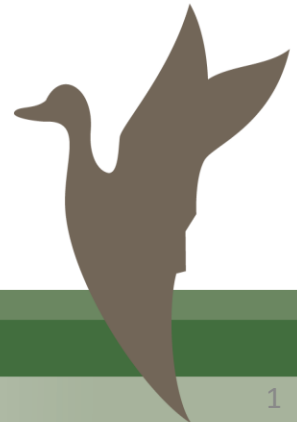


April 10, 2018

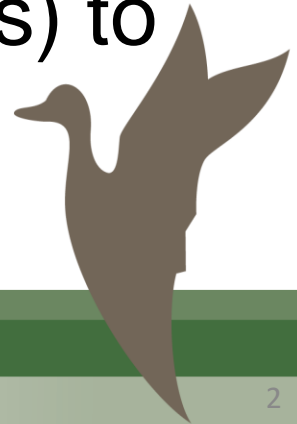
State Revolving Fund Grant Application: Water Meter Replacement Project

Mandeep S. Chohan
Senior Engineer



Background

- State Water Board approved funding application for Water Meter Replacement Project
- \$4.0 million Principal Forgiveness + \$4.0 million loan 1.8%, 10-year term
- Meters must be equipped with Automatic Reading System (cellular-read meters) to qualify



Background

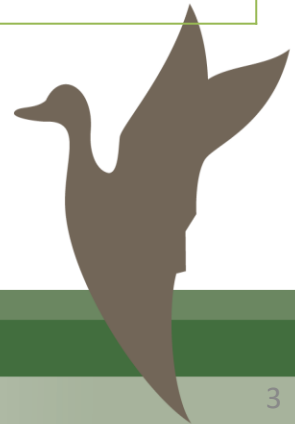
City's Water Distribution System

19,000 radio-read meters total:

14,500 meters	Need meter head replacement
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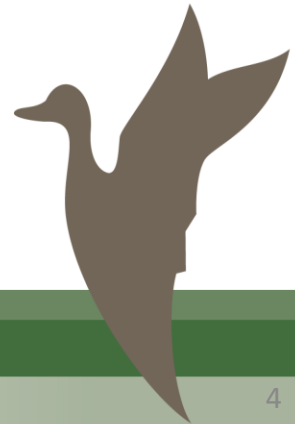
2,000 meters	Need complete meter replacement
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2,500 meters	Recently replaced (can be partially refunded)
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Background

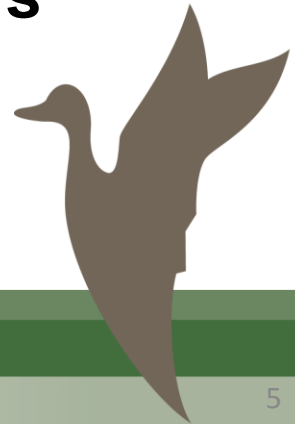
- Two Options:
 1. Replace with 'in-kind' radio-read meter heads/meters
 2. Replace with cellular-read meter heads/meters
- Only Option 2 is eligible for the grant/loan
- Adopted 2017-22 Water CIP Budget identified funding for water meter replacement



Analysis – Cost Comparison

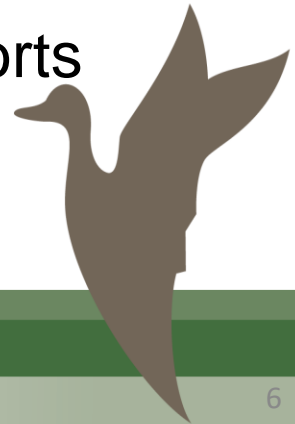
Option	Total Cost	Grant Amount	City Share (cash)	Principal + Interest
1. Replacement with 'in-kind' Radio head: \$219 each Meter w/ head: \$554 each	\$4.3 million	\$0.0	\$4.3 million	\$5.2 million*
2. Replacement with Cellular (AMR) Cellular head: \$396 each Meter w/ head: \$599 ea.	\$8.0 million	\$4.0 million	\$4.0 million	\$4.4 million**
*\$4.3 million at 3.5% interest on bond proceeds **\$4.0 million at 1.8% interest on SRF loan				

- **Option 2 saves total \$1.25 million in next 10 years**
 - \$300,000 construction costs savings (with grant)
 - \$450,000 total on labor savings
 - \$500,000 interest savings



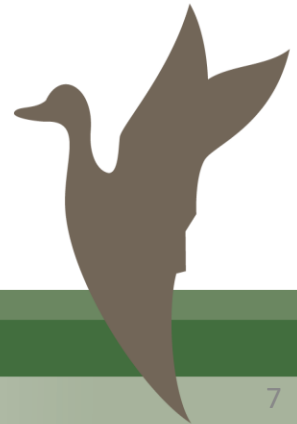
Analysis

- Benefits of cellular-read meters:
 - Improved customer service
 - Real time data for monitoring
 - Automatic data transfer for billing
 - Faster leak detection
 - Customer access through website 24/7 empowering water customers to understand and control their usage
 - Community engagement in water conservation efforts
 - Water & energy conservation
 - Water cost savings

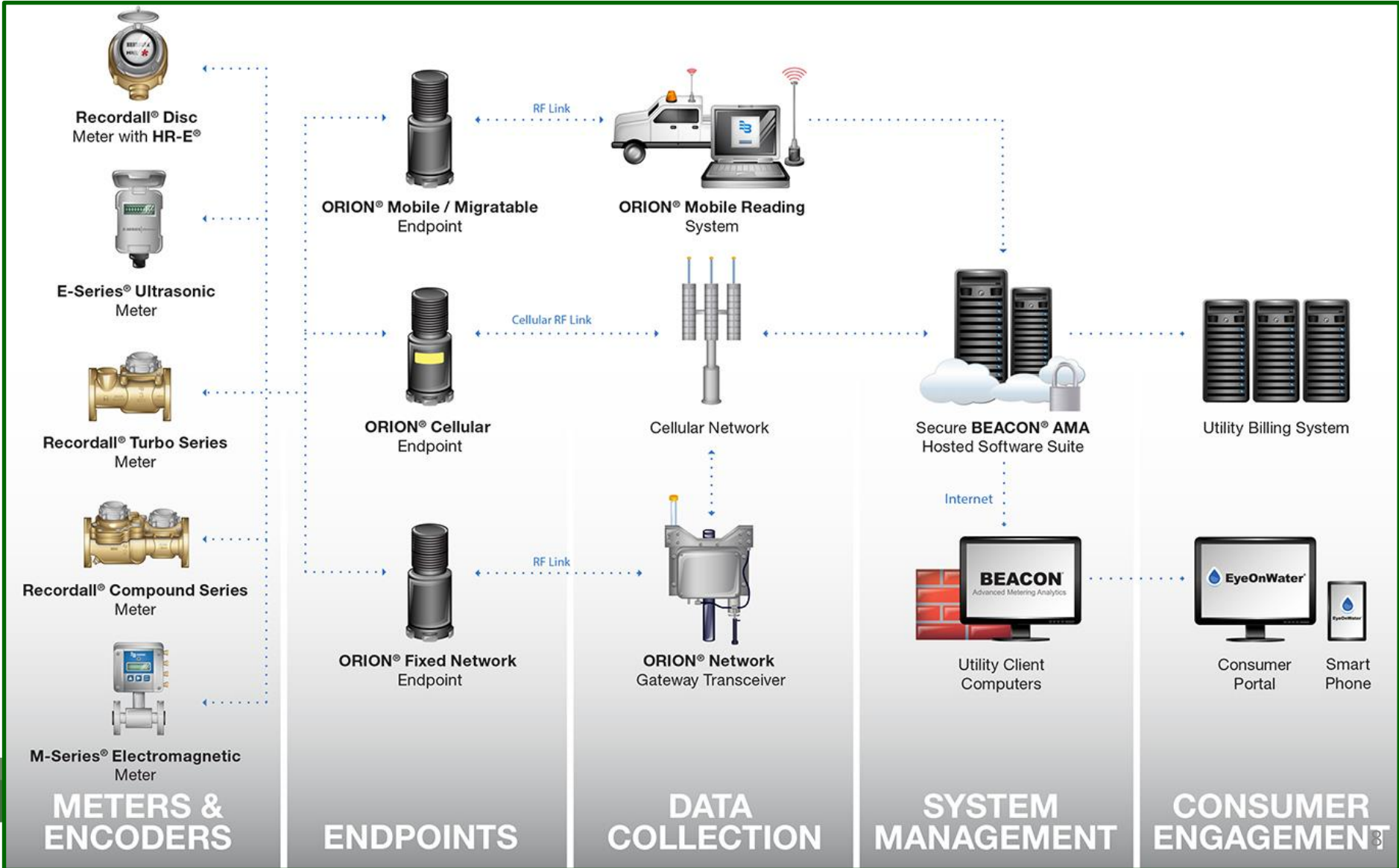


Analysis

Meter & Cellular Transmitter

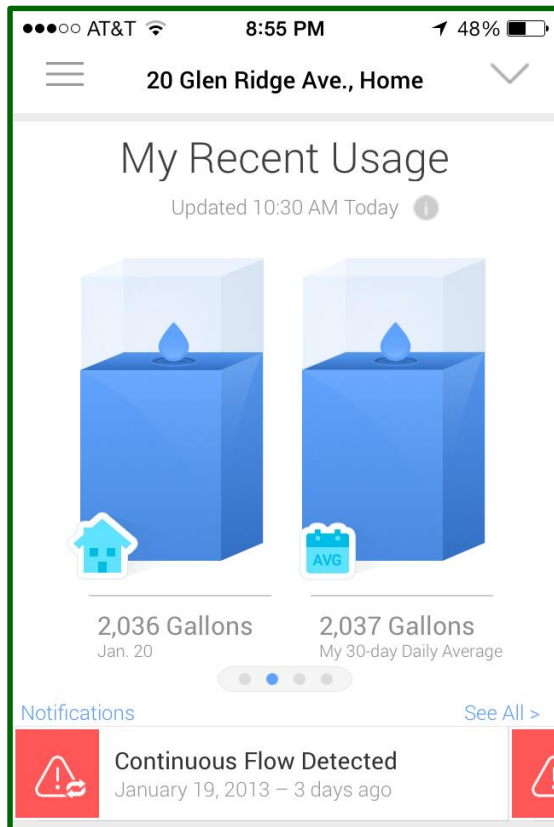


Analysis

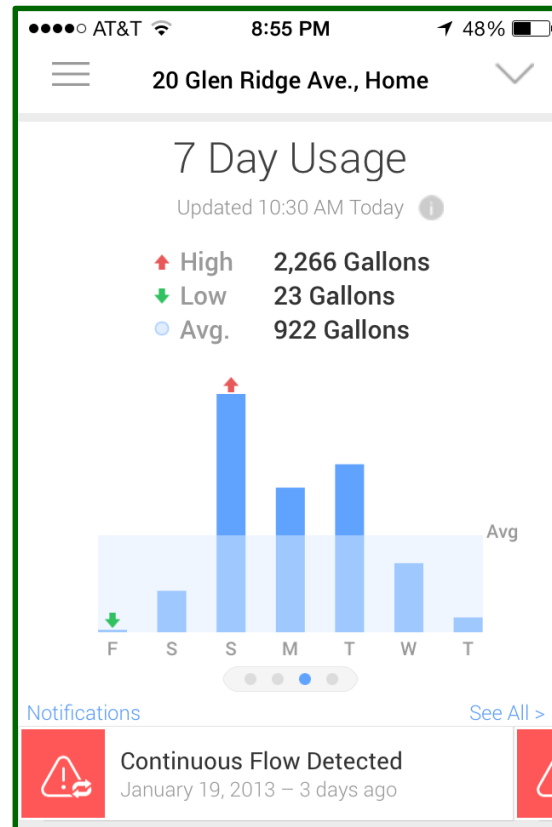


Analysis – Customer Access

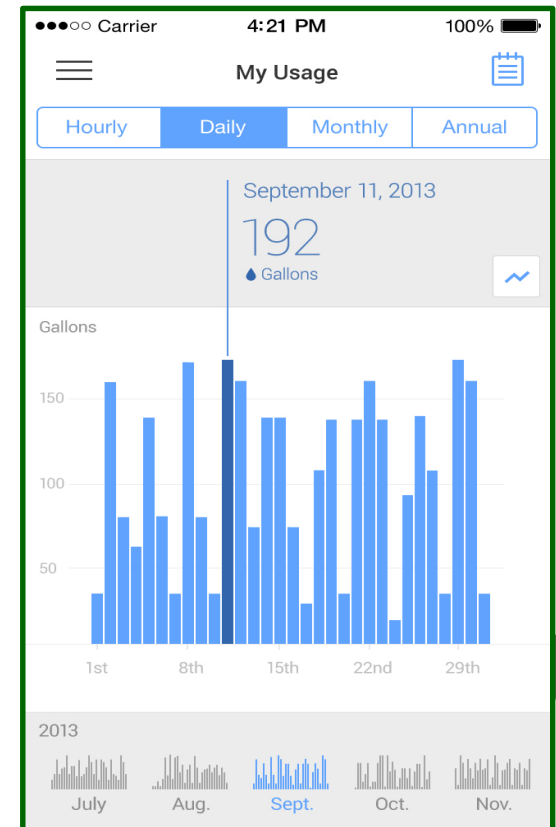
My Recent Usage



7 Day Usage

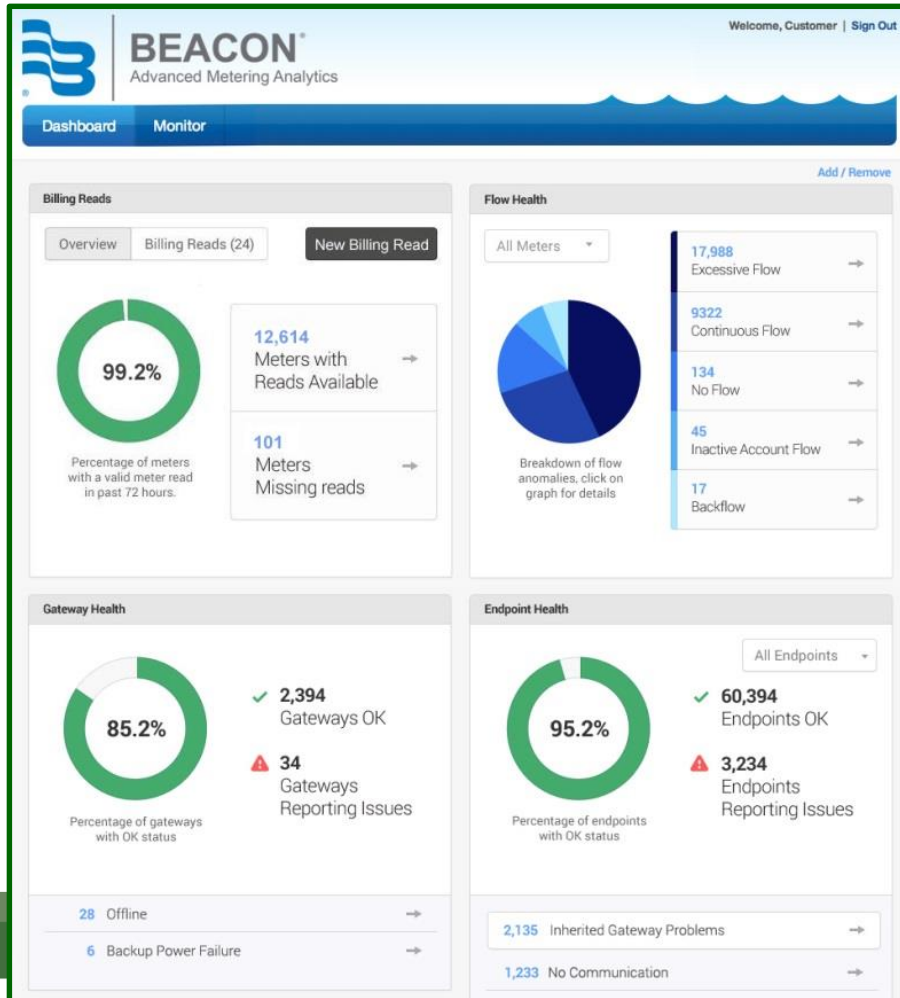


Monthly Usage



Analysis

Customizable Focused Dashboard



Recommendation

Approve the Construction Installment Sale Agreement and authorize the Public Works Director to sign on behalf of the City; direct the Public Works Department to move forward with development of the Water Meter Replacement Project.

