INTRODUCTION

Jenna Moser, Chair of the Customer Advisory Chair (CAC), called the meeting to order at 6:30 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. Introductions
2. Public Comment
3. Approve minutes of May 29, 2018 CAC Meeting #1
4. Water Demand Forecast, District Pipeline Asset Inventory, and Main Replacement Benchmarking
   a. Water Demand Forecast, Technical Memorandum 1-- how projected changes in water usage will affect the way the District replaces and sizes water mains
   b. District Pipeline Asset Inventory Results-- age of the water system, various pipe types, and where they're located throughout the system
   c. Main Replacement Basics and Benchmarking-- major benchmarks to evaluate various options
5. Public Comment
6. Next Steps
7. Close

Laura reiterated that meeting materials will be provided electronically to the CAC members in advance of and following CAC meetings and will be 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 will be posted to the website to be available to the CAC members and the general public.
Customer Advisory Committee Meeting #2 Summary
Tuesday, August 28, 2018, 6:30-9:15 pm

ATTENDEES

CAC Members:  
Kimberly Berg Commercial Representative  
Patti Catalano Residential Representative  
Katherine Cooley Institutional Representative  
Wes Ervin Commercial Representative  
Michael Goble Residential Representative  
Suzanne Guthrie Residential Representative  
Doug MacTaggart Residential Representative  
Richard Moore Residential Representative  
Jenna Moser Residential Representative and CAC Chair  
Richard Moses Residential Representative  
Mike Nishimura Commercial Representative  
David Paige Residential Representative  
Aimee Pfaff Residential Representative  
Cyndi Price Institutional Representative  
Ray Riehle CHWD Director  
Colleen Sloan Residential Representative  
Noe Villa Institutional Representative  
David Wheaton Residential Representative and CAC Vice Chair  

Unable to attend were:  
Julie Beyers Residential Representative  
Porsche Middleton Residential Representative  
Dave Mitchell Institutional Representative  
James Monteton Residential Representative  
Peg Pinard Residential Representative  
Javed Siddiqui Residential Representative  
Chris Ralston Institutional Representative

CHWD Staff:  
Chris Castruita Management Services Supervisor/Chief Board Clerk  
Tamar Dawson Assistant Engineer  
Paul Dietrich Project Manager  
David Gordon Operations Manager  
Madeline Henry Management Services Specialist/Deputy Board Clerk  
Rex Meurer Water Efficiency Supervisor  
Missy Pieri Engineering Manager/District Engineer  
Susan Sohal Administrative Services Manager  
Hilary Straus General Manager

Consultants:  
Roger Kohne Harris & Associates  
Andrew MacDonald Harris & Associates  
Eric Vaughan Harris & Associates  
Laura Mason-Smith Mason-Smith Success Strategies
PUBLIC COMMENT

There was one public comment not related to the meeting agenda which was addressed with the customer individually by General Manager Hilary Straus.

APPROVAL OF MAY 29, 2018, CAC MEETING #1 MINUTES

The minutes of the May 29, 2018, CAC Meeting #1 were unanimously approved without comments or changes.

WATER DEMAND FORECAST, DISTRICT PIPELINE ASSET INVENTORY, AND MAIN REPLACEMENT BENCHMARKING

To continue to build shared understanding among the CAC members, Project 2030 Manager Missy Pieri outlined Project 2030 accomplishments thus far and where the Project is headed (please see http://chwd.org/customer-advisory-committee/ for the slide presentation detail).

Water Demand Forecast, Technical Memorandum 1-- how projected changes in water usage will affect the way the District replaces and sizes water mains

- Eric Vaughan and Roger Kohne reviewed and explained drivers of water demand and technical considerations. As outlined in Technical Memorandum #1, current and projected future water demands are one of the important "building blocks" for the Water Main Replacement Study.

- Chris Castruita reviewed State-mandated policy and regulatory impacts to water demand, specifically those incorporated in California Assembly Bill 1668 and Senate Bill 606.

- Roger Kohne reviewed how the Water Demand Forecast will be used as part of the Project 2030 Water Main Replacement Study.

- CAC members identified questions about the Technical Memorandum #1 which were then answered by the District Staff and Consultants (please see Pages 5-6 of this Summary for questions and answers).
District Pipeline Asset Inventory Results—age of the water system, various pipe types, and where they’re located throughout the system

Missy Pieri outlined the goal of the recently-completed Asset Inventory— to add key data to the District’s GIS water facility map — and the results of completing the Pipeline Inventory.

- All paper maps have now been digitized.
- 99% of the District’s pipe types and pipe age are now known and mapped (versus only 77% and 42%, known respectively prior to the Asset Inventory completion).
- The age and pipe type data will be used when prioritizing water main replacements in the Water Main Assessment/Risk Analysis step of Project 2030:
  - Generally replace older mains first, and
  - When comparing two pipes of the same year, pipe type may be a factor in determining which pipe is replaced first.

Main Replacement Basics and Benchmarking— major benchmarks to evaluate various options

Roger Kohne explained:
- The role of District Operations and Engineering staff in assessing and replacing water mains.
- The elements contributing to main replacement costs.
- Benchmarking:
  - Acts as a standard by which something can be measured or judged, and
  - Enables tracking performance indicators and shows whether goals are being met.
- Why Utilities benchmark:
  - Prioritize main replacement.
  - Improve operational efficiency.
  - Optimize future capital investments.
  - Make informed decisions.
- Benchmarking steps.
- Performance versus main replacement investments.
- Next steps.
Customer Advisory Committee Meeting #2 Summary  
Tuesday, August 28, 2018, 6:30-9:15 pm

CAC MEMBER QUESTIONS AND DISTRICT ANSWERS

Q1: Is there any possibility of the District’s service area expanding or decreasing, and what would be the impacts?
A1: There is the possibility of limited and very minor changes to the District’s service area, but any expected changes would be insignificant.

Q2: What kind of goals or limitations will be coming from the State for outside water usage? How will those be enforced?
A2: SB606/AB1668, which was passed in May 2018, provides a framework for the State Water Resources Control Board (SWRCB) to create water use regulations. The District is awaiting the details from the SWRCB on how they will implement those regulations. Customers can click here to view a fact sheet on the new water regulations, including frequently asked questions. The regulations will be enforced at the District-wide level, not on an individual basis.

Q3: What is the minimum or maximum allowed use of water? Is there a baseline?
A3: As noted in SB606/AB1668, there is maximum allowable indoor water use of 55 gallons of water per capita in 2022, going down incrementally to 50 gallons per capita in 2030. This regulation will be measured and enforced at the District level, and there is no requirement in the new laws that residents must meet a specific target or stop behavior like washing clothes and bathing.

Q4: If the District exceeds mandated water consumption, what are the penalties, and how will they be enforced?
A4: That has not yet been determined by the State Water Resources Control Board.

Q5: What is the relationships between line size, flow rates, and other factors in determining the size of the lines to replace?
A5: Flow rate and pipeline velocity will be used to help determine the size of water main replacements. In addition, the District is centrally located and has several interties with other neighboring water agencies which will assist in providing water to the District and the wider region for emergency purposes and other opportunities to collaborate for water management. Those interties may further optimize the sizing of water main replacements.
Q6: What time of year are you measuring water use?
A6: The data shown represents annual average water consumption, meaning it represents water use from throughout the year.

Q7: What is the level of confidence in the predicted demand forecast, since it varies 17% between low and high?
A7: The range in demand forecasts covers a reasonable level of change in demand over the next 30 years. It is based on an expectation that the state legislation passed in 2018 remains in effect through 2050, and on population increases used by planning agencies across the region.

Q8: Does the San Juan Water District have future or strategic goals that impact this water demand forecast?
A8: The District looked at the San Juan Water District Urban Water Management Plan for compatibility with this project, and found that our assumptions were consistent with their forecast and goals.

Q9: How can we collect and filter rain water to supplement water supplies?
A9: The District encourages homeowners to use water capture and efficiency practices that work best for their respective residences. However, rain water catchment is not considered a viable source of water supply for the region.

Q10: Can we get a water pipeline to get water from flood-prone to drought-stricken areas?
A10: This is a project that is beyond the scope District boundaries as it would need to be considered at a regional or statewide level.

Q11: Are all diameters of pipe compatible with trenchless technology?
A11: There are multiple trenchless technologies. The technologies that are going to be most relevant to the District would be more compatible with larger diameter pipelines.

Q12: Is a residential water re-use program possible?
A12: All of the regional waste water treatment plants that treat water to a level where it could be reused are a significant distance from the District service area. This makes it cost prohibitive to create such a program.

Q13: How does the District regulate water pressure?
A13: The majority of the District’s water pressure is not regulated. However, there are two zones with higher water pressure, and the District uses pressure regulating valves to reduce pressure to an acceptable level in those areas. The scope of this project includes an analysis of regulating water pressure throughout the District. The pressure regulation analysis includes a potential power generation component.

Q14: With the new State water usage regulations, how will the District differentiate between customers’ indoor and outdoor use?
A14: Neither the District nor the State currently have a way to differentiate between each customer’s indoor and outdoor use. The water usage regulations will be carried out at the District level.

Q15: How will the State regulations affect businesses, parks, and greenscapes? And, how will baselines be determined?
A15: The State Water Resources Control Board is currently developing standards for both business and outdoor water use. These will be based in part on the amount of landscape and hardscape that currently exist.

Q16: How will the elderly and physically challenged people handle the State mandates for water usage, both physically and regarding cost?
A16: This is a good question that the State must grapple with as it develops the regulations. The District and other water agencies throughout the state are using the regulatory process to communicate the concerns of the elderly and physically challenged, along with other water users, to the SWRCB.

Q17: What does the service fee on customers’ bills cover?
A17: Customers’ water bills are about 70% fixed charges and 30% variable charges based upon water use. The fixed charges cover the costs to run the District and maintain infrastructure regardless of the amount of water that is used.
Q18: Is it more expensive to replace Asbestos Cement Pipe (ACP) pipe?
A18: The District generally does not remove asbestos cement pipe, or any pipe material, from
the ground. Therefore it is no more expensive to replace ACP pipe than any other pipe
material.

Q19: Do you expect to come up with multiple benchmarks; for example, pipe age, pipe type,
etc.?
A19: The District may make adjustments to a few benchmarks over time, rather than create
many different benchmarks to keep record of. As industry trends continue, the District
intends to revisit these benchmarks in order to judge performance.

Q20: What are the intervals to check against the benchmarks to know if we're headed in the
right direction?
A20: A lot of the information is being collected in real time. The District would likely check
these benchmarks on an annual basis, as we currently do with water loss. Over the long
term, the District will look for trends in performance to compare with established
benchmarks.

Q21: How does the District coordinate with other agencies for water main replacement?
A21: The District routinely checks with the City, County, and other regional agencies to
coordinate water main projects and other infrastructure projects within and around our
service area.

Q22: What does water loss per household mean?
A22: Water loss per household is based on an assumption of 1-4 people per residence.
Calculated on a per capita basis, the water loss per household is approximately 1/4th of
the water loss per residence.

Q23: Is there any financial gain to selling water to another District?
A23: Yes, there is financial gain to selling water to other agencies outside of the service area.
Because of the unpredictable nature of these types of transactions, the District does not
factor any projected revenue into its budget and long term financial model.
Q24: Are there any other utilities that have gone through a process like this that we can learn from, or are most districts behind CHWD?

A24: Yes, there are a number of utilities throughout the state who have gone through or are currently going through the process of asset management. We intend to use industry best practices in asset management. At the same time, we are implementing a very rigorous public engagement process that other agencies may wish to use in the future.

CAC PROCESS AND LOGISTICS OVERVIEW

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

<table>
<thead>
<tr>
<th>Meeting #3: December 11, 2018, 6:30-9:15 pm, Citrus Heights Community Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Replacement Findings and Costs</td>
</tr>
<tr>
<td>Funding Concepts Introduction</td>
</tr>
<tr>
<td>Selection of Main Replacement Options</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Meeting #4: March 2019, 6:30-9:15 pm, Citrus Heights Community Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Replacement Funding Analysis</td>
</tr>
<tr>
<td>Market Research Primer</td>
</tr>
<tr>
<td>Selection of two Main Replacement and Funding Packages for market research</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Meeting #5: May 2019, 6:30-9:15 pm, Citrus Heights Community Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Research Results</td>
</tr>
<tr>
<td>Develop Final Board Recommendation</td>
</tr>
<tr>
<td>Steps for Implementation Plan</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Meeting #6: September 2019, 6:30-9:15 pm, Citrus Heights Community Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review Implementation</td>
</tr>
</tbody>
</table>
Customer Advisory Committee Meeting #2 Summary  
Tuesday, August 28, 2018, 6:30-9:15 pm

CAC MEMBER COMMENTS

1. I appreciate the information provided
2. This collaboration effort is very good and good to see
3. The more I'm starting to learn, the more I don't know
4. It's very impressive to see the amount of work being done; I commend all the staff
5. I appreciate the background information for us lay people
6. Thank you for all the information to help us understand
7. I'm learning a lot
8. Thank you for the outstanding job; I'm learning a lot that is very helpful to understand the issues
9. Very informative—thank you
10. The projector needs to work better so that the Power Point slides are more readable
11. A lot of staff work has gone into preparing for this meeting and Project 2030
12. Very impressed by the logic and sequence of the Project
13. Appreciate the welcoming of CAC members' questions
14. I feel like a sponge tonight and hearing everyone's questions and clear answers
15. The extensive preparation and effort is very noticeable and helpful
16. The asset inventory was a massive undertaking
17. This is an important process
18. Appreciate everyone's thoughtful questions

PUBLIC COMMENTS

None

CLOSE

CAC Chair Jenna Moser thanked the CAC members and District staff and consultants for their participation and adjourned the meeting at 9:15 p.m.

APPROVED:

CHRISTOPHER CASTRUITA
Deputy Secretary
Citrus Heights Water District

JENNA MOSER, Chair
Customer Advisory Committee
Citrus Heights Water District