

STANDING ADVISORY COMMITTEE

AGENDA

Tuesday, October 6, 2020 at 3:00 p.m. Truckee Meadows Water Authority

Virtual Meeting Only

MEMBERS OF THE PUBLIC MAY ATTEND VIA THE WEB LINK, OR TELPHONICALLY BY CALLING THE NUMBER, LISTED BELOW. NO PHYSICAL LOCATION IS BEING PROVIDED FOR THIS MEETING (be sure to keep your phones on mute, and do not place the call on hold)

Please click the link below to join the webinar:

https://tmwa.zoom.us/j/97713870272?pwd=S09yVjg2VFBHNlMrL0tIb1JyOElWUT09

Password: 576673 Or call: Phone: (888) 788-0099 Webinar ID: 977 1387 0272

NOTES:

- 1. Unless and until the Governor issues a Directive or Order requiring a physical location be designated for meetings of public bodies where members of the public are permitted to attend and participate, no members of the public will be allowed in the TMWA's Corporate Office due to concerns for public safety resulting from the COVID-19 emergency and pursuant to the Governor of Nevada's Declaration of Emergency Directive 006 Section 1 which suspends the requirement in NRS 241.023(1)(b) that there be a physical location designated for meetings of public bodies where members of the public are permitted to attend and participate and subsequent directives related to social distancing. This meeting will be held by teleconference only.
- 2. The announcement of this meeting has been electronically posted in compliance with NRS 241.020(3) and Directive 006 at http://www.tmwa.com, and NRS 232.2175 at https://notice.nv.gov/.
- 3. Pursuant to Directive 006, the requirement contained in NRS 241.020(3)(c) that physical locations be available for the public to receive supporting material for public meetings has been suspended. Staff reports and supporting material for the meeting are available 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 Committee may elect to combine agenda items, consider agenda items out of order, remove agenda items, or delay discussion on agenda items. Arrive at the meeting at the posted time to hear item(s) of interest.
- 5. Asterisks (*) denote non-action items.
- 6. Pursuant to Directive 006, public comment, whether on action items or general public comment, may be provided without being physically present at the meeting by submitting written comments online on TMWA's Public Comment Form (tmwa.com/PublicComment) or by email sent to boardclerk@tmwa.com prior to the Committee opening the public comment period during the meeting. In addition, public comments may be provided by leaving a voicemail at (775)834-0255 prior to 4:00 p.m. the day before the scheduled meeting. Voicemail messages received will be noted during the meeting and summarized for entry into the record. Public comment is limited to three minutes and is allowed during the public comment periods. The Committee may elect to receive public comment only during the two public comment periods rather than each action item. Due to constraints of TMWA's videoconference system, public comment must be provided by voicemail, email or online comment as indicated above.
- 7. In the event the Chairman and Vice-Chairman are absent, the remaining SAC members may elect a temporary presiding officer to preside over the meeting until the Chairman or Vice-Chairman are present (**Standing Item of Possible Action**).
- 1. Roll call*
- 2. Public comment limited to no more than three minutes per speaker*

- 3. Approval of the agenda (**For Possible Action**)
- 4. Approval of the minutes of August 4, 2020 meeting (For Possible Action)
- 5. Presentation of TMWA Legislative Session activities —John Zimmerman and Leo Drozdoff*
- 6. Presentation of potential future agreement(s) with City of Reno for implementation of American Flat Advanced Purified Water Demonstration Project and staff and cost sharing for water resource development work John Enloe and John Zimmerman*
- 7. Presentation of TMWA's preliminary, unaudited financial performance for fiscal year ended June 30, 2020 Matt Bowman*
- 8. Presentation of preliminary funding plan for fiscal years 2021 through 2025, discussion and possible recommendation to the Board Michele Sullivan (**For Possible Action**)
- 9. Discussion and possible direction to staff regarding agenda items for future meetings (**For Possible Action**)
- 10. Staff Items* (Unless otherwise listed with a topic description, this portion of the agenda is limited to announcements)
- 11. Committee Items* (Unless otherwise listed with a topic description, this portion of the agenda is limited to announcements)
- 12. Public Comment limited to no more than three minutes per speaker*
- 13. Adjournment (For Possible Action)

STANDING ADVISORY COMMITTEE

DRAFT MINUTES August 4, 2020

The Standing Advisory Committee (SAC) met via Zoom. Chair McGuire called the meeting to order at 3:04 p.m.

1. ROLL CALL

Primary Members and Voting Alternates Present: Kristine Brown, Robert Chambers, Harry Culbert, Jordan Hastings, Colin Hayes, Don Kowitz, Carol Litster, Neil McGuire, Ken McNeil, Chris Melton, Mike Schulewitch, and Jerry Wager.

Alternates Present: Fred Arndt, Ken Becker, Susan Hoog, Jonnie Pullman, Dale Sanderson, and Jim Smith.

Primary Members and Alternates Absent: Karl Katt, John Krmpotic, Scot Munns, and Ann Silver.

Staff Present: Robert Charpentier, Laine Christman, John Enloe, Scott Estes, Sonia Folsom, Mark Foree, Bill Hauck, Laura Rader, Will Raymond, Danny Rotter, Michele Sullivan, Sandra Tozi, John Zimmerman, and Legal Counsel Michael Pagni (McDonald Carano).

2. PUBLIC COMMENT

There was no public comment.

APPROVAL OF THE AGENDA

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

4. APPROVAL OF THE MINUTES OF THE FEBRUARY 4, 2020 MEETING

Upon motion duly made by Member Schulewitch and seconded by Member Hayes, and carried by unanimous consent of the members present, the Committee approved the February 4, 2020 meeting minutes.

5. ELECTION OF VICE CHAIR FOR THE REMAINDER OF CALENDAR YEAR 2020

Michael Pagni, TMWA SAC Legal Counsel, stated vice chair can be elected from the members.

Chair McGuire nominated Mike Schulewitch to be vice chair for the remainder of 2020;

Upon motion duly made by Member Hayes and seconded by Member Chambers, and carried by unanimous consent of the members present, the Committee approved the nomination of Mike Schulewitch to be vice chair for the remainder of calendar year 2020.

6. PRESENTATION ON WATER QUALITY

Will Raymond, Water Operations Manager, provided an overview of TMWA's water quality report and operations. Since 2015, TMWA has received AWWA's Partnership for Safe Drinking Water Award and continues to deliver safe and reliable water service during the coronavirus (COVID-19) pandemic.

The Committee discussed the effects of chlorine on the coronavirus, which is proven effective in killing the virus and the safety of TMWA employees (TMWA has been operating at a Pandemic Response Level 3, which provides for minimal and critical staffing only and no one has tested positive).

7. WATER SUPPLY UPDATE

Bill Hauck, TMWA Water Supply Administrator, reported the snowpack for the year reached a level of about 70% of normal, Lake Tahoe is about 3/4 full and at 72% capacity, and normal river flows are projected for the rest of the year and the next couple of years regardless of what happens this winter.

8. DISCUSSION AND POSSIBLE RECOMMENDATION TO THE BOARD ON TMWA'S DRAFT 2020-2040 WATER RESOURCE PLAN

Kara Steeland, TMWA Hydrologist, presented the draft 2020-2040 Water Resource Plan (2040WRP), as well as the public outreach schedule, and staff plans to bring it back for final Board approval in the fall. Bill Hauck, TMWA Water Supply Administrator, presented the climate change model scenarios, which indicate that even in extreme scenarios, the first year of shortage is 50 years out; therefore, TMWA's water supply remains extremely resilient under current operations. Mr. Hauck further explained the Bureau of Reclamation (BOR) grant TMWA received in September 2019 is a multi-agency approach to reevaluate the flood control management of upstream storage (last updated in 1985) based on changing climate conditions, potentially providing a more flexible and adaptive storage plan.

Member Chambers asked about forest fires and effects on streams and who is responsible for the aftermath. Kara replied that it is addressed in Chapter 6 and TMWA works collaboratively with The Nature Conservancy Nevada Chapter and they are doing extensive modelling in the areas about risk of forest fires within the headwaters of the Truckee River system. Also funding is provided through the

Truckee River Fund for restoration projects to maintain forest health and decrease the magnitude of the fires.

Vice Chair Schulewitch asked about where the agricultural water rights are. John Zimmerman, TMWA Water Resource Manager, replied the majority of the water rights are in the Truckee Meadows basin area, and are small ranchettes that have split up into smaller parcels and/or properties that once had an agricultural use that have since been developed into housing.

Upon motion duly made by Vice Chair Schulewitch and seconded by Member Chambers, and carried by unanimous consent of the members present, the Committee accepted the report and recommended to the TMWA Board of Directors to approve the Draft 2020-2040 Water Resource Plan as presented by staff.

9. PRESENTATION ON TMWA'S NEW RATE SCHEDULE INTERRUPTIBLE LARGE VOLUME NON-POTABLE SERVICE (ILVNPS)

Mr. Zimmerman presented the new rate the Board adopted in June, which creates a mechanism to allow for temporary use of TMWA water rights to be used to make up for any return flow deficits when reclaimed water from other local agencies is used for purposes such as dust control for construction projects and development. This rate will provide for return flow back to the river to meet Orr Ditch Decree and Truckee River Operating Agreement (TROA) requirements and no TMWA facilities will be used for this service. The ILVNPS rate would be limited to projects requiring a minimum of at least 15 acre-feet (AF) and would be at the sole discretion of TMWA.

Chair McGuire inquired about how the customers would be charged if they are taking water from the hydrants or creeks and irrigation ditches. Mr. Zimmerman replied any use from hydrants must be approved by TMWA and is metered, but that the use of water from creeks or irrigation ditches for dust control is a separate issue. The new ILVNPS rate is the use of untreated water left in the river to make up for return flow and the local agencies would then use their reclaimed water, via the purple pipe system, to supply water for dust control purposes and would separately meter that water.

Member Hastings inquired if the service would be for fixed periods. Mr. Zimmerman replied the service agreements would be one year at most or seasonal. For example, the pump at the Somersett golf course went down and they are asking for over 100 AF for their irrigation season; much like a ditch irrigation service customer.

10. PRESENTATION ON THE TMWA TENTATIVE BUDGET FOR THE FISCAL YEAR ENDING JUNE 30, 2021 AND DRAFT CAPITAL IMPROVEMENT (CIP) FOR FISCAL YEARS 2021 THROUGH 2025

Michele Sullivan, TMWA Chief Financial Officer, presented the final FY 2021 Budget and FY 2021-2025 CIP. The final budget reflects the Board's decision to defer the 2.5% rate increase until September,

2020 (a \$600k reduction), and an additional reduction of \$300k in hydroelectric revenue due to the expected downtime to repair the Washoe Flume. The 5-year CIP, \$229m, reflects small changes as well, which increased \$1m in FY 2021, related to the Spanish Springs main replacement project, but reduced additional costs in following years, so there was no additional increase to customer rates, as well as an additional \$4m for the Mt. Rose Water Treatment Plant, and the Farad insurance settlement will be used to build the Orr Ditch Hydro facility.

At this time the Committee discussed the impact COVID-19 has had on revenues (residential sales are up which have offset the decrease in commercial sales, and residential sales closed the budget gap in the last quarter FY 2020); TMWA is not turning customers' water off for non-payment (for customers who are over 60 days, which is a few thousand, it is about \$400k in total, but typically runs about \$100-150k this time of year); the Orr Ditch Hydro project will be using the existing water ways and Chalk Bluff facilities to bring water up to the plant and since it will be behind the meter, TMWA will use the power generated directly; and TMWA is not acquiring new debt over the next five years and will continue to pay down debt.

11. DISCUSSION AND ACTION, AND POSSIBLE RECOMMENDATION TO THE BOARD FOR RECONSIDERATION AND MODIFICATION OF IMPLEMENTATION OF PHASE THREE RATE ADJUSTMENT IN AMOUNT OF 2.5% CURRENTLY SCHEDULED TO BE IMPLEMENTED ON FIRST BILLING CYCLE IN SEPTEMBER 2020

Ms. Sullivan presented the staff report which will be presented to the Board at their August meeting, stating they are recommending for the Board to approve to pushing Phase 3 rate adjustment to May 2021 for final implementation with Phases 4 and 5 to be implemented in 2022 and 2023, respectively. At its April 2020 Board meeting, staff brought forth deferring the rate increase already approved for implementation in May 2020, Given the situation with unemployment and the economic effects of the pandemic, the Board agreed it was the right thing to do, and deferred the rate increase to September, 2020. The Board could consider using the Rate Stabilization Fund, which has a little more than \$9m, but staff does not anticipate that. Staff is requesting the Committee to approve staff recommendation to push the rate increase to May 2021.

Vice Chair Schulewitch stated it is a reasonable expectation to delay and inquired about the future rate increases. Ms. Sullivan replied that it would be held at 2.5% but revisited through the funding plan before each one happened.

Chair McGuire agreed and that we need to pay down more of the debt, and even though 2.5% does not seem that much, it would be considerate to hold off due to the pandemic.

Upon motion duly made by Member Kowitz and seconded by Member Hayes, and carried by unanimous consent of the members present, the Committee approved recommending to the Board to implement Phase 3 rate adjustment of 2.5% to be implemented in May 2021.

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

Next meeting:

- 1. TMWA unaudited FY2020 financials
- 2. Legislative Session Update

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

Upon motion duly made by Member Chambers and seconded by Member Culbert, and carried by unanimous consent of the members present, the Committee approved to cancel the September 1, 2020 meeting.

10. STAFF ITEMS

There were no staff items.

11. COMMITTEE ITEMS

Chair McGuire stated it is important that we need to do this as a committee, to keep this involvement and get the information out to the public.

12. PUBLIC COMMENT

There was no public comment.

13. ADJOURNMENT

With no further items for	discussion, (Chair McGuire adjourned	the meeting at 4:47 p.m.

Approved by the Standing Advisory Committee in session on _____

Sonia Folsom, Recording Secretary



STAFF REPORT

TO: Chairman and Legislative Subcommittee Members

THRU: Mark Foree, General Manager

FROM: John Zimmerman, Water Resources Manager

DATE: September 28, 2020

SUBJECT: Presentation of interim legislative session activities and upcoming session

The following is a summary of staff's work during the interim session and a preview of the upcoming 2021 regular session and water-related bill draft requests.

Interim Session

After the 2019 regular session, the Board directed staff to take a more active role with the legislature and governmental affairs. The Board also created a subcommittee for the interim session. Staff and TMWA lobbyist Leo Drozdoff have taken a more active role with the legislature by meeting with more legislators and presenting to state regulators.

Prior to the COVID-19 shutdown, TMWA was able to meet with Assemblywoman Sarah Peters and Senators Ben Kieckhefer and Julia Ratti. TMWA Board member Kristopher Dahir was able to participate in our meeting with Senator Ratti. Senator Ratti is chair of the Legislative Committee for the Review and Oversight of the Tahoe Regional Planning Agency and the Marlette Water System. Senator Kieckhefer and Assemblywoman Peters are also members of that Committee and Senator Ratti has directed Senator Kieckhefer to take the lead on steering the business of the Committee.

During our individual meetings, TMWA staff and Mr. Drozdoff provided the legislators with a very high-level overview of TMWA's operations. We also briefed the legislators on TMWA's priorities and specifically described TMWA's involvement and interest in working with the Nevada Department of Administration to maximize the beneficial use of water from the Marlette Lake water system, which includes Marlette Lake and the Hobart-East Slope water resources. We received very positive feedback from the legislators and all of them wanted to be helpful regarding TMWA's Marlette Water System involvement. Additionally, Mr. Drozdoff assisted TMWA with engaging Carson City in the discussion and we have entered into a memorandum of understanding that contemplates TMWA, Carson City, and Storey County (on behalf of Virginia City) collaborating on a plan to maximize the beneficial use of these water resources in a manner that works for both parties and the state.

Also prior to the shutdown, Mr. Drozdoff met with Senator Chris Brooks to discuss TMWA's climate change analysis. TMWA is also closely monitoring the selection of chairs for

the Senate and Assembly committees on natural resources. Assemblyman Howard Watts has expressed a strong desire to be the Assembly's Natural Resources Committee chair. TMWA was scheduled to meet with him and Assemblywoman Peters on March 27, but that unfortunately needed to be postponed. On the Senate side, Senator Melanie Scheible is the current chair and has expressed an interest in remaining in that spot. With this said, however, naming a chair is not a current priority for legislative leadership. We will schedule appropriate meetings when we are able to do so.

Discussions with State Regulators

On the policy maker side, we have kept a continuing dialogue going with the Nevada Department of Conservation and Natural Resources (DCNR) and its Division of Water Resources (NDWR) and Division of Environmental Protection (NDEP). We met with the Director of DCNR and several high-level members of his leadership team including the State Engineer, NDEP administrator and deputy administrator, and Nevada Climate Policy Coordinator. This meeting was very productive, and the Director and his leadership team appreciated the information and TMWA's approach to water resource management and long-term planning.

As the Subcommittee will recall, in the last regular session, the Legislature passed Assembly Bill 62 that requires the State Engineer to develop regulations regarding the amount of time and evidence required to prove that a water right owner is proceeding in good faith with reasonable diligence to perfect a water right. The draft regulations required by AB 62 were made public in June and the State Engineer held a public workshop to obtain input on them. TMWA provided written and verbal comments at the hearing, which supported the State Engineer's goals, but disagreed with the language being proposed to accomplish those goals (see attached comments from Gordon DePaoli). Many other stakeholders echoed TMWA's comments, including SNWA and other municipal water purveyors. Almost all public comments were opposed to the proposed regulations. The State Engineer has since stated that they will hold more workshops to work on the draft regulations.

Regarding Assembly Bill 30, which involved "3M" plans, but failed to pass, the Director of DCNR has previously told TMWA that his office would not pursue any legislative or regulatory changes regarding AB 30 topics until they finished the AB 62 regulations. Staff and Mr. Drozdoff will continue to be actively engaged in the process.

2021 Regular Session

The upcoming session is likely going to be dominated by the financial impacts of the COVID-19 pandemic. As of September 25th, there were 477 bill draft requests (BDRs). Of these BDRs, 9 involve water right and water resource issues. There are also several bills involving topics TMWA closely monitors including: collective bargaining, government purchasing and public works, public records, renewable energy, labor and employment. The following is a brief summary of the water-related BDRs.

10-06-20 SAC Agenda Item 5

	Water-Related BDR	is
BDR No.	Description	Sponsor
43	Senate Joint Resolution to amend Nevada Constitution to protect the State's water, land, and air.	Senator Brooks
123	Revises provisions governing water.	Assemblywoman Peters
309	Revises provisions governing hearings on	Dept. of Conservation and Natural
	applications for temporary changes relating to	Resources
	existing water rights.	
310	Revises provisions relating to appeals of	Dept. of Conservation and Natural
	orders and decisions of the State Engineer.	Resources
311	Clarifies the orders and decisions of the State	Dept. of Conservation and Natural
	Engineer that are subject to judicial review.	Resources
339	Creates a water conservation credit program	Dept. of Conservation and Natural
	for irrigation manners of use.	Resources
340	Creates an irrigation manner of use water	Dept. of Conservation and Natural
	rights banking and leasing program.	Resources
341	Adds the State Engineer as a member of the	Dept. of Conservation and Natural
	Colorado River Commission of Nevada.	Resources
471	Revises the qualifications of the State	Legislative Committee on Public
	Engineer	Lands



STAFF REPORT

TO: TMWA Standing Advisory Committee

THRU: Mark Foree

FROM: John Enloe, Director, Natural Resources

John Zimmerman, Manager, Water Resources

DATE: September 17, 2020

SUBJECT: Presentation of potential future agreement(s) with City of Reno for

implementation of American Flat Advanced Purified Water Demonstration Project and staff and cost sharing for water resource development work

This agenda item was presented to the TMWA Board of Directors for their approval. Please find the original staff report attached.



STAFF REPORT

TO: Board of Directors

THRU: Mark Foree, General Manager

FROM: John Enloe, Director, Natural Resources

DATE: September 9, 2020

SUBJECT: Discussion and action, and possible direction to staff to explore potential

future agreement(s) with City of Reno for implementation of American Flat Advanced Purified Water Demonstration Project and staff and cost sharing

for water resource development work

Recommendation: Subject to Reno City Council approval, authorize staff to explore potential future agreement(s) with City of Reno for implementation of the American Flat Advanced Purified Water Demonstration Project and related work, including staffing and cost sharing for water resource development work.

Summary

City of Reno and TMWA staff are interested in pursuing advanced purified water investigations as partners under a more formal process. To accomplish this effort, while at the same time ensuring equitability to our respective customers, Reno's and TMWA's responsibilities must be clearly defined. Responsibilities, staffing needs, and cost sharing agreements need to be developed for the following:

- Ongoing research and development efforts;
- Infrastructure planning, design, finance and construction of pre-treatment, pipe, pump, advanced treatment, recharge and recovery well facilities;
- Staffing needs, including long-term management, operations and maintenance;
- Future water resources, water rights management and potential water rights sales;
- Other matters as may be identified.

Assuming the TMWA Board supports staff's efforts and gives direction to explore potential future agreement(s) with City of Reno for implementation of American Flat Advanced Purified Water Demonstration Project and related work, and the Reno City Council provides similar direction at its meeting on September 23rd, staff's intention is to bring back a definitive agreement or agreements to the Board and Reno City Council for future consideration.

<u>Discussion</u>: OneWater Nevada is a unique effort initiated by the City of Reno, Truckee Meadows Water Authority, University of Nevada, Reno, City of Sparks, Northern Nevada Water Planning Commission, Western Regional Water Commission, and the Truckee Meadows Water Reclamation Facility to evaluate and determine if the State of Nevada's recently adopted Category A+ reclaimed water quality, or advanced purified water, offers regional long-range water supply benefits.

Category A+ reclaimed water quality is advanced purified water meeting the following water quality requirements:

- National Primary Drinking Water Regulations;
- Nevada Secondary Maximum Contaminant Levels;
- Specific Reductions for Pathogens;
- Additionally, NAC requires the development of a water quality monitoring program for unregulated constituents.

Conceptually, potential benefits from an advanced purified water system within the Truckee Meadows may include:

- Provide a local, reliable, drought-proof water source;
- Reduce reliance on the Truckee River;
- Enhances the region's water supply resiliency to help address future uncertainties of climate change, such as longer growing season, snowpack changes and runoff timing.

The ongoing Reno Stead Water Reclamation Facility Advanced Purified Water Feasibility Study (Feasibility Study) offers an opportunity to evaluate advanced purified water treatment technologies coupled with groundwater injection at a small and rigorously controlled pilot demonstration scale. The Feasibility Study proposes introducing advanced purified water in a localized and controlled portion of the Reno Stead - Lemmon Valley East hydrographic basin through an injection well at approximately 10 gallons per minute for up to 45 days. The final recharge portion of the Feasibility Study is expected to occur during September and October 2020, and continued favorable results are expected.

Concurrent to the Feasibility Study, the City of Reno has been considering several seasonal effluent storage options for Reno Stead Water Reclamation Facility (RSWRF) during the non-irrigation season as shown in the attached infographic. The main seasonal effluent storage options include: 1) aboveground open topped reservoir storage and 2) aquifer storage and recovery (ASR) of advanced purified water.

The aboveground effluent storage reservoir concept is known as the Red Rock Reservoir. Algae growth is expected when effluent is stored in an open topped reservoir. The reservoir would be sized to capture and contain precipitation and runoff from the contributing hydrobasin. Some of the stored water will be lost due to evaporation, which will slightly increase the salinity of the stored water. Other water quality impacts from algal growth include increased turbidity and algal-related organic matter. Therefore, additional treatment such as dissolved air flotation for algae removal and refiltration will be required when stored effluent is utilized for irrigation during the following irrigation season.

The ASR option is a field-scale (potentially 1 -2 MGD) groundwater recharge demonstration project led to date by TMWA and the OneWater Nevada team. The ASR project would involve injection of advanced purified water meeting the Nevada Category A+ exceptional quality requirements. Advanced purified water stored in the aquifer would initially be extracted and utilized for irrigation of the American Flat site. TMWA has performed a preliminary investigation of the ASR capacity at the American Flat site and found promising results. While ASR requires a higher level of treatment to achieve Category A+ standards, it does not require substantial retreatment steps and eliminates evaporation water loss and associated salinity increase.

The American Flat Advanced Purified Water Demonstration Project would require the following project elements:

- 1. Pretreatment facilities at RSWRF;
- 2. An advanced purified water facility to be constructed offsite or at the RSWRF site;
- 3. Conveyance pipelines;
- 4. Pump station improvements;
- 5. Injection wells; and
- 6. Extraction wells.

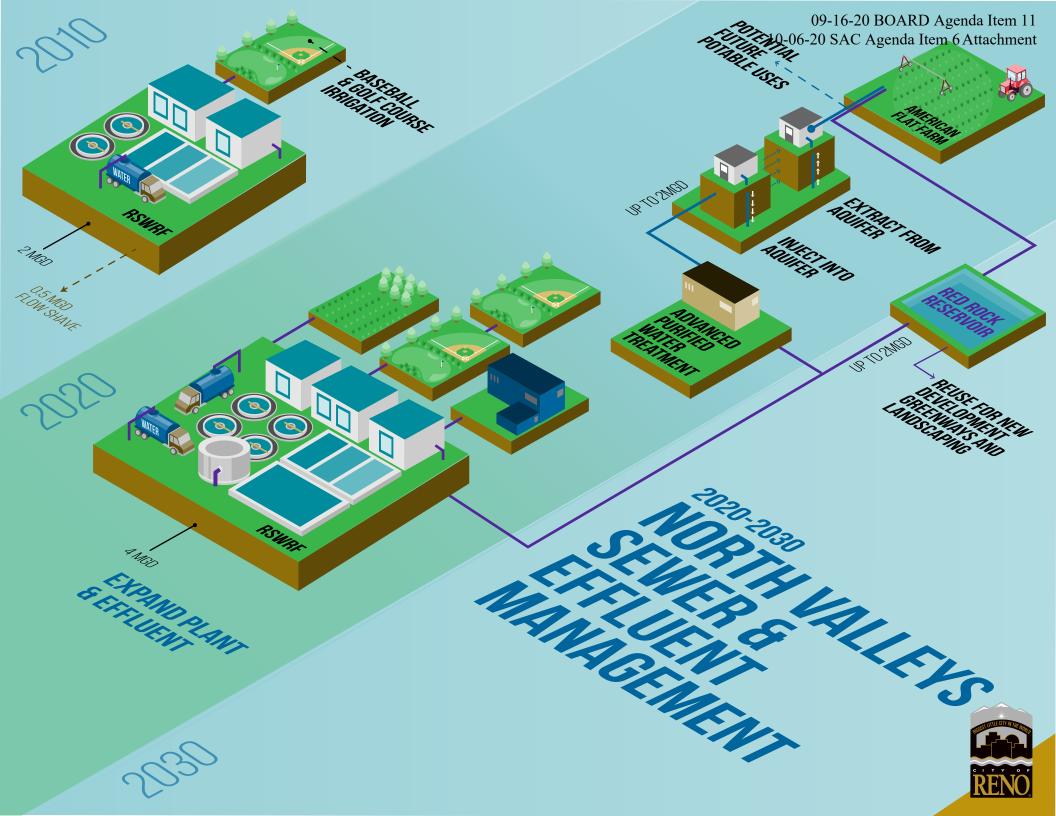
City of Reno and TMWA staff are interested in pursuing the advanced purified water investigations as partners under a more formal process. To accomplish this effort, while at the same time ensuring equitability to our respective customers, Reno's and TMWA's responsibilities must be clearly defined. For instance, responsibilities, staffing and cost sharing agreements would need to be developed for the following:

- Ongoing research and development efforts;
- Infrastructure planning, design, finance and construction of pre-treatment, pipes, pumps, advanced treatment, recharge and recovery well facilities;
- Staffing needs, including long-term management, operations and maintenance;
- Future water resources, water rights management and potential water rights sales;
- Other matters as may be identified.

Assuming the TMWA Board supports staff's efforts and gives direction to explore potential future agreement(s) with City of Reno for implementation of the American Flat Advanced Purified Water Demonstration Project and related work, and the Reno City Council provides similar direction at its meeting on September 23rd, staff's intention is to bring back a definitive agreement or agreements to the Board and Reno City Council for future consideration.

Fiscal Impact: None currently. Future financial considerations will be identified in a subsequent definitive agreement or agreements.

Attachment: RSWRF Infographic





TO: Board of Directors

THRU: Mark Foree, General Manager

FROM: Michele Sullivan, Chief Financial Officer

Matt Bowman, Financial Controller

DATE: August 10, 2020

SUBJECT: Presentation of preliminary fiscal year 2020 unaudited financial performance

Summary

Please refer to Attachments A-1 and A-2 for full Statements of Revenues, Expenses and Changes in Net Position for both actual to budget and year-over-year comparisons as discussed in the report below. Note that all numbers presented in this staff report are subject to TMWA's annual financial statement audit to be completed by Eide Bailly in November, 2020. Overall change in net position is expected to increase following adjustments for Developer Infrastructure Contributions, PERS and OBEP Liabilities. All of these adjustments are non-cash adjustments and are required under GASB accounting standards. For this reason, a comparison of total Change in Net Position to budget and prior year is not useful at this time. The final financial information will be presented to the TMWA Board of Directors following completion of the annual audit.

Revenue

Budget to Actual

	Actual	Budget		
	YTD 2020	YTD 2020	Variance \$	Variance %
OPERATING REVENUES				
Charges for Water Sales	102,487,078	102,706,086	(219,008)	— %
Hydroelectric Sales	3,298,850	3,664,180	(365,330)	(10)%
Other Operating Sales	2,286,729	3,320,950	(1,034,221)	(31)%
Total Operating Revenues	108,072,657	109,691,216	(1,618,559)	(1)%

Operating revenue was \$1.6m or 1% lower than budget for the fiscal year, due to lower hydroelectric and other operating sales revenues. Water sales finished the year less than 1% under budget due to a higher water consumption in the 4th quarter. Through the first three quarters, water sales were down 3% from budget due to mild summer/fall temperatures during the first half of the year, which led to lower water use. Hot and dry temperatures during the 4th quarter led to higher water usage, most notably reflected in residential water sales which were up approximately 15% during the quarter. This increase was offset slightly by a decrease in commercial water sales which were down approximately 25% during the 4th quarter due to COVID-19 related business closures. Although commercial water sales were down, these sales only account for approximately 12% of TMWA's overall water sales revenue, so the overall impact was minimal. Hydroelectric sales were lower due to lower river flows early in the year followed by the shut down of the

Washoe hydro plant due to a flume failure in April, 2020. Other operating sales were lower due to lower than budgeted business service inspection fees.

Year over Year

	Actual	Actual		
	YTD 2020	YTD 2019	Variance \$	Variance %
OPERATING REVENUES				
Charges for Water Sales	102,487,078	101,496,912	990,166	1 %
Hydroelectric Sales	3,298,850	2,624,285	674,565	26 %
Other Operating Sales	2,286,729	2,968,321	(681,592)	(23)%
Total Operating Revenues	108,072,657	107,089,518	983,139	1 %

Total operating revenues were \$1.0m more than the prior year. This is driven by higher water sales and hydroelectric sales revenues offset by lower other operating sales. Water sales were slightly higher than last year due to several factors. First, active retail water services grew about 2% in FY 2020. This was offset by slightly less water use. Although the Washoe hydro plant was down for more than two months during FY 2020, hydroelectric revenue was still higher than in prior year due to the Fleish plant being offline in FY 2019 for the replacement of the tailrace. Other operating sales are lower due to lower inspection fee revenue and lower late fee revenue due to TMWA not charging late fees during the pandemic.

Operating Expenses

Budget to Actual

	Actual	Budget	v · •	V
	YTD 2020	YTD 2020	Variance \$	Variance %
OPERATING EXPENSES				
Salaries and Wages	21,455,982	23,183,489	(1,727,507)	(7)%
Employee Benefits	10,473,904	12,324,771	(1,850,867)	(15)%
Services and Supplies	27,250,167	31,125,499	(3,875,332)	(12)%
Total Operating Expenses Before Depreciation	59,180,053	66,633,759	(7,453,706)	(11)%
Depreciation	32,966,191	33,136,228	(170,037)	(1)%
Total Operating Expenses	92,146,244	99,769,987	(7,623,743)	(8)%

Total operating expenses were \$7.6m lower than budget for FY 2020 due to lower salaries and wages, employee benefits and services and supplies. Note that employee benefits expenses are subject to change as a result of final PERS and OPEB non-cash adjustments for FY 2020. Expenses are expected to increase following these adjustments.

Salaries and wages are lower due to position vacancies during the year. At year-end TMWA had 225 full-time equivalent employees compared to a budget of 231. Employee benefits expenses are lower for the same reason, in addition to the pending PERS and OBEP adjustments, which is expected to increase the expenses. Services and supplies are lower by \$3.9m due to several factors, including primarily, two large project related expenses included in the budget and lower power and chemical costs. The reconstruction of the Glendale diversion was partly budgeted as expense for \$1.6m, however all associated project costs were ultimately capitalized according to accounting standards. Another \$1.0m was related to expected training during the implementation of a new Customer Information System. This project is ongoing and through

June 30, there have been minimal training costs. These costs are expected to be incurred in FY 2021. Power and chemical costs are lower by a combined \$1.0m or 12% of budgeted costs. Power costs are lower due to less power consumption throughout the year principally from TMWA wells and pump stations. TMWA has continued to see improvement in power costs due to optimization of water distribution throughout the service territory. Chemical costs are lower due primarily to less turbidity events (thunderstorms, etc.) in the river which results in less treatment requirements to attain the desired water quality.

Year over Year

	Actual	Actual		
	YTD 2020	YTD 2019	Variance \$	Variance %
OPERATING EXPENSES				
Salaries and Wages	21,455,982	20,973,151	482,831	2 %
Employee Benefits	10,473,904	10,184,189	289,715	3 %
Services and Supplies	27,250,167	28,475,960	(1,225,793)	(4)%
Total Operating Expenses Before Depreciation	59,180,053	59,633,300	(453,247)	(1)%
Depreciation	32,966,191	32,833,604	132,587	— %
Total Operating Expenses	92,146,244	92,466,904	(320,660)	-%

Total operating expenses were less than 1% lower than prior year or \$0.3m lower. Salaries and wages were slightly higher (2%) due to budgeted step and cost of living increases occurring at the start of the fiscal year. Employee benefits saw the same trend, as expected. Offsetting those increases was a decrease in services and supplies costs resulting primarily from costs incurred in FY 2019 for dredging the outlet channel at Donner Lake and lower chemical and power costs. During FY 2019, TMWA contracted to have the outlet channel at Donner Lake dredged to remove sediment and improve operations of the dam. Costs in FY 2019 of approximately \$1.0m were incurred for this project. Chemical and power costs were lower by a combined amount of \$0.7m from prior year. Lower chemical costs of \$0.4m due to better water quality as discussed above. Lower power costs of \$0.3m (6%) are the result of efficiency gains in water delivery throughout the service territory, as discussed above. Offsetting these decreases were other various increases including an increase in insurance costs of \$0.2m year over year resulting from renewed policies and increasing insurance rates.

Non-Operating Expenses

Budget to Actual

	Actual	Budget		
	YTD 2020	YTD 2020	Variance \$	Variance %
NONOPERATING REVENUES (EXPENSES)				
Investment Earnings	4,119,737	3,409,815	709,922	21 %
Net Increase (Decrease) in FV of Investments	3,410,242	_	3,410,242	— %
Gain (Loss) on Disposal of Assets	(487,493)	_	(487,493)	— %
Amortization of Bond/note Issuance Costs	(216,981)	(190,800)	(26,181)	14 %
Interest Expense	(12,698,973)	(13,052,442)	353,469	(3)%
Other Nonoperating Revenue	_	_	_	— %
Other Nonoperating Expense	_		_	— %
Total Nonoperating Revenues (Expenses)	(5,873,468)	(9,833,427)	3,959,959	(40)%

Nonoperating expenses were \$4.0m lower than budgeted for the year. This is primarily due to higher investment income of \$4.1m. Investment earnings which reflects interest and amortization of investment premiums and discounts is due to higher cash balances invested during the period and slightly higher invested rates. Net increase in FV (fair value) of investments is due to investments in securities at higher rates than current market rates. Market rates have dropped drastically in the second half of the fiscal year with the 10-year Treasury yield starting at 1.88% in January then ending June 30 at 0.66%.

Year over Year

	Actual	Actual		
	YTD 2020	YTD 2019	Variance \$	Variance %
NONOPERATING REVENUES (EXPENSES)				
Investment Earnings	4,119,737	4,409,486	(289,749)	(7)%
Net Increase (Decrease) in FV of Investments	3,410,242	2,843,154	567,088	20 %
Gain (Loss) on Disposal of Assets	(487,493)	(225,687)	(261,806)	116 %
Amortization of Bond/note Issuance Costs	(216,981)	(218,132)	1,151	(1)%
Interest Expense	(12,698,973)	(13,268,153)	569,180	(4)%
Other Nonoperating Revenue	_	_	_	— %
Other Nonoperating Expense	_	(233,494)	233,494	(100)%
Total Nonoperating Revenues (Expenses)	(5,873,468)	(6,692,826)	819,358	(12)%

Nonoperating expenses were lower than prior year by \$0.8m. This is mostly due to higher unrealized investment income of \$0.6m. As discussed above, investment rates have dropped leading to unrealized gains in investments held at higher rates. Interest expense is also lower as expected due to lower variable interest on outstanding commercial paper and also lower principal balances on fixed rate debt due to scheduled principal payments.

Capital Contributions

Budget to Actual

	Actual	Budget		
	YTD 2020	YTD 2020	Variance \$	Variance %
CAPITAL CONTRIBUTIONS				
Grants	(20)	1,937,500	(1,937,520)	(100)%
Water Meter Retrofit Program	_	_	_	— %
Water Resource Sustainability Program	1,484,443	926,425	558,018	60 %
Developer Infrastructure Contributions	84,627	15,768,318	(15,683,691)	(99)%
Developer Will-serve Contributions (Net of Refunds)	4,082,279	5,067,536	(985,257)	(19)%
Developer Capital Contributions - Other	8,043,758	6,697,000	1,346,758	20 %
Developer Facility Charges (Net of Refunds)	9,657,274	8,517,248	1,140,026	13 %
Contributions from Others	684,644		684,644	— %
Net Capital Contributions	24,037,005	38,914,027	(14,877,022)	(38)%

Normalized for the pending adjustment for Developer Infrastructure Contributions for FY 2020, net capital contributions were approximately \$0.8m higher than budget. This is driven by higher area fee revenue, direct developer contributions (Kinglet booster pump station and standby generator at STMGID well #6), higher supply and treatment revenue, and other contributions including funding for the Portland Loo from Washoe County and an insurance settlement. Offsetting these increases is lower grant revenue due to two in-process FEMA grants pending approval and lower will-serve contributions.

Year over Year

	Actual	Actual		
	YTD 2020	YTD 2019	Variance \$	Variance %
CAPITAL CONTRIBUTIONS				
Grants	(20)	831,116	(831,136)	(100)%
Water Meter Retrofit Program	_	994,706	(994,706)	(100)%
Water Resource Sustainability Program	1,484,443	689,060	795,383	115 %
Developer Infrastructure Contributions	84,627	19,112,590	(19,027,963)	(100)%
Developer Will-serve Contributions (Net of Refunds)	4,082,279	4,663,826	(581,547)	(12)%
Developer Capital Contributions - Other	8,043,758	6,636,417	1,407,341	21 %
Developer Facility Charges (Net of Refunds)	9,657,274	9,154,403	502,871	5 %
Contributions from Others	684,644	100,000	584,644	585 %
Net Capital Contributions	24,037,005	42,182,118	(18,145,113)	(43)%

Normalized for the pending adjustment for Developer Infrastructure Contributions for FY 2020, net capital contributions were approximately \$0.9m higher than the prior year. Increases over prior year are the result of the items discussed above, with minimal exception.

Capital Spending

Spending on capital outlays and construction projects during the fiscal year was approximately \$41.2m as compared to the FY 2020 budget of \$58.5m. This is approximately 70% of budgeted spend which is typical. Top project spend through three quarters of the year is below -

Mount Rose Water Treatment Plant
 Customer Information System Replacement
 Glendale Diversion Repair
 \$12.5m
 \$3.0m
 \$2.7m

Cash Position

At June 30, 2020 total cash on hand was \$205.8m or \$8.0m higher than at the beginning of the fiscal year. Of the total cash on hand, \$148.2m was unrestricted to be used to meet upcoming and future operating & maintenance expenses, principal & interest payments and construction project payments. The remaining \$57.6m was restricted to pay for scheduled bond principal and interest payments as well as maintaining required reserves as stipulated in our bond covenants.

Attachment A-1

Truckee Meadows Water Authority

Comparative Statements of Revenues, Expenses and Changes in Net Position For the fiscal year ended June 30, 2020

	Actual	Budget		
	YTD 2020	YTD 2020	Variance \$	Variance %
OPERATING REVENUES				
Charges for Water Sales	\$ 102,487,078	\$ 102,706,086	\$ (219,008)	— %
Hydroelectric Sales	3,298,850	3,664,180	(365,330)	(10)%
Other Operating Sales	2,286,729	3,320,950	(1,034,221)	(31)%
Total Operating Revenues	108,072,657	109,691,216	(1,618,559)	(1)%
OPERATING EXPENSES				
Salaries and Wages	21,455,982	23,183,489	(1,727,507)	(7)%
Employee Benefits	10,473,904	12,324,771	(1,850,867)	(15)%
Services and Supplies	27,250,167	31,125,499	(3,875,332)	(12)%
Total Operating Expenses Before Depreciation	59,180,053	66,633,759	(7,453,706)	(11)%
Depreciation	32,966,191	33,136,228	(170,037)	(1)%
Total Operating Expenses	92,146,244	99,769,987	(7,623,743)	(8)%
OPERATING INCOME	15,926,413	9,921,229	6,005,184	61 %
NONOPERATING REVENUES (EXPENSES)				
Investment Earnings	4,119,737	3,409,815	709,922	21 %
Net Increase (Decrease) in FV of Investments	3,410,242	_	3,410,242	— %
Gain (Loss) on Disposal of Assets	(487,493)	_	(487,493)	— %
Amortization of Bond/note Issuance Costs	(216,981)	(190,800)	(26,181)	14 %
Interest Expense	(12,698,973)	(13,052,442)	353,469	(3)%
Other Nonoperating Revenue	_	_	_	— %
Other Nonoperating Expense	_	_	_	— %
Total Nonoperating Revenues (Expenses)	(5,873,468)	(9,833,427)	3,959,959	(40)%
Gain (Loss) Before Capital Contributions	10,052,945	87,802	9,965,143	11,350 %
CAPITAL CONTRIBUTIONS				
Grants	(20)	1,937,500	(1,937,520)	(100)%
Water Meter Retrofit Program	_	_	_	— %
Water Resource Sustainability Program	1,484,443	926,425	558,018	60 %
Developer Infrastructure Contributions	84,627	15,768,318	(15,683,691)	(99)%
Developer Will-serve Contributions (Net of Refunds)	4,082,279	5,067,536	(985,257)	(19)%
Developer Capital Contributions - Other	8,043,758	6,697,000	1,346,758	20 %
Developer Facility Charges (Net of Refunds)	9,657,274	8,517,248	1,140,026	13 %
Contributions from Others	684,644	_	684,644	— %
Net Capital Contributions	24,037,005	38,914,027	(14,877,022)	(38)%
CHANGE IN NET POSITION	\$ 34,089,950	\$ 39,001,829	\$ (4,911,879)	(13)%

Comparative Statements of Revenues, Expenses and Changes in Net Position For the fiscal year ended June 30, 2020

	Actual	Actual		
	YTD 2020	YTD 2019	Variance \$	Variance %
OPERATING REVENUES				
Charges for Water Sales	\$ 102,487,078	\$ 101,496,912	\$ 990,166	1 %
Hydroelectric Sales	3,298,850	2,624,285	674,565	26 %
Other Operating Sales	2,286,729	2,968,321	(681,592)	(23)%
Total Operating Revenues	108,072,657	107,089,518	983,139	1 %
OPERATING EXPENSES				
Salaries and Wages	21,455,982	20,973,151	482,831	2 %
Employee Benefits	10,473,904	10,184,189	289,715	3 %
Services and Supplies	27,250,167	28,475,960	(1,225,793)	(4)%
Total Operating Expenses Before Depreciation	59,180,053	59,633,300	(453,247)	(1)%
Depreciation	32,966,191	32,833,604	132,587	—%
Total Operating Expenses	92,146,244	92,466,904	(320,660)	— %
OPERATING INCOME	15,926,413	14,622,614	1,303,799	9 %
NONOPERATING REVENUES (EXPENSES)				
Investment Earnings	4,119,737	4,409,486	(289,749)	(7)%
Net Increase (Decrease) in FV of Investments	3,410,242	2,843,154	567,088	20 %
Gain (Loss) on Disposal of Assets	(487,493)	(225,687)	(261,806)	116 %
Amortization of Bond/note Issuance Costs	(216,981)	(218,132)	1,151	(1)%
Interest Expense	(12,698,973)	(13,268,153)	569,180	(4)%
Other Nonoperating Revenue	_	_	_	-%
Other Nonoperating Expense	_	(233,494)	233,494	(100)%
Total Nonoperating Revenues (Expenses)	(5,873,468)	(6,692,826)	819,358	(12)%
Gain (Loss) Before Capital Contributions	10,052,945	7,929,788	2,123,157	27 %
CAPITAL CONTRIBUTIONS				
Grants	(20)	831,116	(831,136)	(100)%
Water Meter Retrofit Program	_	994,706	(994,706)	(100)%
Water Resource Sustainability Program	1,484,443	689,060	795,383	115 %
Developer Infrastructure Contributions	84,627	19,112,590	(19,027,963)	(100)%
Developer Will-serve Contributions (Net of Refunds)	4,082,279	4,663,826	(581,547)	(12)%
Developer Capital Contributions - Other	8,043,758	6,636,417	1,407,341	21 %
Developer Facility Charges (Net of Refunds)	9,657,274	9,154,403	502,871	5 %
Contributions from Others	684,644	100,000	584,644	585 %
Net Capital Contributions	24,037,005	42,182,118	(18,145,113)	(43)%
CHANGE IN NET POSITION	\$ 34,089,950	\$ 50,111,906	\$ (16,021,956)	(32)%



STAFF REPORT

TO: TMWA Standing Advisory Committee

THRU: Mark Foree, General Manager

FROM: Michele Sullivan, Chief Financial Officer/Treasurer

DATE: September 25, 2020

SUBJECT: Presentation of preliminary funding plan for fiscal years 2021 through 2025,

discussion and possible recommendation to the Board

Recommendation

Recommendation to accept the five-year funding plan as presented. The Board of Directors delayed the next approved 2.5% rate increases from May, 2020 to September, 2020 at the April, 2020 Board meeting due to the pandemic. They then revisited the rate increase at the August, 2020 Board meeting and delayed all three remaining 2.5% increases to May, 2021, May, 2022, and May, 2023. The SAC and the Board will continue to monitor the closing of the funding gap between recurring revenues and the cost of servicing TMWA customers, based on the funding plan annually.

Summary

At the April, 2017 TMWA Board meeting, the TMWA BOD approved Resolution No. 250 which included rate increases of 3% in May, 2017 and May, 2018 and additional rate increases of 2.5% in May, 2019 through 2021 to be brought for reconsideration to the SAC and BOD before they are implemented. Principal payments on Senior Lien debt were deferred in the 2016 Bond Refunding to give TMWA time to bring rates in line with cost of service. Annual principal payments averaging \$11 million annually resumed in 2020, and should be covered by recurring revenue, which is mainly water sales. Increases of 3% in May of 2017 and 2018 were implemented, and the 2.5% rate increase scheduled for May, 2019 was deferred. The three remaining approved increases were deferred until May 2021, May 2022, and May 2023 at the August, 2020 Board meeting.

The 2021-2025 Draft Funding Plan (See *Attachment A*) shows that rate adjustments are still necessary to close the funding gap between recurring revenues and the cost of servicing the customer base. Increases in water sales revenues, hydroelectric revenues, other operating revenues, as well as investment earnings have helped to close some of the funding gap. Higher than anticipated cash balances over the past few years resulted in higher than originally anticipated investment earnings. One time cash windfalls of \$21.4 million from an insurance

settlement related to Farad, and \$9.5 million from banks for releasing them from Forward Delivery Agreements have placed TMWA in a strong cash position; However, the funding gap is projected to be \$10.5M or 8.6% in FY21, and all three of the 2.5% rate increase will be needed to ensure TMWA can maintain critical financial goals which are essential to maintain adequate cash balances and investment grade credit ratings.

This high-level presentation is based upon very detailed financial projections. Assumptions used in these financial projections can be found in *Attachment B*. The funding plan is different from the budget. When staff prepares the budget we must ensure that we have enough expenses projected to cover all reasonable scenarios. Since the funding plan is used to decide whether a rate increase is necessary, it is more conservative in projecting expenses and uses the CIP plan to predict actual spending based on prior years actual spending as a percent of CIP projections. In this report we have focused on how TMWA's original projections from 2017 compared to actual results, and what we project in the 2021-2025 funding plan.

Discussion

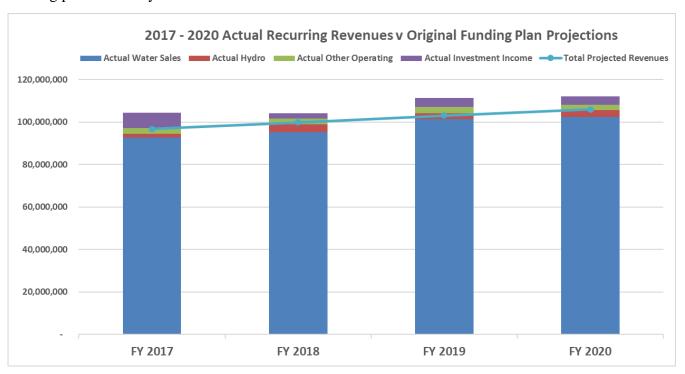
Critical financial goals for TMWA that need to be considered in these funding plans are as follows:

- 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 meets the board designated goal of 1.5x.
- Maintain sufficient cash balances to facilitate the payment for rehabilitative capital projects on a pay-go basis.
- Maintain high investment grade credit ratings to effectively access credit markets.

Funding Plans analyze the ability of TMWA to fund the cost to serve customers which includes operating expenses, principal and interest payments on current outstanding debt related to customers, and all capital improvements presented in the TMWA Capital Improvement Plan (CIP) that relate to maintaining service for current customers from recurring revenues. 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. If recurring revenues are less than the cost to serve customers this is referred to as a funding gap.

RECURRING REVENUES

The following graph compares the original projections for recurring revenue presented in the funding plan in fiscal year 2017 to actual results in 2017-2020.



Water Sales Revenue

Over the last four years, water sales revenue has rebounded somewhat from drought levels. Compared to original projections in 2017, when the current rate increase plan was originally adopted, water sales revenue for the four-year period has been 2.2% (average \$2.1 million per year) higher than expected even with the deferral of the 2.5% increase in last two years. It is uncertain whether this trend will continue as it depends mainly on warmer than average weather patterns. The 2021-2025 funding plan is based on average usage per connection over the last 5 years. Growth in connections over the next five years uses projections from the 2020-2040 Water Resource Plan.

Hydroelectric Revenue

Hydroelectric revenues were higher than expected by 28.7% (average \$0.6 million per year) due to the end of the drought which increased river flows during the period. Fiscal year 2018 was a record year for hydro revenue generation at \$3.8 million. In the 2021-2025 funding plan hydroelectric revenues are expected to remain solid for several years due to sufficient Truckee

River flows, with only occasional shutdowns for maintenance. This could change later in the funding plan period depending on weather patterns.

Other Operating Revenue

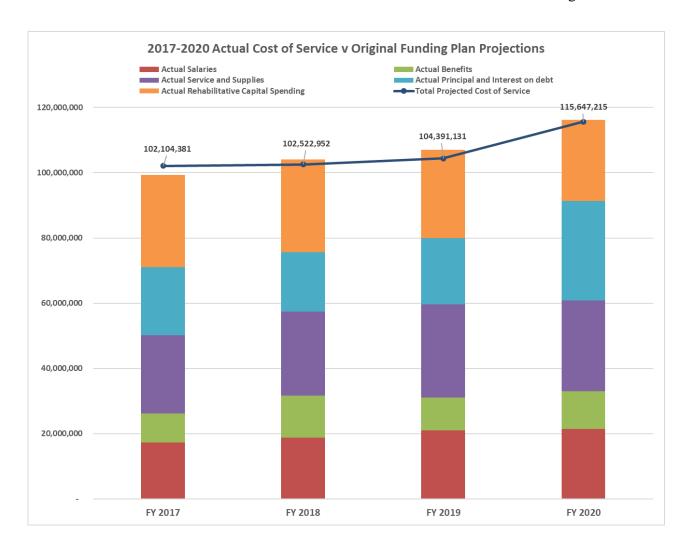
The largest components of other operating revenue are inspection fees, service call charges, late fees, and construction water sales. Compared to original projections, other operating revenue was 14.3% (average \$0.3 million per year) higher than expected. This was mainly due to higher inspection fees and construction water sales due to a rebound in growth in the area. This is the only component of recurring revenue that is slightly affected by growth, as it is necessary for revenue from growth to pay for growth. All other revenue related to growth is considered non-operating.

Investment Income

Investment income has been significantly higher than anticipated in the original funding plan, providing an additional \$14 million dollars over the four year period. This is the greatest fluctuation in total dollars from 2017 original projections in all revenue categories. TMWA had several one-time cash infusions as mentioned earlier which totaled \$30.9 million. Release of the one of the forward delivery agreements provided \$5 million in additional investment income in fiscal year 2017. Higher cash balances, combined with higher interest rates over the period resulted in the significant increase in investment income. Unfortunately, in the upcoming 2021-2025 funding plan, investment income is expected to decline due to much lower interest rates and declining cash balances.

COST OF SERVICE

The following graph compares the original projections for cost of service presented in the funding plan in fiscal year 2017 to actual results in 2017-2020.



Salaries

Salaries expense was 2.3% higher than originally projected in the 2017 funding plan. This fluctuation was mainly in fiscal years 2019 and 2020, and is a combination of overstaffing for retirements and succession planning, hiring due to growth in the service area, and slightly higher than anticipated salary increases. Salaries in the 2021-2025 funding plan include significant turnover due to retirements, and some overstaffing for training in critical positions. There is not a significant overall increase in staffing anticipated (3.5%, or 8 headcount over the five years). Wage increases are forecasted at 2% annually.

Benefits

Benefits expense was actually slightly lower than anticipated due to lower than projected health care premiums, and Post Employment Medical plan cash contributions. A change in accounting principles for the Post Employment Medical plans accounts for a \$3M non-cash adjustment to increase benefits expense in fiscal year 2018. Benefits are expected to increase based on increases in salaries.

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Service and Supplies

This category came in lower than projected by 3.1%. Staff works diligently to keep costs as low as possible. In the next five years, there are annual decreases of \$0.6 million beginning in fiscal year 2022 due to implementation of a new Customer Information System which is more economical, annual decreases in fuel costs of \$0.08 million due to the fuel station built onsite at TMWA's Capital Blvd. location, and annual decreases of \$0.2 million in power expenses when the Orr Ditch hydroelectric facility comes online in fiscal year 2023. Increases in costs include operation of the new Mt. Rose treatment plant for \$0.75 million annually beginning early calendar year 2021, as well as increases in fiscal year 2025 for operation costs related a new Advanced Purified Water plant of \$1.0M.

Principal and Interest on Debt

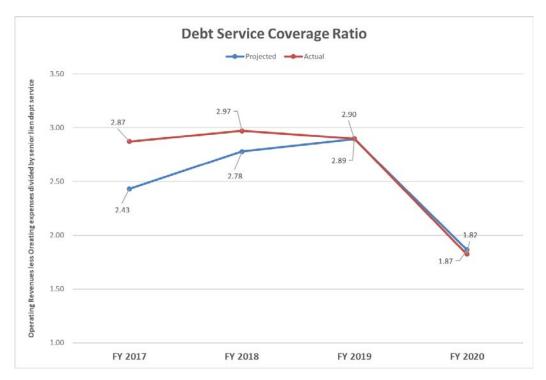
Principal and Interest payments were as expected over the last four years, with a delay of principal payments in fiscal years 2017 through 2019. Principal payments resumed in fiscal year 2020 at approximately \$11 million annually. Those debt payments will continue for the next 20 years.

Rehabilitative Capital Spending

Capital Spending related to maintaining the water system should be covered by customer revenue. Estimates for customer funded capital spending were approximately \$28 million a year in the 2017 funding plan. Actuals were very close in 2017 through 2019, but in fiscal year 2020, \$25 million was spent on maintaining the system, with more spending on developer funded projects. Expected spending in the next five years is \$29 million annually.

DEBT SERVICE COVERAGE RATIO

The debt service coverage (DSC) ratio is an important ratio that is watched by rating agencies, banks and investors. This ratio uses the net operating income (operating revenue less operating expenses) and divides it by the senior lien debt service. TMWA's debt covenants require that we maintain a DSC ratio of 1.25x. The Board has set a goal of 1.5x. The following graph shows the projected DSC ratio from the 2017 plan compared to the actual DSC ratio experienced.



The graph shows that the TMWA DSC ratio was very close to what was anticipated, and dropped dramatically when debt principal payments of \$11 million annually resumed in FY2020. In the new funding plan DSC begins at 1.69x, increasing to 1.99x over the five-year period.

CASH BALANCES

Maintaining sufficient cash balances is critical to maintaining the financial health of TMWA, and is a key factor in maintaining TMWA's credit ratings. When the Board voted to increase the rate stabilization fund in September of 2018, it was part of a financial policy adopted by Resolution 266 to ensure that TMWA maintains adequate cash balances, both restricted and unrestricted. As mentioned earlier, \$30 million in unexpected cash infusions have significantly helped the strength of TMWA's cash position. In the original funding plan we did not do a cash reserve analysis because the policy was not implemented yet. Unrestricted cash balances decreased by \$4.2 million in FY2020 due to principal payments on debt of \$11 million. Over the next five years cash is projected to decrease by \$24.9 million, with unrestricted cash reducing by \$18.0 million. Restricted cash balances in the STMGID reserve fund, the water meter retrofit fund will be fully depleted.

Truckee Meadows Water Authority 2021-2025 Funding Plan with Delayed Rate Increases

TMWA's Revenue Sufficiency and Cost of Service	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Projected Rate Increases	 2.5%	2.5%	2.5%	0.0%	0.0%
Operating Expenses Principal and Interest on customer related debt Rehabilitative Capital Spending	\$ 64,043,977 \$ 28,319,475 29,223,140	65,068,056 \$ 28,526,029 29,223,140	65,295,928 \$ 28,481,716 29,223,140	66,726,575 \$ 28,440,408 29,223,140	68,909,061 26,974,801 29,223,140
Total Projected Cost of Service	\$ 121,586,592 \$	122,817,225 \$	123,000,785 \$	124,390,123 \$	125,107,001
Recurring Revenues	\$ 111,108,472 \$	114,973,290 \$	118,680,602 \$	122,016,457 \$	123,121,344
Surplus (Deficiency)	\$ (10,478,119) \$	(7,843,934) \$	(4,320,183) \$	(2,373,666) \$	(1,985,658)
Surplus (Deficiency) as a % of Cost of Service	 -8.6%	-6.4%	-3.5%	-1.9%	-1.6%
Debt Service Coverage Ratios	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Water Sales Revenues Hydroelectric Sales Other Operating Sales Investment Income Total Revenues Operating Expenses Net Revenues Senior Lien Debt Service Senior Lien DSC Total Sr. Lien and SRF Debt Service Total Sr. Lien and SRF DSC Total Annual Debt Service incl. TECP Interest Total Subordinate DSC	 102,260,229 3,193,880 2,800,120 2,854,243 111,108,472 (64,043,977) 47,064,496 27,829,750 1.69 30,250,471 1.56 30,577,871 1.54	106,791,802 3,190,823 2,343,691 2,646,974 114,973,290 (65,068,056) 49,905,234 28,275,250 1.76 30,695,971 1.63 30,788,696 1.62	110,839,082 3,222,732 2,107,459 2,511,329 118,680,602 (65,295,928) 53,384,673 28,274,500 1.89 30,695,221 1.74 30,745,321 1.74	114,144,950 3,254,959 2,076,077 2,540,471 122,016,457 (66,726,575) 55,289,882 28,287,250 1.95 30,707,971 1.80 30,707,971 1.80	115,192,946 3,287,509 2,050,965 2,589,924 123,121,344 (68,909,061) 54,212,283 27,206,250 1.99 28,954,688 1.87 28,954,688 1.87
TMWA's Cash Balances	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Restricted Cash Rate Stabilization Fund Unrestricted Cash Required by Policy Required Cash Balances Total Cash Balance	\$ 52,054,267 \$ 9,596,733 91,016,603 152,667,603 201,866,022	43,440,085 \$ 9,953,275 91,357,962 144,751,322 194,515,525	42,520,795 \$ 10,205,309 91,433,920 144,160,025 184,514,351	43,345,269 \$ 10,367,762 91,910,802 145,623,833 181,473,608	44,318,619 10,460,506 92,638,296 147,417,422 177,001,439
Difference	\$ 49,198,419 \$	49,764,202 \$	40,354,326 \$	35,849,775 \$	29,584,018

2021-2025 Draft Funding Plan Assumptions

Operational Assumptions

- 1) Reliance on surface water will continue due to recent weather patterns with groundwater supplies augmenting the surface water treatment plants.
- 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 will be maintained to optimize water quality.
- 3) The Mt. Rose/Galena Surface Water Treatment Plant operational in fiscal year 2021 with operating costs assumed to be \$1000 per mgal with total annual production of 750mg.
- 4) Orr ditch hydro will supply power to the Chalk Bluff treatment plant beginning in fiscal year 2023.

Revenue/Capital Contribution Assumptions

- 1) The Draft Funding Plan anticipates an additional 7,869 service connections over the five-year period. Growth in service connections is equal to growth projections presented in the 2020-2040 Water Resource Plan and is slightly higher than the prior year's funding plan. Growth percentage goes from 1.54% in 2020, decreasing to 0.81% in 2024. Usage is based on patterns over the last five years.
- 2)Hydroelectric sales projections are based on sufficient river flows in 2021 through 2025. Downtime for construction and maintenance of hydro plants is considered.
- 3) Weighted average yield on investable cash is estimated to be 0.7% in fiscal year 2021 rising to 2.85% in fiscal year 2025. These yields are significantly lower than the prior year's funding plan.
- 4) Will serve sales are expected to be approximately \$15.6 million over the ensuing period, and will be used to pay down commercial paper balances.
- 5) Other developer contributions are projected to be \$68.1 million over the ensuing period. This does not include any significant funding to expand a water main to Verdi.

Operating Expense Assumptions

- 1) Wages and salaries increase for IBEW workers are based on the latest contract with the union or 3% in 2021. Thereafter, IBEW increases are budget at 2.0%. MPAT employees increase by 2.75% in 2021, and 2.0% thereafter.
- 2) Headcount was increased by eight in the 2022 budget and is projected to remain steady thereafter. As retirements occur they are offset with other hires.
- 3) Public Employee contribution rates are assumed to remain at 29.25% through 2025.
- 4) Health care premiums and life insurance premiums are assumed to increase 3% annually, with change to employer/employee allocation of costs.

- 5) Workmen's compensation premiums assumed to increase 3% annually.
- 6) Funding for the Truckee River Fund is \$650k in 2021, and \$850k in 2022-2025.
- 7) TMWA's anticipated share of TROA administration expenses is approximately \$360k annually.
- 8) General annual inflation of 1.0% is assumed on most service and supplies.

Debt Management Assumptions

- 1)Tax-exempt commercial paper interest rates are assumed to be 0.4% in fiscal year 2021 increasing to 0.93% in fiscal year 2023. Payments of \$16 million are assumed based on will-serve sales and other revenue to reduce commercial paper to a zero balance before the end of fiscal year 2023.
- 2) No new debt is assumed to be issued during the 2021-2025 period.
- 3)Debt service on developer related funding is assumed to be funded by developer fees.

Treasury Assumptions

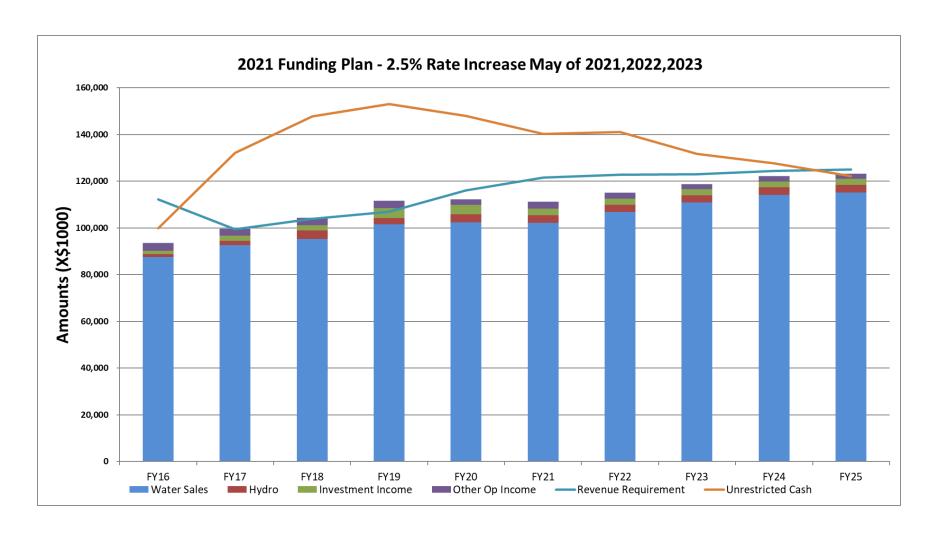
- 1) Total cash and investments at the beginning of fiscal year 2021 are \$205.8 million. Of this total \$147.9 million is unrestricted.
- 2) Restricted reserves that were transferred from the South Truckee Meadows General Improvement District (STMGID) are sufficient to fund capital improvements in this former service area through fiscal year 2022.
- 3) Customer funded capital spending from the five-year CIP plan is spread evenly over the five year period to avoid fluctuations in the funding gap. It is assumed that 95% of this spending will be completed.

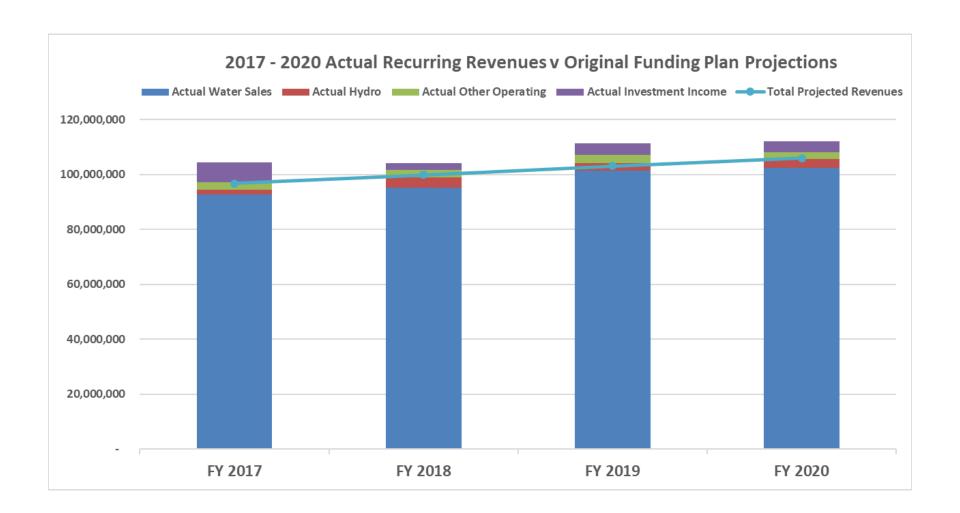


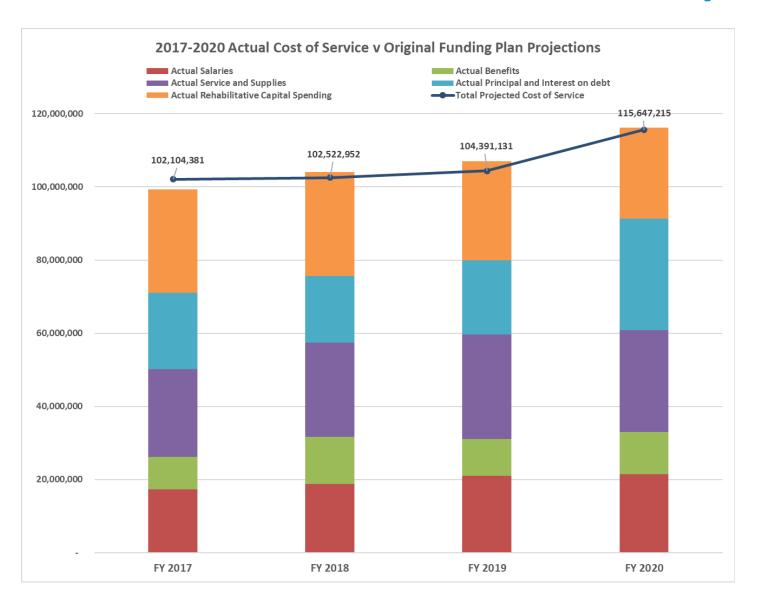
Draft Funding Plan 2021-2025

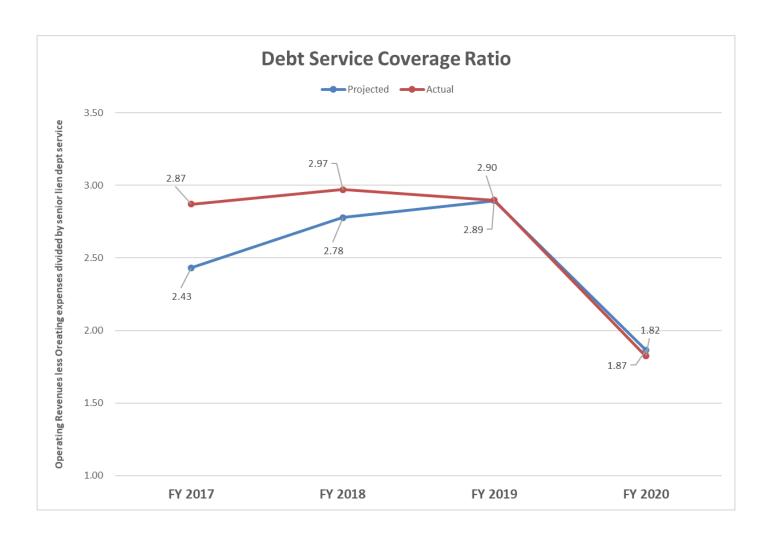


Financial Metrics 2016 - 2025 (Attachment A)









Thank you! Questions?

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