

STANDING ADVISORY COMMITTEE

AGENDA

Tuesday, April 3, 2018 at 3:00 p.m.
Truckee Meadows Water Authority
Independence Meeting Room
1355 Capital Boulevard, Reno, NV 89502

NOTES:

- 1. The announcement of this meeting has been posted at the following locations: Truckee Meadows Water Authority (1355 Capital Blvd., Reno), Reno City Hall (1 E. First St., Reno), Sparks City Hall (431 Prater Way, Sparks), Sparks Justice Court (1675 E. Prater Way, Sparks), Washoe County Courthouse (75 Court St., Reno), Washoe County Central Library (301 South Center St., Reno), Washoe County Administration (1001 East Ninth St., Reno), at https://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 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) 835-8002. Supporting material is made available to the general public in accordance with NRS 241.020(6).
- 4. The Committee may elect to combine agenda items, consider agenda items out of order, remove agenda items, or delay discussion on agenda items. Arrive at the meeting at the posted time to hear item(s) of interest.
- 5. Asterisks (*) denote non-action items.
- 6. Public comment is limited to three minutes and is allowed during the public comment periods. The public may sign-up to speak during the public comment period or on a specific agenda item by completing a "Request to Speak" card and submitting it to the clerk. In addition to the public comment periods, the Chairman has the discretion to allow public comment on any agenda item, including any item on which action is to be taken.
- 7. In the event the Chairman and Vice-Chairman are absent, the remaining SAC members may elect a temporary presiding officer to preside over the meeting until the Chairman or Vice-Chairman are present (**Standing Item of Possible Action**).
- 1. Roll call*
- 2. Public comment limited to no more than three minutes per speaker*
- 3. Approval of the agenda (For Possible Action)
- 4. Approval of the minutes of February 6, 2018 meeting (**For Possible Action**)
- 5. Water Supply Update Bill Hauck*
- 6. Presentation of the TMWA Tentative Budget for Fiscal Year ending June 30, 2019 and Draft Capital Improvement Plan for Fiscal Years 2019 through 2023 Michele Sullivan and Joe Petrelli (For Possible Action)
- 7. Update on the agreement for water system acquisition between West Reno Water Company and TMWA John Enloe*

- 8. Update on StoneGate Retail Service Request John Enloe*
- 9. Update on potential estimate and timeline to retrofit all unmetered services and alternative options for the meter retrofit fund program John Zimmerman*
- 10. Discussion and possible direction to staff regarding agenda items for future meetings (**For Possible Action**)
- 11. Staff Items* (Unless otherwise listed with a topic description, this portion of the agenda is limited to announcements)
- 12. Committee Items* (Unless otherwise listed with a topic description, this portion of the agenda is limited to announcements)
- 13. Public Comment limited to no more than three minutes per speaker*
- 14. Adjournment (For Possible Action)



STANDING ADVISORY COMMITTEE

DRAFT MINUTES February 6, 2018

The Standing Advisory Committee (SAC) met at Truckee Meadows Water Authority (TMWA) in the Independence Room, 1355 Capital Blvd., Reno, Nevada. Chair McGuire called the meeting to order at 3:00 p.m.

1. ROLL CALL

Primary Members and Voting Alternates Present: Bob Chambers, Harry Culbert, Bruce Gescheider, Jordan Hastings, Colin Hayes, Don Kowitz, Carol Litster, Neil McGuire, Ken McNeil, Fred Schmidt, Mike Schulewitch and Jerry Wager.

Alternates Present: Fred Arndt, Ken Becker, Karl Katt, Scot Munns, and Dale Sanderson.

Primary Members and Alternates Absent: Kevin Haddock, Bill Hughes, Mike Pidlypchak, Jonnie Pullman and Jim Smith.

Staff Present: Matt Bowman, Robert Charpentier, John Enloe, Scott Estes, Mark Foree, Sonia Folsom, Andy Gebhardt, Bill Hauck, Joe Petrelli, Pat Nielson, Danny Rotter, Shawn Stoddard, Michele Sullivan, John Zimmerman, Marlene Olsen, GoodStanding, and Legal Counsel Debbie Leonard.

2. PUBLIC COMMENT

There was no public comment.

3. APPROVAL OF THE AGENDA

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

4. APPROVAL OF THE MINUTES OF THE DECEMBER 5, 2017 MEETING

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 December 5, 2017 meeting minutes.

5. WATER SUPPLY UPDATE

Bill Hauck, TMWA Senior Hydrologist, reported that this winter year has seen above average temperatures and below average precipitation which is 50-70% of normal; the snow water content is 45% and 29% of normal in the Truckee Basin and Tahoe Basin, respectively; 2017 winter year was the biggest on record in terms of runoff (surpassing 1983); the current situation is only slightly better than in 2015, but all reservoirs are at flood control, highest legal limits (to allow for runoff during snowmelt); Lake Tahoe is one foot below maximum capacity; and normal river flows are expected for at least the next year, possibly two years, regardless of this winter's precipitation.

Mr. Hauck also provided an update on the Donner Lake outlet channel. He explained the outlet channel had to be dredged up to the dam. After multiple permits were approved with seven different agencies, TMWA worked with five consultants and the contractor to complete removal of 6,000 cubic yards of debris, silt and sand from the outlet channel. As they work with the Army Corps of Engineers, a more permanent bank stabilization solution is pending.

6. PRESENTATION ON THE FIRST BUDGET AUGMENTATION AND BUDGET REVISIONS FOR FISCAL YEAR ENDING JUNE 30, 2018

Michele Sullivan, TMWA Chief Financial Officer, informed the Committee that the Board approved this augmentation at the January Board meeting. Ms. Sullivan explained \$2.6 million is needed for unexpected maintenance expenses at Donner Dam in order to retain the value of the dam, and to remove sediment and debris from the outlet channel.

7. PRESENTATION OF FINANCIAL PERFORMANCE FOR FIRST HALF FISCAL YEAR 2018

Matt Bowman, TMWA Financial Controller, reported the financial performance for first half fiscal year 2018: better than expected revenues and lower than expected operating expenses resulting in Operating Income of \$19.6 million (\$4.5 million over budget); Year over year, revenue was higher by \$2.5 million and operating expenses were lower by \$0.7 million; hydroelectric sales were up \$1.1 million compared to last year due to better river flows; Services and supplies expenses were lower by \$1.3m due to the Chalk Bluff shutdown, employee salaries and wages were less than budget by \$600,000 due to bargaining unit wage freezes and delays in MPAT wage increases, but was offset by overtime wages of \$300,000 higher than budget; capital contributions were approximately \$1.8 million higher than budget but down approximately \$1.0 million compared to prior year; and total cash on hand is \$189.1 million, with \$144.2 million of this being unrestricted to be used for operating/maintenance expenses, principal/interest payments and construction project payments.

Discussion followed regarding augmenting the water sales revenue budget due to having a dry winter (would only do so if it was a significant change, but not now); the next rate increase will be effective May 1st this year, which is still applicable to help close the \$10 million funding gap; the increase in

overtime will continue due to the limited number of water operators, but Ms. Sullivan stated they will budget for 20 operators rather the 17 in the next budget cycle; and capital contributions in the Statement of Changes are paid for by developers and pay TMWA back for facilities constructed for growth.

8. UPDATE ON THE AGREEMENT FOR WATER SYSTEM ACQUISITION BETWEEN WEST RENO WATER COMPANY AND TMWA

John Enloe, TMWA Natural Resources Director, reported that the Board approved the acquisition agreement at the January meeting. Mr. Enloe stated when the agreement is signed by both parties there will be a 120-day due diligence period to review, approve, and finalize all the assets, land easements, water rights and water resources, and facilities, etc. The Reno Land developer has agreed to pay the facility charges of \$2.54 million to TMWA. For the offsite improvements, the City of Reno may establish an assessment district since it is out of TMWA's authority, but TMWA staff will work with the City of Reno and/or Washoe County to provide necessary information.

9. UPDATE ON STONEGATE RETAIL SERVICE REQUEST

Mr. Enloe reported StoneGate is another City of Reno project located in Cold Springs, and planned for the development of 5,000 residential homes, commercial space, open space and schools. This project is again going before the Reno City Council on Feb 14th for consideration. Initially, a wholesale agreement was considered, but the developer has since requested retail service from TMWA. The Great Basin Water Company, which already serves Cold Springs, does not have water resources to provide to the planned development. Mr. Enloe explained the water resource would be from Fish Springs with a future emergency interconnection to Great Basin Water Company; there are 8,000 acre feet of water rights available from Fish Springs, and StoneGate needs about 2,500 acre feet; and the developer and staff are working to develop the local groundwater resource. The issues the Reno City Council has expressed are not the question of enough water resources, rather with the infrastructure, primarily transportation, that needs to be addressed with any new development.

10. PRESENTATION ON STAFF RECOMMENDATION ON POTENTIAL ESTIMATE AND TIMELINE TO RETROFIT ALL UNMETERED SERVICES AND ALTERNATIVE OPTIONS FOR THE METER RETROFIT FUND PROGRAM

John Zimmerman, TMWA Water Resources Manager, reported that staff presented a status report on Meter Retrofit fund program to the Board in August. Member Brekhus requested a feasibility study and report on which remaining nonmetered services could be metered and the cost estimate for metering those services, as well as options for transitioning the retrofit fee to other purposes. Mr. Zimmerman reported that there are 253 remaining nonmetered services, of which, 110 are small unit duplexes that are not feasible. Of the remaining 143 only 82 services were feasible for a cost of \$6 million. Currently there is \$3.2 million in the fund that would cover approximately 45 services. Staff will recommend to the Board to use the \$3.2 million to retrofit 45 services and consider changing the fee to a more

applicable and practical purpose such as drought resiliency, water resources sustainability projects; to do so would require a rule change. The options for consideration were:

- 1. Reserve Current Fund Balance for Future Retrofits and Change Fee Purpose
- 2. Reserve Current Fund Balance for Future Retrofits and Terminate Fee
- 3. Terminate Fee After Remaining Feasible Services Are Retrofitted

Discussion followed regarding when the remaining nonmetered services would change to metered service (when the building is torn down or one of the owners wanted a separate line); duplexes' water usage being similar to that of multi-family services; the remainder of the retrofits will be conducted over a number of years, not immediately; and Member Gescheider suggested staff should strengthen the language regarding changing the purpose of the fee going forward.

Upon motion duly made by Member Schmidt and seconded by Member Kowitz, and carried by unanimous consent of the members present, the Committee approved recommending to the TMWA Board of Directors option #1, to reserve current fund balance for future retrofits and change fee purpose.

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

April meeting:

- 1. Presentation on the tentative budget for fiscal year ending June 30, 2019
- 2. Presentation of the draft Capital Improvement Plan for fiscal years 2019 through 2023
- 3. West Reno and Stonegate update
- 4. Water supply update
- 5. Meter Retrofit Fund program update

Upon motion duly made by Member Gescheider and seconded by Member Wager, and carried by unanimous consent of the members present, the Committee approved to cancel the March 6, 2018 meeting.

Upon motion duly made by Member Culbert and seconded by Member McNeil, and carried by unanimous consent of the members present, the Committee approved the agenda items for future meetings

12. STAFF ITEMS

Pat Nielson, TMWA Distribution, Maintenance & Generation Director, provided background information on the Farad Statement of Interest the members received in January. Mr. Nielson explained that the Farad Hydroelectric Power Plant incurred damage during the 1997 flood and was not transferred to TMWA until recently because of litigation regarding insurance coverage. Mr. Nielson also reported that TMWA has looked at the net present value of rebuilding the plant and it appears it would not be feasible if TMWA were to bring the hydro plant back online, as it would operate at a deficit. Mr.

Nielson described a settlement agreement with NV Energy in which NV Energy agreed to give TMWA proceeds from litigation that totaled \$21.5 million. Mr. Nielson is conducting studies to see if it is feasible to send more water through the Fleish hydroelectric plant and is considering a possible small hydro plant at Chalk Bluff fed by the Highland Canal when excess capacity is available during the winter. Members asked about removing existing structures from the river at Farad and Mr. Nielson responded that he has been contacted by contractors who are interested in the salvage value of the materials that need to be removed if the plant is not rebuilt. Mr. Nielson also reported that the water right associated with Farad is one of the oldest established water rights on the California side of the Truckee River, but are for non-consumptive use only and cannot be used for municipal and irrigation (M&I).

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There were no committee items.

14. PUBLIC COMMENT

There was no public comment.

15. ADJOURNMENT

With no further items for discussion, Chair McGuire adjourned the meeting at 4:41 p.m.

Approved by the Standing Advisory Committee in session on ______.

Sonia Folsom, Recording Secretary



Water Supply Outlook for 2018

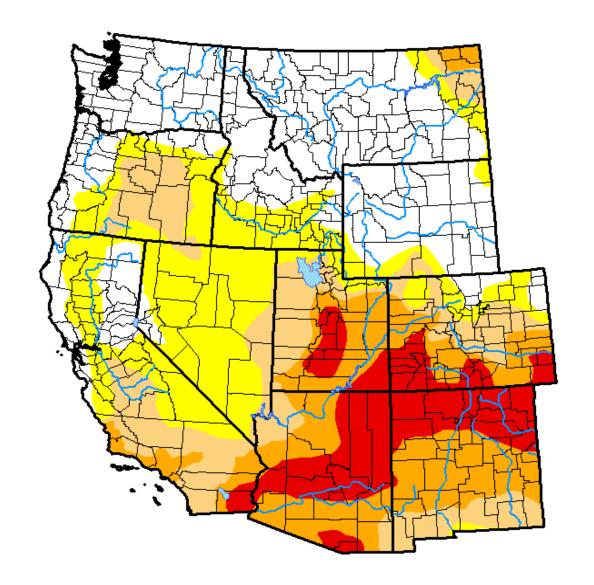
TMWA Standing Advisory Committee Meeting

Bill Hauck, Senior Hydrologist

April 03, 2018



U.S. Drought Monitor West



March 27, Agenda Item 5

(Released Thursday, Mar. 29, 2018)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	34.17	65.83	43.34	27.02	11.53	0.00
Last Week 03-20-2018	30.63	69.37	45.08	28.00	9.50	0.00
3 Month's Ago 12-26-2017	46.57	53.43	28.18	5.32	1.52	0.00
Start of Calendar Year 01-02-2018	48.76	51.24	29.03	8.60	1.52	0.00
Start of Water Year 09-26-2017	55.72	44.28	21.01	8.72	5.30	2.17
One Year Ago 03-28-2017	80.63	19.37	6.04	0.45	0.02	0.00

Intensity:

D0 Abnormally Dry

D3 Extreme Drought

D1 Moderate Drought



D2 Severe Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<u>Author:</u>

Chris Fenimore NCEI/NESDIS/NOAA

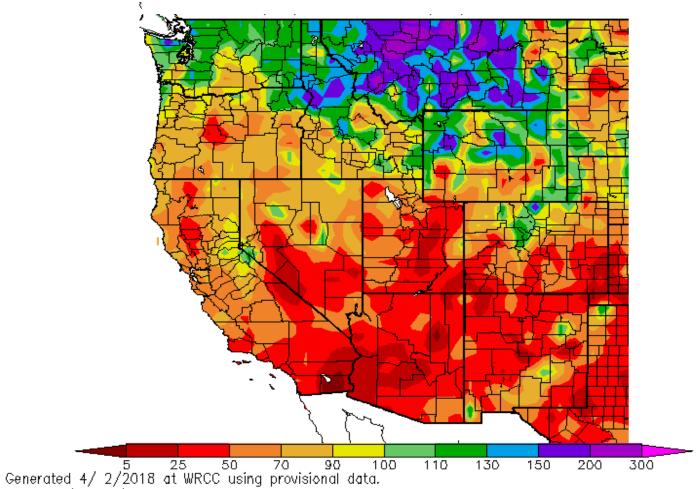








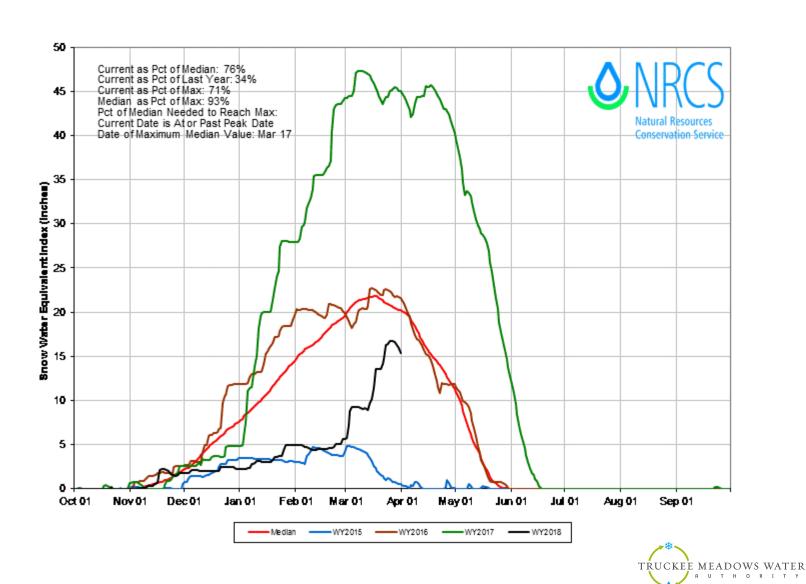
Percent of Average Precipitation (%) 10/1/201-03-18 SAC/Agenda Item 58



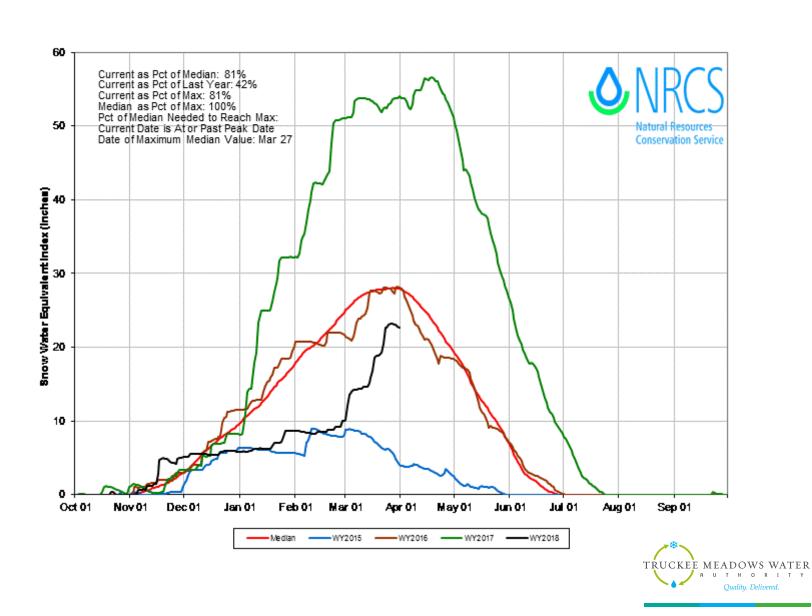
NOAA Regional Climate Centers

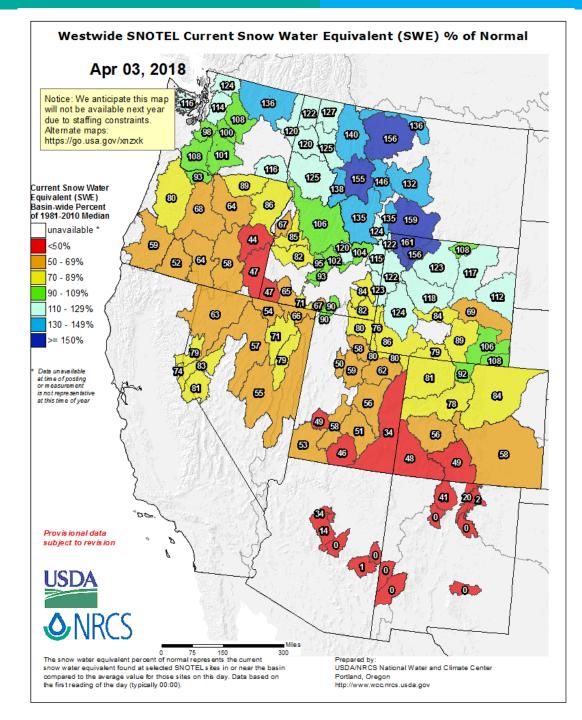


Lake Tahoe Basin Snowpack Stattas 18 SAC Agenda Item 5



Truckee River Basin Snowpack Status SAC Agenda Item 5





04-03-18 SAC Agenda Item 5

Western U.S. SNOTEL Current Snow Water Equivalent (SWE) % of Normal

- Tahoe Basin @ 74% Normal
- Truckee Basin @ 79% Normal

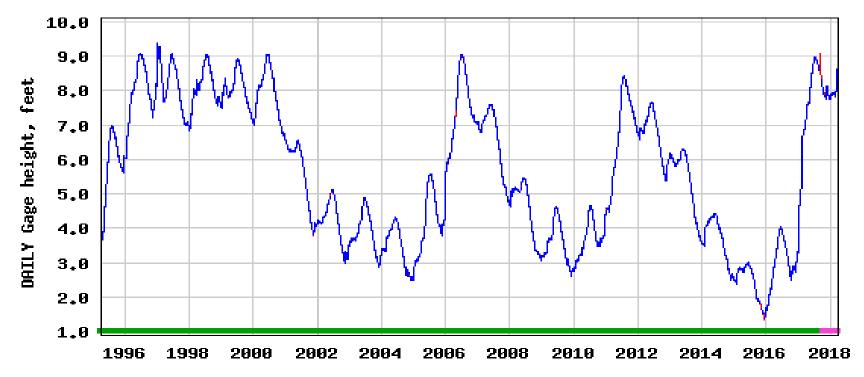


The Truckee & Carson River System 5 SAC Agenda Item 5



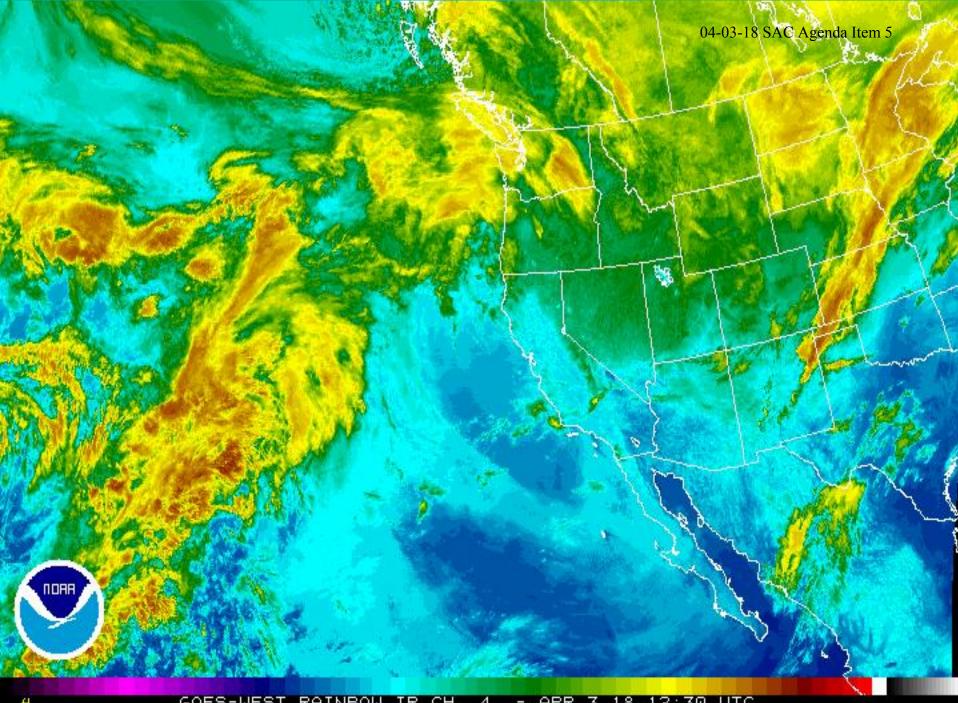
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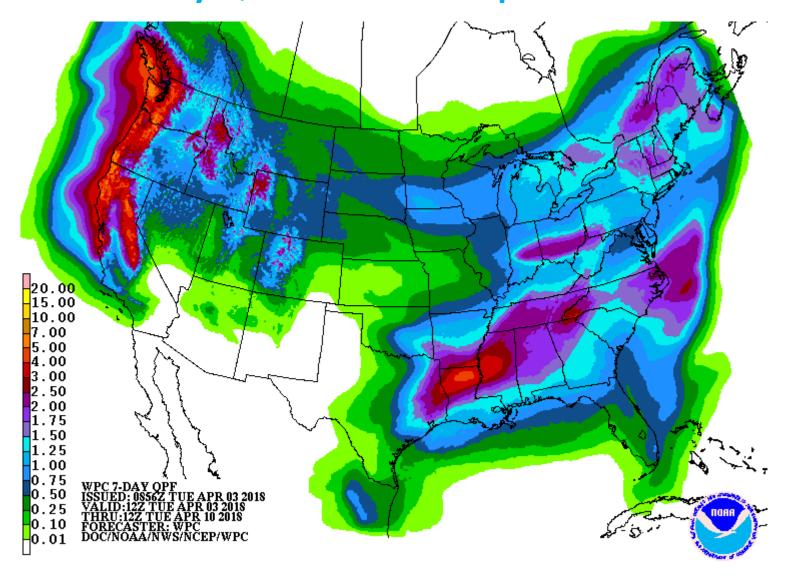


- Daily observation at midnight gage height
- Estimated daily observation at midnight gage height
- Period of approved data
- Period of provisional data





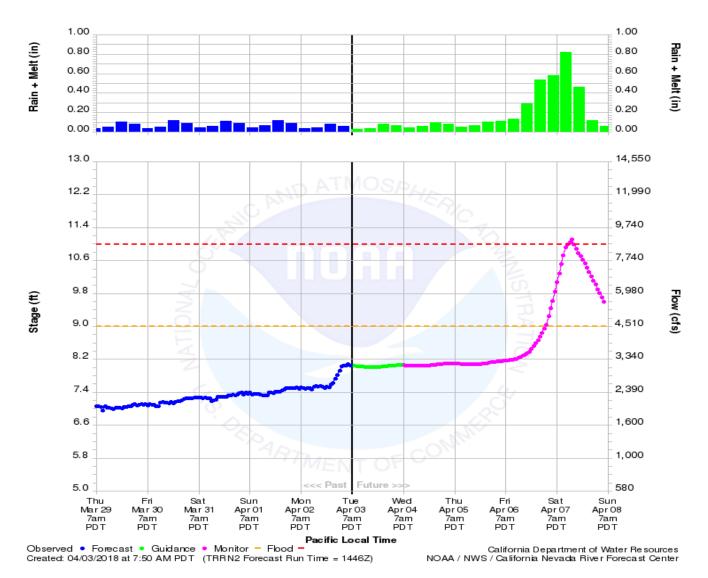
NOAA 7 Day Quantitative Precipitation 4 Poly See Carente Item 5







The Truckee River at Reno











Summary

- A significant recovery in March in terms of snowpack and overall water supply outlook
- Amount of water content in the region's snowpack doubled and even tripled
- Capped off the "official" snowpack season below average, but saw major improvement
- Lake Tahoe 75% normal and Truckee Basin 80% of normal (official NRCS Apr01 values)
- Streamflow runoff forecasts projected to be close to normal (+-90%)
- Reservoirs still at maximum flood control capacity
- All Truckee River reservoirs will fill once again in 2018
- Normal Truckee River flows expected for another 2 years or more (supply outlook excellent)

Thank you!

Questions?

Bill Hauck, Senior Hydrologist Email: bhauck@tmwa.com

O: (775) 834-8111 M: (775) 250-1333





STAFF REPORT

TO: TMWA Board of Directors
THRU: Mark Force, General Manager

FROM: Michele Sullivan, Chief Financial Officer/Treasurer

Joe Petrelli, Principal Financial Analyst

DATE: March 13, 2018

SUBJECT: Discussion and action on the TMWA Tentative Budget for the Fiscal Year

ending June 30, 2019 and Draft Capital Improvement Plan for Fiscal Years

2019 through 2023

Recommendation

TMWA Board and SAC review the tentative budget report for the fiscal year ending June 30, 2019 and preliminary Five Year Capital Improvement Plan 2019-2023 (CIP). This allows the Board and SAC to provide input and direction to TMWA management in advance of the public hearing on the budget and CIP on Wednesday, May 23, 2018. The tentative budget will be filed with the Nevada Department of Taxation by April 15, 2018 in compliance with statutory requirements.

Schedule of Revenues and Expenses Summary- See Attachment A

Operating Revenues

Water demands have been projected based on an average of calendar year 2014 to 2017 water usage per service type and by service size. This methodology projects water sales revenue at \$100.6 million, essentially equal to projections in the most recent funding plan. The approved 3% increase in rates as of the first billing cycle in May, 2018 is included in revenue. The fiscal year 2019 budget also anticipates the addition of 2,206 service connections over the course of the year. This expected growth is corroborated by current billing statistics. While the budget for water sales revenue is in line with the funding plan for 2019, it is \$6.3 million and 6.7% higher than the FY2018 budget due to growth and the 3% rate increase.

Hydroelectric revenues are expected to be slightly lower than FY2018 with generation expected through the entire year. River flows are expected to be sufficient to operate all three hydroelectric plants, with only minor outages for repairs or weather, which will generate \$2.8 million in revenue.

Other miscellaneous operating revenues are estimated at \$3.4 million. Other miscellaneous revenues are made up of late payment fees, turn-on and turn-off fees, construction water sales, cell phone tower rents, inspection services on new business and interruptible water sales. Depending on the pace of residential/commercial construction there could be more or less construction water sales and inspection fees than projected.

Operating Expenses

TMWA operating expenses are expected to increase in 2019. Wages and salaries costs are expected to increase \$2.05 million and 10.79% mainly due to increases in staffing levels by \$1.22 million, with cost of living wage increases and IBEW wage adjustments per the recently approved contract totaling \$0.83 million. Staffing is expected to increase from 206 full time equivalents (FTEs) in FY18 budget to 221 FTEs in FY19 budget. Increases in staff include 12 IBEW employees and 3 MPAT employees. Two of the MPAT employees are engineers, and their salaries will be capitalized as part of construction costs. Headcount increases related to operations are detailed in the table below:

Additions to Staff for Operations	Headcount	Wages	
Fitter (Apprentice)	IBEW	4	\$ 321,843
Inspector	IBEW	1	\$ 106,010
Treatment Plant Operator (Apprentice)	IBEW	2	\$ 220,290
Equipment Specialist	IBEW	1	\$ 99,212
Plant Electrician (Apprentice)	IBEW	1	\$ 110,810
Mechanic Specialist (Apprentice)	IBEW	2	\$ 174,498
SCADA Technician (Apprentice)	IBEW	1	\$ 98,307
Systems Administrator	MPAT	1	\$ 89,535
Total Cost of headcount additions to O&	M	13	\$ 1,220,505

The main reasons for additional headcount are to mitigate overtime, ensure preventive maintenance is performed, and prepare for retirements in the next 3 years. Overtime for water operators will be mitigated with more operators, and should ultimately save as much as \$350,000 annually. This will take time because the apprenticeship for an operator is 2 years. TMWA should begin experiencing savings in overtime in FY20. Overtime for SCADA technicians will also decrease when employees are finished with apprenticeships, which are four years. With a larger service area and more construction, less employee time is available for preventative maintenance. This is especially true for the equipment specialists, plant electricians, mechanic specialists, and SCADA technicians. Retirements of 21 skilled field personnel are expected in the next 3 years. To train individuals to fill these positions, 4 entry level fitters, and one inspector will be hired. A system administrator will be hired in the IT department to manage growing IT infrastructure.

Employee benefits are expected to increase \$0.8 million and 8.4% for FY19. Benefits increased by about 2.4% less than wages expense. This is mainly due to new pension accounting rules causing a one-time expense included in the FY18 budget for \$0.7 million. Medical benefits are

projected to increase by 5%, and all other benefit rates are expected to be similar to last year's levels on a proportionate basis.

Service and supplies budget is in line with FY18 augmented budget. Expenses related to the Donner dam channel dredging of \$2.6 million will be completed in FY18; however, included in the FY19 budget is \$1.5 million in expenses to restore the Glendale Plant diversion due to damage from high river flows in the winter of 2017. TMWA will apply for FEMA funding to recoup a portion of these flood related expenses at Glendale. TROA administration costs are expected to increase by \$0.3 million. Funding for the *Truckee River Fund* was restored to \$0.85 million, an increase of \$0.4 million over FY18, and funding for *Desert Research Institute's* (*DRI's*) cloud seeding was added back at \$75K to maintain minimum standards for that program. Water treatment chemical expenses are expected to increase \$0.3 million in FY19 due to increases in pricing. As in the past TMWA personnel will continue to work diligently on managing operating expenses. A breakdown of services and supplies expenses is presented in *Attachment C*.

Nonoperating Revenues and Expenses

Investment income is expected to increase \$1.5 million due to higher rates of return projected over the next year. Interest expense is expected to remain consistent with estimates in the FY18 budget. Some interest rate estimate is being made for a possible fixed senior lien refunding of a portion (\$44.2 million) of the tax exempt commercial paper (TECP). If that refunding is priced and the deal closed the actual results will be incorporated in the final budget. TMWA plans to keep \$30 million in TECP to be paid down over the next five years. Beyond five years, expectations related to funding sources and interest rates are uncertain. Further information related to this refunding will be presented for Board consideration at the April, 2018 meeting. The budget currently reflects estimates of these transactions.

Capital Contributions

A loan forgiveness grant of \$500,000 is included in the FY19 budget to be received from the State on completion of the consolidation of the Riverbelle mobile home park water system. The water meter retrofit income is projected at a reduced fee of \$1,500 (from \$1,800) per acre foot of surface water will-serves sold. At the time of the preparation of the tentative budget it was uncertain if this fee will continue and in what format. The community is experiencing continued growth which is reflected in developer fee collections. Will-serve contributions are expected to decrease \$1.6 million, while other developer capital contributions are expected to increase \$1.6 million.

Draft Capital Improvement Plan for Fiscal Years 2019-2023

TMWA plans to spend \$191.6 million over the next five years on a variety of construction projects and capital outlays of which \$46.6 million is expected to be spent in fiscal year 2019 and \$50.1 million in fiscal year 2020.

Please refer to Attachment D.

Of the total \$46.6 million in capital spending in fiscal year 2019, \$12.4 million (27%), will be for a number of distribution system improvements. The South Virginia/Midtown Main Replacement

project totaling \$1.5 million is included in the RTC road reconstruction projects to replace antiquated water main, valves, service connections and related appurtenances. The Gordon Avenue Main replacement, totaling \$1.6 million is scheduled ahead of the City of Reno Neighborhood Street Rehabilitation project. In addition, the Verdi Main and Boomtown Water System Improvements total \$2.5 million and \$1.6 million respectively.

Treatment plant Improvements account for \$14 million (30%) with \$11.0 million comprising the major construction phase of the Mt. Rose/Galena Fan Water Treatment Facility.

Of the total \$50.1 million in capital spending in FY 2020, \$6.8 million will be for six additional distribution improvement projects, \$7.0 million will be for treatment plant improvements including completion of the Mt. Rose/Galena Fan Water Treatment Facility. For FY 2021 - 2023 capital spending at a reduced, but relatively level scale will include a combination of rehabilitation construction projects and construction to expand water system capacity to accommodate growth in the community. Total spending on water system rehabilitation projects is expected to be \$148.5 million over five years. The bulk of the remaining balance of project spending will be for water system expansion. After board input TMWA staff will finalize and present a final comprehensive CIP at the May 23, 2018 public hearing.

Cash Position and Coverage Ratios

At this time, TMWA expects to begin fiscal year 2019 with approximately \$180.0 million in total cash and investments, and end the fiscal year with \$174.1 million of total cash and investments based upon planned spending levels. These projections can be found in *Attachment B*. This is a projected decrease in cash of \$5.9 million, and includes pay down of Commercial Paper notes by \$5.0 million. Of the total ending cash and investments in fiscal year 2018, \$52.7 million will be restricted for debt service payments and reserve requirements under TMWA's bond indentures and \$121.4 million will be unrestricted to be used for future operating expenses, capital improvements and any other necessary outlays. This unrestricted cash includes \$21.5 million in flood insurance settlements related to the Farad facility, and \$10 million in settlements related to bank delivery agreements. These unusual nonoperating transactions have helped strengthen TMWA's cash reserves. The \$52.7 million in restricted cash reserves includes \$7.0 million of remaining transferred funds from STMGID which are earmarked for capital improvements in the former STMGID service area.

TMWA's senior lien debt coverage ratio (DSC ratio), excluding system development charges, is estimated to be 2.84x by the end of fiscal year 2019. This ratio has been artificially inflated due to the extension of certain maturities of the Series 2016 Refunding Bonds beyond fiscal year 2034, and out of fiscal year 2019. This level of debt service coverage preserves the ability to access senior lien capital markets, if necessary, under favorable terms. TMWA's senior lien bond covenants require a minimum coverage ratio of 1.25x. TMWA's financial goals adopted in August 2003 established a debt coverage goal of approximately 1.50x (excluding developer fees) to maintain mid-level to higher level investment grade credit ratings and pay-as-you-go funding for water system rehabilitation construction projects. TMWA completed a credit review in February, 2017 by two major credit rating agencies, Moody's and Standard & Poor's (S&P), in front of the upcoming refunding opportunity with TMWA's Series 2007 Revenue Bonds.

TMWA maintained its previous rating with Moody's of Aa2, and was upgraded by Standard & Poor's to AA+ from AA. A credit rating update is expected to be performed in April, 2018.

TRUCKEE MEADOWS WATER AUTHORITY SCHEDULE OF REVENUES, EXPENSES AND CHANGES IN NET POSITION FOR THE FISCAL YEAR ENDING JUNE 30, 2019

	Proposed Tentative Fiscal Year 2019 Total	Amended Final Fiscal Year 2018 Total	Increase (Decrease)
OPERATING REVENUES	Total	Total	(Decircuse)
Charges for water sales Hydroelectric sales Other operating sales	\$ 100,626,513 2,812,568 3,404,500	\$ 94,303,278 2,990,391 3,131,500	\$ 6,323,235 (177,823) 273,000
Total Operating Revenues	106,843,581	100,425,169	6,418,412
OPERATING EXPENSES			_
Salaries and wages Employee benefits Services and supplies	21,078,271 10,125,919 28,268,124	19,024,704 9,303,274 28,312,357	2,053,567 822,645 (44,233)
Total Operating Expenses before Depreciation	59,472,314	56,640,335	2,831,979
Depreciation	33,862,476	34,061,148	(198,672)
Total Operating Expenses	93,334,790	90,701,483	2,633,307
Operating Income	13,508,791	9,723,686	3,785,105
NONOPERATING REVENUES (EXPENSES)			
Investment earnings Unrealized gain on investments Gain (Loss) on disposal of assets Amortization of bond/note issuance costs Interest expense Other non-operating revenue Other non-operating expenses	2,833,548 - (215,748) (13,494,768) -	1,342,692 - (468,624) (13,394,016) - -	1,490,856 - 252,876 (100,752) -
Total Nonoperating Revenues (Expenses)	(10,876,968)	(12,519,948)	1,642,980
Income (Loss) before Capital Contributions	2,631,823	(2,796,262)	5,428,085
CAPITAL CONTRIBUTIONS Grants Water meter retrofit/Sustainability program Developer infrastructure contributions Developer will-serve contributions (net of refunds) Developer capital contributions-other Developer facility charges (net of refunds) Contributions from others Contributions from other governments Net Capital Contributions Change in Net Position	500,000 676,020 - 3,470,232 5,922,000 4,950,708 - - 15,518,960 18,150,783	200,004 781,488 - 5,034,744 4,345,296 4,826,436 - - 15,187,968 12,391,706	299,996 (105,468) (1,564,512) 1,576,704 124,272 - - 330,992 5,759,077
NET POSITION , BEGINNING OF YEAR	\$ 602,342,294	\$589,950,588	5,157,011
NET POSITION, END OF YEAR	\$ 620,493,077	\$602,342,294	\$18,150,783

Attachment A

TRUCKEE MEADOWS WATER AUTHORITY STATEMENTS OF CASH FLOWS FOR THE YEAR ENDED JUNE 30, 2019

		Presented Tentative Fiscal Year	Α	mended Final Fiscal Year		
INICIDE A CE (DECIDE A CE) INI CIA CHI AND CIA CHI EQUIVAT ENTIC		2019		2018		Increase
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS CASH FLOWS FROM OPERATING ACTIVITIES		Total		Total		(Decrease)
Cash received from customers	\$	106,843,581	\$	100,425,169	\$	6,418,412
Cash paid to employees	Ф	(31,204,190)	Ф	(28,327,978)	Ф	(2,876,212)
Cash paid to suppliers		(28,268,124)		(28,312,357)		(44,233)
Net Cash Provided by Operating Activities		47,371,267		43,784,834		3,497,967
CASH FLOWS FROM CAPITAL AND RELATED FINANCING AC	CTIV	ITIES				
Acquisition and construction of capital assets		(46,641,000)		(43,032,000)		(3,609,000)
Interest paid on financing		(16,993,550)		(17,225,410)		(231,860)
Principal paid on financing		(2,738,723)		(2,637,285)		(101,438)
Proceeds from capital debt issuance		-		-		-
Redemptions of commercial paper notes		(5,000,000)		(9,200,000)		4,200,000
Proceeds from refunding bonds		-		-		-
Proceeds transferred to refunding/redemption escrow		-		-		-
Proceeds (spending) from (on) capital asset disposal		-		-		-
Contributions for water meter retrofit program		676,020		781,488		(105,468)
Contributions from developers-will-serve letters		3,470,232		5,034,744		(1,564,512)
Contributions from developers-other		5,922,000		4,345,296		1,576,704
Contributions from developers-facility charges		4,950,708		4,826,436		124,272
Contributions from (to) others		-		-		-
Contributions from (to) other governments		-		-		-
Grants		500,000		200,000		300,000
Bond/Note issuance costs		(215,748)		(468,624)		252,876
Net Cash (Used) by Capital and Related Financing Activities		(56,070,061)		(57,375,355)		841,574
CASH FLOWS FROM INVESTING ACTIVITIES						
Interest received		2,833,548		1,342,692		1,490,856
Net Increase (Decrease) in Cash and Cash Equivalents		(5,865,246)		(12,247,829)		5,830,397
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	\$	180,000,000	\$	171,000,000	\$	9,000,000
CASH AND CASH EQUIVALENTS, END OF YEAR	\$	174,134,754	\$	158,752,171	\$	15,382,583

Attachment B

Truckee Meadows Water Authority Tentative Fiscal Year 2019 Budget comparison to Fiscal Year 2018 Services and Supplies

	Augmented	Tentative	
	FY 2018	FY 2019	
Services and Supplies Expenses	Budget	Budget	Variance
License/Permit Fees	907,780	1,662,050	754,270
Chemicals	2,237,324	2,525,000	287,676
Property Taxes	504,000	735,000	231,000
Training/Travel	255,500	398,542	143,042
Other	438,600	571,219	132,619
Street Repairs	201,200	215,200	14,000
Postage/Shipping (Vertex)	820,700	828,310	7,610
Computer Hardware/Software	1,271,300	1,263,160	(8,140)
Professional Services	2,294,920	2,282,365	(12,555)
Claims	145,800	132,800	(13,000)
Equipment Rental	129,100	107,046	(22,054)
Telephone	452,700	409,500	(43,200)
Insurance	606,000	551,460	(54,540)
Ditch/Storage Fees	863,380	805,380	(58,000)
Electric Power	5,069,939	4,873,523	(196,416)
Supplies	2,773,480	2,562,973	(210,507)
Contracted Services	9,340,634	8,344,592	(996,042)
Total Services and Supplies	\$ 28,312,357	\$ 28,268,120	\$ (44,237)

Attachment C

Attachment D

	TMWA 5 Year Draft Capital Plan Summary	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Five Year CIP Total
	Raw Water Supply Improvements						
1	Highland Canal-Upgrades-Downstream FY 2019- FY 2023	225	225	225	225	225	1,125
2	Highland Canal-Upgrades-Diversion to Chalk Bluff FY 2019 - FY 2023	100	100	1,000	100	100	1,400
3 4	Independence Lake Permitting Study FY 2019 Indirect Potable Reuse FY 2019 - FY 2023	100 100	100	100	100	100	100 500
5	TROA Drought Storage / Implementation FY 2019 - FY 2023	75	50	50	50	50	275
6	Donner Lake Outlet Improvements Phase 2 FY 2019 - FY 2021	300	300	4,000			4,600
7	Total Raw Water	900	775	5,375	475	475	8,000
8 9	Ground Water Supply Improvments Well Rehabilitation Improvements FY 2019 - FY 2023	725	925	925	925	925	4,425
10	Double Diamond #4 Equipping FY 2023	-	-	323	-	1,100	1,100
11	Campello Capacity Increase FY 2020	-	250	-		·	250
	Callamont Well South Equipping FY 2020 - FY 2021	-	60	1,040	-		1,100
13 14	Air Guard Well Replacement FY2021 Sunrise Well #3 Replacement FY 2019	100	-	1,000	-		1,000 100
15	Bedell Flat Water Bank FY 2019 - FY 2023	100	100	100	100	100	500
	Lemmon Valley Well #8 Replacement FY 2023	-	-	-		1,000	1,000
17	Well Fix & Finish FY 2019 - FY 2023	150	150	150	150	150	750
18 19	Well Plugging / Conversion FY 2021 NDEP Monitoring Wells FY 2019 - FY2021	110	100	110 100	-		110 310
20	Thomas Creek Well Replacement FY 2021 - FY 2022	-	100	1,250	1,000		2,250
21	Wellhead Biological Treatment Pilot Study FY 2019	200		1,200	1,222		200
22	Well Head TTHM Mitigation FY 2019 - FY 2022	300	500	500	500		1,800
23	Spring Creek Well 7 Recharge FY 2020	75	425	-	-		500
24 25	Desert Springs 1 & 2 and Spring Creek 5 ASR Retrofit (Bureau of Rec Grant) FY2019 Callamont Well North Equipping FY 2022 - FY 2023	10			60	1,140	10 1,200
26	Total Ground Water	1,770	2,510	5,175	2,735	4,415	16,605
	Treatment Plant Improvements Chalk Pluff Treatment Plant, Fix & Finish EV 2010, EV 2022	700	600	360	255	355	3 455
28 29	Chalk Bluff Treatment Plant Fix & Finish FY 2019 - FY 2023 Glendale Treatment Plant Fix and Finish FY 2019 - FY 2023	780 485	600 1,250	360 210	355 65	355 65	2,450 2,075
_	Chalk Bluff Pump Building Air Handler FY 2019	150	1,230	210	03	05	150
31	Chalk Bluff Lighting Upgrade FY 2021			350			350
32	Glendale Lighting Upgrade FY 2020		250				250
33	Eagle Canyon Transmission Main Phase 2 FY 2019 - 2020	100	1,800	-	- 25		1,900
34 35	Truckee Canyon Water Treatment Improvements FY 2019 - FY 2022 Lightning W Treatment Improvements FY 2019 - FY 2022	50 60	60 10	60 60	35 160		205 290
36	SCADA Rehab / Plant Operating Software FY 2019 - FY 2023	1,331	1,002	793	489	471	4,086
37	Mount Rose Surface Water Treatment Plant FY 2019 - FY 2020	11,000	3,000	-	-		14,000
38	Longley Lane Water Treatment Plant Assessment / Retrofit FY 2020	-	600	-	-		600
39 40	Glendale Diversion Emergency Flood Repairs FY 2019 - FY2020 (FEMA) Sparks Ground Water Treatment Plant FY 2023	100	900	-	-	1,750	1,000 1,750
41	Total Treatment Plant Improvements	14,056	9,472	1,833	1,104	2,641	29,106
42	Pressure Improvements						
43	Pressure Regulators Rehabilitation FY 2019 - 2023	500	500	500	500	500	2,500
44 45	Pressure Reducing Valve (Roll Seal) Removal FY 2019 - 2023 Land Acquisitions FY 2019 - 2023	400 250	400 250	400 250	400 250	400 250	2,000 1,250
46	Desert Springs Pressure Improvements FY 2020	230	400	-	-	250	400
47	Paloma Pressure Regulating Station / Main FY 2019	200	-	-	-		200
48	Longley Booster Pump Station / Double R Capacity Increase FY 2019	500	-	- 100	-	100	500
49 50	Pump Station Oversizing FY 2019 - 2023 Pump Station Rebuilds, Rehabilitations FY 2019 - 2023	100 1,450	100 1,000	100 1,000	100 1,000	100 1,000	500 5,450
51	Truckee River Highlands Pump Station # 1 FY 2021	-	-	1,000	-	1,000	1,000
52	Mount Rose Well #3 Pump Station Improvements FY 2019 -2020	50	250	-	-		300
	Standby Generator Improvements FY 2020 - 2023		150	150	150	150	600
54 55	Idlewild Booster Pump Station Improvements FY 2021 - 2022 Parkridge Circle Conversion FY 2022	-	-	100	1,200 300		1,300 300
56	SW Reno Pump Zone Consolidation Phase 1 FY 2022	-	-	-	300	3,500	3,800
57	Spanish Springs #1 Pump Zone Intertie FY 2022	-	-	600	-	, -	600
58	STMGID Tank 4 Booster Pump Station / Transmission Line FY2020 - FY2021	-	2,450	550	-		3,000
59 60	Wildwood Pressure Regulating Station Scada Control FY 2021 Truckee River Highlands Pump Station # 2 FY 2022	-	-	50	1,000		50 1 000
61	Old Virginia Regulation Station FY 2020	-	330	-	-,000		1,000 330
62	Chalk Bluff Additional Backup Generator Design -FY 2019	1,000	-				1,000
63	Huffaker Booster Pump Station FY 2019	400					400
64 65	Twin Lakes Booster Pump Station FY 2019 Total Pressure Improvements	400 5,250	5,830	4,700	5,200	5,900	400 26,880
66	Water Main-Distribution-Service Line Improvements						
67	Street & Highway Main Replacements FY 2019 - FY 2023	3,000	5,000	5,000	5,000	5,000	23,000
68	South Virginia / Midtown Main Plumb to Liberty FY 2019	1,500	-	-	-	•	1,500
69	California-Marsh 24" Main Replacement FY 2019 - FY 2020	50	1,150	-	-		1,200
70 71	Booth, Sharon Way, Monroe 24" Main Replacements FY 2020 - FY 2021 South Virginia 24" Main (Kumle to Peckham) FY 2019 - FY 2020	100	100	3,100	-		3,200 1,000
71 72	South Virginia 24" Main (Kumle to Peckham) FY 2019 - FY 2020 North East Sparks Feeder Main Relocation FY 2020 - FY 2021	100	900 50	- 950	-		1,000 1,000
73	Spanish Springs - Spring Creek South Zone Conversion FY 2019 - FY2020	50	650	-	-		700
74	West Hidden Valley, Surge St., Piping Rock Main Replacement FY 2020 - FY 2022	-	1,000	230	500		1,730
75 76	Spanish Springs Main Replacement FY 2019 - FY 2020	300	1,000	-	<u>-</u>		1,300
76 77	Bonnie Lane, Snow Flower, Main Extensions FY 2021 - FY 2022 South Truckee Meadows Capacity Improvements FY 2019	400	-	620 -	900		1,520 400
77 78	South Truckee Meadows Capacity Improvements FY 2019 Stead Golf Course Main Replacement FY 2022- FY 2023	400	-	-	90	2,160	400 2,250
79	General Waterline Extensions FY 2019 - FY 2023	100	100	100	100	100	500
80	Verdi Main FY 2019	2,500	-	-	-		2,500
81	Mount Rose 5 Distribution / Pressure Improvements FY 2019 - FY2020	150	1,000	-	-		1,150
82	Gordon Avenue Main Replacement FY 2019	1,580					1,580
0.3	Boomtown Water Sytem Improvements FY 2019	1,990	1,800				1,990 1,930
83 84	Boomtown to TMWA Connection FV 2010		. ~				1.530
83 84 85	Boomtown to TMWA Connection FY 2019 Lemmon Valley Sand Yard FY 2019	130 530	1,800				530

87	Potable Water Storage Improvements				04-03-18	SAC Age	nda Item 6
88	Sun Valley #2 Tank FY 2019 - FY 2021	50	100	1,750	_		1,900
89	Rattlesnake Ring Addition FY 2020	-	800	, -	-		800
90	Fish Springs Ranch #2 Tank FY 2022 - FY 2023	-			100	2,000	2,100
91	Storage Tank Recoats; Access; Drainage Improvements FY 2019 - FY 2023	900	900	900	900	900	4,500
92	Highland Reservoir Tank FY 2021 - FY 2022	-	-	100	5,700		5,800
93	STMGID Tank East (Zone 11 Tank) FY 2019 (Not STMGID)	50	3,075				3,125
94	Total Potable Water Storage Improvements	1,000	4,875	2,750	6,700	2,900	18,225
95	Hydroelectric Improvements						
96	Forebay, Diversion, and Canal Improvements FY 2019 - FY 2023	55	50	50	50	50	255
97	Flume Rehabilitation FY 2019 - FY 2022	600		350	350		1,300
98	Hydro Plant Generator Rewinds FY 2020 - FY 2022	650	650	650			1,950
99	Washoe Flume Reconstruction FY 2020		2,200				2,200
100	Fleish Overflow Reconstruction Design FY 2019	1,400					1,400
101	Hydroelectric Improvements	2,705	2,900	1,050	400	50	7,105
102	Customer Service Outlays						
103	Meter Reading Equipment FY 2020, FY 2022	-	60	-	60	-	120
104	New Business Meters FY 2019 - FY 2022	350	175	100	100		725
105	Mueller Pit Replacements former Washoe County FY 2019 - FY 2023	125	125	125	125	125	625
106	Meter - ERT-RTR Replacements FY 2019 - FY 2023	1,250	1,250	1,250	1,250	1,250	6,250
107	Galvanized / Poly Service Line Replacements FY 2019 - FY 2021	400	400	400	-	-	1,200
108	AMI Automated Meter Infrastructure FY 2019 - FY2022	750	750	750	750		3,000
109	Total Customer Service Outlays	2,875	2,760	2,625	2,285	1,375	11,920
110	Administrative Outlays						
111	GIS / GPS System Mapping Equipment FY 2019 - FY 2023	40	40	40	40	40	200
112	Desktop Computer Upgrades FY 2019 - FY 2023	100	100	100	100	100	500
113	Network Server / Storage Upgrades FY 2019 - FY 2023	175	175	175	275	275	1,075
114	Network Security Upgrades FY 2019 - FY 2023	150	150	150	150	150	750
115	Furniture - Office Equipment FY 2019 - FY 2023	50	50	50	50	50	250
116	Crew Trucks / Vehicles FY 2019 - FY 2023	1,270	585	650	600	600	3,705
117	Security-ER Projects FY 2019 - FY 2023	150	150	150	150	150	750
118	CIS System Replacement FY 2019 - FY 2020	100	3,200				3,300
119	Emergency Operations Annex Design / Construction FY 2021	250	250	1,500	-		2,000
120	System Wide Asphalt Rehabilitation FY 2019 - FY 2023	200 2,485	4, 900	200 3,015	200 1,565	200 1,565	1,000 13,530
121	Total Administrative Outlays	2,405	4,900	3,015	1,565	1,565	13,530
122	Total Capital Spending Outlays	43,421	46,772	36,523	27,054	26,581	180,351
123	Special Projects Funded by Development						
124	Water Meter Retrofits FY 2019 - FY 2023	300	300	300	300	300	1,500
125	Water Right Purchases FY 2019 - FY 2023	150	150	150	150	300	900
126	Total Special Projects Funded by Development	450	450	450	450	600	2,400
127	Total Projected Capital Spending Including Projects Funded By Development	43,871	47,222	36,973	27,504	27,181	182,751
128	Former STMGID System Improvements						
129	STMGID Well Bypass & Chlorine Room Improvements FY 2019	300	-	-	-		300
130	STMGID Well Fix & Finish FY 2019 - FY 2023	150	150	150	150	150	750
131	STMGID Conjunctive Use Facilities FY 2019 - FY 2020	1,800	2,100	-	-		3,900
132	STMGID Tank Recoats FY 2019, FY 2021	220	-	300	-		520
133	STMGID Mueller Pit Replacements FY 2019 - FY 2021	50	50	50	-		150
134	STMGID NAC Deficiencies - Saddlehorn, Upper Toll, STMGID East FY 2019 - 2022 Total Former STMGID Capital Spending - Allocated Funding	250 2,770	2, 900	2,000 2,500	350 500	150	3,200 8,820
135	Total Former STMGID Capital Spending - Allocated Funding	2,770	2,900	2,500	500	150	0,020
136	Total Projected Capital Spending Including STMGID - Allocated Funding	46,641	50,122	39,473	28,004	27,331	191,571
137	Preliminary Plan Funding Sources						
138	Customer Rates	37,026	34,072	33,278	22,854	21,251	148,481
139	Development	5,895	12,700	3,245	4,200	5,330	31,370
140	Grants	500					500
141	STMGID Reserves	2,770	2,900	2,500	500	150	8,820
142	Water Meter Retrofit / Water Rights	450	450	450	450	600	2,400
143	Total Projected Capital Spending	46,641	50,122	39,473	28,004	27,331	191,571
144	Funding By Priority						
145	Priority 1 Mandatory Regulatory	34,721	31,952	17,518	12,714	11,246	108,151
146	Priority 2 Necessary	9,550	15,945	18,905	6,930	9,235	60,565
147	Priority 3 Contingency	2,370	2,225	3,050	8,360	6,850	22,855
148	Total Projected Capital Spending	46,641	50,122	39,473	28,004	27,331	191,571

Attachment D