



TRUCKEE MEADOWS WATER AUTHORITY
Board of Directors

AGENDA

Wednesday, October 18, 2017 at 10:00 a.m.

NEW VENUE: TMWA Corporate, 1355 Capital Blvd., Reno, NV

Board Members

Chair Geno Martini
Member Neoma Jardon
Member Jenny Brekhus
Member Ron Smith

Vice Chair Vaughn Hartung
Member Jeanne Herman
Member Naomi Duerr

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.tmwa.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 (775) 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.tmwa.com/meeting/> or you can contact Sonia Folsom at (775) 834-8002. Supporting material is made available to the general public in accordance with NRS 241.020(6).
4. The Board 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 Board 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**).
8. Notice of possible quorum of Western Regional Water Commission: Because several members of the Truckee Meadows Water Authority Board of Directors are also Trustees of the Western Regional Water Commission, it is possible that a quorum of the Western Regional Water Commission may be present, however, such members will not deliberate or take action at this meeting in their capacity as Trustees of the Western Regional Water Commission.

1. Roll call*
2. Pledge of allegiance*
3. Public comment — limited to no more than three minutes per speaker*
4. Approval of the agenda (**For Possible Action**)

¹The Board may adjourn from the public meeting at any time during the agenda to receive information and conduct labor-oriented discussions in accordance with NRS 288.220 or receive information from legal counsel regarding potential or existing litigation and to deliberate toward a decision on such matters related to litigation or potential litigation.

5. Approval of the minutes of the September 20, 2017 meeting of the TMWA Board of Directors **(For Possible Action)**
6. Presentation on the Smart About Water Day event — Andy Gebhardt*
7. Presentation of TMWA's Fiscal Year 2017 Customer Satisfaction Study — Sara Hart, Director of Research, Infosearch International*
8. Presentation of TMWA's population projection and projected growth in water demands — John Enloe and Shawn Stoddard*
9. Presentation of TMWA Goals and Objectives results for Fiscal Year 2017 — Mark Foree*
10. Discussion and action, and possible direction to staff on the proposed TMWA Goals and Objectives for Fiscal Year 2018 — Mark Foree **(For Possible Action)**
11. Presentation of preliminary funding plan for Fiscal Years 2018 through 2022, discussion and possible direction to staff — Michele Sullivan **(For Possible Action)**
12. Required communication from Eide Bailly in regards to TMWA's annual financial audit — Michele Sullivan*
13. Discussion and possible direction to staff on options for development or use of Farad property, including possible solicitation of requests for proposals for sale, lease or other disposition of Farad property and/or equipment — Pat Nielson and Mark Foree **(For Possible Action)**
14. Discussion and possible direction to staff regarding water service options to the Verdi area including a possible wholesale agreement with the West Reno Water Company, or possible acquisition of the West Reno Water system — John Enloe, Scott Estes and Mark Foree **(For Possible Action)**
15. General Manager's Report*
16. Public comment — limited to no more than three minutes per speaker*
17. Board comments and requests for future agenda items*
18. Adjournment **(For Possible Action)**

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TRUCKEE MEADOWS WATER AUTHORITY
DRAFT MINUTES OF THE SEPTEMBER 20, 2017
MEETING OF THE BOARD OF DIRECTORS

The Board of Directors met on Wednesday, September 20, 2017, at Sparks Council Chambers, 745 4th Street, Sparks, Nevada. Vice Chair Hartung called the meeting to order at 10:01 a.m.

1. ROLL CALL

Members Present: Jenny Brekhus, Alternate Kristopher Dahir, Naomi Duerr, Vaughn Hartung, Jeanne Herman, Neoma Jardon, and Ron Smith.

Members Absent: Geno Martini

A quorum was present.

2. PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was led by Officer Scobell.

3. PUBLIC COMMENT

Ken McNeil, a Reno resident and TMWA Standing Advisory Committee (SAC) member, spoke as a TMWA customer, not as a representative of SAC. Mr. McNeil commended Mr. Mark Foree, TMWA's General Manager, on doing a great job managing TMWA and having a great rapport with members from the SAC; even when they disagree on certain issues there is continued open dialogue. Mr. McNeil also spoke against the proposed wholesale agreement with Boomtown Water System in Verdi, Nevada, which the Board considered at its last meeting.

4. APPROVAL OF THE AGENDA

Vice Chair Hartung stated Jessica Atkinson, TMWA Human Resources Manager, will be presenting on agenda item #12.

Member Brekhus requested agenda item #7 be heard after agenda item #13.

Upon motion by Member Jardon, second by Member Duerr, which motion duly carried by unanimous consent of the members present, the Board approved the agenda as amended.

5. APPROVAL OF THE MINUTES OF THE AUGUST 16, 2017 MEETING

Upon motion by Member Duerr, second by Member Herman, which motion duly carried by unanimous consent of the members present, the Board approved the August 16, 2017 minutes.

6. PRESENTATION OF THE TRUCKEE MEADOWS REGIONAL PLANNING AGENCY (TMRPA) 2017 REGIONAL PLAN UPDATE AND TMRPA REQUEST FOR PUBLIC INPUT

Kim Robinson, TMRPA Executive Director, presented on the many collaborative projects they are working on with other local agencies. Ms. Robinson informed the Board of the continuous public outreach they conduct to receive input from the community including that regarding the 2017 Regional Plan Update. Member Duerr noted Ms. Robinsons' staff attended her Neighborhood Association Board (NAB) and they had a very good presentation.

8. DISCUSSION AND POSSIBLE ACTION ON ADOPTION OF RESOLUTION NO. 254: A RESOLUTION TO APPROVE FUNDING FOR THE PROJECTS RECOMMENDED BY THE TRUCKEE RIVER FUND ADVISORY COMMITTEE AND AN AUTHORIZATION FOR THE COMMUNITY FOUNDATION TO FUND SUCH PROJECTS FROM FUND PROCEEDS

John Enloe, TMWA Natural Resources Director, reported the Truckee River Fund (TRF) advisors met on August 18 and reviewed five proposals; they recommended funding approval for 4 projects for a total of \$281,125. However, Mr. Enloe informed the Board that the TRF Project #191, sponsored by the City of Reno to allow the use of chemicals to treat invasive weeds along the river, has since been pulled from consideration today. The three remaining projects, for a total of \$269,825, were presented to the Board for their consideration.

1. **Project #190:** Watershed Education Initiative (WEI)
Organization: Sierra Nevada Journeys (SNJ)
Amount Requested: \$ 35,065 **Amount Recommended:** \$ 35,065
Organizational Match: \$ 2,700 (Cash) \$ 10,200 (In-Kind)
2. **Project #192:** Truckee River Tributaries Sediment Reduction Project
Organization: Truckee River Watershed Council (TRWC)
Amount Requested: \$ 165,000 **Amount Recommended:** \$ 165,000
Organizational Match: \$ 41,250 (Cash) \$ 900 (In-Kind)
3. **Project #193:** 2018 Spring Invasive Weed Pull & Fall Truckee River Cleanup
Organization: Keep Truckee Meadows Beautiful (KTMB)
Amount Requested: \$ 69,760 **Amount Recommended:** \$ 69,760
Organizational Match: \$ 15,000 (Cash) \$29,932 (In-Kind)

Discussion followed regarding when the next round of funding was going to occur, what the rollover balance was for FY 2018 and how potential recipients could apply for the grant. Lauren Renda, Community Foundation Program Manager for the TRF, replied the next round would be considered at the February 2018 TRF meeting, and brought to the Board for consideration in March, and she emails the request for proposals (RFPs) to non-profits in the area, and anyone who is interested can contact her at the Community Foundation to be put on the list. Mr. Enloe replied that TMWA's funding to TRF was reduced by half in FY17 and the TRF began FY18 with approximately \$850k.

Upon motion by Member Smith, second by Member Herman, which motion duly carried by unanimous consent of the members present, the Board adopted Resolution No. 254 to approve funding for the projects recommended by the Truckee River Fund Advisory Committee with the exception of project #191 and an authorization for the Community Foundation to fund such projects from Fund proceeds.

9. DISCUSSION AND ACTION, AND POSSIBLE DIRECTION TO STAFF REGARDING REQUEST FOR APPROVAL OF REVISIONS TO THE VOLUNTARY EMPLOYEE BENEFIT ASSOCIATION (VEBA) PLAN DOCUMENT

Jessica Atkinson, TMWA Human Resources Manager, presented the revised VEBA Plan document which did not increase TMWA's financial requirements, rather it cleared up ambiguities, formatting, language and references within the document.

Member Brekhus inquired about the difference between the VEBA and the OPEB trust. Ms. Atkinson replied that the OPEB trust is a closed trust for employees that came from Washoe County as a result of the merger and will phase out as employees retire. The VEBA trust is the original and ongoing TMWA employee trust.

Upon motion by Member Brekhus, second by Member Jardon, which motion duly carried by unanimous consent of the members present, the Board approved the revisions to the Voluntary Employee Benefit Association (VEBA) Plan Document.

10. PRESENTATION OF TMWA'S UNAUDITED FY2017 FINANCIAL PERFORMANCE

Michele Sullivan, TMWA Chief Financial Officer, presented on the unaudited financial performance for FY17. Ms. Sullivan stated water sales ended at \$1.5M ahead of budget at the end of FY 2017; operating expenses were on track; employee benefits increased based on GASB 68 in addition to the increase in the number of employees; operating income was \$5.4M higher than anticipated due to savings in operating expenses of \$2.5M, \$1.1M lower depreciation, and \$1.8M higher operating revenue; developer infrastructure contributions were \$10.8M. Overall net change in position was \$21M higher than anticipated and cash balances decreased \$13M or \$10.5M less than the anticipated decrease of \$23.5M.

As part of the 2017 bond refunding, two forward delivery agreements (FDA) were terminated that guaranteed TMWA higher interest rates on debt service reserve and O&M reserve balances and TMWA received \$4.9M cash from dissolving the FDA's for the release of these agreements.

Discussion followed regarding how TMWA has the ability to collect fees from future developers for infrastructure oversizing costs that TMWA incurred in anticipation of increased future demand.; TMWA's portion in the Nevada Public Employees Retirement System (NVPERS) was larger and led to increased costs in employee benefits this year, and is adjusted every year. Ms. Brekhus asked if it was standard practice for TMWA to receive interest on its reserves balances and Ms. Sullivan replied yes; it was necessary to push out debt principle payments to phase in rate adjustments, and the bond refunding assisted TMWA's financial position by being able to pay down \$32M of debt due to the bond refunding.

11. DISCUSSION AND POSSIBLE ACTION ON ADOPTION OF RESOLUTION NO. 255: A RESOLUTION TO APPROVE THE AMENDMENTS TO TMWA'S INVESTMENT POLICY

Joe Petrelli, TMWA Senior Financial Analyst, introduced TMWA's financial advisors to answer any questions, who were on teleconference: Monique Spike and Izac Chyou, from Public Financial Management (PFM) who are responsible for providing financial services and act as a liaison on PFM's investing team, respectively.

Vice Chair Hartung inquired if the suggested updates to the Investment Policy (IP) were more aggressive to account for the trend in the rising market. Monique replied yes, they took advantage of the trend. Ms. Sullivan added it was also because of the release of FDA and without that facility, TMWA needs to figure out what to do with investments; and while Nevada Revised Statutes (NRS) are conservative, TMWA has not been using some of the investment types allowed by NRS. Staff commented that the intent was to bring TMWA's investment policy in line with NRS.

Member Brekhus asked why did TMWA have a more conservative IP in the beginning. Ms. Sullivan replied that may be because the last IP was revised in 2009 during the recession. Member Brekhus asked if utilities generally had different investment policies than local governments.

Discussion followed regarding allowed investments under NRS 355.170 and the potential to use asset back securities, per NRS 355.171, but that legal counsel advised TMWA may not be eligible or it may not be feasible to put NRS 355.171 investments into the policy and additional research and discussion was necessary on those items. Also, the possibility of investing in asset backed securities, but only if they are rated "AAA" by a nationally recognized statistical rating organization (NRSRO); per policy, TMWA will not engage in derivatives investments such as SWAPS; new restrictions were added to the IP such as no more than 20% can go into one type of investment, and restricted 5% to any one issuer; TMWA continues to be aggressively conservative, and investing in securities up to 5 years maturities allows for great flexibility than the current 2 year hold. Staff confirmed that if an investment was not listed, it would not be allowed.

Member Brekhus asked about the logistics of the agreement and if PFM had autonomy to make investment decisions. Ms. Sullivan replied PFM does have the authority to trade right now, which enables them to be proactive, and she speaks with them on a weekly basis.

Upon motion by Member Duerr, second by Member Dahir, which motion duly carried by unanimous consent of the members present, the Board adopted Resolution No. 255 to approve the amendments to TMWA's Investment Policy.

12. DISCUSSION AND ACTION REGARDING GENERAL MANAGER PERFORMANCE REVIEW FOR CONTRACT YEAR 2016/2017 AND DISCUSSION AND ACTION ON POSSIBLE LUMP SUM AWARD AND/OR OTHER COMPENSATION ADJUSTMENT

Ms. Atkinson presented the staff report and reported on the results from the confidential survey taken by six direct reports and seven Board members, including Alternate Dahir.

Vice Chair Hartung commended Mr. Foree on a job well done and opened it to public comment.

Public Comment

Mr. McNeil noted again he is speaking as a TMWA customer and not on behalf of the TMWA SAC. He stated Mr. Foree does a good job, which can be difficult at times while navigating the politics associated with water management, and has qualities difficult to find in most people; very patient, communicates well, and is dedicated to TMWA, staff, Board and the SAC.

The Board was unified in their praise over Mr. Foree's performance as TMWA's general manager for FY17. They agreed that it has been a pleasure to work with him, that Mr. Foree (as well as the staff) is knowledgeable and responsive to their calls and inquiries. He has brought together a team of professionals whom he trusts with their expertise, his ability to handle contentious issues, such as the rate increase, and worked with the Board in making those tough decisions, his commitment to TMWA is reflected in the professional and interpersonal relationships with the Board and in the community, his conflict resolution skill-set, his leadership is a reflection of the team and customer satisfaction results, and that the survey results of his performance are a testament to what he has accomplished.

Member Jardon inquired what the proposed percent salary increase was. Vice Chair Hartung replied it was the Board's decision.

Vice Chair Hartung presented the options for the Board to consider. Michael Pagni, TMWA General Counsel, confirmed the aggregate bonus and salary increase could not be over 10%.

At this point, there was discussion regarding the percent amount to propose for Mr. Foree's salary increase and that it should reflect the same amount the MPATs received which was 3%; that Mr. Foree does not automatically receive cost of living adjustment (COLA) and any salary increase must be proposed and approved by the Board; that it would be difficult to approve a lump sum award in the same year as a rate increase even though Mr. Foree has done a great job leading the company

Member Duerr inquired if any changes to the general manager's contract terms could be considered today. Michael Pagni, TMWA General Counsel, replied no.

Upon motion by Member Smith, second by Member Brekhus, which motion duly carried by unanimous consent of the members present, the Board approved a three percent salary increase for the General Manager.

13. DISCUSSION AND ACTION ON REQUEST FOR BOARD INPUT AND ACCEPTANCE OF GENERAL MANAGER PERFORMANCE OBJECTIVES FOR CONTRACT YEAR 2017/2018

Mr. Foree presented the proposed objectives for contract year 2017/2018 for the Board's consideration.

Discussion followed regarding the ability of moving hydro water rights permits from Farad downstream to be used for another plant on the river; addressing concerns made by recreational river users about not adding another dam or to update diversions, including Glendale diversion, to allow for safe passage and to ensure adequate communication between TMWA staff and river users; to improve the safety for first responders; how TMWA continues to address water issues and manage operations in order to maximize efficiencies and be innovative in alternative solutions for reclaim water; and how TMWA is establishing itself as the regional water leader by scheduling its first public outreach event that's sole purpose is to bring other local agencies together to educate the community about water, resources, management, growth, and how it is all efficiently being managed and monitored.

Upon motion by Member Duerr, second by Member Herman, which motion duly carried by unanimous consent of the members present, the Board approved the General Manager performance objectives for contract year 2017/2018.

7. INFORMATIONAL REPORT ON GROUNDWATER AQUIFERS

Randy Van Hoozer, TMWA Senior Hydrogeologist, and Nick White, TMWA Hydrogeologist, presented the report on groundwater aquifers. Mr. White reported that the region saw its largest water year on record.

Discussion followed regarding how basin boundaries are determined (related to the watershed and aquifer); how the geology determines well capacity and if a well has active recharge capabilities; the status of permitting efforts to expand the recharge program; passive versus active recharge; domestic wells in Spanish Springs and whether they have been depleted due to TMWA's wells or other factors; TMWA staff is obtaining information on the wells owned by Utilities Inc. to further understand the groundwater aquifers in relation to TMWA's wells; how active and passive recharge stabilizes the groundwater aquifers; ongoing monitoring of the age and stability of the wells through the well rehabilitation program; the lack of evidence of jet fuel contamination in the Stead and Lemmon Valley area nor any evidence of contamination due to flood or effluent discharge in Swan Lake after sampling the wells these past six weeks.

14. GENERAL MANAGER'S REPORT

Mr. Foree reminded the Board of the Smart About Water Day on Saturday, October 21st from 10am – 2pm at the Lazy 5 Community Center and the past two months of been the highest in hydro generation revenue in TMWA's history.

15. PUBLIC COMMENT

There was no public comment.

16. BOARD COMMENTS AND REQUESTS FOR FUTURE AGENDA ITEMS

Member Brekhus confirmed the October Strategic Planning Workshop was to be held at TMWA Corporate office and start at 10am and the proposed wholesale agreement with West Reno Water Company would be on the agenda. Mr. Foree replied yes.

Member Herman requested a brief presentation on TMWA's population projections since a few of her constituents have expressed concerns that they have heard that population may reach 750k sooner than TMWA's projections. Mr. Foree replied TMWA's 20-year projection and the County projection are close in line to the Consensus forecast, but will provide a brief update at the workshop.

Mr. Foree thanked the Board for their support and comments received, and any success should also be directed to the staff and management team.

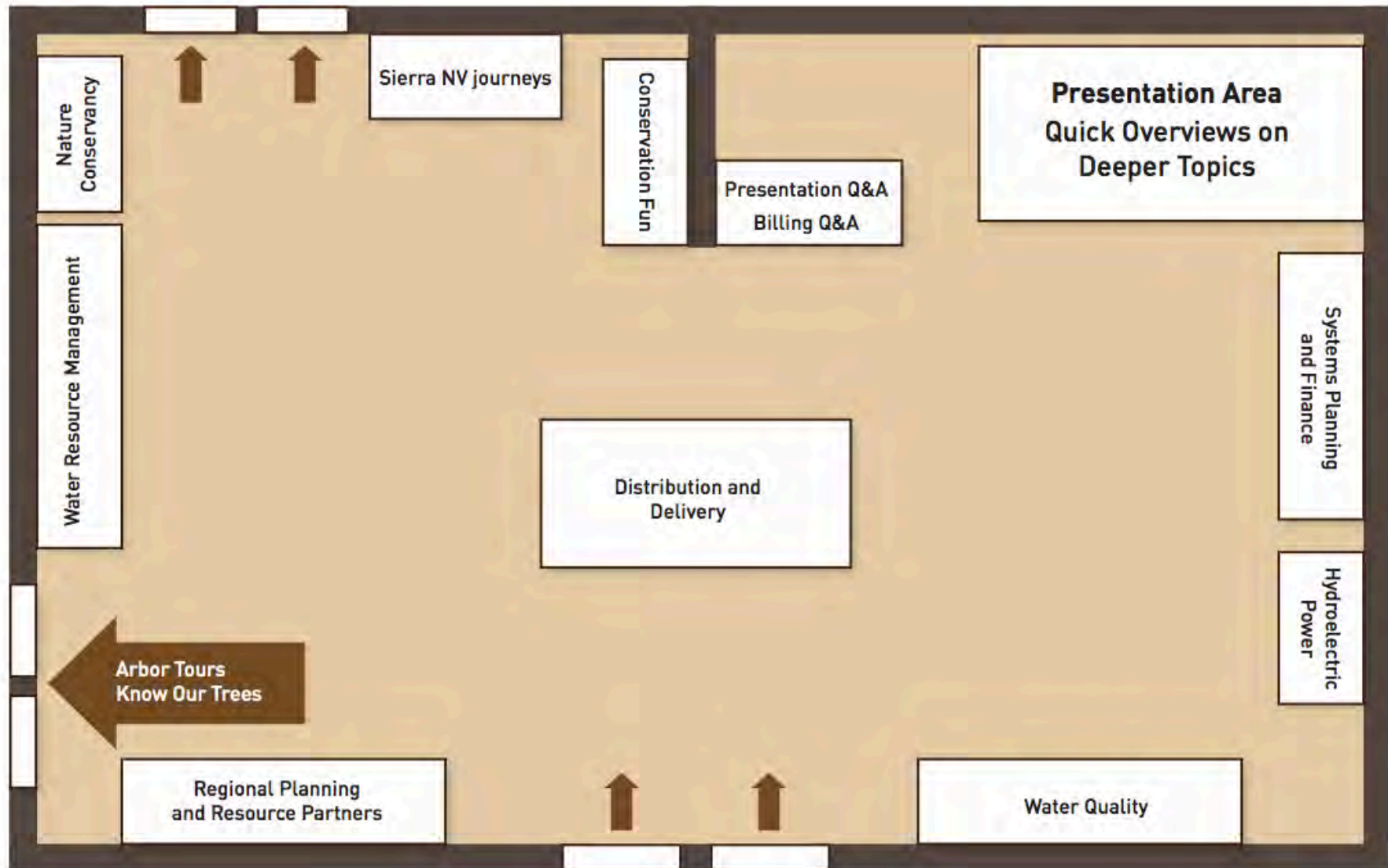
17. ADJOURNMENT

With no further discussion, Vice Chair Hartung adjourned the meeting at 12:18 p.m.

Approved by the TMWA Board of Directors in session on _____.

Sonia Folsom, Recording Secretary

FLOORPLAN





Customer Satisfaction Study Fiscal Year 2017



Survey Purpose & Methodology

Fiscal Year 2017



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 (16 annual studies to date)

2017 Methodology:

- Telephone surveys managed by InfoSearch International
- In the field from July 2016 to June 2017; interviews averaged 7-10 minutes
- Sample of **500**: 400 Residential and 100 Commercial Customers
- Total sample, at 95% confidence level, $\pm 4.4\%$ confidence interval

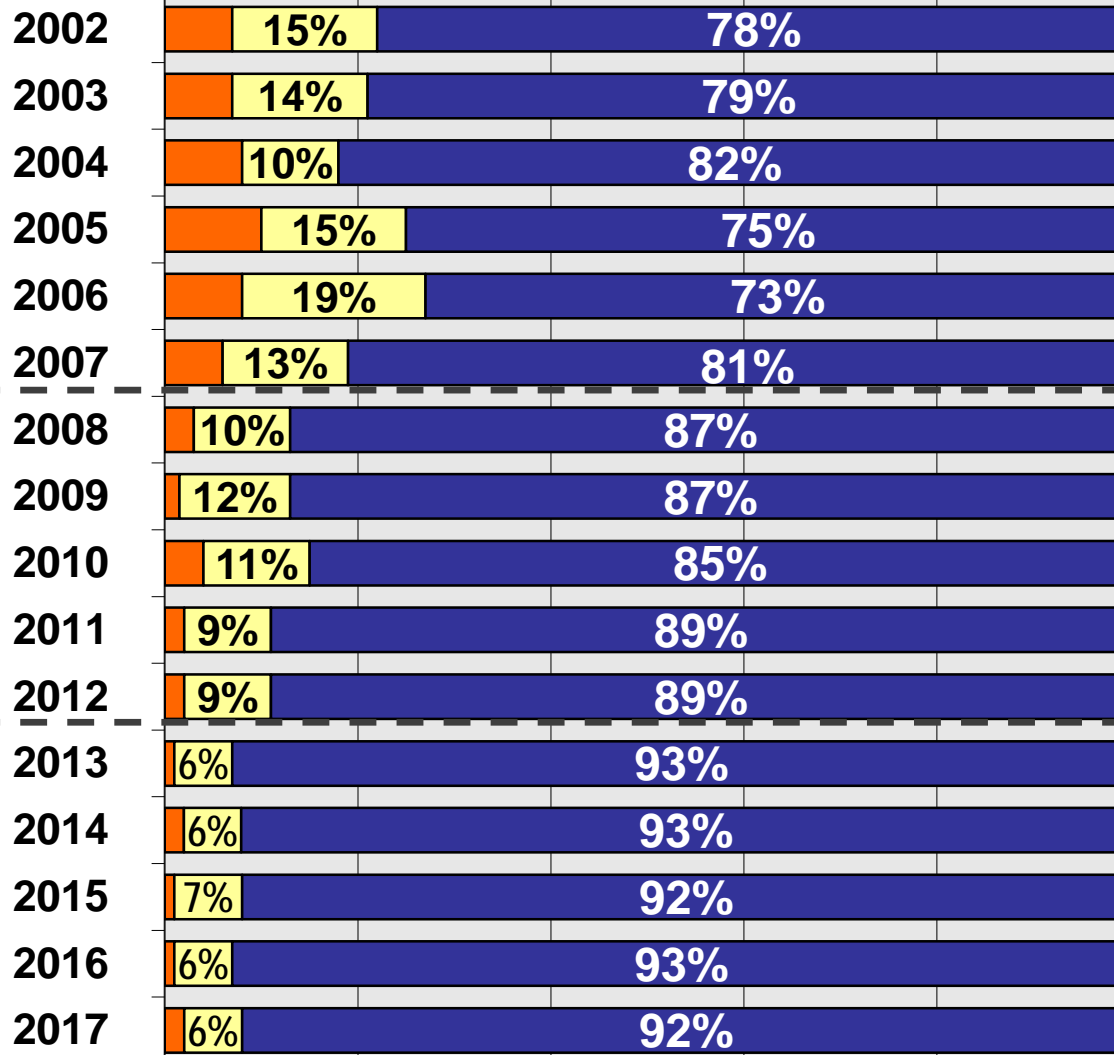
Overall Customer Satisfaction

2002 - 2017

10-18-17 BOARD Agenda Item 7

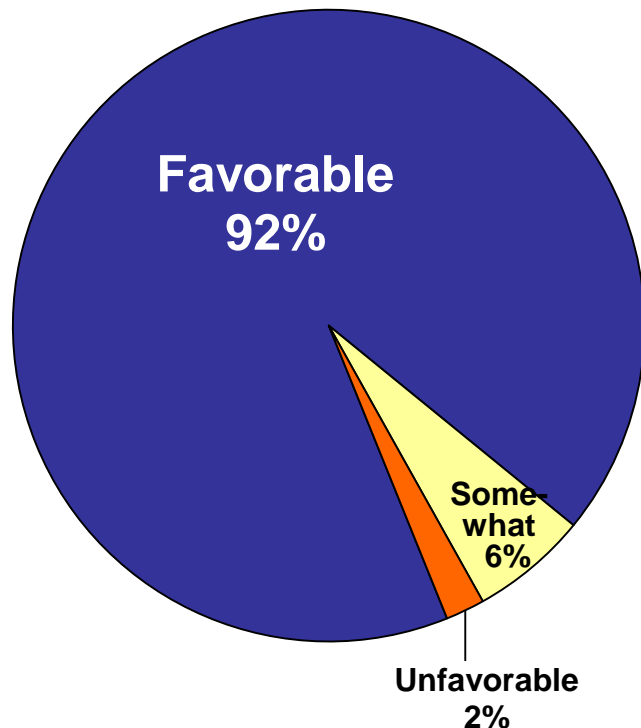


■ Unfavorable
 ■ Somewhat
 ■ Favorable



- 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 five years, overall satisfaction ratings have been in the 92-93% range.

Overall Customer Satisfaction with Example Comments - 2017



- **Favorable (92%)**

- *"I'm very happy with my service."*
- *"You're doing a great job."*
- *"Very pleased with billing inserts, great tips."*
- *"They have always been very helpful."*
- *"It's very convenient for me."*
- *"The rates are good and fair."*
- *"I'm very pleased with the job they do."*

- **Somewhat (6%)**

- *"[In] our dishwasher, there is a residue."*
- *"More enforcement [for] watering on very windy days."*

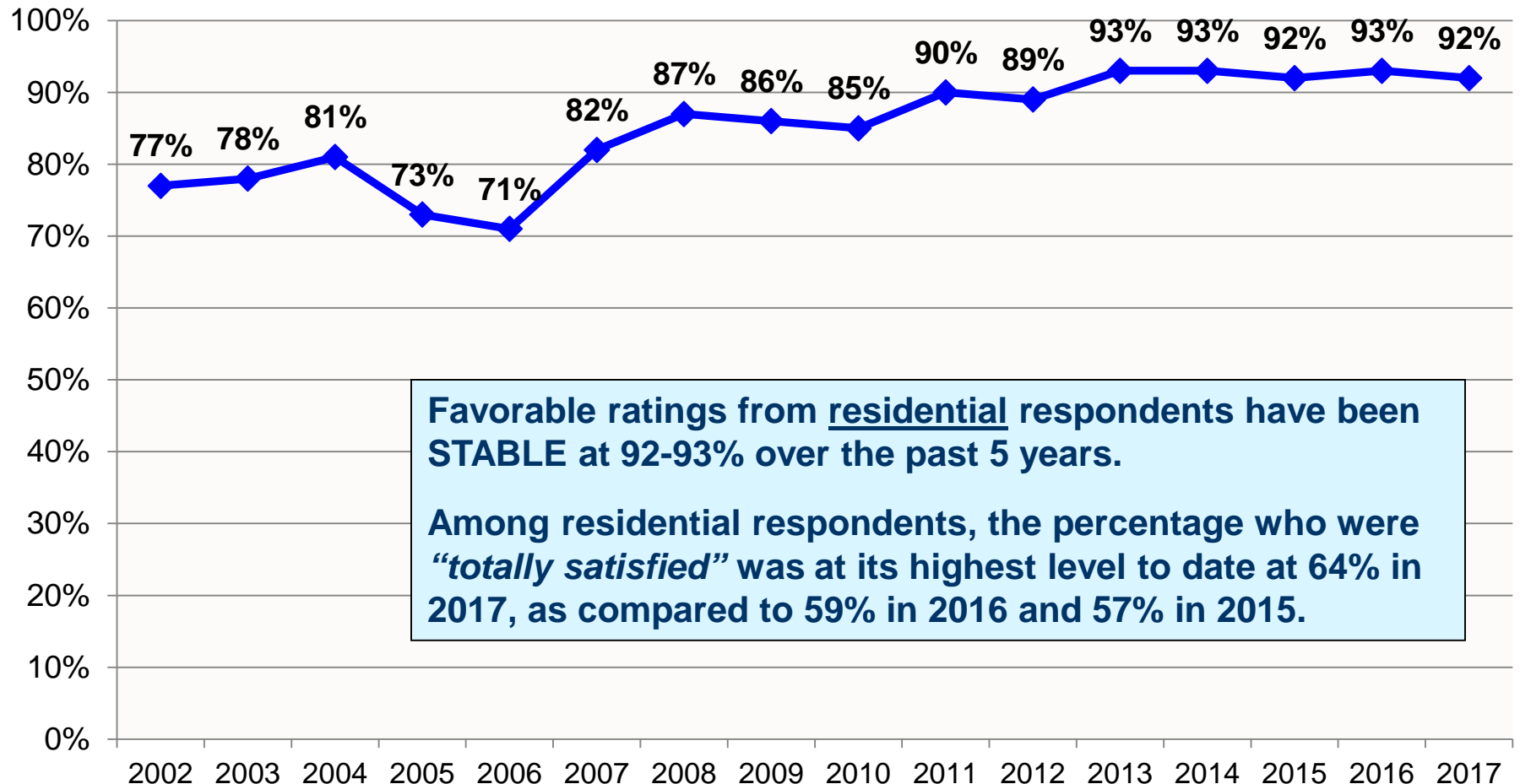
- **Unfavorable (2%)**

- *"Bureaucratic and not concerned with customers."*
- *"Too much Chlorine in [the] water."*

Overall Satisfaction Among Residential Respondents

2002 - 2017

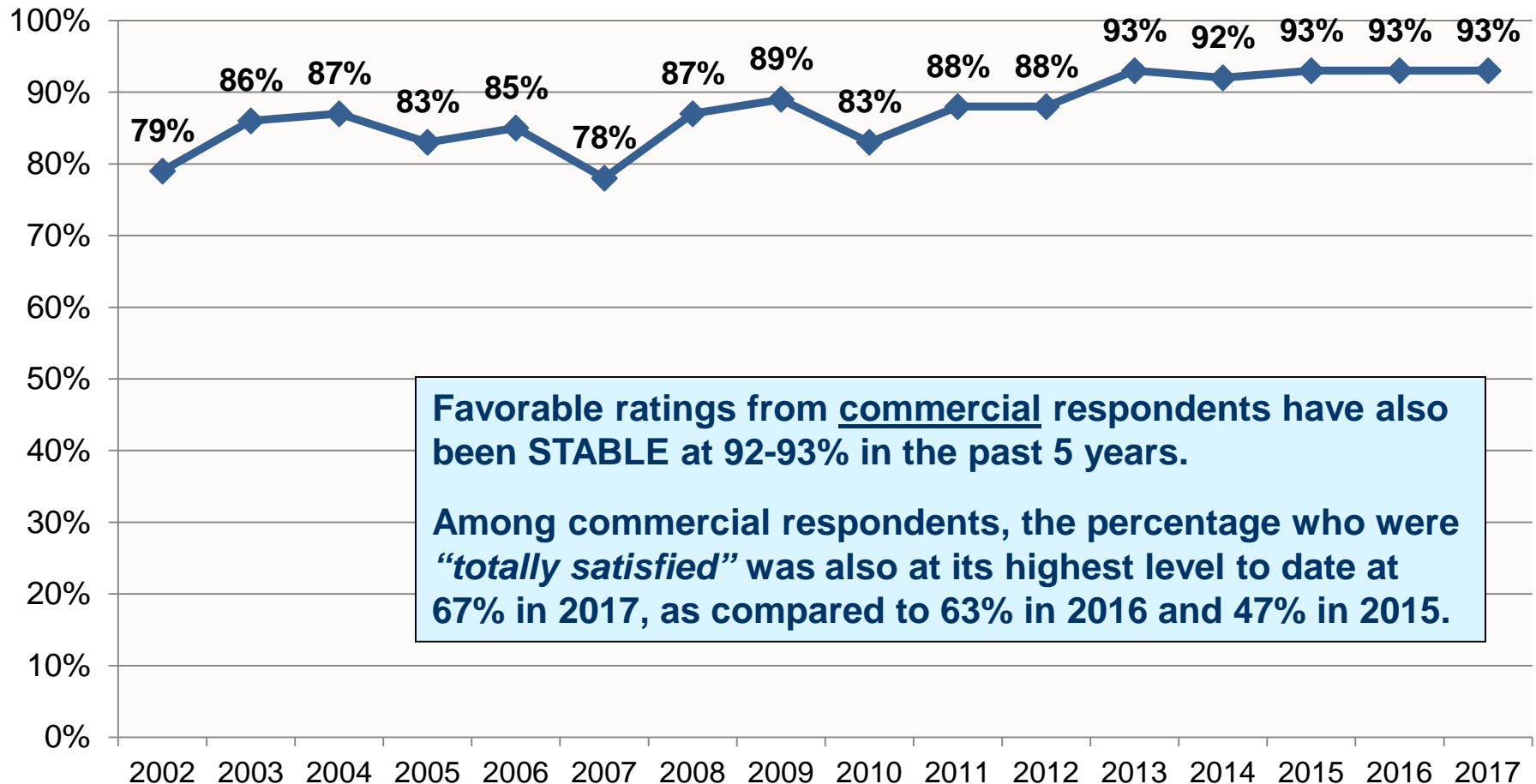
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Overall Satisfaction Among Commercial Respondents

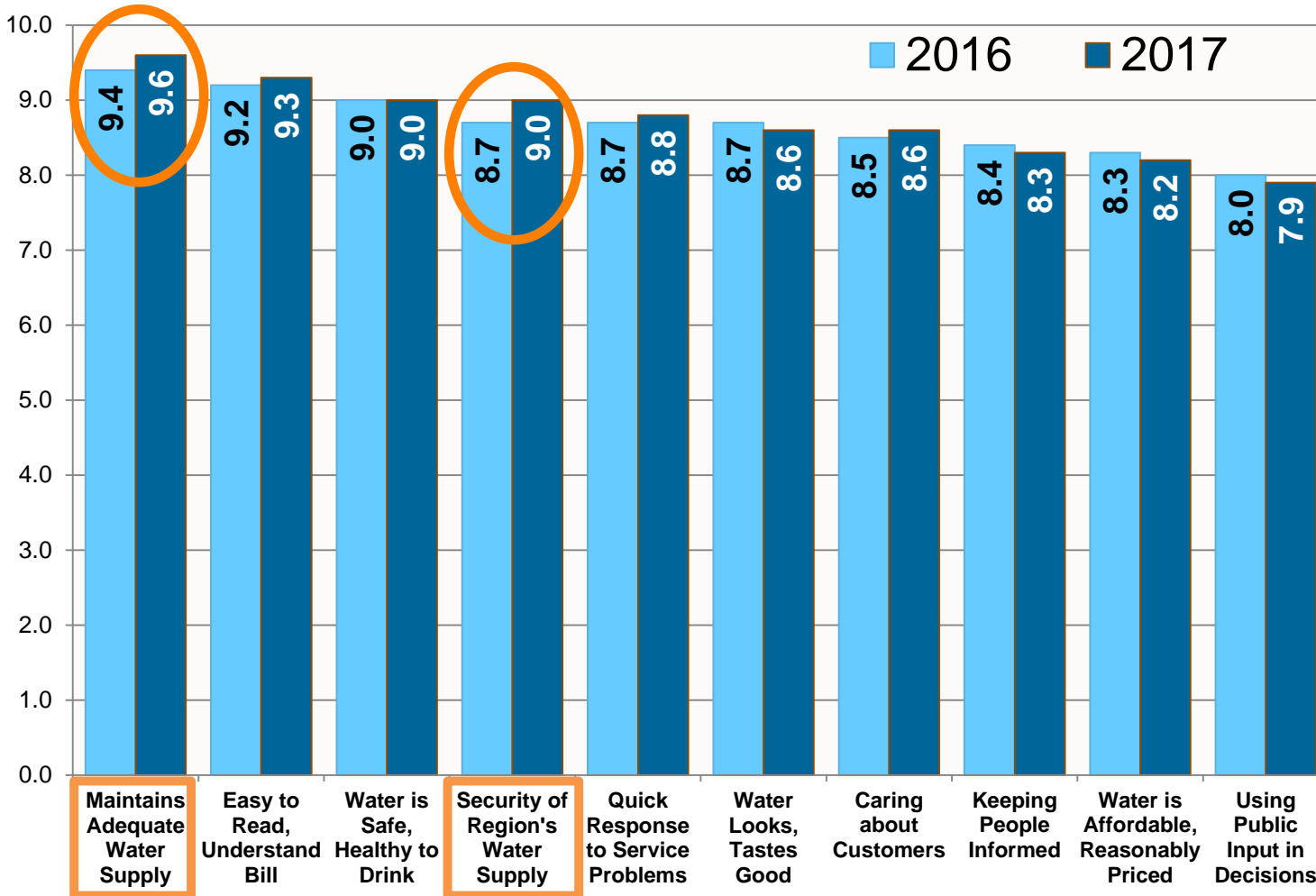
2002 - 2017

10-18-17 BOARD Agenda Item 7



TMWA's Performance – 2016-2017

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



In 2017:

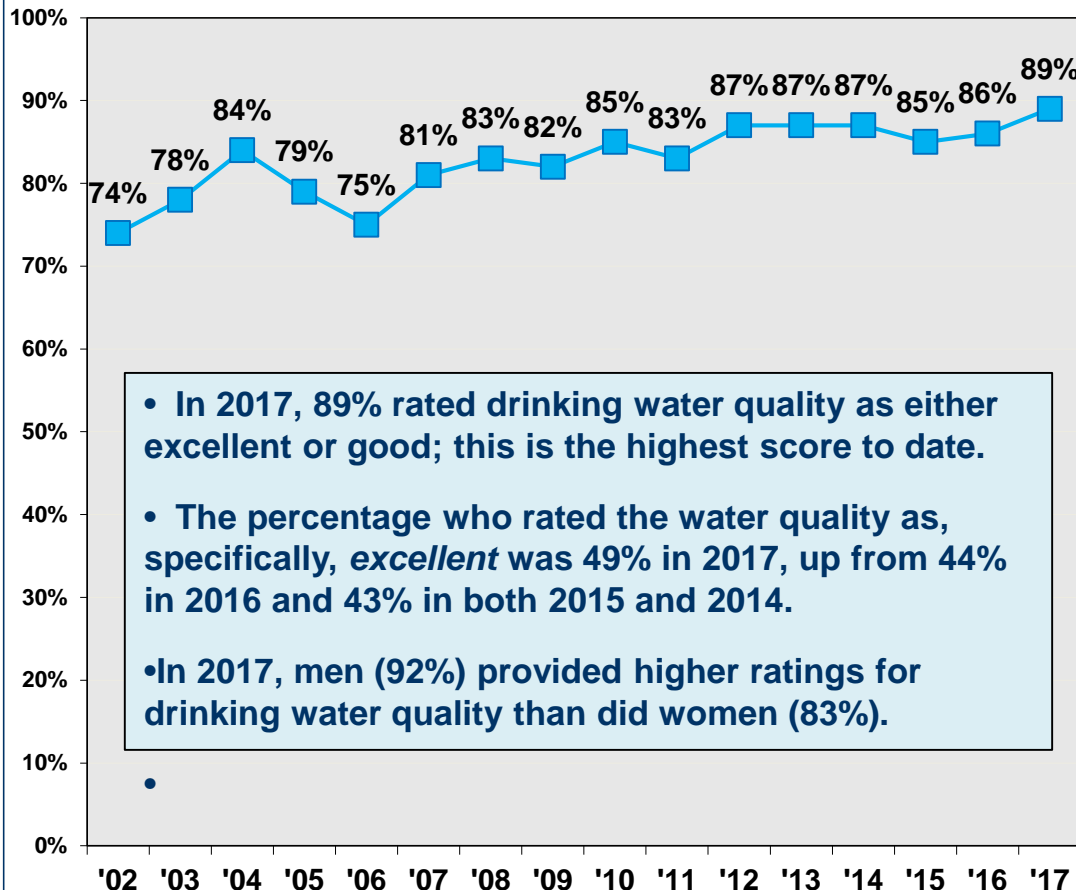
- All 10 performance measures had a mean of 7.9 or higher on a 0-to-10 scale.
- The highest rated item was maintaining an adequate water supply (9.6), while the lowest was using public input in decisions (7.9).
- Residential and commercial respondents provided statistically similar ratings for all 10 performance measures.
- Compared to 2016, ratings increased significantly for the two items related to the water supply; the 2017 ratings were the highest to date.

Quality of Drinking Water

2002 - 2017

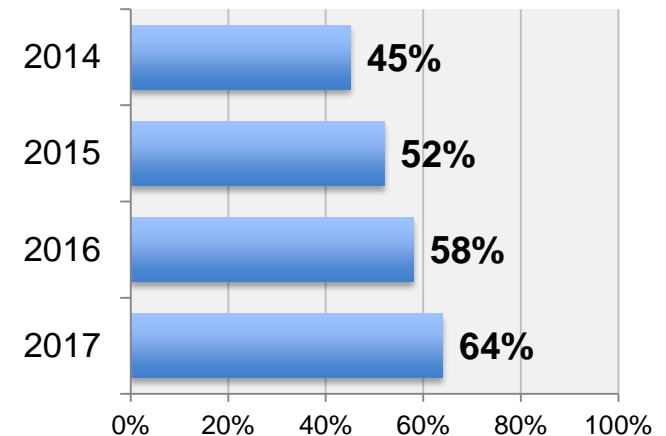


Respondents Who Rated Drinking Water Quality as Excellent or Good



- Nearly all respondents (91%) noted “no difference” in water quality as compared to one year ago; 6% said it was better and 3% said it was worse.
- Three out of five (60%) reported that the overall quality of tap water was better than that of other cities, while just 6% said it was worse.

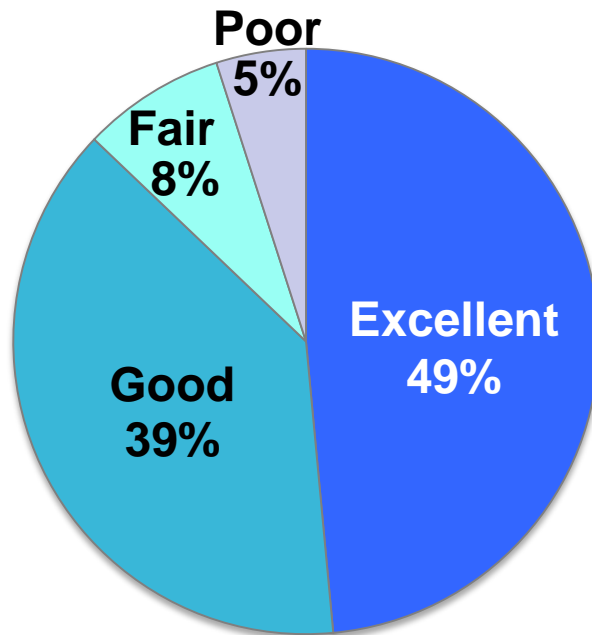
Percentage Who Reported “Never” Having Problems with the Taste



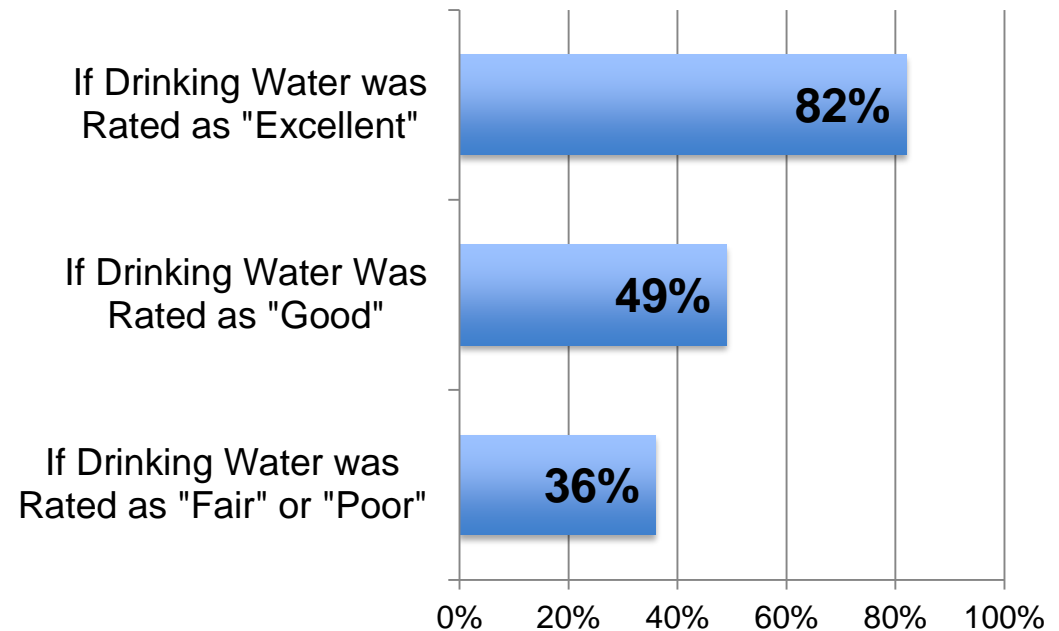
Water Quality and Overall Satisfaction – 2017



Ratings for Drinking Water Quality



Percentage Who Were "Totally Satisfied" with TMWA ... Based on Their Rating for Drinking Water Quality



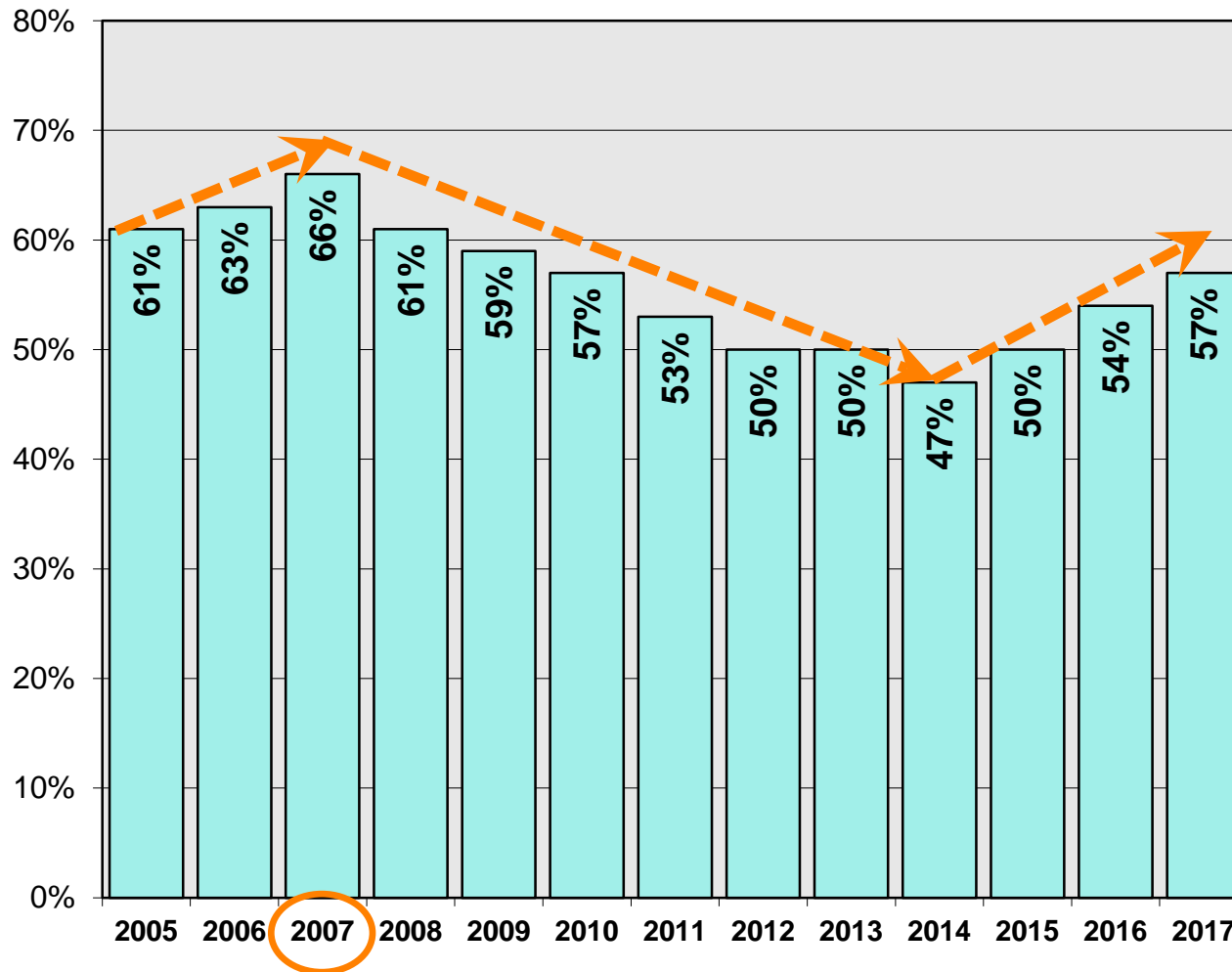
– 2017

WHY?

Rating	Percentage	Can you Elaborate as to Why You Gave that Rating?
Excellent	49%	<ul style="list-style-type: none"> • <i>“Always looks and tastes clean.”</i> • <i>“Better than [in] California.”</i> • <i>“I can drink straight from the tap.”</i> • <i>“Never had any problems with it.”</i> • <i>“No taste, always clear.”</i>
Good	39%	<ul style="list-style-type: none"> • <i>“It tastes fine.”</i> • <i>“It’s good enough.”</i> • <i>“It’s okay.”</i> • <i>“It’s good but not quite excellent.”</i>
Fair	8%	<ul style="list-style-type: none"> • <i>“Has a chemical taste.”</i> • <i>“Sometimes it has a funny smell.”</i>
Poor	5%	<ul style="list-style-type: none"> • <i>“Clear but tastes like Chlorine.”</i> • <i>“Bad taste.”</i>

Use of Bottled Water

2005 - 2017



- TMWA customers' use of bottled water steadily declined from a high of 66% in 2007 to a low of 47% in 2014; however, use has since rebounded up to 57% in 2017.

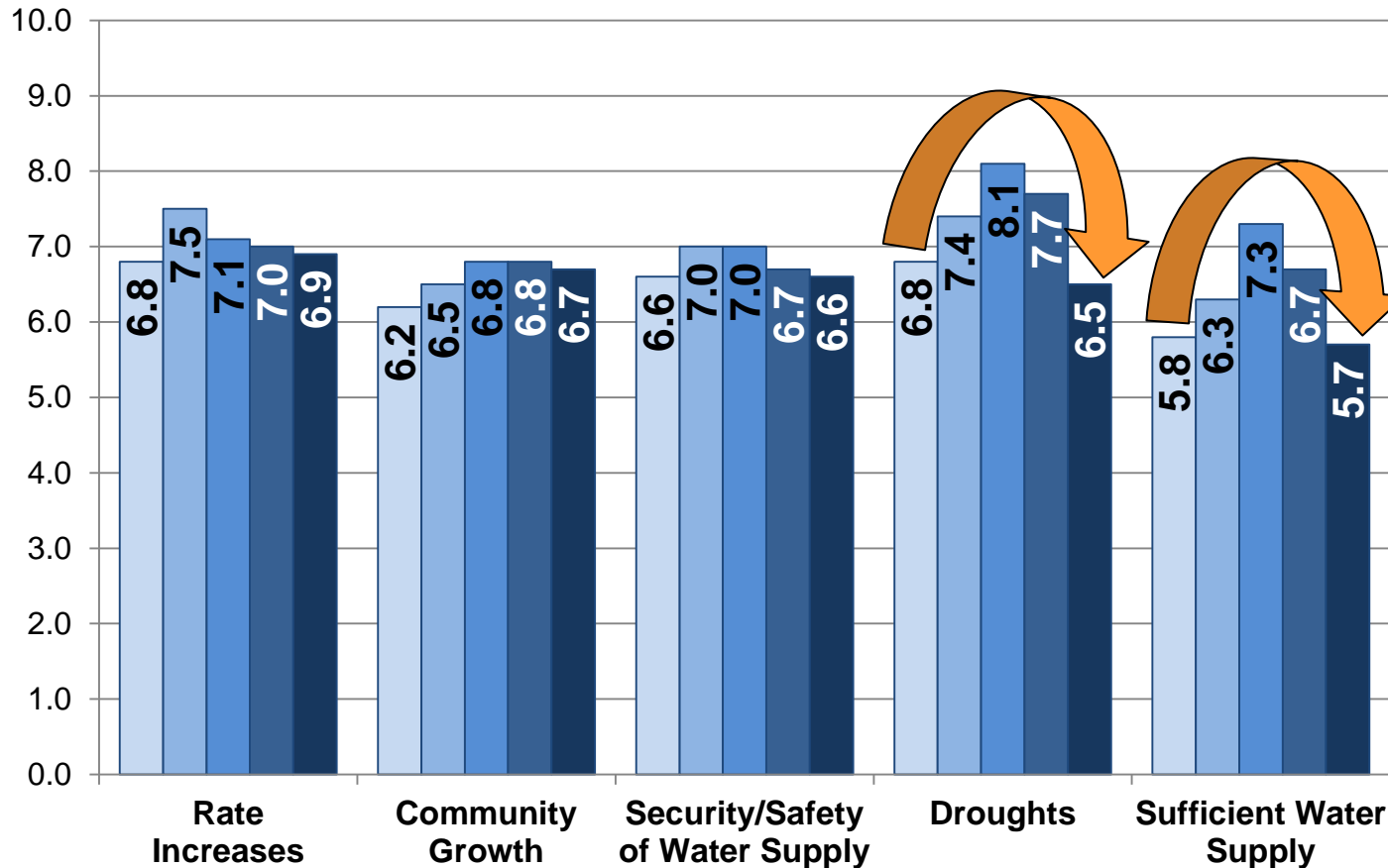
- While the main reason for drinking bottled water continued to be convenience (51%), respondents who drank bottled water provided lower ratings for water quality (41% excellent) than did those who did not drink bottled water (58% excellent).

Level of Concern – 2013-2017

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



2013 2014 2015 2016 2017

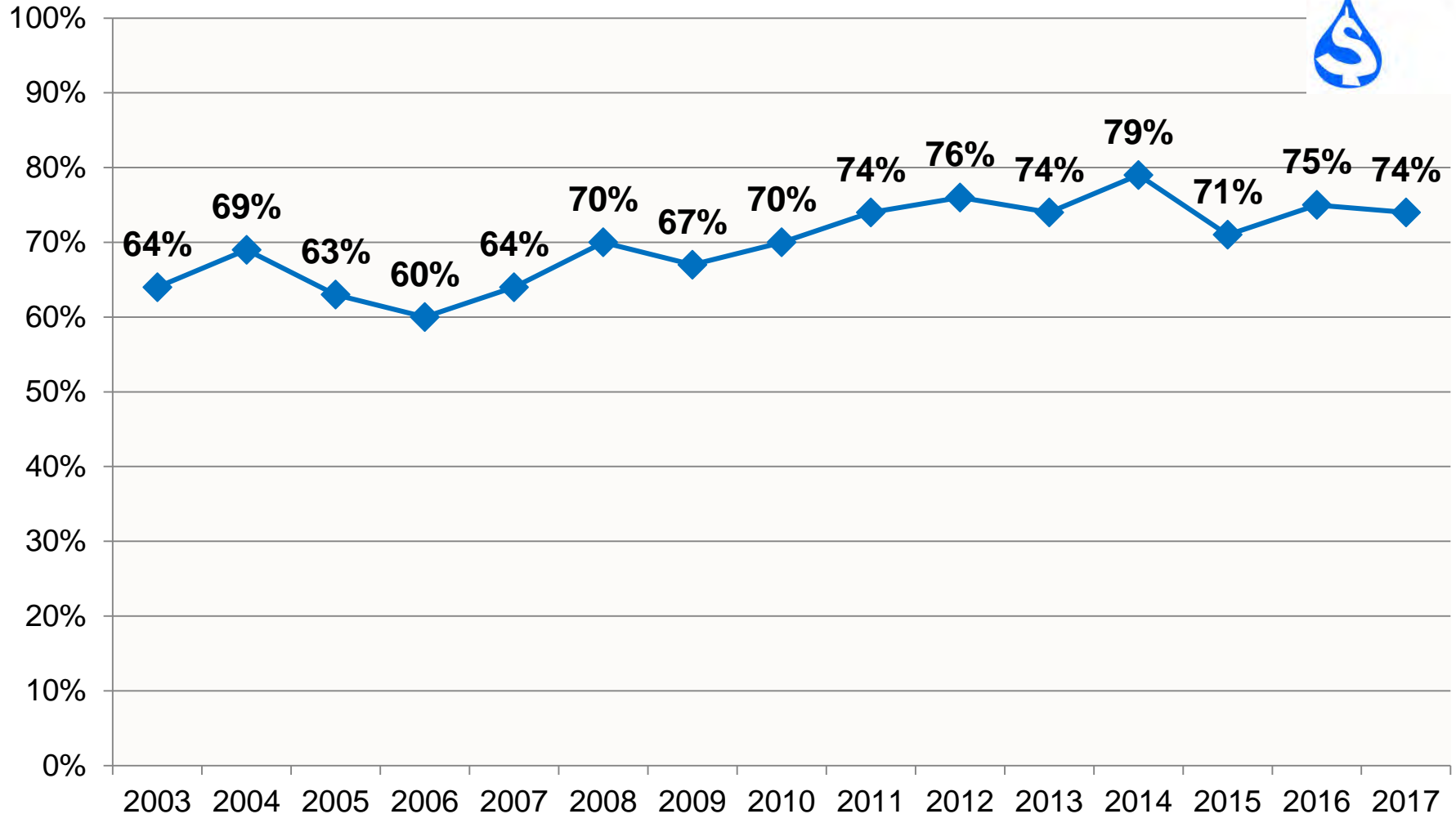


- In 2017, respondents had similar levels of concern (6.5 to 6.9) about rate increases, community growth, the security of the water supply, and droughts.

- Concerns about droughts and having a sufficient water supply decreased significantly from 2015 to 2017; both measures were at their lowest levels of the past five years.

Price Relative to Value of Quality/Service

Excellent and Good Ratings – 2003-2017



– 2017



Rating	Percentage	Can you Elaborate as to Why You Gave that Rating?
Excellent	27%	<ul style="list-style-type: none"> • <i>“Low price for high quality.”</i> • <i>“For the price we pay, it’s a pretty darn good value.”</i> • <i>“Can drink out of the tap and my bill is very cheap.”</i> • <i>“In North Dakota, the water bill was much higher.”</i>
Good	47%	<ul style="list-style-type: none"> • <i>“It’s reasonably priced.”</i> • <i>“It’s okay price-wise.”</i> • <i>“In general, it’s better than most.”</i> • <i>“It seems to even out.”</i> • <i>“There is no issue.”</i>
Fair	22%	<ul style="list-style-type: none"> • <i>“It’s a tier rating and goes up after a certain usage.”</i> • <i>“Concern of increase.”</i> • <i>“Too expensive during the summer.”</i> • <i>“We had a different water company and paid less.”</i>
Poor	4%	<ul style="list-style-type: none"> • <i>“Too expensive.”</i> • <i>“Have to pay to get bottled water; I’m paying twice.”</i>

Feedback about TMWA's 2017 Rate Adjustment



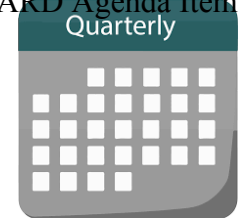
From TMWA's News Release:

"At its April 19, 2017 meeting, TMWA's Board of Directors approved a series of single-digit rate adjustments to be implemented over the next five years. ... The increase was the first in over three years. ... The average residential customer's water bill is expected to increase by \$1.42 (3%) per month starting May 2017 with an additional monthly increase of \$1.47 (3%) in May 2018."

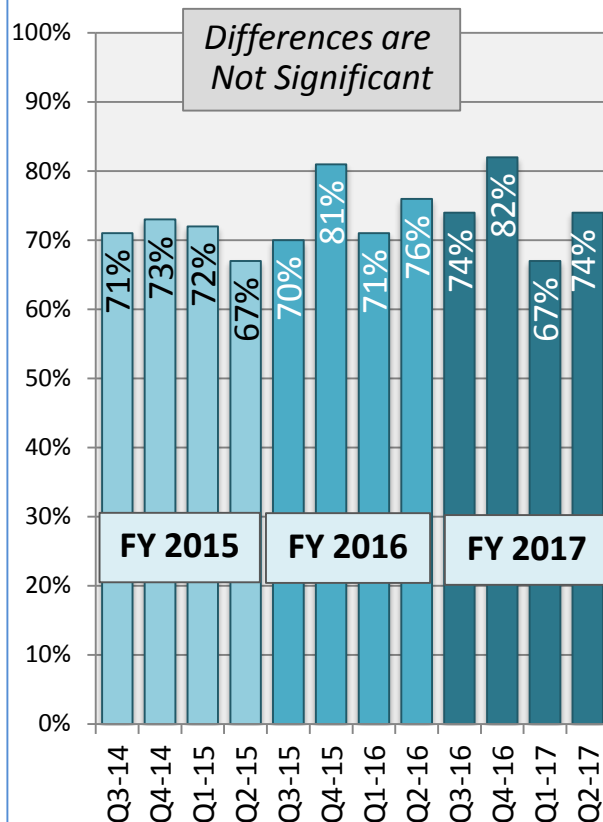
- The following slide shows **12 quarters of data** for Fiscal Years 2015, 2016, and 2017 (Q3-2014 through Q2-2017) for the three measures related to rates.
- The quarterly sample sizes (n=125) are, by definition, one-fourth the size of the annual results (n=500); thus, the ratings may appear to fluctuate yet not be statistically significant.
- Although the rate adjustment did not take effect until Q2-2017 (in May), media coverage of the possible rate adjustment, as well as opportunities for public comment, started in Q1-2017 (in February).

Quarterly Feedback about Rates:

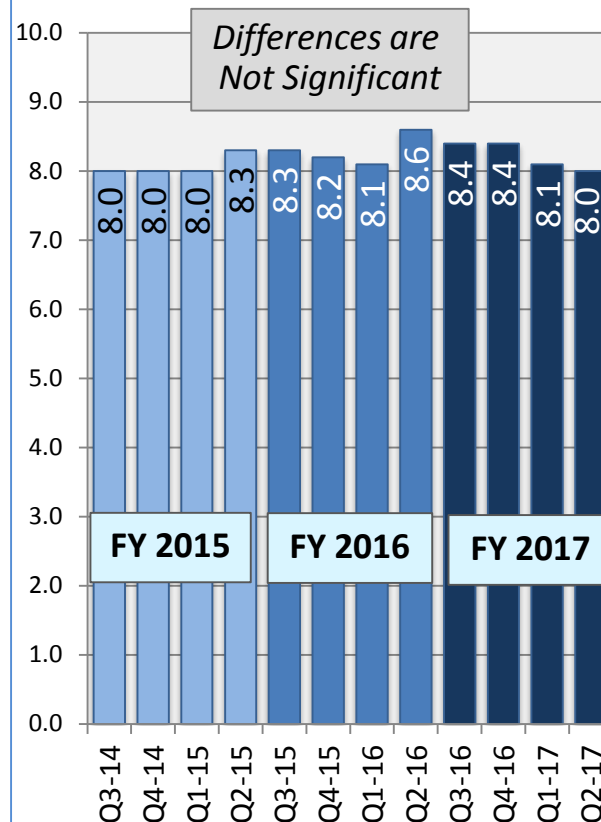
Fiscal Years 2015, 2016, and 2017



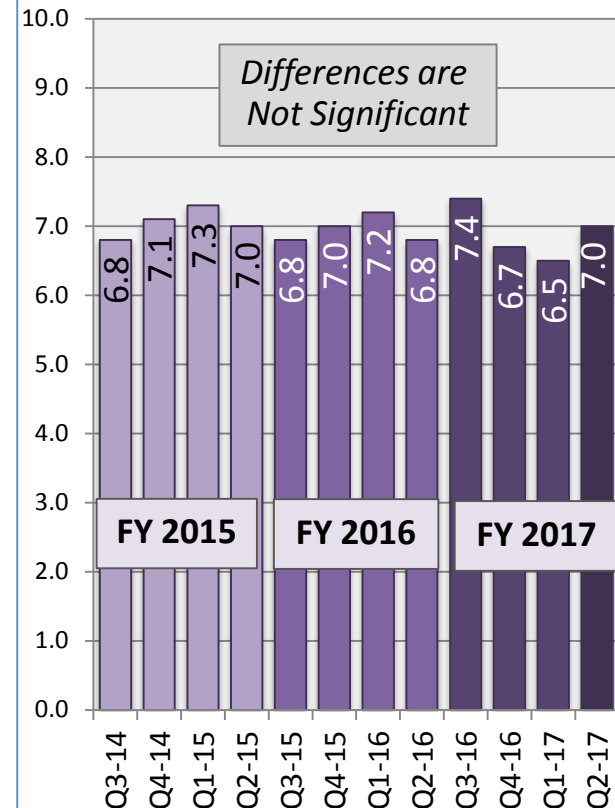
Value for Price is Excellent or Good

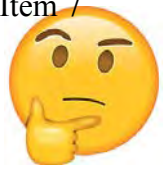


Water is Affordable, Reasonably Priced



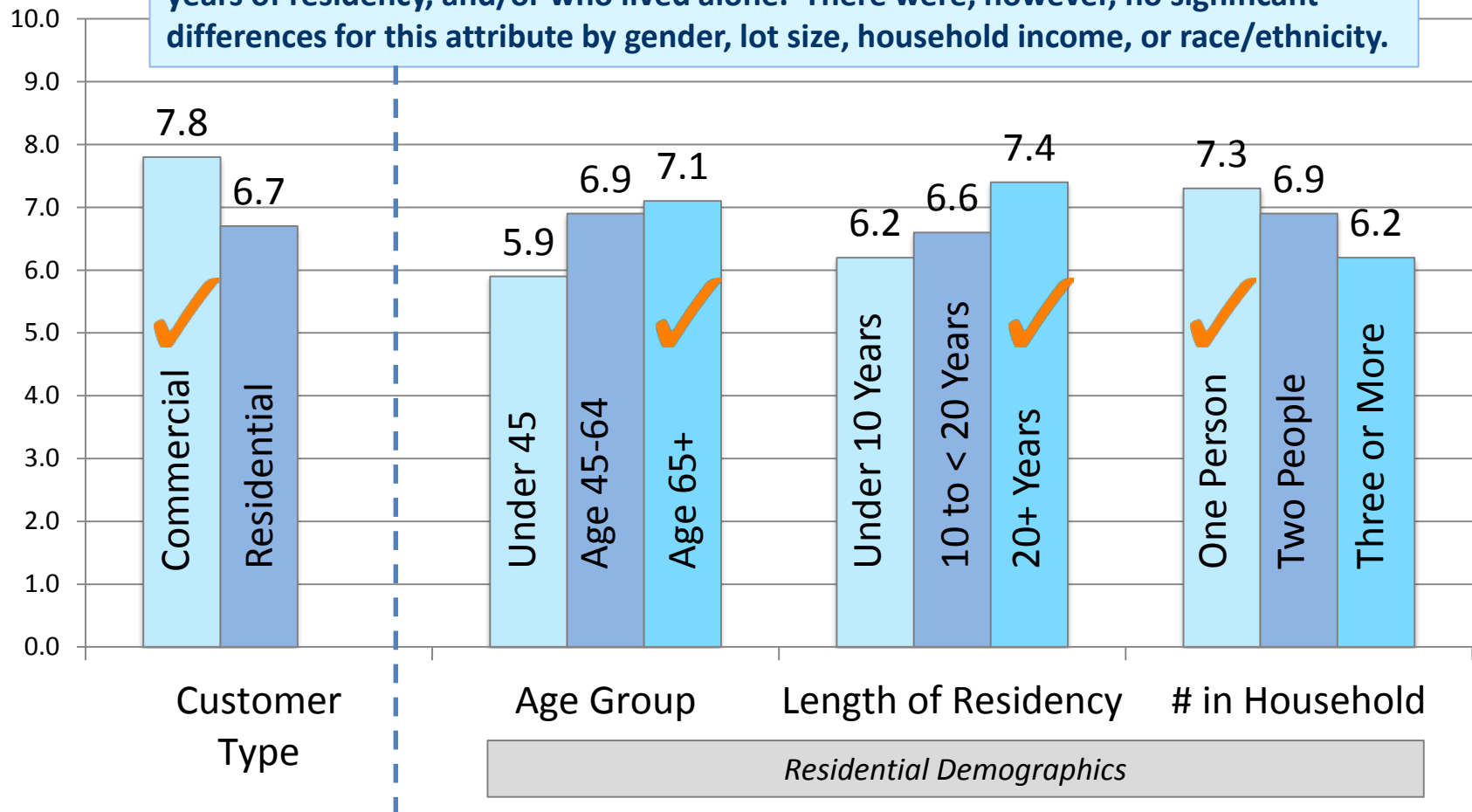
Level of Concern about Rate Increases (Higher Number = More Concern)



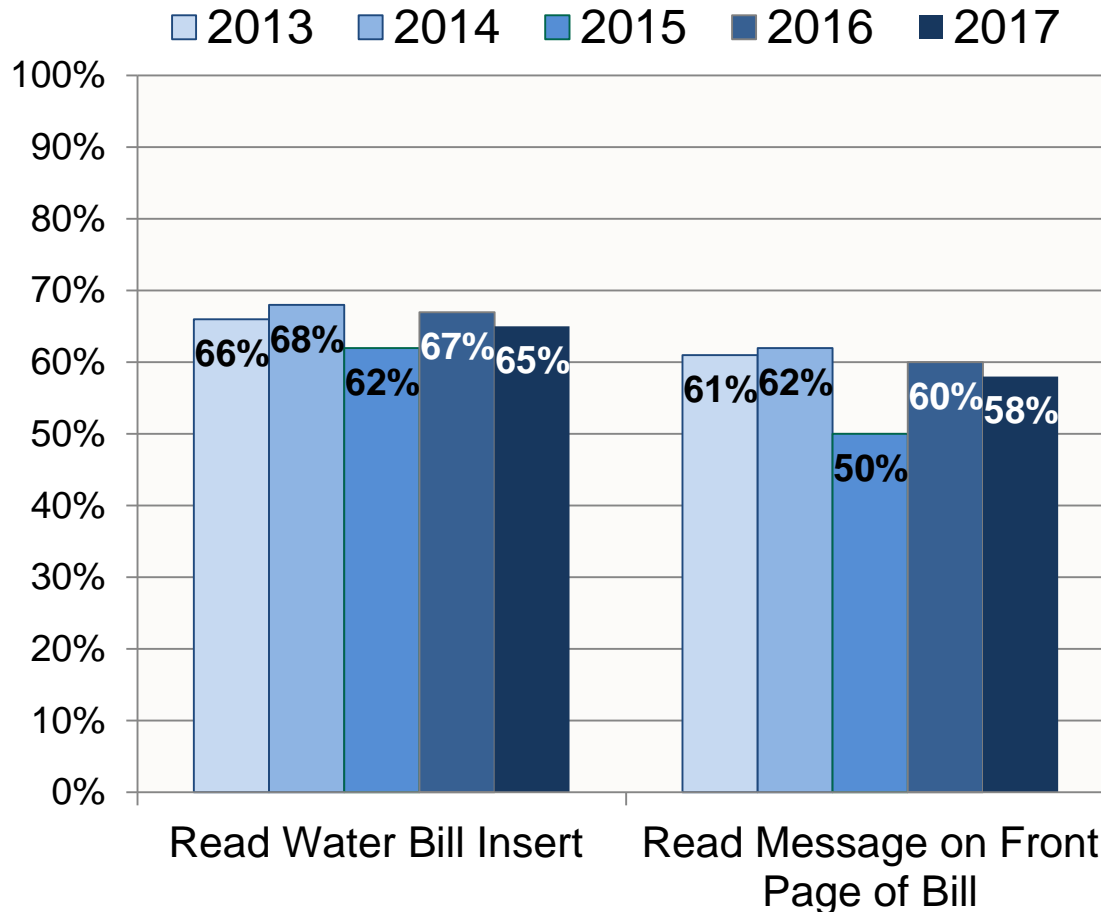


Significant Demographic Differences in Level of Concern about Rate Increases - 2017

The demographic groups most concerned about rate increases were: (1) commercial respondents, or (2) residential respondents who were age 65+, who had 20 or more years of residency, and/or who lived alone. There were, however, no significant differences for this attribute by gender, lot size, household income, or race/ethnicity.



Attention to Written Messages in the Water Bill – 2013-2017



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

- The percentage who read the bill insert has been consistently in the 62-72% range since 2008, including 65% this year.

- The percentage who read the front page message has been consistently in the 50-62% range, including 58% this year.

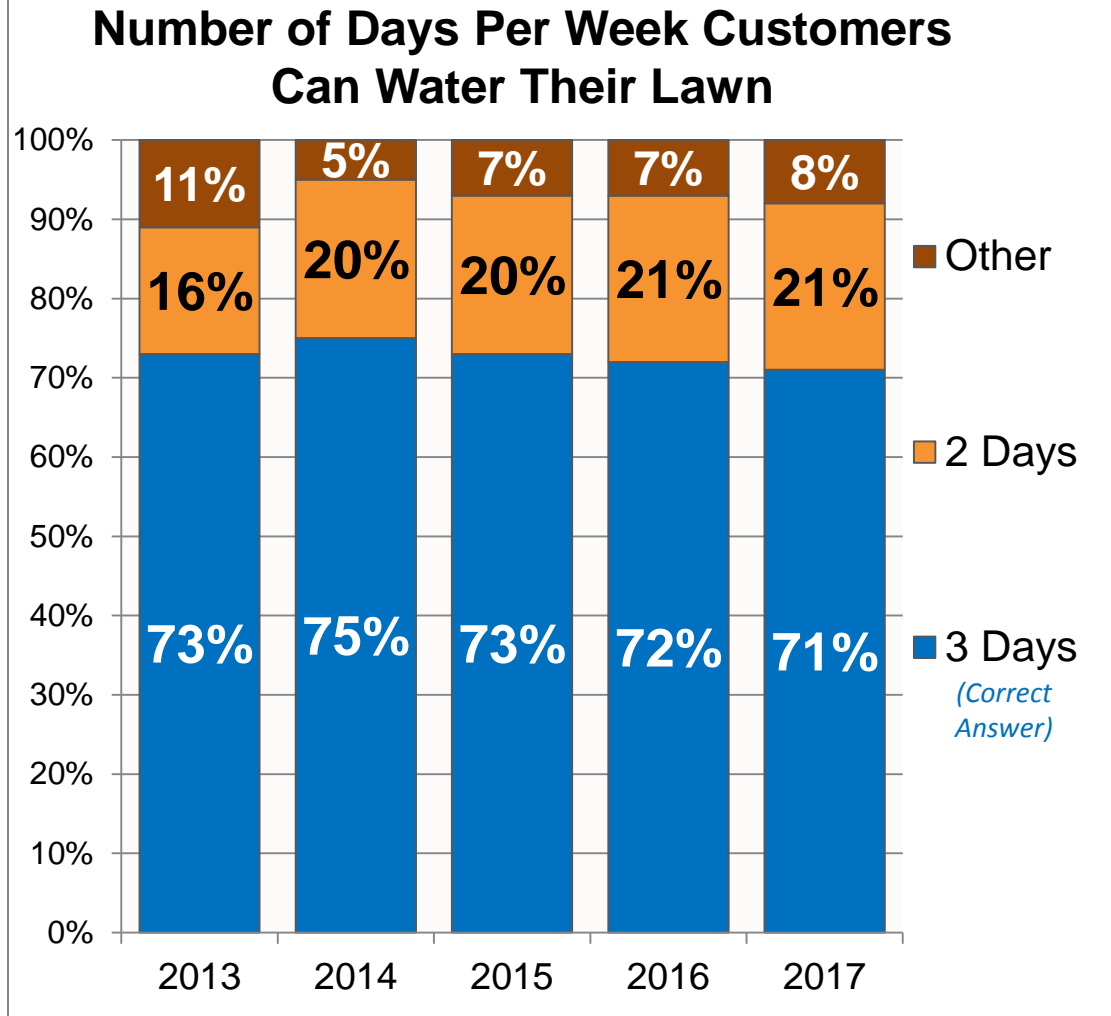
Overall, 75% of respondents read either the insert (17%), the front page message (10%), or both (48%); 25% read neither one.

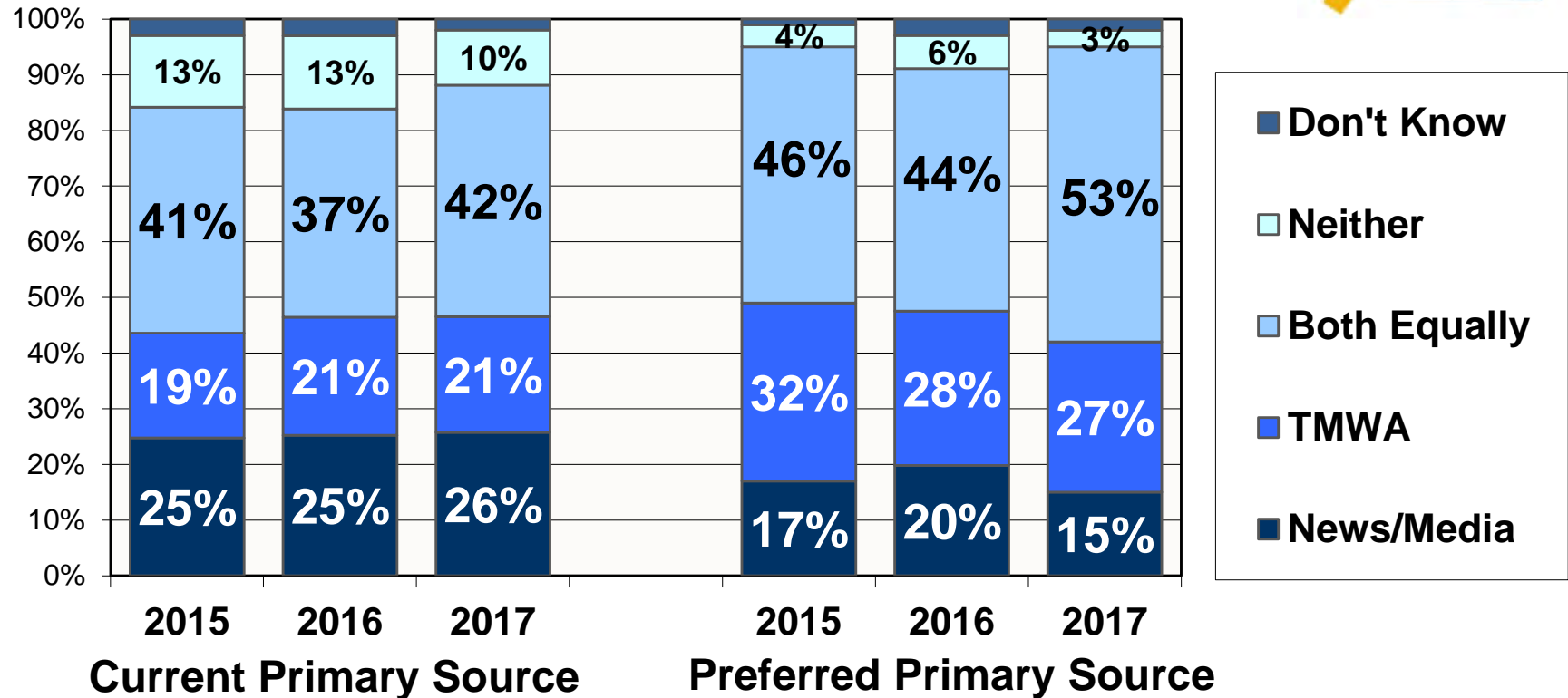
Assigned Day Watering Awareness

2013 - 2017



- Over the past 10 years, at least 9 out of 10 respondents have been aware of Assigned Day Watering, including 94% in 2017.
- In 2017, two out of three (68%) had a lawn that they water.
- Among those who were aware of Assigned Day Watering and had a lawn, 71% reported that they could water 3 days a week; the decline from 75% in 2014 to 71% this year was not statistically significant, but may foreshadow a trend.
- Respondents with lot sizes of one-quarter acre or more were more likely than were those with smaller lots to report that they could water their lawn 3 days a week (83% vs. 70%).

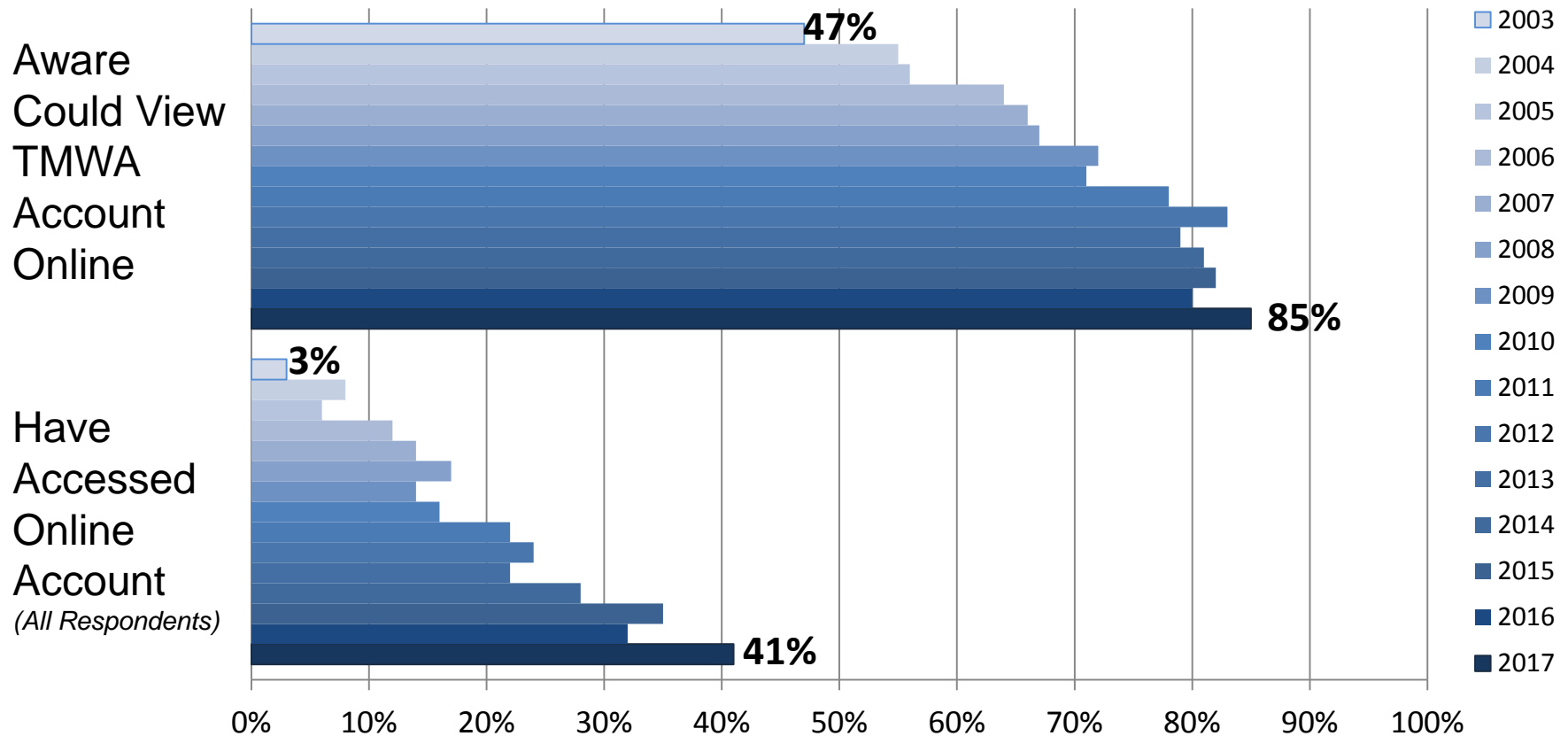




- In 2017, slightly more respondents received information about drinking water from the local news/media (26%) than from TMWA (21%), although more respondents would prefer to receive this information from TMWA (27%) than the local news/media (15%).
- In 2017, over half (53%) reported that they would prefer to receive this information from both the local news/media and TMWA, up from 44% last year.

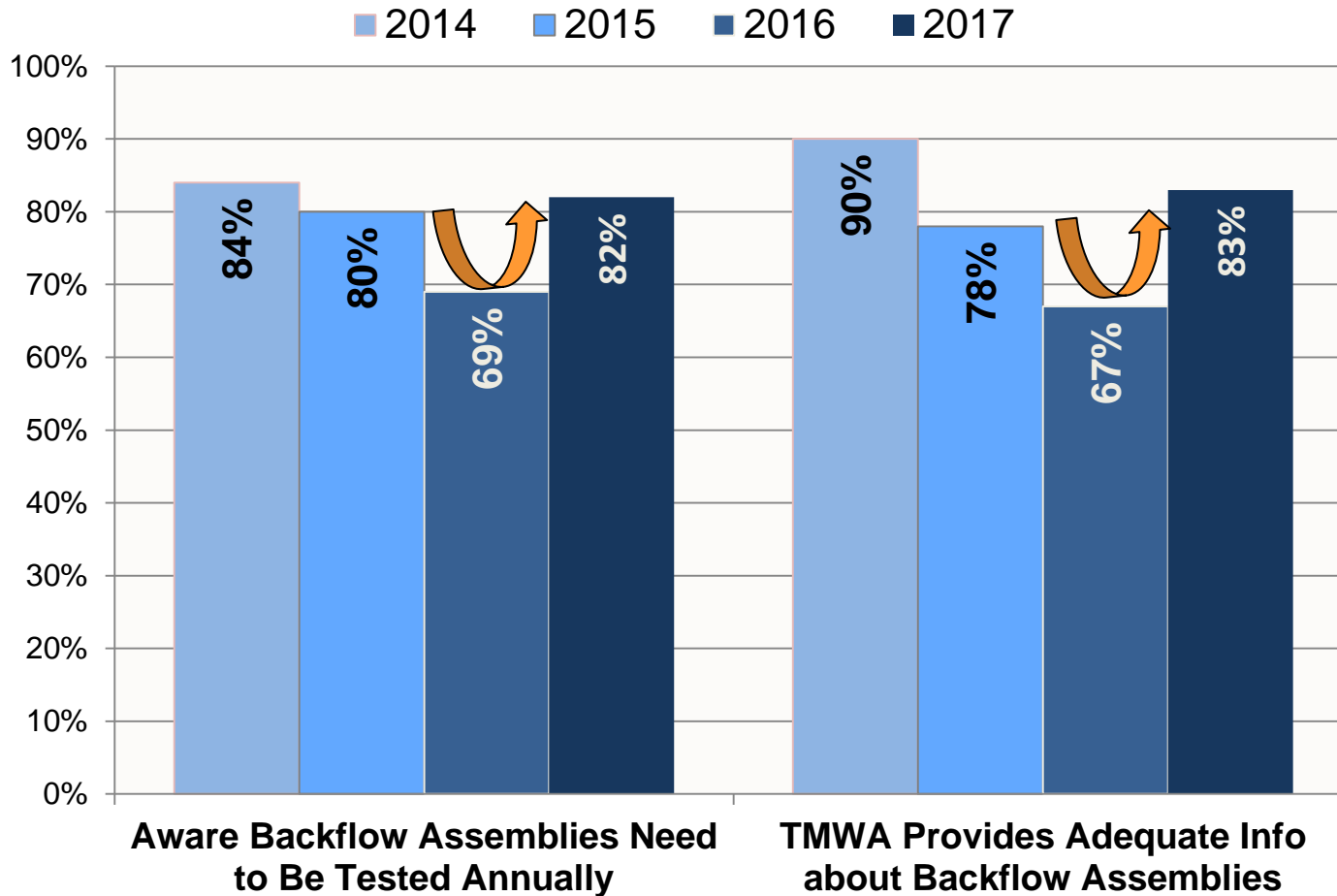


TMWA Online Accounts – 2003-2017



- In 2017, 85% of respondents were aware that they could view their TMWA account online, up from 80% last year and the highest percentage to date.
- In 2017, two out of five respondents (41%) had accessed their online TMWA account, up from 32% in 2016 and the highest percentage to date.
- Residential respondents were more likely to have accessed their online TMWA account (44%) than were commercial respondents (32%).

Commercial Respondents and Backflow Assemblies – 2014-2017



Among commercial respondents, the two ratings regarding backflow assemblies rebounded up in 2017.



2017 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 2017, 92% favorable – " Outstanding. " Rating remained stable with a similar score as last year (93%).
<u>Commercial:</u> Achieve at least 77% favorable ratings; 88%-90% is "excellent" and over 90% is "outstanding"	In 2017, 93% favorable – " Outstanding. " Rating remained stable with the same score as last year (93%).

Communication Initiatives	
Increase awareness of <u>value</u>	Stable. In 2017, 74% rated <u>value for price</u> as excellent or good, similar to 75% last year.
Increase awareness of <u>water quality</u>	Increased. In 2017, 64% reported "never" having problems with the taste of the drinking water, up from 58% last year, 52% in 2015, and 45% in 2014.
Increase awareness of opportunities for <u>public input</u> in decision making	Stable. In 2017, the mean rating for using public input was 7.9; this rating has been statistically stable since 2012.



Customer Satisfaction Study Fiscal Year 2017





STAFF REPORT

TO: Board of Directors
THRU: Mark Foree, General Manager
FROM: Shawn Stoddard PhD, Senior Resource Economist
DATE: **October 4, 2017**
SUBJECT: **Presentation of TMWA's population projection and projected growth in water demands**

Summary

- There are three locally-produced Washoe County population projections (Nevada State Demographer, TMWA, and Truckee Meadows Regional Planning Agency (TMRPA).
- Population projections are greatly dependent on economic and demographic conditions at the time they are created and should be updated more frequently when those conditions are rapidly changing.
- Currently, all three of the above population projections are showing similar population growth through 2030.
- Water use reductions caused by economic and weather-related events have been greater than population related increases water use.

Discussion

Population is the driving force behind the number of water customers and water use. Over the last decade population projections varied greatly as this community went through several economic downturns and recoveries. This report briefly describes the population models used by the State Demographer, TMRPA, and TMWA, how they have varied over time, and the results of current population projections compared with historic and projected water use for 2003 to 2027.

1. Demographer's Population Projection

The Demographer provides certified annual population estimates for all Nevada counties, cities, and towns and county population projections. The Demographer's projections are currently the most-detailed and are developed using the Regional Economic Models, Inc (REMI) model. The REMI model provides information for all Nevada counties broken down by 23 major economic sectors. The REMI model looks at the interaction between the economic and demographic characteristics of a county and the United States as a whole. The Demographer's

20-year projections are produced annually and will change as data becomes available or is revised and information about future developments becomes available. Because REMI looks at the relationship between changes in the economy and population, it is a useful tool for analyzing how changes in the structure of the population or economy can impact each other. Figure 1, shows the Demographer's last four projections.

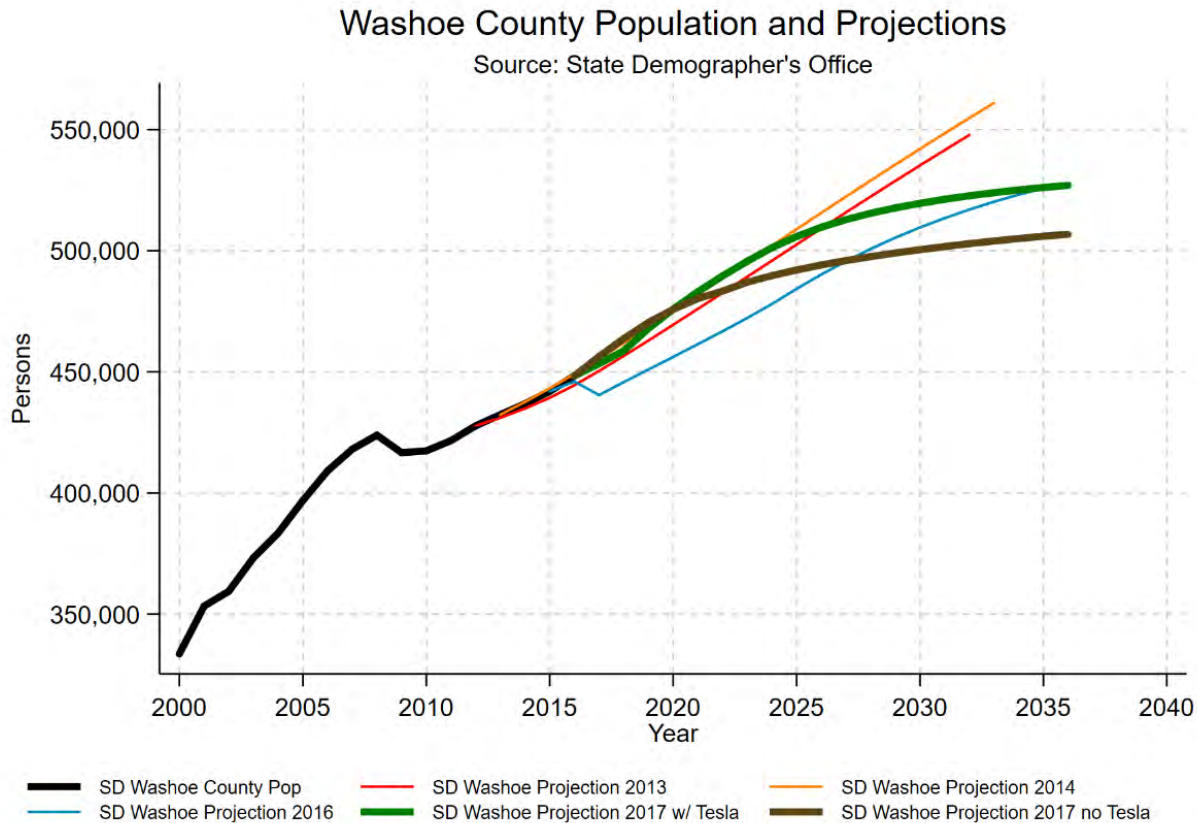


Figure 1: Summary of past Demographer's Washoe County population projections.

2. TMWA's Logistic Curve Model

TMWA has developed a logistic curve population model of Washoe County using annual population estimates from 1950 to 2016. Each projection is calibrated such that the first year of the projection is always equal to the last observed population value. While the Demographer's population projection is based on both population and demographic data and limited to a 20-year projection, TMWA's logistic curve model provides a projection of total population over time and an estimate of the population ceiling. TMWA's model is used for both short-term and long-range resource planning purposes. Figure 2, shows the last five TMWA population projections.

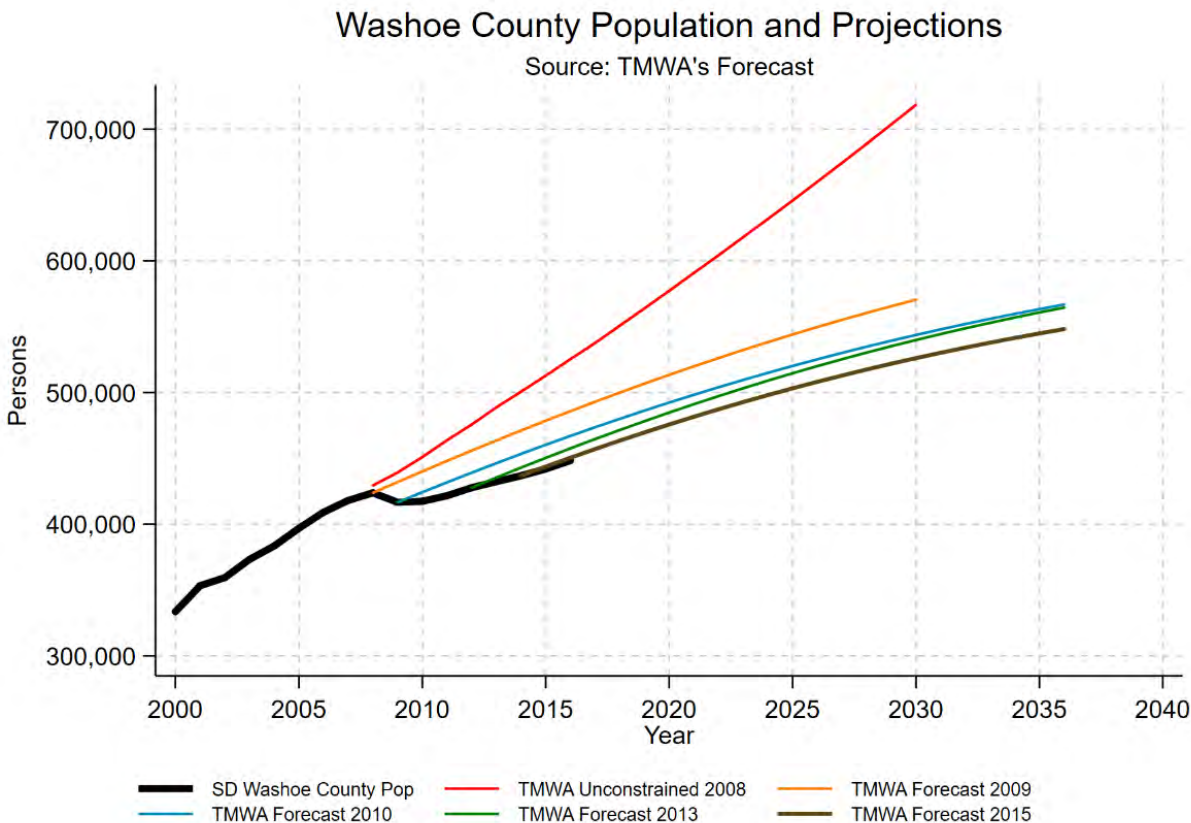


Figure 2: Summary of past TMWA projections

3. TMRPA's Consensus Forecast

The Consensus Forecast is an average of three projections, two of which must be the Demographer and TMWA's projections. A third projection is generally purchased from one of the major population forecasting companies. The Consensus Forecast varied greatly between 2003 and 2016. The 2003 forecast lines up well with the 2016 forecast, almost as if the economic boom and recession never happened. This is a very good example of how a forecast is influenced by current factors and can and will generally miss external events. This is the primary reason that all projections must be updated regularly and even more frequently if conditions are changing rapidly. Figure 3, shows the Consensus Forecast from 2003 to 2016.

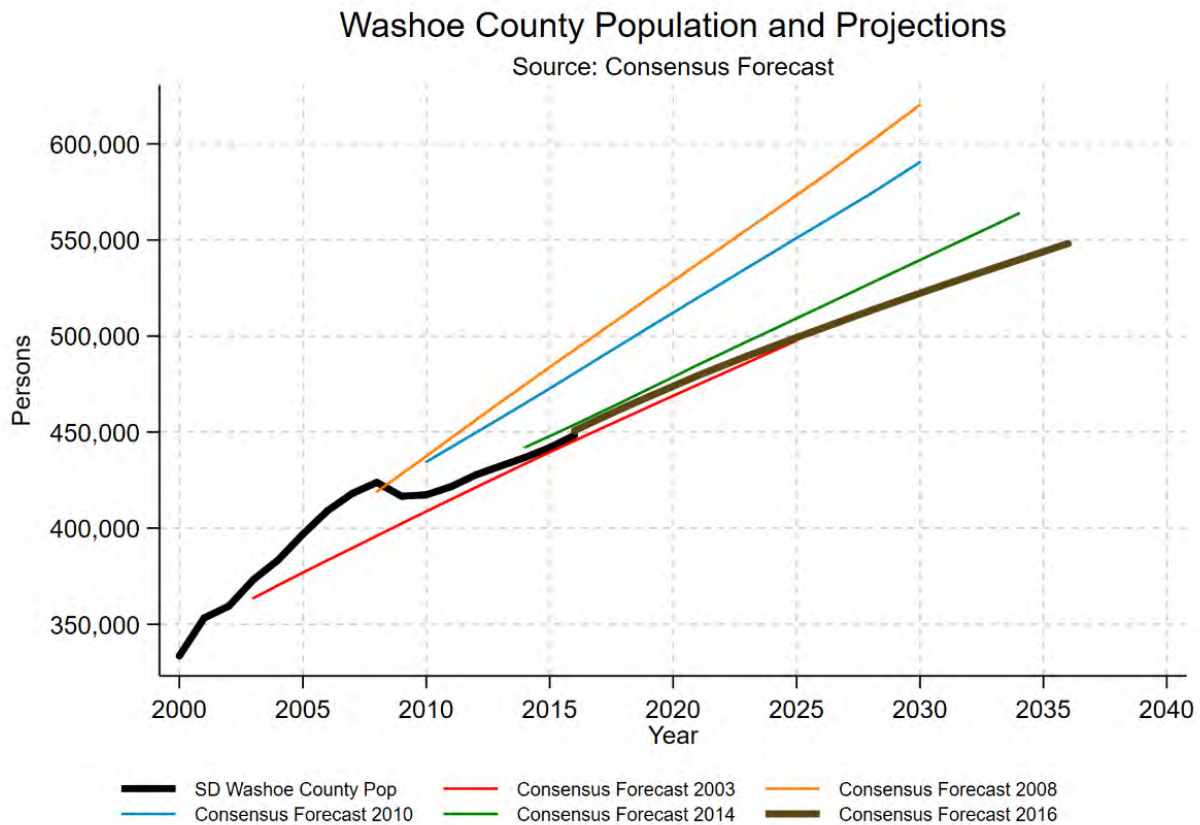


Figure 3: Summary of past Washoe County Consensus Forecasts.

TMWA's 2017 Population Projection

TMWA's current population projection has been updated to include the 2016 population estimate of 448,316 persons, which is the most-recent estimate of Washoe County's population by the Demographer. Figure 4 compares the current model with historic population and shows that the model is a good fit to the historic data and is very close to recent population estimates.

Figure 5 shows the population model forecasting population to year 2100 along with the current Demographer and TMRPA projections. The projected population ceiling is 596,000 persons. Currently, there is very good agreement among all three projections through the next 10 years.

The population model shows how, over time, the actual population cycles above and below the modeled population. This provides support for using a long-run model that can be calibrated to the last observed population value. Figure 6 is a more-detailed graph of TMWA's current population projection.

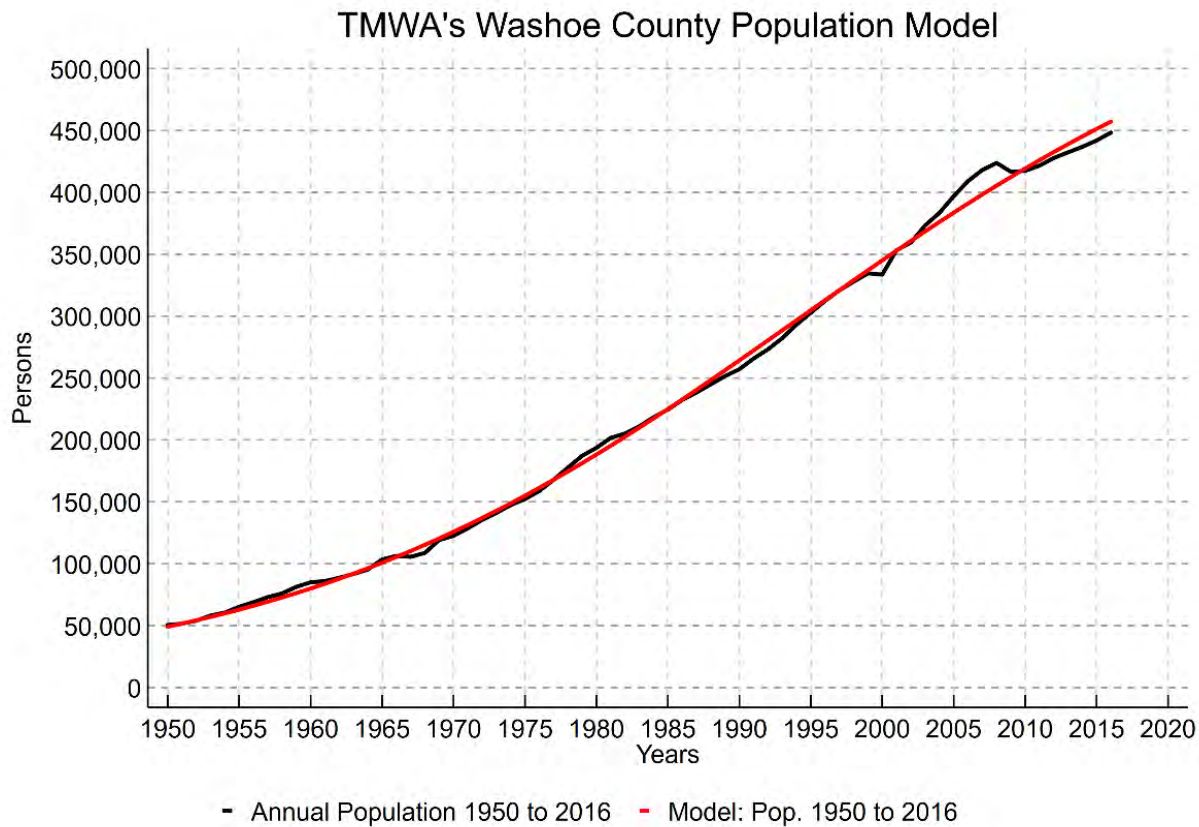


Figure 4: Population and population model 1950 to 2016.

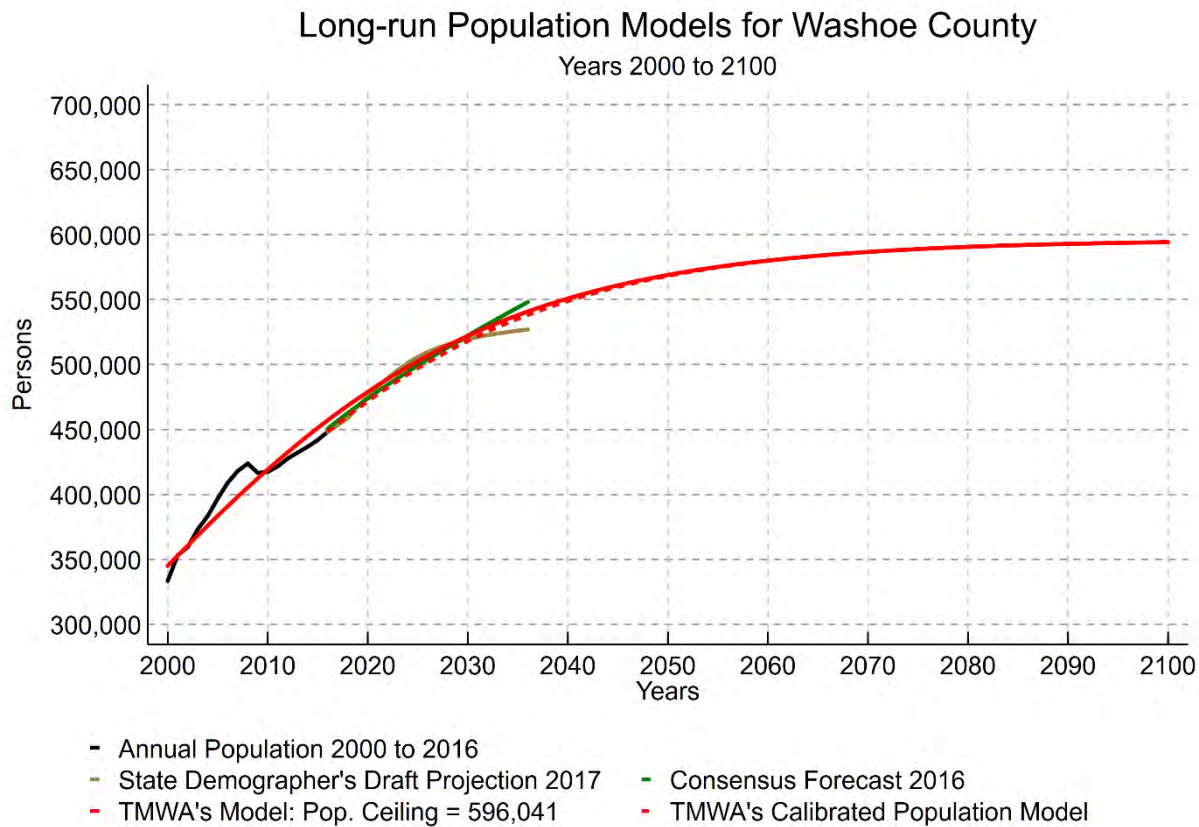


Figure 5: population projection through 2100.

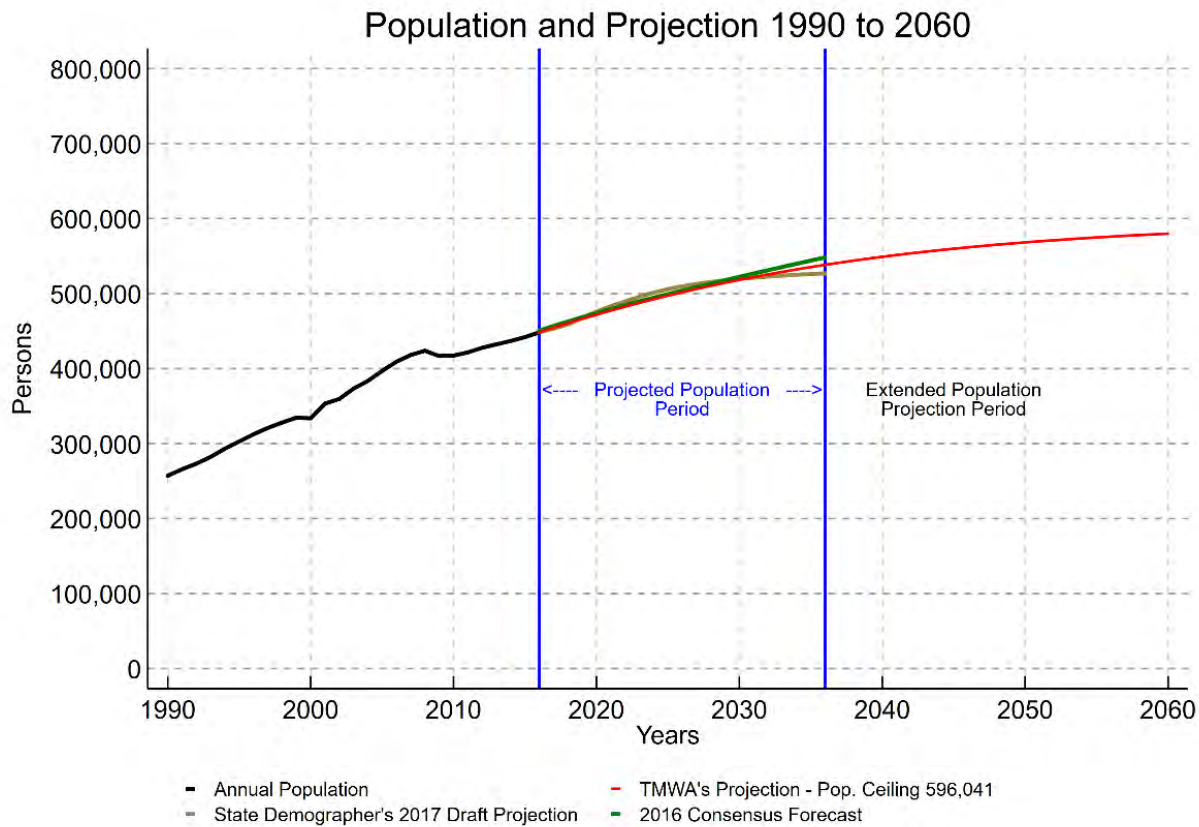


Figure 6: Actual and Projected Population from 1990 through 2060.

Population and Water Use

The historic and projected population and water use for fiscal years 2004 to 2027 are taken from TMWA’s 2017 population projection and current operating revenue model for fiscal years 2018 to 2027. The two are related in that population is the greatest driver for the number of customer connections and water use. However, individual water use can vary greatly over time due to many different factors (wetter than normal springs, drought, economic recessions, hotter/dryer summers). Figure 7 shows historic water use and population for fiscal years 2004 to 2017 and what is currently projected for both water use and population over the next 10 fiscal years. While both are expected to grow over time, the expected water use is not projected to return to 2004 levels until 2027.

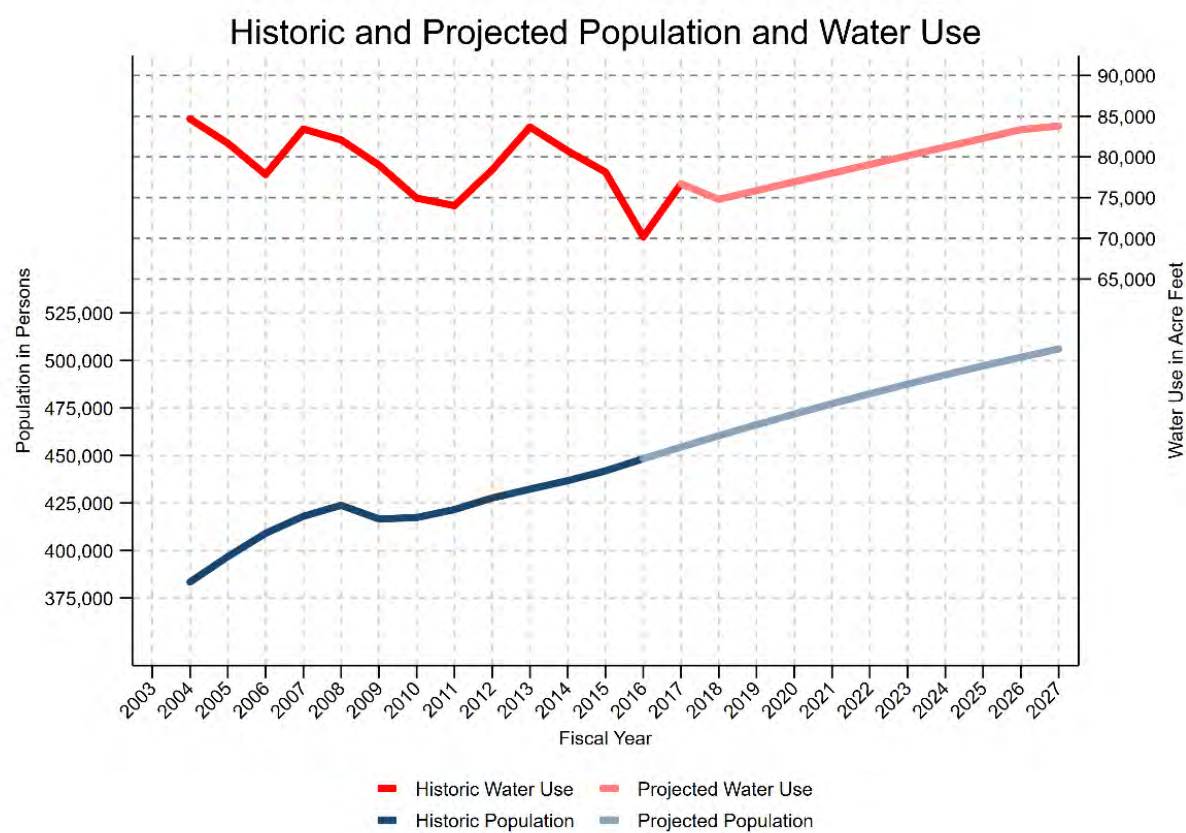


Figure 7: Historic and projected population and water use 2004 to 2027.



STAFF REPORT

TO: Chairman and Board Members
FROM: Mark Foree, General Manager
DATE: October 9, 2017
SUBJECT: Presentation of TMWA Goals and Objectives Results for Fiscal Year 2017

Discussion of Results

Please find attached an at-a-glance summary as well as the detailed measurement results for TMWA's corporate and departmental goals for the 2017 fiscal year. Where appropriate, TMWA uses the American Water Works Association (AWWA) Benchmarking Survey Results for some of the goals to measure against. Below is a summary highlighting the results for specific organizational and departmental goals that required more detail.

Organization Goals

Safety: *Goal 1:* "Safety Incident Rate", had a result of 2.5 average incident rate for Water Supply & Irrigation Systems – Local Government which is significantly lower than the 5.4 average incident rate for water supply & irrigation systems; the good news is that most of the injuries were minor and the employees could make their next scheduled shift. *Goal 2:* The preventable vehicle accidents had a result of 4.4 accidents per 1,000,000 miles driven, which is lower than the industry average of 5.57; all vehicle accidents were also minor, with no injuries and all accidents did not involve a third party. TMWA staff continues to implement the vehicle safety protocol; the 360° walk-around.

Financial: *Goal 5:* We reaffirmed TMWA's Moody's rating of Aa2 and improved S&P rating to AA+ improved (from AA). TMWA refunded (refinanced) its 2007 Bonds (202.9 million), and obtained a net present value savings of \$15.9 million, or 7.8% while eliminating \$55.5 million in outstanding principal. *Goal 8:* The goal to maintain a low debt ratio result was 45% putting us between the median and bottom quartile. Due to our level of debt financing, we understood that we would not meet this goal, but wanted to establish a baseline as we continue to reduce our debt.

Department Goals

Treatment: *Goal 1:* While no longer in a drought, but due to the extreme wet winter, imminent flooding of the river resulting in high turbidity, and additional research in an attempt to optimize treatment, staff was unable to meet the target for treatment cost per million gallons. The treatment

staff continued to challenge itself by meeting the effluent turbidity total of 0.10 NTU's 100% of the time, which is an "outstanding" rating.

Distribution: *Goal 1:* Unplanned customer outage hours compared to national benchmarks were in the top quartile for outages less than 4 hours in duration, but were in the bottom quartile for outages between 4 - 12 hours. *Goal 2:* We were between the median and top quartile for the planned customer outage hours less than 4 hours in duration, but were in the bottom quartile for outages between 4 – 12 hours.

Customer Service: *Goal 1:* We did not meet the average call handle time goal of 4 minutes, 30 seconds with a result of 4 minutes 40 seconds. The reasons for not meeting this goal were due to the high volume and length of calls regarding the rate adjustment and high turn-over rate at the call center. *Goal 8:* We did not meet the top quartile of 4.3 for billing accuracy this fiscal year as compared to the AWWA benchmarking. A few reasons include a number of weather related incidents beyond our control. Moving forward, we will isolate billing inaccuracies more effectively to have a more accurate result to report in FY18.

Natural Resources: *Goal 1:* We maximized the benefit of Truckee River Operating Agreement (TROA) implementation by maintaining elevation of Donner Lake for summer 2016, used only 3,147 acre-feet (AF) of POSW from Donner Lake to meet TMWA customer demand during Sept 10-Oct 12, 2016, and managed upstream releases of TMWA owned water rights so that 39,460 AF of stored water was carried over under TROA at the start of 2017. *Goal 2:* TMWA staff participated in 6 presentations (versus goal of 10 presentations) and 4 community-wide workshops. *Goal 3:* TMWA successfully recharged an additional 7 wells, a total of 25 fully permitted recharge wells in the system and 700 AF was recharged, which ended in January due to the record precipitation. TMWA is working with the Nevada Division of Water Resources for permit coverage on 27 additional wells and the semi-annual report on groundwater aquifers was presented in September 2017. *Goal 4:* Obtained approval from the State Engineer for water right permit applications which added the Mt. Rose Water Treatment Plant point of diversion. Army Corps of Engineers permit for stream diversion construction is expected in October 2017. *Goal 5:* Successfully opposed Assembly bill 193 (Fluoride) and other proposed legislation that would have been detrimental to TMWA customers and participated in stakeholder meetings regarding Southern Nevada Water Authority's proposed legislation on 3M plans to protect TMWA's interests. Purchased approximately 42 AF of surface water rights at prices substantially below Rule 7 Inventory price. Monitoring Rule 7 Inventory daily and reporting monthly. Evaluating opportunities to obtain creek rights capable of serving demand, return flow, or recharge projects.

Engineering and New Business: *Goal 2:* continue to reflect major capital projects completed generally on time and approximately \$5.1 million below budget. *Goal 3:* For new business turnaround time goals, TMWA's results were on average 84% versus 75% for meeting the 30-day turnaround goal and were on average 99% versus 100% for meeting the 60-day turnaround goal. This was a good result considering the large increase in projects due to growth.

Business Information Systems (BIS): BIS far exceeded their results for all goals except one, *Goal 3:* TMWA did not complete development of a Capital Project workflow due to implementing other workflow processes upon hiring of the new Engineering Manager, but staff has completed 90% of the project with only final review and testing to be completed in FY18.










TRUCKEE MEADOWS WATER AUTHORITY

FY 2017

GOALS & OBJECTIVES

AT-A-GLANCE


RESULTS











ORGANIZATION		AWWA BENCHMARK/ INDUSTRY STANDARD	MEASURE	TARGET	FY RESULTS
Customer Satisfaction	Goal 1: Residential Customers Totally or Mostly Satisfied.	71%-81% = Good 82%-86% = Excellent 86% + = Outstanding	% of residential customer's satisfaction	At least 86% residential customer satisfaction	91.6% 
	Goal 2: Commercial Customers Totally or Mostly Satisfied.	77%-87% = Good 88%-90% = Excellent 90% + = Outstanding	% of commercial customer satisfaction	At least 90% commercial customer satisfaction	93% 
	Goal 3: Meet the Vertex contract requirement of 80% of calls answered within 35 seconds.		% of calls answered within 35 seconds	80%	84.8% 
Efficiency	Goal 1: Track customer accounts per employee and compare to national benchmark.	Top Quartile = 583 Median = 428 Bottom = 331	# of accounts per employee	Top quartile	600 
	Goal 2: Track average MGD delivered per employee and compare to national benchmark.	Top Quartile = 0.33 Median = 0.25 Bottom = 0.16	Average MGD delivered per employee	Top quartile	0.33 
Safety	Goal 1: TMWA will maintain a Safety Incident Rate graded on the following scale: Needs Improvement: Incident rate over 5.5 Good: Incident rate of 3 – 5.5 Excellent: Incident rate of less than 3	Industry Standard Bureau of Labor Statistics 2014: 5.4 Average Incident Rate for Water Supply & Irrigation Systems – Local Government	Average number of incidents	5.4 or less incidents	2.5 
	Goal 2: Track Collisions Per Million Miles (CPMM) and compare against Network of Employers for Traffic Safety Fleet Safety Benchmark Report (Reporting for North America Only, All Vehicles).	2015 CPMM for North America Only, All Vehicles: Composite rating is 5.57 per 1,000,000 miles driven	# of collision per 1,000,000 miles driven	Less than 5.57	4.4 









LEGEND:









Completed/On Target: 









Not on Track: 

Critical: 











ORGANIZATION		AWWA BENCHMARK/ INDUSTRY STANDARD	MEASURE	TARGET	FY RESULTS
Financial	Goal 1: Meet all bond covenants.		# of bond covenants met	100%	100% 
	Goal 2: Meet or underspend Capital Commitments as approved by the Board.		\$ spent	Met or underspent	\$14.9M (31%) Underspent 
	Goal 3: Meet or underspend O&M Budget Commitments.		\$ spent	Met or underspent	\$2.7M (5.4%) Underspent 
	Goal 4: Update Five Year Funding Plan.		Update completed	100%	100% 
	Goal 5: Preserve or improve TMWA's excellent credit ratings by the two major credit rating bureaus S&P (AA stable) and Moody's (Aa2 stable).		Maintain or improve credit ratings	AA /Aa2 - stable or better	AA+ improved S&P Aa2 maintained Moody's 
	Goal 6: Create 5-year financial projection, for credit rating, and for future debt issuance/restructuring purposes.		Projection completed	100%	100% 
	Goal 7: Investigate debt restructuring opportunities from a consolidated water utility perspective that can bring significant measurable savings from a long term perspective.			Debt restructured, if savings realized	Debt restructured with PV savings of 7.86% and \$15.9M 
	Goal 8: Maintain a low debt ratio.	Top Quartile = 17% Median = 32% Bottom = 59%		Median	45% 
	Goal 9: Sustain a minimum of 517 days of cash reserve.	Top Quartile = 517 Median = 258 Bottom = 139		Top quartile	959 days 
	Goal 10: Maintain a debt-service coverage ratio of 1.5.	Top Quartile = 2.62 Median = 1.45 Bottom = 0.47		1.5	1.81 

DEPARTMENT		AWWA BENCHMARK/ INDUSTRY STANDARDS	MEASURE	TARGET	FY RESULTS
Treatment	Goal 1: Meet the treatment costs set according to anticipated production.		Achieve \$/MG in the respective production category	24,000 = \$462/MG 25,000 = \$444/MG 26,000 = \$427/MG	\$439.83/MG (25,881.24 MG produced) 
	Goal 2: Meet the benchmark of 0 MCL violations.		# of MCL violations	0	0 
	Goal 3: Maintain effluent turbidity 95% of the time at less than: 0.20 NTU is Good; 0.15 NTU is Excellent; 0.10 NTU is Outstanding.	At less than: 0.30 NTU = EPA Standard 0.20 NTU = Good; 0.15 NTU = Excellent; 0.10 NTU = Outstanding	NTU	≤ 0.10 NTU	≤ 0.10 NTU 100% Outstanding 
Distribution	Goal 1: Track system reliability by calculating unplanned outage hours per 1000 customers and compare to national benchmarks.		# of unplanned outages/1,000 customers	Median or better	
	< 4 hours	Top Quartile = 0.31 Median = 1.30 Bottom = 2.73			0.16 
	4 – 12 hours	Top Quartile = 0.00 Median = 0.24 Bottom = 0.56			0.58 
	Goal 2: Track system reliability by calculating planned outage hours per 1,000 customers and compare to national benchmarks.		# of unplanned outages/1,000 customers	Median or better	
	< 4 hours	Top Quartile = 0.00 Median = 0.53 Bottom = 1.83			0.32 
	4 – 12 hours	Top Quartile = 0.00 Median = 0.10 Bottom = 0.64			1.72 
	Goal 3: Maintain 95% Hydroelectric plant generation availability based on available River flows.		% hydro generation availability	95%	99% 

DEPARTMENT		AWWA BENCHMARK/ INDUSTRY STANDARDS	MEASURE	TARGET	FY RESULTS
Customer Service	Goal 1: Customer Call Center will average a call handle time of 4 minutes, 30 seconds or less.		Average handle time per call	4 min, 30 seconds or less	4 min, 40 seconds 
	Goal 2: Achieve a monthly average of 4 non-weather estimates on all meter reads.		Monthly average of non-weather estimates	4/month or less	0.66/month 
	Goal 3: The fiscal year average for disconnect for non-payment service orders to active accounts will be 0.30% or less.		% average of disconnects for non-payment	0.30% or less	0.22% 
	Goal 4: The write off to revenue will be 0.25% or less at fiscal year-end.		% of write off to revenue	0.25% or less	0.16% 
	Goal 5: Hold a minimum of 18 public workshops and/or tours with a primary focus on responsible water use and education.		# of public workshops and/or tours	18 or more	26 
	Goal 6: Achieve 100% backflow testing compliance for all new construction and TMWA-owned devices, as well as 100% continued notification for backflow testing compliance for all existing customers.		% of backflow testing compliance achieved	100%	100% 
	Goal 7: Perform 175 backflow retrofits.		# of backflow retrofits	175 or more	211 
	Goal 8: Maintain a high level of billing accuracy	Top Quartile = 4.3 Median = 8.1 Bottom = 28.5		Top quartile	9.75 

DEPARTMENT	MEASURE	TARGET	FY RESULTS
Natural Resources	Goal 1: Maximize benefit of TROA implementation.	Maximize upstream storage under TROA within hydrological and operational constraints.	100% 
	Goal 2: Increase community awareness and understanding of TROA and its benefit to our area's municipal water supply.	Continue giving presentations to customer/industry groups regarding the benefits of TROA to the area's municipal water supply.	At least 10 presentations, 3 workshops 6 presentations 4 workshops  
	Goal 3: Optimize aquifer storage and recovery (ASR) and passive recharge capabilities and operations.	Analyze effectiveness of ASR and passive recharge on a well-by-well basis within each basin. Complete semi-annual report describing ASR and passive recharge goals and results	100% 
	Goal 4: Continue permitting process for Mt. Rose Water Treatment Plant with goal to be fully-operational by the winter of 2018.	Seek approval from State Engineer of necessary water right permits and from Army Corps of Engineers for stream diversion construction.	100% 
	Goal 5: Review, monitor, and advise the Board regarding 2017 bills that may affect TMWA and carryout Board-approved lobbying efforts.	Present summary of bills to, and carryout lobbying efforts as directed by the Board.	100% 
	Goal 6: Continue active role in maintaining sufficient water rights inventory, analyze purchase opportunities.	Maintain sufficient water rights inventory	Monthly Board report 100% 
	Goal 7: Turn around new business application water rights work within 10 days.	# of days turnaround new business application	10 days or less 3 days or less 

*Please see staff report for a detailed description of FY17 results.

DEPARTMENT		AWWA BENCHMARK/ INDUSTRY STANDARDS	MEASURE	TARGET	FY RESULTS
Engineering & New Business	Goal 1: Continue cooperative coordination with Agencies and complete projects on schedule. Survey agency satisfaction with utility coordination effort.	1 = Unacceptable 2 = Needs Improvement 3 = Good 4 = Commendable 5 = Outstanding	Average response rate	4 or higher	4.7 
	Goal 2: Deliver required in-service dates for major capital projects on/under budget.		\$10,810,000 Budget	Met or underspent	Spent \$5,675,835 
	Goal 3: Continue to measure and report new business turnaround times.	75% ≤ 30 days 100% ≤ 60 days	% turnaround in ≤ 30 or ≤ 60 days	75%	CwM: 83%  CS: 98%  Sub: 71% 
				100%	CwM: 100%  CS: 99% Sub: 98%
Business Information Systems (BIS)	Goal 1: Complete the mapping of New Business 'as-built' drawings within 10 days or less.		# of days mapping of 'as-built' drawings of 'redline' drawing submittal.	10 days or less	3.44 days 
	Goal 2: Close helpdesk tickets within 48 hours or less.		Average # of hours between the creation and closing of Helpdesk tickets.	≤ 48 hours	44.89 hours 
	Goal 3: Project goal: Development of a Capital Project workflow in PLL by June 30, 2017.		Implementation of the workflow necessary to track various departments' tasks as required for Capital Projects.	100%	90% 
	Goal 4: Project goal: Development of TMWA Business Continuity/Disaster Recovery Plan by June 30, 2017.		Development of process and implementation of infrastructure or tools necessary to provide business continuity.	100%	100% 



TRUCKEE MEADOWS WATER AUTHORITY

FY 2017




GOALS & OBJECTIVES

DETAIL

RESULTS



ORGANIZATION GOALS

Customer Satisfaction

GOALS		BENCHMARKS/ RATINGS	MEASURE	TARGET	RESULTS
1	Using the Customer Satisfaction Survey TMWA will report the percentage of its residential customers that are totally or mostly satisfied with the overall performance of the Company on the following scale:	<ul style="list-style-type: none"> 71% - 81% = Good Performance 82% - 86% = Excellent Performance 86% + = Outstanding Performance 	% of residential customer's satisfaction	At least 86% residential customer satisfaction	91.6% 
2	Using the Customer Satisfaction Survey TMWA will report the percentage of its commercial customers that are totally or mostly satisfied with the overall performance of the Company on the following scale:	<ul style="list-style-type: none"> 77% - 87% = Good Performance 88% - 90% = Excellent Performance 90%+ = Outstanding Performance 	% of commercial customer satisfaction	At least 90% commercial customer satisfaction	93% 
3	Meet the Vertex revised contract requirement of 80% of calls answered within 35 seconds.		% of calls answered within 35 seconds	80%	84.8% 

ORGANIZATION GOALS

Efficiency

GOALS		BENCHMARKS/ RATINGS	MEASURE	TARGET	RESULTS
1	Track customer accounts per employee and compare to national benchmark.	AWWA Benchmark Top Quartile = 583 Median = 428 Bottom Quartile = 331	# of accounts per employee	Top quartile	600 
2	Track average MGD delivered per employee and compare to national benchmark.	AWWA Benchmark: Top Quartile = 0.33 Median = 0.25 Bottom Quartile = 0.16	Average MGD delivered per employee	Top quartile	0.33 



Notes:

Goal 1 Calculation: $\frac{122,930 \text{ Customer Accounts}}{205 \text{ Employees}}$

Goal 2 Calculation: $\frac{67.1 \text{ Average MGD}}{205 \text{ Employees}}$

ORGANIZATION GOALS

Safety

GOALS		BENCHMARKS/ RATINGS	MEASURE	TARGET	RESULTS
1	TMWA will maintain a Safety Incident Rate graded on the following scale: Needs Improvement: Incident rate over 5.5 Good: Incident rate of 3 – 5.5 Excellent: Incident rate of less than 3	Industry Standard Bureau of Labor Statistics 2014: 5.4 Average Incident Rate for Water Supply & Irrigation Systems – Local Government	Incident rate	5.4 or less	2.5 
2	Track Collisions Per Million Miles (CPMM) and compare against Network of Employers for Traffic Safety Fleet Safety Benchmark Report (Reporting for North America Only, All Vehicles).	2015 CPMM for North America Only, All Vehicles: Composite rating is 5.57 per 1,000,000 miles driven.	# of collision per 1,000,000 miles driven	Less than 5.57	4.4 

Notes:

Goal 1 Definition: A safety incident is any incident listed on the OSHA300 log. This excludes incidents that only required first aid treatment. Manhours by all employees is the sum of hours worked by full time, part time, temporary and seasonal employees during the reporting period.

Calculation:

5 Accidents x 200,000 Manhours

393,836.55 Total Manhours

Goal 2 Definition: number of collisions per 1,000,000 miles driven.


Calculation:

5 Collisions x 1,000,000

1,144,328 Total Mileage

ORGANIZATION GOALS

Financial

GOALS		MEASURE	TARGET	RESULTS
1	Meet all bond covenants.	# of bond covenants met	100%	100% 
2	Meet or underspend the Capital Budget as approved by the Board.	\$ spent	Met or underspent	\$14.9M (31%) Underspent 
3	Meet or underspend the O&M Budget as approved by the Board.	\$ spent	Met or underspent	\$2.7M (5.4%) Underspent 
4	Update the 5-Year Funding Plan.	Update completed	100%	100% - Oct 2016 
5	Preserve or improve TMWA's excellent credit ratings by the two major credit rating bureaus S&P (AA stable) and Moody's (Aa2 stable)	Maintain or improve credit ratings	AA /Aa2 - stable or better	AA+ improved S&P Aa2 maintained Moody's 
6	Create 5-year financial projection, for credit rating, and for future debt issuance/restructuring purposes.	Projection completed	100%	100% 
7	Investigate debt restructuring opportunities from a consolidated water utility perspective that can bring significant measurable savings from a long term perspective.		Debt restructured, if savings can be realized	Debt restructured with PV savings of 7.86% and \$15.9M 
8	Maintain a low debt ratio.	AWWA Benchmark: Top Quartile = 17% Median = 32% Bottom = 59%	Median	45% 
9	Sustain a minimum of 517 days of cash reserve.	AWWA Benchmark: Top Quartile = 517 Median = 258 Bottom = 139	Top quartile	959 
10	Maintain a debt-service coverage ratio of 1.5.	AWWA Benchmark: Top Quartile = 2.62 Median = 1.45 Bottom Quartile = 0.47	1.5	1.81 






FY 2017

Calculations:

Goal 8:	$\frac{\$518,996,890 \text{ (Total Liabilities)}}{\$1,150,641,204 \text{ (Total Assets)}}$	
Goal 9:	$\frac{\$132,206,954}{\$50,340,024 / 365}$	$\frac{\text{Undesignated cash}}{(\text{O\&M} / 365)}$
Goal 10:	$\frac{\$97,268,183 - \$50,340,024 + \$7,301,268}{\$29,923,249}$	$\frac{(\text{Operating revenue} - \text{O\&M costs} + \text{Investment Income})}{\text{Total debt service}}$

DEPARTMENT GOALS

Treatment






GOALS		BENCHMARKS/ RATINGS	MEASURE	TARGET	RESULTS
1	Meet the treatment costs set according to anticipated production.	<ul style="list-style-type: none"> If Production is at or near 24,000 MG, TMWA will meet a cost of \$462/MG If Production is at or near 25,000 MG, TMWA will meet a cost of \$444/MG If Production is at or near 26,000 MG, TMWA will meet a cost of \$427/MG 	Achieve \$/MG in the respective production category	24,000 = \$462/MG 25,000 = \$444/MG 26,000 = \$427/MG	\$439.83/MG (25,881.24 MG produced) 
2	Meet the benchmark of 0 (Zero) MCL violations.	0 (Zero) MCL violations	# of MCL violations	0	0 
3	Maintain effluent turbidity 95% of the time.	At less than: <ul style="list-style-type: none"> 0.30 NTU = EPA Standard 0.20 NTU = Good; 0.15 NTU = Excellent; 0.10 NTU is Outstanding 	NTU	≤ 0.10 NTU	≤ 0.10 NTU 100% of the time Outstanding 

Calculation:

Goal 1: 25,881.24 MG produced at a cost of \$11,383,286.18/MG

DEPARTMENT GOALS

Distribution

GOALS		BENCHMARKS/ RATINGS	MEASURE	TARGET	RESULTS
1	Track system reliability by calculating unplanned outage hours per 1,000 customers and compare to national benchmarks.	AWWA Benchmark – A: Top = 0.31 Median = 1.30 < 4 hrs Bottom = 2.73	# of unplanned outages/1,000 customers <4 hrs	Median or better	0.16 
		AWWA Benchmark – B: Top = 0.00 Median = 0.24 4-12 hrs Bottom = 0.56	# of unplanned outages/1,000 customers between 4-12 hrs	Median or better	0.58 
2	Track system reliability by calculating planned outage hours per 1,000 customers and compare to national benchmarks.	AWWA Benchmark – A: Top = 0.00 Median = 0.53 < 4 hrs Bottom = 1.83	# of planned outages/1,000 customers <4 hrs	Median or better	0.32 
		AWWA Benchmark – B: Top = 0.00 Median = 0.10 4-12 hrs Bottom = 0.64	# of planned outages/1,000 customers between 4-12 hrs	Median or better	1.72 
3	Maintain 95% Hydro Plant Generation availability when river flow is available for generation (excluding planned maintenance and rehab, weather limitations and catastrophic failures).		% hydro generation availability	95%	99% 

Calculations:

Goal 1 A:
$$\frac{(1,000) 20.5 \text{ (Total Outage Hrs)}}{124,797 \text{ Total Customers}}$$









Goal 1 B:
$$\frac{(1,000) 72 \text{ (Total Outage Hrs)}}{124,797 \text{ Total Customer}}$$

Goal 2 A:
$$\frac{(1,000) 40.5 \text{ (Total Outage Hrs)}}{124,797 \text{ Total Customers}}$$

Goal 2 B:
$$\frac{(1,000) 214.75 \text{ (Total Outage Hrs)}}{124,797 \text{ Total Customers}}$$

DEPARTMENT GOALS

Customer Service

GOALS		MEASURE	TARGET	RESULTS
1	Customer Call Center will have an average call handle time of 4 minutes, 30 seconds or less per call.	Average handle time per call	4 min, 30 seconds or less	4 min, 40 seconds 
2	Achieve a monthly average of 4 non-weather estimates on all meter reads.	Monthly average of non-weather estimates	4/month or less	0.66 / month 
3	The fiscal year average for disconnect for non-payment service orders to active accounts will be 0.30% or less.	% average of disconnects for non-payment	0.30% or less	0.22% 
4	The write off to revenue will be 0.25% or less at fiscal year-end.	% of write off to revenue	0.25% or less	0.16% 
5	Hold a minimum of 18 public workshops and/or tours with a primary focus on responsible water use and education.	# of public workshops and/or tours	18 or more	26 
6	Achieve 100% backflow testing compliance for all new construction and TMWA-owned devices, as well as 100% continued notification for backflow testing compliance for all existing customers.	% of backflow testing compliance achieved	100%	100% 
7	Perform 175 backflow retrofits.	# of backflow retrofits	175 or more	211 
8	Maintain a high level of billing accuracy.	AWWA Benchmark: Top Quartile = 4.3 Median = 8.1 Bottom Quartile = 28.5	Top quartile	9.75 

Goal 8: $\frac{1461 \text{ (error driven billing adjustments)} \times 10,000}{1,497,884 \text{ (bills generated)}}$

DEPARTMENT GOALS









Natural Resources

GOALS		MEASURE	TARGET	RESULTS
1	Maximize benefit of TROA implementation.	Maximize upstream storage under TROA within hydrological and operational constraints. Continue to cooperate with TROA stakeholders to develop opportunities to improve reservoir operations and efficient use of water resources.	100%	100% 
2	Increase community awareness and understanding of TROA and its benefit to our area's municipal water supply.	Continue giving presentations to customer/industry groups regarding the benefits of TROA to the area's municipal water supply. Hold three public information workshops (North Valleys, South Truckee Meadows, and central Reno) explaining the benefits of TROA.	At least 10 presentations, 3 workshops	6 presentations  4 workshops 
3	Optimize aquifer storage and recovery (ASR) and passive recharge capabilities and operations.	Analyze effectiveness of ASR and passive recharge on a well-by-well basis within each basin. Complete semi-annual report describing ASR and passive recharge goals and results	100%	100% 
4	Continue permitting process for Mt. Rose Water Treatment Plant (MRWTP) with goal to be fully-operational by the winter of 2018.	Seek approval from State Engineer of necessary water right permits and from Army Corps of Engineers for stream diversion construction.	100%	100% 
5	Review, monitor, and advise the Board regarding 2017 bills that may affect TMWA and carryout Board-approved lobbying efforts.	Present summary of bills to, and carryout lobbying efforts as directed by the Board.	100%	100% 
6	Continue active role in maintaining sufficient water rights inventory, analyze purchase opportunities.	Maintain sufficient water rights inventory	Monthly Board report	100% 
7	Turn around new business application water rights work within 10 days.	# of days turn around new business application	10 days or less	On average 3 days or less 

*Please see staff report for a detailed description of FY17 results.

DEPARTMENT GOALS

Engineering & New Business

GOALS		BENCHMARKS/ RATINGS	MEASURE	TARGET	RESULTS
1	Continue cooperative coordination with Agencies and complete projects on schedule. Survey agency satisfaction with utility coordination effort.	Responses were averaged on a 5 point scale. 1 = Unacceptable 2 = Needs Improvement 3 = Good 4 = Commendable 5 = Outstanding	Average Response rating	4 or higher	4.7 (only 2 surveys rec'd so far) 
2	Deliver required in-service dates for major capital projects on/under budget.	Stead Main Ph. 2 STMGID Conj. Use Ph. 1 Pump Station & PRS rehabs Mt Rose WTP Double Diamond Well #3	\$10,810,000 Budget	Met or under spent	Spent \$5,675,835 
3	Continue to measure and report new business turnaround times. Project Category Commercial with Main (CwM) Commercial Service (CS) Subdivision (Sub)	Number of Projects and turnaround times: 75% ≤ 30 days 100% ≤ 60 days	% turnaround in ≤ 30 days	75%	CwM: 83%  CS: 98%  Sub: 71% 
			% turnaround in ≤ 60 days	100%	CwM: 100%  CS: 99%  Sub: 98% 

NOTES:

Goal 1: Survey the satisfaction of the appropriate coordinators at the City of Reno, City of Sparks, Regional Transportation Commission, NV Energy, NDOT and Washoe County with TMWA's Street & Highway Program.

**FY 2017****Goal 2:**

PROJECT	SCHEDULE	BUDGET	EXPENDED
Double Diamond Well #3	In-service delayed by NVE, weather	\$1,260,000	\$1,355,417
Pump Station Rehabs	Major projects deferred to FY18	\$2,050,000	\$1,353,236
STMGID Conj. Use Ph. 1	Project deferred to FY18	\$1,500,000	\$117,766
Stead Main Repl. Ph. 2	Flushing deferred due to flooding	\$5,000,000	\$2,387,341
Mt Rose WTP	Construction deferred to FY18	\$1,000,000	\$ 462,075

Several projects deferred due to budget increase required for Highland Canal Drainage Improvements

STMGID Conj. Use project budget should have been reduced in last augmentation





Goal 3: # of calendar days from application to first red-line review complete.

Only two new business projects took more than 60 days to turn around. One commercial project involved consolidation of an existing community water system which required special agreements and conditions.

One subdivision project was delayed due to internal TMWA workload issues

DEPARTMENT GOALS

Business Information Systems

GOALS		MEASURE	TARGET	RESULTS
1	Complete the mapping of New Business 'as-built' drawings within 10 days or less.	# of days mapping of 'as-built' drawings of 'redline' drawing submittal.	10 days or less	3.44 days 
2	Close helpdesk tickets within 48 hours or less.	Average # of hours between the creation and closing of Helpdesk tickets.	48 hours or less	44.89 hours 
3	Project goal: Development of a Capital Project workflow in PLL by June 30, 2017.	Implementation of the workflow necessary to track various departments' tasks as required for Capital Projects.	100%	90% 
4	Project goal: Development of TMWA Business Continuity/Disaster Recovery Plan by June 30, 2017.	Development of process and implementation of infrastructure or tools necessary to provide business continuity.	100%	100% 



STAFF REPORT

TO: Chairman and Board Members
FROM: Mark Foree, General Manager
DATE: October 9, 2017
SUBJECT: Discussion and action, and possible direction to staff on the proposed TMWA Goals and Objectives for Fiscal Year 2018

RECOMMENDATION

Staff recommends that the Board adopt the Goals and Objectives for Fiscal Year 2018 as recommended and presented in this report. Where appropriate, TMWA uses the American Water Works Association (AWWA) Benchmarking Survey Results, 2016 Edition, for some of the goals to measure against, or other published industry standards, if available.

DISCUSSION OF PROPOSED GOALS

For discussion, attached are TMWA's proposed organization and departmental goals and objectives for this fiscal year. New goals are noted in red, and benchmarks are updated when a new edition of the AWWA Benchmarking Survey Results, as well as industry standards, are available.



Truckee Meadows Water Authority Goals & Objectives FY 2018

*TMWA BOARD OF DIRECTORS
MARK FOREE, GENERAL MANAGER*

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GOALS & OBJECTIVES: AT-A-GLANCE

ORGANIZATION

OBJECTIVES		AWWA BENCHMARK/ INDUSTRY STANDARD	MEASURE	TARGET
CUSTOMER SATISFACTION				
1	Residential Customers Totally or Mostly Satisfied.	71%-81% = Good 82%-86% = Excellent 86% + = Outstanding	% of residential customer's satisfaction	At least 86% residential customer satisfaction
2	Commercial Customers Totally or Mostly Satisfied.	77%-87% = Good 88%-90% = Excellent 90% + = Outstanding	% of commercial customer satisfaction	At least 90% commercial customer satisfaction
3	Meet the Faneuil contract requirement of 80% of calls answered within 35 seconds.		% of calls answered within 35 seconds	80%
NATURAL RESOURCES				
1	Maximize benefit of TROA implementation.		Maximize upstream storage under TROA within hydrological and operational constraints. Continue to cooperate with TROA stakeholders to develop opportunities to improve reservoir operations and efficient use of water resources.	100%
2	Manage aquifer storage and recovery (ASR) and passive recharge capabilities and operations.		Analyze effectiveness of ASR and passive recharge on a well-by-well basis within each basin. Complete semi-annual report describing ASR and passive recharge goals and results	100%
3	NEW: Work with stakeholders to develop draft return flow management agreement.		Update Board on status of return flow management agreement negotiations and present draft agreement to the Board.	100%
4	NEW: Perform cost-benefit analysis for converting remaining flat rate customers to meters and develop options for future of meter retrofit fee.		Report findings to the Board and follow Board direction regarding same.	100%
EFFICIENCY				
1	Track customer accounts per employee and compare to national benchmark.	Top Quartile = 564 Median = 427 Bottom Quartile = 306	# of accounts per employee	Top quartile
2	Track average MGD delivered per employee and compare to national benchmark.	Top Quartile = 0.29 Median = 0.19 Bottom Quartile = 0.13	Average MGD delivered per employee	Top quartile

OBJECTIVES		AWWA BENCHMARK/ INDUSTRY STANDARD	MEASURE	TARGET
SAFETY				
1	Maintain a safety incident rate below the Industry Standard Bureau of Labor Statistics, 2015.	5.6 Average Incident Rate for Water Supply & Irrigation Systems – Local Government	Incident rate	Less than 5.6
2	Track Collisions Per Million Miles (CPMM) and compare against Network of Employers for Traffic Safety Fleet Safety Benchmark Report (Reporting for North America Only, All Vehicles), 2015.	6.28 per 1,000,000 miles driven.	# of collisions per 1,000,000 miles driven	Less than 6.28
FINANCIAL				
1	Meet all bond covenants.		# of bond covenants met	100%
2	Update the 5-year funding plan.		Update completed	100%
3	Preserve or improve TMWA's excellent credit ratings by the two major credit rating bureaus S&P (AA+ stable) and Moody's (Aa2 stable)		Maintain or improve credit ratings	AA+ /Aa2 - stable or better
4	Maintain a low debt ratio.	Top Quartile = 26% Median = 35% Bottom = 58%		Median
5	Sustain a minimum of 718 days of cash reserve.	Top Quartile = 718 Median = 238 Bottom = 134		Top quartile
6	Maintain a debt-service coverage ratio of 1.5.	Top Quartile = 3.20 Median = 1.75 Bottom Quartile = 1.00		1.5 or better
7	NEW: Maintain high level of utility's financial effectiveness	Top Quartile: 3.6% Median: 1.7% Bottom Quartile: 1.0%		Median
8	NEW: Successfully renew or replace TMWA's liquidity facility that supports Tax Exempt Commercial Paper (TECP) by May 2018.		% complete	100%

DEPARTMENT

GOALS		AWWA BENCHMARK/ INDUSTRY STANDARD		MEASURE	TARGET
TREATMENT					
1	Meet the treatment costs set according to anticipated production.	If production is at or near: <ul style="list-style-type: none">• 24,000 MG• 25,000 MG• 26,000 MG	TMWA cost: <ul style="list-style-type: none">• \$494.79/MG• \$475.00/MG• \$456.73/MG	Achieve \$/MG in the respective production category	24kMG=\$494.79/MG 25kMG=\$475.00/MG 26kMG=\$456.73/MG
2	Meet the benchmark of 0 (Zero) MCL violations.	0 (Zero) MCL violations		# of MCL violations	0
3	Maintain effluent turbidity 95% of the time.	At less than: <ul style="list-style-type: none">• 0.30 NTU = EPA Standard• 0.20 NTU = Good;• 0.15 NTU = Excellent;• 0.10 NTU is Outstanding		# of NTU’s	≤ 0.10 NTU
DISTRIBUTION					
1	Track system reliability by calculating the number of unplanned outages per 1,000 customers and compare to national benchmarks. < 4 hours	Top = 0.30 Median = 0.92 Bottom = 2.16		# of unplanned outages/1,000 customers	Median or better
2	Track system reliability by calculating the number of unplanned outages per 1,000 customers and compare to national benchmarks. 4 – 12 hours	Top = 0.01 Median = 0.17 Bottom = 0.86		# of unplanned outages/1,000 customers	Median or better
3	Track system reliability by calculating the number of planned outages per 1,000 customers and compare to national benchmarks. < 4 hours	Top = 0.33 Median = 0.52 Bottom = 1.75		# of unplanned outages/1,000 customers	Median or better
4	Track system reliability by calculating the number of planned outages per 1,000 customers and compare to national benchmarks. 4 – 12 hours	Top = 0.04 Median = 0.25 Bottom = 1.01		# of unplanned outages/1,000 customers	Median or better
5	Maintain 95% Hydro Plant Generation availability when river flow is available for generation (excluding planned maintenance and rehab, weather limitations and catastrophic failures).			% hydro generation availability	95%

GOALS		AWWA BENCHMARK/ INDUSTRY STANDARD	MEASURE	TARGET
CUSTOMER SERVICE				
1	Customer Call Center will have an average call handle time of 4 minutes, 30 seconds or less per call.		Average handle time per call	4 min, 30 seconds or less
2	Achieve a monthly average of 4 non-weather estimates on all meter reads.		Monthly average of non-weather estimates	4/month or less
3	The fiscal year average for disconnect for non-payment service orders to active accounts will be 0.30% or less.		% average of disconnects for non-payment	0.30% or less
4	The write off to revenue will be 0.25% or less at fiscal year-end.		% of write off to revenue	0.25% or less
*5	Hold a minimum of 20 public workshops and/or tours with a primary focus on responsible water use and education, including Water Leadership workshops and open houses.		# of public workshops and/or tours	20 or more
6	Achieve 100% backflow testing compliance for all new construction and TMWA-owned devices, as well as 100% continued notification for backflow testing compliance for all existing customers.		# of public workshops and/or tours	100%
7	Perform 175 backflow retrofits.		# of backflow retrofits	175 or more
8	Maintain a high level of billing accuracy.	Top Quartile = 2.9 Median = 8.6 Bottom Quartile = 30.0		Median
BUSINESS INFORMATION SERVICES				
*1	Complete the mapping of New Business 'as-built' drawings within 7 days or less.		# of days mapping of 'as-built' drawings of 'redline' drawing submittal.	7 days or less
2	Close helpdesk tickets within 48 hours or less.		Average # of hours between the creation and closing of Helpdesk tickets.	48 hours or less
3	Complete development of a Capital Project tracking workflow.		% implementation of the workflow necessary to track various departments' tasks as required for Capital Projects.	100%
4	NEW: Initiate BIS Steering Committee Program to begin by 6/30/2018.		Institute cross-departmental steering committee project management program to increase coordination and to ensure successful execution of BIS/IT initiatives.	100%
5	NEW: Development of TMWA IT Strategic Plan to be accepted by Directors/Managers.		% complete	100%

*Increased the number of public workshops/tours from 18 to 20.

*Reduced the # of 'as-built' drawings of redline drawing submittal from 10 days to 7 days or less.

GOALS		AWWA BENCHMARK/ INDUSTRY STANDARD	MEASURE	TARGET
NATURAL RESOURCES				
*1	Increase community awareness and understanding of TROA and its benefit to our area's municipal water supply.		Continue giving presentations to customer/industry groups regarding the benefits of TROA to the area's municipal water supply. Participate in TMWA's Smart About Water Day.	At least 10 presentations
2	Continue permitting process for Mt. Rose Water Treatment Plant (WTP) with goal to be fully-operational by the winter of 2018/19.		Seek approval from Army Corps of Engineers for stream diversion construction. Participate in final design and construction of Mt. Rose WTP.	100%
3	Review, monitor, and advise the Board regarding issues and activities of the 2017-2018 interim legislative session that may affect TMWA. Continue monitoring and stay updated on statewide water law issues.		As necessary, advise the Board regarding issues or activities that may affect TMWA.	100%
4	Continue active role in maintaining sufficient water rights inventory, analyze purchase opportunities.		Maintain sufficient water rights inventory.	Monthly Board report
*5	Turn around new business application water rights work within 5 business days.		# of days turnaround new business application	5 days or less
6	NEW: Remain actively involved with UNR's Nevada Water Innovation Campus projects		Report activities to the Board	100%
7	NEW: Respond to customer water usage audit requests within 3 business days and provide monthly conservation report to the Board		# of days between receiving request and completing a water audit	3 days or less
HUMAN RESOURCES				
1	NEW: Develop system to track continuous training for full-time equivalents (FTEs) employees to ensure AWWA benchmarking can be met in FY19.		% completed	100%
2	NEW: Track the number of annual employee FTEs departures per year.	Top Quartile: 5.8% Median: 6.8% Bottom Quartile: 9.6%	# of FTEs departed per year	Median or better
3	NEW: Track the number of FTEs eligible for retirement	Top Quartile: 12.8% Median: 22.4% Bottom Quartile: 35.5%	#of FTEs eligible for retirement	Median or better

*Eliminated the target of '3 workshops' and kept 'at least 10 presentations'.

*Reduced the number of days turnaround from 10 days to 5 days or less.

GOALS		AWWA BENCHMARK/ INDUSTRY STANDARD	MEASURE	TARGET
FINANCE				
1	Meet or underspend Capital Commitments as approved by the Board		\$ spent	Met or underspent
2	Meet or underspend O&M Budget Commitments		\$ spent	Met or underspent
3	NEW: Maintain a lean operating ratio	Top Quartile: 46% Median: 56% Bottom Quartile: 80%	% operating ratio	Median
4	NEW: Reduce TMWA's debt per capita based on the American Metropolitan Water Association (AMWA) 2016 Survey.	AMWA Benchmark: \$552 median		Work toward median
5	NEW: Maintain ratio of capital cost to total budgeted costs based on the American Metropolitan Water Association (AMWA) 2016 Survey.	AMWA Benchmark: 25% - 50%	% of capital cost to total budgeted costs	25%
ENGINEERING & NEW BUSINESS				
1	Continue cooperative coordination with Agencies and complete projects on schedule. Survey agency satisfaction with utility coordination effort.	1 = Unacceptable 2 = Needs Improvement 3 = Good 4 = Commendable 5 = Outstanding	Average response rate	4 or higher
2	Deliver required in-service dates for major capital projects on/under budget.	<ul style="list-style-type: none"> Corporate Building Expansion Mt Rose WTP Paloma PRS Peavine Tank Replacement 	\$11,300,000	Met or underspent
3	Continue to measure and report new business turnaround times. <u>Project Category</u> Commercial with Main Commercial Service Subdivision	Number of Projects and turnaround times: 75% ≤ 30 days 100% ≤ 60 days	% turnaround in ≤ 30 days	75%
			% turnaround in ≤ 60 days	100%

GOALS & OBJECTIVES: DETAIL

ORGANIZATION

CUSTOMER SATISFACTION

	OBJECTIVES	AWWA BENCHMARK/ INDUSTRY STANDARD	MEASURE	TARGET
1	Residential Customers Totally or Mostly Satisfied.	71%-81% = Good 82%-86% = Excellent 86% + = Outstanding	% of residential customer's satisfaction	At least 86% residential customer satisfaction
2	Commercial Customers Totally or Mostly Satisfied.	77%-87% = Good 88%-90% = Excellent 90% + = Outstanding	% of commercial customer satisfaction	At least 90% commercial customer satisfaction
3	Meet the Faneuil contract requirement of 80% of calls answered within 35 seconds.		% of calls answered within 35 seconds	80%

NATURAL RESOURCES

	OBJECTIVES	MEASURE	TARGET
1	Maximize benefit of TROA implementation.	Maximize upstream storage under TROA within hydrological and operational constraints. Continue to cooperate with TROA stakeholders to develop opportunities to improve reservoir operations and efficient use of water resources.	100%
2	Manage aquifer storage and recovery (ASR) and passive recharge capabilities and operations.	Analyze effectiveness of ASR and passive recharge on a well-by-well basis within each basin. Complete semi-annual report describing ASR and passive recharge goals and results	100%
3	NEW: Work with stakeholders to develop draft return flow management agreement.	Update Board on status of return flow management agreement negotiations and present draft agreement to the Board.	100%
4	NEW: Perform cost-benefit analysis for converting remaining flat rate customers to meters and develop options for future of meter retrofit fee.	Report findings to the Board and follow Board direction regarding same.	100%

EFFICIENCY

	OBJECTIVES	AWWA BENCHMARK/ INDUSTRY STANDARD	MEASURE	TARGET
1	Track customer accounts per employee and compare to national benchmark.	Top Quartile = 564 Median = 427 Bottom Quartile = 306	# of accounts per employee	Top quartile
2	Track average MGD delivered per employee and compare to national benchmark.	Top Quartile = 0.29 Median = 0.19 Bottom Quartile = 0.13	Average MGD delivered per employee	Top quartile

Calculations:**Goal 1: # of Customer Accounts**

$$\frac{\text{# of Customer Accounts}}{\text{# of Employees}}$$
Goal 2: Average MGD

$$\frac{\text{Average MGD}}{\text{# of Employees}}$$

SAFETY

	OBJECTIVES	AWWA BENCHMARK/ INDUSTRY STANDARD	MEASURE	TARGET
1	Maintain a safety incident rate below the Industry Standard Bureau of Labor Statistics, 2015.	5.6 Average Incident Rate for Water Supply & Irrigation Systems – Local Government	Incident rate	Less than 5.6
2	Track Collisions Per Million Miles (CPMM) and compare against Network of Employers for Traffic Safety Fleet Safety Benchmark Report (Reporting for North America Only, All Vehicles), 2015.	6.28 per 1,000,000 miles driven.	# of collisions per 1,000,000 miles driven	Less than 6.28

Calculations:**Goal 1: # of accidents x 200,000 manhours**

$$\frac{\text{# of accidents} \times 200,000 \text{ manhours}}{\text{Total manhours}}$$
Goal 2: # of collisions x 1,000,000 miles

$$\frac{\text{# of collisions} \times 1,000,000 \text{ miles}}{\text{Total mileage}}$$

FINANCIAL

OBJECTIVES		AWWA BENCHMARK/ INDUSTRY STANDARD	MEASURE	TARGET
1	Meet all bond covenants.		# of bond covenants met	100%
2	Update the 5-year funding plan.		Update completed	100%
3	Preserve or improve TMWA's excellent credit ratings by the two major credit rating bureaus S&P (AA+ stable) and Moody's (Aa2 stable)		Maintain or improve credit ratings	AA+ /Aa2 - stable or better
4	Maintain a low debt ratio.	Top Quartile = 26% Median = 35% Bottom = 58%		Median
5	Sustain a minimum of 718 days of cash reserve.	Top Quartile = 718 Median = 238 Bottom = 134		Top quartile
6	Maintain a debt-service coverage ratio of 1.5.	Top Quartile = 3.20 Median = 1.75 Bottom Quartile = 1.00		1.5 or better
7	NEW: Maintain high level of utility's financial effectiveness	Top Quartile: 3.6% Median: 1.7% Bottom Quartile: 1.0%		Median
8	NEW: Successfully renew or replace TMWA's liquidity facility that supports Tax Exempt Commercial Paper (TECP) by May 2018.		% complete	100%

Calculations:**Goal 4:** $\frac{\text{Total liabilities}}{\text{Total assets}}$

Goal 5: $\frac{\text{Undesignated cash reserves}}{\text{Total annual operations \& maintenance costs / 365 days}}$

Goal 6: $\frac{\text{Total operating revenue} - \text{Total O\&M costs}}{\text{Total debt service}}$

Goal 7: $\frac{\text{Net income}}{\text{Total assets}}$

DEPARTMENT

TREATMENT

GOALS		AWWA BENCHMARK/ INDUSTRY STANDARD		MEASURE	TARGET
1	Meet the treatment costs set according to anticipated production.	If production is at or near: • 24,000 MG • 25,000 MG • 26,000 MG	TMWA cost: • \$494.79/MG • \$475.00/MG • \$456.73/MG	Achieve \$/MG in the respective production category	24k MG = \$494.79/MG 25k MG = \$475.00/MG 26k MG = \$456.73/MG
2	Meet the benchmark of 0 (Zero) MCL violations.	0 (Zero) MCL violations		# of MCL violations	0
3	Maintain effluent turbidity 95% of the time.	At less than: • 0.30 NTU = EPA Standard • 0.20 NTU = Good; • 0.15 NTU = Excellent; • 0.10 NTU is Outstanding		# of NTU's	≤ 0.10 NTU

Calculation:

Goal 1: # of MG produced at a cost of \$/MG

DISTRIBUTION

GOALS		AWWA BENCHMARK/ INDUSTRY STANDARD	MEASURE	TARGET
1	Track system reliability by calculating the number of unplanned outages per 1,000 customers and compare to national benchmarks. < 4 hours	Top = 0.30 Median = 0.92 Bottom = 2.16	# of unplanned outages/1,000 customers	Median or better
2	Track system reliability by calculating the number of unplanned outages per 1,000 customers and compare to national benchmarks. 4 – 12 hours	Top = 0.01 Median = 0.17 Bottom = 0.86	# of unplanned outages/1,000 customers	Median or better
3	Track system reliability by calculating the number of planned outages per 1,000 customers and compare to national benchmarks. < 4 hours	Top = 0.33 Median = 0.52 Bottom = 1.75	# of unplanned outages/1,000 customers	Median or better
4	Track system reliability by calculating the number of planned outages per 1,000 customers and compare to national benchmarks. 4 – 12 hours	Top = 0.04 Median = 0.25 Bottom = 1.01	# of unplanned outages/1,000 customers	Median or better
5	Maintain 95% Hydro Plant Generation availability when river flow is available for generation (excluding planned maintenance and rehab, weather limitations and catastrophic failures).		% hydro generation availability	95%

Calculations:

Goals 1 – 4:
$$\frac{(1,000) \text{ Total outages}}{\text{Total customers}}$$

CUSTOMER SERVICE

	GOALS	AWWA BENCHMARK/ INDUSTRY STANDARD	MEASURE	TARGET
1	Customer Call Center will have an average call handle time of 4 minutes, 30 seconds or less per call.		Average handle time per call	4 min, 30 seconds or less
2	Achieve a monthly average of 4 non-weather estimates on all meter reads.		Monthly average of non-weather estimates	4/month or less
3	The fiscal year average for disconnect for non-payment service orders to active accounts will be 0.30% or less.		% average of disconnects for non-payment	0.30% or less
4	The write off to revenue will be 0.25% or less at fiscal year-end.		% of write off to revenue	0.25% or less
5	Hold a minimum of 20 public workshops and/or tours with a primary focus on responsible water use and education, including Water Leadership workshops and open houses.		# of public workshops and/or tours	20 or more
6	Achieve 100% backflow testing compliance for all new construction and TMWA-owned devices, as well as 100% continued notification for backflow testing compliance for all existing customers.		# of public workshops and/or tours	100%
7	Perform 175 backflow retrofits.		# of backflow retrofits	175 or more
8	Maintain a high level of billing accuracy.	Top Quartile = 2.9 Median = 8.6 Bottom Quartile = 30.0		Median

Calculation:

$$\text{Goal 8: } \frac{\# \text{ error-driven billing adjustments} \times 10,000}{\# \text{ of bills generated}}$$

BUSINESS INFORMATION SERVICES

	GOALS	MEASURE	TARGET
1	Complete the mapping of New Business 'as-built' drawings within 7 days or less.	# of days mapping of 'as-built' drawings of 'redline' drawing submittal.	7 days or less
2	Close helpdesk tickets within 48 hours or less.	Average # of hours between the creation and closing of Helpdesk tickets.	48 hours or less
3	Complete development of a Capital Project tracking workflow.	% implementation of the workflow necessary to track various departments' tasks as required for Capital Projects.	100%
4	NEW: Initiate BIS Steering Committee Program to begin by 6/30/2018.	Institute cross-departmental steering committee project management program to increase coordination and to ensure successful execution of BIS/IT initiatives.	100%
5	NEW: Development of TMWA IT Strategic Plan to be accepted by Directors/Managers.	% complete	100%

NATURAL RESOURCES

	GOALS	MEASURE	TARGET
1	Increase community awareness and understanding of TROA and its benefit to our area's municipal water supply.	Continue giving presentations to customer/industry groups regarding the benefits of TROA to the area's municipal water supply. Participate in TMWA's Smart About Water Day.	At least 10 presentations
2	Continue permitting process for Mt. Rose Water Treatment Plant (WTP) with goal to be fully-operational by the winter of 2018/19.	Seek approval from Army Corps of Engineers for stream diversion construction. Participate in final design and construction of Mt. Rose WTP.	100%
3	Review, monitor, and advise the Board regarding issues and activities of the 2017-2018 interim legislative session that may affect TMWA. Continue monitoring and stay updated on statewide water law issues.	As necessary, advise the Board regarding issues or activities that may affect TMWA.	100%
4	Continue active role in maintaining sufficient water rights inventory, analyze purchase opportunities.	Maintain sufficient water rights inventory.	Monthly Board report
5	Turn around new business application water rights work within 5 business days.	# of days turnaround new business application	5 days or less
6	NEW: Remain actively involved with UNR's Nevada Water Innovation Campus projects.	Report activities to the Board	100%
7	NEW: Respond to customer water usage audit requests within 3 business days and provide monthly conservation report to the Board.	# of days between receiving request and completing a water audit	3 days or less

HUMAN RESOURCES

	GOALS	AWWA BENCHMARK/ INDUSTRY STANDARD	MEASURE	TARGET
1	NEW: Develop system to track continuous training for full-time equivalents (FTEs) employees to ensure AWWA benchmarking can be met in FY19.		% completed	100%
2	NEW: Track the number of annual employee FTEs departures per year.	Top Quartile: 5.8% Median: 6.8% Bottom Quartile: 9.6%	# of FTEs departed per year	Median or better
3	NEW: Track the number of FTEs eligible for retirement	Top Quartile: 12.8% Median: 22.4% Bottom Quartile: 35.5%	#of FTEs eligible for retirement	Median or better

Calculations:**Goal 2:** # of FTEs departed

Total # of FTEs

Goal 3: # of FTEs eligible for retirement in the next 5 years

Total # of FTEs

FINANCE

	GOALS	AWWA BENCHMARK/ INDUSTRY STANDARD	MEASURE	TARGET
1	Meet or underspend Capital Commitments as approved by the Board		\$ spent	Met or underspent
2	Meet or underspend O&M Budget Commitments		\$ spent	Met or underspent
3	NEW: Maintain a lean operating ratio	Top Quartile: 46% Median: 56% Bottom Quartile: 80%	% operating ratio	Median
4	NEW: Reduce TMWA's debt per capita based on the American Metropolitan Water Association (AMWA) 2016 Survey.	AMWA Benchmark: \$552 median		Work toward median
5	NEW: Maintain ratio of capital cost to total budgeted costs based on the American Metropolitan Water Association (AMWA) 2016 Survey.	AMWA Benchmark: 25% - 50%	% of capital cost to total budgeted costs	25%

Calculations:**Goal 3:** Total O&M costs

Total operating revenue

Goal 4: Total debt

Population served

Goal 5: CIP budget

Cost of service

ENGINEERING & NEW BUSINESS

GOALS		AWWA BENCHMARK/ INDUSTRY STANDARD	MEASURE	TARGET
1	Continue cooperative coordination with Agencies and complete projects on schedule. Survey agency satisfaction with utility coordination effort.	1 = Unacceptable 2 = Needs Improvement 3 = Good 4 = Commendable 5 = Outstanding	Average response rate	4 or higher
2	Deliver required in-service dates for major capital projects on/under budget.	<ul style="list-style-type: none"> • Corporate Building Expansion • Mt Rose WTP • Paloma PRS • Peavine Tank Replacement 	\$11,300,000	Met or underspent
3	Continue to measure and report new business turnaround times. <u>Project Category</u> Commercial with Main Commercial Service Subdivision	Number of Projects and turnaround times: 75% ≤ 30 days 100% ≤ 60 days	% turnaround in ≤ 30 days	75%
			% turnaround in ≤ 60 days	100%

Notes:

Goal 1: Survey the satisfaction of the appropriate coordinators at the City of Reno, City of Sparks, Regional Transportation Commission, NV Energy, NDOT and Washoe County with TMWA's Street & Highway Program.

Goal 3: # of calendar days from application to first red-line review complete.



STAFF REPORT

TO: TMWA Board of Directors
THRU: Mark Foree, General Manager
FROM: Michele Sullivan, Chief Financial Officer/Treasurer
DATE: September 27, 2017
SUBJECT: **Presentation of preliminary funding plan for Fiscal Years 2018 through 2022, discussion and possible recommendation to the Board**

Recommendation

Recommendation to maintain the current approved rate increase of 3% in the first billing cycle of May, 2018 and continue to close the funding gap between recurring revenues and the cost of servicing TMWA customers, based on the Draft Funding Plan attached.

Summary

The 2018-2022 Draft Funding Plan shows that rate adjustments are still necessary to close the funding gap between recurring revenues and the cost of servicing the customer base. The TMWA Board of Directors (BOD) approved rate increases of 3% in May, 2017 and 3% in May, 2018. TMWA debt service increases by \$10.6 million in FY2020, due to deferral of principal payments in FY2018 and FY2019. Continued low single digit rate increases are necessary so TMWA is prepared when these principal payments resume. Closing the funding gap, ensures TMWA can maintain critical financial goals which are essential to maintain adequate cash balances and investment grade credit ratings. Additional rate increases of 2.5% in FY2019 through FY2021 will all be brought for vote to the SAC and BOD before they are implemented, and can be thoroughly vetted at that time.

Discussion

The Draft Funding Plans analyzes the ability of TMWA to fund operating expenses, principal and interest payments on all currently outstanding debt, and all capital improvements presented in the TMWA 2018-2022 Capital Improvement Plan (CIP). This high-level presentation is based upon very detailed financial projections. Assumptions used in these financial projections can be found in *Attachment C*.

Critical financial goals for TMWA that need to be considered in these funding plans are as follows:

- Maintain recurring revenues sufficient to cover the cost to serve customers
- Maintain a senior lien coverage (DSC) ratio that not only meets bond covenants (1.25x) but also facilitates the payment for rehabilitative capital projects on a pay-go basis.
- Maintain high investment grade credit ratings to effectively access the credit markets

Recurring revenues are comprised of water sales, hydroelectric revenues, other miscellaneous operating revenues and investment income with water sales making up anywhere from 90 to 95% of recurring revenues. The cost to serve customers is defined as annual cash operating expenses, principal and interest payments on all outstanding debt as well as rehabilitative capital projects and outlays. If recurring revenues are less than the cost to serve customers this is referred to as a funding gap.

Over the last two years, revenue has rebounded somewhat from drought levels. Two summers with record dry spells and heat have helped contribute to increased water sales. Even with the dry summer and no call for additional conservation, water sales revenue for FY2017 was only \$1.5 million or 1.64% higher than the funding plan projection. Implementing the 3% increase in May, 2017 has improved revenue projections, but a funding gap still remains without further increases in rates.

The Draft Funding Plan found in ***Attachment A-1*** and ***A-2*** presents the financial metrics and disparity between recurring revenues and the cost to serve customers. In this five-year projection, water sale assumptions are based on a blending of water sales over the last three years, blending the effects of the drought with the last couple of years of higher water sales. ***Attachment A-1*** projects financial performance metrics with no rate increases under these assumptions and others as listed in ***Attachment C***.

Critical metrics for TMWA are projected as follows:

- TMWA's revenue deficiency as a combined utility increases to \$10.1 million and 8.8% by 2020. Lower projected CIP spending in FY2022 closes some of this gap but there is still a gap of \$7.1 million and 6.2%.
- Unrestricted cash balances decline significantly beginning in 2020 and fall below required levels to maintain investment grade credit ratings by 2022.

In ***Attachment A-2*** the funding plan from ***Attachment A-1*** is shown with projected rate increases sufficient to increase recurring revenues to cover the projected cost of service by 2022, which strengthens TMWA's DSC calculations and preserves cash balances. Rate increases are estimated at 3% annually in May, 2018, with 2.5% in each May 2019 – 2021, consistent with the presentation made in the FY2017-2022 funding plan approved in the prior fiscal year.

Critical metrics for TMWA are projected as follows:

- Recurring revenue is sufficient to cover projected cost of service by 2022.
- TMWA maintains an adequate DSC ratio.
- Unrestricted cash balances are maintained at levels sufficient to maintain investment grade credit ratings.

For comparison purposes the prior year's (FY2017) Draft Funding Plan can be found in ***Attachment B-1 and B-2***. Revenue projections are higher in the FY2018-FY2022 funding plan mainly due to slightly higher growth expectations in FY2018 and FY2019 (approximately 1000 additional connections over the five years). Hydroelectric revenues are also higher in FY2018 and FY2019 due to higher expected river flows. Over the five-year period, operating expenses in the 2018 Draft Funding Plan are in line with last year's funding plan, and are in total lower by \$879K. Slightly higher interest expense on commercial paper is offset by slightly higher interest income due to estimated higher interest rates over the period. Capital spending is higher over the period mainly due to \$8.1 million in projects that were to be completed in FY2017 that were moved to later years.

TMWA management will continue with strong cost control measures, as demonstrated over the past five years. The Draft Funding Plan demonstrates that addressing the funding gap now will avoid higher rate increases in the future. After the 3% increase that is approved for May, 2018 future water rate increases to narrow the funding gap will be revisited and analyzed before any additional rate increases are approved. At this time, it is important to move forward with the approved 3% increase to prepare for the financial impact evident in FY2020 when principal payments on TMWA senior lien bonds resume and will continue through at least FY2034.

Truckee Meadows Water Authority
2018 - 2022 Funding Plan with No Rate Increases

<i>TMWA's Revenue Sufficiency and Cost of Service</i>	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Projected Rate Increases	0.0%	0.0%	0.0%	0.0%	0.0%
Operating Expenses	\$ 54,576,379	\$ 57,611,474	\$ 59,926,899	\$ 61,920,554	\$ 63,688,345
Principal and Interest on all outstanding debt	18,958,595	19,140,953	29,703,765	29,347,007	29,770,778
Rehabilitative Capital Spending	33,223,000	26,798,000	25,205,000	23,845,000	20,463,000
Total Projected Cost of Service	\$ 106,757,974	\$ 103,550,427	\$ 114,835,664	\$ 115,112,561	\$ 113,922,123
Recurring Revenues	\$ 103,188,963	\$ 104,543,942	\$ 104,785,543	\$ 105,739,372	\$ 106,842,743
Surplus (Deficiency)	\$ (3,569,011)	\$ 993,515	\$ (10,050,121)	\$ (9,373,189)	\$ (7,079,380)
Surplus (Deficiency) as a % of Cost of Service	-3.3%	1.0%	-8.8%	-8.1%	-6.2%
<i>Debt Service Coverage Ratios</i>	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Water Sales Revenues	95,724,380	97,110,788	98,177,599	99,173,061	100,175,882
Hydroelectric Sales	2,990,391	2,884,754	2,474,599	2,423,808	2,448,046
Other Operating Sales	3,131,500	3,011,500	2,587,115	2,612,986	2,639,116
Investment Income	1,342,692	1,536,900	1,546,230	1,529,517	1,579,699
Total Revenues	103,188,963	104,543,942	104,785,543	105,739,372	106,842,743
Operating Expenses	(54,576,379)	(57,611,474)	(59,926,899)	(61,920,554)	(63,688,345)
Net Revenues	48,612,584	46,932,468	44,858,644	43,818,818	43,154,398
Senior Lien Debt Service	15,696,200	15,700,800	26,243,800	25,888,000	26,333,500
Senior Lien DSC	3.10	2.99	1.71	1.69	1.64
Total Sr. Lien and SRF Debt Service	18,116,921	18,121,521	28,664,521	28,308,721	28,754,221
Total Sr. Lien and SRF DSC	2.68	2.59	1.56	1.55	1.50
Total Annual Debt Service incl. TECP Interest	18,958,595	19,140,953	29,703,765	29,347,007	29,770,778
Total Subordinate DSC	2.56	2.45	1.51	1.49	1.45
<i>TMWA's Asset/Liability Matching</i>	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Unrestricted Cash and Investments (End of Year)	\$ 98,297,730	\$ 98,899,817	\$ 89,002,758	\$ 79,420,586	\$ 72,646,191
Projected outstanding Tax-Exempt Comercial Paper	74,200,000	68,000,000	61,800,000	55,600,000	49,400,000
Asset/Liability-Match (Mismatch)	\$ 24,097,730	\$ 30,899,817	\$ 27,202,758	\$ 23,820,586	\$ 23,246,191

Truckee Meadows Water Authority
2018 -2022 Funding Plan with Rate Increases

<i>TMWA's Revenue Sufficiency and Cost of Service</i>	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Projected Rate Increases	3.0%	2.5%	2.5%	2.5%	0.0%
Operating Expenses	\$ 54,576,379	\$ 57,611,474	\$ 59,926,899	\$ 61,920,554	\$ 63,688,345
Principal and Interest on all outstanding debt	18,958,595	19,140,953	29,703,765	29,347,007	29,770,778
Rehabilitative Capital Spending	33,223,000	26,798,000	25,205,000	23,845,000	20,463,000
Total Projected Cost of Service	\$ 106,757,974	\$ 103,550,427	\$ 114,835,664	\$ 115,112,561	\$ 113,922,123
Recurring Revenues	\$ 103,722,405	\$ 107,924,463	\$ 110,282,333	\$ 113,367,111	\$ 116,575,307
Surplus (Deficiency)	\$ (3,035,569)	\$ 4,374,036	\$ (4,553,331)	\$ (1,745,450)	\$ 2,653,184
Surplus (Deficiency) as a % of Cost of Service	-2.8%	4.2%	-4.0%	-1.5%	2.3%
<i>Debt Service Coverage Ratios</i>	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Water Sales Revenues	96,257,822	100,491,309	103,514,259	106,447,040	109,424,371
Hydroelectric Sales	2,990,391	2,884,754	2,474,599	2,423,808	2,448,046
Other Operating Sales	3,131,500	3,011,500	2,587,115	2,612,986	2,639,116
Investment Income	1,342,692	1,536,900	1,706,360	1,883,277	2,063,774
Total Revenues	103,722,405	107,924,463	110,282,333	113,367,111	116,575,307
Operating Expenses	(54,576,379)	(57,611,474)	(59,926,899)	(61,920,554)	(63,688,345)
Net Revenues	49,146,026	50,312,989	50,355,434	51,446,557	52,886,962
Senior Lien Debt Service	15,696,200	15,700,800	26,243,800	25,888,000	26,333,500
Senior Lien DSC	3.13	3.20	1.92	1.99	2.01
Total Sr. Lien and SRF Debt Service	18,116,921	18,121,521	28,664,521	28,308,721	28,754,221
Total Sr. Lien and SRF DSC	2.71	2.78	1.76	1.82	1.84
Total Annual Debt Service incl. TECP Interest	18,958,595	19,140,953	29,703,765	29,347,007	29,770,778
Total Subordinate DSC	2.59	2.63	1.70	1.75	1.78
<i>TMWA's Asset/Liability Matching</i>	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Unrestricted Cash and Investments (End of Year)	\$ 98,831,172	\$ 102,813,780	\$ 98,413,511	\$ 96,459,078	\$ 99,417,247
Projected outstanding Tax-Exempt Comercial Paper	74,200,000	68,000,000	61,800,000	55,600,000	49,400,000
Asset/Liability-Match (Mismatch)	\$ 24,631,172	\$ 34,813,780	\$ 36,613,511	\$ 40,859,078	\$ 50,017,247

Truckee Meadows Water Authority
2017 - 2022 Funding Plan No Rate Increase

<i>TMWA's Revenue Sufficiency and Cost of Service</i>	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Projected Rate Increases	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Operating Expenses	\$ 53,731,126	\$ 55,821,167	\$ 57,688,696	\$ 59,640,994	\$ 61,933,775	\$ 63,517,771
Principal and Interest on all outstanding debt	20,371,505	18,700,035	18,700,685	28,004,471	28,418,287	27,918,759
Rehabilitative Capital Spending	36,347,500	30,818,000	23,569,500	21,272,000	21,207,000	20,000,000
Total Projected Cost of Service	\$ 110,450,131	\$ 105,339,202	\$ 99,958,881	\$ 108,917,465	\$ 111,559,062	\$ 111,436,530
Recurring Revenues	\$ 96,766,148	\$ 97,158,031	\$ 97,627,567	\$ 98,062,994	\$ 98,386,072	\$ 98,422,849
Surplus (Deficiency)	\$ (13,683,983)	\$ (8,181,170)	\$ (2,331,314)	\$ (10,854,471)	\$ (13,172,989)	\$ (13,013,680)
Surplus (Deficiency) as a % of Cost of Service	-12.4%	-7.8%	-2.3%	-10.0%	-11.8%	-11.7%
<i>Debt Service Coverage Ratios</i>	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Operating Revenues	94,924,988	96,675,135	96,974,221	97,041,673	97,177,280	97,279,466
Investment Income	1,841,160	482,896	653,346	1,021,321	1,208,792	1,143,383
Total Revenues	96,766,148	97,158,031	97,627,567	98,062,994	98,386,072	98,422,849
Operating Expenses	(53,731,126)	(55,821,167)	(57,688,696)	(59,640,994)	(61,933,775)	(63,517,771)
Net Revenues	43,035,022	41,336,864	39,938,871	38,422,000	36,452,297	34,905,078
Senior Lien Debt Service	17,694,242	15,863,075	15,715,950	24,862,625	25,179,475	24,717,225
Senior Lien DSC	2.43	2.61	2.54	1.55	1.45	1.41
Total Sr. Lien and SRF Debt Service	19,905,339	18,075,414	17,886,072	26,989,314	27,261,478	26,753,254
Total Sr. Lien and SRF DSC	2.16	2.29	2.23	1.42	1.34	1.30
Total Annual Debt Service incl. TECP Interest	20,371,505	18,700,035	18,700,685	28,004,471	28,418,287	27,918,759
Total Subordinate DSC	2.11	2.21	2.14	1.37	1.28	1.25
<i>TMWA's Asset/Liability Matching</i>	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Unrestricted Cash and Investments (End of Year)	\$ 84,489,640	\$ 76,189,757	\$ 75,562,415	\$ 67,160,263	\$ 51,881,874	\$ 38,908,794
Projected outstanding Tax-Exempt Commercial Paper	83,400,000	78,400,000	73,600,000	68,000,000	62,800,000	57,800,000
Asset/Liability-Match (Mismatch)	\$ 1,089,640	\$ (2,210,243)	\$ 1,962,415	\$ (839,737)	\$ (10,918,126)	\$ (18,891,206)

Truckee Meadows Water Authority
2017 - 2022 Funding Plan With Rate Increase

<i>TMWA's Revenue Sufficiency and Cost of Service</i>	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Projected Rate Increases	0.0%	3.0%	3.0%	2.5%	2.5%	2.5%
Operating Expenses	\$ 53,731,126	\$ 55,821,167	\$ 57,688,696	\$ 59,640,994	\$ 61,933,775	\$ 63,517,771
Principal and Interest on all outstanding debt	20,371,505	18,700,035	18,700,685	28,004,471	28,418,287	27,918,759
Rehabilitative Capital Spending	36,347,500	30,818,000	23,569,500	21,272,000	21,207,000	20,000,000
Total Projected Cost of Service	\$ 110,450,131	\$ 105,339,202	\$ 99,958,881	\$ 108,917,465	\$ 111,559,062	\$ 111,436,530
Recurring Revenues	\$ 96,766,148	\$ 99,880,351	\$ 103,177,501	\$ 106,040,114	\$ 108,820,671	\$ 111,371,214
Surplus (Deficiency)	\$ (13,683,983)	\$ (5,458,851)	\$ 3,218,620	\$ (2,877,351)	\$ (2,738,391)	\$ (65,316)
Surplus (Deficiency) as a % of Cost of Service	-12.4%	-5.2%	3.2%	-2.6%	-2.5%	-0.1%
<i>Debt Service Coverage Ratios</i>	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Operating Revenues	94,924,988	99,397,455	102,524,155	105,018,793	107,611,879	110,227,831
Investment Income	1,841,160	482,896	653,346	1,021,321	1,208,792	1,143,383
Total Revenues	96,766,148	99,880,351	103,177,501	106,040,114	108,820,671	111,371,214
Operating Expenses	(53,731,126)	(55,821,167)	(57,688,696)	(59,640,994)	(61,933,775)	(63,517,771)
Net Revenues	43,035,022	44,059,184	45,488,805	46,399,120	46,886,896	47,853,443
Senior Lien Debt Service	17,694,242	15,863,075	15,715,950	24,862,625	25,179,475	24,717,225
Senior Lien DSC	2.43	2.78	2.89	1.87	1.86	1.94
Total Sr. Lien and SRF Debt Service	19,905,339	18,075,414	17,886,072	26,989,314	27,261,478	26,753,254
Total Sr. Lien and SRF DSC	2.16	2.44	2.54	1.72	1.72	1.79
Total Annual Debt Service incl. TECP Interest	20,371,505	18,700,035	18,700,685	28,004,471	28,418,287	27,918,759
Total Subordinate DSC	2.11	2.36	2.43	1.66	1.65	1.71
<i>TMWA's Asset/Liability Matching</i>	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Unrestricted Cash and Investments (End of Year)	\$ 84,489,640	\$ 78,912,077	\$ 83,834,669	\$ 83,409,637	\$ 78,565,846	\$ 78,541,131
Projected outstanding Tax-Exempt Comercial Paper	83,400,000	78,400,000	73,600,000	68,000,000	62,800,000	57,800,000
Asset/Liability-Match (Mismatch)	\$ 1,089,640	\$ 512,077	\$ 10,234,669	\$ 15,409,637	\$ 15,765,846	\$ 20,741,131

**2018-2022 Draft Funding Plan Assumptions
(ATTACHMENT C)**

Operational Assumptions

- 1) Greater reliance on surface water in fiscal year 2018 due to improved weather patterns with groundwater supplies augmenting the surface water treatment plants. Both surface water treatment plants to operate.
- 2) Fish Springs Ranch (Vidler) groundwater will be made available to the North Valleys reducing reliance on groundwater in the Lemmon Valley Basin. Water flow maintained to optimize water quality.
- 3) The Mt. Rose/Galena Surface Water Treatment Plant operational in the middle of fiscal year 2019 with operating costs assumed to be \$600 per mgal.
- 4) River flows are assumed to be adequate to operate the hydroelectric facilities.

Revenue/Capital Contribution Assumptions

- 1) Projected water sale revenues for FY 2018-FY2022 are based upon an average of the last three years of usage so that the effects on water sales from the drought are diluted.
- 2) Hydroelectric sales assumed to be based on higher river flows in 2018 and 2019, and median river flows in 2020 through 2022.
- 3) The Draft Funding Plan anticipates an additional 9,152 service connections over the five-year period. Growth in service connections is slightly higher than growth projections presented in the Draft 2015-2035 Water Resource Plan and the prior year's funding plan.
- 4) Weighted average yield on investable cash is estimated to be 1.0% in fiscal year 2017 rising to 1.55% in fiscal year 2022. These yields are slightly higher than the prior year's funding plan.
- 5) Will serve sales are expected to be approximately \$25.2 million over the ensuing period, and will be used to pay down commercial paper balances.
- 6) Other developer contributions are projected to be \$41.3 million over the ensuing period. This does not include any significant funding to expand to Verdi or other currently unserved areas.
- 7) Collection of Water Meter Retrofit fees are suspended in fiscal year 2019 assuming sufficient funds are collected to finalize meter installations on the remaining non-metered connections.

Operating Expense Assumptions

- 1) Wages and salaries increase for IBEW workers based on the latest offer presented to the union. MPAT employees increase by 2.5% annually.
- 2) Headcount is increased by four in years 2019 and 2020, by two in 2021, with no increase in 2022.
- 3) Public Employee contribution rates are assumed to increase to 29% in fiscal year 2020 through 2022.

- 4) Health care premiums are assumed to increase 5% annually. No change to employer/employee allocation of costs. OPEB trust contributions are assumed to increase 4% per year - less than health premiums due to funded status of the trusts.
- 5) Life and disability premiums assumed to increase 4% annually. Workmen's compensation premiums assumed to increase 2.5% annually due to favorable loss modification factors to premium calculations.
- 6) Funding for the Truckee River Fund is returned to \$850k in 2019-2022 and DRI cloud seeding funding is returned to \$210k for the same period.
- 7) TMWA's anticipated share of TROA administration expenses is approximately \$400k annually beginning in 2019.
- 8) General inflation on all service and supplies assumed to increase by 2.5% annually with the exception of power and fuel assumed to increase 3% annually.

Debt Management Assumptions

- 1) Tax-exempt commercial paper interest rates are assumed to be 1.075% in fiscal year 2018 increasing to 1.94% in fiscal year 2022. Payments of \$34.0 million are assumed based on will-serve sales to reduce commercial paper to a balance of \$49.4M during the five-year period.
- 2) No new debt is assumed to be issued during the 2018-2022 period.

Treasury Assumptions

- 1) Total cash and investments at the beginning of fiscal year 2018 are estimated to be \$174.0 million. Of this total \$110.7 million is unrestricted.
- 2) Restricted reserves that were transferred from the South Truckee Meadows General Improvement District (STMGID) are sufficient to fund all capital improvements in this former service area through 2022.
- 3) Insurance proceeds received of \$21.5 million related to the Farad hydro facility will be used to rehabilitate the Farad property, and expand hydroelectric facilities. These expenses and construction plans are not currently included in TMWA's projections, but these cash balances are assumed to be restricted for this use.

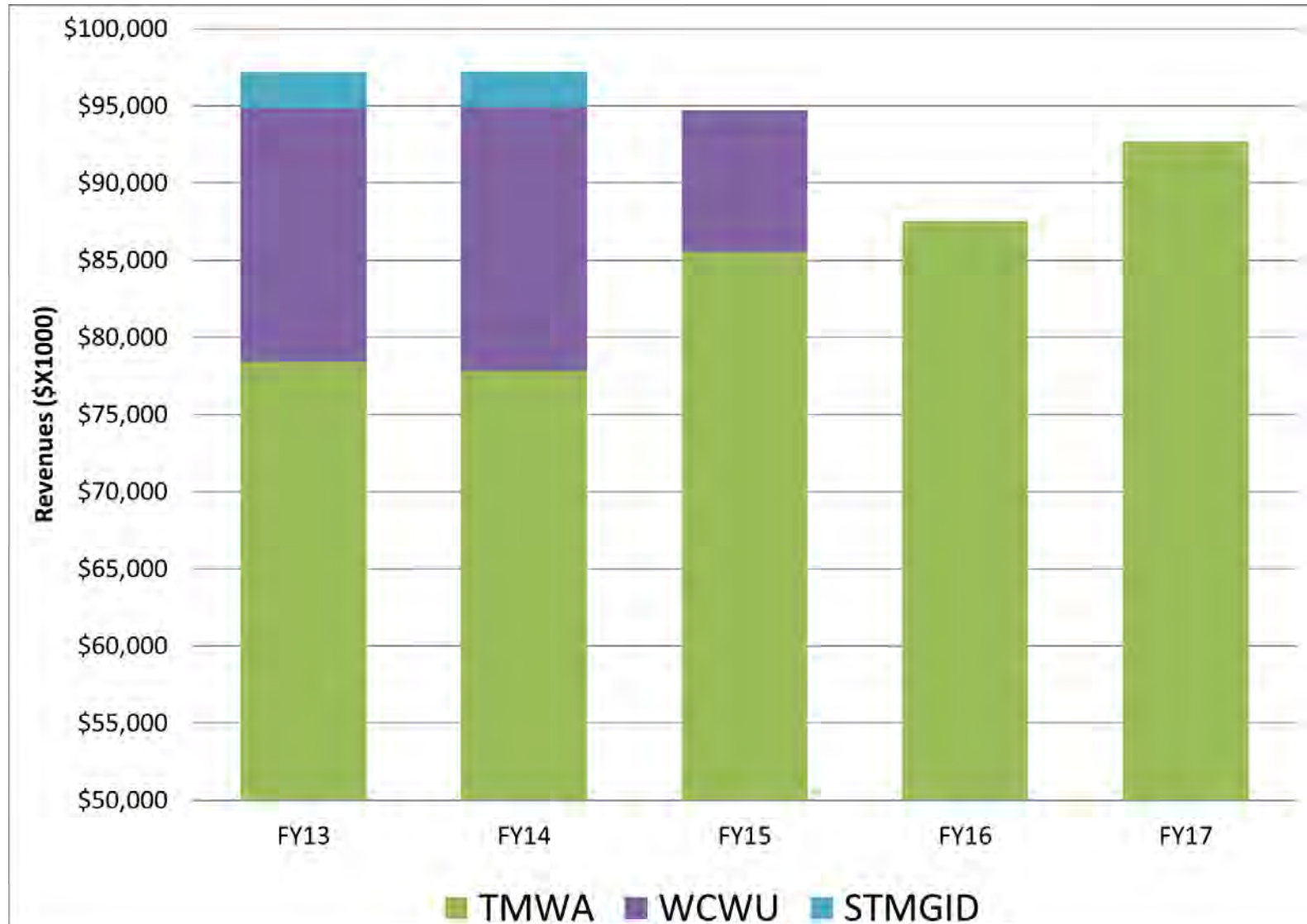
TMWA

Draft Funding Plan 2018-2022 Financial Metrics 2013-2022

Presentation by Michele Sullivan



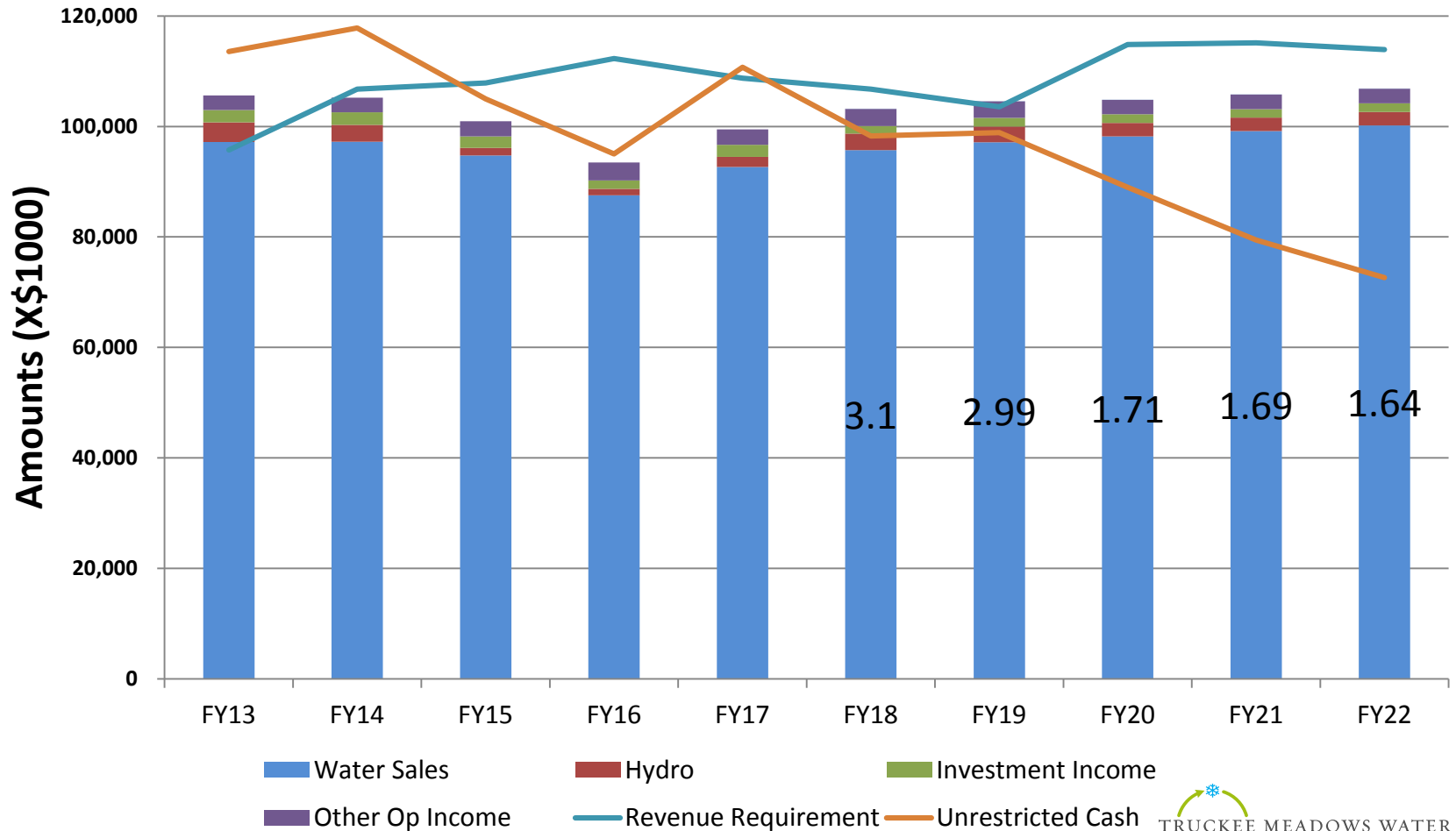
TMWA Water Sales Revenue for Combined Utility



Truckee Meadows Water Authority (TMWA)

Financial Metrics 2013-2022 (Attachment A-1)

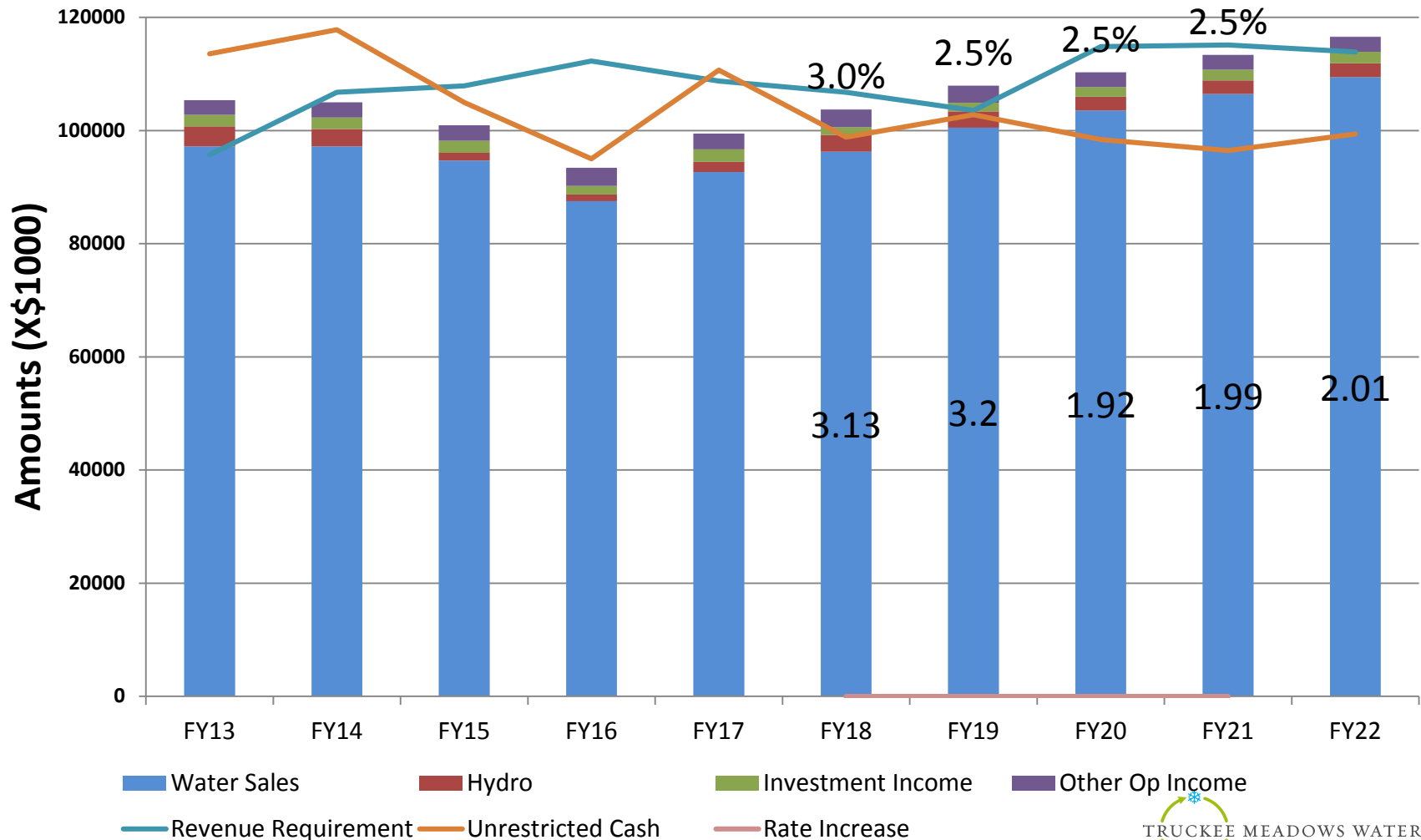
2018 Funding Plan - No Rate Increase



Truckee Meadows Water Authority (TMWA)

Financial Metrics 2013-2022 (Attachment A-2)

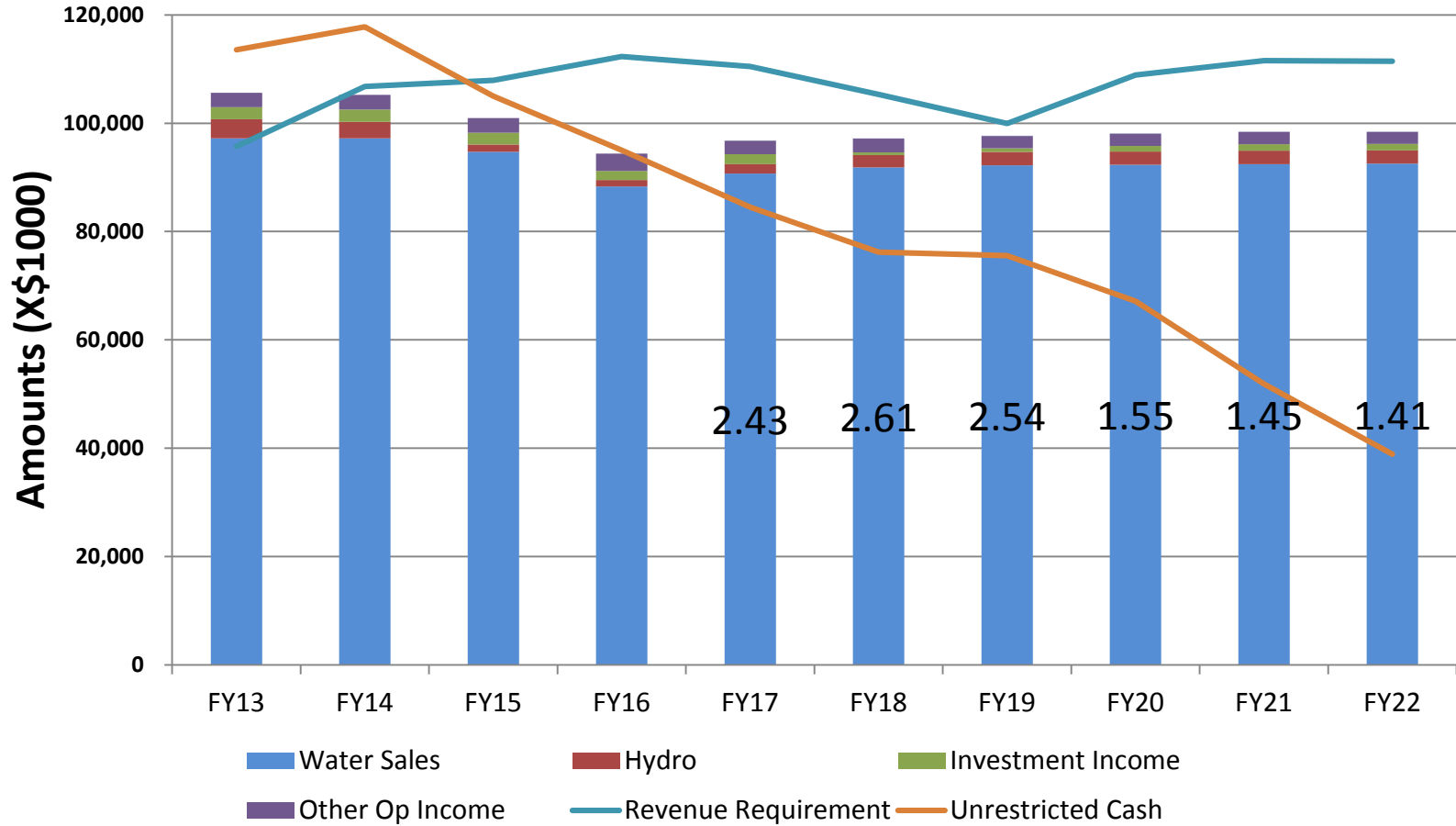
2018 Funding Plan – With Rate Increase



Truckee Meadows Water Authority (TMWA)

Financial Metrics 2013-2022 (Attachment B-1)

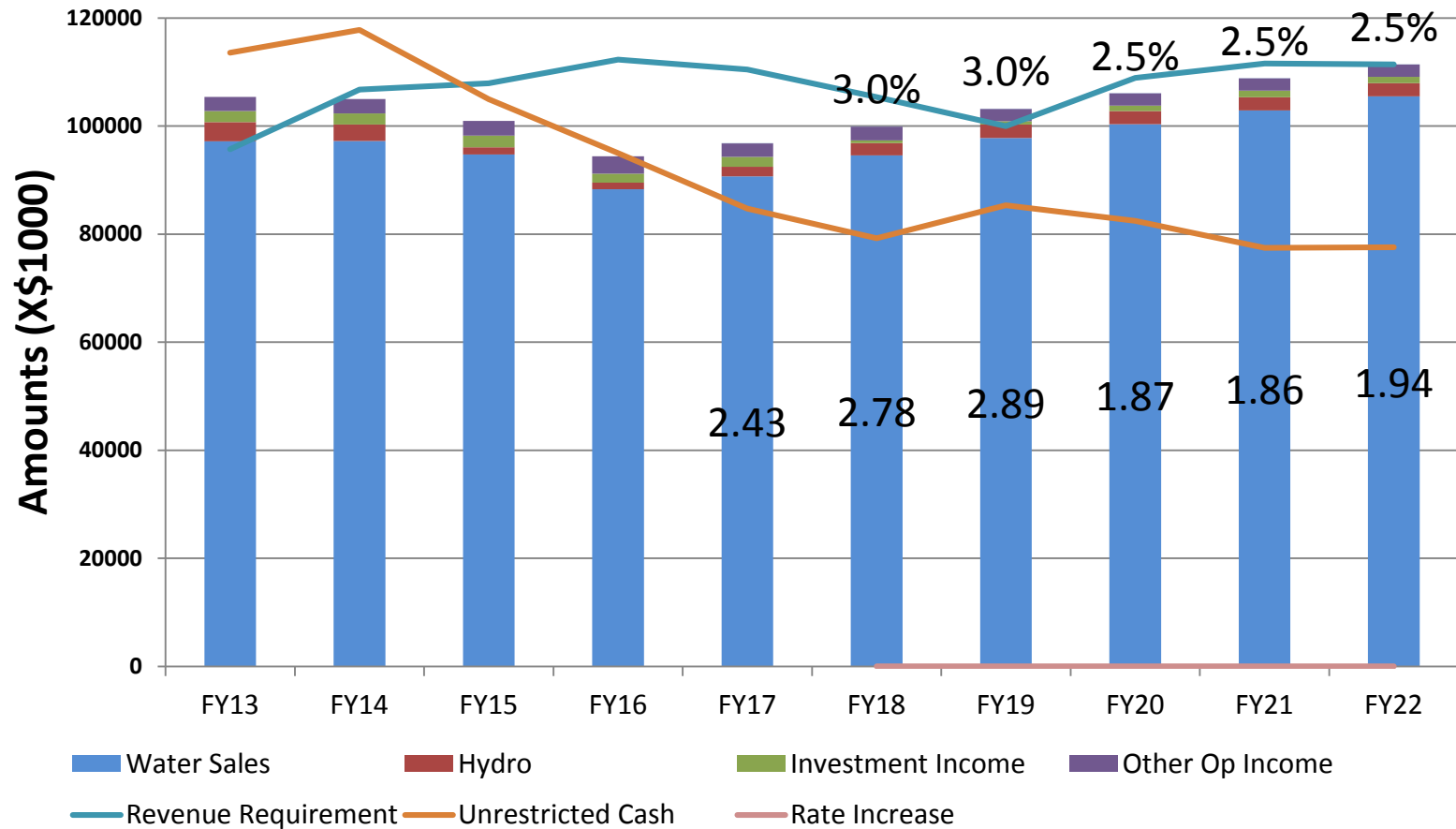
2017 Funding Plan (prior year) – No Rate Increase



Truckee Meadows Water Authority (TMWA)

Financial Metrics 2013-2022 (Attachment B-2)

2017 Funding Plan (prior year) - With Rate Increases



Thank you!
Questions?

Mark Foree, General Manager
Email: mforee@tmwa.com
O: (775) 834-8009 M: (775) 722-2341



STAFF REPORT

TO: Chairman and Board Members
THRU: Mark Foree, General Manager
FROM: Michele Sullivan, Chief Financial Officer
DATE: October 9, 2017
SUBJECT: **Required Communication from Eide Bailly in regards to TMWA's Annual Financial Audit**

Summary

The attached written communication from TMWA's external auditors, Eide Bailly, sets forth expectations for conducting and completing the audit of TMWA's financial statements and related disclosures for the fiscal year ended June 30, 2017. The Eide Bailly communication also defines the roles and responsibilities of TMWA's management, Eide Bailly, and the TMWA Board of Directors.

July 15, 2017

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

This letter is provided in connection with our engagement to audit the financial statements and to audit compliance over major federal award programs of Truckee Meadows Water Authority as of and for the year ended June 30, 2017. Professional standards require that we communicate with you certain items including our responsibilities with regard to the financial statement audit, the compliance audit, and the planned scope and timing of our audits.

Our Responsibilities

As stated in our engagement letter dated March 14, 2017, we are responsible for conducting our audit in accordance with auditing standards generally accepted in the United States of America (GAAS), *Government Auditing Standards* of the Comptroller General of the United States of America, the requirements of the Single Audit Act, as amended; and the provisions of the audit requirements of Title 2 U.S. Code of Federal Regulations (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance), for the purpose of forming and expressing opinions about whether the financial statements that have been prepared by management, with your oversight, are prepared, in all material respects, in accordance with accounting principles generally accepted in the United States of America, and on major federal award program compliance. Our audits of the financial statements and of major federal award programs does not relieve you or management of your respective responsibilities.

Generally accepted accounting principles provide for certain required supplementary information (RSI) to supplement the basic financial statements. Our responsibility with respect to Management's Discussion and Analysis (MD&A), the Schedule of Funding Progress-OPEB, Schedule of Proportionate Share of the Net Pension Liability-NV PERS and Schedule of Contributions-NV PERS, which supplements the basic financial statements, is to apply certain limited procedures in accordance with generally accepted auditing standards. However, the RSI will not be audited and, because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance, we will not express an opinion or provide any assurance on the RSI.

Our responsibility as it relates to supplementary information (the Schedule of Revenues, Expenses and Changes in Net Position – Budget and Actual, and the Schedule of Expenditures of Federal Awards) is to evaluate its presentation for the purpose of forming and expressing an opinion as to whether it is presented fairly in all material respects in relation to the financial statements as a whole.

We have not been engaged to report on Introductory Section and the Statistical Section (considered supplementary information). Our responsibility with respect to this other information in documents containing the audited financial statements and auditor's report does not extend beyond the financial information identified in the report. We have no responsibility for determining whether this other information is properly stated. This other information will not be audited and we will not express an opinion or provide any assurance on it.

Planned Scope of the Audit

Our audits will include examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; therefore, our audit will involve judgment about the number of transactions to be examined and the areas to be tested. Our audit procedures will also include determining major federal programs and performing the applicable procedures described in the U.S. Office of Management and Budget *OMB Compliance Supplement* for the types of compliance requirements that could have a direct and material effect on each of the entity's major programs.

Because of the inherent limitations of an audit, together with the inherent limitations of internal control, an unavoidable risk that some material misstatements or material noncompliance may not be detected exists, even though the audit is properly planned and performed in accordance with U.S. GAAS, *Government Auditing Standards* of the Comptroller General of the United States of America, the requirements of the Single Audit Act, as amended; and the provisions of the Uniform Guidance.

Our audits will include obtaining an understanding of the entity and its environment, including its internal control, sufficient to assess the risks of material misstatement of the financial statements, the risk of material noncompliance in the major federal award programs, and as a basis for designing the nature, timing, and extent of further audit procedures. Our audit is not designed to express an opinion or provide assurance on internal control over financial reporting. However, we will communicate to you at the conclusion of our audit, significant matters that are relevant to your responsibilities in overseeing the financial reporting process, including any material weaknesses, significant deficiencies, and violation of laws or regulations that come to our attention. Our responsibility as auditors is, of course, limited to the period covered by our audit and does not extend to any other periods.

We began our audit procedures in June 2017 and we plan to issue our reports no later than November 30, 2017.

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

Respectfully,

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

Reno, Nevada



STAFF REPORT

TO: Chairman and Board Members
THRU: Mark Foree, General Manager
FROM: Pat Nielson, Distribution Maintenance & Generation Manager
DATE: October 9, 2017
SUBJECT: Discussion and possible direction to staff on options for development or use of Farad property, including possible solicitation of requests for proposals for sale, lease or other disposition of Farad property and/or equipment

Recommendation

Staff is requesting direction from the Board as to the options for development or use of Farad property, including possible solicitation of requests for proposals for sale, lease or other disposition of Farad property and/or equipment.”

Background

The Farad Hydro-electric Facility property is scheduled to be transferred to the Truckee Meadows Water Authority (TMWA) by the end of this calendar year. Based on current market conditions related to renewable energy pricing and estimated construction costs, it does not appear to be economically feasible to rebuild and rehabilitate the necessary components of the hydro facility to create an operational power generating plant.

The property associated with this facility has many potential uses including;

- Recreational
- Educational
- Non-profit
- Private
- For-profit

Staff is providing the Board with a draft Request for Proposals along with a map (attached) for consideration to allow TMWA to explore the interests of our community and provide the Board with potential options for the eventual use/disposition of the property.

Staff continues to investigate the feasibility of increasing the generating capacity of the Fleish hydro plant and the possible installation of a hydro plant at the Highland Canal at Chalk Bluff.

**REQUEST FOR PROPOSALS
FOR
LEASE OR DEVELOPMENT OF FARAD PROPERTY**

[DATE]

I. GENERAL STATEMENT

The Truckee Meadows Water Authority (“TMWA”) is seeking proposals for the potential lease or development of all or portions of certain land, equipment and hydroelectric facilities located generally in Farad, California. The real estate (hereafter referred to as the “Land”) consists of approximately 108.26 acres located in the Truckee canyon in Nevada County, California near the Farad exit from Interstate 80, described as Assessor’s Parcel Numbers 048-050-01 (3.20 acres), 048-030-14 (48.83 acres), 048-060-07 (0.54 acres) and 048-050-10 (55.69 acres), as depicted in the map attached as Exhibit “1”. The Property includes a building constructed in approximately 1899 on APN 048-030-14 (the “Building”), a wooden flume (damaged), diversion works (damaged), penstock and certain facilities related to a 2.8 MW hydroelectric plant previously operated on the Property (“Fixtures”), various permits related to the reconstruction of the diversion dam for the hydroelectric plant damaged in a 1997 flood and operation of the hydroelectric plant (“Permits”), and that certain water right identified as Claim No. 5 in the Final Decree entered September 8, 1944, in *The United States of America, Plaintiff, vs. Orr Water Ditch Company, et al., Defendants*, in the United States District Court for the District of Nevada, In Equity No. A-3e (“Farad Hydro Water Right”). As used herein, the term “Property” consists of the Land, Building, Fixtures, Permits and Farad Hydro Water Right.

The intent of TMWA in issuing this RFP is to receive proposals for leasing or developing all or part of the Property, and to secure a short or long term triple net lease for the use and/or development of all or a portion the Property. The purpose is to maximize value of a once critical, but now dormant, asset while facilitating the protection of the Truckee River watershed. TMWA may consider one or multiple responses where not in conflict. Responses may be limited to portions of the Property (e.g., development and lease of Building; development and lease of portions of the Land for public recreation trails), or may encompass the entire Property (e.g., lease and operation of hydroelectric plant). Leases must be a minimum of three (3) years, and all proposed uses must comply with all applicable federal, state and local laws, ordinances, rules and regulations.

This document, along with the supplied exhibits, and applicable governmental laws, ordinances and regulations (including zoning regulations), is intended to provide the means to furnish a comprehensive and responsive proposal. Therefore, the object is to solicit qualified firms to provide competitive proposals for evaluation and make an award to one or more respondent, or to facilitate the issuance of separate requests for proposals on specific types of uses.

TMWA reserves the right to accept or reject any or all proposal(s) or to award single or multiple contracts.

Opening Date / Time

- Offers must be received, not later than the Opening Date & Time of _____ by the Truckee Meadows Water Authority, 1355 Corporate Blvd., Reno, Nevada 89520. Proposals must be presented as sealed documents. Offers sent by facsimile will not be accepted. TMWA is not responsible for late delivery by U.S. Postal mail or other couriers.

As Is

- The Property is offered "As-Is," "Where is" condition, with all faults, liabilities, and defects, latent or otherwise, known or unknown, in its present state and condition, with no rights of recourse against TMWA, and with no warranties or guarantees, expressed or implied, as to kind, character or its fitness for any use, purpose or its ability to be developed for any use or purpose whatsoever. Prospective respondents may personally inspect the Property, upon request. TMWA will require appropriate disclaimers in any final agreement for the Property.
- Respondent shall be required to assume any and all risks and liabilities as to, concerning, or with respect to the Property, including: (i) the suitability of the Property for any and all activities and uses which Respondent may conduct thereon, including the habitability, merchantability, marketability, profitability or fitness for a particular purpose of the Property; (ii) the nature, quality, state of repair or lack of repair or the condition of the Property, including, with respect to water conditions, soil, geological or geotechnical condition such as soil expansiveness, corrosivity, or stability, or seismic, hydrological, geological and topographical conditions and configurations; (iii) the compliance of or by TMWA, the Property, or its operation with any codes, laws, rules, ordinances, or regulations of any applicable governmental authority or body; (iv) the condition of any improvements previously constructed on the Property; (v) the compliance of the Property with any or all past, present or future federal, state or local ordinances, rules, regulations or laws, building, fire or zoning ordinances, codes or other laws; (vi) compliance with any Hazardous Materials Laws or other laws, rules, regulations, orders, codes or requirements, including the Americans with Disabilities Act of 1990 (all as may be amended from time to time), and the presence or absence of Hazardous Materials at, on or under the Property; and (vii) the conformity of the Property to any plans or specifications or to past, current or future applicable zoning or building requirements, including any specifications that may have been or may be provided to Respondent.

Environmental Conditions

- Respondents are solely responsible for their own investigation with respect to environmental conditions of the Property.
- Lead - all painted materials are presumed to contain lead.

II. REQUEST FOR PROPOSAL (RFP) PROCESS REQUIREMENTS

Site Visit / Inspection

- An official site visit and inspection will be completed on or around _____ PST. Offerors are encouraged to visit the property at that time to become thoroughly familiar with the property and its surrounding environment. Offerors are cautioned not to enter the property except at the scheduled inspection time. Follow-up visits and inspections can be arranged after this date as needed but are subject to TMWA scheduling availability.

Terms of the Request for Proposal (RFP):

General

- TMWA shall generally follow the procedures set forth in NRS 268.059 through 268.063 applicable to leases of TMWA real property, and additional procedures relevant to TMWA bond covenants.
- Proposals must be made in the official name of a firm or individual under which commercial development will be conducted (showing official business address) and must be signed by a person or persons authorized to legally bind the person, partnership, company, or corporation submitting the proposal.
- Proposals must be sealed and submitted in writing to TMWA prior to the meeting at which the lease is to be approved.
- By submitting a proposal, the proposer agrees to be governed by the terms and conditions set forth in this RFP, as well as applicable state and local law. Any exceptions to the specifications must be clearly identified in the last section of the proposer's response.
- If material errors are found in a proposal, or if a proposal fails to materially conform to the requirements of the RFP, the proposal may be rejected. Data and information submitted in the proposal should be prepared in a manner designed to provide TMWA with a straightforward presentation of the proposer's capability of satisfying the requirements of this RFP.
- Proposers shall be responsible for fully acquainting themselves with the condition of the Property that may affect a proposer's ability or capacity to develop the Property. Failure or omission of any proposer to acquaint itself with existing conditions shall in no way relieve it of any obligation with respect to this RFP, if awarded.

Offer Price

- An acceptable offer will include the following price components: (1) a description of the initial capital investment in the Property to develop it, if applicable; (2) a description of the annual base rent proposed to be paid to TMWA, and the proposed duration of the lease term and any renewals; (3) any other consideration proposed to be provided to TMWA. TMWA expressly reserves the right to accept an offer other than the highest responsive offered price.

Selection Criteria

Each Request for Proposal will be evaluated based on any or all of the following factors listed below as enumerated in the Request for Proposals:

- Proposed use;
- Financial ability of the operator;
- Experience of the operator in developing similar properties;
- Effect of the use on the Property, Truckee River watershed, TMWA operations and other TMWA assets and properties;
- Compatibility with applicable laws;
- Consideration offered to be paid to TMWA.

The contract will be awarded to the most responsive and responsible offeror whose offer is deemed most advantageous to TMWA. TMWA reserves the right to waive any defect or omission in any proposal that does not materially affect the terms of the response to this Solicitation. TMWA reserves

the right to reject any proposal. In deciding which offeror is the most responsive, responsible and advantageous to TMWA, TMWA will consider all factors set forth in the proposal documents.

Format and Contents of Offers

The information set forth in the paragraphs below should be included with all offers. Failure to provide any of the information requested by these paragraphs is grounds for TMWA to reject an offer.

- Title Page.
 - The title page should reflect the offer subject, name of the firm, address, telephone number, contract person and date of preparation.
- Table of Contents
 - The Table of Contents should indicate the material included in the offer by section and page number. An offer's table of contents should mirror this section of the Solicitation and must include all the items set forth in this section of the Solicitation.
- Letter of Transmittal (Please limit to three pages)
 - A letter of transmittal should be submitted with an offer. The letter should include:
 - A statement of the offeror's understanding of the project required by the Solicitation. The offeror must explain how it would complete the project for TMWA.
 - The names of the persons who are authorized to make representations on behalf of the offeror (include their titles, addresses and telephone numbers).
 - A statement that the individual who signs the transmittal letter is authorized to bind the offeror to contract with TMWA.
- Profile of the Offeror
 - The offeror's past experience with developments or operations similar to or larger than that proposed on the Property in this Solicitation.
 - Whether the offeror is a local, regional or national firm.
 - How long the firm has been in business under the present name and structure. Provide any other names under which the firm has done business and the dates it operated under each name and the locations at which it operated under each name.
 - Personnel - Full-time and part-time staff who will be assigned direct work on this project must be identified.
 - Financial - A statement verifying the offeror's financial ability to successfully lease and complete the redevelopment of the Property, together with a copy of the firm's last two financial statements
 - A description of any comparable operations and/or projects completed by the offeror during the most recent ten-year period similar in scope to what is proposed in the Solicitation.
- Required Representations by the Offeror
 - List by name the qualifications, education and work experience of all personnel who will be assigned to the project and provide a narrative description of the work responsibilities of each individual. Provide resumes for key individuals.
- Additional Data
 - Data not specifically requested by the foregoing sections but which is considered essential to the offer may be presented in this section. If there is no additional information to present, state in this section, "There is no additional information we wish to present." However, suggestions of additional information include, but are not limited to, copies of relevant media reprints and promotional brochures of your firm.

- Offerors are requested to designate those portions of their offer submissions that contain proprietary information and which should not be made available to the public under the Nevada Public Records Act.

Withdrawal of Offers

Offers may be withdrawn by written request sent to TMWA before the time scheduled for receipt of offers, as set forth in herein. The deposit of the offeror who withdraws his proposal will be returned promptly.

Execution of Agreement for Lease

- Following acceptance by TMWA of the successful offeror's offer, an Agreement for Lease of the Property (the "Agreement"), substantially in the form attached hereto as Exhibit 2, will be presented to the offeror. The offeror must execute the Agreement within fourteen (14) calendar days of presentation. The lease is subject to the approval of the TMWA Board of Directors, which must approve the Agreement and authorize the lease of the Property.

Rejection of Offers

TMWA reserves the right to reject any or all offers received whenever such rejection is in its best interests.

III. RFP APPENDICES

Exhibit 1 – Depiction of Land

Exhibit 2 – Form of Lease [To be attached]

TMWA CONTACT:



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**FARAD HYDRO
NEVADA COUNTY PROPERTIES**

DATE 10/4/2017
MAP BY: JAK
REQUESTED BY: PN
SCALE: 0 100 200 400 Feet





STAFF REPORT

TO: Board of Directors
THRU: Mark Foree, General Manager
FROM: John Enloe and Scott Estes
DATE: October 11, 2017
SUBJECT: Discussion and possible direction to staff regarding water service options to the Verdi area including a possible wholesale agreement with the West Reno Water Company, or possible acquisition of the West Reno Water system

Background

West Reno Water Company, Inc. (West Reno) proposes to provide retail water service to certain areas within its anticipated initial PUCN authorized service territory (PUCN application currently in process) in the Boomtown/Verdi area (see attached figure). West Reno will own, maintain, and operate its own distribution system for retail water service including wells, transmission and distribution mains, and storage tanks. West Reno has separate groundwater supplies that it intends to use to serve all or a portion of the proposed development within the anticipated PUCN authorized service territory, but desires to receive wholesale water service from TMWA to serve a portion of its total water demand to allow for conjunctive management of its groundwater resources with surface water.

TMWA has developed a Verdi Area Facility Plan (Area Plan) to meet the projected buildout demands in the Verdi area. Portions of the Area Plan facilities have been, or are currently being, constructed, including a new water main extension to convey water to the West Meadows development within the east Verdi area. The water system currently being extended into the Verdi area will be a temporary extension of the Mogul/Verdi Business Park tank zone, which has 150 GPM of excess supply capacity.

West Reno has initially requested 50 GPM of supply capacity, which would be provided as a year-round, base load supply. The necessary Truckee River water rights required to support this demand is approximately 80 acre feet per year. These water resources could be purchased through TMWA's Rule 7 Inventory or acquired on the open market. The wholesale service would be billed under the Firm Standby Partial Requirements (FSPR) rate schedule, which would generate a revenue of approximately \$3,400 per month. Required facility fees for the proposed wholesale service amount to \$602,500.

Presently, TMWA does not have the ability to provide retail water service to the planned and proposed developments in the Boomtown / Verdi area. Several major water system improvements are required to deliver the estimated 1,933 GPM buildout demand. Due to the significant cost of the facilities required to supply the necessary capacity (\$13.85 million), TMWA staff does not propose to fund the improvements based on the Area Fee model; therefore, new development will be responsible for the construction of all subsequent water system improvements and facility costs.

At the August meeting of the TMWA Board of Directors, action was deferred on the wholesale agreement, and staff was directed to further evaluate water service options. Four primary options are under consideration:

1. West Reno serves the new development in the area to the extent their groundwater resources allow.
2. West Reno serves the new development in the area to the extent their groundwater resources allow, supported by a TMWA wholesale agreement that would allow for conjunctive use management of groundwater and surface water.
3. With Board direction, authorize staff to enter into negotiations to develop a draft acquisition agreement for the West Reno water system, whereby TMWA would become the retail service provider in the short term (i.e. 6-9 months).
4. With Board direction, authorize staff to enter into negotiations to develop a draft acquisition agreement for the West Reno water system, whereby TMWA would become the retail service provider in the long term (i.e. 2-5+ years). West Reno would provide retail service during this interim period.

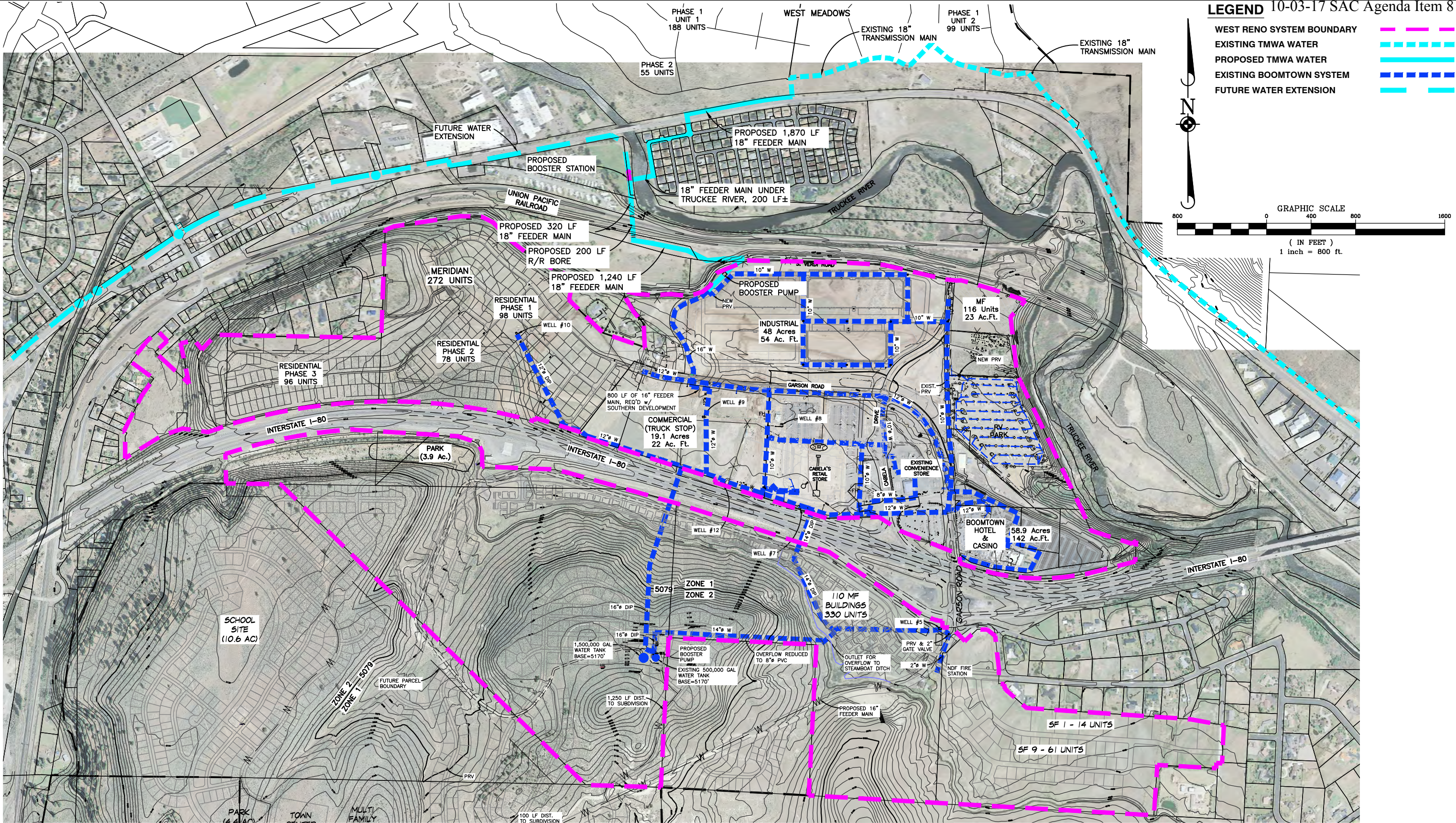
Discussion

On October 3, staff discussed this topic at the SAC meeting. The SAC supported TMWA entering into a wholesale agreement with West Reno to provide wholesale water service which does not negatively impact TMWA customer rates in the future.

A table which summarizes the pros and cons of each option will be presented at the Board meeting. Staff is seeking input and direction regarding the different water service options for the Verdi area, including a possible wholesale agreement with the West Reno Water Company, or possible acquisition of the West Reno Water system.

Attachments:

Figure A: West Reno Water Company



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DATE	REVISIONS	DRAWN BY



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WEST RENO WATER COMPANY			
BOOMTOWN, NEVADA			
BOOMTOWN WATER SYSTEM LAYOUT			
DRAWN BY:	DATE:	SCALE:	CODE:
MB	09/27/17	1"=800'	Bhcrenv



STAFF REPORT

TO: Board of Directors
FROM: Mark Foree, General Manager
DATE: October 9, 2017
SUBJECT: General Manager's Report

Attached please find the written reports from the Management team including the Operations Report (*Attachment A*), the Customer Services Report (*Attachment B*), and the Water Resource and the Annexation Activity Report (*Attachment C*).

Also, included in your agenda packet are press clippings from September 14, 2017 through October 10, 2017.



STAFF REPORT

TO: Board of Directors
THRU: Mark Foree, General Manager
FROM: Scott Estes, Director of Engineering
BY: Bill Hauck, Senior Hydrologist
DATE: October 06, 2017
SUBJECT: **October 2017 Operations Report**

Summary

- The region is positioned extremely well from a water supply perspective
- Truckee River flows are slightly above average for this time of the year
- Lake Tahoe is still quite high and more than 83% full
- All other federal reservoirs will go into this winter as full as legally allowed
- Normal Truckee River flows are anticipated over the course of the next 2 plus years
- Hydro revenue for September 2017 was an estimated \$286,430

(A) Water Supply

- **River Flows** - Truckee River flows at the CA/NV state line were approximately 460 cubic feet per second (CFS) this morning. This is higher than the long-term average of 412 CFS on this date. Above average river flows are anticipated for the remainder of the year.
- **Reservoir Storage** - The elevation of Lake Tahoe is currently 6228.08 feet which is just a little more than a foot (1.02') below its legal maximum storage elevation of 6229.10 feet. All federally owned and operated reservoirs are being lowered for the winter in addition to Donner and Independence lakes which are already down to wintertime operating elevations. Reservoir storage values as of 10/6 are as follows:

Reservoir	Current Storage (Acre-Feet)	% of Capacity (Percent)
Tahoe	619,100	83%
Boca	34,009	83%
Donner	3,890	41%
Independence	14,742	84%
Prosser	13,745	46%
Stampede	211,224	93%

In addition to the storage in Donner and Independence lakes, TMWA has approximately 20,300 acre-feet of water stored between Boca and Stampede Reservoirs under the terms of TROA. TMWA's combined back-up reservoir storage between Donner and Independence lakes and TROA is approximately 38,900 acre-feet as of this morning.

- **Outlook** - The region is positioned extremely well from a water supply perspective as we approach the winter months. It is a good position to be in as Lake Tahoe is still quite high, and all other federally-operated reservoirs will end up going into this winter with as much water in storage as is legally allowable. The region can count on normal river flows for at least the next couple of years regardless of what type of winter we end up experiencing.

(B) Water Production

Demand - Last week customer demand averaged 90 million gallons per day. For the year-to-date, demand is approximately 98.5% of 2016. As of last week, surface water made up about 88% of our raw water supply, and groundwater the other 12% from production wells located throughout TMWA's service territory. As is typical for this time of year, customer demand is dropping significantly week over week as outdoor water use continues to decline.

(C) Hydro Production

Generation - Average Truckee River flow at Farad (CA/NV state line) for the month of September was approximately 623 cubic feet per second (CFS). The Washoe Hydropower plant was off-line for thirteen days in September due to a flash flood event which washed out a section of flume. Hydropower statistics for the month of September are as follows:

Hydro Plant	Days On-Line	Generation (Megawatt hours)	Revenue (Dollars)	Revenue (Dollars/Day)
Fleish	30	1,651	\$118,453	\$3,948
Verdi	30	1,673	\$118,967	\$3,966
Washoe	17	682	\$49,008	\$1,634
Totals	77	4,006	\$286,428	\$9,548



STAFF REPORT

TO: Board of Directors
THRU: Mark Foree, General Manager
FROM: Marci Westlake, Manager Customer Service
DATE: October 18, 2017
SUBJECT: September Customer Service Report

The following is a summary of Customer Service activity for September 2017.

Ombudsman

- No calls for the month of September.

Communications

Customer outreach in September included:

- Pat Nielson, Brent Eisert and Kelly Cecil presented 4 separate Verdi Hydro tours in September and 33 people attended.
- Will Raymond and Kelli Burgess presented 5 separate Chalk Bluff Water Treatment Plant tours in September and 104 people attended.
- Mark Foree presented Water Resources in Nevada: Capacity for Economic Expansion at UNLV in Las Vegas and 30 people attended.
- James Weingart had a water treatment presentation at Chalk Bluff WTP for TMCC Environmental Science class and 15 people attended.
- Will Raymond had a water treatment presentation at Chalk Bluff WTP for a Retired teachers group and 9 people attended.
- Kara Steeland and Laine Christman had a Water Supply, Water Quality and Conservation presentation at Clayton Middle School and 20 students attended.
- Kara Steeland had a Watershed, Water Supply, Storm Water and Conservation presentation at Robert Mitchell ES and 60 students attended.
- Ian Dasmann had a Water Treatment presentation at Chalk Bluff WTP for School Lego Robotix Team and 24 people attended.

Conservation (January 1 – December 31)

- 5,751 Water Watcher Contacts
- 1,495 Water Usage Reviews

Customer Calls – September

- 8,904 phone calls handled
- Average handling time – 4 minutes, 33 seconds per call
- Average speed of answer – 23 seconds per call

Billing – September

- 126,173 bills issued
- 5 (<.1%) corrected bills
- 15,499 customers (12.0%) have signed up for paperless billing to date.

Service Orders –September (% is rounded)

- 8,105 service orders taken
- 4,005 (49%) move-ins / move-outs
- 999 (13%) cut-out-for-non-payment and cut-in after receiving payments, including deposits and checks for tamper
- 581 (7%) zero consumption meter checks
- 447 (6%) re-read meters
- 587 (7%) new meter sets and meter/register/ERT exchanges and equipment checks
- 490 (6%) problems / emergencies, including cut-out for customer repairs, dirty water, no water, leaks, pressure complaints, safety issues, installing water meter blankets, etc.
- 265 (3%) high-bill complaints / audit and water usage review requests
- 731 (9%) various other service orders

Remittance – September

- 34,879 mailed-in payments
- 28,420 electronic payments
- 24,252 payments via RapidPay (EFT)
- 16,482 one-time bank account payments
- 6,590 credit card payments
- 3,324 store payments
- 2,022 payments via drop box or at front desk

Collections –September

- 15,591 accounts received a late charge
- Mailed 9,196 10-day delinquent notices, 7.2% of accounts
- Mailed 2,447 48-hour delinquent notices, 1.9% of accounts
- 376 accounts eligible for disconnect
- 387 accounts actually disconnected (including accounts that had been disconnected-for-non-payment that presented NSF checks for their reconnection)
- 0.11% write-off to revenue

Meter Statistics – Fiscal Year to September 30, 2017

- 0 meter retrofits completed
- 284 meter exchanges completed
- 586 new business meter sets completed
- 123,415 meters currently installed



MONTHLY CONSERVATION REPORT

Tuesday, October 3, 2017

Conservation Response Initiation Type (to-date)

Drive-bys	5166
Deliveries	55
Hotline Reports	306
Email Reports	225
Total	5752

Watering WATER VIOLATIONS Observed (to-date)

Waste	743
Wrong Day	4301
Wrong Time	595
All Violations	5639

WATER WATCHER ACTIONS Taken (to-date)

Educational Visits	2636
A.M. Letters	2780
Courtesy Calls	303
No Actions	32
All Actions	5751

Water Devices Supplied (to-date)

Faucet Aerators	0
Hose Timers	23
Nozzles	49
Low-flow Shower heads	1
Tree Root Feeder	0
All Devices	73

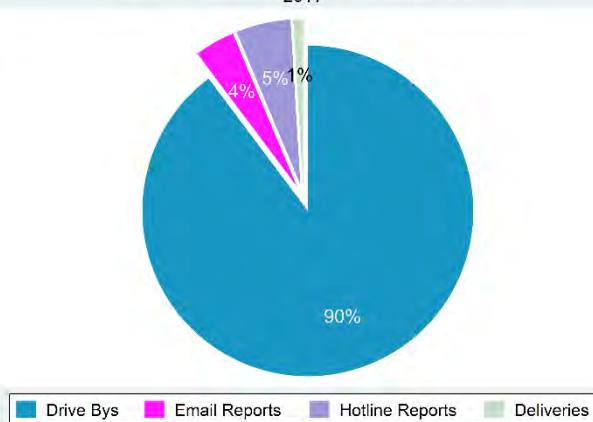
Additional Conservation Actions (to-date)

Water Usage Reviews	1495
Tree Care Visits	101

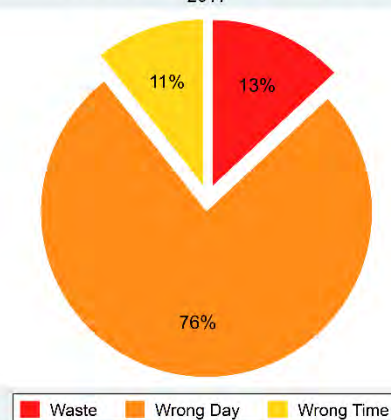
Number of Attendees to Workshops (to-date)

Irrigation System Start-up #1	Cancelled
Irrigation System Start-up #2	12
Irrigation System Start-up #3	20
Irrigation System Start-up Workshop #1	0
Irrigation System Start-up Workshop #2	12
Irrigation System Start-up Workshop #3	20
Landscape Planning & Design Workshop	31
Tree Care Workshop	23
Drip System Maintenance Workshop #1	32
Drip System Maintenance Workshop #2	0
Sprinkler System Maintenance Workshop #1	21
Sprinkler System Maintenance Workshop #2	0
Walking Tour, Part 1 - University Ridge Park	14
Walking Tour, Part 1 - River School Farm	51
Walking Tour, Part 2 - Valley Wood Park #1	40
Walking Tour, Part 2 - Valley Wood Park #2	12
Winterize Your Irrigation System Workshop #1	9
Winterize Your Irrigation System Workshop #2	3
Winterize Your Irrigation System Workshop #3	0
Winterize Your Irrigation System Workshop #4	1
All Workshops	301

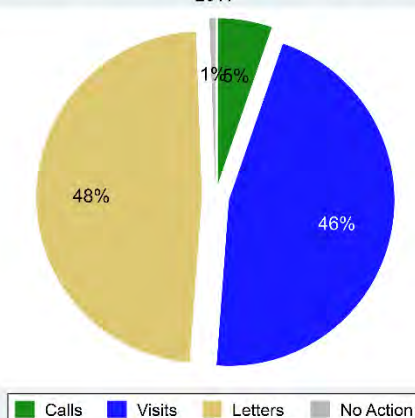
Water Watcher Response Initiation Types
2017



Water Violation Types Observed by Conservation Consultants
2017



Water Watcher Actions Taken by Conservation Consultants
2017

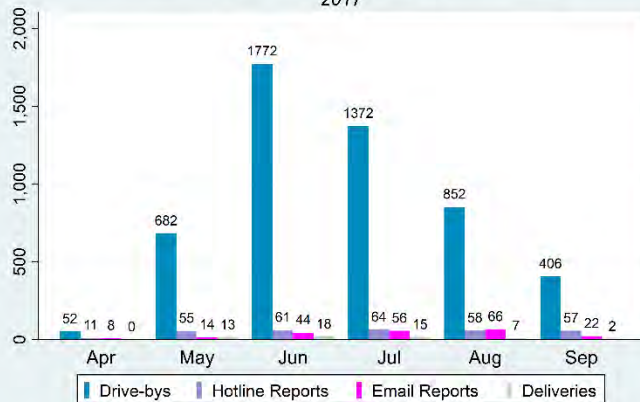




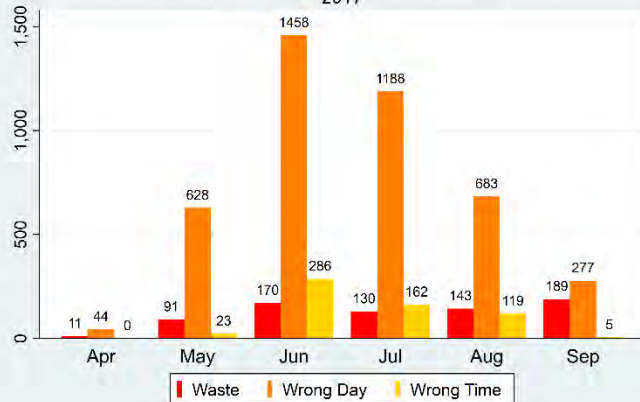
MONTHLY CONSERVATION REPORT

Tuesday, October 3, 2017

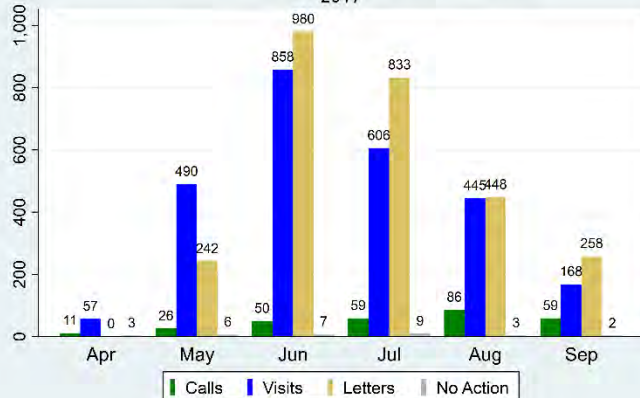
Water Watcher Initiations Received Monthly
2017



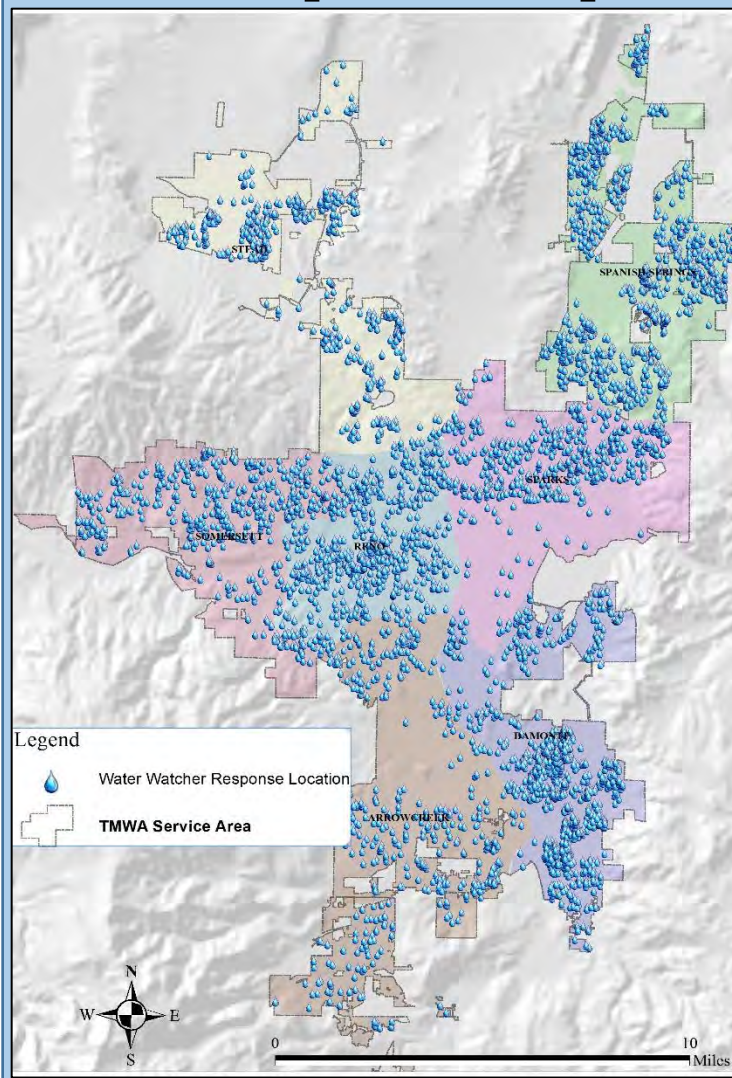
Water Violations Observed Monthly
2017



Water Watcher Actions Taken Monthly
2017



TMWA Water Watcher Response Map



RECAP –As we approach the end of the irrigation season, I'm logging the final Conservation Report of 2017. With only a few reports rolling in, our Conservation staff is reduced to a skeleton crew. While watering violations have dropped, Water Usage Reviews have increased by 52% in September compared to August. Overall, we had thousands of educational interactions with customers. We consider this year's efforts a success and look forward to 2018.



STAFF REPORT

TO: Chairman and Board Members
THRU: Mark Foree, General Manager
FROM: John Zimmerman, Manager, Water Resources
DATE: October 10, 2017
SUBJECT: **Report Water Resources and Annexation Activity**

RULE 7

Rule 7 water resource purchases and will-serve commitment sales against purchased water resources through this reporting period:

Beginning Balance	5,680.98 AF
Purchases of water rights	0.00 AF
Refunds	0.00 AF
Sales	— 79.87 AF
Adjustments	0.00 AF
Ending Balance	5,601.11 AF

Price per acre foot at report date: \$7,500

WATER SERVICE AREA ANNEXATIONS

There were no annexations during this reporting period.



TMWA Board Meeting

Wednesday, October 18, 2017

Press Clippings

September 14, 2017 – October 10, 2017



What will happen to water after industries are through with it?

LETTER TO THE EDITOR Sunday, 9-17-17

What happens to the water shipped to the industrial park after it has been used there?

Will it go back into the river, be injected into the ground?

If some of the recycled water is shipped by pipeline to the industrial park for Tesla et al., what will be the effect on the Truckee River channel from the sewer plant to east of the industrial park or wherever the water will be returned to the river?

The Nature Conservancy and others have done admirable jobs rebuilding the channel into a healthy environment for flora and fauna.

Will this progress be erased if the water normally flowing into the Truckee at the sewage plant is now removed between the sewage plant and the industrialpark?

Jean Stoess, Reno

World-class adventures abound on the Sierra's western slopes

By Tom Stienstra

September 17, 2017



Photo: Mason Trinca, Special To The Chronicle

IMAGE 1 OF 4

Perry Norris, executive director of Truckee Donner Land Trust, looks out on to the meadows of Carpenter Valley near Truckee.

The last steps to the summit of Castle Peak, the 9,103-foot conical mountain in Tahoe National Forest not far from Donner Pass, involve a short scramble over a series of volcanic crags. You emerge on a small perch overlooking the western slopes of the Sierra Nevada, some of California's greatest recreation lands.

To the north are more rocky peaks that give way to green valleys and shape the Pacific Crest Trail. To the west is a swath of 50 miles that extends from the

high Sierra crest downslope to the South Yuba River. You're sitting atop the crown jewel of Northern California's high country.

All around is Nevada County.

The slopes here, which flank Grass Valley and Nevada City and run up the hill, as we say, to the high country north of Truckee and Tahoe, have a historic feel. After all, not long ago they were prospected and panned during the gold rush era. Today, they represent one of the state's best outdoor playgrounds.

You don't have to look far to discover some of Northern California's most rewarding day hikes and burly, brand-new mountain bike trails. Paddlers and boaters have their pick of the pristine Donner and Independence lakes. And modest development in the area means private campsites and funky lodging options abound.

From atop Castle Peak, you can see Highway 20 cutting across the landscape, from Nevada City east to Interstate 80 near Truckee, like an artery of access. And yet, if you peer down from your perch to the I-80 corridor, you'll see one car after another — 26,000 per day, according to Caltrans — sail right on past, en route to north Tahoe and Reno.

Highway 20 provides the launch point for the Pioneer Trail — some of the best mountain biking in California. From the Omega Overlook (with a view of the South Yuba Canyon), the route extends 24 miles one-way to Five Mile House. Like so many sites in Nevada County, it captures the area's rich history. Gold seekers originally established this route in the 1850s.

Another former gold-mining route is the South Yuba Independence Trail. This trail runs along the gorgeous South Yuba River, with easy access at a bridge and hairpin turn along Highway 49 seven miles out of Nevada City. It's gorgeous right from the parking lot. Or you can walk as far as 4.5 miles out

and back. Most visitors walk a mile or two, find a swimming pool and wade out to cool off.

The Spenceville Wildlife Area in the foothills near Smartville is another place I find myself going back to, again and again. For hiking, wildlife watching and exploring, the best access point is the old (and closed to vehicles) wood bridge at Dry Creek on Spenceville Road. This marks the start of a hike along a creek corridor chock full of wild turkeys and deer in the fall, plus a pretty stream and a surprise waterfall at a small spring.

From miles around you can look up through the trees and spot Castle Peak, rising above, anchoring this vast scope of land. Whether you're sitting at its summit or trundling across the land below, it's not hard to imagine what is possible here, and how these adventures can transform your life.

*Tom Stienstra is The San Francisco Chronicle's outdoor writer. He is the author of "Moon California Hiking." E-mail: tstienstra@sfchronicle.com
Twitter: [@StienstraTom](https://twitter.com/StienstraTom)*

Exploring: Carpenter Valley

A few miles north of Donner Lake as the crow flies, behind a subdivision, a jeep trail heading toward the Sierra Crest plunges into a dense forest of pines and firs. Threading granite boulders that were stranded 10,000 years ago by melting glaciers, the trail leads to an expanse of golden grasses and a slow winding creek. Migrating birds flit through willows, and the primordial calls of sandhill cranes crack the stillness.

This is Carpenter Valley, a long-fenced-off landscape that has recently — and for the first time ever — been opened to the public. There are plenty of meadows in the western Sierra, but not many of them remain this pristine, having been plated with homes or foraged by cattle and sheep.

This summer, a 1,317-acre parcel of the valley's lower section, long held by three families as a private retreat, was purchased for \$10 million by San Francisco's Northern Sierra Partnership, the Nature Conservancy and the Truckee Donner Land Trust. "The Lower Carpenter Valley is a little bit of heaven," says Lucy Blake, president of the Northern Sierra Partnership, a San Francisco nonprofit group working to preserve lands north of Lake Tahoe.

The valley links a constellation of nearby protected areas, including Webber and Independence lakes, Perazzo Meadows and Webber Falls — all of which are clustered west of Highway 89 between Truckee and the Sierra Valley. Buying it is part of the Partnership's broader mission to dissolve a checkerboard of parcels stamped on the mountains in the 1860s during construction of the transcontinental railroad.

"It's amazing to see the landscape come back together again," Blake says.

Twice a week this fall, through the end of October, as well as next spring and summer, trained docents are leading hikers on a 5-mile route along the North Fork of Prosser Creek in the valley. The apex of the tour is a natural spring at the flank of Carpenter Ridge that produces startling gardens of hillside color.

The valley is a haven for migrating birds, including willow flycatchers, of which only 200 pairs remain in California, says Helen Loffland, a meadows species specialist at the Institute for Bird Populations. "They perch on the tallest branches of the willows, and throw their heads back when they sing; their white chins look like cotton balls."

Book a Truckee Donner Land Trust guided tour of Lower Carpenter Valley at <http://tinyurl.com/yatwnvqo>.

— *Laura Read*

Hiking: Castle Peak

The name says it all: the 9,104-foot crag is a treeless fortress fronted by rock turrets.

From the summit of Castle Peak, on days with crystalline clarity, you can get glimpse of Lake Tahoe 20 miles southeast. Turn around and you may be able to pick out Lassen Peak, far to the north.

The moderate, 7-mile-round-trip trek up Castle Peak is a popular one in midsummer, but as fall approaches, you can often have it to yourself — particularly on weekdays. To find the trailhead, exit north off of I-80 at Boreal/Castle Peak and look to your right.

The hike starts easy, from an old jeep road, then traces a ridgeline toward the backside of the peak, but the end is grueling: a 1,200-foot elevation gain in the final mile and a half. That last leg includes a stretch of switchbacks, which allows you to get into rhythm, through rock and scree. You then circle around the back of the mountaintop, and make the scramble on small crags to the summit pinnacle.

— *Tom Stienstra*

Mountain Biking: the Hoot Trail

Last spring, when trail builders finished constructing Nevada City's new Hoot Trail, a 1.4-mile multiuse path featuring 438 feet of curves and banked turns, mountain bikers flocked to the area, further cementing Nevada County as a destination for the growing sport. The trail-building organization Bicyclists of Nevada County estimates that the trail sees roughly 50 to 100 riders a day, making it the most popular ride in the area.

Located 5 miles from downtown Nevada City off Highway 20, the Hoot is part of an exceptional and growing network of trails that also includes the 3-mile twisting downhill of Scott's Flat Trail, the beginner-friendly rolling Pioneer Trail that parallels the highway, and the more technical Miner's Trail and Taxi

Cab, which descend precipitously into town. With more offerings bringing more grinders to town, no longer is the sport confined to the bike shop.

“Nevada City has long been a mountain bike destination, but recently, a growing mountain bike culture and community have taken it to a whole new level,” says Truckee mountain biker Jeremy Benson, author of a new guidebook, “Mountain Bike Tahoe.” “Not only is the Hoot Trail ridiculously fun, but it’s perfectly situated to link up with other nearby trails to create any length ride you want.”

Don’t have a bike? You can rent a full-suspension mountain bike — and get maps to the local trails — from the Tour of Nevada City Bicycle Shop in downtown. From \$65 a day; www.tourofnevadacity.com

— *Megan Michelson*

Camping: Peter Grubb Hut

In 1937, the Sierra Club named its new Donner Pass hikers hut after a teenager who had scrambled all over the Sierra studying glaciers, counting bighorn sheep and skiing the untamed cirques and meadows.

Today the Peter Grubb Hut, tucked in a valley beneath Castle Peak, is one of the club’s most popular daytime and overnight destinations. It is one of four similar structures built by Sierra Club volunteers more than 50 years ago to support multiday backcountry trips between Castle Pass and Desolation Wilderness west of Lake Tahoe. The northern three huts — Peter Grubb, Benson and Bradley — are a day’s hike or cross-country ski apart. The fourth is 20 miles south of the Bradley Hut across rugged terrain.

The 3-mile route to the Peter Grubb Hut traverses the 7,880-foot-elevation Castle Pass. The A-frame cabin resembles a supersize gnome house. Its main floor dips into the ground, and an exterior ladder reaches to a second-story

entrance. Inside you'll find mattresses, wood stoves and enough space for 15 people.

While rates are cheap (\$20/night by reservation only), responsibilities are high. Users are the caretakers, and volunteers stock firewood in the fall.

For reservations, call (530) 426-3632 or email
info@clairtappaanlodge.com. www.clairtappaanlodge.com

— *Laura Read*

Lake Tahoe is losing its famous clarity

A crystal-clear example of climate change's effects on lakes.



Scientists in the UC-Davis Tahoe Environmental Research Center's research vessel check on a research buoy that collects data about Lake Tahoe. Credit: Karin Higgins/UC-Davis

About 100 miles east of Sacramento, California, as you drive on Highway 50, you come around a bend and suddenly Lake Tahoe comes into view.

Schladow: "This incredible blue body of water is there out in front of you, and it's just the most unexpected sight to come across in the middle of the Sierra Nevada Mountains."

Geoff Schladow directs the University of California Davis Tahoe Environmental Research Center. He says visitors to Lake Tahoe often admire its crystal-clear water. But the lake is losing its famous clarity. 50 years ago, you could see 100 feet down, now it's more like 70.

One cause is silt and clay washing in from nearby development. But climate change is also a cause. As the lake warms, microscopic algae grow and reduce the water's clarity.

If the water gets too warm, native fish could die off. And invasive species and harmful algae could flourish. And it's not just Tahoe, either.

Schladow: "Lakes are warming at different rates but almost one hundred percent of them are warming."

Tahoe is just one crystal clear example.

Reporting credit: Sarah Kennedy/ChavoBart Digital Media.

Darcie Goodman Collins, PhD, is the executive director of the League to Save Lake Tahoe, also known by its iconic slogan "Keep Tahoe Blue." Watch a short video about Tahoe Forest Stewardship Day at keeptahoeblue.org/tfsd.

League to Save Lake Tahoe column: Celebrating 20 years of stewardship, restoration

Darcie Goodman Collins
Guest Column
September 20, 2017

[Share](#) [Tweet](#) [Comments \(0\)](#)



A healthy forest equals a healthy Lake Tahoe. Tahoe's forests have been hit hard over the years by logging, wildfire, development and drought. They need our help to restore them as natural pollution filters for Lake Tahoe. It's the kind of hard work that is best done on a cool fall day in Tahoe, surrounded by friends and neighbors.

The League to Save Lake Tahoe invites the community to join us on Sept. 23 for the 20th annual Tahoe Forest Stewardship Day and celebration.

If you have never attended Tahoe Forest Stewardship Days before, this is the year to join us — we are planning our best restoration event ever, with a huge celebration to follow. Together, we'll pitch in for a morning of volunteer work to help restore the forest in the

Angora Burn area, and then all participants will gather to celebrate nearby at South Lake Brewing Company.

In 1998, the League to Save Lake Tahoe hosted a hands-on day of environmental restoration — the first Tahoe Forest Stewardship Day. As the effectiveness of environmental restoration depends on repeated attention to damaged areas, the League has organized successful Tahoe Forest Stewardship Days each year ever since, in locations throughout the Tahoe Basin.

The League to Save Lake Tahoe invites the community to join us on Sept. 23 for the 20th annual Tahoe Forest Stewardship Day and celebration.

And each year, the community has thrown itself into the work: stabilizing stream banks, repairing trails, planting trees and shrubs and helping native trees thrive following forest fires.



[Meyers Area Plan updated for first time since 1993](#)



[Greensky Bluegrass returns to Crystal Bay: Q&A covers new album and more](#)

Perhaps no single location is more associated with Tahoe Forest Stewardship Days than the swath of burned trees along Angora Ridge and Tahoe Mountain. When firefighters extinguished the last of the flames from 2007's Angora Burn, a scar remained on the landscape and on the community.

Weeks later, hundreds gathered for the 2007 Tahoe Forest Stewardship Day at the burn site to begin the long work of restoring both our environment and our community. We came back to the Angora Burn in 2008 to continue planting trees and spreading seeds of native plants.

In 2016, community members returned again, lugging heavy tools deep into the burn area to thin brush crowding out native trees that had been planted in 2007 and 2008. By giving each tree more exposure to daylight, the volunteers hastened the recovery of the returning forest. By returning this year, we can further ensure the success of past volunteer efforts and continue to heal the landscape that was so damaged in 2007.

We invite you to visit keeptahoeblue.org for more information on how you can join us on Sept. 23 for the 20th annual Tahoe Forest Stewardship Day.

There is no more fitting way to cap off this summer's remembrance of the 10th anniversary of the Angora Burn than by pitching in as a community to restore our precious forest habitats with hard-but-fun work. And we look forward to celebrating together afterwards at South Lake Brewing Company, where we'll provide lunch and refreshments to all volunteers.

Together, we can Keep Tahoe Blue.

Darcie Goodman Collins, PhD, is the executive director of the League to Save Lake Tahoe, also known by its iconic slogan "Keep Tahoe Blue." Watch a short video about Tahoe Forest Stewardship Day at keeptahoeblue.org/tfsd.

TMWA Approves Funds for Area Restoration, Education Projects

September 20, 2017 Carla O'Day



Money for projects that include restoration efforts, education initiatives, and invasive weed control that correspond to grant priorities were approved unanimously Wednesday by the Truckee Meadows Water Authority (TMWA) board.

The Truckee River Fund Advisory Committee recommended the TMWA board authorize several proposals, which come with thousands of dollars of matching and in-kind contributions.

Projects funded were as follows:

\$35,065 to Sierra Nevada Journeys for its Watershed Education Initiative

The program will serve 800 elementary and middle school students throughout Washoe County. The 4-week period consists of three in-class lessons, one field study experience, pre- and post-assessments, and extension lessons for teachers that align to state and national standards.

"The Watershed Education Initiative delivers high-quality, experiential watershed education programs based on local issues associated with the Truckee River, such as water quality and invasive species while empowering youth to protect and enhance the quality of the Truckee River," the request to TMWA said. "Students gain first-hand experience with the Truckee River, explore human impacts on their water source, and obtain skills and knowledge to help protect the watershed."



Image of Truckee River showing tall whitetop outcompeting riparian vegetation. Image: UNR Cooperative Extension.

\$69,760 to Keep Truckee Meadows Beautiful for its spring invasive weed pull and fall river cleanup

The Truckee River Cleanup is expected to address the direct and immediate presence of invasive weeds, litter, and pollution runoff, along with the underlying causes of these challenges while engaging the community.

"The cleanup will target removal of invasive weeds and trash from along the Truckee River corridor and its tributaries during Keep Truckee River Beautiful's Great Community Cleanup and Truckee River Cleanup Day, monitor the impact of current cleanup efforts, and engage more year-round cleanup support," the request to TMWA said.

\$165,000 to Truckee River Watershed Council for the Truckee River Tributaries Sediment Reduction Project

Goals include improving water quality by restoring actively eroding road networks and stream channels in the Middle Truckee River watershed that are contributing excess sediment to the river.

The watershed council plans to restore hydrologic connectivity by improving drainage on primary roads, obliterating and restoring unneeded road spurs, and incorporating vegetation, seed, and mulch to improve soil health and enhance habitat.

"Extensive road networks within the watershed have led to an increase in stormwater and associated pollutants entering into the Truckee River," the request to TMWA said. "The project will mitigate the negative effects of stormwater and allow for increased connectivity and on-site infiltration."

VIDEO: What's In A Flood Project?

[September 19, 2017 ThisIsReno Website](#)

[Link to video](#)

SPONSORED POST

The Truckee River Flood Management Project is designed to protect the Truckee Meadows community from the devastating effects of high flood events.

As part of its mission, the Truckee River Flood Management Authority (TRFMA) has partnered with numerous local, state and federal agencies, and nonprofit organizations to restore the lower Truckee River (from Vista to Pyramid Lake).

The Lockwood project seeks to restore approximately 0.6 river miles at Lockwood, located along the Lower Truckee River and currently owned by Washoe County. The project includes construction of new river meanders, in-stream riffles, and wetland areas. Following earth-moving activities, about 30 acres will be re-vegetated with native riparian and upland plants.

This area provides a variety of ecosystem services benefits for our community. They include:

- Attenuation of floodwaters, and mitigation of the effects of increased peak flows due to upstream flood control measures.
- Restoration of the structure and function of the river ecosystem.
- Establishment of the habitat for native wildlife species, including threatened and endangered fish species.
- Reduction of existing infestations and control the spread of invasive weeds.
- Improvement of water quality.

This project restored 0.6 miles of river channel, and created 36.6 acres of native habitat.

VIDEO: What the Truckee River Operating Agreement Means

September 20, 2017

[Link to video](#)

The Truckee River Operating Agreement provides the Reno-area with tremendous water storage during drought years. Watch the video to learn more. Video developed in partnership with Truckee Meadows Water Authority and ThisisReno.com. Learn more at: <http://tmwa.com/your-water/topics-facts/truckee-river-operating-agreement/>

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TMWA Board Approves Raise for GM After Positive Review

September 21, 2017 Carla O'Day



TMWA General Manager

Mark Foree

Truckee Meadows Water Authority's (TMWA) board on Wednesday approved a 3 percent raise for general manager Mark Foree after giving him a glowing review.

Surveys were sent to the seven-member board and to seven employees who report to Foree. All board members and six direct reports completed the survey anonymously.

"Adapts to changing conditions, delegates responsibility when appropriate, listens and considers others' input when making important decisions," wrote one reviewer when describing Foree.

TMWA board member Vaughn Hartung said Foree has been able to successfully retain good employees.

"That is key and that's the sign of a good manager," Hartung said. "In my opinion, you've done a stellar job."

Foree's annual compensation will increase to \$200,303, which is still below market data, TMWA human resources manager Jessica Atkinson indicated.

Current market data states a maximum achievable goal for the Reno market at this position is \$237,114, according to Gallagher Benefit Services Inc., a risk management firm from which Atkinson sought input. Midpoint would be \$222,768.

Foree discussed his objectives for the upcoming year, which include preparing and proposing financial plans, investment strategies, funding plans, and adjustments to rates and charges that will secure TMWA's long term financial stability. Improving communication between TMWA and stakeholders, increasing community presence, continuing to create a highly productive work environment, and striving for continuous improvements that will enhance revenue and reduce operating costs were among others.

Any raise for Foree must get board approval because there's no automatic cost of living adjustment written into his contract.

Last year, TMWA's board approved a 4 percent raise for Foree. In 2015, it was 2.1 percent. In 2014, he got a 2 percent raise and \$5,000 bonus. His pay increase in 2013 and 2012 was 3.73 percent and 5 percent, respectively.

The board declined to give Foree a bonus this year because it could result in poor public perception based on water rate increases that took effect in May.

Chefs Clint Jolly and Mark Estee to give food demos at Nevada Field Day

Free University event features hands-on activities, local food, demonstrations and education Sept. 30



Plants grown in the University's greenhouses will be for sale at Nevada Field Day, Sept. 30, to support future research and graduate student work. Photo courtesy of Robert Moore.

"It really helps people understand how we blend the missions of the University... to serve Nevadans"

9/13/2017 | By: Tiffany Kozsan |  Print

At Nevada Field Day on Sept. 30, visitors will be treated to a variety of free activities and giveaways, and even some tasty food samples.

As part of this year's activities, nationally acclaimed local food advocates and Chefs Clint Jolly and Mark Estee will be performing cooking demonstrations. Jolly, who recently won Food Network's Chopped: Impossible Restaurant Challenge, will demonstrate how to make homemade sausage at 11 a.m. Estee, who has been featured on Food Network's Diners, Drive-ins and Dives and in Esquire Magazine, will demonstrate how to make a traditional French dish, Cassoulet a la chez, at 1 p.m.

The University of Nevada, Reno event features hands-on activities and information focusing on the latest advancements in agriculture, horticulture, nutrition, natural resources and the environment. The event will be held 9 a.m. to 3 p.m., at the University's Main Station Field Lab, 5895 Clean Water Way in Reno, near the intersection of McCarran Boulevard and Mill Street. It is a collaborative project of the College of Agriculture, Biotechnology and Natural Resources; Nevada Agricultural Experiment Station; and University of Nevada Cooperative Extension.

"September is great time of year for people to visit the University's Main Station Field Lab," said Bill Payne, dean of the College of Agriculture, Biotechnology and Natural Resources. "There will be a lot to see and do, and it really helps people understand how we blend the missions of the University in terms of teaching, research and engaging with our communities to serve Nevadans in their everyday lives."

Cooperative Extension's Master Gardener volunteers will be on hand to provide information on fall planting and pruning, as well vegetable gardening and other topics for home gardeners. The Desert Farming Initiation will be holding a Farmers Market, selling local produce. Plants grown in the University's greenhouses will also be for sale to support future research and graduate student work.

For those interested in growing food and plants, there will be demonstrations and information on:

- constructing hydroponic systems for growing fruits and vegetables at home,
- implementing conservation measures in an urban agricultural setting,
- attracting beneficial pollinator insects, and safely managing insect pests, and
- salt-tolerant and low-water-use crops and plants.

There will be many hands-on activities for youth, including:

- a 4-H Drone Discovery activity, where youth will experiment with flying foam planes with mounted cameras,
- 4-H clubs providing information and demonstrations on raising animals, such as goats and horses,
- the "Ember House" bean-bag toss, where children learn about embers and the wildfire threat,
- a Lilliputian Garden Necklace craft using live plants that the kids can take home, and
- activities involving Nevada's plants and animals from the Museum of Natural History.

Adults can learn more about making healthy life choices and protecting their homes and families from wildfire, floods and disease-carrying pests, such as mosquitos. They can also learn from faculty and students about the latest research on many other issues, such as managing Nevada's water resources, wetlands and rangelands.

Others will also be on hand providing information, including University student clubs; the Nevada Department of Agriculture; the Nevada Department of Wildlife; the Academy of Arts, Careers & Technology; the Natural Resources Conversation Service; and many others.

For over 60 years, University students and faculty have used the 800-acre ranch at the University's Main Station Field Lab to provide education and research, not only on raising and processing healthy cattle, but also on a variety of other important issues, including controlling noxious weeds, developing alternative low-water-use crops, and preserving air and water quality.

"This year's Field Day has a lot fun hands-on activities and takes place where some of our research happens - at the Main Station Farm. It is a great way to get to know the University and see what we are doing on campus, at our research stations and in Nevada's communities," said Mark Walker, director of University of Nevada Cooperative Extension.

The Battle Born and All Wrapped Up food trucks will be open for business at the event, selling lunches. Admission to the event is free and open to the public, thanks to event support from the Nevada Agricultural Foundation and **Truckee Meadows Water Authority**. For more information, visit the [Nevada Field Day website](#) or call 775-784-1660. Persons in need of special accommodations or assistance are asked to call at least three days prior to the event.

California Tahoe Conservancy awards \$3.35M for 8 Lake Tahoe projects

Special to the Tribune

September 26, 2017

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The California Tahoe Conservancy Board on Thursday awarded up to \$3.3 million for eight project around the Tahoe Basin intended to improve forest health, lake clarity and water quality.

"The suite of projects approved today help address some of the most pressing issues facing Lake Tahoe," said Larry Sevison, the Conservancy's board chairman. "If we are to tackle the threats of catastrophic wildfire, aquatic invasive species, and polluted storm water, we must plan for the future and implement innovative solutions. I'm pleased to report that these projects support that goal."

The projects approved for funding include:

Collaborative Aquatic Invasive Species (AIS) Program Planning, Tahoe Resource Conservation District (Tahoe RCD), \$862,000: To evaluate new techniques for controlling aquatic invasive plants and plan for future AIS control efforts.

Control of the Invasive Mysis Shrimp to Recover Lake Clarity and Ecosystem Health, University of California, Davis, \$390,081: To plan and test a strategy to reduce the abundance of nonnative Mysis shrimp, which damage Lake Tahoe's food web and harm lake clarity.

Lake Tahoe West Restoration Partnership, National Forest Foundation, \$398,750: To plan for large-landscape, multi-jurisdictional forest health, water quality, and restoration projects on nearly 60,000 acres on Lake Tahoe's west shore.

Tahoe City Caltrans Maintenance Yard Relocation and Restoration Project, Tahoe Transportation District, \$354,000: To evaluate the feasibility of relocating the Tahoe City Caltrans Maintenance Yard, which sits on environmentally sensitive land on the banks of the Truckee River, to a more appropriate location.

Polaris Creek and Wetland Restoration, Feasibility Study, Tahoe RCD, \$282,000: To explore the feasibility of restoring Polaris Creek and adjacent wetlands near Dollar Point on the north shore.

Country Club Heights Erosion Control Project, El Dorado County, \$250,000: To construct water quality improvements in several areas of Meyers to enhance wildlife habitat, increase groundwater recharge, and improve water quality.

Country Club Heights Erosion Control Project, Phase 3, El Dorado County, \$250,000: To plan for future storm water improvements that will improve water quality in areas of Meyers that discharge directly into the Upper Truckee River.

Bijou Park Creek Restoration Priority Acquisition, city of South Lake Tahoe, \$572,250: To acquire and restore one environmentally sensitive urban parcel as part of the city's effort to restore the Bijou Park Creek watershed.

The funds come from Proposition 1.

At the same meeting, the board authorized the Conservancy to enter into a joint powers agreement with the Sierra Nevada Conservancy to improve coordination and work together to address shared issues such as forest health, watershed restoration, and recreation needs throughout the Sierra Nevada region.

Reno bars and breweries advocate for clean water

By [Chris Buckley](#) |

Posted: Thu 3:58 PM, Sep 28, 2017 |

Updated: Fri 11:02 AM, Sep 29, 2017



RENO, Nev. (KOLO) - Some Reno bars and breweries are coming together to advocate for the clean water needed to run their businesses.



"it's just like Mark Twain used to say back in the heyday of the Comstock," said Red Rock bar owner Kevin McGehee. "Whiskey is for drinking and water is for fighting over."

They're taking the fight to federal lawmakers. The proposed federal budget calls for cuts to the EPA that could affect clean water programs in Nevada.

"It would affect flood abatement programs, general pollution programs, and it dramatically slashes the superfund program," said Lina Tanner of Tanner Law & Strategy group. "If we don't have that funding, the state has to make up for it."

That's a concern for businesses like Mill Street Still & Brew, a brewery and distillery that relies on a reliable supply of clean water.

"Water is 100% what we do, your completed beer is 95% water, vodka is about 60% water," said Andy Perkins, manager of Mill Street Still & Brew. "Any change in the water or water quality is going to affect us."

It's also a concern for other businesses on the block that are counting on the success of the brewery.

"One of the major reasons my building filled up so fast is the fact I could say, by the way, there's a state-of-the-art brewery and distillery opening up next door," said Luke Hoffman, owner of Atomik City Office Suites.

These businesses are bringing their message to this weekend's craft beer celebration.

"We're fighting for clean water because we know the importance of clean water in our industry," said Stephen Sawyers, Red Rock bar manager. "It's a crucial component not only for providing quality products, but its also important for marketing the region."

The [Nevadafest Craft Beer Festival](#) is set for Saturday at Wingfield Park in downtown Reno.

Volunteers clean up 15 tons of trash along Truckee River

By Staff |

Posted: Sat 11:07 AM, Sep 30, 2017 |

Updated: Sun 7:12 AM, Oct 01, 2017



RENO, Nev. (KOLO) - More than 750 volunteers cleaned up about 30,000 pounds of trash and 39,000 pounds of invasive weeds as part of the [Keep Truckee Meadows Beautiful](#) Truckee River Cleanup Day.



The Keep Truckee Meadows Beautiful cleanup. Photo by Chris Buckley/KOLO.

The cleanup went from Verdi to Lockwood, KTMB said in a statement.

“Our cleanups, like today’s event, are so much more than just cleaning up trash” Deidre Kennelly, KTMB development director, said in a statement. “They are about bringing together the entire community- including high school groups, families, corporate teams and local businesses- to steward this beautiful area and build that sense of appreciation for what we have here.”

Last year about 820 volunteers removed 56,000 pounds of trash.

In a statement, KTMB said cleanup and beautification projects included litter pick-up, graffiti removal, flower plantings, and invasive weed removal along the river corridor. Volunteers also helped raise awareness about the importance of keeping the Truckee River clean by stenciling ‘No Dumping, Drains to River’ on storm drains.

The Full Focus: Economic Development in Nevada

October 1, 2017 By Doresa Banning Comments

2, The Silver State released “Moving Nevada Forward: A Plan for Excellence in Economic Development,” a three-year roadmap for continuing to advance from post-recession doldrums and a 12 percent unemployment rate toward “a vibrant, innovative statewide economy,” Gov. Brian Sandoval wrote in the document. In 2012, The Silver State released “Moving Nevada Forward: A Plan for Excellence in Economic Development,” a three-year roadmap for continuing to advance from post-recession doldrums and a 12 percent unemployment rate toward “a vibrant, innovative statewide economy,” Gov. Brian Sandoval wrote in the document.

Since the plan was released, Nevada’s leadership and business community have been hyper-focused on diversification. So, the real question is, what has the state achieved since then and where in Nevada when it comes to economic development now?

Economic Development Goals

The state has made progress on the five primary goals outlined in “Moving Nevada Forward,” said Steve Hill, executive director, [Nevada Governor’s Office of Economic Development \(GOED\)](#).

The first goal was to establish a cohesive economic development operating system. This has been done, Hill said. GOED organized the state’s nine Regional Development Authorities (RDAs) and unified the economic development efforts of all of the contributors, including its office, the RDAs, local governments’ economic development departments and businesses. The nine RDAs, covering different regions in the state, are Economic Development Authority of Western Nevada (EDAWN), Great Basin Regional Development Authority, Highway 95, Humboldt Development Authority, Las Vegas Global Economic Alliance (LVGEA), Lincoln County Regional Development Authority, Northeastern Nevada Regional Development Authority, Northern Nevada Development Authority (NNDA) and Nye County Regional Economic Development Authority.

After the unification of those nine RDAs, the next step was to advance targeted sectors and opportunities in each region. The select industries to advance were manufacturing, customer service and back-office operations, healthcare services, e-commerce fulfillment operations and headquarters, warehousing, distribution and air cargo and national defense research.

“We’ve seen great employment growth that’s covered all of the sectors,” Hill said. Expanding global engagement was the third goal included in the “Moving Nevada Forward” plan. Nevada

has been engaging other countries in conversations and collaborations related to economic development. For instance, with state-funded

Expanding global engagement was the third goal included in the “Moving Nevada Forward” plan. Nevada has been engaging other countries in conversations and collaborations related to economic development. For instance, with state-funded waterstart, a cluster of global leaders in the implementation of water innovation, GOED has evaluated more than 250 water technologies, many from international businesses, and recruited 11 tech companies to Nevada.

Catalyzing innovation in core and emerging industries has also been a primary goal. Through its \$10 million Knowledge Fund for spurring homegrown research, innovation, and commercialization, the state has financed about 10 projects. They include the creation of the Institute of Quantitative Health Sciences at the University of Nevada, Las Vegas (UNLV) to boost research on data analytics, bioinformatics, and biostatistics.

The last goal was to increase opportunity through education and workforce development. Efforts there have included setting up the Workforce Investment for the New Nevada (WINN) fund program, designed to bridge the educational community with industry and assist in recruitment, assessment, and training for high-wage, high-skill jobs. One WINN investment was \$500,000 for equipment to help train high school and College of Southern Nevada (CSN) students in manufacturing technology.

A shift has taken place from academic and training institutions generally training a future workforce to now training dedicated workforces for specific companies, Hill said.

With that in mind, GOED, in 2016, awarded a STEM Workforce Challenge Grant to Truckee Meadows Community College to develop a new training program for data center engineering technicians in anticipation of Switch’s employee needs in Northern Nevada. The agency also gave funds to Western Nevada College to develop a Siemens certified training center.

GOED is also establishing and administering two new initiatives resulting from the recent legislative session: a loan program for small businesses and businesses owned by minorities, women and the disadvantaged (AB126) and the Nevada Main Street Program (AB 417), to help revitalize and spur economic development in the Silver State’s downtowns.

The Way Forward

One important aspect of economic development is finding the right path forward. For example, the aim of the **Northern Nevada Development Authority (NNDA)** is growing the economy of the Sierra region in a balanced and sustainable way, said Rob Hooper, executive director. The agency is focused on employers and jobs, incoming and existing businesses, the workforce and supporting the building of infrastructure to facilitate growth in those areas. “We’re the concierges who help bring all that together,” he added.

Current NNDA efforts include attracting a skilled workforce internally and externally. For example, a new program called Realizing Opportunities for the American Dream to Succeed (ROADS) retrain local people for higher-paying, high-skilled jobs.

In Southern Nevada, Las Vegas' leadership has been focused on developing three key components for economic development: the Medical District, information technology (IT) and aerospace in downtown (including unmanned autonomous vehicles and systems) and a business park in the northwest, said Bill Arent, director, [economic and urban development department](#).

Current economic development efforts are also happening in the Innovation District, Las Vegas' downtown sector, which has been focused on tech companies. A team remains committed to getting companies worldwide to showcase in Las Vegas their technology related to unmanned autonomous systems, smart cities, and related apps. For example, 1,000 smart city sensors are being installed in Las Vegas, which, when integrated with the transit system, would provide real-time data such as traffic light durations, traffic flows, pedestrian info and more.

Also downtown, Las Vegas is working with the hospitality industry to effect changes and expand the gaming/hotel corridor. Two developments underway are upgrading the Fremont Street Experience infrastructure and maximizing traction in the growth of e-sports.

With the UNLV School of Medicine's first class just having started, Las Vegas is working to finish the infrastructure to support interest in the Medical District and to help companies that want to move into the area and partner with the university. There are currently 80-plus prospective firms looking at the area. And, in the fiscal year 2016-2017, 12 companies announced an expansion within the city with an additional two moving there.

Meanwhile, Henderson has been working to develop a plan for the city. This last summer, the city council approved the new economic development strategic plan. The plan is part of the in-progress, citywide planning document, "Henderson Strong, Comprehensive Plan," said Barbra Coffee, director of [economic development and tourism](#).

The outlined target industries are advanced manufacturing/logistics, healthcare and life sciences, headquarters and global finance, tech and tourism/hospitality/retail.

Henderson's economic development department assisted in the creation of more than 1,220 jobs in fiscal 2016-2017, Coffee added.

North Las Vegas has also been working on comprehensive growth. A primary goal of the city's economic development division is to create development opportunities for large-scale industrial projects in specific locales. Those areas include the Apex Industrial Park, Speedway Industrial Park, the 150 acres for planned medical and research and in-fill areas like the Craig Road Corridor, according to Gina Gavan, director of [economic development](#).

The target sectors for the region include warehouse and distribution, integrated and assembly manufacturing, medical, clean energy, advanced technologies and artificial intelligence (AI).

“We’ve seen an enormous amount of progress,” Gavan said.

The Right Fit

When it comes to recruiting companies to Nevada, agencies are putting careful thought into who to target and how to bring them to the state.

For example, NNDA is targeting two types of companies, both with high growth potential: advanced manufacturers (ones utilizing robotics and mechatronics) and tech innovators (firms with 50 to 100 employees), Hooper said.

A few of NNDA’s many recent successes include attracting Cosmetic Enterprises Ltd. (cosmetic and skin care product manufacturer), Webstaurant (an online commercial restaurant supplies and equipment retailer) to Dayton and Starbucks’ expansion of its coffee roasting plant in Minden. Five or six bigger companies have moved into the region in fiscal 2016-2017. All of the existing industrial space in the region has been filled, so companies looking to move there have long lead times, Hooper said. NNDA’s pipeline spans seven years and involves 772 businesses.

“Our track record is very diverse and it’s really good,” he added. “We’ve moved this region along.”

Henderson is also seeing companies move in through targeted efforts. The city has more than 100 companies in its pipeline with which it maintains a relationship. Recent company recruits include Turano Baking Co., a manufacturer of artisan and specialty bread, whose facility is slated to open next year. Another is Sunshine Minting Inc., a supplier of precious metal and base metal minted products, which secured space in town and will be expanding into Henderson and relocating its corporate offices there.

In Las Vegas, the city landed an institutional partner in Blackstone, which, in July, announced its acquisition of International Market Centers Inc., the Las Vegas-based owner/operator of showroom space.

“To have investors of that scale and pedigree investing in our city is tremendously important,” said Arent.

As for the city department’s progress, Arent said, “We’re really now just starting to see the fruit of those efforts with some of the initial investments we’ve made in those areas. Based on the business counts we are seeing in the city, we think that growth trend is going to continue.”

In North Las Vegas, My Cinemas will break ground this fall on a roughly 70,000-square-foot luxury movie theater complex downtown that will add retail and commercial components in a later phase.

Other companies recently recruited to North Las Vegas include Dr. Pepper, Dignity Health (a micro-hospital in the Craig Road Corridor), JLG Industries (a lift equipment manufacturer) and Bed, Bath and Beyond.

The pipeline for additional activity is full, Gavan said, with 7 million square feet of land development planned for the next three years. The slated development of the Craig Road Corridor “is just huge,” Gavan said, with new retail, food and amenities coming in and some offices planned.

“The outlook [for North Las Vegas] is very positive,” she added.

Additional Focus

With small businesses and entrepreneurship growth as a goal, Henderson offers support for business through its Water Street Rally, a networking event for entrepreneurs, and its monthly Entrepreneurs Assembly, a meeting where entrepreneurs may receive mentorship and support of their endeavors. This month, the city will hold a Business Pitch Competition at the CSN Henderson campus.

“Henderson is doing these things to support the kind of cutting-edge entrepreneurial activity we want to be known for and companies want to identify with,” Coffee said.

The city takes pride in being innovative, Coffee added. For example, with respect to the tech industry, it hosted its first IT Boot Camp last year to fill a computer skills gap in its workforce. It’s also proactive about advertising Henderson’s competitive advantages.

What Henderson could improve, Coffee said, is building on its robust clusters, such as food/beverage and advanced manufacturing.

In North Las Vegas, city improvements have been a focus for city leadership. Work is currently underway in master planning the 150 acres for the Veterans Administration Hospital, which is designated as a medical and research campus, Gavan said.

“This gives us an opportunity to focus on the gaps we have in healthcare regionally, provide additional assets to complement other efforts and service these new rooftops that we have coming in,” she said of the hospital.

In Northern Nevada, in addition to focusing on company recruitment and employee development, NNDA has other projects in the works to improve the region. The Nevada Certified Site Program is one such undertaking. Designed to encourage construction and remove scheduling risk from building a new facility, it streamlines the process for a company wanting to get a site certified.

Another project, with funding from the Environmental Protection Agency's Brownfields program, involves assessing and cleaning up previously used the land so that it may be safely reused. That's taking place in Lyon, Churchill and Douglas counties and Carson City.

Changes in Nevada's Growth

Although its general themes remain relevant, "Moving Nevada Forward" needs updating, Hill said.

"We've been trying to do that for too long," he added. "We just have other things come along. We do need to do that. Over the course of five and a half years, since that plan came out, a lot has changed in Nevada. The circumstances are different. The economy is different."

Generally, it's much stronger. Companies are investing again. Residential and commercial development is active. The state's unemployment rate is below 5 percent. In the City of Las Vegas, for example, the number of businesses (ones with employees and report to the state) grew 3.4 percent year over year between 2015 and 2016.

One major change since 2012 is the emergence of unmanned aerial vehicles (UAVs) — which the state has jumped on to develop further. For one, GOED funded the creation of the Nevada Advanced Autonomous Systems Innovation Center at the University of Nevada, Reno (UNR) through its Knowledge Fund. Recently, at the City of Henderson's new UAV range, companies showcased their various applications of the technology via flight demonstrations.

"That industry continues to grow," Hill said.

Another newer area of concentration is AI and advanced data collection and analysis. GOED awarded \$3 million through the Knowledge Fund in 2013 for the establishment of the Applied Innovation Center for Advanced Analytics at the Desert Research Institute.

"There is the enormous economic opportunity in that whole general field," Hill said. "It's an area that needs to be a part of Nevada's economic plan and will be a focus of our office moving forward."

No one could have forecasted the impact on economic development that companies like Tesla and Switch have had. Today, three years after it announced it chose the Silver State for its first

gigafactory, Tesla employs more than 3,000 people and has more than 4,000 construction workers on site, Hill said.

“Tesla has made a really significant difference, the kind of thing that happens once in a generation maybe,” he added. “It has transformed the economy in Northern Nevada.”

Switch’s impact, too, has been “huge,” Hill said. It attracts lots of other companies to the state, even if only temporarily, thereby creating employment. It spotlights Nevada, which all of its customers see. It created a technology infrastructure that makes the state the most connected in the U.S. Further, Switch demonstrates a commitment to Nevada, for instance, has provided rural schools with the broadband Internet via its “Superloop”.

As for the near future regarding economic development in Nevada, “we’ve still got a lot of exciting things on our plate,” Hill said.

Filed Under: Feature Story Tagged With: Barbra Coffee, Bill Arent, economic and urban development department, economic development, Economic Development and Tourism, Gina Gavan, Gov. Brian Sandoval, Las Vegas business, Nevada business, Nevada Governor’s Office of Economic Development (GOED), Northern Nevada Development Authority (NNDA), Rob Hooper, Steve Hill

United States Smart Water Infrastructure Market 2017-2027 - Research and Markets

October 02, 2017 12:04 PM Eastern Daylight Time

DUBLIN--(BUSINESS WIRE)--The "US Smart Water Infrastructure: Market Forecast (2017 - 2027)" report has been added to **Research and Markets'** offering.

"US Smart Water Infrastructure: Market Forecast (2017 - 2027)"

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The US smart water infrastructure market will represent investment value of \$8.3 billion cumulatively over the next ten years.

The United States has the largest and most developed smart water infrastructure market in the world, and several trends point towards continued growth and development. A survey of nearly 340 water utilities was conducted and the vast majority of respondents have completed or are interested in investing in smart water infrastructure. While automated metering reading (AMR) and advanced metering infrastructure (AMI) water metering is already well developed in the US, still only approximately 60% of water customers have communicating meters, leaving ample room for market growth.

Additionally, within the smart meter segment, both utilities and vendors have shown that the country is trending quickly towards AMI - even at smaller utilities. There is also an overall trend towards investing in smart city infrastructure and increased awareness of water scarcity in some parts of the country. This is creating clear growth opportunities throughout the smart water value chain.

A survey revealed several challenges that utilities have faced, and a number of lagging utilities that are still not interested in smart water infrastructure. Vendors will need to continue to work to improve the logistics, financing, and technical capability of smart water infrastructure to overcome these hurdles. Additionally, there are no binding regulatory or urgent economic drivers that are expected to encourage a large-scale spike in near-term investment.

Key questions answered in this study:

- What are the views of 90 US water utilities on smart water infrastructure investment?
- How large will the smart water infrastructure market be in the US?
- How quickly will US water utilities switch to AMI metering?
- What are the main drivers and barriers of smart water projects in the US?
- Who are the leading vendors in the market and how do they stack up in the survey?

Key Topics Covered:

1. Current state of US water market
2. Survey results

3. Market forecast

4. Drivers and barriers

5. Case studies

6. Vendors

7. Appendix

For more information about this report

visit https://www.researchandmarkets.com/research/bnkch3/us_smart_water

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Related Topics: [Water](#)

Plan to build 78 homes west of Reno falls short

By [Gurajpal Sangha](#) |

Posted: Thu 12:49 AM, Oct 05, 2017 |

Updated: Thu 9:28 AM, Oct 05, 2017



[Link to video report](#)

RENO, Nev (KOLO) -- A developer wants to build homes in the Boomtown area, but neighbors in the area say they're worried this could change their way of life.

After a few months of waiting, Meridian 120 South Village finally got the chance to present its development to the Reno Planning Commission.

The plan is to develop 78 lots. The majority of them would be around 10,000 square feet each and 14 are proposed to be one-acre lots. But people already living in the area are not happy

"My concerns are, number one, I feel my well will be in jeopardy," said a concerned resident.

The impact this could have on wells was a hot issue. Residents want the developer to bring in water through the Truckee Meadows Water Authority.

A spokesperson for the developer said they are working to make that happen.

Another issue residents addressed was flooding.

"Allowing the developer to add water to this drainage that has already maxed out capacity during heavy rainfall will be completely irresponsible," said a concerned resident.

Many people believe the proposed development will bring in more traffic, but the development team says it shouldn't be an issue.

"With these 78 lots, there is no impact at this time. That is not to say with the future build-up for Mortensen-Garson there wouldn't be impacts and we are going through the planning process and that analysis," said Andy Durling, Planner for Wood Rogers Inc.

Despite all the concerns, residents say their biggest one is how this proposed project would impact their quality of life.

"I'm concerned the development will prevent me from riding my horse from my house," said a concerned resident.

"To me, it doesn't seem like a great fit," said another concerned resident.

The Reno Planning Commission approved the tentative map for the project by a vote of three to one. But two members were absent and the rules state the majority of the total commission body must vote in favor, so the project did not pass.

The developer can appeal to the Reno City Council.

The Planning Commission did approve a special use permit and zoning change for the project, unanimously.

TMWA offers tips for winterizing homes

by Jaclyn Shearer



KRNVTthumbnail

AA

RENO, Nev. (News 4 & Fox 11) —

As cooler temperatures approach, Truckee Meadows Water Authority (TMWA) is urging people to take advantage of the warm days remaining to winterize their homes.

Shutting off and bleeding pipes, disconnecting and draining hoses, and placing an insulator over the water meter box can save you from costly and time consuming repairs, but you also want to consider taking precautions inside your home -- especially if you plan on leaving town for a while.

TMWA will be hosting four information sessions over the next month to teach homeowners how to prepare for winter on October 11, October 17, October 24, and November 1.

Sparks City Councilman Ron Smith announces run for Sparks mayor

by News 4-Fox 11 Digital Staff
Thursday, October 5th 2017



*Ron Smith (Courtesy: City of Sparks) *

AA

SPARKS, Nev. (News 4 & Fox 11) — Sparks City Councilman Ron Smith on Thursday announced he is running for mayor of Sparks with current Mayor Geno Martini's blessing, according to a statement.

"Ron Smith has put in the work and has the experience to lead our city for the next four years. Ron also has the overwhelming support of the rest of the city council," Martini said.

Smith, a third term member of the Sparks City Council, also serves as the Chairman of the Truckee Meadows Flood Authority, Chairman of the Regional Transportation Commission, Chairman of the Tourism and Marketing Committee, and is a member of the Truckee Meadows Water Authority.

Commentary: Fracking pollution threatens Nevada's water, wildlife and communities

- PATRICK DONNELLY

Fracking poses major threats to Nevada, even if Thomas Mitchell chooses to ignore them (“Lawsuit falsely claims fracking will be devastating,” Oct. 4, 2017). Those risks are why my organization, the Center for Biological Diversity, and the Sierra Club are taking legal action.

We’re determined to ensure that the federal government follows the law and fully considers the risks of allowing private industry to use hydraulic fracturing, or fracking, on public land.

Both of our organizations are nationwide nonprofits with long histories in Nevada. The Center has been active from our Nevada office in Las Vegas for almost 10 years. Our 12,000 Nevada members and supporters, including hundreds across the rural counties of eastern Nevada, strongly oppose the expansion of oil and gas drilling here. The Sierra Club Toiyabe Chapter was formed in Reno in 1956, making it Nevada’s oldest environmental group.

Our lawsuit challenges the U.S. Bureau of Land Management’s June sale of nearly 200,000 acres of oil and gas leases in Nevada’s Battle Mountain district for fossil fuel development, including fracking. The suit aims to hold the BLM accountable for failing to comply with the National Environmental

Policy Act, which requires a comprehensive evaluation of the environmental impacts of federal actions, like oil and gas development.

The BLM has ignored its legal responsibility to analyze the potential environmental damage to our state from fracking, including water contamination and climate-altering greenhouse gas emissions.

Fracking has accelerated dramatically in the U.S. as new technologies and potentially toxic chemicals have been employed to increase its efficacy. This has made oil and gas development possible in places with limited fossil fuel resources, like Nevada.

But the BLM has consistently refused to analyze the potential dangers of fracking to Nevada's water supply, even though fracking been linked to significant drinking water contamination in other parts of the country.

People in northeast Wyoming are able to set fire to the methane-laced water coming out of their taps. Spills and underground migration of toxic oil industry chemicals have contaminated surface and groundwater in states across the country, including Colorado, Pennsylvania, Ohio, West Virginia and Texas.

In 2012, there were 120 well failures in the Marcellus Shale of Pennsylvania, representing some 9 percent of all fracked wells. These well failures potentially allow oil industry contaminants to enter groundwater. Would you take a 9 percent chance of poisoning your water supply so that oil tycoons in Texas can make a few extra bucks?

Water contamination is not the only danger.

Pause

Fracking can use millions of gallons of water per well. In the driest state in the Union, that means water would either be pumped from our already-overtaxed aquifers or diverted from our overtaxed rivers.

Fracking and underground disposal of fracking wastewater are also associated with increased seismic activity. Active fracking zones in eastern Colorado have seen a terrifying 1,400 percent increase in annual earthquakes greater than magnitude 3.0 over the past 15 years.

And perhaps most important to many rural Nevadans, oil and gas development has caused widespread and significant declines in big game populations, including mule deer, in places like western Wyoming and northwestern New Mexico.

Then there's the 800-pound gorilla in the room — climate change. Human-accelerated climate change from fossil fuel combustion is an indisputable scientific fact. The burning of oil and gas extracted from parcels leased in this auction would result in millions of tons of carbon being emitted into our atmosphere, contributing to the rise in global temperatures.

Yet BLM has consistently refused to analyze any of this, writing off such dangers as “speculation.”

Mr. Mitchell correctly notes the industry's “lack of interest” in oil and gas development in Nevada. And the results of this lease auction bore that out — less than 8 percent of the offered acreage was leased. Kathleen Sgamma, president of the Western Energy Alliance, affirmed this in a recent Daily Caller article, stating, “The interest in Nevada is very small.”

But the speculative nature of oil and gas leasing in Nevada has no bearing on whether the BLM must comply with the laws. If geopolitical events conspire

to increase the price of oil, Nevada could see hundreds or even thousands of oil wells drilled and fracked. This could cause widespread aquifer contamination and groundwater drawdown, and contribute significantly to climate change.

We filed this lawsuit to protect Nevada's water, public lands, public health and wildlife, and to safeguard our climate for future generations. We will continue working to ensure that our government obeys the law and comes clean about the significant threats from fracking and oil and gas development.

Would you take a 9 percent chance of poisoning your water supply so that oil tycoons in Texas can make a few extra bucks?

Patrick Donnelly is the Nevada state director for the Center for Biological Diversity. You can email him at pdonnelly@biologicaldiversity.org or find him on Twitter at @bitterwaterblue.

Crews begin work on project aimed at reducing flooding near Wingfield Park

by Jaclyn Shearer
Monday, October 9th 2017

Crews begin work on project aimed at reducing flooding near Wingfield Park

AA

RENO, Nev. (News 4 & Fox 11) — It's been months since our record breaking winter left many areas in Reno flooded but officials say they're just now getting to parts of the Truckee river -- officials say that's for good reason.

"We had a lot of material that was deposited in the river, and this is where the best and the first opportunity, with the low flow conditions, to get out and do the work," says City of Reno civil engineer Joe Coudriet.

The Truckee river in Reno is 4.23 feet deep as of Monday afternoon, down from over 12 feet in January of this year.

Those higher flows on the river are actually what caused all of the extra material to build up.

"So what happens is during the high flow, once you get to flood stage, a lot of the sediment from upstream begins... washing away in getting up into the high flow and once it gets to the lower portions where it slows down it drops the

sediment, and you see the sandbars which we are removing today," Operations Manager Marnell Heinz explains.

The purpose of removing the sediment is to prevent future flooding -- those sandbars can cause blockages in the river, and during a high flow such as during or after a storm, those blockages can cause flooding -- but it's also to open up other channels.

Coudriet said, "We also want to make sure we get water back in the smaller channel through the park, which will then allow water into the Cochran Ditch which flows into Virginia Lake."

Over 2500 cubic yards of sediment will be removed over the next few weeks, which equates to about 250 ten-wheeler loads.

TMWA Hosts Smart About Water Day at Lazy 5 Park

October 12, 2017 ThisIsReno Website Facebook Twitter YouTube LinkedIn

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The Truckee Meadows Water Authority (TMWA) is holding an all-things-water field day to educate area residents about the region's water system.

"Smart About Water" is free and open to the public Oct. 21, 2017 at the Lazy 5 Regional Park in Spanish Springs. The event is from 10 a.m. to 2 p.m.

The organization wants to educate its customers on where our water comes from and how it is treated.

"We're looking to share the wealth of water knowledge, if you will," said Andy Gebhardt, director of operations and water quality. "We want to help the public understand the water system they have and address any misconceptions they may have."

Activities at the event will include a conservation table, heavy equipment, microscopes, and interactive displays. Subject matter experts, water quality staff and TMWA managers will be on hand.

Winterization workshops will be held at 11 a.m. and 1:30 p.m., and staff will be there to talk about water related issues, such as growth and development.

"One of the things, and it's a hard one, is growth, water, and water conservation," said Gebhardt. "It's hard to get past (the idea) that water conservation is used for growth and that's not true. We're hoping this event helps people understand the facts."

Any new development must purchase existing water rights, he said. "Water is a precious commodity and it's important to understand its works. Our river system is different is from other systems. Every river system is unique."

Workshop Schedule

11:00 Winterizing Workshop, Helping to Make Your Home and Yard Winter-Proof

Laine Christman, TMWA Resource Economist

Walking Arbor Tour: Best trees for our area and how to care for them

Dale Carlon, certified arborist

11:30 Understanding Water Rights in the Truckee Meadows

John Zimmerman, TMWA Water Resources Manager

12:00 Why the Truckee River Operating Agreement is a Game-Changer for the Region

John Enloe, TMWA Director of Natural Resources Planning and Management

Walking Arbor Tour: Best trees for our area and how to care for them

Dale Carlon, certified arborist

12:30 Smart Growth- Our Regional Planning and Water Resources Outlook

Kim Robinson, Truckee Meadows Regional Planning Agency

Jim Smitherman, Western Region Water Commission

1:00 Coordinating Use of Surface Water and Aquifers with Conjunctive Use Management

John Enloe, TMWA Director of Natural Resources Planning and Management

Walking Arbor Tour: Best trees for our area and how to care for them

Dale Carlon, certified arborist

1:30 Winterizing Workshop, Helping to Make Your Home and Yard Winter-Proof

Laine Christman, TMWA Resource Economist

TMWA Hosts Smart About Water Day at Lazy 5 Park

From: WEBSITE: Comments to the Board
To: [Folsom, Sonia](#)
Subject: New submission from Comments to the Board
Date: Thursday, October 12, 2017 9:43:42 AM

Name

Kenneth McNeil

Email

[REDACTED]

Account Number

[REDACTED]

Comments

October 11, 2017

Dear Truckee Meadows Water Authority Board Members,

Although I am a member of the Truckee Meadows Water Authority Standing Advisory Committee, this letter in no way represents the views of the TMWA SAC, and I am not writing this letter on behalf of the TMWA SAC.

The proposal for TMWA to enter into a wholesale water sale agreement with the West Reno Water Company continues to be on my mind for several reasons.

It is hard to imagine the Nevada Public Utilities Commission would not require TMWA to be the water purveyor for new development in the Verdi area, but evidently that is not the case. TMWA has the resources to serve residential customers, but the West Reno Water Company does not. If there was a major earthquake or other natural disaster, TMWA would most likely be able to recover and restore water service much faster than a smaller water provider.

I know the TMWA Board is aware that if Meridian 120 avoids paying for infrastructure improvements, it will impact other proposed development in Verdi. It will also impact the extension of the TMWA water system into Verdi to provide a better water system to fight fires. The recent California fires are an example of what can happen when the wind blows, and if that is combined with an inadequate water system for fighting fires, the possibility increases for a catastrophic fire in Northwest Reno.

You have a lot to consider and evaluate in making a decision about the Meridian 120 Development. The more I hear about TMWA considering an agreement to sell wholesale water to the West Reno Water Company, the more I understand how complicated and difficult it will be for the TMWA Board to decide the best course of action.

I wanted to say a few words at your Strategic Planning Workshop meeting on October 18, but I am going to be out of town. I enjoyed attending your Board Meeting last month, and if it was possible, I would have also attended the meeting on October 18.

I trust any decisions made to provide, or not to provide water, to the West Reno Water Company will be made in the best interests of TMWA. Finding the perfect answer is apparently not possible, and I hope the TMWA Board will work hard to find the best solution to this difficult situation.

Ken McNeil

[REDACTED]

Reno, Nevada 89523

[REDACTED]