



TRUCKEE MEADOWS WATER AUTHORITY
Board of Directors

AGENDA

Wednesday, March 15, 2017 at 10:00 a.m.
Sparks Council Chambers, 745 4th Street, Sparks, NV

Board Members

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

Vice Chair Vaughn Hartung
Member Jeanne Herman
Member Naomi Duerr

NOTES:

1. The announcement of this meeting has been posted at the following locations: Truckee Meadows Water Authority (1355 Capital Blvd., Reno), Reno City Hall (1 E. First St., Reno), Sparks City Hall (431 Prater Way, Sparks), Sparks Justice Court (1675 E. Prater Way, Sparks), Washoe County Courthouse (75 Court St., Reno), Washoe County Central Library (301 South Center St., Reno), Washoe County Administration (1001 East Ninth St., Reno), and at <http://www.tmwa.com>.
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 before the meeting date.
3. The Board may elect to combine agenda items, consider agenda items out of order, remove agenda items, or delay discussion on agenda items. Arrive at the meeting at the posted time to hear item(s) of interest.
4. Asterisks (*) denote non-action items.
5. 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.
6. In the event the Chairman and Vice-Chairman are absent, the remaining Board members may elect a temporary presiding officer to preside over the meeting until the Chairman or Vice-Chairman are present (**Standing Item of Possible Action**).
7. Notice of possible quorum of Western Regional Water Commission: Because several members of the Truckee Meadows Water Authority Board of Directors are also Trustees of the Western Regional Water Commission, it is possible that a quorum of the Western Regional Water Commission may be present, however, such members will not deliberate or take action at this meeting in their capacity as Trustees of the Western Regional Water Commission.

1. Roll call*
2. Pledge of allegiance*
3. Public comment — limited to no more than three minutes per speaker*
4. Approval of the agenda (**For Possible Action**)
5. Approval of the minutes of the February 15, 2017 meeting of the TMWA Board of Directors (**For Possible Action**)

¹The Board may adjourn from the public meeting at any time during the agenda to receive information and conduct labor-oriented discussions in accordance with NRS 288.220.

6. Discussion and possible direction to staff regarding 2017 legislative activities and current bills — John Zimmerman and Steve Walker, Walker & Associates **(For Possible Action)**
7. Discussion and action on the TMWA Tentative Budget for the Fiscal Year ending June 30, 2018 and Draft Capital Improvement Plan for Fiscal Years 2018 through 2022 — Michele Sullivan **(For Possible Action)**
8. PUBLIC HEARING ON RATE AND RULE AMENDMENTS
 - a. Presentation on results of TMWA Open House (and customer comments) regarding the proposed rate adjustments — Andy Gebhardt & Marlene Olsen*
 - b. Rate Amendment, Introduction: Introduction and First Reading of a potential water rate adjustment, including possible multi-year adjustments, with proposed initial implementation for the first billing cycle in May 2017 — Michele Sullivan and John Enloe **(For Possible Action)**
 - c. Public comment — limited to no more than three minutes per speaker*

CLOSE PUBLIC HEARING

9. Discussion and action on Resolution No. 249: A Resolution to approve funding for the projects recommended by the Truckee River Fund Advisory Committee and an authorization for the Community Foundation to fund such projects from Fund proceeds — John Enloe **(For Possible Action)**
10. General Manager's Report*
11. Public comment — limited to no more than three minutes per speaker*
12. Board comments and requests for future agenda items*
13. Adjournment **(For Possible Action)**

¹The Board may adjourn from the public meeting at any time during the agenda to receive information and conduct labor-oriented discussions in accordance with NRS 288.220.

TRUCKEE MEADOWS WATER AUTHORITY
DRAFT MINUTES OF THE FEBRUARY 15, 2017
MEETING OF THE BOARD OF DIRECTORS

The Board of Directors met on Wednesday, February 15, 2017, at Washoe County Commission Chambers, 1001 E. Ninth Street, Reno, Nevada. Acting Chair Hartung called the meeting to order at 10:01 a.m.

1. ROLL CALL

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

Member Absent: Geno Martini

A quorum was present.

2. PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was led by Bill Hauck, TMWA Senior Hydrologist.

3. PUBLIC COMMENT

There was no public comment.

4. APPROVAL OF THE AGENDA

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

5. APPROVAL OF THE MINUTES OF THE JANUARY 18, 2017 MINUTES

Upon motion by Member Smith, second by Member Dahir, which motion duly carried by unanimous consent of the members present, the Board approved the December 21, 2016 minutes.

6. WATER SUPPLY UPDATE

Bill Hauck, TMWA Senior Hydrologist, reported the recent storms are one of the best starts to the water year in recent history. Mr. Hauck stated the precipitation and snowpack levels are measured at more than 160% of the average, Lake Tahoe is almost 3.2 feet above the natural rim (more than 50% full) and is expected to fill in 2017, precautionary releases began at Lake Tahoe, and Stampede and Lahontan reservoirs, and normal river flows are projected for several years.

Acting Chair Hartung confirmed if there were no more rain/snow storms, it would still be about 160% of normal and if there was any danger if the level at Lake Tahoe exceeded its maximum level. Mr. Hauck replied with some melt off, ground absorption, there would still be significant snowpack by the end of March; and everyone is taking preemptive measures at all the lakes and reservoirs, and about 2,500 cubic feet per second can be released from Lake Tahoe.

Alternate Member Dahir inquired if there are any concerns with the dams. Mr. Hauck replied no, TMWA dams are in good condition, however there is high run-off at Donner Lake which staff is monitoring. Mark Foree, TMWA General Manager, added staff issued a precautionary statement to Donner Lake front property owners regarding the potential for flooding. Andy Gebhardt, TMWA Director of Operations and Water Quality, reported staff worked well with the Town of Truckee Fire and Police departments to ensure residents were communicated with appropriately to take precautions.

Acting Chair Hartung asked about the ability to release water at Donner Lake and if there was concern for an increase in melt off as well as any liabilities if Donner Lake flooded. Mr. Hauck replied 500 cubic feet per second (cfs) can be released when the lake is full and no, there are no concerns. Pat Nielson, TMWA Director of Distribution, Maintenance and Generation, added TMWA crew are going up to Donner Lake daily to ensure there are no issues. Michael Pagni, TWMA General Counsel, replied there was some potential for exposure related to flooding.

7. DISCUSSION AND POSSIBLE ACTION AND DIRECTION TO STAFF REGARDING 2017 LEGISLATIVE ACTIVITIES, CURRENT BILLS, AND TMWA RECOMMENDED POSITIONS ON LEGISLATIVE PROPOSALS

John Zimmerman, TMWA Water Resources Manager, informed the Board that the TMWA Legislative Subcommittee met on February 10 to review the staff recommendations on positions on proposed bills. The legislative subcommittee approved all recommended positions. Staff is continuing to track bill draft requests (BDRs) as they become bills and will continue to update both the TMWA legislative subcommittee and Board.

Acting Chair Hartung commented on how well the presentation made by TMWA to the Senate Natural Resources and Assembly Natural Resources, Agriculture and Mining committees was received.

Mr. Foree agreed it went very well and they are invited every session to present on Water Day.

Steve Walker, TMWA Lobbyist, added many legislators told him how informative the presentation was. Mr. Walker noted that Chair Heidi Swank asked why TMWA did not have an aggressive conservation

program much like Southern Nevada. He informed her that the cui-ui fish drives the conservation program and water saved does not create a resource.

Member Duerr asked if there was a policy of using conserved water for growth. Mr. Foree replied no, the Truckee River Operating Agreement (TROA) does not allow it and all conserved water is either preserved in upstream reservoirs or flows into the Truckee River and to Pyramid Lake.

Mr. Walker and Mr. Pagni provided an overview of the bills introduced since the January 18 meeting and actions taken by the TMWA Legislative Subcommittee on February 10.

Discussion revolved around AB107, sealing records of tenants who are evicted, which may be an issue for TMWA regarding payment of bills.

Member Brekhus noted that in the City of Reno approximately 50% of residents are renters and this bill may be problematic. Mr. Walker replied it would more likely be amended since Nevada has a loose eviction law.

Discussion continued regarding AB113, making accommodations for nursing mothers, with Member Jardon questioning the position of Neutral and not Support. Mr. Pagni replied because it creates a cause of action for employees.

Member Smith recommended it be changed to Support.

Mr. Pagni discussed AB193, BDR 40-716, which would require fluoridation of the water supply in Washoe County. Specifically it would obligate TMWA to fluoridate its water supply and is similar to the bill that was introduced in 2009. Under existing law water can only be fluoridated if the voters approve that by a majority vote in an election. Mr. Pagni noted that voters in Washoe County had voted on this issue in 2002, and 58% voted against fluoridation. AB193 mandates, from the state, that the State Board of Health would require TMWA to fluoridate its water supply. He noted staff conducted a preliminary fiscal impact analysis to fluoridate the supply; to rehabilitate the surface water plants and all 83 wells. Preliminary estimates are about \$67 million for capital improvements and \$3 million for operating expenses and would translate to about 8.8% increase in customer rates. Mr. Pagni requested a position from the Board.

Acting Chair Hartung clarified that this bill mandates the changes to TMWA's system and circumvents the public voting process. Mr. Pagni replied yes.

Member Smith inquired if the 8.8% increase would be on top of the proposed 3% rate adjustment. Mr. Pagni replied that is correct.

Member Duerr inquired who was responsible for writing up the fiscal note, would the rehabilitation occur at the central treatment plant and not at the wells, and where is the water treated. Mr. Pagni replied TMWA is responsible for the fiscal note. Mark Foree, TMWA General Manager, added as the bill is written, it would require TMWA to fluoridate at all sources, including the 83 wells, which drives the majority of the capital costs.

Member Duerr stated she is neutral on the fluoridation model, which has a positive impact on public health, and would like to learn more about the fiscal note. Mr. Foree remarked that TMWA hired a third-party consultant to provide the estimate based on the bill language, which would require all sources to have fluoridation facilities.

Member Hartung noted it would be futile to require TMWA to fluoridate its water if it was not provided to all customers.

Member Jardon expressed her concern about the fiscal note, but more importantly circumventing the vote of the people, as it exists today, the majority said no. Mr. Walker noted in 2009, the bill was amended to say “you can fluoridate as long as you go back to people”, which passed the Senate, but not the House. He noted the Board should expect amendments during the legislative session.

Discussion followed regarding TMWA’s water supply, 80% surface water and 20% wells, that the majority of the costs would be associated with the wells, and if the ratio changed during a period of drought. Mr. Foree replied the majority of the cost would be associated with the wells, and the ratio has been up to approximately 20% in recent non-drought years and possibly more in drought years, and can change depending on operational circumstances.

Member Herman stated she is against fluoridation and supports the voters. She inquired what the cost would be to remove the fluoride before it returns to the river, and expressed her doubts that the PLPT would approve. Mr. Pagni replied the fiscal note prepared was for TMWA to put the fluoride in, but not the cost if fluoride needs to be removed before it returns to the river. Those costs would need to be prepared by TMWRF.

Member Dahir pointed out TMWA has improved its water operations at a cost in the past, but the issue is the State circumventing the voters. Clark County voted to fluoridate its water supply at a significant cost and has found it beneficial. Mr. Pagni noted in 1999 the Clark County fiscal impact was about \$4 million because majority of their water supply comes from surface water sources and far less expensive.

Acting Chair Hartung asked Mr. Pagni to explain how the Clark County bill was written in 1999. Mr. Pagni explained the wording on the ballot and that sources indicated the wording confused the voters.

Member Brekhus opposed the States preemption on local control and authority, and objected to the use of the water system as a medical delivery system. She appealed to Member Smith that Truckee Meadows Water Reclamation Facility (TMWRF) consider a fiscal note.

Member Smith noted the main obstacle is agreement by the PLPT, and objected to lowering the population cap from 700,000 to 100,000 and it needs to be put to a vote of the people.

Member Brekhus suggested that the Board position should be to let the voters decide. Mr. Pagni confirmed the law currently requires the vote of the people.

Member Jardon advised Board position should be to watch and convey their concerns to the bill sponsors.

Acting Chair Hartung asked if the Board can vote on the bill today and give direction to staff to provide information to customers. Mr. Pagni replied the Board could give direction today. Mr. Foree added that TMWA should provide information to the customers as soon as possible.

Mr. Walker suggested the Board can oppose unless amended.

Public Comment

Kevin Dick, Washoe County District Health Chief, provided comment on the fluoridation bill AB 193 and provided supporting documentation (see *Attachment*). Mr. Dick requested the Board not oppose the bill.

Member Duerr asked for Mr. Dick to explain the cost estimate and if the 15% of water supply was set by state law. Mr. Dick replied there were different approaches for fluoridating the TMWA system that was conducted in the study; provisions in the bill states if less than 15% of the water supply comes from wells, fluoridation is not required; the wells do not need fluoridation for a period during a drought; and 15% is stipulated in the Nevada Revised Statutes (NRS) and AB193.

Member Duerr stated she would like to review of the cost estimate to see if it is possible to reduce it and bring it to the vote of the people. Her recommendation would be to continue to watch; if the people vote to fluoridate, it would be worth the investment.

Mr. Dick mentioned he is looking forward to his meeting with TMWA to review the cost estimate study.

Member Dahir clarified since this is a medical issue, if the voters agreed, would all costs have to be paid by TMWA or could the District Health Department offer some financial assistance. Mr. Dick replied they do not have the financial capability to support the rehabilitation costs.

Acting Chair Hartung pointed out even if the fiscal cost was reduced by half, it would still result in a total of 7.5%, which includes the proposed 3% rate adjustment.

Mr. Foree emphasized the bill as written, would require TMWA to install fluoridation at all sources of supply.

Member Jardon cited three reasons to oppose the bill as written: expense, preemption of local authority and circumventing the vote of the people.

Member Brekhus agreed with Member Jardon's motion; many of her constituents are opposed to putting fluoride in the water and she will support them by also opposing AB 193. She pointed out that the Board of Health District should have presented their case locally a year ago, since it is a local issue, to discuss the question of fluoridating water in Washoe County, and coinciding with rate setting is untimely.

Acting Chair Hartung noted some people are allergic to fluoride and that may need to be considered. He stated that he personally knew of at least one person that said they were allergic to Fluoride. Mr. Dick replied he would like to be put in touch with that individual and stated that there are about 25 allergens in toothpaste products which have been confused with people being allergic to fluoride.

Member Dahir stated he would like to watch this bill only because the voters should decide, and the Board should support their decision.

Member Brekhus recommended getting this issue put on a ballot through Washoe County Commissioners. Mr. Gebhardt informed the Board that emailed highlights from Board meetings can be provided in an E-Newsletter to inform the public. Mr. Foree suggested to the Board that staff can also put the information in the bill insert as well and Mr. Gebhardt confirmed it would be the same language as in the board meeting highlights.

Upon motion by Member Jardon, second by Member Brekhus, which motion duly carried by unanimous consent of the members present, the Board approved to not support AB 193, unless amended, and to include the board position in the bill insert and public communications.

Upon motion by Member Brekhus, second by Member Herman, which motion duly carried by unanimous consent of the members present, the Board approved to change the TMWA legislative subcommittee's position on AB113 from Watch, to Watch and Support.

8. DISCUSSION AND ACTION ON APPOINTMENT OR REAPPOINTMENT OF FOUR PERSONS TO THE BOARD OF TRUSTEES OF THE WESTERN REGIONAL WATER COMMISSION CONSISTING OF ONE TMWA BOARD MEMBER EACH FROM: THE RENO CITY COUNCIL, SPARKS CITY COUNCIL, WASHOE COUNTY BOARD OF COMMISSIONERS, AND ONE PERSON TO REPRESENT TMWA AS SUCCESSOR TO SOUTH TRUCKEE MEADOWS GENERAL IMPROVEMENT DISTRICT, FROM THE FOLLOWING LIST OF ELIGIBLE PERSONS: JENNY BREKHUS, JEANNE HERMAN, NEOMA JARDON, BOB LUCEY, RON SMITH, FOR TWO-YEAR TERMS ENDING MARCH 31, 2019

Member Duerr requested clarification on item 4 in the staff report regarding the "South Truckee Meadows General Improvement District (STMGID) or its successor shall appoint one trustee from its membership." Mr. Pagni reported Section 25 of the Western Regional Water Commission (WRWC) Act does not have that language of its membership with respect to its appointments by Sun Valley General Improvement District and STMGID, only that they have to be an elected official.

Member Duerr asked if the agenda item has been adequately noticed and the appointment can be made from the pool of all elected officials. Mr. Pagni replied it is adequately noticed with respect to the pool on the agenda, but if she wished to consider other elected officials not on the agenda, they would have to bring it back for consideration at a future meeting.

Member Brekhus noted Commissioner Lucey is the representative of the former STMGID customers, but all the members on the TMWA Board could also be appointed in this place.

Upon motion by Member Hartung, second by Member Smith which motion duly carried by unanimous consent of the members present, the Board voted to reappoint Bob Lucey to the Western Regional Water

Commission representing the successor to the South Truckee Meadows General Improvement District.

Upon motion by Member Hartung, second by Member Brekhus which motion duly carried by unanimous consent of the members present, the Board voted to reappoint Ron Smith to the Western Regional Water Commission as the TMWA Board’s representative from the Sparks City Council.

Member Brekhus commented she would like to continue serving on the WRWC.

Member Jardon remarked she is interested in serving on the WRWC.

Upon motion by Member Smith, second by Member Dahir which motion duly carried by five to two vote of the members present, with Members Brekhus and Duerr dissenting, the Board voted to appoint Neoma Jardon to the Western Regional Water Commission as the TMWA Board’s representative from the Reno City Council.

Upon motion by Member Hartung, second by Member Smith which motion duly carried by unanimous consent of the members present, the Board approved to reappoint Jeanne Herman to the Western Regional Water Commission as the TMWA Board’s representative from the Washoe County Board of Commissioners.

Acting Chair Hartung called for a recess at 11:49 a.m.

The TMWA Board meeting resumed at 11:55 a.m.

Acting Chair Hartung proposed to hear agenda item 10 before agenda item 9.

10. DISCUSSION AND ACTION ON ADOPTION OF RESOLUTION NO. 248: A RESOLUTION DESIGNATED BY THE SHORT TITLE “2017 REFUNDING BOND RESOLUTION” AUTHORIZING THE ISSUANCE BY THE AUTHORITY OF ITS “TRUCKEE MEADOWS WATER AUTHORITY, WATER REVENUE REFUNDING BONDS, SERIES 2017,” FOR THE PURPOSE OF DEFRAYING WHOLLY OR IN PART THE COST OF REFUNDING CERTAIN OUTSTANDING BONDS; PROVIDING THE FORM, TERMS, AND CONDITIONS OF THE BONDS AND THE SECURITY THEREFOR; PROVIDING FOR THE COLLECTION AND DISPOSITION OF REVENUES DERIVED FROM THE OPERATION OF THE AUTHORITY’S WATER SYSTEM; PLEDGING SUCH REVENUES TO THE PAYMENT OF THE BONDS; PROVIDING OTHER COVENANTS, AGREEMENTS, DETAILS AND OTHER MATTERS RELATING THERETO

Michele Sullivan, TMWA Chief Financial Officer, introduced Jennifer Stern, Bond Counsel, who was present, and Thomas Toepfer, Public Financial Management (PFM) Senior Managing Consultant, who was on the phone, to answer any questions Board Members may have on the agenda item. Ms. Sullivan requested the Board adopt Resolution No. 248 for the 2017 Refunding Bond, which will refund a \$202 million 2007 Revenue Bond outstanding. Over \$32 million in the debt reserve fund will be used to pay the bond down during the refunding, and staff expects to receive a premium and end up with a principal balance of \$152 million; which is a \$15 million, or 7.4%, present value savings. TMWA's debt policy states that if more than 3% savings can be achieved, refunding needs to be considered. She stated the ratings presentations with Moody's and Standard and Poor's went well, and the ratings will be received by the end of the month.

Acting Chair Hartung inquired what TMWA's ratings are currently. Ms. Sullivan replied AA. Acting Chair Hartung commented that the refunding was the fiscally responsible thing to do, given the current situation.

Member Brekhus asked if the 2007 Bond of \$202 million was from the original acquisition of TMWA, if \$32 million was unrestricted cash and what the payment structure for the refunding was. Ms. Sullivan replied yes, they were advanced refunded in 2007; no, \$32 million is restricted cash and on the release of the restriction will be used to pay down the debt; and the payment structure is level debt service. Mr. Toepfer replied the existing bonds are being paid at about \$23.6 million per year in debt service for years 2020-2030, during which the principal is paid; no principal, only interest (\$9.5 million), is paid for the three years prior to 2020; with the refunding, TWMA expects an annual savings in debt service payments of \$4 million for years 2020-2030.

Upon motion by Member Smith, second by Member Dahir which motion duly carried by unanimous consent of the members present, the Board adopted Resolution No. 248: A resolution designated by the short title "2017 refunding bond resolution" authorizing the issuance by the authority of its "Truckee Meadows Water Authority, Water Revenue Refunding Bonds, Series 2017," for the purpose of defraying wholly or in part the cost of refunding certain outstanding bonds; providing the form, terms, and conditions of the bonds and the security therefor; providing for the collection and disposition of revenues derived from the operation of the authority's water system; pledging such revenues to the payment of the bonds; providing other covenants, agreements, details and other matters relating thereto.

9. PRESENTATION OF FINANCIAL PERFORMANCE FOR FIRST HALF FISCAL YEAR 2017

Tabitha Carlisle, TMWA Financial Controller, presented on the first half FY 2017 financial performance. Ms. Carlisle referred to Attachment A-1, and noted water sales were higher than budget due to a dry

summer; total operating revenues are \$5.4 million more than the revised budget with hydroelectric revenues \$0.1 million higher than budgeted due to high river flows. Operating spending was \$2.3 million under budget with a \$0.5 million decrease in power being the main contributor. Ms. Carlisle noted it is mid-year and expect to see these operating costs expended by end of the fiscal year. She also noted TMWA received the last portion of the Truckee River Operating Agreement (TROA) grant from the Bureau of Reclamation for \$1.2 million and the Contribution from Others of \$1.2 million was from Scannell Properties for their payment of costs related to the Truckee Canyon Water Treatment Plant Expansion.

Member Brekhus inquired about the Truckee Canyon Water Treatment Plant Expansion, where it was located and if it was oversized for future development. Scott Estes, TMWA Director of Engineering, replied no, it was not oversized for future development. The contribution from Scannell Properties was part of the new business process, which added new demand to the system by developing the Fed Ex property and because the existing system did not have a back-up well and only had a total capacity of 50 gallons per minute (gpm). Mr. Foree added it was a special project for the Fed Ex property and the satellite water system includes an arsenic treatment facility, and TMWA inherited it as part of the merger.

Ms. Carlisle continued with providing an overview of the cash flow; \$19.8 million over budget, but quite a few capital improvement projects have not been spent as many have been delayed by weather; higher water sales than budgeted; and about \$4.4 million in commercial paper was redeemed due water rights (will-serve) sales.

Acting Chair Hartung inquired when staff expects to have all three hydro plants online. Mr. Nielson replied the Verdi Plant is online, but there have been significant delays at the Fleisch (penstock replacement) and Washoe Hydro (replacement of the spill structure) plants due to the snow and rain, which have created very difficult construction conditions.

Member Dahir inquired if staff anticipate presenting project updates soon. Ms. Sullivan replied staff is working on updating the Capital Improvement Plan (CIP), which will be presented at the March meeting.

Ms. Carlisle provided an overview of net-position compared to prior year, indicating a \$2.9 million gain in 2015 regarding the payment for TROA, which will not be a repeated event.

Member Brekhus asked whether staff is considering placing commercial paper in a more long-term stable instrument, requested an overview of 2018-2023 revenues, debt as a percentage for each year and the debt refunding plan over the 5-year period, and inquired if the financial advisors approve the use of commercial paper. Ms. Sullivan replied her concerns can be addressed when staff presents the tentative budget, but the concept with commercial paper is a balance of how much cash is invested with how much is borrowed; and yes, TMWA's financial advisors approve commercial paper because it is paid down with will-serve sales.

Acting Chair Hartung commended PFM on their great efforts working with TMWA.

11. DISCUSSION AND ACTION REGARDING APPOINTMENT OF, AND POSSIBLE APPROVAL OF CONTRACT WITH, TAMI FRUHWIRTH AS TMWA'S OMBUDSMAN

Mr. Gebhardt presented the ombudsman contract for Board approval.

Upon motion by Member Herman, second by Member Smith, which motion duly carried by unanimous consent of the members present, the Board approved the contract with Tammy Fruhwirth as TMWA's ombudsman.

12. GENERAL MANAGER'S REPORT

Mr. Foree had nothing further to report.

13. PUBLIC COMMENT

There was no public comment.

14. BOARD COMMENTS AND REQUESTS FOR FUTURE AGENDA ITEMS

There were no board comments.

15. ADJOURNMENT

With no further discussion, Acting Chair Jardon adjourned the meeting at 12:16 p.m.

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

Sonia Folsom, Recording Secretary



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Centers for Disease Control
and Prevention (CDC)
Atlanta, GA 30341-3724

April 2, 2015

STATEMENT ON THE EVIDENCE SUPPORTING THE SAFETY AND EFFECTIVENESS OF COMMUNITY
WATER FLUORIDATION

On behalf of the Centers for Disease Control and Prevention (CDC), I am pleased to provide a statement on the evidence regarding the safety and benefits of community water fluoridation. For the record, this statement is not testimony for or against any specific legislative proposal.

Good oral health is an important part of good overall health and an essential part of our everyday lives. Diet, sleep, psychological status, social interaction, school, and work are all affected by impaired oral health. Over the past several decades, there have been major improvements in the nation's oral health that have benefitted most Americans.¹

However, profound disparities in oral health status remain for some population subgroups, such as the poor, the elderly, and many members of racial and ethnic minority groups.¹ Tooth decay is one of the most common chronic diseases among American children with 1 of 4 children living below the federal poverty level experiencing untreated tooth decay.² Untreated decay can cause pain, school absences, difficulty concentrating, and poor appearance—all contributing to decreased quality of life and ability to succeed.³

Tooth decay and its complications are preventable, and several preventive and early treatment options are safe, effective, and economical. The CDC leads national efforts to improve oral health by using proven strategies such as community water fluoridation and school-based dental sealant programs that prevent oral diseases.

An Effective Intervention

Community water fluoridation is "the controlled addition of a fluoride compound to a public water supply to achieve a concentration optimal for dental caries prevention."¹ The process of adding fluoride to public water systems in the United States began in 1945 in Grand Rapids, Michigan. Soon after, dramatic declines in dental caries were noted among school children in Grand Rapids compared with school children from surrounding areas. Since then, community water fluoridation has been adopted by communities across the country, providing the cornerstone of caries prevention in the United States.¹ In 2012, more than 210 million people, or 74.6% of the U.S. population served by public water supplies, drank water with optimal fluoride levels to prevent tooth decay.⁴

Water fluoridation is beneficial for reducing and controlling tooth decay and promoting oral health across the lifespan. Evidence shows that water fluoridation prevents tooth decay by providing frequent and consistent contact with low levels of fluoride, ultimately reducing tooth decay by 25% in children and adults.⁵⁻⁸ Additional evidence shows that schoolchildren living in communities

where water is fluoridated have, on average, 2.25 fewer decayed teeth compared to similar children not living in fluoridated communities.⁹

The safety and benefits of fluoride are well documented and have been reviewed comprehensively by several scientific and public health organizations. The U.S. Public Health Service; the United Kingdom's National Institute for Health Research, Centre for Reviews and Dissemination, at the University of York; and the National Health and Medical Research Council, Australia have all conducted scientific reviews by expert panels and concluded that community water fluoridation is a safe and effective way to promote good oral health and prevent decay.¹⁰⁻¹² The U.S. Community Preventive Services Task Force, on the basis of systematic reviews of scientific literature, issued a strong recommendation in 2001 and again in 2013, for community water fluoridation for the prevention and control of tooth decay.^{9,13}

A Cost-saving Intervention

Although other fluoride-containing products such as toothpaste, mouth rinses, and dietary supplements are available and contribute to the prevention and control of dental caries, community water fluoridation has been identified as the most cost-effective method of delivering fluoride to all members of the community regardless of age, educational attainment, or income level.^{14,15} Analyses have also shown that water fluoridation provides additional benefits across the lifespan beyond what is gained from using other fluoride-containing products.^{8,11,16}

By preventing tooth decay, community water fluoridation has been shown to save money, both for families and the health care system.^{7,17} The return on investment (ROI) for community water fluoridation varies with size of the community, increasing as community size increases, but, as noted by the U.S. Community Preventive Services Task Force, community water fluoridation is cost-saving even for small communities.^{17,18} The estimated annual ROI for community water fluoridation, excluding productivity losses, ranged from \$5.03 in small communities of 5,000 people or less, to \$31.88 in large communities of 20,000 or more people.⁷ The estimated ROI for community water fluoridation including productivity losses was \$6.71 in small communities and \$42.57 in large communities.¹⁹

A study of a community water fluoridation program in Colorado used an economic model to compare the program costs associated with community water fluoridation with treatment savings achieved through reduced tooth decay. The analysis, which included 172 public water systems, each serving populations of 1,000 individuals or more, found that 1 year of exposure to fluoridated water yielded an average savings of \$60 per person when the lifetime costs of maintaining a restoration were included.²⁰ Analyses of Medicaid claims data in 3 other states (Louisiana, New York, and Texas), have also found that children living in fluoridated communities have lower caries related treatment costs than do similar children living in non-fluoridated communities; the difference in annual per child treatment costs ranged from \$28 to \$67.²¹⁻²³

A Safe Intervention

Expert panels consisting of scientists from the United States and other countries, with expertise in various health and scientific disciplines, have considered the available evidence in peer-reviewed literature and have not found convincing scientific evidence linking community water fluoridation with any potential adverse health effect or systemic disorder such as an increased risk for cancer,

Down syndrome, heart disease, osteoporosis and bone fracture, immune disorders, low intelligence, renal disorders, Alzheimer disease, or allergic reactions.^{9,11}

Documented risks of community water fluoridation are limited to dental fluorosis, a change in dental enamel that is cosmetic in its most common form. Changes range from barely visible lacy white markings in milder cases to pitting of the teeth in the rare, severe form. In the United States, most dental fluorosis seen today is of the mildest form, affecting neither aesthetics nor dental function.²⁴ Fluorosis can occur when young children—typically less than 8 years of age, whose permanent teeth are still forming under the gums—take in fluoride from any source.^{9,11}

Conclusion

In the seminal report, *Oral Health in America: A Report of the Surgeon General*, Surgeon General David Satcher observed a “‘silent epidemic’ of dental and oral diseases [...] with those suffering the most found among the poor of all ages.”¹ The report affirms that community water fluoridation is “an inexpensive means of improving oral health that benefits all residents of a community, young and old, rich and poor alike.” Because of its contribution to the dramatic decline in tooth decay over the past 70 years, CDC named community water fluoridation 1 of 10 great public health achievements of the 20th century.¹⁴

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COMMUNITY WATER FLUORIDATION AND ORAL HEALTH IN NEVADA

TRENDS (2001-2010) IN UNTREATED DECAY AND MEAN DMFT INDICES BETWEEN 3 COHORTS OF ADOLESCENTS LIVING IN FLUORIDATED (CLARK COUNTY) AND NON-FLUORIDATED (WASHOE AND "ALL-OTHERS") COMMUNITIES IN NEVADA

RACIAL DIFFERENCES IN UNTREATED DECAY AND MEAN DMFT SCORES OF NEVADA MIDDLE AND HIGH SCHOOL STUDENTS LIVING IN FLUORIDATED AND NON-FLUORIDATED COMMUNITIES

GENDER DIFFERENCES IN UNTREATED DECAY AND MEAN DMFT SCORES AMONG ADOLESCENTS 13-18 YEARS OF AGE LIVING IN FLUORIDATED AND NON-FLUORIDATED COMMUNITIES IN NEVADA



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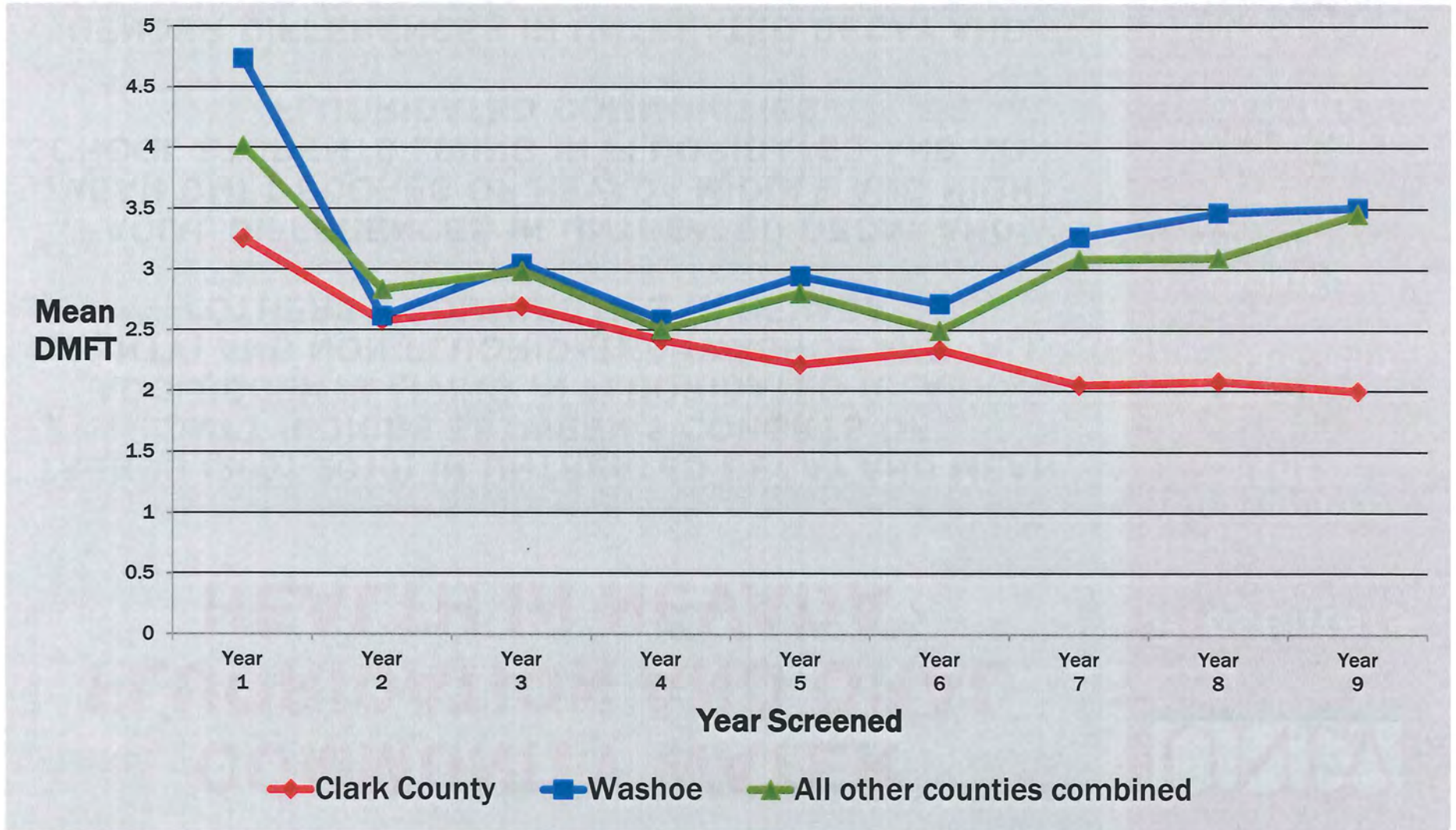
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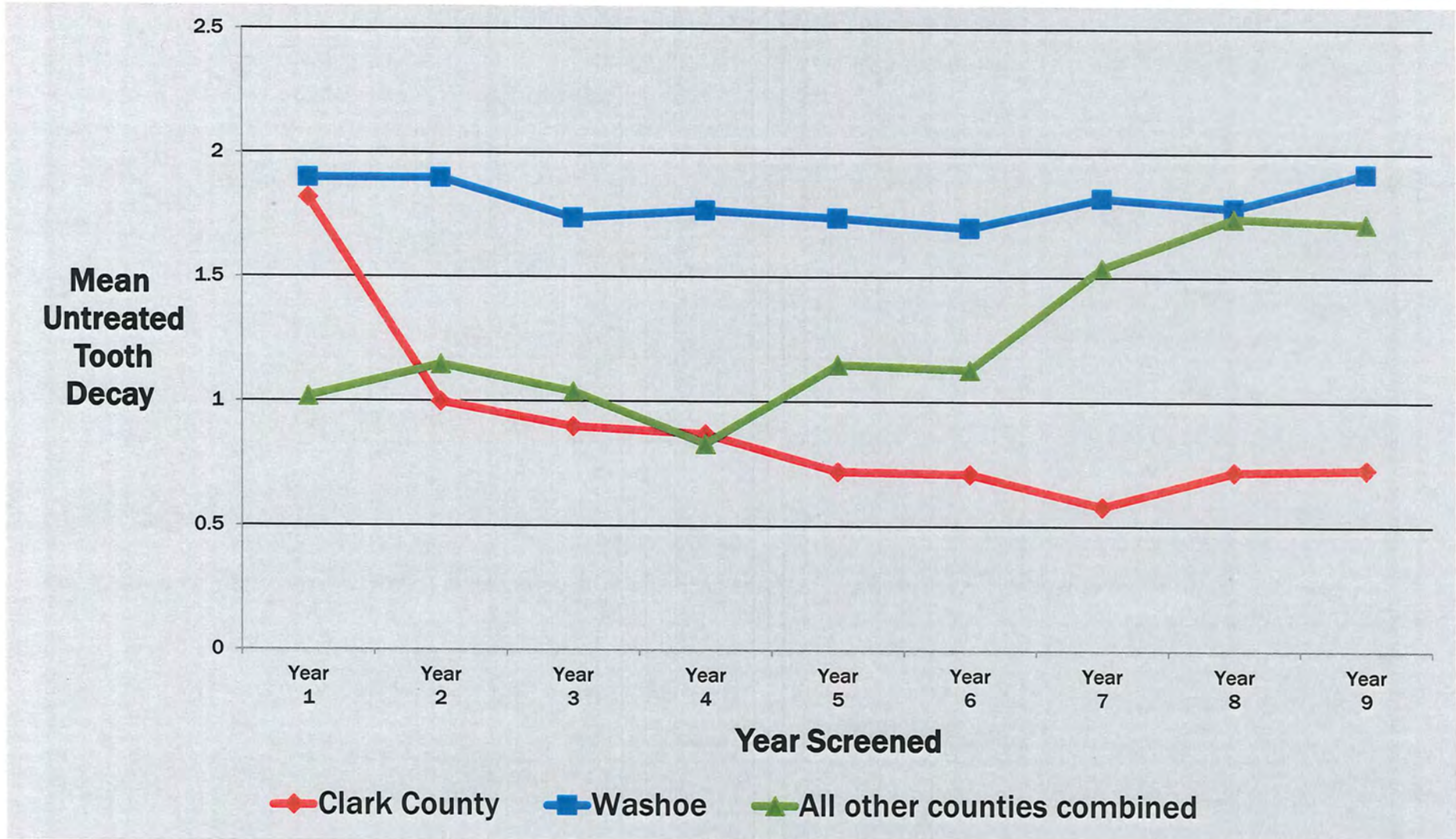
UNLV School of
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OVERALL TRENDS MEAN DMFT INDICES 2001-2010



OVERALL TRENDS UNTREATED TOOTH DECAY (2001-2010)



COMPENDIUM

National and International Organizations That Recognize the Public Health Benefits of Community Water Fluoridation for Preventing Dental Decay

Academy of Dentistry
International Academy of General Dentistry
Academy for Sports Dentistry
Alzheimer's Association
America's Health Insurance Plans
American Academy of Family Physicians
American Academy of Nurse Practitioners
American Academy of Oral and Maxillofacial Pathology
American Academy of Orthopaedic Surgeons
American Academy of Pediatrics
American Academy of Pediatric Dentistry
American Academy of Periodontology
American Academy of Physician Assistants
American Association for Community Dental Programs
American Association for Dental Research
American Association for Health Education
American Association for the Advancement of Science
American Association of Endodontists
American Association of Oral and Maxillofacial Surgeons
American Association of Orthodontists
American Association of Public Health Dentistry
American Association of Women Dentists
American Cancer Society
American College of Dentists
American College of Physicians—
American Society of Internal Medicine
American College of Preventive Medicine
American College of Prosthodontists
American Council on Science and Health
American Dental Assistants Association
American Dental Association
American Dental Education Association
American Dental Hygienists' Association
American Dietetic Association
American Federation of Labor and Congress of Industrial
Organizations
American Hospital Association
American Legislative Exchange Council
American Medical Association
American Nurses Association
American Osteopathic Association
American Pharmacists Association
American Public Health Association
American School Health Association
American Society for Clinical Nutrition
American Society for Nutritional Sciences
American Student Dental Association
American Water Works Association
Association for Academic Health Centers
Association of American Medical Colleges
Association of Clinicians for the Underserved
Association of Maternal and Child Health Programs
Association of State and Territorial Dental Directors
Association of State and Territorial Health Officials
Association of State and Territorial Public Health Nutrition
Directors
British Fluoridation Society
Canadian Dental Association
Canadian Dental Hygienists Association
Canadian Medical Association
Canadian Nurses Association
Canadian Paediatric Society
Canadian Public Health Association
Child Welfare League of America
Children's Dental Health Project
Chocolate Manufacturers Association
Consumer Federation of America
Council of State and Territorial Epidemiologists
Delta Dental Plans Association
FDI World Dental Federation
Federation of American Hospitals
Hispanic Dental Association
Indian Dental Association (U.S.A.)
Institute of Medicine
International Association for Dental Research
International Association for Orthodontics
International College of Dentists
March of Dimes Birth Defects Foundation
National Association of Community Health Centers
National Association of County and City Health Officials
National Association of Dental Assistants
National Association of Local Boards of Health
National Association of Social Workers
National Confectioners Association
National Dental Assistants Association
National Dental Association
National Dental Hygienists' Association
National Down Syndrome Congress
National Down Syndrome Society
National Foundation of Dentistry for the Handicapped
National Head Start Association
National Health Law Program
National Healthy Mothers, Healthy Babies Coalition
Oral Health America
Robert Wood Johnson Foundation
Society for Public Health Education
Society of American Indian Dentists
Special Care Dentistry
Academy of Dentistry for Persons with Disabilities
American Association of Hospital Dentists
American Society for Geriatric Dentistry
The Children's Health Fund
The Dental Health Foundation (of California)
U.S. Department of Defense
U.S. Department of Veterans Affairs
U.S. Public Health Service
Health Resources and Services Administration (HRSA)
Centers for Disease Control and Prevention (CDC)
National Institute of Dental and Craniofacial Research
(NIDCR)
World Federation of Orthodontists



STAFF REPORT

TO: Chairman and Board Members
THRU: Mark Foree, General Manager
FROM: John Zimmerman, Manager of Water Resources
DATE: March 8, 2017
SUBJECT: **Discussion and possible direction to staff regarding 2017 legislative activities and current bills**

This is a standing item on the Board's monthly agenda while the 2017 Legislature is in session. Since the February Board meeting, the TMWA legislative subcommittee has met and reviewed all new bills introduced through March 2nd. Attachment 1 lists all bills reviewed by the subcommittee and its recommendations. Staff, TMWA lobbyist Steve Walker, and General Counsel Michael Pagni will update the Board regarding the new legislation and the subcommittee's recommendations. Additionally, they will advise the Board regarding any relevant new information regarding the session or existing bills the Board has already reviewed (see, Attachment 2).

Staff requests the Board provide direction regarding TMWA's position on, and possible action regarding, the new legislation described in Attachment 1.

Key 2017 Legislative Deadlines:

February 6-----Opening Day
March 20-----Legislators' Bill Introductions
March 27-----Committees' Bill Introductions
April 14-----Committee Passage (1st House)
April 25-----First House Passage
May 19-----Committee Passage (2nd House)
May 26-----Second House Passage
June 5-----Sine Die

**NEW BILLS APPROVED BY THE TMWA
LEGISLATIVE SUBCOMMITTEE**

Content	Description	Sponsor	Tags	Committee Position	Status	MeetingPastTitle	MeetingFutureTitle
AB152	Revises various provisions governing the investment of public money. (BDR 31-782)	Kramer	Financial, Risk Management	2/14 WATCH	Status/Location: Government Affairs		
AB154	Revises provisions relating to prevailing wages. (BDR 28-747)	Assemblymen Brooks, Spiegel, Sprinkle, Joiner, Daly, Elliot Anderson, Bilbray-Axelrod, Bustamante Adams, Cohen, Frierson, Fumo, Jauregui, Miller, Monroe-Moreno, Neal, Swank and Thompson; Senator Atkinson	Financial, Risk Management; Human Resources	2/14 WATCH	Status/Location: Government Affairs		Next Meeting: Assembly Committee on Government Affairs Next Meeting Date: 3/8/2017 8:30 AM
AB159	Prohibits hydraulic fracturing in this State. (BDR 46-593)	Assemblymen Watkins, Swank and Brooks; Senator Ratti	Governance; Water Rights (Resources, Conservation)	2/17 WATCH	Status/Location: Natural Resources, Agriculture, and Mining	Last Meeting: Assembly Committee on Natural Resources, Agriculture, and Mining Last Meeting Date: 2/21/2017 1:30 PM Last Meeting Action: Heard	
AB169	Revises provisions governing certain fees collected by county recorders. (BDR 20-832)	Jauregui, Brooks and Carrillo	Governance; Open Meeting, Records, Boards and Elections	2/17 WATCH	Status/Location: Government Affairs		
AB178	Revises provisions concerning employment discrimination. (BDR 18-831)	Jauregui, Araujo, McCurdy II and Brooks	Human Resources	2/17 WATCH	Status/Location: Government Affairs		Next Meeting: Assembly Committee on Government Affairs Next Meeting Date: 3/9/2017 8:30 AM
AB201	Creates the Office of the Inspector General in the Office of Finance in the Office of the Governor. (BDR 18-548)	Edwards	Financial, Risk Management; Governance	2/17 WATCH	Status/Location: Government Affairs		
AB206	Revises provisions relating to the renewable portfolio standard. (BDR 58-746)	Assemblymen Brooks, Frierson, Yeager, McCurdy II, Watkins and Fumo; Senators Cancela, Parks and Spearman	Energy	2/17 WATCH	Status/Location: Commerce and Labor	Last Meeting: Assembly Committee on Commerce and Labor Last Meeting Date: 2/24/2017 1:30 PM Last Meeting Action: To Subcommittee	Next Meeting: Assembly Committee on Commerce and Labor, Subcommittee on Energy Next Meeting Date: 3/8/2017 4:00 PM
AB208	Prohibits certain vehicles from being operated in the extreme left lane of certain controlled-access highways. (BDR 43-189)	Oscarson	Emergency Mgmt, Safety, Motor Vehicles	2/22 WATCH	Status/Location: Transportation		
AB209	Revises provisions governing the forfeiture of water rights. (BDR 48-308)	Oscarson	Water Rights (Resources, Conservation)	2/15 WATCH	Status/Location: Natural Resources, Agriculture, and Mining		
AB211	Revises provisions governing compensation and wages. (BDR 53-764)	Jauregui, Fumo and McCurdy II	Financial, Risk Management; Human Resources	2/17 WATCH, NEUTRAL	Status/Location: Commerce and Labor	Last Meeting: Assembly Committee on Commerce and Labor Last Meeting Date: 2/27/2017 1:30 PM Last Meeting Action: Heard	
AB213	Revises provisions relating to dental care. (BDR 57-288)	Ohrenschall	Human Resources	2/16 WATCH	Status/Location: Commerce and Labor	Last Meeting: Assembly Committee on Commerce and Labor Last Meeting Date: 3/1/2017 1:30 PM Last Meeting Action: Heard	

**NEW BILLS APPROVED BY THE TMWA
LEGISLATIVE SUBCOMMITTEE**

Content	Description	Sponsor	Tags	Committee Position	Status	MeetingPastTitle	MeetingFutureTitle
AB227	Makes changes relating to domestic partnerships. (BDR 11-784)	Carrillo	Human Resources	2/17 WATCH	Status/Location: Judiciary	Last Meeting: Assembly Committee on Judiciary Last Meeting Date: 2/27/2017 8:00 AM Last Meeting Action: Heard	
AB246	Revises provisions relating to the creation of a local improvement district and tax increment area. (BDR 22-705)	Kramer, Benitez-Thompson, Daly, Hansen and Titus	Governance	3/2: WATCH	Status/Location: Government Affairs		
AB249	Requires the State Plan for Medicaid and all health insurance plans to provide certain benefits relating to contraception. (BDR 38-858)	Frierson, Bilbray-Axelrod, Sprinkle, Benitez-Thompson, Yeager, Elliot Anderson, Araujo, Brooks, Bustamante Adams, Carlton, Carrillo, Cohen, Daly, Diaz, Flores, Fumo, Jauregui, Joiner, McCurdy II, Miller, Monroe-Moreno, Neal, Ohrenschall, Spiegel, Swank, Thompson and Watkins	Human Resources	3/2: WATCH	Status/Location: Health and Human Services	Last Meeting: Assembly Committee on Health and Human Services ast Meeting Date: 3/6/2017 1:00 PM Last Meeting Action: Heard	
AJR4	Requests the National Research Council of the National Academy of Sciences to conduct an independent scientific and economic analysis of the current management practices of the Colorado River, the impact of these practices on water security, flood protection and biodiversity recovery, and alternative management options, including draining Lake Powell and decommissioning and destroying the Glen Canyon Dam. (BDR R-101)	Assemblywoman Swank; Senator Segerblom	Water Rights (Resources, Conservation)	3/2 WATCH	Status/Location: Natural Resources, Agriculture, and Mining		
SB127	Revises provisions relating to the election of members of certain local governing bodies. (BDR 20-786)	Goicoechea	Financial, Risk Management; Governance; Open Meeting, Records, Boards and Elections	2/17 WATCH	Status/Location: Government Affairs	Last Meeting: Senate Committee on Government Affairs -- Work Session Item Last Meeting Date: 2/24/2017 1:00 PM Last Meeting Action: Amend, and do pass as amended	
SB134	Revises provisions concerning water. (BDR 48-787)	Goicoechea and Ford	Water Rights (Resources, Conservation)	2/17 OPPOSE	Status/Location: Natural Resources		
SB138	Authorizes the creation of a local improvement district for a waterfront maintenance project. (BDR 22-678)	Hardy	Financial, Risk Management; Property; Water Rights (Resources, Conservation)	2/17 WATCH	Status/Location: Government Affairs		Next Meeting: Senate Committee on Government Affairs Next Meeting Date: 3/8/2017 1:00 PM
SB157	Revises provisions governing the payment of compensation for overtime and the requirement for a 30-minute meal period. (BDR 53-453)	Farley	Human Resources	2/17 WATCH	Status/Location: Commerce, Labor and Energy		
SB161	Revises provisions governing the installation of drought tolerant landscaping in common-interest communities. (BDR 10-611)	Gansert	Governance; Open Meeting, Records, Boards and Elections; Water Rights (Resources, Conservation)	2/17 WATCH	Status/Location: Judiciary		
SB170	Revises provisions governing public records. (BDR 19-560)	Segerblom	Open Meeting, Records, Boards and Elections	2/17 WATCH	Status/Location: Government Affairs		

**NEW BILLS APPROVED BY THE TMWA
LEGISLATIVE SUBCOMMITTEE**

Content	Description	Sponsor	Tags	Committee Position	Status	MeetingPastTitle	MeetingFutureTitle
SB188	Revises provisions prohibiting certain discriminatory acts. (BDR 18-106)	Parks, Cannizzaro and Ford	Human Resources	2/17 WATCH	Status/Location: Government Affairs		
SB193	Revises provisions relating to certain payments to public officers and employees. (BDR 23-81)	Settelmeyer	Financial, Risk Management; Human Resources; Open Meeting, Records, Boards and Elections	2/17 WATCH	Status/Location: Legislative Operations and Elections		
SB197	Extends the deadline for issuing certain bonds for certain environmental improvement projects in the Lake Tahoe Basin. (BDR S-493)	Committee on Government Affairs	Governance	3/3 SUPPORT	Status/Location: Government Affairs		Next Meeting: Senate Committee on Government Affairs Next Meeting Date: 3/8/2017 1:00 PM
SB198	Extends the deadline for issuing certain bonds relating to the property and natural resources of Nevada approved by the voters in 2002. (BDR S-494)	Committee on Government Affairs	Governance	3/2 WATCH	Status/Location: Government Affairs		Next Meeting: Senate Committee on Government Affairs Next Meeting Date: 3/8/2017 1:00 PM
SB217	Revises provisions governing the membership of the Public Employees' Retirement Board. (BDR 23-842)	Roberson	PERS, PEBS	3/2 WATCH	Status/Location: Government Affairs		
SB230	Makes various changes relating to judgments. (BDR 2-512)	Committee on Judiciary	Financial, Risk Management; Human Resources	3/2 WATCH	Status/Location: Judiciary		
SB231	Revises provisions relating to water. (BDR 48-736)	Committee on Natural Resources	Water Rights (Resources, Conservation)	3/2 WATCH	Status/Location: Natural Resources		
SB233	Requires the State Plan for Medicaid and health insurance plans to provide certain benefits. (BDR 38-817)	Ratti, Cancela, Spearman, Cannizzaro, Woodhouse, Atkinson, Denis, Ford, Manendo, Parks and Segerblom	Human Resources	3/2 WATCH	Status/Location: Health and Human Services		Next Meeting: Senate Committee on Health and Human Services Next Meeting Date: 3/6/2017 3:30 PM Last Meeting Action: Heard, No Action
SJR7	Urges Congress to enact legislation transferring title to certain public lands to the State of Nevada. (BDR R-841)	Senators Roberson, Goicoechea, Settelmeyer, Kieckhefer, Gustavson, Gansert, Hammond, Hardy and Harris; Assemblymen Wheeler, Oscarson, Hansen, Titus, Ellison, Paul Anderson, Edwards, Hambrick, Krasner, Marchant and Pickard	Governance; Property	2/28 WATCH	Status/Location: Natural Resources		

STATUS OF REVIEWED/EXISTING BILLS

Content	Description	Sponsor	Tags	Board/Committee Position	Status	MeetingPastTitle	MeetingFutureTitle
AB3	Makes various changes relating to the administration of workers' compensation claims. (BDR 53-161)	Committee on Commerce and Labor	Human Resources	1/4 WATCH, NEUTRAL	Status/Location: Commerce and Labor		
AB5	Provides for the creation of certain local improvement districts. (BDR 22-233)	Committee on Government Affairs	Energy; Governance	1/3 WATCH, NEUTRAL	Status/Location: Government Affairs	Last Meeting: Assembly Committee on Commerce and Labor, Subcommittee on Energy Last Meeting Date: 2/20/2017 4:00 PM Last Meeting Action: Mentioned no jurisdiction	
AB8	Revises provisions governing the collection of delinquent municipal utility charges. (BDR 21-323)	Committee on Government Affairs	Financial, Risk Management; Governance	11/21 WATCH, SUPPORT	Status/Location: Government Affairs	Last Meeting: Assembly Committee on Government Affairs Last Meeting Date: 3/2/2017 8:30 AM Last Meeting Action: Heard	
AB11	Revises provisions governing the operation of unmanned aerial vehicles. (BDR 44-137)	Committee on Transportation	Emergency Mgmt, Safety, Motor Vehicles; Governance	11/21 WATCH, NEUTRAL	Status/Location: Transportation	Last Meeting: Senate Committee on Finance and Assembly Committee on Ways and Means, Subcommittees on Public Safety, Natural Resources, and Transportation Last Meeting Date: 2/17/2017 8:00 AM Last Meeting Action: Mentioned No Jurisdiction	Next Meeting: Assembly Committee on Transportation Next Meeting Date: 3/9/2017 3:15 PM
AB26	Revises provisions governing the dissemination of certain records of criminal history to certain persons by the Central Repository for Nevada Records of Criminal History. (BDR 14-138)	Committee on Corrections, Probation, and Parole	Human Resources	1/4 WATCH, NEUTRAL	Status/Location: Corrections, Parole, and Probation	Last Meeting: Assembly Committee on Corrections, Parole, and Probation Last Meeting Date: 2/14/2017 8:00 AM Last Meeting Action: Heard	
AB30	Establishes a committee to review the current tax structure in this State. (BDR S-432)	Committee on Taxation	Financial, Risk Management	1/10 WATCH, NEUTRAL	Status/Location: Government Affairs		
AB32	Revises provisions governing pest control. (BDR 49-176)	Committee on Natural Resources, Agriculture, and Mining	Governance	1/9 WATCH, NEUTRAL	Status/Location: Natural Resources, Agriculture, and Mining	Last Meeting: Assembly Committee on Natural Resources, Agriculture, and Mining Last Meeting Date: 3/2/2017 1:30 PM Last Meeting Action: Heard	
AB34	Revises provisions relating to state lands. (BDR 26-179)	Committee on Natural Resources, Agriculture, and Mining	Property	12/20 WATCH, NEUTRAL	Status/Location: Natural Resources, Agriculture, and Mining	Last Meeting: Assembly Committee on Natural Resources, Agriculture, and Mining Last Meeting Date: 2/23/2017 1:30 PM Last Meeting Action: Heard	
AB36	Revises the Charter of the City of Reno. (BDR S-448)	Committee on Legislative Operations and Elections	Governance; Open Meeting, Records, Boards and Elections	1/6 WATCH, NEUTRAL	Status/Location: General File	Last Meeting: Assembly Committee on Government Affairs -- Work Session Item (ws) Last Meeting Date: 3/3/2017 8:30 AM Last Meeting Action: Do pass	
AB39	Revises provisions governing the appointment of representatives to a governing board for regional planning in certain counties. (BDR 22-433)	Committee on Government Affairs	Governance; Open Meeting, Records, Boards and Elections	11/21 WATCH, NEUTRAL	Status/Location: Government Affairs		
AB42	Revises various provisions relating to public records. (BDR 19-389)	Committee on Government Affairs	Open Meeting, Records, Boards and Elections	11/21 WATCH, NEUTRAL	Status/Location: Government Affairs	Last Meeting: Assembly Committee on Government Affairs Last Meeting Date: 2/16/2017 8:30 AM Last Meeting Action: Heard	

STATUS OF REVIEWED/EXISTING BILLS

AB48	Makes various changes relating to local government. (BDR 21-435)	Committee on Government Affairs	Financial, Risk Management	11/21 OPPOSE, NEUTRAL WITH AMENDMENT	Status/Location: Government Affairs		
AB50	Revises provisions relating to the imposition of certain fees, civil penalties and administrative fines by the State Environmental Commission. (BDR 40-181)	Committee on Natural Resources, Agriculture, and Mining	Financial, Risk Management; Governance	12/29 WATCH	Status/Location: Natural Resources, Agriculture, and Mining	Last Meeting: Assembly Committee on Natural Resources, Agriculture, and Mining Last Meeting Date: 2/23/2017 1:30 PM Last Meeting Action: Heard	
AB54	Revises provisions relating to reports of certain accidents or motor vehicle crashes by employers. (BDR 53-160)	Committee on Commerce and Labor	Emergency Mgmt, Safety, Motor Vehicles	1/6 WATCH, NEUTRAL	Status/Location: Commerce and Labor	Last Meeting: Assembly Committee on Commerce and Labor Last Meeting Date: 2/17/2017 12:00 PM Last Meeting Action: Heard	Next Meeting: Assembly Committee on Commerce and Labor -- Work Session Item Next Meeting Date: 3/10/2017 1:30 PM
AB71	Revises provisions governing public employees' retirement. (BDR 23-429)	Committee on Government Affairs	PERS, PEBS	14 WATCH, NEUTRAL	Status/Location: Government Affairs	Last Meeting: Assembly Committee on Government Affairs Last Meeting Date: 2/9/2017 8:30 AM Last Meeting Action: Mentioned not agendized	
AB72	Revises provisions relating to the Uniform Plumbing Code. (BDR 40-237)	Committee on Health and Human Services	Public Works	1/13 WATCH;	Status/Location: Health and Human Services		
AB79	Revises provisions relating to economic development. (BDR S-404)	Committee on Government Affairs	Financial, Risk Management; Water Rights (Resources, Conservation)	1/6 WATCH, NEUTRAL	Status/Location: Government Affairs	Last Meeting: Assembly Committee on Government Affairs Last Meeting Date: 3/6/2017 9:00 AM Last Meeting Action: Heard	
AB83	Makes various changes relating to insurance. (BDR 57-159)	Committee on Commerce and Labor	Financial, Risk Management	1/6 WATCH, NEUTRAL	Status/Location: Commerce and Labor	Last Meeting: Assembly Committee on Commerce and Labor Last Meeting Date: 2/22/2017 1:30 PM Last Meeting Action: Heard	
AB100	Revises provisions governing contractors. (BDR 54-194)	Swank	Human Resources	2/7: WATCH	Status/Location: Government Affairs		
AB106	Revises provisions governing government contracting. (BDR 27-295)	Spiegel	Governance	2/9: WATCH	Status/Location: Government Affairs	Last Meeting: Assembly Committee on Government Affairs Last Meeting Date: 2/23/2017 8:30 AM Last Meeting Action: Heard	
AB107	Provides for the sealing of records relating to eviction under certain circumstances. (BDR 3-689)	Bilbray-Axelrod	Financial, Risk Management; Governance	2/10: WATCH	Status/Location: Judiciary		
AB109	Revises provisions relating to public utilities. (BDR 58-622)	Assemblyman Ellison; Senator Goicoechea	Water Rights (Resources, Conservation)	2/9: WATCH, NEUTRAL	Status/Location: Commerce and Labor		
AB113	Requires an employer to make certain accommodations for a nursing mother. (BDR 40-7)	Spiegel	Human Resources	2/9: WATCH, SUPPORT	Status/Location: Health and Human Services	Last Meeting: Assembly Committee on Health and Human Services Last Meeting Date: 2/27/2017 1:00 PM Last Meeting Action: Heard	
AB114	Revises provisions governing irrigation districts. (BDR 48-639)	Titus	Water Rights (Resources, Conservation)	2/9: WATCH, SUPPORT	Status/Location: Natural Resources, Agriculture, and Mining		
AB121	Makes various changes relating to collective bargaining between local government employers and employee organizations. (BDR 23-621)	Yeager	Human Resources	2/9 WATCH	Status/Location: Government Affairs		
AB138	Authorizes the de minimus collection of precipitation under certain circumstances. (BDR 48-445)	Carlton	Water Rights (Resources, Conservation)	2/10: WATCH, NEUTRAL	Status/Location: Natural Resources, Agriculture, and Mining		

STATUS OF REVIEWED/EXISTING BILLS

AB193	Requires the fluoridation of water in certain circumstances. (BDR 40-716)	Joiner and Sprinkle	Financial, Risk Management; Water Quality (NDEP); Water Rights (Resources, Conservation)	2/15: OPPOSE	Status/Location: Natural Resources, Agriculture, and Mining	Last Meeting: Assembly Committee on Natural Resources, Agriculture, and Mining Last Meeting Date: 3/7/2017 1:30 PM Last Meeting Action: Heard
SB10	Revises provisions governing the publication of information concerning unclaimed and abandoned property. (BDR 10-407)	Committee on Judiciary	Property	11/21 WATCH, NEUTRAL	Status/Location: Judiciary	Last Meeting: Senate Committee on Judiciary Last Meeting Date: 2/13/2017 1:30 PM Last Meeting Action: Heard, No Action
SB21	Abolishes the Nye County Water District. (BDR S-478)	Committee on Government Affairs	Water Rights (Resources, Conservation)	11/21 WATCH	Status/Location: Government Affairs	Last Meeting: Senate Committee on Government Affairs Last Meeting Date: 2/24/2017 1:00 PM Last Meeting Action: Heard, No Action
SB23	Clarifies requirements relating to a petition for judicial review of a final administrative decision in a contested case. (BDR 18-374)	Committee on Government Affairs	Governance	11/21 WATCH	Status/Location: Judiciary	Last Meeting: Senate Committee on Government Affairs -- Work Session Item (ws) Last Meeting Date: 2/17/2017 11:00 AM Last Meeting Action: Do pass
SB24	Authorizes cities to enact ordinances requiring the registration of vacant properties. (BDR 21-421)	Committee on Government Affairs	Governance; Property	11/21 WATCH	Status/Location: Government Affairs	Last Meeting: Assembly Committee on Government Affairs Last Meeting Date: 2/10/2017 8:30 AM Last Meeting Action: Mentioned no jurisdiction
SB26	Makes certain changes concerning governmental entities that contract with or invest in companies that boycott Israel. (BDR 27-418)	Committee on Government Affairs	Governance	11/21 WATCH, NEUTRAL	Status/Location: Government Affairs	
SB36	Revises provisions relating to ethics in government. (BDR 23-230)	Committee on Legislative Operations and Elections	Governance	11/21 WATCH, NEUTRAL	Status/Location: Legislative Operations and Elections	Last Meeting: Senate Committee on Legislative Operations and Elections Last Meeting Date: 3/1/2017 3:30 PM Last Meeting Action: Heard, No Action
SB47	Makes various changes relating to the appropriation of water. (BDR 48-499)	Committee on Natural Resources	Water Rights (Resources, Conservation)	1/6 WATCH, SUPPORT	Status/Location: Natural Resources	Last Meeting: Senate Committee on Natural Resources Last Meeting Date: 3/7/2017 1:30 PM Last Meeting Action: Heard, No Action
SB48	Revises provisions relating to relations between local governments and their employees. (BDR 23-428)	Committee on Government Affairs	Human Resources	1/4 WATCH, NEUTRAL	Status/Location: Government Affairs	
SB51	Makes various changes relating to the adjudication of vested water rights. (BDR 48-180)	Committee on Natural Resources	Water Rights (Resources, Conservation)	12/29 WATCH, NEUTRAL	Status/Location: Natural Resources	Last Meeting: Senate Committee on Natural Resources Last Meeting Date: 3/2/2017 1:00 PM Last Meeting Action: Heard, No Action
SB52	Revises provisions relating to unemployment compensation. (BDR 53-226)	Committee on Commerce, Labor and Energy	Human Resources	1/4 WATCH, NEUTRAL	Status/Location: Commerce, Labor and Energy	Last Meeting: Senate Committee on Commerce, Labor and Energy -- Work Session Item (ws) Last Meeting Date: 3/3/2017 8:00 AM Last Meeting Action: Amend, and do pass as amended
SB53	Revises provisions relating to the installation, operation and maintenance of telecommunications facilities. (BDR 18-234)	Committee on Transportation	Information Tech	1/6 WATCH	Status/Location: Transportation	Last Meeting: Senate Committee on Transportation Last Meeting Date: 2/28/2017 8:30 AM Last Meeting Action: Heard, No Action
SB63	Revises provisions which govern responsibility for the costs of maintenance and repair of certain county roads. (BDR 20-324)	Committee on Revenue and Economic Development	Governance; Property	1/6 WATCH, NEUTRAL	Status/Location: Revenue and Economic Development	Last Meeting: Assembly Committee on Government Affairs Last Meeting Date: 2/10/2017 8:30 AM Last Meeting Action: Mentioned no jurisdiction
SB67	Revises provisions relating to fire safety requirements for multi-story buildings occupied by people. (BDR 42-412)	Committee on Government Affairs	Emergency Mgmt, Safety, Motor Vehicles	1/6 WATCH, NEUTRAL	Status/Location: Government Affairs	Last Meeting: Assembly Committee on Government Affairs Last Meeting Date: 2/14/2017 8:30 AM Last Meeting Action: Mentioned no jurisdiction
SB69	Revises provisions governing state agencies, boards and commissions that regulate occupations and professions. (BDR 54-229)	Committee on Commerce, Labor and Energy	Governance; Human Resources; Open Meeting, Records, Boards and Elections	1/5 WATCH, NEUTRAL	Status/Location: Commerce, Labor and Energy	Last Meeting: Senate Committee on Commerce, Labor and Energy Last Meeting Date: 2/27/2017 9:00 AM Last Meeting Action: Heard, No Action

STATUS OF REVIEWED/EXISTING BILLS

SB73	Revises provisions relating to water. (BDR 48-177)	Committee on Natural Resources	Property; Water Rights (Resources, Conservation)	1/6 WATCH, NEUTRAL	Status/Location: Natural Resources	Last Meeting: Joint Meeting of the Assembly Committee on Natural Resources, Agriculture, and Mining and Senate Committee on Natural Resources Last Meeting Date: 2/7/2017 2:00 PM Last Meeting Action: Mentioned no jurisdiction
SB74	Revises provisions relating to water. (BDR 48-178)	Committee on Natural Resources	Water Rights (Resources, Conservation)	12/29 WATCH	Status/Location: Natural Resources	Last Meeting: Senate Committee on Natural Resources Last Meeting Date: 3/2/2017 1:00 PM Last Meeting Action: Heard, No Action
SB78	Revises provisions relating to local government financial administration. (BDR 31-403)	Committee on Government Affairs	Financial, Risk Management	1/9 WATCH, NEUTRAL	Status/Location: Government Affairs	Last Meeting: Senate Committee on Government Affairs Last Meeting Date: 3/6/2017 1:00 PM Last Meeting Action: Heard, No Action
SB80	Makes various changes relating to the Public Employees' Benefits Program and the Deferred Compensation Program. (BDR 18-243)	Committee on Government Affairs	PERS, PEBS	1/5 WATCH, NEUTRAL	Status/Location: Government Affairs	Last Meeting: Assembly Committee on Legislative Operations and Elections Last Meeting Date: 3/2/2017 1:30 PM Last Meeting Action: Mentioned no jurisdiction
SB82	Revises provisions relating to employment and trade secrets. (BDR 53-419)	Committee on Commerce, Labor and Energy	Human Resources	1/5 WATCH, NEUTRAL	Status/Location: Commerce, Labor and Energy	
SB84	Makes various changes relating to ethics in government. (BDR 23-250)	Committee on Legislative Operations and Elections	Governance	1/6 WATCH	Status/Location: Legislative Operations and Elections	Last Meeting: Senate Committee on Legislative Operations and Elections Last Meeting Date: 2/27/2017 3:30 PM Last Meeting Action: Heard, No Action



STAFF REPORT

TO: TMWA Board of Directors
THRU: Mark Foree, General Manager
FROM: Michele Sullivan, Chief Financial Officer/Treasurer
DATE: February 28, 2017
SUBJECT: Discussion and action on the TMWA Tentative Budget for the Fiscal Year ending June 30, 2018 and Draft Capital Improvement Plan for Fiscal Years 2018 through 2022

Recommendation

TMWA Board and SAC review the tentative budget report for the fiscal year ending June 30, 2018 and preliminary Five Year Capital Improvement Plan 2018-2022 (CIP). This allows the Board and SAC to provide input and direction to TMWA management in advance of the public hearing on the budget and CIP on Wednesday, May 17, 2017. The tentative budget will be filed with the Nevada Department of Taxation by April 15, 2017 in compliance with statutory requirements.

Schedule of Revenues and Expenses Summary- See Attachment A

Water demands have been projected based on an average of calendar year 2013 to 2016 water usage per service type and by service size. This methodology projects water sales revenue at \$94.3 million, essentially equal to projections in the most recent funding plan which assumed a 3% rebound in demand from drought levels. The proposed 3% increase in rates is included in revenue. The fiscal year 2018 budget also anticipates the addition of approximately 2,000 service connections over the course of the year. This expected growth is corroborated by current billing statistics.

Hydroelectric revenues are expected to improve over last year with generation expected through the entire year. River flows are expected to be sufficient to operate all three hydroelectric plants, with only minor outages for repairs or weather, which will generate \$3.0 million in revenue.

Other miscellaneous operating revenues are estimated at \$3.1 million. Other miscellaneous revenue are made up of late payment fees, turn-on and turn-off fees, construction water sales,

cell phone tower rents, inspection services on new business and interruptible water sales. Depending on the pace of residential/commercial construction there could be more or less construction water sales and inspection fees than projected.

TMWA operating expenses are expected to increase slightly in 2018. With drought conditions abated more reliance on surface water will occur in fiscal year 2018. As a result, electric power costs are expected to be reduced. Water treatment chemical expenses are expected to increase in fiscal year 2018 due to a 2% increase in pricing and more usage for year-round treatment of surface water. Wages and salaries costs are expected to increase as a result of labor negotiations and a slight increase in staffing levels. Staffing is expected to increase from 204 full time equivalents (FTEs) in fiscal year 2017 to 206 FTEs in fiscal year 2018. The increase in staffing is for two new technicians to assist with combining the water operating systems onto one updated platform. Employee benefits are expected to decrease for fiscal year 2018. New pension accounting rules changed the manner in which pension expenses were calculated for fiscal year 2017, and caused a one-time adjustment. Health care premiums are planned to increase 5% with total outlays in this area estimated to be \$2.2 million. All other benefit rates are expected to be similar to last year's levels on a proportionate basis. The budget anticipates continued support of the *Truckee River Fund* for \$850,000 and the *Desert Research Institute's (DRI's)* cloud seeding activities for \$210,000. As in the past TMWA personnel will continue to work diligently on managing operating expenses. A breakdown of services and supplies expenses is presented in *Attachment C*.

Investment income is expected to continue to be low due to relatively low rates of return but there are indications that interest rates may pick up in fiscal year 2018. Also, an agreement to pay TMWA 5.5% interest on certain reserves balances will be terminated with the 2017 bond refunding, which further reduces investment income in fiscal year 2018. If we were able to continue with the agreement, investment income earned would have been paid to the federal government due to arbitrage rules. Therefore, refunding the bonds at lower rates, and terminating the agreement is the best option for TMWA.

The community is experiencing more growth which is reflected in greater developer fee collections commensurate with the expectation that 2,000 additional residential units will be connected in fiscal year 2018. It is challenging to determine how much of this service connection growth is from entitled projects and shadow inventories.

Interest expense is expected to decrease with the refunding of the 2007 bonds. Some interest rate accommodation is being made for the upcoming refunding. Once that refunding is priced and the deal closed the actual results will be incorporated in the final budget. TMWA anticipates significant savings with a meaningful reduction in outstanding principal on the Series 2007 Refunding Bonds. The budget currently reflects estimates of these savings.

Draft Capital Improvement Plan for Fiscal Years 2018-2022

TMWA plans to spend \$169.5 million over the next five years on a variety of construction projects and capital outlays of which \$42.6 million is expected to be spent in fiscal year 2018. *Please refer to Attachment D.*

Of the total \$42.6 million in capital spending in fiscal year 2018, \$15.1 million (35%), will be for a number of distribution system improvements. Three projects totaling \$3.9 million are included in various RTC road reconstruction projects to replace antiquated water main, valves, service connections and related appurtenances. These projects are the 4th Street/Prater Way Main Replacement, South Virginia/Midtown Main Replacement and Pyramid Way Transmission Main Replacement. In addition TMWA will advance two other conjunctive use water main projects on the Mt. Rose/Galena Fan area to further water resource management objectives in this part of the service area. Another water resource management project is to begin the design/engineering with initial construction of the Mt. Rose/Galena Fan Water Treatment Facility for \$6.0 million.

For the last four years of the 2018-2022 CIP TMWA will continue with CIP projects at a reduced, but relatively level scale which will include a combination of rehabilitation construction projects and construction to expand water system capacity to accommodate growth in the community. Total spending on water system rehabilitation projects is expected to be \$126.5 million over five years. The bulk of the remaining balance of project spending will be for water system expansion. After board input TMWA staff will finalize and present a final comprehensive CIP at the May 17, 2017 public hearing.

Cash Position and Coverage Ratios

At this time, TMWA expects to begin fiscal year 2017 with approximately \$160.0 million in total cash and investments, and end the fiscal year with \$152.3 million of total cash and investments based upon planned spending levels. These projections can be found in ***Attachment B***. This is a projected decrease in cash of \$7.7 million, and includes pay down of Commercial Paper notes by \$7.2 million. Of the total ending cash and investments in fiscal year 2018, \$45.6 million will be restricted for debt service payments and reserve requirements under TMWA's bond indentures and \$106.7 million will be unrestricted to be used for future operating expenses, capital improvements and any other necessary outlays. The \$45.6 million in restricted cash reserves includes \$6.5 million of remaining transferred funds from STMGID which are earmarked for capital improvements in the former STMGID service area.

TMWA's senior lien debt coverage ratio (DSC ratio), excluding system development charges, is estimated to be 2.95x by the end of fiscal year 2017. This ratio has been artificially inflated due to the extension of certain maturities of the Series 2016 Refunding Bonds beyond fiscal year 2034, and out of fiscal year 2018. This level of debt service coverage preserves the ability to access senior lien capital markets, if necessary, under favorable terms. TMWA's senior lien bond covenants require a minimum coverage ratio of 1.25x. TMWA's financial goals adopted in August 2003 established a debt coverage goal of approximately 1.50x (excluding developer fees) to maintain mid-level to higher level investment grade credit ratings and pay-as-you-go funding for water system rehabilitation construction projects. TMWA completed a credit review in February, 2017 by two major credit rating agencies, Moody's and Standard & Poor's (S&P), in front of the upcoming refunding opportunity with TMWA's Series 2007 Revenue Bonds. TMWA maintained its previous rating with Moody's of Aa2, and was upgraded by Standard & Poor's to AA+ from AA.

TRUCKEE MEADOWS WATER AUTHORITY
SCHEDULE OF REVENUES, EXPENSES
AND CHANGES IN NET POSITION
FOR THE FISCAL YEARS ENDED JUNE 30, 2018 v JUNE 30, 2017

	Proposed Tentative Fiscal Year 2018 Total	Presented Amended Final Fiscal Year 2017 Total	Increase (Decrease)
OPERATING REVENUES			
Charges for water sales	\$ 94,303,278	\$ 88,833,746	\$ 5,469,532
Hydroelectric sales	2,990,391	1,755,890	1,234,501
Other operating sales	3,131,500	2,471,500	660,000
Total Operating Revenues	100,425,169	93,061,136	7,364,033
OPERATING EXPENSES			
Salaries and wages	19,024,704	18,319,615	705,089
Employee benefits	8,708,062	9,332,796	(624,734)
Services and supplies	26,662,211	26,078,715	583,496
Total Operating Expenses before Depreciation	54,394,977	53,731,126	663,851
Depreciation	34,061,148	33,247,620	813,528
Total Operating Expenses	88,456,125	86,978,746	1,477,379
Operating Income	11,969,044	6,082,390	5,886,654
NONOPERATING REVENUES (EXPENSES)			
Investment earnings	1,342,692	2,231,304	(888,612)
Unrealized gain on investments	-	-	-
Gain (Loss) on disposal of assets	-	-	-
Amortization of bond/note issuance costs	(468,624)	(474,444)	5,820
Interest expense	(13,687,272)	(16,930,176)	3,242,904
Other non-operating revenue	-	-	-
Other non-operating expenses	-	-	-
Total Nonoperating Revenues (Expenses)	(12,813,204)	(15,173,316)	2,360,112
Income (Loss) before Capital Contributions	(844,160)	(9,090,926)	8,246,766
CAPITAL CONTRIBUTIONS			
Grants	200,004	150,000	50,004
Water meter retrofit program	781,488	1,619,256	(837,768)
Developer infrastructure contributions	-	-	-
Developer will-serve contributions (net of refunds)	5,034,744	4,615,656	419,088
Developer capital contributions-other	4,345,296	3,165,144	1,180,152
Developer facility charges (net of refunds)	4,826,436	4,509,144	317,292
Contributions from others	-	-	-
Contributions from other governments	-	-	-
Net Capital Contributions	15,187,968	14,059,200	1,128,768
Change in Net Position	14,343,808	4,968,274	9,375,534
NET POSITION , BEGINNING OF YEAR	\$ 589,950,588		
NET POSITION, END OF YEAR	\$ 604,294,396		

**STATEMENTS OF CASH FLOWS
 FOR THE YEAR ENDED JUNE 30, 2018**

	Presented Tentative Fiscal Year 2018 Total
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	
CASH FLOWS FROM OPERATING ACTIVITIES	
Cash received from customers	\$ 100,425,169
Cash paid to employees	(27,732,766)
Cash paid to suppliers	(26,662,211)
	<hr/>
Net Cash Provided by Operating Activities	46,030,192
	<hr/>
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES	
Acquisition and construction of capital assets	(42,605,000)
Interest paid on financing	(17,225,410)
Principal paid on financing	(2,739,695)
Proceeds from capital debt issuance	-
Redemptions of commercial paper notes	(7,200,000)
Contributions for water meter retrofit program	781,488
Contributions from developers-will-serve letters	5,034,744
Contributions from developers-other	4,345,296
Contributions from developers-facility charges	4,826,436
Grants	200,000
Bond/Note issuance costs	(468,624)
	<hr/>
Net Cash (Used) by Capital and Related Financing Activities	(55,050,765)
	<hr/>
CASH FLOWS FROM INVESTING ACTIVITIES	
Interest received	1,342,692
	<hr/>
Net Increase (Decrease) in Cash and Cash Equivalents	(7,677,881)
	<hr/>
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	\$ 160,000,000
	<hr/>
CASH AND CASH EQUIVALENTS, END OF YEAR	\$ 152,322,119
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Attachment B

**TRUCKEE MEADOWS WATER AUTHORITY
 OPERATING EXPENSE DETAILS
 ATTACHMENT C**

TMWA Operating Budget	
Wages & Salaries	19,024,707
Employee Benefits	8,708,062
Services & Supplies	<u>26,662,211</u>
Total TMWA Operating Budget	<u><u>54,394,980</u></u>
Wages & Salaries	
Salaries & Wages Base MPAT	6,951,511
Wages Base IBEW	9,355,370
Wages Temporary Personnel	368,256
Wages Overtime MPAT	345,720
Wages Overtime 1.5 IBEW	1,112,240
Wages Overtime 2.0 IBEW	841,431
Wages Shift Differentials	50,179
	<u>19,024,707</u>
Employee Benefits	
PERS Retirement	4,211,079
Heath Insurance	2,248,999
Life Insurance	62,083
Workmen's compensation	234,173
Employer Medicare	298,900
Long-Term Disability	67,190
Deferred Comp TMWA paid 401a	985,439
Other Post Employment Benefits	600,199
	<u>8,708,062</u>
Services & Supplies	
Chemicals	2,366,724
Claim Payments	195,307
Computer software maintenance	550,758
Computer spares and parts	129,432
Computer hardware maintenance	132,816
Contract Services General	4,873,203
Contract Services Construction	189,600
Contract Services Electrical	102,000
Contract Services- Equipment Maintenance and repairs	853,800
Contract Services Facilities maintenance and repairs	567,600
Contract Services	322,254
Ditch Fees	67,200
Storage Fees	648,780

**TRUCKEE MEADOWS WATER AUTHORITY
 OPERATING EXPENSE DETAILS
 ATTACHMENT C**

River monitoring	480,000
Employee expense reimbursements non travel	11,667
Equipment rentals	56,100
Insurance Property/General liability/Fleet	771,627
Leases Land	60,000
Licenses/Permits/application fees	490,398
Postage & Shipping	676,156
Professional Organization dues	96,889
Professional Services Administration	1,269,334
Professional Services Easement/ROW/Appraisals	24,000
Professional Services -Engineering	247,200
Professional Services Geotechnical/environmental	12,600
Professional Services Hydrology/resource Planning/TROA	483,000
Property taxes Nevada County CA	258,600
Property taxes Sierra County CA	384,000
Public Utility electric power	5,360,311
Public Utility gas & Propane	6,800
Public Utility water/sewer/waste disposal	179,400
Public Utility networking communication	16,200
Public Utility telephone	487,438
Street Repairs-Reno	135,000
Street Repairs Regional Transportation Commission	9,000
Street Repairs Sparks	30,000
Street Repairs Washoe County	36,000
Supplies-Administrative Office	784,880
Supplies Small Tools	175,236
Supplies Mechanical Parts	939,851
Supplies Pipes & Fittings	420,900
Supplies fuel/Lube/Oil	385,040
Supplies Pumps	119,400
Supplies Motors	191,200
Training	129,077
Travel/Lodging/Meals	85,434
Truckee River Fund	850,000
	<u>26,662,211</u>
Total TMWA Operating Budget	<u><u>54,394,980</u></u>

**Capital Improvement Summary
 Truckee Meadows Water Authority
 FY 2018 - FY 2022**

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Proposed Five Year CIP Total
Raw Water Supply Improvements						
Highland Canal-Upgrades-Downstream FY 2018 - FY 2022	225	225	225	225	225	1,125
Highland Canal-Upgrades-Diversion to Chalk Bluff FY 2018 - FY 2022	100	100	100	1,000	100	1,400
Donner Dam Improvements FY 2018	300	-	-	-	-	300
Independence Lake Permitting Study FY 2018	100	-	-	-	-	100
Indirect Potable Reuse FY 2018 - FY 2022	100	100	100	100	100	500
TROA Drought Storage / Implementation FY 2018 - FY 2022	150	150	150	150	150	750
Mesa Park Drainage FY 2018	1,900	-	-	-	-	1,900
	2,875	575	575	1,475	575	6,075
Ground Water Supply Improvements						
Well Rehabilitation Improvements FY 2018 - FY 2022	1,050	725	725	725	725	3,950
Double Diamond #4 Equipment FY 2022	-	-	-	-	-	-
Campello Capacity Increase FY 2020	-	-	150	-	-	150
Callamont Well South Equipment FY 2021	-	-	-	1,000	-	1,000
Air Guard Well Replacement FY2020	-	-	1,000	-	-	1,000
Sunrise Well #3 Replacement FY 2018 - FY 2019	500	900	-	-	-	1,400
Bedell Flat Water Bank FY 2018 - FY 2022	50	100	100	100	100	450
Lemmon Valley Well #8 Replacement FY 2022	-	-	-	-	-	-
Well Fix & Finish FY 2018 - FY 2022	150	150	150	150	150	750
Well Plugging / Conversion FY 2018	110	-	-	-	-	110
NDEP Monitoring Wells FY 2018	110	-	-	-	-	110
Thomas Creek Well Replacement FY 2020 - FY 2021	-	-	1,250	1,000	-	2,250
Spanish Springs Nitrate Treatment FY 2018	400	-	-	-	-	400
Fish Springs Ranch Monitoring Well Rehabs FY 2018	25	-	-	-	-	25
Well Head TTHM Mitigation FY 2018	200	-	-	-	-	200
Spring Creek Well 7 Recharge FY 2019	-	500	-	-	-	500
Callamont Well North Equipment FY 2022	-	-	-	-	-	-
	2,595	2,375	3,375	2,975	975	12,295
Treatment Plant Improvements						
Chalk Bluff Treatment Plant Fix & Finish FY 2018 - FY 2022	845	780	600	360	355	2,940
Glendale Treatment Plant Fix and Finish FY 2018 - FY 2022	405	485	1,250	210	65	2,415
Longley Lane Treatment Plant Fix and Finish FY 2018	145	-	-	-	-	145
Chalk Bluff Pump Building Air Handler FY 2018	850	-	-	-	-	850
Chalk Bluff Lighting Upgrade	-	-	350	-	-	350
Glendale Lighting Upgrade	250	-	-	-	-	250
Eagle Canyon Transmission Main Phase 2 FY 2019 - 2020	-	100	1,800	-	-	1,900
Truckee Canyon Water Treatment Improvements FY 2018 - FY 2022	65	35	60	60	35	255
Lightning W Treatment Improvements FY 2018 - FY 2022	60	60	10	60	160	350
SCADA Rehab / Plant Operating Software FY 2018 - FY 2022	1,339	1,257	867	755	474	4,692
Mount Rose Surface Water Treatment Plant FY 2018 - FY 2019	6,000	4,000	-	-	-	10,000
Longley Lane Water Treatment Plant Assessment / Retrofit FY 2018, 2020	55	-	600	-	-	655
Sparks Groundwater Treatment Plant FY 2022	-	-	-	-	-	-
Terminal Tank PH Adjustment FY 2018	290	-	-	-	-	290
Glendale Diversion Emergency Flood Repairs FY 2018	600	-	-	-	-	600
	10,904	6,717	5,537	1,445	1,089	25,692
Pressure Improvements						
Pressure Regulators Rehabilitation FY 2018 - 2022	400	350	350	350	350	1,800
Pressure Reducing Valve (Roll Seal) Removal FY 2018 - 2022	400	400	400	400	400	2,000
Land Acquisitions FY 2018 - 2022	250	250	250	250	250	1,250
Desert Springs Pressure Improvements FY 2019	-	400	-	-	-	400
Paloma Pressure Regulating Station / Main FY 2018	1,000	-	-	-	-	1,000
Longley Booster Pump Station / Double R Capacity Increase FY 2019	-	500	-	-	-	500
Pump Station Oversizing FY 2018 - 2022	250	100	100	100	100	650
Pump Station Rebuilds, Rehabilitations FY 2018 - 2022	600	700	700	700	700	3,400
D'Andrea #3 Pump Station (developer reimbursed direct cost) FY 2018	619	-	-	-	-	619
Truckee River Highlands Pump Station # 1 FY 2021	-	-	-	1,000	-	1,000
Mount Rose Well #3 Pump Station Improvements FY 2019 -2020	-	50	250	-	-	300
Standby Generator Improvements FY 2018 - 2022	150	800	150	150	150	1,400
Generator Additions - Lightning W, Sunrise Estates, and Old Washoe FY 2018	79	-	-	-	-	79
Idlewild Booster Pump Station Improvements FY 2021 - 2022	-	-	-	100	1,200	1,300
Mogul Booster Pump Station FY 2018	500	-	-	-	-	500
Parkridge Circle Conversion FY 2022	-	-	-	-	300	300
SW Reno Pump Zone Consolidation Phase 1 FY 2021 - 2022	-	-	-	-	300	300
Spanish Springs #1 Pump Zone Intertie FY 2021	-	-	-	600	-	600
STMGID Tank 4 Booster Pump Station / Transmission Line FY2020 - FY2021	-	-	2,450	550	-	3,000
Yellow Pine Main Pressure Regulating Station FY 2018	330	-	-	-	-	330
Wildwood Pressure Regulating Station Scada Control FY 2021	-	-	-	50	-	50
Truckee River Highlands Pump Station # 2 FY 2022	-	-	-	-	900	900
Old Virginia Regulation Station FY 2020	-	-	330	-	-	330
	4,578	3,550	4,980	4,250	4,650	22,008

Water Main-Distribution-Service Line Improvements

Street & Highway Main Replacements FY 2018 - FY 2022	3,000	5,000	5,000	5,000	5,000	23,000
4th and Prater Replacement / Modification FY 2018	2,000	-	-	-	-	2,000
South Virginia / Midtown Main Plumb to Liberty FY 2018 - FY 2019	1,100	500	-	-	-	1,600
Pyramid Way Transmission Main FY 2018	800	-	-	-	-	800
California-Marsh 24" Main Replacement FY 2018 - FY 2019	100	1,200	-	-	-	1,300
Booth, Sharon Way, Monroe 24" Main Replacements FY 2020 - FY 2021	-	-	100	3,100	-	3,200
South Virginia 24" Main (Kumle to Peckham) FY 2019 - FY 2020	-	100	900	-	-	1,000
North East Sparks Feeder Main Relocation FY 2020 - FY 2021	-	-	50	950	-	1,000
Spanish Springs - Spring Creek South Zone Conversion FY 2019	-	700	-	-	-	700
West Hidden Valley, Surge St., Piping Rock Main Replacement FY 2020 - FY 2022	-	0	1,000	230	500	1,730
Spanish Springs Main Replacement FY 2019 - FY 2020	-	650	650	-	-	1,300
Bonnie Lane, Snow Flower, Main Extensions FY 2021 - FY 2022	-	-	-	620	900	1,520
South Truckee Meadows Capacity Improvements FY 2019	-	400	-	-	-	400
Stead Golf Course Main Replacement FY 2021 - FY 2022	-	-	-	-	90	90
Arrowcreek-Mt. Rose Conjunctive Use Phase 2 FY 2018	400	-	-	-	-	400
Arc Flash Improvements FY 2018	100	-	-	-	-	100
General Waterline Extensions FY 2018 - FY 2021	100	100	100	100	-	400
Galvanized / Poly Service Line Replacements FY 2018 - FY 2021	400	400	400	400	-	1,600
Verdi Main FY 2018	2,200	-	-	-	-	2,200
Goldenrod Main FY 2021	-	-	-	1,100	-	1,100
Mount Rose 5 Distribution / Pressure Improvements FY 2018	333	-	-	-	-	333
	10,533	9,050	8,200	11,500	6,490	45,773

Potable Water Storage Improvements

Peavine Tank Replacement FY 2018	2,500	-	-	-	-	2,500
Sun Valley #2 Tank FY 2019 - FY 2020	-	150	1,750	-	-	1,900
Rattlesnake Ring Addition FY 2020	-	-	800	-	-	800
Zone 11 Tank FY 2018 - FY 2019	150	3,000	-	-	-	3,150
Fish Springs Ranch #2 Tank FY 2020 - FY 2021	-	-	100	2,000	-	2,100
Storage Tank Recoats; Access; Drainage Improvements FY 2018 - FY 2022	860	800	800	800	800	4,060
Highland Reservoir Tank FY 2021 - FY 2022	-	-	-	100	5,700	5,800
	3,510	3,950	3,450	2,900	6,500	20,310

Hydroelectric Improvements

Forebay, Diversion, and Canal Improvements FY 2018 - FY 2022	45	55	50	50	50	250
Flume Rehabilitation FY 2018 - FY 2022	300	650	600	600	600	2,750
Hydro Plant Generator Rewinds FY 2019 - FY 2021	-	350	350	350	-	1,050
	345	1,055	1,000	1,000	650	4,050

Customer Service Outlays

Meter Reading Equipment FY 2018 - FY 2022	60	-	60	-	60	180
New Business Meters FY 2018 - FY 2022	350	350	175	100	100	1,075
Mueller Pit Replacements former Washoe County FY 2018 - FY 2022	125	125	125	125	125	625
Meter - ERT-RTR Replacements FY 2018 - FY 2022	1,250	1,250	1,250	1,250	1,250	6,250
	1,785	1,725	1,610	1,475	1,535	8,130

Administrative Outlays

GIS / GPS System Mapping Equipment FY 2018 - FY 2022	40	40	40	40	40	200
Desktop Computer Upgrades FY 2018 - FY 2022	100	100	100	100	100	500
Network Server / Storage Upgrades FY 2018 - FY 2022	175	175	175	175	275	975
Network Security Upgrades FY 2018 - FY 2022	150	150	150	150	150	750
Disaster Recovery Improvements FY 2018	215	-	-	-	-	215
Furniture - Office Equipment FY 2018 - FY 2022	50	50	50	50	50	250
Crew Trucks / Vehicles FY 2018 - FY 2022	825	570	585	650	600	3,230
Security-ER Projects FY 2018 - FY 2022	150	150	150	150	150	750
Emergency Operations Annex Design / Construction FY 2018 - FY 2019	500	1,500	-	-	-	2,000
Corporate Office Expansion- Design / Construction FY 2018	1,800	-	-	-	-	1,800
System Wide Asphalt Rehabilitation FY 2018 - FY 2022	250	250	250	250	250	1,250
	4,255	2,985	1,500	1,565	1,615	11,920

Subtotal Construction Spending Outlays

	41,380	31,982	30,227	28,585	24,079	156,253
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Special Projects Funded by Development

Water Meter Retrofits FY 2018 - FY 2022	300	300	300	300	300	1,500
Water Right Purchases FY 2018 - FY 2022	150	150	150	150	150	750
	450	450	450	450	450	2,250

Total Projected Capital Spending

	41,830	32,432	30,677	29,035	24,529	158,503
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Former STMGID System Improvements

STMGID Well Bypass & Chlorine Room Improvements FY 2018 - FY 2019	400	100	-	-	-	500
STMGID Well #1 Replacement FY 2019 - FY 2020	-	850	900	-	-	1,750
STMGID Well Fix & Finish FY 2018 - FY 2022	150	150	150	150	150	750
STMGID Conjunctive Use Facilities FY 2018 - FY 2020	150	1,800	2,100	-	-	4,050
STMGID Tank Recoats FY 2019, FY 2021	-	220	-	300	-	520
STMGID Mueller Pit Replacements FY 2018 - FY 2021	75	50	50	50	-	225
STMGID NAC Deficiencies - Saddlehorn, Upper Toll, STMGID East FY 2019 - 2022	-	350	100	2,400	350	3,200
Total Former STMGID Capital Spending - Allocated Funding	775	3,520	3,300	2,900	500	10,995

Total Projected Capital Spending Including STMGID - Allocated Funding

	42,605	35,952	33,977	31,935	25,029	169,498
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STAFF REPORT

TO: Board of Directors
FROM: Andy Gebhardt, Director Operations and Water Quality
Marlene Olsen, GoodStanding
DATE: March 8, 2017
SUBJECT: **Presentation on results of TMWA Open House (and customer comments) regarding the proposed rate adjustments**

SUMMARY:

At its January 9, 2017 meeting, the TMWA Board of Directors approved the open house schedule (on the last page of this report) for the proposed rate adjustment. All items listed in the rate adjustment communications plan have been completed; these include: four customer open houses, two bill insert articles (January and February) to all customers, two messages on water bill statements to all customers (January and February), two Standing Advisory Committee meetings (January and February), legal notices in RGJ and Sparks Tribune (**attachment 1**) and an e-newsletter distributed to 79,402 customers with 19,809 opened, resulting in a 25% open rate.

For the general community, we produced an FAQ for media inquiries. We also had a dedicated page on our website that detailed all of the information regarding the proposed rate adjustment. The subject was covered by the following media outlets: the RGJ, KTVN, KOLO, KRNK, KKOI and 96.1 Radio as well as ThisisReno.com. Management staff also met with the RGJ Editorial Board and presented the case for the proposed rate adjustment. In addition, announcements regarding details of the open houses were posted on TMWA's Facebook page at the beginning of each week of the open houses. There were two replies to the Facebook postings; one positive and one negative.

CUSTOMER OPEN HOUSES (4):

*Most customers left satisfied that their questions were answered and chose to not leave a written comment. Copies of the five comments are attached at the end of this report (**attachment 2**)*

February 27, 2017 at Sparks Police Department, Training Room
In attendance: 11 customers
Written comments submitted: 1

Questions and concerns fielded by staff (One customer followed up the next day directly with staff):

- Looked up usage for three customers, two more-than-likely have leaks. When told how much the increase would be on their bills, no one indicated a concern.
- What types of chemicals are used at the plant?
- Fluoridation of the system (against fluoridation).
- Where (reservoirs) do we store our water and how storms impact them?
- Water rights—what are they and how are they obtained. How do developers get water rights? How does someone get the right to use groundwater, or drill a well?

February 29, 2017 at Spanish Spring Library

In attendance: 3 customers

Written comments submitted: none

Questions and concerns fielded by staff:

- Truckee River system, Tahoe to Pyramid and how the Carson River and Lahontan are involved.
- Production well locations in Spanish Springs and how conjunctive use management works.
- Water quality testing criteria.

March 1, 2017 at the California Bldg.

In attendance: 11 customers

Written comments submitted: 2

Questions and concerns fielded by staff:

- Raising rates due to conservation efforts is sending customers the “wrong” message.
- Raising rates is seen as punishment for conservation efforts.
- Growth is causing the rate increase.
- Questions about what costs have increased and how TMWA controls expenses.
- Pro-fluoride customer – 1

March 2, 2017 at South Valleys Library

In attendance: 7 customers

Written comments submitted: 2

Questions and concerns fielded by staff:

- How is TMWA controlling costs?

- There also was interest in the hydroelectric plants and how they help generate electricity and income for TMWA.
- More questions about the system and conservation policy than true concerns about the rate increase.
- Overall impression - People really aren't too worried about the increase.

COMMENTS SUBMITTED FROM E-NEWSLETTER RESPONSES AND

tmwaboard@tmwa.com: A total of 16 were submitted, all are below. (As of March 8, 2017)

All were responded to within 24 hours with a message similar to:

Thank you for taking the time to submit your thoughts regarding the proposed rate increase.

An FAQ is [posted here](#) for further information.

Your full comment will be submitted to the TMWA Board of Directors for their consideration.

All comments will be included in a Public Outreach Report at the Board's March 15th meeting.

The public meeting schedule is located in the link above. You are welcome to attend the next two Board of Directors' meetings, also listed on the above web page.

From: Isabel Reed [<mailto:>]

Sent: Monday, March 6, 2017 11:04 AM

To: tmwaboard@tmwa.com

Subject: rate increase

It's a Catch 22! It doesn't make sense. We, customers, conserve; therefore, TMWA plans to increase our rates. Let's see, the increase will be 3% for the next two years and TMWA has the option to raise rates 2.5% for the next three years. I doubt "option" will be used by TMWA in 2019, 2020, and 2021. By 2021 our rates will increase by 13.5%. Hopefully, our salaries and pensions will also see that increase.

Isabel Reed

-----Original Message-----

From: Jon Bell [<mailto:>]

Sent: Saturday, March 4, 2017 2:36 PM

To: tmwaboard@tmwa.com

Subject: Rate increase

Hello,

I was dismayed to read in the newspaper that the proposed rate increases are due in part to the effective conservation by the community.

Increases due to us doing our part and conserving, per TMWA's request, are rewarded with higher fees. Thanks. Perhaps TMWA could consider a restructure of the punitive tiered system which impacts the homeowner (3/4" service) the most, while commercial properties are allowed much higher use at lower

rates. There seems to be much more waste on commercial properties. The particular irony are the rate increases proposed during a record precipitation year.

Jon Bell

From: Laura Dyer [mailto: [REDACTED]]
Sent: Wednesday, February 22, 2017 12:10 PM
To: tmwaboard@tmwa.com
Subject: Raising our water rates -SURPRISE!

Hello:

I would like to voice my opinion about your desire to raise water rates on the community who is forced to use your service with no alternatives, no competition. Do not raise the rates. Many of us are retired and on fixed incomes and this will continue to cause a burden to us. As a typical governmental bureaucracy, these rate increases leave us with no alternatives than to pay, and go without something else in our lives. Continuous rate increases only create more inflationary pressures on our community and this is, in effect, a tax on all of us.

We are sick of taxes being levied on us. If you had allowed competition, then perhaps I would have nothing to say in the matter, however, there is none. You leave us to feel as if we have no voice in the matter besides a little email complaining about the rate increases. All rate increases should be voted on by the community in my opinion since it is government entity running the show and TMWA forced its way into the purchase of our water supply from a private entity.

I do not believe that any rate increases should occur unless we are shown a 3rd party, independent assessment of the efficiency of the water plants and an assessment of the salaries along and quantity of employees to verify they are consistent with national levels for a city our size which have privately-run water companies.

Laura
Reno

From: Jennifer Biggs [mailto: [REDACTED]]
Sent: Tuesday, February 21, 2017 9:02 AM
To: tmwaboard@tmwa.com
Subject: Rate increase 2017

Dear Board,

I already pay enough for water and now with the increased water we have received additional funds for the revenue seems unsubstantiated. If the extra water residence were using during the drought and fees they should have received does not cover cost as well as the monthly bills, I suggest you go back and find your money elsewhere.

If extra funds are needed why not look into the bloated salaries you all are receiving for work not rendered. I doubt you will care what this community has to say but with the increases of all other services additional cost for water seems unreasonable.

Thank you, Reno Resident

From: [REDACTED] [mailto:[REDACTED]]
Sent: Thursday, February 16, 2017 4:17 PM
To: tmwaboard@tmwa.com
Subject: Proposed Rate-Adjustment

TMWA Board of Directors,

I am a retired senior living on a fixed income within Washoe County. While the proposed increase of 3% in each of the next two years doesn't seem like much on the surface, it is ten times the cost of living increase I received in my social security this year, which was offset by the same increase in my Medicare payments.

Regards,
Dave Wendell
[REDACTED]
Sparks, NV 89436
[REDACTED]
[REDACTED]

From: Judith O'Neal [mailto:[REDACTED]]
Sent: Tuesday, February 14, 2017 9:15 AM
To: tmwaboard@tmwa.com
Subject: subject: Water rates

I see by your letter that your rates will be going up. I don't know if you have ever considered doing a Senior rate for those of us who live on Social Security. So many of us who had any retirement plans lost it when everything went south a few years ago. As you know by now, SS only had a .3% COL raise for Seniors this year. To most that is around \$3.00 a month. Food has gone up as well as gas and prescriptions. Some of us have part D which is just another premium that we face along with Medicare changes and some of the medications aren't covered. Some of us also have supplements plans for Medicare which have also gone up. By the end of the month we are lucky to have a couple of dollars left. We have to live SS check to SS check. At least Seniors who get the small cans from Waste Mgmt get a small break in the price. I would love to go back to work to help pay the cost, but I will be 80 next month and my health won't allow me to go back. I worked until I was 75 in order to be able to make it.

For all of us Seniors it would mean a lot if you consider helping us by giving us a discount. Nevada Energy does not give us a discount. Those bills can and are high during these cold months.

Thank you for your consideration,

Judith O'Neal
[REDACTED]

-----Original Message-----

From: Brian Browder [mailto:[REDACTED]]
Sent: Thursday, February 02, 2017 3:25 PM
To: tmwaboard@tmwa.com
Subject: Proposed Rate Adjustments

Dear TMWA Board of Directors,

I am writing in regards to the proposed series of rate adjustments over the next 5 years. My concern is that the rate adjustments do not go far enough. The vast majority of scientists agree that the Earth's climate is getting warmer (<http://climate.nasa.gov/scientific-consensus/>). As the temperatures rise, droughts are likely to occur more frequently and with greater severity (<https://www.sciencedaily.com/releases/2015/10/151021161032.htm>, https://www.washingtonpost.com/national/health-science/report-climate-change-means-more-frequent-droughts-floods-to-come/2011/11/15/g1QAfwqHXN_story.html).

We need to start preparing for this eventuality now and it's going to require money. In addition to maintaining the existing infrastructure, I believe that TMWA needs to find ways to reclaim more water, while at the same time expand its holding capacity and use periods of normal, or above normal, precipitation to stockpile whatever water it can. Of course, this all hinges on people being willing to conserve water, despite the fact that the snow pack in the mountains is above normal. I don't believe that it is possible to convince everyone of the need to conserve water, but I do believe that it is possible to change their behavior. Studies have shown that money can play a key role in influencing people's behavior (sorry I couldn't find a link to a recent article). If it becomes more expensive for people to use water, they will use less. Water is a human necessity and I understand that rate increases could be seen as a regressive tax, so I'm not suggesting a dramatic rate increase for everyone. Instead, I urge TMWA to investigate the possibility of using a graduated pricing scale, so that someone who uses twice as much water as the average person pays more than twice as much, perhaps 3 or 4 times as much. Water in the United States is too cheap. It is the most precious resource that we have and it's time that the price reflects that reality.

Thank you for your time and service.

Sincerely,
Brian Browder

From: Tim Riley [mailto:[REDACTED]]
Sent: Wednesday, January 25, 2017 1:21 PM
To: tmwaboard@tmwa.com

Subject: Rate increase

I support your increase. TMWA does great job.

██████████ Reno.

Sent from my I-Phone. Tim Riley

From: Raquel Ford [<mailto:██████████>]
Sent: Wednesday, January 25, 2017 1:33 PM
To: tmwaboard@tmwa.com
Subject: [Marketing Mail] Re: TMWA E-Newsletter - Rate Adjustment Open Houses - Water Supply Update - New TMWA Website

Hello TMWA,

I think you will find some public concern about cost increases without documentation. A newsletter gives an overview but a cost breakdown could clarify these concerns to the public as to why the increase is needed?

Randy Ford
TMWA Customer

From: JEFF HALICZER [<mailto:██████████>]
Sent: Wednesday, January 25, 2017 1:42 PM
To: tmwaboard@tmwa.com
Subject: Water Rate Adjustment

I oppose the water rate adjustment, unless the cost to produce and deliver the water has gone up significantly to warrant the need for an increase.

As a community owned non profit public utility company, I don't have a problem with a 'reserve' account for the unforeseen difficulties that do pop up on our case this year come down with rain and snow.

But to have an increase in residential rates just because you can is not something I would approve or be in favor of.

I feel our rates are on the high end of other municipal areas of comparable size.

Thank you,
Jeff Haliczer

From: cckc2 [mailto:]
Sent: Wednesday, January 25, 2017 2:17 PM
To: tmwaboard@tmwa.com
Subject: TMWA Rate adjustments
Importance: High

Hello

I want to point out that all of the approved land development and subsequent increase in tax revenue in the Reno–Tahoe area greatly increases income to TMWA as well as for every utility, the city, county and & all business.

It is not appropriate that current residents are always forced to shoulder the cost of the needs for new land development. A dollar here and there significantly adds up to a lot of money, and esp to people who are on fixed and/or low incomes.

We object to the TMWA rate hikes.

Ken & Carol Church
Lemmon Valley-Reno NV 89506

From: AB [mailto:]
Sent: Wednesday, January 25, 2017 3:28 PM
To: tmwaboard@tmwa.com
Subject: meeting locations

Dear Sirs,

I noticed that none of the meetings are being held anywhere near the North valleys. Is this due to the fact that we don't get our water from the Truckee River? Should I assume that the rate increase will not affect us in the North valleys? Also, how often is the water quality checked here in Lemmon Valley? And does the Lemmon Valley water receive the same sophisticated treatment(reverse osmosis and mineral replacement etc.) as it does in the lower valley?

Sincerely,
A.M. Ballestrasse

Response to this one (as specific questions were asked:

On Jan 26, 2017, at 9:37 AM, Gebhardt, Andy <agebhardt@tmwa.com> wrote:

Thank you for taking the time to submit your thoughts regarding the meeting locations for the proposed rate increase. The rate increase is for all customers of Truckee Meadows Water Authority (TMWA). Our thought was that the Spanish Springs Library venue would provide an easily accessible location for any interested North Valley customers. During our last round of public meetings, we held a session at O'Brien Middle School in Stead and nobody attended.

With that said, if we receive questions from other customers regarding the lack of a North Valley meeting location, we will certainly consider an appropriate location to have one.

As for your other questions, the water you receive in the North Valleys is a mixture of well water as well as Truckee River water, much the same as any customer of TMWA. Your water in Lemmon Valley is tested frequently and on the same schedule as all other water delivered by TMWA. Water treated by TMWA meets all U.S. Environmental Protection Agency (EPA), Nevada Division of Environmental Protection, Nevada State Health and Washoe County District Health Department water quality standards. In most cases, our water is significantly better than these standards require. TMWA's professional staff of scientists, engineers, chemists and operators continually monitors our water quality. More than 1,000 laboratory tests are performed each month on over 180 samples taken from various locations within the TMWA distribution system. Testing is performed both at the treatment plants and throughout the distribution system to make sure high-quality water is delivered to our customers.

Your full comment and this response will be submitted to the TMWA Board of Directors for their consideration in a public outreach report at the Board's April 19th meeting.

If you have any other questions, please don't hesitate to contact me.

Thank You.

Andy Gebhardt

Director Operations and Water Quality

Truckee Meadows Water Authority

1355 Capital Blvd. | Reno, NV 89502

O: (775) 834-8007, M: (775) 230-3699

agebhardt@tmwa.com | www.tmwa.com

From: Sheri Peck [[mailto:w\[REDACTED\]](mailto:w[REDACTED])]
Sent: Thursday, January 26, 2017 5:56 AM
To: tmwaboard@tmwa.com
Subject:

To whom I don't really care ,
The 3% increase does not bother me ,. Its the \$275.00 deposit for my low credit score that concerns me . I believe your extorting money illegally . If I do not see my money returned and I know I wont you extortionist will find a way to keep it , I will be looking to press charges in court . I think you people look for any way possible to screw and extort money any way you can out of the general public and the hard working honest people of Reno suffer . You want to know how to save water its easy have restuarants CHARGE money for it .

Sincerely Wayne Peckl

From: Dave Fritz [[mailto:\[REDACTED\]](mailto:[REDACTED])]
Sent: Wednesday, January 25, 2017 3:04 PM
To: tmwaboard@tmwa.com
Subject: Rate Hike

The rate hikes are good with me. You guys do a great job at delivering fresh, clean and awesome water! Go for it.
Dave Fritz

From: Paulette Pelizzari [mailto: [REDACTED]]
Sent: Thursday, January 26, 2017 9:15 AM
To: tmwboard@tmwa.com
Subject: rate increase

From the Pelizzari's @ [REDACTED], Reno

We don't think the suggested rate increase is excessive.

Some folks are not at all aware and others just forget the number of resources it takes to bring water to us every day. The teams who work and plan for the future to make sure that water keeps 'flowing'.

They also don't realize how much money it cost to educate customers on water conversation. **You are doing an excellent job in that area!**

So, for what it's worth, that's our 2 cents.

Paulette & Daryl Pelizzari

From: Lynette Schweigert [mailto: [REDACTED]]
Sent: Thursday, January 26, 2017 2:31 PM
To: tmwboard@tmwa.com
Subject: Rates: Senior Discounts!

I purchased my home in 1983, there were no meters, no charges for water, our development was on our own private water system (Hidden Valley).

I planted lots of fruit trees, grape vines, berries etc. I created a large vegetable garden. I grow and process my own food...#1/ It's healthier, #2/ It *used* to be less expensive! I always shared any excess with friends, neighbors, family and food pantrys.

Now, I've had to let my beautiful lawn die & lost 9 Aspen trees when I stopped watering my front yard:(

I've instituted every water saving trick I can think of...and my summer water bill is still more then I can afford. I'm on a fixed income, 67, and believe I deserve a Senior Discount and so does everyone else who qualifies as a Senior....**THE LAST THING I NEED IS A RATE HIKE!!!! OMG!**

Water is a right and not just for those who can afford it!

A livid customer!
Lynette Schweigert, Director,

[REDACTED]

From: Holly Cortez [REDACTED] >
Date: March 8, 2017 at 3:38:24 PM PST
To: "tmwaboard@tmwa.com" <tmwaboard@tmwa.com>
Subject: Proposed rate increase

To Whom It May Concern,

We are out of town and are unable to attend the meeting. Having lived in other states we feel that the water rates here are already higher than Texas and Mississippi. With the Reno area growing it would seem that revenues would already increase substantially and yet they are asking for a hike year after year? We think this is yet another money grab! Reno was affordable when we bought here in 2010, but is quickly turning into a tax and spend city. Please turn down the rate increase.

Kind Regards,

Holly Cortez

March 6, 2017

Truckee Meadows Water Authority
 Attn: Board of Directors
 1355 Capital Blvd.
 Reno, NV. 89502

Dear Board Members:

Recently you disclosed that you are seeking a Rate Increase for Water. This is the most ULTIMATE INSULT to those of us who have been GUARDIANS of the water wastage in our area. With your patience I will explain. I live in the Mesa Meadows Subdivision in Sparks, and in 2005 my husband, while out walking noticed water leaking over on Promedio and Los Altos Drive. He told me about it and said it had been leaking for several weeks, and no one had apparently reported it. So on June 2, 2005, I called TMWA and was told it wasn't their responsibility. I called the City of Sparks and nothing was done. So on June 13th the water was still running across the sidewalk and down into the drain. Then on June 21st, I called TMWA, and the City of Sparks about this problem. Both claiming it was not their responsibility and that I needed to contact the Developer of that subdivision, whoever that may have been. Finally on June 27th my husband went to the City Council meeting and told them about it. Brian Bissett with the City said it was the Contractors responsibility. In the meantime thousands of gallons of water were being wasted, and finally as a last straw I called KOLO and talked to Ed Pearce. He was out in the Sparks area that day, and said he would be at this location in about 20 minutes and he would meet me there. He interviewed me at the time, and I told him this water had been running for several weeks, wasting our PRECIOUS RESOURCE, and told him that I had called TMWA, Sparks Parks and Recreation, Public Works and told the City Council and nothing was being done. Well, the POWER OF THE MEDIA took control and within 1 hour there were about 10 TMWA trucks there and the road needed to be dug up because of a broken pipe. This is a case where no one was willing to do anything until it was brought to your attention by someone with a little authority. SHAME OF YOU!

I usually document whenever we have a water problem in our area. And I will tell you about some of those incidents when I was ignored when requesting help on Water Waste. And these are the most recent one. On July 3, 2015, I found 2 leaks in the drip system on Promedio Drive. I called Rick Darby with Parks and Recreation who was then in charge of seeing that our landscaping was being taken care of. (Nothing was done) Then on July 8th, I called Signature Landscaping and talked to a Nanette there, and told her about these leaks and the general appearance of our landscaping. She informed me that Dan Osborn was now in charge and I asked her to have him call me. Receiving no call back, I wrote a letter to Signature about the leaks not being fixed as of the 16th of July. After writing this letter, I finally got a call from Dan Osborn and I explained this situation, and he said he would stop by the next day. He did and after explaining our situation, he sent a crew out the next day to rectify the matter of overgrown weeds, water leaks, etc. In the meantime there was a lot of water wasted again.

On September 10, 2015, I called Dan Osborn and reported a water leakage on Sparks Blvd. Nothing was done, and then on Sept. 28th, I called the Sparks Maintenance Hotline and reported this water leakage that I had reported 3 weeks earlier, and nothing was done. I was leaving Mesa Meadows, and noticed Dan Osborn out in our area, and I stopped and showed him what I was talking about. He remarked how soggy the area was, and they would have to look into it later. Still nothing was done. (NOTE: This is the same place that just recently was dug up because a pipe had broken, and Sparks Blvd. needed to be shut down while it was being repaired). From September 2015 until February 2017 nothing was done, and a lot of water wasted. I asked Dan for the little white flags to mark the spots where either me or other ladies who walked their dogs spotted leaks. He gave me several, and I gave a couple to each of these ladies and told them to report leaks to him.

On August 18, 2016, I noticed a flag up on Painted Desert and since I knew nothing about it. When I saw my neighbor Gail Vaccaro, on August 23rd, I asked her if she had put it there, and she told me she had called the Landscaping Company about 3 weeks before about it. So on August 23, 2016, I called Signature Landscaping about this leak on the corner of Painted Desert and Del Sol that my neighbor said she had reported to them. The lady there was a little rude, and said that they did not take requests from the property owners, and that I needed to deal with a Chris Cobb at 626-2597 (whoever he was). Well, I tried to call Mr. Cobb and his mail box could not accept anymore messages. So I called the Landscaping Co. back and told her that I needed to talk to this man about our problems out here. So in early September, I received a call from Chris Cobb, with the Sparks Development Agency and he gave me his correct Phone number 353-7823 and he was the Capital Project Manager for Sparks, and I should call him when we have a water problem. We have no Home Owners Association, so we have to handle these problems ourselves.

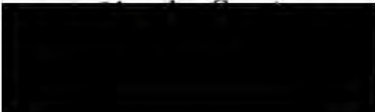
Now after all of this saving water at your request because of our drought situation, we find that we are being PENALIZED for saving water. How ironic! Hell, I've been saving water for many years, and now in my Golden Years when we are living on Social Security, you want to raise our rates. With all of the new housing developments that have gone up in the last few years, you should not have to raise our rates. I have been a Citizens Advocate for many years now, and I am looking out for the Senior Citizens in our community, because with all the increases we have seen lately, this is a burden for them. Some have to decide whether to pay for food or medicine, or whether they need to sell their homes which they planned to live in for the rest of their lives.

Thank you for reading my letter, and I hope that you will RETHINK THIS RATE INCREASE, because it is the right thing to do.

Sincerely,



Shirley Bertschinger, Citizens Advocate



Proposed Schedule May 2017 Rate Adjustment

Date	Item
Wednesday, November 16	Present rate adjustment calendar, preliminary revenue sufficiency analysis, Rate Philosophy, Final Funding Plan, and Revenue Requirements
By Friday, Nov 18	Finalize calendar for rate adjustments
By Friday, December 23	Finalize special one-panel bill insert for all customers regarding open houses and Board meeting dates and times. Insert to run all of January billings.
Tuesday, Jan 3	Present revenue sufficiency analysis and do Part I Rates Training
By Friday, January 13	Finalize January bill insert notifying customers of public hearings for adoption of rate adjustment
Wednesday, February 1	Send in public notice of Customer Open Houses to RGJ & Sparks Tribune for publication on January Open Houses
Tuesday, February 7	Present final Funding Plan and Rates Proposal, plus public open house presentation, and do Part II Rates Training
Tuesday, February 7	Display Public Notices of Customer Open Houses published in RGJ & Sparks Tribune (<i>10 working days before open houses</i>)
Wednesday, Feb 15	Presentation on preliminary Rates proposal
Thursday, February 23	Send in legal notice of first public hearing (March 15) to RGJ & Sparks Tribune for publication on February 28
Weeks of February 20 and 27	4 Public Open Houses on Rates Proposal
Tuesday, February 28	Legal Notice of first public hearing on proposed rate adjustment published in RGJ and Sparks Tribune (<i>10 days before first hearing</i>) and on TMWA website
Tuesday, March 7	Update SAC on Customer Open Houses
Wednesday, March 8	Send in legal notice of final public hearing (April 19) and adoption of rate adjustment to RGJ & Sparks Tribune for publication on March 20
Tuesday, March 14	Legal Notice of final public hearing for adoption of rate adjustment published in RGJ and Sparks Tribune and on TMWA website (<i>30 days in advance of final hearing</i>)
Wednesday, March 15	First Public Hearing and Reading on proposed rate adjustment – proposed evening meeting
Friday, March 17	Post copies of proposed rate adjustments approved at First Public Hearing and post Notice of Final Hearing date, time and location. Post in all the same locations as agenda is posted, and on TMWA Website.
Tuesday, April 4	Update on Rate Adjustments
Wednesday, April 19	Final Public Hearing and Adoption of Rate Adjustment.
Tuesday, May 2	Effective date of Rate Adjustments
Tuesday, May 2	Report of Board Action on Rate Adjustment

NOTICE OF PUBLIC OPEN HOUSE
TO DISCUSS TMWA'S PROPOSED RATE ADJUSTMENTS

Tuesday, February 21, 2017 from 5:30 – 7:30 p.m.

Sparks Police Department – Training Room, 1701 E. Prater Way, Sparks, NV

Thursday, February 23, 2017 from 5:30 – 7:30 p.m.

Spanish Springs Library, 7100 Pyramid Way, Sparks, NV

Wednesday, March 1, 2017 from 5:30 – 7:30 p.m.

California Building in Idlewild Park, 75 Cowen Drive, Reno, NV

Thursday, March 2, 2017 from 5:30 – 7:30 p.m.

South Valley Library, 15650 Wedge Pkwy, Reno, NV

Truckee Meadows Water Authority (“TMWA”) will hold public open houses on Tuesday, February 21; Thursday, February 23; Wednesday, March 1 and Thursday March 2. All workshops will run from 5:30 to 7:30 p.m. at the locations listed above. The purpose of these gatherings is to receive input and comments from the public on TMWA’s proposed rate adjustment, planned for implementation the first billing cycle in May 2017. Customers are encouraged to attend these meetings to get more information about the proposed rate adjustment and have an opportunity to provide feedback, which will be presented to the TMWA Board of Directors.

This Notice of Public Open House is posted at the following locations: Truckee Meadows Water Authority (1355 Capital Blvd., Reno), Reno City Hall (1 E. First St., Reno), Sparks City Hall (431 Prater Way, Sparks), Sparks Justice Court (1675 E. Prater Way, Sparks), Washoe County Clerk's Office/Courthouse (75 Court St., Reno), Washoe County Central Library (301 South Center St., Reno), Washoe County Administration (1001 East Ninth St., Reno), www.tmwa.com and State of Nevada Public Notice Website, <https://notice.nv.gov/>.

Members of the public who are disabled and require special accommodations should contact TMWA at 834-8002 at least 24 hours in advance. For those unable to attend, public comments can also be submitted online at: [http://tmwa.com/about us/comments](http://tmwa.com/about_us/comments). If you have additional questions, contact us at 834-8080.

NOTICE OF FIRST READING
TO DISCUSS POTENTIAL WATER RATE ADJUSTMENT

Wednesday, March, 15, 2017 - 10:00 a.m.

Sparks Council Chambers

745 4th Street, Sparks, NV

Truckee Meadows Water Authority (“TMWA”) will hold a First Reading on Wednesday, March 15, 2017 at 10:00 a.m. of proposed rate adjustment, anticipated for implementation in the first billing cycle in May, 2017. Customers are encouraged to attend this meeting and provide comments. Members of the public who are disabled and require special accommodations should contact TMWA at 834-8002 at least 24 hours in advance.

This Notice of Public Open House is posted at the following locations: Truckee Meadows Water Authority (1355 Capital Blvd., Reno), Reno City Hall (1 E. First St., Reno), Sparks City Hall (431 Prater Way, Sparks), Sparks Justice Court (1675 E. Prater Way, Sparks), Washoe County Clerk's Office/Courthouse (75 Court St., Reno), Washoe County Central Library (301 South Center St., Reno), Washoe County Administration (1001 East Ninth St., Reno), www.tmwa.com and State of Nevada Public Notice Website, <https://notice.nv.gov/>.

Copies of the proposed rate adjustments and information related to the proposed rate adjustments are available for inspection at the Truckee Meadows Water Authority office (1355 Capital Blvd.) or online under Information Regarding TMWA’s proposed rate adjustments at <http://www.tmwa.com>. Public comments can also be submitted online at: [http://tmwa.com/about us/comments](http://tmwa.com/about_us/comments). If you have additional questions, contact us at (775) 834-8080, option 2.

TRUCKEE MEADOWS WATER AUTHORITY

PUBLIC COMMENT CARD

Name: Duane Wolfe (by Michele Sullivan)

Address: _____

I would like to address:

Duane called my line at TMWA. He went to
the open house on Tues, Feb 21 and was disappointed
with the set up and wanted a presentation. He asked
me some questions and wanted to comment that
he is unhappy that conservation is resulting in
a rate increase. He also commented that
TMWA employees are overpaid. I talked to him
about how we manage costs.

TRUCKEE MEADOWS WATER AUTHORITY

PUBLIC COMMENT CARD

Name: Jerry Matha

Address: 

I would like to address:

Very happy with TMWA

TRUCKEE MEADOWS WATER AUTHORITY

PUBLIC COMMENT CARD

Name: Karen

Address: _____

I would like to address:

TMWA Rate Increase mtg. (@ S.V. Library)
Your organization/employees are very
well prepared with visual & verbal
information about this rate increase.
I feel confident that such decisions
are being made for valid reasons!

TRUCKEE MEADOWS WATER AUTHORITY

PUBLIC COMMENT CARD

Name: CLAS SANSEVERINO

Address: 

I would like to address:

Excellent employees + great info provided
at this open house.

Would like the management of funds and
expenses, revisited, since customers should
not be responsible to pay more after their best.
conservation efforts.

TRUCKEE MEADOWS WATER AUTHORITY

PUBLIC COMMENT CARD

Name: Lynn Ann Short

Address: 

I would like to address:

I do not support a rate increase as is - I would only support a rate increase if you were to add fluoride to the water, even if it meant a higher rate increase.

~ 75% of the US population on PWS receives fluoridated water - that's about 68% of the total US population that

includes Clark County - Why do the residents in Las Vegas get the health + economic benefits of fluoride but northern Nevada may not. Don't you think we deserve better dental health, general health and ~~lower~~ ^{lower} dental bills? I'm very disappointed that the TMWA Board voted to not support fluoride added to our waters w/out credible information to support its benefits.



STAFF REPORT

TO: Board of Directors
THRU: Mark Foree, General Manager
FROM: John Enloe, Michele Sullivan
DATE: March 3, 2017
SUBJECT: **Rate Amendment, Introduction: Introduction and First Reading of a potential water rate adjustment, including possible multi-year adjustments, with proposed initial implementation for the first billing cycle in May 2017**

RECOMMENDATION

Staff recommends the Board refer to a second reading a series of rate adjustments to be phased in over 5 years as shown in Exhibit A. The rate adjustment proposed includes two 3% increases (May 2017 and May 2018), and three increases of 2.5% (May 2019, May 2020, and May 2021) in the following three years. These increases will apply to all customer classes including both the customer charge and the commodity charge for all tiers. Staff recommends the Board review underlying assumptions and re-evaluate each of the 2.5% increases prior to implementation to track whether assumptions remain consistent with justifications and the Board reserve the ability to defer or discontinue one or more of such increases prior to their implementation date if deemed appropriate by the Board. The second reading of this proposal is tentatively scheduled for the Board's April 19, 2017 meeting with the Year 1 rate adjustments to be effective the first billing cycle in May 2017.

DISCUSSION

At the Board's October 19, 2016 meeting Staff presented its analysis of TMWA's funding plan which shows a shortfall in recurring revenues, making them insufficient to cover costs of service. The five year funding plan was reviewed by Public Financial Management (PFM), TMWA's financial advisor. The period covered by the funding plan was FY2017 through FY2022. This was the basis for recommending rate adjustments.

Despite slightly lower consolidated Operating and Maintenance expenses, TMWA will experience escalating costs of operations, especially as the economy continues to improve. This includes increased costs to repair and replace current infrastructure so that TMWA can continue to deliver high quality, clean water. Downward trends in customer usage patterns have been experienced locally and nationally, and growth in services in the near future is not projected to add enough water usage to offset this trend. TMWA has actively managed its debt, reducing outstanding debt by \$100 million over the last three years, and deferring principal payments in FY2018 and FY2019, however principal payments will resume in FY2020. All these aforementioned conditions will continue to challenge TMWA's financial position.

TMWA received excellent credit ratings in February, 2017, with an upgrade from Standard and Poor’s to AA+. These ratings are based on the financial stability of the Authority. Negative financial consequences can challenge these ratings, and specifically TMWA’s ability to renew the letter of credit which supports TMWA’s tax-exempt commercial paper program (TECP). This letter of credit must be renewed in 2018. TECP continues to provide TMWA with low-cost debt as compared to comparable fixed rate alternatives. Also, TMWA may have other debt-management opportunities if financial strength can be preserved. Debt management is a key area for managing future cost of service to produce water since TMWA has done as much as possible in controlling operating expenses. As presented in the funding plan last October, TMWA has established certain financial metrics to be achieved consistent with credit rating and bond market expectations. These include strong debt service coverage and unrestricted cash balances sufficient to cover operations, debt service and capital spending. TMWA’s credit ratings reflect its ability to maintain strong liquidity. A significant decline in unrestricted cash reserves can have serious ramifications in the future.

Proposed Rates

Since its inception, the Board has embraced the philosophy that every customer, whether new or existing, should pay their reasonable share for the service they use. Furthermore, TMWA sets its pricing to recover its costs of providing service while encouraging efficient use of resources. Historically, the board has adjusted rates to meet current financial needs, but also phased in any rate increase to reduce the impact of a single large adjustment, while allowing time for economic conditions to change or improve. The current rate adjustment proposed includes two 3% increases in May 2017 and May 2018, and three increases of 2.5% in the following three years. These increases will apply to all customer classes including both the customer charge and the commodity charge for all tiers. To be clear: staff is requesting the Board take final action now to adopt all five rate adjustments, such that no further hearings or actions of the Board shall be required for such adjustments to be implemented at the times indicated. However, TMWA’s continued diligence to control expenses thereby reducing the revenue requirement, and higher than anticipated water demand over the five year period could allow for smaller annual adjustments in years 3 through 5. Therefore, staff is recommending the Board reserve the ability to review the adjustments in years 3 through 5 prior to implementation, in the event the Board should believe the circumstances in existence at those times warrant deferring or discontinuing the implementation of one or more of these 2.5% increases. As a result, these last three phased increases would automatically go into effect *unless* the Board took action to defer or discontinue them.

Exhibit A contains the proposed changes to the rate schedules. First and second year average monthly bill amounts for the ¾ inch metered residential services are shown below. The average monthly bill is a blended average of the TMWA, Washoe County and STMGID average residential bill amounts.

	Current	Proposed Year 1	Proposed Year 2
¾" Single Family Residence			
1 Average Monthly Bill	\$47.45	\$48.87	\$50.34
2 Delta Prior Year Avg Monthly Bill		\$1.42	\$1.47
3 Percent Delta Prior Year Avg Monthly Bill		3.00%	3.00%

Truckee Meadows Water Authority

RATE SCHEDULES

RMWS – RESIDENTIAL METERED WATER SERVICE

APPLICABILITY

Delivery of water under this Rate Schedule is available for all purposes to any single family residential dwelling served through a separate Service Connection. This Rate Schedule is mandatory for delivery of water to residential Customers in newly constructed residential buildings which are occupied for the first time on or after July 1, 1988; and for residential Customers who receive a Meter pursuant to Rules 2 and 6.

Effective October 1, 2015, any single family residential service then receiving the delivery of water under either Rate Schedules RFWS or SUFR will be required to pay the metered rate pursuant to this Rate Schedule commencing upon later of October 1, 2015 or the first billing period following the installation of Meter Facilities and a Meter at the Service Property. For previously Unmetered Service Property(ies), the Authority will install Meter Facilities as soon as practicable, with costs to be borne by the Authority in accordance with Rule 6.

AVAILABILITY

The Authority's retail service territory.

RATES

Customer Charge Per Billing Period

<u>Meter Size</u>	<u>Per Meter</u>
Up to 3/4"	\$18.54 <u>19.10</u>
1"	\$20.40 <u>21.01</u>
1 1/2"	\$23.20 <u>23.90</u>
2"	\$26.90 <u>27.71</u>
3"	\$30.60 <u>31.52</u>
4"	\$35.20 <u>36.26</u>
6"	\$40.80 <u>42.02</u>

Commodity Charge per 1,000 Gallons for each Tier, All Meter Sizes

Tier 1 0 to 6,000 Gallons per Billing Period	\$1.72 <u>1.77</u>
Tier 2 6,001 to 25,000 Gallons per Billing Period	\$2.78 <u>2.86</u>
Tier 3 Greater than 25,000 Gallons per Billing Period	\$3.25 <u>3.35</u>

Added: 03/23/01 Amended: 11/01/01, 09/25/03; 03/01/05; 05/21/09; 02/17/10; 01/19/12; 01/24/2014;
05/21/15; 04/19/17

Truckee Meadows Water Authority

RATE SCHEDULES

RMWS – RESIDENTIAL METERED WATER SERVICE

Late Charge

5% of any amount in arrears from previous billings

Other Charges

As specified in Rate Schedule OC and applied to total bill.

MINIMUM CHARGE

The Minimum Charge hereunder shall consist of the sum of the Customer Charge, commodity charge, backflow charge, late charge, right-of-way toll, and regional water management fee per Billing Period.

SPECIAL CONDITIONS

1. Customers previously billed at the 1 1/4" Customer Charge will be billed at the 1" Customer Charge.
2. Backflow Charge. This charge applies to single family residential Customers where the Service Property has a backflow prevention assembly maintained by the Authority. The monthly charge applied per Billing Period for operations, maintenance, service and annual testing associated with the backflow prevention assembly is \$~~4.50~~4.64.
3. This Rate Schedule is closed to new applications for the delivery of water through a 3" Service Connection.

Added: 03/23/01 Amended: 09/25/03; 05/21/09; 04/19/17

Truckee Meadows Water Authority

RATE SCHEDULES

MMWS – MULTIPLE-UNIT RESIDENTIAL METERED WATER SERVICE

APPLICABILITY

Delivery of water under this Rate Schedule is available for all purposes to any multiple-unit residential Customer in multiple-unit complexes including apartment complexes, mobile home parks and two or more detached single family dwellings metered in accordance with Rule 6. This Rate Schedule is mandatory for delivery of water to residential Customers in newly constructed multi-tenant residential buildings occupied for the first time on or after July 1, 1988; and for multiple-unit residential Customers who have received a Meter pursuant to Rules 2 and 6.

Effective October 1, 2015, any multi-unit complex including apartment complexes, mobile home parks and two or more detached single family dwellings metered in accordance with Rule 6 then receiving the delivery of water under either Rate Schedules MRFS or MRIS will be required to pay the metered rate pursuant to this Rate Schedule commencing upon later of October 1, 2015 or the first billing period following the installation of Meter Facilities and a Meter at the Service Property.

AVAILABILITY

The Authority's retail service territory.

RATES

Customer Charge per Billing Period

<u>Meter Size</u>	<u>Per Meter</u>
Up to 3/4"	\$18.54 <u>19.10</u>
1"	\$20.40 <u>21.01</u>
1 1/2"	\$23.20 <u>23.90</u>
2"	\$26.90 <u>27.71</u>
3"	\$30.60 <u>31.52</u>
4"	\$35.20 <u>36.26</u>
6"	\$40.80 <u>42.02</u>
8"	\$47.30 <u>48.72</u>
10"	\$55.60 <u>57.27</u>

Commodity Charge per 1,000 Gallons for each Tier, All Meter Sizes

Tier 1 All usage up to 4,000 Gallons per Unit Multiplied by number of units per Billing Period	\$1.72 <u>1.77</u>
Tier 2 Usage greater than Tier 1 per Billing Period	\$2.78 <u>2.86</u>

Added: 03/23/01 Amended: 09/25/03; 03/01/05; 05/21/09; 02/17/10; 01/19/12; 01/24/14; 05/21/15;
04/19/17

Truckee Meadows Water Authority

RATE SCHEDULES

MMWS – MULTIPLE-UNIT RESIDENTIAL METERED WATER SERVICE

Late Charge

5% of any amount in arrears from previous billings.

Other Charges

As specified in Rate Schedule OC and applied to total bill.

MINIMUM CHARGE

The Minimum Charge hereunder shall consist of the sum of the Customer Charge, commodity charge, late charge, right-of-way toll, and regional water management fee per Billing Period.

SPECIAL CONDITIONS

1. Customers previously billed at the 1 1/4" Customer Charge will be billed at the 1" Customer Charge.
2. This Rate Schedule is closed to new applications for the delivery of water through a 3" Service Connection.

Added: 03/23/01 Amended: 09/25/03; 05/21/09

Truckee Meadows Water Authority

RATE SCHEDULES

GMWS - GENERAL METERED WATER SERVICE

APPLICABILITY

Delivery of water under this Rate Schedule is available for Commercial Service to Service Property(ies) with a Meter used for billing purposes and where no other Rate Schedule is specifically applicable.

AVAILABILITY

The Authority's retail service territory.

RATES

Customer Charge per Billing Period

<u>Meter Size</u>	<u>Per Meter</u>
3/4"	\$18.54 <u>19.10</u>
1"	\$20.40 <u>21.01</u>
1 1/2"	\$23.20 <u>23.90</u>
2"	\$26.90 <u>27.71</u>
3"	\$30.60 <u>31.52</u>
4"	\$35.20 <u>36.26</u>
6"	\$40.80 <u>42.02</u>
8"	\$47.30 <u>48.72</u>
10"	\$55.60 <u>57.27</u>

Commodity Charge per 1,000 Gallons for each Tier, All Meter Sizes

Tier 1	\$1.72 <u>1.77</u>
Tier 2	\$2.78 <u>2.86</u>
Tier 3	\$3.25 <u>3.35</u>

Tier usage levels are set for each Meter size according to this table:

Meter Size	Tier 1 Gallons	Tier 2 Gallons	Tier 3 Gallons
3/4"	0 to 7,000	7,001 to 30,000	Greater than 30,000
1"	0 to 14,000	14,001 to 65,000	Greater than 65,000
1 1/2"	0 to 28,000	28,001 to 120,000	Greater than 120,000
2"	0 to 50,000	50,001 to 210,000	Greater than 210,000
3"	0 to 165,000	165,001 to 640,000	Greater than 640,000
4"	0 to 300,000	300,001 to 1,300,000	Greater than 1,300,000
6"	0 to 1,000,000	1,000,001 to 2,600,000	Greater than 2,600,000
8"	0 to 1,475,000	1,475,001 to 6,000,000	Greater than 6,000,000
10"	0 to 9,500,000	9,500,001 to 15,000,000	Greater than 15,000,000

Added: 03/23/01 Amended: 09/25/03; 03/01/05; 05/21/09; 02/17/10; 01/19/12; 01/24/14; 04/19/17

Truckee Meadows Water Authority

RATE SCHEDULES

GMWS - GENERAL METERED WATER SERVICE

Late Charge

5% of any amount in arrears from previous billings.

Other Charges

As specified in Rate Schedule OC and applied to total bill.

MINIMUM CHARGE

The Minimum Charge hereunder shall consist of the sum of the Customer Charge, commodity charge, late charge, right-of-way toll, and regional water management fee per Billing Period.

SPECIAL CONDITIONS

1. This Rate Schedule is closed to new applications for the delivery of water through a 3 inch Service Connection.

Added: 03/23/01 Amended: 09/25/03; 05/21/09

Truckee Meadows Water Authority

RATE SCHEDULES

MIS – METERED IRRIGATION SERVICE

APPLICABILITY

Delivery of water under this Rate Schedule is mandatory for separately metered Irrigation Service.

AVAILABILITY

The Authority's retail service territory.

RATES

Customer Charge per Billing Period

<u>Meter Size</u>	<u>Per Meter</u>
3/4"	\$18.54 <u>19.10</u>
1"	\$20.40 <u>21.01</u>
1 1/2"	\$23.20 <u>23.90</u>
2"	\$26.90 <u>27.71</u>
3"	\$30.60 <u>31.52</u>
4"	\$35.20 <u>36.26</u>
6"	\$40.80 <u>42.02</u>
8"	\$47.30 <u>48.72</u>
10"	\$55.60 <u>57.27</u>

Commodity Charge per 1,000 Gallons, All Meter Sizes

Off-Peak Period	\$2.78 <u>2.86</u>
On-Peak Period	\$3.37 <u>3.47</u>

Late Charge

5% of any amount in arrears from previous billings.

Other Charges

As specified in Rate Schedule OC and applied to total bill.

Added: 03/23/01 Amended: 09/25/03; 03/01/05; 05/21/09; 02/17/10; 01/19/12; 01/24/14; 04/19/17

Truckee Meadows Water Authority

RATE SCHEDULES

MIS – METERED IRRIGATION SERVICE

MINIMUM CHARGE

The Minimum Charge hereunder shall consist of the sum of the Customer Charge, commodity charge, late charge, right-of-way toll, and regional water management fee per Billing Period.

SPECIAL CONDITIONS

1. If a Customer disconnects and reconnects within one (1) calendar year, the Customer shall pay the Customer Charge for each month the delivery of water was disconnected.
2. This Rate Schedule is closed to new applications for the delivery of water through a 3" Service Connection.

Added: 03/01/05 Amended: 05/21/09; 01/19/12

Truckee Meadows Water Authority

RATE SCHEDULES

SUFR – SMALL UNIT FLAT RATE SERVICE

APPLICABILITY

Delivery of water under this Rate Schedule is available for single family residence(s) on a Service Property(ies) with lot size 3,000 square feet or less served individually through a separate 3/4" Service Connection to the Service Property. After October 1, 2015, the delivery of water under this Rate Schedule shall be available only to a Service Property (1) that was billed under this schedule on October 1, 2015 and (2) so long as such Service Property is not able to be billed under Rate Schedule RMWS. For previously Unmetered Service Property(ies), the Authority will install Meter Facilities as soon as practicable, with costs to be borne by the Authority in accordance with Rules 2 and 6. Customers receiving delivery of water under either of the residential metered water or multiple-unit flat rate service Rate Schedules are excluded from this Rate Schedule.

AVAILABILITY

The Authority's retail service territory.

RATES

Customer Charge per Billing Period

~~\$39.12~~ 40.29 for a Service Connection.

Late Charge

5% of any amount in arrears from previous billings.

Other Charges

As specified in Rate Schedule OC and applied to total bill.

MINIMUM CHARGE

The Minimum Charge for this service shall consist of the sum of the Customer Charge, commodity charge, late charge, right-of-way toll, and regional water management fee per Billing Period.

SPECIAL CONDITIONS

1. This Rate Schedule is not available to Customers currently billed under the MRFS or MRIS Rate Schedules.
2. Single family residence Service Property(ies) with lot size(s) greater than 3,000 square feet individually served through a separate Service Connection shall be billed under RMWS or RFWS Rate Schedules.
3. Separate Irrigation Service shall be billed under the MIS Rate Schedule.
4. This Rate Schedule is closed to new applications for the delivery of water.

Added: 03/23/01 Amended: 10/01/03; 03/01/05; 01/19/12; 01/24/14; 05/21/15; 04/19/17

Truckee Meadows Water Authority

RATE SCHEDULES

MRFS – MULTIPLE-UNIT RESIDENTIAL FLAT RATE SERVICE

APPLICABILITY

Delivery of water under this Rate Schedule is available for residential purposes to any Customer for use in multiple-unit residential complexes, including apartment complexes, mobile home parks, and two or more detached single family dwellings served through a single Service Connection with separate Irrigation Service at the same Service Property. After October 1, 2015, the delivery of water under this Rate Schedule shall be available only to a Service Property (1) that was billed under this schedule on October 1, 2015 and (2) so long as the Service Property is not able to be billed under Rate Schedule MMWS. For previously Unmetered Service Property(ies), the Authority will install Meter Facilities as soon as practicable, with costs to be borne by the Authority in accordance with Rules 2 and 6.

AVAILABILITY

The Authority's retail service territory.

RATES

Customer Charge per Billing Period

~~\$17.00~~17.51 for a 3/4" Service Connection
~~\$18.70~~19.26 for a 1" Service Connection
~~\$21.30~~21.94 for a 1 1/2" Service Connection
~~\$24.70~~25.44 for a 2" Service Connection
~~\$28.40~~28.94 for a 3" Service Connection
~~\$32.30~~33.27 for a 4" Service Connection
~~\$37.40~~38.52 for a 6" Service Connection

Unit Charge per Billing Period

~~\$10.90~~11.23 for each dwelling unit.

Late Charge

5% of any amount in arrears from previous billings.

Other Charges

As specified in Rate Schedule OC and applied to total bill.

Added: 03/23/01 Amended: 10/01/03; 03/01/05; 05/21/09; 02/17/10; 05/21/15; 04/19/17

Truckee Meadows Water Authority

RATE SCHEDULES

MRFS – MULTIPLE-UNIT RESIDENTIAL FLAT RATE SERVICE

MINIMUM CHARGE

The Minimum Charge for delivery of water for this service shall consist of the sum of the Customer Charge, unit charge, late charge, right-of-way toll, and regional water management fee per Billing Period.

SPECIAL CONDITIONS

1. Customers previously billed at the 1 1/4" Customer Charge will be billed at the 1" Customer Charge.
- ~~3.~~ 2. All irrigation to the multiple-unit complex must be provided by separate irrigation service lines.
- ~~4.~~ 3. This Rate Schedule is closed to new applications for the delivery of water for multiple-unit residential service.

Added: 03/23/01 Amended: 10/01/2003; 04/19/17

Truckee Meadows Water Authority

RATE SCHEDULES

MRIS - MULTIPLE-UNIT RESIDENTIAL AND IRRIGATION SERVICE

APPLICABILITY

Delivery of water under this Rate Schedule is available for residential purposes to any Customer in multiple-unit residential complexes, including apartment complexes, mobile home parks, and two or more detached single family dwellings, served through a single Service Connection without separate Irrigation Service at the same Service Property. After October 1, 2015, the delivery of water under this Rate Schedule shall be available only to a Service Property (1) that was billed under this schedule on October 1, 2015 and (2) so long as the Service Property is not able to be billed under Rate Schedule MMWS. For previously Unmetered Service Property(ies), the Authority will install Meter Facilities as soon as practicable, with costs to be borne by the Authority in accordance with Rules 2 and 6.

AVAILABILITY

The Authority's retail service territory.

RATES

Customer Charge per Billing Period

\$ ~~34.20~~35.23 for a 3/4" Service Connection
 \$ ~~50.30~~51.81 for a 1" Service Connection
 \$ ~~79.40~~81.78 for a 1 1/2" Service Connection
 \$ ~~125.30~~129.06 for a 2" Service Connection
 \$ ~~240.30~~216.61 for a 3" Service Connection
 \$ ~~429.30~~442.18 for a 4" Service Connection
 \$ ~~693.10~~713.89 for a 6" Service Connection
 \$ ~~885.40~~911.96 for a 8" Service Connection
 \$ ~~1,260.40~~1,298.21 for a 10" Service Connection

Unit Charge per Billing Period

\$~~11.50~~11.85 for each dwelling unit

Late Charge

5% of any amount in arrears from previous billings.

Other Charges

As specified in Rate Schedule OC and applied to total bill.

Added: 03/23/01 Amended: 10/01/2003; 03/01/05; 05/21/09; 02/17/10; 05/21/15; 04/19/17

Truckee Meadows Water Authority

RATE SCHEDULES

MRIS - MULTIPLE-UNIT RESIDENTIAL AND IRRIGATION SERVICE

MINIMUM CHARGE

The Minimum Charge for delivery of water for this service shall consist of the sum of the Customer Charge, unit charge, late charge, right-of-way toll, and regional water management fee.

SPECIAL CONDITIONS

1. Customers previously billed at the 1 1/4" Customer Charge will be billed at the 1" Customer Charge.
2. Once a Meter is installed for separate Irrigation Service, Customers previously billed under this Rate Schedule will be moved to the MRFS Rate Schedule and the irrigation to the MIS Rate Schedule.
3. This Rate Schedule is closed to new applications for the delivery of water for multiple-unit residential service.

Added: 03/23/01 Amended: 10/01/03

Truckee Meadows Water Authority

RATE SCHEDULES

FPS – FIRE PROTECTION SERVICE

APPLICABILITY

Delivery of water under this Rate Schedule is available for fire protection purposes to any Service Property through Customer-owned Fire Facilities as defined in the Rules. Fire Facilities owned by Local Governments within the Authority's retail service territory are excluded from this Rate Schedule.

AVAILABILITY

The Authority's retail service territory.

RATES

Customer Charge per Billing Period

The charge for delivery of water per Billing Period for this service shall consist of a monthly Customer Charge computed at \$ ~~5.07~~5.22 per inch of the nominal diameter of the Service Pipe.

Late Charge

5% of any amount in arrears from previous billings.

Other Charges

As specified in Rate Schedule OC and applied to total bill.

MINIMUM CHARGE

The Minimum Charge will consist of the Customer Charge, late charge, right-of-way toll, and regional water management fee per Billing Period.

SPECIAL CONDITIONS

1. This Rate Schedule is closed to new applications for the delivery of water through a 3" Service Connection.

Added: 03/23/01 Amended: 02/01/02; 10/01/03; 03/01/05; 05/21/09; 02/17/10; 01/19/12; 01/24/14;
04/19/17

Truckee Meadows Water Authority

RATE SCHEDULES

NPS – NON-POTABLE WATER SERVICE

APPLICABILITY

Delivery of water under this Rate Schedule is available, at the sole discretion of the Authority, to Customers for Non-Potable uses of water including but not limited to, dust control, earth compaction, irrigation or any other Non-Potable use from non-treated or treated water sources of supply managed by the Authority.

AVAILABILITY

Delivery of water is available from any mutually agreed Service Connection from existing Facilities of the Authority located within its retail and Wholesale Service territory boundaries.

RATES

Customer Charge per Billing Period

Per delivery point	\$33.09 <u>34.08</u>
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Commodity Charge per 1,000 Gallons

Untreated Water	\$0.98 <u>1.01</u>
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Treated Water	\$3.37 <u>3.47</u>
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Late Charge

5% of any amount in arrears from previous billings.

Other Charges

As specified in Rate Schedule OC and applied to total bill.

MINIMUM CHARGE

The Minimum Charge for this service shall consist of the sum of the Customer Charge, commodity charge, late charge, right-of-way toll, and regional water management fee per Billing Period.

Added: 11/01/02 Amended: 10/01/03; 05/21/09; 02/17/10; 01/19/12; 01/24/14; 04/19/17

Truckee Meadows Water Authority

RATE SCHEDULES

NPS – NON-POTABLE WATER SERVICE

CHARACTER OF SERVICE

Delivery of water under this Rate Schedule shall be provided at the sole discretion of the Authority, and may be subject to interruptions or curtailments for indefinite periods. Curtailment and/or interruption of delivery of water may occur due to various operating conditions including but not limited to cross-contamination or threat of cross-contamination, insufficient water availability, system repairs, maintenance or construction, or with other conditions and circumstances both inside and outside of the Authority's direct ability to control (e.g., acts of God, system repair, system failure, labor disputes, etc). Subject to the foregoing, the Authority shall provide the Customer with as much notice as is practical of any curtailment or interruption of delivery of water and in the event of curtailment or interruption, the Authority will use reasonable efforts to restore delivery of water in a safe and efficient manner.

SPECIAL CONDITIONS

1. For all Non-Potable uses, the Customer will be required to execute an "NPS Service Agreement" with the Authority. The agreement will cover, but is not limited to, sufficient water resources to supply the delivery of water when necessary, cross-connection control issues, delivery rates, specific delivery requirements of the Customer, conditions of delivery, Authority conveyances as to the likelihood of interruption given the Customer's specified requirements, times of year when delivery of water will be required, the nature of curtailment and interruption notices, time allowed for Customer's response to Authority's interruption notification, etc.
2. All costs necessary to provide delivery of water hereunder shall be payable by Customer consistent with the Authority's Rules.
3. The Customer acknowledges that the use of Non-Potable water poses a potential cross-connection risk to the Customer's on-site system and to the Authority's water delivery system. Accordingly, the Customer shall additionally abide with the following conditions of delivery of water.
 - a. The Customer shall obtain all permits and approvals necessary for the use of Non-Potable water.
 - b. The Customer shall identify and provide contact information to the Authority for the Customer's "NPS Supervisor" who shall be responsible for the operation and maintenance of the on-site Non-Potable system.
 - c. The Customer may not connect to the Potable system without approval of the Authority.

Added: 11/01/02 Amended: 10/01/03

Truckee Meadows Water Authority

RATE SCHEDULES

NPS – NON-POTABLE WATER SERVICE

- d. In the event the Customer maintains a Potable Service from the Authority at the same Service Property as NPS, NPS shall be air-gapped in a manner acceptable to the Authority. An annual inspection of the Non-Potable on-site system shall be performed at the Customer's expense. This inspection shall be performed by representatives from the Customer and the Authority. The Authority may require an annual shutdown test be performed to confirm that no cross-connections exist. The Authority reserves the right to terminate NPS at any time for any reason in its sole discretion.
4. In the event that the Authority interrupts delivery of water to a Customer who is receiving untreated water under this Rate Schedule but the Customer has (1) elected to receive treated water for NPS in the service agreement, (2) the Customer has all necessary cross-connection control devices installed and operational, and (3) the Authority is able to deliver treated water in lieu of untreated water pursuant to this Rate Schedule, the Authority will deliver treated water for NPS and the Customer will be charged the treated water commodity charge listed in this Rate Schedule.
5. Temporary NPS, pursuant to Authority's Rule 2, is available under the conditions of this schedule subject to the terms of the "NPS Service Agreement".

Added: 11/01/02 Amended: 10/01/03

Truckee Meadows Water Authority

RATE SCHEDULES

IWS – INTERRUPTIBLE WATER SERVICE

APPLICABILITY

Delivery of water under this Rate Schedule is available, at the sole discretion of the Authority, to Customers for interruptible water deliveries.

AVAILABILITY

Interruptible Water Service is available hereunder from existing Facilities of Authority located within its retail territories.

RATES

<u>Customer Charge per Meter per Billing Period</u>	\$33.09 <u>34.08</u>
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<u>Commodity Charge per 1,000 Gallons</u>	\$0.98 <u>1.01</u>
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Late Charge

5% of any amount in arrears from previous billings.

Other Charges

As specified in Rate Schedule OC and applied to total bill.

MINIMUM CHARGE

The Minimum Charge will consist of the Customer Charge, commodity charge, late charge, rights-of-way toll, and regional water management fee per Billing Period.

CHARACTER OF SERVICE

Delivery of water provided under this Rate Schedule shall be provided at the sole discretion of the Authority and may be subject to frequent and immediate interruptions or curtailments for indefinite periods. Curtailment and/or interruption of delivery of water may take place due to various operating conditions associated with protecting the overall integrity of the water system (such as the need to maintain drought reserves, insufficient water availability, or lack of available capacity); or with repairing, constructing, or maintaining Facilities on the Authority's system; or with other conditions and circumstances both inside and outside of the Authority's direct ability to control (e.g., acts of God, system repair, system failure, labor disputes, etc.). Subject to this general understanding as to the interruptible nature of the delivery of water, the following assurances as to the character of the service are made:

1. The Authority shall provide the Customer with as much notice as is practical of any curtailment of interruption of delivery of water.

Added: 03/23/01 Amended: 10/01/03; 05/21/09; 02/17/10; 01/19/12; 01/24/14; 04/19/17

Truckee Meadows Water Authority

RATE SCHEDULES

IWS – INTERRUPTIBLE WATER SERVICE

2. Water delivered under this Rate Schedule, although interruptible, will be provided on a best-efforts basis after the Authority has satisfied all other non-interruptible retail and wholesale Customer sales obligations. Delivery of water for this service will be limited by the existing capacity of the system and its availability to render the requested deliveries, without construction of any additional Facilities. Delivery of water will be available subject to the terms and conditions of delivery specified in the contract for service and as long as, in the Authority's judgment, the required water deliveries can be provided without jeopardizing the integrity of the system, or affecting the Authority's ability to modify, expand or repair the system as necessary to provide adequate deliveries of water to existing or future Customers.
3. If, in the Authority's opinion, the Customer applying for the IWS is not able to adequately demonstrate the ability to tolerate the types of interruption in water deliveries that may occur under the provisions of this Rate Schedule, or the terms and conditions of the contract for service, then delivery of water under this Rate Schedule will not be granted by the Authority. In such cases, the Authority will make best efforts to serve the Customer's water needs under an appropriate non-interruptible water Rate Schedule.
4. In the event there is a need to partially curtail any portion of the total interruptible water load served by the Authority, on any particular day or for any other particular time period, then the curtailment/interruption protocols will be as follows:
 - a. The curtailment or interruption will be in the reverse order of the effective date of the contract for service agreement.
 - b. When two or more service agreements have the same effective date, then among the Customers with such service agreements, the curtailment/interruption requirement will be achieved by proportionally allocating the remaining water available for interruptible service delivery among all such Customers' based upon each such Customer's maximum daily demand (as specified in the service agreement) to the total maximum daily demands of these Customers. If a Customer's service agreement with the Authority does not provide for a maximum daily delivery, then the Customer's minimum delivery will be used for proration purposes. Customers not requesting delivery of water during the time curtailment is required will be excluded from the calculation of any proration.
 - c. Notwithstanding the other provisions of parts a) and b) above, the Authority shall not be required to interrupt water delivery to any Customer or curtail water delivery to any Customer served from those locations on Authority's system where, due to operational or capacity limitations, the Authority's ability to maintain the priorities provided herein would not be improved.

Added: 03/23/01 Amended: 10/01/03

Truckee Meadows Water Authority

RATE SCHEDULES

IWS – INTERRUPTIBLE WATER SERVICE

SPECIAL CONDITIONS

1. The Customer will be required to execute a contract for this service with the Authority, and will mutually agree to distribute water within a specified geographic area and/or use water for specified purposes. The contract may also cover, but not be limited to, requirements as to water resources sufficient to supply the water, the specific delivery requirements of the Customer, conditions of delivery, Authority conveyances as to the likelihood of interruption given the Customer's specified requirements, times of year when delivery of water will be required, the nature of curtailment and interruption notices, time allowed for Customer's response to Authority's interruption notification, etc.
2. The Customer shall pay all interconnection costs necessary to provide delivery of water hereunder, consistent with the Authority's Rules.
3. Any additional costs required to provide delivery of water in excess of those described in this Rate Schedule shall be the responsibility of the Customer. Any additional cost responsibility shall be clearly described in the contract for service.
4. The Authority, for the purposes of providing Wholesale Service, has the option to annex the Customer's retail service territory, prior to the granting of delivery of water under this Rate Schedule.
5. Failure of the Customer to respond to, or cooperate with, the Authority's notification of a need to curtail or interrupt delivery of water, in a timely manner and without justifiable cause, will be sufficient grounds for the Authority to discontinue delivery of water under this Rate Schedule. The Authority must notify the Customer of its reason for terminating delivery of water within ten (10) days after the discovery of the Customer's violation. Delivery of water can also be terminated under the conditions specified in applicable Authority rules, and can be terminated by either party upon one (1) year's prior written notice.
6. This Rate Schedule is closed to new applications for the delivery of water through a 3" Service Connection.

Added: 03/23/01 Amended: 10/01/03; 05/21/09

Truckee Meadows Water Authority

RATE SCHEDULES

LVS – LARGE VOLUME RESALE SERVICE

APPLICABILITY

Large Volume Resale Service is applicable to water companies for resale within a Customer's Wholesale Service area included in this rate schedule.

AVAILABILITY

Large Volume Resale Service is available from existing facilities of Authority located within its Wholesale Service territories.

RATES

Commodity Rates per 1,000 Gallons

Sun Valley General Improvement District

First 29,000,000 Gallons per Billing Period	\$1.48 <u>1.52</u>
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Greater than 29,000,000 Gallons per Billing Period	\$2.45 <u>2.52</u>
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Additional Charges

Customer Charge per Meter per Billing Period	\$126.50 <u>130.30</u>
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Late Charge:

5% of any amount in arrears from previous billings.

Other Charges:

As specified in Rate Schedule OC excluding Regional Water Management Fee and applied to total bill.

MINIMUM CHARGE

The Minimum Charge for delivery of water for this service shall consist of the Customer Charge, commodity charge, late charge, and right-of-way toll per Billing Period.

Added: 03/23/01 Amended: 10/01/03; 03/01/05; 09/20/06; 05/21/09; 01/21/10; 01/19/12; 01/01/15; 04/19/17

Truckee Meadows Water Authority

RATE SCHEDULES

LVS – LARGE VOLUME RESALE SERVICE

SPECIAL CONDITIONS

1. A written contract for delivery of water between the Authority and Customer will be required. The contract shall require the Customer to distribute water within a mutually agreeable specified geographic area, or use water for a mutually agreeable specified purpose.
2. The Customer shall pay all interconnection costs necessary to provide delivery of water per this Rate Schedule, consistent with the Authority's Rules. Any exceptions to this provision will be clearly delineated in the contract.
3. This Rate Schedule is closed to new applications for the delivery of water through a 3" Service Connection.
4. The Authority, in agreement with Customers billed under this Schedule, may annually adjust the tier usage level in this schedule which adjustment would be effective the first billing cycle in June. The adjustment made to each Customer's tier would be based on the average usage of the preceding Winter Usage.

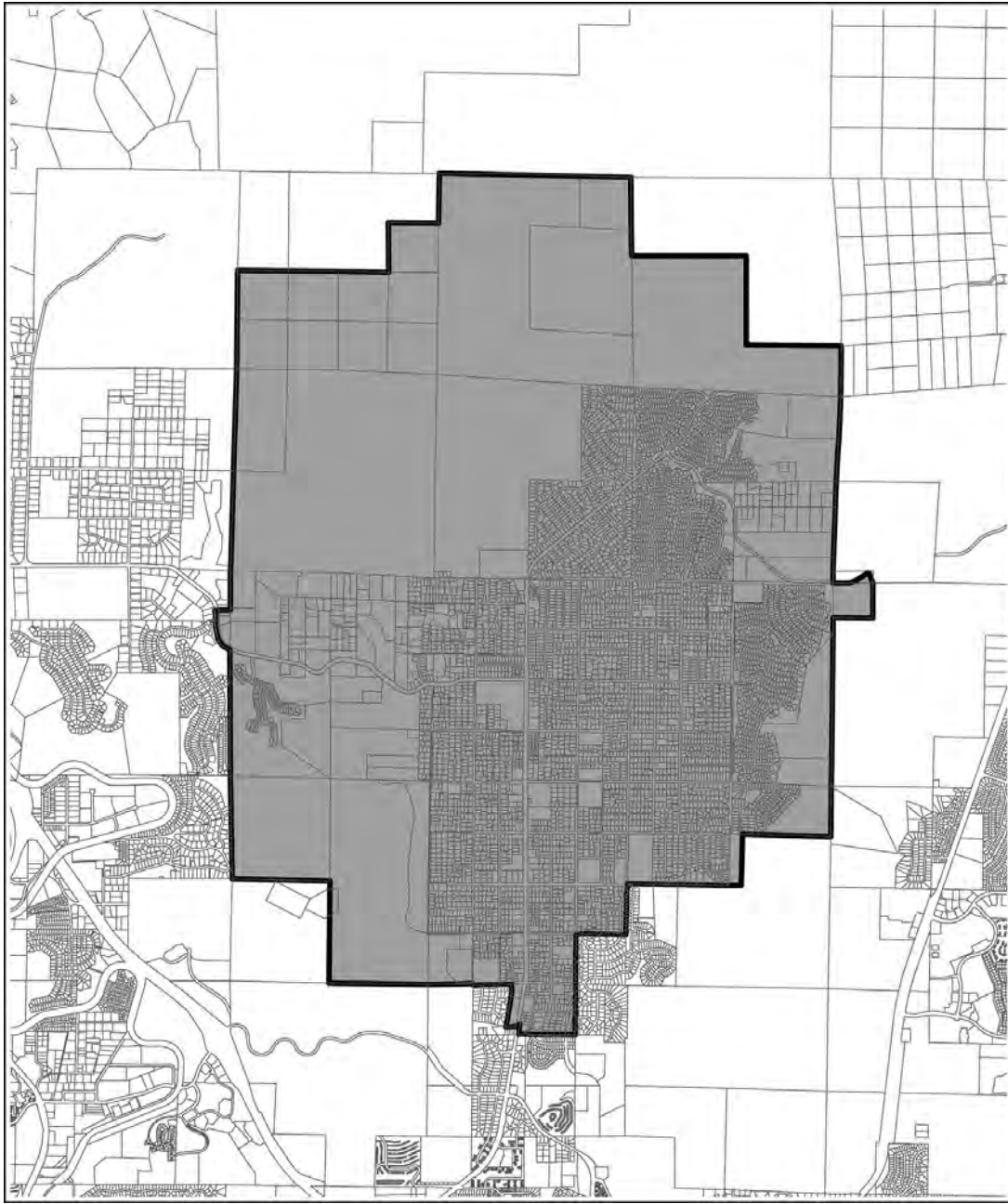
Added: 03/23/01 Amended: 10/01/03; 03/01/05; 05/21/09; 02/17/10; 01/19/12; 01/24/14; 01/01/15

Truckee Meadows Water Authority

RATE SCHEDULES

LVS – LARGE VOLUME RESALE SERVICE

PARCEL A - Sun Valley General Improvement District Wholesale Service Area



NOTE: The wholesale service areas within this schedule are the approximate boundaries of the wholesale Customer and are subject to occasional adjustment by the wholesale Customer and Authority. The Authority attempts to keep a current map posted on its website, at www.tmwa.com; however, this map may not show sufficient detail to depict location of a Service Property precisely which the Authority will determine at the time of application.

Added: 01/01/15

Truckee Meadows Water Authority

RATE SCHEDULES

FSPR – FIRM STANDBY AND PARTIAL REQUIREMENTS

APPLICABILITY

Firm Standby/Partial Requirements Service is available, at the sole discretion of the Authority, to Customers where: (1) none of their water requirements are supplied by the Authority and the Authority agrees to provide standby water service or, (2) only a portion of their normal daily water requirements are supplied by the Authority and the Authority agrees to supply partial water requirements.

AVAILABILITY

Firm Standby/Partial Requirements Service is available from existing Facilities of the Authority located within its water service territories.

RATES

<u>Customer Charge per Meter per Billing Period</u>	\$126.50 <u>130.30</u>
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<u>Commodity Charge per 1,000 Gallons, All Meter Sizes</u>	
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Per Billing Period	\$0.98 <u>1.01</u>
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<u>Demand Charge</u>	
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<u>Per Billing Period in the On-Peak Period:</u>	
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Per 1,000 Gallons of Contract Demand plus	\$14.15 <u>14.57</u>
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Per 1,000 Gallons of Actual Demand above the Contract Demand up to the Allowable Variance plus	\$84.90 <u>87.45</u>
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Per 1,000 Gallons for which the Actual Demand exceeds the Contract Demand including the Allowable Variance	\$169.80 <u>174.89</u>
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<u>Per Billing Period in the Off-Peak Period:</u>	
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Per 1,000 Gallons of Contract Demand	\$14.15 <u>14.57</u>
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<u>Late Charge</u>	
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5% of any amount in arrears from previous billings.

Added: 03/23/01 Amended: 10/01/03; 03/01/05; 05/21/09; 02/17/10; 01/19/12; 01/24/14; 01/01/15; 04/19/17

Truckee Meadows Water Authority

RATE SCHEDULES

FSPR – FIRM STANDBY AND PARTIAL REQUIREMENTS

Other Charges

As specified in Rate Schedule OC excluding Regional Water Management Fee and applied to total bill.

MINIMUM CHARGE

The Minimum Charge for delivery of water for this service shall be the sum of the Customer Charge, commodity charge, demand charge, late charge, and right-of-way toll per Billing Period.

SPECIAL DEFINITIONS

1. Contract Demand: Contract Demand is defined as the Customer's maximum firm daily capacity (in thousands of gallons) for which Authority will standby for or provide as partial requirements during the On-Peak Period. The Contract Demand designation shall also set the Customer's maximum daily usage to be served by Authority during the Off-Peak Period. Usage may be subject to curtailment/interruption by Authority per Special Condition No. 1 of this Rate Schedule. The Contract Demand shall be designated in the contract for service and is subject to adjustment by Authority pursuant to the terms of Special Condition No. 5 of this Rate Schedule.
2. Actual Demand: The Actual Demand is defined as the maximum metered daily usage occurring in the Billing Period.
3. Allowable Variance: The allowable variance amount is 5% above the Contract Demand during the On-Peak Period, unless another variance amount is specified in the contract for service.

SPECIAL CONDITIONS

1. A contract for service between the Authority and the Customer will be required for delivery of water under this Rate Schedule. The service contract shall require the Customer to distribute water within a mutually agreeable specified geographic area and/or use water for a mutually agreeable specified purpose. The service contract shall include but is not limited to the level of firm service required by the Customer over the term of the agreement (i.e., the Contract Demand), conditions for the termination and extension of delivery of water, requirements as to water resources sufficient to supply water, the specific delivery requirements of the Customer, conditions of delivery, provisions outlining possible service interruptions or

Added: 03/23/01 Amended: 10/01/03; 01/19/12

Truckee Meadows Water Authority

RATE SCHEDULES

FSPR – FIRM STANDBY AND PARTIAL REQUIREMENTS

- curtailments, and, where appropriate, assurances of financial security sufficient to ensure payment of all charges for delivery of water.
2. Delivery of water hereunder is available to Customers with firm standby or partial water requirements who own and operate their distribution system and are capable of supplying all or a portion of their water supply, daily storage, fire protection, maintenance, billing, etc.
 3. Customer shall take delivery of water at a point within or adjacent to the Authority's existing distribution Facilities of adequate capacity to provide required delivery of water, or shall pay Authority's entire cost for providing such facilities.
 4. The Customer shall provide and install the necessary Meter Facilities, inclusive of the Meter and, if required by the Authority, telemetry equipment necessary for daily meter readings as well as any other equipment required for delivery of water hereunder including flow control devices, piping, and other related equipment. All required equipment and facilities shall be installed in accordance with Authority specifications and in a location that is mutually acceptable. Meter and Meter Facilities shall remain under the sole ownership and operation control of the Authority, unless otherwise specified by the Authority.
 5. Contract Demand Adjustment: The established Contract Demand may be adjusted by the Authority to a higher, permanent level if:
 - (i) the Customer's Actual Demand exceeds the existing Contract Demand by ten (10) percent or more two (2) times in the On-Peak Period over any consecutive 24 month period, or
 - (ii) if the Customer's Actual Demand exceeds the existing Contract Demand by twenty (20) percent or more in any month of the On-Peak Period.

If either of these two conditions is met, the Customer's Contract Demand may be reset to the highest Actual Demand imposed by the Customer during the On-Peak Period in the last 24 months.
 6. Special Condition No. 5 above shall not apply during periods of legitimate emergency, beyond the control and foresight of the Customer, which require the Authority to deliver water in excess of the Contract Demand. The Customer must notify the Authority of any emergency situation requiring the Authority to deliver water in excess of the Contract Demand. If an emergency arises, the Customer shall notify the Authority with reasonable speed, verbally or by phone, specifying the nature of the emergency, the estimated quantity of water to be delivered, the time at which the emergency began, and the time at which the emergency ended.

Added: 03/23/01 Amended: 10/01/03; 01/19/12; 01/01/15

Truckee Meadows Water Authority

RATE SCHEDULES

FSPR – FIRM STANDBY AND PARTIAL REQUIREMENTS

7. The Authority is not obligated to provide service to a Customer at levels of capacity that exceed the Contract Demand in the Off-Peak or On-Peak Period. Service in excess of the Contract Demand may be subject to curtailment or total interruption by Authority at its sole discretion. If usage above the established Contract Demand occurs in the On-Peak Period the Authority may adjust the Customer's Contract Demand upward pursuant to Special Condition No. 5 above. In accordance with Special Condition No. 6 above, the Authority shall try to accommodate a Customer's requirements for water deliveries in excess of the Contract Demand when an emergency situation exists.

8. The Authority is not obligated to deliver water at total annual volumes or quantities of water in excess of the level specified in the contract for service. Delivery of water in excess of the annual quantities designated may be subject to curtailment or total interruption by the Authority at its sole discretion.

Added: 03/23/01 Amended: 10/01/03; 01/19/12

Truckee Meadows Water Authority

RATE SCHEDULES

DIS – DITCH IRRIGATION SERVICE

APPLICABILITY

Applicable to Irrigation Service only by any Customer described below in the amount of their respective water right(s). Service is to be taken at one point, or alternately at two points, directly from a ditch operated by the Authority and shall not include any service from the Authority's reservoirs, purification basins, or distribution system.

AVAILABILITY

Available upon application for a five-month season to those parties, persons, and corporations and their grantors and predecessors in interest who have acquired water rights in the Truckee River and who have permission from the Authority to divert water through a ditch operated by the Authority for use on their respective lands for irrigation in amounts determined by certain decrees and court orders. Should the ditch operated by the Authority be operating after said five-month season, such Customer may apply for additional delivery of water providing such Customer has not already consumed his decreed allocation. In no case will the Authority be obligated to provide irrigation water under this Rate Schedule in an amount that exceeds the decreed allocation for the Customer's lands.

Delivery of water shall only be available during those times that the ditch operated by the Authority is in operation and transporting water. Due to unanticipated emergencies and other unforeseen conditions, it may be necessary to remove the ditch from service during the irrigation season. During drought periods, the Federal Watermaster may require reductions in the amount of water that can be delivered to the Customer's land or even require complete termination of irrigation deliveries. The Authority shall be bound by the Watermaster's directives and shall reduce or curtail delivery of water.

RATES

Customer Charge

The charge for delivery of water shall be payable in advance and shall be at the rate of \$ ~~18.95~~19.52 for each acre foot for which application is made for the five month irrigation season. This charge may be prorated based on the number of days in the 160 day period for which water is requested to be delivered.

Late Charge

5% of any amount in arrears from previous billings.

Truckee Meadows Water Authority

RATE SCHEDULES

DIS – DITCH IRRIGATION SERVICE

Other Charges

As specified in Rate Schedule OC and applied to total bill.

MINIMUM CHARGE

The Minimum Charge for delivery of water hereunder shall be the sum of the Customer Charge, late charge, right-of-way toll, and regional water management fee.

Added: 03/23/01 Amended: 10/01/03

Truckee Meadows Water Authority

RATE SCHEDULES

FRMSGID- FORMER STMGID RATES AND CHARGES

APPLICABILITY

Rates contained in this Rate Schedule FRMSGID are applicable solely to the delivery of water service to Premise(s) receiving water service from, and located within the former retail service area of, the South Truckee Meadows General Improvement District as of December 31, 2014, subject to the Special Conditions set forth below in this rate schedule.

RATES

RFWG – Residential Unmetered Water Service for Residential and Irrigation Service

Customer Charge per Billing Period

\$ ~~44.91~~46.26 for a Service Connection

Late Charge

5% of any amount in arrears from previous billings.

Other Charges

As specified in Rate Schedule OC and applied to total bill.

RMWG – Residential Metered Water Service

Customer Charge per Billing Period

Meter Size

Per Meter

Up to 3/4"	\$ 9.49 <u>9.77</u>
1"	\$ 11.64 <u>11.96</u>
1 1/2"	\$ 16.47 <u>16.96</u>

Commodity Charge per 1,000 Gallons for each Tier per Billing Period

Tier 1	0	to	6,000	\$ 1.36 <u>1.40</u>
Tier 2	6,001	to	20,000	\$ 1.80 <u>1.85</u>
Tier 3	20,001	to	40,000	\$ 2.21 <u>2.28</u>
Tier 4	40,001	to	65,000	\$ 2.58 <u>2.66</u>
Tier 5	>65,000	to		\$ 2.73 <u>2.81</u>

Late Charge

5% of any amount in arrears from previous billings.

Added: 01/01/2015 Amended: 04/19/17;

Truckee Meadows Water Authority

RATE SCHEDULES

FRMSGID- FORMER STMGID RATES AND CHARGES

Other Charges

As specified in Rate Schedule OC and applied to total bill.

GOV – Governmental Metered Water Service

Customer Charge per Billing Period

<u>Meter Size</u>	<u>Per Meter</u>
Up to 3/4"	\$ <u>9.499.77</u>
1"	\$ <u>11.6411.96</u>
1 1/2"	\$ <u>16.4716.96</u>
2"	\$ <u>22.2322.90</u>
3"	\$ <u>39.3940.57</u>
4"	\$ <u>57.5759.30</u>
6"	\$ <u>108.25111.50</u>
8"	\$ <u>181.38186.82</u>
10"	\$ <u>274.47282.70</u>

Commodity Charge per 1,000 Gallons for each Tier per Billing Period

GOVS - Less than 2" meter:

Tier 1	0	to	30,000	\$ <u>1.471.51</u>
Tier 2	30,001	to	50,000	\$ <u>1.821.87</u>
Tier 3	>50,000			\$ <u>2.622.70</u>

GOVL - 2" and larger meters:

Tier 1	0	to	200,000	\$ <u>1.481.52</u>
Tier 2	200,001	to	700,000	\$ <u>2.092.15</u>
Tier 3	>700,000			\$ <u>2.983.07</u>

Added: 01/01/2015 Amended: 04/19/17;

Truckee Meadows Water Authority

RATE SCHEDULES

FRMSGID- FORMER STMGID RATES AND CHARGES

COM – Commercial and Industrial Metered Service

Customer Charge per Billing Period

<u>Meter Size</u>	<u>Per Meter</u>
Up to 3/4"	\$ 9.499.77
1"	\$ 41.64 11.96
1 1/2"	\$ 46.47 16.96
2"	\$ 22.23 22.90
3"	\$ 39.39 40.57
4"	\$ 57.57 59.30
6"	\$ 108.25 111.50
8"	\$ 181.38 186.82
10"	\$ 274.47 282.70

Commodity Charge per 1,000 Gallons for each Tier per Billing Period

COMS - Less than 2" meter:

Tier 1	0 to 20,000	\$ 1.44 1.45
Tier 2	20,001 to 40,000	\$ 1.57 1.62
Tier 3	>40,000	\$ 1.76 1.81

COML - 2" and larger meters:

Tier 1	0 to 70,000	\$ 1.36 1.40
Tier 2	70,001 to 275,000	\$ 1.60 1.65
Tier 3	>275,000	\$ 3.20 3.30

Late Charge

5% of any amount in arrears from previous billings.

Other Charges

As specified in Rate Schedule OC and applied to total bill.

Added: 01/01/2015 Amended: 04/19/17;

Truckee Meadows Water Authority

RATE SCHEDULES

FRMSGID- FORMER STMGID RATES AND CHARGES

MISG – Commercial or Governmental Irrigation Metered Water Service

Customer Charge per Billing Period

Meter Size

Per Meter

Up to 3/4"	\$ 8.74 <u>8.97</u>
1"	\$ 40.83 <u>41.15</u>
1 1/2"	\$ 45.69 <u>46.16</u>
2"	\$ 21.45 <u>22.09</u>
3"	\$ 38.64 <u>39.77</u>
4"	\$ 56.79 <u>58.49</u>
6"	\$ 107.47 <u>110.69</u>
8"	\$ 180.60 <u>186.02</u>
10"	\$ 273.69 <u>281.90</u>

Commodity Charge per 1,000 Gallons

\$~~1.99~~2.05

Late Charge

5% of any amount in arrears from previous billings.

Other Charges

As specified in Rate Schedule OC and applied to total bill.

Fire Protection Service

Customer Charge per Billing Period

Service Pipe

Per Meter

Up to 3/4"	\$ 0.37 <u>0.38</u>
2"	\$ 4.34 <u>4.47</u>
3"	\$ 12.64 <u>12.99</u>
4"	\$ 26.86 <u>27.67</u>
6"	\$ 78.04 <u>80.38</u>
8"	\$ 166.30 <u>171.29</u>
10"	\$ 299.07 <u>308.04</u>

MINIMUM CHARGE

The Minimum Charge for delivery of water service under any rate identified in this schedule shall consist of the sum of the Customer Charge, late charge, right-of-way toll, and regional water management fee per Billing Period.

Added: 01/01/2015 Amended: 04/19/17;

Truckee Meadows Water Authority

RATE SCHEDULES

FRMSGID- FORMER STMGID RATES AND CHARGES

SPECIAL CONDITIONS

1. Conversion From FRMSGID Rate. Upon the Conversion Date applicable to a Premise, Rate Schedule FRMSGID shall no longer apply to such Premise and the delivery of water service to such Premise shall thereafter be subject to and billed in accordance with rates for comparable class and service size under Rate Schedule RMWS, RFWS, MRFS, MRIS, MIS, GMWS, or FPS, as applicable. "Conversion Date" shall mean the earlier of:
 - (a) The date of recordation of a sale, transfer or conveyance of the Premise then subject to the FRMSGID Rate Schedule, excluding any conveyance which is exempt from real property transfer tax under NRS 375.090; or
 - (b) The first billing cycle in January 2035.
2. Conversion to Metered Rates. Upon any change in the billing Customer of record at an existing RFWG service Premise, which change does not otherwise qualify as a Conversion Date, or upon the request of the Customer at the Service Property, the delivery of water service to the Premise shall thereafter be subject to the metered rate under Rate Schedule RMWG. Upon and following a Conversion Date applicable to a RFWG service Premise, the delivery of water service to such Premise shall thereafter be subject to and billed under Rate Schedule RFWS.
3. Installation of Meters. The Authority will install Meter Facilities as soon as practicable on any Unmetered Service Property subject to the FRMSGID Rate, with costs to be borne by the Authority in accordance with Rule 6.
4. Closed Tariff. Rate Schedule FRMSGID is closed and shall not be applicable to any applications for the delivery of water to a new service.

Truckee Meadows Water Authority

RATE SCHEDULES

FRMWC - FORMER WASHOE COUNTY WATER UTILITY RATES AND CHARGES

APPLICABILITY

Rates contained in this Rate Schedule FRMWC are applicable solely to the delivery of water service to Premises receiving water service from, and located within the former retail service area of the Washoe County Community Services Department Water Utility as of December 31, 2014, subject to the Special Conditions set forth below in this rate schedule.

Effective October 1, 2015, any Service Property then receiving the delivery of water under Rate Schedule RFWD will be required to pay the metered rate under Rate Schedule RMWD commencing upon later of October 1, 2015 or the first billing period following the installation of Meter Facilities and a Meter at the Service Property. After October 1, 2015, delivery of water under Rate Schedule RFWD shall be available only to a Service Property (1) that was billed under Rate Schedule RFWD on October 1, 2015 and (2) so long as such Service Property is not able to be billed under Rate Schedule RMWD or RMWS.

RATES

RFWD – Residential Unmetered Water Service for Residential and Irrigation Service

Customer Charge per Billing Period

Up to 3/4"	\$ 89.82
1"	\$ 90.18
1 1/2"	\$ 92.12
2"	\$ 93.55
3"	\$ 94.96
4"	\$ 99.18

Late Charge

5% of any amount in arrears from previous billings.

Other Charges

As specified in Rate Schedule OC and applied to total bill.

RMWD – Residential Metered Water Service

Customer Charge per Billing Period

<u>Meter Size</u>	<u>Per Meter</u>
Up to 3/4"	\$ 17.43 <u>17.95</u>
1"	\$ 22.42 <u>23.09</u>
1 1/2"	\$ 32.07 <u>33.03</u>
2"	\$ 42.76 <u>44.04</u>
3"	\$ 68.85 <u>70.92</u>
4"	\$ 100.84 <u>103.87</u>
6"	\$ 183.85 <u>189.37</u>

Added: 01/01/2015 Amended: 05/21/15; 04/19/17

Truckee Meadows Water Authority

RATE SCHEDULES

FRMWC - FORMER WASHOE COUNTY WATER UTILITY RATES AND CHARGES

Commodity Charge per 1,000 Gallons for each Tier per Billing Period

RMWD1 - Meters less than 1 1/2":

Tier 1	0	to	6,999	\$2.622.70
Tier 2	7,000	to	20,999	\$3.273.37
Tier 3	21,000	to	40,999	\$3.934.05
Tier 4	Greater than 41,000			\$5.255.41

RMWD2 - 1 1/2" and larger meters:

Tier 1	0	to	28,999	\$2.622.70
Tier 2	29,000	to	150,999	\$3.273.37
Tier 3	151,000	to	600,999	\$3.934.05
Tier 4	Greater than 601,000			\$5.255.41

Late Charge

5% of any amount in arrears from previous billings.

Other Charges

As specified in Rate Schedule OC and applied to total bill.

MMWD – Multi-Unit Residential Metered Water Service

Customer Charge per Billing Period

<u>Meter Size</u>	<u>Per Meter</u>
Up to 3/4"	\$ 17.4317.95
1"	\$ 22.4223.09
1 1/2"	\$ 32.0733.03
2"	\$ 42.7644.04
3"	\$ 68.8570.92
4"	\$100.84103.87
6"	\$183.85189.37

Commodity Charge per 1,000 Gallons for each Tier per Billing Period

Tier 1	0	to	28,999	\$2.622.70
Tier 2	29,000	to	150,999	\$3.273.37
Tier 3	151,000	to	600,999	\$3.934.05
Tier 4	Greater than 601,000			\$5.255.41

Added: 01/01/2015 Amended: 04/19/17

Truckee Meadows Water Authority

RATE SCHEDULES

FRMWC - FORMER WASHOE COUNTY WATER UTILITY RATES AND CHARGES

Late Charge

5% of any amount in arrears from previous billings.

Other Charges

As specified in Rate Schedule OC and applied to total bill.

GMWD – Commercial Service to Service Property(ies) with a Meter and where no other Rate Schedule is specifically applicable per Billing Period.

Customer Charge per Billing Period

Meter Size

Per Meter

Up to 3/4"	\$ <u>17.4317.95</u>
1"	\$ <u>22.4223.09</u>
1 1/2"	\$ <u>32.0733.03</u>
2"	\$ <u>42.7644.04</u>
3"	\$ <u>68.8570.92</u>
4"	\$ <u>100.84103.87</u>
6"	\$ <u>183.85189.37</u>
8"	\$ <u>276.42284.71</u>

Commodity Charge per 1,000 Gallons, All Meter Sizes

On Peak	\$ <u>2.943.03</u>
Off Peak	\$ <u>2.522.60</u>

Late Charge

5% of any amount in arrears from previous billings.

Other Charges

As specified in Rate Schedule OC and applied to total bill.

Added: 01/01/2015 Amended: 04/19/17

Truckee Meadows Water Authority

RATE SCHEDULES

FRMWC - FORMER WASHOE COUNTY WATER UTILITY RATES AND CHARGES

MISD – Metered Irrigation Water Service

Customer Charge per Billing Period

Meter Size

Per Meter

Up to 3/4"	\$ 17.43 <u>17.95</u>
1"	\$ 22.42 <u>23.09</u>
1 1/2"	\$ 32.07 <u>33.03</u>
2"	\$ 42.76 <u>44.04</u>
3"	\$ 68.85 <u>70.92</u>
4"	\$ 100.84 <u>103.87</u>

Commodity Charge per 1,000 Gallons

\$~~4.35~~4.48

Late Charge

5% of any amount in arrears from previous billings.

Other Charges

As specified in Rate Schedule OC and applied to total bill.

Fire Protection Service

Customer Charge per Billing Period

Service Pipe

Per Meter

3"	\$ 25.15 <u>25.90</u>
4"	\$ 39.50 <u>40.69</u>
6"	\$ 72.94 <u>75.13</u>
8"	\$ 119.00 <u>122.57</u>
10"	\$ 175.02 <u>180.27</u>
12"	\$ 253.16 <u>260.75</u>

Late Charge

5% of any amount in arrears from previous billings.

Other Charges

As specified in Rate Schedule OC and applied to total bill.

Added: 01/01/2015 Amended: 04/19/17

Truckee Meadows Water Authority

RATE SCHEDULES

FRMWC - FORMER WASHOE COUNTY WATER UTILITY RATES AND CHARGES

MINIMUM CHARGE

The Minimum Charge for delivery of water service under any rate identified in this schedule shall consist of the sum of the Customer and Commodity Charges, late charge, right-of-way toll, and regional water management fee per Billing Period.

To facilitate the implementation of the merger between Authority and Washoe County Community Services Department Water Utility, Authority will apply a credit to the sum of the Customer and Commodity Charges otherwise applicable to service properties within the City of Reno and City of Sparks as follows:

Period	Credit
January 1, 2015 through December 31, 2015:	5% of total bill
January 1, 2016 through December 31, 2016:	5% of total bill
January 1, 2017 through December 31, 2017:	3% of total bill
January 1, 2018 through December 31, 2018:	2% of total bill
January 1, 2019 through December 31, 2019:	1% of total bill
After December 31, 2019:	0% of total bill

SPECIAL CONDITIONS

1. Installation of Meters. The Authority will install Meter Facilities as soon as practicable on any Unmetered Service Property subject to the FRMWC Rate, with costs to be borne by the Authority in accordance with Rules 2 and 6.
2. Backflow Charge. This charge applies to single family residential Customers where the Service Property has a backflow prevention assembly maintained by the Authority. The monthly charge applied per Billing Period for operations, maintenance, service and annual testing associated with the backflow prevention assembly is \$4.~~5064~~.
3. Closed Tariff. Rate Schedule FRMWC is closed and shall not be applicable to any applications for the delivery of water to a new service.



STAFF REPORT

TO: Board of Directors
THRU: Mark Foree, General Manager
FROM: John Enloe, Director of Natural Resources
Janet Phillips, Chairman, Truckee River Fund Advisory Committee
DATE: March 6, 2017
SUBJECT: **Discussion and action on adoption of Resolution No. 249: A resolution to approve funding for the projects recommended by the Truckee River Fund Advisory Committee and an authorization for the Community Foundation to fund such projects from Fund proceeds**

Recommendation

The Truckee River Fund (TRF) Advisors recommend that the TMWA Board authorize by resolution the funding of the following projects from the TRF. This recommendation stems from a Fund advisors' meeting held on February 17, 2017 where multiple grant proposals from the spring request for proposal process were reviewed and discussed. Corresponding to the TRF Grant Priorities (see attachment), six projects are recommended for funding totaling \$500,317.00 out of seven project funding requests for \$636,196.40. Each of the project details are summarized below. In addition, staff has provided a project update report summarizing the status of ongoing projects and those that have been recently completed.

PROJECTS RECOMMENDED FOR FUNDING

Project #183: Truckee River Cleanup Crew – Year 3

Organization: City of Reno

Amount Requested: \$ 28,694

Amount Recommended: \$ 28,694

Organizational Match: \$ 59,554 (Cash) \$ 17,491 (In-Kind)

Project Description:

This project intends to remove trash and debris from the banks of the Truckee River within Reno's city limits, focusing on public property along the Truckee River Path. The project location will be the banks of the Truckee River within Reno's city limits. The upper limit will be the White Fir subdivision; the lower limit will be just below Telegraph Road. Work will primarily be on public property (City, County

and State) within Reno city limits, and may also include certain private properties with owner permission. These will primarily include adjacent business, railroad and owner association property.

Results will be measured by the number of bags of trash and debris, shopping carts, and other materials removed from the project area.

TMWA Benefit:

This project supports the Grant Priority VI – *Stewardship and Environmental Awareness*. Crew will remove trash, litter, illegal campsites and other refuse along the banks of the Truckee River and direct tributaries, primarily upstream of TWMA’s Glendale Water Treatment Plant. This will help protect the quality of the community’s municipal water supply

Project #184: Watershed Education Initiative (WEI)

Organization: Sierra Nevada Journeys (SNJ)

Amount Requested: \$ 32,998 **Amount Recommended:** \$ 32,998

Organizational Match: \$ 2,610 (Cash) \$ 10,440 (In-Kind)

Project Description:

The WEI delivers high-quality, experiential watershed education programs based on local issues associated with the Truckee River, such as water quality and invasive species while empowering youth to protect and enhance the quality of the Truckee River.

Through this funding, SNJ will serve 783 K-8 grade students in 29 classrooms throughout northern Nevada. Conducted over a four-week period, WEI includes three in-class lessons, one field-study experience, pre- and post-assessments, classroom extension lessons for teachers, significantly increase family and community engagement, and citizen science. Curriculum developed and delivered by SNJ’s team of credentialed teachers aligns to state and national standards and the North American Association for Environmental Education’s Guidelines for Excellence.

TMWA Benefit:

This program satisfies the TRF Grant Priority VI – *Stewardship and Environmental Awareness*. WEI is an education program that addresses water, water quality and watershed protection for K-8th grade students, directly aligning with grant priority VI. Students gain first-hand experience with the Truckee River, explore human impacts on their water source, and obtain skills and knowledge to help protect the watershed. The overall long-term impacts achieved through this program include:

- Students understand important concepts related to the Truckee River watershed

- Students understand and discuss with family and friends how their behavior affects the Truckee River
- Teachers use extension lessons and implement more hands-on exploration of the watershed
- Parents and community members engage in watershed education directly through WEI volunteer opportunities
- The health of the Truckee River watershed and local ecosystems improves as students and their families adopt environmental stewardship practices

Project #185: Mount Rose Noxious Weed Monitoring and Treatment #5

Organization: Friends of Nevada Wilderness

Amount Requested: \$ 22,405

Amount Recommended: \$ 22,405

Organizational Match: \$ 12,232 (Cash) \$ 8,640 (In-Kind)

Project Description:

Friends of Nevada Wilderness seeks to treat approximately 75 acres of noxious weeds on Humboldt-Toiyabe National Forest lands within the Truckee River Watershed. Noxious weeds out-compete native plants and as a result, they damage water quality, contribute to soil erosion, and degrade plant and animal habitat. Removing noxious weeds will help retain and improve watershed health by allowing native plant communities to thrive without the competition from noxious weeds.

TMWA Benefit:

This project satisfies the TRF Grant Priorities I, II and VI – *Aquatic Invasive Species, Watershed Improvements and Stewardship and Environmental Awareness*. The project will focus on eradicating noxious weeds in the Mount Rose Wilderness, which is critical due to its immediate proximity to the Truckee River.

Project #187: Landscape Conservation Forecasting (LCF) for the Truckee River Watershed

Organization: The Nature Conservancy of Nevada

Amount Requested: \$ 60,000

Amount Recommended: \$ 60,000

Organizational Match: \$ 25,000 (Cash)

Project Description:

The RIOS watershed assessment by Podolak et al.(2017) indicates that management of the upper Truckee River watershed, in the form of increased land protection and dirt road maintenance, would reduce sediment delivery and improve water quality and water security for downstream users.

Thus, the Nevada Chapter of TNC has undertaken a targeted second study that will use landscape Conservation Forecasting (LCF; Provencher et al. 2013), a mapping and state-and-transition modeling approach that simulates vegetation succession under different management scenarios for conservation, coupled with hydrologic and sediment modeling. Scenarios of climate change and disturbances such as wildfire, floods, and droughts will be simulated, followed by an assessment of water resource impacts that would result from those disturbances.

Through the RIOS study and stakeholder process, the forested portion of the Truckee River watershed was identified as a potential management area that would be suitable for a "water fund" that raises capital for investments in high return-on-investment management actions (Podolak et al 2017).The final product of the LCF study will be a forested watershed management plan emphasizing water resource protection for the headwaters from the outlet of Lake Tahoe to Verdi, including the eastern slope of the Sierra Nevada. The LCF-based Truckee River watershed study will:

- Assess and quantify the potential for disturbances, including wildfires and climate change, to impact the forested watershed's snow pack retention, runoff characteristics, and erosivity
- Quantify the expected change in sediment runoff and sediment loading of the mainstem, key tributaries, and reservoirs of the Truckee River system
- Quantify the economic impacts that may be realized of these disturbances and subsequent sedimentation and changes in flows
- Assess the potential to avoid economic impacts through more effective land management actions, including forest thinning and prescribed fire

TMWA Benefit:

This program satisfies the TRF Grant Priority VIII – *Leverage Stakeholder Assets and Participation*. The LCF study stems from an assessment of various stakeholder interests in all aspects of river water quality, watershed protection, source water protection and species enhancement completed through the previously TRF-funded RIOS study. Also, leveraging available funds and other assets is one of the longer term goals of the proposed study and stakeholder outreach, as we will use the results as a tool in our effort to attract new investments to leverage existing land manager budgets and existing sources of conservation/restoration funding.

The long-term goals of the project would also fall under TRF's Grant Priority II – *Watershed Improvements*, as the new investments would be directed to increasing the pace and scale of land management activities to address erosion and the resulting sediment and related pollutant discharges to the river.

Project #188: One Truckee River Phase 1 Action

Organization: Nevada Land Trust (NLT)

Amount Requested: \$ 412,454

Amount Recommended: \$ 306,220, \$50,000 of which will be awarded contingent upon NLT raising an additional \$50,000 in match

Organizational Match: \$ 75,614 (Cash)

\$ 27,500 (In-Kind)

Project Description:

This project supports the implementation of first year Action Items for Phase 1 listed in the Truckee River Management Plan unanimously adopted by Washoe County, City of Reno and City of Sparks in September 2016. This includes identifying and creating a structure for the long-term management and implementation of the One Truckee River initiative and Management Plans. Other implementation items include creating a Master Signage Plan for the Truckee River; implementing the Community Watershed Education Plan (developed through TRF 180); hosting a Truckee River Forum to obtain community commitments for Phase I Action Plan items; advocacy work for the Truckee River at the state and local level; and launching the planning process for Phases II and III.

TMWA Benefit:

This proposal advances all of Truckee River Fund's grant priorities through implementation of the comprehensive One Truckee River Phase I Plan and associated action items.

Project #189: Big Chief: F4M Restoration Culvert Outflows

Organization: Truckee River Watershed Council

Amount Requested: \$ 50,000

Amount Recommended: \$ 50,000

Organizational Match: \$ 15,000 (In-Kind)

Project Description:

The goal of the Big Chief: F4M Restoration (First 4 Mile) Culvert Outflows project is to complete design of outflows from 34 culverts. The project will ultimately improve water quality and habitat along the main stem Truckee River, and decrease sedimentation reaching the Truckee River. The Middle Truckee River watershed is listed as Clean Water Act impaired by sediment by the U.S. EPA, with an approved TMDL (Lahontan Water Board, 2008). Outcomes of the project are final restoration design plans that coordinate and complement engineering plans for the reconstruction of the Truckee River Bike Tail.

TMWA Benefit:

This program satisfies the TRF Grant Priorities II, VI, VII, and VIII:

Watershed Improvements: The project will decrease sedimentation, the 303(d) listed TMDL pollutant to Truckee River in the First 4 Miles (F4M) below Tahoe Dam.

Stewardship and Environmental Awareness: The project is located adjacent to the very popular and heavily used Truckee River Bike Trail. Interpretative and acknowledgement signage are planned and funded to explain the role of erosion in harming water quality and habitat.

Meet Multiple Objectives: The project meets the two objectives listed above. The project also benefits meadow, riparian, and in-stream habitat, and the fish and wildlife using those habitats.

Leverage Stakeholder Assets and Participation: Stakeholders' prioritization of this reach of the Truckee River is documented in the Truckee River Corridor Access Plan (Placer County, 2006), and the Tributaries Assessment (Truckee River Watershed Council and U.S. Forest Service, 2017).

TRUCKEE MEADOWS WATER AUTHORITY
(TMWA)

RESOLUTION NO. 249

**A RESOLUTION APPROVING PROJECTS
FOR FUNDING UNDER THE TRUCKEE RIVER FUND**

WHEREAS, the Truckee Meadows Water Authority and the Community Foundation of Western Nevada (the "Community Foundation"), a Nevada non-profit corporation, have entered into an agreement creating The Truckee River Fund (the "Fund") to foster projects that protect and enhance water quality or water resources of the Truckee River, or its watershed;

WHEREAS, pursuant to the Fund Agreement, an Advisory Committee has solicited proposals from prospective beneficiaries of the Fund;

WHEREAS, the Advisory Committee has recommended projects for funding, as listed on Exhibit A, attached hereto;

WHEREAS, the Advisory Committee has the responsibility of securing preliminary approval for projects from the TMWA Board, which may disapprove projects for any reason, or may approve projects by resolution, subject to Community Foundation Board approval;

WHEREAS, the Community Foundation has advised the Advisory Committee that the projects' applicants are eligible beneficiaries of the Fund;

WHEREAS, the Board has reviewed the recommendation of the Advisory Committee and has found that the projects as listed on Exhibit A are consistent with the purposes of the Fund and merit funding;

NOW THEREFORE, BE IT RESOLVED by the Board of Directors of the Truckee Meadows Water Authority:

The projects set forth on **Exhibit A** are approved for funding under the Truckee River Fund in the amount set forth in such Exhibit, subject to final authorization by the Community Foundation Board, and subject to the provisions of the Fund Agreement, including without limitation the requirements set forth in Article VC.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Truckee Meadows Water Authority,

Upon motion of _____, seconded by _____, the foregoing Resolution was passed and adopted on March 15, 2017 by the following vote of the Board:

Ayes: _____

Nays: _____

Abstain: _____ Absent: _____

Approved March 15, 2017

Geno Martini, Chairman

STATE OF NEVADA,)
 : ss.
COUNTY OF WASHOE.)

On this 15th of March, 2017, Geno Martini, Chairman of the Board of Truckee Meadows Water Authority, personally appeared before me, a Notary Public in and for said County and State, and acknowledged that he executed the above instrument freely and voluntarily and for the purposes therein mentioned.

Notary Public

EXHIBIT A**Project #183:** Truckee River Cleanup Crew – Year 3**Organization:** City of Reno**Amount Requested:** \$ 28,694**Amount Recommended:** \$ 28,694**Organizational Match:** \$ 59,554 (Cash) \$ 17,491 (In-Kind)**Project Description:**

This project intends to remove trash and debris from the banks of the Truckee River within Reno's city limits, focusing on public property along the Truckee River Path. The project location will be the banks of the Truckee River within Reno's city limits. The upper limit will be the White Fir subdivision; the lower limit will be just below Telegraph Road. Work will primarily be on public property (City, County and State) within Reno city limits, and may also include certain private properties with owner permission. These will primarily include adjacent business, railroad and owner association property.

Results will be measured by the number of bags of trash and debris, shopping carts, and other materials removed from the project area.

TMWA Benefit:

This project supports the Grant Priority VI –*Stewardship and Environmental Awareness*. Crew will remove trash, litter, illegal campsites and other refuse along the banks of the Truckee River and direct tributaries, primarily upstream of TWMA's Glendale Water Treatment Plant. This will help protect the quality of the community's municipal water supply

Project #184: Watershed Education Initiative (WEI)**Organization:** Sierra Nevada Journeys (SNJ)**Amount Requested:** \$ 32,998**Amount Recommended:** \$ 32,998**Organizational Match:** \$ 2,610 (Cash) \$ 10,440 (In-Kind)**Project Description:**

The WEI delivers high-quality, experiential watershed education programs based on local issues associated with the Truckee River, such as water quality and invasive species while empowering youth to protect and enhance the quality of the Truckee River.

Through this funding, SNJ will serve 783 K-8 grade students in 29 classrooms throughout northern Nevada. Conducted over a four-week period, WEI includes three in-class lessons, one field-study experience, pre- and post-assessments, classroom extension lessons for teachers, significantly increase family and community engagement, and citizen science. Curriculum developed and delivered by SNJ's team of credentialed teachers aligns to state and national standards and the North American Association for Environmental Education's Guidelines for Excellence.

TMWA Benefit:

This program satisfies the TRF Grant Priority VI – *Stewardship and Environmental Awareness*. WEI is an education program that addresses water, water quality and watershed protection for K-8th grade students, directly aligning with grant priority VI. Students gain first-hand experience with the Truckee River, explore human impacts on their water source, and obtain skills and knowledge to help protect the watershed. The overall long-term impacts achieved through this program include:

- Students understand important concepts related to the Truckee River watershed
- Students understand and discuss with family and friends how their behavior affects the Truckee River
- Teachers use extension lessons and implement more hands-on exploration of the watershed
- Parents and community members engage in watershed education directly through WEI volunteer opportunities
- The health of the Truckee River watershed and local ecosystems improves as students and their families adopt environmental stewardship practices

Project #185: Mount Rose Noxious Weed Monitoring and Treatment #5

Organization: Friends of Nevada Wilderness

Amount Requested: \$ 22,405

Amount Recommended: \$ 22,405

Organizational Match: \$ 12,232 (Cash) \$ 8,640 (In-Kind)

Project Description:

Friends of Nevada Wilderness seeks to treat approximately 75 acres of noxious weeds on Humboldt-Toiyabe National Forest lands within the Truckee River Watershed. Noxious weeds out-compete native plants and as a result, they damage water quality, contribute to soil erosion, and degrade plant and animal habitat. Removing noxious weeds will help retain and improve watershed health by allowing native plant communities to thrive without the competition from noxious weeds.

TMWA Benefit:

This project satisfies the TRF Grant Priorities I, II and VI – *Aquatic Invasive Species, Watershed Improvements and Stewardship and Environmental Awareness*. The project will focus on eradicating noxious weeds in the Mount Rose Wilderness, which is critical due to its immediate proximity to the Truckee River.

Project #187: Landscape Conservation Forecasting (LCF) for the Truckee River Watershed

Organization: The Nature Conservancy of Nevada

Amount Requested: \$ 60,000

Amount Recommended: \$ 60,000

Organizational Match: \$ 25,000 (Cash)

Project Description:

The RIOS watershed assessment by Podolak et al.(2017) indicates that management of the upper Truckee River watershed, in the form of increased land protection and dirt road maintenance, would reduce sediment delivery and improve water quality and water security for downstream users.

Thus, the Nevada Chapter of TNC has undertaken a targeted second study that will use landscape Conservation Forecasting (LCF; Provencher et al. 2013), a mapping and state-and-transition modeling approach that simulates vegetation succession under different management scenarios for conservation, coupled with hydrologic and sediment modeling. Scenarios of climate change and disturbances such as wildfire, floods, and droughts will be simulated, followed by an assessment of water resource impacts that would result from those disturbances.

Through the RIOS study and stakeholder process, the forested portion of the Truckee River watershed was identified as a potential management area that would be suitable for a "water fund" that raises capital for investments in high return-on-investment management actions (Podolak et al 2017).The final product of the LCF study will be a forested watershed management plan emphasizing water resource protection for the headwaters from the outlet of Lake Tahoe to Verdi, including the eastern slope of the Sierra Nevada. The LCF-based Truckee River watershed study will:

- Assess and quantify the potential for disturbances, including wildfires and climate change, to impact the forested watershed's snow pack retention, runoff characteristics, and erosivity
- Quantify the expected change in sediment runoff and sediment loading of the mainstem, key tributaries, and reservoirs of the Truckee River system
- Quantify the economic impacts that may be realized of these disturbances and subsequent sedimentation and changes in flows

- Assess the potential to avoid economic impacts through more effective land management actions, including forest thinning and prescribed fire

TMWA Benefit:

This program satisfies the TRF Grant Priority VIII – *Leverage Stakeholder Assets and Participation*. The LCF study stems from an assessment of various stakeholder interests in all aspects of river water quality, watershed protection, source water protection and species enhancement completed through the previously TRF-funded RIOS study. Also, leveraging available funds and other assets is one of the longer term goals of the proposed study and stakeholder outreach, as we will use the results as a tool in our effort to attract new investments to leverage existing land manager budgets and existing sources of conservation/restoration funding.

The long-term goals of the project would also fall under TRF's Grant Priority II – *Watershed Improvements*, as the new investments would be directed to increasing the pace and scale of land management activities to address erosion and the resulting sediment and related pollutant discharges to the river.

Project #188: One Truckee River Phase 1 Action

Organization: Nevada Land Trust (NLT)

Amount Requested: \$ 412,454

Amount Recommended: \$ 306,220, \$50,000 of which will be awarded contingent upon NLT raising an additional \$50,000 in match

Organizational Match: \$ 75,614 (Cash)

\$ 27,500 (In-Kind)

Project Description:

This project supports the implementation of first year Action Items for Phase 1 listed in the Truckee River Management Plan unanimously adopted by Washoe County, City of Reno and City of Sparks in September 2016. This includes identifying and creating a structure for the long-term management and implementation of the One Truckee River initiative and Management Plans. Other implementation items include creating a Master Signage Plan for the Truckee River; implementing the Community Watershed Education Plan (developed through TRF 180); hosting a Truckee River Forum to obtain community commitments for Phase 1 Action Plan items; advocacy work for the Truckee River at the state and local level; and launching the planning process for Phases II and III.

TMWA Benefit:

This proposal advances all of Truckee River Fund's grant priorities through implementation of the comprehensive One Truckee River Phase I Plan and associated action items.

Project #189: Big Chief: F4M Restoration Culvert Outflows

Organization: Truckee River Watershed Council

Amount Requested: \$ 50,000

Amount Recommended: \$ 50,000

Organizational Match: \$ 15,000 (In-Kind)

Project Description:

The goal of the Big Chief: F4M Restoration (First 4 Mile) Culvert Outflows project is to complete design of outflows from 34 culverts. The project will ultimately improve water quality and habitat along the main stem Truckee River, and decrease sedimentation reaching the Truckee River. The Middle Truckee River watershed is listed as Clean Water Act impaired by sediment by the U.S. EPA, with an approved TMDL (Lahontan Water Board, 2008). Outcomes of the project are final restoration design plans that coordinate and complement engineering plans for the reconstruction of the Truckee River Bike Tail.

TMWA Benefit:

This program satisfies the TRF Grant Priorities II, VI, VII, and VIII:

Watershed Improvements: The project will decrease sedimentation, the 303(d) listed TMDL pollutant to Truckee River in the First 4 Miles (F4M) below Tahoe Dam.

Stewardship and Environmental Awareness: The project is located adjacent to the very popular and heavily used Truckee River Bike Trail. Interpretative and acknowledgement signage are planned and funded to explain the role of erosion in harming water quality and habitat.

Meet Multiple Objectives: The project meets the two objectives listed above. The project also benefits meadow, riparian, and in-stream habitat, and the fish and wildlife using those habitats.

Leverage Stakeholder Assets and Participation: Stakeholders' prioritization of this reach of the Truckee River is documented in the Truckee River Corridor Access Plan (Placer County, 2006), and the Tributaries Assessment (Truckee River Watershed Council and U.S. Forest Service, 2017).



STAFF REPORT

TO: Board of Directors
FROM: Mark Foree, General Manager
DATE: March 6, 2017
SUBJECT: General Manager's Report

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

Included in your agenda packet are press clippings from February 9, 2017 through March 8, 2017.

At the February TMWA Board of Directors meeting, the TMWA Board voted to “Oppose” the fluoridation bill, AB193. We received many public comments regarding that decision, with the majority of the commenters praising the Board’s decision. From the tone of many of the comments, it seemed that customers thought that the Board’s decision meant that Fluoride would not be added to the drinking water. We communicated to all of the customers that the Legislature had the final say on fluoride, not the TMWA Board, and if they were concerned, they should contact their State Legislator. Attached at the end of this report you will find the comments that we have received as of March 8, 2017.



STAFF REPORT

TO: Board of Directors
THRU: Mark Foree, General Manager
FROM: Scott Estes, Director of Engineering
BY: Bill Hauck, Senior Hydrologist
DATE: March 7, 2017
SUBJECT: **Operations Report**

Summary

- The current water supply outlook is possibly the best the region has *ever* seen
- 2017 will go down as the biggest recovery year ever in terms of gains in reservoir storage
- Lake Tahoe elevation is currently 3.83 feet above the rim (rising 4.3 feet since October)
- Lake Tahoe will easily fill, as will all other upstream reservoirs in 2017
- Normal Truckee River flows can be expected through 2018 and beyond
- TMWA still has a significant amount of water being held in storage (~32,000 AF)
- Hydro revenue is expected to be approximately \$96,910 for February 2017

(A) Water Supply

Snowpack - Snowpack in the Lake Tahoe basin is still more than two times what is considered normal for this time of the year (221% of average). This is 245% of the same day last year and 210% of the normal peak snowpack value typically seen by the end of March. So far, snowpack in 2017 has outpaced the best snowpack year ever recorded for the Lake Tahoe basin (1983).

River Flow - Truckee River flow at the CA/NV state line was approximately 1,300 cubic feet per second (CFS) this morning. Flow through town is expected to increase in the coming days as temperatures are expected to rise and lower elevation snowpack begins to melt off.

Reservoir Storage - The elevation of Lake Tahoe is currently at 6226.83 feet (3.83' above the natural rim elevation of 6223.00 feet). Current reservoir storage is as follows:

Reservoir	Current Storage (Acre-Feet)	% of Capacity (Percent)
Tahoe	466,100	63%
Donner	4,754	50%
Independence	15,845	91%
Prosser	8,548	29%
Stampede	176,503	78%

In addition to Donner and Independence lakes, TMWA has approximately 12,650 acre-feet of water stored between Boca and Stampede reservoirs under the terms of TROA. TMWA has been and will continue credit storage operations as hydrological conditions permit. TMWA's total back-up reservoir storage between Donner and Independence lakes and TROA is 32,025 acre-feet as of this morning.

Outlook - The 2017 Water Year is already one for the record books, and it isn't over yet. This is, according to the National Weather Service, already the wettest year on record in Reno. Over thirteen inches (13.12") of precipitation has fallen through the first week of March surpassing the old record of 12.72". All reservoirs on the Truckee River system (including Lake Tahoe) are going to fill this year. Tahoe has already risen 4.3 feet since the start of the water year in October, and the spring runoff hasn't even begun yet. With another 4 feet of streamflow runoff yet to occur, precautionary drawdowns (releases) are being made to prevent the lake from over-filling. Precautionary releases are also occurring at Stampede and Lahontan reservoirs. 2017 will go down in the record books as being the single largest recovery year in history in terms of gains in reservoir storage at Lake Tahoe and the Truckee River system overall. The latest streamflow runoff projections are significantly above average (230-260% of normal). The 2017 Water Year has a good chance of becoming the biggest the region has ever seen in 110 years of recordkeeping, in terms of snowpack, streamflow runoff, and gains in reservoir storage and has by any standard officially put an end to the drought of 2012-2016.

(B) Water Production

Demand - Customer demands are still at their wintertime lows, averaging ~36 million gallons per day which is typical for this time of year. About 97% of customer demands are being met with surface water from the Chalk Bluff water treatment plant, and the remaining 3% from groundwater production wells located throughout TMWA's consolidated service area.

(C) Hydro Production

Generation - Average Truckee River flow at Farad (CA/NV state line) for the month of February was 2,433 CFS. This flow was well above average due to a couple of significant winter storm events that swept across our region. TMWA's Verdi power plant was on-line the entire month. The Fleish and Washoe plants remained off-line for scheduled maintenance during the entire month as completion of scheduled repairs has been delayed due to the significant flooding events and unprecedented rainfall the last two months.

Hydro Plant	Days On-Line	Generation (Megawatt hours)	Revenue (Dollars)	Revenue (Dollars/Day)
Fleish	0	0	0	0
Verdi	28	1,363	\$96,910	\$3,461
Washoe	0	0	0	0
Totals	28	1,363	\$96,910	\$3,461



STAFF REPORT

TO: Board of Directors
THRU: Mark Foree, General Manager
FROM: Marci Westlake, Manager Customer Service
DATE: March 15, 2017
SUBJECT: February Customer Service Report

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

Ombudsman

There were four calls in February. One questioning the web site, one wanted a water usage estimate for a premises and two that did not leave messages. Marci handled the web site call and the call center called back with the usage estimate.

Conservation (January 1 – December 31)

- 7 Water Watcher Contacts
- 219 Water Usage Reviews

Customer Calls – February

- 6,453 phone calls handled
- Average handling time – 4 minutes, 32 seconds per call
- Average speed of answer – 24 seconds per call

Billing – February

- 124,583 bills issued
- 200 (<.1%) corrected bills
- 13,924 customers (11.0%) have signed up for paperless billing to date.

Service Orders – February (% is rounded)

- 6,747 service orders taken
- 2,716 (40%) move-ins / move-outs
- 678 (10%) cut-out-for-non-payment and cut-in after receiving payments, including deposits and checks for tamper
- 1,133 (17%) zero consumption meter checks
- 665 (10%) re-read meters
- 537 (8%) new meter sets and meter/register/ERT exchanges and equipment checks
- 281 (4%) problems / emergencies, including cut-out for customer repairs, dirty water, no water, leaks, pressure complaints, safety issues, installing water meter blankets, etc.
- 92 (1%) high-bill complaints / audit and water usage review requests
- 645 (10%) various other service orders

Remittance – February

- 29,688 mailed-in payments
- 24,339 electronic payments
- 23,986 payments via RapidPay (EFT)
- 15,019 one-time bank account payments
- 5,059 credit card payments
- 3,276 store payments
- 1,790 payments via drop box or at front desk

Collections – February

- 12,873 accounts received a late charge
- Mailed 6,386 10-day delinquent notices, 5.1% of accounts
- Mailed 934 48-hour delinquent notices, 0.7% of accounts
- 159 accounts eligible for disconnect
- 147 accounts actually disconnected (including accounts that had been disconnected-for-non-payment that presented NSF checks for their reconnection)
- 0.17% write-off to revenue

Meter Statistics – Fiscal Year to February 28

- 2 meter retrofits completed
- 719 meter exchanges completed
- 841 new business meter sets completed
- 122,251 meters currently installed



STAFF REPORT

TO: Chairman and Board Members
THRU: Mark Foree, General Manager
FROM: John Zimmerman, Manager, Water Resources
DATE: 7 March 2017
SUBJECT: **Report Water Resources and Annexation Activity**

RULE 7

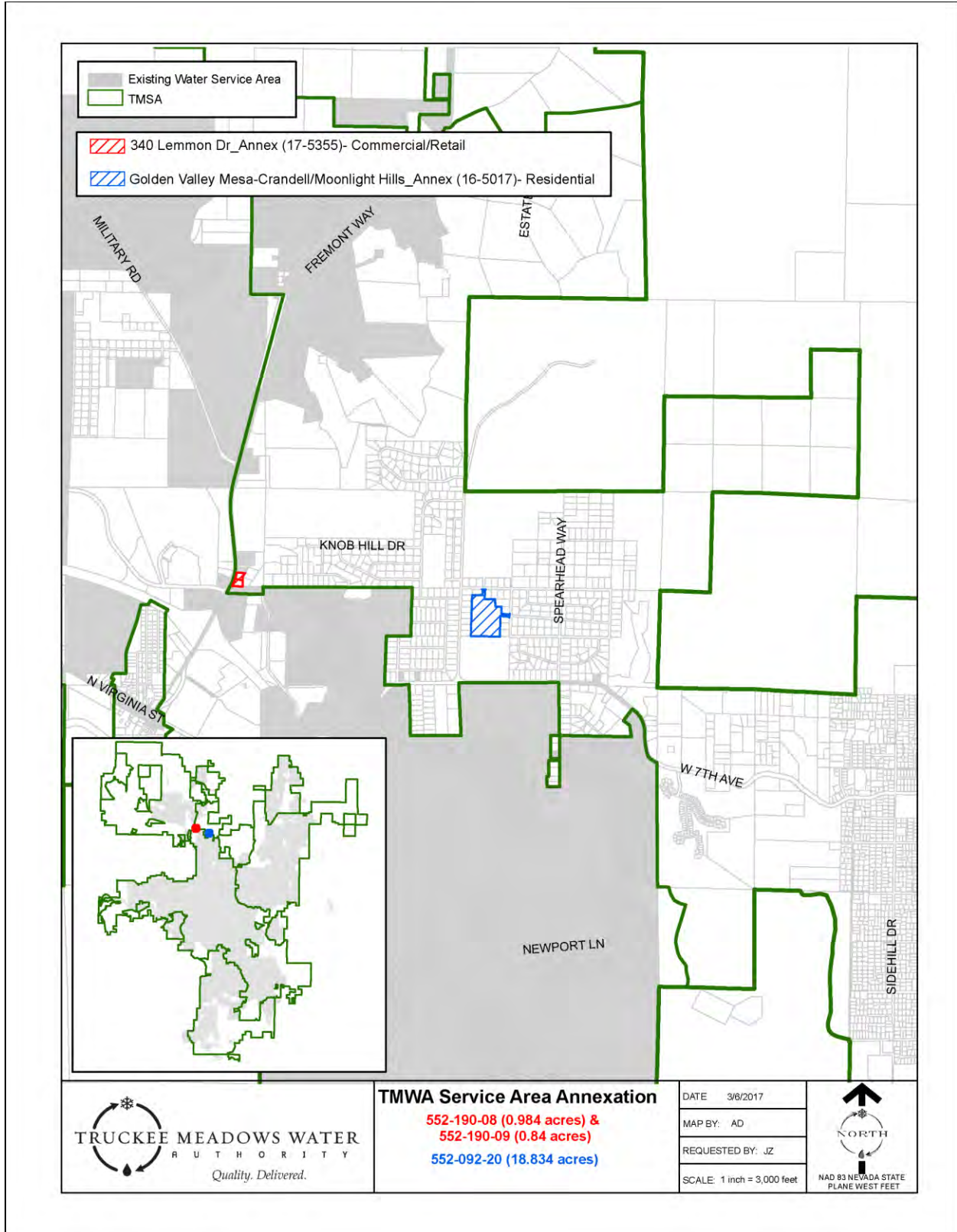
Rule 7 water resource purchases and will-serve commitment sales against purchased water resources through this reporting period:

Beginning Balance		6,326.89 AF
Purchases of water rights	0.00 AF	
Refunds	0.00 AF	
Sales	- 155.25 AF	
Adjustments	- 19.02 AF	
Ending Balance		6,152.62 AF

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

WATER SERVICE AREA ANNEXATIONS

An 18-acre residential development in Golden Valley and two commercial properties in Lemmon Valley. (See attached map).



Fluoridation Comments from March 1, 2017 E-Newsletter

These comments are a response to the E-Newsletter story, "TMWA Board of Directors Vote to Not Support Fluoridation Bill."

(Received by TMWA on 3/3/17)

Thank you for informing me of this issue. I was unaware that it had been resurrected. I let my assembly man know that it was not acceptable to circumvent the wishes of the residents supplied by TMWA water. Please keep me up to date.

Thanks again

Alan Dreher - [REDACTED]

(Received by TMWA on 3/2/17)

Thank you for opposing this! Completely BS legislation

Eric Swenson - [REDACTED]

(Received by TMWA on 3/1/17)

Good for us all! Thank you.

[REDACTED]

(Received by TMWA on 3/1/17)

Thank you!

Kat Wilson - [REDACTED]

(Received by TMWA on 3/1/17)

THANK YOU for NOT supporting fluoridation!!!

Much appreciated!

Affordable Nevada Homes - [REDACTED]

(Received by TMWA on 3/1/17)

Thank you for not adding fluoride to our water supply. Most toothpaste sold today has fluoride. I worry that long term ingestion may have adverse health effects.

John W. Zawosky - [REDACTED]

(Received by TMWA on 3/1/17)

Thank you for **not** supporting fluoridation.

[REDACTED]

(Received by TMWA on 3/1/17)

Thank you for voting to Not fluoride our water! Thank you, thank you, thank you!

Thanks!

Shelly Brown - [REDACTED]

(Received by TMWA on 3/1/17)

ALSO, THERE ARE SO MANY ALTERNATIVES IN GETTING FLORIDE APPLICATIONS WITHOUT REDUNDANTLY PLACING FLORIDE IN THE WATER. MANY PEOPLE DON'T REALIZE THIS. TOO MUCH FLORIDE IS HARMFUL AND CAN SIGNIFICANTLY AFFECT A PERSON'S HEALTH. VERY IMPORTANT. IF A PERSON BRUSHES THEIR TEETH WITH FLORIDE TOOTHPASTE TWICE A DAY AND EVEN ONCE A DAY, THAT IS A SUFFICIENT AMOUNT OF FLORIDE.

Mary Anne - [REDACTED]

(Received by TMWA on 3/1/17)

Shame!

John Kitchen - [REDACTED]

(Received by TMWA on 3/1/17)

FLORIDE IN OUR WATER IS POISON.....THANKS FOR NO VOTE!

Judy Anne Hutchison - [REDACTED]

(Received by TMWA on 3/1/17)

Awesome! Thank you!

Mike Smith - [REDACTED]

(Received by TMWA on 3/1/17)

Thank you for a "NO" on flouridation

Keep saying "NO".

We do not want it. Period

Thank you again.

Maurice Hershberger - [REDACTED]

Name

Ronald Eheman

Mailing Address

[REDACTED]

[REDACTED]

United States

[Map It](#)

Email

[REDACTED]

Phone

[REDACTED]

Account Number

?

Please explain your question

Who is watching the Store?

1) Are there any Federal safety standards set specifically for water additives?

a. {No.}

2) When did U.S. EPA give up oversight for ALL water additives (including fluoridation chemicals)?

a. {1988.}

3) To be clear, does this mean that the U.S. EPA does not make determinations of safety or effectiveness of water additives?

a. The U.S. EPA states that there are no federal safety standards for any water additives.

4) To further clarify, has the EPA EVER made a specific determination of safety and effectiveness of chemicals used for fluoridation?

a. No. The U.S. EPA has responded to Congressional investigation that it is not able to even locate ANY chronic toxicological data on the chemicals used in 90% of the fluoridation programs in the U.S.

b. The U.S. EPA has never been authorized by Congress to make determinations of effectiveness of substances intended to treat or prevent disease in humans.

5) What, if anything, was established to fill the gap in federal oversight over water additives?

a. Individual state determination.

b. Voluntary adoption by states of industry-established safety criteria in non-governmentally-controlled ANSI/NSF Standard 60.

6) Does ANSI/NSF Standard 60 establish any special consideration or margin of safety for water additives intended to treat humans and/or recognized as intended to alter physical or mental function?

a. ANSI/NSF Standard 60 does not apply any more protective margin of safety distinction between water additives intended to intervene with human physical or mental function and water additives intended to treat water.

7) Does Standard 60 establish any criteria for manufacturers to divulge the safety of their product?

a. Yes. Standard 60 General Requirement for a manufacturer to be certified by NSF, International, Section 3.2.1, requires that a manufacturer supply a list of all toxicological data, both published and unpublished if available, on the manufacturer's product and all contaminants of the product.

8) How is this Section 3.2.1 Requirement applied to fluoridation chemicals?

a. NSF, International has replied to Congressional investigation (and under oath during depositions) that no manufacturer of fluoridation chemicals has complied with this requirement, even under Business Confidentiality Act protection.

9) To be clear, are manufacturers certified by NSF even though they are out of compliance with this requirement?

a. Yes.

10) Are individual states or water suppliers who rely on certification as an indicator of compliance with Standard 60 informed that in the case of fluoridation chemicals all requirements have not been met?

a. According to testimony under oath during depositions by Stan Hazan, NSF, International has not provided notice to any State that fluoridation chemical manufacturers are certified without compliance with this requirement.

11) If not governmentally controlled, who sets the safety standards for water additives incorporated in Standard 60?

a. A volunteer group consisting of product suppliers and water industry representatives.

12) In what manner does Standard 60 act to control contaminants?

a. Standard 60 establishes a MAL (Maximum Allowable Level) for a specific contaminant for which a manufacturer's product is not supposed to exceed.

13) Is this Maximum Allowable Level established for a specific contaminant correlated with the scientific point of safety required by the Safe Drinking Water Act?

a. No.

14) What is the significance of the difference between the Maximum Allowable Level for a contaminant set in Standard 60, and the Maximum Contaminant Level Goal established by U.S. EPA?

a. The Maximum Allowable Level is a concentration of a contaminant that industry has deemed reasonable.

b. The Safe Drinking Water Act directs U.S. EPA to determine scientifically at what concentration a contaminant can be consumed with a margin of safety that is protective for an entire lifetime without adverse health effect.

c. The Safe Drinking Water Act directs water suppliers to report the existence of contaminants in their water with reference to these scientific points known as Maximum Contaminant Level Goals in federally mandated Consumer Confidence Reports and Annual Water Quality Reports.

d. Neither Standard 60, nor the Safe drinking Water Act, mandates that the consumer must be informed that the water treatment process or the addition of a substance to treat humans is "allowed to," and does, contain contaminants at concentrations significantly higher than the scientific point of safety consumers are provided as reference.

15) What is the Standard 60 Maximum Allowable Level of a contaminant in a manufacturer's product based upon?

a. ANSI/NSF Standard 60 establishes a Maximum Allowable Level of a contaminant in a manufacturer's product to 10% of the regulatory point for remediation, normally 10% of the U.S. EPA Maximum Contaminant Level (MCL).

16) To be clear, does the Maximum Allowable Level established by Standard 60 that is applied to each contaminant restrict the number of contaminants that can conceivably be present just below the MAL threshold?

a. No. There may be numerous contaminants at significant concentrations, but NSF makes no quality restrictions on the number of contaminants.

18) How is Standard 60's reliance on regulatory Maximum Contaminant Levels (MCL's) significantly different than if consideration of contaminants was based on U.S. EPA's scientific point of safety (MCLG's)?

a. The MCLG's are required to determine the point below which, with a margin of safety, a person can consume water with that concentration of a contaminant for an entire lifetime without known or anticipated health risk. By order of the U.S. Safe Drinking Water Act MCLG's are to be determined based on science without regard to cost, measurement capabilities, or methodologies for removal.

b. MCL's are to be set as close to the scientific point of safety (MCLG) as practicable.

c. However, MCL's are allowed to consider cost, measurement capabilities, and methodologies for removal, and are often politically negotiated with other considerations, thus not as protective as MCLG's.

d. Considering contaminants already present in source water presents questions of reliability in measurement and sometimes extensive costs in remediation, thus the MCL's for some contaminants are set magnitudes higher than the point of safety even though significant harm is expected to occur at concentrations below the

MCL.

19) How do issues of reliability of measurement, and cost of remediation differ when considering source water and considering water additives?

- a. In restricting measurement to only after-dilution concentrations, risk of adverse health effects is often cloaked in what is called a "non-detect," which to many may appear as not significant, when in fact it is merely not within the technical capabilities of the measurement device used in that specific case.
- b. A manufacturer's raw product CAN be reliably measured in its pre-diluted stage and calculated for its contaminant contribution, and assessed for its risk of adverse health effects.
- c. Switching to a new water source or doing without our most essential resource is often not a life-sustaining option, whereas selecting a product to add to our water supply, or doing without, is.

20) In the case of fluoridation chemicals, who set the safety standards incorporated in Standard 60?

- a. A volunteer group heavily persuaded by the largest suppliers of fluoridation chemicals: Cargill, producer of an estimated 70% of all fluoridation chemicals in the U.S.; Lucier Chemical Industries (LCI, Ltd), the largest distributor of fluoridation chemicals; and Kaiser Aluminum, another supplier.

21) Is the Standard 60 MAL uniformly applied to fluoridation chemicals?

- a. No. The Maximum Contaminant Level for fluoride (which is now under review by the National Research Council) is established at 4 parts per million (ppm). Under Standard 60, at the Maximum Use Level declared by the manufacturer, their product would not be able to contain more than 10% of the MCL -- 0.4 parts per million. The reasoning behind NSF incorporating a MAL to abate health risk is ignored for fluoridation chemicals.

22) How do the safety standards established for fluorides incorporated by industry representatives and product manufacturers into Standard 60 differ from what consumer-protective interests would, or should, expect?

- a. According to the CDC, 95% of the fluoridation chemicals are derived from phosphate fertilizer mining operations where the product, by-product, or waste material, including its contaminants, varies based on the mining operations of the period.
- b. Mining operations are required to have only one annual inspection of their plant and product.
- c. Neither Standard 60 or any federal government agency requires batch testing to assure conformity.
- d. Standard 60 does not require manufacturers of fluoridation chemicals to supply any data showing that their specific product will fulfill the claims of effectiveness for the intent the product is to be utilized.

Fluorosilicic acid does not comply with NSF Rule 60 because the rule says that the concentration cannot exceed 10% of the EPA MCL. 4.0 ppm is the MCL. 10% of that would be .4 ppm. Anything over that does not comply. Many states, provinces, countries have adopted NSF Rule 60 and require by law that fluoridation materials comply with it.

<http://www.yes4cleanwater.org/files/HazanDeposition010304.pdf>

Who is watching the Store?

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- a. {No.}

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- a. {1988.}

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- a. No. The U.S. EPA has responded to Congressional investigation that it is not able to even locate ANY chronic toxicological data on the chemicals used in 90% of the fluoridation programs in the U.S.
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substances intended to treat or prevent disease in humans.

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- b. The Safe Drinking Water Act directs U.S. EPA to determine scientifically at what concentration a contaminant can be consumed with a margin of safety that is protective for an entire lifetime without adverse health effect.
- c. The Safe Drinking Water Act directs water suppliers to report the existence of contaminants in their water with reference to these scientific points known as Maximum Contaminant Level Goals in federally mandated Consumer Confidence Reports and Annual Water Quality Reports.
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16) To be clear, does the Maximum Allowable Level established by Standard 60 that is applied to each contaminant restrict the number of contaminants that can conceivably be present just below the MAL threshold?

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b. A manufacturer's raw product CAN be reliably measured in its pre-diluted stage and calculated for its contaminant contribution, and assessed for its risk of adverse health effects.

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a. A volunteer group heavily persuaded by the largest suppliers of fluoridation chemicals: Cargill, producer of an estimated 70% of all fluoridation chemicals in the U.S.; Lucier Chemical Industries (LCI, Ltd), the largest distributor of fluoridation chemicals; and Kaiser Aluminum, another supplier.

21) Is the Standard 60 MAL uniformly applied to fluoridation chemicals?

a. No. The Maximum Contaminant Level for fluoride (which is now under review by the National Research Council) is established at 4 parts per million (ppm). Under Standard 60, at the Maximum Use Level declared by the manufacturer, their product would not be able to contain more than 10% of the MCL -- 0.4 parts per million. The reasoning behind NSF incorporating a MAL to abate health risk is ignored for fluoridation chemicals.

22) How do the safety standards established for fluorides incorporated by industry representatives and product manufacturers into Standard 60 differ from what consumer-protective interests would, or should, expect?

a. According to the CDC, 95% of the fluoridation chemicals are derived from phosphate fertilizer mining operations where the product, by-product, or waste material, including its contaminants, varies based on the mining operations of the period.

b. Mining operations are required to have only one annual inspection of their plant and product.

c. Neither Standard 60 or any federal government agency requires batch testing to assure conformity.

d. Standard 60 does not require manufacturers of fluoridation chemicals to supply any data showing that their specific product will fulfill the claims of effectiveness for the intent the product is to be utilized.

Fluorosilicic acid does not comply with NSF Rule 60 because the rule says that the concentration cannot exceed 10% of the EPA MCL. 4.0 ppm is the MCL. 10% of that would be .4 ppm. Anything over that does not comply. Many states, provinces, countries have adopted NSF Rule 60 and require by law that fluoridation

materials comply with it.

<http://www.yes4cleanwater.org/files/HazanDeposition010304.pdf>

michelle gustavson

Mailing Address

██████████
reno, Nevada 89512
United States

[Map It](#)

Email

████████████████████

Phone

██████████

Account Number

██████████

Please explain your question

Thank you so much for standing up for the people and for letting us know in the email what those nasty legislators Joiner and Sprinkle were trying to do to our vote. What a terrible thing to do to the voters! Many people have good reason to be concerned and I so appreciate you standing up to them trying to shove this down our throats. GREAT JOB!! HUGE KUDDOS TO YOUR BOARD!! THANK YOU SO MUCH!

wayne weaver

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Phone

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Account Number

██████████

Please explain your question

no question - just a big thank you for voting NO on AB193

Great news !!!

tom greco

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reno, Nevada 89523
United States
[Map It](#)

Email

██████████

Phone

██████████

Account Number

██████████

Please explain your question

comment on "TMWA board of directors vote to not support fluoridation bill"
Floridation is too important to being playing politics with.
The hell with " pre-emption of local control", some folks will not vaccinate their kids, how stupid is that?
Prior vote against fluoridation-- so what?
The high cost of fluoridation, yea, vs. the high cost of dental work,
Are you kidding, this is a no brainer,
Or in your case, a no backbone.

Please for the well bing of the community, reconsider this very important issue.

you need not respond to this if you are trying to change my views.

Tom Greco, ██████████

Name

mark wizniak

Mailing Address

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Sparks, Nevada 89434
United States
[Map It](#)

Email

██████████

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██████████

Account Number

██████████

Please explain your question

Why doesn't TMWA publish articles outlining the negative health benefits of fluoridation?

Donna Saarem

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[REDACTED]
Reno, Nevada 89511
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Email

[REDACTED]

Phone

[REDACTED]

Account Number

[REDACTED]

Please explain your question

Just wondering what the next steps are with the water fluoridation situation. Does the state accept TMWA's declination of the states position on fluoridation or is there still some concern that we may have to comply and flouridate our water?

Lisa Sauls

Mailing Address

[REDACTED]
Reno, Nevada 89509
United States
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Email

[REDACTED]

Phone

[REDACTED]

Account Number

[REDACTED]

Please explain your question

This is a COMPLIMENT! Thank you, thank you, thank you for respecting the Washoe county voters regarding the use of fluoride in the water supply. Thank you. With all the competing poisons we don't need additional ones. Again, Kudos to you and TMWA. Thank you so much. Lisa

Carol Church

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United States
[Map It](#)

Email

[REDACTED]

Phone

[REDACTED]

Account Number

[REDACTED]

Please explain your question

Thank you for rejecting the Fluoridation Bill. Besides the cost, it would endanger my husband who has kidney disease. If someone wants fluoride, let their doctor prescribe it.

sarah wilks

Email

[REDACTED]

Account Number

i do not have an account number

Comments

I am very concerned about the suggestion that our water will be fluoridated, I am ill and do not want fluoride in my water, and cannot afford the expensive filters to remove it. Who do i contact with my concern?



TMWA Board Meeting

Wednesday, March 15, 2017

Press Clippings

February 9, 2017 – March 8, 2017



The Latest: California retains drought measures

Posted: Feb 08, 2017 2:36 PM PST Updated: Feb 08, 2017 4:32 PM PST

FRESNO, Calif. (AP) - The Latest on California's drought regulations (all times local):

4:25 p.m.

California has retained largely symbolic measures guiding water conservation during drought.

The move by the State Water Resources Board came Wednesday as the state has seen one of its wettest winters in years.

The board, which enacts regulations, relaxed its requirements last year, allowing local districts to set their own conservation measures.

Roughly 80 percent of those districts now say they have ample supplies and aren't requiring residents to cut back on how often they water lawns and flush toilets.

However, board members decided to retain the measures at least until spring as a precaution against the return of dry weather.

Gov. Jerry Brown declared a drought emergency in 2014.

2:25 p.m.

State officials say Californians made significant progress saving water in December.

The State Water Resources Control Board in Sacramento on Wednesday reported the most recent conservation figures.

They say residents and businesses statewide used roughly 20 percent less water in December. That's compared to the same time in 2013, the year before Gov. Jerry Brown declared a drought emergency.

They say that since mandatory conservation started in June 2015, Californians have saved enough water to serve nearly one-third of the state's population for a year.

California had endured more than five years of drought until recent rain and snow doused the state.

State regulators will decide Wednesday whether to keep drought regulations that require monthly conservation reports.

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Donner Lake homeowners sue California State Lands Commission

Courtesy SOS Donner Lake |

The lake level rests below private docks on Donner Lake during periods of low rainfall, as seen here during a previous year.



Courtesy SOS Donner Lake |

The lake level rests below private docks on Donner Lake during periods of low rainfall.

According to its website, SOS Donner Lake is a “nonprofit mutual benefit corporation” of Donner Lake lakefront property owners created to “again fight the SLC’s claim to our property,” which the group says has been an issue since the mid-1970s.

There are roughly 300 lakefront property owners on Donner Lake, including single-family dwellings, condominiums, hotel/motel properties, and homeowner association beachfront property.

While it’s unclear how many property owners are members of SOS Donner Lake, board member Robert Lauchland told the Sierra Sun that of the roughly 300 docks on the lake, SOS membership was approaching “roughly two thirds” of that.

Visit <https://sosdonner.wordpress.com> to learn more about the group.

Is this land really your land, or is it my land? Is it both of ours? What are the limitations and what does that mean for real estate?

A local group of homeowners may learn the answer to that question soon.

Save Our Shores Donner Lake, a nonprofit association made up of Donner Lake lakefront property owners, recently filed a lawsuit in Nevada County Superior Court against the California State Lands Commission over ownership of the land on which the lake’s private docks are built.

It’s a complicated matter involving the lake’s navigability as well as the high water mark.

When California became a state in 1850, it acquired ownership of the lakebed at Donner Lake — that is, the land beneath the water.

The state owns the land up to the high water mark, which includes the land that private docks are on. The state leases land in situations like this to the dock owners, and those dock owners have to go through the town of Truckee to make any repairs.

SOS Donner Lake board member Robert Lauchland said the state is claiming the high water mark, or the boundary for the land it owns, is higher than it actually is.

In other words, Lauchland and the rest of SOS Donner Lake believe the state is claiming ownership of more land than it is rightfully entitled to.

According to SOS Donner Lake’s website, the group believes the state has no claim to the land beneath the lake or the private docks because they believe the lake is non-navigable.

That’s where things get complicated, since there are different legal tests for defining navigability.

Even if a judge finds the lake is navigable, the water line separating what land the state owns and what land the property owners can claim is also being disputed.

To be clear, the lawsuit only involves private docks. The SLC's claim to Donner Lake is rooted in the Public Trust Doctrine, which says that the state holds domain and sovereignty over all shorelands and navigable water, regardless of private ownership.

A spokesperson for the California State Lands Commission said in an email that the commission could not comment on the matter since litigation is pending. The spokesperson did confirm the commission has until Feb. 14 to file a response.

The Sierra Sun attempted to follow up with the SLC by phone, but calls were not returned.

Look to the Sun for updates to this story as they become available in the coming months.

[SOS Donner Lake v. State Lands \(Complaint for Declaratory Relief\)](#) by [Amanda Rhoades](#) on Scribd
Amanda Rhoades is a news, environment and business reporter for the Sierra Sun. She can be reached at arhoades@sierrasun.com, 530-550-2653 or [@akrhoades](#).

Morning Mix

188,000 evacuated, emergency declared as California's massive Oroville Dam threatens floods

By [Samantha Schmidt](#) and [Derek Hawkins](#) By [Samantha Schmidt](#) and [Derek Hawkins](#)

Morning Mix

February 13 at 6:04 AM

188,000 evacuated as California dam threatens floods. Here's what you need to know.

About 188,000 residents near Oroville, Calif., were ordered to evacuate Sunday after a hole in an emergency spillway in the Oroville Dam threatened to flood the surrounding area. Thousands clogged highways leading out of the area headed south, north and west, and arteries major and minor remained jammed as midnight approached on the West Coast.

Even as they fled, however, the flow of water over the spillway halted late in the evening, stabilizing the crisis. But officials warned the damaged infrastructure could create further dangers as storms approach in the week ahead, and it remained unclear when residents might be able to return to their homes.

Lake Oroville is one of California's largest man-made lakes, with 3.5 million acre-feet of water and 167 miles of shoreline, and the 770-foot-tall Oroville Dam is the nation's tallest, about 44 feet higher than the Hoover Dam on the Colorado River. The lake is the linchpin of California's government-run water delivery system, sending water from the Sierra Nevada for agriculture in the Central Valley and for residents and businesses in Southern California.

After a record-setting drought, California has been battered by potentially record-setting rain, with the Northern California region getting 228 percent more than its normal rainfall for this time of year. The average annual rainfall of about 50 inches had already been overtaken with 68 inches in 2017 alone.

Water overflows into Calif. dam's emergency spillway

[California drought shrinks to smallest level in years after onslaught of rain and snow]

There was never any danger of the dam collapsing. The problem was with the spillways, which are safety valves designed to release water in a controlled fashion, preventing water from topping over the wall of the colossal dam that retains Lake Oroville.

Earlier this week, unexpected erosion crumbled through the main spillway, sending chunks of concrete flying and creating a large hole. Then sheets of water began spilling over the dam's emergency spillway for the first time in its nearly 50-year history.

Water from rain and snow rapidly flowed into the lake, causing it to rise to perilous levels, and sending water down the wooded hillside's emergency spillway, carrying murky debris into the Feather River below.

"Once we have damage to a structure like that, it's catastrophic," Bill Croyle, acting director of the state's Department of Water Resources, said in a 10 p.m. news conference Sunday, in reference to the erosion of the main spillway. "We determined we could not fix the hole. You don't just throw a little bit of rock in it."

Anticipating a possible catastrophe for the Lake Oroville area, located about 75 miles north of Sacramento and about 25 miles southeast of Chico, the Butte County Sheriff's Office ordered evacuations, adding in a news release that this was "NOT a drill."

But as the reservoir's water levels lowered, the flows over the emergency spillway ceased late Sunday night.

California Gov. Jerry Brown (D) issued an emergency order to boost the state's response to the evacuation efforts and spillway crisis, which Brown called "complex and rapidly changing." Despite the minimized threats, Butte County Sheriff Kory Honea said in a news conference at about 10 p.m. local time Sunday that he would not be lifting the mandatory evacuation order until water resources officials had a better grasp on the anticipated risks.



[View Photos](#)

About 188,000 residents near Oroville, Calif., were ordered to evacuate after a hole in an emergency spillway in the Oroville Dam threatened to flood the surrounding area.

Caption

About 188,000 residents near Oroville, Calif., were ordered to evacuate after a hole in an emergency spillway in the Oroville Dam threatened to flood the surrounding area.

Feb. 12, 2017 Water from the Oroville Dam Auxiliary Spillway at Lake Oroville in California is seen eroding the roadway just below the spillway. Kelly M. Grow/California Department of Water Resources via European Pressphoto Agency

[Buy Photo](#)

Wait 1 second to continue.

The evacuation took residents by surprise.

April Torlone, 18, was at work at a Dollar General in Live Oak, Calif., Sunday evening when she received a flood emergency alert on her phone. She hurried home, she said, where she had about 10 minutes to gather some clothes and her late father's ashes.

Torlone drove with her mother and sister to her grandmother's house in Sacramento, arriving well after midnight. The roughly 40-mile trip took six hours, she said. Gas stations were packed and stores were running out of food. Along the way, they saw more than 30 people camped out in their cars on the side of the road, many with trunks full of belongings, Torlone said.

"I just hope everyone is safe and finds a place to stay, and that no one's homes are damaged," she told The Washington Post. "It's honestly so sad."

Shelters, churches, schools and seven Sikh temples opened their doors, and people offered to open their homes to strangers via Twitter messages. Hotels and motels out-of-harm's-way filled up quickly, creating little communities of the suddenly displaced.

The dam itself remained structurally sound through the evening, the state Department of Water Resources (DWR) said.

In a news conference Sunday night, Honea said helicopters would be deployed to drop bags of rocks into the crevice and prevent any further erosion. Officials doubled the flow of water out of the nearly mile-long primary spillway to 100,000 cubic feet per second, helping to reduce the lake's levels. The normal flow is about half as much, but increased flows are common at this time of year, during peak rain season, officials said.

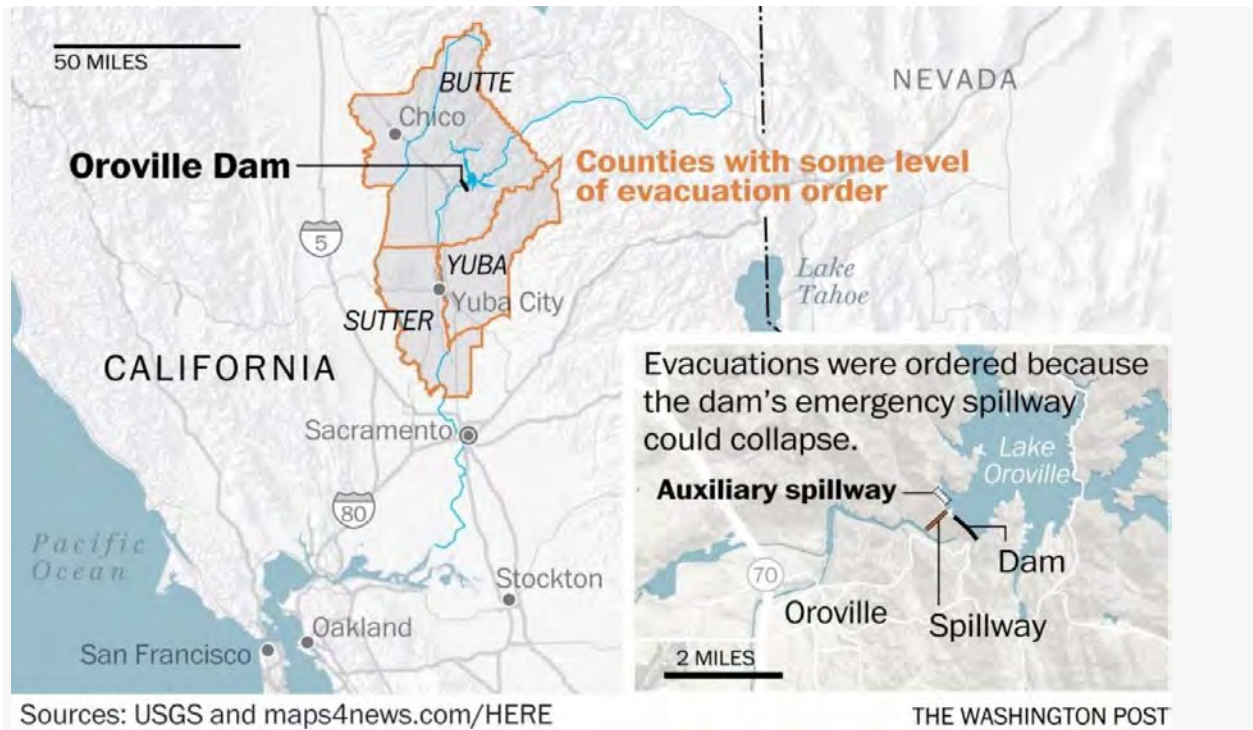
Croyle said that the lake would need to lower almost 50 feet to reach levels at which the system would normally operate. Croyle said that personnel were unable to access the eroded emergency spillway Sunday to do repair work. Officials aimed to continue to discharge as much water as possible ahead of upcoming storms, without adding too much pressure to the already damaged infrastructure.

"Our goal is to be able to use that infrastructure throughout this wet season," Croyle said. Forecasts indicate that dry weather will dominate through Tuesday, but a series of Pacific storms are expected to arrive across the region Wednesday into Thursday, bringing up to four inches of rain to parts of the Central Valley, according to the [National Weather Service](#).

Honea called the evacuation order a "critical and difficult decision" and said he recognized it would cause significant dislocations and traffic jams, which it did. Residents of Oroville, a town of 16,000 people, were ordered to head north toward Chico, while other nearby residents drove south toward Sacramento.

"I recognize how tough this situation is on people," Honea said in the 10 p.m. news conference. "I recognize that we've had to displace a lot of people."

The California National Guard will provide eight helicopters to assist with emergency spillway repair, Adjutant General David S. Baldwin said in a news conference. All 23,000 soldiers and airmen statewide received an alert to be "ready to go if needed," Baldwin said. The last time such an alert was sent out to the entire California National Guard was the 1992 Los Angeles riots, which erupted after a trial jury acquitted four officers of the Los Angeles Police Department of the use of excessive force in the videotaped arrest and beating of Rodney King.



Officials said 250 law enforcement personnel were being deployed to patrol the evacuated areas.

Travelers reported traffic at a standstill on some routes, especially on Highway 99 between Oroville and Chico.

Nicholas Mertz, a front desk supervisor at Oxford Suites Chico, told The Post that when he started his shift at 3 p.m. on Sunday, the hotel's 184 rooms were at 54 percent occupancy, but within an hour or two, the rooms reached full capacity. What began as a normal night quickly turned into "hectic craziness, everything all at once," Mertz said. The hotel's five phone lines were ringing nonstop, and hundreds of guests came pouring in.

"It's never happened that fast," Mertz said. Larger families of five to eight people packed into rooms, without having to pay the usual fees for additional guests, Mertz said, because "in this scenario, it's whatever you can do."

Many guests expressed confusion and frustration, while others spoke of their fears: What would happen to the pets they left behind? Would there be looting in the evacuated neighborhoods? Would their homes still be standing when they returned?

“Not only are you just a front desk person you’re kind of like a therapist as well,” Mertz said.

Kyle Dobson, 41, said he was visiting the dam Sunday afternoon from Yuba City, Calif., and noticed that the lake was higher than he had ever seen it. He said he got a call later in the day that Oroville was being evacuated. By the time he got home, Yuba City had also been ordered to evacuate.

Dobson said he and his wife packed about a week’s worth of clothes for themselves and their four young children, and moved pictures and other belongings to the second floor of their two-story home. For now, they are staying put, but if the situation gets worse, they will drive to Sutter, Calif., to stay with family, Dobson said.

“I’ll stay up probably all night, listen to the police scanner and watch the reports come in,” he said. “The river levels — that’s what you’ve got to watch out for.”

Adriana Weidman of Marysville, Calif., said she heard about the evacuation around 5 p.m. Fearing that nearby rivers would overflow, she rushed to pack as much as she could, then got into the car with her husband and two children, she said. By 10 p.m., the family was still sitting in gridlocked traffic on the way to Colfax, Calif., about 45 miles east.

“It’s scary,” Weidman told The Post. “I’m terrified I’m not going to have a home to come home to.”

Out of an “abundance of caution,” inmates were in the process of being evacuated from the Butte County Jail Sunday night, the sheriff’s office wrote on Facebook.

“We needed to get people moving quickly in order to protect the public and save lives if the worst case scenario did come to fruition,” Honea said.

The damaged primary spillway caused water flowing downstream to become muddy and brown with debris earlier this week, threatening the lives of millions of baby Chinook salmon in the Feather River Hatchery below. In a rescue operation, officials with the California Department of Fish and Wildlife successfully moved about 5 million Chinook salmon to a nearby annex, the department said on Facebook.

The other 3 million baby salmon will remain at the main hatchery, where staff and engineers have rigged a system of pumps, pipes and generators and a sediment pond in the hopes of filtering the water enough to support the fish.

Ironically, the state's five years of drought caused Lake Oroville's water levels to plunge to a low of 33 percent of capacity, according to the [Los Angeles Times](#). The lake became a poster child for the drought. In a dramatic shift, Northern California witnessed an extraordinarily rainy winter this year that caused waters to rise to their highest levels in decades.

Cost of Water Fluoridation a Concern for TMWA Board

FEBRUARY 15, 2017 BY [CARLA O'DAY](#) 4 COMMENTS By Carla O'Day



A bill introduced by two state lawmakers that would require the Nevada Board of Health adopt regulations mandating the fluoridation of water in counties with more than 100,000 residents concerns local officials.

The Truckee Meadows Water Authority board heard from its lobbyist, Steve Walker, on Wednesday about bills affecting the utility that are being introduced in the Nevada Legislature. State law currently requires fluoridation of water in counties having more than 700,000 residents. Smaller counties need approval of voters. Washoe County's estimated population in 2015 was 446,903.

Assembly Bill 193 is sponsored by Assemblywoman Amber Joiner, D-Reno, and Assemblyman Mike Sprinkle, D-Sparks. The bill has been referred to the Assembly Committee on Natural Resources, Agriculture and Mining, and Walker said it could be heard or voted on before TMWA's next regularly-scheduled meeting next month.

If approved by the full Legislature, TMWA would need to rehabilitate its plants and wells. The initial cost would be \$70 million, followed by \$3 million in annual maintenance fees, TMWA executive director Mark Foree said.

Doing this would mean an additional 8.8 percent rate increase for customers, which is on top of the three percent increase already expected in May.

"We tack on an eight percent increase and voters will take us to the shed," Reno Councilwoman Neoma Jardon said.

The cost estimate was provided by an outside engineering firm, Foree said.

"I'm pretty neutral on the concept of fluoridation and I'd like to watch it myself," Reno Councilwoman Naomi Duerr said. "But I'm not sure about this fiscal note."

Voters in 2002 rejected WC-1, which would fluoridate the water system but Reno Councilwoman Jenny Brekhus noted that voting populations and communities change. However, it's unlikely TMWA would get money from the state to meet requirements should this bill pass. Grants are possible but would make a minimal dent in the cost.

"I object to a state mandate," Brekhus said. "Water shouldn't be used as a medical delivery system."

Sparks Councilman Kristopher Dahir noted that Clark County has a fluoridated water system and it must be benefiting residents there because it's continuing.

“The state deciding against the voters is questionable but it’s important to look at the benefits,” Dahir said.

Washoe County District Health Officer Kevin Dick urged the board to support the bill. There’s lots of misinformation about water fluoridation, just as people who are opposed to vaccinations put out misleading literature on shots, he said. Also, he said the automobile industry was resistant about putting seat belts in vehicles decades ago due to costs but seat belts have proven to save lives.



Kevin Dick, Washoe County Health District

“Fluoridation of water is proven to increase oral health,” Dick said. “It strengthens tooth enamel and prevents tooth decay. The investment will result in great return.”

Some board members said they’ve spoken to constituents who oppose fluoridation of water or who’ve said they’re allergic to fluoride.

“There are 25 other allergens that are in toothpaste products that have been confused with being allergic to fluoride,” Dick said.

Ultimately, the board declined to support the bill as written because of cost and the decision of voters 15 years ago.

“The bill could change over time,” Duerr said. “Let’s leave the door open.”

Text of AB 193: <https://www.leg.state.nv.us/Session/79th2017/Bills/AB/AB193.pdf>

Lake Tahoe and Area Reservoirs Expected To Fill, This Year

Posted: Feb 14, 2017 5:15 PM PST <em class="wnDate">Tuesday, February 14, 2017 8:15 PM EST *Updated: Feb 14, 2017 6:10 PM PST* <em class="wnDate">Tuesday, February 14, 2017 9:10 PM EST

By Paul Nelson

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Lake Tahoe is having a banner year. After starting out with drier than normal conditions, the lake has rebounded in a way that has never been seen before. On average, the lake's water level increases 1.3 feet during the winter, and another 1.3 feet during the spring runoff. Since October, it has already risen nearly four feet.

"At the beginning of this year, we were a half-foot plus below the natural rim, and it looks very likely that we will fill Tahoe," Chad Blanchard, U.S. District Court Water Master said. "So, that will be the largest physical rise on Tahoe in history."

The current elevation of Lake Tahoe is 6,226.2 feet. If more precipitation and runoff happens, it will likely reach its legal capacity of 6,229.1 feet. Snowpack is more than 200 percent in some areas of the Sierra, so runoff is also expected to be higher than average. As the lake gets closer to its limit, officials will have to find a balance of the amount of water to release, compared to the amount of inflow expected.

"You have to fill," Blanchard said. "We are mandated to fill but you want to do it in a manner where we don't end up spilling too much and causing issues downstream."

That is why water is being released, ahead of time. Lake Tahoe's surface area is 120,000 acres. So, one storm could have a huge impact, simply because of its size.

"When the lake is full and the gates are wide open, you can only release a little over 4/100 of a foot of water from Tahoe, a day, and we can get half a foot on a big storm, rise, in a day," Blanchard said.

Last winter was average for precipitation, following four years of drought. So, despite the issues that have come along with heavy rain and snow, the outlook is good for the water supply for residents and agricultural use.

"It's a huge boost for our water supply," Blanchard said. "Tahoe alone, if we fill Tahoe, we'll have three years worth of supply."

Precipitation usually drops off, starting in March, but if February ends the way it started, the reservoirs will be full by summer.

"It's amazing to start," Blanchard said. "Basically, empty at all the reservoirs, and in one year, fill it up. We know this can happen. It's very unlikely but here we are

Donner Lake Level Remains High, Lake Front Residents Stay Informed

By Truckee Police -

February 15, 2017, 10:57:19 AM

-
-

February 15, 2017 – The Town of Truckee, Truckee Police Department, Truckee Fire Protection District and Truckee Meadows Water Authority (TMWA) have been working together regarding recent storm water runoff events and the water level of Donner Lake.

The Truckee River and streams remain swollen and the Donner Lake water level remains high as a result of the unprecedented amount of rain and snow our area has received over the last month or so. While there is currently no risk of infrastructure failure of any sort, lake levels rising above the high water mark could result in low level flooding of some properties around the lake front. Currently, the lake level has stabilized and is dropping. With the upcoming storms forecasted by the National Weather Service over the next seven days expected to be colder, this should help further stabilize the lake level. While TMWA will continue to take every measure possible to ensure that the lake level remains stable, storm water inflows have exceeded outflow at various times which could lead to higher than expected lake elevations.

As a simple precaution, we are encouraging lake front residents to survey their property and make adjustments as needed. We want residents to take every precaution they can to ensure the safety and security of their property and to be informed should lake levels begin to rise. The rising lake levels are not anticipated to cause life threatening events, roadway access or access issues of emergency services to Donner Lake. This remains a precautionary message regarding possible flooding to those homes on the lake and at levels close to the water.

Donner Lake residents encouraged to take precautions due to rising water levels

by Kenzie Bales

Wednesday, February 15th 2017



Sky Vision soars over Donner Lake, Feb. 15, 2017

TRUCKEE, Cali. (News 4 & Fox 11) — Several emergency agencies in Truckee are working diligently regarding recent storm water runoff events and the water levels at Donner Lake.

The Truckee River and streams remain swollen and Donner Lake water levels are still high as a result of the unprecedented amount of rain and snow the region has received over the last month.

There currently is no risk of infrastructure failure of any sort, but lake levels rising above the high water mark could result in low level flooding of some properties around the lake front.

Officials say the lake level has stabilized and is dropping.

Upcoming storms forecasted by the National Weather Service predict that the storm over the next seven days will be colder, which should help further stabilize the lake level.

Truckee Meadows Water Authority (TMWA) will continue to take every measure possible to ensure the lake levels remain stable.

As a simple precaution, authorities are encouraging lakefront residents to survey their property and make adjustments as needed. Residents should take every precaution they can to ensure the safety and security of their property to be informed should the lake levels being to rise again.

Rising water levels are not anticipated to cause life-threatening events, roadway access or access issues of emergency services to Donner Lake.

Water forum to be held in Carson City

A two-day free public forum will focus on the Carson River watershed.

The Carson Water Subconservancy District (CWSD) and Carson River Coalition are hosting the event Feb. 22-23 at the Bob Boldrick Theater in the Carson City Community Center.

On the first day, starting at 9 a.m., speakers will discuss floodplain, meadow restoration, flooding and other topics.

Speakers include Ed James, general manager, and Brenda Hunt, program manager, with CWSD; ranchers Valerie Gordon and Devere Dressler, Ace Hereford Ranch; and John Cobourn, water specialist, University of Nevada Reno Cooperative Extension.

On Feb. 23, more than a dozen speakers from Carson City and Douglas, Lyon and Storey counties as well as the U.S. Geological Service will cover the Carson City Open Space program, Virginia City wastewater improvement project, the future of the Newlands Project and other issues.

A full-day bus tour of mercury superfund sites that kicks off the forum on Feb. 21 is already full.

To register for the forum, go online to carson2017.eventbrite.com or contact Shane Fryer at 887-9005 or shane@cwsd.org.

The Carson City Community Center is located at 851 E. William St

Grass Valley Union Lake Tahoe within 3 feet of legal limit



Courtesy Rafal Bogowski Photography /

www.rafalbogowski.com |

As of 2 p.m. this past Tuesday, lake level at Tahoe stood at 6,226.22 feet, which is 3.22 feet above the natural rim and about 2.88 feet shy of the la...



Courtesy Rafal Bogowski Photography /

www.rafalbogowski.com |

The snow water equivalent in the Lake Tahoe Basin stood at 209 percent of the median, according to the California/Nevada SNOTEL report.



Tahoe Lake level over the years

In less than five months, the water level at Lake Tahoe has gone from just below its natural rim to within less than 3 feet of the legal limit.

Put another way, approximately 138.65 billion gallons of water have been added to the lake since Oct. 1, according to the National Weather Service. And put yet another way, the amount of water since Oct. 1 is enough to supply the average annual water consumption for 425,506 four-member households.

Buoyed by winter storms that have dumped rain and feet upon feet upon feet of snow in the mountains and at lake level, Tahoe has experienced a greater rise in lake level between Oct. 1, 2016 and Feb. 14, 2017 than the same time period in the previous nine years, according to data from the United States Geological Survey.

As of 2 p.m. Tuesday, lake level at Tahoe stood at 6,226.22 feet, which is 3.22 feet above the natural rim and about 2.88 feet shy of the lake's legal limit. Since Oct. 1 Lake Tahoe has risen approximately 3 ½ feet.

“With very wet antecedent conditions in lower elevations and exceptionally deep snowpack at higher elevations, even small amounts of precipitation could create renewed flooding concerns.” National Weather Service

Comparatively, lake level has increased over that time period only three times in the past nine years. The greatest increase, aside from the most recent one, was between 2010 and 2011. Lake level rose 1.05 feet — going from 6,223.47 feet on Oct. 1, 2010 to 6,224.52 feet on Feb. 14, 2011. From 2015 to 2016, the lake rose .2 feet.

Lake level has not been as high on Feb. 14 since 2012 when the lake was 6,226.82 feet.

Beyond the lake, the snow water equivalent in the Lake Tahoe Basin stood at 209 percent of the median, according to the California/Nevada SNOTEL report.

Although it is still early, the current lake level and snowpack have some eagerly looking to the coming spring and summer

“Shoot, I’m looking forward to it,” South Tahoe Standup Paddle’s Chris Brackett said of the upcoming summer.

The beaches will likely be smaller than in recent years, which is not necessarily a bad thing, and the lake clarity might be slightly reduced with more runoff, but overall it should be a great summer, Brackett predicted.

As for the more immediate future, a series of storms is expected to impact the region starting Wednesday night, according to a special statement Tuesday from the National Weather Service.

“There is potential for strong winds across the Sierra Front Range and along the Highway 395 and Interstate 580 corridor late Wednesday night and Thursday morning, which could affect high-profile vehicles and aviation,” according to the statement. “Additional rain and snow will create periods of difficult travel conditions in the Sierra.”

Storms could continue rolling into the region through the weekend and into the middle of next week — with the strongest storms coming early next week. The likelihood of precipitation starting this week could lead to more flooding, NWS warns.

“With very wet antecedent conditions in lower elevations and exceptionally deep snowpack at higher elevations, even small amounts of precipitation could create renewed flooding concerns.”

Ryan Hoffman is a reporter with the Tahoe Daily Tribune. He can be reached at rhoffman@tahoedailytribune.com.

TMWA Schedules Open Houses, Hearings on Proposed Rate Adjustments

FEBRUARY 17, 2017 BY [CARLA O'DAY LEAVE A COMMENT](#)

By Carla O'Day



Truckee Meadows Water Authority has scheduled several open houses in the region to answer questions from the public and to get feedback about planned rate adjustments.

Water rate adjustments in Northern Nevada are expected to take effect in May to close a funding gap between recurring revenue and cost of services, which is expected to reach \$13 million in the next five years.

TMWA's board approved a rate-adjustment structure in December, which was recommended by the utility's staff and its Standing Advisory Committee.

Expected increases of three percent are planned each for the first and second years and up to 2.5 percent in each of the third through fifth years. After implementation of year one and two rate adjustments, increases in years three through five should be subject to an annual review of TMWA's financial performance to determine if rates can be lowered or deferred.

According to TMWA, the average customer's water bill is expected to increase by \$1.42 per month, with an additional \$1.47 in May 2018.

Open house hours are from 5:30 to 7 :30 p.m. Dates and locations are as follows:

- Feb. 21 at Sparks Police Department, 1701 E. Prater Way
- Feb. 23 at Spanish Springs Library, 7100 Pyramid Hwy.
- March 1 at Idlewild Park California Building, 75 Cowan Dr.
- March 2 at South Valleys Library, 15650 Wedge Pkwy.

TMWA's board holds its first public hearing on the matter March 15 and final hearing April 19. Both meetings are at 10 a.m. at Sparks City Hall, 745 Fourth St.

Customers who cannot attend the meetings can comment by email to tmwaboard@tmwa.com or call 775-834-8080.

For more information about rate adjustments, visit www.tmwa.com/rates2017

Water Authority Wants Your Feedback

Posted on February 22, 2017



The Truckee Meadows Water Authority has proposed a plan to raise your water rates, and they'd like to get your feedback. It would be the first rate adjustment in over three years and would raise the average customer's water bill by \$1.42 per month starting in May with an additional increase of \$1.47 in May of 2018. If you'd like to give your feedback, the next meeting is Thursday, February 23rd from 5:30 to 7:30 at the Spanish Springs Library at 7100 Pyramid Way. If you can't attend but would like to comment, you can e-mail the water authority at tmwaboard@tmwa.com. Two more meetings are scheduled for early next month.

TMWA hosts public meetings on rate changes

By Staff |

Posted: Mon 9:56 PM, Feb 20, 2017 |

Updated: Tue 8:54 AM, Feb 21, 2017



RENO, Nev. (KOLO) Truckee Meadows Water Authority (TMWA) has scheduled several public meetings to collect customer feedback regarding a proposed **rate** adjustment.

The rate adjustment would be the first in over three years and is intended to help the utility meet revenue requirements. The average customer's water bill is expected to increase by \$1.42 per month starting May 2017 with an additional increase of \$1.47 in May 2018.

TMWA continues to monitor the effectiveness of our rate structures, and, as necessary, makes adjustments that better reflect the costs associated with treating, delivering, and maintaining the high-quality water that our customers currently expect. Customers are encouraged to attend the following meetings for more information and to provide feedback, which will be presented to the TMWA Board of Directors.

There will be opportunities for the public to comment during TMWA's Board of Directors and Standing Advisory Committee meetings.

Customers who cannot attend a meeting, but would like to comment, can do so by sending an e-mail to tmwboard@tmwa.com. For the most current information about the proposed rate adjustment, visit www.tmwa.com/rates2017, or contact us with your questions at 834-8080

Customers who cannot attend a meeting, but would like to comment, can do so by sending an e-mail to tmwboard@tmwa.com. For the most current information about the proposed rate adjustment, visit www.tmwa.com/rates2017, or contact us with your questions at 834-8080.

February 21 5:30 pm-7:30 pm
Sparks Police Department Training Room
1701 E. Prater Way
Sparks, NV 89434 United States

February 23 5:30 pm-7:30 pm
Spanish Springs Library
7100 Pyramid Way
Sparks, NV 89436 United States

March 1 5:30 pm-7:30 pm
California Building in Idlewild Park
75 Cowan Drive
Reno, NV 89509 United States

March 2 5:30 pm-7:30 pm
South Valleys Library
15650 Wedge Pkwy
Reno, NV 89511 United States

Lake Tahoe weather: 3+ feet of snow blankets region; power outages begin



TAHOE-TRUCKEE — Snow totals could rapidly vary across the Tahoe Basin Tuesday as more bands of snow move into the area, dumping as much as a foot of snow at lake level.

A winter storm warning remains in effect until 4 a.m. Wednesday, according to the National Weather Service in Reno, while a backcountry avalanche warning from the Sierra Avalanche Center is in place until 7 a.m. Tuesday. Avalanche danger is high at all elevations.

Per the storm warning, accumulation above 7,000 feet could range from 8 to 14 inches Tuesday, while 5 to 10 inches could accumulate below 7,000 feet. Areas where heavy snow bands persist could see up to 18 inches.

“Bands of snow will continue through tonight with the heaviest snow expected today,” according to NWS. “Snow may rapidly vary in intensity over short distances.”

The Tuesday forecast comes after Monday’s heavy storm in which the region saw anywhere from 2 to more than 3 feet of snow at higher elevations, as well as an avalanche that covered the Mt. Rose Highway overnight Monday with roughly 20 feet of snow.

According to the Washoe County Sheriff’s Office, the main route between Reno and Lake Tahoe would remain closed until further notice. No one was believed to be hurt in the incident.

Meanwhile, according to NWS, the nearby Mt. Rose Ski Tahoe resort recorded between 39 and 43 inches of fresh snow as of 7 a.m. Monday, with 42 inches falling at Heavenly and up to 32 inches at upper mountain at Sugar Bowl.

A solid foot of snow had fallen by 7 a.m. at ground level in Truckee, with closer to 2 feet at higher elevations like in Tahoe Donner.

Winds Tuesday are expected to range from 20 to 30 mph with gusts up to 50 mph. Peak gusts on the Sierra ridge could be as strong as 135 mph.

NWS warns that rapid rates of snowfall — up to 2 inches per hour — and winds could cause dangerous whiteout conditions, particularly over mountain passes and in the backcountry.

Once again, as was the case all day Monday, road conditions will be very sketchy, with chain and/or snow tire restrictions in place across all major highways.

Visit the California Department of Transportation website and Nevada Department of Transportation website for road conditions.

Officials may have to ‘spill’ excess water from Lake Tahoe



Courtesy Stephen Dolan

Third Creek in Incline Village — which dumps into Lake Tahoe — is ripping on Feb. 9, thanks to one of the region's recent wet winter storms.

LAKE TAHOE — Given the amount of precipitation that has dumped into Lake Tahoe in the past handful of months, water officials may have to send "quite a bit" of water over the emergency spillway located in Tahoe City.

That statement from U.S. District Court Water Master Chad Blanchard on Tuesday comes with a caveat: Officials are waiting for an updated forecast that will take into account the impact of the most recent storms on spring runoff.

New information outstanding, the need to release, or spill, some water from the lake is looking likely.

As of 2 p.m. Tuesday, Lake Tahoe was at 6,226.66 feet, according to provisional data from the U.S. Geological Survey. That number puts the lake 3.66 inches above its natural rim and within 2 ½ feet of the lake's "legal limit."

"This year it looks like we'll have to spill quite a bit of water," Blanchard said in an interview with the Tahoe Daily Tribune.

Use of the term "legal limit" in a previous report about the large rise in lake level between October and mid-February sparked curiosity from some readers who found the phrase unusual.

One reader asked: "What happens if the lake exceeds the limit? Does it get a ticket?"

The legal limit of 6,229.1 (6.1 feet above the lake's natural rim) and ensuing need to release water dates back roughly 100 years, Blanchard explained.

"It all dates back to 1907. We had another year like this [year], but 1906 had been a big year also, and we went into the winter full. ... Then we had this type of winter that we're having now and the lake rose tremendously," Blanchard said.

In July 1907, the lake level was at 6,231.26 feet — an elevation that led to a great deal of erosion. With no way at the time of forecasting how the winter weather could impact lake level come spring, and with fear of possible damage to homes around the lake, talks about limiting Lake Tahoe's level started ramping up around that time, Blanchard said.

Going above the eventually established legal limit was common in the early 20th century. The lake exceeded the legal limit by at least ½ a foot in 1906, 1907, 1914, 1916 and 1917.

There was legal action at some point, and around 1917 was when 6,229.1 feet was established as the upper, or legal, limit of the lake. The number eventually found its way into the Truckee River Agreement of 1935, and it has remained the legal limit since.

There have been instances, such as in 1997, when the lake went slightly above the limit. Only so much water can be released, and in some instances the outflow cannot keep pace with the inflow, Blanchard said. In 1997, the lake exceeded the limit by "a couple tenths of a foot" before dropping back down, he added.

As for this year, the decision on whether to release water (and if so, how much) in order to make room for runoff will need to be made in the near future.

Currently, 50 cubic-feet-per-second — the minimum amount required to be released from Lake Tahoe at this time of year — is running out of the lake. Blanchard noted that even if officials decide to spill water, the amount pales in comparison to that lost to evaporation each year. That number averages 40 inches, he said.

If the lake does manage to fill this year, it will mark a physical increase of 6 ½ feet — a new record. The previous record of 6 feet came in 1995.

"We'll have to wait for a new forecast. ... We very well could be required to start some precautionary release from Tahoe," Blanchard said.

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TRPA: Ramping up invasive species control projects at Lake Tahoe



beata.jarvis |

Over the last two decades, the Lake Tahoe Region has become a national leader in fighting the introduction and spread of aquatic invasive species (AIS) that threaten to harm its world-renowned environment and the \$5 billion recreation-based economy it supports.

The Lake Tahoe Region is working with other partners throughout the American West to better safeguard waterbodies and improve national invasive species policies. We are also working with the boating industry to help manufacturers design watercraft that are less likely to carry AIS and are easier to inspect and decontaminate.

Ben Franklin said, "an ounce of prevention is worth a pound of cure." This is especially true for invasive species that out-compete native species, and, once established, become incredibly difficult and costly to manage or eradicate.

Fortunately, Lake Tahoe's watercraft inspection program has overseen the safe launch of tens of thousands of motorized boats at Lake Tahoe since its creation in 2008. Along with the Tahoe Keepers program that trains people to inspect and decontaminate their own hand-powered watercraft, it has successfully prevented the introduction of any new invasives in the lake.

With this critically-important frontline prevention program working and sustainably funded through boater fees and contributions from the states of California and Nevada, now is the time to ramp up programs to better manage or eradicate the invasive species that are already in the lake before they can spread or do more harm.

The \$415 million Lake Tahoe Restoration Act that Congress passed in December will help on this front. The legislation authorizes up to \$45 million in federal funding over seven years for projects to combat invasive species at Lake Tahoe, and TRPA and its partners are working to secure those funding appropriations.

We have seen the impacts invasives can have, with invasive aquatic plants like Eurasian watermilfoil and curly leaf pondweed fouling marinas, beaches and swimming areas. Non-native warm water fish that follow the spread of these weeds further impact the lake's ecology and populations of native species.

Work done in Emerald Bay shows we can successfully fight the spread and harmful impacts of these invasive aquatic weeds. Through a labor-intensive project with light-blocking bottom barriers and weed pulls by divers, partner agencies restored 6 acres of shoreline that were being choked by aquatic invasive weeds. Several years later, iconic Emerald Bay remains weed-free.

Today, the Tahoe Keys are ground-zero in the fight against these invasive aquatic plants and warm water fish. Weeds have overtaken as much as 90 percent of the 172 acres of canals and lagoons in this South Shore neighborhood. Clearing the canals and lagoons with mechanical harvesters each summer has failed to stop the spread of the weeds, which have grown back thicker each year. It also creates small fragments of weeds that threaten to carry infestations to other parts of the lake.

Working with numerous public agency partners and researchers, the Tahoe Keys Property Owners Association is creating an "integrated management plan" that identifies ways to better manage the aquatic weeds.

The plan is looking at improved mechanical harvesting and fragment collection methods, the use of bottom barriers and scuba-assisted weed pulls. It also is investigating potentially new treatment methods at Lake Tahoe, such as the possible use of aquatic herbicides.

The Tahoe Keys Property Owners Association this month applied for permits from the Lahontan Regional Water Quality Control Board and TRPA for a pilot project that would test the use of federally-approved aquatic herbicides at nine sites in dead-end lagoons in 2018. The association is proposing to install a barrier between the test sites and the lake and other safety and monitoring measures to ensure that the herbicides, which break down with exposure to sunlight and other natural processes, do not reach the lake.

While these herbicides are used to control invasive aquatic weeds in other parts of California and the United States, they have never been used at Lake Tahoe. And the application for this pilot project to test their use has raised some public questions about the risks it could pose for communities, drinking water and the environment at Lake Tahoe.

Over the next year, TRPA looks forward to working closely with the Lahontan Regional Water Quality Control Board, the Tahoe Keys Property Owners Association, other partner agencies and researchers, and the public to fully consider all the risks that could be associated with this potentially new approach to controlling invasive aquatic weeds at Lake Tahoe, as well as the potential benefits.

To protect the environment, the economy and the natural resources we all treasure, our region must continue to work together and innovate for new solutions to better protect Lake Tahoe from the harms of invasive species.

Joanne S. Marchetta is executive director of the Tahoe Regional Planning Agency.

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Water Main Replacement to Impact North Virginia Street North of Stead Blvd

Posted: Feb 20, 2017 2:00 PM PST <em class="wnDate">Monday, February 20, 2017 5:00 PM EST *Updated: Feb 20, 2017 2:00 PM PST* <em class="wnDate">Monday, February 20, 2017 5:00 PM EST
By Shelbi Jay



A water main replacement project will begin on February 27th impacting travelers.

The Truckee Meadows Water Authority construction will be taking place on North Virginia Street between the intersection with Lemmon Drive and one-half mile past the intersection with Stead Blvd.

Traffic will be reduced to one lane between the hours of 8:00 a.m. and 4:30 p.m. and commuters are recommended to take alternate routes to avoid potentially lengthy delays.

This project, the Stead Main Replacement Phase 2, includes the installation of 11,800 feet of 20-inch ductile iron water main, replacing an old water main installed in 1959. This project is set to bring more reliability and flexibility for delivering water from the Chalk Bluff Water Treatment Facility to the Stead area.

<https://www.google.com/maps/@39.6124014,-119.8706639,15z>

Wettest Year Ever Recorded in Reno; I-80 Open

The series of winter storms that has battered the Sierra Nevada with record snow for nearly two months has also made it the wettest year ever recorded in Reno.

Feb. 22, 2017, at 9:33 p.m.

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Wettest Year Ever Recorded in Reno; I-80 Open

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By SCOTT SONNER, Associated Press

RENO, Nev. (AP) — The series of storms that battered the Sierra Nevada with record snow for nearly two months has also made it the wettest year ever recorded in Reno, the National Weather Service said Wednesday. And that's with nearly half of the water season still far from over. The Nevada Highway Patrol responded to more than two dozen crashes on U.S. Interstate 80 and other roads in and around Reno during the Wednesday morning commute after the latest storm dumped 4 feet of snow Monday through Tuesday night on the mountain tops.

Sunny skies prevailed across the region Wednesday, but another storm is in the forecast for the weekend.

The Mount Rose Highway connecting Reno to Lake Tahoe reopened late Wednesday afternoon for the first time since an avalanche buried it in 20 feet of snow Monday night. Traffic also was moving again Wednesday night in both directions on I-80 from Reno to Sacramento. Tire chains were still required on most mountain passes, authorities said.

ADVERTISING

Rainfall at Reno-Tahoe International Airport officially surpassed the previous wettest year recorded in 1982-83 at 4 a.m. Wednesday, the weather service said. Water seasons run from October through the next September.

Since last Oct. 1, Reno has recorded 12.74 inches of precipitation, the service said. The old mark for a 12-month water season was 12.72 from Oct. 1, 1982 to Sept. 30, 1983.

The weather service has records in Reno dating to 1888. Annual rainfall in the city linking the Sierra's eastern front to the high desert to the east averages about 7.4 inches.

Most ski resorts around Lake Tahoe have received record snow since Jan. 1. Since Sunday night, the Mount Rose ski resort southwest of Reno has received 5 feet of new snow to bring to its season-record total to 53 feet.

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Tags: [Nevada](#), [California](#)

Pyramid Lake May Reopen Soon

Posted: Feb 13, 2017 6:19 PM PST <em class="wnDate">Monday, February 13, 2017 9:19 PM EST Updated: Feb 13, 2017 7:38 PM PST <em class="wnDate">Monday, February 13, 2017 10:38 PM EST

By Zac Mooney

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producers@ktvn.com



The Pyramid Lake Paiute Tribe is working to reopen the lake to recreation while fixing millions of dollars worth of damage.

The lake has been closed to fishing and other recreation since January 11th due to flood damage. One major issue is to the Pelican Point boat ramp. The amount of sediment left in the lake after the flooding raised the lake bed underneath the docks. The water was too shallow for the tribe to launch its rescue boat so they closed the lake to all boats in case of an emergency.

"We don't have an exact dollar on what the loss is with permits but there is definitely a loss of business," says Tribal Chairman Vinton Hawley, adding that it isn't just businesses that sell fishing permits, but auxiliary business from sales, "With the extent of the damage. The revenue that comes in from permits and recreational use is nowhere near the amount of work that has to be completed."

Repairs to Sutcliffe Drive are just part of the more than \$4 million the tribe needs to complete. That doesn't include the more than \$7 million in damages to SR-446 between Sutcliffe and Nixon. During the flooding in January, the road was either partially or completely washed out in 11 different places. Crews are replacing the surface of the road while adding more, wider drainage pipes. The Nevada Department of Transportation says the work is about 75% complete.

Tribe officials hope to have the lake reopened for recreation by April. The council is working on a plan to open with limited access, with details announced at the end of the week.

"Any time we can reduce some of that danger down is greatly appreciated on us," says the tribe's emergency manager Donald Pelt, "Because we have a very limited staff with a very limited budget."

The Pyramid Lake Paiute Tribe would like to thank the following: NDOT, TMWA, IHS, BIA, Reno-Sparks Indian Colony, FEMA and the volunteers

Why is Reno's Idlewild pond empty when Truckee River is full?

[Mark Robison](#), mrobison@rgj.com Published 10:25 a.m. PT Feb. 22, 2017 | Updated 15 hours ago



Buy Photo

Geese and ducks waddle around the edge of the mostly empty lower pond at Idlewild Park near downtown Reno on Feb. 21. (Photo: Mark Robison/RGJ) Buy Photo

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Why is the pond at Reno's Idlewild Park practically empty when the nearby Truckee River is close to flood stage?

- **Short answer:** The city is intentionally keeping the pond — it's actually considered two ponds — empty to test why it isn't retaining water as well as it used to.

Full question

Debby Whitsitt of Reno writes, "I've been wondering this for the longest time: What is the water source that feeds into the pond at Idlewild Park? The river is practically overflowing these days but the pond is still not full."

Full reply

"In addition to precipitation, the primary water source for the Idlewild Park ponds is the Truckee River," says City of Reno spokesman Matthew Brown. "However, for the last couple months, City of Reno staff — Parks and Public Works — has manually kept the ponds from naturally filling up. Some water has been let into the upper pond, but the City is keeping the lower pond closed.

"The City needs the surface of the pond to dry out in order to take coring samples that will help explain why the ponds don't retain water like they once did. The City will then devise a plan to reseal them. The exceptionally rainy winter is keeping the ponds muddy and delaying the drying process. As soon as it dries out, which could be several weeks, the City will ask a geotechnical contractor to do an investigation."

Sierra storms kick start Truckee River 'drowning machine'

[Benjamin Spillman](#), bspillman@rgj.com Published 9:05 a.m. PT Feb. 23, 2017 | Updated 4 hours ago

Flow reversal in Reno could trap boaters beyond reach of quick rescue



Buy Photo

Charles Albright explains the reversal on the Truckee River that can be dangerous for a kayaker or someone floating on the river. (Photo: Andy Barron/RGJ) Buy Photo

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A huge Sierra Nevada snowpack means 2017 will likely be exciting for kayakers and others who like to play in the Truckee River.

It could also be deadly for the unprepared.

That's because the surging Truckee is creating and exposing types of hazards that are less frequent in lower-flow seasons.

One glaring example is a potentially deadly reverse flow hazard in Reno that could trap boaters or tubers in a spot that's incredibly difficult for rescuers to reach.

"There is no way of escaping," said kayaker of Charles Albright of Reno. "It is going to be really dangerous."

It appears flows associated with the stormy winter rearranged the rocks at the Glendale Diversion to create the hazard, which Albright referred to as a "drowning machine."

The diversion is an earth and stone structure the Truckee Meadows Water Authority created in 2011 to divert water into the Glendale Water Treatment Facility.

The problem is the flows appear to have carved a submerged bowl downstream from the diversion. The bowl alters the flow and creates a reversal back toward the diversion.

[There is a link to Spillman's video](#)

That reversal, which goes across much of the entire channel, is enough to trap objects or people who float into it.

“You can’t fight the current,” Albright said. “It is like a sloped hole feeding back into itself.”

The effect is similar to reversals that develop at low-head dams across the country and has potential to be equally deadly.

Since the 1960s there have been nearly 400 deaths due to people being caught in such reversals, according to research [published in the Journal of Dam Safety](#)

Andy Gebhardt, director of operations and water quality for the water authority, said the authority is aware of the problem at Glendale.

“The flood just washed some rock away, we were not anticipating that,” Gebhardt said. “We want to get back in there and take a look and make sure it is not doing any more damage and repair it.”

Gebhardt said the authority will install signs upstream to warn people to get out of the river and walk around the structure.

But until repairs are made it will remain a hazard.

The rocky river bottom at the location adds to the entrapment risk because a person trying to stand could get his or her foot lodged between rocks.

“You can’t get your foot loose,” Albright said. “Your head and body are under water and you drown.”



Buy Photo

There a reversal on the Truckee River at Glendale Ave. that can be dangerous for a kayaker or someone floating on the river. (Photo: Andy Barron/RGJ)

Even if a person managed to stay afloat within the reverse flow zone rescue would be difficult.

That’s because the jagged, uneven rocks installed on the river bed extend below the hazard for several hundred feet and up the steep riverbanks.

That makes it difficult for rescuers to reach the spot where people would likely be trapped.

“We couldn’t get into it from downstream and to get into it from upstream would put the rescuer at extreme risk,” said Kevin Joell, director of the Reno Fire Department Water Entry Team.

Joell said there’s a chance rescuers could use a fixed, highline rope system to reach the spot. But that’s not ideal, either.

“That is not a quick, immediate rescue,” Joell said. “Realistically it may end up being a body recovery at that point.”

It’s also important for people to realize Glendale likely isn’t the only fresh hazard on the Truckee River.

There’s a similar reversal at Chalk Bluff in west Reno and high flows fueled by cold snowmelt are likely to increase risk on the river deep into spring.

People should expect faster, colder water in the Truckee and prepare accordingly.

“This is completely different than what we have had the last six to eight years,” Albright said. “It is going to change a lot and it is going to be a lot more hazardous.”

Truckee River safety tips



Use these tips to stay safe

- Always wear a personal floatation device (PFD) and helmet when in or around the river.
- Wear sturdy shoes, consider thermal protection from cold water.
- Do not drink alcohol or use drugs when boating or tubing.
- Never go into the river alone.
- Have a plan and rendezvous point in case you become separated.
- Let a friend or family member know where you are going and when you plan to return.

Source: Reno Fire Department Water Entry Team

Fluoridation: One Strategy for Improving Public Health, Experts Say

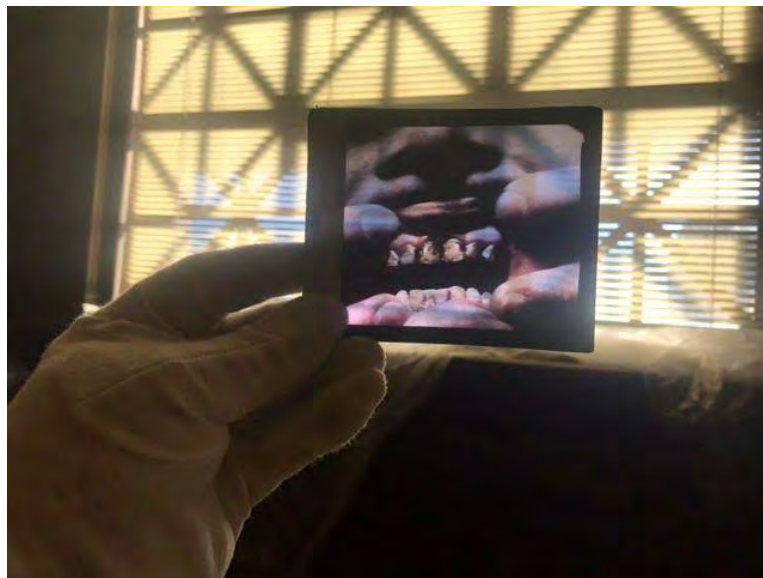
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Colorado Springs Utilities environmental technician Corey Thiel collects chilly water samples for testing.

Oral health falls under Governor John Hickenlooper's [Top 10 Winnable Battles](#) for health in Colorado. Consuming fluoride in water is one safe and inexpensive way to help prevent dental decay, according to public health experts, and it was discovered right here in Colorado.

At the Pioneers Museum in downtown Colorado Springs, director Matt Mayberry holds up a century-old slide to the light. It belonged to Colorado Springs dentist Frederick McKay in the early 1900s.



One of Frederick McKay's century-old slides shows a child's brown-stained teeth due to dental fluorosis.

Credit Dana Cronin / 91.5 KRCC

It shows what looks like a child's mouth with lips pulled apart, teeth exposed. The teeth are covered in brown spots.

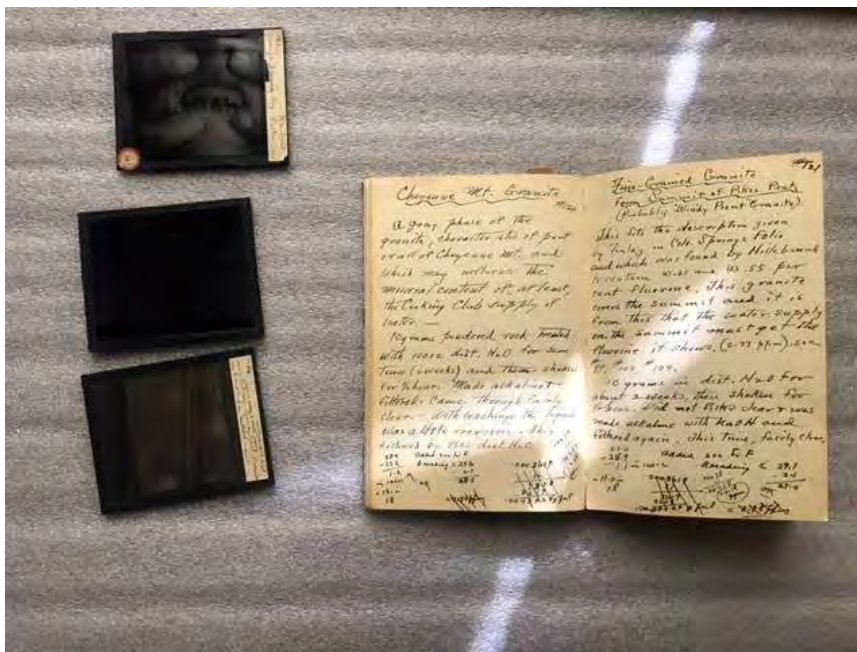
"As he was working on children in Colorado Springs," Mayberry says, "he would notice that many of our Colorado Springs kids had brown-stained teeth. It went on to become known as the 'Colorado brown-stain.'"

McKay also noticed that despite the unsightly appearance of their teeth, these patients had fewer cavities than patients he had treated elsewhere.

He eventually discovered that the staining came from fluoride his patients were getting in their drinking water through Pikes Peak granite.

"Fluoride's a naturally occurring mineral," says Dr. Jeff Kahl, a pediatric dentist and an executive committee member of the Colorado Dental Association. "Tooth structure that has fluoride incorporated into it as part of that chemical reaction is actually more resistant to the acids from bacteria. It makes the teeth harder, stronger."

And it doesn't always discolor teeth, not if it's at the proper concentration.



Frederick McKay's journal, which documents much of his research, will be on display at the Pioneer's Museum in Colorado Springs.

Credit Dana Cronin / 91.5 KRCC

Those brown stains are formally called dental fluorosis. They appear when teeth are exposed to water with fluoride levels higher than two parts per million. According to the American Dental Association, the optimal level of fluoride to help protect teeth without causing dental fluorosis is .7 parts per million.

Katya Mauritson works in the oral health division of the Colorado Department of Public Health and Environment, which encourages communities to make sure there's enough fluoride in the drinking water.

"Water fluoridation has always been shown to be very cost effective," Mauritson says. "It was shown by the Centers for Disease Control and Prevention as [one of the top ten public health interventions](#) of the 20th century."

Many water systems, including those in Denver, Fort Collins, and Pueblo, add fluoride to their drinking water to meet optimal levels.

Because Pikes Peak granite naturally has a lot of fluoride, Colorado Springs Utilities sometimes dilutes its water with water from other sources.

Monitoring Fluoride

At Fountain Creek in Colorado Springs, Corey Thiel submerges several bottles beneath the surface of the partially frozen water. Thiel is an environmental technician at Colorado Springs Utilities.

Thiel is demonstrating how he gathers samples from water sources to do physical, chemical, and microbiological analysis at the lab.



Credit Holly Pretsky / 91.5 KRCC

[<img](#)

Corey Thiel readies his field equipment in his lab at a water treatment facility in Colorado Springs.

He says they check fluoride levels about once a week.

Due to that fluoride-rich Pikes Peak granite, Thiel expects results to typically show Colorado Springs water at well above the optimum level or .7 parts per million.

However, nowadays, the majority of the city's residents, those living in the north and northeast parts of the city, get water with levels far below that.

Rick Johnson supervises water analysis at Colorado Springs Utilities. He says the water serving those areas doesn't actually come from the Pikes Peak region.

"Colorado Springs having high fluoride concentration in one area and lower fluoride concentration in another part of the city is due to the fact that we bring in different sources of water," he says.

So Johnson says, while about 20% of residents of the city are drinking local water, the other 80% are drinking transmountain water from across the state. Some are getting lots of fluoride, but most are barely getting any, and the city doesn't add fluoride.

Katya Mauritsen with the state's health department says Colorado [currently ranks 27th in the nation](#) as to the percentage of residents with access to optimally fluoridated water.

As for the 10 Winnable Battles, the goal is to have almost 80% of water systems in the state fluoridated by 2020. Mauritsen says they're on track to meet that goal.

Editor's Note: Matt Mayberry is a member of the 91.5 KRCC Community Advisory Board.

Connecting the Drops is a collaboration between Rocky Mountain Community Radio Stations and the Colorado Foundation for Water Education. Find out more at YourWaterColorado.org.

Support for this is provided by COBank.

Reno water rate hike inspired by savings during drought

[Mark Robison](#), mrobison@rgj.com Published 4:17 p.m. PT Feb. 27, 2017 | Updated 13 hours ago



TMWA's proposed rate increase would go into effect in May and then again next year. (Photo: Getty Images)

Reno-Sparks water customers conserved so much during the recent drought that the water utility wants a rate increase.

Water sales have fallen “due to drought conservation,” Truckee Meadows Water Authority said in a presentation given to the RGJ Editorial Board on the rate increases.

Rates would rise 3 percent this year and then 3 percent again in 2018. The plan would hit all customers: residential, business and irrigation.

“Although water use has gone down, over 90 percent of our costs remain fixed regardless of the amount of water used,” TMWA says in a document explaining the proposal.

A 2015 Ask the RGJ column looked at the fixed costs of debt payments, infrastructure maintenance and operating expenses. The article concluded, “If Reno-Sparks saves much more than twice this year's goal of 10 percent, TMWA will have to start looking at rate increases to meet its financial obligations.”

In fact, customers ultimately saved 20 percent in 2015, the worst drought year on record for Northern Nevada. Andy Gebhardt, TMWA's director of customer relations, said many of conservation changes made by customers were permanent and will continue for years to come.

This is the [wettest winter on record for Reno](#). Rather than asking customers to conserve, TMWA now emphasizes that they should avoid wasting water.

If the rate increases are approved, they would be the first since February 2014.

TMWA will hold customer open houses Wednesday March 1 and Thursday March 2 to explain the proposal.

TMWA's board of directors has the power to implement the rate increases. It will hold a first public hearing March 15 to raise all water customers' bills by 3 percent. This would raise the typical residential customer's bill about \$1.42 a month, TMWA estimates, and it would go into effect in May. The proposal calls for the same increase to happen again in May 2018.

A final public hearing that would lock in the rate increases is scheduled for April 19.

Fiscal year 2016 was the first full year since TMWA consolidated operations involving customers from Washoe County Water Utility and South Truckee Meadows General Improvement District. TMWA says there have been 7,000 new connections in the past four years.

Meeting schedule

- **March 1:** A customer open house will be from 5:30 to 7:30 p.m. Wednesday March 1 in the California Building at Idlewild Park.
- **March 2:** A customer open house will be from 5:30 to 7:30 p.m. Thursday March 2 at the South Valleys Library.
- **March 15:** A first public hearing before the TMWA board on the rate increases will start at 10 a.m. at 745 Fourth St. in Sparks.
- **April 19:** A final public hearing before the TMWA board on the rate increases will start at 10 a.m. at 745 Fourth St. in Sparks.

This story was updated with more context at 6:15 p.m. Feb.

Water To Be Diverted Into Fallon Desert

Posted: Feb 27, 2017 6:06 PM PST <em class="wnDate">Monday, February 27, 2017 9:06 PM ESTUpdated: Feb 27, 2017 6:31 PM PST

As winter winds down, Fallon residents are looking at what will come this spring. After one of the wettest winters on record, Lake Lahontan is nearly full, but the forecast shows enough snowmelt to fill the lake two more times.

"We all know that upstream, we're forecast to have that large volume of water coming down, so we have to be well out ahead of that," Rusty Jardine, General Manger of the Truckee-Carson Irrigation District said.

The TCID is building a spillway along the V Line Canal, west of Fallon. Water is already being released from the Lahontan Dam, and nearly half of it will go through the spillway once it is complete. The water will flow into the desert, south and west side of Fallon. It will flow into the Carson Lake and pasture, eventually heading to the Carson Sink.

"We're going to see water, virtually covering this side of the valley," Jardine said.

The plan is being implemented to reduce the risk of flooding for Fallon residents, along the Carson River. The project is estimated to cost \$600,000.

"At any cost, it's something that's so important in preserving the integrity, the safety, and I think the peace of mind associated with the residents of the Fallon area," Jardine said.

Lake Lahontan is only a few feet from the top of the dam, and it has risen more than one foot in the last week. About 35,000 acre-feet have already been drained, which is close to the amount of space available. Jardine says the TCID is releasing more water than is flowing in, for now, but it's a balancing act to keep drain and fill the lake at the same time.

"Our effort will be, in a perfect world, to draw this water out, allow for Lahontan to come up, and manage that so at the end of the day, we're right there," Jardine said.

Water started being diverted into the irrigation canals on February 11. That does not normally happen until mid to late March. During a wet year like this, the dam is doing more than holding water for irrigation.

"It was not created for flood control, but essentially, that's what we're using it for, presently," Jardine said.

Jardine says the dam is in great shape, so there is not any fear of structural failure. The plan is to keep the water level below the top, keeping it from spilling over the flash boards at the top of the dam.

"Once the water gets so high that it starts to go over that, that's when we can no longer exercise any control over that," Jardine said.

The new spillway is expected to open by March 10, releasing up to 1,000 cubic feet per second. Jardine says it is unknown how long it will take for the water to travel to its final destination but he is certain it will ease flood concerns for Fallon residents.

Authorities stop releasing water at Oroville Dam

Reno Gazette-Journal 7:14 a.m. PT Feb. 28, 2017



FILE - This Saturday, Feb. 11, 2017, file aerial photo released by the California Department of Water Resources shows the damaged spillway with eroded hillside in Oroville, Calif. (Photo: William Croyle, AP)

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California water officials have finished releasing water from the damaged spillway at the Oroville Dam.

Department of Water Resources spokeswoman Lauren Bisnett said water flow was stopped Monday.

The spillway will stay dry for up to a week so water workers can remove between 500,000 and 1 million cubic yards of debris blocking a power plant that was shut down amid high water levels.

A potential failure of an emergency spillway at the dam prompted authorities earlier this month to evacuate nearly 200,000 people.

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LOCALLY: [Tahoe deluge will sustain Reno water for years](#)

Lake Tahoe Water Level At Highest It's Been In 10 Years

- [Sally Schilling](#)

Tuesday, February 28, 2017 | Sacramento, CA | [Permalink](#)



Omar Bárcena / Flickr

Lake Tahoe has almost filled to the brim, promising years of consistent water supply to the Reno area.

Truckee Meadows Water Authority Senior Hydrologist Bill Hauck says Tahoe's level has risen more than 7 feet in less than a year.

"Tahoe will have the single largest rise in terms of gains in storage in one water year in recorded history," says Hauck.

During the drought, the agency had to release water from other reservoirs including Donner Lake to keep a steady supply to its customers.

Hauk says a full Lake Tahoe guarantees Reno will have two to three years of normal water supply.

Water regulators have already begun a precautionary draw-down of Tahoe in preparation for more storms and spring snow melt.

The last measurement of the Tahoe Basin's snow pack showed it was 233 percent of normal.

A new snow pack report for the Sierra will come out Wednesday

Tahoe winter deluge will sustain Reno water for years

[Benjamin Spillman](#), bspillman@rgj.com Published 4:42 p.m. PT Feb. 24, 2017 | Updated 8:19 a.m. PT Feb. 25, 2017



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Water is seen flowing through the Lake Tahoe Dam and into the Truckee River at Tahoe City on Feb. 23, 2017. Thanks to a snowpack that's at more than 200 percent of normal Lake Tahoe is expected to reach maximum allowable elevation of 6,229.1 feet for the first time since 2006. (Photo: JASON BEAN/RGJ, RENO GAZETTE-JOURNAL-USA TODAY NETWORK) [Buy Photo](#)

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When Donnelyn Curtis imagined an [exhibit celebrating historic Sierra Nevada winters](#), she didn't expect to experience one herself.

Since opening the exhibit at the Mathewson-IGT Knowledge Center on the university's campus in Reno, more than 50 feet of snow has fallen on some of the spots documented in the old photos.

Reno is experiencing its wettest winter on record and Lake Tahoe-area ski resorts anticipate Fourth of July skiing and snowboarding.

"I just thought I might be nostalgic for the days when there used to be a lot of snow," said Curtis, a librarian at the University of Nevada. "Then it turned out it was one of those winters."

[Reno's irrigation ditches fail during floods, damaging homes](#)

[Lemmon Valley floodwater will stand around through early summer](#)

A historic amount of precipitation means more than a chance at recreating old photos and novel holiday skiing.

It's likely to fill Lake Tahoe to its storage limit for the first time since 2006. And that means water from the largest alpine lake in North America will spill into the Truckee River for years to come.

“After Tahoe fills it is good for three years,” said Chad Blanchard, the federal water master in Reno. “We could have unprecedented dry (weather) and it still ends up being two years.”

The amount of precipitation since Oct. 1, the beginning of what water managers call the "water year," has already broken annual records.

With seven months of the water year remaining, Reno has recorded 12.74 inches of precipitation. The old mark for a 12-month water season was 12.72 from Oct. 1, 1982, to Sept. 30, 1983.

Totals near Lake Tahoe are more astounding.

Since Oct. 1, Tahoe City has seen 56.38 inches of precipitation in the form of rain or snow water equivalent.

That beats the previous record for October through February, set in 1969, by more than 10 inches. Even if it doesn't rain or snow before the end of March, it would beat the October to March record, set in 1982, by two inches.

If snow and rain were to stop completely for the remainder of the water year, 2016-17 would still rate as the third-wettest year on record for the Tahoe Basin following 1995, 60.98 inches, and 1982, 69.21 inches, Blanchard said.



In 2017 Lake Tahoe could reach maximum allowable level of 6,229.1 feet in elevation for the first time since 2006. Here are the maximum and minimum levels for each year since then and the level as of February 23, 2017. It's expected to keep rising until the snowmelt cycle is complete. The natural rim is 6,223 feet. Below that level water doesn't flow into the Truckee River.

Since Oct. 13, the elevation of Lake Tahoe has risen from 6,222.46 feet, which is about 6 inches below the natural rim, to 6,226.74 feet, which is nearly 4 feet above the rim.

Bill Hauck, senior hydrologist for the Truckee Meadows Water Authority, said it's a "foregone conclusion" the lake will reach the storage limit level of 6,229.1 feet for the first time since 2006.

"We are basically going from one extreme to the other in two years," Hauck said.

The massive quantities of water flowing into the lake has officials working to let as much water as possible out via the Truckee River.

Blanchard said they opened the dam at Tahoe City on Wednesday, sending water down the Truckee toward Pyramid Lake.

"We have significantly more water forecast to come in than we have room for," he said.

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Photos: Water surges through the Lake Tahoe Dam in Tahoe City

[Fullscreen](#)

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Much of the expected inflow is still in the form of snow piled high in the Tahoe Basin.

At the beginning of February, the Tahoe Basin snowpack was 233 percent of normal. The snowpack in the Truckee River Basin was 215 percent of normal.

It means that in addition to Lake Tahoe, reservoirs such as Independence, Donner, Stampede, Boca and Prosser will also fill.



Water is seen flowing through the Lake Tahoe Dam and into the Truckee River at Tahoe City on Feb. 23, 2017. JASON BEAN/RGJ, RENO GAZETTE-JOURNAL-USA TODAY NETWORK

For the time being, managers are saving space in the reservoirs to prevent flooding. But once the snowpack shrinks and flooding risk diminishes, they will fill the reservoirs to their legal limits.

“We fill when we can and we hold as much as we can,” Hauck said.

Abundant water isn’t limited to the Tahoe and Truckee basins.

The Carson River Basin snowpack was 200 percent of normal on Feb. 1.

The water is surging through, and sometimes flooding, the river and swelling Lake Lahontan, a reservoir in Churchill County that in recent years has been in the news for being close to dry.

On Wednesday, the Lahontan contained 245,487 acre-feet of water, said Kelly Herwick, water master for the Truckee Carson Irrigation District.

At 290,000 acre feet, the water will start pouring over the spillway, Herwick said. But managers are already releasing water at a rate of more than 1,400 cubic-feet-per second.

“We are attempting to lower the lake level to make room for runoff,” Herwick said.



Reno's housing sky is falling: Mike Kazmierski

Mike Kazmierski, Special to the RGJ 2:39 p.m. PT Feb. 23, 2017



New housing units in Reno-Sparks are not keeping up with population boom, Mike Kazmierski says. (Photo: Getty Images)

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I hate to sound like Chicken Little, but this is not a new message. In July of 2015, yes over 18 months ago, I wrote an article titled, “The Impending Housing Crisis”. That article talked about the 50,000 new jobs we were expecting in the region and the 30,000 to 40,000 new housing units we would need to accommodate that growth. According to the Bureau of Labor Statistics, we have added more than 20,000 new jobs since then, but added just 4,000 new housing units over the same 18 months. This is a problem! At 1.5 jobs per housing unit, a common jobs to housing ratio, we should have produced 13,000 new housing units. Is there any wonder why our housing prices have doubled, our rental rates are up 30 to 50% and our vacancy rates are at record lows?

So yes, the sky is actually falling and the adverse impacts of failing to meet these growing housing needs will hurt us all. So what can we do?

The first thing we must do is understand that **THIS IS NOT A BUBBLE!** We need to acknowledge that this is not the last housing boom, which was built off of speculation, but one based on real sustainable job growth. Additionally, we must recognize that this has become a genuine crisis and we have frittered away the time we had to slowly accelerate our construction efforts to accommodate this growth. There is little doubt we will add nearly 30,000 additional jobs to the region in the next three years, so our failure to address this very real need, as a community, is a recipe for disaster. It would be as if we just got notified by the weather service that due to the heavy rains in the mountains we could expect to see a major flood in a week - but then we choose to do nothing to prepare for it.

Some may say fine, we don't want this growth anyhow. To those that ignore the warnings, like a flood, failure to prepare will just make the impacts of this critical shortage of housing that much worse. Those who will be hurt the most are the vulnerable in our community; minimum wage citizens; the working poor, our elderly, the retired, and our college students. The affordable housing they are now in will soon be gone.

The market is all about supply and demand and as a community we have failed to keep up on the supply side, so as demand continues to go up so will the prices. As prices go up we also encourage more urban sprawl and associated traffic with the longer commutes. A growing housing shortage can build a real pricing bubble that will at some point make it too expensive to live here, driving the jobs and our talent away and forcing us into a localized recession of our own doing.



Mike Kazmierski (Photo: Provided)

There are many things we can do to avert this crisis. The key players must get on the same sheet of music and work together to find a way to get our new housing starts up – dramatically. We were at over 6,000 housing starts in 2005 and averaged over 5,200 new housing units in the six years before the recession. Yet over the past eight years we averaged just 1,350 units a year with our peak of just under 3,000 last year, which is still a fraction of our pre-recession rate.

- **Reno housing news:** [‘Historic’ low inventory to boost Reno house prices in spring, summer](#)

Here is what we are hearing from our construction and development industry. “The costs of everything are going up. There is an increasing shortage of construction workers, land prices are increasing and the land that was ready to go has been absorbed, so it will take longer to get more housing developments and apartment projects through the planning process. Additionally, it is taking much longer to get government approval to build housing and the increasing scrutiny by our elected officials, even after approvals are received by their planning commissions, is further slowing the process and increasing the costs. It is almost like charging triple and requiring weeks of paperwork to draw and fill sandbags just days before the flood!

So now is the time to embrace this challenge as a region. We did it when our schools were overcrowded and falling apart by passing WC-1. It will take the same community effort and government’s realization that it can no longer be “business as usual” when it comes to housing.

Reducing fees, fast tracking housing developments and encouraging, even incentivizing infill of housing projects, are all things to consider.

The development and construction industry must also look at ways to get affordable housing up as fast as possible. It will take a collaborative effort between local governments and the private sector to address this crisis. Now let’s start filling those sandbags because the flood is coming.

Mike Kazmierski is president and CEO of the Economic Development Authority of Western Nevada.

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Lemmon Valley floodwater will stand around through early summer

Mike Higdon , mhigdon@rgj.com Published 6:37 p.m. PT Feb. 23, 2017 | Updated 5:02 p.m. PT Feb. 24, 2017



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(Photo: Mike Higdon/RGJ)

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Terry Raemhild bought a boat today so he could get from his front door to his truck. His Lemmon Valley house is an island surrounded by standing floodwaters from the overflowed Swan Lake.

"We have to move, we gotta do something, we can't live this way," Raemhild said.

Raemhild donned hip waders and trudged through frigid waters to reach the truck. If he needed to carry something large, he filled the boat with belongings then used a rope strung between the house and his mailbox to pull himself across waste-deep water to his truck parked by the road. Then he unloaded everything into the truck and started the trek back to the house to do it all again.

Many of his neighbors are in the same boat.

Unlike flooding from overrun creeks in the Truckee Meadows, the floodwaters in Lemmon Valley are not going anywhere soon — instead of draining away, the water keeps pouring into the valley and has nowhere else to go. About 20 homes are affected.

This weekend, wet weather will threaten more homes near the edges of the lake. And once snow on Peavine Mountain melts, more standing water will accumulate through spring and summer, said Ed Evans, senior hydrologist at the Truckee River Flood Project.

Washoe County officials advised affected residents to plan for months-long recovery.

They said [other residents should prepare for rising waters](#).

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Continued flooding in Lemmon Valley

Fullscreen



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Higdon/RGJ

Mike

Some residents won't be able to return home for months as the water slowly evaporates and recedes. Those who stayed behind frantically piled sandbags in front of doorways and hoped for the best.

Several culverts overflowed, closing crossroads and trapping residents and farm animals. Washoe County officials plan to close parts of Lemmon Drive tonight due to rising water on the road.

Raemhild said he is disappointed in the county and city of Reno's response to the crisis. Both jurisdictions manage parts of the land — his property is in Reno's jurisdiction and Washoe manages the other side of the road. So far, the county is providing mitigation through sand bags. Raemhild said he would prefer pumps, but also levees and other proactive measures.

"I'm just angry because there's no cooperation between the city and the county and they don't take the time to walk up and talk to you," he said.

Today, county officials said they started working with the city of Reno on the problem. Officials said sucking water out of these areas would require 24-hour pumping for 100 straight days and even then they don't know where to put that water. Shooting it across the street into the lake would cause it to overflow back over the roads. Officials gave no specific plans for future flood mitigation and said this year's flooding is worse than any previously recorded.

Some wells and septic tanks are overflowing. Raemhild said his tap water has turned brown. [Washoe County Health District advises people to avoid standing water](#), avoid brown water and boil tap water or buy bottled water for those people using wells. Some residents have rented portable outhouses.

If people need to leave their homes, Assistant County Manager Kevin Schiller said they can help people relocate. So far, no shelters opened to take on displaced residents.

[County officials said they will also help coordinate](#) animal rescue and one-on-one services. Call 775-328-2180 for assistance and advice from the joint agencies.

At this point, the National Guard has not been activated. County officials are still determining next steps for long-term mitigation

Reno City Council Holds Workshop in North Valleys on Growth



From City of Reno:

Reno, Nevada (February 24, 2017) — There will be a [Workshop Meeting](#) of the Reno City Council on Tuesday, February 28, 2017 at 6 p.m. at Reno City Hall. The City of Reno, led by the Community Development and Public Works departments, is hosting the workshop to provide information about growth in the North Valleys.

Council will hear three presentations:

[B.1](#) - Growth in the North Valleys, including existing and anticipated future development and potential need for additional public facilities.

[B.2](#) - Transportation planning in the North Valleys, including the recently completed Regional Transportation Commission (RTC) [North Valleys Multimodal Transportation Study](#) and update on the Nevada Department of Transportation (NDOT) Reno [Freeway Study](#) with an emphasis on U.S. 395.

[B.3](#) - Sewershed planning to include the Reno Stead Water Reclamation Facility (RSWRF), lift stations and collection system improvements.

Council may take action on any or all items. Each presentation will be followed by a session to answer questions from the Council and the public.

Meetings

•

Invasive mussel larvae found in Southern California pipeline

Posted: Feb 24, 2017 6:49 PM PST <em class="wnDate">Friday, February 24, 2017 9:49 PM ESTUpdated: Feb 24, 2017 6:49 PM PST <em class="wnDate">Friday, February 24, 2017 9:49 PM EST

SAN BERNARDINO, Calif. (AP) - Samples of water taken from a pipeline that connects two Southern California reservoirs have tested positive for an invasive species of mussel.

The California Department of Water Resources says that preliminary testing this month showed tiny larvae were floating in the Santa Ana pipeline, though subsequent searches did not turn up any mature mussels.

Confirmatory testing will determine whether the larvae are quagga or zebra mussels. Once established, both species can wreak havoc on water delivery systems, as they cluster in pipes and block the flow of water.

The pipeline connects Silverwood Lake in San Bernardino County to Lake Perris in Riverside County. The state department said it has monitored both lakes for mussels since 2008, the year after quagga mussels were first discovered in California.

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Truckee River gates open. Snowpack 179% of average

[Tahoe Weekly](#) > [The Outdoors](#) > [Features](#) > Truckee River gates open. Snowpack 179% of average



The 2016-17 winter season will be one for the books – ski areas have been pummeled with snow, Lake Tahoe has risen to above its legal limit and the Sierra snowpack is now 179 percent of average.

January and February brought a barrage of snowstorms that have made for long-awaited snow conditions that haven't been seen in years. With that snow also comes the valuable water content that will replenish rivers, lakes and reservoirs throughout California and Northern Nevada.

The California Department of Water Resources checks the snowpack for its water content throughout the year. The survey taken on March 1 reveals a snow depth of 112.7 inches, which contains 43.4 inches of water content.

Video Player http://thetahoeweekly.com/files/wp-content/uploads/2017/03/IMG_5033.m4v
00:00
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Lake Tahoe is also being replenished from this year's snowfalls. The lake level is at 6,226.74 feet on March 1 and the gates for the Truckee River dam in Tahoe City are flowing. One year ago, the lake level only stood at 6,224.25 feet.

And, the season's far from over as another snow storm moves into the Tahoe Sierra on Sunday.

With the gates open, that means replenished water supplies downstream of the Truckee River including into Northern Nevada, as well as a great rafting season this summer along the stretch from Tahoe City to Alpine Meadows along with whitewater rafting downstream. Some local rafting companies are already accepting summer reservations in anticipation of the busy season

Mobile home park owner accused of dumping sewage into Truckee River

by Kim Burrows
Wednesday, March 1st 2017

Mobile home park owner accused of dumping sewage into Truckee River

AA

VERDI, Nev. (News 4) — The owner of a Verdi mobile home park is under investigation, accused of dumping raw sewage into a ditch that made its way into the Truckee River.

It was caught on video Feb. 9. A resident at the Crystal Peak Mobile Home Park saw a hose dumping what he suspected was sewage into a drainage ditch.

"Fresh water that smells like (expletive)," said the resident while he recorded. The videographer followed a hose dumping in the substance into stream to its source inside a big metal shipping container.

"...Show you right where it connects to which is this septic tank, he's polluting the water," he's heard saying on the video.

The Bureau of Water Pollution Control with the Nevada Division of Environmental Protection issued a complaint and a cease and desist order to the mobile home park owner, Glen Highfield.

The state said he installed an illegal above-ground tank to hold sewage. That tank is inside a big metal container. The state said the sewage was collected from some or all of the 38 mobile homes in the park.

Investigators said leach fields were saturated so sewage was pumped into the tank, which was not meant to hold fluids. Highfield is accused of pumping raw sewage into an open ditch that flowed into the Truckee River.

"Whenever you're dealing with raw sewage, you're always dealing with a human health issue, so you're dealing with concerns with public health exposure to public pathogens and bacteria," said Joe Maez, the Bureau of Water Pollution Control Engineer.

On the video there's at least one hole where you can see liquid pouring out. That too made its way into nearby ditch and the surrounding ground.

Residents tell News 4 that the park's owner dumped sewage regularly.

Highfield wouldn't talk on camera, but over the phone he said it only happened once.

The state's not so sure though. It only had the video evidence of the one alleged violation of contaminating the ground, ditch and Truckee River. But it's unknown how much sewage was disposed and for how many days.

Neighbors downstream are concerned.

"Kind of disappointing. It's really gross that somebody would do that out here," said Verdi Resident Dirk Maxwell.

Maez said they've ordered Highfield to stop pumping sewage into the ground, dismantle the storage tank and clean up the ground.

"(We're) working with the mobile home park manager to make sure the area is basically cordoned off from public access. We're disinfecting the spill site with in this case lime to kill all the pathogens," Maez said.

But when News 4 went out several times in February, the area was not roped off. It was open to anyone who came to visit.

If Highfield doesn't stop dumping sewage immediately and doesn't come up with a plan to disconnect the storage tank by March 17, he'll face a \$25,000-a-day fine.

Snow data confirms drought-busting Sierra Nevada winter

[Benjamin Spillman](#), bspillman@rgj.com Published 4:21 p.m. PT March 1, 2017 | Updated 2 hours ago



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(Photo: Benjamin Spillman/RGJ)

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One sure sign the Sierra Nevada is experiencing a historic winter is the snowpack is getting too deep for devices scientists use to measure it.

It's a problem that cropped up Wednesday when researchers sought to confirm snow depth at a data site on Slide Mountain at Mt. Rose Ski Tahoe near Reno.

"We're not even close," hydrologist Jeff Anderson said after jamming an aluminum tube more than 16 feet into the snowpack hoping to reach the ground below.

The snow-measuring snafu provided real life confirmation of what scientific instruments on the site already showed.

The Sierra Nevada is wrapping up a historic winter and that's huge news for Nevada and California, states that have spent the past several years mired in drought.

“Who would have thought this two years ago when we were measuring the worst snowpack on record,” Anderson said.

The snowpack is 212 inches deep at the Slide Mountain SNOTEL site. Water content at the site was 74.6 inches, meaning there’s more than six feet of water in the 17-foot snowpack. It’s a record for March 1 at the site.

The previous record for March 1 snow water equivalent at the site was a little more than five feet in 1997. The overall site record was more than seven feet of snow water equivalent in May 1995.

Since Oct. 1, the first day of what’s referred to as the “water year,” there’s been nearly eight feet of precipitation at the Slide Mountain site. Much of it has been rain but there’s plenty of snow.

Mt. Rose Ski Tahoe has measured a total of about 54 feet since the beginning of ski season.

The total precipitation so far makes it the second-wettest year at that SNOTEL site, with seven months remaining in the water year.

An average year at the site sees a little more than four-and-a-half feet of precipitation.

The big numbers aren’t limited to one SNOTEL site.

The overall snowpack in the Truckee River Basin is 207 percent of normal for the date. The Lake Tahoe Basin snowpack is at 220 percent. The Carson River Basin is at 210 percent. The Upper Humboldt Basin, which is an important basin for rural northern Nevada, is at 156 percent.

California’s March 1 snowpack totals are equally impressive.

At the Phillips snow course site south of Lake Tahoe the water content jumped from 28 inches at the beginning of February to more than 43 inches March 1. Snow depth was more than nine feet.

Statewide, the California snowpack is at an estimated 185 percent of normal for the date.

In fact, there’s more snow now than there usually is on April 1, when the snowpack tends to peak.

“We busted through April 1 values pretty much at all snow courses throughout the state,” said Frank Gehrke, chief of the California Cooperative Snow Surveys Program.

Although the impressive snowpack has delivered much-needed drought relief the region still faces long term environmental challenges due in large part to global climate change.

Nighttime lows in the Sierra Nevada are trending warmer and the mean freeze level is getting higher. Both trends threaten to make large snowpack winters less frequent in the future.

A greater percentage of precipitation coming in the form of rain instead of snow and irregular snow melt cycles makes it more difficult for communities to capture water for public use.

“Instead of making its way into our faucets, the snow we have now could be washed away into the ocean,” said Juliet Christian-Smith, senior climate scientist and water expert at the Union of Concerned Scientists, wrote in a [statement about the California snowpack](#). “Even in heavy snow years like this one, global warming is the wild card in our water security.”

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Photos: Water surges through the Lake Tahoe Dam in Tahoe City

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JASON BEAN/RGJ, RENO GAZETTE-JOURNAL-USA TODAY NETWORK

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Latest Snow Survey Goes Unexpectedly

Posted: Mar 01, 2017 4:49 PM PST Updated: Mar 01, 2017 5:17 PM PST
By Angela Schilling

CONNECT



Since last month, we've added about 90 inches of snow depth at Mt. Rose, and our automated system SNOTEL says the current water content is just over 74 inches. It's the best March 1st snow pack we've had since the site was installed in 1981. A survey gives ground truth to what the SNOTEL sites are telling us, but sometimes conditions can make the process challenging.

"This kind of a snow survey is a nightmare to have a really warm day with fresh new snow and really deep snow pack. It makes for a really hard sampling," said hydrologist Jeff Anderson.

So difficult in fact, plans did not go as expected.

"Unfortunately we were unable to get to the bottom of the snow pack today but that's great news for our water supply. That means we got a ton of snow up here," said Anderson.

Last time when we were up here we got enough snow for someone to reach the top of a sixteen foot shed, but now they've gotten so much snow they've had to dig a hole to get to their equipment. We still have the month of March to get through. All of this is great news for Lake Tahoe and our water supply.

"It's a great thing we know where our water supply is coming from the next two to three years and we're standing on it," said Bill Hauck, a hydrologist for TMWA.

If the SNOTEL site is correct Anderson says we're about 229% of normal for this date and two times of normal when you compare it to April first.

"We've got lots of water and I do not think there is anything that could go wrong and not give us enough water this year," said Anderson.

Anderson says the fresh snow was able to absorb the rain we've received and those layers of snow and ice can make the survey all the more harder to do. They'll try to do another snow survey in April.

UPDATED: Why isn't Reno's Virginia Lake filling up with water?

[Mark Robison](#), mrobison@rgj.com Published 11:10 a.m. PT Feb. 27, 2017 | Updated 21 hours ago



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The ditch leading to Virginia Lake in Reno is dry on Feb. 27. (Photo: Mark Robison/RGJ) Buy Photo

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Updated to include city's interaction with FEMA.

Why isn't Virginia Lake in Reno filling up with water?

- **Short answer:** Debris is blocking water from getting there. To remove it will cost about \$15,000, and the city of Reno is waiting to get reimbursement approval from the feds. The city expects to see the situation fixed "in the next month or so."

Full question

Pam Beko of Reno asks, "With all the water we have had this year, I'm wondering why Virginia Lake is only half-full and under the bridge is virtually dry?"

Full reply

Lauren Ball from the city of Reno said the water is being blocked.

"The Cochrane Ditch feeds Virginia Lake and originates near the Sierra Street Bridge on the Truckee River," she said by email. "There is debris that needs to be removed from the intake of the ditch before it is opened. This is a project that we have submitted to FEMA [Federal Emergency Management Agency] as a priority for the city of Reno. As soon as we can clear the debris from the intake structure, the ditch will convey water to Virginia Lake and the lake will refill."

When asked why FEMA's approval was needed before clearing the debris, Ball responded:

"The initial estimate from the city of Reno's Public Works Department shows that it will cost about \$15,000 to remove the debris from the Cochrane Ditch inlet. The city of Reno is seeking reimbursement from FEMA to do the work as part of the city's ongoing flood-recovery efforts. The city will remove the debris whether or not it is reimbursed by FEMA, but due to the extensive nature of the flood damage across the city, the city is seeking FEMA's financial assistance at this time. Residents should expect to see this situation resolved in the next month or so."

Buzzkills...

[Brian Duggan and Brett McGinness](#), Reno Gazette-Journal Published 12:44 p.m. PT March 1, 2017 | Updated 2 hours ago
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It's Wednesday, so let's get to it. Somebody is trying to save the old commercial building, we saved too much water and does anybody know a good real estate agent? The details...

Old building not about to be Old Yeller'd

The oldest commercial building in town — the Reno Mercantile/Masonic Lodge, which was built in 1872 and sits on the same block as the Whitney Peak Hotel — has several gates surrounding it right now. That's because it needs several upgrades to reinforce the structure, something the building's owners say they're willing to do. "It's going to be awesome, we just need to work through the structural elements," said Niki Gross, asset manager for Reno Real Estate Ventures, LLC, the owners of the building. [Mike Higdon has more.](#)

At least everyone can still buy illegal fireworks?

If someone goes to a marijuana festival without marijuana, was it really dab worthy? That's the question thousands of people will be asking this week before the 2017 High Times Cannabis Cup kicks off on tribal land outside of Las Vegas. The festival, one of the largest pot gatherings in the world, usually features plenty of the headliner drug, but federal officials might shut down the event as a result, according to a letter sent by U.S. Attorney Daniel Bogden. [Jenny Kane has the exclusive.](#)

We were so good at saving water that we're going to have to pay more for it

Well, we suppose this is what they mean when people say "no good deed goes unpunished." Because Truckee Meadows Water Authority customers saved so much water during the drought, the water provider needs to increase water rates by 3 percent this year and again next year. "Although water use has gone down, over 90 percent of our costs remain fixed regardless of the amount of water used," TMWA says in a document explaining the proposal. [Mark Robison has more.](#)

Reno-Sparks customers may face 3 percent water rate hike

by News 4-Fox 11 Digital Staff

Tuesday, February 28th 2017



Reno-Sparks customers may face 3 percent water rate hike. (MGN Online)

AA

RENO-SPARKS, Nev. (News 4 & Fox 11) — Reno-Sparks customers have done such a good job of conserving water during the drought that their water utility says it needs to increase its rates.

Truckee Meadows Water Authority is proposing a 3 percent increase this year and another 3 percent increase in 2018.

According to the proposal, a typical resident would pay \$1.42 more per month starting May 2017, with an additional monthly increase of \$1.47 in May 2018.

A TMWA spokesperson said water sales drop during conservation but the utility's costs remain the same, which is why the rate increase is needed.

A public hearing will be held on March 15 before the TMWA board and another hearing will take place on April 19, when the board will likely make a decision on the increase.

Reno's water isn't fluoridated. An assemblywoman wants to change that.

[Seth A. Richardson](#), srichardson@rgj.com Published 10:41 a.m. PT March 4, 2017 | Updated 10:45 a.m. PT March 4, 2017



NOTTINGHAM, ENGLAND - MAY 31: Fast moving water flows. (Photo by Richard Heathcote/Getty Images)(Photo: Richard Heathcote, Getty Images)

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Washoe County remains in the minority of the country by not having a fluoridated water supply, but one Reno assemblywoman is looking to change that.

Currently, Clark County is the only county in Nevada required to fluoridate its water after a 1999 bill passed requiring counties of more than 700,000 people to treat water. Now, Assemblywoman Amber Joiner, D-Reno, wants to change that law so it includes counties with more than 100,000 people — which would add Washoe County to the mix.

“I think it’s time we revisit that,” Joiner said. “We’re a larger community now and I don’t know why it hasn’t happened.”

Despite the overwhelming amount of scientific and medical support for fluoridating water, that doesn't mean everyone is on board. The scientific community is at a consensus that small amounts of fluoride delivered over an extended period of time are beneficial and the water system is the best method of delivery.

Yet people remain opposed to adding fluoride to water, some based on philosophical grounds, some based on cost and some based on questionable scientific findings.

How does fluoridated water work?

Fluoride is a naturally occurring mineral that is already found in many water supplies. Its most common usage is preventing tooth decay, according to Dr. John Novak, a pediatric dentist and vice-chairman of the Washoe County District Board of Health.

“In simple terms, it makes the tooth structure less susceptible to acid,” he said. “Acid is what makes the decay in your tooth process. That’s why when you eat a lot of candy and junk and stuff, that’s turned into acid more than something that may not break down into an acid as well. The sugar breaks down into an acid that the tooth is very susceptible to without the fluoride.”

While most people associate fluoride with dental health, Novak said other studies show it helps with either prevent or treat other ailments such as gum disease, osteoporosis and bone lesions.

Grand Rapids, Mich., became the first city in the nation to adjust its water’s fluoride levels in 1945. Since then, it’s become very common across America.

Statistics from the CDC show around 75 percent of people receiving community water services – about 211 million people – received fluoridated water in 2014.

Water authority pushes back

Joiner is already facing resistance from the Truckee Meadows Water Authority, which voted to oppose the bill at a Feb. 14 meeting. Board members cited cost and circumventing the voters as the main reasons.

A fiscal note from TMWA estimated the cost of fluoridating the water system at around \$70 million in capital projects with a further \$3 million annually for maintenance. That translates to a \$3.90 per month increase per customer, according to TMWA General Manager Mark Foree.

The TMWA board is comprised of local lawmakers and public officials including the Reno City Council, Sparks City Council and Washoe County Commission.

“I don’t have anything against fluoridation in particular,” said Sparks Councilman Ron Smith. “It’s the amounts, the costs that would cost us not only to set up everything, but then to maintain it.”

Voters struck down water fluoridation in a 2002 county ballot initiative. Reno Councilwoman Neoma Jardon said she had political concerns about not putting fluoridation to a vote – especially since TMWA is seeking to [impose a 3 percent rate increase](#) of about \$1.42 a month per customer after residents cut water usage by 20 percent during the drought.

“We tack on anywhere near an 8 percent increase and the voters are going to take us to the shed,” she said.

Reno Councilwoman Jenny Brekhus said she had problems using water as a distribution system in general.

“I’ve always personally – and it’s philosophical – had an objection to thinking of the water system as a medical delivery system,” she said.

The science

Novak said there is a lot of “junk science” floating around about fluoride. While it can cause fluorosis – an over-saturation of the mineral that discolors teeth – that only happens in water systems where there is too much fluoride.

“I heard it expressed at a meeting recently that the concern about it is it’s going to kill the ancient fish in Pyramid Lake,” Novak said. “I’ve heard it’s going to kill the grass in your yard or trees. None of that is true.”

Fluoride is one of the most studied minerals and many scientific reports and medical organizations recommend using community water as a means of delivery.

The [Centers for Disease Control and Prevention](#), the [American Dental Association](#), the [American Medical Association](#) and the [World Health Organization](#) all recommend community water fluoridation. The CDC has called it one of the [10 greatest public health achievements of the 20th Century](#), alongside vaccinations and regulating tobacco use.

Dr. Robert Talley, executive director of the Nevada Dental Association, said his organization is in strong support of Joiner’s bill. The Washoe County District Board of Health is also supporting the measure.

Brekhus said she believed in the benefits of fluoride, but has concerns about how it's distributed. "I feel that if medicine is going to be delivered to someone, it should be with their fully-informed consent," she said in an interview with the RGJ.

“I know people have told me of approaches they have in their personal lives and I have my own history of that in the school being able to take shots of fluorided (sic) water,” Brekhus added. “I know my mother gave me pills growing up outside of a fluorided (sic) system. That’s where everyone can be informed and consenting of this.”

Kevin Dick, Washoe County district health officer, said that idea is mistaken.

“Just to start with on a basic level, fluoride isn’t medicine. It’s a mineral,” he said. “We’re just adjusting the concentration to that optimal level that in the water.”

The website for the CDC states “community water fluoridation is the most cost-effective way to deliver fluoride to people of all ages, education levels, and income levels who live in a community.”

Fluoride pills and supplements can also be more expensive than the proposal to add it to the water. Dick said there are a range of prices and he's heard anywhere from \$5 per month to \$11 per month – assuming the person has insurance.

That puts low-income earners and minorities – who are more likely to not have proper fluoride levels or insurance – at a disadvantage, he said.

“Ms. Brekhus may not understand the challenges that many in our community face with coping with having a place to sleep, with having to feed themselves and their children,” he said. “It doesn't leave them with a lot of time to figure out what their fluoridation options are and how they can get those types of things.”

The cost

The nearly \$70 million price tag and \$3.90 increase in rates per month was the main argument against the bill from TMWA board members during the Feb. 14 meeting.

Multiple organizations, including the CDC and ADA, estimate the return on investment at fluoridated water at a high yield. For every \$1 spent on water fluoridation, the public receives anywhere between \$4 and \$38 in public health benefits.

“One estimate shows that TMWA customers would enjoy a savings in general cost alone of over \$12 million per year,” Joiner said. “When you look at something like that, it is worth the investment. That would be my key point. We can go back and forth about how much we think this will cost up front, but it is absolutely worth the investment in the long term.”

Scientific reports routinely find significant differences in overall dental health as well as risk factors between communities with fluoridated water and communities without.

Dr. Marcia Ditmyer, an assistant dean at the University of Nevada, Las Vegas school of dental medicine, said in one of her studies, fluoridated water was one of the top factors in determining how much tooth decay might affect children.

“Those that lived in an area that was not fluoridated were at two times the risk of getting decayed teeth than those that lived in the areas that were fluoridated,” she said.

A separate adolescent oral health study conducted from 2001 through 2009 headed by Ditmyer found children in Clark County with access to fluoridated water were less susceptible to tooth decay. It also found women, Hispanics, blacks and uninsured children were at greater risk for developing tooth decay because of a lack of access to fluoridated water.

“At the community level, action should focus on retaining and expanding the community fluoridation program as an effective preventive measure,” the [report concludes](#). “At the individual level the study identifies the need for more targeted efforts to reach children early with a focus on females, Hispanics and blacks, and uninsured children.”

Dick, the Washoe County health officer, said beyond the health benefits, there's also an economic cost. People aren't productive when they're visiting the emergency room for dental problems and it also puts a strain on Medicaid, he said.

“We also have \$12 million a year that is spent with people visiting the emergency room because of dental health problems,” he said. “That \$12 million isn’t even used to treat their dental problems. It’s spent on pain pills and on antibiotics to fight the infections that they have because of their dental disease. That’s another expense and obviously those people are not being productive if they have that level of disease if it’s sending them to the emergency room.”

State lawmakers last considered fluoridating Washoe County's water in 2009 and TMWA estimated the cost to be around \$5.5 million, far from the estimated \$70 million presented at the February board meeting.

Foree said the 2009 fiscal note only accounted for the surface water whereas the 2015 bill would require groundwater wells to also comply, leading to higher costs.

Joiner said she’d always planned to work with TMWA and was surprised the numbers were made public before she had a chance to see them or discuss the plan with the board. She also questioned if those numbers were correct and said it sounded high compared with other municipalities.

'A modern community'

Joiner and the public health officials said they were simply surprised that Reno’s water isn’t treated, especially given the scientific consensus and because Reno is often billed as an increasingly cosmopolitan community.

“Most people think that we have it because we’re a modern community,” Joiner said. “When you tell them that we don’t – I think this is also just an educational issue. People don’t know that they need the supplements and they’re not getting them.”

Reno Mayor Hillary Schieve declined to comment.

Joiner’s bill is currently awaiting a hearing in the Assembly Committee on Natural Resources, Agriculture and Mining.

Seth A. Richardson covers politics for the Reno Gazette-Journal. Like him on [Facebook here](#) or follow him on Twitter at [@SethARichardson](#).

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Read or Share this story: <http://on.rgj.com/2IIUJeW>

Clear eyes, full heart

[Brian Duggan and Brett McGinness](#), Reno Gazette-Journal 10:46 a.m. PT March 6, 2017
[CONNECT](#)[TWEET](#)[LINKEDIN](#)[COMMENT](#)[EMAIL](#)[MORE](#)

Welcome to the week, folks. We're going to take a moment and write directly to all members of the Nevada Wolf Pack men's basketball team: Please keep this [supercut of Coach Taylor pep talks](#) on repeat for the remainder of March. What else is happening? Lawmakers are debating whether we should put flouride in our water, we found a bunch of menus of closed restaurants that you might remember and

We're the champs! (for now)

The Wolf Pack men's basketball team won the Mountain West championship Saturday night, so now it's on to the NCAA Tournament! Except (funny story) the Pack's great run over the last 18 games doesn't do anything except determine who plays who in the Mountain West's postseason tournament. If Nevada doesn't win its next three games, it's pretty likely we'll spend another spring in the NIT Tournament, the store-brand cola of college basketball tournaments. [Chris Murray has the details](#).

We could just cut out the middleman and fluoridate the snowpack

Throwback Month at the Nevada Legislature is off to a great start. First we had the reboot of 1972's Equal Rights Amendment; now a Reno assemblywoman is pushing for Washoe County to add fluoride to its water supply. Fluoridation, of course, is part of a secret Soviet plot from 1945 to control America's minds while reducing its tooth decay up to 35 percent. Critics of the plan, including the Truckee Meadow Water Authority, say the plan would be too costly, adding \$3.90 per customer per month to maintain the system. Others say the entire state's mind-controlling needs already are met by Area 51 anyway. [Seth Richardson has more](#).

If any of these menus are still on the fridge, you can take them down now

If you didn't know, the restaurant business is hard. Also, it has some pretty lousy hours AND you have to deal with insufferable Yelp reviewers. To remind everybody about the hardknock lives of our friends in the restaurant business who keep us fat and happy, we found 50 menus of now-closed Reno restaurants, from the Little House on Center Street to Theory in Midtown. We salute thee. [Johnathan Wright has more](#).

The rundown

- [Reno is getting another arcade bar](#)
- [Join the RGJ for Battle Born Politics with Aaron Ford and Ben Kieckhefer at Craft](#)
- [Reno homeless man who lost feet to frostbite exposes need for more outreach](#)
- [Forecast: Snow, then not snow](#)
- [A couple of medical students are trying to change Nevada's marijuana DUI law](#)

- [Washoe County School District's \\$30 million deficit could mean larger class sizes](#)

Who's winning the internet

[The leaked trailer for Deadpool 2](#), which was probably leaked on purpose to make some sort of meta joke about leaked movie trailers.

The Reno Memo is written by Brian Duggan and Brett McGinness. Check us out at [TheRenoMemo.com](#).

Bill to Fluoridate Washoe County Water

Posted: Mar 07, 2017 8:27 PM PST Updated: Mar 08, 2017 6:46 AM PST
By Zac Mooney

CONNECT



Clark County is the only county in Nevada required to add fluoride to its water supply but that change soon.

"Assembly Bill 193 would add fluoridated water in Washoe County," said Assemblywoman Amber Joiner during an Assembly Natural Resources, Agriculture and Mining Committee hearing Tuesday. Assemblywoman Joiner and Assemblyman Mike Sprinkle are sponsoring AB193. The bill would require all counties with a population of more than 100,000 to fluoridate water. The current law applies to counties with 700,000 or more which is specifically Clark County. "When it comes up fluoridation, people say 'Oh we have enough in the water I don't need those supplements for my kids.' And they're always shocked when they learn that we don't."

Several health professionals and child health advocates spoke in favor of the bill, including the Washoe County Health District and Renown and Saint Mary's hospitals. Those in favor say fluoridated water will improve the community's oral health in turn helping its overall health. The more at-risk population that can't afford may also benefit and prevent future pain or medical costs caused by cavities and other health issues.

There is plenty of opposition as well. The Truckee Meadows Water Authority says it does not take a stance on the health factors but has an issue with the cost of implementation as well as the lack of a vote from its customers. Assemblywoman Joiner argues that she was elected to represent the people and points to other public health measures that do not go to a public vote (i.e. restaurant inspections).

Frischeisen, originally from Germany, lives in Reno and is opposed to putting all chemicals into his body, including fluoride. He uses toothpaste with an alternative to fluoride and says it is one of the reasons he is so healthy.

"If people leading or following the advice of their dentist then go ahead, but don't put this into our water supply."

He and others spoke at Tuesday's hearing to share their concerns. People worry about fluorosis, also known as mottled enamel, from too much exposure to fluoride. Some argue that with fluoride in the water (even with the amount monitored) that it would be difficult to tell how much you ingest because of fluoride in other sources of food and drink. Others point to [research](#) that says "fluoride may adversely affect cognitive development in children."

Washoe County voters rejected a measure in 2002 that would have added fluoride to the water supply. The Centers for Disease Control has named fluoridized water one of ten of the greatest public health achievements

FACEBOOK:



News Talk 780 KOH kkoh.com

· 19 hrs ·

Hey Washoe County residents, do YOU want #NVLeg to require Truckee Meadows Water Authority to add fluoride to our water? Assemblywoman Amber Joiner has written AB193 to require counties with more than 100K people to fluoridate.. meaning Washoe County, since Clark county already adds fluoride to their water. Read more below:



Do You Want Fluoride in Your Water?

Looks like we're going to fight over fluoridating water in Nevada. In the state only one county, Clark, mandates that fluoride be added to drinking water,...

kkoh.com
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Beck No!!!
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Remove

News Talk 780 KOH kkoh.com Tell you #NVLeg representatives, Lisa!

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Remove

Lopeared Galute Fluoride is only one of the most toxic poisons we have... Sure!

Like · Reply · 2 · 17 hrs



Remove

Nancy Scarborough No no no! Hell no.

Like · Reply · 2 · 17 hrs



Remove

Marlene Olsen I ditto Nancy.

Like · Reply · 3 · 17 hrs



Remove

Rhonda Lund No

Like · Reply · 2 · 17 hrs



Remove

Curtis Hutchinson Aww hell no!

Who's paying her? I don't know her party, she's out next term!

Like · Reply · 2 · 16 hrs



Remove

Linda Grace AMBER JOINERS PHONE NUMBER IS 775 338 6733 BLOW UP HER PHONE AND LET HER KNOW WE DONT WANT TOXIC WASTE IN OUR WATER AND IT WILL NOT BE FORCED ON US.

Unlike · Reply · 4 · 16 hrs



Remove

Leah Searle Neill NO, NO , NO WAY 🙅🙅🙅

Like · Reply · 1 · 16 hrs · Edited



Remove

Keith Haley No I do not

Like · Reply · 13 hrs



Remove

Jimmy Goodrich NOPE !

Like · Reply · 11 hrs



Remove

Kim Nelson Mazer NO! If you would rather write than call, the bill's author's email address is: Amber.Joiner@asm.state.nv.us. In addition, you can tell all legislators your opinion on AB193 at: <https://www.leg.state.nv.us/App/Opinions/79th2017/A/>

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Remove

James Clapp fluoride is poison, a waste material as a by product of the aluminum manufacturing process!

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Washoe County should fluoridate water: 2 UNR pediatricians

Max J. Coppes and Trudy Larson, Special to the RGJ 6:06 a.m. PT March 8, 2017



(Photo: robertprzybysz, Getty Images/iStockphoto)
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Fluoridation is the controlled adjustment of the fluoride concentration of a public water supply to reduce tooth decay (also called dental cavities) caused by mouth bacteria that make acids from the sugar we consume. Those acids, in turn, eat away at our teeth. Fluoride makes our teeth more resistant to these acids, hence preventing tooth decay. Why is the prevention of tooth decay a big deal? Because healthy teeth are part of our digestive system. Oral health is not about ‘pearly white’ teeth; it refers to the health of our teeth, gums, palate, lips, tongue, and the lining of our mouth and throat. Severe tooth decay may lead mouth bacteria to form dental abscesses, and even lower jaw infections. It can cause debilitating pain, difficulty eating, swelling of the gums, and bad breath. Cavities can lead to the loss of teeth and impact social and emotional health. Tooth decay in all its forms is very prevalent with more than 90% of adults having some form of dental cavities.



Max J. Coppes is a professor of pediatrics physician-in-chief at Renown Children’s Hospital. (Photo: Jeff Ross/Provided)

- **Background story:** [Reno's water isn't fluoridated. An assemblywoman wants to change that.](#)

Prevention of tooth decay is also important because it so pervasive. It is the most common chronic disease in children: it is 5 times more common than asthma, 4 times more common than early childhood obesity, and 20 times more common than diabetes. According to the Centers for Disease Control and Prevention, about 1 in 4 children aged 3 to 5 years have experienced tooth decay, while about 50% of children aged 6 to 9 years and those aged 13 to 15 years have experienced decay.

Between 10 and 20 percent of children, depending on age, have untreated decay. Socioeconomic factors, which have a considerable impact on the health and well-being of children in general, also have an enormous impact. Dental cavities are twice as high in children aged 3 to 15 years from low-income families compared to those from higher income households. Many low income families cannot afford fluoride supplements or dental sealants to prevent decay.



Trudy Larson is director of UNR's School of Community Health Sciences and a professor of pediatrics. (Photo: Provided)

The idea to approach tooth decay as a public health issue rather than an individual health problem goes back to the 1940s and 1950s when several studies showed that the adjustment of fluoride levels in drinking water significantly reduced the development of cavities.

Today, more than 211 million people benefit from its implementation. In Nevada about 74% of the population receives fluoridated water, but we in Washoe County do not. As public health advocates, parents, and providers of care to children and teenagers, we find this very problematic. Our children, our families, our community deserve better.

Max J. Coppes is chair and Nell J. Redfield professor of pediatrics at UNR Med as well as physician-in-chief at Renown Children's Hospital. Trudy Larson is director of the School of Community Health Sciences at UNR and professor of pediatrics at UNR Med.