Customer Advisory Committee Meeting 1

OCTOBER 23, 2019
PLEDGE OF ALLEGIANCE
MEETING AGENDA

- Study Overview
- Overview of Water Meters
- Overview of CHWD’s Water Meters
- New Technology Overview
- CAC Tabletop Exercise
- Next Steps
PUBLIC COMMENT
PUBLIC COMMENT
APPROVE MEETING #8
SUMMARY – SEPTEMBER 10, 2019
PURPOSE OF THE STUDY

Meter replacement cycle

- 20 years per AWWA and manufacturers’ guidelines
- Currently, CHWD has approximately 20,000 meters
STUDY DEVELOPMENT

- CHWD Strategic Planning Project
- Multi-Agency Planning Study
- Consortium of 12 agencies
Seven phases:

1) Individual Agency Assessment
2) Next Generation Program Options
3) Meter Testing Program Strategy
4) Implementation Strategy
5) Long Term Planning (Beyond Next Generation)
6) Final Report/Plan Adoption
7) Public Outreach Strategy
IMPORTANCE OF THE CONSORTIUM

• Economies of scale

• Valuable input from a variety of agencies and technical experts

• Study is a model for other regional programs
STUDY SCHEDULE

Phase (P) 2019 2020

<table>
<thead>
<tr>
<th>Phase</th>
<th>2019</th>
<th>2020</th>
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</thead>
<tbody>
<tr>
<td>P1: Individ. Agency Assessment</td>
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<tr>
<td>P2: Next Generation Analysis</td>
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<tr>
<td>P3: Meter Testing Strategy</td>
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<tr>
<td>P4: Implementation</td>
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<tr>
<td>P5: Long-Term Planning</td>
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<td>P6: Final Report</td>
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<td>P7: Public Outreach</td>
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🌟 = CAC Meeting
Consortium & CAC
IMPORTANCE OF THE CAC

• Valuable input from the end users
• Involvement in the long-range financial planning for the meter testing and replacement program
• Involvement in the public engagement component of the study
Gather CAC Questions for Clarification
OVERVIEW OF WATER METERS
Why Measure Water?

• Understanding capacities
  — Ensuring a water supply for our customers

• Balancing our water resources
  — Surface water supplies
  — Groundwater supplies
  — Environment
• State & Federal Laws
  — SB 229 (1991): Required meters for new connections
  — Central Valley Project Improvement Act (1992/Federal): Required metering of all CHWD connections

• 1997-2008: CHWD installed meters

• 2009: CHWD Metered billing
Why use meters?

- Know system demands
- Billing based on usage
- Understand water losses (leaks)
- Identify customer leaks
  - Prior to meters, we relied on manual inspections
  - Billing now flags anomalies
Specifics of metering

• Meter Body
  — Various measurement devices
• Reading a Meter
  — Manual read
  — Touch read
  — Drive by
  — Automatic smart read
• Meter data transmitted to billing
OVERVIEW OF CHWD’S WATER METERS
CHWD METERS

Number of deployed meters by size

- 16,789 meters are 1 inch in size.
- 1,828 meters are 0.75 inch in size.
- 66 meters are 0.625 inch in size.

90% are read manually (touch read)
Average Age of Meters by Size

CHWD METERS
<table>
<thead>
<tr>
<th>Agency/Meter Brand</th>
<th>Badger</th>
<th>Hersey</th>
<th>Master Meter</th>
<th>Neptune</th>
<th>Sensus</th>
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<tr>
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<tr>
<td>City of Folsom</td>
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<td>City of Sacramento</td>
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<td>Placer County Water Agency</td>
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<tr>
<td>Sacramento County</td>
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<td>Sac Suburban Water District</td>
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<tr>
<td>San Juan Water District</td>
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## Consortium Meters

<table>
<thead>
<tr>
<th>Agency</th>
<th>Average Age of Meters 5/8”-2” (Years)</th>
<th>Number of Meters</th>
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<tbody>
<tr>
<td>CHWD</td>
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<td>19,869</td>
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<tr>
<td>City of Folsom</td>
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<td>21,386</td>
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<td>City of Sacramento</td>
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<td>129,086</td>
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<td>Placer County Water Agency</td>
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<td>Sacramento County</td>
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<td>Sac Suburban Water District</td>
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<td>San Juan Water District</td>
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<td>10,558</td>
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<td><strong>TOTAL</strong></td>
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<td><strong>313,322</strong></td>
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NEW TECHNOLOGY
Advantages of new technologies

- Online customer portal
  - Track usage in real-time or at set intervals
  - Leak alert option
    - Customers can see usage spikes
    - District can notify customers of usage spikes
    - Field staff will know if the leak is on the District’s or customer’s side of the meter
Advantages of new technologies

• Meter reading from a central location (safer & more efficient)
• Reduced labor cost for meter reading
• Alert for illegal water use
• Facilitates compliance with future regulations
Disadvantages of new technologies

- Fewer field inspections to identify:
  - Damaged meter boxes
  - Customer construction issues
  - Landscaping obstructions
- Data transmission & storage needs (increased cost)
- Additional components (battery & electronics)
Gather CAC Questions for Clarification
BREAK
ANSWER CAC QUESTIONS
SOLICIT CAC INPUT
TABLE GROUP ACTIVITY
PUBLIC COMMENT
NEXT STEPS
CAC MEETING #2

Wednesday, March 11th

• New technology findings (Phase 2)

• How the CAC’s input was included in the Study (Phase 2)

• Introduction to meter testing (Phase 3)
VISIT THE CAC WEBPAGE:
chwd.org/customer-advisory-committee/
SLIDES BELOW ARE HELD FOR FUTURE USE
<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
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<tbody>
<tr>
<td>CHWD’s cost (single agency)</td>
<td>$450,405</td>
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<tr>
<td>CHWD’s cost (w/consortium)</td>
<td>$155,751</td>
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<tr>
<td></td>
<td>(65% discount)</td>
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What is a technical memo?

• Structure
• Key information/components
• Deadline(s)