



## STANDING ADVISORY COMMITTEE AGENDA

**Tuesday, June 4 2024 at 3:00 p.m.**  
**Truckee Meadows Water Authority**  
**Independence Room, 1355 Capital Blvd., Reno, NV**

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### NOTES:

1. The announcement of this meeting has been posted at the following locations: Truckee Meadows Water Authority (1355 Capital Blvd., Reno), at <http://www.tmwa.com>, and State of Nevada Public Notice Website, <https://notice.nv.gov/>.
2. In accordance with NRS 241.020, this agenda closes three working days prior to the meeting. We are pleased to make reasonable accommodations for persons who are disabled and wish to attend meetings. If you require special arrangements for the meeting, please call 834-8002 at least 24 hours before the meeting date.
3. 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. 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 Chair and Vice-Chair are absent, the remaining SAC members may elect a temporary presiding officer to preside over the meeting until the Chair or Vice-Chair 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 April 2, 2024 meeting (**For Possible Action**)
5. Presentation of Fiscal Year 2024 Q3 year to date financial results — Matt Bowman\*
6. Presentation on the final budget for the Fiscal Year ending June 30, 2025 and the 2025-2029 Five-Year Capital Improvement Plan — Matt Bowman and David Diegle\*
7. Informational update on TMWA's rate study — Matt Bowman and Shawn Stoddard\*
8. Presentation on TMWA's cybersecurity program — Sean Feeney\*

9. Discussion and possible recommendation to the Board on promoting Alex Talmant from Senior Citizen alternate representative to primary representative — Sonia Folsom (**For Possible Action**)
10. Discussion and possible direction to staff regarding agenda items for future meetings (**For Possible Action**)

**NEXT REGULAR SAC MEETING: October 1, 2024**

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**)

**TRUCKEE MEADOWS WATER AUTHORITY  
STANDING ADVISORY COMMITTEE**

**DRAFT MINUTES**

April 2, 2024

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The Standing Advisory Committee (SAC) met at TMWA, 1355 Capital Blvd, Reno, NV. Chair Krmpotic called the meeting to order at 3:01 p.m.

1. ROLL CALL

**Primary Members and Voting Alternates Present:** Fred Arndt, \*Ken Becker, Brian Bosma, Colin Hayes, John Krmpotic, Neil McGuire, Ken McNeil, Chris Melton, Dale Sanderson, and Alex Talmant.

**Primary Members and Alternates Absent:** Robert Chambers, Jordan Hastings, Justin McDougal, Connor Naisbitt, Jonnie Pullman, Kevin Ryan, and Jerry Wager.

**Staff Present:** Matt Bowman, David Diegle, John Enloe, Sonia Folsom, Andy Gebhardt, Bill Hauck, David Kershaw, Dan Nubel, Danny Rotter, Shawn Stoddard, Sandra Tozi, John Zimmerman, and Legal Counsel Justina Caviglia (PBL).

*\*Member Becker attended virtually via Zoom.*

2. PUBLIC COMMENT

There was no public comment.

3. APPROVAL OF THE AGENDA

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

4. APPROVAL OF THE MINUTES OF JANUARY 9, 2024 MEETING

**Upon motion duly made by Member Arndt, and seconded by Member Melton, and carried by unanimous consent of the members present, the Committee approved the minutes of January 9, 2024.**

5. WATER SUPPLY UPDATE

Bill Hauck, TMWA Water Supply Supervisor, informed the Committee that despite a slow start Lake Tahoe Basin snowpack is now 115% of normal as of April 1<sup>st</sup>, and that all upstream reservoirs (including Lake Tahoe) will completely fill this year. Normal river flows are projected for at least the

next two to three years. There is no drought in the Sierra Nevada range, and the regional water supply outlook is extremely good.

6. PRESENTATION AND POSSIBLE RECOMMENDATION TO THE BOARD, OF APPLICATIONS TO FILL THE COMMERCIAL ALTERNATE REPRESENTATIVE VACANCY AND OTHER POSSIBLE VACANCIES FROM THE FOLLOWING POOL OF CANDIDATES LISTED IN ALPHABETICAL ORDER: RYAN GREENHALGH

Sonia Folsom, TMWA Executive Assistant, presented the staff report.

**Upon motion duly made by Member Hayes, and seconded by Member Melton, and carried by unanimous consent of the members present, the Committee approved recommendation to the Board to appoint Ryan Greenhalgh to fill the commercial alternate representative vacancy.**

7. DISCUSSION AND POSSIBLE AMENDMENTS TO THE STANDING ADVISORY COMMITTEE GOVERNING RULES

Justina Caviglia, TMWA Legal Counsel, informed the Committee the Board was presented on its history and member orientation; the Board did not provide any recommendations to amend the governing rules.

Member McNeil inquired about the proposed changes and said he did not agree with them, and recommended making all members primary. Ms. Caviglia replied that it was based on the discussion at the October 2023 meeting and presented as such at the January 2024 meeting.

At this time, the Committee discussed the proposed changes, making all members primary could pose potential quorum issues, and confirmed the current structure is adequate and there were no disadvantages with primary members who have no alternates.

**No action taken.**

8. UPDATE ON PROPOSED RATE ADJUSTMENT AND CASH OPTIMIZATION

Matt Bowman, TMWA Chief Financial Officer, informed the Committee that the Board approved the proposed rate adjustments and the first one at 4.5% will go into effect in May reflecting on customers' June bill. Also, he explained the process for the cash optimization and refunding the debt (in December) and issuing new debt (early January), they continued to monitor rates and timed it as such that resulted in a net present value of \$12m (17%) in savings, which will be realized over time in reductions in interest payments and principal.

9. PRESENTATION OF FISCAL YEAR 2024 Q2 YEAR-TO-DATE FINANCIAL RESULTS

Mr. Bowman presented the fiscal year 2024 Q2 financial results.



**10. PRESENTATION ON THE TMWA TENTATIVE BUDGET FOR THE FISCAL YEAR ENDING JUNE 30, 2025 AND DRAFT CAPITAL IMPROVEMENT PLAN (CIP) FOR FISCAL YEARS 2025 THROUGH 2029 AND POSSIBLE RECOMMENDATION TO THE BOARD**

Mr. Bowman and David Diegle, TMWA Engineering Manager, presented the tentative budget for FY 2025 and draft FY 2025-2029 CIP.

Members of Committee inquired about the significant drop-in customer rate funded projects in FY2029, reimbursement projects, and the potential of a policy change regarding infrastructure. Mr. Bowman replied that projections drop off in the outer years and Mr. Diegle added high priority projects are scheduled in the early years, but priorities shift; such as pressure regulation stations are being rehabilitated now and not being replaced. Danny Rotter, TMWA Director of Engineering, added staff wants to get everything done, hence the first few years of the CIP are large, reimbursements happen upfront, developers pay TMWA before construction begins, and a potential rule change, in about six months, could include oversizing of tanks.

**Upon motion duly made by Member McGuire, and seconded by Member Arndt, and carried by unanimous consent of the members present, the Committee approved recommendation to the Board TMWA's Tentative Budget for the Fiscal Year ending June 30, 2025 and Draft Capital Improvement Plan for Fiscal Years 2025 through 2029.**

**11. PRESENTATION OF PROPOSED REVISIONS TO THE WATER SYSTEM FACILITY (WSF) CHARGES RATE SCHEDULE, AND POSSIBLE RECOMMENDATION TO THE BOARD**

David Kershaw, TMWA Engineering Manager, presented the proposed revisions to the WSF charges.

Members of the Committee asked what is used to estimate the cost of facilities (recent bid items are used), cost of linear foot for a new or existing road (use the average number), the difference between the area fees (more centralized locations have capacity, projects further out in the system, need to be built and cost increases).

**Upon motion duly made by Member McGuire, and seconded by Member Arndt, which motion duly carried eight to one with Member McNeil abstaining, the Committee approved recommendation to the Board the proposed revisions to the Water System Facility (WSF) Charges Rate Schedule.**

**12. OVERVIEW OF TMWA'S 2024 COMMUNICATION PLAN**

Andy Gebhardt, TMWA Director of Distribution, Maintenance, and Generation, presented the 2024 Communication Plan which includes four pillars: Water Quality, Water Conservation, Water Leadership, and Customer Experience. Staff is embarking on a new partnership with Desert Research Institute and Washoe County School District to develop curriculum for teachers.

**13. DISCUSSION AND POSSIBLE REQUESTS FOR AGENDA ITEMS FOR FUTURE MEETINGS**

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

**Next meeting:**

1. Q3 Financial Update
2. Presentation of final FY25 Budget and FY25-29 Capital Improvement Plan
3. Primary appointment of Alex Talmant
4. Presentation on TMWA's cybersecurity program
5. Update on rate study

**14. STAFF ITEMS**

Mr. Gebhardt informed the Committee that they partnered with the Service Line Warranties of American to provide customers the option to sign up for service line protection. They are endorsed by the National League of Cities and are legitimate and only work with utilities; TMWA does not get any money when a customer signs up and staff recommends reaching out to your homeowners' insurance first to see if you already have the protection or can add it even at a lower cost. Also, TMWA's Smart About Water Day is on Saturday, May 4<sup>th</sup> from 10am – 2pm at the McKinley Arts and Culture center and the picnic is on Saturday, July 13<sup>th</sup> from 11am – 3pm.

**15. COMMITTEE ITEMS**

There were no committee items.

**16. PUBLIC COMMENT**

There was no public comment.

**17. ADJOURNMENT**

With no further items for discussion, Chair Krmpotic adjourned the meeting at 4:50 p.m.

Approved by the Standing Advisory Committee in session on \_\_\_\_\_.

Sonia Folsom, Recording Clerk



## STAFF REPORT

**TO:** Board of Directors  
**THRU:** John R. Zimmerman, General Manager  
**FROM:** Matt Bowman, Chief Financial Officer  
**DATE:** May 9, 2024  
**SUBJECT:** Presentation of Fiscal Year 2024 Q3 Year-to-Date Financial Results

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### Summary

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

### Budget to Actual

	Actual YTD 2024	Budget YTD 2024	Variance \$	Variance %
CHANGE IN NET POSITION	\$ 36,213,662	\$ 34,056,342	\$ 2,157,320	6 %

Change in net position was \$2.2m or 6% higher than budget through Q3 2024. This was driven by higher operating income due to lower operating expenses, higher unrealized investment earnings and grant revenue.

### Year over Year

	Actual YTD 2024	Actual YTD 2023	Variance \$	Variance %
CHANGE IN NET POSITION	\$ 36,213,662	\$ 32,112,350	\$ 4,101,312	13 %

Change in net position was \$4.1m or 13% higher than the prior year. This was primarily due a net increase in fair value of investments compared to a net loss in the prior year. In the fourth quarter, interest rates dropped sharply leading to unrealized gains in TMWA's investment portfolio. Capital contributions were higher from grant revenue related to the Advanced Meter Infrastructure project, offset by lower operating income.

## Revenue

### Budget to Actual

	Actual YTD 2024	Budget YTD 2024	Variance \$	Variance %
<b>OPERATING REVENUES</b>				
Charges for Water Sales	82,642,691	87,805,898	(5,163,207)	(6)%
Hydroelectric Sales	3,083,465	2,313,022	770,443	33 %
Other Operating Sales	3,361,701	2,491,519	870,182	35 %
Total Operating Revenues	89,087,857	92,610,439	(3,522,582)	(4)%

Operating revenue was \$3.5m or 4% lower than budget through Q3 2024. This was mostly driven by lower water sales. Water consumption was significantly lower than budget due to high precipitation through the summer and into fall with lower temperatures. Although the variance in water sales remains significant, there was a slight improvement from Q2, which was 7% lower than budget. TMWA's hydroelectric sales remain strong with the Hydro teams achieving record revenue in the first three quarters of the fiscal year.

### Year over Year

	Actual YTD 2024	Actual YTD 2023	Variance \$	Variance %
<b>OPERATING REVENUES</b>				
Charges for Water Sales	82,642,691	83,144,259	(501,568)	(1)%
Hydroelectric Sales	3,083,465	1,911,274	1,172,191	61 %
Other Operating Sales	3,361,701	2,354,372	1,007,329	43 %
Total Operating Revenues	89,087,857	87,409,905	1,677,952	2 %

Total operating revenues were higher than prior year by \$1.7m or 2% due to slightly lower water sales offset by higher other operating sales and hydroelectric sales. Washoe plant was offline in Q3 of the prior year due to low river flows and inspections and repairs.

## Operating Expenses

### Budget to Actual

	Actual YTD 2024	Budget YTD 2024	Variance \$	Variance %
<b>OPERATING EXPENSES</b>				
Salaries and Wages	22,609,091	24,080,555	(1,471,464)	(6)%
Employee Benefits	10,125,225	10,846,681	(721,456)	(7)%
Services and Supplies	27,976,223	32,635,112	(4,658,889)	(14)%
Total Operating Expenses Before Depreciation	60,710,539	67,562,348	(6,851,809)	(10)%
Depreciation	27,244,754	26,595,457	649,297	2 %
Total Operating Expenses	87,955,293	94,157,805	(6,202,512)	(7)%

Total operating expenses were \$6.2m or 7% lower than budget through Q3 2024. Salaries and wages and employee benefits are both lower due primarily to position vacancies. Services and supplies were \$4.7m or 14% lower than budget. This was mostly due to lower chemical costs of approximately \$1.0m due to lower pricing, less turbidity events and improved operating efficiency. There are various other categories of services and supplies expenses which are lower than budget. These are offset by an increase of \$0.7m in electric power costs.

### Year over Year

	Actual YTD 2024	Actual YTD 2023	Variance \$	Variance %
<b>OPERATING EXPENSES</b>				
Salaries and Wages	22,609,091	20,319,308	2,289,783	11 %
Employee Benefits	10,125,225	8,645,159	1,480,066	17 %
Services and Supplies	27,976,223	27,370,722	605,501	2 %
Total Operating Expenses Before Depreciation	60,710,539	56,335,189	4,375,350	8 %
Depreciation	27,244,754	25,811,291	1,433,463	6 %
Total Operating Expenses	87,955,293	82,146,480	5,808,813	7 %

Year over year operating expenses were \$5.8m or 7% higher compared to the prior year. Salaries and wages and benefits are higher than prior year to due to Labor Market Index (LMI) increases, step increases, and additions to staff during FY 2024. Services and supplies expenses are higher due to increase in costs primarily in electric power costs offset by a decrease in chemical costs.

## Non-Operating Expenses

### Budget to Actual

	Actual YTD 2024	Budget YTD 2024	Variance \$	Variance %
<b>NONOPERATING REVENUES (EXPENSES)</b>				
Investment Earnings	134,749	3,611,978	(3,477,229)	(96)%
Net Increase (Decrease) in FV of Investments	6,728,103	—	6,728,103	— %
Gain (Loss) on Disposal of Assets	(38,154)	(1,232,250)	1,194,096	(97)%
Amortization of Bond/note Issuance Costs	(499,000)	—	(499,000)	— %
Interest Expense	(7,962,245)	(8,271,540)	309,295	(4)%
Total Nonoperating Revenues (Expenses)	(1,636,547)	(5,891,812)	4,255,265	(72)%

Nonoperating expenses were \$4.3m or 72% lower than budgeted than in Q3 2024. Investment earnings were lower than budget due to cash optimization financing which was finalized in January 2024, TMWA liquidated investments resulting in a realized loss of approximately \$3.2m. However, the reinvested proceeds from the 2024 Series bonds are expected to earn approximately \$3.7m over two years. The unrealized gain was recognized as market rates dropped sharply in November and December 2023.

### Year over Year

	Actual YTD 2024	Actual YTD 2023	Variance \$	Variance %
<b>NONOPERATING REVENUES (EXPENSES)</b>				
Investment Earnings	134,749	2,562,308	(2,427,559)	(95)%
Net Increase (Decrease) in FV of Investments	6,728,103	(772,445)	7,500,548	(971)%
Gain (Loss) on Disposal of Assets	(38,154)	(18,616)	(19,538)	105 %
Amortization of Bond/note Issuance Costs	(499,000)	—	(499,000)	— %
Interest Expense	(7,962,245)	(8,634,152)	671,907	(8)%
Total Nonoperating Revenues (Expenses)	(1,636,547)	(6,862,905)	5,226,358	(76)%

Nonoperating expenses were lower than prior year by \$5.2m or 76%, primarily due a net increase in fair value of investments compared to a net loss in the prior year. In November and December 2023 interest rates dropped sharply leading to unrealized gains in TMWA's investment portfolio.

## Capital Contributions

### Budget to Actual

	Actual YTD 2024	Budget YTD 2024	Variance \$	Variance %
<b>CAPITAL CONTRIBUTIONS</b>				
Grants	8,265,785	2,015,775	6,250,010	310 %
Water Resource Sustainability Program	779,664	846,246	(66,582)	(8)%
Developer Infrastructure Contributions	8,818,317	11,508,594	(2,690,277)	(23)%
Developer Will-serve Contributions (Net of Refunds)	3,756,608	3,910,500	(153,892)	(4)%
Developer Capital Contributions - Other	3,443,855	—	3,443,855	— %
Developer Facility Charges (Net of Refunds)	9,245,314	12,639,405	(3,394,091)	(27)%
Contributions from Others	7,250	—	7,250	— %
Contributions from Other Governments	2,400,852	10,575,000	(8,174,148)	(77)%
Net Capital Contributions	36,717,645	41,495,520	(4,777,875)	(12)%

Capital contributions were \$4.8m or 12% lower than budget. Several factors led to the variance lower spending on the American Flat APW project which led to lower contributions from other governments. Also contributing to the variance is lower developer infrastructure contributions. These reductions were offset by an increase in grant revenue. TMWA recognized \$8.0m in grant revenue related to the Advanced Meter Infrastructure project. The total grant awarded TMWA through the Nevada Water Conservation Infrastructure Initiative was \$9.5m. TMWA expects to spend the remaining funds in the next year.

### Year over Year

	Actual YTD 2024	Actual YTD 2023	Variance \$	Variance %
<b>CAPITAL CONTRIBUTIONS</b>				
Grants	8,265,785	88,724	8,177,061	9,216 %
Water Resource Sustainability Program	779,664	700,167	79,497	11 %
Developer Infrastructure Contributions	8,818,317	16,015,618	(7,197,301)	(45)%
Developer Will-serve Contributions (Net of Refunds)	3,756,608	3,258,169	498,439	15 %
Developer Capital Contributions - Other	3,443,855	7,257,646	(3,813,791)	(53)%
Developer Facility Charges (Net of Refunds)	9,245,314	5,300,576	3,944,738	74 %
Contributions from Others	7,250	—	7,250	— %
Contributions from Other Governments	2,400,852	1,090,930	1,309,922	120 %
Net Capital Contributions	36,717,645	33,711,830	3,005,815	9 %

Year over year, capital contributions are \$3.0m or 9% higher than the prior year primarily due to an increase in grants offset by a decrease in developer infrastructure contributions.

### **Capital Spending**

Cash spent on capital outlays and construction projects through Q3 2024 was approximately \$45.0m. Total budgeted capital spend for fiscal year 2024 is \$103.7m, which includes \$20.0m and \$19.8m for the American Flat APW facility and Orr Ditch pump station and hydro facility, respectively. Spending on the top three projects is listed below:

Orr Ditch pump station and hydro facility	\$10.2m
Tank Improvements	\$ 5.1m
7th St Hi/Lo BPS Relocation	\$ 4.4m

### **Cash Position**

At March 31, 2024 total cash and investments was \$194.6m or \$12.7m lower than at the beginning of the fiscal year. Of the total cash and investments, \$137.2m was unrestricted to be used to meet upcoming and future operating and maintenance expenses, principal and interest payments and construction project payments. The remaining \$57.4m was restricted to pay for scheduled bond principal and interest payments as well as maintaining required reserves as stipulated in our bond covenants.



# Truckee Meadows Water Authority

Comparative Statements of Revenues, Expenses and Changes in Net Position  
For the third quarter ended March 31, 2024

	Actual YTD 2024	Budget YTD 2024	Variance \$	Variance %
<b>OPERATING REVENUES</b>				
Charges for Water Sales	\$ 82,642,691	\$ 87,805,898	\$ (5,163,207)	(6)%
Hydroelectric Sales	3,083,465	2,313,022	770,443	33 %
Other Operating Sales	3,361,701	2,491,519	870,182	35 %
Total Operating Revenues	89,087,857	92,610,439	(3,522,582)	(4)%
<b>OPERATING EXPENSES</b>				
Salaries and Wages	22,609,091	24,080,555	(1,471,464)	(6)%
Employee Benefits	10,125,225	10,846,681	(721,456)	(7)%
Services and Supplies	27,976,223	32,635,112	(4,658,889)	(14)%
Total Operating Expenses Before Depreciation	60,710,539	67,562,348	(6,851,809)	(10)%
Depreciation	27,244,754	26,595,457	649,297	2 %
Total Operating Expenses	87,955,293	94,157,805	(6,202,512)	(7)%
<b>OPERATING INCOME</b>	<b>1,132,564</b>	<b>(1,547,366)</b>	<b>2,679,930</b>	<b>(173)%</b>
<b>NONOPERATING REVENUES (EXPENSES)</b>				
Investment Earnings	134,749	3,611,978	(3,477,229)	(96)%
Net Increase (Decrease) in FV of Investments	6,728,103	—	6,728,103	— %
Gain (Loss) on Disposal of Assets	(38,154)	(1,232,250)	1,194,096	(97)%
Amortization of Bond/note Issuance Costs	(499,000)	—	(499,000)	— %
Interest Expense	(7,962,245)	(8,271,540)	309,295	(4)%
Total Nonoperating Revenues (Expenses)	(1,636,547)	(5,891,812)	4,255,265	(72)%
Gain (Loss) Before Capital Contributions	(503,983)	(7,439,178)	6,935,195	(93)%
<b>CAPITAL CONTRIBUTIONS</b>				
Grants	8,265,785	2,015,775	6,250,010	310 %
Water Resource Sustainability Program	779,664	846,246	(66,582)	(8)%
Developer Infrastructure Contributions	8,818,317	11,508,594	(2,690,277)	(23)%
Developer Will-serve Contributions (Net of Refunds)	3,756,608	3,910,500	(153,892)	(4)%
Developer Capital Contributions - Other	3,443,855	—	3,443,855	— %
Developer Facility Charges (Net of Refunds)	9,245,314	12,639,405	(3,394,091)	(27)%
Contributions from Others	7,250	—	7,250	— %
Contributions from Other Governments	2,400,852	10,575,000	(8,174,148)	(77)%
Net Capital Contributions	36,717,645	41,495,520	(4,777,875)	(12)%
<b>CHANGE IN NET POSITION</b>	<b>\$ 36,213,662</b>	<b>\$ 34,056,342</b>	<b>\$ 2,157,320</b>	<b>6 %</b>

# Truckee Meadows Water Authority

Comparative Statements of Revenues, Expenses and Changes in Net Position  
For the third quarter ended March 31, 2024

	Actual YTD 2024	Actual YTD 2023	Variance \$	Variance %
<b>OPERATING REVENUES</b>				
Charges for Water Sales	\$ 82,642,691	\$ 83,144,259	\$ (501,568)	(1)%
Hydroelectric Sales	3,083,465	1,911,274	1,172,191	61 %
Other Operating Sales	3,361,701	2,354,372	1,007,329	43 %
Total Operating Revenues	89,087,857	87,409,905	1,677,952	2 %
<b>OPERATING EXPENSES</b>				
Salaries and Wages	22,609,091	20,319,308	2,289,783	11 %
Employee Benefits	10,125,225	8,645,159	1,480,066	17 %
Services and Supplies	27,976,223	27,370,722	605,501	2 %
Total Operating Expenses Before Depreciation	60,710,539	56,335,189	4,375,350	8 %
Depreciation	27,244,754	25,811,291	1,433,463	6 %
Total Operating Expenses	87,955,293	82,146,480	5,808,813	7 %
<b>OPERATING INCOME</b>	<b>1,132,564</b>	<b>5,263,425</b>	<b>(4,130,861)</b>	<b>(78)%</b>
<b>NONOPERATING REVENUES (EXPENSES)</b>				
Investment Earnings	134,749	2,562,308	(2,427,559)	(95)%
Net Increase (Decrease) in FV of Investments	6,728,103	(772,445)	7,500,548	(971)%
Gain (Loss) on Disposal of Assets	(38,154)	(18,616)	(19,538)	105 %
Amortization of Bond/note Issuance Costs	(499,000)	—	(499,000)	— %
Interest Expense	(7,962,245)	(8,634,152)	671,907	(8)%
Total Nonoperating Revenues (Expenses)	(1,636,547)	(6,862,905)	5,226,358	(76)%
Gain (Loss) Before Capital Contributions	(503,983)	(1,599,480)	1,095,497	(68)%
<b>CAPITAL CONTRIBUTIONS</b>				
Grants	8,265,785	88,724	8,177,061	9,216 %
Water Resource Sustainability Program	779,664	700,167	79,497	11 %
Developer Infrastructure Contributions	8,818,317	16,015,618	(7,197,301)	(45)%
Developer Will-serve Contributions (Net of Refunds)	3,756,608	3,258,169	498,439	15 %
Developer Capital Contributions - Other	3,443,855	7,257,646	(3,813,791)	(53)%
Developer Facility Charges (Net of Refunds)	9,245,314	5,300,576	3,944,738	74 %
Contributions from Others	7,250	—	7,250	— %
Contributions from Other Governments	2,400,852	1,090,930	1,309,922	120 %
Net Capital Contributions	36,717,645	33,711,830	3,005,815	9 %
<b>CHANGE IN NET POSITION</b>	<b>\$ 36,213,662</b>	<b>\$ 32,112,350</b>	<b>\$ 4,101,312</b>	<b>13 %</b>



## STAFF REPORT

**TO:** TMWA Board of Directors  
**THRU:** John R. Zimmerman, General Manager  
**FROM:** Matt Bowman, Chief Financial Officer/Treasurer  
David Diegle, Engineering Manager  
**DATE:** May 13, 2024  
**SUBJECT:** **Discussion, and action on request for adoption of Resolution No. 326: A resolution to adopt the final budget for the Fiscal Year ending June 30, 2025 and the 2025-2029 Five-Year Capital Improvement Plan**

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### **Recommendation**

Staff recommends the TMWA Board approve the proposed Final Budget for the fiscal year ending June 30, 2025 and direct staff to file the adopted Final Budget and related 2025-2029 Capital Improvement Plan (CIP) with the State of Nevada Department of Taxation as required by statute.

### **Summary**

TMWA has prepared the proposed Final Budget and CIP for consideration and approval by the TMWA Board. The Tentative Budget and CIP were approved by the Board at the March 20, 2024 Board meeting. The proposed Final Budget and CIP contain the changes described below.

### **Discussion**

A comparison of the proposed Final Budget to the original approved Tentative Budget is accompanying this report in *Attachments A and B*.

Changes to the operating budget include the following:

- Increase of capital spend in FY 2025 of \$2.8m due to changes in the CIP.

Changes to the CIP include an overall increase over five years of \$7.3m and include the following:

- Emergency Operations Annex Design/Construction increase of \$4.1m due to additional costs for an EOC facility which is expected to be funded 75% by federal grant monies.
- Office Expansion increased by \$2.5m due to an updated cost estimate.
- Physical Site Security Improvements increased by \$1.1m due to additional fencing needed at Chalk Bluff and reservoir fencing improvements.
- Various other changes resulting in a net decrease of \$0.4m.

The proposed Final Budget estimates a year-end Debt Service Coverage ratio of 1.40x. TMWA's senior lien bond covenants require a minimum coverage ratio of 1.25x. As part of the funding plan TMWA planned for use of the Rate Stabilization Fund to meet the financial goal of 1.5x coverage.

**Recommended Motion**

Move to approve the Final Budget for the fiscal year ending June 30, 2025, and Capital Improvement Plan for fiscal years 2025 through 2029.

Attachment A

## TRUCKEE MEADOWS WATER AUTHORITY

### Comparative Statements of Revenues, Expenses and Changes in Net Position

**Proposed Final Budget**

	Final Budget 2025	Tent. Budget 2025	Variance \$	Variance %
<b>OPERATING REVENUES</b>				
Charges for Water Sales	\$ 123,715,379	\$ 123,715,379	\$ -	0%
Hydroelectric Sales	2,963,889	2,963,889	-	0%
Other Operating Sales	3,600,377	3,600,377	-	0%
Total Operating Revenues	130,279,645	130,279,645	-	0%
<b>OPERATING EXPENSES</b>				
Salaries and Wages	35,083,573	35,083,573	-	0%
Employee Benefits	15,835,901	15,835,901	-	0%
Services and Supplies	46,074,717	46,074,717	-	0%
Total Operating Expenses Before Depreciation	96,994,191	96,994,191	-	0%
Depreciation	35,590,563	35,590,563	-	0%
Total Operating Expenses	132,584,754	132,584,754	-	0%
<b>OPERATING INCOME</b>	(2,305,110)	(2,305,110)	-	0%
<b>NONOPERATING REVENUES (EXPENSES)</b>				
Investment Earnings	5,103,838	5,103,838	-	0%
Loss on Disposal of Assets	(1,442,800)	(1,442,800)	-	0%
Interest Expense	(8,878,315)	(8,878,315)	-	0%
Total Nonoperating Revenues (Expenses)	(5,217,277)	(5,217,277)	-	0%
Gain (Loss) Before Capital Contributions	(7,522,386)	(7,522,386)	-	0%
<b>CAPITAL CONTRIBUTIONS</b>				
Grants	3,098,500	3,098,500	-	0%
Water Resource Sustainability Program	969,677	969,677	-	0%
Developer Infrastructure Contributions	14,819,179	14,819,179	-	0%
Developer Will-serve Contributions (Net of Refunds)	5,232,000	5,232,000	-	0%
Developer Capital Contributions - Other	-	-	-	0%
Developer Facility Charges (Net of Refunds)	16,106,141	16,106,141	-	0%
Contributions from Others	65,845	65,845	-	0%
Contributions from Other Governments	5,700,000	5,700,000	-	0%
Net Capital Contributions	45,991,341	45,991,341	-	0%
<b>CHANGE IN NET POSITION</b>	38,468,955	38,468,955	-	0%

## TRUCKEE MEADOWS WATER AUTHORITY

### Statements of Cash Flows

#### Proposed Final Budget

	Final Budget 2025	Tent. Budget 2025	Variance \$	Variance %
<b>OPERATING ACTIVITIES</b>				
Cash Received From Customers	\$ 130,279,645	\$ 130,279,645	\$ -	0%
Cash Paid to Employees	(50,919,474)	(50,919,474)	-	0%
Cash Paid to Suppliers	(46,074,717)	(46,074,717)	-	0%
Net Cash From Operating Activities	33,285,454	33,285,454	-	0%
<b>CAPITAL AND RELATED FINANCING ACTIVITIES</b>				
Acquisition & Construction of Capital Assets	(63,842,500)	(61,074,000)	(2,768,500)	5%
Interest Paid on Financing	(13,830,452)	(13,830,452)	-	0%
Principal Paid on Financing	(17,958,730)	(17,958,730)	-	0%
Grants	4,067,300	4,067,300	-	0%
Contributions for Water Resource Sustainability Program	969,677	969,677	-	0%
Contributions From Developers-Will-Serve Letters	5,232,000	5,232,000	-	0%
Contributions from Developers - Facility Charges	16,106,141	16,106,141	-	0%
Contributions from Others	65,845	65,845	-	0%
Contributions from Other Governments	5,700,000	5,700,000	-	0%
Net Cash Used For Capital & Relating Financing Activities	(63,490,720)	(60,722,220)	(2,768,500)	5%
<b>INVESTING ACTIVITIES</b>				
Interest Received	5,103,838	5,103,838	-	0%
Net Cash From Investing Activities	5,103,838	5,103,838	-	0%
<b>NET CHANGE IN CASH AND CASH EQUIVALENTS</b>	(25,101,428)	(22,332,928)	(2,768,500)	12%
<b>CASH AND CASH EQUIVALENTS, BEGINNING PERIOD</b>	204,292,100	204,292,100	-	0%
<b>CASH AND CASH EQUIVALENTS, END OF PERIOD</b>	\$ 179,190,672	\$ 181,959,172	\$ (2,768,500)	-2%



# Truckee Meadows Water Authority

*Quality. Delivered.*



**Photo:** Nighttime Pump Rebuild - Mae Anne & McCarran Booster Pump Station

**Photo By:** Dillon Hansen, Maintenance Mechanic Specialist

## Five Year Capital Improvement Plan

**Fiscal Year 2025-2029**

Truckee Meadows Water Authority is a not-for-profit, community-owned water utility, overseen by elected officials and citizens from Reno, Sparks and Washoe County



# Truckee Meadows Water Authority FY 2025-2029 Capital Improvement Plan

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## Truckee Meadows Water Authority FY 2025-2029 Capital Improvement Plan

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## INTRODUCTION

The Truckee Meadows Water Authority's (TMWA's) Five-Year Capital Improvement Plan 2025-2029 (CIP), describes all infrastructure construction and major capital outlays that will take place between July 1, 2024 and June 30, 2029. Guidance for identifying and scheduling projects in the CIP is provided by TMWA's 2020-2040 Water Facility Plan (WFP) and the 2020-2040 Water Resource Plan (WRP).

TMWA is a joint powers authority formed in November 2000, pursuant to a Cooperative Agreement (as amended and restated as of February 3, 2010, the "Cooperative Agreement") among the City of Reno, Nevada ("Reno"), the City of Sparks, Nevada ("Sparks") and Washoe County, Nevada (the "County"). The Authority owns and operates a water system (the "Water System") and develops, manages and maintains supplies of water for the benefit of the Truckee Meadows communities. On January 1, 2015, TMWA, the Washoe County Water Utility (WCWU) and South Truckee Meadows General Improvement District (STMGID) consolidated to create a regional water system under TMWA. TMWA has a total of 171 square miles of service area, which includes the cities of Reno and Sparks and other surrounding populated areas of the County (except certain areas in the vicinity of Lake Tahoe and other small areas bordering California). TMWA has no authority to provide water service outside of its service area; however, may provide service in the future to developments that are annexed into its service area.

The CIP incorporates a comprehensive compilation of water system improvements for TMWA. A major feature of the CIP is the construction of several projects that will expand the conjunctive use of the region's water resources. The philosophy behind conjunctive use of local water resources is to maximize the use of surface water while preserving the integrity of groundwater resources which are drawn upon during periods of persistently dry weather. Another aspect of the CIP is to expand the Aquifer Storage and Recovery Program (ASR Program) which is the recharge of groundwater basins with treated surface water, and explore the possibilities related to Advanced Purified Water (APW). In addition, this CIP includes several major projects to extend full conjunctive use water service to the Verdi area, made possible by approved development and cost effective oversizing. The estimated costs of the new backbone water facilities is \$20.0 million and is being borne largely by regional developments in the area.

The CIP constitutes an essential component in TMWA's system of planning, monitoring and managing the activities of purveying water and generating hydroelectric power. The CIP is incorporated into a broader, constantly-updated Five-Year Funding Plan ("Funding Plan") for a comparable period. This Funding Plan will determine adequate levels and sources of funding for projects contained in the CIP.

The 2024-2028 Funding Plan indicates a nominal funding gap in each year, however, due to adequate treasury and ongoing revenues from various sources, TMWA can fund the CIP.

***Water Conservation*** TMWA is a steward of the region's water resources and promotes the efficient use of water in drought and non-drought years. Due to TMWA's ongoing conservation programs, among other factors, municipal residential per capita demand has decreased by 30% since the early 2000s, helping to offset total water use as TMWA's customer base has grown by approximately 30%. Capital spending represents a key aspect of TMWA's conservation program. Projects such as meter replacements, conjunctive use and recently the Advanced Purified Water Facility at American Flat represent projects which help to ensure TMWA has the appropriate infrastructure in place to allow for efficient water use. Specifically, projects included in the CIP having significant conservation impacts are as follows: Advanced Purified Water Facility at American Flat (\$212.0 million), Automated Meter Infrastructure (\$13.3 million), Well Head TTHM Mitigation (\$1.5 million), Lazy 5 Pump Station (\$3.0 million) and STMGID Tank 4 Booster Pump Station/Transmission Line (\$0.7 million).

The CIP includes total spending of \$632.3 million with approximately 48.0% or \$303.4 million dedicated to upgrades or replacement of existing infrastructure, and approximately 44.8% or \$283.3 million allocated to construction of new water system capacity projects, conjunctive use construction projects, retrofit of remaining unmetered services, and potential opportunistic acquisition of water rights. Of the total projected spending over the next five years 5.7% or \$35.8 million is considered contingency spending which is dependent on certain events occurring to trigger spending. The \$632.3 million in projected spending is grouped into broad categories of improvements and spending outlays. These categories are described below with detailed project descriptions to be found in the Project Description Section.

***Raw Water Supply Improvements*** contains 35.5% or approximately \$224.4 million of total spending in the CIP. Comprising nearly all of the spending in this category is the construction of an Advanced Purified Water (APW) Facility at American Flat which will be built as a follow up to the OneWater NV advanced purified water feasibility study, and will be a joint effort with other agencies. Through an interlocal agreement, TMWA has partnered with City of Reno who will reimburse TMWA for 70% of the construction costs. There will be immediate benefit to City of Reno resulting from increased capacity at the Reno Stead Water Reclamation Facility. Other projects in this category include improvements to the Highland Canal/Siphon raw water conveyance infrastructure, upstream storage improvements for Donner Lakes where TMWA stores Privately-Owned Stored Water (POSW) and expenses associated with the storage and implementation of the Truckee River Operating Agreement (TROA).

***Ground Water Supply Improvements*** contains 6.0% or approximately \$37.8 million of total spending in the CIP. These projects focus on preserving existing well capacities, drilling and equipping of new wells and at times complete replacement of existing wells.

***Treatment Plant Improvements*** contains 11.7% or approximately \$73.8 million of total spending in the CIP. The Orr Ditch pump station/Hydro Facility project will increase redundancy and reliability by enhancing the Truckee River source of supply to the Chalk Bluff Water Treatment Plant and directly offset power costs. Other spending in this category targets fix and finish projects with the primary focus on the Chalk Bluff and Glendale Surface Water Treatment

Plants located on the Truckee River. Other improvements include installation of a new disinfection process at two wells historically treated by the Longley Lane ground water treatment plant and a complete upgrade of the Supervisory Control and Data Acquisition (SCADA) system which provides centralized automated system control and data storage for the distribution system and treatment plants.

***Distribution System Pressure Improvements*** contains 11.7% or approximately \$73.8 million of total spending. This spending primarily includes pump and pressure regulating station rebuilds and new construction, correction of pressure or fire flow deficiencies, as well as reconstruction of pressure regulating valves.

***Water Main Distribution & Service Line Improvements*** contains 10.7% or approximately \$67.7 million of total spending in the CIP. These improvements include replacement of aged water mains reaching end of service life, installation of new mains for new and expanded service, water main oversizing and extensions, off-river supply improvements, and conjunctive use projects to extend surface water supplies to the areas that rely heavily on year round groundwater pumping. This last set of projects furthers the conjunctive use philosophy of water resource management and includes the Boomtown water system improvements.

***Potable Water Storage Improvements*** contains 11.0% or approximately \$69.6 million of total spending in the CIP. These projects are comprised mainly of new treated water storage tank to increase system redundancy and reliability (Sun Valley 2 Tank and Caughlin 2 Tanks) and construction to serve new and expanded service (STMGID Tank East Zone 11 Tank), some replacement of existing treated water tank capacity as well as systematic recoating of treated water tank interiors and exteriors to extend service life of these facilities.

***Hydroelectric Improvements*** contains 3.9% or approximately \$24.7 million of total spending in the CIP. These improvement center on the three run-of-river hydroelectric facilities currently owned by TMWA. Efforts on these facilities focus primarily on plant, flume, forebay, diversion and canal improvements as well as equipment upgrades.

***Customer Service Outlays*** contains 2.5% or approximately \$15.7 million of total spending in the CIP. The majority of spending in this category is for Automated Meter Infrastructure (AMI) meter replacements, providing more accurate and real time usage information which can be leveraged for billing, conservation and cost efficiencies. Also, in this category is a spending provision for new business meters which is funded by development.

***Administrative Outlays*** contains 4.3% or approximately \$27.3 million of total spending in the CIP. These outlays are primarily for the purchase of heavy and light vehicles, excavation equipment and fleet upgrades. Other spending in this category are for facilities expansions, as well as an Emergency Operations Center. Also, in this category is spending for security improvements such as fencing, intrusion detection, security cameras, lighting.



*Special Programs Funded by Development* include outlays for opportunistic water rights purchases. They are separated from a presentation standpoint because in the case of water right acquisitions, spending is currently driven by pricing opportunity. This comprises 2.8% or approximately \$17.5 million of total spending in the CIP.



**Photo:** Chalk Bluff Clearwell Walkthrough before Disinfection

**Photo By:** Craig Moyle, Water Equipment Specialist



## **DEFINITIONS**

### **Capital Improvement Program Definitions**

The Five-Year CIP is a planning and budgeting tool, which provides information about TMWA's infrastructure needs for a five-year time frame. Each year, the list of projects is reviewed for cost and priority. New projects may be added and other projects delayed or deleted entirely. Since most projects are mandatory or necessary, deletion of a project would be rare with the exception of contingency spending. However, capital spending plans must remain flexible, and from time to time it is necessary to take revisions to the approved fiscal year's CIP back to the TMWA Board for approval. If construction or outlays can be deferred, TMWA will defer spending in order to preserve cash reserves, regardless whether or not there are difficult economic times. These decisions are made on a case by case basis.

### **Definition of Capital Outlays**

"Capital Outlays," which are in TMWA's capital budget, include construction projects that improve the life of current TMWA infrastructure or are new additions to TMWA infrastructure. Other outlays include computer equipment and software, vehicles, and heavy equipment which are generally found in the Administrative category of projects. Outlays for meter installations and related infrastructure and equipment are generally included in the Customer Service category.

## PRIORITIZATION OF PROJECTS/OUTLAYS

TMWA may not have sufficient funding to meet all its capital needs each year or may divert funding to meet unexpected capital improvements. If such conditions arise, projects are prioritized based on the effect each project has on TMWA's ability to meet customer demand and maintain water system reliability. TMWA's Funding Plan is used to analyze total spending, identify various funding alternatives, and determine whether or not water rate adjustments will be required.

The priority categories represent a relative degree of need for any particular project and are described below.

- \* **PRIORITY 1 MANDATORY:** These are considered absolutely required, and are the highest priority of all capital projects. Mandatory projects include those in final design or already under construction, or those required by legislation or regulation for protection of public health and safety. These projects are generally found in the first fiscal year of the CIP. Based on current water demands and infrastructure conditions, if the project is not completed, there is risk of eventually being unable to reliably provide water service to its existing customers and/or new and expanded service, or incur extended outages.
- \* **PRIORITY 2 NECESSARY:** A project that is important for providing water service to customers, yet timing of construction or spending outlay is not as critical as a mandatory project. These projects are required and are generally found in the last four years of the CIP. External factors such as the pace of new development or the condition of existing infrastructure may delay or accelerate the timing of project construction.
- \* **PRIORITY 3 CONTINGENCY:** These projects or capital outlays are not immediately critical to the operation of the water system. Expenditures in this category generally require a business case study or specific criteria to be met before spending can occur. If such criteria are not met, then spending may or may not be justified. Also, some projects can be deferred if spending is required in an area of higher priority. Even though these projects and outlays are in the CIP, the likelihood that spending will occur may be remote and is based upon future conditions that are difficult to predict.

## **FUNDING OF CAPITAL SPENDING**

### **Funding Sources**

The CIP will rely on various funding sources to pay for capital projects/capital outlays. TMWA relies heavily on revenues generated from water sales, hydroelectric, and other operating sales to fund the majority of projects. Developer contributions have historically been an important funding source for certain construction projects for new and expanded water system capacity. Investment income is also available to augment other revenue sources but is minor in relation to other funding sources. Funding from developer contributions can vary year to year and is dependent on the local economy and pace of new construction in TMWA's service territory. For this reason, TMWA does not rely on these fees to fund operations or fund annual principal and interest payments on TMWA's outstanding debt. TMWA may rely on the issuance of debt to fund large levels of capital spending in a particular period. Generally, TMWA does not issue new debt to fund capital projects. However, if there is an opportunity to issue debt at discounted rates, or with accompanying principal forgiveness, TMWA would consider this option.

### **Developer Contributions**

TMWA looks to the development community for developer contributions in the form of system development charges or direct reimbursements to fund capital expenditures related to new or expanded water service, including pump station construction or expansions and feeder main extension projects. In June 2003, the TMWA Board adopted facility charges to pay for new treatment/supply capacity projects and new storage capacity projects. TMWA began collecting these facility charges in January 2004. Under TMWA's Rule 5 these proceeds are used to support new capacity construction. Rule 7 governs the purchase of water rights and reimbursement by developers for issuance of will-serve commitments for water service. However, because of the timing of certain growth driven capital projects, additional financial resources may be called upon as needed. The most recent update to the water system facility charges, which updated area fees, supply and treatment fees, as well as storage unit costs are scheduled for approval by the TMWA Board in May, 2024 with an effective date of July, 2024. These fees are subject to periodic review for funding adequacy.

### **Financing Background**

Revenue bond issuance has been an integral part of funding construction spending. TMWA has historically taken advantage of lower rate, subordinated debt financing obtained through the Drinking Water State Revolving Loan Fund (DWSRF) and a tax-exempt commercial paper program (TECP) due to lower cost of capital and repayment subordination features of these funding vehicles. Federal and State Grants and loan forgiveness programs have also been identified in the past to fund projects. In the event customer water sales and developer funding is not sufficient to cover immediate infrastructure needs, TMWA maintains the ability to access the

credit market and issue debt. TMWA has been able to reduce debt by over \$90.8 million, and 21% during the last 5 years.

### **Rule 5 and Rule 7 Fees**

These fees are collected from the development community. Rule 5 fees are paid by developers to TMWA for the construction of new water feeder mains, new treatment/supply capacity, new storage capacity, and for new or rebuilt pump stations to meet demand resulting from new and expanded service. Rule 7 Fees are derived from will-serve sales to development. TMWA historically purchased water rights on the open market and reserves these rights for will-serve letters to be sold to development. TMWA also recovers the applicable administrative and financing costs with the sale of each will-serve. The title to water rights are retained by and dedicated to TMWA. TMWA has sufficient inventory of water rights to meet the demands for new and expanded service for the foreseeable future.

### **Water Resource Sustainability Fund Fees**

Resolution 272, passed by the Board of Directors on January 16, 2019, broadened the purpose of the Water Meter Retrofit Fee to support projects such as expanded conjunctive use, aquifer storage and recovery, demonstration and validation of advanced purified water treatment processes, future water resource identification and acquisition, and other projects that enhance water resource sustainability and drought resiliency. The fee is \$1,600 for each acre-foot of demand when will-serve commitments based on surface water right dedications are issued for new or expanded service.

### **Capital Contributions from Other Governments**

TMWA and the City of Reno entered into an Interlocal Agreement (ILA) effective December 7, 2021, which outlined cost sharing responsibilities for construction of the Advanced Purified Water Facility at American Flat. As discussed in more detail on page 23, the City of Reno will be funding 70% of the construction costs through contributions to TMWA, who will be the ultimate owner of the asset.

TMWA is a water wholesaler to the Sun Valley General Improvement District (SVGID). From time to time, new infrastructure must be constructed to service this retail water-service provider. There are no expectations of any need for reimbursement from this source in the CIP although historically SVGID has made contributions to TMWA.

### **Reserves from the Water Utility Consolidation**

TMWA, the WCWU and STMGID consolidated on January 1, 2015. As a result of the consolidation, the respective treasuries of the WCWU and STMGID were transferred to TMWA.

The WCWU treasury that was transferred to TMWA amounted to approximately \$43.4 million while the STMGID treasury transferred to TMWA was approximately \$15.7 million of which zero remains. These cash and investment reserves will continue to be used to make necessary improvements in the former water utility service areas including conjunctive use enhancements.

### **Other Resources**

One method of generating additional funds for capital improvements is to increase existing fees/charges or to add new fees/charges. However, future increases are expected to be nominal if TMWA is able to meet revenue requirements and maintain bond coverage ratios that will suffice to maintain strong investment-grade credit ratings. TMWA has obtained many benefits of Aa2 from Moodys, AA+ from S&P, and AAA from Fitch. The Board approved a five-year customer water rate plan in February 2024 which included a 4.5%, 4.0% and a 3.5% over the next three years, followed by annual increases, maximum of 4.5% and minimum of 1.0% tied to the Consumer Price Index for all Urban Consumers (CPI-U) for the Western Region. The rate adjustments will be reviewed and evaluated by the Board each year with the ability for the Board to defer or modify the increase prior to implementation date. Water rate increases are essential for TMWA to maintain sound credit ratings and to preserve access to opportunities in the capital markets.

## FISCAL YEAR 2025 CAPITAL SPENDING-THE CAPITAL BUDGET

TMWA expects to spend \$111.2 million in fiscal year 2025, the first year of the FY 2025-2029 CIP. Of this total, \$71.5 million will be funded by customer rates for water system rehabilitation, pressure system improvements, water main distribution service line improvements, and administrative and customer service outlays. Another \$36.8 million will be funded by developer fees for water system expansion, limited opportunistic acquisition of water rights. Hydroelectric operations will fund \$2.0 million in improvements. The sustainability fund will pay for \$0.9 million in projects.

## SUMMARY OF PROJECTS FOR THE FISCAL YEAR 2025 BUDGET

TMWA has established the following projects for the capital budget in fiscal year 2025 (Amounts presented in thousands of dollars):

Summary of Projects for FY 2025	Amount
<b>Raw Water Supply Improvements</b>	
Highland Canal-Upgrades-Downstream	225
Highland Canal-Upgrades-Diversion to Chalk Bluff	1,200
TROA Drought Storage / Implementation	100
Advanced Purified Water Facility at American Flat	8,000
South Truckee Meadows Recharge Valve	250
Washoe Lake System Improvements	250
Independence Lake Communication Improvements	100
<b>Total Raw Water Supply</b>	<b>10,125</b>
<b>Ground Water Supply Improvements</b>	
Well Rehabilitation Improvements	200
Well Fix and Finish	350
Brush Well Replacement	1,200
Well Head TTHM Mitigation	500
Spring Creek Well 10 - Donovan	1,500
Fish Springs Ranch TDS Monitoring Wells	250
Fish Springs Ranch Geophysics/Drilling Project	300
Spring Creek Well 9 (Spring Creek 4 Replacement)	1,700
STMGID Well 1 Re-Drill and Equipping	1,200
<b>Total Ground Water Supply</b>	<b>7,200</b>
<b>Treatment Plant Improvements</b>	
Chalk Bluff Treatment Plant Improvements	360
Chalk Bluff Clearwell 1 Rehabilitation	300

Truckee Meadows Water Authority FY 2025-2029 Capital Improvement Plan

Summary of Projects for FY 2025 (continued)	Amount
Chalk Bluff Clearwell 2 Rehabilitation	200
Chalk Bluff HVAC Improvements	75
Chalk Bluff 25K Power Reliability and Safety Improvements	100
Chalk Bluff Soda Ash Reliability Upgrade	50
Glendale Treatment Plant Improvements	375
Glendale HVAC Improvements	250
Mt Rose Treatment Plant Efficiency Improvements	450
Chalk Bluff Filter Underdrains	1,200
Orr Ditch Pump Station Rehabilitation and Hydro Facility	11,000
Truckee Canyon Water Treatment Improvements	20
Lightning W Treatment Improvements	10
SCADA Rehabilitation / Plant Operating Software	1,000
Spanish Springs Nitrate Treatment Facility	500
Glendale Sand Yard Improvements	430
Chalk Bluff Effluent Reservoir Outlet Repairs	100
Chalk Bluff Screening Facility Rehabilitation and Upgrades	200
<b>Total Treatment Plant</b>	<b>16,620</b>
<b>Pressure Improvements</b>	
Pressure Regulators Rehabilitation	2,000
Land Acquisitions	150
Pump Station Oversizing	250
Pump Station Rebuilds, Rehabilitations	150
Standby Generator Improvements	100
PSOM Standby Generator Additions	1,100
South-West Pump Zone Consolidation Phase 1	400
Lazy 5 Low Head Pump Station and Mains	2,500
South Hills Booster Pump Station Replacement	70
7th Street High and Low Booster Pump Station Replacement	3,000
Verdi 1 Booster Pump Station	2,500
Santerra Quilici 1 Booster Pump Station	3,700
Ascente Booster Pump Station	2,500
Talus Valley Booster Pump Station	2,900
Caughlin Train A Improvements	1,000
Idlewild Irrigation Pump Station Improvements and Repair	170
<b>Total Pressure Improvements</b>	<b>22,490</b>
<b>Water Main-Distribution-Service Line Improvements</b>	
Street and Highway Main Replacements	4,000
Golden Parkway Main and Check Valve Tie	40
Yori and E. University Main Replacement	2,200

Truckee Meadows Water Authority FY 2025-2029 Capital Improvement Plan

Summary of Projects for FY 2025 (continued)	Amount
Kate Smith Water Main Replacement Phase 1-3	1,900
Kate Smith Sparks Feeder Main-36"	100
Thomas Jefferson Area Main Replacements	1,800
South Virginia Rapid Transit Main Replacement	2,000
North-East Sparks Feeder Main Phase 8	10
Goldenrod Main	1,800
Boomtown Water System Improvements	1,500
Montreux High Pressure ACP Replacement	100
Somersett 6 Main Tie and Pressure Regulating Station	280
South Truckee Meadows Capacity Improvements	800
West 4th Street Main Replacement	2,100
<b>Total Water Main-Distribution-Service Line</b>	<b>18,630</b>
<b>Potable Water Storage Improvements</b>	
Sun Valley 2 Tank	420
Storage Tank Rehabilitation and Improvements	10,100
Boomtown System Improvements Phase 4 - Boomtown Tank	1,000
Caughlin 2 Tanks	500
US 40 Tank and Feeder Main	3,500
Lemmon Valley Tank 1 Replacement and Patrician Pressure Regulating Station	1,500
Hidden Valley Tank 4 Outage Improvements	250
Hunter Creek Reservoir Rehabilitation	75
Terminal Tank CO2 Delivery Road Improvements	100
STMGID 6 New Tank	20
<b>Total Potable Water Storage</b>	<b>17,465</b>
<b>Hydroelectric Improvements</b>	
Forebay, Diversion, and Canal Improvements	100
Flume Rehabilitation	150
Verdi Sandgate Improvements	500
Verdi Bypass Valve Improvements	850
Washoe Plant Improvements	400
<b>Total Hydroelectric</b>	<b>2,000</b>
<b>Customer Service Outlays</b>	
Meter Reading Equipment	75
New Business Meters	100
Mueller Pit Replacements former Washoe County	125
Galvanized / Poly Service Line Replacements	250
Automated Meter Infrastructure (AMI)	2,650
<b>Total Customer Service Outlays</b>	<b>3,200</b>



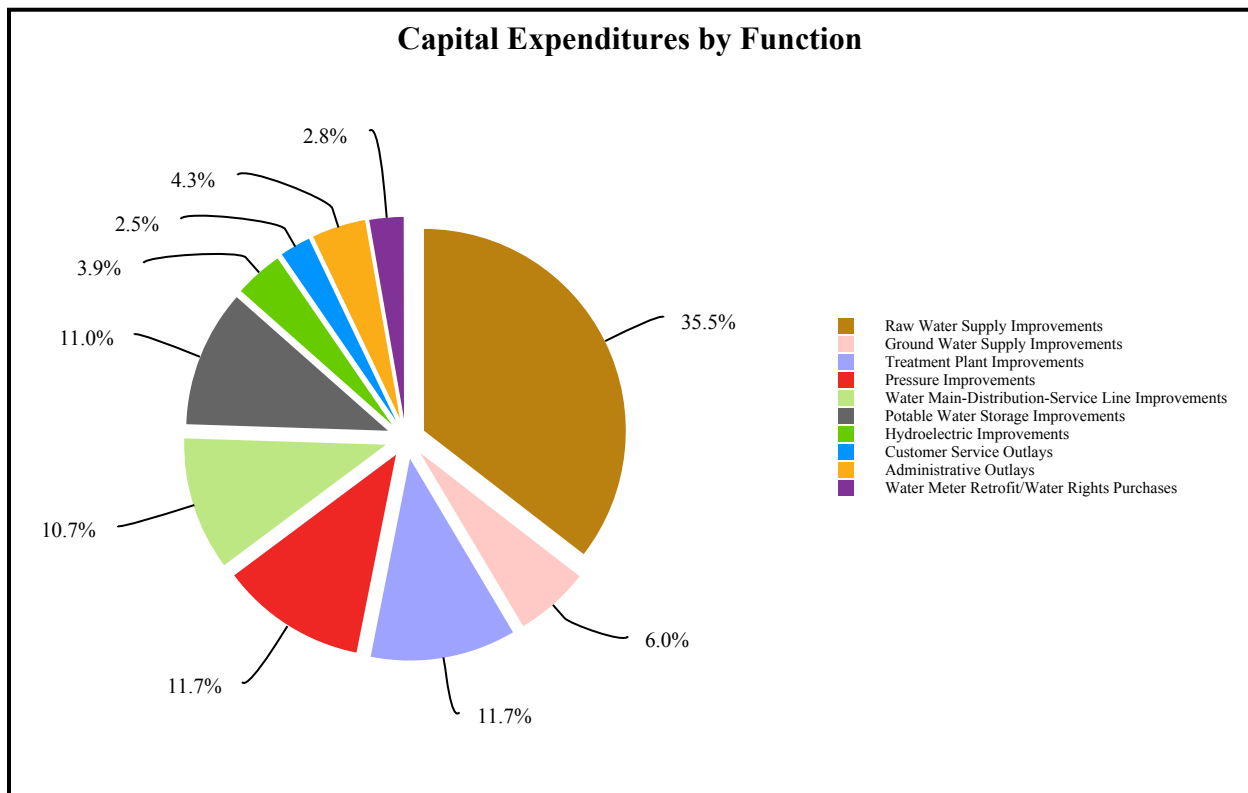
Truckee Meadows Water Authority FY 2025-2029 Capital Improvement Plan

Summary of Projects for FY 2025 (continued)	Amount
<b>Administrative Outlays</b>	
GIS / GPS System Mapping Equipment	20
IT Server Hardware and Equipment	240
IT Network Security Upgrades	210
IT Physical Access Security Upgrades	15
IT Firewall Infrastructure Enhancements	100
Printer / Scanner Replacement	10
Crew Trucks / Vehicles	1,500
Replacement HCM System	1,000
Corporate Office Expansion	5,000
Glendale Office Expansion	500
Corporate HVAC Improvements	100
Emergency Management Projects	50
Physical Site Security Improvements	1,250
<b>Total Administrative Outlays</b>	<b>9,995</b>
<b>Special Projects Funded by Development</b>	
Water Right Purchases	3,500
<b>Total Special Projects</b>	<b>3,500</b>
<b>Total Capital Spend for FY 2025</b>	<b>111,225</b>

Detailed project descriptions are provided for all projects in the CIP. These descriptions cover the fiscal year 2025 capital budget and the years 2026-2029.

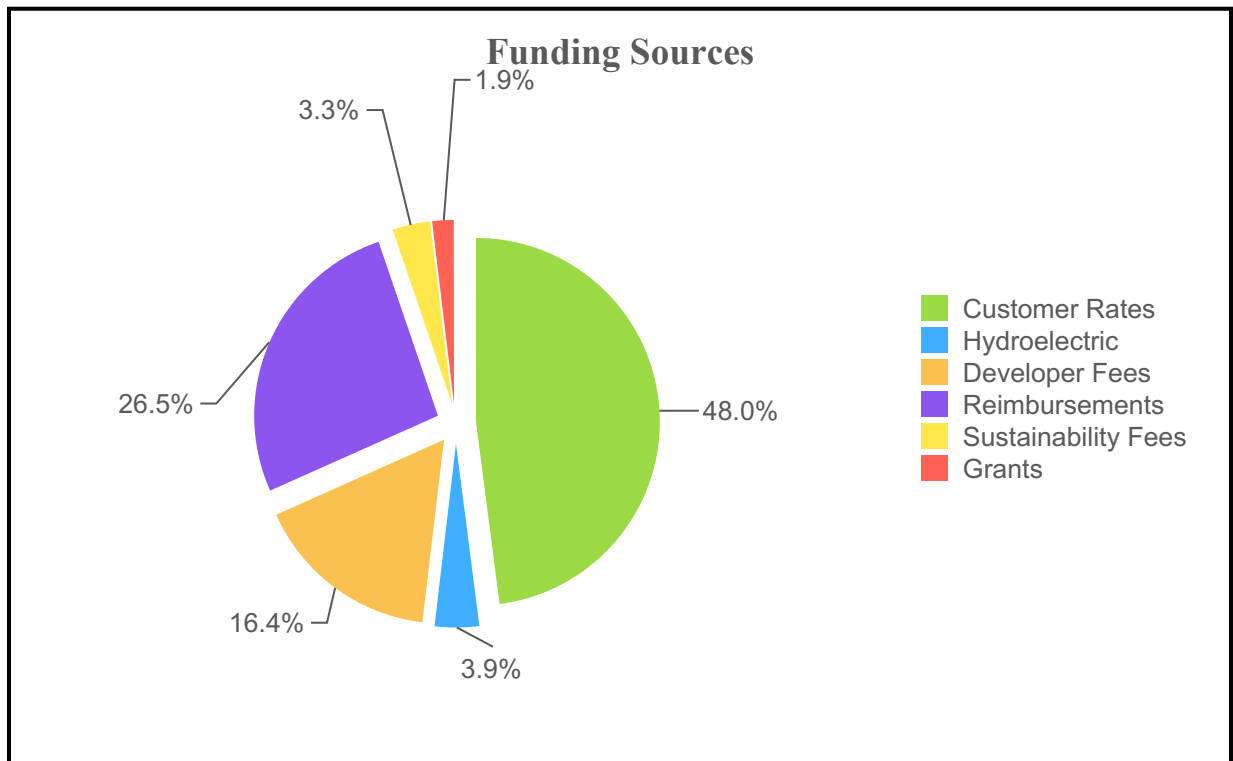
## CAPITAL EXPENDITURES BY FUNCTION (Amounts in thousands of dollars)

Summary of Capital Expenditures by Function	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
Raw Water Supply Improvements	10,125	86,275	88,675	38,675	675	224,425
Ground Water Supply Improvements	7,200	4,850	7,750	7,200	10,780	37,780
Treatment Plant Improvements	16,620	7,795	22,000	19,065	8,355	73,835
Distribution System Pressure Improvements	22,490	13,950	8,750	14,580	14,050	73,820
Water Main Distribution Service Line Improvements	18,630	18,585	11,880	9,150	9,450	67,695
Potable Water Storage Improvements	17,465	13,170	15,750	11,540	11,660	69,585
Hydroelectric Improvements	2,000	11,865	10,275	290	300	24,730
Customer Service Outlays	3,200	3,125	3,125	3,125	3,125	15,700
Administrative Outlays	9,995	7,220	4,345	4,295	1,420	27,275
Water Meter Retrofit / Water Rights Purchases	3,500	3,500	3,500	3,500	3,500	17,500
<b>Total Projected Capital Spending</b>	<b>111,225</b>	<b>170,335</b>	<b>176,050</b>	<b>111,420</b>	<b>63,315</b>	<b>632,345</b>



**PRELIMINARY FUNDING PLAN**  
**FUNDING SOURCES**  
 (Amounts in thousands of dollars)

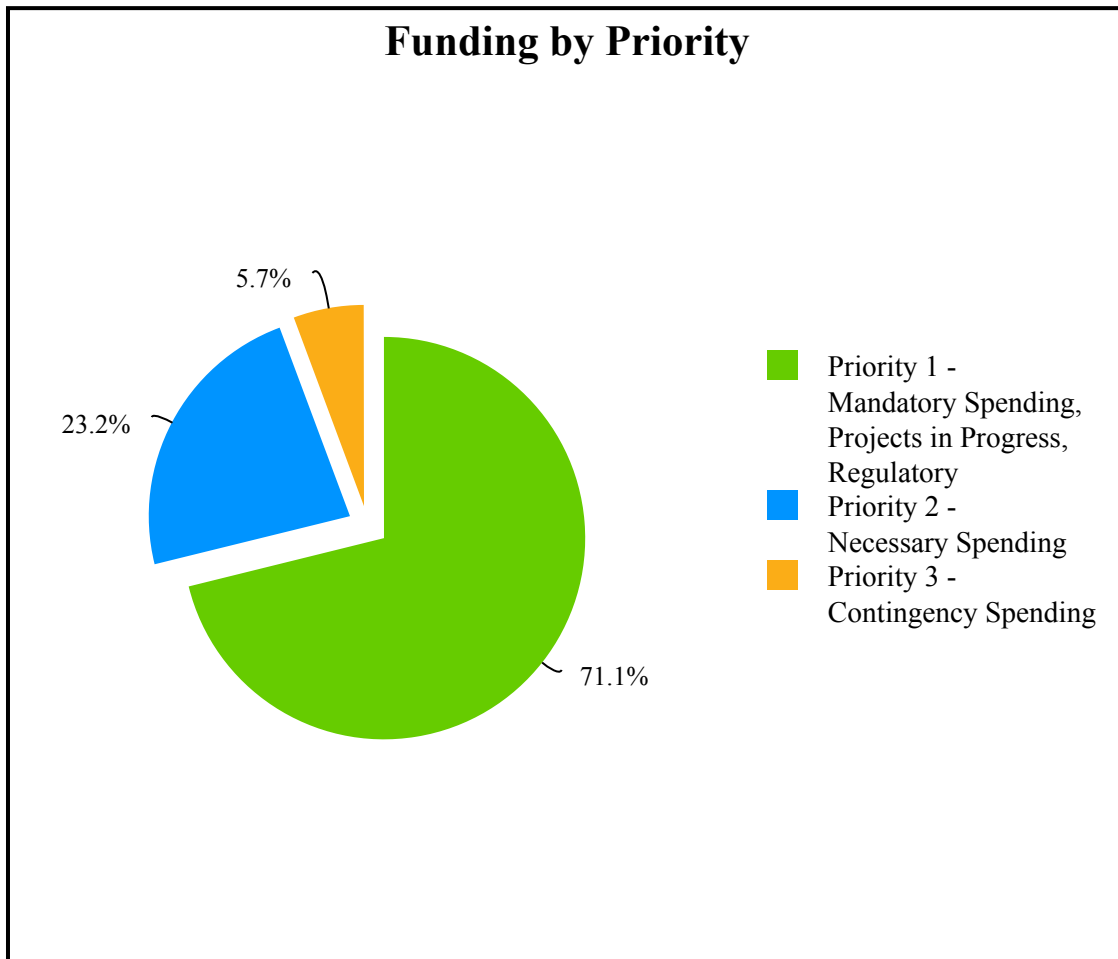
Summary of Funding Sources	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
<b>Customer Rates</b>	71,532	60,367	62,695	62,150	46,609	303,353
<b>Hydroelectric</b>	2,000	11,865	10,275	290	300	24,730
<b>Developer Fees</b>	14,353	27,491	31,189	14,747	16,156	103,936
<b>Reimbursements</b>	16,460	62,240	59,700	28,900	—	167,300
<b>Sustainability Fees</b>	880	7,872	8,410	3,552	250	20,964
<b>Grants</b>	6,000	500	3,781	1,781	—	12,062
<b>Total Projected Capital Spending</b>	<b>111,225</b>	<b>170,335</b>	<b>176,050</b>	<b>111,420</b>	<b>63,315</b>	<b>632,345</b>



## FUNDING BY PRIORITY (Amounts in thousands of dollars)

Summary of Funding by Priority	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
Priority 1 - Mandatory Spending, Projects in Progress, Regulatory	97,975	141,125	119,925	63,990	26,880	449,895
Priority 2 - Necessary Spending	8,450	23,875	41,285	42,280	30,730	146,620
Priority 3 - Contingency Spending	4,800	5,335	14,840	5,150	5,705	35,830
<b>Total Projected Capital Spending</b>	<b>111,225</b>	<b>170,335</b>	<b>176,050</b>	<b>111,420</b>	<b>63,315</b>	<b>632,345</b>

*For additional information about how TMWA classifies its projects, see Prioritization of Projects/Outlays on Page 6.*

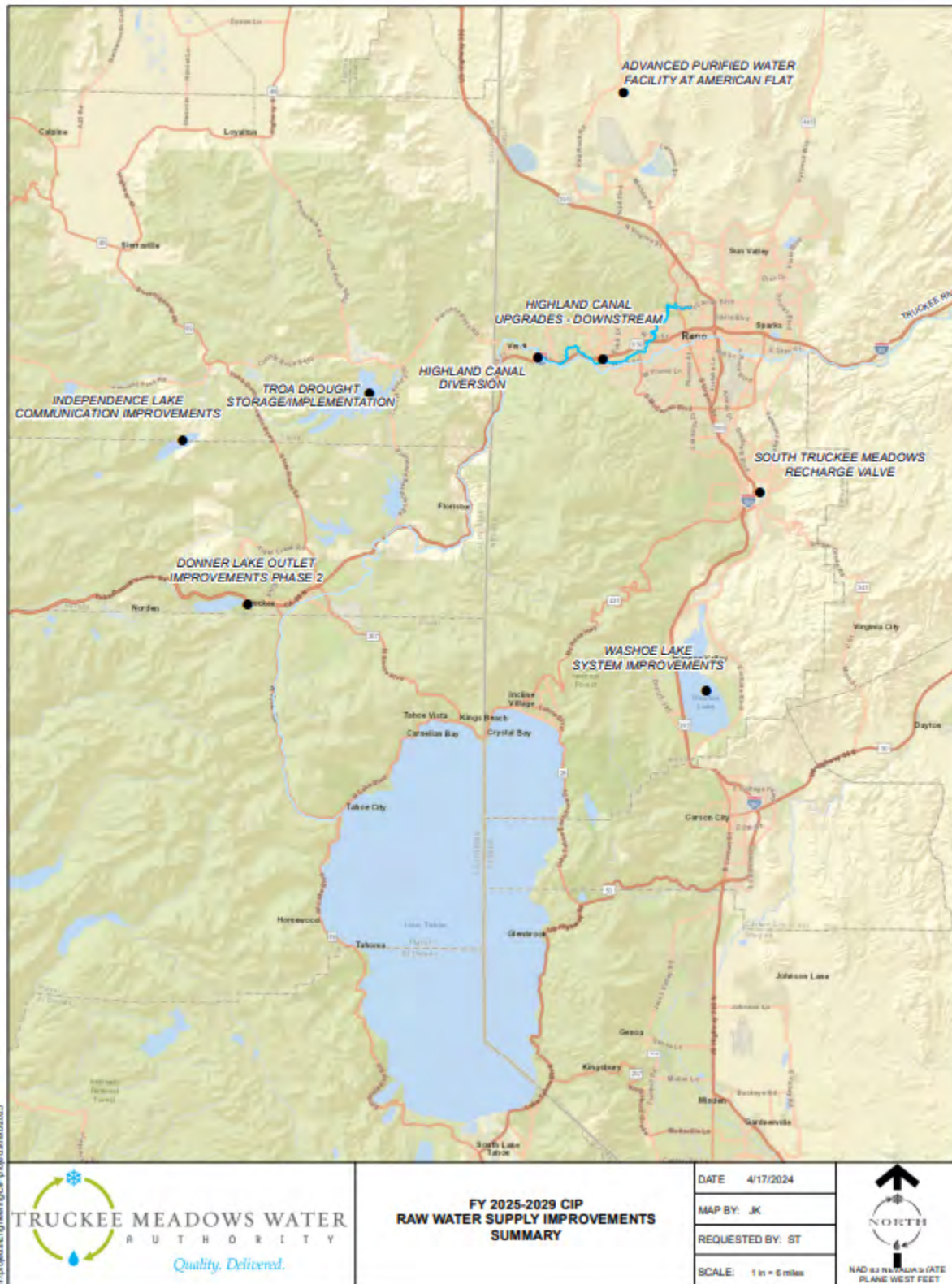


**PROJECT FUNCTIONS AND DESCRIPTIONS**  
**RAW WATER SUPPLY IMPROVEMENTS**  
**Summary**

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
3	Customer Rates	Highland Canal- Upgrades-Downstream	225	225	225	225	225	1,125
1	Customer Rates	Highland Canal- Upgrades-Diversion to Chalk Bluff	1,200	3,400	3,100	1,100	100	8,900
3	Customer Rates	TROA Drought Storage / Implementation	100	100	100	100	100	500
2	Customer Rates	Donner Lake Outlet Improvements Phase 2	—	300	—	—	—	300
1	Developer Fees / Sustainability Fees / Grants/ Reimbursements	Advanced Purified Water Facility at American Flat	8,000	82,000	85,000	37,000	—	212,000
1	Customer Rates	South Truckee Meadows Recharge Valve	250	—	—	—	—	250
3	Customer Rates	Washoe Lake System Improvements	250	250	250	250	250	1,250
1	Customer Rates	Independence Lake Communication Improvements	100	—	—	—	—	100
<b>Subtotal Raw Water Supply</b>			<b>10,125</b>	<b>86,275</b>	<b>88,675</b>	<b>38,675</b>	<b>675</b>	<b>224,425</b>

**Project Locations:** Map of all *Raw Water Supply Improvements* projects are highlighted in the following map.

# Truckee Meadows Water Authority FY 2025-2029 Capital Improvement Plan





## Raw Water Supply Improvements Highland Canal-Upgrades-Downstream

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
3	Customer Rates	Highland Canal-Upgrades-Downstream	225	225	225	225	225	1,125

**PROJECT DESCRIPTION:** The improvements reflected in this capital project item are for improvements along the canal downstream of the Chalk Bluff Water Treatment Plant to the Rancho San Rafael Park. Approximately 2,000 feet of “smart ditch” (a molded plastic trapezoidal channel section) has been installed downstream of Chalk Bluff in recent years. This product reduces leakage and maintenance and it is planned to continue to extend the installation in the future. Other efforts are rehabilitative in nature and may address access and security concerns.

**SCHEDULE:** Projects are identified and prioritized on an annual basis.



## Raw Water Supply Improvements

### Highland Canal – Upgrades – Diversion to Chalk Bluff

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Highland Canal-Upgrades-Diversion to Chalk Bluff	1,200	3,400	3,100	1,100	100	8,900

**PROJECT DESCRIPTION:** These improvements are for the stretch of canal between the diversion on the Truckee River and Chalk Bluff Water Treatment Plant. The proposed spending is to secure the canal from trespass, enhance public safety, and prevent encroachment on TMWA property. TMWA will also complete fencing along the canal for public safety, install security cameras, and access barriers. The proposed budget is for the replacement of the existing 54-inch siphon pipe under the Truckee River just downstream of the diversion, which was installed in 1954. Additionally, replacement of the access bridge across the Truckee River from old Hwy 40 to the Highland intake, and a feasibility study will be conducted for replacing sections of the flume that are showing signs of failure.

**SCHEDULE:** Projects are identified and prioritized on an annual basis.





## Raw Water Supply Improvements TROA Drought Storage/Implementation

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
3	Customer Rates	TROA Drought Storage / Implementation	100	100	100	100	100	500

**PROJECT DESCRIPTION:** TROA became effective and TMWA began implementation officially on December 1, 2015.

**SCHEDULE:** Ongoing budget under TROA implementation is for additional stream gauges in new locations as required, as well as improving the monitoring capabilities of existing gauges as needed on an annual basis. Other smaller capital improvements are related to the operation of reservoir sites.



## Raw Water Supply Improvements Donner Lake Outlet Improvements Phase 2

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Donner Lake Outlet Improvements Phase 2	—	300	—	—	—	300

**PROJECT DESCRIPTION:** Dredging of a portion of the Donner Lake outlet channel was completed in FY 2019. The project was scaled back to fit within the California Environmental Quality Act emergency permitting requirements. Additional work is required to extend and improve the outlet channel further into the lake, including possible bank stabilization improvements to minimize future dredging requirements.

**SCHEDULE:** Permitting and preliminary design will be conducted in FY 2026.





## Raw Water Supply Improvements

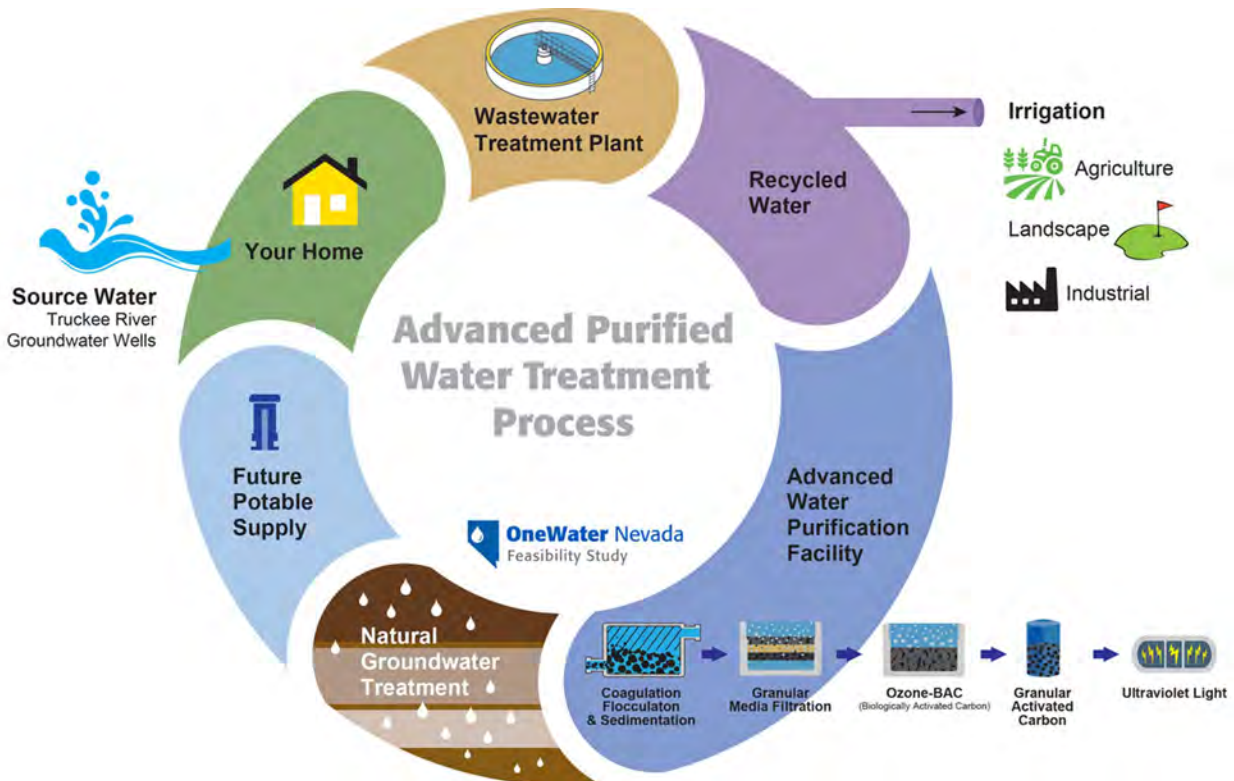
### Advanced Purified Water Facility at American Flat

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Developer Fees / Sustainability Fees / Grants/ Reimbursements	Advanced Purified Water Facility at American Flat	8,000	82,000	85,000	37,000	—	212,000

**PROJECT DESCRIPTION:** The Advanced Purified Water Facility at American Flat will be Nevada’s first Advanced Purified Water project achieving category A+ reclaimed water quality. Category A+ reclaimed water is suitable for all Nevada water recycling practices, including augmenting groundwater aquifers. The Project’s core element is a 2 million gallons per day (MGD) advanced purified water facility (APWF) producing 2,000 acre-feet (AF) of water annually for groundwater augmentation to provide a sustainable regional drought proof supply and crucially enhance the region’s water supply resiliency to help address future climate change impacts. TMWA is partnering with City of Reno who will be reimbursing TMWA for 70% of the total construction costs of the project.

**SCHEDULE:** Construction will continue through FY 2028.



## Raw Water Supply Improvements South Truckee Meadows Recharge Valve

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	South Truckee Meadows Recharge Valve	250	—	—	—	—	250

**PROJECT DESCRIPTION:** Install two down hole recharge valves on two existing wells in the South Truckee Meadows system.

**SCHEDULE:** Installation planned for FY 2025 based on priority.



## Raw Water Supply Improvements Washoe Lake System Improvements

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
3	Customer Rates	Washoe Lake System Improvements	250	250	250	250	250	1,250

**PROJECT DESCRIPTION:** Improvements as necessary to Washoe Lake Dam and related infrastructure to monitor, capture, store and deliver raw water as necessary to meet regional water supply objectives.

**SCHEDULE:** Projects are identified and prioritized on an annual basis.





## Raw Water Supply Improvements

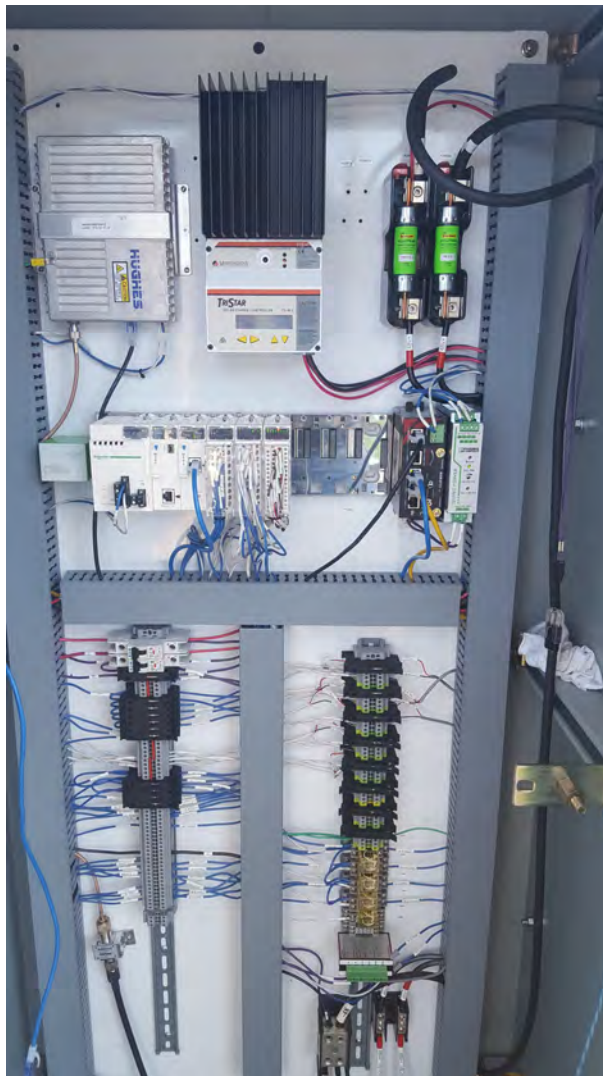
### Independence Lake Communication Improvements

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Independence Lake Communication Improvements	100	—	—	—	—	100

**PROJECT DESCRIPTION:** Upgrade the communications connection to TMWA SCADA system to improve reliability and security.

**SCHEDULE:** Improvements are scheduled for FY 2025.



## GROUND WATER SUPPLY IMPROVEMENTS

### Summary

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Well Rehabilitation Improvements	200	200	200	200	200	1,000
2	Developer Fees	Double Diamond 5 and Equipping	—	—	—	—	80	80
2	Developer Fees	Callamont Well South Equipping	—	—	—	100	1,900	2,000
2	Customer Rates	Air Guard Well Replacement Equipping	—	—	—	—	2,000	2,000
2	Customer Rates	Lemmon Valley Well 8 Replacement	—	800	2,500	—	—	3,300
2	Customer Rates	Well Fix and Finish	350	350	350	350	350	1,750
1	Customer Rates	Brush Well Replacement	1,200	—	—	—	—	1,200
2	Customer Rates	Spring Creek 8 Well Equipping	—	—	—	1,000	1,000	2,000
2	Customer Rates / Sustainability Fees	Well Head TTHM Mitigation	500	—	500	—	500	1,500
2	Developer Fees	Callamont Well North Equipping	—	—	100	1,900	—	2,000
1	Developer Fees	Spring Creek Well 10 - Donovan	1,500	1,000	—	—	—	2,500
1	Customer Rates	Fish Springs Ranch TDS Monitoring Wells	250	—	—	—	—	250
2	Customer Rates/ Reimbursements	Fish Springs Ranch Geophysics/Drilling Project	300	—	—	—	—	300
1	Customer Rates	Spring Creek Well 9 (Spring Creek 4 Replacement)	1,700	1,500	1,000	—	—	4,200
1	Customer Rates	STMGID Well 1 Re-Drill and Equipping	1,200	500	1,500	500	—	3,700
1	Customer Rates	Boomtown 13 Well	—	500	—	2,000	—	2,500
1	Customer Rates	Spring Creek 2 Re-drill	—	—	800	—	2,000	2,800
1	Customer Rates	Lightning W 2 Re-drill	—	—	800	—	2,000	2,800

Truckee Meadows Water Authority FY 2025-2029 Capital Improvement Plan

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Desert Springs 5 Production Well	—	—	—	800	—	800
1	Customer Rates	Desert Springs 6 Exploration Well and Testing	—	—	—	350	750	1,100
<b>Subtotal Ground Water Supply</b>			<b>7,200</b>	<b>4,850</b>	<b>7,750</b>	<b>7,200</b>	<b>10,780</b>	<b>37,780</b>

**Project Locations:** Map of all *Ground Water Supply Improvements* projects are highlighted in the following map.



# Truckee Meadows Water Authority FY 2025-2029 Capital Improvement Plan



## Ground Water Supply Improvements Well Rehabilitation Improvements

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Well Rehabilitation Improvements	200	200	200	200	200	1,000

**PROJECT DESCRIPTION:** Funds are budgeted to rehabilitate TMWA production wells as required. Typically for subgrade rehabilitation efforts, five to six wells are inspected, tested and evaluated every year to determine if rehabilitation is required. Typical subgrade rehab activities include but are not limited to pump and pump column pipe replacements; rehabilitation of well casing and screen; and other enhancements to maintain well function and capacities. Spending in fiscal years 2025-2029 will include improvements at several wells to provide general above grade well equipment and building and/or electrical upgrades. Some of the spending will go towards converting an oil lubed shaft vertical turbine to water lubed and eliminate any standing oil in the well. TMWA has over 90 production wells operating throughout the water system. TMWA relies on these wells to provide drought and emergency supply and as a supplemental source to meet peak demands on the water system.

**SCHEDULE:** Wells targeted for rehabilitation improvements in FY 2025 include 4th Street Well, Lakeside Well and STMGID 6 Well.



## Ground Water Supply Improvements Double Diamond 5 and Equipping

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Developer Fees	Double Diamond 5 and Equipping	—	—	—	—	80	80

**PROJECT DESCRIPTION:** Construct pumping facilities for the existing Double Diamond Well 5 including the pump house building, electrical power, pump/motor and valves and piping to provide an additional 1,200 gallons per minute of peak period supply to the Double Diamond area. The project also includes construction of a blending main between Double Diamond Wells 4 and 5.

**SCHEDULE:** Based on current growth rates, it is anticipated that the additional capacity from the new well will be needed in the summer of FY 2029.





## Ground Water Supply Improvements Callamont Well South Equipping

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Developer Fees	Callamont Well South Equipping	—	—	—	100	1,900	2,000

**PROJECT DESCRIPTION:** Construct pumping facilities for one of the existing Callamont wells in the Mt. Rose system including the pump house building, electrical power, pump/motor and valves and piping to provide an additional 500 gallons per minute of peak period supply to the area.

**SCHEDULE:** This project is currently scheduled for construction in FY 2029, but may be constructed sooner (or later) depending on the actual schedule for the proposed 210 unit Callamont residential development.



## Ground Water Supply Improvements Air Guard Well Replacement Equipping

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Air Guard Well Replacement Equipping	—	—	—	—	2,000	2,000

**PROJECT DESCRIPTION:** Replacement of the Air Guard Well in Stead was necessary to reduce sanding and provide additional capacity to the Stead system. The new/replacement well was drilled and constructed in FY 2016. Test pumping indicates the new well will have a capacity of about 2,500 gallons per minute which is twice the capacity of the old well. The budget for FY 2029 is for constructing the pumping facilities including the well building, pump and motor, valves and piping, electrical and controls, etc.

**SCHEDULE:** The pumping facilities are scheduled for construction in FY 2029.



## Ground Water Supply Improvements Lemmon Valley Well 8 Replacement

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Lemmon Valley Well 8 Replacement	—	800	2,500	—	—	3,300

**PROJECT DESCRIPTION:** The existing Lemmon Valley 8 Well has been in service since 1974, making it one of the older wells in the East Lemmon Valley system. The existing well casing and screens show signs of significant corrosion. With the potential for a well casing failure, TMWA intends to drill and equip a replacement well on the existing well property. In addition, the replacement well is expected to have similar construction while producing at least 20 percent more capacity than the original Lemmon Valley 8 Well. The additional capacity will provide supply to support base load supplied from the Fish Springs groundwater system.

**SCHEDULE:** Well drilling will occur in FY 2026 and well equipping in FY 2027.





## Ground Water Supply Improvements Well Fix & Finish

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Well Fix and Finish	350	350	350	350	350	1,750

**PROJECT DESCRIPTION:** Equipment improvements are expected to bring existing wells up to modern standards, including antiquated equipment replacements and improvements for water quality purposes. This project includes improvements to sodium hypochlorite rooms, pump to waste lines and drainage improvements. It also includes well retrofit for recharge where needed.

**SCHEDULE:** Projects are identified and prioritized on an annual basis.



## Ground Water Supply Improvements Brush Well Replacement

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Brush Well Replacement	1,200	—	—	—	—	1,200

**PROJECT DESCRIPTION:** The Brush Well was replaced in FY 2019. Well equipping is currently underway, but due to long lead times for certain electrical gear, completion and startup of the well are now expected in the summer of 2024.

**SCHEDULE:** Equipping is scheduled to be completed in FY 2025.





## Ground Water Supply Improvements

### Spring Creek 8 Well Equipping

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Spring Creek 8 Well Equipping	—	—	—	1,000	1,000	2,000

**PROJECT DESCRIPTION:** The Spring Creek 8 production well was replaced in FY 2019. The next phase for this site involves equipping the well for production, which is scheduled to take place in FY 2028.

**SCHEDULE:** Well equipping is scheduled to begin in FY 2028.



## Ground Water Supply Improvements Well Head TTHM Mitigation

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates / Sustainability Fees	Well Head TTHM Mitigation	500	—	500	—	500	1,500

**PROJECT DESCRIPTION:** Planning, permitting and implementation of tank mixers and ventilation equipment technologies to reduce disinfection byproduct (DBP) formation in recharged water and receiving groundwater.

**SCHEDULE:** Other technologies will be implemented at key recharge well sites in subsequent years based on priority.



## Ground Water Supply Improvements Callamont Well North Equipping

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Developer Fees	Callamont Well North Equipping	—	—	100	1,900	—	2,000

**PROJECT DESCRIPTION:** Construct pumping facilities for the remaining existing Callamont well in the Mt. Rose system including the pump house building, electrical power, pump/motor and valves and piping to provide an additional 500 gallons per minute of peak period supply to the area.

**SCHEDULE:** This project is currently scheduled for construction in FY 2028, but may be constructed sooner (or later) depending on the actual schedule for the proposed 210 unit Callamont residential development.





## Ground Water Supply Improvements Spring Creek Well 10 - Donovan

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Developer Fees	Spring Creek Well 10 - Donovan	1,500	1,000	—	—	—	2,500

**PROJECT DESCRIPTION:** The project involves construction and equipping of a new production well located just south of Indian Sage Court in Spanish Springs Valley. TMWA owns a 6,000 square foot parcel at this location where a test well was previously constructed but will need access and pipeline/utility easements. It is anticipated that the new well will produce up to 500 gallons per minute of new supply for the area.

**SCHEDULE:** This project schedule assumes the new well is drilled and constructed in FY 2025 and the pumping facilities are constructed in FY 2026.



## Ground Water Supply Improvements Fish Springs Ranch TDS Monitoring Wells

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Fish Springs Ranch TDS Monitoring Wells	250	—	—	—	—	250

**PROJECT DESCRIPTION:** This project involves installing a network of wells that will monitor TDS concentrations and vertical gradients near the Fish Springs Ranch production wellfield in Honey Lake Valley. These monitoring locations will provide critical water quality information associated with increased groundwater production at Fish Springs Ranch. Allocated funds will be utilized to drill and construct three nested monitoring wells completed to approximately 450-feet below land surface.

**SCHEDULE:** Design and construction for the project is scheduled to be completed in FY 2025.





## Ground Water Supply Improvements Fish Springs Ranch Geophysics/Drilling Project

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates/Reimbursements	Fish Springs Ranch Geophysics/Drilling Project	300	—	—	—	—	300

**PROJECT DESCRIPTION:** An airborne geophysical survey and subsequent drilling program will be conducted to confirm and/or refine hydraulic characteristics in Honey Lake Valley. The results from the airborne survey will be utilized to identify locations for new monitoring wells, which will validate the aquifer materials identified by the survey. This information will then be used to validate and refine aquifer parameters in the groundwater model that TMWA uses to manage resources in Honey Lake Valley.

**SCHEDULE:** This work will be conducted in FY 2025.



## Ground Water Supply Improvements Spring Creek 9 (Spring Creek 4 Replacement)

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Spring Creek Well 9 (Spring Creek 4 Replacement)	1,700	1,500	1,000	—	—	4,200

**PROJECT DESCRIPTION:** The project involves redrilling and equipping of a new production well in Spanish Springs Valley, located north of the intersection of La Posada Dr. and La Posada Ct (pending land approvals). The well will be a dual purpose ASR/Production Well and it is anticipated that the new well will produce up to 1,500 GPM with about one third of the capacity bringing new supply to the area.

**SCHEDULE:** Drilling and installation will be in FY 2025 and equipping completed in FY 2027.





## Ground Water Supply Improvements STMGID Well 1 Re-Drill and Equipping

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	STMGID Well 1 Re-Drill and Equipping	1,200	500	1,500	500	—	3,700

**PROJECT DESCRIPTION:** This project involves the complete replacement of STMGID well 1. Recent rehabilitation work on the production well indicated the screens have deteriorated enough to allow sediment and gravel pack to pass through. The well is a critical groundwater supply asset as it currently accounts for approximately 24% of the max day demand in STMGID Tank Zone 1.

**SCHEDULE:** The well is estimated to be drilled in FY 2025 and constructed in FY's 2026-2028.





## Ground Water Supply Improvements Boomtown 13 Well

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Boomtown 13 Well	—	500	—	2,000	—	2,500

**PROJECT DESCRIPTION:** The project involves the drilling and equipping of a new production well in Verdi, located adjacent the Boomtown billboard. This well is anticipated to support the peak day demand for future development in the area.

**SCHEDULE:** The well is estimated to be drilled in FY 2026 and constructed in FY 2028.



## Ground Water Supply Improvements Spring Creek 2 Re-drill

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Spring Creek 2 Re-drill	—	—	800	—	2,000	2,800

**PROJECT DESCRIPTION:** The casing material for the existing Spring Creek 2 Production well was recently found to be compromised during well rehabilitation activities. A new well will be re-drilled and constructed with superior materials and a better design to allow for future maintenance and better well rehabilitations. This will provide well longevity and additional groundwater redundancy for the Spanish Springs system.

**SCHEDULE:** The re-drill is currently scheduled for FY 2027. Prioritization for this well will be analyzed each FY moving forward.



## Ground Water Supply Improvements

### Lightning W 2 Re-drill

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Lightning W 2 Re-drill	—	—	800	—	2,000	2,800

**PROJECT DESCRIPTION:** The existing production well Lightning W2 was poorly designed and constructed. The current condition of the well does not allow for proper maintenance and rehabilitation of the production well due to a shallow, small diameter sleeve that was permanently installed. A new well will be re-drilled and constructed with superior materials and a better design to facilitate future maintenance and better well rehabilitations. This will ensure well longevity and provide additional groundwater redundancy for the Lightning W system.

**SCHEDULE:** The re-drill is currently scheduled for FY 2027. Prioritization for this well will be analyzed each FY moving forward.





## Ground Water Supply Improvements Desert Springs 5 Production Well

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Desert Springs 5 Production Well	—	—	—	800	—	800

**PROJECT DESCRIPTION:** An exploration well drilled and tested on the west side of Pyramid Highway in 2023 found a sufficient quantity and quality of groundwater to supply the planned Nitrate Treatment Plant. A large-diameter production well will be drilled, tested, and equipped to replace aging wells and augment supplies in Spanish Springs Valley.

**SCHEDULE:** This work is scheduled for FY 2028.



## Ground Water Supply Improvements

### Desert Springs 6 Exploration Well and Testing

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Desert Springs 6 Exploration Well and Testing	—	—	—	350	750	1,100

**PROJECT DESCRIPTION:** This project will investigate a possible production well location on the east side of Pyramid Highway to supply water for the planned Nitrate Treatment Plant. An exploratory drilling program, featuring a small-diameter boring and exploration well, will characterize aquifer geology and water quality before drilling a large-diameter production well to replace aging wells and augment supplies in Spanish Springs Valley.

**SCHEDULE:** This work is scheduled for FY 2028 with a possible equipping in 2029.



## TREATMENT PLANT IMPROVEMENTS

### Summary

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Chalk Bluff Treatment Plant Improvements	360	350	525	425	425	2,085
2	Customer Rates	Chalk Bluff Sedimentation Rehabilitation	—	—	700	—	—	700
1	Customer Rates	Chalk Bluff Clearwell 1 Rehabilitation	300	—	—	—	—	300
1	Customer Rates	Chalk Bluff Clearwell 2 Rehabilitation	200	1,500	—	—	—	1,700
1	Customer Rates	Chalk Bluff HVAC Improvements	75	1,000	—	—	—	1,075
1	Customer Rates	Chalk Bluff 25K Power Reliability and Safety Improvements	100	650	—	—	—	750
2	Customer Rates	Chalk Bluff Soda Ash Reliability Upgrade	50	—	350	—	—	400
1	Customer Rates	Glendale Treatment Plant Improvements	375	325	405	360	455	1,920
1	Customer Rates	Glendale HVAC Improvements	250	—	—	—	—	250
2	Customer Rates	Mt Rose Treatment Plant Efficiency Improvements	450	—	—	—	—	450
1	Customer Rates	Chalk Bluff Filter Underdrains	1,200	—	—	—	—	1,200
2	Customer Rates	Glendale Filter Underdrains	—	500	3,500	—	—	4,000
1	Customer Rates	Orr Ditch Pump Station Rehabilitation and Hydro Facility	11,000	—	—	—	—	11,000
1	Customer Rates	Truckee Canyon Water Treatment Improvements	20	10	10	20	60	120
1	Customer Rates	Lightning W Treatment Improvements	10	10	10	10	165	205
1	Customer Rates	SCADA Rehabilitation / Plant Operating Software	1,000	1,000	750	750	750	4,250
2	Customer Rates	Longley Water Treatment Plant Retrofit	—	250	500	3,500	1,500	5,750



Truckee Meadows Water Authority FY 2025-2029 Capital Improvement Plan

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates/Grants	Spanish Springs Nitrate Treatment Facility	500	500	15,000	14,000	5,000	35,000
2	Customer Rates	Glendale Sand Yard Improvements	430	—	—	—	—	430
1	Customer Rates	Chalk Bluff Effluent Reservoir Outlet Repairs	100	700	—	—	—	800
1	Customer Rates	Chalk Bluff Screening Facility Rehabilitation and Upgrades	200	1,000	—	—	—	1,200
1	Customer Rates	Chalk Bluff Electrical System Upgrades	—	—	250	—	—	250
<b>Subtotal Treatment Improvements</b>			<b>16,620</b>	<b>7,795</b>	<b>22,000</b>	<b>19,065</b>	<b>8,355</b>	<b>73,835</b>

**Project Locations:** Map of all *Treatment Plant Improvements* projects are highlighted in the following map.

# Truckee Meadows Water Authority FY 2025-2029 Capital Improvement Plan



## Treatment Plant Improvements

### Chalk Bluff Treatment Plant Improvements

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Chalk Bluff Treatment Plant Improvements	360	350	525	425	425	2,085

**PROJECT DESCRIPTION:** The Chalk Bluff Water Treatment Plant is over 30 years old and requires ongoing rehabilitation work to remain fully operational. This spending is classified as necessary due to the criticality of maintaining plant operations during rehabilitation work. Plant improvements include, but are not limited to: plate settler inspections, valve and instrument replacement, filter media replacement, UPS upgrades, water treatment solids removal improvements, influent water treatment train improvements, additional finished water isolation valves, flow meter improvements and safety improvements.

**SCHEDULE:** Major projects and timelines include flow meter, actuator and pump replacements as necessary when older equipment is no longer supported, implementing redundant chemical feed process improvements, replacing antiquated instruments and analyzers to ensure treated water quality, improving finished water clearwell isolation valves to maintain treatment plant production during maintenance activities, enhancing uninterruptible power supply electrical feeds to maintain treatment during power events, incorporating improved rapid mixer solutions to ensure proper water treatment and making improvements to the pre-settling basins to better manage treatment plant raw water solids.



## Treatment Plant Improvements Chalk Bluff Sedimentation Rehabilitation

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Chalk Bluff Sedimentation Rehabilitation	—	—	700	—	—	700

**PROJECT DESCRIPTION:** This project involves replacing all 6 solids collection system mechanisms with upgraded units to enhance the reliability of the sedimentation system at the Chalk Bluff Water Treatment Plant.

**SCHEDULE:** Improvements are scheduled for FY 2027.





## Treatment Plant Improvements

### Chalk Bluff Clearwell 1 Rehabilitation

**FUNDING TIMELINE:**

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Chalk Bluff Clearwell 1 Rehabilitation	300	—	—	—	—	300

**PROJECT DESCRIPTION:** In FY 2024, inside of Clearwell 1 was rehabilitated. The outside roof lining has reached its lifespan and will be replaced.

**SCHEDULE:** The improvements are scheduled for FY 2025.



## Treatment Plant Improvements Chalk Bluff Clearwell 2 Rehabilitation

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Chalk Bluff Clearwell 2 Rehabilitation	200	1,500	—	—	—	1,700

**PROJECT DESCRIPTION:** This project includes inspection of the Clearwell in FY 2025 and anticipated rehab in winter of FY 2026. Rehab will include epoxy coating concrete support columns, caulk joint replacement & improvement for all expansion joints, vertical extension of the concrete baffle wall, full replacement of the baffle wall curtains, roof curb repair as needed, and other misc. incidental repairs.

**SCHEDULE:** The improvements are scheduled for FY 2026.





## Treatment Plant Improvements

### Chalk Bluff HVAC Improvements

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Chalk Bluff HVAC Improvements	75	1,000	—	—	—	1,075

**PROJECT DESCRIPTION:** The HVAC equipment at Chalk Bluff's main operations building is nearing its useful life and needs to be replaced. Other equipment throughout the facility will need Controls upgrades due to outdated hardware.

**SCHEDULE:** Design is anticipated for FY 2025 and construction in FY 2026.



## Treatment Plant Improvements

### Chalk Bluff 25K Power Reliability and Safety Improvements

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Chalk Bluff 25K Power Reliability and Safety Improvements	100	650	—	—	—	750

**PROJECT DESCRIPTION:** The Chalk Bluff 25K power loop is protected with fused disconnect junctions throughout the facility. In a recent outage, we discovered that the type of fuses used on this system is no longer supported and has limited availability with unreasonable lead times. This project will include upgrading those connections with the relatively new industry standard. Additionally, this project will involve adding protection relays to the electrical system to lower the arc-flash safety risk of the equipment.

**SCHEDULE:** This project is in design and is anticipated to go to construction in FY 2025.





## Treatment Plant Improvements

### Chalk Bluff Soda Ash Reliability Upgrade

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Chalk Bluff Soda Ash Reliability Upgrade	50	—	350	—	—	400

**PROJECT DESCRIPTION:** This project includes adding redundancy and reliability to the soda ash system at Chalk Bluff. Soda ash is critical to the process and the maintenance of this system has continued to group over the past few years.

**SCHEDULE:** Preliminary Design Report Scheduled for FY 2025 with modifications scheduled for FY 2027. Cost for FY 2027 will be updated once the Preliminary Design Report identifies the full scope of the project.



## Treatment Plant Improvements

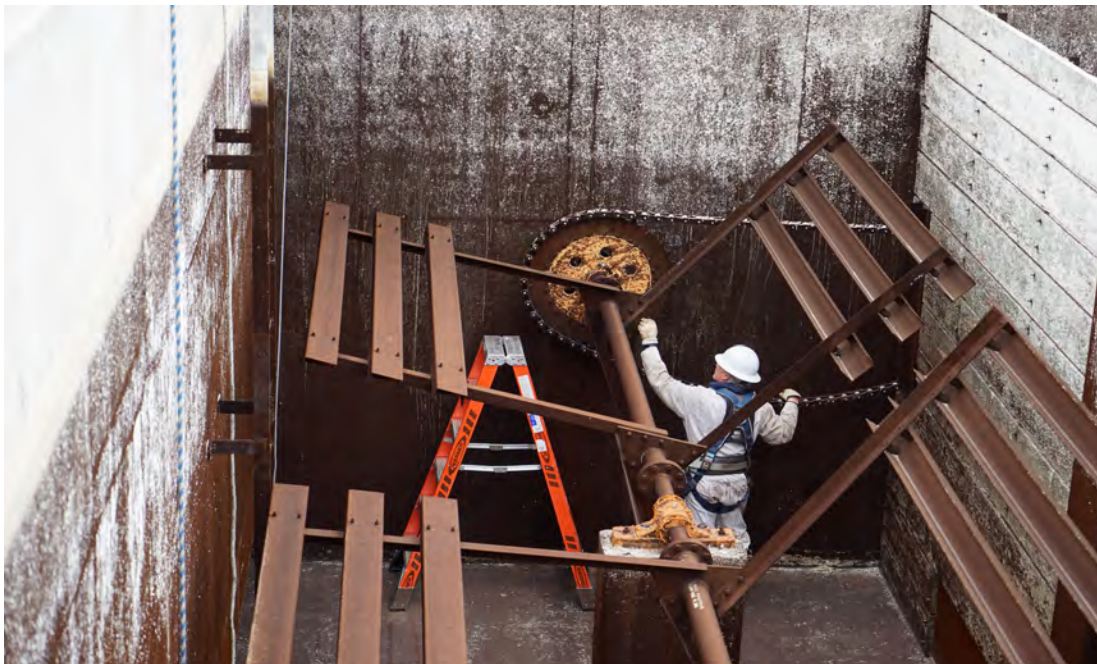
### Glendale Treatment Plant Improvements

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Glendale Treatment Plant Improvements	375	325	405	360	455	1,920

**PROJECT DESCRIPTION:** The Glendale Water Treatment Plant is over 40 years old and remains a significant piece of the water supply portfolio by operating 24/7 typically during the months of April through October. Glendale plays an important role due to its availability to treat off-river water supplies, such as groundwater wells that cannot pump straight to the distribution system. This spending is classified as necessary due to the criticality of maintaining plant operations. Plant improvements include, but are not limited to, plate settler inspections, valve and instrument replacement, Trac-Vac improvements, flow meter improvements, treatment chemical upgrades and maintenance storage/shop upgrades.

**SCHEDULE:** Instrumentation upgrades will continue within the next five years as obsolete instruments are no longer supported by suppliers. Filter media replacement will occur when yearly filter media evaluation indicates that replacement will soon be necessary. Since the Glendale plant is used seasonally, most work will continue over the course of the five-year CIP and during the periods that the plant is not operating.





## Treatment Plant Improvements

### Glendale HVAC Improvements

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Glendale HVAC Improvements	250	—	—	—	—	250

**PROJECT DESCRIPTION:** The HVAC equipment at Glendale is outdated and beginning to fail. The two basement air handler units (AHUs), the AHU in the Chemical Storage Building, and the Lab HVAC systems require replacement and control upgrades due to outdated hardware.

**SCHEDULE:** Design and construction are scheduled for FY 2025.





## Treatment Plant Improvements

### Mt Rose Treatment Plant Efficiency Improvements

**FUNDING TIMELINE:**

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Mt Rose Treatment Plant Efficiency Improvements	450	—	—	—	—	450

**PROJECT DESCRIPTION:** This project contains several efficiency and remote operations improvements identified during startup and testing of the Mt. Rose Water Treatment Plant (MRWTP). One larger task is adding a permanent air compressor to the creek diversion backwash cycle to support remote operations, use less power and disturb less wildlife by using air for scour instead of pumping water through the screens for backwash. The other improvements include various flow measurement and process control improvements to make remote operations more feasible by reducing on site operations labor hours and reducing downtime.

**SCHEDULE:** Improvements are scheduled for FY 2025.



## Treatment Plant Improvements

### Chalk Bluff Filter Underdrains

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Chalk Bluff Filter Underdrains	1,200	—	—	—	—	1,200

**PROJECT DESCRIPTION:** The dual media filters at Chalk Bluff are nearing the end of its useful life and maintenance and/or repairs are needed on filters that have experienced recent underdrain performance issues. An engineering evaluation of the filters has been completed and an entire replacement of one or more filter underdrains is recommended.

**SCHEDULE:** Replacements of the underdrains are scheduled for FY 2025.



## Treatment Plant Improvements

### Glendale Filter Underdrains

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Glendale Filter Underdrains	—	500	3,500	—	—	4,000

**PROJECT DESCRIPTION:** The dual media filters at Glendale are nearing the end of its useful life and maintenance and/or repairs are needed on filters that have experienced recent underdrain performance issues. An engineering evaluation of the filters has been completed and an entire replacement of one or more filter underdrains is recommended.

**SCHEDULE:** Due to cost and operational complexities associated with taking a filter out of service, this will be a multi-year effort beginning with design and bidding in FY 2026 and replacements taking place in FY 2027.



## Treatment Plant Improvements

### Orr Ditch Pump Station Rehabilitation and Hydro Facility

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Orr Ditch Pump Station Rehabilitation and Hydro Facility	11,000	—	—	—	—	11,000

**PROJECT DESCRIPTION:** This project will increase redundancy and reliability by enhancing the Truckee River source of supply to the Chalk Bluff Water Treatment Plant. Currently, there are very limited options to facilitate repairs or conduct preventative maintenance due to the location and arrangement of the intake structure and wet well. The project design will include modifying the existing proprietary wet well submersible pump design into a pedestal-style vertical turbine pump arrangement with non-submerged motors, the construction of a building over the top of the wet well to increase security and allow a safer means of performing maintenance activities, and incorporate a system to eliminate silting issues within the intake structure. During periods of low demand, the Highland Canal has available capacity to bring water to the Chalk Bluff Facility. An existing pipeline brings water from the river via the Orr Ditch Pump Station up to Chalk Bluff. During winter months, excess water from the Highland Canal can be sent down the hill to the pump station to generate hydroelectric power that can be used at the facility to offset power costs during those months.

**SCHEDULE:** Construction commenced in FY 2024 and is scheduled to be completed in FY 2025.





## Treatment Plant Improvements

### Truckee Canyon Water Treatment Improvements

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Truckee Canyon Water Treatment Improvements	20	10	10	20	60	120

**PROJECT DESCRIPTION:** The current treatment system which removes arsenic, iron, and manganese consists of a greensand filter system and an evaporation pond for backwash water with a total capacity of about 100 gallons per minute. Scheduled improvements may include the addition of a polymer feed system to improve filter performance, fine tuning of the treatment process to reflect chemical changes in the raw water and replacement of miscellaneous components and control upgrades.

**SCHEDULE:** Expenditures in FY's 2025-2029 are contingent spending related to treatment efficiency and for chemical changes in the raw water.





## Treatment Plant Improvements

### Lightning W Treatment Improvements

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Lightning W Treatment Improvements	10	10	10	10	165	205

**PROJECT DESCRIPTION:** The existing treatment process consists of two ion exchange resin pressure vessels to remove uranium. Previous work included change out/replacement of the filter media, disposal of the spent media. The remaining work includes miscellaneous improvements to the building that houses the treatment equipment.

**SCHEDULE:** The FY 2029 work includes media exchange.



## Treatment Plant Improvements

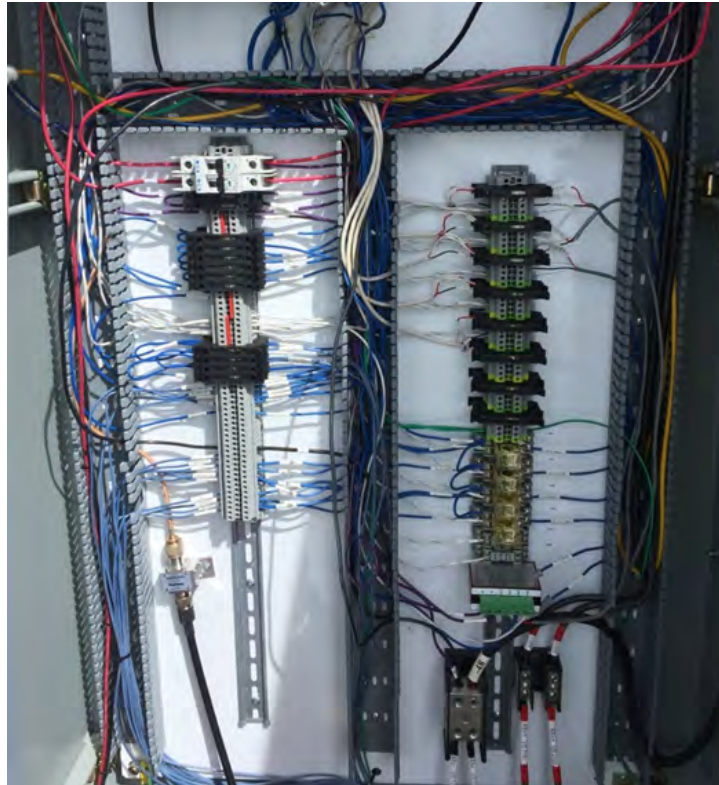
### SCADA Rehab/Plant Operating Software

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	SCADA Rehabilitation / Plant Operating Software	1,000	1,000	750	750	750	4,250

**PROJECT DESCRIPTION:** SCADA (Supervisory Control and Data Acquisition) is the system by which TMWA monitors, records and controls the water system inputs, outputs, flows and pressures. Data acquired by these system controls are primarily monitored at the treatment plants, but the system equipment and technology are spread throughout the water system infrastructure. Much of the technology is approaching obsolescence and needs to be replaced with emphasis on standardization of programmable logic controllers (PLC) and other equipment. Therefore, TMWA decided on a systematic approach to updating the equipment and operating software starting in fiscal year 2015 with telemetry improvement in the ensuing four years to convert to wireless transmission of data feeds where possible.

**SCHEDULE:** The improvements and replacements of the equipment and operating software will continue through FY 2029.



## Treatment Plant Improvements

### Longley Water Treatment Plant Retrofit

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Longley Water Treatment Plant Retrofit	—	250	500	3,500	1,500	5,750

**PROJECT DESCRIPTION:** This project will include the determination of what improvements and costs would be needed to convert the existing Longley Lane Water Treatment Plant from a micro filtration process to a greensand arsenic/iron/manganese treatment process.

**SCHEDULE:** Planning and permitting to be completed in FY 2026. Design is scheduled for FY 2027 and construction is scheduled to begin in FY 2028 completing in FY 2029.





## Treatment Plant Improvements

### Spanish Springs Nitrate Treatment Facility

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates/ Grants	Spanish Springs Nitrate Treatment Facility	500	500	15,000	14,000	5,000	35,000

**PROJECT DESCRIPTION:** Initiation of planning, permitting, site acquisition and design for a 3 MGD biological water treatment process to treat several groundwater wells in Spanish Springs that are out of service due to elevated nitrate and arsenic. Treatment is required to maintain and restore the service capacity of the wells.

TMWA completed the operation and testing of a 5 GPM pilot treatment plant in 2018. Biological treatment of nitrate in potable water is currently not permitted in Nevada. TMWA, working with Carollo Engineers, UNR and WaterStart, has evaluated this innovative technology and determined it to be a cost-effective treatment solution compared to traditional, high cost alternatives such as ion exchange.

**SCHEDULE:** Planning, permitting, site acquisition and design was conducted in FY 2023 continuing through FY 2026 with construction scheduled to begin in FY2027.





## Treatment Plant Improvements Glendale Sand Yard Improvements

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Glendale Sand Yard Improvements	430	—	—	—	—	430

**PROJECT DESCRIPTION:** This Project is for adding a metal three sided building over the trench materials bins at Glendale. This will ensure the material stays in a usable conditions during emergency leak repairs. The project also includes improvements to the site drainage and security of the facility.

**SCHEDULE:** This project is currently in design and construction is scheduled for FY 2025.



## Treatment Plant Improvements

### Chalk Bluff Effluent Reservoir Outlet Repairs

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Chalk Bluff Effluent Reservoir Outlet Repairs	100	700	—	—	—	800

**PROJECT DESCRIPTION:** A few years ago, the 72" effluent pipe out of the Clearwell at Chalk Bluff experienced a significant leak, prompting TMWA maintenance to perform an emergency repair to restore treatment operations. This project involves installing a permanent fix using a 72" flexible fitting.

**SCHEDULE:** Design is underway and the repair is scheduled for FY2026.



## Treatment Plant Improvements

### Chalk Bluff Screening Facility Rehabilitation and Upgrades

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Chalk Bluff Screening Facility Rehabilitation and Upgrades	200	1,000	—	—	—	1,200

**PROJECT DESCRIPTION:** This project involves replacing all the isolation slide gates in the screening facility, which have failed due to corrosion and wear. It also includes replacing mechanical bar screen #2, which has reached its useful lifespan, as well as installing a pipe to enable bypassing the screening facility in emergency operation scenario.

**SCHEDULE:** Design is underway and Construction is scheduled for FY 2025.





## Treatment Plant Improvements

### Chalk Bluff Electrical System Upgrades

**FUNDING TIMELINE:**

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Chalk Bluff Electrical System Upgrades	—	—	250	—	—	250

**PROJECT DESCRIPTION:** Evaluation of the existing electrical system at the Chalk Bluff Treatment Plant to identify the cause of main breaker power disruption when electrical faults occur in auxiliary plant equipment.

**SCHEDULE:** Electrical System upgrades are scheduled to be completed in FY 2027.





## DISTRIBUTION SYSTEM PRESSURE IMPROVEMENTS

### Summary

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Pressure Regulators Rehabilitation	2,000	1,200	750	750	750	5,450
2	Customer Rates	Land Acquisitions	150	150	150	250	250	950
2	Customer Rates	Desert Fox Standby Generator	—	—	150	—	—	150
2	Developer Fees	Longley Booster Pump Station / Double R Capacity Increase	—	250	1,500	—	—	1,750
3	Customer Rates	Pump Station Oversizing	250	250	250	250	250	1,250
3	Customer Rates	Pump Station Rebuilds, Rehabilitations	150	150	150	250	250	950
2	Customer Rates / Developer Fees	Sullivan 2 Booster Pump Station Replacement	—	—	250	2,750	—	3,000
3	Customer Rates	Mount Rose Well 3 Pump Station Improvements	—	—	—	250	800	1,050
3	Customer Rates	Standby Generator Improvements	100	100	100	150	150	600
1	Customer Rates	PSOM Standby Generator Additions	1,100	2,100	1,000	—	—	4,200
1	Customer Rates	Idlewild Booster Pump Station Improvements	—	—	400	1,200	1,800	3,400
2	Developer Fees	Raleigh to Fish Springs Booster Pump Station	—	—	—	300	2,750	3,050
2	Customer Rates / Developer Fees	South-West Pump Zone Consolidation Phase 1	400	—	—	330	3,660	4,390
2	Developer Fees	STMGID Tank 4 Booster Pump Station / Transmission Line	—	250	100	250	100	700
2	Developer Fees	Wildwood 2 Pressure Regulating Station SCADA Control	—	100	—	—	—	100
2	Customer Rates / Developer Fees	South-West Pump Zone Consolidation Phase 2	—	—	—	50	990	1,040
2	Customer Rates	Sierra Summit-Kohl's Zone Consolidation	—	—	400	400	—	800
2	Customer Rates	Wild Mustang Regulated Pressure Zone	—	—	50	400	—	450
2	Customer Rates	Thomas Creek 4 Pressure Regulating Station	—	300	—	—	—	300

Truckee Meadows Water Authority FY 2025-2029 Capital Improvement Plan

Priority	Funding Source	Description	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	CIP Total
2	Customer Rates	Kings Row 2 Booster Pump Station	—	—	200	500	2,300	3,000
2	Developer Fees	Spring Creek Tanks 3 and 4 Booster Pump Station Modifications	—	300	1,000	—	—	1,300
1	Developer Fees	Lazy 5 Low Head Pump Station and Mains	2,500	500	—	—	—	3,000
1	Customer Rates	South Hills Booster Pump Station Replacement	70	2,750	1,500	—	—	4,320
2	Customer Rates	Sierra Highlands Pressure Regulating Station	—	250	—	—	—	250
1	Customer Rates	7th Street High and Low Booster Pump Station Replacement	3,000	—	—	—	—	3,000
1	Customer Rates	STMGID NAC Deficiencies - Upper Toll	—	—	600	2,500	—	3,100
1	Reimbursements	Verdi 1 Booster Pump Station	2,500	500	—	—	—	3,000
1	Reimbursements	Santerra Quilici 1 Booster Pump Station	3,700	—	—	—	—	3,700
1	Reimbursements	Santerra Quilici 2 Booster Pump Station	—	—	200	3,000	—	3,200
1	Reimbursements	Silver Hills Booster Pump Station	—	3,000	—	—	—	3,000
1	Reimbursements	Ascente Booster Pump Station	2,500	—	—	—	—	2,500
1	Reimbursements	Talus Valley Booster Pump Station	2,900	800	—	—	—	3,700
2	Customer Rates	Tappan 2 Pressure Regulating Station	—	300	—	—	—	300
1	Customer Rates	Caughlin Train A Improvements	1,000	—	—	—	—	1,000
1	Reimbursements	Idlewild Irrigation Pump Station Improvements and Repair	170	200	—	—	—	370

Truckee Meadows Water Authority FY 2025-2029 Capital Improvement Plan

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Off River Supply Redundancy Improvements STM and NVS	—	500	—	1,000	—	1,500
<b>Sub-Total Pressure Improvements</b>			<b>22,490</b>	<b>13,950</b>	<b>8,750</b>	<b>14,580</b>	<b>14,050</b>	<b>73,820</b>

**Project Locations:** Map of all *Distribution System Pressure Improvements* projects are highlighted in the following map.

## Truckee Meadows Water Authority FY 2025-2029 Capital Improvement Plan





## Distribution System Pressure Improvements

### Pressure Regulators Rehabilitation

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Pressure Regulators Rehabilitation	2,000	1,200	750	750	750	5,450

**PROJECT DESCRIPTION:** Provision is made in the annual budget for major rehabilitation or complete reconstruction of several pressure regulators in the distribution system. TMWA has evaluated nearly 130 pressure regulator stations currently in service and has identified a number of pressure regulator stations requiring a certain amount of rehabilitation on an annual basis.

**SCHEDULE:** This is an ongoing rehabilitation project with about 130 individual stations identified as requiring rehabilitation or replacement over the next fifteen years.



## Distribution System Pressure Improvements Land Acquisitions

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Land Acquisitions	150	150	150	250	250	950

**PROJECT DESCRIPTION:** TMWA has over 120 pump stations in service. Many of these pump stations have 480 volt electrical services and are underground (below grade) in locations that allows for water infiltration. Many underground pump stations will be reaching the end of their service life, which will require replacement of the underground vault. Rather than replace the stations in place TMWA is planning to acquire other sites so these stations can be rebuilt above grade improving access and safety. Acquisition of sites may be time consuming and may not be purchased in a particular year.

**SCHEDULE:** This is an ongoing project with funding to allow purchase of 3-4 sites per year depending on location and market conditions.



## Distribution System Pressure Improvements Desert Fox Standby Generator

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Desert Fox Standby Generator	—	—	150	—	—	150

**PROJECT DESCRIPTION:** This project involves furnishing and installing a new standby generator and ATS to power one 50 Hp pump at the existing Desert Fox booster pump station. This alternative pumping capacity is needed when the existing 0.5 MG Spring Creek 5A Tank is out of service for recoating or other maintenance or if an extended power outage occurs in the area.

**SCHEDULE:** The installation of the generator is scheduled in FY 2027.





## Distribution System Pressure Improvements

### Longley Booster Pump Station/Double R Capacity Increase

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Developer Fees	Longley Booster Pump Station / Double R Capacity Increase	—	250	1,500	—	—	1,750

**PROJECT DESCRIPTION:** Increase pumping capacity at the existing Longley Lane Booster Pump Station and make improvements at the Double R Intertie to provide additional peak supply to the Double Diamond area. The improvements at the Longley pump station will consist of replacing one of the existing pumps/motors with a new higher capacity unit along with electrical and motor starter upgrades. Certain components of the Double R Intertie will be replaced to provide the additional capacity without excessive friction losses.

**SCHEDULE:** The improvements are scheduled for FY's 2026-2027. The improvements are necessary when supply through the Double R Intertie must exceed 5,400 gallons per minute.





## Distribution System Pressure Improvements Pump Station Oversizing

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
3	Customer Rates	Pump Station Oversizing	250	250	250	250	250	1,250

**PROJECT DESCRIPTION:** The project may consist of cash contributions towards construction of a new above ground booster pump stations. From time to time, TMWA may provide oversizing to certain booster stations that are development driven. Each is reviewed on a case by case basis.

**SCHEDULE:** The improvements are ongoing, but the schedule is subject to change based on development & operational needs.



## Distribution System Pressure Improvements Pump Station Rebuilds, Rehabilitations

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
3	Customer Rates	Pump Station Rebuilds, Rehabilitations	150	150	150	250	250	950

**PROJECT DESCRIPTION:** TMWA has over 120 pump stations in service. An amount is budgeted annually for rehabilitation of TMWA's older pump stations. Other pump stations may require pump, motor, and electrical upgrades. Budget for future years will allow TMWA to complete up to one above ground replacement project per year if suitable sites can be acquired. Otherwise, normal rehabilitation work will be performed per the priorities established by the study at a lower overall annual cost.

**SCHEDULE:** In FY 2025, TMWA will continue conducting condition assessments on our existing Booster Pump Stations (BPS) and preparing to reconstruct several booster stations above ground. Depending on land acquisition timing and rehabilitation priorities, we may replace the Scottsdale BPS, Kings Row 2 Pump Station, or other priority BPS identified in this year's evaluation.



## Distribution System Pressure Improvements

### Sullivan 2 Booster Pump Station Replacement

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates / Developer Fees	Sullivan 2 Booster Pump Station Replacement	—	—	250	2,750	—	3,000

**PROJECT DESCRIPTION:** The project involves construction of a new above grade pump station at the site of the existing Sullivan Tank on El Rancho. The new pump station will pump to the proposed Sun Valley 2 Tank tentatively located off of Dandini Drive near the TMCC/DRI complex. Completion of these facilities should allow the retirement of the existing Sun Valley 1 pump station.

**SCHEDULE:** Construction is scheduled to begin in FY 2028 to reflect delays in obtaining a tank site due to unknowns with the US 395 Connector Project.





**Distribution System Pressure Improvements  
Mount Rose Well 3 Pump Station Improvements**

**FUNDING TIMELINE:**

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
3	Customer Rates	Mount Rose Well 3 Pump Station Improvements	—	—	—	250	800	1,050

**PROJECT DESCRIPTION:** The project involves rehab of the building, removal of pipe and valves that will no longer be necessary following completion of the Mt. Rose Well 3 improvements and upgrades to electrical and control systems.

**SCHEDULE:** Construction is scheduled to begin in FY 2028.





## Distribution System Pressure Improvements Standby Generator Improvements

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
3	Customer Rates	Standby Generator Improvements	100	100	100	150	150	600

**PROJECT DESCRIPTION:** A number of TMWA pumps stations have backup generation in case of power failures. TMWA incorporates a contingency for replacement of a generator in case of failure or if the Washoe County Health District requires backup generation at a particular site. No spending will occur unless necessary. This spending does not include backup generation for new pump stations required by and paid for by growth.

**SCHEDULE:** No single project has been identified for the current 5-year CIP and no funds will be expended unless necessary.



## Distribution System Pressure Improvements PSOM Standby Generator Additions

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	PSOM Standby Generator Additions	1,100	2,100	1,000	—	—	4,200

**PROJECT DESCRIPTION:** In 2021, NV Energy began their efforts to de-risk their infrastructure during periods of high fire risk (high winds, low humidity). Those efforts culminated in the “Public Safety Outage Management” or “PSOM” events where NV Energy proactively de-energizes their grid for up to 72 hours per event. TMWA has initially responded by renting several large trailer mounted generators and modified various facilities to accept the electrical connections from these generators. This project will procure and install permanent generators for these sites: Caughlin 2 BPS, Caughlin 3 BPS, Caughlin 4 BPS, Mt. Rose 5 BPS and Well, US 40 BPS, Mae Anne 1 BPS, and Mt. Rose Tank 1 BPS.

**SCHEDULE:** TMWA will prioritize the Mae Anne, US 40, and Mt. Rose BPS' in FY 2025 and the balance of the stations in FY's 2026-2027. Due to land availability restrictions the Caughlin BPS' will be pushed. A review of the financial viability of continuing to rent the trailer mounted generators will occur prior to procurement.



## Distribution System Pressure Improvements Idlewild Booster Pump Station Improvements

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Idlewild Booster Pump Station Improvements	—	—	400	1,200	1,800	3,400

**PROJECT DESCRIPTION:** The project will replace existing pumps and motors at the Idlewild BPS Transfer Station to insure adequate and reliable emergency capacity. It is the only booster station that is capable of transferring water from the Highland Reservoir Zone to the Hunter Creek Reservoir Zone. The station was originally constructed as part of the Idlewild WTP, and was never designed specifically for the purpose that it is used for today. Improvements identified in the project include: Properly sizing new pumps and motors for today's application, upgrading antiquated electrical systems and HVAC systems and bringing building up to modern construction codes. Evaluations by TMWA indicated this was the most cost effective alternative to provide a redundant supply for the zone and allowed retirement of the old 24-inch transmission pipeline on Plumb Lane to the Hunter Creek Reservoir.

**SCHEDULE:** Design is scheduled for FY 2027 with construction scheduled to begin in FY 2028.





## Distribution System Pressure Improvements Raleigh to Fish Springs Booster Pump Station

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Developer Fees	Raleigh to Fish Springs Booster Pump Station	—	—	—	300	2,750	3,050

**PROJECT DESCRIPTION:** The project involves construction of a new pump station to pump water from the Raleigh Heights zone to the Fish Springs terminal tank when the Fish Springs Wells are off-line or if a main break occurs on the Fish Springs transmission line. In the future, there will be a number of customers served directly from the Fish Springs terminal tank; therefore, it is necessary to provide a secondary supply to maintain continuous water service.

**SCHEDULE:** Implementation will begin in FY 2028 and construction in FY 2029.





## Distribution System Pressure Improvements South-West Reno Pump Zone Consolidation Phase 1

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates / Developer Fees	South-West Pump Zone Consolidation Phase 1	400	—	—	330	3,660	4,390

**PROJECT DESCRIPTION:** The project includes a new high head booster pump station located on Lakeridge golf course property adjacent to Plumas; a new 12-inch suction pipeline from Lakeside Dr.; a high pressure transmission pipeline from the pump station across golf course property to Greensboro and McCarran Blvd.; and another 12-inch pipeline tie to the Ridgeview 1 pump zone. The completion of Phase 1 will allow the retirement of four existing below ground pump stations (Lakeside, Lakeridge, Plumas, Ridgeview 1).

**SCHEDULE:** Design of the improvements is scheduled to begin in FY 2025. Construction is scheduled for FY's 2028 - 2029.



**Distribution System Pressure Improvements**  
**STMGID Tank 4 Booster Pump Station / Transmission Line**

**FUNDING TIMELINE:**

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Developer Fees	STMGID Tank 4 Booster Pump Station / Transmission Line	—	250	100	250	100	700

**PROJECT DESCRIPTION:** The project includes a new booster pump station located near the STMGID Tank 4/5 site and approximately 6,000 feet of 12-inch discharge main to the Mt Rose Water Treatment Plant (WTP). The facilities will provide a supplemental source to the Mt Rose WTP that will back up plant production on the maximum day during drought and will also provide another source of supply for implementing conjunctive use in the area.

**SCHEDULE:** Design and construction of the pipeline and pressure regulating station will begin in FY 2026 and construction will continue in FY 2027. The design and construction of the pump station will begin in FY 2027 with final design and construction following in FY 2028. The need for the pump station may elevate based on an extended drought and source supply to the Mt. Rose WTP.



## Distribution System Pressure Improvements

### Wildwood Pressure Regulating Station/SCADA Control

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Developer Fees	Wildwood 2 Pressure Regulating Station SCADA Control	—	100	—	—	—	100

**PROJECT DESCRIPTION:** The project involves retrofitting an existing pressure regulating station to SCADA (remote) control to provide additional transfer capacity into the Mt Rose Tank 2 zone. It will be necessary to obtain electrical service to the existing vault; install a new PLC; and to equip the existing pressure regulating valve with solenoid control to allow the valve to be remotely operated from the Glendale control room.

**SCHEDULE:** The project is scheduled for FY 2026 but may be delayed or accelerated depending on the timing of growth and the need for the additional tank fill capacity.





## Distribution System Pressure Improvements South-West Pump Zone Consolidation Phase 2

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates / Developer Fees	South-West Pump Zone Consolidation Phase 2	—	—	—	50	990	1,040

**PROJECT DESCRIPTION:** The project is a continuation of Phase 1 and involves construction of additional water main to further integrate the new South-West Reno pump station and allow the retirement of one more existing underground pump station plus provide backup to two other pump zones.

**SCHEDULE:** Design of the facilities is scheduled to begin in FY 2028. Construction is scheduled to start in FY 2029.





## Distribution System Pressure Improvements Sierra Summit-Kohl's Zone Consolidation

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Sierra Summit-Kohl's Zone Consolidation	—	—	400	400	—	800

**PROJECT DESCRIPTION:** The project involves construction of a new pressure regulating station (PRS) at Old Virginia and Sutherland; a short main tie between the former STMGID Well 9 site and the distribution system; and about 950 feet of 8-inch main in Sutherland from the PRS to Sage Hill Road. The improvements will convert an area with very high distribution system pressures to the existing Kohl's Regulated Zone and would expand the regulated zone by consolidating the Kohl's, Walmart and Old Virginia 2 regulated pressure zones.

**SCHEDULE:** The project is scheduled for construction to begin in FY 2027.



## Distribution System Pressure Improvements Wild Mustang Regulated Pressure Zone

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Wild Mustang Regulated Pressure Zone	—	—	50	400	—	450

**PROJECT DESCRIPTION:** The project involves construction of a new pressure regulator station and approximately 750 linear feet of water main to create a new pressure zone in the Geiger Grade area of the South Truckee Meadows to reduce distribution system pressures in the area.

**SCHEDULE:** Design of the construction is scheduled to begin in FY 2027 followed by construction in FY 2028.



## Distribution System Pressure Improvements Thomas Creek 4 Pressure Regulating Station

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Thomas Creek 4 Pressure Regulating Station	—	300	—	—	—	300

**PROJECT DESCRIPTION:** The project involves construction of a new pressure regulator station and approximately 160 liner feet of water main to increase capacity to the Moonrise pressure zone. The increase in capacity will help with replenishing storage in the STMGID Tank and increase fire flow within the zone.

**SCHEDULE:** The project is scheduled for FY 2026.





## Distribution System Pressure Improvements Kings Row 2 Booster Pump Station

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Kings Row 2 Booster Pump Station	—	—	200	500	2,300	3,000

**PROJECT DESCRIPTION:** This project will replace the existing underground Kings Row 1 pump station with a new above ground pump station on TMWA property. The project is part of annual booster pump station rehabilitation/replacement program focused on reconstructing existing pump stations above grade.

**SCHEDULE:** Planning and design will occur in FY's 2027-2028 with construction scheduled in FY 2029.





## Distribution System Pressure Improvements

### Spring Creek Tanks 3 and 4 Booster Pump Station Modifications

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Developer Fees	Spring Creek Tanks 3 and 4 Booster Pump Station Modifications	—	300	1,000	—	—	1,300

**PROJECT DESCRIPTION:** This project will replace an existing 200 GPM pump with a new pump/motor rated for 1,800 GPM at the existing Spring Creek 3/4 Tanks site in Spanish Springs Valley. The existing regulated bypass will also be equipped for SCADA control. The improvements will provide redundant supply to the Desert Springs 3 and Spring Creek 6 tank zones.

**SCHEDULE:** Planning and design will occur in FY 2026 with construction scheduled in FY 2027.



## Distribution System Pressure Improvements Lazy 5 Low Head Pump Station & Mains

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Developer Fees	Lazy 5 Low Head Pump Station and Mains	2,500	500	—	—	—	3,000

**PROJECT DESCRIPTION:** The project involves construction of a new low head pump station located near the existing Lazy 5 Intertie in NE Sparks/Spanish Springs Valley along with suction and discharge mains. TMWA will need to acquire a parcel of land and pipeline easements out to the Pyramid Hwy. The project will increase TMWA’s ability to transfer surface water to the Spanish Springs Valley and may defer more costly groundwater treatment options to increase capacity for growth.

**SCHEDULE:** Construction scheduled to begin in FY 2025 with the project completing in FY 2026.



## Distribution System Pressure Improvements South Hills Booster Pump Station Replacement

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	South Hills Booster Pump Station Replacement	70	2,750	1,500	—	—	4,320

**PROJECT DESCRIPTION:** The project involves construction of a new, above grade booster pump station with genset; 3,700 liner feet of 16-inch main, 250 liner feet of 14-inch main and 2,300 linear feet of 12-inch main on Broken Hills Rd, Foothill Rd and Broili; a new Caribou pressure regulator station; and 9 each individual PRV'S on customer service lines.

**SCHEDULE:** Planning and design is scheduled to begin in FY 2025 and construction is scheduled to begin in FY 2026 with the project completing in FY 2027.





**Distribution System Pressure Improvements  
Sierra Highlands Pressure Regulating Station**

**FUNDING TIMELINE:**

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Sierra Highlands Pressure Regulating Station	—	250	—	—	—	250

**PROJECT DESCRIPTION:** The project involves construction of a new pressure regulator station located near the intersection of Sierra Highlands Drive and North McCarran Blvd. to provide a secondary/supplemental supply from the Mae Anne-McCarran zone to the Chalk Bluff zone.

**SCHEDULE:** Construction for the project is scheduled for FY 2026.





**Distribution System Pressure Improvements**  
**7th Street High & Low Booster Pump Station Replacement**

**FUNDING TIMELINE:**

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	7th Street High and Low Booster Pump Station Replacement	3,000	—	—	—	—	3,000

**PROJECT DESCRIPTION:** The project will replace 2 underground booster pump stations in the intersection of Keystone Avenue and 7th Street in Northwest Reno. The booster pump stations need rehabilitation and accessing them for maintenance is unsafe and requires major traffic control in the highly traveled intersection. TMWA has been in discussions with NDOT for purchasing a remnant parcel on 7th street east of Keystone Avenue and West of Vine Street.

**SCHEDULE:** Construction for the project is scheduled for FY 2025.



## Distribution System Pressure Improvements STMGID NAC Deficiencies - Upper Toll

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	STMGID NAC Deficiencies - Upper Toll	—	—	600	2,500	—	3,100

**PROJECT DESCRIPTION:** The project consists of main ties, hydrant installations and individual booster pump systems to be constructed in multiple locations in former STMGID service areas to correct NAC pressure and fire flow deficiencies. In order to correct deficiencies in the upper Toll Road area, it will be necessary to create a new higher pressure zone by constructing a new tank, booster pump station and approximately 6,300 linear feet of 12-inch main.

**SCHEDULE:** The new pressure zone on upper Toll Road will be constructed in FY 2028 subject to acquisition of the tank site property which may be private or on BLM property.





## Distribution System Pressure Improvements Verdi 1 Booster Pump Station

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Reimbursements	Verdi 1 Booster Pump Station	2,500	500	—	—	—	3,000

**PROJECT DESCRIPTION:** This booster pump station is part of the ‘backbone facilities’ necessary to bring more surface water to the Verdi area and meet planned/approved growth via various housing projects underway. The planned capacity is 3,500 gpm.

**SCHEDULE:** Construction is scheduled to begin in FY 2025.



## Distribution System Pressure Improvements Santerra Quillici 1 Booster Pump Station

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Reimbursements	Santerra Quillici 1 Booster Pump Station	3,700	—	—	—	—	3,700

**PROJECT DESCRIPTION:** This booster pump station will be located next to the Boomtown Tanks to provide service to the portions of Santerra Quillici project located higher in elevation than can be served by existing infrastructure. The planned capacity is 1,000 gpm.

**SCHEDULE:** Construction is scheduled for FY 2025.





## Distribution System Pressure Improvements Santerra Quillici 2 Booster Pump Station

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Reimbursements	Santerra Quillici 2 Booster Pump Station	—	—	200	3,000	—	3,200

**PROJECT DESCRIPTION:** This pump station will be located next to the Boomtown Tanks to provide service to the portions of Santerra Quillici project located higher in elevation than can be served by existing infrastructure. The planned capacity is 415 gpm.

**SCHEDULE:** Design and construction will occur in FY 2027 with construction in FY 2028.



## Distribution System Pressure Improvements Silver Hills Booster Pump Station

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Reimbursements	Silver Hills Booster Pump Station	—	3,000	—	—	—	3,000

**PROJECT DESCRIPTION:** The booster pump station will be located next to the Army Air well at the Reno Stead Airport to provide service to the Silver Hills project located to the west of the Airport and on either side of Red Rock Road. The planned capacity is 2,000 gpm.

**SCHEDULE:** Construction is scheduled for FY 2026.



## Distribution System Pressure Improvements

### Ascente Booster Pump Station

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Reimbursements	Ascente Booster Pump Station	2,500	—	—	—	—	2,500

**PROJECT DESCRIPTION:** The Ascente Pump Station will be located within the Ascente development in South Truckee Meadows. It will pump from the existing Mt. Rose 2 tank to the new Ascente Tank. The planned capacity will be 250 gpm but will also have fire pump capacity in the event of a tank outage. The pump station is located in a NV Energy PSOM (preventative maintenance outage management) area and will require a backup generator.

**SCHEDULE:** Design and Construction is scheduled for FY 2025.



**Distribution System Pressure Improvements  
Talus Valley Booster Pump Station**

**FUNDING TIMELINE:**

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Reimbursements	Talus Valley Booster Pump Station	2,900	800	—	—	—	3,700

**PROJECT DESCRIPTION:** The Talus Valley Development is the driver for this project. This booster pump station will add an additional 1,500 GPM supply to the Double Diamond pressure zone from the Sparks Gravity zone. This development needs 900 GPM and TMWA is upsizing the capacity to 4,000 GPM. No off-site improvements are included in this project.

**SCHEDULE:** Final Design and the start of Construction will take place in FY 2025 with an anticipated completion in FY 2026.





## Distribution System Pressure Improvements Tappan 2 Pressure Regulator System

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Tappan 2 Pressure Regulating Station	—	300	—	—	—	300

**PROJECT DESCRIPTION:** The project will provide the Tappan Reg zone with more redundancy and a second source of supply. The location is approximate and subject to easement acquisition and timing.

**SCHEDULE:** Planned for design/construction in FY 2026 if land acquisition timing allows.



## Distribution System Pressure Improvements Caughlin Train A Improvements

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Caughlin Train A Improvements	1,000	—	—	—	—	1,000

**PROJECT DESCRIPTION:** To enhance redundancy and reliability in this critical system, the A-train pumps and motors within Caughlin booster pump stations 2, 3, and 4 will be upsized. Additionally, improvements to address corrosion issues in these pump stations will be made.

**SCHEDULE:** Design and procurement is underway with the completion anticipated in FY 2025.



## Distribution System Pressure Improvements

### Idlewild Irrigation Pump Station Improvements and Repair

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Reimbursements	Idlewild Irrigation Pump Station Improvements and Repair	170	200	—	—	—	370

**PROJECT DESCRIPTION:** The Idlewild Irrigation Pump Station site along the Truckee River requires repair due to a retaining wall failure along the riverside. Additionally, the City of Reno is conducting a lining project for the Idlewild Park ponds, and TMWA is collaborating with the City to install an intake from the ponds to the pump station. If successful, this intake will eliminate the costly sanding issue the pump station encounters when operating from the current Truckee River intake.

**SCHEDULE:** Improvements are scheduled to begin in FY2025 and the full project is anticipated to continue into 2026.





## Distribution System Pressure Improvements Off River Supply Redundancy Improvements STM and NVS

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Off River Supply Redundancy Improvements STM and NVS	—	500	—	1,000	—	1,500

**PROJECT DESCRIPTION:** This project will connect the Fish Spring System in the North Valleys through a series of regulation stations into the Highland gravity zone.

**SCHEDULE:** This is in the planning phase and will likely be a phased design to begin in FY 2026 followed by construction in FY 2028.





## WATER MAIN DISTRIBUTION & SERVICE LINE IMPROVEMENTS

### Summary

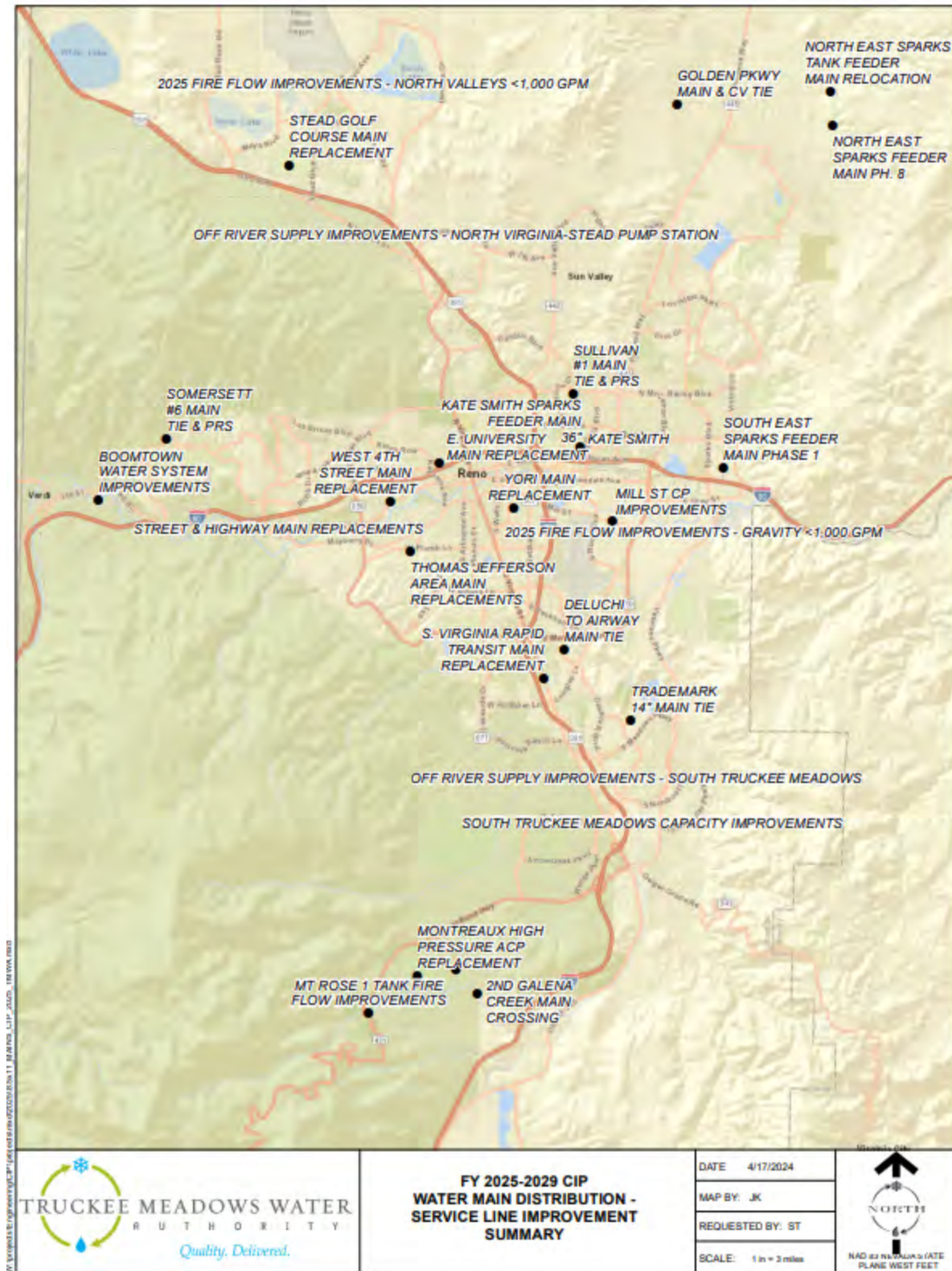
Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Street and Highway Main Replacements	4,000	5,000	5,000	5,000	5,000	24,000
1	Customer Rates	Golden Parkway Main and Check Valve Tie	40	150	—	—	—	190
1	Customer Rates	Yori and E. University Main Replacement	2,200	—	—	—	—	2,200
1	Customer Rates	Kate Smith Water Main Replacement Phase 1-3	1,900	2,800	200	—	—	4,900
1	Customer Rates	Kate Smith Sparks Feeder Main-36"	100	3,800	—	—	—	3,900
1	Customer Rates	Thomas Jefferson Area Main Replacements	1,800	2,000	—	—	—	3,800
1	Customer Rates	South Virginia Rapid Transit Main Replacement	2,000	—	—	—	—	2,000
2	Developer Fees	North-East Sparks Tank Feeder Main Relocation	—	975	—	—	—	975
2	Developer Fees	Trademark 14" Main Tie	—	470	—	—	—	470
2	Customer Rates	Mount Rose Tank 1 Fire Flow Improvements	—	400	570	—	—	970
2	Customer Rates / Developer Fees	Stead Golf Course Main Replacement	—	—	200	2,400	—	2,600
1	Developer Fees	North-East Sparks Feeder Main Phase 8	10	50	2,050	—	—	2,110
2	Developer Fees	Goldenrod Main	1,800	—	—	—	—	1,800
1	Developer Fees	Boomtown Water System Improvements	1,500	1,500	—	—	—	3,000
2	Customer Rates / Developer Fees	Sullivan 1 Main Tie and Pressure Regulating Station	—	—	100	650	—	750
2	Customer Rates	Montreux High Pressure ACP Replacement	100	1,000	1,200	—	—	2,300
2	Customer Rates	2nd Galena Creek Main Crossing	—	40	560	—	—	600
2	Customer Rates	Off-River Supply Improvements - South Truckee Meadows	—	—	50	1,050	—	1,100
2	Customer Rates	Off-River Supply Improvements - North Virginia-Stead Pump Station	—	400	—	—	—	400
2	Customer Rates	Somersett 6 Main Tie and Pressure Regulating Station	280	—	—	—	—	280
1	Customer Rates	2025 Fire Flow Improvements - Gravity <1,000 GPM	—	—	550	—	—	550
1	Customer Rates	2025 Fire Flow Improvements - North Valleys <1,000 GPM	—	—	950	—	—	950

Truckee Meadows Water Authority FY 2025-2029 Capital Improvement Plan

Priority	Funding Source	Description	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	CIP Total
2	Developer Fees	Deluchi to Airway Main Tie	—	—	450	—	—	450
1	Developer Fees	South-East Sparks Feeder Main Phase 1	—	—	—	50	4,450	4,500
1	Developer Fees	South Truckee Meadows Capacity Improvements	800	—	—	—	—	800
1	Customer Rates	West 4th Street Main Replacement	2,100	—	—	—	—	2,100
<b>Subtotal Water Main Distribution Improvements</b>			<b>18,630</b>	<b>18,585</b>	<b>11,880</b>	<b>9,150</b>	<b>9,450</b>	<b>67,695</b>

**Project Locations:** Map of all *Water Main Distribution Service Line Improvements* projects are highlighted in the following map.

# Truckee Meadows Water Authority FY 2025-2029 Capital Improvement Plan



## Water Main-Distribution Service Line Improvements Street and Highway Main Replacements

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Street and Highway Main Replacements	4,000	5,000	5,000	5,000	5,000	24,000

**PROJECT DESCRIPTION:** Provision is made each year for water main replacements in conjunction with repaving efforts by the City of Reno, City of Sparks, Washoe County and RTC. In addition to repaving projects, TMWA coordinates water main replacements with sewer main replacements in areas where TMWA also has older water lines. TMWA plans for up to \$5.0 million annually for these efforts, so that TMWA can capitalize on repaving projects planned by other entities. Anticipated spending in the out years is reflective of historical activity. Levels of spending can vary year to year and are difficult to predict.

**SCHEDULE:** Projects are identified and prioritized on an annual basis.





## Water Main-Distribution Service Line Improvements Golden Parkway Main and Check Valve Tie

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Golden Parkway Main and Check Valve Tie	40	150	—	—	—	190

**PROJECT DESCRIPTION:** This project will establish water system redundancy in the Spanish Springs area and includes the construction of 350 linear feet of 8-inch diameter main and an associated check valve adjacent to the Eagle Canyon Pressure Reducing Station (PRS).

**SCHEDULE:** Construction is scheduled for FY 2025.



## Water Main-Distribution Service Line Improvements Yori and E. University Main Replacement

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Yori and E. University Main Replacement	2,200	—	—	—	—	2,200

**PROJECT DESCRIPTION:** The project involves replacing approximately 5,000 linear feet of older cast iron pipe ahead of 2025 City of Reno street rehabilitation work. Includes railroad crossing at 8th and Record Street.

**SCHEDULE:** Construction is scheduled for FY 2025.



**Water Main-Distribution Service Line Improvements**  
**Kate Smith Water Main Replacement Phase 1-3**

**FUNDING TIMELINE:**

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Kate Smith Water Main Replacement Phase 1-3	1,900	2,800	200	—	—	4,900

**PROJECT DESCRIPTION:** This is a multi-phased project to replace the mains around the Kate Smith residential area ahead of the City of Sparks Kate Smith Road Rehab project. This includes main abandonment and service tie overs with minimal residential outages.

**SCHEDULE:** Design and construction is scheduled for FY's 2025-2027.



## Water Main-Distribution Service Line Improvements Kate Smith Sparks Feeder Main-36"

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Kate Smith Sparks Feeder Main-36"	100	3,800	—	—	—	3,900

**PROJECT DESCRIPTION:** Installation of approximately 1,500 linear feet of 36-inch ductile iron pipe on F Street from Rock Blvd to 19th Street and 19th Street from Prater Way to F Street. This work is in coordination with the City of Sparks Kate Smith School Area street reconstruction projects.

**SCHEDULE:** Construction is scheduled for FY 2026.





## Water Main-Distribution Service Line Improvements

### Thomas Jefferson Area Main Replacements

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Thomas Jefferson Area Main Replacements	1,800	2,000	—	—	—	3,800

**PROJECT DESCRIPTION:** Replacement of approximately 8,500 liner feet of older 4-inch, 6-inch and 8-inch cast iron mains. This work is in coordination with the City of Reno Thomas Jefferson, California and Sharon/Marsh road reconstruction projects.

**SCHEDULE:** Planning and design will be completed in FY 2025. Construction will be completed in FY 2026.



## Water Main-Distribution Service Line Improvements South Virginia Rapid Transit Main Replacement

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	South Virginia Rapid Transit Main Replacement	2,000	—	—	—	—	2,000

**PROJECT DESCRIPTION:** Replacement of a minimum 2,000 linear feet to a maximum of 5,100 linear feet of older 6-inch, 8-inch and 12-inch cast iron main. Final scope to be determined. This work is in coordination with RTC's Rapid Transit Project on South Virginia Street from Moana Lane to Plumb Lane.

**SCHEDULE:** Construction is scheduled for FY 2025.



## Water Main-Distribution Service Line Improvements North-East Sparks Tank Feeder Main Relocation

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Developer Fees	North-East Sparks Tank Feeder Main Relocation	—	975	—	—	—	975

**PROJECT DESCRIPTION:** The North-East Sparks Tank Feeder Main was constructed in 1988 within private easements several years prior to the construction of South Los Altos Parkway. The final alignment selected for South Los Altos Parkway does not follow the alignment of the tank feeder main. As a result, the tank feeder main now runs through developed properties next to buildings, under parking areas and at considerable depth in some locations. This situation presents potential problems for access to the pipe for maintenance and repair of the critical pipeline. This project will relocate approximately 3,000 linear feet of the 18-inch tank feeder main out into the public right-of-way in South Los Altos Parkway.

**SCHEDULE:** Design and the improvements are scheduled for FY 2026.





## Water Main-Distribution Service Line Improvements Trademark 14" Main Tie

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Developer Fees	Trademark 14" Main Tie	—	470	—	—	—	470

**PROJECT DESCRIPTION:** This project involves construction of approximately 350 linear feet of 14-inch water main from Trademark to South Meadows Parkway, including crossing of an existing major drainage channel. The project will increase transmission capacity in the Double Diamond system to meet the needs of growth.

**SCHEDULE:** Construction is scheduled to be completed in FY 2026.





## Water Main-Distribution Service Line Improvements

### Mount Rose Tank 1 Fire Flow Improvements

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Mount Rose Tank 1 Fire Flow Improvements	—	400	570	—	—	970

**PROJECT DESCRIPTION:** The project involves reconstruction of an existing pressure regulator station at Mt. Rose Tank 1, a new pressure regulator station on Blue Spruce and approximately 3,100 linear feet of 10-inch water main on Blue Spruce and Douglas Fir to increase system pressure and fire flow capacity to existing customers in Galena Forest Estates. Existing fire flows are currently less than 1,000 GPM in the area.

**SCHEDULE:** Planning and design will be completed in FY 2026. Construction will occur in FY's 2026-2027.



## Water Main-Distribution Service Line Improvements Stead Golf Course Main Replacement

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates / Developer Fees	Stead Golf Course Main Replacement	—	—	200	2,400	—	2,600

**PROJECT DESCRIPTION:** The project consists of replacement of about 10,000 linear feet of 14-inch steel pipe installed around 1945. The pipe provides an important hydraulic tie between the Stead tanks and the northeast extremities of the Stead distribution system. The pipeline may also be useful to alleviate an existing bottleneck between the Stead wells and the distribution system.

**SCHEDULE:** The project is scheduled for construction to be completed in FY 2028.





## Water Main-Distribution Service Line Improvements North-East Sparks Feeder Main Phase 8

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Developer Fees	North-East Sparks Feeder Main Phase 8	10	50	2,050	—	—	2,110

**PROJECT DESCRIPTION:** The project involves construction of approximately 6,400 linear feet of 14-inch water main on Satellite Drive from Vista Blvd to Sparks Blvd to increase capacity for growth in Spanish Springs and maintain adequate suction pressure at the Satellite Hills booster pump station.

**SCHEDULE:** Design is scheduled for FY's 2025-2026 and the improvements will be constructed in FY 2027.



## Water Main-Distribution Service Line Improvements Goldenrod Main

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Developer Fees	Goldenrod Main	1,800	—	—	—	—	1,800

**PROJECT DESCRIPTION:** The project involves construction of approximately 4,500 linear feet of 12-inch water main from the Tessa West Well to the intersection of Goldenrod and Mountain Meadows Lane. This project will provide additional capacity between the Arrowcreek and Mt. Rose systems for Mt. Rose 2 tank fills and for on-peak supply from the Mt. Rose Water Treatment Plant.

**SCHEDULE:** Construction is planned in FY 2025.





## Water Main-Distribution Service Line Improvements Boomtown Water System Improvements

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Developer Fees	Boomtown Water System Improvements	1,500	1,500	—	—	—	3,000

**PROJECT DESCRIPTION:** The Boomtown system requires several high priority improvements to bring the system into compliance with NAC 445A regulations and TMWA standards and to allow efficient operation and maintenance of the water facilities. The improvements consist of upgrades to three existing wells (pump to waste facilities, SCADA, new pumps, new motors, new starters and arc flash analyses), tank site improvements (grading, drainage, overflow, fencing, paving, sampling vault, SCADA) and tank access improvements.

**SCHEDULE:** The improvements will be designed and constructed in FY's 2025-2026.



## Water Main-Distribution Service Line Improvements Sullivan 1 Main Tie and Pressure Regulating Station

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates / Developer Fees	Sullivan 1 Main Tie and Pressure Regulating Station	—	—	100	650	—	750

**PROJECT DESCRIPTION:** The project involves construction of about 1,300 linear feet of 10-inch main on El Rancho and a new pressure regulator station to supply the Sullivan 1 zone. The project timeline assumes that the proposed Sun Valley 2 Tank and Sullivan 2 pump station are in service.

**SCHEDULE:** Planning and design is scheduled to begin in FY 2027 with construction scheduled in FY 2028.





## Water Main-Distribution Service Line Improvements Montreux High Pressure ACP Replacement

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Montreux High Pressure ACP Replacement	100	1,000	1,200	—	—	2,300

**PROJECT DESCRIPTION:** The project involves replacement of approximately 6,500 linear feet of existing 10-inch transite water main between Mt Rose Well 5 and Joy Lake Road. The existing ACP pipe installed in the 1970's is currently operated at pressures between 120-250 psi.

**SCHEDULE:** Planning and design will occur in FY 2025 with construction to be completed in FY 2027.



## Water Main-Distribution Service Line Improvements 2nd Galena Creek Main Crossing

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	2nd Galena Creek Main Crossing		40	560	—	—	600

**PROJECT DESCRIPTION:** The project involves construction of approximately 2,200 linear feet of 10-inch ductile iron water main between Breithorn Cir. and Piney Creek Parklet including a crossing of Galena Creek. The existing 10" ACP pipe that crosses Galena Creek is currently the only tie between well sources and storage tanks.

**SCHEDULE:** Design will occur in FY 2026 with construction to be completed in FY 2027.





## Water Main-Distribution Service Line Improvements Off-River Supply Improvements - South Truckee Meadows

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Off-River Supply Improvements - South Truckee Meadows	—	—	50	1,050	—	1,100

**PROJECT DESCRIPTION:** The project involves construction of four SCADA controlled, pressure reducing bypass stations in strategic locations in the South Truckee Meadows to allow excess well capacity and excess Mt. Rose Water Treatment Plant capacity to be provided to the Highland gravity zone in case of loss supply from the Truckee River. Two additional bypasses (Arrowcreek BPS & future Veteran's BPS) will be constructed separately under the budget for those facilities.

**SCHEDULE:** Planning and design will occur in FY 2027 with construction to be completed in FY 2028.



## Water Main-Distribution Service Line Improvements Off-River Supply Improvements - North Virginia-Stead Pump Station

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Off-River Supply Improvements - North Virginia-Stead Pump Station	—	400	—	—	—	400

**PROJECT DESCRIPTION:** The project involves construction of a SCADA controlled, pressure reducing bypass station at the North Virginia-Stead booster pump station to allow excess Fish Springs well capacity to be provided to the Highland gravity zone in case of loss supply from the Truckee River.

**SCHEDULE:** Project implementation and construction will occur in FY 2026.



## Water Main-Distribution Service Line Improvements Somerset 6 Main Tie and Pressure Regulating Station

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Somerset 6 Main Tie and Pressure Regulating Station	280	—	—	—	—	280

**PROJECT DESCRIPTION:** The project involves construction of about 600 linear feet of 10-inch main within improved paved pathway and a new pressure regulator station to provide a secondary source to Somerset Village 6.

**SCHEDULE:** Project implementation and construction will occur in FY 2025.





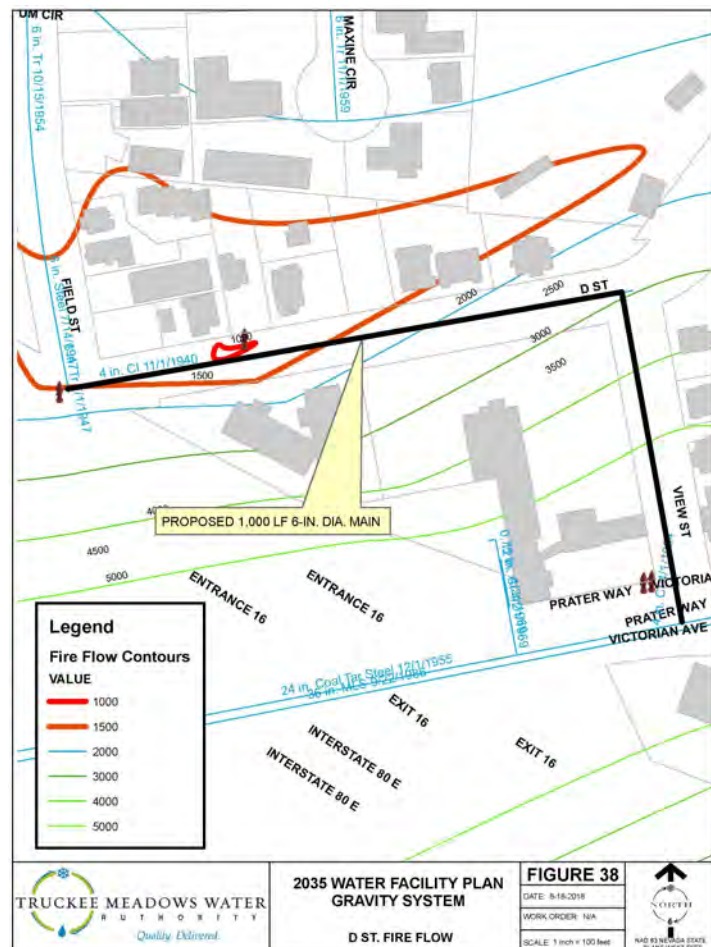
## Water Main-Distribution Service Line Improvements 2025 Fire Flow Improvements - Gravity <1,000 GPM

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	2025 Fire Flow Improvements - Gravity <1,000 GPM	—	—	550	—	—	550

**PROJECT DESCRIPTION:** The project involves improvements at five separate locations in the gravity zone that have an available fire flow of less than 1,000 GPM. Reference Pages 20-22 of the 2035 WFP – Items 14,18,20,25,31 (also Figures 38,42,44,49,55). Construction consists of approximately 1,900 linear feet of new 6-inch and 8-inch main including new hydrant taps and laterals.

**SCHEDULE:** The improvements are scheduled for construction in FY 2027.





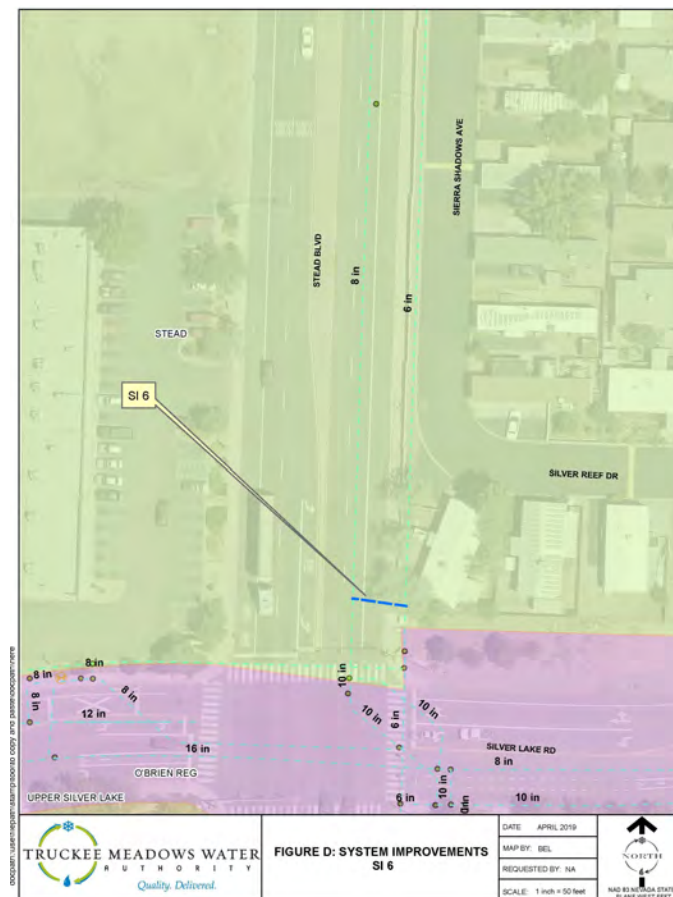
## Water Main-Distribution Service Line Improvements 2025 Fire Flow Improvements - North Valleys <1,000 GPM

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	2025 Fire Flow Improvements - North Valleys <1,000 GPM	—	—	950	—	—	950

**PROJECT DESCRIPTION:** This project involves improvements at two separate locations that have an available fire flow of less than 1,000 GPM. Reference Items SI6 and SI7 on pages 6-7 of the North Valleys section of the 2035 Water Facilities Plan (also Figures D and E). Construction of approximately 3,500 linear feet of new 6-inch and 8-inch main and new high pressure Regulating Station.

**SCHEDULE:** The improvements are scheduled for construction in FY 2027.



## Water Main-Distribution Service Line Improvements

### Deluchi to Airway Main Tie

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Developer Fees	Deluchi to Airway Main Tie	—	—	450	—	—	450

**PROJECT DESCRIPTION:** The project involves construction of approximately 1,200 linear feet of 14-inch main from Deluchi to Airway including crossing a major storm drainage channel. The project promotes looping of the distribution system and provides additional North to South peak period capacity.

**SCHEDULE:** The project is scheduled for construction in FY 2027.



## Water Main-Distribution Service Line Improvements South-East Sparks Feeder Main Phase 1

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Developer Fees	South-East Sparks Feeder Main Phase 1	—	—	—	50	4,450	4,500

**PROJECT DESCRIPTION:** The project involves construction of approximately 9,700 linear feet of 24-inch main on Greg Street between 21st Street and Stanford to provide additional capacity for future growth and to lower peak period pressure in the area.

**SCHEDULE:** Planning and design are scheduled to begin in FY 2028 and construction is scheduled to begin in FY 2029.





## Water Main-Distribution Service Line Improvements South Truckee Meadows Capacity Improvements

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Developer Fees	South Truckee Meadows Capacity Improvements	800	—	—	—	—	800

**PROJECT DESCRIPTION:** The project involves construction of approximately 1,500 linear feet of 14-inch main on Offenhauser and Gateway with a SCADA controlled valve installed in an underground vault to provide an intertie between the Longley and Double Diamond systems. Also included is a short 8-inch main tie at Bluestone and Portman. The improvements increase capacity to the South Truckee Meadows system.

**SCHEDULE:** Construction is scheduled for FY 2025.





## Water Main-Distribution Service Line Improvements West 4th Street Main Replacement

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	West 4th Street Main Replacement	2,100	—	—	—	—	2,100

**PROJECT DESCRIPTION:** Replacement of approx. 3,400 linear feet of 6-inch cast iron with 8-inch ductile iron. The limits are on W. 4th St. from 500' W/O Stoker Ave. to 400' W/O Keystone Ave.

**SCHEDULE:** Work will take place in FY 2025 ahead of the RTC W. 4th St. Safety project.



## POTABLE WATER STORAGE IMPROVEMENTS

### Summary

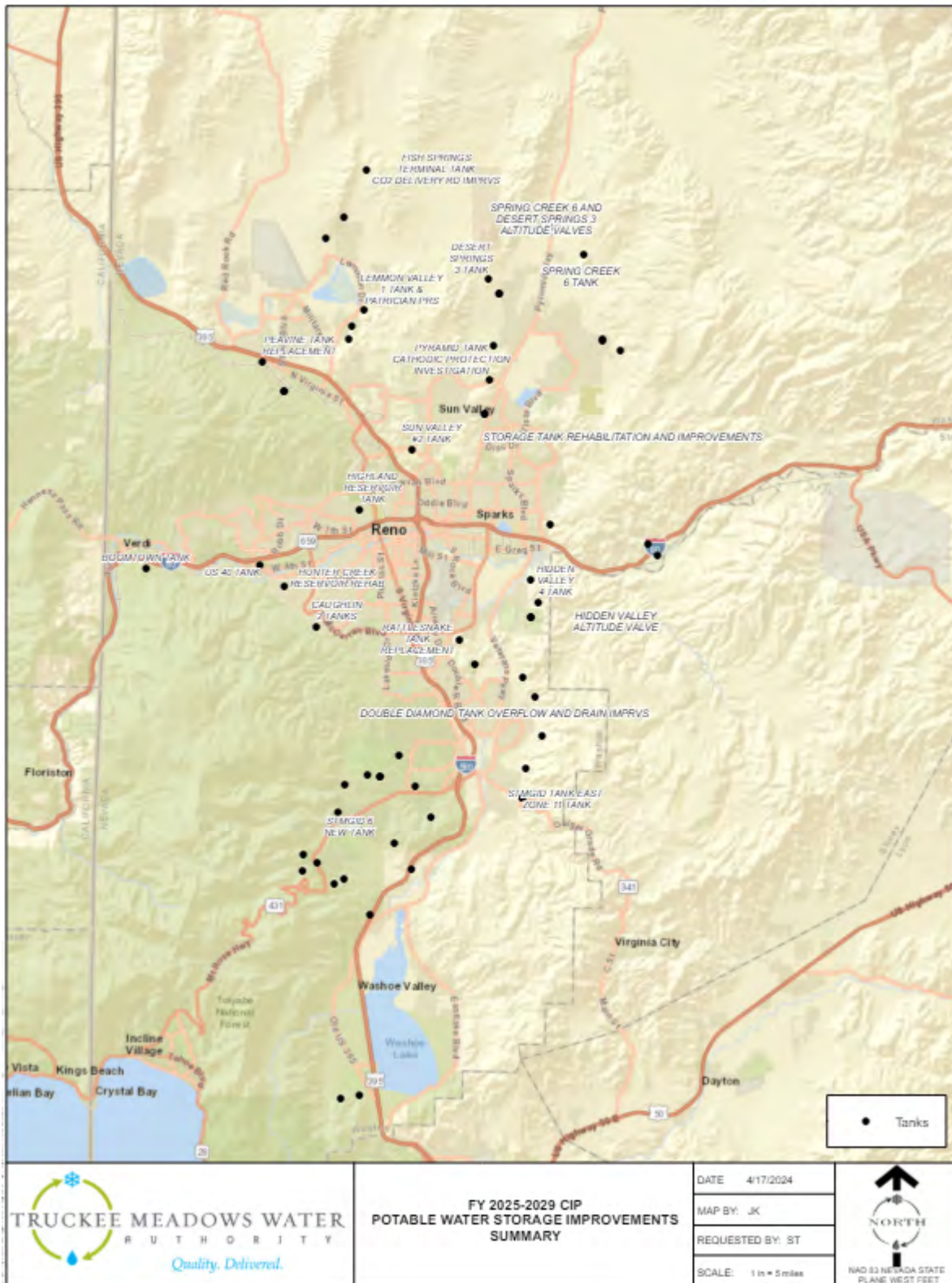
Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates / Developer Fees	Sun Valley 2 Tank	420	2,980	—	—	—	3,400
2	Developer Fees	Fish Springs Terminal Tank 2	—	—	—	40	2,160	2,200
1	Customer Rates	Storage Tank Rehabilitation and Improvements	10,100	4,500	5,000	5,000	5,000	29,600
1	Customer Rates / Developer Fees	Boomtown System Improvements Phase 4 - Boomtown Tank	1,000	—	—	—	—	1,000
1	Customer Rates	Caughlin 2 Tanks	500	1,000	1,500	—	—	3,000
2	Customer Rates / Developer Fees	Highland Reservoir Tank	—	2,000	5,000	—	—	7,000
1	Customer Rates / Developer Fees	STMGID Tank East Zone 11 Tank	—	175	2,900	—	—	3,075
1	Customer Rates / Reimbursements / Developer Fees	US 40 Tank and Feeder Main	3,500	1,000	—	—	—	4,500
2	Customer Rates / Developer Fees	Spanish Springs Altitude Valves (SC6 and DS3)	—	—	300	—	—	300
2	Customer Rates	Hidden Valley Tank Altitude Valve	—	—	350	—	—	350
1	Customer Rates	Lemmon Valley Tank 1 Replacement and Patrician Pressure Regulating Station	1,500	—	—	—	—	1,500
1	Customer Rates	Hidden Valley Tank 4 Outage Improvements	250	1,500	—	—	—	1,750
2	Customer Rates	Reservoir Rehabilitation	75	—	100	3,000	1,500	4,675
1	Customer Rates	Terminal Tank CO2 Delivery Road Improvements	100	—	—	—	—	100
2	Customer Rates	STMGID 6 New Tank	20	—	—	400	—	420
2	Customer Rates	Rattle Snake Tank Replacement	—	—	500	3,000	3,000	6,500

Truckee Meadows Water Authority FY 2025-2029 Capital Improvement Plan

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Pyramid Tank Cathodic Protection Investigation	—	15	—	100	—	115
3	Customer Rates	Double Diamond Tank Overflow and Drain Improvements	—	—	100	—	—	100
<b>Subtotal Storage Improvements</b>			<b>17,465</b>	<b>13,170</b>	<b>15,750</b>	<b>11,540</b>	<b>11,660</b>	<b>69,585</b>

**Project Locations:** Map of all *Potable Water Storage Improvements* projects are highlighted in the following map.

# Truckee Meadows Water Authority FY 2025-2029 Capital Improvement Plan





## Potable Water Storage Improvements Sun Valley 2 Tank

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates / Developer Fees	Sun Valley 2 Tank	420	2,980	—	—	—	3,400

**PROJECT DESCRIPTION:** TMWA continues to analyze opportunities to consolidate pump zones to eliminate future pump station replacement costs and to increase reliability to continuous pumping zones. Several years ago, TMWA consolidated the Sutro 1 pump zone with the Sun Valley/Sullivan pump zone, placing additional capacity requirements on the Sun Valley zone. This tank is needed to provide the required emergency storage capacity to the expanded zone and will also provide the capacity for the Sun Valley zone to reach build-out.

**SCHEDULE:** The project is scheduled for construction in FY 2026 subject to successful acquisition of a suitable tank site which is elevation sensitive and is complicated by the US 395 Connector project alignment.



## Potable Water Storage Improvements

### Fish Springs Terminal Tank 2

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Developer Fees	Fish Springs Terminal Tank 2	—	—	—	40	2,160	2,200

**PROJECT DESCRIPTION:** This project involves a second 2.5 MG storage tank that is needed at the terminus of the Fish Springs pipeline at the north end of Lemmon Valley to equalize demand and supply during peak use periods.

**SCHEDULE:** The project is currently scheduled for design in FY 2028 with construction scheduled in FY 2029. The actual schedule will be dependent upon the rate of growth in the North Valleys.



## Potable Water Storage Improvements Storage Tank Rehabilitation and Improvements

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Storage Tank Rehabilitation and Improvements	10,100	4,500	5,000	5,000	5,000	29,600

**PROJECT DESCRIPTION:** TMWA has a very proactive tank reservoir maintenance program where 20% of all tanks are inspected annually on a rotating basis. Based on these inspection observations, a determination is made as to whether interior tank coatings (for steel tanks) or other fix and finish work is required. TMWA has 97 storage tanks in service, with combined storage of approximately 123 million gallons. Interior coating/liners are generally replaced every 20 years resulting in the need to recoat several tanks per year to maintain the rehabilitation cycle. The budget and plan also includes exterior painting of steel tanks and any replacement of any interior components that may be corroded.

**SCHEDULE:** This is an ongoing annual project. It is anticipated that several tanks will need to be recoated every year.





## Water Main-Distribution Service Line Improvements Boomtown System Improvements Phase 4 - Boomtown Tank

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates / Developer Fees	Boomtown System Improvements Phase 4 - Boomtown Tank	1,000	—	—	—	—	1,000

**PROJECT DESCRIPTION:** Boomtown 1 tank (500,000 gallons), which was originally constructed in 1986, was acquired by TMWA from the Boomtown Water System. As part of the acquisition, TMWA made provisions to bring the tank up to current NAC And TMWA standards, thus, this project will make these improvements. Improvements may also include replacement of any corroded structural components. Additionally, the tank will be used to provide suction to the proposed Santerra Quilici 1 BPS; therefore, piping and other modifications will be made to accommodate this future use. Finally, the tank will receive full interior and exterior blasting and recoat.

**SCHEDULE:** The improvements are scheduled for FY 2025.





## Distribution System Pressure Improvements Caughlin 2 Tanks

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Caughlin 2 Tanks	500	1,000	1,500	—	—	3,000

**PROJECT DESCRIPTION:** The project involves the proposed Caughlin 2 tanks that will provide redundancy for an existing continuous pumping zone and will expand emergency storage for the entire southwest area. The tanks will also provide a greater level of redundancy to a fire prone area by relying less on pumping and power, and more on elevated storage.

**SCHEDULE:** Construction for the project is scheduled to begin in FY 2026.



## Potable Water Storage Improvements Highland Reservoir Tank

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates / Developer Fees	Highland Reservoir Tank	—	2,000	5,000	—	—	7,000

**PROJECT DESCRIPTION:** TMWA has two large finished water storage reservoirs, one at Hunter Creek and one at the Highland site just west of the intersection of Washington and College Drive. These reservoirs are lined and covered with flexible polyethylene or hypalon membranes. As such, they are more maintenance intensive and susceptible to damage than a conventional steel or concrete tank. To provide reliability during repairs or during extended outages for inspection and cleaning, it is proposed to construct a conventional 4 million gallon water storage tank at the reservoir site. Due to topography and proximity to residential areas the tank may need to be a buried pre-stressed concrete tank, which is reflected in the project budget. The tank will also provide additional storage capacity to meet future system requirements as required by the NAC regulations.

**SCHEDULE:** The tank is scheduled for construction in FY's 2026-2027.





## Potable Water Storage Improvements STMGID Tank East Zone 11 Tank

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates / Developer Fees	STMGID Tank East Zone 11 Tank	—	175	2,900	—	—	3,075

**PROJECT DESCRIPTION:** The project involves construction of a 3.7 MG above ground welded steel storage tank in the South Truckee Meadows area off of Geiger Grade formerly owned by STMGID. Due to growth in the area over the last several years, additional storage is required to meet the requirements of the NAC 445A regulations and TMWA standards. The tank will replace an existing 0.75 MG tank providing a net increase in storage of about 3 MG.

**SCHEDULE:** The project is currently scheduled for construction in FY 2028, subject to acquisition of the Special Use Permit and Bureau of Land Management (BLM) permitting.



## Potable Water Storage Improvements US 40 Tank and Feeder Main

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates / Reimbursements / Developer Fees	US 40 Tank and Feeder Main	3,500	1,000	—	—	—	4,500

**PROJECT DESCRIPTION:** The project involves construction of two 800,000 gallon steel tanks with site improvements, utilities, drain line and access road including about 2,100 linear feet of 20-inch feeder main. The project will improve reliability and hydraulic performance in the zone which experiences a lot of surge issues due to cycling of the Mae Anne pump train and the closed system on the Mogul end. This situation is only expected to worsen when pumping to Verdi begins.

**SCHEDULE:** Construction is scheduled to begin in FY 2025.





**Potable Water Storage Improvements**  
**Spanish Springs Altitude Valves (SC6 and DS3)**

**FUNDING TIMELINE:**

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates / Developer Fees	Spanish Springs Altitude Valves (SC6 and DS3)	—	—	300	—	—	300

**PROJECT DESCRIPTION:** The project involves the construction of altitude valves in underground vaults at the Spring Creek Tank 6 and at the Desert Springs Tank 3. The altitude valves will keep the existing tanks from overflowing when well recharge operations are conducted in Spanish Springs Valley.

**SCHEDULE:** The project is schedule for construction in FY 2027.



## Potable Water Storage Improvements

### Hidden Valley Tank Altitude Valve

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Hidden Valley Tank Altitude Valve	—	—	350	—	—	350

**PROJECT DESCRIPTION:** The project involves installation of a new altitude valve in a vault on the Hidden Valley Tank I in/out line. Requires cutting into and rerouting existing piping, addition of new valves, etc.

**SCHEDULE:** The project is schedule for construction in FY 2027.



## Potable Water Storage Improvements

### Lemmon Valley Tank 1 Replacement and Patrician Pressure Regulating Station

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Lemmon Valley Tank 1 Replacement and Patrician Pressure Regulating Station	1,500	—	—	—	—	1,500

**PROJECT DESCRIPTION:** Lemmon Valley Tank 1 is at the end of its useful life and needs to be replaced. The tank can't be taken out of service without improvements to the system. The Patrician pressure regulator station would provide supply with the tank out of service and allow the existing tank to be demolished and the new tank to be constructed.

**SCHEDULE:** Construction is scheduled in FY 2025.





**Potable Water Storage Improvements**  
**Hidden Valley Tank 4 Outage Improvements**

**FUNDING TIMELINE:**

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Hidden Valley Tank 4 Outage Improvements	250	1,500	—	—	—	1,750

**PROJECT DESCRIPTION:** Hidden Valley Tank 4 is due for rehabilitation and recoating in the next year. The tank cannot be taken out of service and meet all NAC requirements including fire flow. This project will improve redundancy and supply to the zone with the tank out of service.

**SCHEDULE:** Construction is scheduled in FY 2026.





## Potable Water Storage Improvements Hunter Creek Reservoir Rehabilitation

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Hunter Creek Reservoir Rehabilitation	75	—	100	3,000	1,500	4,675

**PROJECT DESCRIPTION:** The pond liner and floating cover of the Hunter Creek 30 MG Reservoir are nearing the end of their useful lifespan and require replacement. A condition report conducted in 2020 included project recommendations for improvements. Combining periodic inspections of the liner indicates that it needs replacement within the next five years.

**SCHEDULE:** Some minor improvements, based on the 2020 condition assessment report, will be done in FY 2025 with the major replacement anticipated to begin in FY 2027.



## Potable Water Storage Improvements Terminal Tank CO2 Delivery Road Improvements

### FUNDING TIMELINE

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Terminal Tank CO2 Delivery Road Improvements	100	—	—	—	—	100

**PROJECT DESCRIPTION:** Currently, only one CO2 vendor is willing to deliver to the Terminal Tank site due to site constraints. TMWA has met with another vendor and identified site improvements that can be made to open this to a more competitive bid. This project will require easement agreements with the neighboring International Community of Christ Property.

**SCHEDULE:** Design and Construction is anticipated to be completed in FY 2025.





## Potable Water Storage Improvements STMGID 6 New Tank

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	STMGID 6 New Tank	20	—	—	400	—	420

**PROJECT DESCRIPTION:** This project is to add a redundant steel tank in order to rehab the existing tank. This project also include site improvements for a continued slope failure.

**SCHEDULE:** Site improvements scheduled for FY 2025 with the new tank in FY 2028.



## Potable Water Storage Improvements Rattle Snake Tank Replacement

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Rattle Snake Tank Replacement	—	—	500	3,000	3,000	6,500

**PROJECT DESCRIPTION:** An assessment of the Rattle Snake Tank was conducted in FY 2024, revealing serious corrosion in the rafters, roof plate, and floor. The extent of the damage is beyond justifiable repair and necessitates replacement. This project will involve installing a second redundant tank in phase 1 and replacing the tank in phase 2. This approach is also necessary to maintain fire flow to the Northern Nevada Hospital.

**SCHEDULE:** Design is scheduled to begin in FY 2027 and phased construction FY 2027-2029.





## Potable Water Storage Improvements Pyramid Tank Cathodic Protection Investigation

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Pyramid Tank Cathodic Protection Investigation	—	15	—	100	—	115

**PROJECT DESCRIPTION:** This tank was rehabilitated during the 21/22 Tank Improvements Project. During the final phase of the rehabilitation, it was discovered that the bottom side of the floor is sitting on highly corrosive soils. A corrosion protection system is needed, including a full floor scan and patching of the floor as needed.

**SCHEDULE:** Floor scan is scheduled for FY 2026 and the Corrosion system design and construction in FY 2028.



**Potable Water Storage Improvements**  
**Double Diamond Tank Overflow and Drain Improvements**

**FUNDING TIMELINE:**

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
3	Customer Rates	Double Diamond Tank Overflow and Drain Improvements	—	—	100	—	—	100

**PROJECT DESCRIPTION:** The current tank discharges on a very steep slope above the South Truckee Meadows Water Reclamation Facility effluent ponds. Damage to the pond road will take place if this tank overflows and the overflow pipe needs improvement.

**SCHEDULE:** Design and Construction is anticipated in FY 2027.



## HYDROELECTRIC IMPROVEMENTS

### Summary

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Hydroelectric	Forebay, Diversion, and Canal Improvements	100	105	110	115	120	550
3	Hydroelectric	Flume Rehabilitation	150	160	165	175	180	830
3	Hydroelectric	Fleish Plant Improvements	—	600	10,000	—	—	10,600
1	Hydroelectric	Verdi Sandgate Improvements	500	—	—	—	—	500
1	Hydroelectric	Verdi Bypass Valve Improvements	850	—	—	—	—	850
2	Hydroelectric	Washoe Plant Improvements	400	11,000	—	—	—	11,400
<b>Subtotal Hydroelectric Improvements</b>			<b>2,000</b>	<b>11,865</b>	<b>10,275</b>	<b>290</b>	<b>300</b>	<b>24,730</b>

**Project Locations:** Map of all *Hydroelectric Improvements* projects are highlighted in the following map.

# Truckee Meadows Water Authority FY 2025-2029 Capital Improvement Plan





## Hydroelectric Improvements Forebay, Diversion, and Canal Improvements

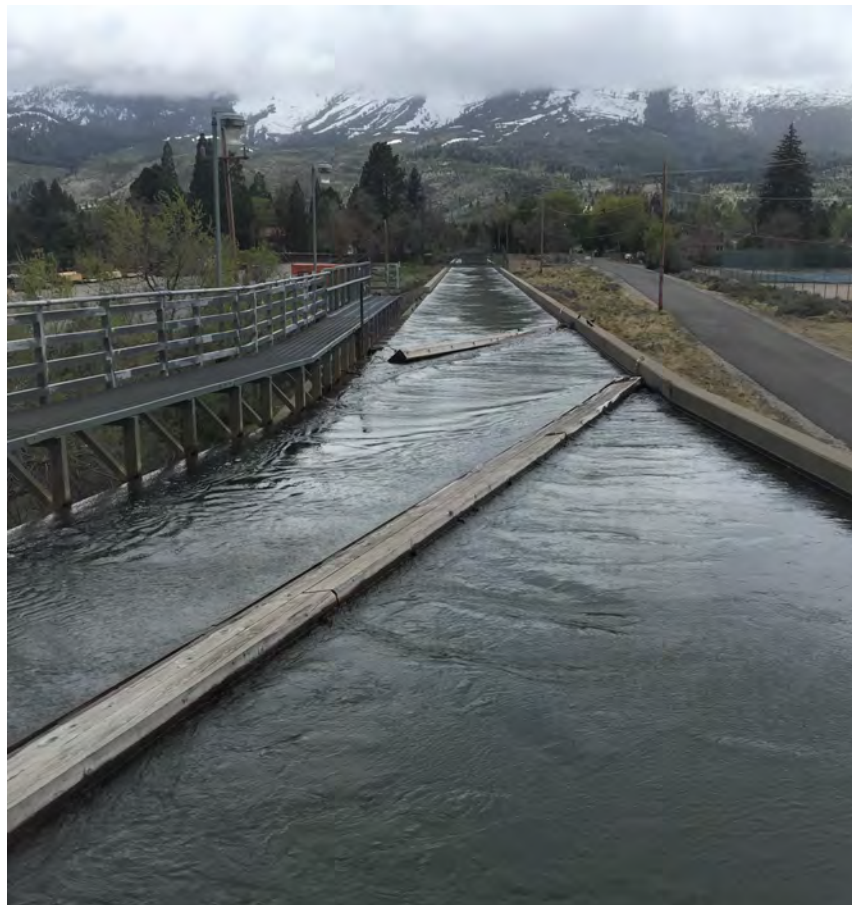
### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Hydroelectric	Forebay, Diversion, and Canal Improvements	100	105	110	115	120	550

### PROJECT DESCRIPTION:

Provision is made each year for hydroelectric flume reconstruction to mitigate damage from unexpected rock falls, landslides and/or flooding events. Diversion structures including gates, canals, flumes, forebays and all hydro-plant water conveyance structures are monitored and evaluated for reliable and safe operation.

**SCHEDULE:** Ongoing annual evaluation and prioritization of forebay and canal conditions in the early spring (winter weather can change priorities) to identify projects for fall construction when historically, river flows are lower.



## Hydroelectric Improvements Flume Rehabilitation

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
3	Hydroelectric	Flume Rehabilitation	150	160	165	175	180	830

**PROJECT DESCRIPTION:** TMWA’s three operating hydroelectric facilities have nearly 12,150 feet of flume. The average service life for flume structures is 35 years using treated timbers, at an average replacement cost of approximately \$1,000 per lineal foot of flume. The present cost to replace a linear foot of flume depends on the location and height of the flume structure.

**SCHEDULE:** Ongoing annual evaluation and prioritization of flume condition in the early spring (winter weather can change priorities) to identify projects for fall construction when historically, river flows are lower.





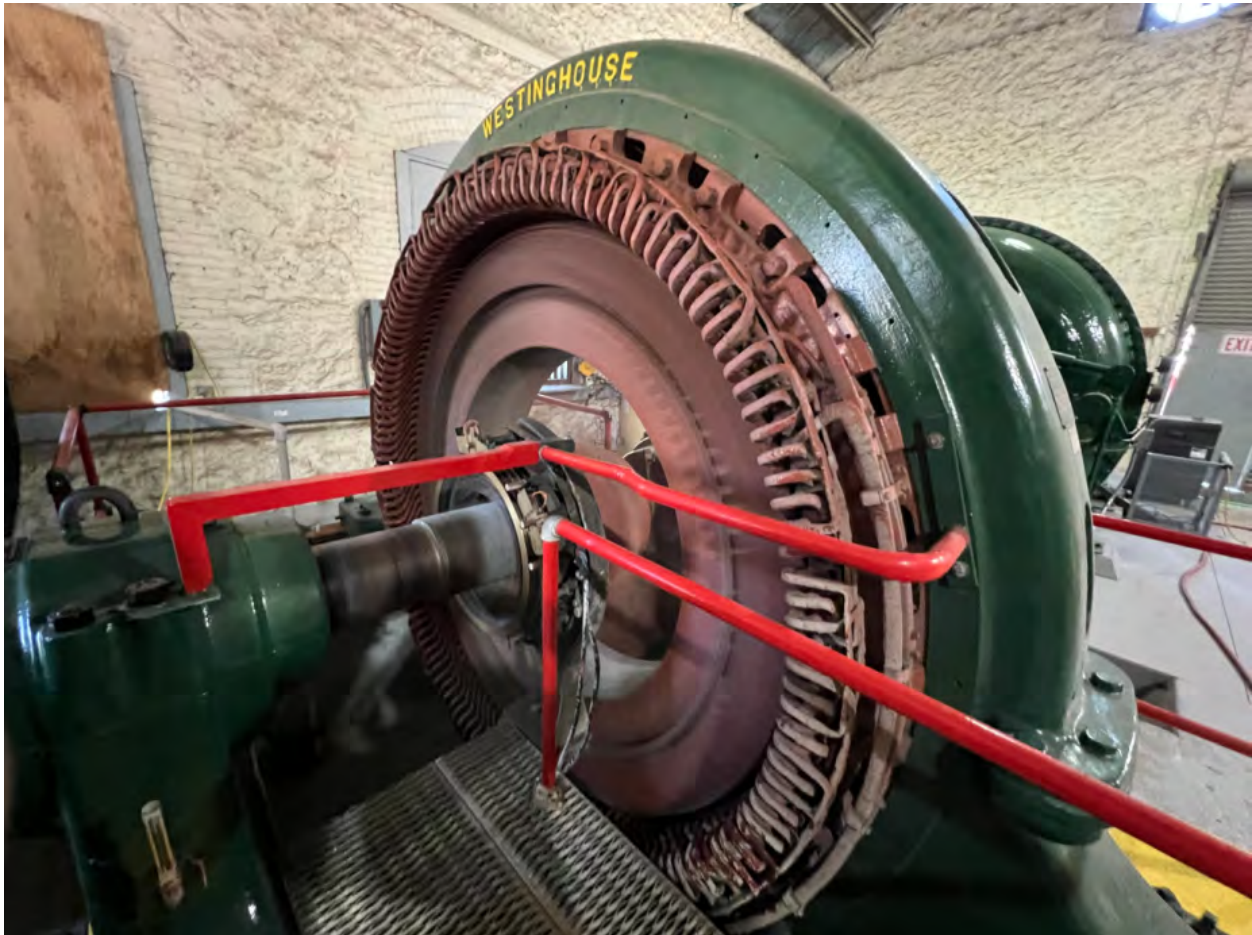
## Hydroelectric Improvements Fleish Plant Improvements

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
3	Hydroelectric	Fleish Plant Improvements	—	600	10,000	—	—	10,600

**PROJECT DESCRIPTION:** The Fleish Hydroelectric Plant was commissioned in 1905. Roofing, HVAC, windows and glass, and aging infrastructure is in need of replacement or repair.

**SCHEDULE:** Improvements are scheduled for FY 2027.



## Hydroelectric Improvements Verdi Sandgate Improvements

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Hydroelectric	Verdi Sandgate Improvements	500	—	—	—	—	500

**PROJECT DESCRIPTION:** This project will rehabilitate the Verdi Hydro Sand Gate dam to halt erosion and the flow of water through the dam, which leads to loss productivity. We are also replacing the rusted out old gate, along with implementing access improvements to ensure safe operation.

**SCHEDULE:** Improvements are scheduled for FY 2025.





## Hydroelectric Improvements

### Verdi Bypass Valve Improvements

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Hydroelectric	Verdi Bypass Valve Improvements	850	—	—	—	—	850

**PROJECT DESCRIPTION:** The concrete structure below the existing valve has degraded and is no longer properly supporting the valve. The valve is original to the plant and is being held closed by the plant crane. Replacement of the valve will allow for electronic operation and use of the plant crane when the facility is online. This project will replace the valve, associated piping, and improve the structure supporting the valve.

**SCHEDULE:** Replacement of the valve is scheduled for FY 2025.



## Hydroelectric Improvements Washoe Plant Improvements

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Hydroelectric	Washoe Plant Improvements	400	11,000	—	—	—	11,400

**PROJECT DESCRIPTION:** Assessment and potential replacement of the 1908 Built Washoe Hydroelectric Facility building, both turbines and auxiliary equipment, and generator rewind.

**SCHEDULE:** The project is currently in the assessment stage and is planned to move to design in FY 2025 and to construction in FY 2026.



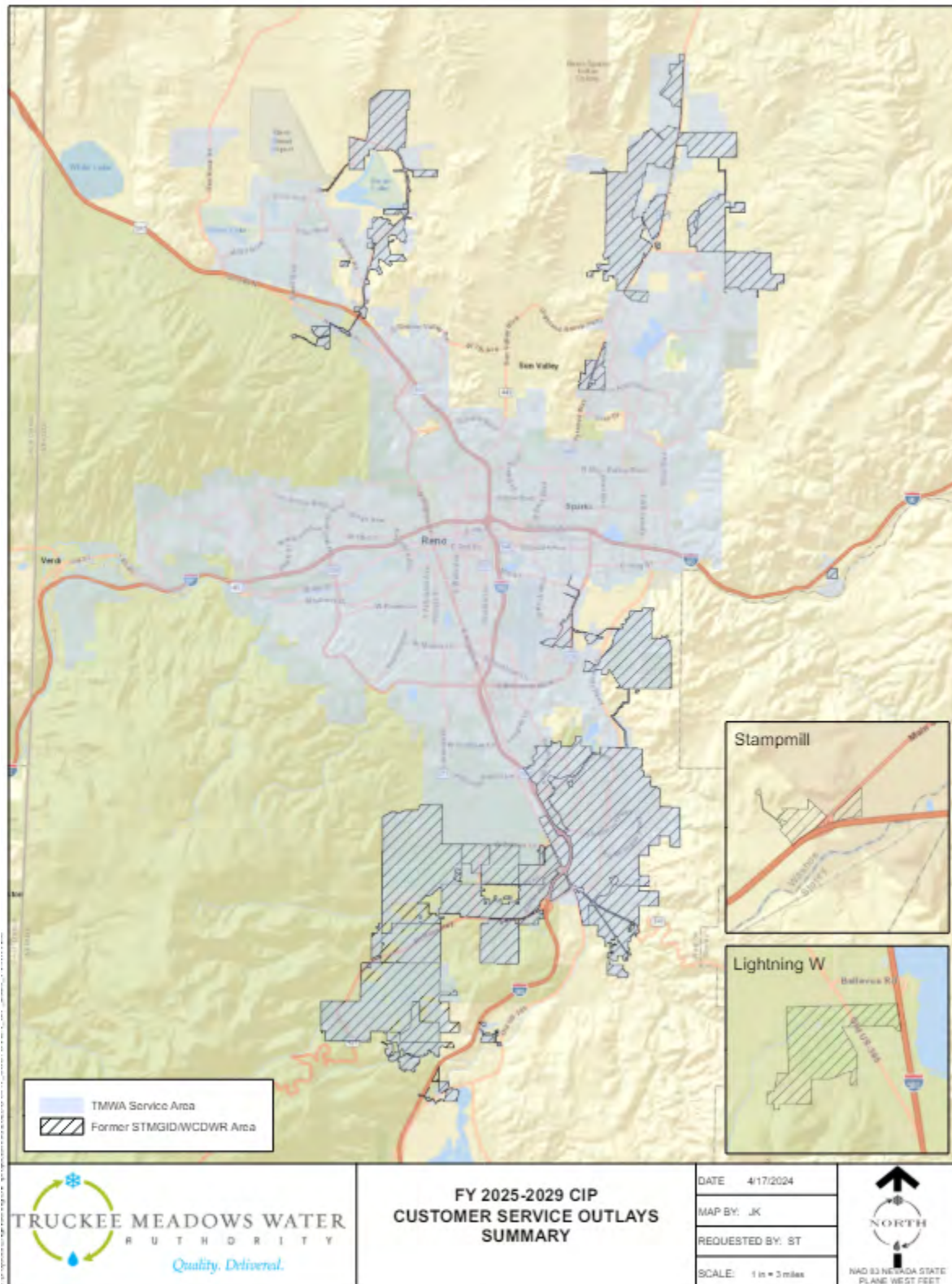
## CUSTOMER SERVICE OUTLAYS

### Summary

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
3	Customer Rates	Meter Reading Equipment	75	—	—	—	—	75
2	Developer Fees	New Business Meters	100	100	100	100	100	500
1	Customer Rates	Mueller Pit Replacements former Washoe County	125	125	125	125	125	625
2	Customer Rates	Galvanized / Poly Service Line Replacements	250	250	250	250	250	1,250
1	Customer Rates	Automated Meter Infrastructure (AMI)	2,650	2,650	2,650	2,650	2,650	13,250
<b>Subtotal Customer Service</b>			<b>3,200</b>	<b>3,125</b>	<b>3,125</b>	<b>3,125</b>	<b>3,125</b>	<b>15,700</b>

**Project Locations:** Map of all *Customer Service Outlays* projects are highlighted in the following map.

# Truckee Meadows Water Authority FY 2025-2029 Capital Improvement Plan





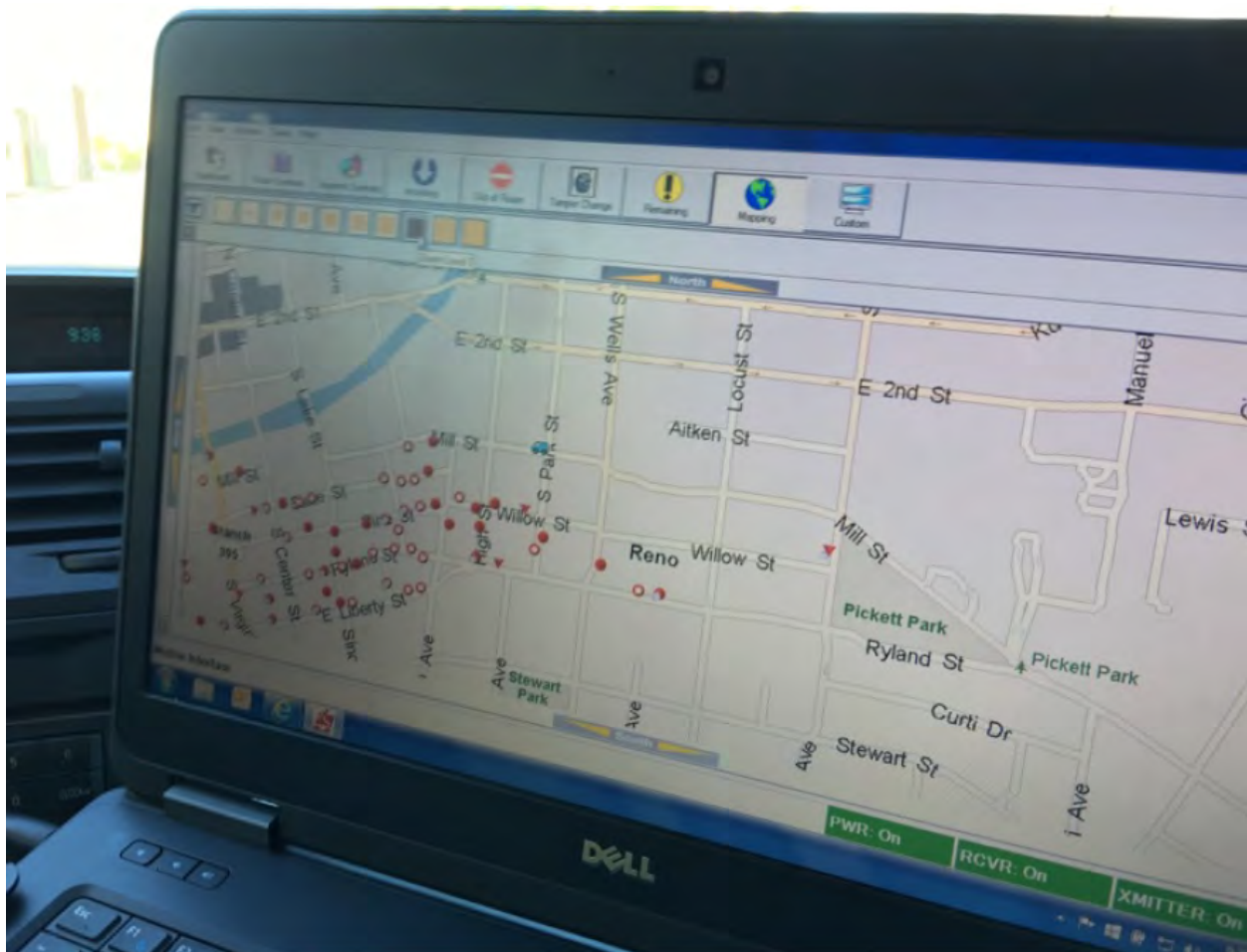
## Customer Service Outlays Meter Reading Equipment

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
3	Customer Rates	Meter Reading Equipment	75	—	—	—	—	75

**PROJECT DESCRIPTION:** TMWA utilizes a multiple meter reading systems in which the transmitters attached to the meters send a signal out to be collected by data collectors. These collectors are mounted in the meter reading vehicles or on various mountain peaks surrounding the valley. TMWA is anticipating replacing units that have degraded.

**SCHEDULE:** Will need to purchase equipment on an as needed basis.



## Customer Service Outlays

### New Business Meters

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Developer Fees	New Business Meters	100	100	100	100	100	500

**PROJECT DESCRIPTION:** All new water services are required to be metered. Meters are purchased by TMWA and installed for new development. New business fees pay for these installations.

**SCHEDULE:** Dependent on the pace of development in the service territory.





**Customer Service Outlays**  
**Mueller Pit Replacements Former Washoe County**

**FUNDING TIMELINE:**

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Mueller Pit Replacements former Washoe County	125	125	125	125	125	625

**PROJECT DESCRIPTION:** The Mueller metering pits are a very high maintenance metering facility and are prone to leaks and failures. TMWA plans to replace these facilities in response to leaks and or subsidence of these facilities.

**SCHEDULE:** Equipment and employee needs are evaluated and updated annually.



## Customer Service Outlays

### Galvanized / Poly Service Line Replacements

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Galvanized / Poly Service Line Replacements	250	250	250	250	250	1,250

**PROJECT DESCRIPTION:** TMWA has shifted from just repairing service lines from the street main to the curb valve or meter box to completely replacing service lines that are galvanized steel or polybutylene. These two materials are responsible for many after-hours call outs which escalate overtime expenses to repair leaks in the street because the galvanized lines are corroded, and polybutylene once thought very durable, becomes brittle and cracks or splits very easily. Just repairing these lines does not prevent them from leaking in the near future, escalating repair costs while further damaging city streets. Complete replacement provides a permanent repair in a cost effective manner and prevents further water system losses.

**SCHEDULE:** This is an ongoing annual project budget. Service lines will be replaced as they are identified.





## Customer Service Outlays

### Automated Meter Infrastructure (AMI)

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Automated Meter Infrastructure (AMI)	2,650	2,650	2,650	2,650	2,650	13,250

**PROJECT DESCRIPTION:** TMWA utilizes multiple meter reading systems in which the transmitters attached to the meters send a signal out to be collected by data collectors. Over the next five years, TMWA will be installing new meters or retrofitting existing meters with technology that will allow for remote readings. This is expected to assist in quickly identifying leaks for customers, more accurate billing, and long-term cost savings.

**SCHEDULE:** This project began in FY 2022 and is expected to be completed in FY 2029.



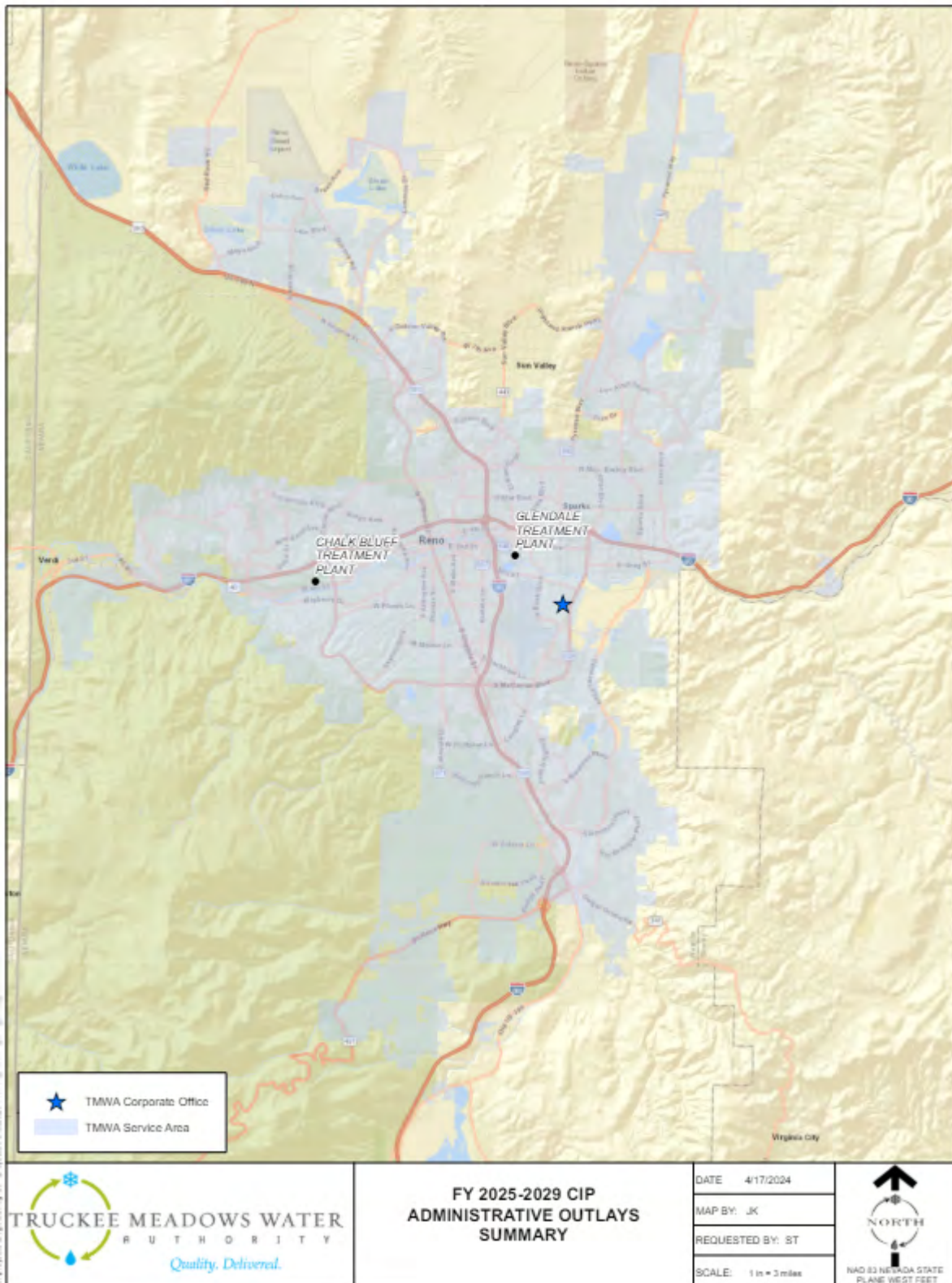
## ADMINISTRATIVE OUTLAYS

### Summary

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	GIS / GPS System Mapping Equipment	20	20	20	20	20	100
2	Customer Rates	IT Server Hardware and Equipment	240	20	20	—	—	280
2	Customer Rates	IT Network Security Upgrades	210	10	10	—	—	230
2	Customer Rates	IT Physical Access Security Upgrades	15	10	10	—	—	35
1	Customer Rates	IT Firewall Infrastructure Enhancements	100	—	—	—	—	100
2	Customer Rates	Printer / Scanner Replacement	10	10	10	—	—	30
2	Customer Rates	Crew Trucks / Vehicles	1,500	1,500	1,500	1,500	1,000	7,000
1	Customer Rates	Replacement HCM System	1,000	—	—	—	—	1,000
1	Customer Rates	Corporate Office Expansion	5,000	2,500	—	—	—	7,500
1	Customer Rates	Glendale Office Expansion	500	2,000	—	—	—	2,500
1	Customer Rates	Corporate HVAC Improvements	100	—	—	—	—	100
1	Customer Rates	Emergency Management Projects	50	50	50	50	50	250
2	Customer Rates/ Grants	Emergency Operations Annex Design / Construction	—	250	2,375	2,375	—	5,000
1	Customer Rates	Physical Site Security Improvements	1,250	850	350	350	350	3,150
<b>Subtotal Administrative Outlays</b>			<b>9,995</b>	<b>7,220</b>	<b>4,345</b>	<b>4,295</b>	<b>1,420</b>	<b>27,275</b>

**Project Locations:** Map of all *Administrative Outlays* projects are highlighted in the following map.

# Truckee Meadows Water Authority FY 2025-2029 Capital Improvement Plan





**Administrative Outlays**  
**GIS/GPS System Mapping Equipment**

**FUNDING TIMELINE:**

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	GIS / GPS System Mapping Equipment	20	20	20	20	20	100

**PROJECT DESCRIPTION:** TMWA will have to update mapping equipment on a periodic basis to keep up with changes in technology; and to replace existing equipment as it reaches obsolescence.

**SCHEDULE:** Equipment is replaced and/or purchased as needed.





## Administrative Outlays

### IT Server Hardware

## FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	IT Server Hardware and Equipment	240	20	20	—	—	280

**PROJECT DESCRIPTION:** TMWA currently has over 50 physical servers and 130 virtual servers, hosting a variety of enterprise software applications that support TMWA's daily business operations. All physical servers are typically purchased with a three year warranty, with the expectation that they will reach the end of their system life cycle in a three to five year time frame, requiring a replacement. TMWA annually reviews its server platforms and can option a strategy of warranty extension, if cost effective, rather than outright hardware replacement. All servers require an Operating System Software license to run. Operating System Software is upgraded only when the current release is obsolete or a newer version offers a significant advantage over the current iteration.

**SCHEDULE:** Spending would be determined on an as needed basis.



## Administrative Outlays

### IT Network Security Upgrades

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	IT Network Security Upgrades	210	10	10	—	—	230

**PROJECT DESCRIPTION:** As a leading water purveyor for a major metropolitan area, TMWA is reliant on the internet for employee productivity enhancement and providing valuable customer information and outreach. Such dependency on the internet also carries a significant degree of risk, as it makes TMWA a major target for external security threats looming within globalized networks. To offset this risk and combat network threats, a variety of security specific hardware and software solutions are used, weaving them into a layered deployment strategy called Defense in Depth. In order to continually evolve and reinforce this Defense in Depth strategy and effectively fight new unforeseen threats, TMWA must continually acquire new security platforms that adapt to the continually changing security landscape.

**SCHEDULE:** Spending occurs only on an as needed basis.



## Administrative Outlays

### IT Physical Security Upgrades

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	IT Physical Access Security Upgrades	15	10	10	—	—	35

**PROJECT DESCRIPTION:** Security measures that are designed to deny unauthorized access to facilities, equipment and resources to protect personnel from damage or harm such as theft or attacks. Physical security involves the use of multiple layers of interdependent systems which can include surveillance, security guards, protective barriers, locks and other techniques.

**SCHEDULE:** Equipment is replaced and/or purchased as needed.





**Administrative Outlays**  
**IT Firewall Infrastructure Enhancements**

**FUNDING TIMELINE:**

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	IT Firewall Infrastructure Enhancements	100	—	—	—	—	100

**PROJECT DESCRIPTION:** In addition to broad network security device upgrade and replacements, TMWA must further protect its corporate network by increasing the number and the features of the installed next generation firewalls allowing for enhanced network segmentation.

**SCHEDULE:** Implementation is scheduled for FY 2025.



## Administrative Outlays

### Printer / Scanner Replacement

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Printer / Scanner Replacement	10	10	10	—	—	30

**PROJECT DESCRIPTION:** TMWA currently has variety of printers and scanners that support TMWA’s daily business operations. All printers are typically purchased with a three-year warranty, with the expectation that they will reach the end of their system life cycle in a three to five year time frame, requiring a replacement. TMWA annually reviews its printer/scanner performance and business needs and can option a strategy of warranty extension, if cost effective, rather than outright replacement.

**SCHEDULE:** Equipment is replaced and/or purchased as needed.



## Administrative Outlays

### Crew Trucks/Vehicles

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates	Crew Trucks / Vehicles	1,500	1,500	1,500	1,500	1,000	7,000

**PROJECT DESCRIPTION:** TMWA’s service fleet consists of light duty and heavy duty crew trucks. TMWA plans to cycle the light crew fleet over a period of seven to ten years. Spending is determined annually depending on vehicle availabilities and other factors. Spending only occurs if justified. TMWA’s fleet cycles older vehicles to the treatment plants or other less demanding activities prior to disposal at auction.

**SCHEDULE:** Equipment and employee needs are evaluated and updated annually.





## Administrative Outlays

### Replacement HCM System

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Replacement HCM System	1,000	—	—	—	—	1,000

**PROJECT DESCRIPTION:** TMWA is implementing a new Human Capital Management (HCM) system. This system will provide tools for employee timekeeping, payroll, recruiting and onboarding, and human resources. The system is expected to be live in fiscal year 2025.

**SCHEDULE:** The system is expected to be fully implemented in FY 2025.



## Administrative Outlays

### Corporate Office Expansion

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Corporate Office Expansion	5,000	2,500	—	—	—	7,500

**PROJECT DESCRIPTION:** TMWA’s corporate office expanded in 2017 to account for the new staff associated with the merger of the STMGID and WCWU systems. The headcount has steadily grown for office and field staff since then to a point where the office will be full in a couple of years. This project allocates funds for construction or acquisition of additional building space.

**SCHEDULE:** If constructed, planning and design would commence in FY 2025, acquisition would occur in FY 2025 with improvements in FY 2025 and 2026.



## Treatment Plant Improvements



## Glendale Office Expansion

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Glendale Office Expansion	500	2,000	—	—	—	2,500

**PROJECT DESCRIPTION:** This project includes the additions of four offices and the necessary HVAC and lighting improvements in the Glendale Water Treatment Plant ready room.

**SCHEDULE:** Design is scheduled for FY 2025 and construction is scheduled for FY 2026.



## Administrative Outlays



## Corporate HVAC Improvements

### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Corporate HVAC Improvements	100	—	—	—	—	100

**PROJECT DESCRIPTION:** Replacement of VAVs (variable air volume) throughout the building and replacement of the controls for the boiler system.

**SCHEDULE:** Improvements are scheduled for FY 2025.



**Administrative Outlays**  
**Emergency Management Projects**

**FUNDING TIMELINE:**

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Emergency Management Projects	50	50	50	50	50	250

**PROJECT DESCRIPTION:** Various ongoing preparedness, mitigation and recover planning.

**SCHEDULE:** Evaluated and assessed annually.



## Administrative Outlays

### Emergency Operations Annex-Design / Construction

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
2	Customer Rates/ Grants	Emergency Operations Annex Design / Construction	—	250	2,375	2,375	—	5,000

**PROJECT DESCRIPTION:** The need for a dedicated, full-time Emergency Operations Center has been identified on subsequent Department of Homeland Security (DHS) Vulnerability Assessments as a top priority for TMWA to be able to effectively prepare for, respond to, and recover from natural disasters and emergency related events impacting the Truckee Meadows region within Washoe County. TMWA is currently in the planning and conceptual design phase for a primary Emergency Operations Center (EOC), co-located Security Operations Center (SOC), and Disaster Recovery (DR) site. The location for this project is TBD. Potential emergency operations conducted from the EOC would include internal response to earthquakes, floods, and similar events as well as conducting training and communications support with regional partners. Security operations will be conducted from the SOC on a 24/7 basis while working to ensure the security of our staff, water production, distribution facilities, and other critical infrastructure.

**SCHEDULE:** Construction is scheduled to begin in FY 2027.





## Administrative Outlays

### Physical Site Security Improvements

#### FUNDING TIMELINE:

Priority	Funding Source	Description	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	CIP Total
1	Customer Rates	Physical Site Security Improvements	1,250	850	350	350	350	3,150

**PROJECT DESCRIPTION:** Physical site security improvements for Chalk Bluff, Glendale and Corporate sites are based on Department of Homeland Security (DHS) Vulnerability Assessments. Recommended priorities included bringing site perimeter fencing up to DHS minimum standards, expanding our security camera network for better site perimeter coverage, general exterior lighting improvement throughout both treatment plants and the use of intrusion detection systems. Landscaping improvements were also noted to help prevent unauthorized access, improve overall visibility, and protect TMWA personnel and buildings.

**SCHEDULE:** Improvements will continue annually.





**Photo:** Hidden Valley Tank #2 Rebuild  
**Photo By:** Tarra Mora, Student Employee Engineering



# TMWA's CyberSecurity Posture

*Prepared by: Technology Services  
June 4, 2024*



**Truckee Meadows  
Water Authority**

*Quality. Delivered.*



# Digital Cops and Robbers

Cyberattack is any intentional effort to steal, expose, alter, disable, or destroy data, applications, or other assets through unauthorized access to a network, computer system or digital device.

Cybersecurity refers to any technology, measure or practice for preventing cyberattacks or mitigating their impact.

The average cost of a data breach in 2023 was USD 4.45 million, up 15% over the last three years;

The average cost of a ransomware-related data breach in 2023 was even higher, at USD 5.13 million. (This number does not include the cost of the ransom payment, which averaged an extra USD 1,542,333, up 89% from the previous year. )

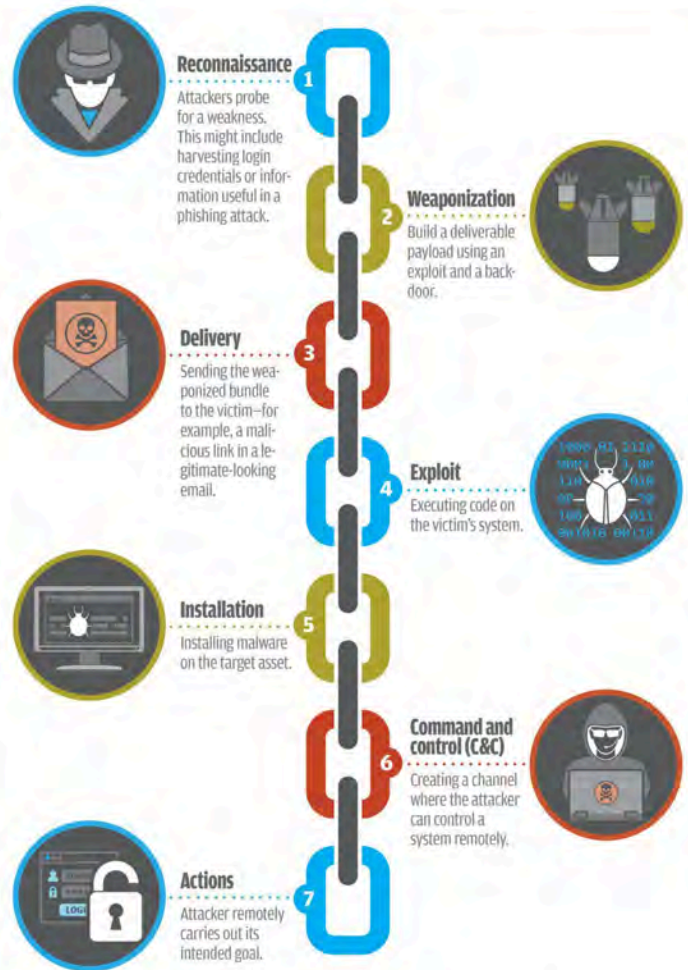
One estimate projects cybercrime is likely to cost the world economy 10.5 Trillion (USD) by 2025



# Understanding the Attack

## What is the **CYBER KILL CHAIN**?

The cyber kill chain, created by Lockheed Martin, describes the phases or stages of a targeted attack. Each stage presents an opportunity to detect and react to an attack.



SOURCE: LOCKHEED MARTIN

- Every Cyber Attack follows a predictable pattern
- Understanding the sequence of events allows an entity to defend against them

# Breaking the Chain

## TMWA's approach to cybersecurity

- Following a Framework - The roadmaps to a security program
- Building security in layers - Defense in Depth
- Protect the what is critical - Segmentation and separation
- Utilize Zero Trust Model - Never trust always verify
- Employing the right tools - Utilize specialized security applications
- Invest in people - maintain and promote a culture of security



# Investing in Security

## Notable Cybersecurity Initiatives

- 2018 - OT Environment was restructured, segmented, and separated
- 2019 - IT SIEM System was implemented
- 2019 - Dedicated Security Analysts hired
- 2021 - OT Network Security Monitoring System implemented
- 2022 - MDR company contracted for 24x7 cybersecurity monitoring
- 2024 - IT environment is being restructured, segmented, and separated



*IT: Information Technologies*

*OT: Operational Technologies*

*SIEM: Security Information & Event Management*

*MDR: Managed Defense Response*

# Continued Vigilance

**Cyberthreats are ever present and ceaseless and TMWA must be ready**

- TMWA Security Analysts constantly review the latest cyber-intelligence to fortify against current and future threats
- TMWA continually look for ways to improve its cybersecurity posture and combat changing cyber threat tactics through evolving defense tools and techniques
- TMWA adapts and implement new Industry, State, Federal security guidelines by consistently reviewing & refining current security processes\policies\procedures
- TMWA confirm its security posture and security readiness by routinely conducting in house tabletop exercises, authorized penetration testing, and recurrent process auditing

**TMWA's cybersecurity commitment has been proven time and again thru positive and reaffirming feedback provided by external auditors and testers**

# Thank you!

Questions?





## STAFF REPORT

TO: Standing Advisory Committee  
FROM: Sonia Folsom, TMWA SAC Liaison  
DATE: May 23, 2024  
SUBJECT: **Discussion and possible recommendation to the Board on promoting Alex Talmant from Senior Citizen alternate representative to primary representative**

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### **Recommendation**

Staff is presenting to the Standing Advisory Committee (SAC) for its review, and possible recommendation to the Board, to promote Alex Talmant as the senior citizen alternate representative to fill the senior citizen primary position.

### **Background**

The SAC was created in 2005 to review budgets, rate proposals and other matters as directed by the Board. In 2016, the TMWA Board decided to remove the two appointments made by the Northern Nevada Water Planning Commission and the Office of Consumer Advocate and replace those with two at-large positions. The committee currently consists of Board-appointed representatives of ten customer classes and four other seats held by representatives of community-interest groups (**Attachment 1**). TMWA customers interested in becoming a SAC member can submit a letter of interest at any time and will be presented to the SAC when a vacancy opens for consideration.

**TMWA Standing Advisory Committee**  
Term Appointments  
2024-2025 Membership List

Customer Class	Primary Representative	Member Since	Term Ends	Alternate Representative	Member Since	Term Ends
Wholesale (Sun Valley)	Chris Melton	2020	12/31/2025	Vacant		
Irrigation	Neil McGuire	2005	12/31/2024	Vacant		
Multi-family Residential	Vacant			Jonnie Pullman	2012	12/31/2025
Commercial	John Krmpotic	2020	12/31/2025	Ryan Greenhalgh	2024	12/31/2025
Senior Citizen	Robert Chambers	2005	12/31/2024	Alex Talmant	2021	12/31/2025
At-Large 1	Ken McNeil	2013	12/31/2024	Vacant		
At-Large 2	Jordan Hastings	2017	12/31/2024	Vacant		
Residential:						
Representative 1	Dale Sanderson	2017	12/31/2024	Vacant		
Representative 2	Fred Arndt	2017	12/31/2024	Vacant		
Representative 3	Jerry Wager	2014	12/31/2024	Kevin Ryan	2021	12/31/2025
Appointments:						
BANN	Colin Hayes	2010	12/31/2025	Justin McDougal	2024	12/31/2025
Reno-Sparks Chamber	Brian Bosma	2024	12/31/2025	Conner Naisbitt	2024	12/31/2025