



## STAFF REPORT

**TO:** Board of Directors  
**THRU:** Mark Foree, General Manager  
**FROM:** Scott Estes, Director of Engineering  
John Enloe, Operational Strategies Manager  
John Erwin, Director of Natural Resources  
Jeff Tissier, CFO  
**DATE:** May 14, 2015  
**SUBJECT:** **Second and Final Reading, Public Hearing and Possible Adoption of Resolution No. 229 to Amend TMWA’s Rate Schedule Water System Facility Charges (WSF)**

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### **RECOMMENDATION**

Staff submits for Second Reading and adoption by resolution the proposed amendments to the TMWA Rate Schedule WSF to Modify Charge Area 14 and 15 Facility Charges and Boundaries. Proposed amendments are shown in the attached redline copies.

**Possible Motion:** “I move to adopt Resolution 229 and to amend TMWA’s Rate Schedule WSF to Modify Charge Area 14 and 15 Facility Charges and Boundaries, to be effective upon the start of business day June 1, 2015.”

### **BACKGROUND**

During merger due diligence, TMWA identified that once the mergers with STMGID and Washoe County were complete, TMWA would need to develop programs to move surface water into and conjunctively manage surface and groundwater resources in the Mt. Rose/Galena Fan area to protect existing municipal groundwater supplies. The Mt. Rose/Galena Fan area is located in the southwest Truckee Meadows and is broken into two sub-areas: (1) the area in Pleasant Valley Hydrographic Basin 88, also referred to as the Arrowcreek/Mt. Rose Area (“Arrowcreek/Mt Rose”) and (2) the southwest area in Truckee Meadows Hydrographic Basin 87, also referred to as the STMGID West/Thomas Creek area (“STMGID West”). TMWA Charge Area 14 encompasses portions of STMGID West/Thomas Creek and Arrowcreek/Mt. Rose. TMWA Charge Area 15 encompasses only portions of Arrowcreek/Mt. Rose. Each area has unique geology and hydrologic constraints and thus, two separate but necessary solutions are required to improve groundwater resource supplies in these areas.

Based on growth and other projections at the time, it was anticipated TMWA would have some time after the merger closing to refine and implement conjunctive use resource and facility planning in these areas. However, accelerated recovery in the housing markets combined with historic extended drought conditions have accelerated the need to implement such plans to mitigate impacts of future groundwater dedications while developing long term engineered solutions to replenish the aquifer. These plans include 1) identifying supplemental surface water dedication requirements; and 2) modifying capital improvement plans to develop water system facilities to move surface water resources into the fan area.

On December 31, 2014, the Truckee Meadows Water Authority acquired the water utility systems of the Washoe County Department of Water Resources (“DWR”) and the South Truckee Meadows General Improvement District (“STMGID”). The systems acquired include systems in the Mt. Rose/Galena Fan area in southwest Reno. As a result, TMWA is now the municipal purveyor with the authority to provide water service to new development in the Mt. Rose/Galena Fan.

The First Reading to amend TMWA Rate Schedule Water System Facility Charges (“WSF”) to modify Charge Area 14 and 15 Facility Charges and boundaries was presented for the Board’s consideration and discussion on April 15, 2015, at which time the amendment was approved for referral to a second reading. The proposed amendments are necessary to allocate costs of additional facilities identified by TMWA after completion of the merger which will be necessary to conjunctively manage and improve the sustainability of water supply in Charge Areas 14 and 15.

## **DISCUSSION**

The Mt. Rose/Galena Fan is located in hydrographic basin 88 and the southwest corner of hydrographic basin 87. The area is generally located along the corridor of the Mt. Rose highway, and south of the highway into Pleasant Valley. In addition to the former municipal systems of DWR and STMGID, there are approximately 450 to 500 active domestic wells in Area 15 that rely on groundwater resources.

DWR and STMGID relied solely on groundwater to provide water supply in the Mt. Rose/Galena Fan area, providing water service through numerous municipal wells. Many of these rights came from the County’s acquisition of the Mt. Rose Utility system and various groundwater rights in the early 1990’s. Mt. Rose Service Company also assigned ownership of various water rights to private parties as well, so ownership of permitted groundwater rights are mixed between DWR (now TMWA) and private developers. On paper, TMWA now owns over 3,900 AF of groundwater permits issued by the State Engineer in Basin 88. Approximately 1,500 AF of groundwater permits remains uncommitted for future use.

The primary risk with any water right is whether a reliable supply of actual physical water exists year-in, year-out that can be diverted for the intended use. The critical question is not whether a person has a right on paper (i.e., in a permit) to water, it is whether the water claimed on paper actually exists. This is particularly true in groundwater basins where the amount of water stored in the aquifer continually declines year-over-year. If aquifers are over pumped and in continual

decline, wells eventually go dry, causing hardships on municipal and domestic well owners and threatening the sustainability of water supplies previously committed for service.

In the early 1990's, concern was expressed that the Mt. Rose/Galena Fan aquifer was being over pumped, causing continual decline in water levels year-over-year without evidence of recovery from the natural hydrologic cycle. In 1991, County modeling concluded that "pumping a total of 8,892 AFA of groundwater from the Mt Rose / Galena Fan area... results in over pumping of the aquifer system". See Preliminary Results of Groundwater Investigation, Technical Memo 4, pg 4-2 (Jan 25, 2002). The County developed the South Truckee Meadows Facility Plan, which concluded the Mt Rose/Galena Fan aquifer is over pumped and in need of supply augmentation in order to meet demands in the area,<sup>1</sup> reaffirming earlier County modeling efforts.

Based on analyses, studies and the history of groundwater levels in Area 15 and the southwest portion of Basin 87, water levels are declining and evidence indicates additional withdrawals of groundwater will exceed the perennial yield of the basin, causing continued declines in water levels in the aquifer. TMWA staff has determined that sufficient evidence exists to conclude that the number of permitted groundwater rights in Area 15 is greater than the amount of actual physical water than can be extracted on a sustainable basis without impairing TMWA water rights used to meet existing commitments or impairing existing domestic wells. These issues were identified by TMWA during the Merger due diligence. TMWA recognized that upon acquisition of the DWR and STMGID systems, TMWA would need to develop programs to move surface water into these systems and conjunctively manage surface and groundwater resources in the Mt. Rose Fan to protect existing municipal groundwater supplies. In fact, TMWA's unique ability to provide conjunctive use management (something neither STMGID nor DWR could do with their more limited assets) was one of the identified benefits in consolidating the systems. In anticipation of the groundwater issues, the TMWA Board adopted the County's Mt Rose / Galena Fan Domestic Well Mitigation Program to provide mitigation for domestic well owners suffering unreasonable adverse impacts from municipal well pumping. Additionally, prior to the completion of the merger TMWA staff began evaluating and developing strategies for financing and constructing infrastructure needed to move surface water resources into the Mt. Rose Fan area.

#### **A. Southwest Truckee Meadows Conjunctive Use Facility Plan**

In October 2014, the TMWA Board approved amendments to Schedule WSF that implemented applicable mechanisms to recover costs for infrastructure to serve growth in the STMGID and Washoe County water systems upon the close of merger. The collection of Facility Charges from new development is necessary to reimburse the utility for facility improvements required to meet the demands of new growth. Area Facility Charges, Supply and Treatment Facility Charges and Storage Facility Charges apply only to developers or applicants applying for new or expanded

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<sup>1</sup> "A consensus was reached that it is likely that the municipal wells can reliably supply up to approximately 75% of the groundwater rights allocated to municipal wells in the STM, in addition to the demand placed on the aquifer by individual domestic wells." Technical Memo 8, Recommended Water and Wastewater Facility Plan, Pg 8-3 (June 28, 2002)

water service, and do not affect the costs or rates to serve existing customers. In other words, pursuant to prior Board direction on customer rates: growth pays for growth.

To begin the process to mitigate the potential shortfall in real water in this area, TMWA has identified the need for additional infrastructure and facilities to take advantage of Galena, Thomas and Whites Creek resources to improve the long-term viability and sustainability of water supplies in this region. In order to recover applicable costs from new development, TMWA staff is seeking Board approval of amendments to the Water System Facility charges imposed on new development in Charge Areas 14 and 15.

Since the merger, TMWA conducted pump tests at the Napoleon #1 & #2 Wells (formerly known as the Tessa East & West Wells). Based on the result of those pump tests, staff concluded that continued pumping of these wells at rated/design capacity cannot be sustained. The non-pumping static water level in these wells has declined about 80 feet in the last 10 years and average pumping levels are now 45 feet below the top of the well screen. The long-term reduction of pressure in water bearing strata can lead to dewatering and consolidation of the geologic formation and can result in irreversible damage to the aquifer. Approximately 1,450 gallons per minute (gpm) of maximum day supply has been committed from the Napoleon wells. However, staff is limiting the production from these two wells to 1,000 gpm total to reduce continued degradation of the basin. A similar conservative approach is recommended for equipping of the future Callamont wells. Clearly a supplemental source of supply is needed for the area.

The current groundwater situation has been aggravated by continued drought conditions, thus staff is accelerating plans to construct facilities to deliver conjunctive use surface water into the area. The resulting facility plan is slightly different than that used to develop the original developer fees approved in 2014. The current plan takes advantage of existing property and facilities with excess off-peak capacity to deliver surface water to the upper reaches of the Arrowcreek system to allow passive recharge to begin in much of Area 15 during the winter of 2015/2016. The plan is a phased approach and eventually will deliver surface water to the balance of Area 15, including the upper reaches of the Mt. Rose system. In addition, the current facility plan still includes a separate system to deliver conjunctive use surface water into the STMGID West zone (Area 14) with a proposed in-service date for these facilities in Fiscal Year 2017.

As a preliminary matter, TMWA recognizes that some of the facilities to implement conjunctive use on the Thomas Creek/Whites Creek and Galena Creek/Mt. Rose fans address an existing problem with supply to existing customers. As these facilities will benefit primarily existing customers, it is appropriate that the cost of these facilities should be paid by existing customers. TMWA identified the need to construct these facilities and improve supply to existing customers during merger due diligence, so as part of the merger requirements with STMGID TMWA identified and required the transfer of STMGID cash and assets to pay for the construction of these facilities. The costs of these facilities are not included in the Area 14 or Area 15 Facility Charges, and will not be paid by TMWA customers, but will be financed by treasury transferred to TMWA as part of the merger.

New facilities will also be required to implement conjunctive use for new development demands. Since new growth in Area 14 will be served by supply from TMWA's Truckee River Resource Area ("TMRA")<sup>2</sup>, new development utilizing TMRA resources in Area 14 will pay the full TMWA Supply-Treatment Facility Charge to recover the costs for growth demands on Truckee River supply and treatment facilities.

In addition, TMWA has identified the need to construct a small treatment plant located above the Arrowcreek system to treat Whites Creek and Thomas Creek water to provide reliability of supply, avoid or reduce pumping costs and avoid major on-peak capacity improvements within the lower TMWA gravity system. The County's South Truckee Meadows Facility Plan recognized "The upper treatment plant is an integral component of the recommended water supply plan.... Most importantly; it will provide recharge water and/or offset winter groundwater pumping in the upper Mt Rose fan area".<sup>3</sup> Although actual will-serve commitments will be made against groundwater dedications, it will take both groundwater and conjunctive use surface water to effectively realize the yield of the groundwater rights. As these facilities primarily benefit growth, the cost of the treatment plant and the additional creek rights to make it viable will be paid by growth in Area 15.

## **B. Southwest Truckee Meadows Conjunctive Use Water Resources**

Sufficient evidence exists to conclude that the number of permitted groundwater rights in Area 15 is greater than the amount of actual physical water than can be extracted on a sustainable basis without impairing the use of TMWA permits to meet prior commitments and/or existing domestic wells. Accepting groundwater rights as the sole source of supply without some element of mitigation will expose TMWA and existing customers to potentially substantial additional financial risk, accelerate and increase the number of claims under the existing Domestic Well Mitigation Program, and/or degrade the aquifer before supply augmentation solutions can be implemented.

The success of the conjunctive use plan for the Mt Rose and STMGID areas requires additional surface water resources be delivered to the areas. The Area 15 charges include a resource supply component to enable TMWA to acquire supplemental surface water supplies when accepting groundwater dedications in Area 15. Supplemental surface water resources are a critical component of conjunctive resource management and are necessary to ensure a sustainable water supply for existing and new development in these basins. Requiring supplemental resources is similar in concept to requirements imposed by the County in Spanish Springs prior to the merger. In the event the Applicant is able to dedicate supplemental surface (creek) water supplies to TMWA which are acceptable to TMWA under Rule 7, the Area 15 charge would be reduced to offset the surface water resource component in the fee.

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<sup>2</sup> As defined in Rule 7 the "Truckee Meadows Resource Area ("TMRA")" means the portion of TMWA's Service Area within which TMWA can accept for dedication any mainstem Truckee River water source/right that can be diverted at its Chalk Bluff or Glendale treatment plants.

<sup>3</sup> Technical Memo 8, Recommended Water and Wastewater Facility Plan, Pg 8-14 (June 28, 2002)

## C. Development of Proposed Fee Amendments for Areas 14 and 15

### 1. “Growth pays for growth”.

The City of Reno, City of Sparks and the County of Washoe formed a Joint Powers Authority (JPA) in December of 2000, pursuant to Chapter 277 of the NRS, with the purpose of acquiring the water assets of Sierra Pacific Resources (SPR). SPR decided to divest its water assets in a blind bid process, whereby potential bidders are unknown to each other and bona fide bids are confidential. The intent of the local governments was to preserve local control of the region’s water resources consistent with what existed historically.

On June 11, 2001, the water operations transitioned from SRP to TMWA. At the time of transition SRP looked to customer rates to support expansion of certain elements of the water system for new and expanded service, i.e. growth, which has a very specific meaning. Costs associated with feeder main improvements to serve new and expanded service was originally charged to “growth” by SRP but supply/treatment and storage costs related to new and expanded service were borne by customer rates including a rate of return on utility constructed improvements as approved by the Public Utilities Commission of Nevada.

Subsequent to TMWA assuming water system operations, staff proposed and the TMWA Board adopted Resolution 19 *Adopting a Financial Guidelines Policy* at the September 2001 board meeting. This policy is also referred to as the “non-cross-subsidization policy” which essentially declared that there would be no cross-subsidization between customer groups or classes. This policy had far reaching implications in that it clearly defined the concept that “growth pays for growth”. As a result, the funding responsibilities for supply/treatment and storage costs associated with new and expanded service transferred from existing customer rates to developers. These costs for feeder main, supply/treatment and storage facilities for growth are recovered from developers under TMWA’s WSF (Water System Facility) fees in TMWA’s rate schedules (and are also known as “Facility Charges” or “System Development Charges” in the industry). In September 2003 when customer rates were adjusted, the development community took responsibility for all costs assigned to new and expanded service and TMWA instituted the WSF fees that included feeder main fees. These fees have been periodically updated in fiscal years 2005; 2006; 2008 and 2013.

In October of 2014 in a merger related item, TMWA updated these WSF fees to include areas of service of the former Washoe County Water Utility and the South Truckee Meadows General Improvement District so that TMWA was prepared to collect WSF fees from growth in this area after the merger was completed. At that time the terminology for Feeder Main Area unit costs was changed to Area Facility unit costs. These fees are periodically updated as required and reviewed for adequacy and adherence to Resolution 19.

**2. Funding sources available to implement the Arrow Creek and STMGID conjunctive use facilities, and the planned water treatment plant.**

Transferred cash reserves from Washoe County (\$35.52 million) and STMGID (\$15.7 million) will be used to fund the conjunctive use projects which benefit existing customers. With respect to the Mt. Rose Surface Water Treatment Plant, Washoe County cash reserves will be used again to initially to fund the project in addition to any connection fees collected for this purpose up to the point of construction completion. Post construction, TMWA will seek reimbursement from supply/treatment connection fees to replenish the cash reserves used to construct this treatment facility.

**3. Adapting the Capital Improvement Plan to post-merger conditions**

The 2010-2030 Water Facility Plan Update was issued in July 2010 and subsequently approved by the Board in October 2010 (2010 WFP). The 2010 WFP provides a 20-year blueprint for orderly expansion of the water system to serve growth while maintaining adequate levels of water service for existing customers. The 2010 WFP utilizes the Maximum Day Demand projections produced by TMWA's Resource group to establish the timing and sizing of improvements to meet capacity requirements of the water system through the 20-year planning horizon. The 2010 WFP is typically updated every five years. TMWA's Capital Improvement Plan CIP is prepared and approved by the Board on an annual basis and reflects adjustments in the timing and scope of projects to reflect current conditions. The annual CIP can be described as a mini-WFP since it is a focused, five year look ahead at facility requirements.

The 2010 WFP did not contemplate a consolidation with the Washoe County and STMGID water systems. The facilities published in the 2010 WFP for the South Truckee Meadows (STM) Phase 1 and 2 were for distribution system improvements in TMWA's gravity system (and Longley pump zone) to provide up to 7,400 gallons per minute (GPM) and up to 11,650 GPM, respectively in wholesale water to the County in the STM. As is sometimes the case, the facilities were never constructed since the County decided to pursue other means of expanding the capacity of their water supply.

Due to dependence upon groundwater and the continued decline in water levels aggravated by the ongoing drought, it is necessary to provide a supplemental source of supply for the water systems located on the upper Mt. Rose and Galena fan areas as soon as possible. This is a current problem impacting existing customers. The Arrowcreek-Mt. Rose Conjunctive Use Facilities Phase 1 and 2 items in the current CIP will provide up to 1,500 GPM of off-peak supply for the upper fan areas to allow the TMWA production wells in Area 15 to rest during the winter season.

The Phase 1 facilities consist of three booster pump stations and about 3,600 feet of 10-inch pipe on Zolezzi Lane to deliver conjunctive use water to the Arrowcreek #3 Tank. Phase 2 improvements move some of the supply into the Mt. Rose, St. James and Galena Forest areas. Because the facilities do not require acquisition of private property, they can be

constructed relatively quickly, which is a major benefit to the plan. This supply plan should meet the off-peak demand of existing (plus committed) customers but will not provide additional on-peak capacity for growth in Area 15.

Approved tentative maps in Area 15 include:

• Sierra Reflections	938 units
• Terrasante (Callamont)	210 units
• Mt. Rose Estates	23 units
Total	1,171 units

The estimated maximum day demand for these potential future single family residential units is about 1,557 GPM. In comparison, the estimated maximum day demand for existing plus committed customers in Area 15 is about 4,680 GPM. To provide reliability for existing customers and additional capacity to serve the approved development in Area 15, a two million gallon per day (2 MGD; 1,400 GPM nominal capacity) water treatment plant is proposed for treating creek water from Whites Creek and Thomas Creek. This “wet” surface water capacity will augment the 1,500 acre-feet of local basin groundwater rights that were banked by Washoe County as “acceptable resources” to meet future residential project dedication requirements.

An alternative analysis indicated that this plan is the overall least cost option for increasing the supply to Area 15, ranking highly from both a lower operating cost and also from a capital cost perspective. It is proposed that a suitable site for the treatment plant be acquired and permitted as soon as possible to allow time to perform a more detailed analysis of potential growth and development to be completed prior to initiating construction of the facilities.

The STMGID Conjunctive Use Facilities item in the CIP will provide a conjunctive use supply for Area 14 which consists primarily of the former STMGID customers in the western portion of STMGID. Very little future growth is anticipated in Area 14 and the facilities are proposed to benefit existing customers by preserving the existing groundwater supply. The system consists of a new booster pump station to be located on the reclaim water reservoir site off of Arrowcreek Parkway and about 8,100 feet of 10-inch pipe on Arrowcreek Parkway to deliver about 1,000 GPM of off-peak supply to the STMGID Tank 4 and Tank 5 zones.

Looking beyond the tentative maps listed above, there may be an additional 1,600 acres of developable land in and adjacent to Area 15. In the future, if overall supply capacity to the Double Diamond area is increased sufficiently, a relatively moderate oversizing of these facilities (14” pipeline, slightly bigger pumps/motors) could provide up to 2,500 GPM of on-peak supply for growth on the upper fan area if a development were to pay the direct costs of extending facilities from the STMGID Tank 4/5 zone. The decision to oversize this pipeline and provide additional capacity to serve future development will be made at a later date.

In summary, immediate construction of the facilities to implement conjunctive use should provide a measure of reliability for existing customers by mitigating the continued decline of

groundwater levels in the area; and the development of supplemental surface water supplies and dedication requirements will provide for the long-term solvency of existing local groundwater rights.

#### **4. Water resource planning to meet objectives of the Regional Plan / Forest Area Plan.**

In the early 1990's, concern was expressed that the Mt. Rose/Galena Fan aquifer was being over pumped, causing continual decline in water levels year-over-year without evidence of recovery from the natural hydrologic cycle. In 1991, County modeling concluded that "pumping a total of 8,892 AFA of groundwater from the Mt Rose / Galena Fan area... results in over pumping of the aquifer system". In 2002, the County adopted the South Truckee Meadows Facility Plan, which also concluded the Mt Rose/Galena Fan aquifer is over pumped and in need of supply augmentation in order to meet demands in the area.

TMWA recognized that upon acquisition of the DWR and STMGID systems, TMWA would need to implement plans to move surface water into these systems and conjunctively manage surface and groundwater resources in the Mt. Rose Fan to protect existing municipal groundwater supplies. TMWA's unique ability to provide conjunctive use management (something neither STMGID nor DWR could do with their more limited assets) was one of the identified benefits in consolidating the systems.

Subsequent to the merger, TMWA staff determined that sufficient evidence exists to conclude that the number of permitted groundwater rights in Area 15 is greater than the amount of actual physical water that can be extracted on a sustainable basis without impairing TMWA water rights used to meet existing commitments or impairing existing domestic wells. Although actual will-serve commitments will be made against groundwater dedications, it will take both groundwater and supplemental surface water (creeks) rights to effectively realize the yield of the groundwater rights to ensure a sustainable water supply for existing and new development in these basins.

Surface water from local creeks, historically used for agricultural irrigation, has long been part of the regional water resources mix for the South Truckee Meadows. In addition to creek water rights dedicated for return flow purposes and used to augment the STMWRF reclaimed water supply, over 1,900 acre feet of creek water rights have been approved by State Engineer for will-serve commitments. Will-serve commitments have been issued against these creek rights since 2010. Furthermore, continued conversion of the creek water resources in the South Truckee Meadows to municipal use will not negatively impact TMWRF operations (personal communication, Mike Drinkwater, TMWRF Plant Manager).

The County's South Truckee Meadows Facility Plan recognized "The upper treatment plant is an integral component of the recommended water supply plan.... Most importantly; it will provide recharge water and/or offset winter groundwater pumping in the upper Mt Rose fan area". TMWA's plan to develop a small water treatment facility for this purpose is consistent with the Facility Plan, as well as Washoe County's Forest Area Plan, quoted below:

“Water Resources – Supply

Goal Seventeen: Water resources will be supplied to land uses in the Forest planning area according to the best principles/practices of sustainable resource development. Because all existing residences are supplied by groundwater wells, future development must be constrained to the sustainable groundwater yield of the basins in the planning area, and minimize pumping impacts to domestic wells. Whenever possible, future water supply systems will be designed to lessen the burden on existing municipal and domestic wells.”

The proposed amendments to TMWA Rate Schedule Water System Facility Charges are also consistent with goals of the Regional Plan. The Regional Plan includes goals and policies to promote a Regional Form which encourages development within Transit Oriented Development Corridors and Regional Centers. As a water purveyor that responds to approved development, TMWA does not promote or encourage development in one location versus another. *When, where and what type* of growth should occur is solely within the land use entitlement and planning functions of cities, counties and regional planning agencies. By contrast, water supply planning is designed to provide for *the ability* to deliver safe and reliable water supplies through engineering solutions and project design, if and when land use entitlements are granted. Under the Cooperative Agreement, TMWA is obligated to provide retail water service to users in its service area, which it can only do by identifying and planning for water service needs within its retail and planning service areas. TMWA’s integrated planning processes ensures the long-term resource, facility and funding mechanisms are in place to meet current and future demand conditions. TMWA notes that the recommended WSF charge for the proposed Area 15 (a portion of the Washoe County TMSA) is \$12,568 compared to \$5,096 for the Central Reno Charge Area, demonstrating financial incentives for developing in the urban core consistent with the regional planning goals.

## SUMMARY

TMWA is now the municipal purveyor with authority to issue will-serve commitments in Areas 14 and 15. As described above, analysis by TMWA of the groundwater conditions in Areas 14 and 15 concurs with prior analyses that additional water resources are needed in the Mt Rose area. TWMA has developed plans to conjunctively manage surface and groundwater resources in the Mt. Rose Fan to protect existing municipal groundwater supplies. Growth and development demands in Areas 14 and 15 as well as historic extended drought conditions have accelerated the need to implement a plan to mitigate impacts of groundwater dedications while long term engineered solutions to replenish the aquifer are explored. Supplemental surface water resources are a critical component of conjunctive resource management and providing for a sustainable water supply for existing and new development in this basin.

The proposed amendments to the Area 14 and 15 fees are shown in the attached red-line version of Rate Schedule WSF. Area Facility Charges are applied on a geographic basis and are based on the cost to expand the capacity of the water system in specific areas where growth is anticipated to occur. The proposed changes include modified boundaries between Areas 14 and 15 to better reflect actual operational pressure zones and the actual areas benefiting from the facilities.

As part of the public process associated with amending TMWA's rates or fees, TMWA conducted a public workshop on Monday evening, April 13, 2015. A First Reading and public hearing of the amendments was heard by the Board at its April 15, 2015 meeting. TMWA also conducted a presentation on this subject to BANN's Infrastructure & Planning Committee on April 23, 2015. As of this writing, staff has not received any written comments on the proposed amendments.

Staff recommends the Board adopt Resolution 229 and to amend TMWA's Rate Schedule WSF to Modify Charge Area 14 and 15 Facility Charges and Boundaries, to be effective upon the start of business day June 1, 2015.

**TRUCKEE MEADOWS WATER AUTHORITY**

**RESOLUTION NO. 229**

**A RESOLUTION ADOPTING AMENDMENTS TO TRUCKEE MEADOWS WATER AUTHORITY’S SCHEDULE WSF “WATER SYSTEM FACILITIES”**

**WHEREAS**, upon its formation, the Truckee Meadows Water Authority (“the Authority”) adopted Rules of Service on March 28, 2001, and such Rules have been modified and revised subsequent to the formation of TMWA;

**WHEREAS**, after conducting a review of its rate schedules, the Authority has revised and amended Rate Schedule WSF from time to time to meet the needs of its business environment by ensuring appropriate cost recovery through its fees and rates;

**WHEREAS**, the Authority’s Board desires to amend the Authority’s Rate Schedule WSF to update the fees charged for services rendered and facilities constructed as more fully described in Exhibit 1 attached hereto and incorporated herein by reference;

**WHEREAS**, the revisions to Rates Schedule forth in Exhibit 1 attached hereto and incorporated herein are appropriate and justified;

**NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE TRUCKEE MEADOWS WATER AUTHORITY DOES RESOLVE:**

The revisions to Rate Schedule WSF as set forth in Exhibit 1 are approved and adopted effective the start-of-business day June 1, 2015.

Upon motion of \_\_\_\_\_, seconded by \_\_\_\_\_, the foregoing Resolution was passed and adopted this 21st day of May, 2015, by the following vote of the Board:

Ayes: \_\_\_\_\_

Nays: \_\_\_\_\_

Abstain: \_\_\_\_\_ Absent: \_\_\_\_\_

Approved this 21st day of May, 2015

\_\_\_\_\_  
Chairman

Truckee Meadows Water Authority  
Resolution No. 229

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

On this \_\_\_\_\_ day of May, 2015, 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.

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Notary Public

## Truckee Meadows Water Authority

### RATE SCHEDULES

#### WSF – WATER SYSTEM FACILITY CHARGES

#### APPLICABILITY

Pursuant to procedures set forth in Rule 5, Applicants for new Service or Modified Service to a Service Property(ies) are subject to Water System Facility (WSF) Charges. WSF Charges are based on the Maximum Day Demand estimated in gallons per minute (GPM) by the Authority to serve the Service Property(ies) multiplied by the following Unit Costs. WSF Charges will be assessed where applicable and as identified in the Water Service Agreement.

#### A. Area Facility Unit Cost by Charge Area

	Charge Area	Amount	
0	Central Reno	\$ 0.00	per GPM
1	South Truckee Meadows	\$958.00	per GPM
2	Sparks-East Reno	1,711.00	per GPM
2A	Sparks-Inside McCarran Blvd	856.00	per GPM
3	Northwest Reno – Northgate/Mogul	1,575.00	per GPM
4	Sparks – Pyramid/Spanish Springs	2,877.00	per GPM
5	Sparks – The Vistas	4,555.00	per GPM
6	Sun Valley-Sullivan Pump Zones	1,309.00	per GPM
7	Verdi	TBD	
8	Sierra-North Virginia Pump System	4,168.00	per GPM
8A	Horizon Hills	4,023.00	per GPM
9	Lakeridge-Plumas Pump System	1,838.00	per GPM
10	Stead – Silver Lake	5,623.00	per GPM
11	Southeast Truckee Meadows	2,828.00	per GPM
12	Spanish Springs	5,789.00	per GPM
13	Lemmon Valley	2,734.00	per GPM
13A	Heppner*	1,011.00	per GPM
13B	Fish Springs	4,237.00	per GPM
14	<del>Thomas/Whites</del> _____ Creek	<del>5,103.00</del>	per GPM
	<del>STMGID West/Thomas Creek</del>	<del>655.00</del>	
15	<del>Mt.</del> _____ <del>Rose/Galena</del>	<del>4,038.00</del>	per GPM
	<del>Arrowcreek-Mt. Rose**</del>	<del>12,568.00</del>	

\_\_\_\_\_ Where a Service Property is not located within an established Charge Area described above or where the Area Facility Unit Cost for that Charge Area has not been established, applicable Area Facility Unit Costs shall be determined by Authority on a case by case basis and may include charges for on-site and off-site improvements, including Oversizing Costs, to integrate new Water System Facilities or to connect to, expand, relocate or alter existing water Facilities, determined by the Authority as necessary to facilitate annexation of the Service Property into the Authority's Retail Service Area and/or development of the Charge Area or Charge Area Unit Cost to be established, as set forth in the Annexation Agreement or Water Service Agreement between Applicant and Authority.

\* Charge Area 13A is subject to an additional charge of \$5,490.00 per lot for on-site distribution improvements.

Added: 06/18/03 Amended: 10/01/03; 01/21/04; 03/01/05; 10/18/06; 03/01/08; 05/21/09; 05/21/10; 06/19/13; 10/15/14; 01/01/15

# Truckee Meadows Water Authority

## RATE SCHEDULES

### WSF – WATER SYSTEM FACILITY CHARGES

\*\* Component of fee includes estimated costs of acquiring supplemental resource supply. Fee may be reduced to \$7,618.00 upon Applicant dedication of an acceptable combination of groundwater and creek water rights to satisfy supplemental conjunctive use supply as determined by the Authority pursuant to its Rule 7.

Added: 06/18/03 Amended: 10/01/03; 01/21/04; 03/01/05; 10/18/06; 03/01/08; 05/21/09; 05/21/10; 06/19/13;  
10/15/14; 01/01/15

## Truckee Meadows Water Authority

### RATE SCHEDULES

#### WSF – WATER SYSTEM FACILITY CHARGES

#### B. Supply and Treatment Facility Unit Cost By Charge Area

"Supply and Treatment Facility Unit Cost" is the unit cost in dollars per GPM of Maximum Day Demand, representing the cost to construct and finance supply/treatment improvements identified in the Authority's facility plan.

Charge Area	Amount	
0 Central Reno	\$4,163.00	per GPM
1 South Truckee Meadows	4,163.00	per GPM
2 Sparks-East Reno	4,163.00	per GPM
2A Sparks-Inside McCarran Blvd	4,163.00	per GPM
3 Northwest Reno – Northgate/Mogul	4,163.00	per GPM
4 Sparks – Pyramid/Spanish Springs	4,163.00	per GPM
5 Sparks – The Vistas	4,163.00	per GPM
6 Sun Valley-Sullivan Pump Zones	4,163.00	per GPM
7 Verdi	TBD	per GPM
8 Sierra-North Virginia Pump System	4,163.00	per GPM
8A Horizon Hills	4,163.00	per GPM
9 Lakeridge-Plumas Pump System	4,163.00	per GPM
10 Stead – Silver Lake	4,163.00	per GPM
11 Southeast Truckee Meadows	4,163.00	per GPM
12 Spanish Springs	4,163.00	per GPM
13 Lemmon Valley	0.00	per GPM
13A Heppner	0.00	per GPM
13B Fish Springs	0.00	per GPM
14 <u>STMGID</u> <u>West/Thomas/Whites</u> Creek	<del>2,082.00</del> <u>4,163.</u> <u>00</u>	per GPM
15 <u>Arrowcreek</u> -Mt. Rose/ <u>Galena</u>	<del>2,082.00</del> <u>0.00</u>	per GPM

Added: 06/18/03 Amended: 10/01/03; 01/21/04; 03/01/05; 10/18/06; 03/01/08; 05/21/09; 05/21/10; 06/19/13;  
10/15/14; 01/01/15

## Truckee Meadows Water Authority

### RATE SCHEDULES

#### WSF – WATER SYSTEM FACILITY CHARGES

#### C. Storage Facility Unit Cost By Charge Area

“Storage Facility Unit Cost” is the unit cost in dollars per GPM of Maximum Day Demand, representing the cost to construct and finance storage improvements identified in the Authority’s facility plan.

	Charge Area	Amount	
0	Central Reno	\$933.00	per GPM
1	South Truckee Meadows	933.00	per GPM
2	Sparks-East Reno	933.00	per GPM
2A	Sparks-Inside McCarran Blvd	933.00	per GPM
3	Northwest Reno – Northgate/Mogul	933.00	per GPM
4	Sparks – Pyramid/Spanish Springs	933.00	per GPM
5	Sparks – The Vistas	933.00	per GPM
6	Sun Valley-Sullivan Pump Zones	933.00	per GPM
7	Verdi	TBD	per GPM
8	Sierra-North Virginia Pump System	933.00	per GPM
8A	Horizon Hills	0.00	per GPM
9	Lakeridge-Plumas Pump System	933.00	per GPM
10	Stead – Silver Lake	933.00	per GPM
11	Southeast Truckee Meadows	0.00	per GPM
12	Spanish Springs	0.00	per GPM
13	Lemmon Valley	0.00	per GPM
13A	Heppner	0.00	per GPM
13B	Fish Springs	0.00	per GPM
14	<del>STMGID</del> <u>West/Thomas</u> <del>Creek/Thomas/Whites Creek</del>	0.00	per GPM
15	<del>Arrowcreek-Mt. Rose</del> <u>Mt. Rose/Galena</u>	0.00	per GPM

NOTE: The following map depicts only approximate boundaries of the Charge Areas because the Authority’s distribution system undergoes frequent modification, Charge Area boundaries are subject to frequent adjustment and the exact boundaries of the Charge Areas shall be maintained by and may be adjusted from time to time by the General Manager of the Authority. The Authority attempts to keep a current map posted on its website, at [www.tmwa.com](http://www.tmwa.com); however, this map may not show sufficient detail to depict Charge Areas precisely. Pursuant to Rule 5 the Authority will determine the Charge Area and associated Area Facility charges to serve the Applicant’s Service Property(ies) at the time of application based on the most current Charge Area boundary information maintained by the General Manager of the Authority.

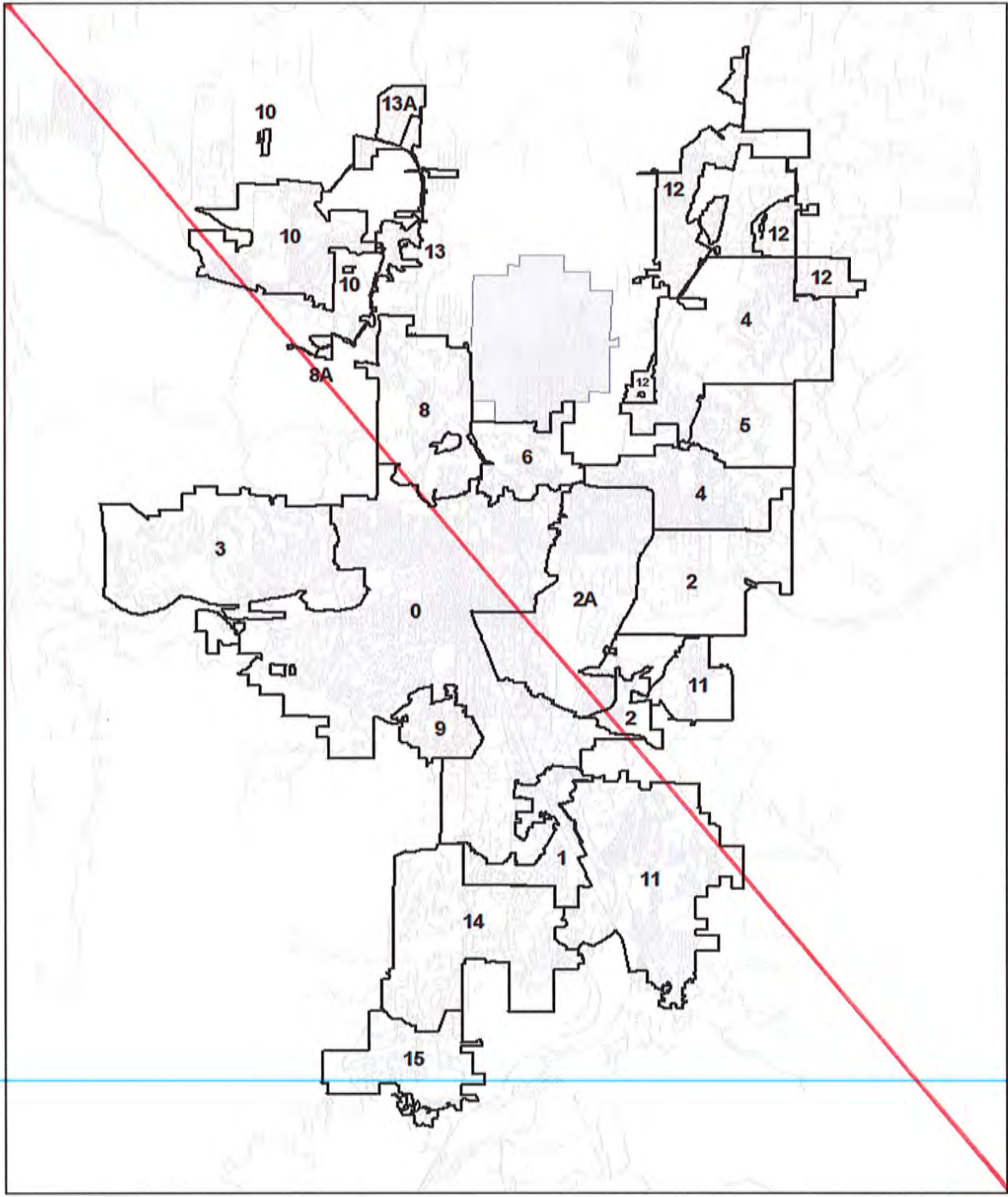
Added: 06/18/03 Amended: 10/01/03; 01/21/04; 03/01/05; 10/18/06; 03/01/08; 05/21/09; 05/21/10; 01/01/15

# Truckee Meadows Water Authority

## RATE SCHEDULES

### WSF – WATER SYSTEM FACILITY CHARGES

#### EXISTING AREAS

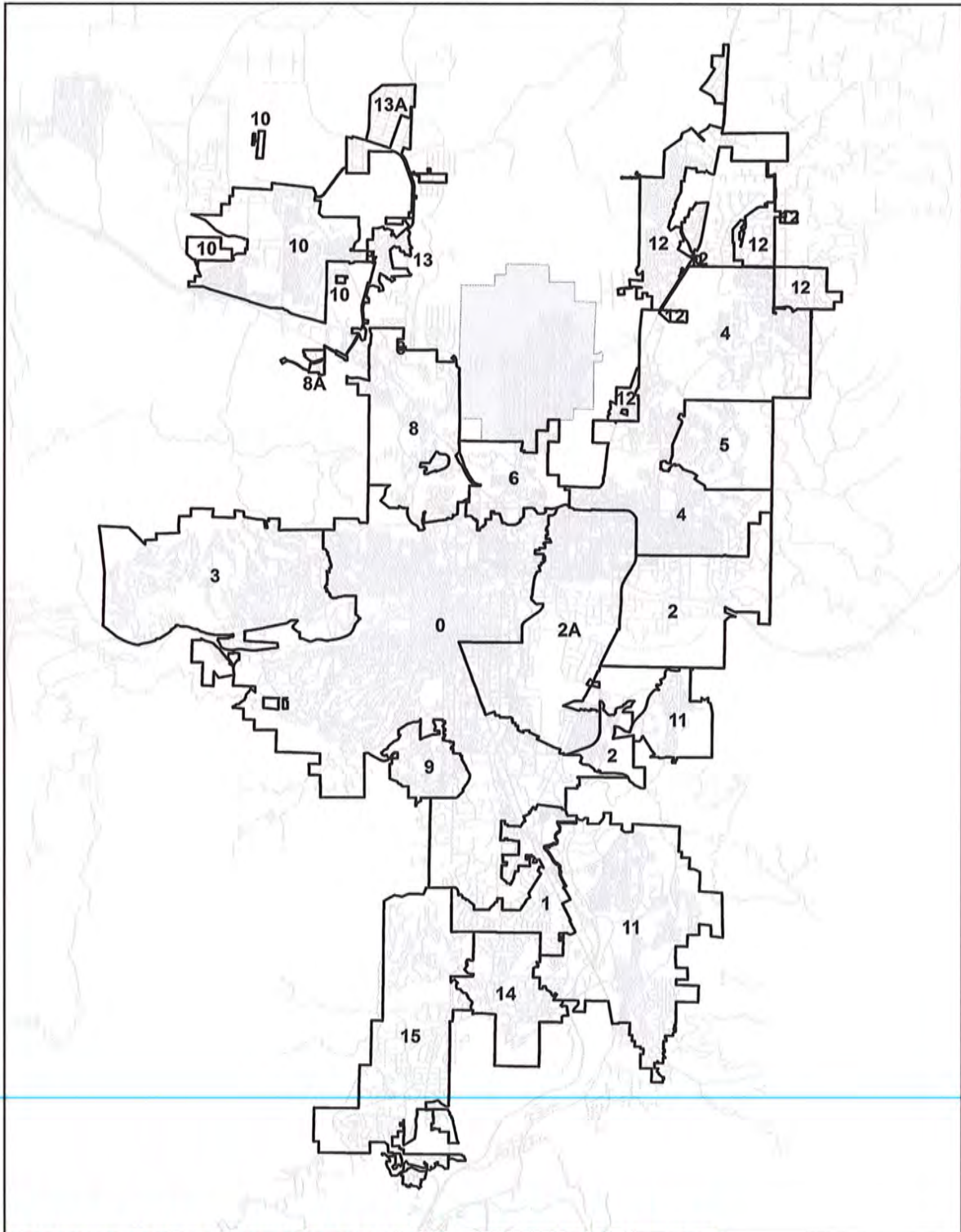


Added: 01/01/15

# Truckee Meadows Water Authority

## RATE SCHEDULES

### WSF – WATER SYSTEM FACILITY CHARGES



**PROPOSED AREAS – MODIFIED AREA 14 & 15 BOUNDARIES**

Added: 01/01/15