



TRUCKEE MEADOWS WATER AUTHORITY
Board of Directors

AGENDA

Wednesday, September 20, 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), at <http://www.tmwa.com>, and State of Nevada Public Notice Website, <https://notice.nv.gov/>.
2. In accordance with NRS 241.020, this agenda closes three working days prior to the meeting. We are pleased to make reasonable accommodations for persons who are disabled and wish to attend meetings. If you require special arrangements for the meeting, please call (775) 834-8002 at least 24 hours before the meeting date.
3. Staff reports and supporting material for the meeting are available at TMWA and on the TMWA website at <http://www.tmwa.com/meeting/> or you can contact Sonia Folsom at (775) 835-8002. Supporting material is made available to the general public in accordance with NRS 241.020(6).
4. The 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.
5. Asterisks (*) denote non-action items.
6. Public comment is limited to three minutes and is allowed during the public comment periods. The public may sign-up to speak during the public comment period or on a specific agenda item by completing a "Request to Speak" card and submitting it to the clerk. In addition to the public comment periods, the Chairman has the discretion to allow public comment on any agenda item, including any item on which action is to be taken.
7. In the event the Chairman and Vice-Chairman are absent, the remaining 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**).
8. 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**)

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 or receive information from legal counsel regarding potential or existing litigation and to deliberate toward a decision on such matters related to litigation or potential litigation.

5. Approval of the minutes of the August 16, 2017 meeting of the TMWA Board of Directors **(For Possible Action)**
6. Presentation of the Truckee Meadows Regional Planning Agency (TMRPA) 2017 regional plan update and TMRPA request for public input — Kim Robinson, TMRPA*
7. Informational report on groundwater aquifers — Randy Van Hoozer and Nick White*
8. Discussion and possible action on adoption of Resolution No. 254: 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)**
9. Discussion and action, and possible direction to staff regarding request for approval of revisions to the Voluntary Employee Benefit Association (VEBA) Plan Document — Jessica Atkinson and Michele Sullivan **(For Possible Action)**
10. Presentation of TMWA's unaudited FY2017 financial performance — Michele Sullivan*
11. Discussion and possible action on adoption of Resolution No. 255: A resolution to approve the amendments to TMWA's Investment Policy — Joe Petrelli and Michele Sullivan **(For Possible Action)**
12. Discussion and action regarding General Manager performance review for contract year 2016/2017 and discussion and action on possible lump sum award and/or other compensation adjustment — Mark Foree **(For Possible Action)**
13. Discussion and action on request for Board input and acceptance of General Manager performance objectives for contract year 2017/2018 — Mark Foree **(For Possible Action)**
14. General Manager's Report*
15. Public comment — limited to no more than three minutes per speaker*
16. Board comments and requests for future agenda items*
17. Adjournment **(For Possible Action)**

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TRUCKEE MEADOWS WATER AUTHORITY
DRAFT MINUTES OF THE AUGUST 16, 2017
MEETING OF THE BOARD OF DIRECTORS

The Board of Directors met on Wednesday, August 16, 2017, at Sparks Council Chambers, 745 4th Street, Sparks, Nevada. Vice Chair Hartung called the meeting to order at 10:00 a.m.

1. ROLL CALL

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

Members Absent: Geno Martini

A quorum was present.

**Member Duerr arrived at 10:01 a.m.*

***Member Jardon left at 11:57 a.m.*

2. PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was led by Member Smith.

3. PUBLIC COMMENT

There was no public comment

4. APPROVAL OF THE AGENDA

Vice Chair Hartung stated an attorney-client closed door session will be held before agenda item 8.

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

5. APPROVAL OF THE MINUTES OF THE JUNE 21, 2017 MEETING

Upon motion by Member Duerr, second by Member Herman, which motion duly carried by unanimous consent of the members present, the Board approved the June 21, 2017 minutes.

6. REPORT ON TMWA'S DAM INVENTORY AND REBUILDING, AND SAFETY MEASURES

Pat Nielson, TMWA Distribution Maintenance and Generation Director, informed the Board of the various dams and diversions TMWA owns as well as those owned by other entities, the million gallons per day (MGD) diverted, the average kilowatts generated by the hydro plants as well as the annual revenue generated which helps offset TMWA's electrical operating expenses. Mr. Nielson stated that TMWA is working with the U.S. Fish & Wildlife Services (USFWS) on replacing the diversion dams at Steamboat Canal and Verdi Hydroelectric plant to promote fish passage and consider safety measures for boat passage. Also, Pat discussed plans to assess damage to the riverbed and additional portage signs ahead of the Glendale Diversion Dam.

Discussion followed regarding concerns expressed by certain individuals about the Glendale Diversion Dam, meeting USFWS fish ladder standards, addressing the concerns from the boating/rafting community, and improving the overall Truckee River recreational user experience as it is important to the community.

The Board requested to be kept apprised of the progress and staff report on any updates.

7. INFORMATIONAL REPORT REGARDING THE METER RETROFIT FUND PROGRAM

John Zimmerman, TMWA Water Resources Manager, reported that the current fund balance as of June 30, 2017 was \$2,425,647 and the estimated fund revenue by the end of fiscal year 2022 will be between \$4.2M and \$9.7M.

Mr. Nielson explained in detail the construction required to retrofit the remaining services to meters would be costly; the most difficult and expensive of which would be the Small Unit Flat Rate Services which is estimated between \$500,000 and \$2,480,000.

Member Brekhus explained one of her constituents had expressed concerns regarding a multi-unit complex that is not metered and she appreciated the report.

The Board discussed how TMWA tracks tenant improvements to monitor expanded use of water, keeping a single service for an apartment complex rather than putting individual meters for each unit is more beneficial due to cost, and to address using the meter retrofit fund for other purposes, such as the rate stabilization fund, before the next budget is approved.

The Board requested staff provide a more detailed estimate and timeline to retrofit all the unmetered services to determine which services should be retrofitted and which ones are not feasible to retrofit and return with their recommendations at a future meeting.

The TMWA Board of Directors recessed for an attorney-client privilege closed door session at 10:27 a.m.

The TMWA Board of Directors reconvened at 11:12 a.m.

8. UPDATE AND DISCUSSION ON TRANSFER OF FARAD HYDRO FACILITIES FROM NV ENERGY UNDER 2001 ASSET PURCHASE AGREEMENT AND DISCUSSION AND POSSIBLE ACTION ON RECOMMENDATIONS TO STAFF REGARDING TIMING AND RECONSTRUCTION OPTIONS FOR FARAD DAM AND HYDRO FACILITIES

Mr. Nielson presented the Board with the options for the Farad dam and hydro facilities with staff looking for Board direction on how to proceed.

Michael Pagni, TMWA General Counsel, provided background with reference to the 2001 Asset Purchase Agreement with Sierra Pacific Power Company (now NV Energy). Under that agreement, NV Energy agreed to transfer all hydro facilities to TMWA. Delay in the transfer of the Farad Hydro has occurred because of insurance litigation over damage to the dam by the 1997 flood. The conclusion of the litigation on portions of coverage this year triggers elements under TMWA's settlement with NV Energy on the transfer of Farad property to TMWA. Staff was looking for direction from the Board on options for the property once it is transferred.

Mark Foree, TMWA General Manager, stated as part of the recommendation, the recent financial analysis to rebuild the dam and facilities shows that it is not financially feasible for TMWA to reconstruct the dam and facilities at this time.

Public Comment

Janet Phillips, Tahoe-Pyramid Bikeway, stated that TMWA has been a key partner in building the bikeway and requested the TMWA Board consider a permanent easement for the bikeway through the Farad property if the Board considers selling the property. (Attachment)

Vice Chair Hartung confirmed if there is flexibility in granting an easement for the bikeway. Mr. Pagni replied yes there is flexibility, and the Board can give direction to staff to research and bring it back as a future item.

For the record, Vice Chair Hartung disclosed that Ms. Phillips is a friend, but they have not had any discussions pertaining to this subject.

The Board expressed appreciation for Ms. Phillips' comments and discussed alternative options with regards to the Farad facility and property for other purposes, such as: removal of the flume and selling the material, recreational opportunities for education purposes, determine what equipment is salvageable and what can be sold, dedicating it to the parks and recreation, permitting to generate hydro on Highland Canal, other possibilities to generate increased hydro revenues, and security issues need to be addressed.

The Board requested staff bring this agenda item at a future meeting to present alternative options.

Upon motion by Member Jardon, second by Member Duerr, which motion duly carried by unanimous consent of the members present, the Board approved staff recommendation to not pursue reconstruction of the Farad dam at this time and to pursue other options as discussed as well as easements for the Tahoe-Pyramid Bikeway.

9. DISCUSSION AND POSSIBLE ACTION, AND DIRECTION TO STAFF REGARDING THE DRAFT WHOLESALE WATER SERVICE AGREEMENT BETWEEN TMWA AND WEST RENO WATER COMPANY AND REQUEST FOR BOARD AUTHORIZATION FOR GENERAL MANAGER TO FINALIZE AND EXECUTE THE AGREEMENT

John Enloe, TMWA Natural Resources Director, and Scott Estes, TMWA Engineering & Planning Director, recommended the Board authorize the General Manager to finalize and execute the wholesale water service agreement between TMWA and West Reno Water Company (West Reno) for property outside TMWA's retail service area. The agreement would provide for limited service to the Boomtown area to begin to address water supply issues in this area since TMWA does not have the ability to provide retail water service directly without infrastructure costs of approximately \$15M. Mr. Enloe explained that Boomtown is currently a private water company regulated by the Health District not the Public Utilities Commission (PUC), but by providing service to new customers, they are going over the state regulatory threshold and will be required to create a new entity, West Reno, which would be regulated by the PUC.

Discussion followed regarding costs to TMWA, TMWA's position of regional water purveyor, the lack of infrastructure to serve the Boomtown area, groundwater sustainability management, which entity would be responsible for providing water service to the area, West Reno not having the ability to recharge, whether TMWA has the authority to create and implement a water purveyor policy, and the concern of having a private water utility operate within the City of Reno jurisdiction.

Member Brekhus expressed her concerns over the lack of success with private water utility companies in the area and it may be incumbent upon the developer to pay up front to assist TMWA in providing water service, and stressed that discussion should occur at the City of Reno. She inquired if TMWA has a special assessment or bonding capabilities. Mr. Pagni replied that TMWA has established connection fees and service charge areas under its Rules, and facility charges are applied to each new service connection within that service charge area. Also, TMWA has some bonding abilities to convert domestic wells to the municipal system.

Member Duerr suggested to include the option for TMWA to acquire the private utility at a later date for the current appraisal value adjusted for maintenance and replacement costs.

Member Hartung expressed his dissatisfaction with West Reno wanting to buy water from TMWA at a wholesale rate.

Member Jardon confirmed the City of Reno Planning Commission would not be hearing this item at their meeting later today and expressed her concerns about the lack of information, collaboration between staff at the City of Reno and TMWA, and as such it would be premature to decide today and requested it be deferred to a future meeting.

Mr. Enloe agreed and stressed that TMWA has not been directly involved in these decisions pertaining to the proposed housing developments in the Boomtown area and requested staff at the City of Reno work with TMWA staff. He stated the State Engineer's office also has concerns about the lack of information

on sustainability of the groundwater resource and is supportive of a service connection to TMWA in order to provide support with its multiple resources.

Upon motion by Member Brekhus, second by Member Duerr, which motion duly carried by unanimous consent of the members present, the Board directed staff to continue working on this item and to bring it back at a future meeting.

10. DISCUSSION AND POSSIBLE DIRECTION FROM BOARD REGARDING THE GENERAL MANAGER'S PERFORMANCE EVALUATION PROCESS

Upon motion by Member Smith, second by Member Duerr, which motion duly carried by unanimous consent of the members present, the Board approved the General Manager's performance evaluation process.

11. GENERAL MANAGER'S REPORT

Mr. Foree informed the Board that TMWA's water supply is very good and the reservoirs are at or near capacity and July saw the second best monthly hydro revenue in TMWA's history at \$359,227. He also reminded the Board of the Nevada Water Innovation Campus event on August 24th at 3pm at the University.

12. PUBLIC COMMENT

There was no public comment.

13. BOARD COMMENTS AND REQUESTS FOR FUTURE AGENDA ITEMS

Vice Chair Hartung requested an update on TMWA's recharge plans and timing.

14. ADJOURNMENT

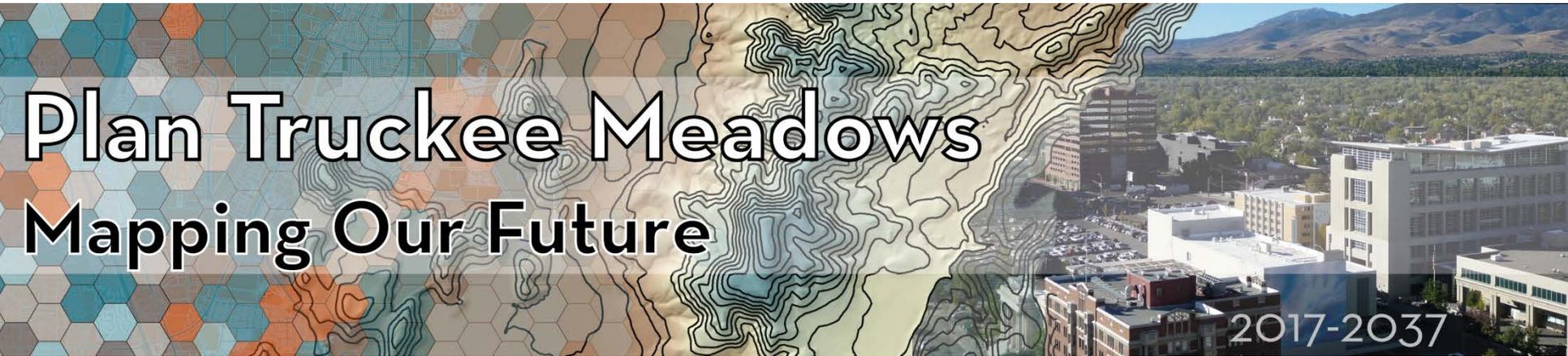
With no further discussion, Vice Chair Hartung adjourned the meeting at 12:13 p.m.

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

Sonia Folsom, Recording Secretary

** Member Duerr was present for agenda items 4 thru 14 only.*

***Member Jardon was present for agenda items 1 thru 9 only.*



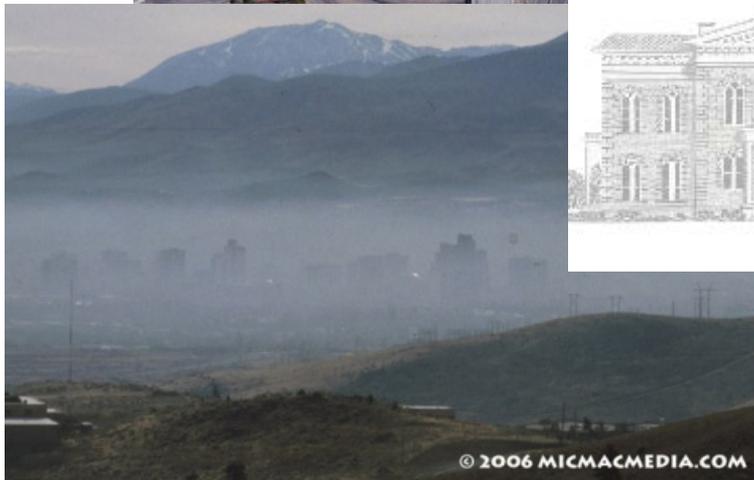
2017 Truckee Meadows Regional Plan Update

TMRPA

TRUCKEE MEADOWS REGIONAL PLANNING AGENCY



Who Are We?



Why Plan Regionally?

09-20-17 BOARD Agenda Item 6







40 collaborative projects
\$1 Million

Why Are We Here?



Image Credit: City of Sparks



Image Credit: University of Nevada, Reno



Image Credit: Washoe County

Plan Truckee Meadows Mapping Our Future

2017-2037

Help shape the future of our community! Join us in updating the Truckee Meadows Regional Plan at:

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Staff Report

TO: Board of Directors
THRU: Mark Foree, General Manager
FROM: John Enloe, Director of Natural Resources
 Department of Natural Resources - Hydrogeology Staff
DATE: September 12, 2017
SUBJECT: **Informational Report on Groundwater Aquifers**

SUMMARY

This staff report is being provided as an update on groundwater elevation fluctuations in monitoring wells from January 2001 through June 2017. Data collected from monitoring wells in this summary represent general groundwater level conditions within hydrographic basins covered by Truckee Meadows Water Authority's (TMWA) service area. Additional information on groundwater conditions and hydrographs are included in the 2016-2035 Water Resource Plan.

The charts in this report depict groundwater elevations, municipal pumping and active recharge volumes. Several graphs also depict groundwater elevations and monthly precipitation from 2010 through February 2017. The graphs with groundwater elevations and precipitation illustrate the range of response created by rain/snow events: some areas having a relatively quick response and a situation where precipitation does not have an immediate impact.

Groundwater elevations are recovering following the amount of precipitation the region received during the 2016-2017 water year (more than 200% above normal). Looking forward, groundwater recovery is expected to continue because TMWA will continue to implement the following water resource management practices that reduce groundwater pumping (referred to as passive recharge):

- Implementation of TROA – regional aquifers will benefit from surface water storage capabilities provided by TROA and expanded conjunctive use operations.
- Construction of a surface water treatment plant on White's Creek – the plant will provide treated creek water to the distribution system for use in Basins 87 and 88, allowing TMWA to use more creek water and less groundwater.
- Importing groundwater from Fish Spring Ranch – TMWA owns and operates production wells and a distribution system that transports water from Fish Springs Ranch to Lemmon Valley. TMWA will continue using this water and reduce pumping wells in Lemmon Valley and additional areas as necessitated.

TMWA will also continue active recharge by aquifer storage and recovery (ASR) projects where practical. Currently, TMWA is permitted to perform ASR in Basins 85, 87 and 92A (see Figure 1). ASR activities will also eventually expand to Basin 88.

DISCUSSION:

The following hydrographs depict groundwater elevations in black and monthly pumping volumes from municipal wells in blue. The units associated with groundwater elevations and municipal pumping are feet above mean sea level (ft-amsl) and acre-feet (AF), respectively. If the municipal well also serves as an ASR well, monthly injection volumes (in AF) are depicted in purple. Where applicable, precipitation recorded at nearby weather stations (in inches) is depicted in green. Figure 1 depicts hydrographic basin delineations, TMWA's service area, and municipal well locations referred to herein.

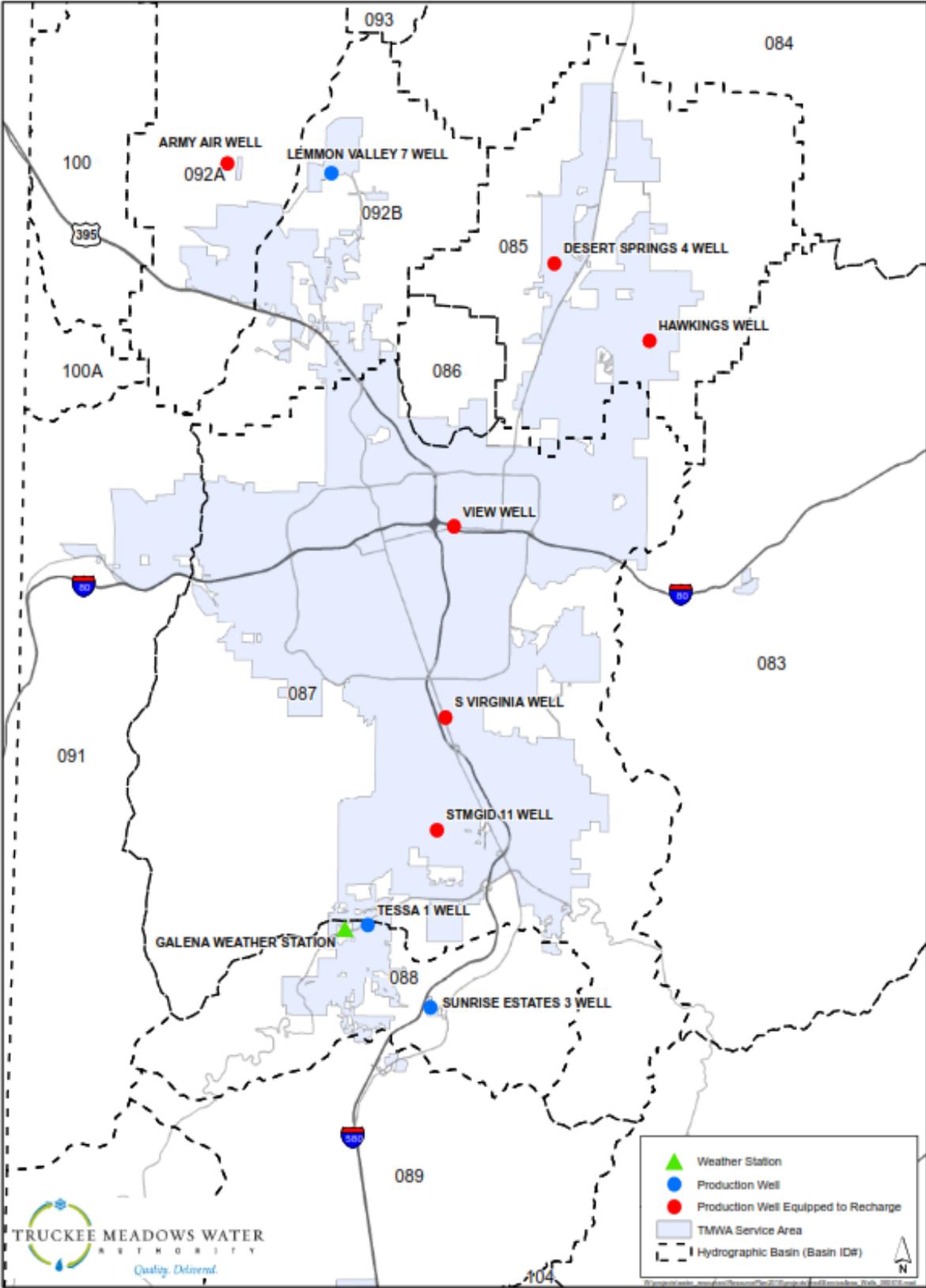
The hydrographs represent fluctuations in groundwater elevations resulting from: variations in precipitation/natural recharge, active or passive (reduced pumping) recharge, pumping of domestic and municipal wells, evapotranspiration, aquifer properties, and regional hydrogeologic settings.

The increased 2016-2017 winter precipitation and subsequent snow melt played a major role in recent groundwater elevation recovery trends. The recovery trends can be attributed to the following occurrences:

- Rapid recovery of groundwater elevations from direct connections to recharge sources (e.g., faults, fractures, streams, etc.);
- Slower recovery of groundwater elevations due to an indirect connection to recharge sources (infiltration/percolation to deeper zones and pressure related responses); and,
- Passive recharge due to increased surface water availability which allows TMWA to substantially reduce pumping during the summer months.

Typical groundwater elevation recoveries per basin were on the order of three to ten feet with extreme scenarios exceeding 10 feet. Larger recovery anomalies can typically be attributed to a wells proximity to a recharge source and the hydrogeologic setting (i.e., fractured hardrock vs. unconsolidated sediments). To exemplify the magnitude of the 2016-2017 winter, a weather station operated by TMWA in Honey Lake Valley near Fish Springs Ranch (FSR) registered over 19 inches of precipitation from October 2016 through June 2017, with over eight inches of precipitation falling in January 2017 alone. For reference, Herlong California located approximately 15 miles west of FSR averages nine inches of precipitation annually.

Figure 1: Service Area and Well Location Map



HYDROGRAPHIC BASIN 87 – NORTH AND SOUTH TRUCKEE MEADOWS

Basin 87 encompasses 195 square miles and regional groundwater flow occurs in fractured hardrock, alluvial fan sediments, and basin-fill. TMWA operates 44 production wells in this relatively large basin (12 wells are completed in fractured hardrock and alluvial fan sediments and 32 wells are completed in the basin-fill). There are also approximately 1,480 domestic wells within the basin. Groundwater generally flows east-northeast to the valley floor then north toward the Truckee River.

Groundwater elevations fluctuate seasonally with recovery during non-pumping and natural recharge periods (winter months) and declines during pumping periods. Groundwater elevations in the southwest part of this basin have historically declined over time when groundwater was the only resource. However, groundwater elevation recovery is now evident in areas where conjunctive use and ASR have occurred since the merger of TMWA with the Washoe County Department of Water Resources.

Municipal wells in the northern portion of Basin 87 are primarily used to supplement summer peak demands. Groundwater elevations continue to be relatively stable given they are in the vast basin-fill aquifer(s). Groundwater elevations typically decline during pumping and immediately recover following non-pumping periods. Active ASR also contributes to water level recovery and replenishment. Figures 2, 3, and 4 depict groundwater elevations throughout Basin 87.

Figure 2: Groundwater Hydrograph for the South-central Area of Basin 87

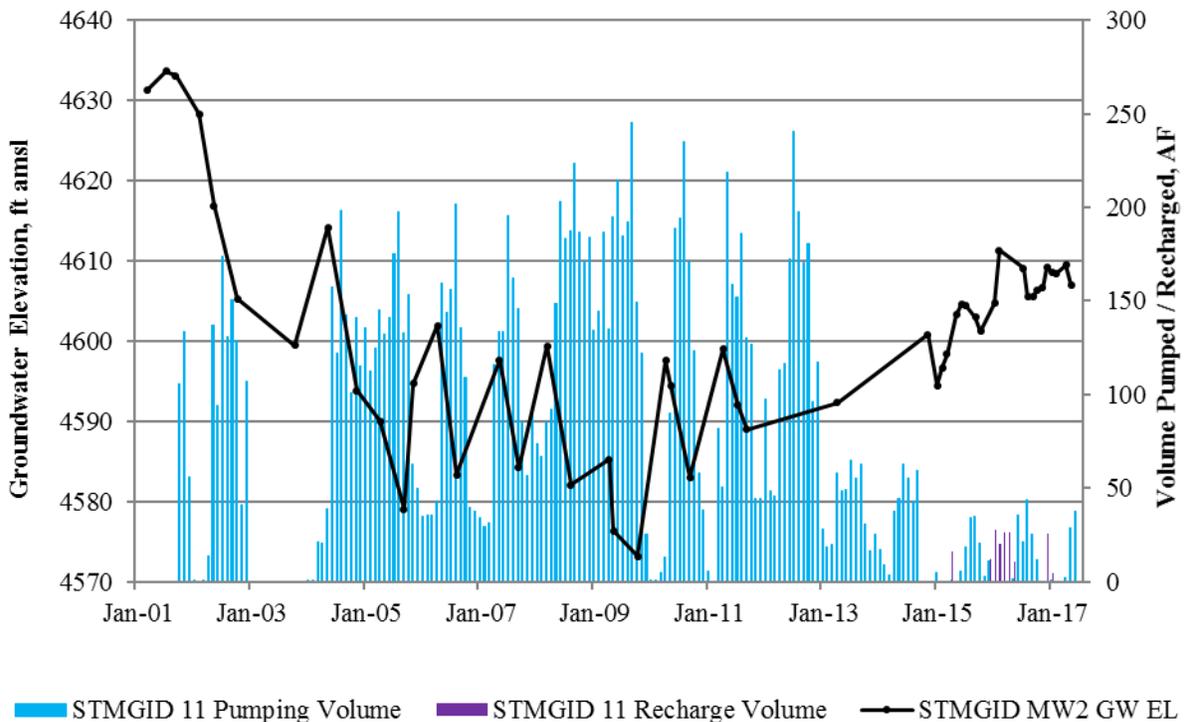


Figure 3: Groundwater Hydrograph for the Central Area of Basin 87

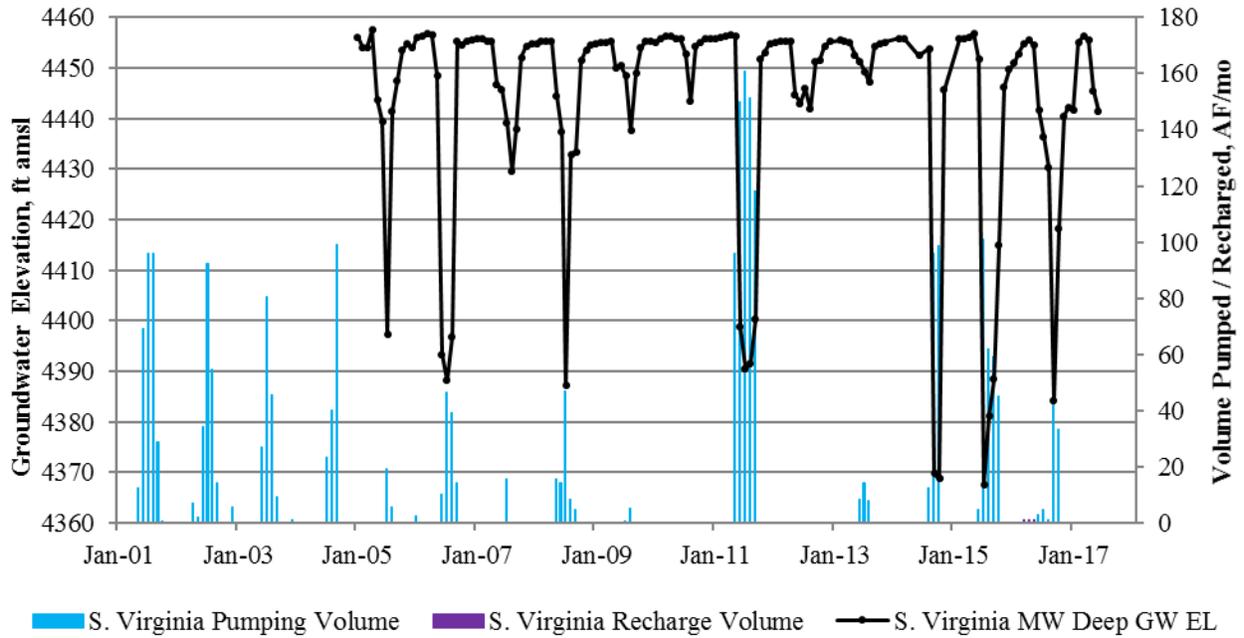
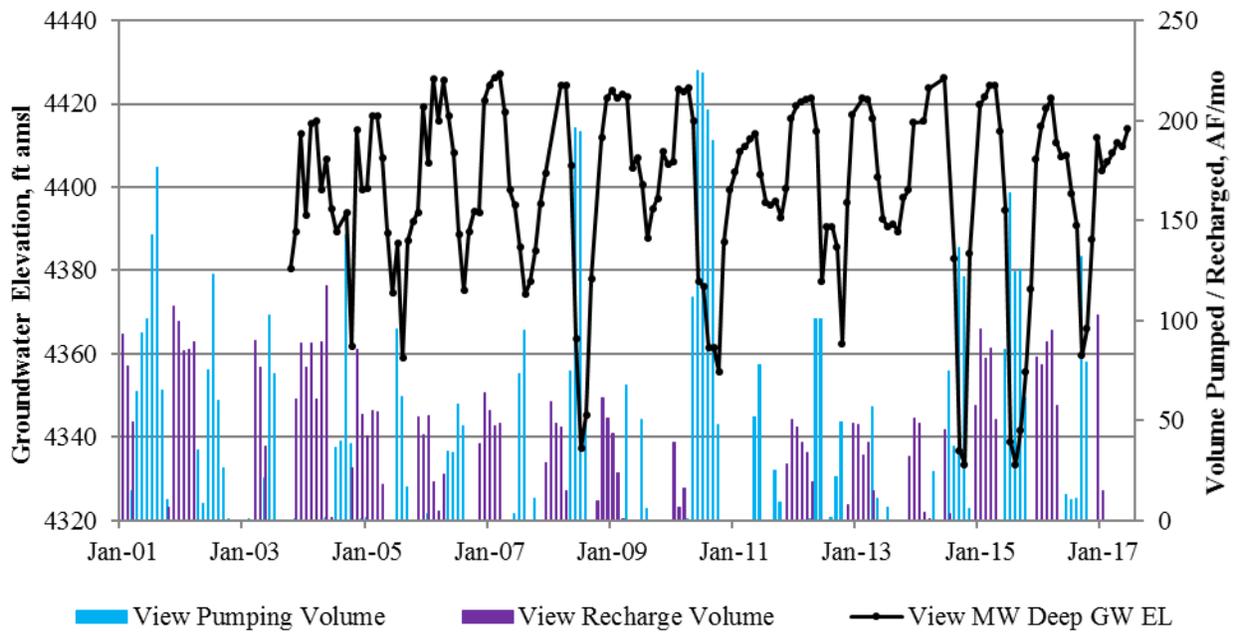


Figure 4: Groundwater Hydrograph for the North Area of Basin 87



HYDROGRAPHIC BASIN 88 – PLEASANT VALLEY

Basin 88 encompasses 39 square miles and regional groundwater flow occurs in fractured hardrock and basin-fill. TMWA operates nine production wells in this basin. There are also approximately 820 domestic wells in Basin 88. Groundwater generally flows eastward from the Carson Range through the alluvial fan highlands to the basin-fill lowland areas and Steamboat Creek. Steamboat Creek flows north into Basin 87.

Until recently, groundwater has been the only resource in this area resulting in declining groundwater elevations. Groundwater elevations fluctuate seasonally with recovery during non-pumping and natural recharge periods (winter months) and declines during pumping periods. Figures 5 and 6 depict groundwater elevations from multiple locations within Basin 88.

Figure 5 includes monthly groundwater elevations, pumping volumes, and precipitation for Tessa East from 2010 through June 2017. As indicated by Figure 5, reduced groundwater pumping over the last several years has helped stabilize groundwater levels on the Mt. Rose Fan. Tessa East is completed in deep fractured hardrock and although recharge from precipitation is an important recovery component in this area, it is not immediately apparent. Conversely, groundwater elevations recover rapidly after large precipitation events in the Sunrise Estates area (Figure 6).

Figure 5: Groundwater Hydrograph for the Northwest Area of Basin 88 including Precip.

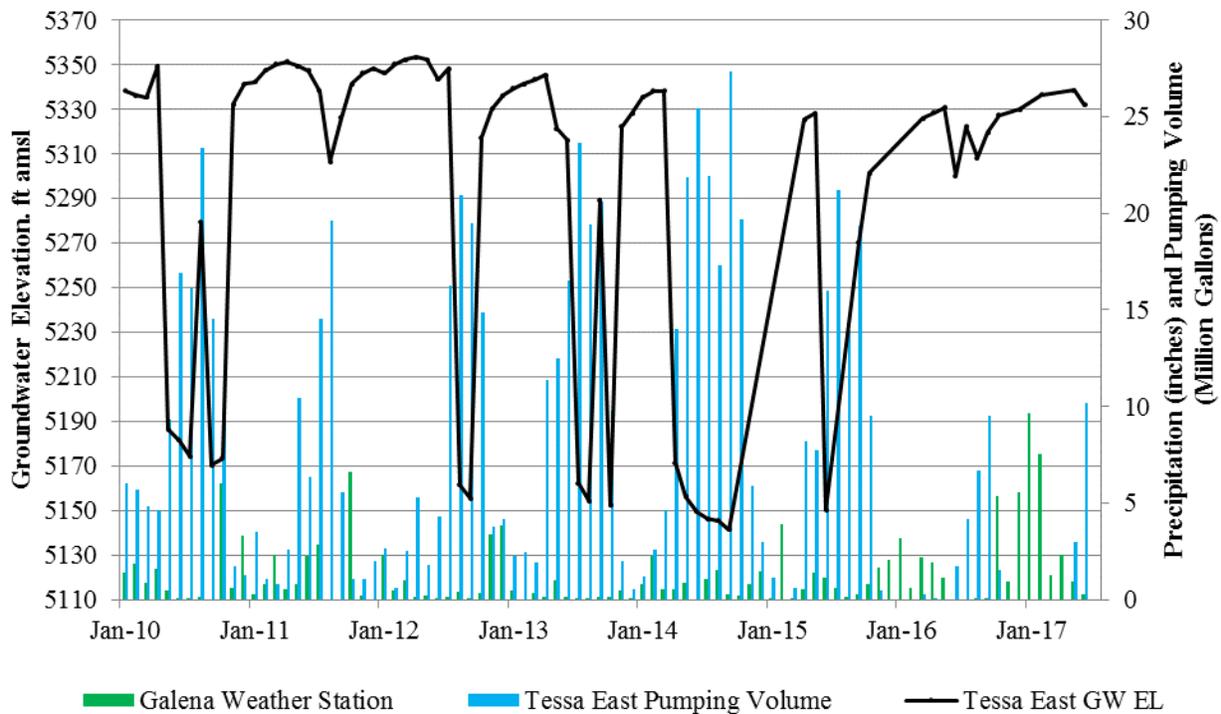
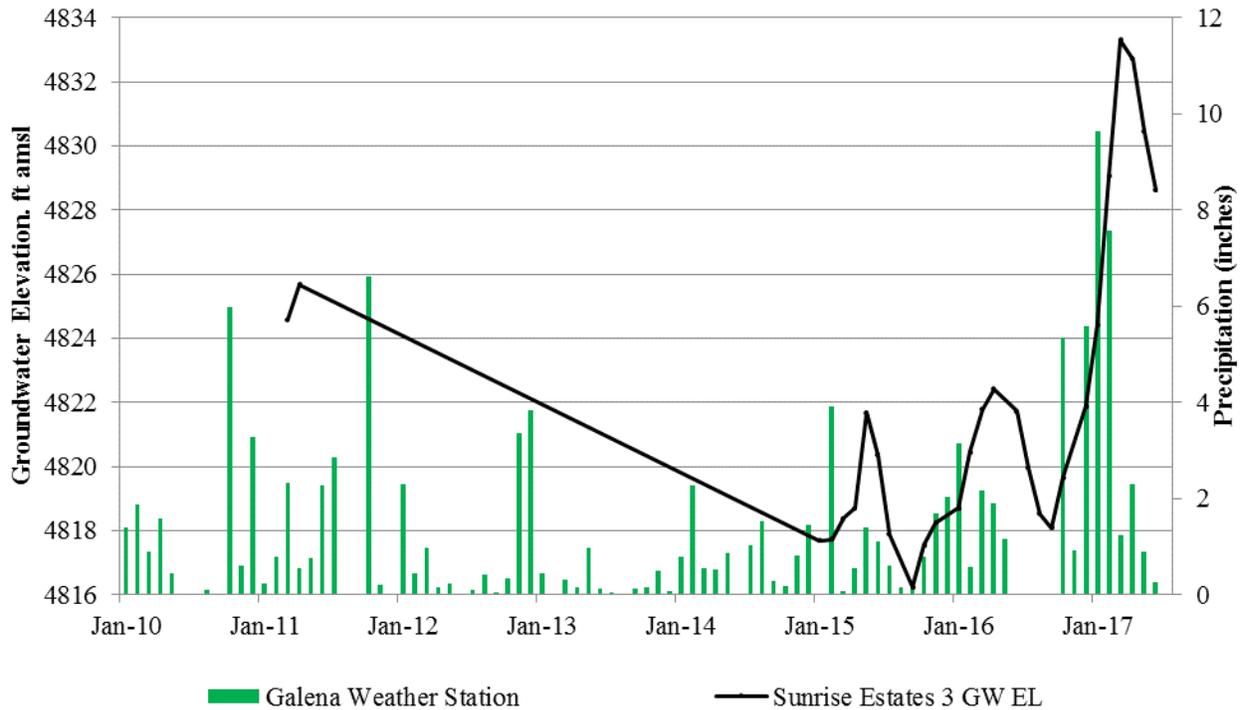


Figure 6: Groundwater Hydrograph for the Southeast Area of Basin 88



HYDROGRAPHIC BASIN 85 – SPANISH SPRINGS VALLEY (SSV)

Basin 85 encompasses 80 square miles and regional groundwater flow occurs in fractured hardrock on the east side and in alluvial sediments and basin-fill throughout the western and central portions of the basin. TMWA operates 4 production wells in the Desert Springs system (west side) and 4 production wells in the Spring Creek and Hawkings System (east side). There are also approximately 410 domestic wells in SSV. Groundwater generally flows from the mountain ridges toward the center of SSV, and then north and south from a groundwater flow divide to adjacent basins.

In addition to seasonal fluctuations, groundwater pumping in Basin 85 has transitioned with reduced usage on the west side to increased usage on the east side. This has resulted in groundwater elevation increases on the west side and decreases on the east side. Overall, groundwater elevations fluctuate seasonally. Active ASR enhances water level recovery as seen in monitoring wells depicted in Figures 7 and 8. Implementation of conjunctive use operations will continue to expand in Basin 85 in order to effectively manage the water resources.

Figure 7: Groundwater Hydrograph for the West Side of Basin 85

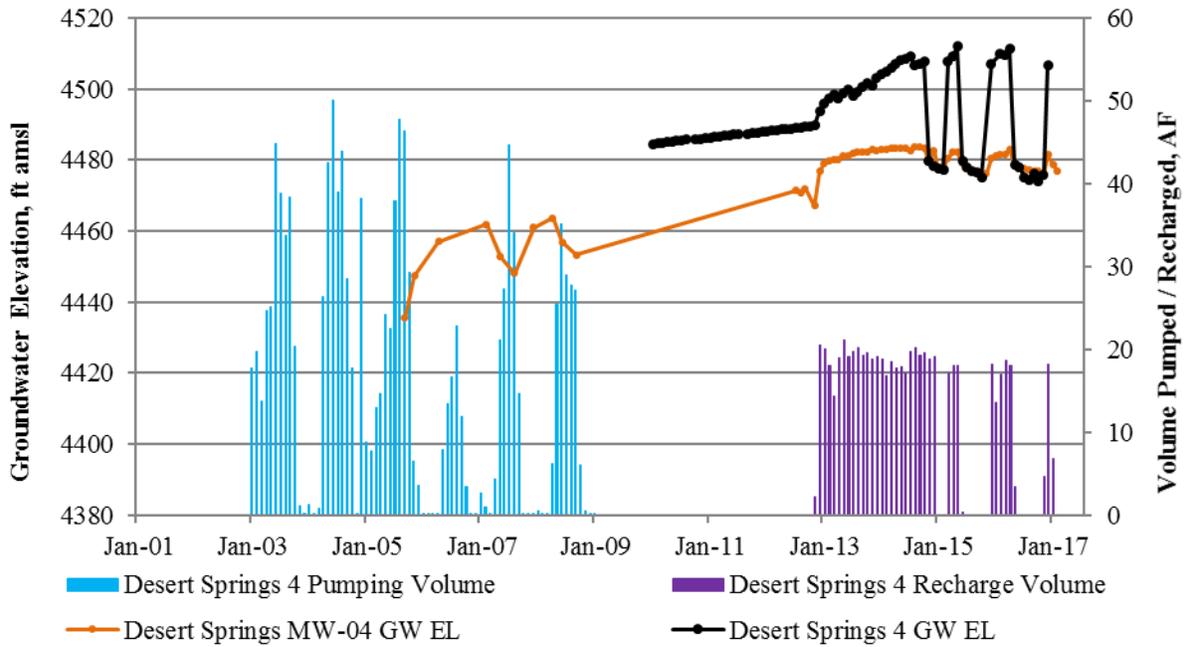
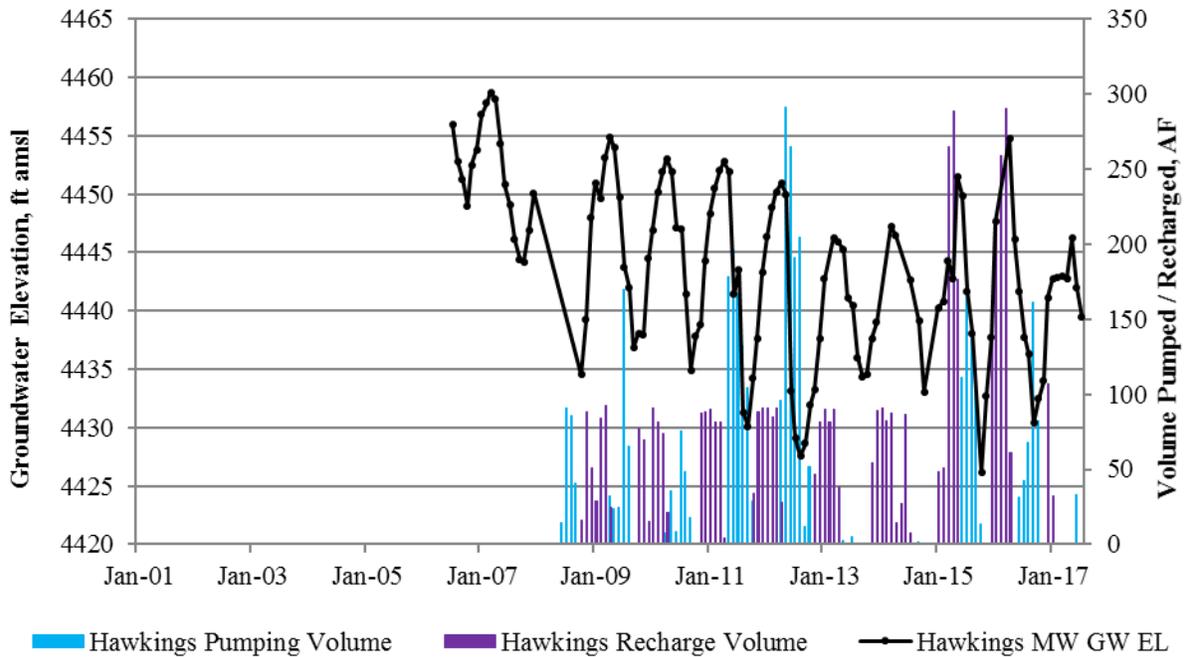


Figure 8: Groundwater Hydrograph for the East Side of Basin 85



HYDROGRAPHIC BASINS 92A AND 92B – WEST AND EAST LEMMON VALLEY

Basin 92A, West Lemmon Valley (WLV), and 92B, East Lemmon Valley (ELV), encompass 97 square miles. Regional groundwater flow regimes are separated by a hydraulic flow barrier (termed the Airport fault) that runs down the middle of the basin. Lemmon Valley is comprised of mountain ridges, unconsolidated basin-fill deposits and two playa lakes. TMWA operates 3 production wells in WLV and 5 production wells in ELV. There are approximately 730 domestic wells in WLV and approximately 1,370 domestic wells in ELV. Groundwater generally flows from the mountain ridges toward the lower-lying playa areas which act as discharge sites (open water evaporation and groundwater ET).

Water levels in WLV and ELV fluctuate annually with recovery during non-pumping and recharge periods (winter months) and declines during pumping periods. Groundwater elevations are relatively stable in WLV and ASR activities have enhanced water level recovery, with water levels increasing by greater than 10 feet over the past 10 years (Figure 9). Groundwater elevations in ELV were declining historically but are now recovering due to the implementation of passive recharge (reduced pumping at municipal wells) made possible by the FSR importation project and completion of the North Valley’s Integration Project. For reference, 2016 groundwater production from Basin’s 92A/B totaled 237 AF (119 AF from 92A and 118 AF from 92B) and 2017 groundwater production to date has only totaled approximately 76 AF. Domestic well users have also decreased as residences have been connected TMWA’s water system (Figure 10).

Figure 9: Groundwater Hydrograph for Basin 92A

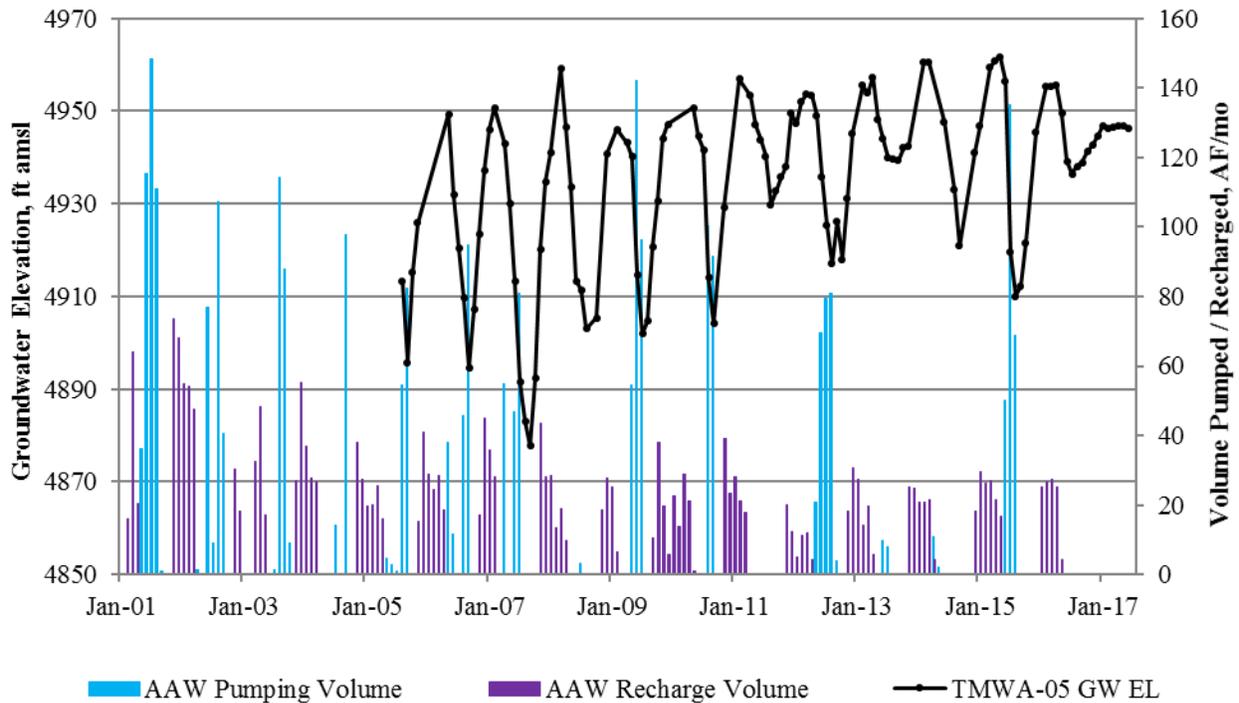
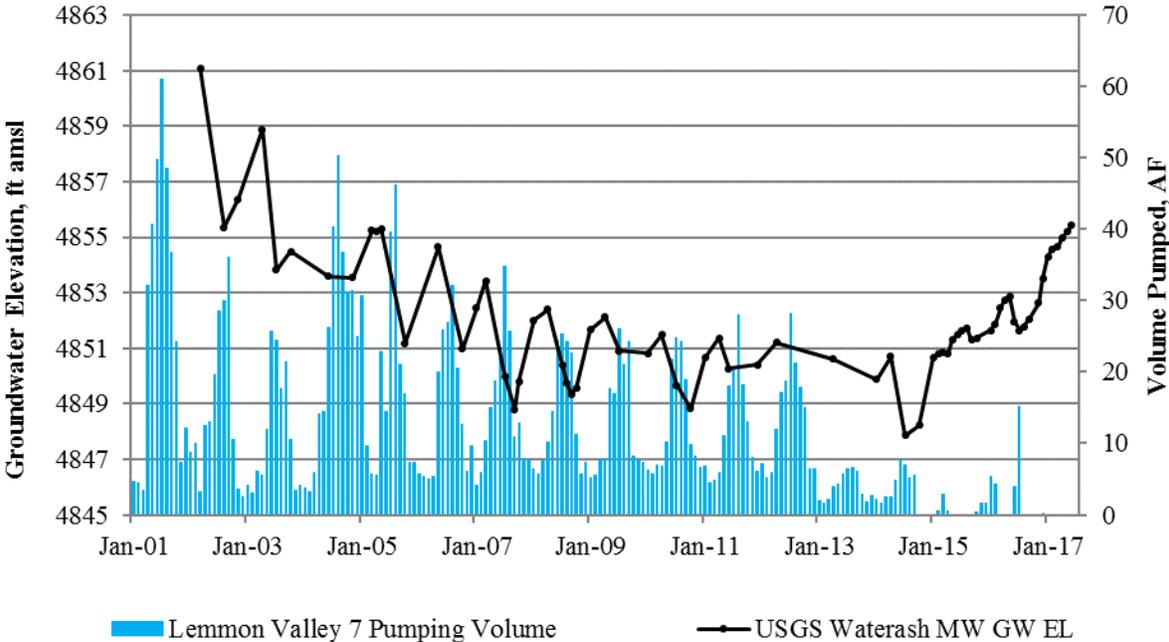


Figure 10: Groundwater Hydrograph for Basin 92B



Groundwater Level Update

Presentation by

Randy Van Hoozer, Senior Hydrogeologist

Nick White, Hydrogeologist

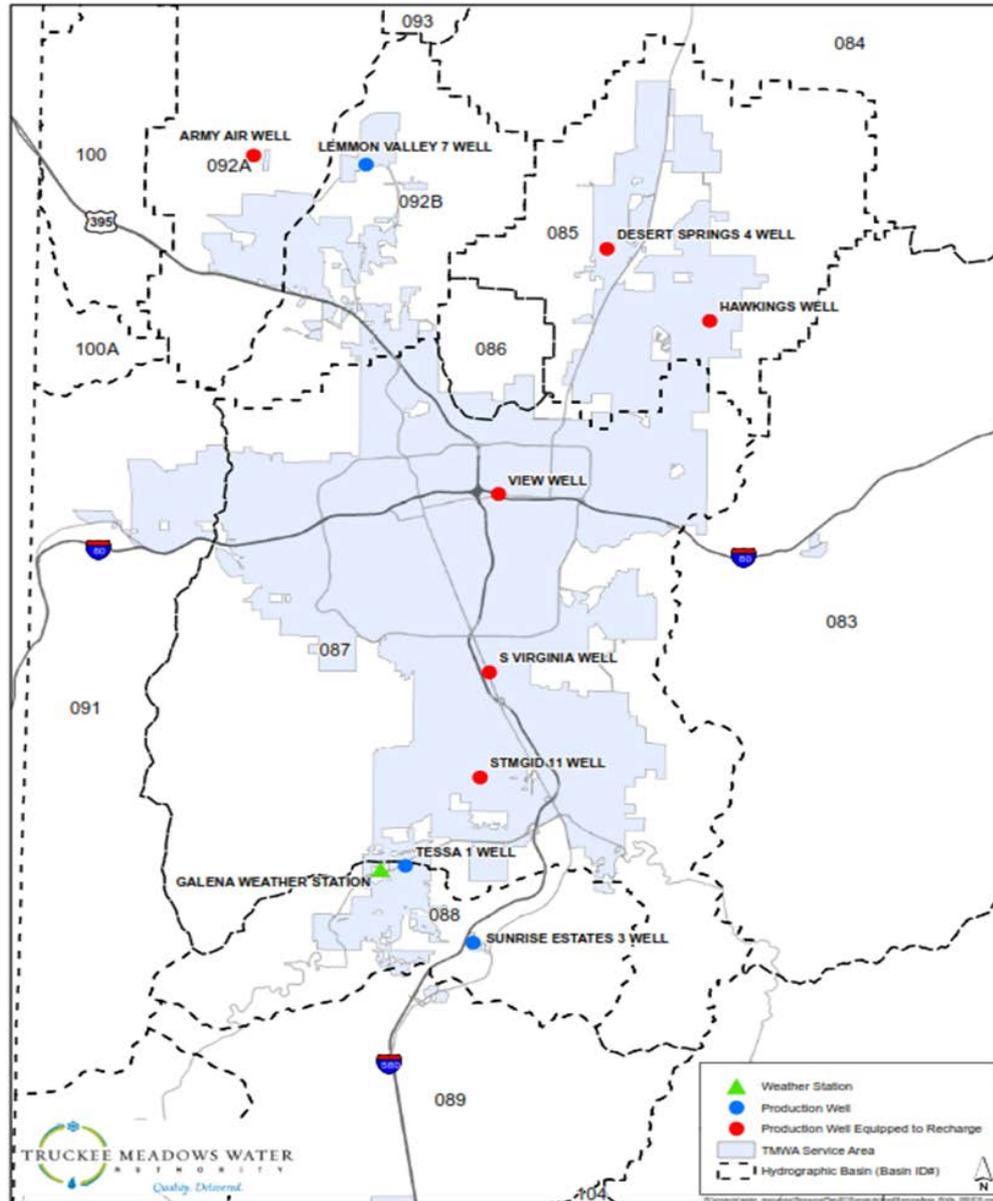
September 20, 2017



Truckee Meadows Water Authority (TMWA)

09-20-17 BOARD Agenda Item 7

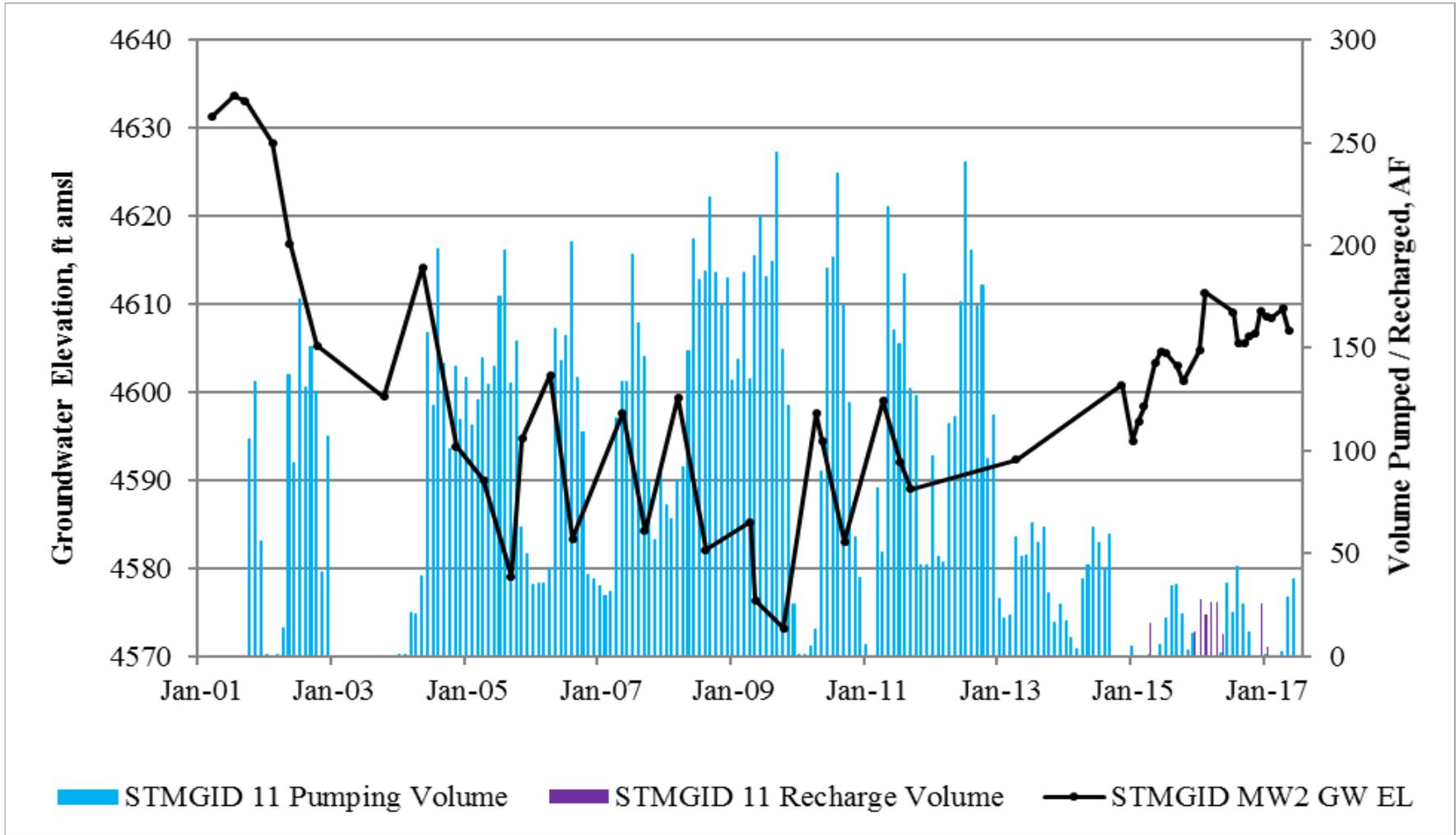
Figure 1: Well Locations for Groundwater Hydrograph Review



Truckee Meadows Water Authority (TMWA)

09-20-17 BOARD Agenda Item 7

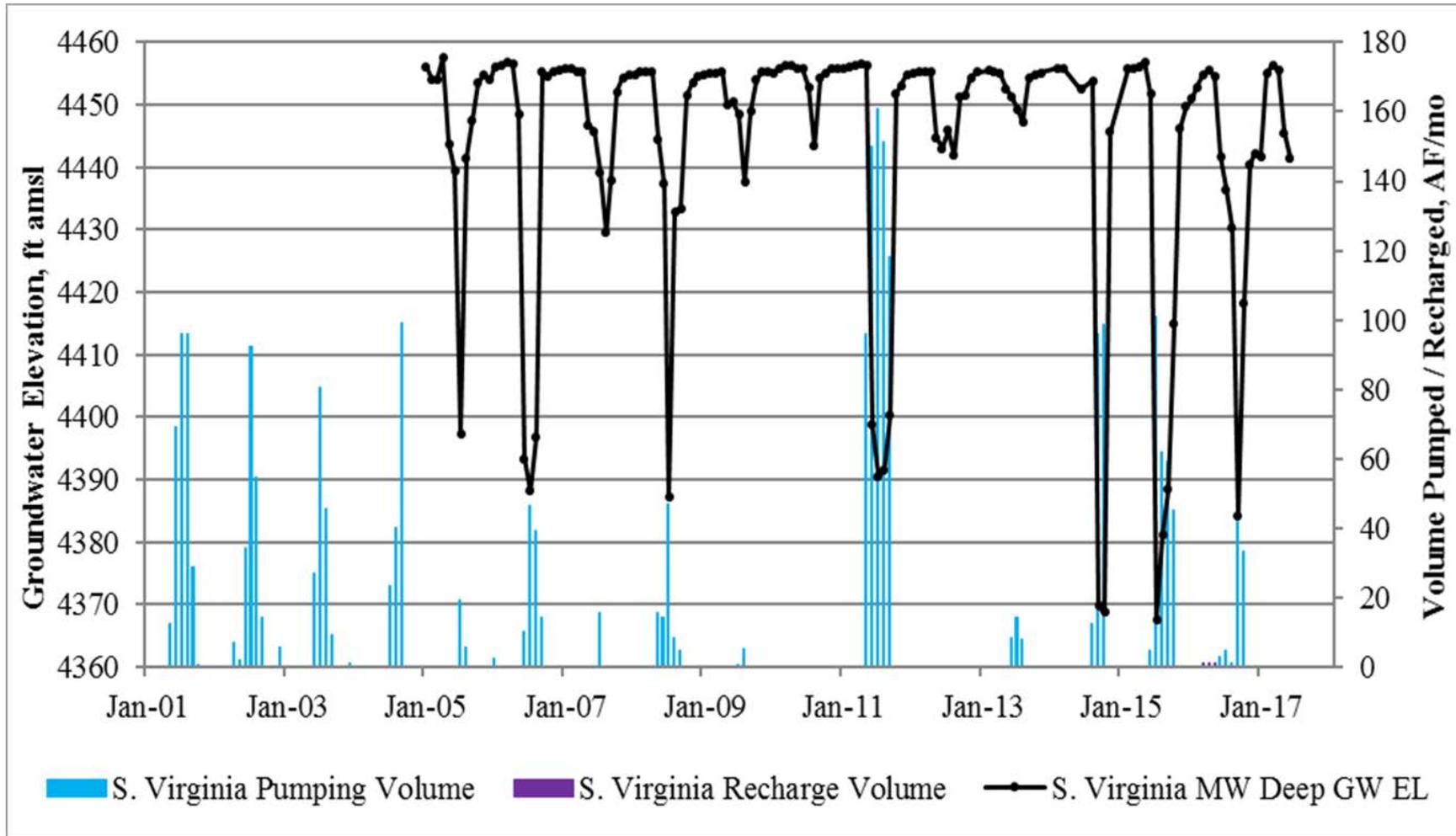
Figure 2: Groundwater Hydrograph for the South-central Area of Basin 87



Truckee Meadows Water Authority (TMWA)

09-20-17 BOARD Agenda Item 7

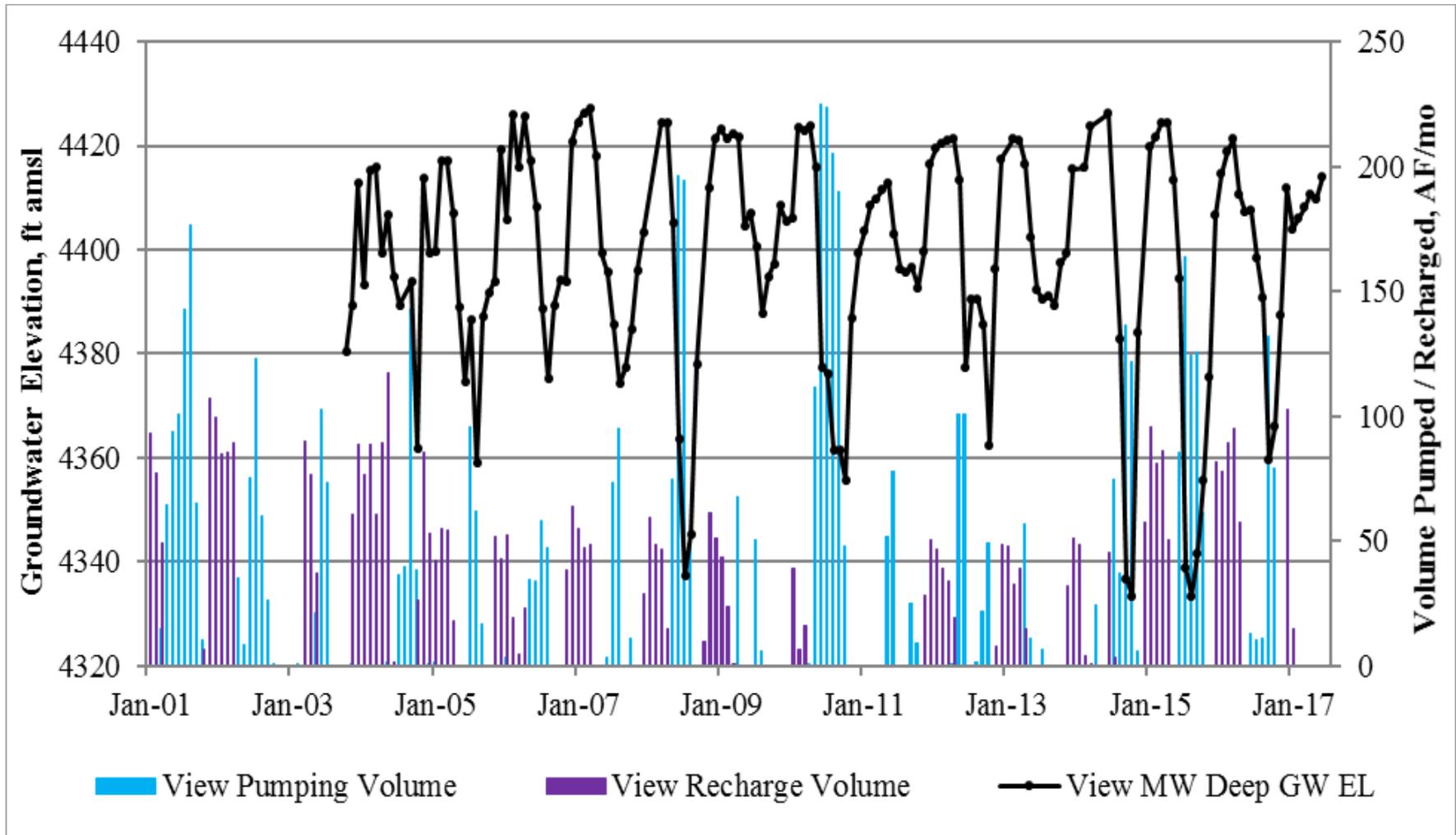
Figure 3: Groundwater Hydrograph for the Central Area of Basin 87



Truckee Meadows Water Authority (TMWA)

09-20-17 BOARD Agenda Item 7

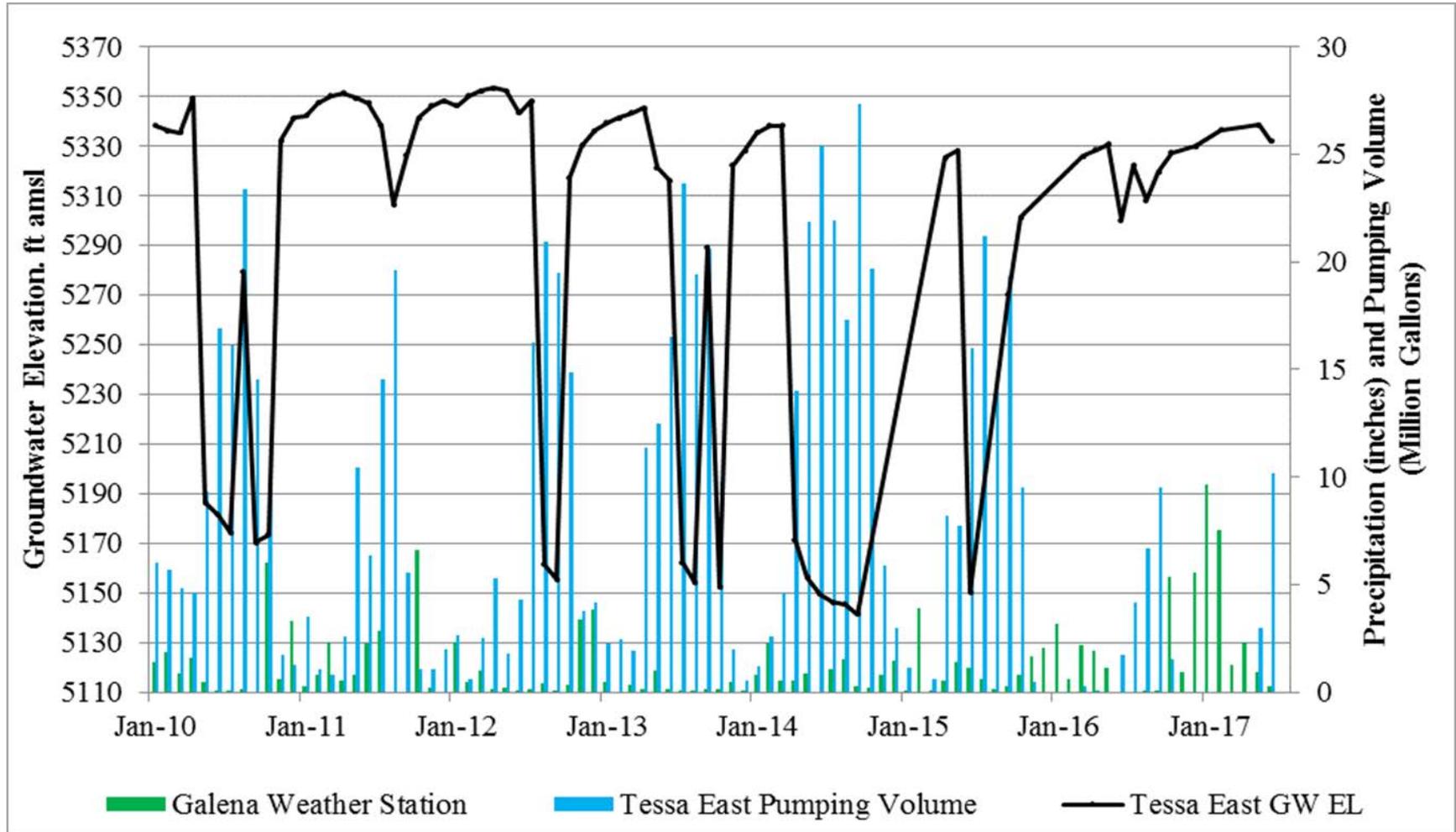
Figure 4: Groundwater Hydrograph for the North Area of Basin 87



Truckee Meadows Water Authority (TMWA)

09-20-17 BOARD Agenda Item 7

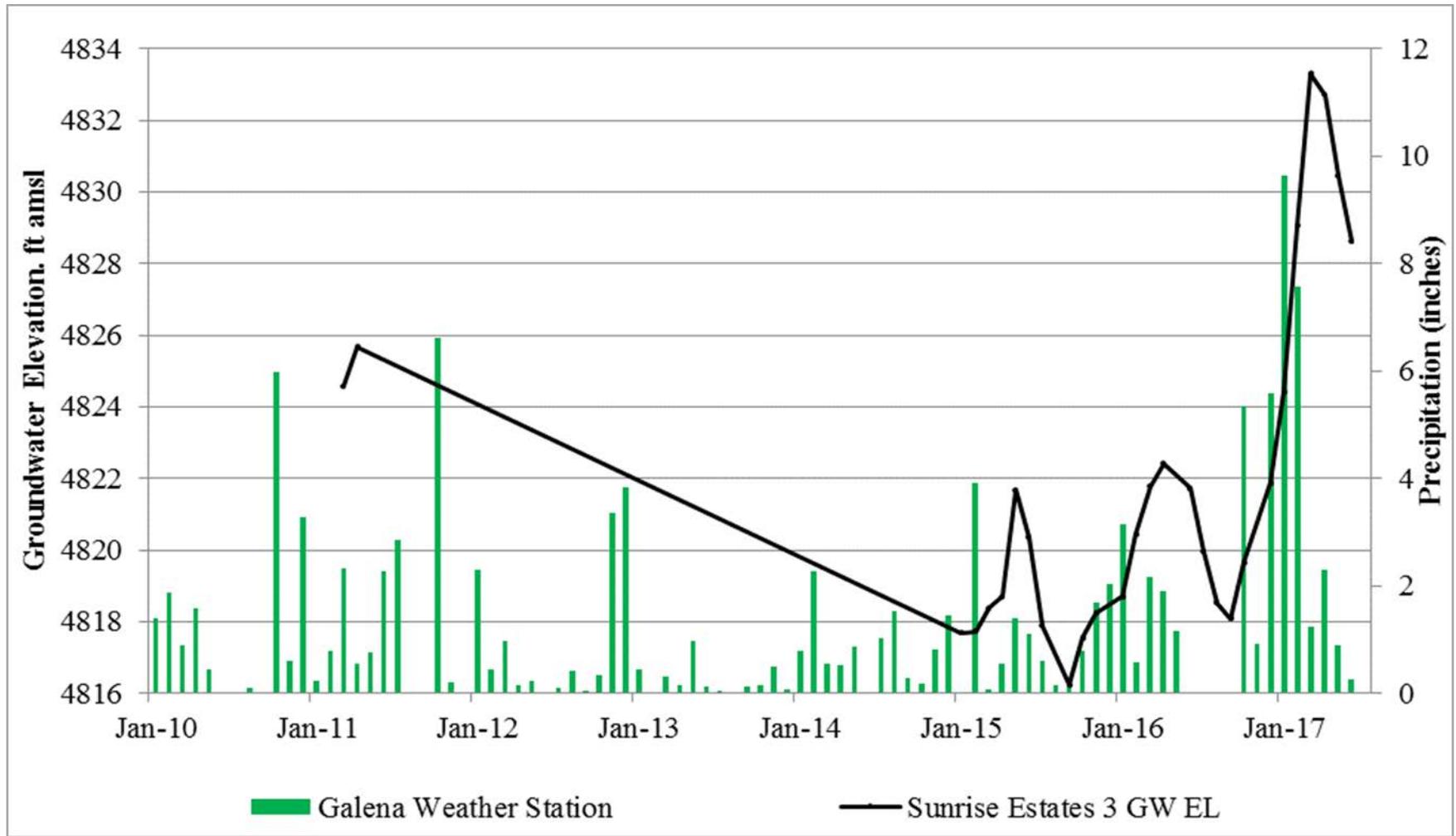
Figure 5: Groundwater Hydrograph for the Northwest Area of Basin 88 including Precip.



Truckee Meadows Water Authority (TMWA)

09-20-17 BOARD Agenda Item 7

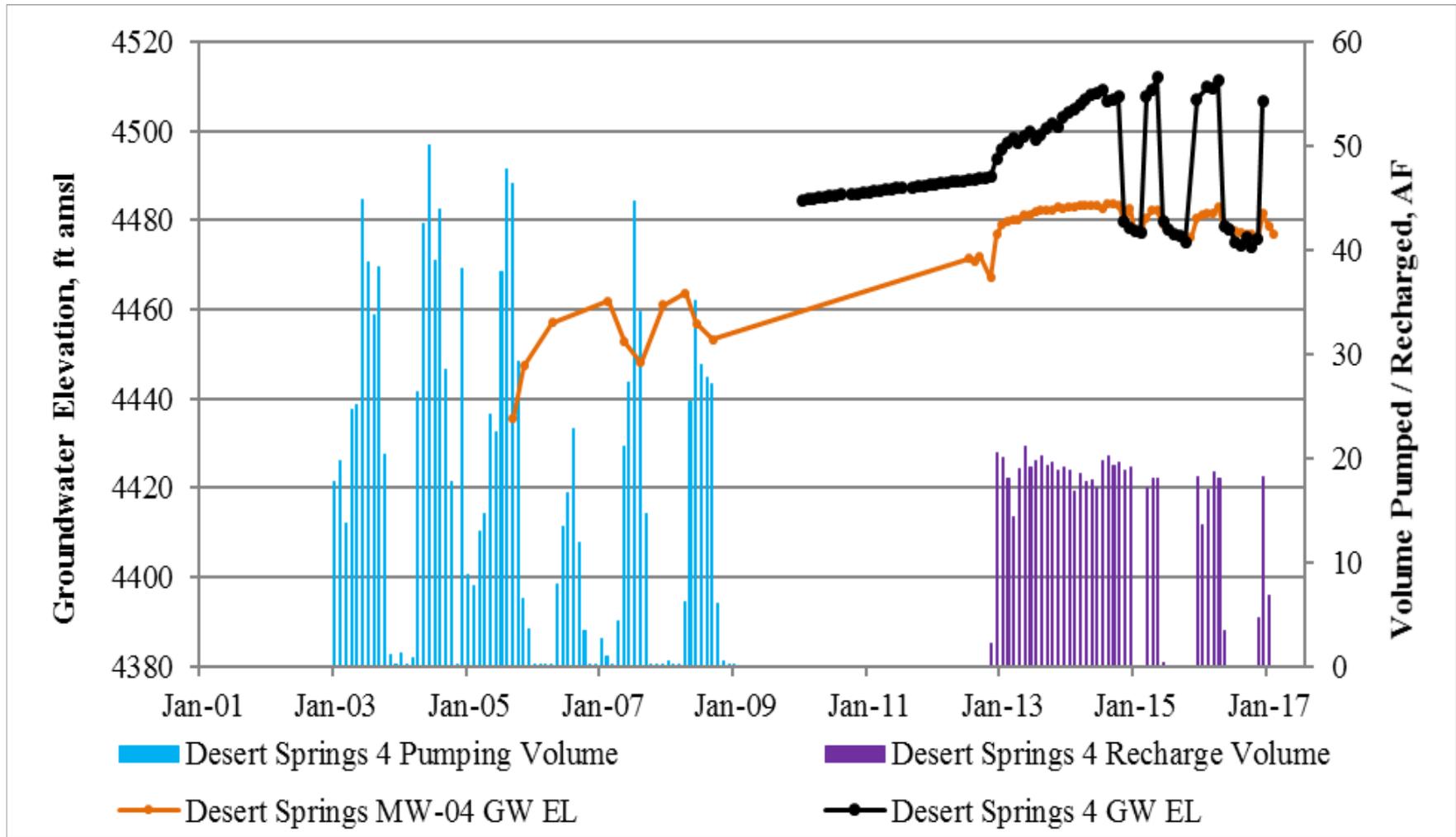
Figure 6: Groundwater Hydrograph for the Southeast Area of Basin 88



Truckee Meadows Water Authority (TMWA)

09-20-17 BOARD Agenda Item 7

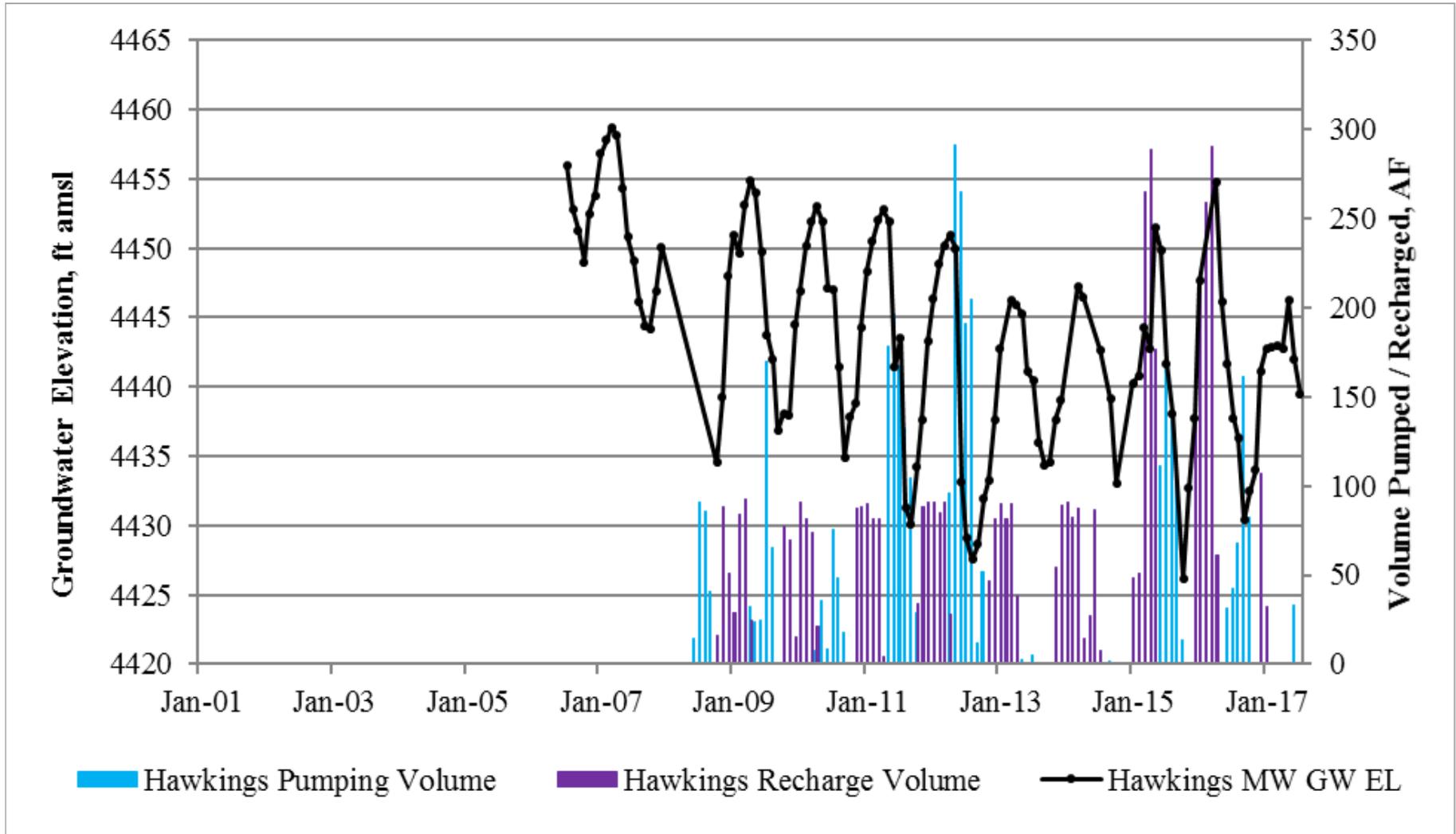
Figure 7: Groundwater Hydrograph for the West Side of Basin 85



Truckee Meadows Water Authority (TMWA)

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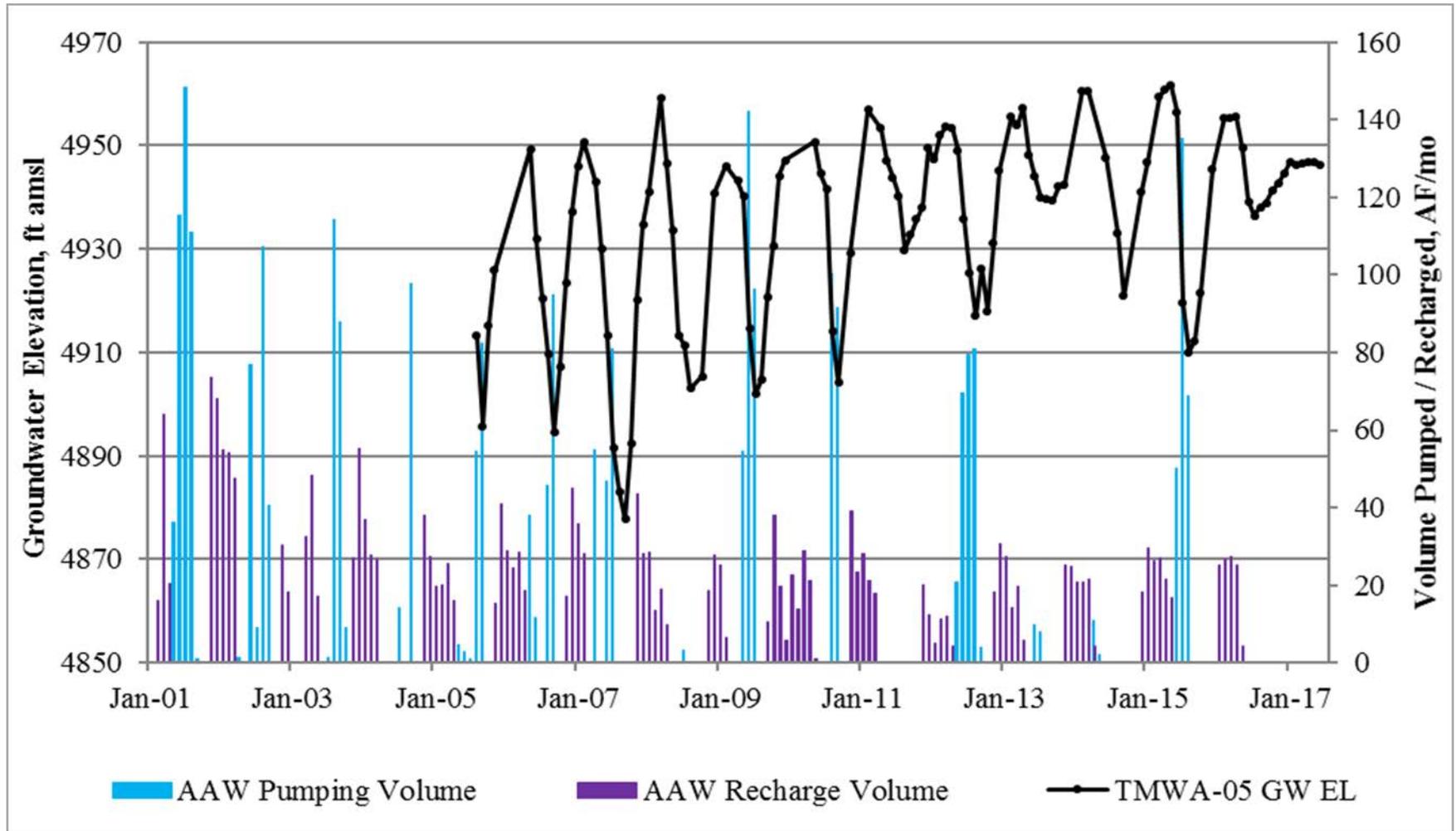
Figure 8: Groundwater Hydrograph for the East Side of Basin 85



Truckee Meadows Water Authority (TMWA)

09-20-17 BOARD Agenda Item 7

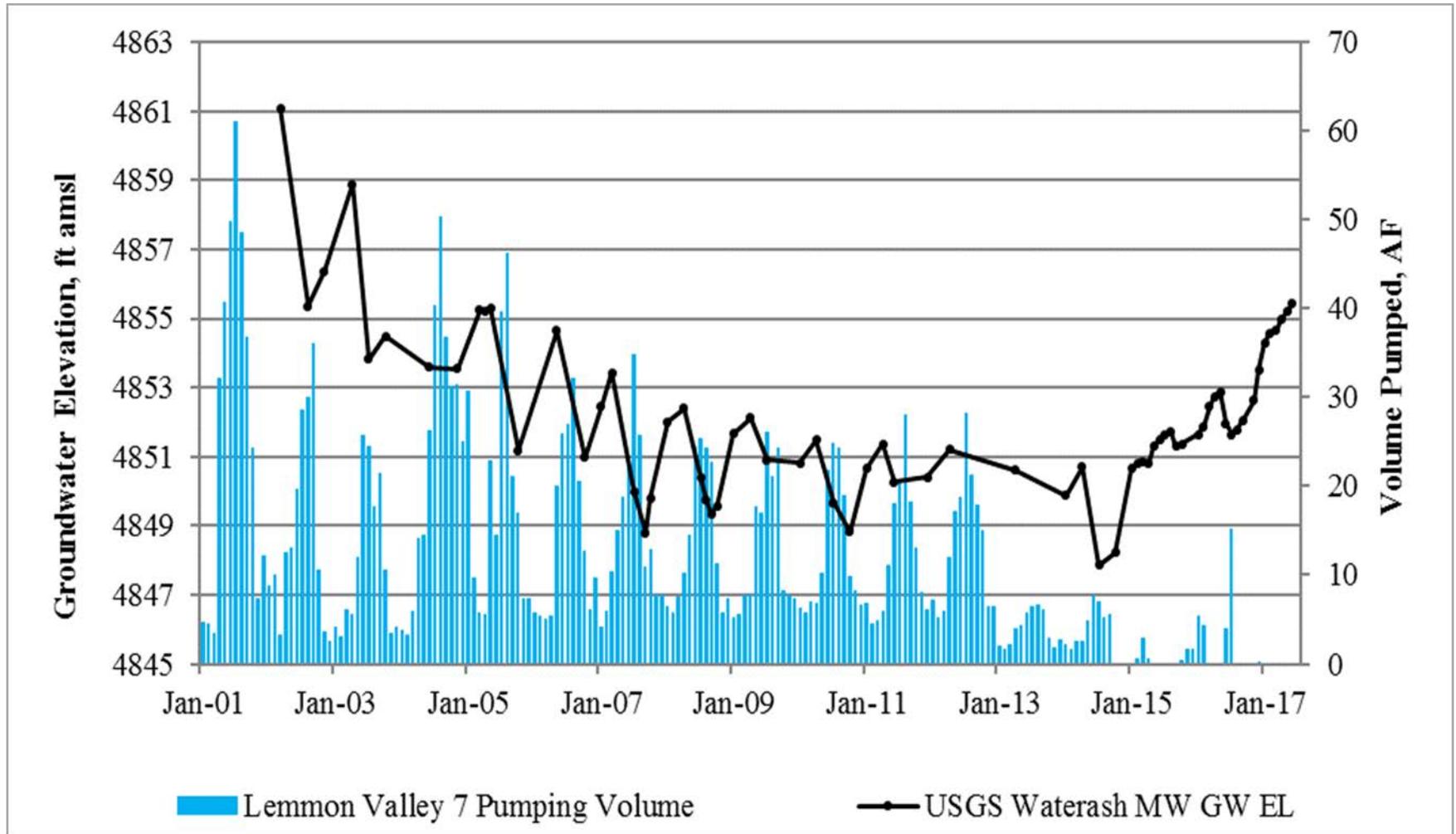
Figure 9: Groundwater Hydrograph for Basin 92A



Truckee Meadows Water Authority (TMWA)

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Figure 10: Groundwater Hydrograph for Basin 92B



Thank you!
Questions?



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: September 11, 2017
SUBJECT: Discussion and possible action on adoption of Resolution No. 254: 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 August 18, 2017 where multiple grant proposals from the spring request for proposal process were reviewed and discussed. Corresponding to the TRF Grant Priorities (see attachment), four projects are recommended for funding totaling \$281,125 out of five project funding requests for \$330,000. 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 #190: Watershed Education Initiative (WEI)

Organization: Sierra Nevada Journeys (SNJ)

Amount Requested: \$ 35,065

Amount Recommended: \$ 35,065

Organizational Match: \$ 2,700 (Cash) \$ 10,200 (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 800 K-8th grade students in 30 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 increases 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, and
- The health of the Truckee River watershed and local ecosystems improves as students and their families adopt environmental stewardship practices

Project #191: Invasive Weed Removal – Reno Park Property

Organization: City of Reno

Amount Requested: \$ 11,300

Amount Recommended: \$ 11,300

Organizational Match: \$ 3,000 (Cash) \$ 225 (In-Kind)

Project Description:

This project will chemically treat noxious and invasive weeds in Reno parks along the Truckee River which have grown in size with ongoing flooding during the winter of 2016/17. The areas will be documented with before and after photos of the infested areas and treated weeds.

TMWA staff has requested City of Reno staff to coordinate the treatment of the areas upstream of the Glendale diversion so as to coincide treatment when Glendale Water Treatment Plant is off-line and to approve the chemicals to be used.

TMWA Benefit:

This project satisfies Priority VI – *Stewardship and Environmental Awareness*. This project will focus on eradicating noxious weeds in the Truckee River corridor adjacent to Reno parks.

Project #192: Truckee River Tributaries Sediment Reduction Project

Organization: Truckee River Watershed Council (TRWC)

Amount Requested: \$ 165,000 **Amount Recommended:** \$ 165,000

Organizational Match: \$ 41,250 (Cash) \$ 900 (In-Kind)

Project Description:

The goal of this project is to improve water quality by restoring actively eroding road networks and associated stream channels in the Middle Truckee River watershed that are contributing excess sediment to the Truckee River. To achieve this goal, TRWC will implement the following: 1) improve drainage on primary roads and associated stream channels to restore hydrologic connectivity; 2) obliterate and restore un-needed road spurs and; 3) incorporate vegetation, seed, and mulch to improve soil health and enhance habitat.

TMWA Benefit:

This project satisfies the TRF Grant Priorities:

Watershed Improvements: The project will decrease sedimentation and support attainment of the 303(d) listed TMDL pollutant to Truckee River in seven key tributaries within the Middle Truckee watershed.

Local Stormwater Improvements: Extensive road networks within the watershed have led to an increase in stormwater and associated pollutants entering into the Truckee River. The project will mitigate the negative effects of stormwater and allow for increased connectivity and on-site infiltration.

Support to Rehabilitation of Local Tributary Creeks and Drainage Courses: The project will restore road systems adjacent to key tributaries of the Truckee River, improve watershed function, and reduce sediment transfer to the tributaries, as well as to the main stem of the Truckee River.

Meet Multiple Objectives: The project meets the three 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: Stakeholder prioritization of sediment reduction associated with dirt road systems is documented in the Tributaries Assessment (Truckee River Watershed Council and U.S. Forest Service, 2017) and in the Truckee River TMDL (LRWQCB, 2008).

Project #193: 2018 Spring Invasive Weed Pull & Fall Truckee River Cleanup

Organization: Keep Truckee Meadows Beautiful (KTMB)

Amount Requested: \$ 69,760

Amount Recommended: \$ 69,760

Organizational Match: \$ 15,000 (Cash) \$29,932 (In-Kind)

Project Description:

The Truckee River Cleanup is designed to address both the direct and immediate presence of weeds, litter and nonpoint pollution runoff, and the underlying causes of these challenges by educating and engaging the community. KTMB uses proven approaches to “cleanups” that have been shown to save tax payers money. The cleanup will target removal of invasive weeds and trash from along the Truckee River corridor and its tributaries during KTMB’s Great Community Cleanup and KTMB’s Truckee River Cleanup Day, monitor the impact of current cleanup efforts, and engage more year-round cleanup support.

TMWA Benefit:

This project supports the TRF Grant Priorities V, VI, VII and VIII – *Support to Rehabilitation of Local Tributary Creeks and Drainage Courses, Stewardship and Environmental Awareness, Meet Multiple Objectives, and Leverage Stakeholder Assets and Participation*. KTMB educates and informs residents and visitors about the importance of maintaining a healthy river; how noxious weeds negatively affect native plant communities, habitats, and watershed; how litter and pollution are harmful to human health, wildlife, the local environment and economy; and collaborates to create a cleaner community while saving precious taxpayer dollars that would otherwise be spent on cleanup.

TRUCKEE MEADOWS WATER AUTHORITY
(TMWA)

RESOLUTION NO. 254

**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.

Truckee Meadows Water Authority
Resolution No. 254 (continued)

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 September 20, 2017 by the following vote of the Board:

Ayes: _____

Nays: _____

Abstain: _____ Absent: _____

Approved September 20, 2017

Geno Martini, Chairman

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

On this 20th of September, 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 #190: Watershed Education Initiative (WEI)****Organization:** Sierra Nevada Journeys (SNJ)**Amount Requested:** \$ 35,065**Amount Recommended:** \$ 35,065**Organizational Match:** \$ 2,700 (Cash) \$ 10,200 (In-Kind)**Project Description:**

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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:

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TMWA Benefit:

This project supports the TRF Grant Priorities V, VI, VII and VIII – *Support to Rehabilitation of Local Tributary Creeks and Drainage Courses, Stewardship and Environmental Awareness, Meet Multiple Objectives, and Leverage Stakeholder Assets and Participation.* KTMB educates and informs residents and visitors about the importance of maintaining a healthy river; how noxious weeds negatively affect native plant communities, habitats, and watershed; how litter and pollution are harmful to human health, wildlife, the local environment and economy; and collaborates to create a cleaner community while saving precious taxpayer dollars that would otherwise be spent on cleanup.



STAFF REPORT

TO: Board of Directors
THRU: Mark Foree, General Manager
FROM: Jessica Atkinson, Human Resources Manager
Michele Sullivan, Chief Financial Officer
DATE: September 05, 2017
SUBJECT: **Discussion and action, and possible direction to staff regarding request for approval of revisions to the Voluntary Employee Benefit Association (VEBA) Plan Document**

Recommendation

TMWA Staff recommends that the TMWA Board accept the revisions to the VEBA Plan document.

Summary

- TMWA's VEBA plan document has been revised by our trust attorney to clear up ambiguities, to clarify areas related to statutory requirements and clean up formatting, language and references.
- Revisions were primarily administrative in nature and do not increase TMWA's financial obligations for post-retirement benefits.

Background

Pursuant to the Asset Purchase Agreement between TMWA and Sierra Pacific Resources (now NV Energy), TMWA was to assume certain employee benefits. One of those benefits was to continue to provide certain post-retirement health care benefits to TMWA employees. In separate board actions taken in 2001, the Board approved certain post-retirement health care benefits as contained in the labor agreement between TMWA and IBEW Local Union #1245, and approved certain post-retirement health care benefits as part of the compensation package for Management, Professional, Administrative, and Technical (MPAT) employees (Board Resolution No. 6).

In response to these agreements and resolutions, TMWA created a Trust to provide for a funding mechanism for these benefits (Resolution 59). TMWA and NV Energy funded this trust in May 2009 based upon actuarial studies. Based on the latest actuarial analysis, which was performed as of July 1, 2016, the funded status of the trust is 86%.

Discussion

After carefully reviewing the latest revision of VEBA plan document, which was approved by the TMWA Board in July of 2011, a number of clarifications and refinements were deemed necessary to clear up ambiguities, to clarify areas related to statutory requirements and also to clean up language, formatting and references. The attorney for the trust worked with trustees to draft and approve all revisions. These revisions were provided in redline form to all current trust beneficiaries and feedback was solicited from this group. In August, the Post-Retirement Medical Plan and Trust Board of Trustees approved the revisions to the Trust document. The revisions were primarily administrative in nature (grammar, correct references, etc.) and do not increase TMWA's financial obligations for post-retirement benefits.

**TRUCKEE MEADOWS WATER AUTHORITY
POST-RETIREMENT MEDICAL AND LIFE INSURANCE PLAN & TRUST
(AS RESTATED ON ~~AUGUST 23, 2011~~, 2017)**

ARTICLE 1. INTRODUCTION

1.1 Purpose of Plan.

The Truckee Meadows Water Authority Post-Retirement Medical Plan & Trust was originally established effective January 1, 2006. The Plan was subsequently amended and restated in its entirety ~~in accordance with the resolution of the TMWA Board of Trustees (Resolution No. 141) adopted on January 21, 2009, to incorporate the provisions of NRS 287.017, added to the Nevada Revised Statutes in 2007 and August 23, 2011.~~ The Plan is now being amended and restated to ~~incorporate the payment of group life insurance premiums as a benefit offered under the Plan and to make such other~~certain changes to clarify the Plan ~~which are deemed necessary by the Trustees.~~ The purpose of this Plan is to provide Participants ~~a benefit~~and their Dependents with benefits to assist with the payment of premiums for post-retirement ~~medical~~health coverage and post-retirement group life insurance coverage. The Plan, as amended and restated, hereafter reads as follows.

1.2 Plan Status.

The benefits offered under this Plan are intended to qualify as (i) accident and health plan benefits under ~~section~~Code Sections 105 and 106 ~~of the Code~~ and the corresponding Treasury ~~regulations~~Regulations, and (ii) ~~as~~ group term life insurance benefits under ~~section 79 of the~~ Code Section 79 and the corresponding Treasury ~~regulations~~Regulations. The benefits provided under this Plan ~~shall be~~are funded through the Plan which qualifies as a voluntary employees' beneficiary association under Code ~~section~~Section 501(c)(9). Pursuant to a determination letter from the Internal Revenue Service dated May 25, 2007, the Plan is exempt from Federal income tax under Code ~~section~~Section 501(c)(9). The Plan may be amended or terminated as provided in Article 9.1. Capitalized ~~Unless the context indicates otherwise, capitalized~~ terms used in this Plan are ~~defined to have the meanings set forth~~ in Article 2.

ARTICLE 2. DEFINITIONS

2.1 Code.

"Code" means the Internal Revenue Code of 1986, as amended. ~~Reference to any sectionSection or subsectionSubsection~~ of the Code includes reference to any comparable or succeeding provisions of any legislation that amends, supplements or replaces such ~~sectionSection~~ or ~~subsectionSubsection~~.

2.2 CBA.

"CBA" means a collective bargaining agreement entered into between TMWA and IBEW from time to time, together with any amendments thereto, which among other things, establishes the amount of the Post-Retirement Benefits for those employees of TMWA who are covered by the CBA.

2.3 Dependent.

"Dependent" shall have the same meaning as set forth in the ~~Group Health PlanPlans~~ and/or the Group Life Insurance ~~Plan,Plans, such as the case may be a spouse or child of the Participant;~~ provided, however, that any such Dependent must also qualify as a dependent of the Participant under the applicable provisions of Code Section 152 and the corresponding Treasury Regulations.

2.34 Eligible Retiree.

"Eligible Retiree" means any MPAT Employee or IBEW 1245 Employee who has separated from service from TMWA after attaining age 55 and has completed at least ten (10) Years of Service as defined in Section 2.18; provided, however, the term "Eligible Retiree" shall not include any retiree or former employee of TMWA that is entitled to receive benefits under "The Truckee Meadows Water Authority OPEB Trust Fund," a separate plan that is currently maintained by TMWA.

~~2.4 Employer.~~

~~"Employer" means Truckee Meadows Water Authority.~~

2.5 ~~Group Health PlanPlans~~ and Group ~~lifeLife~~ Insurance ~~PlanPlans~~.

“Group Health Plan”(s)” means (i) the ~~current~~ group policies and/or plans maintained by TMWA from time to time that provide group health may be offered by TMWA from time to time that provide medical, dental, and/or vision coverage to ~~the~~ Participants and ~~Dependents, and/or~~ their Dependents, (ii) individual policies or plans that are procured by a Participant that provide medical, dental, and/or vision coverage to Participants and/or their Dependents, (iii) Medicare Plans Part B and Part D, Medicare Supplemental Plans, and Medicare Advantage Plans that provide medical, dental, and/or vision coverage for Participants and/or their Dependents, together with any current and future plans available to individuals eligible for Medicare coverage that are approved and authorized by the United States Department of Health and Human Services or its successor, and (iv) the group policies or plans offered by an employer of a Participant or an employer of a spouse of a Participant (other than TMWA) that provide medical, dental, and/or vision coverage to Participants and/or their Dependents.

“Group Life Insurance Plan”(s)” means the ~~current~~ group policies and/or plans maintained that may be offered by TMWA, from time to time, that provide group life insurance coverage to the Participants and or their Dependents.

Notwithstanding anything contained in this Section 2.5 to the contrary, the terms “Health Plan(s)” and “Group Life Insurance Plans(s)” shall not include a policy or plan offered by the employer of a Participant or an employer of a Participant’s spouse to the extent that the premiums are paid by the employer on a “pre-tax” basis, including, without limitation, a policy or plan offered by an employer under a Code Section 125 plan (commonly referred to as a “Cafeteria Plan”).

2.6 Highly Compensated Employee.

"Highly Compensated Employee" means, for purposes of determining discrimination, a Participant who is described in ~~section 414(q) of the~~ applicable provisions of Code Sections 414(q) and 105(h) and the corresponding Treasury ~~regulations under section 414(q) of the Code~~ Regulations thereto.

2.7- IBEW.

"IBEW" means the Local Union 1245 of the International Brotherhood of Electrical

~~the Employer~~TMWA pursuant to the Purchase Agreement between TMWA and Sierra (the “Purchase Agreement”) and transferred to TMWA from Sierra on June 11, 2001. MPAT Transfer Employees shall also include the three MPAT Employees listed on Appendix “B” attached hereto who did not transfer to TMWA from Sierra on June 11, 2001, but who received offers of employment from TMWA entitling them to receive credit for their Years of Service accrued under the Sierra Plan for all relevant purposes under this Plan;

~~(a)(b)~~ "MPAT Transfer Employees Receiving Sierra Plan Benefits" ~~means~~mean ~~each~~ former management, professional, administrative and technical ~~employees~~employee of Sierra who ~~were~~was hired by ~~the Employer~~TMWA pursuant to the Purchase Agreement, transferred to TMWA from Sierra on June 11, 2001, and who elected to retire under the Sierra Plan;

~~(b)(c)~~ "Other MPAT Employees" ~~means full-time~~mean each (i) regular (non-temporary) management, professional, administrative and technical ~~employees hired by~~employee of TMWA who ~~are~~is not listed in clauses (a) or (b) ~~above~~of this Section 2.9, other than an employee who is entitled to receive benefits under “The Truckee Meadows Water Authority OPEB Trust Fund.”

2.10—~~(RESERVED)~~

—~~2.11~~ NRS and NAC.

“NRS” means the Nevada Revised Statutes, as amended from time to time, and “NAC” means the Nevada Administrative Code, as amended from time to time.

~~2.12~~11 Participant.

"Participant" means an Eligible Retiree who has elected to participate in the Plan pursuant to ~~section~~Section 3.1.

~~2.13~~12 Permanent Waiver.

“Permanent Waiver” means the execution by a Participant or ~~eligible employee~~Eligible Retiree of a written instrument, in a form approved by the Trustees, delivered to the Trustees,

whereby a Participant or ~~eligible employee~~Eligible Retiree elects to waive his or her right to receive ~~benefits~~Post-Retirement Benefits under the ~~term~~terms of this Plan. If a Participant or ~~eligible employee~~Eligible Retiree executes and delivers a Permanent Waiver to the Trustees, such waiver shall be irrevocable, and the Participant or ~~eligible employee~~Eligible Retiree shall be precluded from participating in this Plan as of the effective date of the Permanent Waiver and such waiver shall apply to all future Plan Years following the effective date of the Permanent Waiver.

2.1413 Plan.

"Plan" means the Truckee Meadows Water Authority Post-Retirement Medical and Life Insurance Plan & Trust, which is set forth in this document.

2.1514 Plan Year.

"Plan Year" means the calendar year. __

2.15 Post-Retirement Benefits.

"Post-Retirement Benefits" mean and are limited to the premiums required to be paid by this Plan, either directly to a Health Plan and/or Group Life Insurance Plan, or by reimbursement to the Participant for coverage of a Participant and/or his or her Dependents under (i) a Health Plan and/or (ii) Group Life Insurance Plan. The actual amount of Post-Retirement Benefits payable by this Plan on behalf of a particular Participant and his or her Dependents are described in further detail in Sections 4.1.1 through 4.1.5 and Article 5. Post-Retirement Benefits are not to include (i) the reimbursement of any co-payments, deductibles, out of pocket, or other similar charges incurred by a Participant and/or his or her Dependents under a Health Plan, (ii) any premiums paid by a Participant and/or his or her Dependents for coverage under a Health Plan that are reimbursed to the Participant or the Dependents by a person or entity other than this Plan, or (iii) any premiums paid by a Participant and/or his or her Dependents under a Health Plan that are not treated as qualified medical expenses under Code Section 213.

2.16- Purchase Agreement.

"Purchase Agreement" means the "Asset Purchase Agreement between Sierra Pacific Power

calculated at the time of separation from service from TMWA retroactively for all periods of continuous regular employment. No period where an employee is classified by TMWA as a temporary, non-benefited employee will qualify towards periods of ~~Year~~Years of Service. Years of Service shall be recognized only for periods of paid employment. Therefore, the only periods of unpaid leave of absence that shall be ~~recognized~~credited towards Years of Service are those required by current or future State and Federal law~~laws~~, such as The Uniformed Services Employment and Reemployment Rights Act (USERRA). Furthermore, breaks in service shall not be included in Years of Service; however, Years of Service earned prior to a break in service shall be aggregated with Years of Service worked after the break in service. All references in this paragraph to a "provisional" employee of TMWA means an IBEW 1245 Employee whose employment, at the time of hire, was intended to last more than six (6) months, but less than two (2) calendar years, and whose work or duties are linked to specific projects, or are in anticipation of future events, with a specific date at which the position will be eliminated.

2.19 Adjusted PRMPT Years of Service, ~~Adjusted PRMPT.~~

~~The~~ "Adjusted PRMPT Years of Service" shall be calculated by adding each "Year of Service." Years of Service will then be prorated for periods in which ~~an employee~~a Participant worked less than full time (as defined by the ~~Collective Bargaining Agreement~~CBA or TMWA policy). Refer to ~~Article~~Section ~~4.17 of this document~~1.7 for further information.

2.20- Sierra.

"Sierra" means the Sierra Pacific Power Company, now known as NV Energy.

2.21 Sierra Plan.

"Sierra Plan" means the Sierra Pacific Resources Post-Retirement Medical Plan.

2.22 Trust.

"Trust" means the Trust established and set forth in this document.

2.23 Trustees and Trustee.

"Trustees" ~~means~~mean the trustees appointed pursuant to Article 8 whose duties include the administration of the Plan and Trust, and "Trustee" means any one (1) of the Trustees.

2.24 TMWA.

"TMWA" means the Truckee Meadows Water Authority, a local government agency within the meaning of NRS 354.474.

ARTICLE 3. ELIGIBILITY AND PARTICIPATION

3.1 Eligibility and Commencement of Coverage.

Each Eligible Retiree shall be eligible to become a Participant in the Plan upon the later of (i) the date ~~of his or her separation~~the Eligible Retiree separates from service from TMWA, or (ii) the date the Eligible Retiree applies for ~~benefits~~Post-Retirement Benefits under this Plan, either individually or together with his or her Dependents, in the time and manner specified by the Trustees. Notwithstanding the preceding sentence, if an Eligible Retiree either retired from Sierra or terminated employment from Sierra prior to being hired by TMWA (e.g., the Eligible Retiree did not transfer employment from Sierra to TMWA pursuant to the Purchase Agreement) and elected to receive post-retirement ~~medical~~health benefits from the Sierra Plan, the Eligible Retiree will not be eligible to become a Participant unless at the time of separation from service from TMWA, the Eligible Retiree (i) earned ten years of service as an employee ~~of~~with TMWA; (ii) attained age 55; and (iii) applies for ~~benefits~~Post-Retirement Benefits under this Plan in the time and manner specified by the Trustees. If an Eligible Retiree defers, ~~but does~~ not permanently ~~waives,waive~~ coverage under this Plan at the time of separation of service from TMWA, the Eligible Retiree may apply for benefits under this Plan (i) during any subsequent open enrollment period under a Health Plan, or (ii) following an event ~~as defined in the Groupa Health Plan~~ that allows an Eligible Retiree to ~~apply for benefits~~select coverage under ~~this~~the Health Plan at a time other than during the open enrollment period.-

3.2 Termination of Participation.

A Participant shall cease to be ~~covered under eligible to participate in~~ this Plan on the occurrence of earliest of the following ~~dates: events~~: (i) the date of the Participant's death; (ii) the

date the Participant's ~~post-retirement health coverage and life insurance coverage is~~ Post-Retirement Benefits are cancelled due to the execution of a Permanent Waiver by the Participant; (iii) ~~due to the Participant's non-payment of~~ the date the Participant fails to pay his or her share of the premiums ~~or costs;~~ for coverage under a Health Plan and/or Group Life Insurance Plan in accordance with the policies established by the Trustees from time to time; (iv) the date that a Participant is no longer covered under a Health Plan and a Group Life Insurance Plan, or (iv) the date this Plan is terminated. If a Participant's participation in the Plan is terminated by reason of failing to pay his or her share of premiums, the Participant may reenroll in the Plan during any subsequent open enrollment period, but only if the Participant has remitted to the Plan all delinquent premiums prior to the first day of the commencement of coverage.

ARTICLE 4. ——— POST-RETIREMENT BENEFITS

4.1 ~~Health~~ Post-Retirement Benefits Pertaining to Health Plans-In General.

~~A Participant shall be eligible to participate in the health~~ If permitted by this Plan and the terms of the applicable Health Plan, a Participant may elect coverage ~~options offered by TMWA~~ under a particular Health Plan, and a Participant may enroll his or her Dependents in ~~the health coverage options offered by TMWA, if permitted by the applicable Group Health Plan.~~ Monetary benefits ~~such Health Plan.~~ Post-Retirement Benefits earned by a Participant under this Plan shall be used to either reimburse the Participant or pay directly ~~all or a portion of~~ to the Health Plan ~~the Plan's share of the total~~ premiums ~~or costs~~ assessed for health coverage such coverage under the Health Plan, as specified by the terms of this Plan (See Sections 4.1.1 through 4.1.4 for the calculation of the amount of the Post-Retirement Benefits to which a Participant and his or her Dependents, as specified by the terms of this Plan. Portions of health coverage are entitled to receive for coverage under a Health Plan). Those portions of the premiums ~~or costs~~ that are not required to be paid by this Plan shall be the sole responsibility of, and paid by, the Participant. A Participant who does not pay his or her portion of the premiums ~~or costs~~ for ~~health~~ coverage under a Health Plan in the time and manner specified by the Trustees shall forfeit all rights ~~for~~ to his or her coverage under the ~~Group~~ Health Plan. The Trustees shall from time to time adopt policies pertaining to the timing and the manner in which Participants and their Dependents ~~of Participants~~

are to pay their share of the health coverage premiums ~~and costs. In accordance with~~for the ~~current policy of coverage elected.~~ If the Trustees, ~~the entire health care~~ adopt a policy in which all premiums ~~and costs attributable for coverage under a Health Plan are~~ to the health care coverage ~~chosen by the Participant will~~ be paid by the Plan, ~~and the the Participant and Dependents of a Participant is required to shall~~ reimburse the Plan for ~~his or her share of the premiums and costs attributable to the health care coverage chosen by the Participant.~~ To the extent that the Trustees ~~require the Participants and Dependents to pay their share of the health care premiums and costs directly to the Plan, rather than to the Group Health Plan, then such~~their share of the total premiums ~~that are required to be paid by them, and the Plan's~~ policies and procedures shall specify the due dates in which the Participant and/or ~~the Participant's~~ Dependents are required to remit their share of such ~~health care premiums and costs~~ to the Plan. Copies of the policies and procedures adopted by the Trustees from time to time are to be provided to each Participant and each Dependent of a Participant.

4.1.1 Transfer of Employees between IBEW and MPAT.

If ~~an employee transfers during the time a Participant was employed by TMWA and/or Sierra, he or she transferred~~ from employment as an IBEW 1245 Employee to employment as an MPAT Employee (or vice versa), the ~~employee's health care benefits at retirement~~Participant's ~~Post-Retirement Benefits~~ under this Plan ~~at his or her Retirement Date~~ shall be calculated as if ~~the employee~~Participant was employed in his or her most recent employment classification for his or her entire period of service with TMWA and/or Sierra. ~~Notwithstanding the above, if the employee~~Participant was an IBEW Transferred Employee or an MPAT Transferred Employee, such ~~employee~~Participant shall continue to be treated as either an IBEW Transfer Employee or an MPAT Transferred Employee at his or her ~~retirement~~Retirement Date for purposes of calculating ~~his or her~~ Years of Service ~~(as defined in under Section 2.18 herein) under this Plan., and if applicable Section 2.19.~~

4.1.2 Specific ~~Health-Post Retirement~~ Benefits for ~~Health Plan Coverage for~~ MPAT Employees.

~~An Employee-A Participant~~ who was an MPAT Employee ~~and is an Eligible Retiree~~at his or

~~her Retirement Date may participate in the health-elect coverage options under the Health Plans that are made available to TMWA's active employees who are entitled to receive health and life benefits (hereafter referred to as "Benefited Employees of the Employer or any"), or alternatively, elect coverage under other health insurance plan.~~ Health Plans described in Section 2.5. A Participant who is an MPAT Employee shall receive Post-Retirement Benefits based upon an annual credit ~~toward the~~ that is to be applied towards the total annual ~~premium~~ premiums charged for his or her chosen ~~health~~ Health Plan coverage ~~option~~ which is to be based upon the Participant's Years of Service as described below. The annual credit shall be calculated as follows:

**Participant's Age
(Each Month) on
Birthday during the
Relevant Plan Year
for the Applicable
Monthly Request
for Coverage**

**Annual
Credit
Calculation**

Age 55 through 64

\$235 x "Adjusted PRMPT Years of Service"
(up to 30 years)

Age 65 and above

\$105 x "Adjusted PRMPT Years of Service"
(up to 35 years)

The total annual credit shall be reduced by 5% for each full year (with proration for fractional months) that the ~~Eligible Retiree~~ Participant is under age 62 as of the date he or she requests coverage under this Plan. (the "Penalized Benefit"). ~~If an Eligible Retiree participates in the Plan and~~ If a Participant receives a Penalized Benefit at the time of his or her initial participation in the Plan, then such Penalized Benefit is to continue in effect permanently, regardless of whether coverage is continuous. The annual credit shall be provided in the time and manner specified by the Trustees. In order to be eligible ~~for the above health benefits, Participants who are~~

to participate in a Health Plan offered by TMWA, when a Participant described in this Section attains age 65 or older during the relevant Plan Year he or she must enroll in and pay the total cost of Medicare Part "B" or Medicare Part "C" coverage. Unless the Plan pays the Participant's share of premiums directly to the Health Plan which the Participant elects coverage under, the Participant shall pay ~~for the health insurance coverage~~ his or her share of such premiums to the Health Plan and shall be reimbursed by the Plan to the maximum amount specified above. See Section 4.1.6 for reimbursement procedures.

Example of Calculation of Annual Credit:

Assume a MPAT Employee retires at age 55 with 15 "Adjusted PRMPT Years of Service." His or her annual ~~credit~~ Post-Retirement Benefits that may be used towards his or her ~~health insurance~~ coverage under a Health Plan would be as follows:

Before Age 65:

Step 1: Calculate maximum annual benefit. $\$235 \times 15$ "Adjusted PRMPT Years of Service" = $\$3,525$.

Step 2: Calculate the reduction percentage. $5\% \times 7$ (years between age 62 and age 55) = 35%

Step 3: Calculate the reduction amount. $\$3,525 \times 35\% = \$1,233.75$

Step 4: Reduce the maximum benefit by the reduction amount to obtain the annual credit. $\$3,525$. (step 1) - $\$1,233.75$ (step 3) = $\$2,291.25$ annual credit.

After the ~~participant~~ Participant reaches age 65, repeat the steps above by substituting \$105 for \$235 in step 1. Result = $\$1,575$ (step 1) - $\$551.25$ (step 3) = $\$1,023.75$ annual credit.

4.1.3 Specific ~~Health~~ Post-Retirement Benefits for Health Plan Coverage for all IBEW 1245 Employees ~~Hired~~ hired on or after January 1, 1998 and for "IBEW Transfer Employees Receiving Sierra Plan Benefits" hired before January 1, 1998.

All IBEW 1245 Employees hired on or after January 1, 1998, and "IBEW Transfer

Employees Receiving Sierra Plan Benefits” hired before January 1, 1998, ~~may participate in the health~~ are entitled to receive Post-Retirement Benefits for coverage ~~options~~ under the Health Plans made available to ~~active~~ Benefited Employees of ~~the Employer TMWA~~ or ~~any private health insurance plan as allowed by the NRS.~~ In addition, such Participant ~~other Health Plans described in Section 2.5.~~ For those Participants described in this Section, he or she will receive Post-Retirement Benefits in an amount equal to the following lifetime lump-sum credit which will be applied toward the annual ~~premium~~ premiums charged for his or her ~~chosen health~~ coverage ~~option~~ under a Health Plan: \$1,250 for each “Adjusted PRMPT Year of Service.” The ~~Participant~~ Plan shall ~~be entitled to use~~ the ~~entire premium cost~~ amount of ~~health coverage~~ the above referenced lifetime lump-sum credit to pay the entire premiums for the coverage elected under a Health Plan for the Participant and his or her Dependents until the lifetime lump-sum credit is exhausted. At that point, the Participant may elect to continue health coverage through ~~the Health Plan and this~~ Plan; provided, however, that the Participant is to be responsible for ~~such~~ the total premiums for his or her coverage under the Health Plan at the ~~rate~~ rates and terms established ~~for~~ under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended (hereafter, referred to as “COBRA coverage and eligible duration under the Group Health Plan in which the Participant has elected health coverage.”). Unless otherwise specified by the Trustees, the Plan ~~shall~~ may pay the entire ~~premium or costs charged~~ premiums for a Participant’s chosen ~~health coverage option~~ under a Health Plan, provided that the Participant ~~reimburses~~ shall reimburse the Plan for the Participant’s share of such premiums ~~and costs until such time that the lifetime lump sum credit is exhausted~~ in accordance with the policies and procedures adopted from time to time by the Trustees.

–4.1.4 Specific Post-Retirement Benefits for Health Plan Coverage for IBEW Transfer Employees Hired by Sierra before January 1, 1998.

(a) At Least Age 55 and Under Age 65.

A Participant who was an IBEW Transfer Employee, was hired by Sierra before January 1, 1998 and is at least age 55 and under age 65 on ~~the date that he~~ his or ~~she requests her~~ Retirement Date, is entitled to receive Post-Retirement Benefits only for coverage ~~under this~~ a Health Plan, is

~~eligible to participate in the same health coverage plans as active employees of the Employer that is offered by TMWA to its Benefited Employees~~ until the Plan Year in which the Participant attains age 65. During the Plan Year in which the Participant attains age 65 and later Plan Years, the Participant is eligible to ~~participate in the health plans~~ receive Post-Retirement Benefits for coverage under Health Plans offered by ~~the Employer~~ TMWA to ~~active employees of the Employer~~ its Benefited Employees, a Medicare Supplement Plan or a Medicare Risk Contract. However, during the Plan Year in which the Participant attains age 65 and later Plan Years, the Participant must enroll in and pay the total cost of Medicare Part "B" or Medicare Part "C" coverage, in accordance with Medicare enrollment criteria, in order to be eligible for the ~~benefits~~ Post-Retirement Benefits under this ~~paragraph. In addition, such Participant will~~ Section. For those Participants described in this Section, they are entitled to receive Post-Retirement Benefits equal to an annual credit (as described below) which is to be used toward the annual ~~premium or costs~~ premiums charged for ~~his or her chosen health~~ the Participant's coverage ~~option~~ chosen under a particular Health Plan (including the coverage ~~cost~~ for his or her Dependents~~;~~). The annual credit referenced herein is to be determined as follows:

- (1) 80% of the total annual premium ~~or for~~ coverage ~~costs~~ under a Health Plan, less
- (2) 4% of the total annual premium ~~or for such~~ coverage ~~costs~~, multiplied by the difference between:
 - (A) 20, minus
 - (B) the Participant's number of Years of Service (not to exceed 20).

Unless otherwise specified by the Trustees, the Plan ~~shall~~ may pay the entire annual premium ~~or costs~~ charged for a Participant's ~~chosen health~~ coverage ~~option~~ under a Health Plan, provided that the Participant ~~reimburses~~ must reimburse the Plan for the Participant's share of such premiums ~~and costs~~ (i.e., those premiums in excess of the annual credit available to the Participant) in accordance with the policies and procedures adopted from time to time by the Trustees. ~~Each~~ In this regard, each Participant shall be responsible for reimbursing the Plan for the difference between (i) the amount determined under ~~(4.1)~~ 4(a)(1) and 4.1.4(a)(2), and ~~(2) above and~~ (ii) 100%

of the total premium ~~or charged for~~ coverage ~~costs attributable to the health coverage option~~ chosen by the Participant: under a Health Plan.

(b) Age 65 and over.

A Participant who was an IBEW Transfer Employee, was hired by Sierra before January 1, 1998, and is age 65 or over on ~~the date that he or she requests coverage under this Plan,~~ his Retirement Date is eligible to ~~participate in the health plans~~ receive Post-Retirement Benefits for coverage under Health Plans offered by ~~the Employer~~ TMWA to ~~active employees of the Employer~~ its Benefited Employees, a Medicare Supplement Plan, or a Medicare Risk Contract. ~~In addition, such Participant~~ For those Participants described in this Section, they will receive Post-Retirement Benefits equal to an annual credit that shall be applied toward the annual ~~premium or costs~~ premiums charged for ~~his or her chosen health~~ the coverage option ~~elect~~ selected under the Health Plan (including the premiums for coverage ~~elect~~ selected for his or her Dependents). The annual credit referenced in the preceding sentence is to be determined as follows:

- (1) 85% of the total annual ~~premium or premiums for~~ coverage ~~costs~~ under a Health Plan, less
- (2) 4% of the total annual premium ~~or for such~~ coverage ~~costs~~, multiplied by the difference between:
 - (A) 20, minus
 - (B) the Participant's number of Years of Service (not to exceed 20).

The 85% in clause (1) above shall be 100% for a Participant who elects to participate in ~~the~~ Medicare Risk Contract. In order to be eligible for the benefits under this ~~paragraph~~ Section, the Participant must enroll in and pay the entire cost of Medicare Part "B" or Medicare Part "C" coverage. Unless otherwise specified by the Trustees, the Plan ~~shall~~ may pay the entire annual premium ~~or costs~~ charged for a Participant's ~~chosen health~~ coverage ~~option~~ under a Health Plan.

provided that the Participant ~~reimburses~~must reimburse the Plan for the Participant's share of such premiums ~~and costs~~(i.e., those premiums in excess of the annual credit available to the Participant) in accordance with the policies and procedures adopted from time to time by the Trustees. ~~Each~~In this regard, each Participant described in this Section shall be responsible for reimbursing the Plan for the difference between (i) the amount determined above under 4.1.4(b)(1) and 4.1.4(b)(2), and (ii) 100% of the total premium or charged for coverage costs chosen by the Participant under a Health Plan.

4.1.5 Surviving ~~Spouse~~Spouse's Death Benefits.

The surviving spouse of ~~any Participant, either individually or together with the Participant's other Dependents~~a deceased Participant who ~~was~~was covered by ~~the~~a Health Plan on the Participant's date of death, may continue receiving ~~health~~coverage under the Health Plan for three years after the death of the Participant, ~~beginning if permitted by the Health Plan and applicable law.~~ Such coverage is to begin on the first day of the month following the month of the Participant's death. ~~The Trust Plan~~The Trust Plan will pay a portion of the premiums ~~or costs~~for the health coverage plan under the Health Plan for the first year after the Participant's death by computing ~~benefits~~Post-Retirement Benefits under this Plan as if the surviving spouse was the Participant. All terms applicable to the Participant in the year of his or her death shall apply to the surviving spouse during the first year following the Participant's death. ~~For the final two years of the three year period following the death of a Participant, the surviving spouse shall be eligible for coverage under health care option Health Plans that covered the deceased Participant. If the surviving spouse elects to continue to receive health coverage under a Group Health Plan, was eligible to participate in under the terms of this Plan. If during the final two years of the three year period following the death of a Participant, the surviving spouse elects to continue to receive coverage under a Health Plan,~~ then the surviving spouse will be obligated to pay for the total premiums ~~or costs~~offor such coverage ~~and eligible duration~~at the rate established for COBRA coverage underby the ~~Group~~Group Health Plan ~~providing that provides~~provides coverage to the surviving spouse and eligible Dependents.

4.1.6 Procedures for Payment of Benefits.

In the event that a Participant and/or his or her Dependents is entitled to receive ~~benefits~~Post-Retirement Benefits under the terms of the Plan for ~~health-care~~ coverage under a Health Plan, in order to receive such benefits from the Plan, the Participant and/or his or her Dependents must submit proof of ~~health-insurance~~ coverage under a Health Plan and proof of the payment of premiums in the time and manner specified by the Trustees. Participants who are age 65 or older during the relevant Plan Year must also submit proof of enrollment in and proof of payment of premiums for Medicare Part "B" or Medicare Part "C" coverage. Post-Retirement Benefits shall be made in a time and manner specified by the Trustees upon receipt of proof of coverage and payment of premiums. However, if a Participant who receives an annual credit towards the payment of premiums for a particular Plan Year fails to request reimbursement for the premiums incurred in such Plan Year on a timely manner as determined by the Trustees, then the Participant will forfeit any unused credits for that particular Plan Year and such credits will not carry forward to future Plan Years.

4.1.7 Reduction in Annual and Lump Sum Credits.

Notwithstanding anything contained in this Plan to the contrary, the annual and lifetime lump sum credits available to Participants shall be computed as indicated ~~in~~under the applicable ~~sections~~Sections of this Article 4.

The ~~credit~~credits (\$235, \$105 or \$1,250) shall be multiplied by the Adjusted PRMPT Years of Service. The Adjusted PRMPT Years of Service shall be calculated by adding each Year of Service. Years of Service will be prorated for periods in which an employee worked less than full time (as defined by the Collective Bargaining Agreement or TMWA policy).

Examples of the Reduced Credits are below:

Example #1: Assume that at the time an employee separates from TMWA service at the age of 65 ~~after, he or she~~ has ~~attaining~~attained 10 Years of Service as an MPAT employee, meets all other requirements to participate in this Plan, and elects to participate in the Plan. Assume further, that during the initial five years of ~~their~~his or her 10 Years of Service the employee

~~was worked~~ full time while during the last five years of employment ~~they~~ he or she worked part time. ~~They~~ Under these facts, such employee would be eligible to receive Post-Retirement Benefits equal to an annual credit of $\$105 \times 7.5$ Adjusted PRMPT Years of Service [5 years of full time service plus five years at part time (50%)] = \$787.50 Annual Credit

Example #2: Assume that at the time an employee separates from TMWA service at the age of 59 ~~after, he or she~~ has ~~attaining~~ attained 18 Years of Service as a post January 1998 IBEW employee, meets all other requirements to participate in this Plan, and elects to participate in the Plan. Assume further, that during the initial eight years of ~~their~~ his or her 18 Years of Service the employee ~~was worked~~ part time while during the last 10 years of employment ~~they~~ he or she worked full time. ~~They~~ Such employee would be eligible to receive Post-Retirement Benefits equal to a lifetime lump sum credit of $\$1,250 \times 14$ Adjusted PRMPT Years of Service [8 years of part time service (50%) plus 10 years of full time service] = \$17,500 Lifetime Lump sum Credit.

Example #3: Assume that at the time an employee separates from TMWA service at the age of 65 ~~after, he or she~~ has ~~attaining~~ attained 10 Years of Service as an MPAT employee, meets all other requirements to participate in this Plan, and elects to participate in the Plan. Assume further, that during the initial five years of ~~their~~ his or her 10 Years of Service the employee ~~was worked~~ full time while during the last five years of employment ~~they~~ he or she worked three-quarters time (75%). ~~They~~ Such employee would be eligible to receive Post-Retirement Benefits equal to an annual credit of $\$105 \times 8.75$ Adjusted PRMPT Years of Service [5 years of full time service plus five years at three-quarters (~~75%~~ 75%)] = \$918.75 Annual Credit.

4.2 ~~Life Insurance~~ Post-Retirement Benefits for Group Life Insurance Plan Coverage.

A Participant, who is covered under ~~a Collective Bargaining Agreement with TMWA (the "CBA")~~, shall be eligible to ~~participate in~~ elect coverage for the group life insurance options required to be offered to such Participant under and/or the Participant's Dependents under the Group Life Insurance Plans maintained by TMWA for its Benefited Employees in accordance with the terms and conditions of the CBA and the Group Life Insurance Plans, as amended from time to time. A Participant, who is not covered by a CBA, shall be eligible to ~~participate in the~~

~~group life insurance options offered by TMWA to elect coverage for~~ the Participant ~~as set forth in and/or the Participant's Dependents under the Group Life Insurance Plans maintained by TMWA for its Benefited Employees in accordance with the terms and conditions of the Group Life Insurance Plans and~~ the policies and resolutions adopted by TMWA from time to time. ~~A Participant may elect group life insurance coverage for his or her Dependents under the Group Life Insurance Plans offered by TMWA if such coverage is permitted by the applicable plan.~~ If a Participant elects ~~group life insurance coverage,~~ under a Group Life Insurance Plan, then this Plan shall pay ~~for all or a portion of the premiums for Post-Retirement Benefits towards the premium cost of~~ such coverage in ~~accordance with the terms and conditions of those amounts set forth in~~ the CBA (for Participants covered by the CBA) or TMWA's policies and resolutions (for Participants not covered by a CBA). ~~Portions~~ The amount of life insurance coverage ~~that a Participant may currently elect under a Group Life Insurance Plan is set forth in Appendix "C" attached to this Plan. Those portions of~~ premiums ~~or costs~~ for coverage under a Group Life Insurance Plan that are not paid by this Plan shall be paid by the Participant. A Participant who does not pay his or her share of the premiums or costs for ~~life insurance coverage~~ under a Group Life Insurance Plan in the time and manner specified by the Trustees shall forfeit all rights to the life insurance coverage elected by the Participant. ~~The Trustees shall from time to time adopt policies pertaining to the timing and the manner in which Participants and Dependents of Participants are to pay their share of the life insurance premiums and costs. Until such time as the Trustees adopt a different policy, the entire life insurance premiums and costs attributable to the life insurance premiums for~~ coverage ~~chosen by the Participant will be paid by the~~ under a Group Life Insurance Plan, ~~and the Participant will be required to reimburse the Plan for his or her share of the premiums and costs attributable to the life insurance coverage chosen by the Participant.~~ To the extent that the Trustees require the Participants and/or their Dependents to pay their share of the ~~life insurance coverage and costs directly to the Plan, rather than to the insurance carrier providing such coverage~~ premiums for coverage elected under a Group Life Insurance Plan, then such policies and procedures shall specify the due dates in which the Participant and/or Dependents are required ~~to remit~~ pay their share of such life insurance

premiums ~~and costs~~ to the Plan. Copies of the policies and procedures adopted by the Trustees from time to time are to be provided to each Participant and each Dependent of a Participant.

ARTICLE 5. COBRA CONTINUATION OF COVERAGE

To the extent required by COBRA, a Participant and his or her ~~Spouse and/or~~ Dependents, as applicable, whose coverage terminates under ~~the Group~~this Plan and/or a Health Plan because of a qualifying event described in COBRA (and ~~whosuch person~~ is a qualified beneficiary as defined under COBRA), then such person shall be given the opportunity to continue on a self-pay basis the same coverage that he or she had under this Plan and the ~~Group Medical~~Health Plan on the day before the qualifying event for the periods prescribed by COBRA. Such continuation coverage shall be subject to all conditions and limitations under COBRA. Notwithstanding anything contained in this ~~paragraph~~Article to the contrary, if this Plan, the CBA covering a Participant, or the policies and resolutions adopted by TMWA, provide for benefits in excess of those offered under COBRA, then the provisions of this Plan, the CBA, or TMWA's policies and resolutions shall govern. ~~Contributions~~Premiums for COBRA coverage, not otherwise required to be paid ~~from~~by this Plan shall be paid to the Plan and/or the Health Plan by the individual entitled to receive COBRA continuation coverage in accordance with the policies and procedures adopted by the Trustees of the Plan from time to time.

ARTICLE 6. HIPAA COMPLIANCE

6.1 General.

Members of ~~the Employer's~~TMWA's workforce or the Trustees may, from time to time, have access to protected health information ("PHI") of Plan Participants for administrative functions of the Plan. The Health Insurance Portability and Accountability Act of 1996, ("HIPAA"), and the regulations issued thereunder at 45 C.F.R. Parts 160 and 164 (the "~~HIPAA~~regulationsRegulations"), as amended from time to time, impose privacy obligations on the Plan and restrict the disclosure of PHI. ~~The Employer~~TMWA and the Trustees shall have access to PHI from the Plan only as permitted under this Article 6 or as otherwise required or permitted by HIPAA or other applicable law. ~~HIPAA and the corresponding regulations were modified by the Health Information Technology for Economic and Clinical Health Act ("HITECH Act"), the~~

~~statutory provisions of which are incorporated herein by reference.~~ All capitalized terms within this Article 6 not otherwise defined in the Plan shall have the meaning provided under HIPAA.

6.2 Definition of PHI.

Protected health information or PHI means information that is created or received by the Plan and relates to the past, present, or future physical or mental health or condition of a Participant; the provision of health care to a Participant; or the past, present, or future payment for the provision of health care to a Participant; and that identifies the Participant or for which there is a reasonable basis to believe the information can be used to identify the Participant. Protected health information includes information of persons living or deceased.

6.3 Uses and Disclosures of PHI.

The Plan may disclose a Plan Participant's PHI to ~~the Employer~~TMWA or the Trustees (or to ~~the Employer~~TMWA or the Trustees' agent) to the fullest extent permitted by the HIPAA ~~regulations~~Regulations (but not in a manner inconsistent with 45 C.F.R. § 164.404~~504~~(f)), including but not limited to:

(a) Enrollment-Disenrollment Information.

The Plan may disclose to ~~the Employer~~TMWA or the Trustees information on whether the individual is participating in the Plan, or is enrolled in or has disenrolled in the Plan.

(b) Summary Health Information.

The Plan may disclose Summary Health Information to ~~the Employer~~TMWA or the Trustees, provided ~~the Employer~~TMWA or the Trustees requests the Summary Health Information for the purpose of (a) obtaining premium bids from health plans for providing health insurance coverage under the Plan; or (b) modifying, amending, or terminating the Plan. "Summary Health Information" means: information that (a) summarizes the claims history, claims expenses or type of claims experienced by individuals for whom a plan sponsor had

~~6.5~~, as permitted by 45 C.F.R. § 164.508, 45 C.F.R. § 164.512, and other ~~sections~~Sections of the HIPAA ~~regulations~~Regulations, or as required by law;

(b) Ensure that any of its agents, including a subcontractor, to whom it provides PHI received from the Plan agree to the same restrictions and conditions that apply to ~~the Employer~~TMWA or the Trustees with respect to such information;

(c) Not use or disclose the PHI for employment-related actions and decisions or in connection with any other benefit or employee benefit plan of ~~the Employer~~TMWA;

(d) Report to the Plan any use or disclosure of the PHI that is inconsistent with permitted disclosures that ~~the Employer~~TMWA or the Trustees becomes aware;

(e) Make the PHI of a particular Participant available for purposes of the Participant's requests for inspection, copying, and amendment, and carry out such requests in accordance with HIPAA ~~regulation~~Regulation 45 C.F.R. §§ 164.524 and 164.526;

(f) Make the PHI of a particular Participant available for purposes of a required accounting of disclosures by ~~the Employer~~TMWA or the Trustees pursuant to the Participant's request for such an accounting in accordance with HIPAA ~~regulation~~Regulation 45 C.F.R. § 164.528;

(g) Make ~~the Employer's~~TMWA's and Trustees' internal practices, books, and records relating to the use and disclosure of PHI received from the Plan available to the Secretary of the U.S. Department of Health and Human Services for purposes of determining compliance by the Plan with HIPAA;

(h) If feasible, return or destroy all PHI received from the Plan that ~~the Employer~~TMWA or the Trustees still maintain in any form and retain no copies of such information when no longer needed for the purpose for which disclosure was made, except that, if such return or destruction is not feasible, ~~the Employer~~TMWA or the Trustees agree to limit further

uses and disclosures to those purposes that make the return or destruction of the information infeasible; and

~~(i) (i)~~—Ensure that there is adequate separation between the Plan and ~~the Employer~~TMWA or the Trustees by implementing the terms of Section 6.6.

~~The Employer~~TMWA and Trustees further agree that if they create, receive, maintain, or transmit any electronic PHI (other than enrollment/disenrollment information and Summary Health Information, which are not subject to these restrictions) on behalf of the Plan, they will implement administrative, physical and technical safeguards that reasonably and appropriately protect the confidentiality, integrity and availability of the electronic PHI, and they will ensure that any agents (including subcontractors) to whom they provide such electronic PHI agree to implement reasonable and appropriate security measures to protect the information. ~~The Employer~~TMWA and Trustees will report to the General Manager of TMWA any security incident of which they become aware.

6.6 Separation between Plan and ~~the Employer~~TMWA or the Trustees.

6.6.1 Employees with Access to PHI.

The following employees or other individuals under the control of ~~the Employer~~TMWA or the Trustees are the only individuals that may access PHI received from the Plan: chief financial officer, general manager, IBEW business representatives, Trustees, human resources representatives, accounting staff, payroll staff, and information systems staff.

6.6.2 Use Limited to Plan Administration.

The access to and use of PHI by the individuals described in Section 6.6~~(a), above, 1~~, is limited to Plan Administration functions as defined in HIPAA ~~regulation~~Regulation 45 C.F.R. § 164.504(a) that are performed by ~~the Employer~~TMWA or the Trustees for the Plan.

6.6.3 Mechanism for Resolving Noncompliance.

If ~~the Employer~~TMWA or the Trustees, or person(s) responsible for monitoring compliance, determines that any person described in Section 6.6~~(a), above, 1~~ has violated any of the restrictions of this Section ~~6.6~~, then such individual shall be disciplined in accordance with the policies of ~~the Employer~~TMWA or the Trustees established for purposes of privacy compliance,

up to and including permanent dismissal from the Board of Trustees. ~~The Employer~~TMWA or the Trustees shall arrange to maintain records of such violations along with the persons involved, as well as disciplinary and corrective measures taken with respect to each incident.

ARTICLE 7. ADMINISTRATION OF PLAN

7.1 Administration.

The Trustees shall administer the Plan subject to applicable requirements of law, including without limitation, the provisions contained in NRS ~~Sections~~287.015 and 287.017 and the corresponding administrative ~~regulations~~Regulations of the NAC adopted from time to time. For this purpose, the Trustees' power and sole discretion shall include, but shall not be limited to, the following authority, in addition to all other powers provided by this Plan:

(a) To make and enforce such rules and regulations as it deems necessary or proper for the efficient administration of the Plan;

(b) To interpret the Plan in good faith with such interpretation to be final and conclusive on all persons claiming benefits under the Plan;

(c) To decide all questions concerning the Plan and the eligibility of any person to participate in the Plan;

(d) To appoint such attorneys, actuaries, accountants, consultants and other persons as may be required to assist in administering the Plan;

(e) To allocate and delegate its responsibilities under the Plan and to designate other persons to carry out any of its responsibilities under the Plan;~~and~~

(f) To approve the amount of Post-Retirement Benefits that shall be payable to any Participant in accordance with the provisions of the Plan; to inform the Participant of the amount of such Post-Retirement Benefits; and to provide a full and fair review to any Participant whose claim for Post-Retirement Benefits has been denied in whole or in part; and

~~(f)(g)~~ To hold meetings in compliance with ~~chapter~~Chapter 241 of NRS.

7.2 Indemnification.

To the extent permitted by applicable law, ~~the Employer~~TMWA shall indemnify the Trustees and each other person acting in connection with the administration of its members~~the Plan~~, individually against any and all claims, losses, damages and expenses, including legal fees and amounts paid in settlement with ~~the Employer's~~TMWA's approval, resulting from any action or failure to act in connection with the administration of the Plan if such action or inaction is not covered by the statutory immunity given to public employees under ~~Nevada Revised Statutes section 41, Chapter 41 of the NRS~~, except when the same is determined to be attributable to the gross negligence or willful misconduct of such person.

ARTICLE 8. TRUST PROVISIONS

8.1 Appointment, Qualification and Terms of Trustees.

The Trust shall be administered by the Trustees. ~~The Employer~~TMWA and ~~the~~ Trustees will comply with the provisions of NRS 287.015 and 287.017, together with the corresponding provisions of the NAC, concerning the selection of the Trustees and the administration of the Plan. ~~The Employer~~TMWA shall appoint four individuals who shall serve as Trustees;: (i) two members of TMWA management, one whom shall be the Chief Financial Officer, and ~~two IBEW representatives. The two Trustees who are~~ the other appointed from TMWA management ~~are to be appointed by the Employer at the direction~~ discretion of theTMWA's General Manager ~~of the Employer~~, and (ii) two IBEW representatives. The two Trustees who are appointed from IBEW are to be appointed by ~~the Employer~~TMWA at the direction of IBEW Local 1245. At all times, equal numbers of TMWA management and IBEW representatives shall serve as Trustees of the Plan. In appointing the Trustees, ~~the Employer~~TMWA shall insure that the Trustees satisfy the requirements of NRS 287.017 and the corresponding provisions of the NAC. Notwithstanding anything contained in this Plan to the contrary, no person is to serve as a Trustee if the person has a substantial financial interest in the ownership or negotiation of the securities or other financial instruments in which the assets of the trust are invested, or if the person is a member of the governing body of ~~the Employer~~TMWA. The term of each person serving as a Trustee shall be for a period of two years. However, a person who has served as a Trustee for a term of two years may be reappointed to serve additional two year terms.

8.2 Meetings of the Trustees.

The Trustees shall meet quarterly or at the call of the ~~Chairman~~Chairperson of the Board of the Trustees when business is presented. The Trustees shall not take action without a quorum. In order to have a quorum, at least three of the four members of the Board of Trustees must be present. The Trustees may take action by a majority decision of the quorum. The Trustees shall appoint a ~~chairperson~~Chairperson and a ~~vice-chairperson~~Vice Chairperson to serve two-year terms. One of these positions shall be held by a member of TMWA management and the other shall be held by an IBEW representative. The Trustees intend for the ~~chairperson~~Chairperson position to rotate between the two groups every two years so that if a member of TMWA management was the ~~chairperson~~Chairperson during one term, an IBEW representative will be the ~~chairperson~~Chairperson during the next term. However, if the group that is entitled to select a ~~chairperson~~Chairperson for the next term chooses to relinquish this right, then the Trustees may appoint the same ~~chairperson~~Chairperson to retain his or her position for the next term, or alternatively select a ~~chairperson~~Chairperson who is recommended by the group that has selected the current ~~chairperson~~Chairperson. The Trustees shall negotiate in good faith to reach a majority decision on matters that comes to a vote before the Trustees. If the Trustees are unable to reach a majority decision on an issue, the following rules apply:

(a) Within ten (10) calendar days, the Trustees will agree upon a neutral arbitrator to resolve the dispute. The Trustees shall choose an arbitrator by majority decision and consent to an arbitrator shall not be unreasonably withheld. If the Trustees cannot choose an arbitrator by majority decision with a reasonable period of time, the Trustees shall retain the American Arbitration Association to appoint an arbitrator;

(b) If all of the Trustees agree, the dispute may be submitted to a Board of Arbitration. The Board of Arbitration shall consist of the neutral arbitrator, one Trustee who is a member of TMWA management (appointed by the General Manager of TMWA)) and one Trustee who is a representative of IBEW (appointed by IBEW). The decision of the Board of Arbitration is final and binding;

(c) If all of the Trustees do not agree to submit the dispute to a Board of Arbitration, the neutral arbitrator shall make final and binding decision regarding the resolution of the dispute;

(d) A statement of the matter in dispute shall be presented in writing to the Board of Arbitration or neutral arbitrator. If the Trustees cannot agree upon a joint statement of the matter in dispute, each group of Trustees shall prepare its own statement of the matter in dispute within (5) days after it is determined that the Trustees cannot agree upon a joint statement of the matter in dispute.

(e) The Board of Arbitration and neutral arbitrator are bound by the provisions of this Plan and Trust, any applicable collective bargaining agreement and applicable law in making a decision on the matter in dispute.

(f) The decision of the Board of Arbitration or neutral arbitrator shall be rendered in writing within ten (10) days after submission of the dispute for decision. The ten (10) day period may be extended by agreement of all of the Trustees. All other matters of procedure shall be decided by the neutral arbitrator. If the Board of Arbitration or the neutral arbitrator does not render a written decision within ten (10) days or the additional time granted by the Trustees, any Trustee may submit the dispute to a court of competent jurisdiction for decision.

(g) The costs and attorneys' fees incurred in connection with the foregoing shall be paid out of the Trust Fund, including reasonable compensation for the neutral arbitrator.

8.3 Assets Held by Trustees; Contributions.

(a) Receipt of Contributions.

The Trustees shall receive and deposit in the Trust any contributions paid to the Trustees in cash or such property that the Trustees deem is acceptable. The Trustees may appoint a custodian to receive and deposit contributions in the Trust on behalf of the Trustees. All assets held by the Trust and the earnings and income thereon shall be invested, reinvested and applied as provided in this Article 8 and the remainder of the Plan. All monies and other property held in the Trust are referred to as the "Trust Fund."

(b) Initial Funding.

A cash contribution ~~shall be~~ initially made to the Trust ~~in an amount determined by the Employer TMWA~~. Additionally, Sierra (now known as NV Energy) ~~shall cause, and the Trust shall accept, a transfer of~~ transferred funds from a voluntary employee benefit association sponsored by Sierra that represents funds accumulated to pay ~~post-retirement medical benefits~~ Post-

The responsibilities of the Trustees shall be:

- (a) To hold, invest and reinvest the assets in the Trust Fund, subject to the terms and conditions of the Plan and the funding policy;
- (b) To revalue the assets held in the Trust Fund at fair market value annually and more often as necessary,
- (c) To report the value of the Trust Fund as of each Plan Year to ~~the~~ Employer TMWA; and
- (d) To pay monies from the Trust Fund in accordance with the provisions in this Plan and at the discretion of the Trustees.

8.8 Administration of the Trust Fund.

The Trustees shall have discretion in the administration of the assets held in the Trust Fund. This discretion includes the power of the Trustees to liquidate assets held in the Trust Fund to enable the Trustees to pay ~~benefits~~ Post-Retirement Benefits in accordance with the terms of the Plan and to collect administrative fees from the assets held in the Trust Fund in accordance with ~~section~~ Section 8.11.

8.9 ~~Power~~ Powers of the Trustees.

Unless applicable law provides otherwise, the Trustees are expressly authorized, in carrying out its duties under this Plan, to:

- (a) Purchase, or subscribe for, any securities or other property and to retain the same in the Trust;
- (b) Sell, alter, improve, lease or otherwise dispose of any asset of the Trust Fund;
- ~~(c)~~ —Vote upon any stocks, bonds, or other securities; give general or special proxies or powers of attorney with or without power of substitution; exercise any conversion privileges, subscription

(c) rights, or other options, and to make any payments incidental thereto; oppose, consent to, or otherwise participate in, corporate reorganizations or other changes affecting corporate securities, delegate discretionary powers, pay any assessments or charges in connections therewith, and generally exercise any of the powers of an owner with respect to stock, bonds, securities or other property held as part of the Trust Fund;

(d) Cause any securities or other property held as part of the Trust Fund to be registered in the Trustees' own name or in the name of one or more of the Trustees' nominees, and to hold any investments in bearer form, but the books and records of the Trustees shall at all times show that all such investments are part of the Trust Fund;

~~(e) — {Intentionally Omitted}~~

~~(f)(e)~~ Accept and retain for such time as the Trustees may deem advisable any securities or other property received or acquired by them as Trustees hereunder, whether or not such securities or other property would normally be purchased as investments hereunder;

~~(g)(f)~~ Make, execute, acknowledge and deliver documents of transfer and conveyance and other instruments that may be necessary or appropriate to carry out the powers granted in this ~~section~~Section;

~~(h)(g)~~ Invest funds of the Trust Fund in overnight deposits or savings accounts bearing a reasonable rate of interest in a bank selected by the Trustees;

~~(i)(h)~~ Invest in Treasury Bills and other forms of United States government obligations;

~~(j)(i)~~ Except as expressly authorized herein, the Trustees are prohibited from selling or purchasing stock options. The Trustees are expressly authorized to write and sell call options under which the holder of the option has the right to purchase shares of stock held by the Trustees as part of the assets of this Trust, if such options are traded on and sold through a national securities exchange registered under the Securities Exchange Act of 1934, as amended, which exchange has been authorized to provide a market for option contracts pursuant to rules promulgated under such Act so long as the Trustees hold sufficient stock in the assets of this Trust to meet the obligations under such option if exercised. In addition, the Trustees are expressly authorized to purchase and acquire call options for the purchase of shares of stock covered by such options if the options are traded on and purchased through a national

securities exchange as described in the immediately preceding sentence, and so long as any such option is purchased solely in a closing purchase transaction, meaning the purchase of an exchange traded call option the effect of which is to reduce or eliminate the obligations of the Trustees with respect to a stock option contract or contracts which it has previously written and sold in a transaction authorized under the immediately preceding sentence;

~~(k)~~ Deposit monies in federally insured savings accounts or certificates of deposit in banks or savings and loan associations;

~~(l)~~ Deposit stocks or other securities held in the Trust Fund in any voting trust, with any protective or like committee, or with a trustee or depositories designated by any protective or like committee;

~~(m)~~ Retain part interests in real property or in mortgages on real property, wherever situated, with the right to transfer title in their name as Trustee or in the name of a nominee, either alone or jointly with the holder or holders of other part interests in the property or their nominees;

~~(n)~~ Delegate the management and operation of any part interest in any real property or mortgage to a manager or the holders of a majority interest in such real property or mortgage on such real property;

~~(o)~~ Sell real property or sell any mortgages on real property that it may retain in the Trust Fund;

~~(p)~~ Carry out the decisions of a manager or holder(s) of a majority interest in real property with respect to the sale or mortgage of such real property or otherwise;

~~(q)~~ Settle, compromise or submit to arbitration any claims, debts or damages due or owing to or from the Trust or the Trust Fund;

~~(r)~~ Commence or defend legal proceedings for or against the Trust;

~~(s)~~ Retain cash temporarily awaiting the payment of benefits or expenses, without liability for interest on the amount retained;

~~(s)~~ Establish custodial arrangements as deemed necessary;

~~(t)~~ Delegate all or some of these powers to an Investment Manager if (i) the Investment Manager is qualified as an investment manager under applicable law, and (ii) the Investment Manager acknowledges in writing that it is acting as a fiduciary with respect to the Plan and Trust, or to the Retirement Benefits Investment Fund of the Public Employees' Retirement System of Nevada by contract with the Retirement Benefits Investment Board.

~~(u)~~ Employ suitable agents and counsel;

~~(v)~~ Generally exercise any of the powers of an owner with respect to stock, other securities or property comprising the Trust Fund;

~~(w)~~ Notwithstanding the above, the Trustees may not change the benefits provided to Participants and Dependents under the terms of the Plan, unless (1) the benefits of Participants and Dependents covered by a CBA are amended by the CBA, or (2) the benefits of Participants and Dependents not covered by a CBA are amended pursuant to the policies and resolutions of TMWA ; and

~~(x)~~ Take all actions that the Trustees deem necessary to administer the Trust Fund and carry out the purposes of this Plan.

8.10 Administrative Expenses.

All costs and expenses incurred in connection with administration of the Plan and Trust that may properly be paid by the Trust shall be paid by the Trust.

8.11 Trustee Compensation.

The Trustees shall not receive any compensation for the performance of their duties under this Plan.

8.12 Records ~~and~~, Reports ~~and~~ Budgets.

The Trustees shall keep, or hire a third party to keep, accurate and detailed accounts with respect to the Trust Fund, covering all investments, receipts, disbursements and other transactions under this Trust. The Trust Fund is to be administered in accordance with generally accepted accounting principles and actuarial studies applicable to the future provision of ~~retirement benefits~~ Post-Retirement Benefits to the Eligible Retirees, Participants and Dependents of

Participants. All accounts, books and records shall be open to inspection by any person designated by ~~the Employer TMWA~~ at all reasonable times. Within 120 days following the close of each Plan Year (and at other dates requested by ~~the Employer TMWA~~), the Trustees, or third party if directed by the Trustees, shall file with ~~the Employer TMWA~~ a written report setting forth all investments, receipts, disbursements and other transactions involving the Trust Fund during the Plan Year or the part thereof for which the report is filed. The report shall contain a description of all securities sold, the net proceeds of sale (excluding accrued interest paid or received), and showing the securities and investments held at the end of such period and the cost of each item as carried on the books of the Trust. The Trustees, or third party if directed by the Trustees, also shall render such additional statements or reports to ~~the Employer TMWA~~ as ~~the Employer TMWA~~ may reasonably request. If the Trustees have elected to invest Trust assets in the Retirement Benefits Investment Fund of the Public Employees' Retirement System of Nevada, investment reporting requirements shall coincide with the reporting periods of the Public Employees' Retirement System of Nevada.

The Trustees shall annually submit a tentative budget to the governing board of TMWA for its consideration, approval and inclusion in the tentative and final budgets of TMWA. The tentative budget submitted by the Trustees to the governing board of TMWA must incorporate the amount of contributions that TMWA expects to make to the Trust Fund. The governing board of TMWA may modify the tentative budget submitted by the Trustees at its discretion. The Trustees shall cause the Trust Fund to be audited annually. The governing board of TMWA shall incorporate the results of the audit into the annual audit report of TMWA.

8.13 Removal and Resignation of Trustees.

Any or both of the two Trustees representing TMWA management may be removed by written notice from ~~the Employer TMWA~~, except that the Chief Financial Officer must remain as a Trustee. Removal shall be effective 60 days after the individual Trustee receives such notice or certified copies of the resolutions, as appropriate. The Trustee may resign upon 60 days written notice to ~~the Employer TMWA~~. Upon the removal or resignation of a Trustee, ~~the Employer TMWA~~ shall appoint a successor trustee or trustees. Each successor trustee shall agree

8.17 Trust Exemption.

The Trust has been issued a determination letter by the Internal Revenue Service, effective May 25, 2007, treating it as exempt from federal income taxes under ~~section~~Section 501(c)(9) of the Code.

8.18 Standards of Interpretation.

This Plan and Trust are designed and intended to comply with applicable law. The Trustees are vested with the power to interpret the Plan and Trust, and their interpretation, if not in conflict with plain meaning of the Plan and Trust or any applicable law or government regulation, shall be final and conclusive. The Trustees, and any entity or person approved by the Trustees, shall have the full discretionary authority to determine eligibility for ~~benefits~~Post-Retirement Benefits awarded under the Plan and to construe the terms of the Plan and Trust.

8.19 Certain Prohibitions pertaining to the Trust.

Notwithstanding anything contained in this Plan to the contrary, the Trustees are precluded from exercising the following powers:

- (a) The power to borrow money;
- (b) The power to finance any debt of ~~the Employer~~TMWA or any other local government and the power to loan funds to ~~the Employer~~TMWA or to funds maintained by ~~the Employer~~TMWA.

ARTICLE 9. AMENDMENT AND TERMINATION OF PLAN

9.1 Amendment and Termination.

~~The Employer reserves~~TMWA and the Trustees reserve the right to amend ~~or terminate~~ the Plan and associated Trust, ~~as to (i) comply with the requirements of Code Section 501(c)(9) or other provisions of the Code that are applicable to the Plan and Trust, or to conform the Plan and Trust with any group of Eligible Retirees, at other laws applicable to the Plan and Trust, (ii) conform the Plan and Trust with any time, amendments, changes, or modifications to the Post-Retirement Benefits for IBEW 1245 Employees that are approved under a CBA between TMWA~~

and IBEW, and (iii) conform the Plan and Trust with any amendments, changes, or modifications to the Post-Retirement Benefits for MPAT Employees that are approved under a policy or resolution of the governing board of TMWA. TMWA and the Trustees also reserve the right to terminate the Plan and Trust by a duly adopted resolution by the Employer. Upon of the governing board of TMWA, and upon termination of the Plan, the Trustees shall apply all the assets remaining in the Trust in a uniform and non-discriminatory manner toward the provision of benefits for Participants- in accordance with applicable law. Notwithstanding anything contained in the Plan to the contrary, TMWA and the Employer is Trustees are precluded from amending, modifying or terminating the Plan in any form or manner that would allow the assets of the Plan to inure to or revert to the Employer TMWA, or which would violate any law applicable to the Plan.

ARTICLE 10. MISCELLANEOUS PROVISIONS

10.1 Non-Discrimination.

The Employer TMWA intends that this Plan will not discriminate in favor of Highly Compensated Employees- and/or Key Employees as required by section Code Sections 505(b) of the Code-), 105(h), and 79(d), in both coverage and benefits provided.

10.2 Right to Payment.

The benefits Post-Retirement Benefits paid to Participants and Dependents under Article 4 shall be paid out of the Trust pursuant to the terms of this Plan. Except with respect to for the right of Participants and covered Dependents to receive post-retirement medical benefits and life insurance benefits Post-Retirement Benefits under this Plan, no employee of TMWA or any other person shall have any right, title or interest in or to the assets of the Trust, or in or to any Employer contributions made by TMWA to the Trust, such contributions being made to and held in the Trust for the exclusive purpose of providing post-retirement medical and life insurance benefits Post-Retirement Benefits under the Plan and defraying administrative expenses under the Plan.

10.3 Information to Be Furnished.

Participants and Dependents shall provide the Trustees with information and evidence and shall sign documents as may reasonably be requested for the purpose of administration of the

Plan.

10.4 Limitation of Rights.

Neither the establishment of the Plan, any amendment thereof, nor the payment of any benefits, shall be construed as giving to any Eligible Retiree, Participant, Dependent or other person any legal or equitable right against the Trustees or ~~the EmployerTMWA~~, except as provided herein.

10.5 Prohibition of Discrimination.

Any discretionary acts to be taken under the terms and provisions of this Plan by the Trustees shall be uniform in their nature and in their application to all those similarly situated, and no discretionary acts shall be taken that would be discriminatory under the provisions of the Code relating to accident and health plans and/or group life insurance plans. In applying the discrimination provisions of Code Sections 105(h), Code Section 79(d), and the corresponding Treasury Regulations thereto, to the extent permitted by applicable law, the Post-Retirement Benefits described herein for the benefit of the MPAT Employees and the IBEW 1245 Employees are to be treated as a separate plans.

10.6 No Contract of Employment.

This Plan shall not be deemed to be a contract between ~~the EmployerTMWA~~ and any ~~Eligible Retiree~~employee or former employee of TMWA, or other individual, or to be a consideration or an inducement for the employment of any ~~Eligible Retiree~~employee or former employee of TMWA or other individual. Nothing contained in this Plan shall give any ~~Eligible Retiree~~employee or former employee of TMWA or other individual the right to be retained in the service of ~~the EmployerTMWA~~.

10.7 Incapacity.

If, in the opinion of the Trustees, any ~~person~~Participant or Dependent becomes unable to handle properly any amounts payable to such person under the Plan, the Trustees may make any arrangement for payment on such person's behalf that it determines will be beneficial to such

person, including payment to such person's guardian, conservator, spouse or other dependent.

10.8 Governing Law.

This Plan shall be construed, administered and enforced according to the laws of Nevada and all applicable federal laws. ~~If any provision of the Plan is inconsistent with the provisions of applicable federal, state or local law, then the provisions of federal, state or local law (as applicable) will prevail.~~ TMWA and the Trustees recognize that this Plan shall be subject to amendments of such laws and regulations, to new legislation, or to new interpretations of existing laws or regulations. Any provision of law that invalidates or is otherwise inconsistent with the terms of this Plan or would cause the Plan to be in violation of law shall be deemed to have superseded the terms of this Plan; provided, however, that TMWA and the Trustees shall exercise their best efforts to accommodate the terms and intent of this Plan to the greatest extent possible consistent with the intent of Plan.

10.9 Coverage Options

The terms of the ~~health~~Health Plans and ~~life insurance coverage option(s)~~Group Life Insurance Plans chosen by the Participant shall govern the Participant's coverage and receipt of benefits under ~~the health and life insurance coverage option(s); those plans.~~ Should any term of this Plan conflict with any term of the ~~Participant's chosen health~~Health Plans and/or life insurance coverage option(s); Group Life Insurance Plans which provide coverage to the Participants and ~~their covered Dependents,~~ the ~~term~~terms of the ~~health and life insurance coverage option(s)~~Health Plans and Group Life Insurance Plans shall ~~prevail~~govern, except that such terms shall not apply to expand or reduce the amount of any ~~benefit~~Post-Retirement Benefits offered or provided under this Plan.

10.10 Costs

The costs of administering the Plan shall be paid by the Trust Fund to the extent permitted by law. Any remaining administration costs, if any, shall be paid by ~~the Employer~~TMWA.

~~10.11 Tax Effects~~

Neither TMWA nor the Trustees makes any warranty or other representation as to whether any Post-Retirement Benefits paid to or on behalf of any Participant will be treated as excludable from gross income for state or federal income tax purposes.

(Dates and Signatures to Follow)

Dated this 23rd day of August, 2011, 2017.

Board of Trustees

Accepted and Approved By:

Truckee Meadows Water Authority

By: _____

Its: Chairman, Board of Directors



TO: Board of Directors
THRU: Mark Foree, General Manager
FROM: Michele Sullivan, Chief Financial Officer
DATE: August 30, 2017
SUBJECT: Presentation of TMWA's unaudited FY2017 financial performance

Recommendation

The TMWA Board accepts the unaudited financial report for the fiscal year ended June 30, 2017.

Summary

TMWA's financial performance for the fiscal year ended June 30, 2017 was excellent. Total change in net position was \$46.7 million, which was \$21.0 million greater than an expected increase in net position of \$25.7 million per the revised budget. Several items that were one-time events and not included in the budget had significant impact on the change in net position. As part of the 2017 bond refunding, two forward delivery agreements (FDA) were terminated that guaranteed TMWA higher interest rates on debt service reserve and O&M reserve balances. The banks agreed to pay a total of \$5.1 million for the release of these agreements. Original arbitrage calculations performed by TMWA's financial consultants indicated that most of these funds would be owed to the IRS, but after further review, TMWA was able to retain all but \$0.2 million. Operating income was \$5.4 million higher than anticipated due mainly to savings in operating expenses of \$2.5 million, \$1.1 million lower depreciation expense, and \$1.8 million higher operating revenue. Developer infrastructure contributions (non-cash contributions) were \$10.8 million.

Cash balances decreased \$13.0 million or \$10.5 million less than an anticipated decrease of \$23.5 million in the revised budget. The main drivers contributing to higher than expected cash balances were cash received from dissolving the FDA's of approximately \$4.9 million after taxes, lower than anticipated O&M expenses by \$2.5 million, and \$1.8 million higher operating revenues. Included in the budget was receipt of \$11.8 million in cash from insurance settlements related to the Farad hydroelectric facility.

Discussion

The purpose of this report is to provide a brief overview of TMWA's financial performance for the fiscal year ended June 30, 2017 as compared to the FY17 budget and FY16 actuals. This report is being presented in advance of the annual audited financial statements to bring timely information to the Board. This report was presented to, and accepted by, the SAC at their September meeting.

Fiscal Year 2017 Actual to Budget comparison

The following comparisons of FY17 actual unaudited financials to FY17 revised budget are attached:

- **Attachment A-1** Statement of Revenues, Expenses and Changes in Net Position Actual to Budget
- **Attachment A-2** Statement of Cash Flows Actual to Budget

Total operating revenues were approximately \$97.3 million, 1.9% higher than the revised operating revenue budget. Water sales revenues were \$1.5 million or 1.6% higher than the revised water sales budget. Water sale revenues were higher than budget by \$4.1 million last summer (July-September, 2016) due to over 90 days of no precipitation. However, a cooler, wetter spring (March-May, 2017) left water sales revenues short of budget projections for those months, leaving water sales flat as compared to budget after the spring season. In June of 2017, revenues rebounded with more hot weather, bringing water sales revenue slightly higher than budget for the year. Hydroelectric revenues were \$0.03 million or 1.9% higher than budget. Other miscellaneous water sales were \$0.3 million or 13.0% higher than budget, mainly due to increases in inspection fees for new business activities as residential building activity becomes more robust in the service area.

Total operating expenses before depreciation were approximately \$50.3 million, \$2.5 million or 4.7% less than the revised budget. Spending on wages and salaries was \$1.1 million or 5.8% less than budget, due to turnover and lower spending on interns and temporary employees. Employee benefits were \$0.3 million or 3.56% over budget due to adjustments in the NVPERS actuarial estimates related to the proportion of TMWA's contribution to NVPERS. Spending on service and supplies was \$1.8 million or 6.8% less than revised budget. Power costs were \$1.1 million less than anticipated. TMWA as a consolidated water utility continues to aggressively manage power expenses. Claims for domestic well mitigation were also lower than anticipated by \$0.2 million. Depreciation expense was \$32.2 million, \$1.1 million or 3.2% less than revised budget.

Net non-operating revenue and expenses were favorable \$3.6 million or 23.6% as compared to the revised budget. As part of the 2017 bond refunding, there was a release of two forward delivery agreements (FDA) with Bank of New York Mellon and JP Morgan. These banks will no longer have to provide a 5.5% interest rate on a portion of TMWA's debt reserves and O&M reserves balances, so they paid TMWA \$5.1 million for the release of this commitment. This settlement was negotiated by our financial advisors at PFM. Offsetting were higher bond amortization expenses of \$0.6 million related to the 2017 refunding bonds, and a decrease in the fair value of investments of \$0.3 million.

Total capital contributions were \$43.4 million, \$12.0 million or 38.0% greater than planned mainly due to developer infrastructure contributions of \$10.8 million.

Spending on capital outlays and construction projects for the fiscal year ended June 30, 2017 was approximately \$33.6 million. The final revised capital budget was \$31.9 million significantly reduced from the previous augmented budget amount of \$47.8 million.

Customer Rate funded projects totaled \$29.0 million or 86.3%, Developer funded projects were \$3.8 million or 11.3%, and STMGID Reserves funded \$0.8 million or 2.4% of capital spending.

Major projects funded by Customer Rates were the Fleish Penstock at \$2.5 million, Stead Main Replacement \$2.4 million, 4th and Prater Replacement \$2.7 million, Chalk Bluff Plant Improvements \$1.8 million, Double Diamond Well 3 \$1.4 million and Tank Improvements \$1.1 million. Major projects funded by Developers were the Truckee Canyon Water Treatment Improvements \$1.5 million and Terminal PH Adjustment \$1.0 million.

Total cash and investments as of June 30, 2017 was approximately \$174.0 million, \$10.4 million higher than budget. Additional cash balances are from the release of FDAs received as investment income of \$5.1 million, higher operating cash flow of \$2.9 million, and higher developer contributions of \$1.2 million. Approximately \$41.8 million was restricted by bond indenture requirements and conditions of the STMGID water utility consolidation. The remaining balance of \$132.2 million was available to pay for future operating and maintenance expenses, construction spending, future debt payments, and commercial paper redemptions. Included in unrestricted cash is \$21.5 million from insurance settlements collected in FY16 and FY17 for Farad hydroelectric facilities, and \$9.5 million collected in FY16 and FY17 for the release of FDA agreements.

Fiscal Year 2017 Actual to Prior Year Comparison

The following comparisons of FY17 actual financials to prior year FY16 actuals are attached:

- **Attachment B-1** Statement of Revenues, Expenses and Changes in Net Position Actual to Prior Year
- **Attachment B-2** Statement of Net Position Actual to Prior Year
- **Attachment B-3** Statement of Cash Flows Actual to Prior Year

Total operating revenues in fiscal year 2017 were approximately \$97.3 million, 5.49% higher than the prior fiscal year 2016. Water sales revenues were \$5.2 million or 5.56% higher than prior year. Water sale revenues were higher than prior years by \$4.6 million last summer (July-September, year over year) due to over 90 days of no precipitation in FY17. Additional revenue due to the rate increase effective the first billing cycle in May 2017 contributed an additional \$0.5 million in water sales revenue to fiscal year 2017. Hydroelectric revenues were \$0.6 million or 34.3% higher than prior year due to additional water flow in the Truckee River. Other miscellaneous water sales were \$0.4 million or 15.31% less than prior year, mainly due to an insurance settlement collected in the prior year.

Total operating expenses before depreciation were approximately \$50.3 million, \$1.8 million or 3.6% higher than the prior year. Spending on wages and salaries was \$0.7 million or 4.15% higher, due to wage increases of approximately 2%, promotions and step

increases. Employee benefits were \$2.7 million or 29.66% higher mainly due to \$2.3 million increase in NVPERS actuarial estimates related to the proportion of TMWA's contribution to NVPERS. Spending on service and supplies was \$1.6 million or 6.7% less than prior year. Expenses related to the Fleish penstock project were expensed for a loss of \$0.6 million in the prior year. Power costs are lower by \$0.3 million in the current year, and professional services are lower \$0.3 million due to work performed internally, especially in hydrology. Accruals for fiscal year ended June 30, 2016 were slightly overstated by \$0.3 million.

Net non-operating revenue and expenses were unfavorable \$2.1 million or 18.11% as compared to prior year. In the prior year the sale of water rights to implement TROA created a gain on sale of \$7.0 million. Offsetting was lower interest expense in 2017 of \$4.5 million.

Total capital contributions were \$43.4 million, \$24.2 million or 55.6% greater than prior year due to an \$11.8 million insurance settlement related to Farad hydroelectric plant, \$9.4 million increase in developer contributions, \$2.3 million in additional developer infrastructure contributions, and \$1.0 million in additional grants received mainly due to TROA.

Total cash and investments as of June 30, 2017 was approximately \$174.0 million, \$13.0 million lower than prior year. Use of \$32.9 million in the debt service reserve fund to pay down debt in the 2017 refunding was offset by \$11.8 million additional insurance funds received, and \$5.1 million received from release of FDAs. Restricted cash balances decreased from \$87.3 million to \$41.8 million due to release of the debt service reserve fund and lower current debt service requirements due to deferral of principal payments on Senior Lien Debt. The unrestricted cash balance increased from \$99.8 million to \$132.2 million. Included in unrestricted cash is \$21.5 million from insurance settlements collected in FY16 and FY17 for Farad hydroelectric facilities, and \$9.5 million collected in FY16 and FY17 for the release of FDAs.

TRUCKEE MEADOWS WATER AUTHORITY
STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION - ACTUAL TO BUDGET
YEAR ENDED JUNE 30, 2017

	<u>UNAUDITED</u> Actual	<u>REVISED</u> Budget	Variance	% Var
OPERATING REVENUES				
Charges for water sales	\$ 92,687,260	\$ 91,196,093	\$ 1,491,167	1.64%
Hydroelectric sales	1,788,934	1,755,890	33,044	1.88%
Other operating sales	2,791,989	2,471,500	320,489	12.97%
Total Operating Revenues	<u>97,268,183</u>	<u>95,423,483</u>	<u>1,844,700</u>	1.93%
OPERATING EXPENSES				
Salaries and wages	17,257,430	18,319,615	1,062,185	5.80%
Employee benefits	9,047,279	8,736,336	(310,943)	-3.56%
Services and supplies	23,980,449	25,730,715	1,750,266	6.80%
Total Operating Expenses before Depreciation	<u>50,285,158</u>	<u>52,786,666</u>	<u>2,501,508</u>	4.74%
Depreciation	<u>32,169,578</u>	<u>33,247,620</u>	<u>1,078,042</u>	3.24%
Total Operating Expenses	<u>82,454,736</u>	<u>86,034,286</u>	<u>3,579,550</u>	4.16%
Operating Income	<u>14,813,447</u>	<u>9,389,197</u>	<u>5,424,250</u>	57.77%
NONOPERATING REVENUES (EXPENSES)				
Investment earnings	7,209,113	2,231,304	4,977,809	223.09%
Net increase (decrease) in fair value of investments	(342,257)	-	(342,257)	*
Gain (Loss) on disposal of assets	(111,696)	-	(111,696)	*
Amortization of bond/note issuance costs	(1,083,480)	(474,444)	(609,036)	128.37%
Interest expense	(17,018,860)	(16,930,176)	(88,684)	0.52%
Other non operating expense	(243,000)	-	(243,000)	*
Total Nonoperating Revenues (Expenses)	<u>(11,590,180)</u>	<u>(15,173,316)</u>	<u>3,583,136</u>	23.61%
Income (Loss) before Capital Contributions	<u>3,223,267</u>	<u>(5,784,119)</u>	<u>9,007,386</u>	155.73%
CAPITAL CONTRIBUTIONS				
Grants	1,226,863	1,191,168	35,695	3.00%
Water meter retrofit program	341,074	450,000	(108,926)	-24.21%
Developer infrastructure contributions	10,797,854	-	10,797,854	*
Developer will-serve contributions (net of refunds)	7,950,666	8,189,633	(238,967)	-2.92%
Developer capital contributions-other	6,149,809	5,328,086	821,723	15.42%
Developer facility charges (net of refunds)	5,116,956	4,509,144	607,812	13.48%
Contributions from others	11,855,511	11,805,511	50,000	0.42%
Net Capital Contributions	<u>43,438,733</u>	<u>31,473,542</u>	<u>11,965,191</u>	38.02%
Change in Net Position	<u>46,662,000</u>	<u>25,689,423</u>	<u>20,972,577</u>	-81.64%
NET POSITION, BEGINNING OF YEAR	<u>584,982,314</u>	<u>560,575,086</u>		
NET POSITION, END OF YEAR	<u>\$ 631,644,314</u>	<u>\$ 586,264,509</u>		

TRUCKEE MEADOWS WATER AUTHORITY
 STATEMENT OF CASH FLOWS - ACTUAL TO BUDGET
 YEAR ENDED JUNE 30, 2017

	UNAUDITED Actual	REVISED Budget	Variance	% Var
INCREASE IN CASH AND CASH EQUIVALENTS				
CASH FLOWS FROM OPERATING ACTIVITIES				
Cash received from customers	\$ 95,999,034	\$ 95,423,482	\$ 575,552	0.60%
Cash paid to employees	(25,619,675)	(27,055,951)	1,436,276	-5.31%
Cash paid to suppliers	(20,093,718)	(25,730,715)	5,636,997	-21.91%
Net Cash Provided by Operating Activities	<u>50,285,641</u>	<u>42,636,816</u>	<u>7,648,825</u>	17.94%
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES				
Acquisition and construction of capital assets	(33,590,151)	(31,874,291)	(1,715,860)	5.38%
Interest paid on financing	(16,172,525)	(16,154,600)	(17,925)	0.11%
Principal paid on financing	(14,004,694)	(47,100,153)	33,095,459	-70.27%
Proceeds from refunding bonds	172,268,662	-	172,268,662	*
Redemption of commercial paper notes	(4,400,000)	(4,400,000)	-	0.00%
Proceeds transferred to refunding escrow	(207,049,764)	-	(207,049,764)	*
Proceeds from capital debt issuance	732,529	-	732,529	*
Proceeds from capital asset disposal	(111,696)	-	(111,696)	*
Contributions for water meter retrofit program	341,074	450,000	(108,926)	-24.21%
Contributions from developers-will-serve letters	7,950,666	8,189,633	(238,967)	-2.92%
Contributions from developers-other	6,149,809	5,328,086	821,723	15.42%
Contributions from developers-facility charges	5,116,956	4,509,144	607,812	13.48%
Contributions from others	11,855,510	11,805,511	49,999	0.42%
Grants	1,262,453	1,191,168	71,285	5.98%
Bond/Note issuance costs	(1,058,081)	(440,820)	(617,261)	140.03%
Net Cash (Used) by Capital and Related Financing Activities	<u>(70,709,252)</u>	<u>(68,496,322)</u>	<u>(2,212,930)</u>	3.23%
CASH FLOWS FROM INVESTING ACTIVITIES				
Payments received on Verdi Business Park receivable	20,793	-	20,793	*
Interest received	7,403,545	2,404,344	4,999,201	207.92%
Net Cash Provided by Investing Activities	<u>7,424,338</u>	<u>2,404,344</u>	<u>5,019,994</u>	208.79%
Net Increase (Decrease) in Cash and Cash Equivalents	(12,999,274)	(23,455,162)	<u>10,455,888</u>	-44.58%
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR (including \$87,271,218 in restricted accounts for the year ended June 30, 2016)				
	<u>187,035,903</u>	<u>187,035,903</u>		
CASH AND CASH EQUIVALENTS, END OF YEAR (including \$41,832,676 in restricted accounts for the year ended June 30, 2017)				
	<u>\$ 174,036,629</u>	<u>\$ 163,580,741</u>		

TRUCKEE MEADOWS WATER AUTHORITY
STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION - ACTUAL TO PRIOR YEAR
YEAR ENDED JUNE 30, 2017

	UNAUDITED 2017	AUDITED 2016	Variance	% Var
OPERATING REVENUES				
Charges for water sales	\$ 92,687,260	\$ 87,534,332	\$ 5,152,928	5.56%
Hydroelectric sales	1,788,934	1,175,195	613,739	34.31%
Other operating sales	2,791,989	3,219,416	(427,427)	-15.31%
Total Operating Revenues	<u>97,268,183</u>	<u>91,928,943</u>	<u>5,339,240</u>	5.49%
OPERATING EXPENSES				
Salaries and wages	17,257,430	16,541,811	(715,619)	-4.15%
Employee benefits	9,047,279	6,364,279	(2,683,000)	-29.66%
Services and supplies	23,980,449	25,575,227	1,594,778	6.65%
Total Operating Expenses before Depreciation	<u>50,285,158</u>	<u>48,481,317</u>	<u>(1,803,841)</u>	-3.59%
Depreciation	<u>32,169,578</u>	<u>32,134,190</u>	<u>(35,388)</u>	-0.11%
Total Operating Expenses	<u>82,454,736</u>	<u>80,615,507</u>	<u>(1,839,229)</u>	-2.23%
Operating Income	<u>14,813,447</u>	<u>11,313,436</u>	<u>3,500,011</u>	23.63%
NONOPERATING REVENUES (EXPENSES)				
Investment earnings	7,209,113	6,737,745	471,368	6.54%
Net increase (decrease) in fair value of investments	(342,257)	80,042	(422,299)	123.39%
Gain (Loss) on disposal of assets	(111,696)	6,460,373	(6,572,069)	5883.89%
Amortization of bond/note issuance costs	(1,083,480)	(1,219,746)	136,266	-12.58%
Interest expense	(17,018,860)	(21,549,864)	4,531,004	-26.62%
Other non operating expense	(243,000)	-	(243,000)	100.00%
Total Nonoperating Revenues (Expenses)	<u>(11,590,180)</u>	<u>(9,491,450)</u>	<u>(2,098,730)</u>	18.11%
Income (Loss) before Capital Contributions	<u>3,223,267</u>	<u>1,821,986</u>	<u>1,401,281</u>	43.47%
CAPITAL CONTRIBUTIONS				
Grants	1,226,863	224,138	1,002,725	81.73%
Water meter retrofit program	341,074	482,081	(141,007)	-41.34%
Developer infrastructure contributions	10,797,854	8,454,980	2,342,874	21.70%
Developer will-serve contributions (net of refunds)	7,950,666	4,363,692	3,586,974	45.12%
Developer capital contributions-other	6,149,809	2,473,163	3,676,646	59.78%
Developer facility charges (net of refunds)	5,116,956	2,931,940	2,185,016	42.70%
Contributions from others	11,855,511	356,200	11,499,311	97.00%
Net Capital Contributions	<u>43,438,733</u>	<u>19,286,194</u>	<u>24,152,539</u>	55.60%
Change in Net Position	<u>46,662,000</u>	<u>21,108,180</u>	<u>25,553,820</u>	54.76%
NET POSITION, BEGINNING OF YEAR	<u>584,982,314</u>	<u>563,874,134</u>		
NET POSITION, END OF YEAR	<u>\$ 631,644,314</u>	<u>\$ 584,982,314</u>		

TRUCKEE MEADOWS WATER AUTHORITY
 STATEMENT OF NET POSITION - ACTUAL TO PRIOR YEAR
 JUNE 30, 2017

ASSETS

	UNAUDITED 2017	AUDITED 2016	Change	% Chg
CURRENT ASSETS				
Cash and investments	\$ 132,203,955	\$ 99,764,684	\$ 32,439,271	24.54%
Accounts receivable, net	14,803,390	13,580,981	1,222,409	8.26%
Due from others	333,417	313,955	19,462	5.84%
Due from other governments	9,559	45,969	(36,410)	-380.90%
Interest receivable	595,161	1,048,498	(453,337)	-76.17%
Prepaid assets and other assets	1,222,604	1,243,125	(20,521)	-1.68%
	<u>149,168,086</u>	<u>115,997,212</u>	<u>33,170,874</u>	<u>22.24%</u>
RESTRICTED CURRENT ASSETS				
Cash and investments:				
Water meter retrofit program	2,369,793	2,084,980	284,813	12.02%
Current bond debt service	6,250,183	19,395,405	(13,145,222)	-210.32%
	<u>8,619,976</u>	<u>21,480,385</u>	<u>(12,860,409)</u>	<u>-149.19%</u>
Total Current Assets	<u>157,788,062</u>	<u>137,477,597</u>	<u>20,310,465</u>	<u>12.87%</u>
RESTRICTED NONCURRENT ASSETS				
Cash and investments:				
Future bond debt service	3,242,632	35,390,010	(32,147,378)	-991.40%
Operations and maintenance	8,797,778	8,739,954	57,824	0.66%
Renewal and replacement	20,672,290	21,160,870	(488,580)	-2.36%
Water rate stabilization	500,000	500,000	-	0.00%
	<u>33,212,700</u>	<u>65,790,834</u>	<u>(32,578,134)</u>	<u>-98.09%</u>
NONCURRENT ASSETS				
Capital assets, not depreciated	150,654,627	147,064,145	3,590,482	2.38%
Capital assets, depreciated	791,082,302	783,728,106	7,354,196	0.93%
Deferred charges and other assets	510,360	1,013,985	(503,625)	-98.68%
	<u>942,247,289</u>	<u>931,806,236</u>	<u>10,441,053</u>	<u>1.11%</u>
Total Noncurrent Assets	<u>975,459,989</u>	<u>997,597,070</u>	<u>(22,137,081)</u>	<u>-2.27%</u>
DEFERRED OUTFLOW OF RESOURCES				
Deferred amount on bond refundings	3,153,858	3,053,052	100,806	3.20%
Deferred amount on net pension liability	14,239,295	7,156,688	7,082,607	49.74%
Total Deferred Outflow of Resources	<u>17,393,153</u>	<u>10,209,740</u>	<u>7,183,413</u>	<u>41.30%</u>
Total Assets	<u>\$1,150,641,204</u>	<u>\$1,145,284,407</u>	<u>\$ 5,356,797</u>	<u>0.47%</u>

TRUCKEE MEADOWS WATER AUTHORITY
STATEMENT OF NET POSITION - ACTUAL TO PRIOR YEAR
JUNE 30, 2017

LIABILITIES

	UNAUDITED	AUDITED		
	2017	2016	Variance	Var %
CURRENT LIABILITIES PAYABLE FROM UNRESTRICTED				
CURRENT ASSETS				
Accounts payable	\$ 7,236,523	\$ 2,909,126	\$ 4,327,397	59.80%
Contracts and retention payable	719,471	2,185,872	(1,466,401)	-203.82%
Accrued liabilities	3,912,374	4,000,137	(87,763)	-2.24%
Due to other governments	1,928,514	2,137,679	(209,165)	-10.85%
Accrued interest payable	384,147	315,707	68,440	17.82%
Current portion of long term debt	85,205,701	89,414,845	(4,209,144)	-4.94%
Customer deposits and amounts due to developers	2,729,962	2,757,239	(27,277)	-1.00%
	<u>102,116,692</u>	<u>103,720,605</u>	<u>(1,603,913)</u>	-1.57%
CURRENT LIABILITIES PAYABLE FROM RESTRICTED				
CURRENT ASSETS				
Current portion of long term debt	850,000	12,620,000	(11,770,000)	-1384.71%
Interest payable	5,400,183	6,775,405	(1,375,222)	-25.47%
	<u>6,250,183</u>	<u>19,395,405</u>	<u>(13,145,222)</u>	-210.32%
Total Current Liabilities	<u>108,366,875</u>	<u>123,116,010</u>	<u>(14,749,135)</u>	-13.61%
NONCURRENT LIABILITIES				
Net pension liability	35,783,246	26,869,406	8,913,840	24.91%
Long-term debt, net of current portion	372,309,512	406,696,538	(34,387,026)	-9.24%
Total Non-Current Liabilities	<u>408,092,758</u>	<u>433,565,944</u>	<u>(25,473,186)</u>	-6.24%
DEFERRED INFLOW OF RESOURCES				
Deferred amount on net pension liability	2,410,007	3,486,191	(1,076,184)	-44.65%
Deferred amount on bond refundings	127,250	133,948	(6,698)	-5.26%
Total Deferred Inflow of Resources	<u>2,537,257</u>	<u>3,620,139</u>	<u>(1,082,882)</u>	-42.68%
Total Liabilities	<u>518,996,890</u>	<u>560,302,093</u>	<u>(41,305,203)</u>	-7.96%
NET POSITION				
Net investment in capital assets	495,575,149	478,543,111	17,032,038	3.44%
Restricted for water meter retrofit program	2,369,793	2,084,980	284,813	12.02%
Restricted for debt service	850,000	12,620,000	(11,770,000)	-1384.71%
Restricted for operations and maintenance reserve	4,197,778	4,139,954	57,824	1.38%
Restricted for renewal and replacement reserve	20,672,290	21,160,870	(488,580)	-2.36%
Restricted for water rate stabilization	500,000	500,000	-	0.00%
Unrestricted	107,479,304	65,933,399	41,545,905	38.65%
Total Net Position	<u>631,644,314</u>	<u>584,982,314</u>	<u>46,662,000</u>	7.39%
Total Liabilities and Net Position	<u>\$1,150,641,204</u>	<u>\$1,145,284,407</u>	<u>\$ 5,356,797</u>	0.47%

TRUCKEE MEADOWS WATER AUTHORITY
 STATEMENT OF CASH FLOWS - ACTUAL TO PRIOR YEAR
 YEAR ENDED JUNE 30, 2017

	UNAUDITED 2017	AUDITED 2016	Variance	% Var
INCREASE IN CASH AND CASH EQUIVALENTS				
CASH FLOWS FROM OPERATING ACTIVITIES				
Cash received from customers	\$ 95,999,034	\$ 90,753,299	\$ 5,245,735	5.78%
Cash paid to employees	(25,619,675)	(24,132,183)	(1,487,492)	6.16%
Cash paid to suppliers	(20,093,718)	(26,198,864)	6,105,146	-23.30%
Net Cash Provided by Operating Activities	<u>50,285,641</u>	<u>40,422,252</u>	<u>9,863,389</u>	24.40%
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES				
Acquisition and construction of capital assets	(33,590,151)	(49,416,333)	15,826,182	-32.03%
Interest paid on financing	(16,172,525)	(18,904,799)	2,732,274	-14.45%
Principal paid on financing	(14,004,694)	(12,568,107)	(1,436,587)	11.43%
Proceeds from refunding bonds	172,268,662	149,354,337	22,914,325	15.34%
Redemption of commercial paper notes	(4,400,000)	(7,200,000)	2,800,000	-38.89%
Proceeds transferred to refunding escrow	(207,049,764)	(151,026,620)	(56,023,144)	37.09%
Proceeds from capital debt issuance	732,529	8,239,034	(7,506,505)	-91.11%
Proceeds from capital asset disposal	(111,696)	6,460,373	(6,572,069)	-101.73%
Contributions for water meter retrofit program	341,074	482,081	(141,007)	-29.25%
Contributions from developers-will-serve letters	7,950,666	4,363,692	3,586,974	82.20%
Contributions from developers-other	6,149,809	2,473,163	3,676,646	148.66%
Contributions from developers-facility charges	5,116,956	2,931,940	2,185,016	74.52%
Contributions from others	11,855,510	356,200	11,499,310	3228.33%
Grants	1,262,453	253,131	1,009,322	398.74%
Bond/Note issuance costs	(1,058,081)	(1,298,798)	240,717	-18.53%
Net Cash (Used) by Capital and Related Financing Activities	<u>(70,709,252)</u>	<u>(65,500,706)</u>	<u>(5,208,546)</u>	7.95%
CASH FLOWS FROM INVESTING ACTIVITIES				
Cash received in connection with WCWU transfer of operations	-	9,678,076	(9,678,076)	-100.00%
Cash received from STMGID subsequent to merger	-	162,770	(162,770)	-100.00%
Payments received on Verdi Business Park receivable	20,793	22,244	(1,451)	-6.53%
Interest received	7,403,545	7,233,417	170,128	2.35%
Net Cash Provided by Investing Activities	<u>7,424,338</u>	<u>17,096,507</u>	<u>(9,672,169)</u>	-56.57%
Net Increase (Decrease) in Cash and Cash Equivalents	(12,999,274)	(7,981,947)	<u>(5,017,327)</u>	62.86%
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR (including \$87,271,218 in restricted accounts for the year ended June 30, 2016)				
	<u>187,035,903</u>	<u>195,017,850</u>		
CASH AND CASH EQUIVALENTS, END OF YEAR (including \$41,832,676 in restricted accounts for the year ended June 30, 2017)				
	<u>\$ 174,036,629</u>	<u>\$ 187,035,903</u>		



STAFF REPORT

TO: TMWA Board of Directors
THRU: Mark Foree, General Manager
FROM: Joe Petrelli, Principal Financial Analyst
Michele Sullivan, Chief Financial Officer/Treasurer
DATE: September 11, 2017
SUBJECT: **Discussion and possible action on adoption of Resolution No. 255: A resolution to approve the amendments to TMWA's Investment Policy**

Recommendation

TMWA Staff requests that the TMWA Board review and approve the revised Investment Policy for the Truckee Meadows Water Authority (*Attachment 1 is redlined version; Attachment 2 is final version*) and adopt Resolution 255 (*Attachment 3*).

Discussion

The policy governs the investment of TMWA's restricted and unrestricted cash. TMWA utilizes the expertise and experience of Public Financial Management's (PFM's) investment advisory group in Harrisburg, Pennsylvania to assist TMWA in selecting appropriate investments consistent with the guidelines set forth in TMWA's Investment Policy (IP). In addition, TMWA may seek the services of additional investment advisors, and banking custody services.

In TMWA's recent refunding transaction, Forward Delivery Agreements were terminated that provided TMWA with around a 5% return on a significant portion of investments. In discussions with PFM, they suggested we update our investment policy to be more aggressive. TMWA's policy has been traditionally much more restrictive than NRS statute requirements.

The revised IP will allow TMWA to invest beyond the current restriction of two years, out to five or ten years. Securities will be sold before maturity if it is in the best interest of the overall portfolio. Also, corporate notes currently require a AA rating for purchase by TMWA, and we would lower that to an A rating which is the same rating required in the County and the City of Reno's policies.

TMWA Staff, based on advice from PFM, has determined the IP should also be amended to allow certain permitted investments that were not part of the amended IP adopted in February 2009, namely certain asset backed securities. Today's investment environment has created certain opportunities to invest in asset backed securities that may have yields greater than other permitted investments while not creating more credit risk. TMWA will only invest in such securities if they are rated "AAA" by a nationally recognized statistical rating organization

(NRSRO). Per statute TMWA cannot invest in securities with greater than 10 year maturities, but to minimize interest rate risk will focus on maturities from 1 – 5 years depending on market factors.

TMWA has managed its investment program in full compliance with Chapter 355 of the Nevada Revised Statutes. The revisions to our IP will bring TMWA into line with our peer agencies in terms of investment selection and maturities (see policy comparison worksheet ***Attachment 4***) . Prudent investment selection through the use of professional financial advisors and fee management is designed to improve TMWA's future investment performance.



INVESTMENT POLICY

TMWA BOARD OF DIRECTORS
MARK FOREE, GENERAL MANAGER
MICHELE SULLIVAN, CHIEF FINANCIAL OFFICER/TREASURER

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I INTRODUCTION

The Truckee Meadows Water Authority (TMWA) has on balance, significant amounts of restricted and unrestricted cash resources at any one time. The goal is to invest these funds to obtain suitable rates of return on investments, in a safe and prudent manner. The purpose of this policy is to establish guidelines that will govern the investment activities of TMWA and to establish a formal reporting policy to ~~the TMWA's Technical Advisory Committee and~~ Board of Directors. ~~TMWA's Technical Advisory Committee has three members who are the Finance Directors for the City of Reno, City of Sparks and Washoe County. These persons have the necessary qualifications to independently review TMWA's investments and provide guidance to TMWA in this area.~~

Upon final approval by the TMWA Board, this policy can only be amended by a majority vote of the TMWA Board of Directors. ~~once changes are reviewed and approved by TMWA's Technical Advisory Committee.~~

This policy will ensure the prudent investment of TMWA financial resources, adherence to Nevada Revised Statutes applicable to the investment of public funds, maintenance of daily liquidity requirements, anticipation of future cash requirements and realization of a competitive rate of return on investments. This policy supersedes and replaces all prior TMWA investment policies.

II STEWARDSHIP

This policy applies to all restricted and unrestricted monies held by TMWA. TMWA is authorized to use alternative investments such other governmental investment pools if the rate of return performance warrants such investment alternatives. Other-wise TMWA can utilize the expertise of outside registered independent investment advisors in the management of an active portfolio of permitted investments and to provide recommendations on investment alternatives.

The standard of care shall be governed by the prudent person standard, embodied in NRS 355.145, which will be applied while conducting all investment transactions:

“The TMWA General Manager, Treasurer, and Chief Financial Officer who have responsibilities for investing TMWA monies shall exercise the judgment and care, under the circumstances then prevailing, which a person of prudence, discretion and intelligence exercises in the management of their own affairs, not in regard to speculation, but in regard to the investment of ~~his~~their money, considering the probable income as well as the probable safety of ~~his~~their capital.”

Authorized investment officers and staff who act in accordance with this policy and procedures in the management of TMWA monies and who exercise the proper due diligence will have no personal responsibility for an individual security's credit risk or market price changes, provided that deviations from expectations are reported and preventative action taken to control adverse developments.

III OBJECTIVES

There are three major objectives in the investment of public monies which listed in the order of importance, are integral to managing various investments risks. Investment risks include but are not limited to market risk, liquidity risk, credit risk, reinvestment risk, collateral risk, and rate volatility risk.

Safety: Safety of principal is the foremost objective of the investment program. Investments by TMWA shall be undertaken to ensure the preservation of principal in the portfolio.

Liquidity: TMWA will remain sufficiently liquid to allow for the normal withdrawals by participants. Sufficient portion of the portfolio will be maintained in overnight securities to meet immediate cash needs to cover operating expenses and pending water right purchases.

Return on Investment: TMWA will invest monies in a manner to obtain a reasonable rate of return on investments considering long term liquidity requirements based upon cash demand projections. TMWA will prepare a drawdown schedule at least annually to model an investment portfolio.

IV ETHICS

All investment staff will act responsibly as custodians of public funds. The staff will refrain from personal business activity that could conflict with the proper execution of the investment program or that could impair their ability to make impartial investment decisions.

V INVESTMENT PROCEDURES

TMWA will prepare a drawdown schedule at least annually for purposes of developing an investment plan for unrestricted cash to be used by operations and by the most recent capital spending plan which may be different from the annual budget and other capital spending plans. Particular to TMWA is reserving adequate amounts of cash to make water right purchases on an as needed basis. This is accomplished by monitoring water right purchase activity.

This drawdown schedule will project cash inflows and outflows on a weekly basis. Special care in maintaining liquidity will be of particular importance to avoid forced liquidation of investment securities. TMWA will not invest beyond ~~two~~ five years unless cash flow projections warrant the alternative. Due to rate volatility, investments may experience unrealized losses and gains at any given point in time. TMWA will not prematurely liquidate investments unless liquidity is required. TMWA will make every effort to hold investments to maturity. Securities may be sold at either a gain or loss

prior to maturity if the TMWA or the external investment advisor deems the sale to be in the best interest of the overall portfolio and is in accordance with the investment strategy. If TMWA experiences greater than planned cash resources, TMWA can prepare a revised drawdown schedule and invest in such a manner to meet cash demands or invest in shorter maturities based upon breakeven analyses if investing in shorter term securities is justified.

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TMWA will maintain relationships with banking and financial institutions that are authorized to provide investment services and custody arrangements and are organized and operating, or licensed to operate in the United States under federal or state laws. TMWA may contract with an external investment advisors and may rely on the authorized list of broker/dealers of the investment advisor.

VII PERMITTED INVESTMENTS

TMWA will only invest its funds in compliance with the provisions of NRS 355.170 which sets forth investments authorized to be made by local governments, or as otherwise allowed by law for a joint powers authority. TMWA shall be authorized to invest in the following: TMWA's IP as set forth herein, is more restrictive than NRS 355.170 and does not authorize all investments permitted by NRS 355.170. TMWA shall be authorized to invest only in the following:

A United State Treasury Bills, Notes and Bonds

~~1. Maximum maturity of two (2) years~~

B United State Government Agency Securities

- ~~1. Fannie Mae~~
- ~~2. Federal Agricultural Mortgage Corporation~~
- ~~3. Federal Farm Credit Bank~~
- ~~4. Federal Home Loan Bank~~
- ~~5. Federal Home Loan Mortgage Corporation~~
- ~~6. Government National Mortgage Association~~
- ~~7. Maximum maturity of two (2) years~~

~~C. Student Loan Marketing Association~~

~~1. Maximum maturity of two (2) years~~

C. Agency Issued Mortgage Backed Securities FNMA, FHLMC, GNMA

D. Corporate Notes

1. Rating must be “AA” or its equivalent or better by a nationally recognized statistical rating organization (NRSRO)
2. Maximum maturity of ~~five~~ (5) years
- ~~2.3.~~ Aggregate par value may not exceed 20% of the total par value of the total investment portfolio

E. Money Market Mutual Funds

- ~~3.1.~~ Only SEC registered 2(aA)-7 funds are eligible
- ~~4.2.~~ Rating must be “AAA” or its equivalent by an NRSRO
- ~~5.3.~~ Investments only in securities issued by the Federal Government or agencies of the Federal Government or in repurchase agreements fully collateralized by such securities must only be:
 - a) ~~United States Treasury or United States governmental agency securities~~
 - b) ~~Master notes, bank notes, or commercial paper rated “A-1”, “P-1” or its equivalent or better, issued by a corporation organized and operating or by a depository institution licensed by the United States, or any state, and operating in the United States.~~
 - e) ~~Repurchase Agreements collateralized by the securities in f-3a, and f-3b~~
- ~~6.4.~~ Funds must maintain a \$1 Net Asset Value

F. Negotiable Certificates of Deposit

- ~~7.1.~~ Issued by commercial banks
- ~~8.2.~~ Issued by insured savings and loan associations
- ~~3.~~ Issued by insured credit unions
- ~~4.~~ Maximum maturity of five (5) years
- ~~9.5.~~ Maximum aggregate position of 20% of portfolio
- ~~10.~~ Rating must be “a-1”, “P-1” or equivalent or better
- ~~11.~~ Maximum maturity of one (1) year
- ~~12.~~ Aggregate par value may not exceed 20% of the total par value of the total investment portfolio available to TMWA

G. Repurchase Agreements

- ~~13.1.~~ Executed with a qualified counterparty
- ~~2.~~ Comply with other requirements of NRS 355.170(2)
- ~~3.~~ Must be collateralized at 102% or higher
- ~~4.~~ The date on which the securities are to be repurchased must not be more than 90 days after the date of purchase

H. Commercial Paper

- ~~14.1.~~ Rating must be “A-1”, “P-1”, equivalent or better by an NRSRO;
- ~~2.~~ Maximum maturity of 270 days
- ~~15.~~ —
- ~~16.3.~~ Aggregate par value may not exceed 20% of the total par value of the total investment portfolio ~~available to TMWA~~

I. Bankers Acceptances

- 1. Rating must be “A-1”, “P-1”, equivalent or better by an NRSRO;
- 2. Maximum maturity of 180 days
- ~~1.3.~~ Aggregate par value may not exceed 20% of the total par value of the total investment portfolio ~~available to TMWA~~

J. Long Term Forward Sale Contracts and Guaranteed Investment Contracts

1. The FSC or GIC is invested with a commercial bank or credit union, which is organized and operating or licensed to operate in the United State under federal or state law with a credit rating on its outstanding long term debt of not less than “A2” by Moody’s Investor Services, Inc. or “AA” by Standard & Poors Rating Services, or their equivalent

~~J.2.~~ Maintains appropriate collateral which are securities of the Federal government or agencies of the Federal Government for the protection of principal equal to or greater than 102% of the principal invested.

3. TMWA receives a security interest in the collateral that is fully perfected and the collateral is held in custody for TMWA by a third-party agent of TMWA which is a commercial bank authorized to exercise trust powers

K. Long Term and Short Term Local Government Investment Pool (LGIP) of the State of Nevada

L. Collateralized Mortgage Obligations

- ~~—Rating must be “A-1”, “P-1AA” or, its equivalent or better by an NRSRO~~
- ~~—Maximum maturity of five (5) years~~
 - ~~1. — Final Cash flow Payment date will not exceed two (2) years assuming a zero (0) pre-payment speed~~
 - ~~2. Underlying collateral must be United States Government Securities~~
 - ~~3. Certain risks should be examined before investment in these instruments such as exposure to interest only mortgages and other potentially higher risk mortgage products that may make this type of investment not suitable to TMWA~~

ML. Municipal Securities

1. Negotiable note(s) in medium-term obligations issued by local governments of the State of Nevada pursuant to NRS 350.087 to 350.095, and subject to NRS 355.177 which prohibits a local government from investing in its own securities of any kind or interim warrants from any source.
2. The interest on such obligations must be exempt from gross income for federal income tax purposes.
3. Such obligations must be rated "A" or higher by one or more nationally recognized bond credit rating agencies.

N. M Asset-backed Securities

1. Rating must be "AAA" or its equivalent by an NRSRO
2. Maximum maturity of five (5) years

~~TMWA will not invest in Asset Backed Securities (ABS), even though this investment is a permitted investment pursuant to NRS 355.171.~~

~~VIII COLLATERALIZATION~~

~~A. Repurchase Agreements~~

~~1. The purchase securities will be United State Treasury or United States government agency securities with a term to maturity not exceed ten (10) years. The market value of the purchased securities must equal or exceed 102 percent of the repurchase price to be paid by the counterparty and the value of the purchased securities must be marked to market weekly. If the value of the purchased securities should fall below 102 percent, the counterparty will be required to submit additional collateral to make up the deficit. The date on which the securities are to be repurchased must not be more than 90 days after the date of purchase.~~

~~IXVIII SAFEKEEPING/CUSTODY AND DELIVERY~~

- A. Securities purchased by TMWA as well as collateral for repurchase agreements will be delivered against payment and held in a custodial safekeeping account with an approved financial institution acting as a third party custodian.
- B. If TMWA enters into Master Securities Custody Services and these services encompass the following functions:

1. The settlement of all purchase, sales, and calls through the Federal Reserve System (Fed) or the Depository Trust Company (DTC)
2. The collection and distribution of all interest payments
3. The facilitation of all trading activity conducted by investment managers and securities lending agent.
4. Provide daily accounting of all investment accounts, and month end reports that show a detailed list of holdings with market evaluations.

XIX PORTFOLIO GROUP STRATEGY AND- DIVERSIFICATION

TMWA shall view its investment structure in two distinct groups:

Group A - Near Term Cash Flow

To be based on cash flow needs for the next 18 months based upon near term operational cash flows and capital needs. Investments will mature in 1 year or less for liquidity. These will typically consist of Money Market Funds, Treasury Notes, Agency Notes, Certificates of Deposit, Repurchase Agreements, Commercial Paper, Bankers Acceptances, and LGIP.

Group B – Core Portfolio

To be based on long term capital growth and planned cash requirements greater than 18 months. Investments will mature 1 to 5 years and may consist of all Permitted Investments outlined in Section VII.

A. Securities held by TMWA or by TMWA's custodians will be diversified to eliminate risk of loss from over-concentration of assets in a specific maturity, a specific issuer, or a specific class of securities. The following diversification limitations shall be imposed:

1. With the exception of United States Treasury securities, United States governmental agency securities, and repurchase agreements, no more than 20 percent of the total par value of the portfolio will be invested in a single security type.
2. No more than 40 percent of the total par value of the portfolio will be invested in any combination of negotiable certificates of deposit, commercial paper, and corporate notes-

B. TMWA shall diversify the investments within the portfolio to avoid incurring unreasonable risks inherent in over investing in specific instruments, individual financial institutions or maturities. To promote diversification, no more than 5% of the portfolio may be invested in the securities of any one issuer, regardless of security type; excluding U.S. Treasuries, federal agencies, and pooled investments such as money market funds or local government investment pools.

XIX MATURITIES

- A. Liquidity: ~~to the extent practical, The portfolio shall be structured to provide liquidity to meet projected cash flow requirements investment of maturities should must match normal cash flow requirements of TMWA.~~ Portfolio management will require a periodic assessment of cash flow requirements on a continual basis and also on a quarterly basis with respect to forecasting drawdown requirements.
- B. Market Risk: Market risk relates to the constant price fluctuations of securities that may result in a loss to TMWA if cash flow requirements force a premature sale.
- C. Portfolio maturities must be structured to avoid the forced sale of securities in any but the most severe circumstances. The projection of a “Minimum Liquidity Requirement” as defined by drawdown schedules will be enforced to ensure that money is available to meet the short-term operating needs of TMWA.

XI INVESTMENT PERFORMANCE

TMWA ~~cash will be~~ invested to attain a reasonable return while maintaining a high-quality, secure portfolio with sufficient liquidity to meet on investment consistent with cash flow requirements, ~~and risk constraints.~~ TMWA must meet funding requirements of operating expenses, capital spending, and funding of principal and interest payments on TMWA’s outstanding debt. Rate of return on investments can be greatly influenced by prevailing economic conditions. ~~TMWA maintains a conservative, “buy and hold” investment strategy, which incorporates the matching of maturing securities to cash requirements of TMWA. TMWA will try to achieve yields benchmarked against the 3-month United States Treasury bill yield.~~

XII ACCOUNTING AND REPORTING

TMWA will report investment results to the ~~Technical Advisory Committee and the TMWA~~ Board of Director’s semiannually within 60 days of the close of a calendar quarter ending on December 31 and June 30 beginning with the calendar quarter ending June 30, 2005. These results will include investments transactions, securities holdings, calculate yield to maturity, and average portfolio life and calculate portfolio earnings.

XVII XIII INTERNAL CONTROLS

TMWA’s investments are subject to audit by TMWA outside external financial auditors.

TMWA maintains a system of internal controls to monitor investment transactions and associated activities. These controls are created to safeguard against fraud, investment decision errors, or other actions that could result in a loss of TMWA's money

XVIII XIV SECURITIES LENDING

TMWA has not engaged in securities lending and has no intent to engage in securities lending. Securities lending is permitted pursuant to Nevada Revised Statutes under certain conditions. If TMWA engages in securities lending TMWA will revise this investment policy to incorporate constraints on securities lending pursuant to state statute.

XV GLOSSARY

ASSET-BACKED SECURITIES are securities in which its income payments and value is derived from and collateralized or "backed" by a specified pool of underlying assets such as receivables. Investors of these securities receive the principal and interest payments of the underlying loans.

BANKERS ACCEPTANCES are short-term credit arrangements to enable businesses to obtain funds to finance commercial transactions. They are time drafts drawn on a bank by an exporter or importer to obtain funds to pay for specific merchandise. By its acceptance, the bank becomes primarily liable for the payment of the draft at maturity. An acceptance is a high-grade negotiable instrument. Acceptances are purchased in various denominations for 30 to 270 days. The interest is calculated on a 360 day discount basis similar to Treasury Bills.

CERTIFICATES OF DEPOSIT

Negotiable Certificates of Deposit are large-denomination CDs issued in \$1 million increments. These securities have average trades in the secondary market of \$5 million to \$10 million. They are issued at face value and typically pay interest at maturity, if maturing in less than 12 months. CDs that mature beyond this range pay interest semi-annually. Negotiable CDs are issued by U.S. banks (domestic CDs), U.S. branches of foreign banks (Yankee CDs) and thrifts. There is an active secondary market for negotiable domestic and Yankee CDs. However, the negotiable thrift CD secondary market is limited. Yields on CDs exceed those on U.S. treasuries and agencies of similar maturities. This higher yield compensates the investor for accepting the risk of reduced liquidity and the risk that the issuing bank might fail. State law does not require the collateralization of negotiable CDs.

Non-Negotiable Certificates of Deposit are time deposits with financial institutions that earn interest at a specified rate for a specified term. Liquidation of the CD prior to maturity incurs a penalty. There is no secondary market for those instruments, therefore, they are not liquid. They are classified as public deposits and financial institutions are required to collateralize them. Generally, financial institutions use mortgages to collateralize these deposits. Non-negotiable CDs of \$250,000 are insured respectively by the Federal Deposit Insurance Corporation (FDIC), and the National Credit

Union Share Insurance Fund (NCUSIF).

COLLATERAL is securities, evidence of deposits or other property that a borrower pledges to secure repayment of a loan. It also refers to securities pledged by a bank to secure deposits of public monies.

COLLATERALIZED MORTGAGE OBLIGATIONS (CMOs), a type of mortgage-backed security, are bonds that represent claims to specific cash flows from large pools of home mortgages. The streams of principal and interest payments on the mortgages are distributed to the different classes of CMO interests, known as tranches, according to a complicated deal structure. Each tranche may have different principal balances, coupon rates, prepayment risks, and maturity dates.

COMMERCIAL PAPER is a short term, unsecured, promissory note issued by a corporation to raise working capital. These negotiable instruments may be purchased at a discount to par value or interest bearing. Eligible commercial paper is issued by corporations organized and operating within the United States and having total assets in excess of \$500 million. This would include firms such as American Express, Bank of America, Wells Fargo Bank, et cetera.

CORPORATE NOTES are debt obligations issued by corporations and banks, usually in the form of unsecured promissory notes. These are negotiable instruments that can be bought and sold in a large and active secondary market. They can be issued with fixed or floating-rate coupons, and with or without early call features, although the vast majority are fixed-rate and non-callable. Corporate notes have greater risk than Treasuries or Agencies because they rely on the ability of the issuer to make payment of principal and interest. Corporate notes can be rated by one or more Nationally Recognized Statistical Rating Organizations (NRSRO), with ratings of AAA, AA+, AA, AA-, etc. or their equivalent. Frequent issuers of corporate notes are General Electric Capital Corp., Bank of America, J.P. Morgan, AT&T, Wal-Mart and IBM.

FEDERAL AGENCY INSTRUMENTS are issued by U.S. Government Agencies or Government Sponsored Enterprises (GSE). Although they were created or sponsored by the U.S. Government, most Agencies and GSEs are not guaranteed by the United States Government. Examples of these securities are notes, bonds, bills and discount notes issued by Fannie Mae (FNMA), Freddie Mac (FHLMC), the Federal Home Loan Bank system (FHLB), and Federal Farm Credit Bank (FFCB). The Agency market is a very large and liquid market, with billions traded every day.

FEDERAL GOVERNMENT means the United States, or any agency, instrumentality or corporation thereof.

ISSUER means any corporation, governmental unit or financial institution that borrows money through the sale of securities.

LIQUIDITY refers to the ease and speed with which an asset can be converted into cash without loss of value. In the money market, a security is said to be liquid if the spread

between the bid and asked price is narrow and reasonably sized trades can be done at those quotes. U.S. Treasury bills are very liquid.

LOCAL GOVERNMENT INVESTMENT POOL (LGIP) is operated by the Nevada State Treasurer and are pooled state and local government funds under State of Nevada law.

MATURITY is the date upon which the principal or stated value of an investment becomes due and payable.

MONEY MARKET FUNDS are shares of beneficial interest issued by diversified management companies. Money market funds strive to maintain a stable net asset value (NAV) per share of \$1.00. Money market funds must adhere to Rule 2a-7 of the SEC that regulates the liquidity and credit minimums and sector allocation limitations to protect the investors in money market funds. These funds invest primarily in money market securities with final maturities of 397 days or less to maintain a weighted average maturity of 60 days or less.

NEGOTIABLE is the term used to designate a security, the title to which is transferable by delivery.

PORTFOLIO is the term used to describe the collection or group of securities owned by an investor.

PRINCIPAL describes the original cost of a security. It represents the amount of capital or money that the investor pays for the investment.

REPURCHASE AGREEMENTS are short-term investment transactions. Banks buy temporarily idle funds from a customer by selling him U.S. Government or other securities with a contractual agreement to repurchase the same securities on a future date at an agreed upon interest rate. Repurchase Agreements are typically for one to ten days in maturity. The customer receives interest from the bank. The interest rate reflects both the prevailing demand for Federal Funds and the maturity of the Repo. Repurchase Agreements must be collateralized.

U.S. TREASURY ISSUES are direct obligations of the United States Government. They are highly liquid and are considered the safest investment security. U.S. Treasury issues include:

Treasury Bills are non-interest-bearing discount securities issued by the U.S. Treasury to finance the national debt. Bills are currently issued in one, three, six, and twelve month maturities.

Treasury Notes have original maturities of one to ten years.

Treasury Bonds have original maturities of greater than 10 years.

Treasury Inflation Protected Securities (TIPS) pay principal and interest based on changes in the rate of inflation as measured by the CPI-U index.



Truckee Meadows Water Authority Investment Policy

**TMWA BOARD OF DIRECTORS
MARK FOREE, GENERAL MANAGER
MICHELE SULLIVAN, CHIEF FINANCIAL OFFICER/TREASURER**

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3. Issued by insured credit unions
4. Maximum maturity of five (5) years
5. Maximum aggregate position of 20% of portfolio

G. Repurchase Agreements

1. Executed with a qualified counterparty
2. Comply with other requirements of NRS 355.170(2)
3. Must be collateralized at 102% or higher
4. The date on which the securities are to be repurchased must not be more than 90 days after the date of purchase

H. Commercial Paper

1. Rating must be "A-1", "P-1", equivalent or better by an NRSRO
2. Maximum maturity of 270 days
3. Aggregate par value may not exceed 20% of the total par value of the total investment portfolio

I. Bankers Acceptances

1. Rating must be "A-1", "P-1", equivalent or better by an NRSRO
2. Maximum maturity of 180 days
3. Aggregate par value may not exceed 20% of the total par value of the total investment portfolio

J. Long Term Forward Sale Contracts and Guaranteed Investment Contracts

1. The FSC or GIC is invested with a commercial bank or credit union, which is organized and operating or licensed to operate in the United State under federal or state law with a credit rating on its outstanding long term debt of not less than "A2" by Moody's Investor Services, Inc. or "AA" by Standard & Poors Rating Services, or their equivalent
2. Maintains appropriate collateral which are securities of the Federal government or agencies of the Federal Government for the protection of principal equal to or greater than 102% of the principal invested.
3. TMWA receives a security interest in the collateral that is fully perfected and the collateral is held in custody for TMWA by a third-party agent of TMWA which is a commercial bank authorized to exercise trust powers

K Long Term and Short Term Local Government Investment Pool (LGIP) of the State of Nevada

L. Municipal Securities

1. Negotiable note(s) in medium-term obligations issued by local governments of the State of Nevada pursuant to NRS 350.087 to 350.095, and subject to NRS 355.177 which prohibits a local government from investing in its own securities of any kind or interim warrants from any source.
2. The interest on such obligations must be exempt from gross income for federal income tax purposes.
3. Such obligations must be rated "A" or higher by one or more nationally recognized bond credit rating agencies.

M Asset-backed Securities

1. Rating must be "AAA" or its equivalent by an NRSRO
2. Maximum maturity of five (5) years

VIII SAFEKEEPING/CUSTODY AND DELIVERY

- A. Securities purchased by TMWA as well as collateral for repurchase agreements will be delivered against payment and held in a custodial safekeeping account with an approved financial institution acting as a third party custodian.
- B. If TMWA enters into Master Securities Custody Services and these services encompass the following functions:
 1. The settlement of all purchase, sales, and calls through the Federal Reserve System (Fed) or the Depository Trust Company (DTC)
 2. The collection and distribution of all interest payments
 3. The facilitation of all trading activity conducted by investment managers and securities lending agent.
 4. Provide daily accounting of all investment accounts, and month end reports that show a detailed list of holdings with market evaluations.

IX PORTFOLIO GROUP STRATEGY AND DIVERSIFICATION

TMWA shall view its investment structure in two distinct groups:

Group A - Near Term Cash Flow

To be based on cash flow needs for the next 18 months based upon near term operational cash flows and capital needs. Investments will mature in 1 year or less for liquidity. These will typically consist of Money Market Funds, Treasury Notes, Agency Notes, Certificates

of Deposit, Repurchase Agreements, Commercial Paper, Bankers Acceptances, and LGIP.

Group B – Core Portfolio

To be based on long term capital growth and planned cash requirements greater than 18 months. Investments will mature 1 to 5 years and may consist of all Permitted Investments outlined in Section VII.

- A. Securities held by TMWA or by TMWA’s custodians will be diversified to eliminate risk of loss from over-concentration of assets in a specific maturity, a specific issuer, or a specific class of securities. The following diversification limitations shall be imposed:
 - 1. With the exception of United States Treasury securities, United States governmental agency securities, and repurchase agreements, no more than 20 percent of the total par value of the portfolio will be invested in a single security type.
 - 2. No more than 40 percent of the total par value of the portfolio will be invested in any combination of negotiable certificates of deposit, commercial paper, and corporate notes

- B. TMWA shall diversify the investments within the portfolio to avoid incurring unreasonable risks inherent in over investing in specific instruments, individual financial institutions or maturities. To promote diversification, no more than 5% of the portfolio may be invested in the securities of any one issuer, regardless of security type; excluding U.S. Treasuries, federal agencies, and pooled investments such as money market funds or local government investment pools.

X MATURITIES

- A. Liquidity: The portfolio shall be structured to provide liquidity to meet projected cash flow requirements. Portfolio management will require a periodic assessment of cash flow requirements on a continual basis and also on a quarterly basis with respect to forecasting drawdown requirements.

- B. Market Risk: Market risk relates to the constant price fluctuations of securities that may result in a loss to TMWA if cash flow requirements force a premature sale.

- C. Portfolio maturities must be structured to avoid the forced sale of securities in any but the most severe circumstances. The projection of a “Minimum Liquidity Requirement” as defined by drawdown schedules will be enforced to ensure that money is available to meet the short-term operating needs of TMWA.

XI INVESTMENT PERFORMANCE

TMWA will invest to attain a reasonable return while maintaining a high-quality, secure portfolio with sufficient liquidity to meet cash flow requirements. TMWA must meet funding requirements of operating expenses, capital spending, and funding of principal and interest payments on TMWA's outstanding debt. Rate of return on investments can be greatly influenced by prevailing economic conditions.

XII ACCOUNTING AND REPORTING

TMWA will report investment results to the Board of Director's semiannually within 60 days of the close of a calendar quarter ending on December 31 and June 30 . These results will include investments transactions, securities holdings, calculate yield to maturity, and average portfolio life and calculate portfolio earnings.

XIII INTERNAL CONTROLS

TMWA's investments are subject to audit by TMWA outside external financial auditors. TMWA maintains a system of internal controls to monitor investment transactions and associated activities. These controls are created to safeguard against fraud, investment decision errors, or other actions that could result in a loss of TMWA's money

XIV SECURITIES LENDING

TMWA has not engaged in securities lending and has no intent to engage in securities lending. Securities lending is permitted pursuant to Nevada Revised Statutes under certain conditions. If TMWA engages in securities lending TMWA will revise this investment policy to incorporate constraints on securities lending pursuant to state statute.

XV GLOSSARY

ASSET-BACKED SECURITIES are securities in which its income payments and value is derived from and collateralized or "backed" by a specified pool of underlying assets such as receivables. Investors of these securities receive the principal and interest payments of the underlying loans.

BANKERS ACCEPTANCES are short-term credit arrangements to enable businesses to obtain funds to finance commercial transactions. They are time drafts drawn on a bank by an exporter or importer to obtain funds to pay for specific merchandise. By its acceptance, the bank becomes primarily liable for the payment of the draft at maturity. An acceptance is a high-grade negotiable instrument. Acceptances are purchased in various denominations for 30 to 270 days. The interest is calculated on a 360 day discount basis similar to Treasury Bills.

CERTIFICATES OF DEPOSIT

Negotiable Certificates of Deposit are large-denomination CDs issued in \$1 million increments. These securities have average trades in the secondary market of \$5 million to \$10 million. They are issued at face value and typically pay interest at maturity, if maturing in less than 12 months. CDs that mature beyond this range pay interest semi-annually. Negotiable CDs are issued by U.S. banks (domestic CDs), U.S. branches of foreign banks (Yankee CDs) and thrifts. There is an active secondary market for negotiable domestic and Yankee CDs. However, the negotiable thrift CD secondary market is limited. Yields on CDs exceed those on U.S. treasuries and agencies of similar maturities. This higher yield compensates the investor for accepting the risk of reduced liquidity and the risk that the issuing bank might fail. State law does not require the collateralization of negotiable CDs.

Non-Negotiable Certificates of Deposit are time deposits with financial institutions that earn interest at a specified rate for a specified term. Liquidation of the CD prior to maturity incurs a penalty. There is no secondary market for those instruments, therefore, they are not liquid. They are classified as public deposits and financial institutions are required to collateralize them. Generally, financial institutions use mortgages to collateralize these deposits. Non-negotiable CDs of \$250,000 are insured respectively by the Federal Deposit Insurance Corporation (FDIC), and the National Credit Union Share Insurance Fund (NCUSIF).

COLLATERAL is securities, evidence of deposits or other property that a borrower pledges to secure repayment of a loan. It also refers to securities pledged by a bank to secure deposits of public monies.

COLLATERALIZED MORTGAGE OBLIGATIONS (CMOs), a type of mortgage-backed security, are bonds that represent claims to specific cash flows from large pools of home mortgages. The streams of principal and interest payments on the mortgages are distributed to the different classes of CMO interests, known as tranches, according to a complicated deal structure. Each tranche may have different principal balances, coupon rates, prepayment risks, and maturity dates.

COMMERCIAL PAPER is a short term, unsecured, promissory note issued by a corporation to raise working capital. These negotiable instruments may be purchased at a discount to par value or interest bearing. Eligible commercial paper is issued by corporations organized and operating within the United States and having total assets in excess of \$500 million. This would include firms such as American Express, Bank of America, Wells Fargo Bank, et cetera.

CORPORATE NOTES are debt obligations issued by corporations and banks, usually in the form of unsecured promissory notes. These are negotiable instruments that can be bought and sold in a large and active secondary market. They can be issued with fixed or floating-rate coupons, and with or without early call features, although the vast majority are fixed-rate and non-callable. Corporate notes have greater risk than Treasuries or Agencies because they rely on the ability of the issuer to make payment of principal and

interest. Corporate notes can be rated by one or more Nationally Recognized Statistical Rating Organizations (NRSRO), with ratings of AAA, AA+, AA, AA-, etc. or their equivalent. Frequent issuers of corporate notes are General Electric Capital Corp., Bank of America, J.P. Morgan, AT&T, Wal-Mart and IBM.

FEDERAL AGENCY INSTRUMENTS are issued by U.S. Government Agencies or Government Sponsored Enterprises (GSE). Although they were created or sponsored by the U.S. Government, most Agencies and GSEs are not guaranteed by the United States Government. Examples of these securities are notes, bonds, bills and discount notes issued by Fannie Mae (FNMA), Freddie Mac (FHLMC), the Federal Home Loan Bank system (FHLB), and Federal Farm Credit Bank (FFCB). The Agency market is a very large and liquid market, with billions traded every day.

FEDERAL GOVERNMENT means the United States, or any agency, instrumentality or corporation thereof.

ISSUER means any corporation, governmental unit or financial institution that borrows money through the sale of securities.

LIQUIDITY refers to the ease and speed with which an asset can be converted into cash without loss of value. In the money market, a security is said to be liquid if the spread between the bid and asked price is narrow and reasonably sized trades can be done at those quotes. U.S. Treasury bills are very liquid.

LOCAL GOVERNMENT INVESTMENT POOL (LGIP) is operated by the Nevada State Treasurer and are pooled state and local government funds under State of Nevada law.

MATURITY is the date upon which the principal or stated value of an investment becomes due and payable.

MONEY MARKET FUNDS are shares of beneficial interest issued by diversified management companies. Money market funds strive to maintain a stable net asset value (NAV) per share of \$1.00. Money market funds must adhere to Rule 2a-7 of the SEC that regulates the liquidity and credit minimums and sector allocation limitations to protect the investors in money market funds. These funds invest primarily in money market securities with final maturities of 397 days or less to maintain a weighted average maturity of 60 days or less.

NEGOTIABLE is the term used to designate a security, the title to which is transferable by delivery.

PORTFOLIO is the term used to describe the collection or group of securities owned by an investor.

PRINCIPAL describes the original cost of a security. It represents the amount of capital or money that the investor pays for the investment.

REPURCHASE AGREEMENTS are short-term investment transactions. Banks buy temporarily idle funds from a customer by selling him U.S. Government or other securities with a contractual agreement to repurchase the same securities on a future date at an agreed upon interest rate. Repurchase Agreements are typically for one to ten days in maturity. The customer receives interest from the bank. The interest rate reflects both the prevailing demand for Federal Funds and the maturity of the Repo. Repurchase Agreements must be collateralized.

U.S. TREASURY ISSUES are direct obligations of the United States Government. They are highly liquid and are considered the safest investment security. U.S. Treasury issues include:

Treasury Bills are non-interest-bearing discount securities issued by the U.S. Treasury to finance the national debt. Bills are currently issued in one, three, six, and twelve month maturities.

Treasury Notes have original maturities of one to ten years.

Treasury Bonds have original maturities of greater than 10 years.

Treasury Inflation Protected Securities (TIPS) pay principal and interest based on changes in the rate of inflation as measured by the CPI-U index.

TRUCKEE MEADOWS WATER AUTHORITY
(TMWA)

RESOLUTION NO. 255

**A RESOLUTION APPROVING AN INVESTMENT POLICY FOR THE TRUCKEE
MEADOWS WATER AUTHORITY**

WHEREAS, The TMWA Board adopted the original Investment Policy in July 2005, the first revision was approved in February 2009:

WHEREAS, the Investment Policy is to be updated periodically to include additional permitted investments and other appropriate changes as necessary;

WHEREAS, pursuant to Chapter 355 of NRS, TMWA is allowed to invest in permitted investments and for maturities up to ten years,

WHEREAS, the TMWA has developed certain requirements for investment of cash resources tailored to TMWA's requirements for preservation of principal, provision of liquidity, and obtaining a competitive return on investment as more particularly set forth in the revised Investment Policy, attached hereto as Exhibit A;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Truckee Meadows Water Authority that the revised Investment Policy attached hereto as Exhibit A provides prudent guidance for investment of TMWA's cash resources and is hereby approved.

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

Ayes: _____

Nays: _____

Abstain: _____ Absent: _____

Approved _____, 2017

Chairman

Investment Policy Comparison Local Entities vs TMWA Current and Proposed

Investments NRS 350, 354, 355, 356 Inclusive	Washoe County			City of Reno			TMWA Current			TMWA Proposed		
	Term	Rating / Collateral	Percentage Limits Portfolio / Issuer	Term	Rating / Collateral	Percentage Limits Portfolio	Term	Rating / Collateral	Percentage Limits Portfolio	Term	Rating / Collateral	Percentage Limits Portfolio / Issuer
Direct Obligations of US Treasury / Bills / Notes	10	N/A	100	10	N/A	100	2	N/A	100	10	N/A	100
US Govt. Backed Full Faith and Credit GNMA / SBA Loans or Pools	10	N/A	100	10	N/A	100	2	N/A	100	10	N/A	100
Government Sponsored Entities (GSE's)--Federal National Mortgage Association(FNMA), Federal Home Loan Mortgage Corporation (FHLMC), Federal Home Loan Institutions (FHLB), Student Loan Marketing Association (SLMA), Federal Farm Credit Institution (FFCB), Federal Housing Administration (FHA)	10	N/A	40 / 15	10	N/A	100	2	N/A	100	10	N/A	100
Agency-Issued Mortgage-Backed Securities--FNMA, FHLMC, GNMA	10	N/A	40 / 15	10	N/A	100	N/A	N/A	N/A	10	N/A	20/5
Corporate Notes and Bonds Incorporated and Operating in the US. Must sell upon downgrade below "A"	5	A	20 / 5 / 25	5	A	20	2	AA	20	5	A	20 / 5
Asset-backed securities that are rated by a nationally recognized rating service as "A-1+", "AAA" or its equivalent.	5	A-1+	20 / 5	N/A	N/A	N/A	N/A	N/A	N/A	5	AAA or NRSRO Equivalent	20 / 5
Negotiable medium-term obligations issued by local governments of the State of Nevada. Pursuant to NRS 355.177, Obligations of state and local governments if the interest on the obligation is exempt from gross income for federal income tax purposes.	5	A	20 / 10	5	A	20	N/A	N/A	N/A	5	A	20/5
Repurchase Agreements with Qualified Counterparty	90 days	102% Collateral	100 / 100	90 Days	102% Collateral	20	N/A	N/A	20	90 Days	102% Collateral	20 / 5
Bankers' Acceptances	180 Days	N/A	20 / 5	180 Days	N/A	20	180 Days	A-1, P-1	20	180 Days	A-1, P-1 or NRSRO Equivalent	20 / 5
Commercial Paper, which must be purchased by a registered broker-dealer and must be rated "A-1," "P-1" or its equivalent, or better by a nationally recognized rating service.	270 Days	A-1 / P-1	20 / 5	N/A	N/A	N/A	270 Days	A-1, P-1	20	270 Days	A-1, P-1	20 / 5
Negotiable certificates of deposit issued by commercial banks, insured credit unions or savings and loan associations.	N/A	N/A	20 / 5	180 Days	N/A	20	1	A-1, P-1	20	5	N/A	20 / 5
Money Market Funds rated AAA or its equivalent to cash paid daily interest payed monthly. Registered with SEC	N/A	AAA	45	N/A	AAA	N/A	N/A	AAA	20	N/A	2a /AAA or NRSRO Equivalent	20
Local Government Pooled Investment Fund (LGIP) as created under NRS 355.167 and pursuant to an executed Depository Agreement between the County and the Nevada State Treasurer. Same as cash, available daily interest payed monthly.	N/A	N/A	20 / 25	10	N/A	100	N/A	N/A	20	N/A	N/A	20
Collateralized Mortgage Obligations (CMOs) US Government Securities as Collateral. Risks assessed as to underlying interest and mortgage products packaging.	N/A	N/A	N/A	N/A	N/A	N/A	2	A-1 / P-1 US Government Securities	20	N/A	N/A	N/A
Long Term Forward Sale Contracts (FSC) and Guaranteed Investment Contracts (GIC)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	AA / 102% Collateral	20	N/A	AA / 102% Collateral	20 / 5

* The City of Sparks is currently in the process of revising its investment policy and not included in this comparison.



STAFF REPORT

TO: Board of Directors
THRU: Mark Foree, General Manager
FROM: Jessica Atkinson, Human Resources Manager
DATE: September 11, 2017
SUBJECT: **Discussion and action regarding General Manager performance review for contract year 2016/2017 and discussion and action on possible lump sum award and/or other compensation adjustment**

Recommendation

The TMWA Board review the General Manager’s performance results for the past contract year and consider a possible compensation adjustment which could include an adjustment to annual salary and/or lump sum award.

Discussion

In October 2016, the Board adopted the specific objectives that the General Manager would be working to accomplish during the contract year and that the Board would use to evaluate the performance of the General Manager.

The updated General Manager’s evaluation report (see bold-italicized on page 5, goal #6) of accomplishments related to the goals set by the Board last year is shown in **Attachment 1**.

The results of the GM evaluation survey completed by 1) Board members and 2) Division/Department Heads (direct reports to GM) is shown in **Attachment 2**.

Below are the last 5 years of increase information related to TMWA’s GM:

<u>Year</u>	<u>Salary Increase</u>	<u>Lump Sum Award</u>
2012	5%	0
2013	3.73%	0
2014	2%	\$5,000
2015	2.1%	0
2016	4%	0

TMWA's compensation consultant, Arthur J. Gallagher & Co. prepared a memo along with a detailed market pricing worksheet (aged to current) related to the TMWA GM's compensation compared to other western water utility general managers and is shown in **Attachment 3**.

The TMWA GM's current annual salary is \$194,469, which is well below the average or median salary of other western water utility general managers. The TMWA GM's employment agreement (**Attachment 4**) limits the annual compensation adjustment (base salary adjustment plus any lump sum award) to 10% of current annual salary.



STAFF REPORT

TO: Chairman and Board Members
FROM: Mark Foree, General Manager
DATE: August 22, 2017
SUBJECT: General Manager's report related to performance on goals adopted by the Board for Contract Year 2016/2017 – UPDATED

RECOMMENDATION

The TMWA Board review the General Manager's performance results for the past contract year.

DISCUSSION

In October 2016, the Board adopted the following specific objectives that the General Manager would be working to accomplish during the contract year and that the Board would use to evaluate the performance of the General Manager. The following is a brief summary of results (shown in italics).

General Objectives

- A) Direct the preparation of and propose financial plans, investment strategies, funding plans and adjustments to rates and charges that will continue to keep TMWA in long term financial stability; including preparation of budgets and financial reporting that comply with Nevada Revised Statutes and the Securities and Exchange Commission (SEC).

Fiscal budgets including the Capital Improvement Plan were prepared and presented to the Board for preliminary and final approval. A 5-year financial forecast for the utility was also completed for credit rating agencies prior to bond refinancing of TMWA 2007 bonds – refinancing of these bonds was very successful. Regular updates regarding financial picture and investments were presented.

- B) Develop proactive communications plans to address upcoming issues (e.g., topics affecting water supply, drought planning, utility integration/consolidation and rate changes) and to keep all stakeholders including the Board, the employees, and the

customers informed through a variety of mediums. Respond to media inquiries and provide informational interviews.

Communications were delivered through multiple media including newsprint, a myriad of broadcast interviews, various presentations before local groups, bill print messages, bill inserts, TMWA's e-newsletter, workshops and special events booths. Focus this year was on water supply, conservation, water quality and the continued implementation of TROA. Proposed TMWA rate adjustments were noticed and open houses and public hearings were conducted.

- C) Create a community presence for TMWA through participation in community committees, boards, and networking organizations and by providing presentations and information to these groups; offer Truckee River, Chalk Bluff Plant and/or other informational Tours to the community.

TMWA staff participates in a multitude of organizations including Rotary, The Chamber, EDAWN, WIN and participated in multiple community events including Earth Day, farmers markets, forums, River days, etc. Presentations to organizations like Rotary, the Builders Association of Northern Nevada, and HOA's have touched on many topics including water supply, drought planning, conservation, TROA implementation and more. Several public tours were given this year including numerous tours of the Chalk Bluff plant and the Verdi Hydroelectric power plant. Due to heavy winter snowfall, and abundant water supply, TMWA Board chose not to fund the cloud seeding efforts of DRI this fiscal year, but may reconsider in future years.

- D) Continue to create a highly productive work environment and a highly motivated employee team by developing, training, retaining and recruiting the highest quality employees.

TMWA again achieved favorable rating of over 90% in our annual third party administered Customer Satisfaction Survey – this outstanding result is a tribute to TMWA's talented and highly motivated employees. TMWA continues to maintain high certification levels for staff, and provides both internal and external training opportunities. Management staff participated in emergency response training exercises and was given refresher media training this year.

- E) Strive for continuous improvements in processes and operations targeting initiatives that will enhance revenues and/or reduce operating costs thus keeping customer rates as low as possible.

TMWA underspent its O & M Budget by approximately \$2.7 million or 5.4% and underspent its Capital Budget by \$14.9 million or 31.1% (several reasons for this including large projects coming in substantially below estimates and deferral of a few other large projects). Recent improvements expanding the use of surface water and other energy management initiatives continue to result in outstanding energy savings. In the last 8 years TMWA's annual electric bill has gone from \$7.2 million to \$4.7 million even with utility consolidation – a savings of \$2.5 million or 35%. Hydro

generation produced \$1.8 million in revenue – up compared to last year due to increase in available river flows due to the record breaking snowpack year. Completed a very successful bond refinancing of TMWA’s 2007 bonds replacing \$202.9 million outstanding in Series 2007 Refunding Bonds with \$147.4 million in Series 2017 Refunding Bonds resulting in net present value savings of \$15.9 million, or 7.8% (versus a minimum of 3% per TMWA’s Debt Management Policy). The refinancing also reduced TMWA’s outstanding debt by \$55 million due to bond premiums achieved from refinancing and release of TMWA’s debt service reserve fund to pay down outstanding principal.

Specific Objectives

- 1) With the current contract expiring on June 30, 2017, negotiate multi-year contract with the International Brotherhood of Electrical Workers (IBEW) Local 1245, and present to the Board with goal of completing contract and gaining approvals on or before May, 2017.

TMWA and IBEW Local 1245 have concluded contract negotiations without reaching an agreement and are now proceeding to mediation.

- 2) Develop/refine Drought Response Plan (if required) per the approved 2016-2035 Water Resource Plan guidelines and develop customer conservation communications plan for the 2017 irrigation season, including water supply planning, and detailed public/customer communications/outreach plan - present to the SAC for their recommendation and Board for approval no later than the April Board Meeting.

A drought response plan was not required this year due to the record breaking snowpack this past winter. The communication plan was completed and presented to the Board in June and was approved by the Board. Staff waited to present the plan until after all the public hearings on the rate adjustments were completed. It was not presented to the SAC due to not having any meetings held since April. This plan followed the approved 2016-2035 WRP. On June 30, 2017, all of TMWA’s reservoirs were at full capacity, Lake Tahoe was 0.19 inches below its legal limit of 6229.1 feet, and Floriston Rates are expected to last through September, and per the WRP, TMWA’s water supply would not be impacted. Therefore, we did not require additional conservation efforts from our customers. Advertising and messaging focused on continued responsible water use and staff launched a “Smart About Water” campaign as part of the communication plan. The effort is to change the dialogue with customers by taking a more pro-active stance in educating and informing the community. The campaign has been well received by our customers.

- 3) Work with city and county staff in the regional effluent planning effort including investigating and analyzing: 1) delivering effluent to the Tahoe Reno Industrial Center, 2) infiltrating or injecting highly treated wastewater into the ground for later use, 3) constructing an effluent pipeline connection between TMWRF and STMWRF, etc.

TMWA has continued to support the Cities in their reclaimed water planning efforts, primarily on water rights issues and developing a proposed water management strategy to fulfill required return flow obligations. TMWA staff has worked extensively with the cities regarding the possible delivery of effluent to the Tahoe Reno Industrial General Improvement District system for industrial use, with a focus on developing a return flow management strategy. TMWA was directly involved on the State Reclaimed Water Steering Committee which developed new regulations for indirect potable reuse by groundwater infiltration/injection; helped secure funding from the WRWC for an Advanced Water Treatment Demonstration Project being conducted by UNR; and continues to investigate the feasibility of infiltrating or injecting reclaimed water in Stead, Cold Springs and Bedell Flat. The effluent pipeline connection between TMWRF and STMWRF is still being considered, but nothing further at this time.

- 4) Analyze water supply options related to fringe area development where private systems exist and analyze possible acquisition of private systems and/or providing wholesale water to private systems, make recommendations to Board and follow Board direction regarding same.

In FY 2017 TMWA analyzed extension of the public water system into Verdi to consolidate several private water systems (including the Riverbelle MHP and the Verdi Mutual Water Co.) and to provide wholesale water service to Boomtown's West Reno Water Company. With direction from the Board to pursue the plan, the Verdi Main Extension project has been advanced to the 90 percent design level. TMWA has submitted DWSRF loan applications to NDEP and continues to work on acquisition of easements for the pipeline facilities along with preparation of a draft wholesale agreement with the West Reno Water Company. In addition, TMWA has analyzed the delivery of wholesale water to the Great Basin Water Co. (aka Utilities Inc.) in Cold Springs at the request of the utility and the Stonegate developer who continues to pursue project approvals through the City of Reno.

- 5) Monitor and participate in Legislative activities during the 2017 legislative session, prepare and deliver presentations to Legislative Committees as requested, keep the Board updated and informed regarding legislative matters, and pursue Board direction regarding Legislative issues. Facilitate open communications between legislators and the TMWA Board.

Monitored legislative activities and worked closely with TMWA legal counsel and lobbyists, provided reports to TMWA's Legislative Subcommittee and the Board and received input from same and testified accordingly on various bills. TMWA (Mike Pagni, Vice Chair Vaughn Hartung and I) made a presentation to the Senate Natural Resources Committee and the Assembly Natural Resources, Agriculture, and Mining Committee which was well received by both Committees. Also, TMWA Board Member Jenny Brekhuis and TMWA Lobbyist Steve Walker met with the sponsors of AB193, requiring fluoridation of water in certain circumstances, and committee members to discuss the implications of AB193 prior to it being heard. At the public hearing, with Board support, TMWA Chairman Geno Martini, legal counsel Michael Pagni and I testified in opposition of AB193, which ultimately did not pass out of the Assembly.

- 6) Continue to monitor federal legislation for opportunities to obtain funding for a variety of TMWA projects.

Staff requested and received \$1,164,254.16 in grant money from the Bureau of Reclamation this past fiscal year to reimburse TMWA for expenses related to TROA. The vast majority of the request was for reimbursement of a significant portion of TMWA's legal expense related to the Donner Lake litigation brought by the Truckee Carson Irrigation District (TCID) that was incurred several years ago. First staff had to make the case that the expenses incurred in this litigation were directly related to the successful implementation of TROA, and secondly, the invoices related to this litigation were not in TMWA's records due to records retention policies. Therefore, staff had to chase down the invoices from the California legal firm that defended TMWA in the case, Best, Best and Krieger (BBK), and fortunately BBK was able to find the invoices in their records, leading to the very successful request and subsequent reimbursement.

TMWA staff applied for, and received, a \$109,095.00 grant from the Bureau of Reclamation (BOR) to develop a Dynamic Drought Contingency Decision Support System that Accounts for Climate Change and Institutional Constraints. \$62,879.27 in grant fund was received so far, with the remainder to come in fiscal year 2018.

TMWA staff applied for and received another \$300,000 grant from the BOR for a Municipal Well Aquifer Storage and Recovery Retrofit Project for Drought Resiliency which will be received as the project progresses in the next few fiscal years. Environmental review was successfully completed and approvals from State and Local regulatory agencies have been received. Design of the ASR well conversions is nearing completion and well rehabilitation and testing will begin in October.

- 7) Assist the Washoe County Water Conservation District regarding cost reimbursement issues related to the Boca Dam Seismic Improvements proposed by the U.S. Bureau of Reclamation including working with Senator Reid's office related to possible mitigation of reimbursable costs.

TMWA staff worked with federal lobbyist Marcus Faust and attorneys Michael Pagni and Gordon Depoali regarding putting forth possible federal legislation that would reduce the financial impact to WCWCD and those who pay the operating costs of the District (TMWA funds over 50% of the District's annual operating costs). The proposed legislation was presented to Nevada's congressional delegation and was well received. The same group listed above have also worked toward a different administrative solution through the Bureau of Reclamation administration that shows some promise.

- 8) Manage financing and funding options to maximize benefits to TMWA customers through investment income strategies and short-term commercial paper programs. Evaluate market conditions for opportunities for bond refinancing(s) focused on refinancing of TMWA's 2007 bonds, to achieve cost savings in compliance with TMWA's Debt Management Policy if market conditions present.

Completed a very successful bond refinancing of TMWA's 2007 bonds replacing \$202.9 million outstanding in Series 2007 Refunding Bonds with \$147.4 million in Series 2017 Refunding Bonds resulting a net present value savings of \$15.9 million, or 7.8% (versus a minimum of 3% per TMWA's Debt Management Policy). The refinancing also reduced debt by \$55 million due to bond premiums achieved from refinancing and release of TMWA's debt service reserve fund to pay down outstanding principal. The Series 2017 Refunding Bond offering was oversubscribed by approximately 5 to 1 and due to the strong demand, TMWA was able to achieve additional savings by lowering yields on day of pricing. The majority of savings occur between 2020 and 2029 and will reduce debt service payments by \$4.2 million annually.

Prior to refinancing, we provided extensive data and made presentations to two credit rating agencies which resulted in 1) maintaining TMWA's current AA credit rating from Moody's and 2) a credit upgrade to AA+ from S&P.

- 9) Update the 5-year Funding Plan and propose Board actions based on the results of the planning cycle updates. Implement Board directions with regard to funding plan outcomes.

This was done prior to rating agency presentations and bond sale to refinance TMWA's 2007 bonds as described above.

- 10) Analyze TMWA's financial position in regard to any necessary rate adjustments or water facility charge adjustments, report results of analysis to the SAC and Board of Directors and follow Board direction regarding same.

Staff presented the five-year funding plan to the Board at the October 2016 Strategic Planning Workshop and the SAC at its November 2016 meeting. The funding plan proposed a rate adjustment was necessary to close the funding gap and maintain critical financial goals; essential in maintaining adequate cash balances and investment grade credit ratings. Having not had a rate adjustment since 2014, the proposed rate adjustments of 3% (approximately \$1.42 increase in the average residential bill per month) for years 1 and 2, and 2.5% for years 3, 4, and 5 were considered an inflationary increase to better reflect the costs associated with treating, delivering, and maintaining the high-quality water our customers expect from TMWA. After addressing questions and concerns from the Board and SAC, staff was given direction to hold four public open houses, which were well received. After holding two public hearings, the Board adopted the rate increase with the option to revisit the 2.5% rate adjustments in years 3, 4, and 5 if necessary.

- 11) Carefully analyze opportunities to acquire water rights and resources in the market in consideration of current inventory and financial constraints. Insure adequate resources are available through TMWA Rule 7.

There was only a small amount of activity here due to large inventory.

- 12) Provide staff support to the SAC, Truckee Meadows Community Forestry Coalition and the Truckee River Fund (TRF) Advisors and ensure communications regarding TRF projects

This was done.

- 13) Manage and direct activities relative to legal issues, keeping the Board informed on all such matters.

This was done.

- 14) Update TMWA Administrative Instructions as required to ensure they are compliant with applicable laws and current practices. Deliver updates to the Board and employees, and implement the changes.

Staff is currently working on updating the TMWA Administrative Instructions and will be presented to the Board at a later date.

- 15) Minimize cost impacts to customers by maximizing investment and hydroelectric income, pursuing revenue enhancement and collection opportunities, pursuing process improvements and projects that drive savings in TMWA expenses, and actively pursuing grant/low-interest loan funding for projects.

TMWA earned \$1.8 million in hydro revenue by maximizing hydro production even in light of having two hydro facilities off-line for a better part of the fiscal year. Recent improvements expanding the use of surface water and other energy management initiatives continue to result in outstanding energy savings. In the last 8 years TMWA's annual electric bill has gone from \$7.2 million to \$4.7 million even with the consolidated utility – a savings of \$2.5 million or 35%.

- 16) Continue work to develop a Workforce Strategic Plan to include employee retention and recruitment strategies as well as succession planning strategies focused on replacing key team members who will be retiring in the next several years.

TMWA continues working on a Workforce Strategic Plan with an emphasis on succession planning. Many of TMWA's management team members are expected to retire within the next 5-10 years. As such, we continue to train and prepare qualified individuals to move into supervisory/management ranks as necessary.

- 17) Develop/refine strategies to optimize conjunctive use of surface water and groundwater resources; further develop/refine drought supply operational strategies; and implement plans.

TMWA received permit approval from the Nevada Division of Environmental Protection for an additional 7 recharge wells in FY17. This brings the total to 25 fully permitted recharge wells in the system. TMWA is working with the Nevada Division of Water Resources for permit coverage on 27 additional wells. Through conjunctive use, groundwater pumping was reduced by over 3,600 acre-feet in the Mt. Rose, Spanish

Springs, Lemmon Valley and former STMGID areas, and 700 acre-feet was recharged system-wide during FY 2017. Recharge operations were terminated in January, in large part due to the record precipitation and high river flows.

- 18) Continue to develop, refine and implement strategies to mitigate pre-merger groundwater conditions on the Mt. Rose fan.

With the completion of the Zolezzi Improvements which convey surface water into the Arrow Creek system (former Washoe County groundwater only supply), TMWA was able to reduce 2016 groundwater pumping on the Mt. Rose fan by approximately 50% compared to 2015 pumping amounts. TMWA staff finalized the purchase of the Mt. Rose Water Treatment Plant(WTP) site, obtained water rights permit approvals from the State Engineer for the new Whites Creek diversion, and is proceeding with final design of the WTP. TMWA has also secured easements and is working on the final design of pipeline and pump station improvements along Arrowcreek Parkway to supply Truckee River water to the STMGID West system.

- 19) Work collaboratively with the City of Reno, the City of Sparks, Washoe Country and other agencies in regard to regional water issues, regional economic development initiatives, etc.

TMWA staff continues to work extensively with all of the agencies on a Regional Effluent Management Team that works together to enhance and optimize Effluent Reuse in the region. This has included working with NDEP on new regulations to expand the current uses of reclaimed water to include indirect potable reuse, evaluation of delivering effluent to the Tahoe Reno Industrial Center, and technical support of UNR's Advanced Water Treatment Demonstration Project.

Also, I will participate in the 3rd Annual Nevada Economic Development Conference in Las Vegas in September and present on the "Water Resources in Nevada: The Capacity of Economic Expansion" panel.



General Manager Performance Evaluation

Introduction

The General Manager's performance evaluation consists of an annual appraisal by the Board of Directors, as provided for in the General Manager's employment agreement.

The purpose of the evaluation process is to maintain a strong Board/Manager team by ensuring open and productive communication on an annual basis. During this formal review process, there is an opportunity to identify areas of satisfaction and areas for growth or needing change as identified by the Board.

The evaluation will be completed by each member of the Board.

The Executive Team and Department Heads reporting to the General Manager have been invited to participate in this performance review process.

The Human Resources Manager is the facilitator for this process, and will gather input from the confidential survey completed by each of the above-referenced individuals. A staff report and the summary results from the evaluation survey will be provided as supporting materials for the public meeting at which the TMWA Board reviews the annual performance of the General Manager.

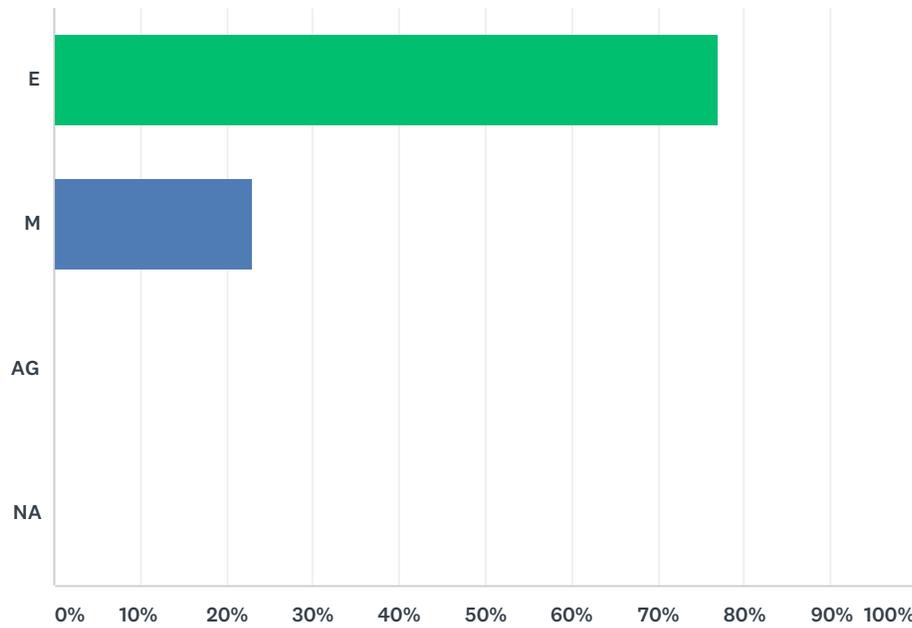
Rating Criteria:

For each performance criteria, please use the following rating scale:

- E – Exceeds your expectations
- M – Meets your expectations
- AG – Areas for growth
- NA – Not applicable

Q1 Ability to relate well to others and to make people feel at ease, even in difficult situations.

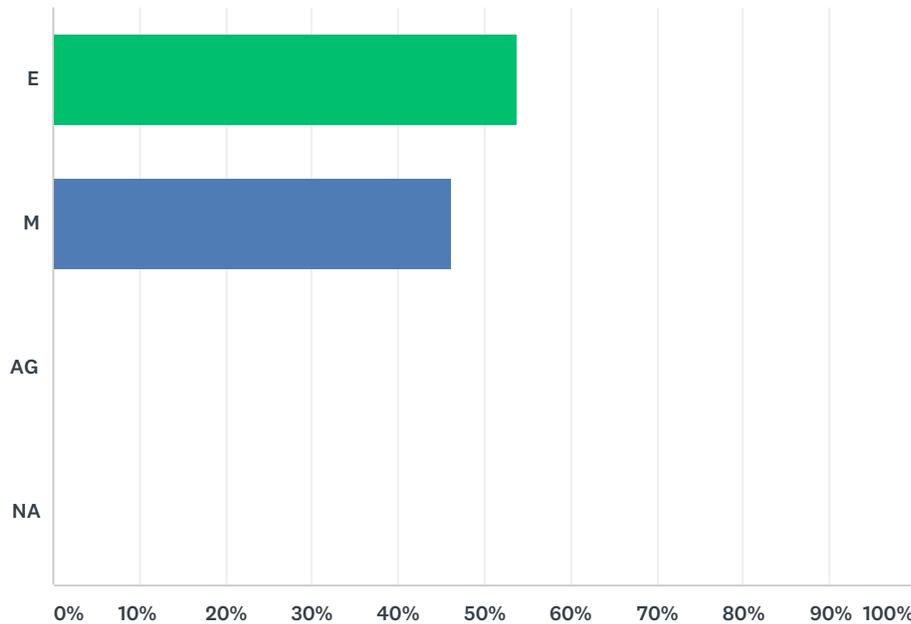
Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
E	76.92%	10
M	23.08%	3
AG	0.00%	0
NA	0.00%	0
TOTAL		13

Q2 Ability to gain the trust and confidence of the public; fosters contact and cooperation among citizens, community organizations and other government agencies.

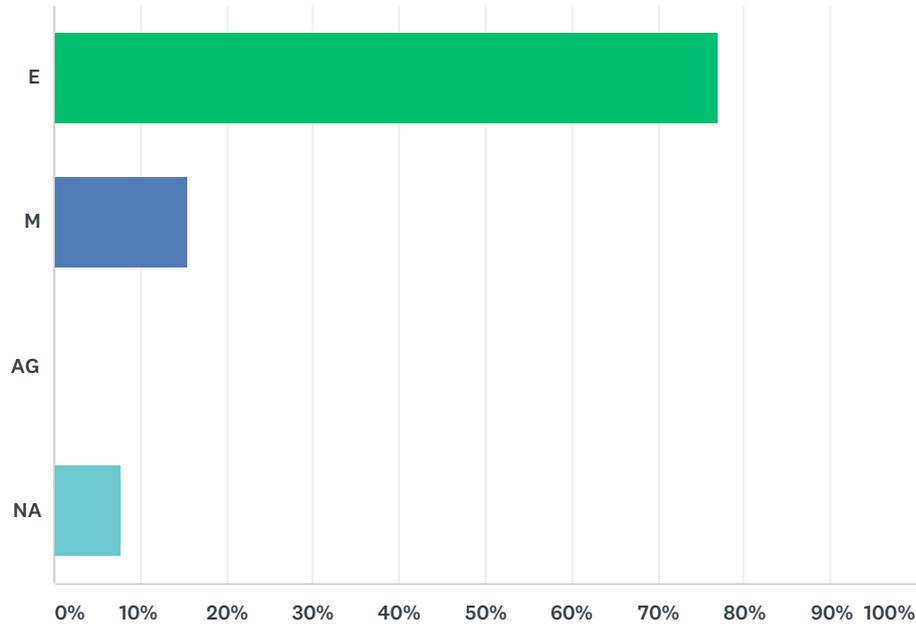
Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
E	53.85%	7
M	46.15%	6
AG	0.00%	0
NA	0.00%	0
TOTAL		13

Q3 Fosters cooperative communication and positive working relationships with the Board.

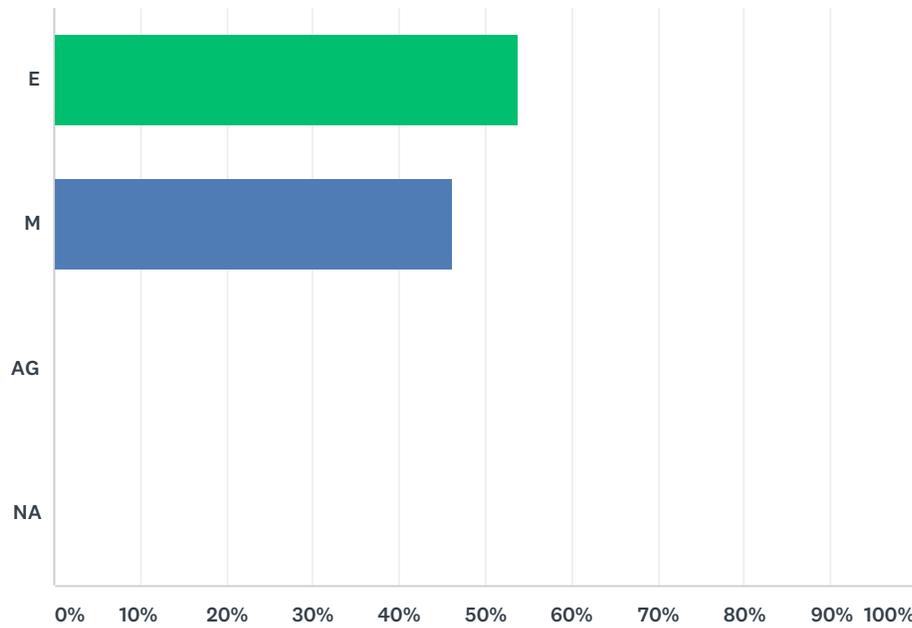
Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
E	76.92%	10
M	15.38%	2
AG	0.00%	0
NA	7.69%	1
TOTAL		13

Q4 Skilled in negotiation techniques in a variety of scenarios – employee, Board, public, interagency, outside entities.

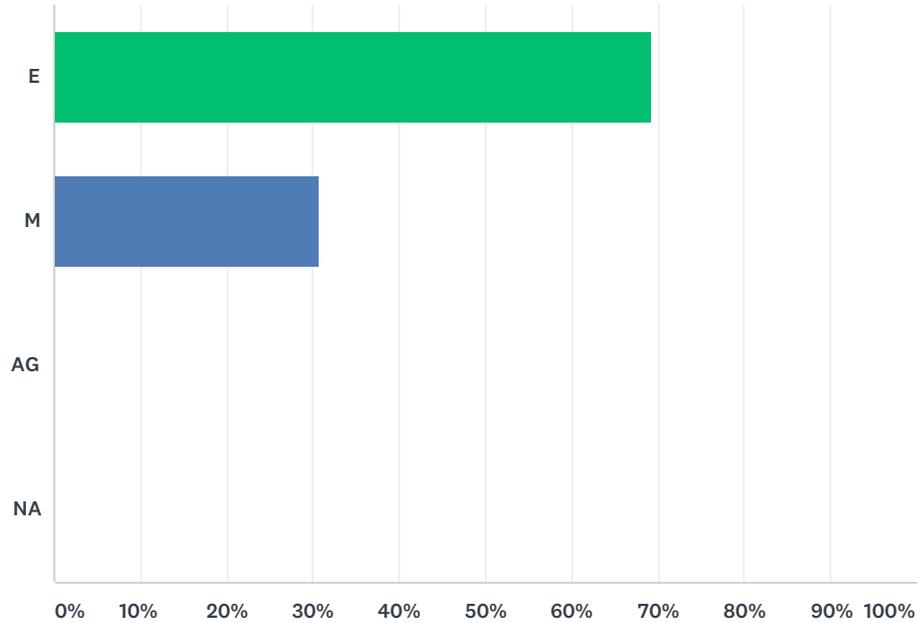
Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
E	53.85%	7
M	46.15%	6
AG	0.00%	0
NA	0.00%	0
TOTAL		13

Q5 Demonstrates sensitivity to individuals and groups, as appropriate.

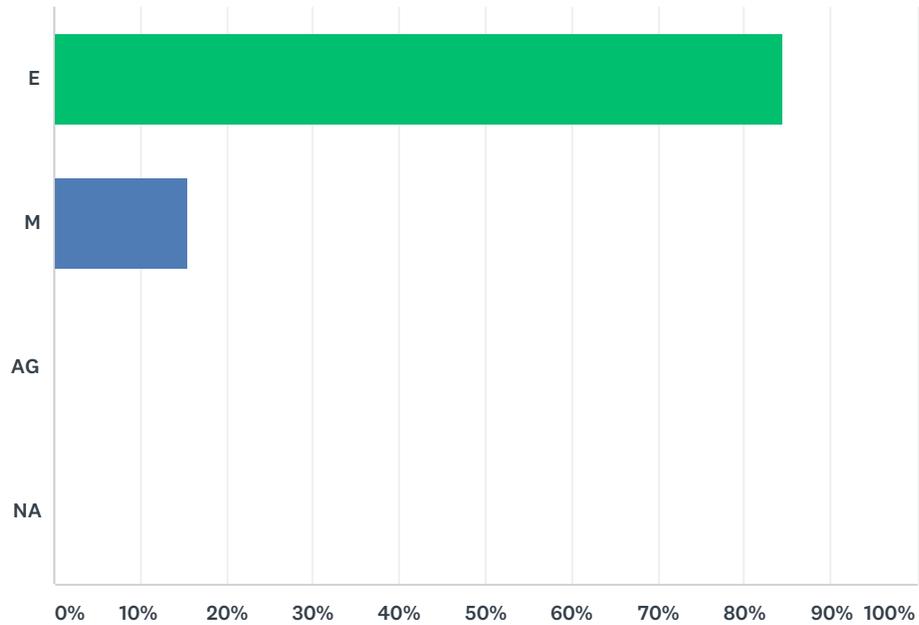
Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
E	69.23%	9
M	30.77%	4
AG	0.00%	0
NA	0.00%	0
TOTAL		13

Q6 Is forthright and honest in all relationships.

Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES
E	84.62% 11
M	15.38% 2
AG	0.00% 0
NA	0.00% 0
TOTAL	13

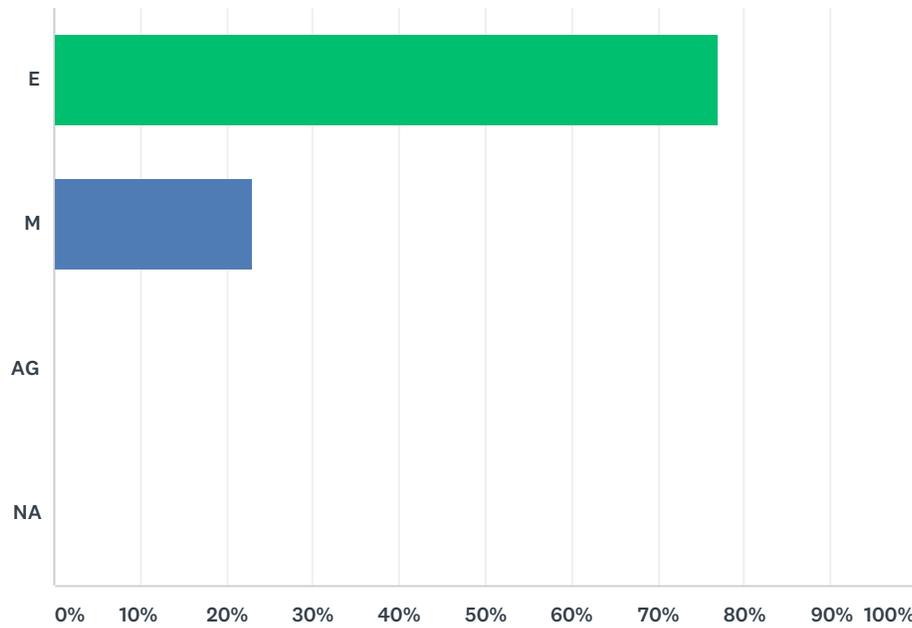
Q7 Do you have any other comments, questions, or concerns?

Answered: 7 Skipped: 6

#	RESPONSES	DATE
1	I think Mark has excellent interpersonal skills.	9/8/2017 4:48 PM
2	none	9/1/2017 7:38 AM
3	Mark is always very professional and supportive of requests from the board, SAC, and his employees	8/31/2017 9:32 AM
4	I find Mark to be extremely approachable, easy to talk to and always willing to work with me in addressing and handling issues.	8/25/2017 2:01 PM
5	Mark fosters a cooperative, supportive, team oriented environment	8/24/2017 10:42 AM
6	He seems to be well qualified and Questions are always answered Promptly and professionally.	8/23/2017 3:57 PM
7	It is enjoyable to work with Mark. He is professional and knowledgeable in his leadership to TMWA.	8/23/2017 11:43 AM

Q8 Supports and manages in accordance with identified TMWA values and Board priorities.

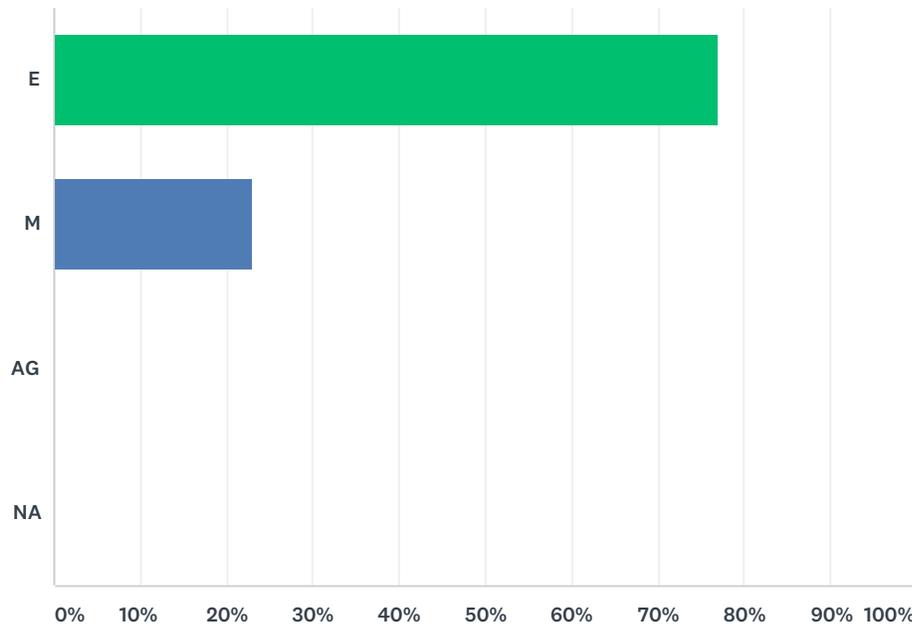
Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
E	76.92%	10
M	23.08%	3
AG	0.00%	0
NA	0.00%	0
TOTAL		13

Q9 Uses sound judgment in decision making; seeks out all relevant and necessary data, makes decisions in a timely manner.

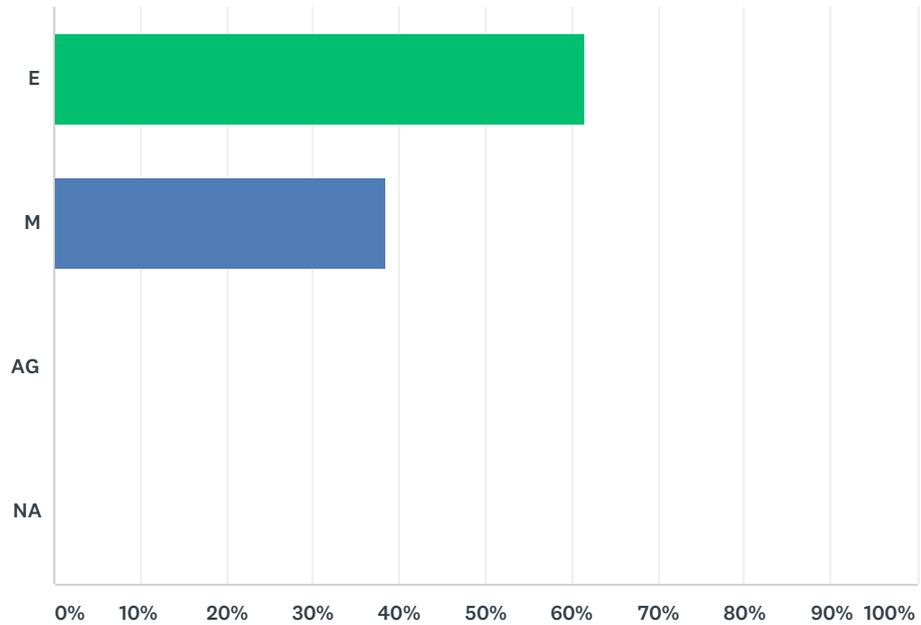
Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
E	76.92%	10
M	23.08%	3
AG	0.00%	0
NA	0.00%	0
TOTAL		13

Q10 Directs utilization of TMWA resources effectively.

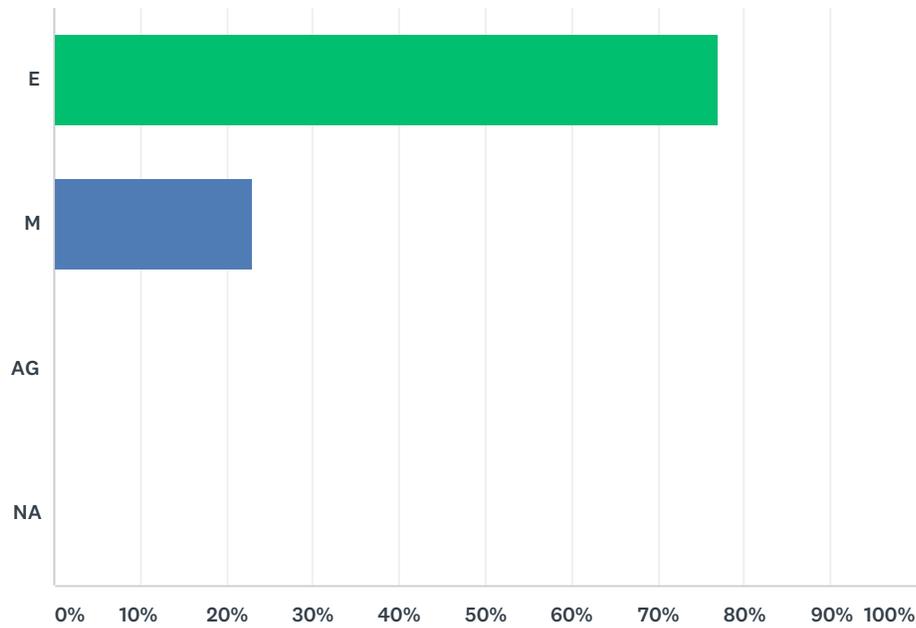
Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
E	61.54%	8
M	38.46%	5
AG	0.00%	0
NA	0.00%	0
TOTAL		13

Q11 Crises and/or emergencies are handled in an effective, efficient, and professional manner.

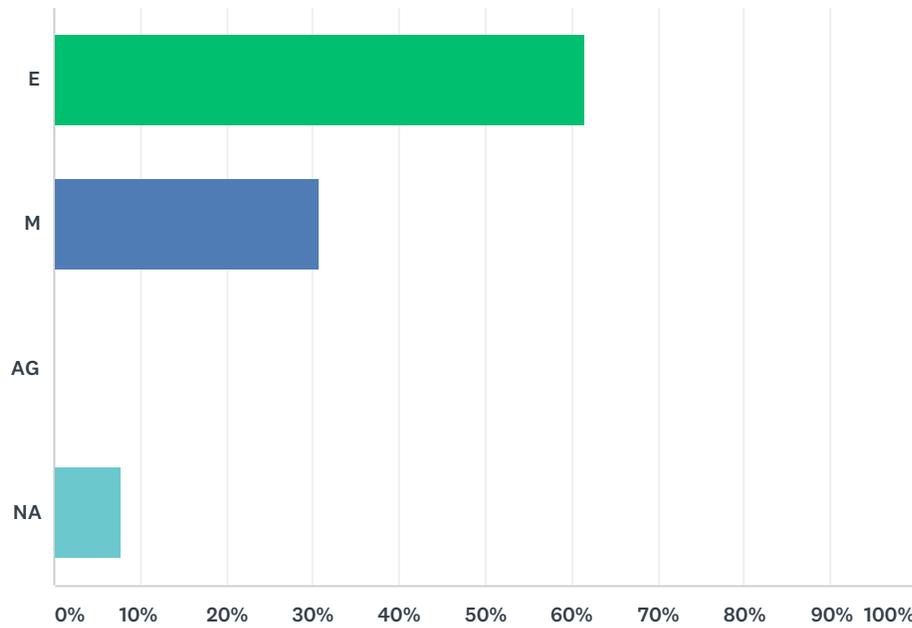
Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
E	76.92%	10
M	23.08%	3
AG	0.00%	0
NA	0.00%	0
TOTAL		13

Q12 Stays current on management practices and techniques and seeks to increase his/her value to TMWA.

Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
E	61.54%	8
M	30.77%	4
AG	0.00%	0
NA	7.69%	1
TOTAL		13

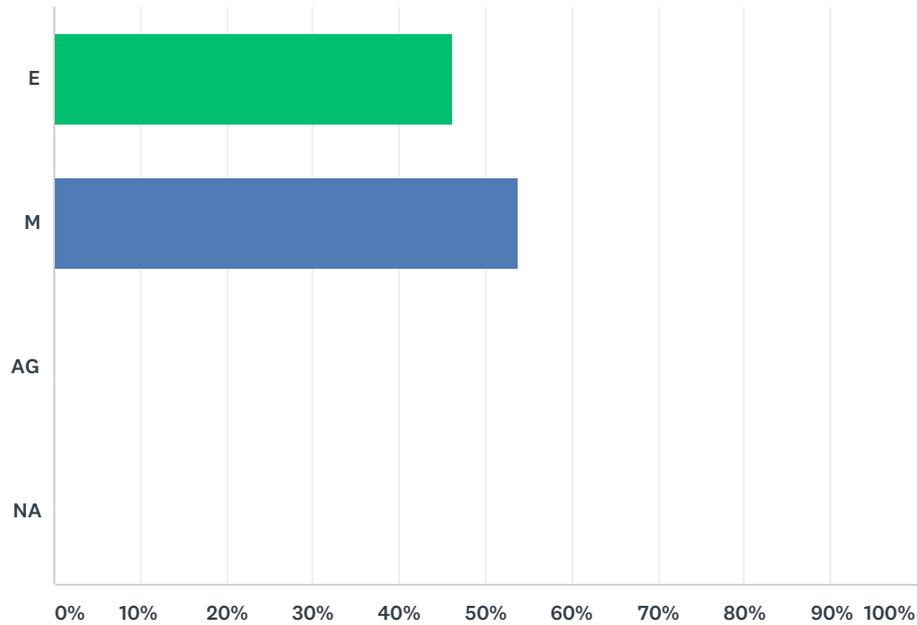
Q13 Do you have any other comments, questions, or concerns?

Answered: 4 Skipped: 9

#	RESPONSES	DATE
1	Mark shows very good leadership skills. His employees seem to respect him and follow his directives. He seems to be good at building and empowering the team.	9/8/2017 4:48 PM
2	none	9/1/2017 7:41 AM
3	Mark's leadership is evidenced by TMWA's accomplishments and mgmt./supv team longevity	8/24/2017 10:46 AM
4	No	8/23/2017 3:59 PM

Q14 Participates with Board and Staff in strategic planning.

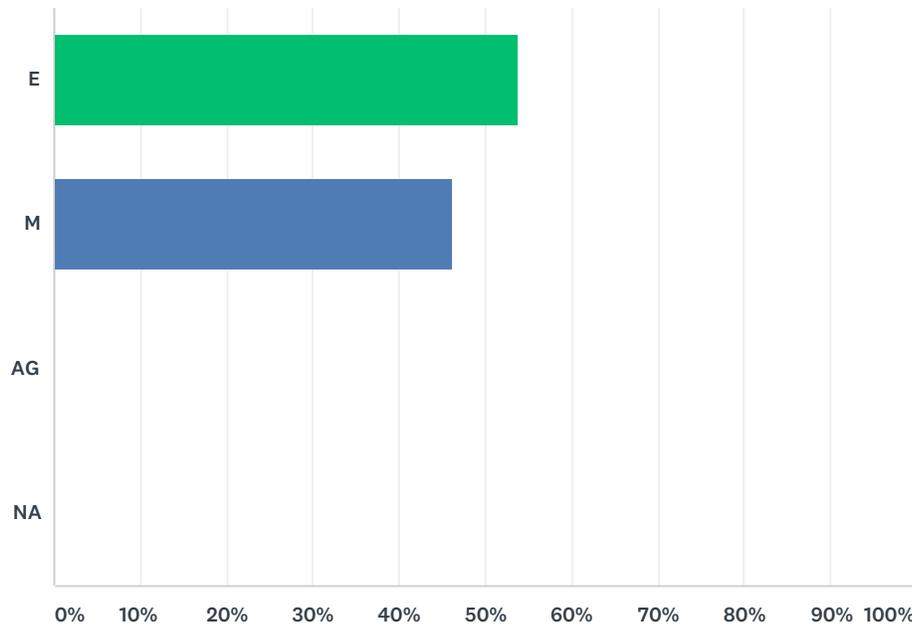
Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
E	46.15%	6
M	53.85%	7
AG	0.00%	0
NA	0.00%	0
TOTAL		13

Q15 Links goals to Board priorities; sets objectives for performance and manages toward those objectives.

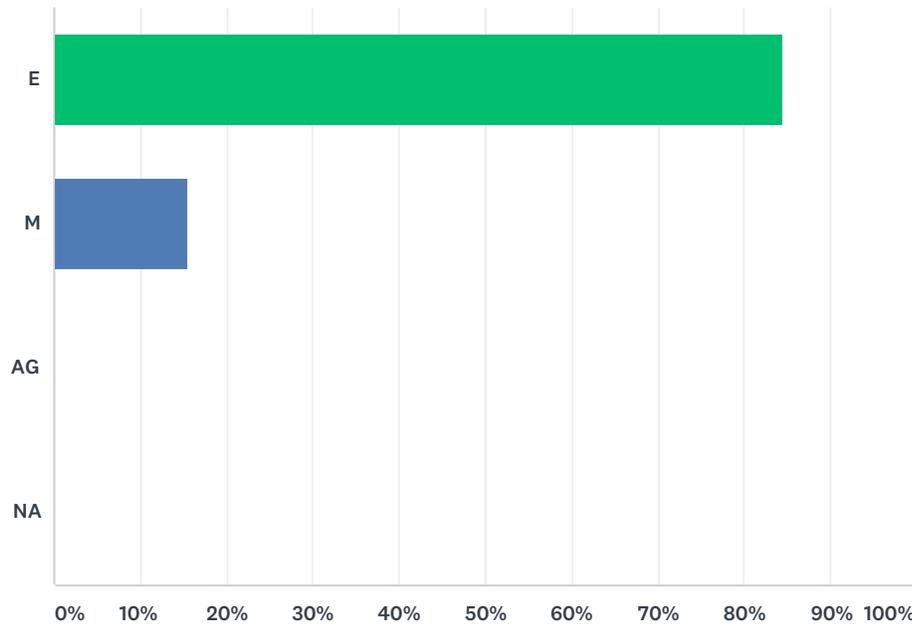
Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
E	53.85%	7
M	46.15%	6
AG	0.00%	0
NA	0.00%	0
TOTAL		13

Q16 Receptive to new ideas, suggestions and approaches to make our community a better place. Exhibits a short-term and long-term forward-thinking approach to the State of TMWA.

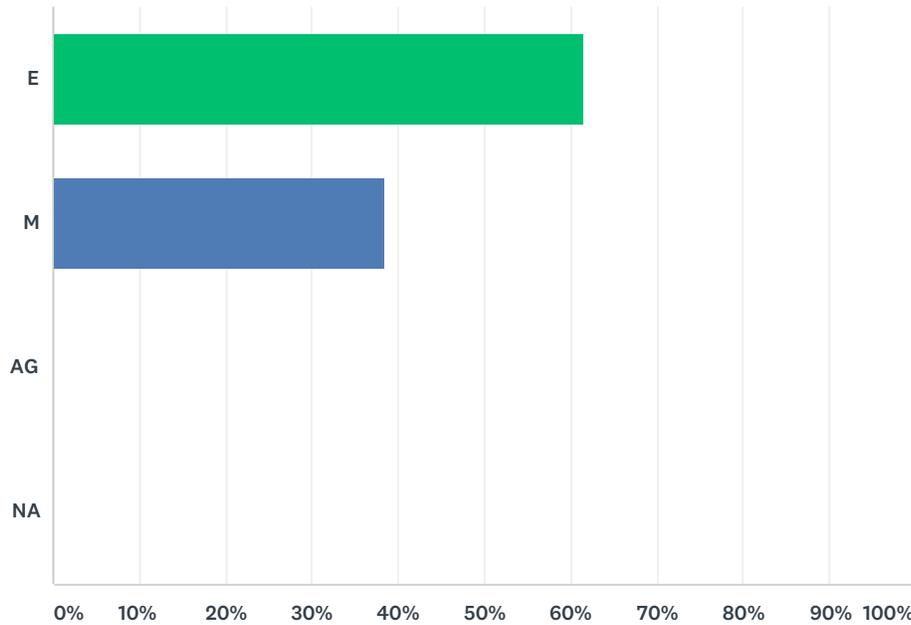
Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
E	84.62%	11
M	15.38%	2
AG	0.00%	0
NA	0.00%	0
TOTAL		13

Q17 Receptive to a changing environment.

Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
E	61.54%	8
M	38.46%	5
AG	0.00%	0
NA	0.00%	0
TOTAL		13

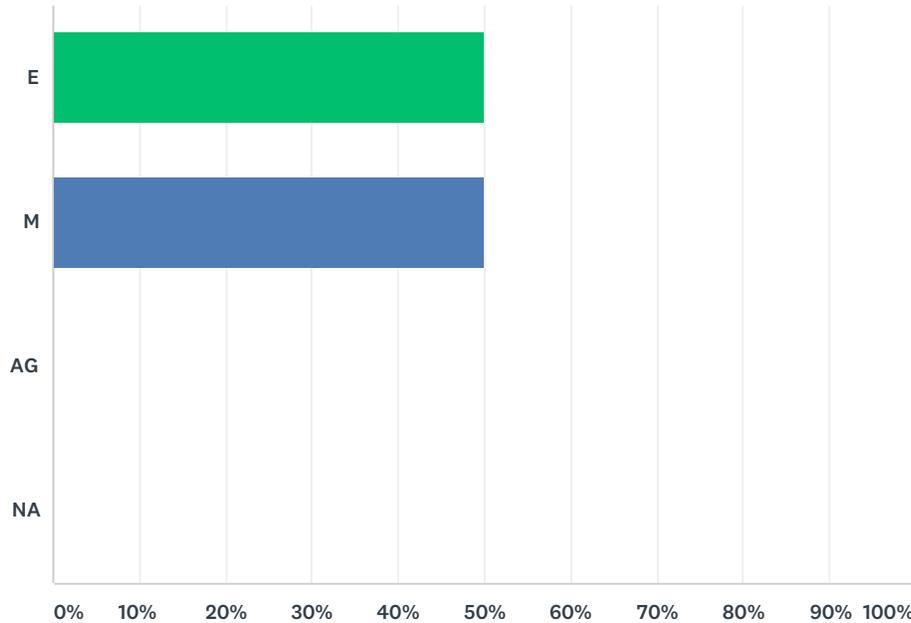
Q18 Do you have any other comments, questions, or concerns?

Answered: 3 Skipped: 10

#	RESPONSES	DATE
1	I think Mark and TMWA are generally innovative- especially when it comes to solving complex infrastructure problems like the Sierra foothills and North Valley recharge projects. That said, I think innovation in tackling water policy issues is one area that Mark and the senior TMWA staff could really focus their energies on in the coming year for the benefit of the community. Since the consolidation of Washoe County Water Resources into TMWA, there is a void in the essential water planning roles. I think these big picture/planning issues could really benefit from Mark's leadership.	9/8/2017 4:49 PM
2	none	9/1/2017 7:43 AM
3	Mark / TMWA is very adaptive as conditions warrant. A unique trait in a public agency!	8/24/2017 10:47 AM

Q19 Verbal Communication Skills – Good command of oral expression; expresses ideas clearly and concisely; easily comprehends ideas expressed by others; ability to explain and understand difficult and complex subjects.

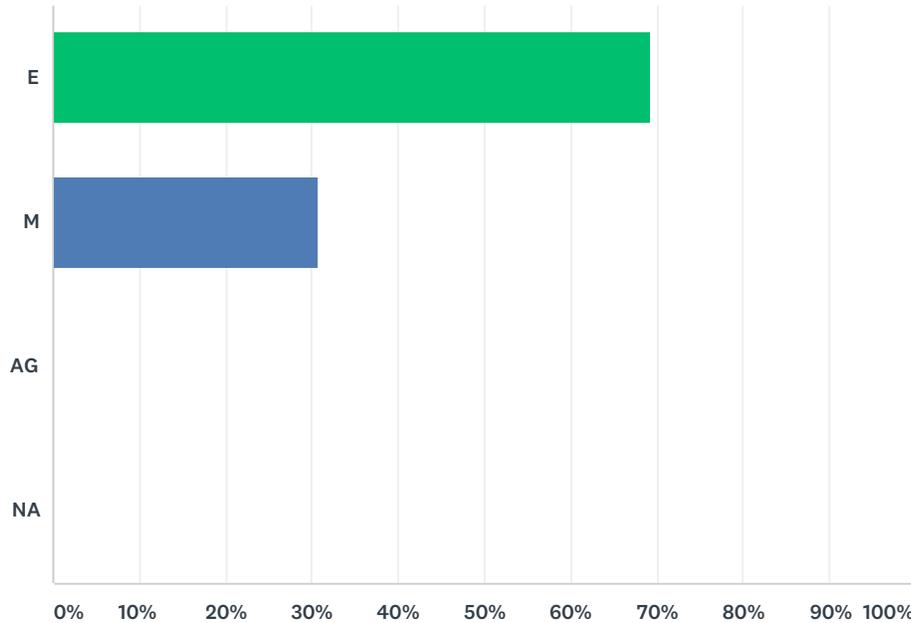
Answered: 12 Skipped: 1



ANSWER CHOICES	RESPONSES	
E	50.00%	6
M	50.00%	6
AG	0.00%	0
NA	0.00%	0
TOTAL		12

Q20 Written Communications Skills – Good command of written expression; expresses ideas clearly and concisely; easily comprehends ideas expressed by others; ability to explain and understand difficult and complex subjects through written media.

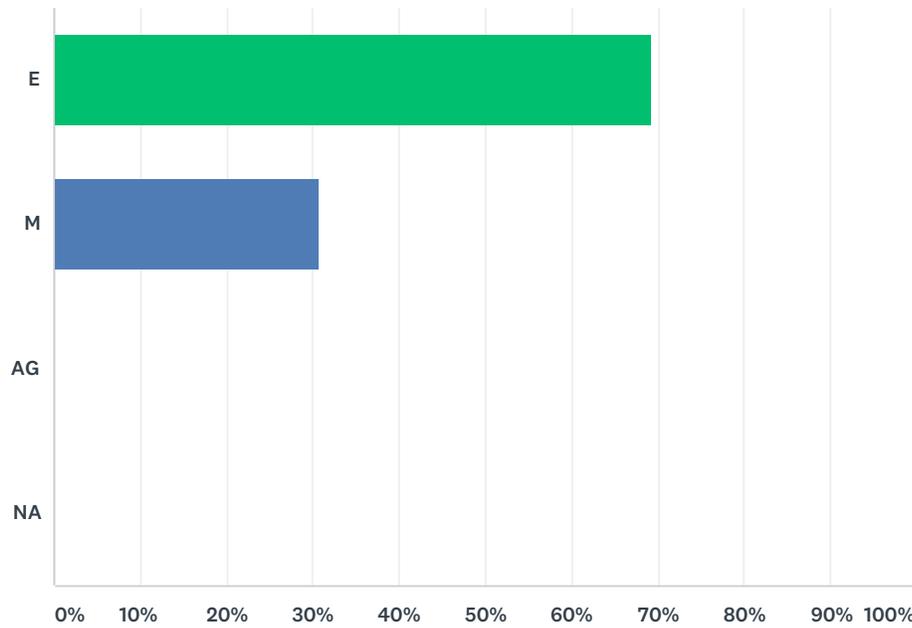
Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
E	69.23%	9
M	30.77%	4
AG	0.00%	0
NA	0.00%	0
TOTAL		13

Q21 Presentation Skills – Ability to present effective, quality presentations in public settings appealing to a variety of audiences.

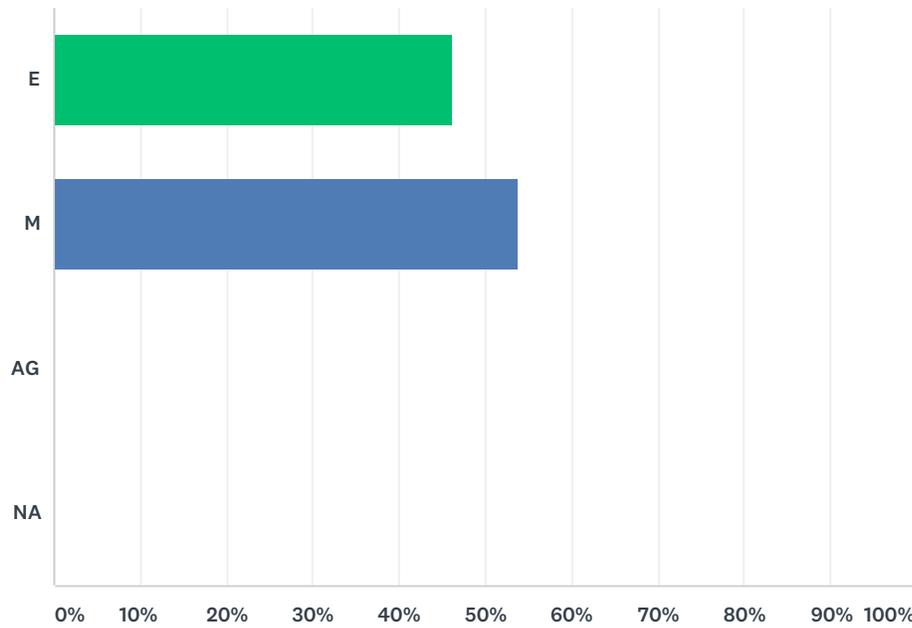
Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
E	69.23%	9
M	30.77%	4
AG	0.00%	0
NA	0.00%	0
TOTAL		13

Q22 Ability to utilize appropriate media for communication – TV, radio, newspaper, group interaction, individual meetings.

Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
E	46.15%	6
M	53.85%	7
AG	0.00%	0
NA	0.00%	0
TOTAL		13

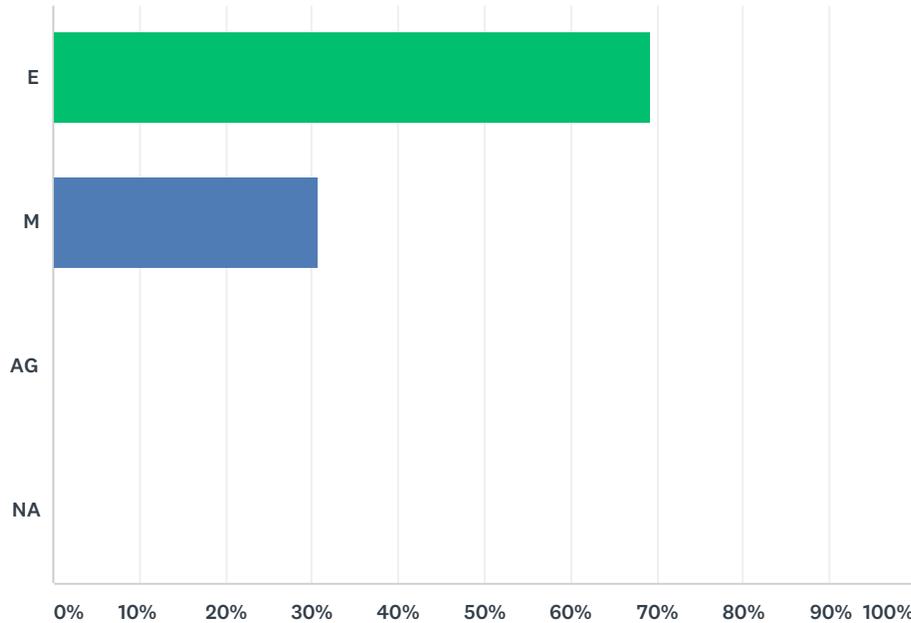
Q23 Do you have any other comments, questions, or concerns?

Answered: 2 Skipped: 11

#	RESPONSES	DATE
1	I have not seen enough of Mark's written work or oral presentations to make a thorough assessment, but he does well at the Board meetings.	9/8/2017 4:49 PM
2	none	9/1/2017 7:43 AM

Q24 Knowledgeable, effective and efficient use of authority granted to the General Manager by the Cooperative Agreement, by Board Resolution, and by the TMWA Board and respectful of the delegation of powers described in Board Resolutions.

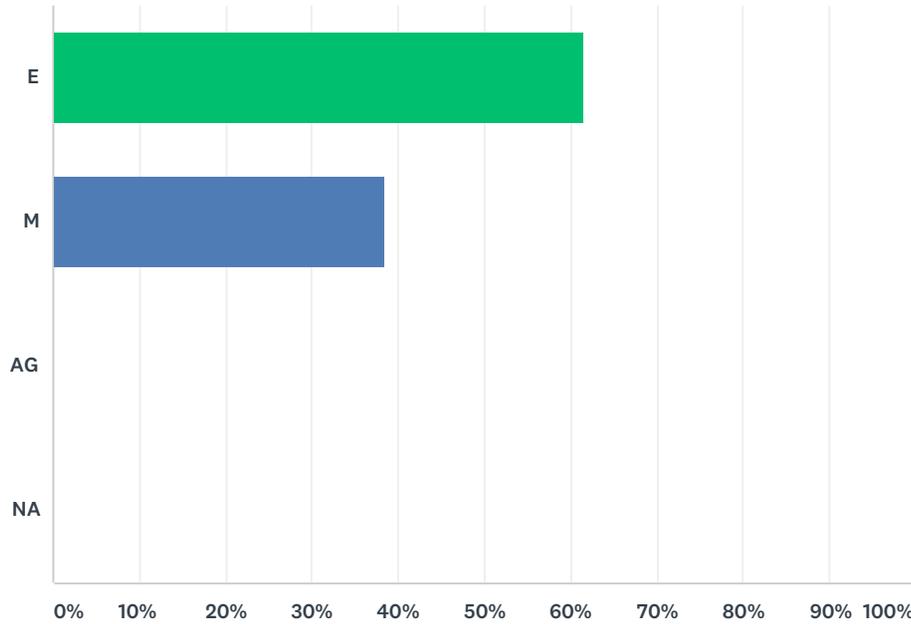
Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
E	69.23%	9
M	30.77%	4
AG	0.00%	0
NA	0.00%	0
TOTAL		13

Q25 Setting the Agenda for the TMWA Board Meetings: presenting issues for consideration by the Board in a timely manner; creating logical sequence for items to be considered.

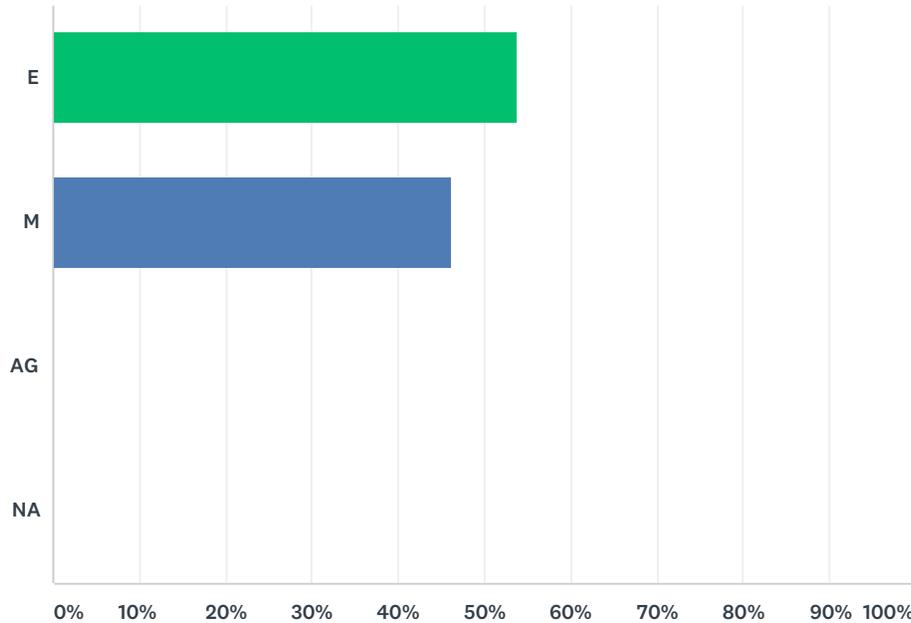
Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
E	61.54%	8
M	38.46%	5
AG	0.00%	0
NA	0.00%	0
TOTAL		13

Q26 Preparation of Materials for Board Meeting: Materials explanatory to the Board, with the pertinent facts and analysis for the Board to make informed decisions; materials available for the general public to review and understand.

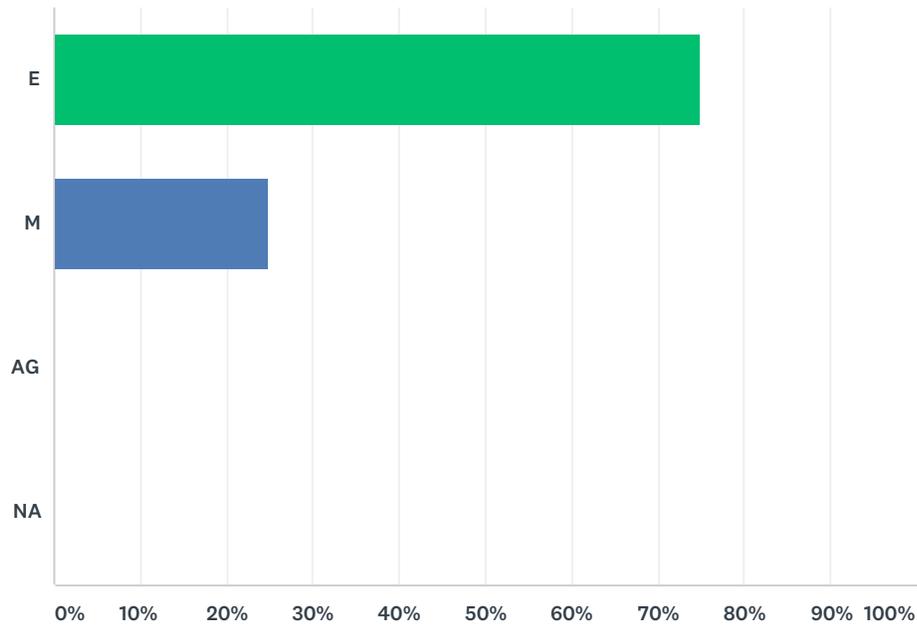
Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
E	53.85%	7
M	46.15%	6
AG	0.00%	0
NA	0.00%	0
TOTAL		13

Q27 Conduct of TMWA Board Meetings: Initiates responses to issues and concerns that the Board and/or public poses; contributes positively to Board deliberations.

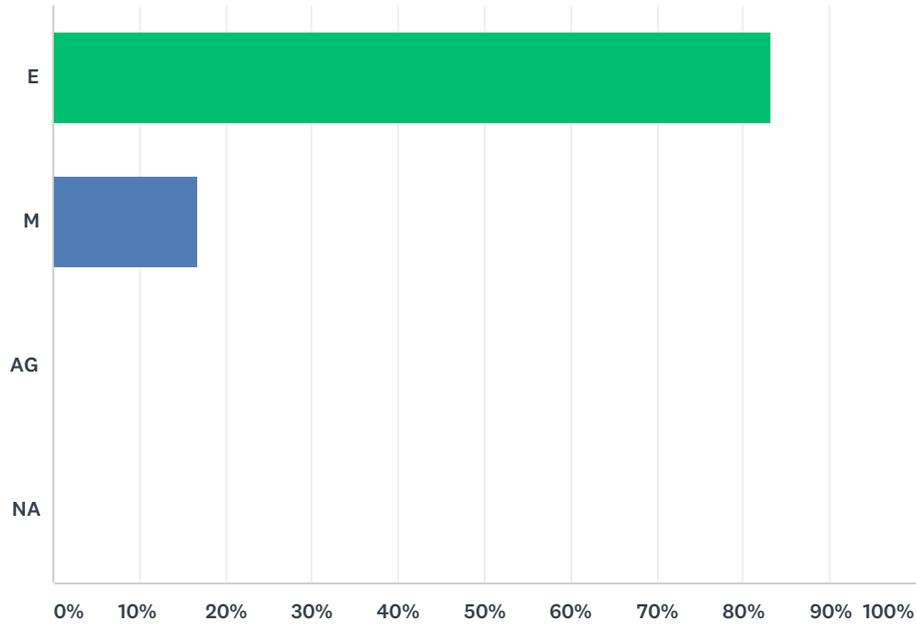
Answered: 12 Skipped: 1



ANSWER CHOICES	RESPONSES	
E	75.00%	9
M	25.00%	3
AG	0.00%	0
NA	0.00%	0
TOTAL		12

Q28 Ability to delegate authority, granting proper authority at the proper times; sound judgment in the evaluation of when delegation is appropriate.

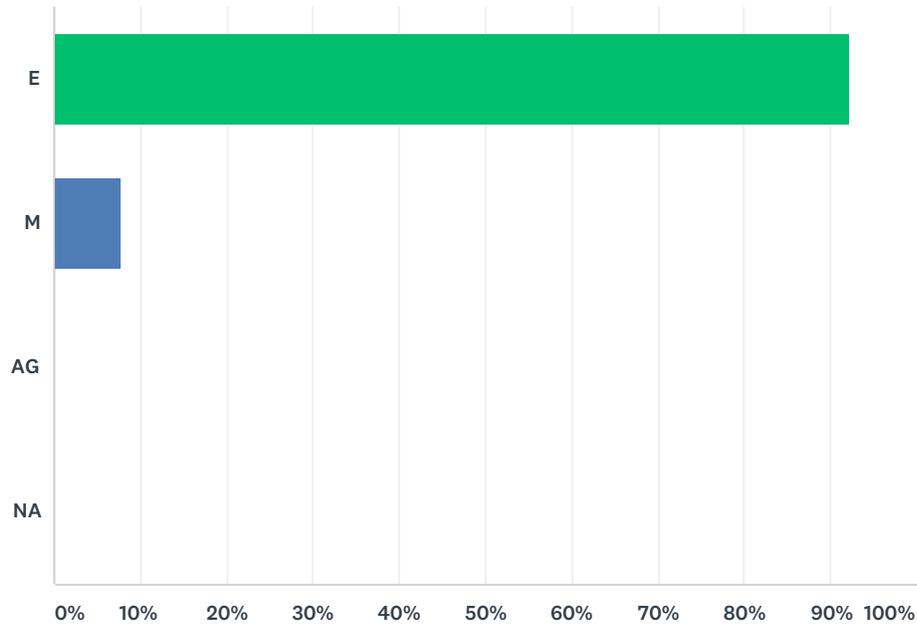
Answered: 12 Skipped: 1



ANSWER CHOICES	RESPONSES	
E	83.33%	10
M	16.67%	2
AG	0.00%	0
NA	0.00%	0
TOTAL		12

Q29 Utilizes a positive approach to direct work efforts of staff.

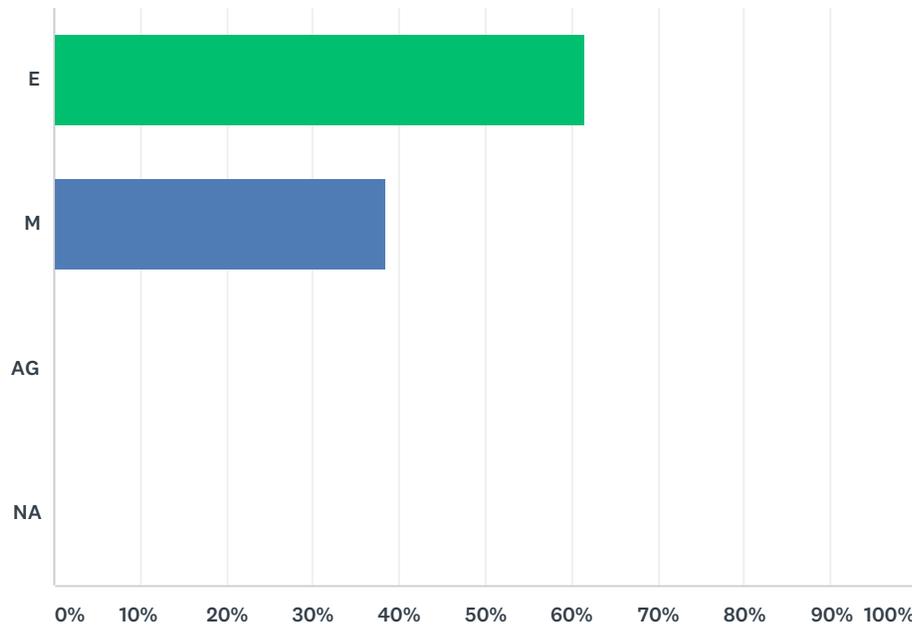
Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES
E	92.31% 12
M	7.69% 1
AG	0.00% 0
NA	0.00% 0
TOTAL	13

Q30 Encourages and rewards initiative and promotes effective Human Resources programs and values.

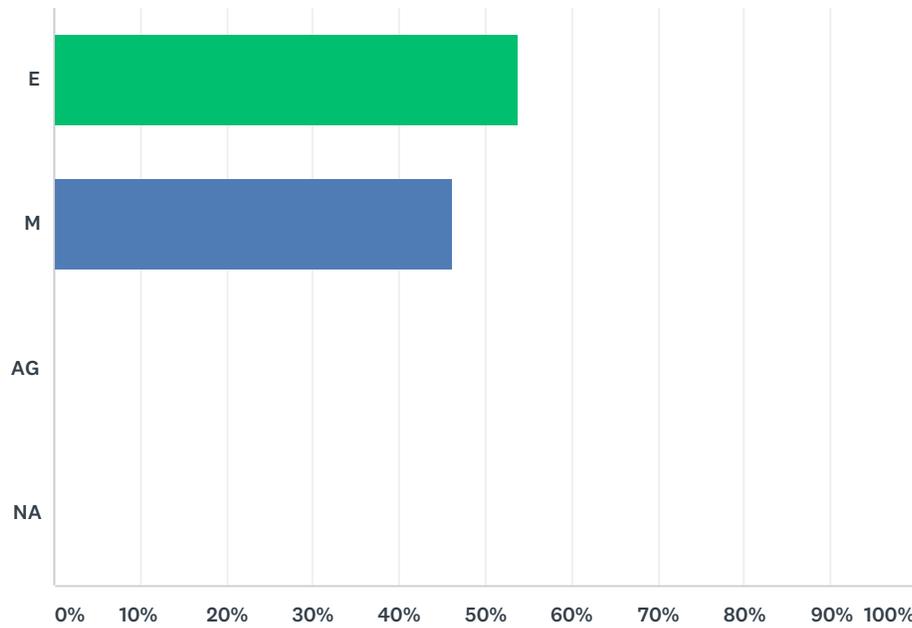
Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES	
E	61.54%	8
M	38.46%	5
AG	0.00%	0
NA	0.00%	0
TOTAL		13

Q31 Utilizes effective project management techniques. Completes projects agreed upon with Board within given time frame.

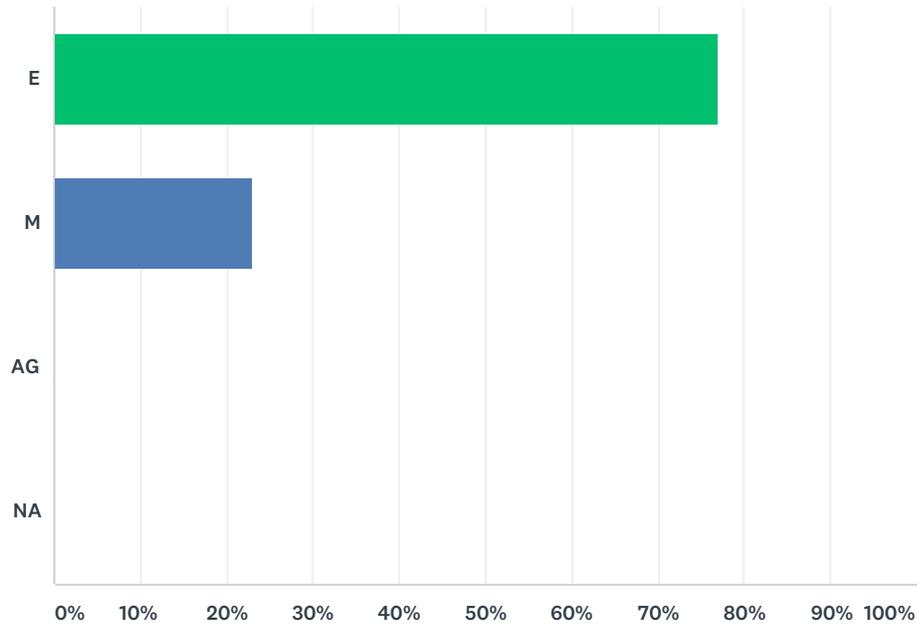
Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES
E	53.85% 7
M	46.15% 6
AG	0.00% 0
NA	0.00% 0
TOTAL	13

Q32 Promotes cohesive teamwork with the Senior Management Team.

Answered: 13 Skipped: 0



ANSWER CHOICES	RESPONSES
E	76.92% 10
M	23.08% 3
AG	0.00% 0
NA	0.00% 0
TOTAL	13

Q33 Do you have any other comments, questions, or concerns?

Answered: 4 Skipped: 9

#	RESPONSES	DATE
1	I really appreciate the ability to debate the issues presented by the TMWA staff at the TMWA meetings to develop the best course of action for our community as a Board. At times, the TMWA agendas are a little over-packed for the time allotted for the meetings. I do think the staff reports could use a little work, but that comment is directed at the overall team, not Mark himself. Some of the reports delve into great detail, but are still a bit out of range for the public to understand. Other staff reports seem purposely quite brief, but leave a lot unsaid that probably should be said. This is just an area to continue to work on. Overall, management of TMWA seems very good.	9/8/2017 4:49 PM
2	none	9/1/2017 7:45 AM
3	Mark is an exceptional leader and serves as a great mentor to staff.	8/25/2017 2:04 PM
4	Mark encourages initiative and promotes teamwork throughout the organization.	8/24/2017 10:51 AM

Q34 What you are most pleased with in the General Manager's performance?

Answered: 10 Skipped: 3

#	RESPONSES	DATE
1	I think that the organization works cohesively together and that he fosters that collaboration. I think that he is receptive to new approaches to meet foreseeable challenges and changing community dynamics.	9/10/2017 1:23 PM
2	Mark is very committed to his job and obviously cares a great deal about the TMWA family. He is very knowledgeable and approachable and always willing to make himself available for questions. I would say Mark's interpersonal relations and management capabilities are real strengths.	9/8/2017 4:50 PM
3	he has put together the right people to do the job. Communication with board members	9/1/2017 7:46 AM
4	Mark understands the issues and his broad knowledge of the business is a great asset.	8/31/2017 8:43 PM
5	Mark's ability to listen and use his Staff's knowledge wisely to see through today's problems into tomorrow's solutions.	8/31/2017 9:45 AM
6	He trusts his staff and provides necessary support and direction when required.	8/30/2017 1:51 PM
7	Adapts to changing conditions, delegates responsibility when appropriate, listens and considers others' input when making important decisions.	8/24/2017 10:54 AM
8	I appreciate his open lines of communication and his trust in his Senior Staff. While always interested in what is going on, he doesn't meddle in the day to day and trusts us to make sound decisions.	8/24/2017 7:02 AM
9	The accomplishments of this manager working in concert with An extremely well chosen staff Are quite amazing. TMWA is very Fortunate to be led by Mr. Foree.	8/24/2017 7:00 AM
10	He is strategic and informed as he performs his job.	8/23/2017 11:48 AM

Q35 What areas for growth would you like to see? Please provide specific suggestions on how the General Manager may improve the areas for growth?

Answered: 4 Skipped: 9

#	RESPONSES	DATE
1	I think that there could be increased sophistication to the capital financing plan that could be scenario based giving the board some options dependent upon different revenue outcomes.	9/10/2017 1:23 PM
2	I think Mark is sensitive to the Board and our desires - almost to a fault. I would like to see him feel a bit more confident and comfortable in his position. In a more substantive area, I would like to see Mark and the organization to continue to take a greater leadership role in regional water issues. Rather than wait to be invited to a discussion, Mark and the team may want to initiate greater interagency coordination when they see an issue developing. Call a meeting, set up a workshop, plan a board discussion or even sponsor a regional leadership conference (See proposed goal). I think we could all benefit from Mark's greater involvement in regional issues.	9/8/2017 4:50 PM
3	Perhaps closer coordination with City/County managers, PW directors on regional issues.	8/24/2017 10:54 AM
4	At this time I am pleased with what I have seen.	8/23/2017 11:48 AM

Q36 Comments related to General Manager's accomplishments for FY2017:

Answered: 6 Skipped: 7

#	RESPONSES	DATE
1	Good leadership in the process of the Board's consideration of the rate hike.	9/10/2017 1:26 PM
2	Over the past three years TMWA under his leadership has accomplished an astonishing job of bringing the water supply Problems to a much better place.	9/9/2017 1:43 PM
3	Particularly great job on: 1. Refinancing the 2007 bonds (!) 2. Making the case to increase water rates, esp. working to improve communications on the need for the increase 3. The high ratings by the public of TMWA operations 4. Working through the TRIC reclaimed water issues - with more to come! 5. Development of the Verdi water service project Kudos and well done!!	9/8/2017 4:51 PM
4	Outstanding results across the board.	8/30/2017 1:59 PM
5	TMWA's accomplishments speak for themselves, enacted a necessary rate increase, refunded \$147.4 million in bonds, he keeps TMWA well positioned to respond to the community's needs, and he continues to manage TMWA with a "business minded" perspective, which is highly effective.	8/24/2017 11:00 AM
6	I am pleased with his consolidation of finances.	8/23/2017 11:51 AM

Q37 Board Member suggested General Manager goals for FY2018:

Answered: 4 Skipped: 9

#	RESPONSES	DATE
1	Due to sensitivity of rate increase, keep Board up to date of revenues and debt payoffs. Broaden TMWA participation in the growth dynamics facing the community particular with respect to local government land use decision making.	9/10/2017 1:26 PM
2	1. Plan a regional water "conference" of elected and appointed officials to work on developing broader regional consensus on issues like the role of private water systems in our region, use of reclaimed water, the region's ability to meet growth demands, possible expansion of TMWA's service area, and the like. 2. Continue to play a pivotal role in working through issues associated with the TRIC reclaimed water 3. Help develop consensus to limit the expansion of private water systems and instead integrate them into regional TMWA water service.	9/8/2017 4:51 PM
3	Moving towards building a Hydro Plant on the Highland Canal to stabilize TMWA's long-term power costs at Chalk Bluff.	8/31/2017 10:08 AM
4	I want to see some timely and best practices implemented on construction times and how TMWA relates to other entities and governing boards. (I.e. Health board)	8/23/2017 11:51 AM



Arthur J. Gallagher & Co.

September 11, 2017

Jessica Atkinson, HR Manager
Truckee Meadows Water Authority
P.O. Box 30013
Reno, NV 89520

Dear Ms. Atkinson:

As requested, we have completed a supplemental compensation analysis for the position of General Manager to determine competitive compensation levels based on TMWA's defined labor market.

This analysis utilizes the same methodology and data sources as TMWA's 2016/17 compensation analysis. Specifically, all salary comparisons have been adjusted to reflect the Reno, NV labor market using geographic cost of labor differentials obtained from the Economic Research Institute (ERI), and all salary comparisons have been made against the market 60th percentile. In addition, the summary salary range reflects the actual achievable salary in the labor market, and does not reflect any supplemental performance-based compensation programs.

This letter outlines our findings and considerations for the competitive market analysis. A detailed market pricing worksheet containing all market compensation data is provided as an attachment to this memo.

We appreciate having the opportunity to assist you with this analysis. Should you have any questions of need additional information, please call me at 612-501-1122.

Sincerely,

A handwritten signature in black ink, appearing to read 'Devin Grdinic'.

Devin Grdinic, M.A., CCP

Cc: Bruce Lawson
Managing Director

FINDINGS & CONSIDERATIONS

Following is a summary of the competitive market data for the position of General Manager at the market 60th percentile:

Competitive Salary Range (60th percentile)

Minimum: \$205,764

Midpoint: \$222,768

Maximum: \$237,114

The market data indicates a maximum achievable base salary for the position of \$237,114, which includes geographic adjustments for the Reno market. Depending on prevailing market conditions, job performance, and similar incumbent-specific factors, compensation for individuals performing similar work would normally fall between the range presented above.

It is important to note that the effective salary range for the General Manager role is narrower than what is typically found for other roles. This is due to many organizations using a negotiated salary rate that does not depend on a formal salary range.

Part No	Participant Name	Bench No	Benchmark Title	Job Match	RAW MARKET DATA			ADJUSTED MARKET DATA			
					Minimum	Midpoint	Maximum	Geo Diff	Minimum	Midpoint	Maximum
1	Alameda County Water District	61	General Manager	General Manager	\$234,632	\$259,918	\$285,203	0.841	\$197,404	\$218,677	\$239,951
2	City of Anaheim	61	General Manager	Utilities General Manager	\$199,457	\$264,281	\$329,105	0.913	\$182,137	\$241,333	\$300,528
3	City of Chandler	61	General Manager	No Match	-	-	-	1.049	-	-	-
5	City of Henderson	61	General Manager	No Match	-	-	-	1.016	-	-	-
6	City of Mesa	61	General Manager	No Match	-	-	-	1.051	-	-	-
7	City of Reno	61	General Manager	No Match	-	-	-	1.000	-	-	-
8	City of Sacramento Main	61	General Manager	Director of Utilities	\$149,567	\$186,959	\$224,351	0.947	\$141,665	\$177,081	\$212,498
9	City of Scottsdale	61	General Manager	No Match	-	-	-	1.051	-	-	-
10	City of Sparks	61	General Manager	No Match	-	-	-	1.022	-	-	-
11	Contra Costa Water District	61	General Manager	General Manager (Flat Rate)	\$278,112	\$268,715	\$268,715	0.840	\$233,660	\$225,766	\$225,766
13	Helix Water District – San Diego	61	General Manager	General Manager (Flat Rate)	\$200,000	\$200,000	\$200,000	0.967	\$193,433	\$193,433	\$193,433
14	Las Vegas Valley Water Dist.	61	General Manager	General Manager (Flat Rate)	\$174,692	\$221,422	\$268,152	0.989	\$172,741	\$218,950	\$265,158
15	Marin Municipal Water District	61	General Manager	General Manager (Flat Rate)	\$260,796	\$260,796	\$260,796	0.797	\$207,854	\$207,854	\$207,854
16	NV Energy	61	General Manager	No Match	-	-	-	1.000	-	-	-
18	Regional Transportation Commission (RTC)	61	General Manager	Executive Director	\$223,723	\$223,723	\$223,723	1.000	\$223,723	\$223,723	\$223,723
23	Sweetwater Authority	61	General Manager	No Match	-	-	-	0.936	-	-	-
25	Washoe County	61	General Manager	No Match	-	-	-	1.000	-	-	-
26	Eastbay Mud	61	General Manager	General Manager (Old Flat Rate)	\$288,628	\$288,628	\$288,628	0.841	\$242,832	\$242,832	\$242,832
100	TMWA	61	General Manager	General Manager	\$146,830	\$168,855	\$190,879	1.000	\$146,830	\$168,855	\$190,879
				AVERAGE	\$223,290	\$241,605	\$260,964		\$199,495	\$216,628	\$234,638
				50TH PERCENTILE (MEDIAN)	\$223,723	\$259,918	\$268,152		\$197,404	\$218,950	\$225,766
				60TH PERCENTILE	\$232,450	\$260,620	\$268,603		\$205,764	\$222,768	\$237,114
				75TH PERCENTILE	\$260,796	\$264,281	\$285,203		\$223,723	\$225,766	\$242,832

AMENDED AND RESTATED EMPLOYMENT AGREEMENT

1. PARTIES AND RECITALS

This Amended and Restated Employment Agreement ("Agreement") is entered into on October 15, 2014 ("Effective Date") by and between the Truckee Meadows Water Authority, by and through its duly constituted Board of Directors ("TMWA"), a political subdivision of the State of Nevada and a public entity organized pursuant to NRS 277.110, et. seq., and Mark Foree ("Foree"), collectively the "Parties", and amends and supersedes the Employment Agreement entered between the Parties dated October 17, 2012.

- 1.1 TMWA was formed to exercise powers, privileges and authorities to develop and maintain supplies of water for the benefit of the Truckee Meadows community;
- 1.2 TMWA desires to retain the services of Foree as General Manager;
- 1.3 Foree desires employment as General Manager of TMWA; and
- 1.4 The parties desire to enter into an agreement reflecting the terms and conditions under which Foree will be employed by TMWA as its General Manager.

NOW, THEREFORE, in consideration of their mutual covenants contained herein, TMWA and Foree agree as follows:

2. EMPLOYMENT

TMWA hereby employs Foree and Foree agrees to serve as the General Manager of TMWA to perform the functions and duties specified in Section 3 for the term specified in Section 5.

3. DUTIES/ESSENTIAL JOB FUNCTIONS

3.1 Foree agrees that during the Term of Employment (as defined in Section 5.1) he will hold the office of General Manager of TMWA reporting to TMWA's Board of Directors (the "Board"). Foree agrees to perform faithfully and to the best of his ability such duties and assignments relating to the business of TMWA as the Board of Directors of TMWA shall direct.

3.2 During the Term of Employment Foree shall, except during customary vacation periods and periods of illness, devote his business time and attention to the performance of his duties hereunder and to the business and affairs of TMWA and to promoting the best interests of TMWA. Foree shall not, either during or outside of normal business hours, engage in any activity inimical to the best interests of TMWA. Foree acknowledges that he has ownership interest in a water company in Winnemucca, Nevada, for which he provides occasional services for compensation. Foree agrees to ensure that his ownership and any activities undertaken by Foree in connection with said company shall not interfere with his ability to devote his full time

and attention to the business and affairs of TMWA. Except for said services, Foree shall not serve as a consultant to other public or private utilities. Notwithstanding the foregoing, Foree may engage in charitable or civic pursuits provided that such service or pursuits do not interfere with Foree's obligations under the Agreement.

4. SALARY

TMWA agrees to pay Foree for his services an annual base salary of One Hundred Eighty Three Thousand Three Hundred Four and 12/100 Dollars (\$183,304.12) ("Base Salary"). Foree will have an opportunity to earn a Base Salary increase and a lump sum award based upon Foree's specific job performance in meeting the mutually agreed upon goals for the previous year. The Board and Foree will meet by December 1, 2014 to set initial performance goals for the 2014-15 fiscal year. The Board shall evaluate Foree's performance and in its sole discretion may determine a performance lump sum award or any salary adjustment in accordance with Section 6 of this Agreement. This adjustment may be made either to the Base Salary or in the form of a lump sum award or as a combination of the two at the sole discretion of TMWA. The total award (addition to Base Salary plus lump sum award) may be up to 10% of Base Salary. Any portion of a salary adjustment granted as a lump sum award shall not become part of Foree's Base Salary for future years.

5. TERM AND TERMINATION

5.1 Term. The term of this Agreement ("Term of Employment") is four (4) years beginning on the Effective Date of this Agreement; subject, however, to prior termination as provided herein.

5.2 Events of Termination. The Term of Employment, Foree's Base Salary, and any and all other rights of Foree under this Agreement or otherwise as an employee of TMWA may terminate (except as otherwise provided in this Section):

- (a) Upon the death of Foree;
- (b) Upon the disability of Foree (as defined in Section 5.3) immediately upon written notice from either party to the other;
- (c) For Cause (as defined in Section 5.4) immediately upon notice from TMWA to Foree, or at such later time as such notice may specify;
- (d) Upon Foree's 60 days written notice unless the parties subsequently agree to a different notice period; or
- (e) Upon termination by TMWA for any reason other than "For Cause" as defined in Section 5.4.

5.3 Definition of Disability. For purposes of Section 5.2, Foree will be deemed to have a "disability" if, for physical or mental reasons, Foree is unable to perform the essential

functions of Foree's duties under this Agreement for a period of ninety (90) days. The disability of Foree will be determined by a medical doctor selected by written agreement of TMWA and Foree upon the request of either party by notice to the other. If TMWA and Foree cannot agree on the selection of a medical doctor, each of them will select a medical doctor and the two medical doctors will select a third medical doctor who will determine whether Foree has a disability. The determination of the medical doctor selected under this Section 5.3 will be binding on both parties. Foree must submit to a reasonable number of examinations by the medical doctor making the determination of disability under this Section 5.3, and Foree hereby authorizes the disclosure and release to TMWA of such determination and all supporting medical records. If Foree is not legally competent, Foree's legal guardian or duly authorized attorney-in-fact will act in Foree's stead, under this Section 5.3, for the purposes of submitting Foree to the examinations, and providing the authorization of disclosure, required under this Section 5.3.

5.4 Definition of "For Cause". For purposes of Section 5.2, the phrase "For Cause" means: (a) Foree's breach of this Agreement; (b) Foree's failure to adhere to any written policy of TMWA if Foree has been given a reasonable opportunity to comply with such policy or cure his failure to comply; (c) the appropriation or attempted appropriation of a material business opportunity of TMWA, including attempting to secure or securing any personal profit in connection with any transaction entered into on behalf of TMWA; (d) the misappropriation or attempted misappropriation of any of TMWA's funds or property; or (e) the conviction of, the indictment for or its procedural equivalent, or the entering of a guilty plea or plea of no contest with respect to, a felony, the equivalent thereof, or any other crime with respect to which imprisonment is a possible punishment.

5.5 Termination Pay. Effective upon the termination of this Agreement, TMWA will be obligated to pay Foree (or, in the event of his death, his designated beneficiary as defined below) only such compensation as is provided in this Section 5.5, and in lieu of all other amounts and in settlement and complete release of all claims Foree may have against TMWA. For purposes of this Section 5.5, Foree's designated beneficiary will be such individual beneficiary or trust, located at such address, as Foree may designate by notice to TMWA from time to time or, if Foree fails to give notice to TMWA of such a beneficiary, Foree's estate. Notwithstanding the preceding sentence, TMWA will have no duty, in any circumstances, to attempt to open an estate on behalf of Foree, but will act reasonably in ascertaining the whereabouts of Foree's beneficiaries and seeing to it that such beneficiaries are properly paid.

(a) If this Agreement is terminated by either party as a result of Foree's death or disability as determined under Section 5.3, TMWA shall pay Foree his Base Salary accrued through the date of termination plus any accrued unused banked vacation and PTO as set forth in section 8 below.

(b) If this Agreement is terminated by TMWA "For Cause" pursuant to Section 5.2(c) or by Foree pursuant to Section 5.2(d), TMWA shall pay Foree his Base Salary accrued through the date of termination, but not any accrued unused banked vacation and PTO.

(c) If TMWA terminates this Agreement for any reason other than “For Cause” pursuant to Section 5.2(e), TMWA agrees to pay Foree severance pay equal to Forees’ six-month Base Salary.

5.6 Renewal of Agreement. In the event TMWA elects not to renew or extend this Agreement or offer some other mutually agreeable contract, TMWA will give Foree six months written notice of its intent not to renew the Agreement. Failure to give such notice on the part of TMWA shall be treated as a termination and Foree will receive severance pay as set forth in Section 5.5(c) above.

6. PERFORMANCE EVALUATION

TMWA's Board of Directors will review and evaluate Foree’s performance at least once annually on or within four months of the end of the fiscal year. Foree’s annual salary review and any adjustment to compensation will coincide with the annual performance evaluation timeframes established for all TMWA employees.

7. RETIREMENT

7.1 Subject to applicable laws, TMWA will contribute an amount equal to 6% of Foree’s base salary to a deferred compensation plan on Foree’s behalf.

7.2 TMWA agrees that Foree will be a member of the Nevada Public Employees Retirement System at TMWA's expense.

8. PAID TIME OFF

8.1 Foree will be granted 40 days of compensated paid time off (“PTO”) each year for personal use, including vacation and illness. Unused PTO may be taken as pay, at any time, or carried over to the next calendar year as set forth in Section 8.2.

8.2 Accrued but unused PTO will be carried over from year to year. A maximum of 320 PTO hours can be carried over each calendar year. Upon termination of Foree’s employment, Foree will be entitled to full compensation for his accrued, unused PTO, up to a maximum of 320 hours.

8.3 Banked vacation which Foree accrued as of July 1, 2009 will remain in the banked vacation account until used. Such banked vacation time may also be cashed out as pay at any time and upon Foree’s employment termination, except for termination “For Cause” pursuant to Section 5.4.

9. DUES, SUBSCRIPTIONS AND PROFESSIONAL DEVELOPMENT

9.1 TMWA agrees to pay the professional dues, certifications and subscriptions of Foree necessary for his continuation and participation in national, regional, state and local

associations and organizations necessary and desirable for his continued professional participation, growth and advancement, and for the good of TMWA.

9.2 TMWA agrees to pay the travel and subsistence expenses of Foree for professional and official travel and meetings adequate to continue the professional development of Foree as the chief executive of a water utility and to adequately pursue necessary official functions for TMWA. Such travel and subsistence expenses must be approved by TMWA's Chief Financial Officer and submitted to the Chair of the TMWA Board for review. TMWA will also pay for Foree's attendance at conferences, seminars and short courses which are deemed to be of value to TMWA.

10. EXPENSES, ALLOWANCES AND OTHER BENEFITS

10.1 Foree will be paid a fixed sum of \$750 per month for the use of his personal vehicle for TMWA business, with future increases to be determined by TMWA as a part of the budget cycle.

10.2 TMWA agrees to pay Foree a fixed sum of \$150 per month as a cell phone/personal digital assistance (PDA) allowance.

10.3 TMWA will pay all costs of any fidelity or other bonds required of Foree by virtue of his employment with TMWA.

10.4 Foree will be provided all other benefits given to management employees, such as observed paid holidays, group health coverage (medical, dental, vision), short and long term disability.

11. TEAM BUILDING, GOALS AND RETREATS

TMWA agrees that annually TMWA's Board of Directors will schedule and participate in the following:

- (a) A goals-setting session to develop objectives for TMWA; and
- (b) A session to develop specific criteria to serve as the basis for Foree's pay-for-performance clause set forth in Section 6 of this agreement. This session will be held within four months of the end of each fiscal year of the Term of Employment.

12. MISCELLANEOUS

12.1 The captions in this agreement are not part of the provisions hereof, are merely for the purpose of reference and shall have no force or effect for any purpose whatsoever, including the construction of the provisions of this Agreement, and if any caption is inconsistent with any provisions of this Agreement, such provisions shall govern. The Recitals are part of this Agreement.

12.2 This Agreement is made in, and shall be governed by and construed in accordance with the internal laws of the State of Nevada.

12.3 This Agreement contains a complete statement of all of the arrangements between the parties with respect to the subject matter hereof. There are no representations, agreements, arrangements or understandings, oral or written between the parties relating to the subject matter of this Agreement, which are not fully expressed in this Agreement.

12.4 This Agreement may not be waived, changed, modified or discharged orally, but only by an agreement in writing signed by the party against whom any waiver, change, modification or discharge is sought.

12.5 All notices given hereunder shall be in writing and shall be sent by registered or certified mail, return receipt requested as such other address as TMWA and Foree designate. Each such notice shall be deemed to be given on the date received at the address of the addressee.

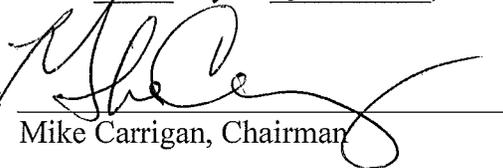
12.6 If litigation over this Agreement is initiated in any court, the Parties agree the proper venue is Washoe County, Nevada. Foree irrevocably (i) waives and agrees not to assert in any such action, suit or other proceeding that he is not personally subject to the jurisdiction of such courts, that the action, suit or other proceeding is brought in an inconvenient forum or that the venue of the action, suit or other proceeding is improper, (ii) waives personal service of any summons, complaint or other process and (iii) agrees that the service thereof may be made by certified or registered mail directed to Foree at his address for purposes of notices hereunder. Should Foree fail to appear or answer within the time prescribed by law, he shall be deemed in default and judgment may be entered by TMWA against him for the amount or other relief as demanded in any summons, complaint or other process so served.

IN WITNESS WHEREOF, the parties have executed this Agreement the day and year first hereinabove written.

TMWA

Dated this 17 day of OCT., 2014

By:


Mike Carrigan, Chairman

GENERAL MANAGER

Dated this 15th day of OCT., 2014

By:


Mark W. Foree



STAFF REPORT

TO: Chairman and Board Members
FROM: Mark Foree, General Manager
DATE: September 4, 2017
SUBJECT: Discussion and action on request for Board input and acceptance of General Manager performance objectives for contract year 2017/2018

RECOMMENDATION

The TMWA Board review the objectives proposed herein, provide input to the proposed objectives and approve the objectives as amended by the Board discussion.

DISCUSSION

As in the past the Board has requested an opportunity to discuss and approve specific objectives and criteria that the General Manager would be working to accomplish during the current fiscal year. These objectives and criteria would be used to evaluate the performance of the General Manager at the end of the contract year. Below are suggestions for the Board's discussion and input, as well as Attachment 1 which are suggestions gathered from the General Manager's Performance Evaluation Survey:

General Objectives

- A) Direct the preparation of and propose financial plans, investment strategies, funding plans and adjustments to rates and charges that will continue to keep TMWA in long term financial stability; including preparation of budgets and Capital Improvement Plans and financial reporting that comply with Nevada Revised Statutes and the Securities and Exchange Commission (SEC).
- B) Develop proactive communications plans to address upcoming issues (e.g., topics affecting water supply, drought planning, regional water issues, utility water system consolidation and rate changes) and to keep all stakeholders including the Board, the employees, and the customers informed through a variety of mediums. Respond to media inquiries and provide informational interviews.

- C) Continue having and improve on a community presence for TMWA through the Water Leadership program and participation in community committees, boards, and networking organizations and by providing presentations and information to these groups; offer Truckee River, Chalk Bluff Plant and/or other informational Tours to the community.
- D) Continue to create a highly productive work environment and a highly motivated employee team by developing, training, retaining and recruiting the highest quality employees.
- E) Strive for continuous improvements in processes and operations targeting initiatives that will enhance revenues and/or reduce operating costs thus keeping customer rates as low as possible.

Specific Objectives

- 1) Complete process of implementing a multi-year contract with the International Brotherhood of Electrical Workers (IBEW) Local 1245.
- 2) Develop customer conservation communications plan for the 2018 irrigation season, including water supply planning, and detailed public/customer communications/outreach plan - present to the SAC for their recommendation and Board for approval no later than the April Board Meeting.
- 3) Work with city and county staff in regard to regional water issues, regional economic development initiatives, etc. including developing and completing a water resource management agreement for delivery of effluent to the Tahoe Reno Industrial Center GID if approved by the cities, 2) infiltrating or injecting highly treated wastewater into the ground for later use, 3) constructing an effluent pipeline connection between TMWRF and STMWRF, etc.
- 4) Analyze water supply options related to fringe area development where private systems exist and analyze possible acquisition of private systems and/or providing wholesale water to private systems, make recommendations to Board and follow Board direction regarding same.
- 5) Monitor and participate in Legislative activities during the interim, prepare and deliver presentations to Legislative Interim Committees as requested, keep the Board updated and informed regarding legislative matters, and pursue Board direction regarding Legislative issues. Facilitate open communications between legislators and the TMWA Board.
- 6) Continue to monitor federal legislation for opportunities to obtain funding for a variety of TMWA projects.
- 7) Continue to assist the Washoe County Water Conservation District (WCWCD) regarding cost reimbursement issues related to the Boca Dam Seismic Improvements proposed by the U.S. Bureau of Reclamation including working with TMWA's federal lobbyist Marcus Faust and the Nevada delegation regarding legislation that would lower the cost

for WCWCD and TMWA as TMWA is responsible for more than 50% of the district's annual operating costs.

- 8) Manage financing and funding options to maximize benefits to TMWA customers through investment income strategies and short-term commercial paper programs. Renew or replace TMWA's liquidity facility that supports our Tax Exempt Commercial Paper (TECP) program.
- 9) Update the 5-year Funding Plan and present to the SAC and the Board. Propose Board actions based on the results of the planning cycle updates. Implement Board direction with regard to funding plan outcomes.
- 10) Analyze TMWA's financial position in regard to the implementation of the second phase of rate adjustment (scheduled to go into effect in May, 2018 – approved by the Board in April, 2017) and provide a report to the Board prior to the scheduled implementation date.
- 11) Analyze the need for any necessary water facility charge adjustments, report results of analysis to the SAC and Board of Directors and follow Board direction regarding same.
- 12) Carefully analyze opportunities to acquire water rights and resources in the market in consideration of current inventory and financial constraints. Insure adequate resources are available through TMWA's Rule 7.
- 13) Provide staff support to the SAC, Truckee Meadows Community Forestry Coalition and the Truckee River Fund (TRF) Advisors and ensure communications regarding TRF projects.
- 14) Manage and direct activities relative to legal issues, keeping the Board informed on all such matters.
- 15) Update TMWA Administrative Instructions as required to ensure they are compliant with applicable laws and current practices. Deliver updates to the Board and employees, and implement the changes.
- 16) Minimize cost impacts to customers by maximizing investment and hydroelectric income, pursuing revenue enhancement and collection opportunities, pursuing process improvements and projects that drive savings in TMWA expenses, and actively pursuing grant/low-interest loan funding for projects.
- 17) Continue to develop/refine strategies to optimize conjunctive use of surface water and groundwater resources; further develop/refine drought supply operational strategies; and implement plans.
- 18) Continue to develop, refine and implement strategies to mitigate pre-merger groundwater conditions on the Mt. Rose fan including commencing construction of the Mt. Rose Water Treatment Plant.

- 19) Analyze and develop a recommendation to the Board to address the remaining multi-unit flat-rate services, including funding required to retrofit those remaining unmetered services that are determined to be financially and physically reasonable to retrofit, and to provide options for repurposing the meter retrofit fund.
- 20) Prepare an RFP regarding sale of the Farad property and facilities where both for-profit and non-profit entities can provide proposals for the property related to possible conservation, recreation, education, etc. uses, receive input from the Board and develop a process for selection.
- 21) Analyze and estimate feasibility and cost of using a portion of the Farad hydroelectric water right to A) increase the generation output at the Fleish hydro and B) to install a hydro generation facility at the Highland Canal at Chalk Bluff and provide a report and recommendation to the Board.

Q37 Board Member suggested General Manager goals for FY2018:

Answered: 4 Skipped: 9

#	RESPONSES	DATE
1	Due to sensitivity of rate increase, keep Board up to date of revenues and debt payoffs. Broaden TMWA participation in the growth dynamics facing the community particular with respect to local government land use decision making.	9/10/2017 1:26 PM
2	1. Plan a regional water "conference" of elected and appointed officials to work on developing broader regional consensus on issues like the role of private water systems in our region, use of reclaimed water, the region's ability to meet growth demands, possible expansion of TMWA's service area, and the like. 2. Continue to play a pivotal role in working through issues associated with the TRIC reclaimed water 3. Help develop consensus to limit the expansion of private water systems and instead integrate them into regional TMWA water service.	9/8/2017 4:51 PM
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4	I want to see some timely and best practices implemented on construction times and how TMWA relates to other entities and governing boards. (I.e. Health board)	8/23/2017 11:51 AM



STAFF REPORT

TO: Board of Directors
FROM: Mark Foree, General Manager
DATE: September 11, 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*).

Also, included in your agenda packet are press clippings from August 10, 2017 through September 13, 2017.



STAFF REPORT

TO: Board of Directors
THRU: Mark Foree, General Manager
FROM: Scott Estes, Director of Engineering
BY: Bill Hauck, Senior Hydrologist
DATE: September 11, 2017
SUBJECT: **September 2017 Operations Report**

Summary

- The region is positioned very well from a water supply perspective
- Truckee River flows are above average for this time of the year
- Lake Tahoe is still more than 90% full
- All other federal reservoirs on the Truckee River system are close to maximum capacity
- Normal Truckee River flows are anticipated over the course of the next 2 years or more
- Hydro revenue for August 2017 was \$357,529

(A) Water Supply

- **River Flows** - Truckee River flows at the CA/NV state line were approximately 640 cubic feet per second (CFS) this morning. This is higher than the long-term average of 479 CFS. Above average river flows are anticipated for the remainder of the year.
- **Reservoir Storage** - Most federally-operated reservoirs on the Truckee River system are still close to capacity, including Lake Tahoe which is 90% full. The elevation of Lake Tahoe is currently 6228.52 feet (0.58' below the legal maximum storage elevation of 6229.10 feet). Water is currently being released from Donner and Independence lakes in order to lower them to their respective wintertime operating levels. Reservoir storage values as of 9/11 are as follows:

Reservoir	Current Storage (Acre-Feet)	% of Capacity (Percent)
Tahoe	673,300	90%
Boca	38,519	94%
Donner	7,340	77%
Independence	16,954	97%
Prosser	17,740	60%
Stampede	213,882	95%

In addition to the storage in Donner and Independence lakes, TMWA has approximately 11,750 acre-feet of water stored between Boca and Stampede Reservoirs under the terms of TROA. TMWA’s combined back-up reservoir storage between Donner and Independence lakes and TROA is approximately 37,400 acre-feet as of this morning.

- **Outlook** - The region could not be positioned better as far as our water supply outlook is concerned. The epic winter of 2017 will go down in the record books as one of the top handful of years as far as snowpack is concerned. Flooding and springtime runoff basically rewound the clock in terms of upstream reservoir storage. In fact, the 2017 water year for the Truckee River will end up being the largest runoff year on record (surpassing historic 1983 by 30%). It is a good position to be in as Lake Tahoe and most other federally-operated reservoirs are still close to capacity as we start the month of September. The region can count on normal river flows for at least the next couple of years.

(B) Water Production

Demand - Last week customer demand averaged 120 million gallons per day. For the year-to-date, demand is approximately 99.3% of 2016. As of last week, surface water made up about 79% of our raw water supply, and groundwater the other 21% from production wells located throughout TMWA’s service territory. With the shorter daylight hours and cooler evening temperatures, customer demand will begin dropping noticeably over the coming weeks.

(C) Hydro Production

Generation - Average Truckee River flow at Farad (CA/NV state line) for the month of August was approximately 661 cubic feet per second (CFS). With steady river flows it was another extremely solid generation month as all three of TMWA’s hydro-electric plants were on-line and experienced no outages.

Hydro Plant	Days On-Line	Generation (Megawatt hours)	Revenue (Dollars)	Revenue (Dollars/Day)
Fleish	31	1,864	\$133,772	\$4,315
Verdi	31	1,741	\$123,784	\$3,993
Washoe	31	1,391	\$99,973	\$3,225
Totals	93	4,996	\$357,529	\$11,533



STAFF REPORT

TO: Board of Directors
THRU: Mark Foree, General Manager
FROM: Marci Westlake, Manager Customer Service
DATE: September 20, 2017
SUBJECT: **August Customer Service Report**

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

Ombudsman

- 3 calls for the month- Two did not leave a message and one wanted back billing explained and talked to about a possible leak.

Communications

Customer outreach in August included:

- River School Farm & Gardens Tour August 19th.
- Neece Schlesener had a Bio-Diverse Gardening workshop at Valleywood Park and 26 people attended.
- River Cleanup at Fisherman's Park 1, 34 people helped clean the River.

Conservation (January 1 – December 31)

- 5201 Water Watcher Contacts
- 1248 Water Usage Reviews

Customer Calls – August

- 9,809 phone calls handled
- Average handling time – 4 minutes, 26 seconds per call
- Average speed of answer – 23 seconds per call

Billing – August

- 126,360 bills issued
- 13 (<.1%) corrected bills
- 15,449 customers (12.0%) have signed up for paperless billing to date.

Service Orders –August (% is rounded)

- 8,761 service orders taken
- 5,053 (58%) move-ins / move-outs
- 1002 (11%) cut-out-for-non-payment and cut-in after receiving payments, including deposits and checks for tamper
- 475 (5%) zero consumption meter checks
- 345 (4%) re-read meters
- 790 (9%) new meter sets and meter/register/ERT exchanges and equipment checks
- 400 (5%) problems / emergencies, including cut-out for customer repairs, dirty water, no water, leaks, pressure complaints, safety issues, installing water meter blankets, etc.
- 185 (2%) high-bill complaints / audit and water usage review requests
- 511 (6%) various other service orders

Remittance – August

- 34,879 mailed-in payments
- 28,854 electronic payments
- 32,662 payments via RapidPay (EFT)
- 18,820 one-time bank account payments
- 7,222 credit card payments
- 3,566 store payments
- 2,257 payments via drop box or at front desk

Collections –August

- 18,835 accounts received a late charge
- Mailed 9,152 10-day delinquent notices, 7.2% of accounts
- Mailed 2,338 48-hour delinquent notices, 1.8% of accounts
- 354 accounts eligible for disconnect
- 341 accounts actually disconnected (including accounts that had been disconnected-for-non-payment that presented NSF checks for their reconnection)
- 0.12% write-off to revenue

Meter Statistics – Fiscal Year to August 31, 2017

- 0 meter retrofits completed
- 202 meter exchanges completed
- 362 new business meter sets completed
- 123,165 meters currently installed

MONTHLY CONSERVATION REPORT

Friday, September 8, 2017

Conservation Response Initiation Type (to-date)

Drive-bys	4731
Deliveries	53
Hotline Reports	249
Email Reports	203
Total	5236

Watering Violations Observed (to-date)

Waste	545
Wrong Day	4001
Wrong Time	590
All Violations	5136

Water Watchers Actions Taken (to-date)

Educational Visits	2458
A.M. Letters	2503
Courtesy Calls	244
No Actions	30
All Actions	5235

Water Devices Supplied (to-date)

Faucet Aerators	0
Hose Timers	20
Nozzles	46
Low-flow Shower heads	1
Tree Root Feeder	0
All Devices	67

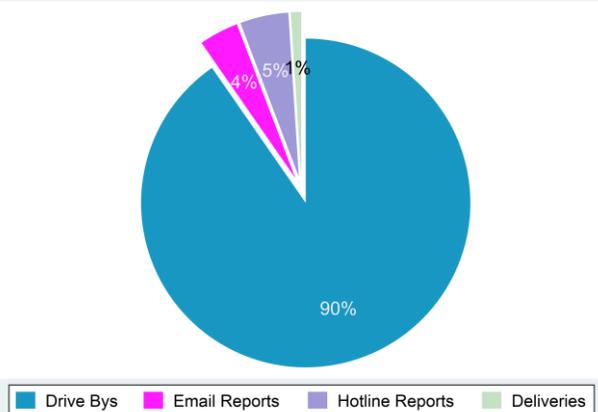
Additional Conservation Actions (to-date)

Water Usage Reviews	1248
Tree Care Visits	96

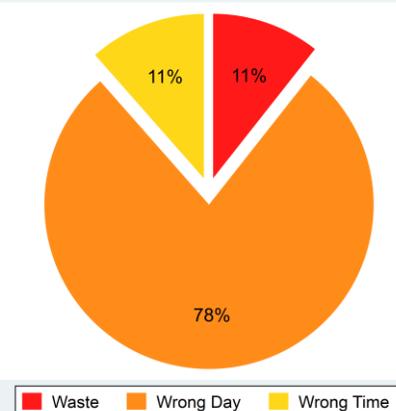
Number of Customers Registered for Workshops (to-date)

Irrigation System Start-up #1	Cancelled
Irrigation System Start-up Workshop #2	12
Irrigation System Start-up Workshop #3	20
Landscape Planning & Design Workshop	31
Tree Care Workshop	23
Easy Drip System Maintenance Workshop #1	32
Easy Drip System Maintenance Workshop #2	0
Easy Sprinkler System Maintenance Workshop #1	21
Easy Sprinkler System Maintenance Workshop #2	0
Walking Tour, Part 1 - University Ridge Park	14
Walking Tour, Part 1 - River School Farm	51
Walking Tour, Part 2 - Valley Wood Park #1	40
Walking Tour, Part 2 - Valley Wood Park #2	12
Winterize Your Irrigation System Workshop #1	2
All Workshops	258

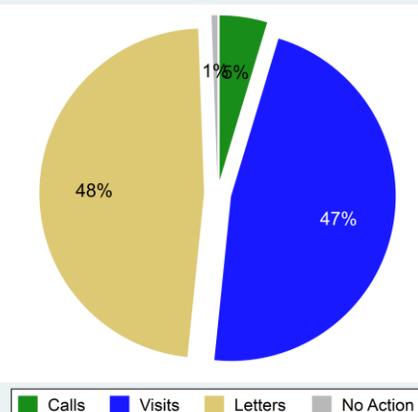
Water Watcher Response Initiation Types
2017



Water Violation Types Observed by Conservation Consultants
2017



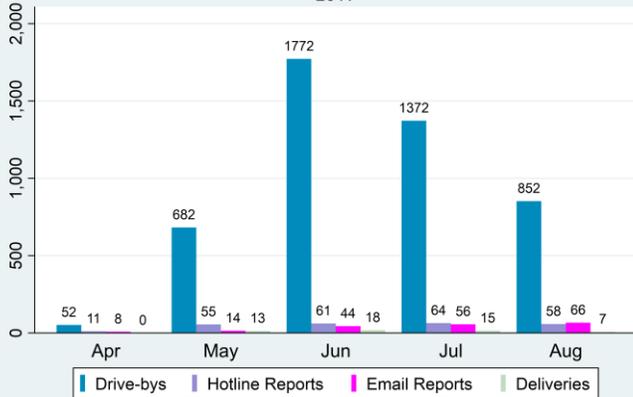
Water Watcher Actions Taken by Conservation Consultants
2017



MONTHLY CONSERVATION REPORT

Friday, September 8, 2017

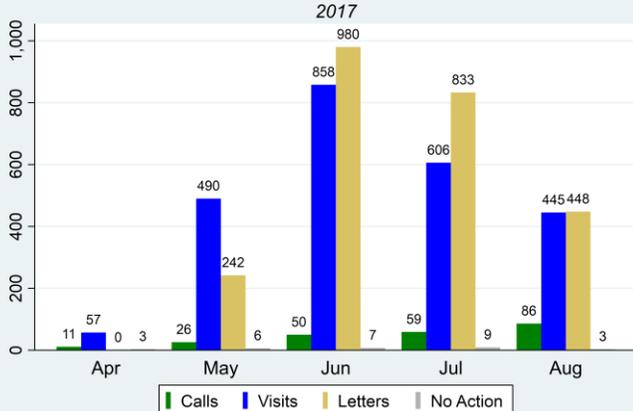
Water Watcher Initiations Received Monthly
2017



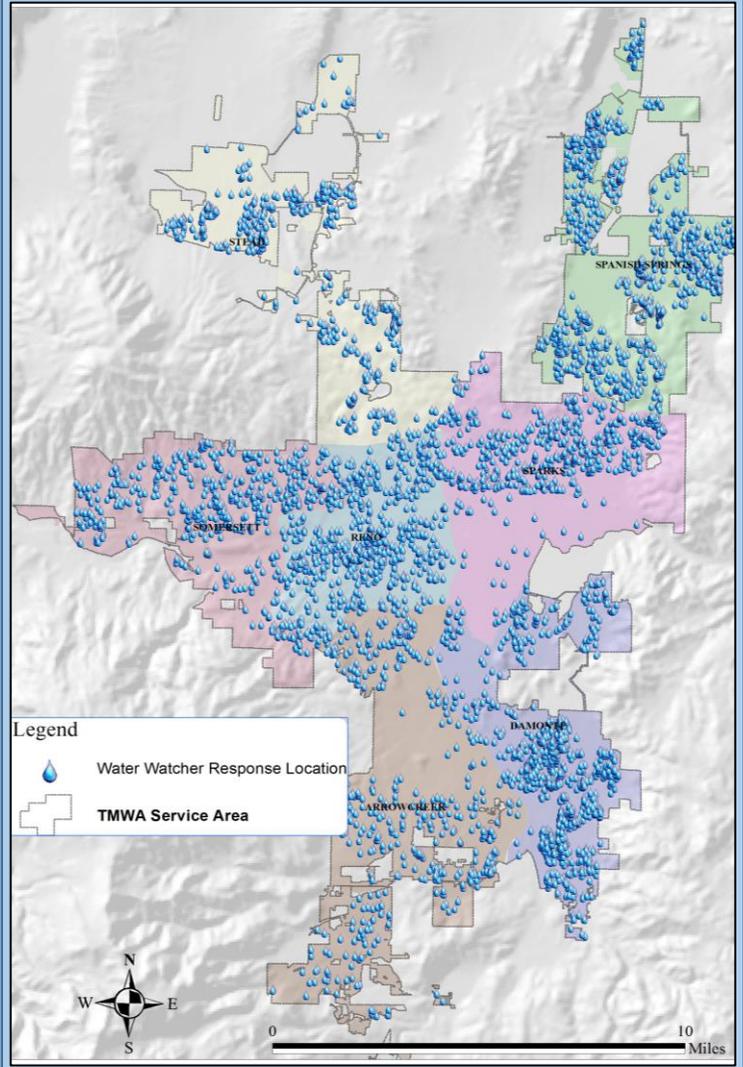
Water Violations Observed Monthly
2017



Water Watcher Actions Taken Monthly
2017



TMWA Water Watcher Response Map



RECAP –The season is winding down as we enter the last month of the irrigation season. While the number of wrong day violations dropped last month, observed water waste rose slightly from July. Also, this month we say goodbye to our long-time Senior Conservation Coordinator, Necie Schlesener, whom is retiring. We wish her all the best in her future endeavors. You will be missed, Necie!!!



STAFF REPORT

TO: Chairman and Board Members
THRU: Mark Foree, General Manager
FROM: John Zimmerman, Manager, Water Resources
DATE: 12 September 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	5,749.05 AF
Purchases of water rights	0.00 AF
Refunds	3.91 AF
Sales	- 71.98 AF
Adjustments	0.00 AF
Ending Balance	5,680.98 AF

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

WATER SERVICE AREA ANNEXATIONS

There were no annexations during this reporting period.



TMWA Board Meeting

Wednesday, September 20, 2017

Press Clippings

August 10, 2017 – September 13, 2017



Another tax increase? Truckee River flood project needs funding

[Anjeanette Damon](#), adamon@rgj.com Published 2:45 p.m. PT Aug. 17, 2017 | Updated 2:48 p.m. PT Aug. 17, 2017



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(Photo: JASON BEAN/RGJ, RENO GAZETTE-JOURNAL-USA TODAY NETWORK)

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Washoe County voters may face another tax increase decision next year depending on the work of a new committee convened to figure out how to fund \$420 million in Truckee River flood projects.

The committee, created by the Nevada Legislature, is charged with crafting a funding package that includes a fee imposed on properties directly affected by flooding as well as a tax increase paid by the entire county. It held its first meeting Thursday.

Under the law, the committee will be able to consider raising property taxes, real estate transfer taxes, car registration taxes or room taxes. The committee will not be able to propose an increase in the sales tax, which voters raised last year to fund school infrastructure.

Voters will have the final say over whether taxes are increased for the project, while the board of the Truckee River Flood Management Authority will impose the fees that must be part of any funding package.

The funding is needed as a local match for \$180 million in federal money for which the project is eligible.

"We can't leave those federal dollars sitting in D.C.," said Assemblyman Mike Sprinkle, D-Sparks, who sponsored the legislation creating the committee. He is also a member of the committee.

The project under consideration has been in the works for more than a decade as local officials struggled to come up with a funding mechanism for it. In 2015, the flood authority board rejected a fee program that it spent \$1.2 million researching, saying the ultimate package would be too onerous on property owners.

So far, the flood authority has helped build the new Virginia Street Bridge and the relocation of the Vista drain east of Sparks with existing funding.

"We have developed a 100-year program that will basically protect us from all the known floods that have hit this area since records have been kept in the early 1900s," said Jay Aldean, executive director of the flood authority. "It is a local plan that we put together ourselves."



A 55-acre parcel sought by Washoe County for flood control improvements is inundated by floodwaters along with surrounding land during the January 1997 flood. The parcel can be seen below and to the left of the Hilton and above and to the left of the bright roof in the center right of the photo. (Photo: Marilyn Newton/RGJ)

The project, however, will only help those affected when the Truckee River itself floods, including industrial areas of Sparks, the Reno-Tahoe International Airport and some parts of downtown Reno.

The project will not help victims of the most recent floods, including homeowners in Lemmon Valley who are still underwater from winter storms or homeowners inundated when the area's irrigation ditches and creeks flood.

Citizen activist Jeff Church attended the committee's first meeting to protest the imposition of another tax.

"We already pay sales tax for flood control," he said, referring to a 1998 sales tax increase of 1/8 cent. "Let those who build in the floodplain pay their own way."

The [committee is mostly made up](#) of industry representatives and lobbyists for real estate agents, retailers, industrial properties, the Chamber, builders and labor unions. One retired engineer sits on the committee. Sprinkle and state Sen. Julia Ratti, D-Sparks, are the only elected officials who are members. Former Councilman Dave Aiazzi also is on the committee.

The committee must have its recommendation on a tax increase ballot question to the Washoe County Commission by April 2. The commission will decide whether to put the question on the ballot.



Buy Photo

Flood water is seen in Lemmon Valley on March 17, 2017. (Photo: JASON BEAN/RGJ, RENO GAZETTE-JOURNAL-USA TODAY NETWORK)

If the committee recommends and the voters approve a property tax increase, it would not be subject to the various caps that protect taxpayers from skyrocketing tax bills.

After the committee figures out a funding package for the Truckee River flood project, it will turn its attention to developing a regional plan that might address flooding outside of the river. But no money from the flood project tax increase could be used for whatever recommendations the committee recommends for regional flooding.

This winter, which produced a record amount of rainfall, the Truckee River did not flood. But the network of irrigation ditches that crisscross southwest Reno spilled their banks, flooding houses and ranches. Flooding creeks inundated southeast Reno. And Lemmon Valley experienced catastrophic flooding and remains under water.

"We thought this would be a good avenue to look at other flood management priorities we may need in the future, but the premise behind the bill was to raise money and that money can only be used for the current project," Sprinkle said.

Officials promise to protect Lake Tahoe with \$415 million

Updated 10:29 am, Wednesday, August 23, 2017

Federal officials promised Tuesday to protect Lake Tahoe for future generations, a pledge that one said doesn't rule out also maintaining a robust regional economy. California's junior senator, Kamala Harris, a Democrat who took office in January, said officials can protect the delicate Lake Tahoe Basin and the cold, deep cobalt lake straddling the California and Nevada border without devastating a \$5 billion annual economy that largely caters to tourists, skiers, gamblers and recreation-seekers.

SEE ALSO: Readers' photos show off Lake Tahoe, brimming with water and beautiful

LATEST NEWS VIDEOS

Harris used the 21st annual Lake Tahoe Summit to call for "rejecting false choices on this issue of the environment and suggesting that you're either in favor of the economy of you're in favor of the environment. That's nonsense. That's a false choice which we just reject. We can do both."

Democratic U.S. Sen. Dianne Feinstein of California and Republican U.S. Sen. Dean Heller of Nevada co-authored the Lake Tahoe Restoration Act that former President Barack Obama signed into law in December. It authorizes \$415 million in federal money over seven years for projects to improve the lake's famed water clarity, reduce the risk of catastrophic wildfires, counter invasive species and protect threatened native species and wildlands.

The 2017 Lake Tahoe Summit will be hosted by California Senator Dianne Feinstein from 10:00 a.m. to 12:00 p.m. on Tuesday, August 22 at Valhalla Tahoe in South Lake Tahoe

Media: KCRA / KQCA US

Heller noted that part of the new money will go toward nonpolluting transportation projects like new bike trails, along with restoring deteriorating roads and bridges and seeking other means of reducing congestion and protecting the lake.

The first Lake Tahoe Restoration Act, in 2000, authorized the federal government to spend \$415 million over 10 years to restore the lake.

SEE ALSO: \$75 million mansion is most expensive lakeside Tahoe house ever

Feinstein said that helped lead to more than \$2 billion in combined spending by the federal government, California, Nevada, local communities and private businesses. It funded more than 500 improvement and restoration projects, with 139 more in progress.

Feinstein, who hosted the summit along the lake's south shore, said a key focus is on countering the effects of climate change. She noted a recent scientific report from University of California, Davis, researchers that found the lake is warming much faster now than its historical average.

SEE ALSO: Smoke from Mariposa fire chokes Tahoe Basin, creates apocalyptic sunset at the lake

Democratic U.S. Sen. Catherine Cortez Masto of Nevada said in her prepared remarks that the nation is at a pivotal point not just for the lake, but "for the health and sustainability of our public lands and environment."

She criticized Republican President Donald Trump for considering revoking some national monument designations, a decision she said would "damage our rural economies and destroy our natural heritage."

Business

International water tech companies moving into Nevada

A Syrinix system used for recording water pressure at a hydrant near Sahara Avenue and Maryland Parkway on Thursday, Aug. 3, 2017. (Patrick Connolly/Las Vegas Review-Journal) @PConnPie



A Syrinix system used for recording water pressure at a hydrant near Sahara Avenue and Maryland Parkway on Thursday, Aug. 3, 2017. (Patrick Connolly/Las Vegas Review-Journal) @PConnPie

New technology monitors pressure fluctuations in water system (Erik Verduzco/Las Vegas Review-Journal)

By Nicole Raz Las Vegas Review-Journal

August 12, 2017 - 7:53 am

Updated August 12, 2017 - 8:25 pm

Lyle Mariam, a mechanical engineer with the Las Vegas Valley Water District, shows the district's newest technology, a water pressure recording system called Syrinix, at a hydrant near Sahara Avenue and Maryland Parkway on Thursday, August 3, 2017. Patrick Connolly Las Vegas Review-Journal @PConnPie

Lyle Mariam, left, a mechanical engineer with the Las Vegas Valley Water District, and Tony Hamer, an asset management technician, show data on a laptop from a new water pressure recording system called Syrinix at a hydrant near Sahara Avenue and Maryland Parkway on Thursday, Aug. 3, 2017. (Patrick Connolly/Las Vegas Review-Journal) @PConnPie

Lyle Mariam, a mechanical engineer with the Las Vegas Valley Water District, shows data on his phone from the district's newest technology, a water pressure recording system called Syrinix, at a hydrant near Sahara Avenue and Maryland Parkway on Thursday, Aug. 3, 2017. (Patrick Connolly/Las Vegas Review-Journal) @PConnPie

Lyle Mariam, a mechanical engineer with the Las Vegas Valley Water District, shows data on a laptop from the district's newest technology, a water pressure recording system called Syrinix, at a hydrant near Sahara Avenue and Maryland Parkway on Thursday, Aug. 3, 2017. Patrick Connolly Las Vegas Review-Journal @PConnPie

Tony Hamer, an asset management technician, unlocks a box containing a Syrinix system while Lyle Mariam, a mechanical engineer with the Las Vegas Valley Water District, stands by at a hydrant near Sahara Avenue and Maryland Parkway on Thursday, Aug. 3, 2017. (Patrick Connolly/Las Vegas Review-Journal) @PConnPie

Tony Hamer, an asset management technician with the Las Vegas Valley Water District, shows the district's newest technology, a water pressure recording system called Syrinix, at a hydrant near Sahara Avenue and Maryland Parkway on Thursday, Aug. 3, 2017. (Patrick Connolly/Las Vegas Review-Journal) @PConnPie

Lyle Mariam, a mechanical engineer with the Las Vegas Valley Water District, shows the district's newest technology, a water pressure recording system called Syrinix, at a hydrant near Sahara Avenue and Maryland Parkway on Thursday, Aug. 3, 2017. (Patrick Connolly/Las Vegas Review-Journal) @PConnPie

A Syrinix system used for recording water pressure at a hydrant near Sahara Avenue and Maryland Parkway on Thursday, Aug. 3, 2017. (Patrick Connolly/Las Vegas Review-Journal) @PConnPie

A Syrinix system used for recording water pressure at a hydrant near Sahara Avenue and Maryland Parkway on Thursday, Aug. 3, 2017. (Patrick Connolly/Las Vegas Review-Journal) @PConnPie

Three international water technology companies are setting up shop in Nevada.

They won't have a huge employment presence, with around 30 projected direct jobs within two years combined, but WaterStart Executive Director Nate Allen said they are helping to create a local hotbed for innovation in water technology.

"We started WaterStart because Nevada has for a long time had a really big appetite for new water technologies and being innovative in how we manage water, but we've never leveraged that demand into building an actual innovation sector here," Allen said.

Founded in 2013, WaterStart works with state agencies and groups to support and bring water technology companies into the state.

"It's kind of that phase of where we're at now," Allen said. "Two years ago we had to start from scratch finding tech companies, we had to start from scratch identifying priorities, and there's just a time delay in getting set up."

To have three companies — Syrinix, RedEye and STAR Water — land in Nevada in one quarter shows that the nonprofit is "gaining momentum," he said, adding that the second quarter of 2017 was the best quarter yet for the nonprofit.

Syrinix

Syrinix, headquartered in Norwich, United Kingdom, will finish setting up an office by the end of the month inside WaterStart at the Desert Research Institute.

It will be the company's first U.S. office and will serve as headquarters for all of Syrinix's operations in North America, Syrinix CEO James Dunning told the Review-Journal via email.

"Our focus is on providing water utilities with data-led insights that can help them monitor and manage their networks more effectively," Dunning said.

The decision to create an office in Nevada follows a pilot project the Southern Nevada Water Authority and the Las Vegas Valley Water District have been doing with Syrinix since January 2016.

The water utilities placed Syrinix sensors around different areas of the city to monitor the water pressure running through the city of Las Vegas' and unincorporated Clark County's 6,500 miles of water transmission and delivery pipelines.

Southern Nevada Water Authority spokesman Bronson Mack said the authority has "adjusted" some of its operations using data from the Syrinix technology to decrease pressure fluctuations, which is a benefit to the long-term health of the water infrastructure.

Mack said the authority plans to place sensors along Las Vegas Boulevard next within the next few months, adding another tool to detect leaks.

Syrinix is recruiting an office manager and an operations manager to work out of that space and plans to hire a third employee within the next 12 months, Dunning said.

STAR Water

Sydney, Australia based STAR Water is working to establish its first U.S. office inside WaterStart at the Desert Research Institute.

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The company creates water filtration systems using locally sourced organic materials, such as different types of sands. Institute Director of Hydrology Kumud Acharya said researchers are testing different materials to see how well they filter out toxins and heavy metals.

After researchers find the best natural materials, STAR Water CEO Chris Rochfort said the company will install the filters “in water-sensitive locations” over the next year.

“We then engage local manufacturers to manufacture the filters to our specifications and they are then installed by contractors,” Rochfort said.

The filtration system can be installed either above or below ground, he said, around new buildings to filter urban runoff or at mining sites to filter wastewater before it contaminates groundwater.

The system also has indoor industrial applications, he said.

“We are in negotiations with two manufacturers in Nevada, one in Las Vegas and one near Reno,” Rochfort said.

The company will hire 10 to 20 local technical, administrative, management and sales support staff as the company grows.

“The technical staff will provide assistance to local manufacturers and the supply chain while sales support staff will assist our distribution channel,” Rochfort said.

RedEye

Brisbane, Australia-based RedEye opened its first office in Nevada in January with two relocated employees from Australia to start local operations and made their first new hire in the spring. It is the company’s first office outside of Australia.

“RedEye developed a cloud-based and mobile solution for large-asset owners, such as water utilities, to help manage engineering drawings and data,” said Roman Galikov, RedEye’s general manager for North America, via email.

Greg Kodweis, director of infrastructure management at the water authority, said digitizing blueprints and internal data has been a significant time and paper saver.

Galikov said RedEye hopes to bring their system to additional water and power utilities across the United States.

The company plans to hire eight employees as it grows, Galikov said.

Contact Nicole Raz at nraz@reviewjournal.com or 702-380-4512. Follow @JournalistNikki on Twitter.

League to Save Lake Tahoe to host an aquatic invasive species training session in Incline Village

- Article
-



Tribune File Photos |

A Tahoe Keys Property Association boat crew pulls invasive weed fragments from the canals on Tuesday. Fragments are usually kicked up during harvestin...

For the past half century, the League to Save Lake Tahoe has worked to raise awareness about protecting the lake's famous clarity.

The organization will continue that undertaking on Wednesday, Aug. 23, partnering with High Sierra Gardens to host Eyes on the Lake, an aquatic invasive species training session.

Whether it is spotting a floating piece of Eurasian watermilfoil while paddling along the lake, or coming across a chunk of curlyleaf pondweed, the League to Save Lake Tahoe wants to know, and wants more trained eyes looking for these invasive species.

Eyes on the Lake is the league's volunteer program, aimed to curtail the spread of aquatic invasive plants by teaching the public to identify and report them to its website.

"It's our program to encourage locals and visitors that while they are out on the water, to be our eyes," Natural Resources Manager Zack Bradford said. "We give volunteers an introduction on what are the aquatic invasive species in Tahoe. We have a lab set up where they can see these plants and we also take them out in the field, go to an infestation and see what it looks like, and give them a chance to identify invasive plants on the lake."

The group will meet at High Sierra Gardens in Incline Village to host a training session on identifying aquatic invasive plants and what to do when they're spotted.

RECOMMENDED STORIES FOR YOU

[Pine Nuts: An open letter to Kim Jong-un](#)[Workshops set for new hemp regulations in Nevada](#)[Truckee man indicted for \\$1.7 million investment scheme](#)[Creating a terrarium can add serious character to your Lake Tahoe home](#)

Bradford said many of the training sessions the organization puts on throughout the summer months take place in the field or in laboratory settings, but Wednesday's event will be more casual with wine and food being served during the session.

"We wanted to give more opportunity for the community to interact with scientists and learn more about efforts that are going on in Tahoe," Bradford said. "We are going to have more of a free-flowing training with getting the other agencies involved in the state of the lake with the spread of aquatic invasive species."

Members of the Tahoe Environmental Research Center and Tahoe Resource Conservation District will also be on hand.

Tahoe's two primary aquatic invasive species — Eurasian watermilfoil and curlyleaf pondweed — hurt the lake's clarity by outcompeting native plants and altering near-shore environments, according to Bradford, which can form suitable environments for other invasive species.

In the early 1960s, the lake's clarity level was measured at over 100 feet in depth, according to information from the Tahoe Regional Planning Agency, but since that time the average annual clarity has dipped as low as 65 feet and now hovers around 75 feet.

The Eyes on the Lake's free training will take place from 5:30 p.m. to 7:30 p.m. To RSVP for the event contact protect@keptahoeblue.org.

"It's a great opportunity for visitors, locals — everybody coming here," Bradford said. "We're all enjoying the lake, and this is something easy to do while you're out playing and having fun."

To report an aquatic invasive plant, visit keptahoeblue.org/our-work/current-priorities/eyes.

Share

TMWA Board to Consider Options for Damaged Farad Hydroelectric Plant

August 17, 2017 Carla O'Day



The Farad Hydroelectric Plant, and a recently-constructed footbridge that's part of the Tahoe-Pyramid Bikeway. Photo: Tahoe Pyramid Bikeway

The Truckee Meadows Water Authority (TMWA) board decided Wednesday not to pursue immediate reconstruction of the Farad dam and hydro facilities that were damaged in a flood two decades ago.

Board members instead are asking for public input on what should happen to the inoperative facility in Nevada County, Calif. it's about to acquire as a result of litigation. Some had questions and floated ideas that included use for educational opportunities, open space, and residential living.

"Something not good could turn into something great," Reno City Councilwoman Neoma Jardon said.

Janet Philips, Tahoe-Pyramid Bikeway president, told the board that access to the area should remain regardless of what TMWA decides to do with the property.

"My hope is that we can get a permanent easement for the trail before it's sold to someone else," Philips said.

TMWA staff said there wouldn't be a sufficient return on investment for the utility to pursue reconstruction of the Farad dam and that other options for the facility should be explored. Potential problems include current availability and pricing of hydroelectric resources and anticipated uninsured costs of reconstruction.

“It’s in a bad state of disrepair,” said Pat Nielson, TMWA director of distribution maintenance and generation.

Nielson said contractors interested in salvage material have contacted him.

Farad Hydroelectric Plant, built alongside the Truckee River in 1899, was the first electric generating plant on the eastern slope of the Sierra Nevada. Mining interests bankrolled the project so water could be pumped out of the Virginia City silver mines as the mine shafts were sunk deeper into the earth.



Farad Hydroelectric Plant after the 1966 Truckee earthquake. Photo: **USGS**

BACKGROUND

- TMWA purchased the hydroelectric facility and some of its assets, according to an agreement in January 2001 between TMWA and Sierra Pacific Power Co., known today as NV Energy. As a result of damages from a 1997 flood, the Farad facility wasn’t operational then and Sierra Pacific was involved in litigation with insurance companies over coverage disputes. Because of this, the purchase agreement provided for a post-closing delivery of the facility.
- Insurance litigation delayed delivery of the Farad facility but TMWA and Sierra Pacific entered into a settlement agreement in June 2014. The agreement stated Sierra Pacific would assign TMWA 100 percent of all future insurance proceeds related to Farad and all claims for interest due for delayed payment. This includes payments under actual cash value coverage, replacement coverage, and destruction and increased cost of construction policies. The exact amount of insurance proceeds remain subject to litigation between Sierra Pacific and insurance underwriters.
- In January 2017, the Second Judicial Court entered an order affirming \$12.2 million of actual cash value plus interest and said Sierra Pacific is entitled to replacement cost coverage for reconstruction of the Farad facility. Therefore, Sierra Pacific can seek reimbursement for invoiced construction costs in excess of actual cash value coverage up to policy sub-limits of \$62 million.
- The court order also says that Sierra Pacific and TMWA may only recover replacement costs from insurers if electing for replacement coverage by April 2017. If so, reconstruction of the dam must take place within three years of the conclusion of the litigation. Assuming no further post-judgement proceedings on the interest payment occur, the deadline will expire Jan. 18, 2020. Since the deadline applies only to replacement coverage, nothing prevents TMWA from reconstructing the Farad facility at a later date.
- Sierra Pacific timely elected replacement coverage pursuant to the settlement agreement, which requires it to transfer the Farad facility to TMWA within 120 days after the insurer’s acceptance, granted July 17, 2017.

TMWA Debates Selling Water at Wholesale to Private Utility

August 17, 2017 Carla O'Day



120 development in Verdi. Image: Colliers International

Truckee Meadows Water Authority (TMWA) is struggling to get on board with selling water at wholesale prices to a private water company doing business in the Verdi area.

The TMWA board on Wednesday considered the request from West Reno Water Company Inc. but tabled it to allow ample time for customers in the Verdi area to provide feedback.

Reno City Councilwoman Jenny Brekhus said she's seen inconsistent water information related to the Meridian 120 development and was concerned West Reno Water would be unaccountable to the public. Meridian 120 is a 783-acre mixed-use project near Verdi off Interstate 80.

"Private water companies don't have a great track record," Brekhus said.

Washoe County Commissioner Vaughn Hartung agreed.

"They want to buy water from us at a wholesale rate and I have a difficult time with this," Hartung said. "If something goes awry, TMWA has to back them up."

Nobody from West Reno Water addressed the board at the meeting.

West Reno Water plans to provide retail water service to certain areas within its service territory in the Boomtown and Verdi areas. It will own, maintain, and operate its distribution system for retail water service, including wells, transmission, and distribution mains and storage tanks. West Reno has separate groundwater supplies that it intends to use to serve all or a portion of the proposed development within

its territory, but desires to receive wholesale water service from TMWA to serve a portion of its total water demand to allow for conjunctive management of its groundwater resources with surface water.



TMWA Workers Install a Water Main Pipeline.

Photo: TMWA

TMWA doesn't have the infrastructure in place to immediately serve the Verdi area but it has developed a Verdi Area Plan to meet the projected buildout demands. Portions of the facilities have been, or are currently being constructed, including a new water main extension to convey water to the West Meadows development, according to TMWA. The water system currently being extended into the Verdi area will be a temporary extension of the Mogul/Verdi Business Park tank zone, which has 150 gallons per minute of excess supply capacity.

Upon completion of the Mogul Booster Pump Station upgrade, the West Meadows subdivision oversizing and the Somerset Road to Riverbelle Mobile Home Park improvements expected in Spring 2018, TMWA will have 150 gallons per minute of system capacity available to the Verdi area on a first-come, first-served basis.

West Reno has initially requested 50 gallons per minute of supply capacity, which would be provided as a year-round, base load supply. The necessary Truckee River water rights required to support this demand is approximately 80 acre feet per year. These water resources could be purchased through TMWA or acquired on the open market.

If approved, a wholesale service would be billed to West Reno Water under a rate schedule, which would generate about \$3,400 per month. Required facility fees for the proposed wholesale service amount to \$602,500, according to TMWA.

TMWA Debates Selling Water at Wholesale to Private Utility

Truckee Meadows Water Authority nixes rehab for 2.8-MW Farad hydropower plant

SPARKS, Nev.

08/18/2017

By [Michael Harris](#)

Associate Editor



The Truckee Meadows Water Authority will not pursue the reconstruction of the 2.8-MW Farad hydroelectric plant, per a decision made by the agency's board on Wednesday.

Located on the [Truckee River](#) in Nevada County, Calif., the facility was constructed by the Truckee River General Electric Co. in 1899 to help power silver mines in the region. Farad operated under TRGE's successor, the Sierra Pacific Power Co., until 1997, when a flood knocked the plant out of operation.

TMWA has been tasked with deciding Farad's fate because the authority is about to assume control of the facility, following years of litigation related to insurance coverage associated with the flood. Terms of the settlement dictate that TMWA could only collect insurance payments if it completes reconstruction of Farad within three years of litigation that was settled in April, though a report submitted by the board's general counsel last week indicates it has no intention of rehabilitating the project.

"Given current availability and pricing of hydroelectric resources and anticipated uninsured costs of reconstruction, staff believes there does not appear to be a sufficient return on investment to pursue reconstruction," the document says.

For more business news, [visit here](#).

Un

Uncertainty Over Water Source for Tesla and Corporate Giants in Reno

No one seems to know how much water a massive desert industrial complex will ultimately require. But treated urban wastewater may help protect the imperiled Truckee River as more big companies move in.

WRITTEN BY [Matt Weiser](#)

PUBLISHED ON σ Aug. 22, 2017

READ TIME Approx. 6 minutes



Mustangs

graze Thursday, June 24, 2015, on the open range at the Tahoe Reno Industrial Center about 15 miles east of Sparks, Nev., along U.S. Interstate 80 near where Tesla Motors is building a \$5 billion Gigafactory to produce batteries for its electric cars. The company has never revealed how much water the factory requires. A draft agreement

has been reached to deliver treated wastewater to the site from the Reno-Sparks area. Scott Sonner, AP

JUST 12 MILES east of Reno, Nevada, across a swath of brown and barren desert hills, some of the largest corporations in the U.S. are forming a new metropolis. Behemoths of manufacturing, retailing and computing are rushing to build new warehouses, data centers and factories at an industrial complex billed as the largest in the world.

The Tahoe Reno Industrial Center, or TRIC, sprawls across 107,000 acres of Storey County, a wedge of desert mountains and plains just east of the Reno metropolitan area. Tesla, Google, Ebay and Wal-Mart are some of the corporate luminaries that have bought in, with 11 million sq ft of pancake-flat industrial buildings already occupied. That's not even half the total that will eventually be built here.

It's a modern-day land rush that begs an important question: Where will all the water come from to serve these corporate ambitions?

Surprisingly, no one knows yet. Even the founders of the complex don't know how much water their powerful tenants will eventually require.

"I don't have any estimate on water needs from any of the companies at this point," said Lance Gilman, TRIC's director, who is also an elected Storey County commissioner. "You gotta set the crystal ball on the table and take your best guess and go for it."



A satellite image of the Tahoe Reno Industrial Center in Nevada, with the Truckee River and Interstate 80 at the top, and the Tesla Gigafactory in the lower right. (Image Courtesy Google Maps)

Tesla, the wunderkind electric-car builder, began producing lithium-ion batteries this year at its Gigafactory on the site, which the company calls the “biggest building in the world.” In just three years the factory has grown to 1.9 million sq ft and may eventually reach 10 million.

Yet Tesla has never revealed how much water its Gigafactory might need. And Nevada officials apparently never bothered to ask, despite twisting arms for months to assemble a \$1.4 billion incentive package that lured Tesla to the state.

“I’ve never heard a firm number,” said Jason King, Nevada’s state engineer, whose job is to oversee all water rights in the state.

TRIC is serving tenants from groundwater wells. An extensive on-site water recycling system stretches this supply. It also holds water rights in the Truckee River, which flows adjacent to the complex. But those rights are restricted during drought conditions, which are becoming increasingly common. Gilman acknowledges a more reliable long-term water supply is needed.

In recent weeks, a **solution** has emerged: Reno and Sparks have agreed to transfer 4,000 acre-feet per year of treated urban

wastewater to the industrial complex. This wastewater is currently discharged from the regional sewage treatment plant into the Truckee River, sometimes with undesirable effects on water quality because the effluent is heavy with nitrates, said Reno City councilman David Bobzien.

In return, TRIC and the state of Nevada would relinquish an equivalent amount of Truckee River water rights. This could result in a net water quality benefit because the river water – left instream – would replace treated wastewater now discharged to the river.

The price TRIC will pay for the wastewater has yet to be determined.

Bobzien said the agreement is a positive development for the region, because it ensures the industrial center can continue growing without impacting the Truckee River. He also said the deal has come a long way from the first proposal offered by TRIC and its tenants, which “wasn’t well received” by many in local government.

“The initial proposal was, ‘Hey, you guys pay for some infrastructure, build us a pipeline, and we’ll take all the wastewater off your hands.’ As if it was going to be this wonderful thing for us,” Bobzien said. “Overall, the concept is in a much better place now.”

Most of the water that serves the Reno-Sparks metro area comes from the Truckee River. This ribbon of Sierra Nevada snowmelt begins at Lake Tahoe and ends at Pyramid Lake, a vast saline oasis in the desert belonging to the Pyramid Lake Paiute Tribe.

The tribe and numerous agencies have been working for decades to restore rare fish to the lake and the river that feeds it, including Pyramid Lake Cui-ui and Lahontan cutthroat trout. And for 90 years, a federal watermaster has overseen the river to make sure every drop is used wisely.

As a result, new demands on the Truckee River are viewed with broad concern, including TRIC's 4,000 acre-feet of instream water rights.

"Ever since European settlement, we've been using and abusing that river," said Mickey Hazelwood, Truckee River project manager for the Nature Conservancy, which has led an ambitious restoration effort on the river for 15 years. "What buildout will look like for that industrial center, nobody really knows."

The deal to share treated wastewater could alleviate these concerns.

The draft agreement would give TRIC access to 4,000 acre-feet of treated wastewater annually for 30 years, with two 20-year extensions available. TRIC will have to spend about \$35 million building a 10-mile pipeline to access the wastewater, plus another \$30 million for onsite improvements to manage and distribute the water to its tenants.

Gilman said the effort is worth it, because a reclaimed wastewater supply would be "absolutely secure."

"We do know there will be a significant need for the reclaimed water," he said. "It's as secure as you can get, because we're taking it out of a resource stream that's coming from all the development in the Reno-Sparks market area."

Tesla is the star tenant at TRIC – and the biggest tenant. It also is certainly one of the largest water users.

Jason King, the state engineer, said he heard "very early in the process" of luring Tesla to Nevada that the company could require as much as 2,500 acre-feet of water per year for its battery manufacturing at TRIC. If true, that's almost half the total annual groundwater supply at the complex (5,400 acre-feet, according to Gilman) being absorbed by a single tenant.



Support beams are lowered into position during construction of the Tesla Motors, Inc., Gigafactory in July 2016 at the Tahoe Reno Industrial Center. The factory has now reached 1.9 million sq ft and this year began producing batteries for Tesla electric cars. The company claims it's the largest building in the world and may eventually reach 10 million sq ft. (Rich Pedroncelli, AP)

“It wasn't clear to me at the time whether that's once the Gigafactory is up and running, or whether it includes construction water,” King said.

Tesla officials declined to comment.

The Reno City Council is set to review the wastewater deal at its meeting Aug. 23, followed by the Sparks City Council in September. The two cities jointly operate the regional sewage treatment plant that produces the wastewater supply.

There are many details yet to be revealed. One of the most important concerns is the swap of treated wastewater for Truckee River water rights.

Although the wastewater sometimes exceeds nitrate limits allowed in the river, Bobzien said, it still represents an important component of overall Truckee River flows in such an arid environment.

The treated wastewater flow helps sustain fisheries. It also helps sustain water elevations in Pyramid Lake, which has been shrinking for decades as urbanization taps into the Sierra snowmelt that would otherwise reach the lake.

So if 4,000 acre-feet of treated wastewater is pulled out of the river, will the traded water rights replace that in equal measure? That remains to be seen.

Gilman, for instance, said the Truckee River water rights TRIC is contributing to the deal are not currently being tapped. Which means this water is already in the river, and will not replace the diverted wastewater.

“We’re actually not replacing water, we’re leaving what we could be taking in the river,” Gilman said.

For reasons like that, the Paiute Tribe remains skeptical of the deal. The tribe depends on Truckee River flows to sustain Pyramid Lake, the last remnant of a vast inland water body that has been sacred to its people for millennia.

“The main concern is that the river remain whole,” said Donna Noel, the tribe’s natural resources director. “We haven’t seen any details so far.”

The Nature Conservancy also remains wary of the agreement until more information emerges, said Hazelwood. The nonprofit has invested \$27 million in Truckee River restoration projects over the past 15 years, including some immediately adjacent to the TRIC site.

“The folks at the industrial center have been good neighbors to our restoration work,” he said. “I wish we knew enough to know where we as an organization stand on this.”

One thing the negotiations have already achieved is enlightening Reno and Sparks to the potential of their treated sewage effluent. Bobzien said it could be decades until area residents are ready to consider recycling that effluent to use as a drinking water

resource, as other communities have done. But it now seems like a possibility, at least.

“I think many in local government quickly realized the wastewater effluent – while it is a problem and a liability to us in terms of our discharge requirements – also has a value,” he said.

From Treatment To Tap: TMWA explains its annual water quality report (Video)

August 24, 2017 ThisIsReno Website Facebook Twitter YouTube LinkedIn

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Link to Video: <http://thisisreno.com/2017/08/truckee-tap-tmwa-explains-annual-water-quality-report-video/>

The Truckee Meadows Water Authority explains its water treatment process and where people can look at the region's annual water quality report.

Download the report: <http://quality.tmwa.com/>

Tour a TMWA facility in September: <http://tmwa.com/meeting/>

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The Truckee River Flood Management Authority Announces Members of the Truckee River Flood Control Project Needs Committee

August 21, 2017 By Chrisie Yabu [Comments](#)

Provides Overview on the Next Steps for the Truckee River Flood Management Project

Reno – The Truckee River Flood Management Authority (TRFMA) announced its committee members for the Truckee River Flood Control Project Needs Committee (FCPNC), the first step in establishing “a flood control project needs committee to recommend the imposition of certain taxes, fees, rates, charges, levies or assessments to fund the approved flood management project of the flood management authority.”

Assembly Bill No. 375 (AB 375) was signed into law on June 12, 2017 by Governor Brian Sandoval, enabling the Truckee River Flood Management Authority (TRFMA) to continue its mission to plan, engineer and construct flood project improvements that will protect the Truckee Meadows region from a 100-year major flood event. The 100-year plan will help avoid the life-threatening and economic impacts that a major flood event could cause in the future, and is intended to benefit the community as a top regional priority.

The 16-person FCPNC is as follows:

Jay Aldean, TRFMA, TRFMA Executive Director (non-voting member)
Julia Ratti, State Senate Nevada State Senator, Nevada State Senator
Mike Sprinkle, State Assembly, Nevada State Assemblyman
Marge Frandsen, Nevada Association of Realtors, Realtor at Trans-Action Realty 500
Lea Tauchen, Retail Association of Nevada, Vice President of Administration and Government Affairs for the Retail Association of Nevada
Scott Smith, Washoe County, Retired Engineer
Dave Aiazzi, City of Reno, Former Reno City Council Member and Former TRFMA Board Member
Dick Mills, City of Sparks, Commercial Property Owner
Rod Young, NV AFL-CIO, Retired from the Operating Engineers Local No. 3
Governor’s Office appointee – To be determined
Mike Kazmierski, EDAWN, EDAWN President and CEO
Andrew Diss, Nevada Resort Association, Director of Government Affairs, Grand Sierra Resort
Tray Abney, Reno-Sparks Chamber of Commerce, Director of Government Relations and Vice-Chair of the FCPNC
Bob LaRiviere, Builders Association of Northern Nevada, Member of the 2017 BANN Associate Directors, President of CFA, Inc. and Chair of the FCPNC
Dean Schultz, Airport Authority, Executive Vice President/COO (non-voting member)
Matthew Duplantis, NAIOP, Assistant Vice President at Global Logistic Properties

“It will be a community effort to provide the best solution to prevent major flooding for our region that will benefit our citizens,” said Jay Aldean, executive director, TRFMA. “Our goal is to utilize the approved federal funding from the Army Corps of Engineers along with the additional local matching funds needed to construct the flood project.” The FCPNC will be tasked with determining how to best address the funding needs to meet the local obligation in order to take advantage of federal funding available through the Army Corps of Engineers. Once the total project funding is secure, the TRFMA will partner with the Army Corps of Engineers and build the project; otherwise, the federal commitment will be lost.

The FCPNC has two objectives. It will focus understanding on the background, history and needs of the project and the project components, and work toward developing a recommendation for best mix of rates, fees and taxes to fund the flood project. Before April 2, 2018 the FCPNC will formulate their recommendation into a ballot question to be considered by the voters of Washoe County. The FCPNC must also provide a report that addresses regional drainage issues for each local government entity, and a recommended manner in which to address them. This report will be specific to outlying areas in the county, and describe those areas most affected by recent flooding and those areas not covered by the existing plan – all within 18 months.

While the Board of Directors of the TRFMA has the authority to propose a fee, which may partially fund the project, the FCPNC may also add a proposal for voter consideration for the implementation of taxes for the remaining amount. The FCPNC:

Must include a proposal for the imposition of a fee, rate or charge that the governing body of the flood authority must approve

May include a proposal for imposition of one or more taxes

The flood management authority shall impose the fee as recommended. If a tax is recommended, the Board of County Commissioners shall submit a question to the voters at the general election of 2018 asking if the proposed taxes should be imposed.

Under AB 375, the taxes that may be considered include: room tax, supplemental government services tax (vehicle privilege tax); real property transfer tax; property tax; or any other tax that the county is authorized to impose under State law. Sales tax may not be considered.

For more information on the Truckee River Flood Management Authority, please visit trfma.org.

About the Truckee River Flood Management Authority (TRFMA):

The Truckee River Flood Management Authority (TRFMA) is responsible for the oversight and implementation of the Truckee River Flood Management Project. The agency is a joint powers authority created in 2011 by an Interlocal Cooperative Agreement executed among Washoe County, the City of Reno and the City of Sparks. The agency’s primary mission is to plan, design, build, operate and maintain infrastructure to reduce flood damages, safeguard public health and create a more resilient community.

Filed Under: Press Release WireTagged With: [The Truckee River Flood Management Authority, TRFMA](#)

Effluent Pipeline to Tesla, Switch Gets Tentative Approval From City

August 24, 2017 Bob Conrad Website Facebook TwitterLinkedIn



Former Southern Nevada “water czar” Pat Mulroy testified yesterday at City Hall in favor of project that will deliver treated effluent from the Reno area to Storey County. At right is Switch’s Adam Kramer.

The Reno City Council yesterday contemplated changes to a proposed agreement **that will pipe 4,000-acre-feet of treated effluent from the Truckee Wastewater Treatment Facility to Storey County’s Tahoe-Reno Industrial General Improvement District (TRIGID).**

The water is needed for **Switch, Tesla and other businesses at the Tahoe-Reno Industrial Center (TRIC).**

Switch brought heavy-hitter “water czar” Pat Mulroy, formerly of the **Southern Nevada Water Authority**, to testify for the agreement, which mostly met with favor among council members.

Mulroy was a key figure in Clark County’s controversial efforts to pipe groundwater from eastern Nevada to Las Vegas, efforts that have been ongoing for decades and which are still making their way through court. Mulroy retired in 2013.

She said she was retained by Switch as a consultant on the TRIGID project.

Under the agreement, treated water would go to help meet water needs at the TRIC. This means more clean water staying in the Truckee River and less treated effluent going downstream, according to City Public Works Director John Flansberg, who framed the effort as mutually beneficial.

TRIGID would be responsible for construction costs, and approval of the agreement by Sept. 15, 2017 would allow the improvement district to seek state funding.



Councilwoman Jenny Brekhus

That tight deadline had some council members concerned. Councilwoman Jenny Brekhus said: “It puts my hackles up to (meet) this deadline.”

But Councilwoman Naomi Duerr called the project a win-win for the Reno area.

“This agreement will solve a lot of issues for our community,” she said.

Switch pushed for the agreement.

“(This is) one of the most innovative water agreements in the West,” Switch representative Adam Kramer said. “I know our friends at Tesla feel the same way.”

Councilman Paul McKenzie said he would only vote for the pipeline if it was specifically noted that it was a public works project so that prevailing wages would be paid for its construction.

A new draft of the agreement, which takes into account the council and mayor’s concerns, is expected to be considered the City Council’s Sept. 13, meeting, just ahead of the Sept. 15, 2017 deadline.

*Effluent Pipeline to Tesla, Switch Gets Tentative Approval
From City* [CLICK TO TWEET](#)

Commissioner Jung warns of 'arms race' with city of Reno

RAY HAGAR

NEVADA NEWSMAKERS

Washoe County Commissioner Kitty Jung this week called the relationship between the Commission and the Reno City Council "an arms race," saying growth, regional planning and annexation are factors that plague the relationship.

Jung also said on Nevada Newsmakers that more cooperation is needed for infrastructure repairs.

"We all should all be working together on the infrastructure that is necessary for the future," Jung said, including the City of Sparks.

She said the current efforts are "siloeed," in the local governments, meaning efforts are not shared.

"And having this arms race of needing development to pay for fire (protection), needing to annex that (county land) to take the property tax. It is an arms race and if that not solved, it is very difficult for us to be regional partners," Jung said.

Jung was especially critical of the City of Reno annexing land from the county.

"When they annex into the county, we lose the tax base for the fire (protection) we provide," she said. "And we have a dedicated fund for that (firefighter and fire fighting). It is not a general-fund based operation. Every time they annex, we then lose that and I could argue, they don't build another fire station."

When host Sam Shad noted the city could say it does not have the money to a new fire station, Jung shot back: "Then don't annex."

Jung proposed Reno Mayor Hillary Schieve and Commission Chairman Bob Lucey should meet to resolve differences.

Jung called Schieve "open minded, practical and reasonable."

Jung said Lucey should be the representative of the county because he has missed the most contentious times between

the Washoe Commission and Reno Council since he was just elected in 2014.

"He did not go through the fire divorce or the de-consolidation but they (current city council) didn't either. But staff did," Jung said.

The commission and council battled for almost four years -- from 2012 to 2016 -- over the acrimonious deconsolidation of the community's two largest fire agencies, one from the City of Reno and the other from Washoe County. Jung was there for all of it, having been first appointed to the commission in 2007 by then-Gov. Jim Gibbons.

Jung also said Washoe commissioners must also address problems of regional growth with commissioners from other counties.

Yet she said she understood the reluctance of neighboring counties to act as "bedroom communities" for the urban area of Washoe County.

Despite a critical need for housing in Northern Nevada, Jung said: "I also understand why people don't want housing," she said. "A bedroom community is not a sustainable community because they (families) have so many services that they demand and it really doesn't work out.

"A commercial county that is all commercial is the richest county because they don't call the fire department," Jung said.

“They don’t call the police. They don’t have kids in school, right? So I get that isolationist role.”

Jung said the county is also working on easing the housing crisis within Washoe. Home and apartment construction has not kept up with demand, as the Reno area is becoming a tech hub and jobs magnet with the recent arrivals of major corporations such as Switch, Google, Tesla and others.

“Fifth-five percent of our citizens here in Washoe County can’t afford the median housing price, that’s more than half, “ she said. “And this is projected to not get better, but worse if we do not take some sort of action as a region.”

Affordable housing is critical for the future development of the region, Jung said.

“I really believe that this should live with regional planning and the housing authorities to figure out a bank of some sort that developers pay into and then we can turn around and subsidize developers to then build affordable housing,” she said.

“That to me is the clearest path. But I’m sure there are lots of other ideas. I did ask (county) staff to come back with some ideas across the country, the best practices, because we are not the only community that has had this sort of explosion of growth and prices.”



Washoe County Commissioner Kitty Jung this week cited tensions between the Commission and the Reno City Council.
JASON BEAN/RGJ FILE

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High housing costs are symptom of Reno's evolution: Our view

The Opinion of the RGJ Editorial Board Published 8:00 a.m. PT Aug. 25, 2017 | Updated 2:26 p.m. PT Aug. 28, 2017

The rising cost of housing in the last few years is making home ownership a tough proposition for Reno home buyers. We look at what's fueling the Biggest Little City's housing crisis and potential options for people looking for a new place to call home Jason Hidalgo/RGJ



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(Photo: Andy Barron/RGJ)

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The relentless rise of rents and home prices in the Reno area continues.

In July, the median price for an existing single-family home in Reno [hit a record \\$387,250](#). Meanwhile, the average rent in Reno-Sparks hit almost \$1,200 and vacancies fell to 1.17 percent, both also records.

This has inspired a lot of hand-wringing in certain circles and bickering on the Reno City Council over whether it's been making progress on the housing shortage three years after deciding to focus on the issue. As government watchdog reporter [Anjeanette Damon wrote recently](#), "A scattered Reno City Council continued to struggle with how to

address the city's burgeoning affordable housing crisis Wednesday, jumping from idea to idea even as city staff pleaded with them to provide a focused game plan.”

An alternative message on Reno's housing situation: Home prices and rents are doing what they are supposed to do.

When there's more demand than supply, prices go up. This inspires more building, more renovating, and more residents to rent out basements and remodeled garages. Over time, prices will naturally stabilize. This is what markets do. At least for now, it's a good problem to have. It means people are seeing a bright future in Reno and want to move here.

That's not to say everything is perfect. Not as many housing units are being built as are needed, and there is a major shortage of starter homes.

Another way to look at this: Reno is becoming a true city. In thriving metros, it is often the case where young families and service workers live further out in more affordable areas. This has happened a little in Reno, but not like is expected now.

A commute from Carson City to south Reno is not much farther than from the North Valleys. Dayton and Fernley are good options. USA Parkway may open up Silver Springs as a viable option in 10 years.

And here's a reason not to enter crisis mode: Crises often inspire government to “fix” problems in ways that have negative unintended consequences.

At the Reno City Council meeting in July mentioned above, Councilman Paul McKenzie demanded a legal opinion on whether the council can implement rent controls. Fast forward to this month and [McKenzie told RGJ business reporter Jason Hidalgo](#), “I know that our decision just to look into rent control has caused a jump in rents from people saying, ‘OK, if they're going to do it, then we want to get ahead of it and raise rents up now.’”

That's not to say government cannot and should not play a role. One important way is to investigate what other cities have done that failed and make sure we don't fall into the same traps. A medical philosophy should apply to government: First, do no harm.

Some streamlining of the development and building process may help. Also, a community discussion may be fruitful over whether it's finally appropriate to have higher densities on parcels with one-acre minimums just outside incorporated areas.

And one more perspective on high housing prices: Many in our community are just now getting above water on homes they bought before the recession. This is a good thing. More equity generally helps the overall economy.

Our biggest little city is becoming bigger. Growing pains are expected.

Toxic Algae Bloom Develops in Tahoe Keys Water

Posted: Aug 30, 2017 4:42 PM PDT Updated: Aug 30, 2017 6:06 PM PDT
By Ryan Canaday

CONNECT



On August 16th, residents at the Tahoe Keys reported seeing an algae bloom in the water. After numerous tests, officials have found the algae to be toxic to people and animals.

Carol McCauley has lived in the Tahoe Keys for several decades and she says algae blooms growing in the canals is nothing new.

“It comes and it goes with nature and we have no control over it,” said McCauley.

But now that the harmful blue-green algae has been discovered in her neighborhood, she has a message for visitors and residents who have dogs like her.

“Please keep your dogs on leashes don't let them go into the water because we have this problem.”

Doug Smith with the Lahontan Water Board says the combination of warm temperatures and nutrient rich water is the reason low level toxins are developing in the algae.

“Take caution, stay out of it, don't drink the water, keep your pets out and everybody's good,” said Smith. “It's at a very low level, not at a danger level, but at a caution level they should be aware of.”

However, the toxin levels are just high enough that officials are looking for solutions. Paddlewheel harvesting recently ramped up in the Tahoe Keys to help circulate the waters, and the algae bloom is already dissipating.

“It can last for a couple days, or up to a couple of weeks,” said Smith.

According to the Tahoe Keys Property Owners Association, the algae has not harmed any animals or people. However, if you or a pet get sick after gog in the water, call a doctor or veterinarian.

A Comeback For the Truckee River

Posted: Aug 30, 2017 1:49 PM PDT Updated: Aug 30, 2017 2:01 PM PDT
By John Potter
CONNECT\



[Link to video](#)

The Truckee River Restoration Project, a huge effort to bring nature back along 11 miles of the river, has finally ended after remaking its final stretch. Today, 20 miles down the highway from Reno along the river by Tracy, sprigs are sprouting...bees are buzzing...butterflies are blooming. The beauty is back. As The Nature Conservancy's Lori Leonard told us, "It is looking really good! We're just excited to see all the new cottonwoods."

It's all a very big change from years ago when the river path was gouged in a mostly straight path for agriculture, water needs and a misguided idea of flood control. Leonard says, "It was narrow channels and basic weeds around it."

Fifty years ago they thought straightening the river would prevent floods, but they were wrong. The river ended up losing 90% of its forest and 70% of its bird population. The Nature Conservancy spent over a decade nurturing the river and the land around it back to life. Today, baby cottonwood trees are sprouting at the river's edge. Looking around, Leonard showed us, "There's the sunflowers here, there's some Louisiana sage. Some things have absolutely started coming up."

It's the last victory in a mile-by-mile effort, section by section from Lockwood to the east. Bulldozers, excavators and graders were used to set the clock back. 300,000 tons of dirt and rock were moved out here, lowering the ground by six feet so the river is now free to run. Cottonwood trees were planted and invasive plants replaced by native ones. The river spread out, watering the ground for even more growth. Leonard says it's also nature's original flood control: "That flood plain restoration allows the water to slow down and infiltrate down more slowly."

Everything here has come full circle...with cottonwoods, butterflies and bees. The Truckee is once again meandering and working the way it was. Just east of the Tracy power plant, you can now see the river...quieter and surrounded in

green, with new shade in the summer and eventually willows and trees everywhere. They will bring back the wildlife...to what it used to be.

Funding for the Truckee River Restoration Project came from the Federal Bureau of Reclamation, along with donations to The Nature Conservancy and their partners.

Rob Sabo | Info@nbnw.biz

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September 3, 2017

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ROADWAY remake



Courtesy RTC |

Construction worker dig in a trench created by the RTC project to recreate the stretch along Fourth Street and Prater Way from downtown Reno through S...

Fourth Street, along with Virginia Street, enjoys perhaps the richest heritage in Reno's storied history.

Long before Interstate 80 was built, Fourth Street was the main thoroughfare through Reno. State Marker No. 220, a blue metal sign shaped like the state of Nevada, sits at the corner of Fourth and Toano streets. It's the site where boxers Jim Jeffries and Jack Johnson clashed in the racially charged "Fight of the Century" in 1910.

Although that corner is now home to Reno Salvage Company, the history of Fourth Street is undeniable, from its many motels to its historic brick buildings. That history will be preserved as the Regional Transportation Commission gives the Fourth Street/Prater Way corridor a much-needed facelift.

The \$52.5 million project that broke ground in February will add sidewalks and bike lanes from the bus station at Fourth Street and Evans Avenue east to Pyramid Way. It also includes installation of eight new bus stations. The RTC worked with local historian Alicia Barber to capture the deep history of the corridor in oral stories told by longtime residents and business owners. That history will be prevalent throughout the design of the eight bus stations, which will include interpretive materials at the stations and on the sidewalks.

The many improvements reshaping Fourth Street and Prater Way stem from a 2012 corridor study that identified the area as a priority for investment.

Lee Gibson, executive director of the Regional Transportation Commission, says the improvements to the corridor are designed to improve safety and accessibility to public transportation routes, as well as to increase access to public transportation for the disabled.

Due to its age and the proximity of all the above-ground utilities, the corridor was probably the single biggest concentration for lack of accessibility for the disabled, Gibson adds.

"Traffic count analysis shows that if you go by car from Reno to Sparks, you will likely take the interstate," Gibson says. "But if you have to take the bus, or ride your bike, you are going to be on the Fourth/Prater Corridor – that drove a lot of key issues you see in construction today.

"That corridor is the single stretch of road for cyclists, transit users, pedestrians, and most significantly for the design of the project, the disabled," he adds. "The sidewalk conditions right now don't meet the requirements of the Americans With Disabilities Act, and this project will bring us to and above those standards."

More than 3.2 miles of six-foot-wide or more of sidewalk space and new bike lanes will run from Pyramid Way west to the Fourth Street bus station to increase access for the disabled, as well as alleviate crashes involving pedestrians and cyclists that happen along the corridor.

Spanish Springs Construction is the general contractor on the job and is tasked with moving all the various utilities underground. SSC, along with the RTC, is working hand-in-hand with NV Energy, Truckee Meadows Water Authority and other organizations to sink utilities. As usually is the case, undergrounding utilities in an older part of the city is not without a few surprises.

Gibson says that most often, existing underground infrastructure hasn't been found exactly where it's supposed to be. Crews also unearthed an undocumented underground storage tank, similar to what happened when the Fourth Street bus station was built.

"When you work in the (city) core, you are going to get surprises," Gibson says. "It's just a function of time, changes in utility technology, and changes in the condition of the utilities that are there."

RTC is not upgrading or modernizing any utilities unless it falls under its umbrella, such as upgrading the communications technology for the traffic signals in the area.

When completed in summer of 2018, the new Fourth Street and Prater Way will look nothing like it has in the past. Fourth Street will remain four lanes near downtown, but east of Valley Road to Sutro Street it will be configured as two eastbound lanes and one westbound lane into downtown. East of Sutro, the roadway will be one lane in each direction, with a center turn lane.

Amy Cummings, RTC planning director, says there are not huge traffic counts along that section of Fourth Street.

"Taking it down to one lane in each direction is fine for traffic operations, and the center turn lane lets people who want to make left turns pull out of that flow of traffic," Cummings says.

Additionally, RTC will add eight new BRT, or Bus Rapid Transit stations, each with level-loading platforms so riders won't have to step up or down to enter/exit the bus. It may seem trivial to non-bus riders, but all those extra seconds spent waiting for riders to get on or off the bus add up, Gibson says.

"It is convenient for the customer when the bus stop and the bus are at the same height, but there's an economic reason for that (too)," Gibson says. "The shorter that bus is at that stop to let people on and off, the less it costs to operate it. If it's there a long time, the bus is not doing its job, which is moving people. These eight bus stops will help us move people more efficiently through the corridor."

The RTC also will put five new all-electric busses into service in the corridor. Route 11, which moves riders from Fourth Street Station at Evans Avenue to Centennial Plaza on Victorian Avenue in Sparks, has the second-highest ridership of all routes with more than 5,000 trips per day. It will be renamed the Lincoln Line to honor the former Lincoln Highway, the main artery through town that was superseded by Interstate 80.

The project is being funded through the RTC-5 fuel tax, sales taxes, and grants from the Federal Transportation Administration and the U.S. Department of Transportation.

Share

Harvey's rain in Texas = 118 years of rain, snowmelt in Lake Tahoe

[Mark Robison](#), mrobison@rgj.com Published 3:35 p.m. PT Aug. 29, 2017 | Updated 4:07 p.m. PT Aug. 29, 2017



Rescue boats fill a flooded street from Tropical Storm Harvey on Aug. 28, 2017, in Houston.(Photo: David J. Phillip, AP)

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How much water fell in Houston recently compared to what Lake Tahoe gets?

- **Short answer:** If we took all of the snowmelt and rain that enters Lake Tahoe each year, it would take 118 years to match the amount expected to fall from Hurricane Harvey in Texas.

Full question

Lots of media outlets have been trying to help people wrap their heads around just how much rain has fallen in the Houston area.

The New Orleans [Times-Picayune reports](#) that Hurricane Harvey's two-day rain total in Houston amounts to three times the amount of floodwater pumped out of New Orleans after Katrina.

Harvey will deliver the equivalent of all the rain seen in Reno from the past four years in just one week to Houston, the New York [Times reports](#).

And the Washington Post's [Capital Weather Gang reports](#), "The final tally may be ... 21 trillion gallons or more — enough to fill Utah's Great Salt Lake four times over. ... If we averaged this amount of water spread equally over the lower 48 states, that's the equivalent of about 0.17 inches of rain — roughly the height of three pennies stacked atop each other — occupying every square inch of the contiguous United States. Imagine one downpour large enough to cover the entire country!"

So we got to wondering about our major water spot: Lake Tahoe. How does Houston's rainfall compare to it?

Full reply

Environmental engineer and Tahoe resident David C. Antonucci's "[Lake Tahoe Facts](#)" says, "The Lake holds 39 trillion gallons of water, enough to cover the state of California to a depth of 14 ½ inches."

Combine these facts with this [information from CNN](#): "Already, [Harvey] has dumped 11 trillion gallons of rain over the state, says Ryan Maue with WeatherBell, a weather analytics company. And by the time Harvey dissipates, the state will have seen 25 trillion gallons of rain, he predicts."

Maue is talking about Harvey's precipitation for the whole state of Texas, but it's the best estimate available in gallons.

When all is said and done, Harvey's Texas rainfall would fill an empty Lake Tahoe about two-thirds of the way full. And remember: Tahoe is the second deepest lake in the U.S., down to 1,645 feet at its max depth, and it has about 75 miles of shoreline. It's big.

Antonucci reports about where Tahoe gets its water: "Snowmelt from 63 tributaries in the 315 square mile watershed adds 65% of the water. Another 35% falls as precipitation on the Lake. Typically, 212 billion gallons of water enter the Lake this way each year."

That means if we took all of the snowmelt and rain that enters Lake Tahoe each year, it would take 118 years to match the amount expected to fall from Hurricane Harvey in Texas.

TMWA Offers Free Tours of Water Treatment, Hydroelectric Power Plants

August 29, 2017 ThisIsReno Website Facebook Twitter YouTubeLinkedIn



SPONSORED POST

Learn more about your water by touring TMWA's water treatment and hydroelectric plants this August and September.

All tours are free and require only a reservation to attend.

Attendees of the Chalk Bluff Water Treatment Plant tour will learn what it takes to get water from the Truckee River to their taps. They will also learn about the many tests that are conducted to ensure that TMWA's water is of the highest possible quality. Chalk Bluff has been recognized with the President's Award from the Partnership for Safe Water.

With this award, TMWA's Chalk Bluff Water Treatment Plant joins the ranks of the highest-performing water treatment plants in the country. Sign up for any of the tours, conducted on Tuesdays: Sept. 5, at 1 p.m.; Sept. 12, at 3 p.m., Sept. 19, at 1 p.m. and Sept. 26, at 1 p.m. Meet our team of highly skilled engineers, scientists, and operators and find out how they work to provide you with high-quality drinking water.

Please note: these are lengthy walking tours and will involve climbing a significant number of stairs and walking on uneven surfaces.

Customers can also tour TMWA's Verdi Hydroelectric Power Plant, which has been producing clean, renewable energy for over 100 years. The plant, which is located upstream of the Chalk Bluff Water Treatment Plant, harnesses the natural flow of the Truckee River to generate more than 2.3 megawatts of power. The tours will take place on Wednesdays: on Aug. 30 at 2 p.m., Sept. 6 at 10 a.m., Sept. 20 at 2 p.m. and Sept. 27 at 2 p.m.

These one-hour tours are free and open to all TMWA customers. Participants must be at least 18 years of age. Each tour is limited to 20 people, so please be sure to RSVP to rsvp@tmwa.com or call 775-834-8290.

Water restored to Reno homes after a water main breaks



By Staff |

Posted: Sat 10:50 AM, Sep 02, 2017 |

Updated: Mon 8:12 AM, Sep 04, 2017

This is the area of a water main break on Washington Street in Reno. Photo by Rebecca Kitchen/KOLO.

RENO, Nev. (KOLO) - 10:46 a.m. update:

The water main that broke west of the University of Nevada, Reno has been fixed and water service has been restored, said Marlene Olsen, a spokeswoman for the Truckee Meadows Water Authority.

7:35 p.m. update:

Thirty-seven homes will be without water overnight as crews fix a broken water main west of the University of Nevada, Reno.

The crews will work on the water main overnight and they expect the water will be back on in the morning. The affected homes are between University Terrace and Gear Street.

Tree roots wrapped around the pipe and broke it.

Washington Street is closed between University Terrace and Ninth Street.

Original story:

A 6-inch water main has broken in the neighborhood west of the University of Nevada, Reno.

The break happened Friday afternoon on Washington Street near University Terrace and Washington Street is closed there, Truckee Meadows Water authority spokeswoman Marlene Olsen said.

We think no one will be without water, Olsen said. Crews will “try to fix it hot,” meaning they won’t turn off the water, to ensure water service is not interrupted.

Crews Repair Water Main Break on Washington Street

Posted: Sep 01, 2017 5:48 PM PDT Updated: Sep 02, 2017 10:51 AM PDT



A portion of Washington Street in Reno is back open after a water main break was repaired Saturday morning.

About 36 homes in the area had their water shut off while the break was repaired.

The break happened Friday at Washington and 11th Streets. Washington had been closed from University Terrace to 10th Street.

There's no immediate word on what caused the break.

New multi-agency water partnership to address regional challenges

University of Nevada, Reno leads effort to provide solutions to sustainable clean water



Krishna Pagilla, director of the Nevada Water Innovation Campus and professor of environmental engineering, addresses the audience of officials from the partner agencies as they launch the new collaboration that will focus on sustainable water management for economic growth and enriching the natural water environment for the Truckee Meadows region.

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9/8/2017 | By: Mike Wolterbeek |  Print

"Perhaps nowhere in the world is water more important than in Nevada," University of Nevada, Reno Executive Vice-President and Provost Kevin Carman told the 150 people gathered to launch and celebrate a new collaboration to develop and implement innovative and integrated water solutions. "Especially with our emerging economies, stewardship of water and research on best practices and uses of water is important."

The new collaboration, the Nevada Water Innovation Campus, has the six major regional agencies and cities focused on addressing engineered water infrastructure needs, challenges and opportunities in the region. The shared vision and effort encourages the practice of sustainable water management for economic growth and

enriching the natural water environment.

At the launch in August, University of Nevada, Reno and local water officials announced the new collaboration that will focus on sustainable water management for economic growth and enriching the natural water environment for the Truckee Meadows region.

The partnership includes the University of Nevada, Reno, Washoe County, City of Reno, City of Sparks, Western Regional Water Commission, [Truckee Meadows Water Authority](#) and Nevada Department of Transportation.

Common Purpose

"We all have a common purpose, with vast experience and expertise," Krishna Pagilla, [environmental engineering](#) professor and director of the Nevada Water Innovation Campus, said. "From water supply to water reclamation and reuse and to flooding issues, we can develop water resiliency for economic health and human health with innovative methods through collaborative projects. This Campus ties us all together for greater efficiencies and to solve real world problems."

The University will help develop new approaches and the agencies will implement them. Water projects will include topics such as storm water management, groundwater recharge for future use, reduction of emergent contaminants in the water supply, pollution prevention, industrial water and waste issues, water treatment, water reclamation and reuse and water quality protection. The collaboration will help to educate future workforce and community on water issues and sustainable water use and reuse.

"We've spent more than a year working with directors and staff to build this collaboration," Rick Warner, chairman of the Campus Board of Advisors and senior engineer at Washoe County, said. "This will help with the economic vitality of the region, providing innovative solutions and academic involvement."

[The Nevada Water Innovation Campus](#) is intellectually and administratively housed at the University of Nevada, Reno and physically located at the regional water utilities and partner agencies. University research labs serve as the basic and fundamental research component of the water innovation campus.

"As regional leaders, I am pleased we are taking a collaborative approach to find imaginative and bold solutions to our water quantity and quality challenges," Bob Lucey, Chair of the Washoe County Commissioners, said. "As in line with the mission of Washoe County to provide and sustain a safe, secure and healthy community, we collectively recognize the value of water to the community's public health, arts and recreation, natural treasures and wildlife, and our economy, which is why I am proud Washoe County is a part of the Nevada Water Innovation Campus."

Mridul Gautum, vice president for research and innovation at the University, said "this collaboration is addressing one of the important issues of our time, with direct impact on

public health, economic prosperity and job growth. This isn't just a project, this an initiative that can make a difference, our research resources will help inform public policy decisions and support solutions. It's good that we're all pulling the wagon in the same direction."

Related Academic Program

- [BS degree Environmental Engineering](#)

"The City of Reno has long viewed sustainability and climate action as a top priority, and water management is an essential part of that commitment," At-Large Reno City Councilmember David Bobzien, said. "Our commitment to sustainability was cemented on a global level when Mayor Schieve and the Reno City Council signed the Compact of Mayors in 2015. We also joined the One Truckee River Management Plan in 2016. This latest collaboration of local agencies led by the University of Nevada, Reno is another important step in the right direction."

"As operators of the Truckee Meadows Water Reclamation Facility, the City of Sparks is proud to collaborate with industry leaders and to help educate our community on sustainable water use and reuse," Mayor Geno Martini said.

"At TMWA, our customers expect high-quality water and this will strengthen and expand that," Naomi Duerr, speaking on behalf of the Truckee Meadows Water Authority said. "We have a long history with the University on a number of projects over the years to improve our operations and processes at the water treatment plants."

"I believe the Nevada Water Innovation Campus will help us all be more effective in attaining our goals," David Gaskin, deputy director of the Nevada Department of Transportation, said. "By sharing our knowledge, experience and resources, we can better advance the noble cause of protecting and enhancing our state's precious water resources."

Galletti Closed at 4th on Monday for TMWA

Posted on September 9, 2017

(KOH) – The RTC will have Galletti Way closed at 4th St starting tomorrow so that the Truckee Meadows Water Authority can upgrade their pipes. The work is being done in conjunction with the \$58 million dollar 4th St/Prater Way Bus Rapid Transit Project, and is expected to be done by Friday. If you need to get to DMV or other Galletti Way businesses from 4th St, a detour route will be available going east on 4th to Kieztke and back to Galletti.

Northern Cities May Send Recycled Water to Tesla Gigafactory, Switch Data Center

September 12, 2017 By Sparks Tribune [Leave a Comment](#)

By Daniel Rothberg

The Nevada Independent

Technology companies want the wastewater. The cities produce a steady supply of it.

The Tahoe Reno Industrial Park, which houses the Tesla gigafactory and a Switch data center, is pushing to build a 13-mile pipeline connecting the park to a nearby sewage facility.

It would allow the environmentally-conscious companies to tap into recycled wastewater for their water-intensive operations. It would help local governments reduce their infrastructure load at a time of growth, fueled in part by Tech's presence. It could even improve quality on the Truckee River, where wastewater is currently discharged.

"All parties can really benefit from this application," said Lance Gilman, who developed the 107,000-acre industrial center. Gilman, a Storey County commissioner, said the water will help meet the demand for manufacturing and data storage, which uses water for cooling.

Supporters cast the plan as a win-win, but the details have made a deal complicated.

In the coming days, the cities of Reno and Sparks, as well as the Governor's Office of Economic Development, plan to discuss preliminary approval of a pipeline project that would transfer more than a billion gallons of water to the corporate park each year.

On Monday, the Sparks City Council will vote on a preliminary agreement to move forward with the plan. Two days later the Reno City Council will weigh the deal for the second time. If the cities, which own the treatment plant, approve, the Governor's Office of Economic Development will consider whether to approve bonds under an expiring authority in legislation passed to incentivize construction of the Faraday Future factory.

The bonds, which would not be issued until the cities agree on a more comprehensive agreement, would support the construction of the \$35 million pipeline. Water at the industrial park is walled off from regional utilities and is managed by a separate governmental entity, known as a general improvement district, that charges the businesses directly.

How the deal is structured

To serve Tesla, Switch and potentially Google, the industrial park needs more water from a more secure source. The park is currently reliant on groundwater, which state regulators can curtail in dry years, and recycling. The proposed deal has provisions that would guarantee the park a certain amount of water during normal years and drought years.

Under the deal, the cities would effectively lease their wastewater to the industrial center for a period of 30 to 70 years. In exchange, the state and the industrial center would give the cities equivalent water rights so that it can maintain Truckee River stream flow. The city water originates from the Truckee and must be replaced to balance the river flows.

The deal proposes leasing 4,000 acre-feet of water, about 1.3 billion gallons

“This was not a simple transaction,” said Pat Mulroy, the former director of the Southern Nevada Water Authority and a consultant for Switch, which is based in Las Vegas.

The companies, through rates charged by the industrial park, will pay a base fee for the treated wastewater and a premium fee during dry years when water is more scarce.

“The Reno-Sparks customers are 100 percent left whole,” she said.

The growth factor

Customers could even benefit, city planners argue. When the plan was presented at a Reno City Council meeting in late August, a staff report estimated that the city could defer sewage plant upgrades that could cost it anywhere from \$30 to \$250 million.

Although the 4,000 acre-feet of wastewater would still go through the Truckee Meadow Water Reclamation Facility, the water standards for industrial use are much lower than the current near-drinking water standards required to discharge the water into the river.

In the past, the cities have been fined for not cleaning enough nitrogen from the water.

This is also important because the region is experiencing growth, in part a result of development at the industrial center. By diverting wastewater with the 13-mile pipeline, city planners could reduce the strain that growth is already being placed on the plant.

Steve Driscoll, Sparks' city manager, said it "takes pressure off that long-term build."

"This is against the backdrop of the economic growth that we are experiencing," said Reno Councilman David Bobzien. "This is a big concept and an innovative one. But it is certainly one that is complex enough and has such long-term implications for the region that everyone needs to come to the table so the important questions can be asked."

Getting a fair deal

The proposal is not a new one. It was first floated more than two years ago.

Many details have yet to be worked out. "The questions we've been asking along the way will continue and they will continue to expand in their scope and detail," Bobzien said.

In a phone interview, he listed some of the lingering questions: How do you quantify and value the replacement water? What are the protections and benefits for ratepayers?

These questions will be fully explored and answered in the next phase of project planning. The agreement that the cities will consider next week is only preliminary, a requirement before the governor's economic development office will approve the bonds (the office is under a deadline to approve them at its upcoming meeting).

The bonds won't be issued until a more comprehensive plan is in place. If the cities cannot agree on that plan within two years, then the whole deal would fall apart.

Reno Councilmember Jenny Brekhus said at the August meeting that she wants to make sure ratepayers, who have assessed a fee for water treatment, are getting the best deal.

"Effluent is considered a resource and an asset," Brekhus said in a phone interview.

Despite some concerns, local governments have softened their position on the plan, which was somewhat controversial when it was first proposed. "The history of this conversation has come a long way," said Bobzien, who noted that in the original proposal, the cities would have been on the hook for constructing the pipeline.

"(The water) has a future value we're not just going to give away," he added.

A complicated river system

The Truckee, which runs adjacent to the corporate park, is one of the most regulated waterways in the West. The river has been subjecting of disputes and litigation dating back to the 1800s. It has a court-appointed federal water master, whose job is to keep track of river flow and oversee the river's operating agreement. He will have to sign off on a deal.

The Nature Conservancy has invested \$27 million in the restoration of the Truckee River's ecosystem over the past 15 years. Mickey Hazelwood, the director of that project, said the organization has yet to take a position for or against the proposed transfer of wastewater.

"This has the potential to be something that is good," he said, emphasizing the need to protect it during dry years. "The devil is in the details and we don't have the details yet."

Proponents believe the project has the potential of improving river quality. Instead of replacing river water with wastewater, Reno-Sparks would replace it with clean water.

The river, which stretches from Lake Tahoe to Pyramid Lake, falls within the boundaries of the Pyramid Lake Paiute Tribe. The tribe's natural resource manager told WaterDeeply, a non-profit water news outlet, that it wants to ensure the plan does not affect river flows. Driscoll, Sparks' city manager, said the proposal would keep the river whole and abide by an operating agreement that the tribe is a signatory on.

Mulroy believes the plan could serve as a model for other water users along highly-regulated rivers across the West, arguing that it offers flexibility and protects downstream water rights.

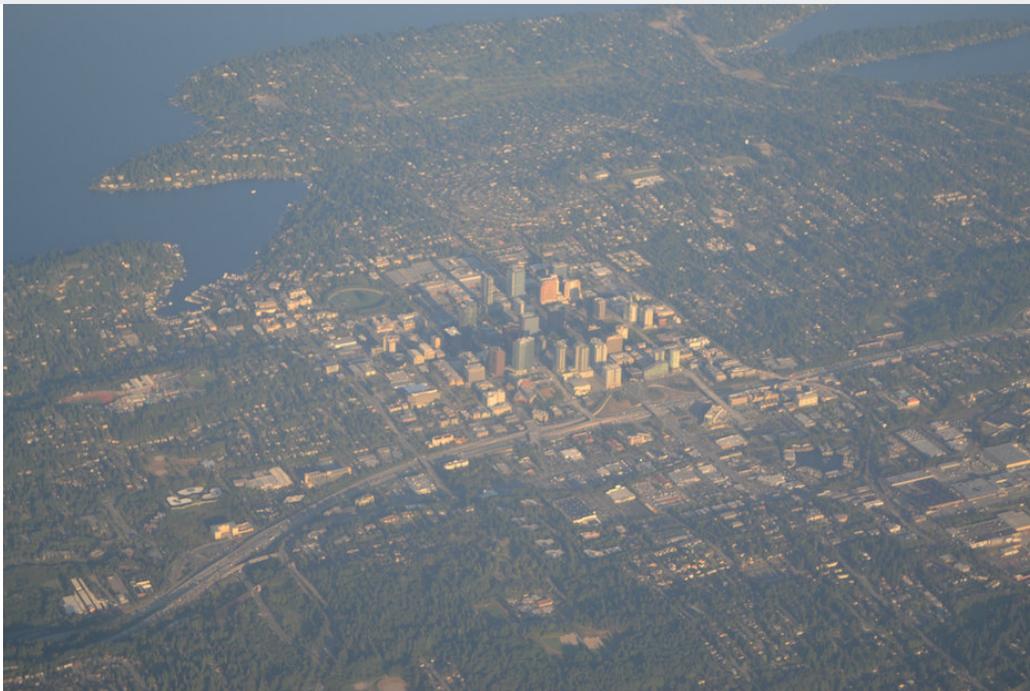
"What better water to spend for industrial uses than treated wastewater," she said.

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4 Jurisdictions Craft Scalable Smart Solutions for Water Quality, Flooding, Air Pollution, Public Safety

Bellevue, Wash.; Portland, Ore.; Newport News, Va.; and Montgomery County, Md., use their Global City Teams Challenge grant awards from the National Institute of Standards and Technology to come up with smart tech systems that can be easily replicated.

BY **SKIP DESCANT** / AUGUST 10, 2017



Aerial view of Bellevue, Wash., which is developing a “smart city dashboard” to synthesize and highlight key pieces of water-quality information.[FLICKR/BRIANNE](#)

Tweaking chlorine levels or even knowing where the next possible waterline break will be in Bellevue, Wash., could get a lot easier once the city completes a new smart city application to address water quality.

Bellevue is developing a “smart city dashboard” to synthesize and highlight key pieces of water-quality information. The move is a first step in a vision to bring a host of data together under one dashboard

application that will collect and analyze data in six areas: water, transportation, connectivity, building, energy and public safety.

“There are times when we need to coordinate between departments. And building a dashboard allows us to have visibility into each other’s areas and better coordinate creating some efficiencies between our departments,” said Bellevue Chief Technology Officer Chelo Picardal. “So we’d start with water, and we’d specifically look at water quality. What we’re trying to do now is a piece of the overall dashboard vision that we’re trying to accomplish. And we know that it will take a while — many years to accomplish all the other pieces.”

RELATED

What is the National Institute of Standards and Technology (NIST)? Early Ideas for Smart City Challenge Include Self-Driving Shuttles, Adaptive Traffic Lights

The project is one of four “smart cities” initiatives to receive a total of \$350,000 in funding from the National Institute of Standards and Technology (NIST) during the 2016 Global City Teams Challenge, which attracted about 90 applicants from across the country. Bellevue received \$75,000. Other recipients include Newport News, Va. (\$75,000); Montgomery County, Md. (\$100,000); and Portland, Ore. (\$100,000).

NIST's goal in offering this funding is to help communities and businesses connect to improve resource management and quality of life by using effective networking of computer systems and physical devices, often called the Internet of Things (IoT) or cyberphysical systems, said Chad Boutin, a science writer and spokesman for the institute.

Another priority for challenge grant recipients is having them come up with “smart cities” technology systems that can be easily replicated by other communities or agencies.

“Many established cities have similar goals of improving air quality or delivering better health care — and emerging regions want to be smart from the start,” said Chris Greer, director of NIST's Smart Grid and Cyber-Physical Systems Program Office, via email. “But those projects often address only one city or region at a time. The Global City Teams Challenge will help communities around the world work together on shared challenges.”

Montgomery County is developing its “Safe Community Alert” (SCALE) network as a new element of the public-sector safety net. Developers are installing Wi-Fi enabled sensors to detect smoke, carbon dioxide and monoxide, toxic gases, humidity, temperature, and particulates at a senior living facility. The network senses hazardous air and water factors, as well as some facets of the physical health and well-being of the residents. The county will now take the prototype platform into a new stage of development that will allow it to be replicated locally and in other communities.

Portland is conducting lab and field test deployments of low-cost air-quality sensors for measuring urban air pollution. The city aims to produce and share a framework for how to use such sensors, with the idea that other cities could use these guidelines to design their own air-quality sensing systems.

“The idea is that no one will have to reinvent any wheels,” said Boutin.

In Newport News, officials are developing urban hydrodynamic models to predict flood events. The system will contain three elements: deployment of 12 water-level sensors, development of models to predict flooding and an app to gather crowdsourced data.

The four projects “will identify standards and measurements to guide technology innovators in creating solutions that can work anywhere and lay the groundwork for a future of smarter cities,” said Greer.

Back in Bellevue, Picardal said the water-quality segment for the city's dashboard is about 90 percent complete.

"We have all of the data identified. We are working, as part of this grant, with CH2M as the kind of developer and integrator for us," she explained.

Brian Pugliese, smart water infrastructure and technology project manager for the city, said the team is "in the stage where we're about to launch."



[Skip Descant](#) Staff Writer