TRUCKEE MEADOWS WATER AUTHORITY

STAFF REPORT

TO: Chairman and Board Members
FROM: Mark Foree, General Manager
DATE: March 7, 2016
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)***, the Web Usage and Social Media Report ***(Attachment C)***, and the Water Resource and the Annexation Activity Report ***(Attachment D).***

Also included in your agenda packet are press clippings from February 10, 2016 through March 9, 2016. Also, attached is a *Tell the Board* submission from a person who was not pleased with the customer service via the call center.

In 2015, TMWA received the Presidents Award for excellence in water treatment from the Partnership for Safe Water. In the March 2016 issue of the Treatment Plant Operator Magazine, TMWA was again recognized for its continuous efforts in achieving and maintaining the highest water quality standards for which we were recognized in 2015. Please see attachment for the full article.

top performer
water: PLANT

Why Not the *Best?*

A PRESIDENTS AWARD FROM THE PARTNERSHIP FOR SAFE WATER WAS A NATURAL RESULT OF COMMITMENT TO EXCELLENCE BY THE ENTIRE TRUCKEE MEADOWS TEAM

STORY: **Ted J. Rulseh**
PHOTOGRAPHY: **David Calvert**

The Truckee Meadows Water Authority Chalk Bluff Water Treatment Facility in Reno, Nevada.

SOMETIMES THE TRUCKEE RIVER FLOWS CLEAR. Other times it flows like chocolate milk. The change can take place within minutes. Whatever the river water's condition, the Truckee Meadows Water Authority turns it into drinking water at no more than 0.08 NTU.

The river water's variability is one big challenge facing the TMWA, which serves about 400,000 residents of the Reno-Sparks area in northern Nevada. Another is a drought that has persisted for four years, putting stress on water supplies. On both counts, the utility's 16-member operations team has come through, with lots of help from the rest of the 190-member staff and from customers who know the value of water in a high desert environment.

Most water heading to customers passes through conventional treatment at the 90 mgd (design) Chalk Bluff Water Treatment Facility. That plant, commissioned in 1994, received a 2015 Presidents Award for excellence in water treatment from the Partnership for Safe Water.

Paul Miller, manager, operations and water quality, says the award is a natural outcome of his team's dedication to quality. "It's a tribute to the operators and a testament to their pursuit of excellence," he says. "That pursuit of excellence is shared throughout the entire company."

NEWLY EXPANDED

The TMWA was formed in 2001. In January 2015, the utility completed a consolidation with the Washoe County Department of Water Resources and the South Truckee Meadows General Improvement District. The merger aimed to reduce the cost of service and to maximize use of surface water resources across the region.

During non-drought years, the TMWA draws about 90 percent of its water from the Truckee River and the rest from 92 groundwater wells. Demand averages about 62.5 mgd but can peak at 125 mgd in summer. At such times, the utility calls on its 27 mgd (design) Glendale Water Treatment Facility.

Truckee Meadows Water Authority, Reno, Nevada

FOUNDED: |	**2001**
POPULATION SERVED: |	**400,000 (120,000 connections)**
SERVICE AREA: |	**8 communities, 2 water districts**
SOURCE WATER: |	**Truckee River, 92 groundwater wells**
CAPACITY: |	**65 mgd average, 125 mgd peak**
TREATMENT PROCESS: |	**Conventional**
DISTRIBUTION: |	**1,900 miles of pipeline**
SYSTEM STORAGE: |	**150 million gallons**
KEY CHALLENGE: |	**Maintaining supply during drought**
WEBSITE: |	**www.tmwa.com**
GPS COORDINATES: |	**Latitude: 39°30'23.67"N; longitude: 119°45'4.85"W**

"During periods of drought such as this, we rely much more heavily on groundwater. We have a drought plan that we are following, and everything is going according to plan."
PAUL MILLER

> "You wouldn't achieve this without having a committed team of people. It took an operations team fully on board to achieve this high standard 100 percent of the time."
> **PAUL MILLER**

Truckee Meadows Water Authority team members include, from left, James Bryant, apprentice operator; Jeremy Keele, operator; Paul Miller, operations and water quality manager; Will Raymond, water operations supervisor; Eric Mothershead, operations and maintenance supervisor; and Scott Knecht and Bill Hovda, operators.

TOMORROW'S OPERATORS

The Truckee Meadows Water Authority helps fill the pipeline for water operators through a state-certified apprenticeship program, in cooperation with the International Brotherhood of Electrical Workers union.

"We put candidates through a two-year program that includes the Sacramento State University curriculum," says Scott Knecht, operator III. "There are numerous milestones of achievement to be met each month. Work hours are aligned to the different disciplines in water treatment and distribution.

"All the hours are carefully calculated and recorded to enable participants to qualify for state certification. There are milestone tests that each apprentice has to take and pass. It's a very rigorous program." Apprentices rotate through day and night shifts and among four crews, gaining exposure to all facets of the processes.

"After the two years, they should have their Grade 2 state treatment and distribution licenses and be ready to go to work," Knecht says.

Openings for apprentices attract multiple applicants, from high school graduates on up to people with bachelor's and master's degrees in a variety of fields, says Knecht. "We look for people who want more than just a job. It takes a big commitment to make it work, but it's worthwhile. It's satisfying, it's a great career, and it's a great company."

"During periods of drought such as this, we rely much more heavily on groundwater," says Miller. "We have a drought plan that we are following, and everything is going according to plan. The best thing for this community is that we have stored surface water upstream in a number of reservoirs. We have used about 20 percent of that stored water during this drought. We've also asked our customers for a voluntary 10 percent reduction in usage. They have responded even better than we've requested."

All members of the operations team are dual-certified, licensed in treatment and distribution. Foremen are required to have Grade 4 certifications; all operators are certified to Grade 3. The team includes:

- Will Raymond, water operations supervisor
- Working foremen Tim Flanagan, Pat Kuykendall, Brian Luczkow and Ted Saxe
- Treatment plant operators III Kurtis Arnold, Mike Bryant, Travis Bunkowski, Darrin Garland, Ben Goodrich, Bill Hovda, Jeremy Keele, Scott Knecht, Michael Nevarez and Jimmy Winters (James Bryant is an apprentice operator)

RIVER'S CHALLENGES

Operating the Chalk Bluff plant means constantly watching raw water quality. The Truckee River flows out of Lake Tahoe and drains part of the high Sierra Nevadas. "You can imagine flowing from a mountain watershed with snow melt, how variable the raw water can be," says operator Knecht. "We get heavy thunderstorms in spring, and we have a fire-scarred watershed.

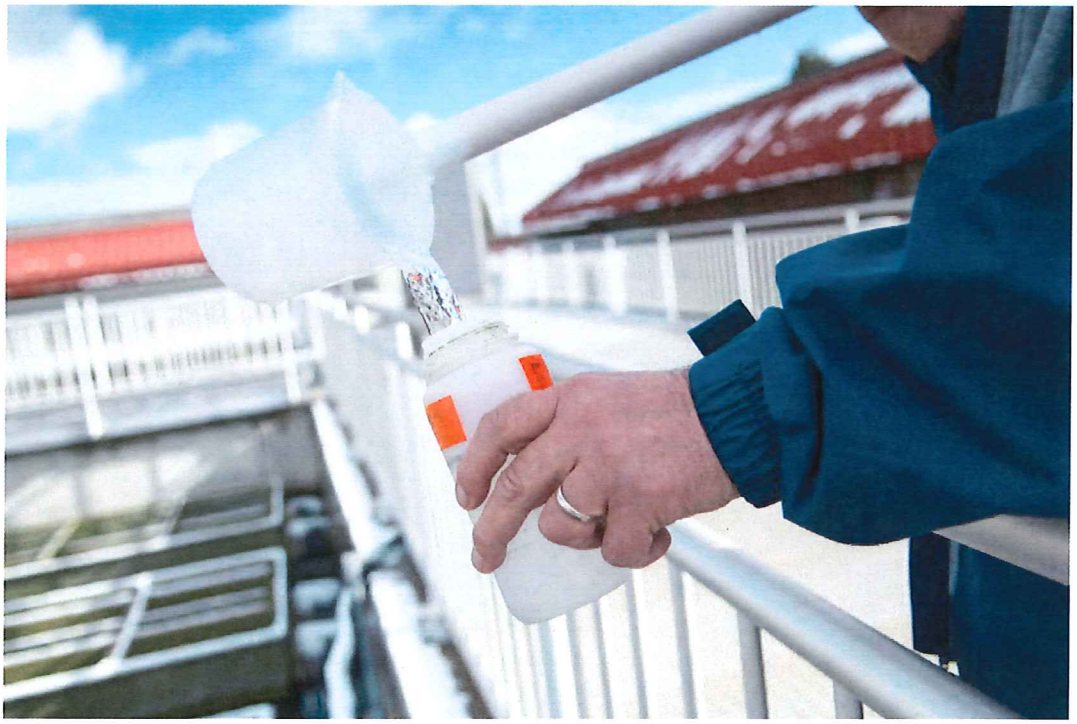
"Combine those two and you can get huge runoffs very quickly. We get some seriously dirty water. In minutes, we can go from 2 NTU up to 5,000 NTU — that's like thick chocolate milk. We continuously surveil the upstream watershed conditions for any problems coming down toward us so we can decide how to treat it, or even close the plant intakes and let the slug go by, if we can afford to. Usually, though, we treat the water."

Seasonally low raw water temperatures and wide diurnal pH swings add to the treatment challenges. The pH, driven by algae, can exceed 9 in the early evening and bottom out below 7 in the early morning. Despite all this, the imperative is to produce water that never exceeds 0.08 NTU.

TREATING WITH PRECISION

Water comes to the Chalk Bluff plant in a 6 1/2-mile concrete-lined canal and passes through coarse screens before entering two 2-million-gallon pretreatment ponds. Although their main purpose is gravity settling, the ponds

FREE INFO – SEE ADVERTISER INDEX



Frequent sampling and analysis helps the Chalk Bluff team know when to adjust the process to keep finished water quality consistent.

can be chlorinated to oxidize taste and odor (which can be caused by algae blooms in the river) or fed primary coagulant to speed settling (such as when the raw water is extremely turbid).

The water then passes through a pair of Envirex and Link-Belt fine, mechanically cleaned screens (WSG & Solutions) and is dosed with carbon dioxide as needed to bring the pH below 7.7. Next, the water enters two treatment trains where polyaluminum chloride coagulant is added. After flash mixing, the flow enters six flocculation/sedimentation basins. These are followed by 12 gravity filters containing 54 inches of anthracite and 10 inches of silica sand media, and licensed for a loading rate up to 8 1/2 gallons per square foot per minute.

The filtered water is disinfected with sodium hypochlorite to achieve an overall 4-log pathogen removal/inactivation, then adjusted to pH 8 with soda ash before distribution to minimize potential leaching of copper and lead from customer piping.

FINE TUNING

A variety of measures helps ensure that water leaving the filters stays below 0.08 NTU. "We have turbidimeters (Hach) a few miles upriver so we can watch a plume of dirty water come down toward us," Knecht says. "In

ABOVE: Scott Knecht checks bar screens where raw water is delivered.
RIGHT: Knecht discusses the rapid mixer and jet diffuser with Dillon Hansen, apprentice operator.

the raw water canal, we have cameras and turbidimeters. Then we have turbidimeters throughout the plant, all the way through the process. We adjust our feed rates based on turbidity and flow, the temperature of the water, and the type of dirt that's in it, whether it's large or small, easy to treat or not."

Coagulant addition is flow-paced; jar tests also support dose determination. "We continuously change the dose, anywhere from 14 to 30 mg/L," says Knecht. "It's automated based on how much water is coming into the plant, as read by the flowmeters. Each metering pump is checked at least twice a day for accuracy to make sure those pumps are giving us exactly what we want."

Two streaming current detectors (Milton Roy) help operators regulate the coagulant feed rate and optimize flocculation and sedimentation. But pure operator observation helps, too. "Through experience, you can tell by the color how big or small the particles are and how easily they're going to settle," says Knecht. "We look at the floc continuously. When we have good treatment, it looks much like storm clouds and it goes right to the bottom of the sedimentation basin."

A Zeta potential analyzer (Brookhaven Instruments, a Nova Instruments Company) can be used to measure the electrical potential of particles in the water to help assess how well the primary coagulant is working.

To deal with extremely cold water, operators can add anionic and non-ionic polymers to aid coagulation and flocculation, or reduce the filter loading rate. A final line of defense is a fail-safe mechanism on the filters. If a turbidimeter on a filter detects turbidity rising toward the limit of 0.08 NTU, the effluent valve closes, a waste valve automatically opens, and the water is returned to the primary settling ponds while the issue is diagnosed and resolved.

A SCADA system with Wonderware software (Schneider Electric - Invensys) with some 7,500 inputs oversees the distribution system and more than 90 storage tanks. Each day, the SCADA system distills flow data into a production number and a consumption number that, along with the weather forecast, helps the staff set the next day's production.

"We're on a fine tightrope," Knecht says. "We're using our drought resources stored upstream, and we have to husband those resources carefully. So our production/consumption numbers are critical for our planning. We don't have any water to waste. We need to plan how much we're going to make the next day."

QUALITY FIRST

The TMWA's focus on quality made pursuit of the Presidents Award natural, according to Miller: "We decided it was just the best a utility could do to protect public health and the best water we could offer to our customers, so we embraced the goal.

"We talked to the members of our firm and said, 'Look, we're going to embrace this and go the whole way with it.' I'm glad we did. I'm not an award-

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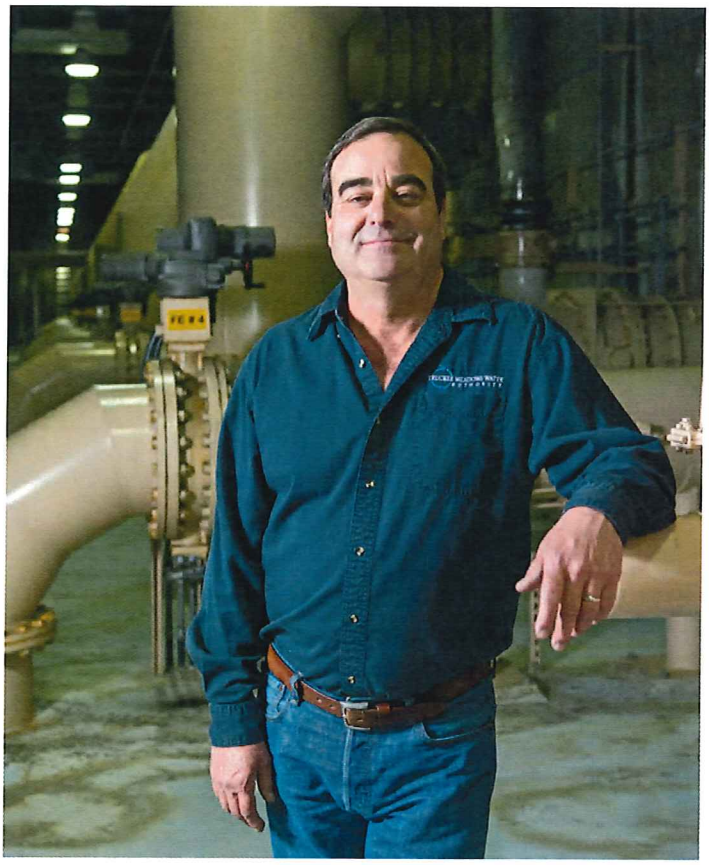
FREE INFO – SEE ADVERTISER INDEX



Operator Scott Knecht and the Chalk Bluff team take pride in producing quality water in a fiscally responsible manner.

seeking individual, but it was a good goal for the utility. It's a good goal for any utility to try to achieve. When we received the award, I believe only 18 other utilities had won it. You wouldn't achieve this without having a committed team of people. It took an operations team fully on board to achieve this high standard (0.08 NTU) 100 percent of the time. They made it happen through some really challenging conditions over the last several years."

Knecht observes, "For the 14 years I've been with this company, every operator or apprentice has been really inculcated with the fact that water quality is job one. Yes, we try to do it in a fiscally responsible manner, but we simply don't cut corners when it comes to water quality. I'm sure everybody who works at TMWA feels the same. But as operators, we're on the front lines. It's ingrained in us that water quality will not be sacrificed for anything." tpo

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TRUCKEE MEADOWS WATER AUTHORITY

STAFF REPORT

TO: Board of Directors
THRU: Mark Foree, General Manager
FROM: Scott Estes, Director of Engineering
BY: Bill Hauck, Sr. Hydrologist
DATE: March 7, 2016
SUBJECT: **Operations Report for the March 2016 Board Meeting**

(A) Water Supply

Snowpack - Snowpack as of today is 87% of average in the Truckee River Basin, and 93% of average in the Lake Tahoe Basin. Snowpack on this same day last year was just 33% of average in the Truckee Basin, and 21% of average in the Tahoe Basin respectfully. So through this point in time the region is in much better shape when looking at snowpack.

Reservoir Storage -The elevation of Lake Tahoe is currently 6222.47 feet. While still 0.53' below the elevation of the rim, the lake has risen almost 9/10 of a foot (0.87') since the start of the New Year as a result of winter storms. Storage at Tahoe is -65,454 acre-feet (AF). Boca Reservoir has approximately 17,650 AF of water in storage, and is currently at 43% of capacity. Donner Lake storage is 5,500 acre-feet, and is 58% of capacity. Independence Lake is at 91% capacity with 16,000 AF in storage. Prosser Reservoir storage is currently 10,200 AF which is 34% of its maximum storage capacity of 29,800 acre-feet. Stampede Reservoir's storage is currently at 42,800 AF which is 19% of its maximum capacity of 226,000 acre-feet. TMWA has 5,160 acre-feet of water stored in Stampede Reservoir according to the provisions of the new Truckee River Operating Agreement (TROA).

Truckee River Flows - River flows are noticeably higher this morning due to significant amounts of precipitation experienced in the Sierra over the weekend. Discharge this morning was 1,200 cubic feet per second (cfs) at the CA/NV state line.

Outlook -This past weekend's winter storms brought some much needed precipitation to the Sierra Nevada Range in the form of both rain and snow. Significant amounts of precipitation were recorded at Donner Lake (> 5'') and at Independence Lake (> 3") over the three day period. Ski resorts are reporting 3 day totals anywhere from a foot and a half (1 ½') to over four feet (4') of new snow on the ground. Snowpack numbers increased from 81 to 87% of average in the Truckee Basin, and from 88 to 93% of average in the Lake Tahoe Basin accordingly. The National Weather Service is projecting a continuation of this active storm pattern over the next

week or so before another high pressure ridge off the coast has the potential to settle back in again.

The latest model runs are projecting just slightly below average streamflow runoff for this spring and summer, which means we should experience normal river flows just about through the month of August. This gets us past our peak customer demand months before any impacts to river flows would be experienced and if we do need to go to back-up supplies this year, it shouldn't be until sometime in September. We are in great shape from an upstream drought supply perspective this year. Under TROA we have been able to credit store approximately 5,160 AF since December 1, and it is anticipated that we'll have the opportunity to store *at least* another 9,000 acre-feet on top of that prior to July. Combined with what is currently in storage, and the projected re-fill of Donner and Independence lakes this spring, TMWA will go into the summer with approximately 39,000 acre-feet of upstream drought reserves. This is more than 10,000 acre-feet more than the utility had going into last summer.

(B) Water Production

Demand - System demands are at their typical wintertime levels but are beginning to creep upwards. Customer demand averaged approximately 35 million gallons per day (MGD) last week which is what you would expect for this time of the year. Ninety seven (97) percent of TMWA's customer demand is currently being met with surface water from the Chalk Bluff water treatment plant, and the remaining three (3) percent from groundwater. TMWA is currently recharging about 8 MGD through numerous well sites located throughout our service territory.

(C) Hydro Production

Generation - Both the Verdi and Washoe hydro-electric plants have been back on-line since the third week of January. Average Truckee River flow at Farad (CA/NV state line) for the month of February was 450 cubic feet per second (cfs). A total of 2,289 megawatt hours (Mwh) were generated. This yielded combined hydropower revenue from the two plants of approximately $161,850 for the month or an average of $5,580/day. Generation at the Verdi plant averaged $3,476/day and generation at the Washoe plant averaged $2,103/day. The outlook is good for river flows and hydropower generation at least over the next six months as normal river flows are expected to occur. The Fleish Hydro plant was brought back into service on February 13th, but had to be taken off-line again on February 23rd after leaks in the recently repaired penstock were discovered. An investigation into the cause of the excessive shrinkage of the liner material is being conducted and a repair plan will be developed.

TRUCKEE MEADOWS WATER AUTHORITY

STAFF REPORT

TO: Chairman and Board Members
THRU: Mark Foree, General Manager
FROM: Andy Gebhardt, Customer Relations Director
DATE: March 7, 2016
SUBJECT: **Customer Service Report**

The following is a summary of Customer Service activity since the February Board meeting.

Ombudsman

There were three (3) calls to the Ombudsman in February. They were: a customer who was shut off for non-payment and was upset about what she had to pay and when we would be able to turn her water back on. Her situation was taken care of by our Customer Services Supervisor and our Field and Meter Services Supervisor; a customer that received a letter from a 3rd party vendor, offering to insure their water lines, and was wondering if this was sponsored by TMWA. She was told it wasn't; someone from Fallon that was going to court and wanted to know our collection practices. A message was left for her, but she never called the Ombudsman back.

Communications

Attached is the website / social media report.

Since the February Board meeting there were numerous media articles, including numerous articles on how TMWA recharges the aquifer and the benefits this provides to the community. In addition, there were several articles on snowpack and river flows.
One of the more impressive media articles that came out was one that appeared in Water Treatment Plant Operator Magazine. This article was very complimentary of TMWA in general, and more specifically, the TMWA Water Treatment Operator staff, for their involvement in TMWA receiving the Presidents Award from the Partnership for Safe Water.

Customer outreach included:

- Participation in the Hug HS Career and College Fair, where we talked to over 1400 students about careers in the water utility industry. Employees that participated were Jackie Boado, Rich Dominguez, Robert Charpentier, Sonia Folsom, Bubba Quilici, Justin Greenland and Johnny Naungayan.

- Multiple tours of Chalk Bluff to talk about water quality/water treatment. These tours were given to: 5 international journalists that were here with the Northern Nevada International Center; 17 members of Plumbers and Pipefitters Local 350; 15 students from the Reno High School A/P Environmental class; 11 students from UNR College of Education; and 25 students from the Homeschool Explorer Club. These tours were presented by Will Raymond, Dillon Hansen, Ian Dasmann and Kim Mazeres.
- Jackie Boado and Brett Coffman presented to 19 students at an Innovation HS Physical Science class. The subject of the presentation was Chemistry/Water Treatment.
- A presentation by John Enloe to the Washoe County Board of Adjustment regarding the Mr. Rose WTP.
- A presentation by John Enloe to the Ward 4 NAB about water rights and how water is being managed. This was attended by 15 customers.

Conservation

The drought communications planning team is continuing to meet to discuss plans for communications and advertising for this year's watering season.

Customer Calls – February

- 7,455 phone calls handled
- Average handling time – 4 minutes, 50 seconds per call
- Average speed of answer – 23 seconds per call

Billing – February

- 122,615 bills issued
- 147 *(.1%)* corrected bills
- 10,997 customers (9.0%) signed up for paperless billing

Service Orders – February

- 7,373 service orders taken
- 3,405 *(*46%) move-ins / move-outs
- 766 (10%) cut-out-for-non-payment and cut-in after receiving payments, including deposits and checks for tamper
- 1158 (16%) zero consumption meter checks
- 837 (11%) re-read meters
- 608 (8%) new meter sets and meter/register/ERT exchanges and equipment checks
- 343 (5%) problems / emergencies, including cut-out for customer repairs, dirty water, no water, leaks, pressure complaints, safety issues, installing water meter blankets, etc.

- 100 (1%) high-bill complaints / audit and water usage review requests
- 63 (1%) various collection actions, including hanging 48-hour notices for elderly and disabled customers, returned mail and/or unpaid deposits, and handling of additional deposits

Remittance – February

- 40,913 mailed-in payments
- 25,227 electronic payments
- 22,723 payments via RapidPay (EFT)
- 14,408 one-time bank account payments
- 4,702 credit card payments
- 3,866 store payments
- 2,532 payments via drop box or at front desk

Collections – February

- 16,019 accounts received a late charge
- Mailed 7,074 10-day delinquent notices, 5.8% of accounts
- Mailed 996 48-hour delinquent notices, 0.8% of accounts
- 147 accounts eligible for disconnect
- 163 accounts actually disconnected (including accounts that had been disconnected-for-non-payment that presented NSF checks for their reconnection)
- 0.17% write-off to revenue

New business / New Construction – February

- 106 active jobs currently in process
- Collected nearly $1,400,000 in new business fees/facility charges

Meter Statistics – Fiscal Year to Date

- 11 meter retrofits completed
- 396 meter exchanges completed
- 1,062 new business meter sets completed
- 120,617 meters currently installed

TRUCKEE MEADOWS WATER AUTHORITY

STAFF REPORT – Web & Social Media

TO: Chairman and Board Members
THRU: Mark Foree, General Manager
FROM: Robert Charpentier
DATE: March 4, 2016
SUBJECT: Web & Social Media Overview for YTD 2016 + Five-Year Review

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Web & Social Media Overview – YTD 2016 + Five-Year Review

Highlights

- **Website Overview – Trends over the Last Five Years**: visitor numbers have increased 69% since 2011. Mobile use surged from 7% to 31% in the same period.
- **Traffic Drop due to 2015 Consolidation Bump**: Year-over-year traffic to tmwa.com in the Jan-Feb period dropped by about 15%, which appears to be due to a bump caused by the consolidation at the end of 2014. TMWA's online account access and Consolidation webpages grew by 177% and 2,700% respectively in early 2015. Also, the "Welcome to TMWA" webpage received over 2,000 visits in the first month after consolidation.
- **Social Media Engagement Grows**: TMWA's Facebook and Twitter followers have increased by 88% and 19% respectively since February of 2015.

tmwa.com — Website Review – Trends Over the Last Five Years

User traffic to tmwa.com over the last five years has grown from 278,583 visitors in 2011 to 471,014 in 2015: given the economic difficulties and negligible growth in our area during much of this period, the results point to a significant improvement in tmwa.com's performance among established customers.

Year	Visits	New	Returning	Pages/Visit	Avg. Visit Duration	Bounce Rate
2015	471,014	48.2%	51.8%	1.61	1:23 min	29.7%
2014	377,618	47.4%	52.6%	1.65	1:36 min	39.4%
2013	342,275	55.4%	44.6%	1.63	2:04 min	25.6%
2012	313,891	54.9%	45.1%	1.73	1:53 min	35.7%
2011	278,583	50.4%	49.6%	2.02	1:24 min	69.7%

Growth in Mobile Traffic 2011 - 2015

There has been substantial growth in the number of users who access tmwa.com via mobile devices – from a little over seven percent in 2011 to nearly a third of all users in 2015.

2011 ..... 7%	2014 ..... 27%
2012 ..... 13%	2015 ..... 31%
2013 ..... 21%	

Website Results for YTD 2016 vs. 2015

This admittedly-thin sampling of web data wouldn't normally be useful but the numbers do indicate significant influence of consolidation-related traffic in early 2015. Jan/Feb 2016 saw 16% fewer user sessions and 12% fewer page views than the same period in 2015. The average visit duration was well under two minutes, with the majority of visitors focused on payment options, employment, contact information, and the new customer, "Welcome to TMWA" page.

Top Content (YTD 2016)

Again, a significant traffic drop compared to 2015 is attributable to a bump because of consolidation-related activity. The most visited pages on tmwa.com (listed below) are similar what we have seen in the past. After the homepage—our most visited page—traffic went mostly to our residential payment, employment, contact us, and "Doing Business with TMWA" pages.

Rank	Page	Pageviews	%Pageviews
1	Homepage	53,179	-7%
2	Residential/Payment Options	7,547	-29%
3	Employment	7,020	-27%
4	Contact Us	3,186	-26%
5	Doing Business With TMWA	2,211	-8%

Consolidation-Related Webpages With Traffic Decreases:

Consolidation	-90%
Welcome to TMWA	-68%
Account Access	-60%
Contact TMWA	-46%
TMWA FAQs	-29%

TMWA Social Media

Currently TMWA has **1,291 Twitter followers** and **1,331 Facebook fans**. There is a current Twitter feed on the *tmwa.com* homepage that is updated daily to reflect current topics.

TMWA's YouTube Channel: http://www.youtube.com/user/truckeemeadowswater

TMWA videos are intended to provide tips for addressing issues they may face with their water supply, as well as give customers a window into TMWA's everyday operations, showing everything from infrastructure improvements to water-main repairs.

"About TMWA" Videos:

- A Day in the Life of a Water Conservation Consultant
- TMWA Takes it Personally

"TMWA How-to" videos:

- Household Winterization – Get Ready for the Cold
- How to Reduce Your Water Use 10%
- Spring Sprinkler System Start-Up
- How to Shut off Your Home's Water in an Emergency
- How to Use Your Water Meter to Determine if you have a Leak
- How to Test for and Fix a Leaky Toilet Flapper
- How to Make an Online Bill Payment from Your Checking Account

"TMWA at Work" videos:

- Stead Water Tank Rehabilitation
- Partnership For Safe Water Award
- Idlewild Pump Station Improvements
- Steamboat Spillway, Flume Repair
- Fleish 'Railcar Bridge
- Water Main Repair on Haskell St.
- Highland Canal Improvement Project
- Ice Fighting

TMWA also manages the following informational websites:

- www.communityforestry.org:
- www.howdoyousave.org:
- www.tmwastorage.com:
- www.tmwaacademy.com:
- www.tmwalandscapeguide.com:
- www.truckeeriverfund.org:

TRUCKEE MEADOWS WATER AUTHORITY

STAFF REPORT

TO: Chairman and Board Members
THRU: Mark Foree, General Manager
FROM: Dir Natural Resources
DATE: 7 March 2016
SUBJECT: **Report Water Resource 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		7,156.55 AF
Purchases of water rights	0.00 AF	
Refunds	0.00 AF	
Sales	- 11.02 AF	
Adjustments	0.00 AF	
Ending Balance		7,145.53 AF

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

WATER SERVICE AREA ANNEXATIONS

No annexations to report.