ParkerWater
& SANITATION DISTRICT

CWCB MEMORANDUM

To: Ben Wade, Water Conservation Coordinator, CWCB

From: Billie L. Owens, Customer Relations Manager, Parker Water and Sanitation District BLO

CC: Steve Hellman, CFO
Randy Hellinger, Field Services Supervisor
Chris D. White, AMI Coordinator

Date: **March 30, 2017**

Title: PWSD 2016 Water Efficiency Grant Update – Phase 1 Meter Replacement Program 75% Progress Report

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Executive Summary

The purpose of this memorandum is to provide a project status update for CWCB staff:

- Meter Replacement,
- Advanced Metering Infrastructure Installation

Discussion

Via contract, PWSD has partnered with Sensus as the metering and AMI solution product provider, committing to purchase meters, endpoints, and communication hardware through their local distributor, Dana Kepner, at agreed upon contract pricing. This contract involves authorizing a long-term (20-year) lease of a portion of Sensus' proprietary radio band for metering endpoint communication, as well as provision of meter data management hosting services for the period of five years. PWSD has contracted with American Conservation Billing to provide meter data management and data analytics, as well as a customer portal. PWSD has also partnered with Utility Metering Solutions (UMS) for project management and metering infrastructure installation services for project phases 1 and 2.

Phasing for this multi-year project is as follows:

- Phase 1 (2016 – 2017):
    1. Installation of fixed base communication infrastructure (3 of 4 towers);
    2. Meter retrofit of all non-single family residential accounts; and retrofit of one single-family residential subdivision (approximately 1,300 meters.)

- Phase 2: (2017) Retrofit of manually read single-family residential walking routes (approximately 6,000 meters.)
- Phase 3: (2018 – 2022) Retrofit of remaining radio read walking routes and AMR metering infrastructure (approximately 6,000 meters.)
  NOTE: Project timing is contingent on funding availability.

PWSD received approval from the CWCB for a Water Conservation Implementation grant for $50,000 to go towards Phase 1 of this project.

Phase 1 Project Status:

CONTRACT: Contracts were executed with UMS, Sensus, Dana Kepner, and AmCoBi in June and July of 2016.

METERING COMMUNICATION INFRASTRUCTURE: Installation of three fixed base communication towers and data concentrators were completed in October of 2016. Attachment A shows one of the completed tower installations.

COMMUNICATIONS OUTREACH PLAN: A comprehensive communication plan and outreach materials were developed and finalized in October and November of 2016. Minor revisions have been made to materials based on customer feedback. Attachment B includes a copy of the communications plan, master communications templates, as well as PWSD web page information.

TRAINING: Significant training was required related to the new metering technology. Training associated with installation, programming, and monitoring through the RNI of the new meters has occurred. Training on MDM and alert management and settings has taken place for both field, billing and customer service staff. Staff has also completed billing import and customer portal training. Training was initiated in November of 2016, and has been substantially completed by field and billing staff.

SOFTWARE INTEGRATION & CUSTOMER PORTAL: Initial integration of raw meter data to the meter data management (MDM) and analytics system (AquaHawk) was completed in November of 2016. Also completed was the integration of UMS' proprietary mass meter change out software with the billing system, which automates the import of new meter information into the billing system from UMS mobile field systems. AquaHawk also performs the function of the customer portal, and this was integrated, tested with customer and rate information, and launched for public use in January of 2017. Attachment C graphically depicts the AMI systems integration.

WATER METER RETROFIT

- Single Family Residential – As part of Phase 1 installation, one meter reading route, a subdivision of 62 single family residential properties were retrofitted. This subdivision was completed at the end of February 2017.

- Non-Single Family Residential – Also part of Phase 1 was the retrofit of all commercial, multi-family and irrigation meters. The following table shows the status of these change-outs by meter size.

Phase 1 Non-Single Family Residential Meter Installation Status			
Meter Size	# of Meters	# of Meters Retrofitted to Date	Percent Complete
4" meters	4	4	100%
3" meters	32	32	100%
2" meters	181	152	83.98
1 ½"	444	397	89.41
1"	336	294	87.50
¾"	269	217	80.7

PROJECT BUDGETING UPDATE

While the Meter Replacement Program is an approved multi-year capital project, ongoing funding is contingent on annual funding allocation, which is reviewed and budgeted on an annual basis. As part of the 2017 District budget approval process, funding for the AMI program was revised as demonstrated in the table below. The shifting of funding from the 2019-2023 timeframe to 2017 will allow for expedited elimination of manually read walking routes.

Annual Funding Summary	2016	2017	2018	2019 – 20203
2016 Approved Program Budget	$1.8 M	$1.0 M	$1.0 M	$2.4 M
2017 Approved Program Budget	$1.8 M	$2.5 M	$1.0 M	$0.9 M

INITIAL EFFICIENCIES

The following are initial efficiencies that have been experienced to date related to the AMI metering infrastructure from an operational and water savings standpoint. Additional information will be provided in the final report.

- Meter reading has historically taken 5+ days to complete. Using the remote reading process for the meters that have been installed has eliminated nearly 1.5 days manually read walking routes. This has saved staff time, as well as vehicle usage.
- The meter reading cycle has historically been from the 17th – 19th, with bills generated according to this usage on the 5th of the following month. The read cycle is now being incrementally adjusted on a month-by-month basis towards the end of the month, so at the end of the retrofit, all meters will be read on a more timely cycle consistent with when bills are generated.
- Final read acquisition for homes that have been retrofitted has changed from sending staff to the field to looking up the read in AquaHawk.

- Electronic-based water meters, iPerls, are being used for all small meters. These are touted to have increased flow capturing capabilities. While results to date are antidotal, meters that have been installed in employee homes within the District appear to be capturing a higher level of low flow volume. Further analysis is being conducted to evaluate this parameter.
- Full account audits, between billing system and field information, are being performed as meters are retrofitted. This has resulted in addressing discrepancies that have existed, in some cases, for several years. To date, twelve accounts were discovered that were being under-billed based on inaccurate meter test circles. More accurate metering information will result in accurate billing, and representative usage characteristics, as well as assist with calculation of more accurate water loss information.
- AquaHawk alert reporting is received and evaluated daily. Protocols are being developed for parameters for proactive customer notification of potential leaks. This has resulted in early detection of some large commercial leaks, in the magnitude of 100's to 1,000's of gallons per minute. Currently, there are over 200 customers subscribing to the AquaHawk alerting module. Additional outreach is planned to market this effective water management feature.

Please feel free to contact me should you have any questions regarding this report.

/blo

Attachments

Attachment A

Photo of completed fixed base tower installation

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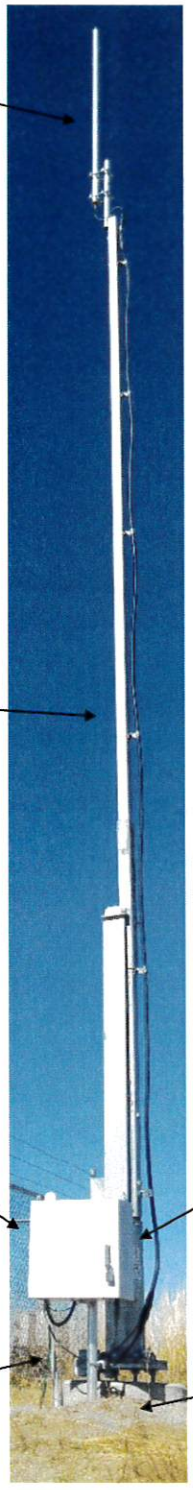
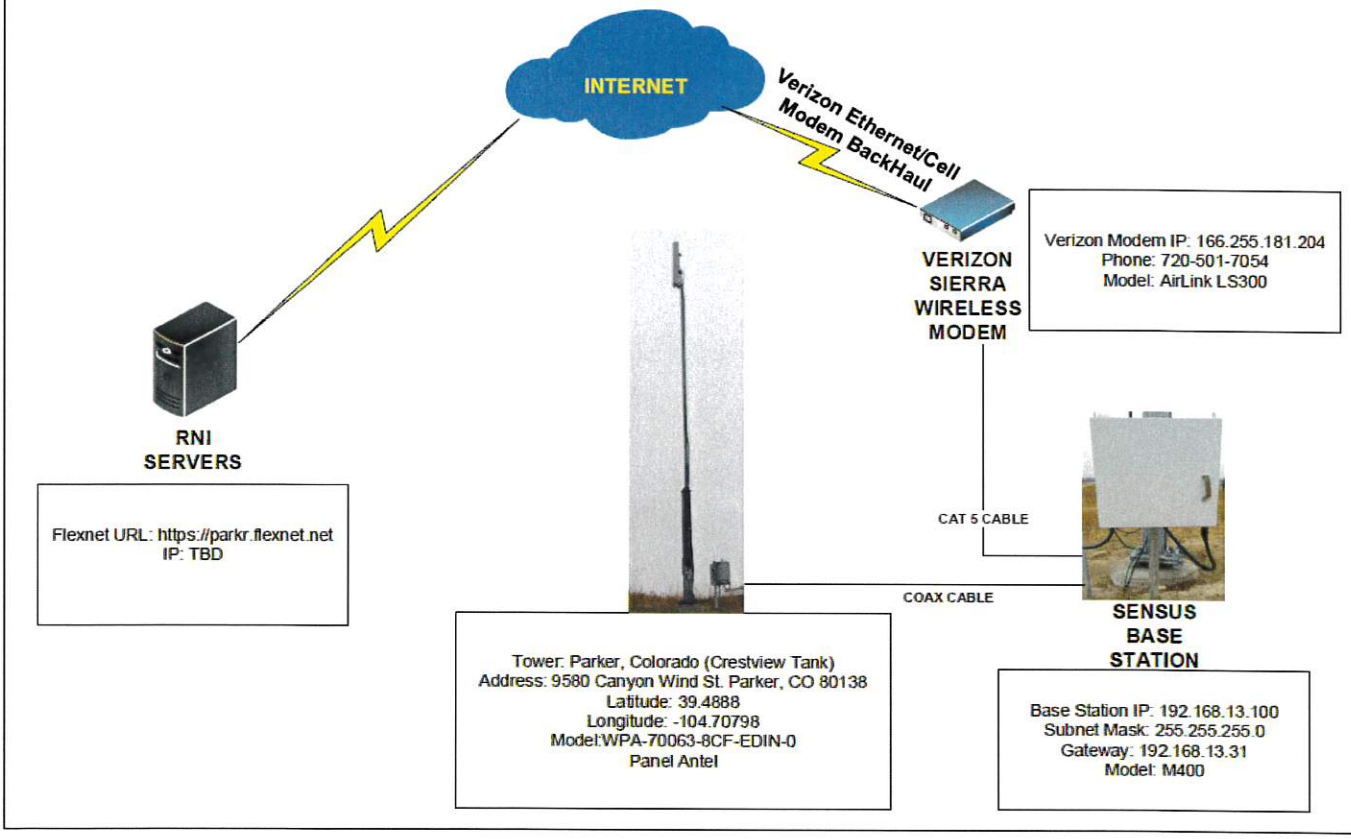
Tank Network Diagram


Antennas by Sensus
Towers supplied by KNS and installed by Thin Air
Base Stations by Sensus
Backhaul Modems by Verizon
Electrical by Cross Diamond Electric
Bases Prepared By Badger Daylighting

CRESTVIEW TANK NETWORK DIAGRAM



Attachment B

Communication Plan, Templates

&

PWSD Web Page Information

METER REPLACEMENT AND AMI INSTALLATION COMMUNICATIONS PLAN

SITUATIONAL ANALYSIS:

The District has an aging metering infrastructure that:

- ✓ Has a mechanically-based measuring system that is decreasing in metering accuracy and coming to the end of its useful life in areas of the District that are 20 years in age or older;
- ✓ Requires approximately ½ of the meters to be read manually, requiring staff to walk and manually enter readings in all weather conditions;
- ✓ Has design challenges with ensuring reading accuracy due to the potential of a read discrepancy between the register and the remote, as well as issues with some large meter volumetric logging due to test circles/meter multiplier inaccuracies that are facilitated by the metering registration design;
- ✓ Provides only monthly meter readings which are less informative to determine customer-side leaks, enabling leaks to persist and take longer to detect by the customers on their bills and staff via limited meter analytics reports;
- ✓ Requires staff to be deployed on site to acquire special and final meter reads, adding to truck-rolls;
- ✓ Does not provide adequate information related to actual customer usage for financial, operational and capital modeling purposes;
- ✓ Does not provide adequate information to customers for them to effectively manage their water use in a timely manner;
- ✓ Enables customers to be more reliant on the District to assist them, and take on more responsible for customer water use than necessary;
- ✓ Has operational pressure requirements that are lower in most cases than the District's supplied pressure, requiring the District to have a privately owned pressure regulating valve installed upstream of the meter which creates challenges for customers designating, accessing and maintaining their infrastructure.

Current best practice metering infrastructure technology can enhance these areas:

Volumetric Metering & Meter Reading

- ⇨ More accurate flow capture at low and high flow volumes;
- ⇨ Reduce the costs and risks associated with meter reading;
- ⇨ Reduce moving parts and failure points in the water meter itself (electronic meters) so that accurate metering occurs and meter maintenance is reduced;
- ⇨ Operate in high pressure ranges without causing meter damage or reading inaccuracies, thus eliminating the need to reduce pressure prior to metering the use, resulting in less need for a property owner to have private infrastructure in the form of a PRC in a meter pit;
- ⇨ Provide meter read data on an hourly to every 15-minute frequency.

Billing

- ⇨ Provide on demand reads for special reads, and final billing;
- ⇨ Provide higher visibility information to billing customer service agents to assist customers;

METER REPLACEMENT AND AMI INSTALLATION COMMUNICATIONS PLAN

PROJECT PURPOSE: The purpose of this project is to - in a manner that is consistent with the District's vision, mission and values - effectively manage the District's metering assets through a retrofit and upgrade of aging metering infrastructure with state of the art technology that improves customer service, informs all business areas of the organization, and makes the most efficient use of existing department and District resources, resulting in more effective service provision from a financial and service level standpoint for our customers.

Primary project objectives include upgrade metering infrastructure with a 20-year solution according to approved budget and phasing plan. Additional information is available regarding project schedule, phasing, goals, tasks and responsible parties in the Project Management Plan.

Major project tasks are summarized at a high level as follows:

1. Install metering communication infrastructure that minimizes sites required by the District, maximizes redundancy, reliability and security of read acquisition;
2. Install, integrate and maintain meter reading and software analytics systems that minimize the required installation and maintenance of District IT support, and maximize information management capabilities;
3. Upgrade meters and install endpoints that increase volumetric reading accuracy, provide granular minimum hourly read capability, provide for 2-way communication, and reduce maintenance. Installation phasing targets non-single family customers, elimination of manually residential read meters, and then elimination of existing AMR metering infrastructure;
4. Create streamlined interface for billing to acquire monthly meter reads, special and final read;
5. Create customer portal for internal and customer use that allows for enhanced customer service and customer water use management empowerment;
6. Facilitate use of water usage data to other departments including Finance, Engineering and Water Operations.

COMMUNICATION PLAN PURPOSE: The purpose of the communication plan is to strategically outline overarching project goals and align outreach activities that effectively communicate consistent messaging to customers to streamline project completion, demonstrate project value and facilitate customer self-water use management, resulting in enhanced improved customer satisfaction. The plan defines:

- ☆ Purpose and value of the project to the District;
- ☆ The benefits of the technology to the customer;
- ☆ The process by which the retrofit and upgrade will occur; and
- ☆ The timing of the retrofit and upgrade on a District, and individual customer level.

Communication Plan Goals:

1. Maintain the support of the Board, and gain the support of customers and stakeholders impacted by this project.

Large Meter Audit Customer Coordination
Web site – General & Map
Press Release(s) – General/Neighborhood specific
Bill inserts & Tidbits
HOA Newsletters – Route specific
Social Media (District FB/Twitter
Individual Customer Notices

- Initial Notice
- 2nd Notice
- Final Notice
- Disconnect Hang Tag
- Hang tag/notice of completion
- Survey Enhance customer satisfaction as demonstrated by survey metrics
- Direct marketing tools with benefits/instructions for online services

General overall ongoing marketing tools with benefits/instructions for online services
Public project status updates
IVR call outs
Offer customer open houses – general, and HOA
Video online (of retrofit and tutorial for portal use)
PWSD customer inquiry management

- Designate, train, talking points for primary point(s) of contact
- Define customer communication service levels for managing customer interfaces
- Phone tree design/including recorded message information
- Internal SME/messaging, define expectations for customers, assistance and back up
- Customer Care (Field & Billing)
- Other PWSD support staff

<u>Internal (PWSD/PWSD & Contractor)</u>
Team status meetings
Status reports in relation to critical timelines, budget and dynamic issue resolution
Interim Board updates (memo and potential presentations)
All-staff meeting updates
Customer Care team status updates
Individual departmental meetings with IT, Engineering, Water Resources, Finance, as information is brought on line, integrated, and available for use in each area – rollout how the data can be used and facilitate its integration into each functional area and systems.
Internal risk management related to leading a major technology switch, including technological demands and impacts created by data management
Intranet

<u>Modes of Delivery</u>

- Utility spokesperson(s)

2. Customer service levels and associated programs (customer notifications processes) – Once AMI and associated information is available to customers and the PWSD Billing
3. Communication targeted service levels, metrics, and reporting.

ATTACHMENTS:

Attachment A – Communications Plan Schedule (with party responsible for developing and disseminating.)

Attachment B – PWSD customer communication protocol (phone & email) and service levels

Attachment C – Retrofit process and communication flowchart and escalation process (residential and non-single family residential)

Attachment D – Subdivisions/areas in order of retrofit/upgrade priority

Attachment E – Communication materials

Water Meter Replacement Project

Parker Water & Sanitation District (PWSD) is committed to effective management of our critical water resources. As part of the sustainable water initiative, PWSD is replacing its aging water meters. Doing the best job we can for our customers today and in the future is our primary objective! Applying industry related best management practices & technologies is allowing key benefits to be realized:

- ✓ Enhancing customer service & empowering our customers with online access to information to help understand & manage water use;
- ✓ Increasing water metering effectiveness & meter reading efficiency; and
- ✓ Leveraging water use data to inform operating/engineering/financial decisions.

This multi-year project is designed to minimize the inconvenience of changing out water meters, while improving the management of this precious resource!

Parker Water & Sanitation District

Renewable, sustainable, long-term water resources.
A vital investment for our Future!

Key Milestones

2016: Communication infrastructure & integration
2016 – 17: Meter installation for commercial, multi-family, irrigation, and manually read single-family residential accounts
2018 – 2023: Remaining single-family residential accounts

Who We Are & Our Partners

Parker Water & Sanitation District (PWSD), established in 1962, provides water & wastewater services for the Town of Parkers, portions of unincorporated Douglas County, and in the near future, will also serve parts of Lone Tree & Castle Pines. PWSD is partnering with ***OUR CUSTOMERS*** & **Utility Metering Solutions** (UMS), our installation contractor, to successfully implement this multi-year water meter replacement project. Beginning in the fall of 2016 and continuing over the next several years, we will be visiting neighborhoods replacing aging meters with updated technology. The folks at UMS are nationally recognized, experienced professionals who are helping streamline the project, while supporting one of our primary values - customer satisfaction.

For More Information, Visit
pwsd.org/meterreplacement or call (720) 842-4233

The Plan

Parker Water & Sanitation District & our partners, UMS will be notifying customers by letter and door hanger when crews will be in their neighborhood. Information on how to make an appointment & what to expect during the meter replacement process will be provided. Customers will also be provided materials on how they can access their metering information online. A map showing the general timeline of when crews will be in each neighborhood is published on PWSD's website & will be updated as the project progresses.

For more information: pwsd.org/meterreplacement

ParkerWater
& SANITATION DISTRICT

Parker Water & Sanitation District
18100 E Woodman Drive
Parker, CO 80134
(303) 841-4627

Notice of Inside Water Meter Installation

UMS
UTILITY METERING SOLUTIONS

Utility Metering Solutions
117 E Thomas St
Hammond, LA 70401

November, 2016

Dear Valued Parker Water & Sanitation District Customer,

Parker Water & Sanitation District (PWSD) is committed to effective management of our critical water resources. As part of the sustainable water initiative, PWSD is replacing its aging water meters with new models that provide greater efficiency and conservation technology. We are partnering with Utility Metering Solutions (UMS) to complete the installation of these meters. This letter authorizes UMS to change the water meter on behalf of the District. This work will take place beginning in the fall of 2016 and continue over the next several years. You will receive notifications from UMS/PWSD when we are visiting your neighborhood.

If the water meter is inside your home, a UMS installer will request access to your residence to replace the water meter. The installation should take approximately 30-60 minutes. All UMS installers have completed a background check and will have an ID badge indicating their name and their employment with UMS. UMS employees will have a large "UMS" magnet on their vehicles. UMS installers will be wearing bright yellow vests with "UTILITY METERING SOLUTIONS" or "UMS" on the back (as pictured).

It is important that no water is being used during the replacement process. The current water meter will be checked to verify that this is the case. The old meter will then be isolated and replaced with the new meter and your water service will be restored immediately. There will be interruption of your service for approximately 15-20 minutes during the change, however, after that it will be the same great service (and even better) that you've come to expect.

To find out more about how this new metering technology can benefit you, visit our website at www.pwsd.org/meterreplacement. Should you have any questions about the installation process, feel free to contact us during business hours at our main office number of 303-841-4627 or my direct line below.

PWSD and Utility Metering Solutions (UMS) thank you for your cooperation in making this program a success!

Sincerely,

Randy Hellinger
PWSD Field Services Supervisor
720-842-4253

Sustainable Water Initiative: Water Meter Replacement Project

An Important Message from PWSD
Response Required

Dear Valued Customer: (INSERT NAME IF MAIL MERGE), ACCOUNT #:_____ INSERT DATE

Parker Water & Sanitation District (PWSD) is committed to effective management of our critical water resources. As part of the sustainable water initiative, PWSD is replacing its aging water meters with new models that provider greater efficiency and conservation technology. We are partnering with Utility Metering Solutions (UMS) to complete the installation. ***Since the water meter is located inside your residence or business, we are asking for your help in providing access to the water meter by scheduling an appointment with UMS.***

How do you schedule your appointment?

- ✓ Please have your account number ready and visit the UMS 24-hr online scheduling portal at: **www.umsonlinescheduling.com.**
- ✓ Appointments may also be made by calling the UMS Call Center at **(844) 741-6248.** Spanish speaking agents are available (Option #2).

Scheduling agents are available:
Monday-Friday, 6:00AM to 4:00PM (MT)
Saturdays, 6:30AM to 2:00PM (MT)
Appointment times are available Monday through Friday, **8:00AM to 4:00PM** (MT).
Limited evening and weekend appointments are available upon request.
Please schedule an appointment no later than _____.

There is *no charge* to you for this meter replacement. To complete installation of the new water meter:

- ⇨ UMS will need access to the water meter inside your home or business.
- ⇨ The area should be clear and accessible. Related plumbing valves should be in working order.
- ⇨ The homeowner or a responsible party (18 years old or older) must be present at the time of installation.
- ⇨ For the safety of UMS meter installer, please secure all pets.

All PWSD meters are scheduled for replacement. *Failure to respond to this notice may result in service interruption.*

What you can expect during your appointment...

You will be asked to schedule an appointment spanning a two-hour block of time. The UMS installer will arrive to complete the meter installation work within the two-hour time frame. Pending any unforeseen issues, the actual installation process will take approximately 30-60 minutes. UMS is an experienced meter installation contractor. All installers will have ID, wear UMS uniforms, and travel in marked vehicles.

To find out about the enhanced customer service benefits, see the enclosed flier for more information. Questions? Contact the PWSD project management team at **(720) 842-4233**, or email at replacemymeter@pwsd.org, or visit the website at www.pwsd.org/meterreplacement. Also, feel free to call us at our administrative offices at (303) 841-4627 for more information regarding this project.

Parker Water & Sanitation District & UMS thank you for your cooperation in making this program a success!

ParkerWater
& SANITATION DISTRICT
18100 E Woodman Drive
Parker CO 80134-3452
(303) 841-4627/www.pwsd.org

UMS
UTILITY METERING SOLUTIONS

ParkerWater
& SANITATION DISTRICT

Immediate Response Required*

2ND ATTEMPT Notice to PWSD Customer

Parker Water & Sanitation District is installing new water meters in its service area & is partnering with Utility Metering Solutions (UMS) to complete the installation.
There is no charge to you for this meter replacement, however an appointment is necessary.

YOU MUST SCHEDULE WITHIN 48 HOURS

Please have your account number ready and visit UMS 24-hr online scheduling portal at **www.umsonlinescheduling.com**.

Appointments can also be made by calling the UMS Call Center at **(844) 741-6248**. Spanish speaking agents are available (Option #2). Scheduling agents are available **Monday-Friday, 6:00AM to 4:00PM (MT), Saturdays, 6:30AM to 2:00PM (MT)**.

Appointments are available Monday through Friday **8:00AM to 4:00PM.** Limited evening/weekend appointments.

What happens during installation?
- UMS will need to access to the water meter inside your home or business.
- The area should be clear and accessible.
- Homeowner or responsible party (18 years old or older) must be present at the time of installation.
- Pets must be secured.

You will be asked to schedule an appointment spanning a two-hour block of time. The installer will arrive within the two-hour time frame and complete the meter installation in approximately 30-60 minutes.

Failure to respond to this notice will result in service interruption.

If you have any questions, please visit our website at www.pwsd.org/meterreplacement, or contact the PWSD office via phone at **(720) 842-4233**, or email at replacemymeter@pwsd.org.

ADDRESS _____

Date/Time _____

Installer _____

UMS
A Division of Xtralight

ParkerWater
& SANITATION DISTRICT

Notice to our Valued Customer

~~*** The WATER METER installation for your property has been completed ***~~

The water meter replacement that is part of PWSD's sustainable water initiative was completed by the District's partnering installation contractor, UMS.

Installation Summary:
- An experienced UMS employee replaced the existing water meter with a new meter in accordance with PWSD standards.
- Your service was interrupted for 15-20 minutes while the old meter was removed.
- Water service was restored after the new meter installation. The water line was flushed to remove air in the line. *If your water is discolored, please flush your line until clear by turning on the cold water in your sink faucet, or a yard hose.*

(NOTE: If your service was "OFF" at the curb stop, or meter pit before installation, we changed your meter and your service was left "OFF".)

For questions, concerns, or to report a water leak following this installation, please contact UMS at (800) 297-0511

Now that the new meter is installed, sign up for:
AQUAHAWK ALERTING!
This online customer portal provides powerful information to help you manage your water use:
- Find out your water use before you receive your bill!
- Set up individualized use thresholds, even be alerted to leaks!

Please visit our website at www.pwsd.org/meterreplacement for more information about this customer service enhancement.

If you have any questions, please contact the PWSD office via phone at (720) 842-4233, or email at replacemywatermeter@PWSD.org.

Your satisfaction is important to us! We want your feedback! Please visit our website at www.pwsd.org/meterreplacement to complete a short survey about your experience with this meter replacement process.

The PWSD & UMS team thank you for your cooperation in making this a successful program!

UMS
A Division of Xtralight

ParkerWater
& SANITATION DISTRICT

Immediate Response Required*

FINAL ATTEMPT NOTICE TO PWSD CUSTOMER

YOU MUST SCHEDULE WITHIN 24 HOURS OR YOUR WATER MAY BE DISCONNECTED.

The Parker Water & Sanitation District is installing new water meters in its service area & is partnering with Utility Metering Solutions (UMS) to complete the installation. *There is no charge to you for this meter replacement, however an appointment is necessary.*

Please have your account number ready and visit UMS 24-hr online scheduling portal at www.umsonlinescheduling.com.

Appointments can also be made by calling the UMS Call Center at: (844) 741-6248. Spanish speaking agents are available (Option #2). Scheduling agents are available Monday-Friday, 6:00AM to 4:00PM (MT), Saturdays, 6:30AM to 2:00PM (MT).

Appointments are available Monday through Friday, 8:00AM to 4:00PM

What happens during installation?
- UMS will need to access to the service line area inside your home or business.
- The area should be clear and accessible.
- Homeowner or responsible party (18 years old or older) must be present at the time of installation.
- Pets must be secured.

You can schedule an appointment spanning a two-hour block of time. The installer will arrive within the two-hour time frame. The installation should take approximately 30-60 minutes.

If you have any questions, please contact the PWSD office via phone at (720) 842-4233, or email at replacemymeter@pwsd.org

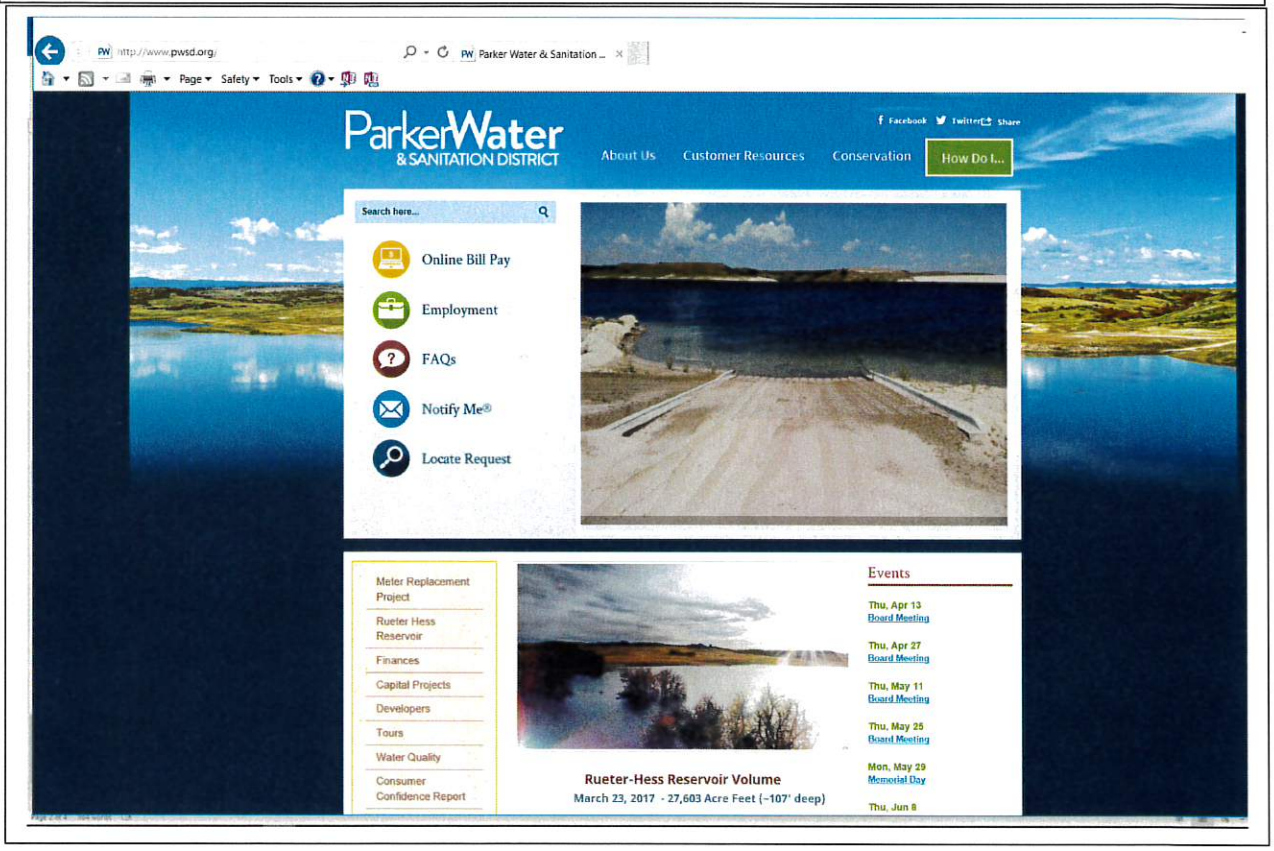
ADDRESS _____

Date/Time _____

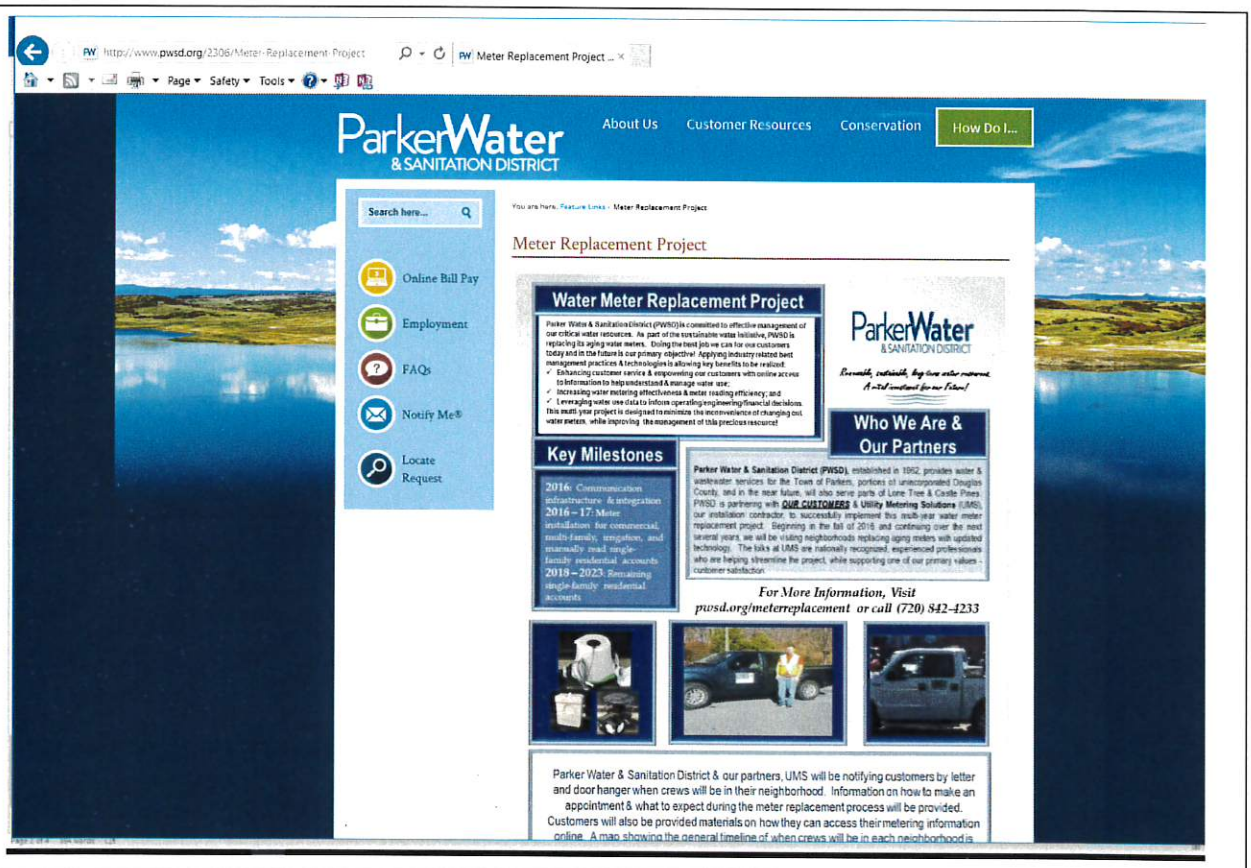
Installer _____

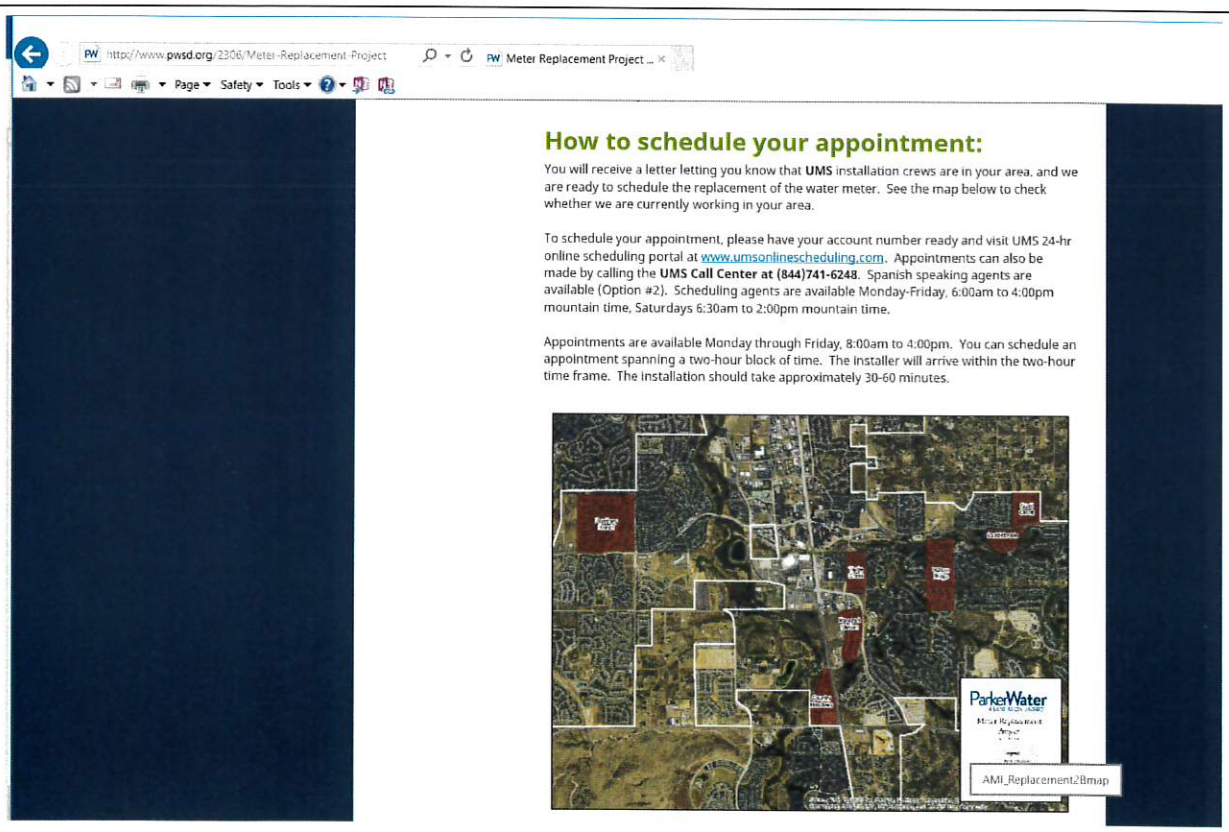
UMS

Home Screen

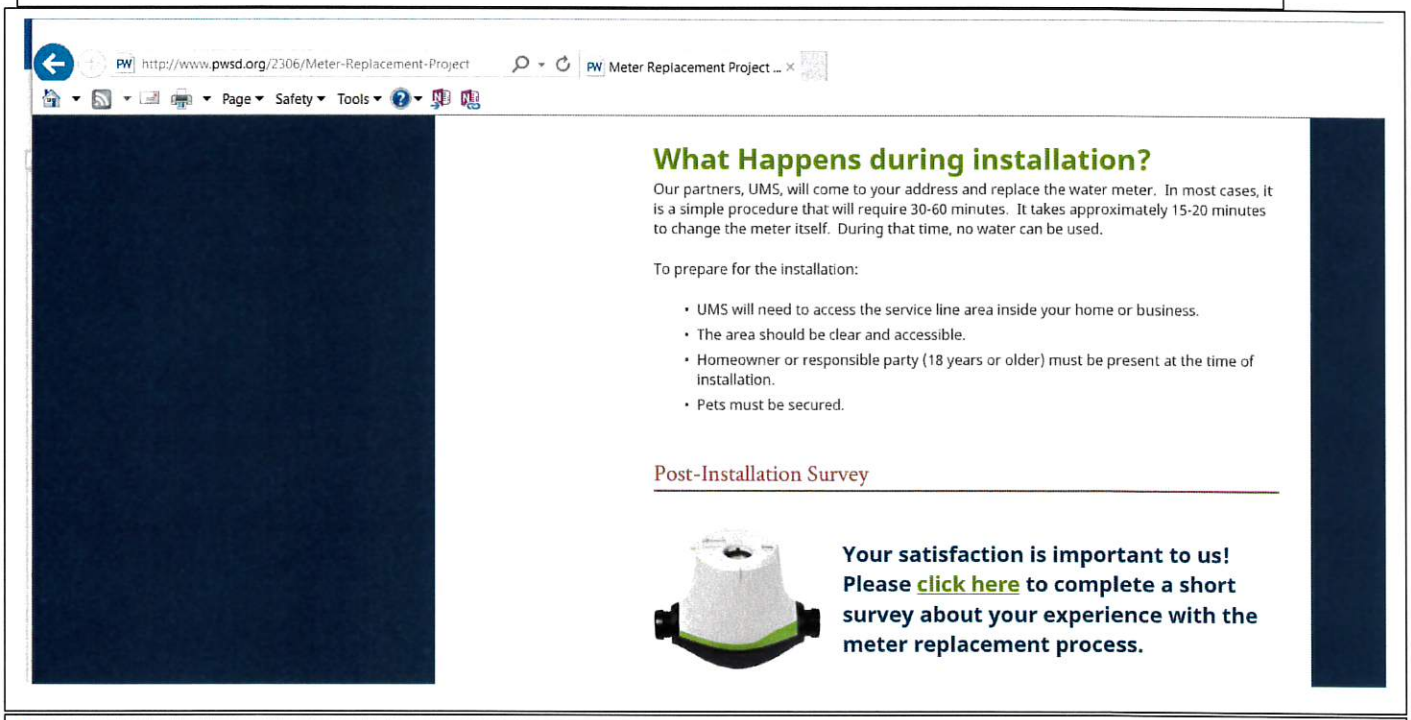

http://www.pwsd.org/
Parker Water & Sanitation ...
Page
Safety
Tools
ParkerWater
& SANITATION DISTRICT
Facebook
Twitter
Share
About Us
Customer Resources
Conservation
How Do I...
Search here...
Online Bill Pay
Employment
FAQs
Notify Me®
Locate Request
Meter Replacement Project
Rueter Hess Reservoir
Finances
Capital Projects
Developers
Tours
Water Quality
Consumer Confidence Report
Rueter-Hess Reservoir Volume
March 23, 2017 - 27,603 Acre Feet (~107' deep)
Events
Thu, Apr 13
Board Meeting
Thu, Apr 27
Board Meeting
Thu, May 11
Board Meeting
Thu, May 25
Board Meeting
Mon, May 29
Memorial Day
Thu, Jun 8

Meter Replacement Project Page





Meter Replacement Project Page (continue)



What Happens during installation?

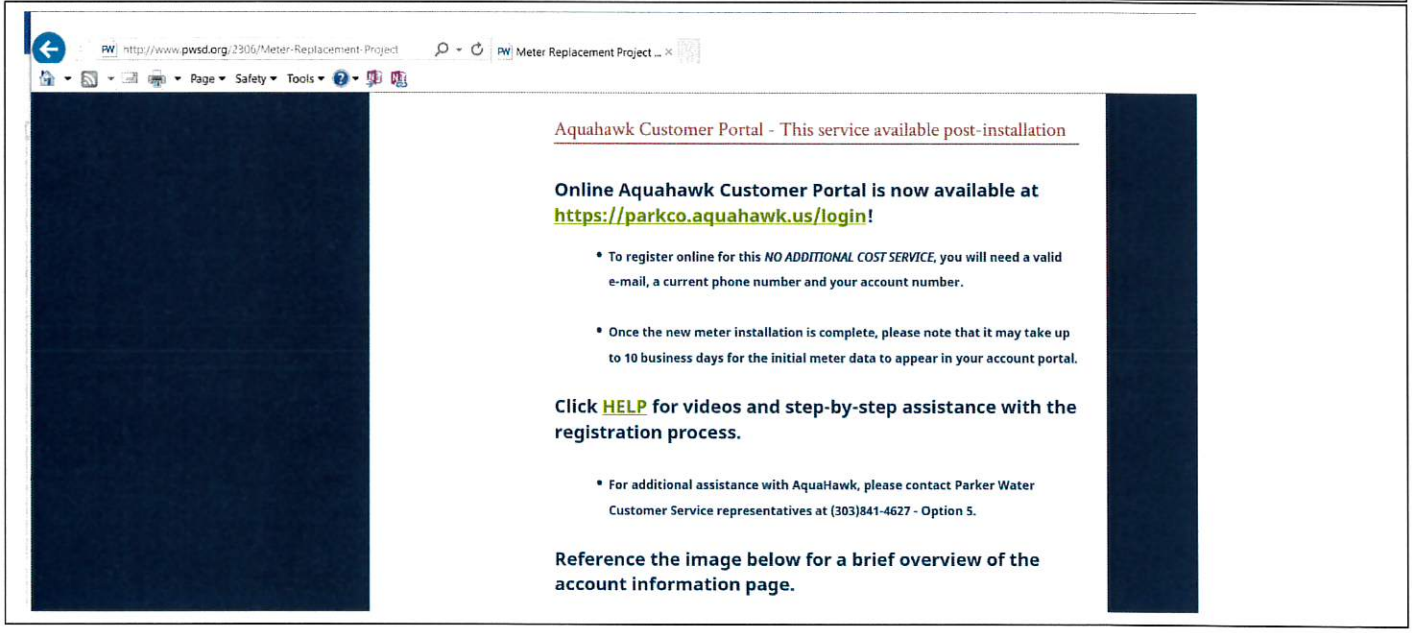
Our partners, UMS, will come to your address and replace the water meter. In most cases, it is a simple procedure that will require 30-60 minutes. It takes approximately 15-20 minutes to change the meter itself. During that time, no water can be used.

To prepare for the installation:

- UMS will need to access the service line area inside your home or business.
- The area should be clear and accessible.
- Homeowner or responsible party (18 years or older) must be present at the time of installation.
- Pets must be secured.

Post-Installation Survey

Your satisfaction is important to us! Please click here to complete a short survey about your experience with the meter replacement process.



Aquahawk Customer Portal - This service available post-installation

Online Aquahawk Customer Portal is now available at https://parkco.aquahawk.us/login!

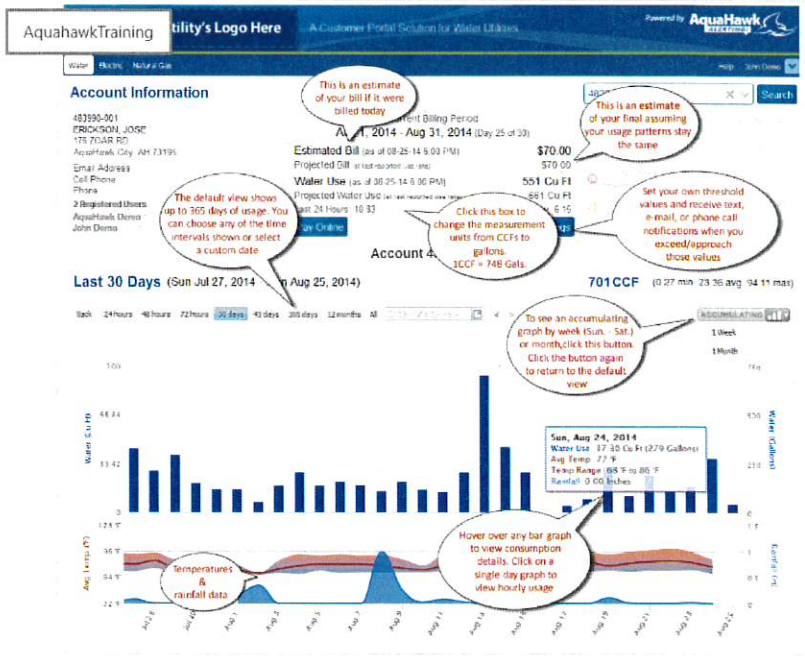
- **To register online for this *NO ADDITIONAL COST SERVICE*, you will need a valid e-mail, a current phone number and your account number.**
- **Once the new meter installation is complete, please note that it may take up to 10 business days for the initial meter data to appear in your account portal.**

Click HELP for videos and step-by-step assistance with the registration process.

- **For additional assistance with AquaHawk, please contact Parker Water Customer Service representatives at (303)841-4627 - Option 5.**

Reference the image below for a brief overview of the account information page.

Meter Replacement Project Page (continue)



Frequently Asked Questions

1. Why is the water meter being replaced?

Over time, meters wear out, and can under register the amount of water being used. By replacing meters, usage readings will be more accurate. In addition, the new system will include meter reading technology that will save labor, wear and tear on District vehicles, prevent reading recording errors, and minimize the need for District personnel to go on to customer's private property to read the meter. This technology will also empower customers to manage their water use by providing more timely information through an online customer portal where customers can access they own meter reading information, set up usage threshold alerts, and identify potential leaks.

2. How does the new metering technology benefit me?

The new technology has a customer portal – AquaHawk - that allows you to find out your water use usually within a day, much faster than waiting for your water bill to arrive.

Each customer can set up individualized usage thresholds/budgets in the customer portal, see how your usage compares to the same time last year, and can also alert for high use or continuous flow (which usually means you have a leak!).

Understanding your water use helps you make informed decisions about your water use and your water bill.

3. Can you tell me more about how the meter replacement process works?

When will this work be performed?

The work is beginning in November 2016 and will continue in different phases for the next several years. You will receive a letter when crews are replacing meters in your area. You can also visit our website for a map outlining the areas and approximately when crews will be in your neighborhood.

You will receive a letter letting you know that crews are in your area, and we are ready to schedule the replacement of your water meter. The work will be performed Mondays through Fridays, during the hours of 8:00 a.m. – 5:00 p.m. You will be provided with how you can schedule your appointment online, or call in to our scheduling center.

How long will it take, and will my service be affected?

Our partners, UMS, will come to your address and replace the water meter. In most cases, it is a simple procedure that will require 30-60 minutes. It takes approximately 15-20 minutes to change the meter itself. During that time no water can be used, but after that you can expect the same great service!

Meter Replacement Project Page (continue)

How do I know who is authorized to do the work?
Our partners, UMS, will be performing the meter replacement. They will be driving "UTILITY METERING SOLUTIONS" trucks, wearing bright shirts, jackets, or vests identified by "UTILITY METERING SOLUTIONS" and carrying appropriate credentials.

Do they need to come inside my home/business?
If the water meter is located inside your home in your basement or crawl space, yes, the installers will need to get into your home. For businesses, or multi-family residential customers, the water meter is usually in a mechanical room, so access is needed. The majority of homes built after 2008 have outside meter pit sets.

Do I have to be present for the installation if the meter is inside my home?
If the water meter is located inside, yes. For your peace of mind, we require an adult be present during the installation. The installer will not enter your home unless authorized to do so by someone 18 years old or older.

What will they do inside my home?
Installers will remove the old water meter, install the new meter, and install the meter communication endpoint, which usually goes on the outside of the home or building.

What if the meter is outside my home?
If the water meter is located outside in a meter pit, it will not be necessary for anyone to be home. In this case, the majority of the work will take place near the street in the meter pit.

4. Will the wireless technology affect my health, privacy or other electronic devices in my home?

The new meters will not negatively affect health or privacy. In fact, these meters better address these types of concerns by replacing vehicles and manual visits to your home with environmentally clean radio communication. The wireless portions of the system:

- ⇨ Will be operated according to Federal Communications Commission rules;
- ⇨ Will not interfere with other radio frequencies in the area;

When the meter is inside, the radio transmitter will be mounted outside the home or place of business, and the transmission time is only 15 seconds per day.

Still have questions?

Contact the PWSD office via phone at (720) 842- 4233
or by email at replacemymeter@pwsd.org.

Post-Installation Meter Replacement Program Survey

Target Audience: Customers – Commercial, Multi-family, Irrigation, and Single-family residential - that have had their water meter changed out. This includes individual customers, management companies, representatives, and/or responsible parties.

Objectives:

1. Project Understanding:
    a. To determine if the customer understood the project;
    b. To help identify other additional outreach methods/materials need to be made available; and
    c. To evaluate efficacy and facilitate additional FAQ's;
2. Scheduling:
    a. To identify the preferred method of scheduling an appointment;
    b. Whether the existing methods of taking appointments are effective for our customers;
    c. Identify if we need additional/alternative ways to make appointments
    d. Determine the quality of performance of the call center.
3. Installation:
    a. To determine the quality of performance of the contractor;
    b. To determine the quality of the service the customer experienced, including having enough information about the project, understanding how to make an appointment, ease of making an appointment, ease and thoroughness of how questions were managed, was service timely, did the crew keep the home clean, was their service restored in a timely manner.
4. AquaHawk Adoption
    a. To determine the interest in customer water management tools available in AquaHawk;
    b. To determine the adoption rate of AquaHawk as a management tool;
    c. To identify which are the most popular water management functions that are available in AquaHawk;
    d. Help identify potential development items for AquaHawk.

SURVEY

Post-Installation Meter Replacement Program Survey

Extraordinary customer service – It's a core value!

Your satisfaction is important to us! We want your feedback! Thank you for taking a few minutes to complete a short survey about your experience with the meter replacement process.

Address or Subdivision*:
(Mandatory field – need to type something in here to be able to move forward.)

Date of Installation:
(Not mandatory field – drop down selection if possible.)

1. How did you make your appointment to get the water meter replaced?
    - Online
    - Through the call center

2. Were you satisfied with how your questions about the installation process were answered?
    - Very satisfied
    - Somewhat satisfied
    - Somewhat dissatisfied
    - Very dissatisfied
    - Didn't have any questions

3. How satisfied were you with the friendliness & courtesy of the call center staff?
    - Very satisfied
    - Somewhat satisfied
    - Somewhat dissatisfied
    - Very dissatisfied

4. Were you satisfied with the installation crew? (Please consider whether they were on time, were courteous, answered any questions you may have had, and were careful not to leave a mess.)
    - Very satisfied
    - Somewhat satisfied
    - Somewhat dissatisfied
    - Very dissatisfied

5. If you called PWSD directly, did you receive the help you needed from our staff concerning your retrofit?
    - Yes
    - No

- Didn't need assistance.

6. How would you rate the overall experience?
   - You made it easy on me!
   - It went okay.
   - It was a real challenge to get this done.
   - No opinion

7. Have you looked up your account in the online customer portal - AquaHawk Alerting?
   - Yes
   - Not yet
   - Probably won't

8. If you have viewed your account in AquaHawk Alerting, do you think this tool will help you manage your water use more effectively?
   - Yes! I think it will be very helpful.
   - Maybe.
   - No. Probably won't use it.
   - No opinion

9. Is there additional information that you wish was available about this project?
   (Free form box available for comments.)

Have questions? Want more information?
Call us at (720)842-4233, or email at replacemymeter@PWSD.org.

ParkerWater
& SANITATION DISTRICT

Parker CO 80134-3452
(303) 841-4627/www.pwsd.org

Notice to our Valued Customer

PWSD has recently installed a WATER METER at the following address:

Now that the new meter is installed, you will have access to:

AquaHawk ALERTING!

This online customer portal provides powerful information to help you manage your water use, including:

- Monitoring your water use *before* you receive your bill!
- Setting up individualized use thresholds and leak alerts!

Please visit our website at www.pwsd.org/meterreplacement for more information about this customer service enhancement, or go to https://parkco.aquahawk.us/login to sign up today!

Need help getting registered? Call us at (303) 841-4627 Option 5, and we can walk you through the registration process.

Water meter information may take 10-14 days to be available in the customer portal.

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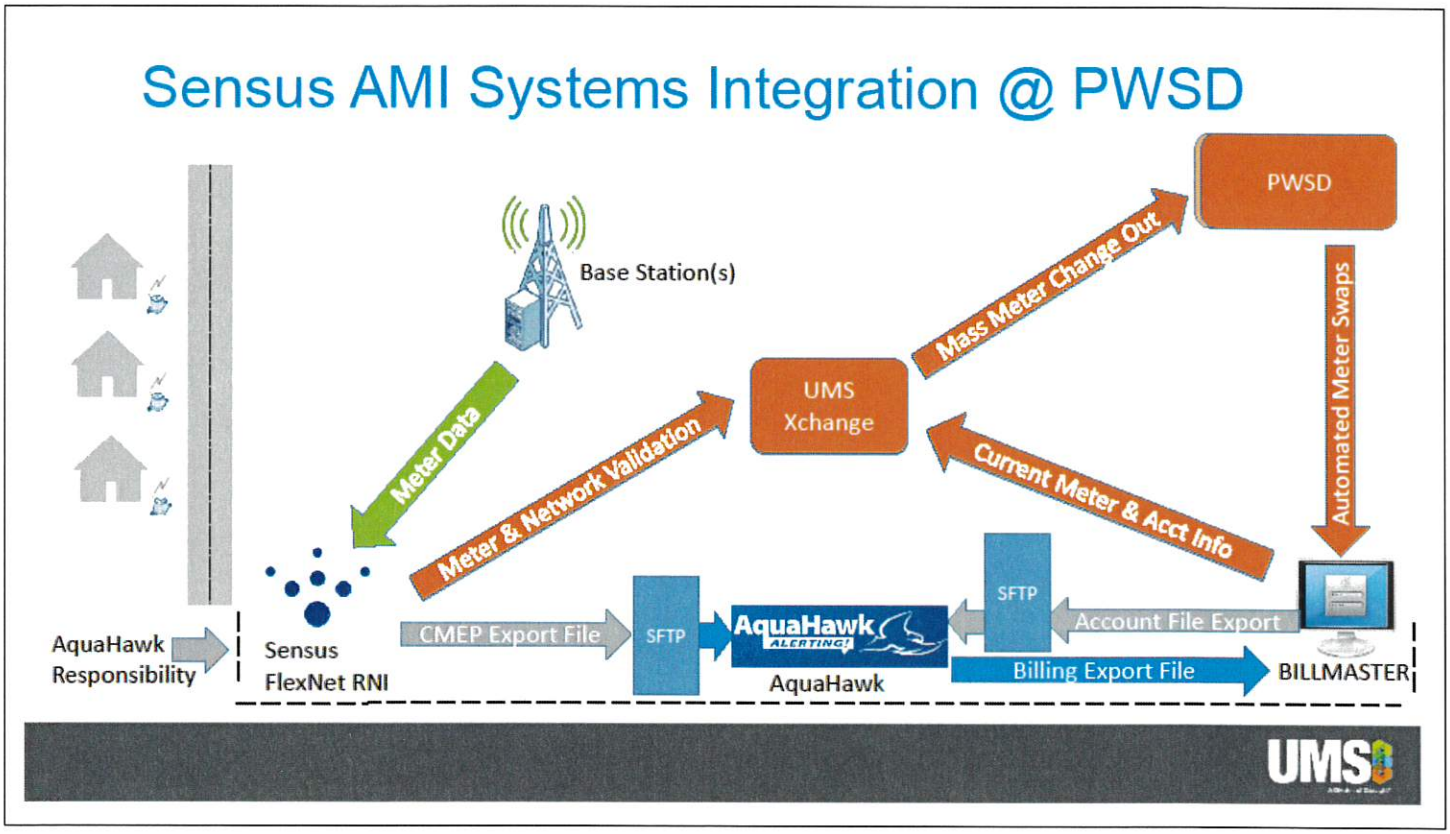
Attachment C

Integration Graphic


Sensus AMI Systems Integration @ PWSD
PWSD
Base Station(s)
Mass Meter Change Out
Automated Meter Swaps
Meter Data
Meter & Network Validation
UMS
Xchange
Current Meter & Acct Info
SFTP
Account File Export
CMEP Export File
SFTP
AquaHawk
ALERTING
AquaHawk
Billing Export File
BILLMASTER
AquaHawk
Responsibility
Sensus
FlexNet RNI
UMS