



November 4, 2021

Automated Metering Infrastructure

Engineering and Operations
Committee Meeting

What is AMI?

- Meters are read in three main ways:
 - Manual read meters (walking routes)
 - Automated Meter Reading (AMR - drive-by)
 - Automated Metering Infrastructure (AMI - remote meter read collection)
- AMI allows meters to be read without the need for field labor (walking/driving).
- A series of towers, base stations, and repeaters provide a constant stream of data collection.



What types of meters does SCV Water currently have?

Meter Read Type	Number of Meters	System (PWS)
Manual	4,969	Valencia
AMI	~11,000	Santa Clarita/Valencia
AMR	~56,000	Castaic/Newhall/Pinetree/Santa Clarita/Tesoro/Valencia



Meter Reading Equipment



SCV Water Meter Replacements

- Routine Meter Replacements
 - Based on age, usage, warranty, failure, read style
 - Approximately 3,700 per year or 5%
- Meter Data
 - Age
 - Volume
 - Read Style



AMI Migration Plan

- Total of ~20,000 meters converted over the next 3 years.
- Approximately 10,000 meters will be replaced as part of grant funding.
 - 4,969 manual read meters
 - 1,910 Castaic System AMR meters
 - 1,157 Tesoro System AMR meters
 - ~2,000 various other AMR meters in strategic locations
- Routine Meter Replacements
 - An additional ~11,100 meters will be replaced by SCVWA staff.



Meter Cost Estimates

Grant Year	Meter Quantity	Meter Cost
1	4,969	\$1,500,000
2	2,550	\$770,000
3	2,550	\$770,000
Totals	10,069	\$3,040,000

Routine Replacement Year	Meter Quantity	Meter Cost
1	3,700	\$1,117,000
2	3,700	\$1,117,000
3	3,700	\$1,117,000
Totals	11,100	\$3,351,000

*Meter counts and costs are estimates and based on 2021 quotes.

Financial Considerations

- Funds for the purchase of 4,969 meters are included in the Capital Improvement FY 2021/2022 Meter Replacement Budget.
- This purchase is being requested due to supply constraints and long lead times of up to 40 weeks.



Recommendation

That the Engineering & Operations Committee recommends that the Board of Directors:

- Authorize the General Manager to purchase 4,969 meters in an amount not to exceed \$1,500,000.

