SAWS ConnectH2O Program

Mary Bailey
VP – Customer Experience & Strategic Initiatives

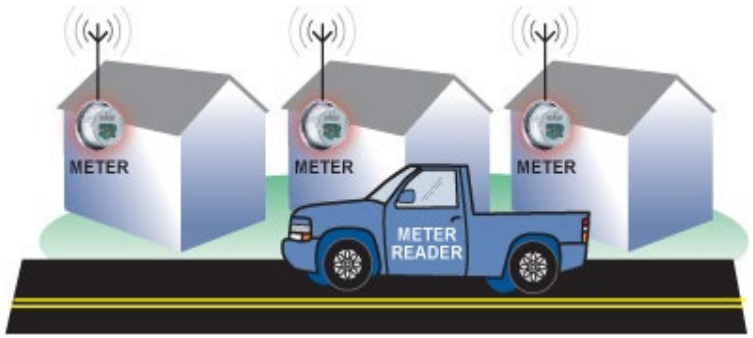
San Antonio Water System

Municipal Utilities Committee
April 4, 2022

MAKING SAN ANTONIO WATERFUL

Meter Reading Technology Over Time

Manual



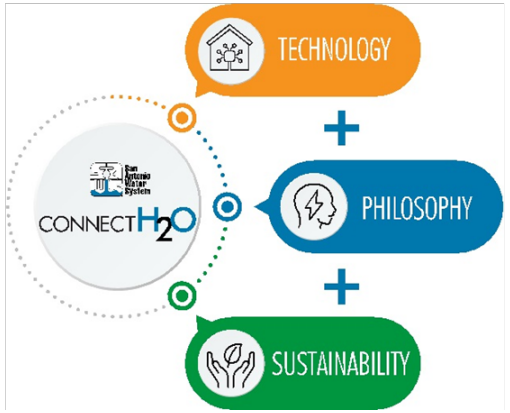
Automated Meter Reading (AMR)

Advanced Metering Infrastructure (AMI)

ConnectH2O Program – Key Objectives

- Enhance customer experience by providing more information to customers about their water usage
- Empower every customer to proactively manage their own water footprint
- Improve efficiency by reducing costs and non-revenue water

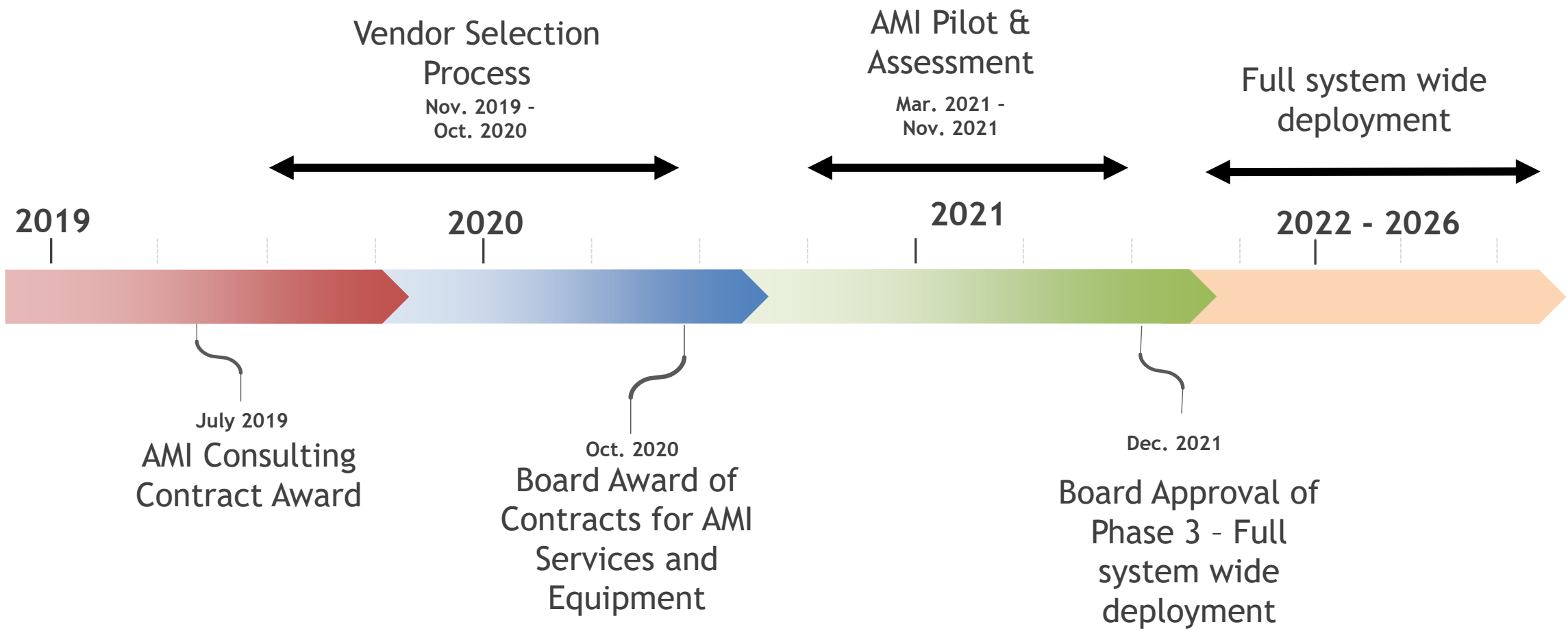
CONNECTH2O



Key Program Highlights

- Largest U.S. deployment of static meters
  - Reduction in non-revenue water due to improved meter registration
- Unique partnership with CPS Energy
  - Maximizes benefits of CPSE AMI network for shared customers
- Supports San Antonio Climate Action Plan
  - Reduction in vehicle emissions associated with limited need for manual meter reads and other field related trips

ConnectH2O Program Timeline



Pilot Objectives

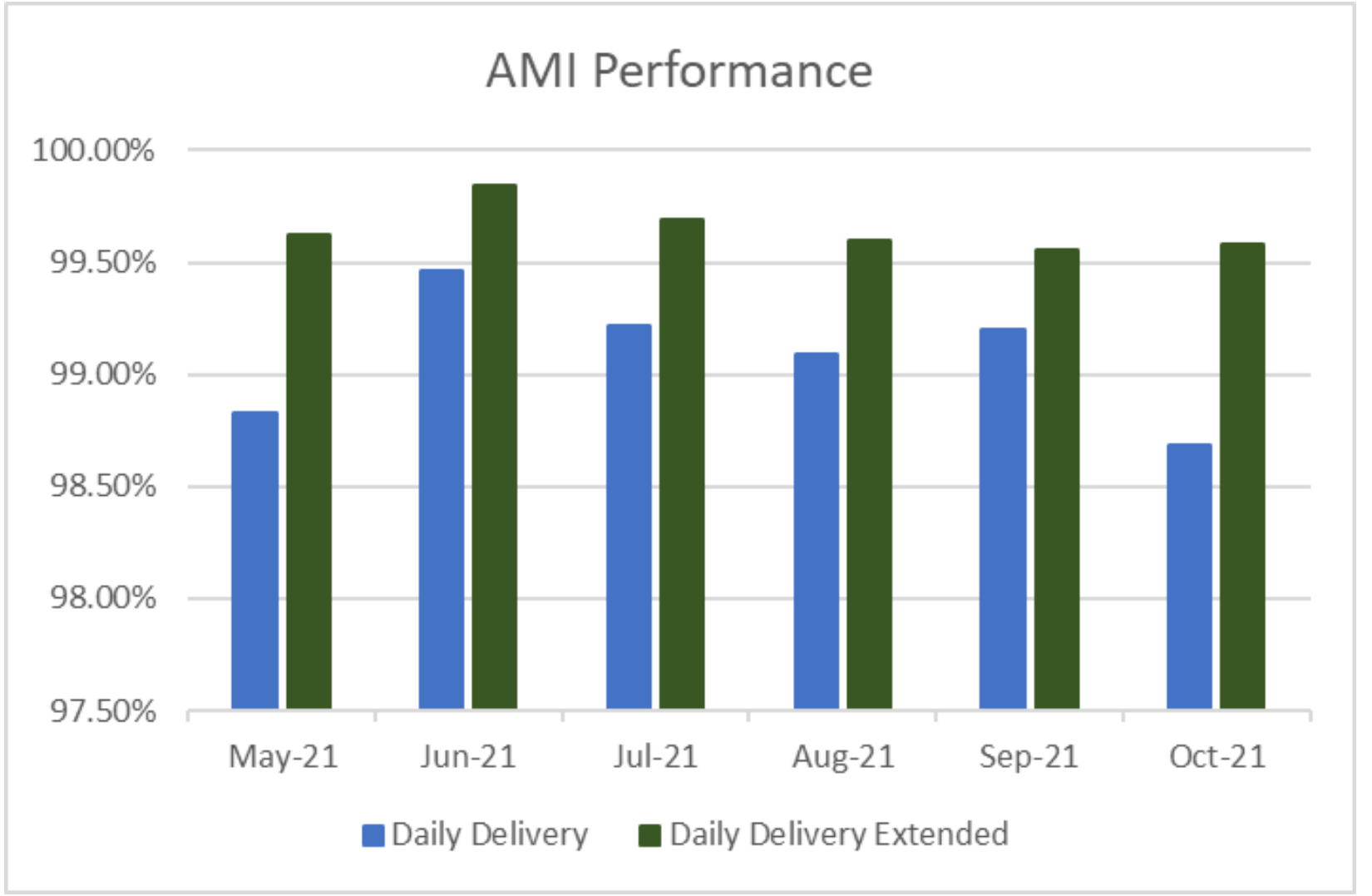
Demonstrate Program Feasibility

1. Evaluation of communication technology in a variety of real world settings (topology, density, etc.)
2. Evaluation of ultrasonic (static) meter technology
3. Customer engagement
4. Refinement of process changes

Pilot Test Areas

- Three pilot areas selected
- These areas consist of ~2,500 total meters and endpoints for testing of Itron AMI technology

Accurate and Consistent Transmission of Data



Static vs PD Metrology

- Positive Displacement (PD) meters
  - Mechanical device (moving parts)
  - Lifespan tends to be less accurate over time
  - Removable register
- Ultrasonic (Static) meters
  - No moving parts or wear
  - Accuracy consistent over lifespan
  - Extended low flow accuracy

Static vs PD Meter Analysis

- Lab Testing
  - Eastside Outdoor Test Lab (EOTL)
  - Static meter accuracy - meter test bench
- Pilot Usage Analysis
  - Static replacements vs PD retrofits
  - Static replacements vs Pilot control group

Customer Engagement Efforts

- Pre-installation notifications
- Installation survey
- Brochure on how to read a static meter
- Presentment of interval data on SAWS MyAccount
- MyAccount survey
- Outreach related to high/continuous usage

My Account

Schedule a Move Contact Us

BALANCE DUE

$0.00

Last Payment: **$35.77** paid on 5/26/2021

Current Charges Due: **6/7/2021**

Any unpaid previous balance is due NOW
View current bill for details

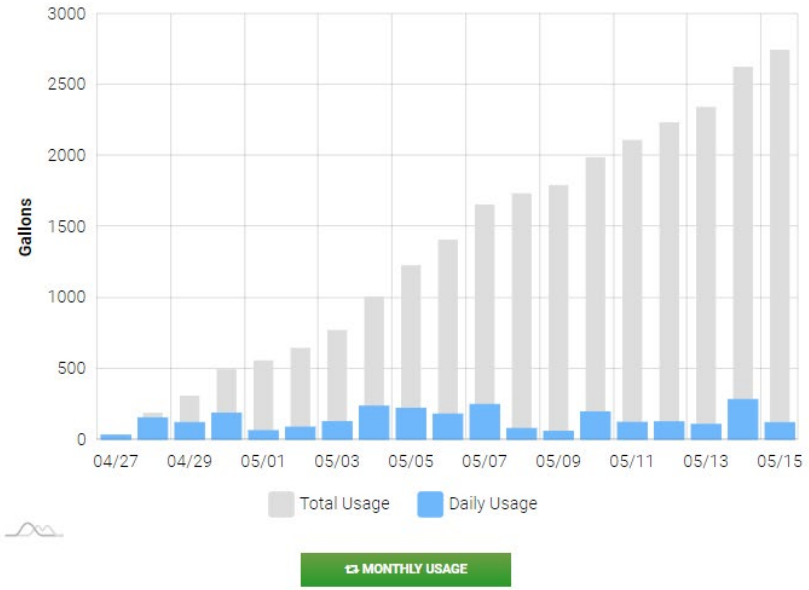
VIEW CURRENT BILL

Current Bill Highlights

Domestic Water Service Charge	$15.49
Water Supply Fee	$5.73
Edwards Aquifer Authority Fee	$1.16
Sewer Service Charge	$19.17
State-Imposed TCEQ Fee	$0.27

DAILY USAGE FOR MOST RECENT BILL

Service Address: 108 FAIRFAX



MONTHLY USAGE

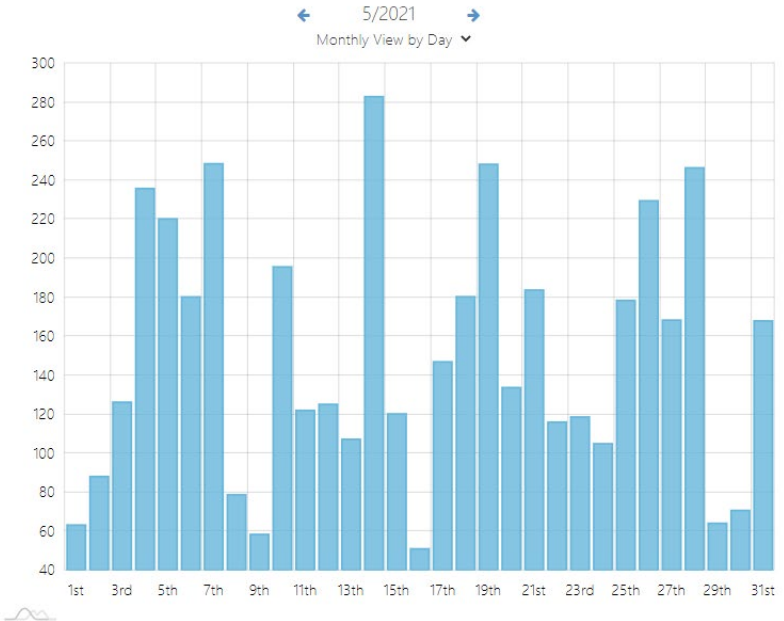
USAGE

Service Address: 108 FAIRFAX

04/01/2021 - 05/31/2021
Specific Date Range

Last Bill Usage
5/15/2020 - 6/16/2020

Usage Since Last Bill
6/16/2020 - 6/21/2021



CONNECTH2O

Find Out More

Total Usage
4660.9 gallons
Water Used This Month

Peak Point
282.9 gallons
Highest Day this Timeframe

SAWS ConnectH2O Program

ConnectH2O Program

Board Authorization

- Upon completion of pilot in October 2021, SAWS staff concluded that program feasibility had been demonstrated
- In December 2021, the SAWS Board approved:
  - Deployment of ~600K electronic meters and communication devices across SAWS service area over approximately 4 years
  - 100% replacement of meters 2” and smaller with static meters
  - Meters 3” and above will be evaluated individually for appropriate meter strategy

ConnectH2O Program Cost

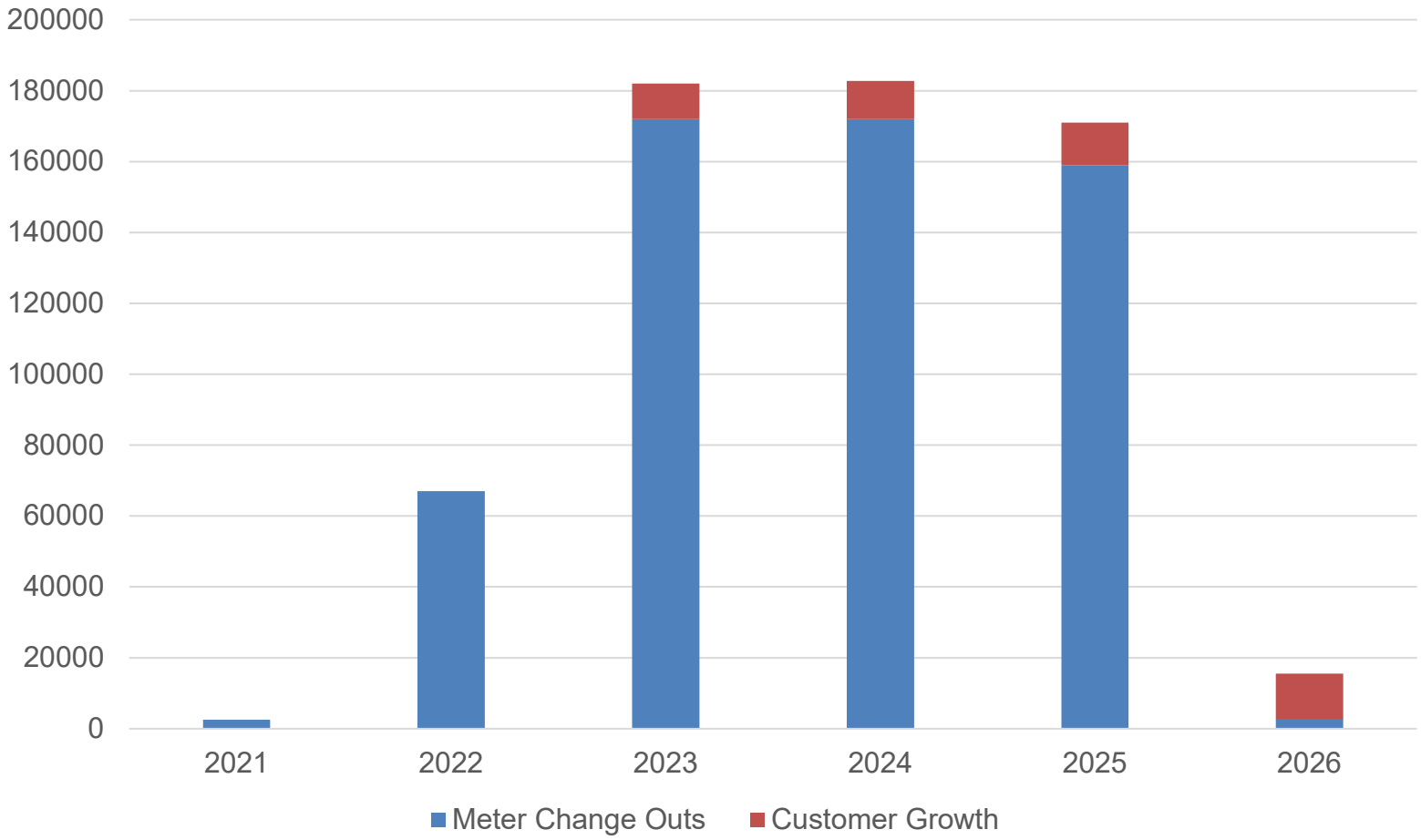
Board Approved Contracts

Vendor	Program Role	Contract Term	Pilot	Full System Wide Deployment	Total
Itron, Inc.	AMI System	2040	$935,144.13	$170,517,629.34	$171,452,773.47
Vanguard Utility Services	Endpoint Installation	2026	$278,740.00	$33,938,419.00	$34,217,159.00
SmartWorks	MDMS	2028	$1,345,355.31	$4,450,060.06	$5,795,415.37
VASS Solutions	Program Management	2026	$2,486,277.00	$6,206,459.00	$8,692,736.00
			$5,045,516.44	$215,112,567.40	$220,158,083.84

- Pilot program costs were included in previous SAWS budgets.
- Full system wide deployment costs have been incorporated in the SAWS 2022 Budget with no rate adjustments needed.

ConnectH2O Installations – Initial Deployment Period

More than 600K installations over the next 4 years



- Contract with Itron will provide meters and communication endpoints through 2040
- Static meters and AMI communication endpoints are expected to become the standard for new growth beginning in 2023

Additional Program Benefits

Future State – once fully deployed

- Water usage data can be utilized to:
  - Better correlate customer usage with daily production data
  - Ensure billing periods are more consistent
  - Provide information related to water outages/main breaks
    - Empty pipe and reverse flow alerts
  - Assist with water master planning efforts
- AMI Network can be leveraged to add technology that provides information currently unavailable

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