



Customer Advisory Committee Meeting #1 Summary

Wednesday, October 23, 2019, 6:30-9:30 pm

INTRODUCTION

Jenna Moser, Chair of the Customer Advisory Committee (CAC), called the meeting to order at 6:34 p.m. After welcoming the members of the CAC, she turned the meeting over to Laura Mason-Smith, the CAC meeting facilitator, who reviewed with the CAC the **Meeting Agenda:**

1. Welcome and Pledge of Allegiance
2. Agenda Review and Brief Intro's
3. Public Comment
4. Meter Replacement Program Overview
5. Water Meter Overview
 - Background
 - New Meter Technologies
6. CAC Input on New Water Meter Technology Preferences
7. Preview of CAC Meeting #2 on March 11, 2020
8. Clarify Next Steps
9. Public Comment
10. Close

Laura reiterated that meeting materials are provided electronically to the CAC members in advance of and following their meetings, and are posted on the CHWD website, [Customer Advisory Committee Section](#). In addition, meeting summaries that provide an overview of each of the CAC meetings as well as a video of the meetings are posted to the website to be available to the CAC members and the general public.



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ATTENDEES

CAC Members:

Kimberly Berg	Commercial Representative
Ray Bohlke	Residential Representative
Michael Goble	Residential Representative
Doug MacTaggart	Residential Representative
Jenna Moser	Residential Representative and CAC Chair
Richard Moore	Residential Representative
Richard Moses	Residential Representative and CAC Vice Chair
Mike Nishimura	Commercial Representative
Alan Utzig	Residential Representative

Unable to attend were:

Julie Beyers	Residential Representative
Deborah Cartwright	Residential Representative
Katherine Cooley	Institutional Representative
Wes Ervin	Commercial Representative
Suzanne Guthrie	Residential Representative
Andrew Johnson	Residential Representative
Dave Mitchell	Institutional Representative
James Montenton	Residential Member
Cyndi Price	Institutional Representative
Chris Ralston	Institutional Representative
Pamela Schultz	Residential Representative
Javed Siddiqui	Residential Representative
Noe Villa	Institutional Representative
Debra Walker	Residential Representative

CHWD Staff and Board:

Tim Cutler	Water Distribution Supervisor
David Gordon	Director of Operations
Madeline Henry	Acting Senior Management Analyst/Deputy Board Clerk
Rex Meurer	Water Efficiency Supervisor
Brittany Moore	Acting Management Analyst/Deputy Board Clerk
Ray Riehle	CHWD Director
Rebecca Scott	Senior Management Analyst
Hilary Straus	General Manager
Susan Talwar	Director of Finance and Administrative Services

Consultants:

Eric Vaughan	Harris & Associates
Laura Mason-Smith	Mason-Smith Success Strategies

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PUBLIC COMMENT

None.

APPROVAL OF SEPTEMBER 10, 2019, CAC MEETING #8 MINUTES

Due to the lack of a quorum, the minutes of the September 10, 2019, CAC Meeting #8 will be held for approval at the Meter Replacement Program (MRP) CAC Meeting #2 on March 11, 2020.

METER REPLACEMENT OVERVIEW

David Gordon, District Director of Operations, provided an overview of the Meter Replacement Program:

1. General overview
2. Study purpose and development:
 - a. The Meter Replacement Program Consortium and its importance
 - b. The benefits of being part of the Consortium
3. The relationship between the Consortium, Citrus Heights Water District, and the Customer Advisory Committee (CAC)
4. The seven stages of the Planning Study and schedule
5. The importance and involvement of the District's CAC in the Meter Replacement Program Planning Study

WATER METER OVERVIEW

Rex Meurer, District Water Efficiency Supervisory, provided background on the District's water meters:

1. How water usage is measured
2. District meter history
3. Why water agencies use meters
4. Specifics of metering
 - a. Meter components
 - b. Reading a meter
 - c. Meter data transmitted to billing
5. Regulatory requirements



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NEW TECHNOLOGIES OVERVIEW

Eric Vaughan, Harris & Associates Project Manager, provided an overview on meter types and technologies:

1. District meter types
2. Consortium meter types, ages, and numbers
3. New technology advantages and disadvantages

QUESTIONS AND ANSWERS

Q1: Who will be the lead agency of the Consortium?

A1: *CHWD was the first agency to start the process and is the lead agency.*

Q2: Who is part of the Consortium?

A2: *CHWD, Fair Oaks Water District, Orange Vale Water Company, Sacramento Suburban Water District, Sacramento County, City of Sacramento, City of Folsom, Carmichael Water District, Golden State Water Company, Placer County Water Agency, Regional Water Authority, and San Juan Water District.*

Q3: Explain the math. Why are the numbers of meters inconsistent with the population of the City of Citrus Heights?

A3: *CHWD's boundaries overlap the City of Citrus Heights by about two thirds, so the Water District is not the City of Citrus Heights. The District also extends out to parts of Orangevale, Fair Oaks, Roseville, and Placer County. We service approximately 67,000 people, or approximately 3.5 people per water meter.*

Q4: How does the District replace a water meter; is it plug and play?

A4: *When the District replaces water meters that have already been installed, it is a relatively simple process that is essentially plug and play. Depending on the register type, it could be a little more complicated if the meter has AMI, or Automated Meter Infrastructure.*

Q5: Do any of the other agencies have an equivalent of the CAC?

A5: *No, there is no Customer Advisory Committee for the other agencies.*

QUESTIONS AND ANSWERS *(continued)*

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Q6: Can CHWD use a smart phone/device app to track customer usage?

A6: *Yes, it is possible. However, in order to do that the meter reading platform would need to be AMI that does not have to be read manually and allows two-way communication between the meter and the District and its customers.*

Q7: Would some new technology meters mitigate time loss for locating meters?

A7: *The District has maps that show the location of every meter at every property. However, one thing CHWD will be looking at over the next five years is to GPS all of our facilities that are out in the field, not just water meters. The District has relatively good accuracy within about two to three feet, but GPS would allow us to know within one to two inches.*

Q8: How do economies of scale apply to testing?

A8: *Some of the neighboring agencies have invested in test bench facilities to be able to take meters out of the ground and accurately test them in a controlled environment rather than in the field, which may be less accurate. CHWD thinks that by partnering with several of these agencies who have already invested in a test bench facility, there can be economies of scale through the use of their facilities rather than each agency building their own test bench. That is a possibility CHWD wants to look at as part of the study.*

Q9: Is the District spending an inordinate amount of time leading the Consortium without being reimbursed for time spent?

A9: *There are some staff time and materials for the project management, but it is a major benefit for the District to be able to manage the process and have 12 experts in the room at one time who are not tied to any particular vendor. And, the other agencies are sharing in the costs for the study. By participating in the consortium, the District is saving approximately \$300,000 on the cost of the advanced planning study. CHWD can also work with people we don't normally work with, and this will provide other opportunities to partner in the future that will have unimaginable benefits that we can't even foresee now. CHWD sees this as a real opportunity to gain many more benefits in the future.*

QUESTIONS AND ANSWERS (continued)

Q10: How do installation costs and rates vary depending on meter type?

A10: *Installation costs do vary, and the newer technology is slightly more. There are some meter manufacturers who are not using brass products and are using PVC instead, which drops the price. Some agencies have chosen to go with some less*

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expensive products that may be experiencing some related problems. The labor is basically the same for each type of meter.

Q11: Is water used in fire sprinklers before and after water meters, and is it metered?

A11: Fire sprinkler systems have a dedicated connection and are individually metered so that the District can capture those flows, either during testing or during an actual fire.

Q12: Is it possible to take advantage of future 5G installations for future monitoring?

A12: Yes, it is possible, and this is something that some agencies are really jumping on. However, there is a warning in that some of the agencies went to 3G when it came out; then, once that platform was purchased by our armed forces, it was no longer available and those agencies' 3G networks are being phased out. Therefore, which network used and the implications to the District are something to consider. FYI, 3G, 4G, and 5G are generations of cell technology.

Q13: How can meters fail?

A13: There are a few different ways that meters can fail. There can be an obstruction in the meter that is physically stopping the meter from reading or reading accurately. There also can be failures on the registers. If a meter is physically damaged, for example by someone doing some landscaping, it would be replaced with a new meter.

Q14: Can you dispel smart meters' bad reputations for accuracy?

A14: There is a lot of misinformation about smart meters. The technology is getting more and more reliable and is progressing, or getting "smarter."

Q15: Is there any other agency that has attempted this kind of process for meter replacement, and are you able to use their lessons learned?

A15: Yes, most of the Consortium agencies have already performed some kind of meter replacement study. And, all the agencies believe they can gain a lot through understanding each other's experiences.

QUESTIONS AND ANSWERS (continued)

Q16: When will the District go from 90% touch to 90% auto-smart meters?

A16: That is the basis of this study. CHWD is heading in that direction, with about 5 percent of our meters having the ability to be smart meters, but the study will help us determine whether we should expand this technology to all our meters.

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Q17: Can we just go back to the old, simple style meter rather than advanced technologies?

A17: The study will help CHWD assess this option.

Q18: Regarding the testing facility, will that be used for testing refurbished meters, or spot checking each batch purchased, or is there 100% testing of all purchased meters?

A18: *Testing 20,000 meters would not be cost efficient, so testing will be in batches and ongoing to determine how meters are running consistently throughout their life cycle. Through the study, we are looking forward to developing best management practices for testing meters consistently throughout their life cycle.*

CAC INPUT ON NEW WATER METER TECHNOLOGY PREFERENCES

The CAC members met in two discussion groups to review the potential advantageous features of new water meter technologies. After discussing the features, they indicated which features they believed District customers would find most useful.

The potential advantageous features that the groups believed customers would find most useful are:

1. More proactive leak detection and being able to notify customers about leaks (both groups)
2. Water usage tracking and historical data (both groups)
3. Making water demand forecasting more accurate (one group)
4. Data storage and customer access to their data to make decisions on usage (one group)
5. Online portal and an app for a phone/computer (one group)

They also discussed that the District would have to weigh the costs and benefits for all alternatives.

CAC PROCESS AND LOGISTICS OVERVIEW *(continued)*

The CAC reviewed the upcoming CAC meeting schedule ([see meeting materials on the website for the schedule graphic](#)). These meetings and the high-level topics anticipated for each of the meetings are shown below.



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Workshop #2: March 11, 2020, 6:30-9:15 pm, Citrus Heights Community Center
Technology Analysis Regional-Level Investment Analysis Testing Program Options
Workshop #3: June TBD, 2020, 6:30-9:15 pm, Citrus Heights Community Center
Testing Program Analysis Regional Pilot Program Options Strategy for Implementation
Workshop #4: August TBD, 2020, 6:30-9:15 pm, Citrus Heights Community Center
Implementation Strategy Options Phasing Strategy Financial Options
Workshop #5 January TBD, 2021, 6:30-9:15 pm, Citrus Heights Community Center
Long-Term Planning Analysis Final Report and Plan Adoption Development of Public Outreach Strategy

CAC MEMBER CLOSING COMMENTS

The CAC members indicated what they were taking away from the Meeting as:

1. Excited that the District is spearheading the Consortium, is driving a historical process as a model for other districts and will be able to share costs. Well done, CHWD!
2. Like the idea that we're part of the Consortium.
3. The Consortium is beneficial because 12 heads are better than one. It will be interesting to see more information about the meters, warrantees available, and costs. Also, it will be interesting to see what governmental regulations will be in the future.
4. I'm amazed with how many different kinds of things there are to deal with in all of this. Meter replacement sounds simple, but there are so many things to deal with.
5. I'm amazed at the information we received today about the meters, how many different kinds of meters exist, and the possibilities for data collection. With our two discussion

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groups tonight, we pretty much came up with the same item we felt was most important, which was leak detection. Also, I hope as part of a process of replacing meters, that the four-by-four squares will be removed from the driveways and replaced by full panels, which will make customers happier.

6. I came away learning several things. I expected to learn about several types of meters but I didn't expect that there would be that many and that they would be so varied. From the equipment display, I learned that meter testing ensures that the water amounts flowing through are accurate, which is nice to see. Also, it's interesting to learn that there is both meter technology and meter-reading technology, which was new to me.
7. I'm anxious to learn more about the technology and the analysis of choices and costs.
8. I think it's amazing that the District is leading the Consortium, and the value of getting 12 agencies together in one room talking is an amazing feat. Being able to apply lessons learned by other agencies in the long run will really pay for the Consortium.
9. I am very proud that the District is at the head of the Consortium, and everyone should know about this. There are benefits now to the District of being part of the Consortium and benefits that will come to the District over a long period of time, solving problems that come forward, building camaraderie, and opening communication lines.

PUBLIC COMMENTS

None

CLOSE

CAC Chair Jenna Moser thanked the CAC members, District staff, and consultants for their participation and adjourned the meeting at 8:54 pm.