

WATER LOSS UPDATE

Public Utilities

Board of Public Utilities

March 9, 2026

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WATER LOSS UPDATE

1. Provide an update on RPU's Water Loss Program
2. Summarize regulatory requirements and compliance status
3. Review system performance and trends
4. Highlight ongoing and proposed water loss reduction efforts



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WHY WATER LOSS MATTERS

1. Supports California water conservation policies
2. Improves drought resilience and energy efficiency
3. Reduces lost revenue and defers new supply/infrastructure needs
4. Focus on cost-effective water recovery



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REGULATORY & PROGRAM BACKGROUND

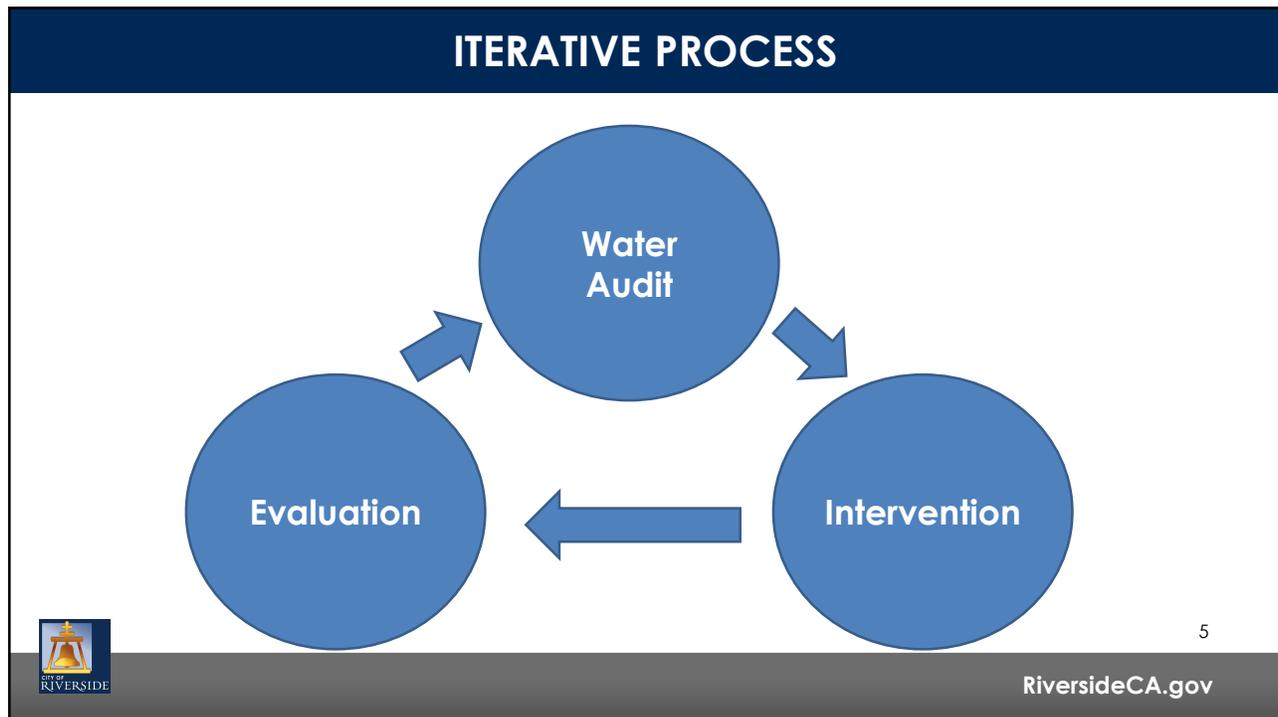
1. SB 555 (2015) – Requires annual validated water loss audits
2. Audits submitted annually to DWR beginning by October 1
3. Audits follow AWWA M36 water audit methodology



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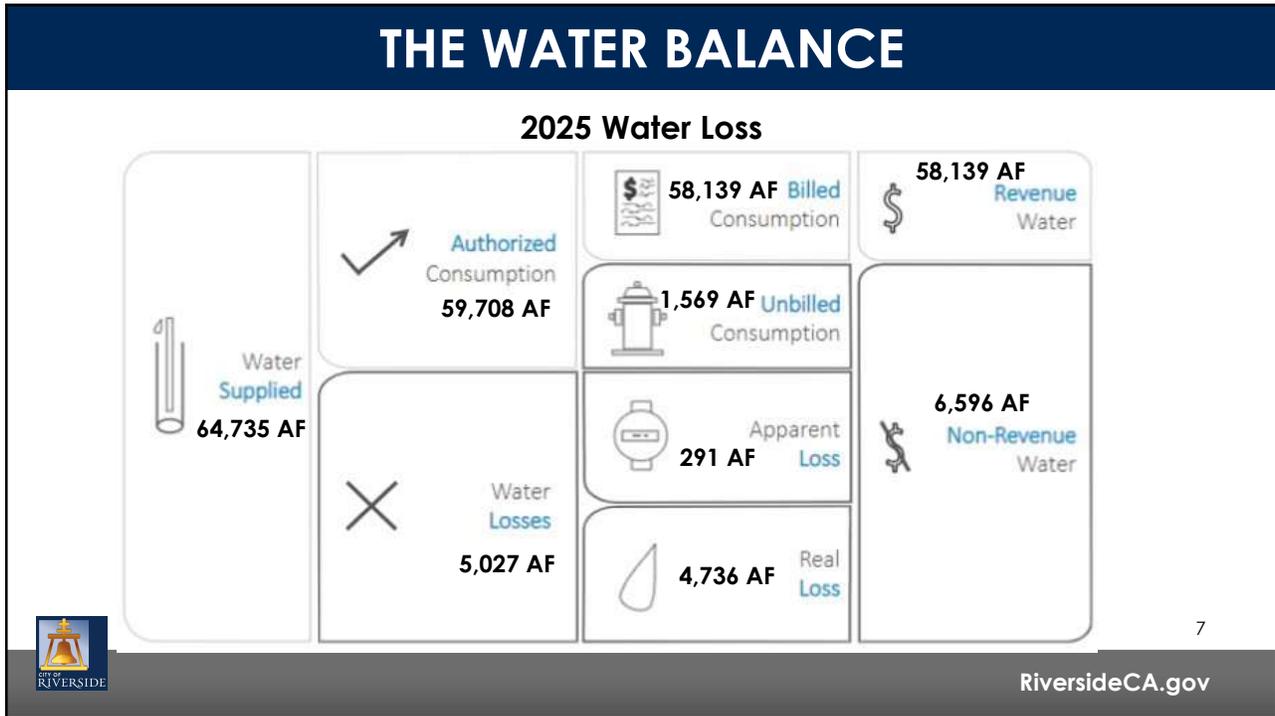
WATER LOSS PERFORMANCE

1. RPU has completed water audits since 2014
2. Most water loss originates in the distribution system
3. FY 2025 water balance
 - a. Total system losses: **7.2% of non-revenue water**
 - b. Transmission mains: ~105 AF
 - c. Non-potable losses: ~ 348 AF
 - d. Distribution system: ~5,600 AF
 - e. Distribution system accounts for ~ **92% of losses**

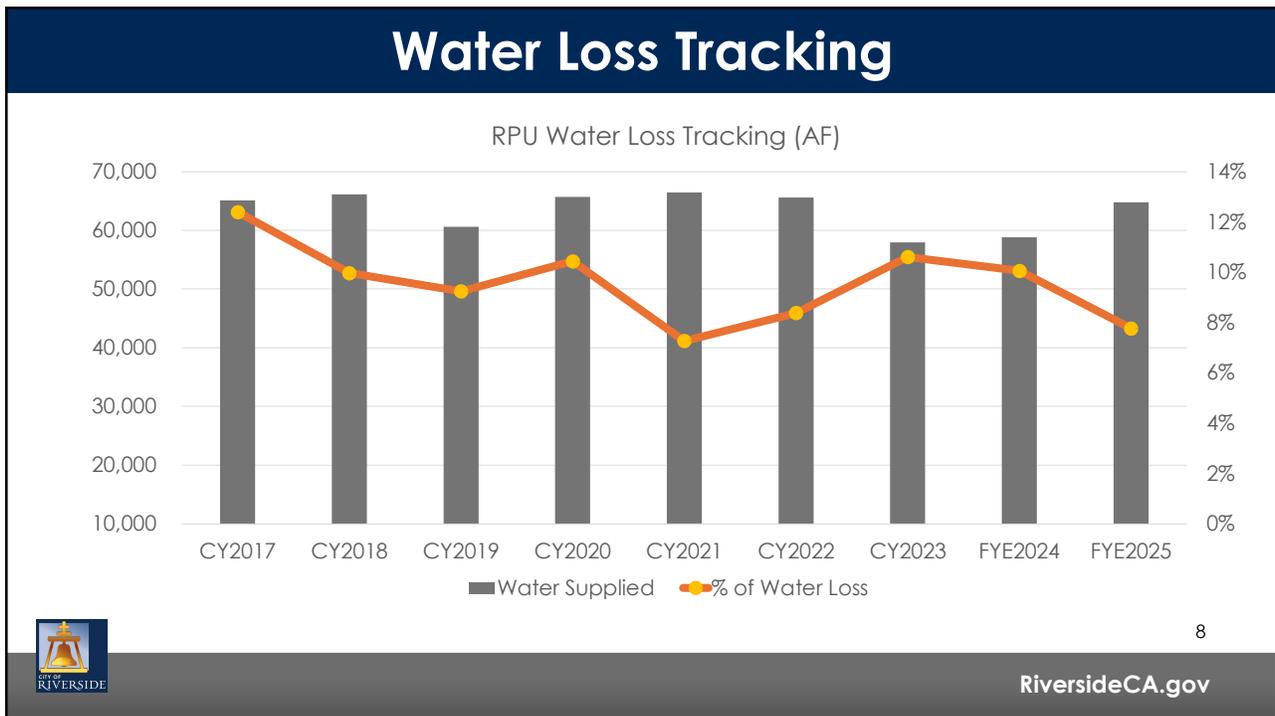
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PROGRESS OVER TIME

1. Non-revenue water reduced: \$1.8M → <\$1.2M
2. Revenue loss % reduced from **4.6%** → **2%**
3. Data quality and reliability steadily improved



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BENCHMARK COMPARISON

Volume and Data Quality

Agency	Real Loss (AF)	Apparent Loss (AF)	Total Water Loss (AF)	Water Loss %	Total Water Supplied (AF)
Riverside (2025)	4,736	291	5,027	8%	64,735
Anaheim (2024)	343	1,125	1,468	3%	52,803
SBMWD (2024)	2,782	1,145	3,927	11%	36,006
WMWD (2023)	1,089	184	1,273	7%	19,441

AF: Acre-feet



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BENCHMARK COMPARISON

Value and Data Quality

Agency	Real Loss Cost	Apparent Loss cost	Total Water Loss cost	Water Loss %	Total Water Supplied cost
Riverside (2025)	\$938,390	\$258,319	\$1,196,709	2%	\$ 55,486,242
Anaheim (2024)	\$307,939	\$1,929,866	\$2,237,806	2%	\$105,059,347
SBMWD (2024)	\$619,823	\$1,591,260	\$2,211,083	5%	\$42,742,799
WMWD (2023)	\$1,741,658	\$235,297	\$1,976,955	4%	\$52,467,346

- RPU value loss % (2%) comparable or lower
- Demonstrates competitive system performance

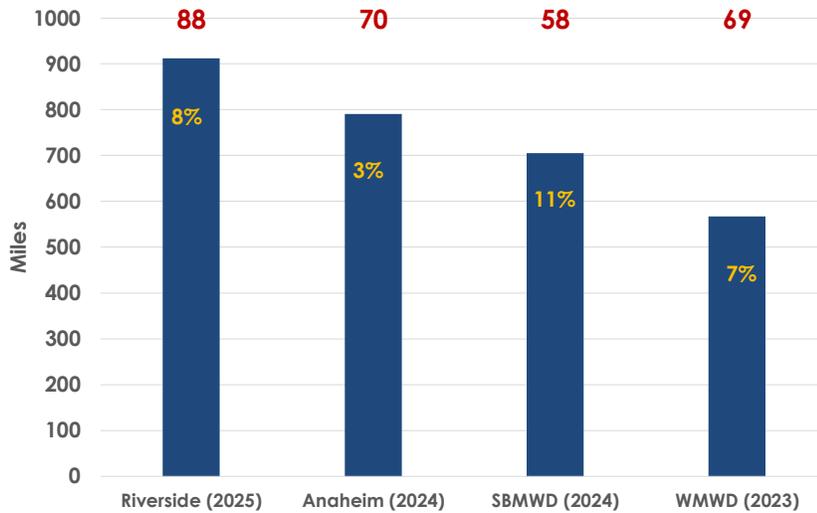


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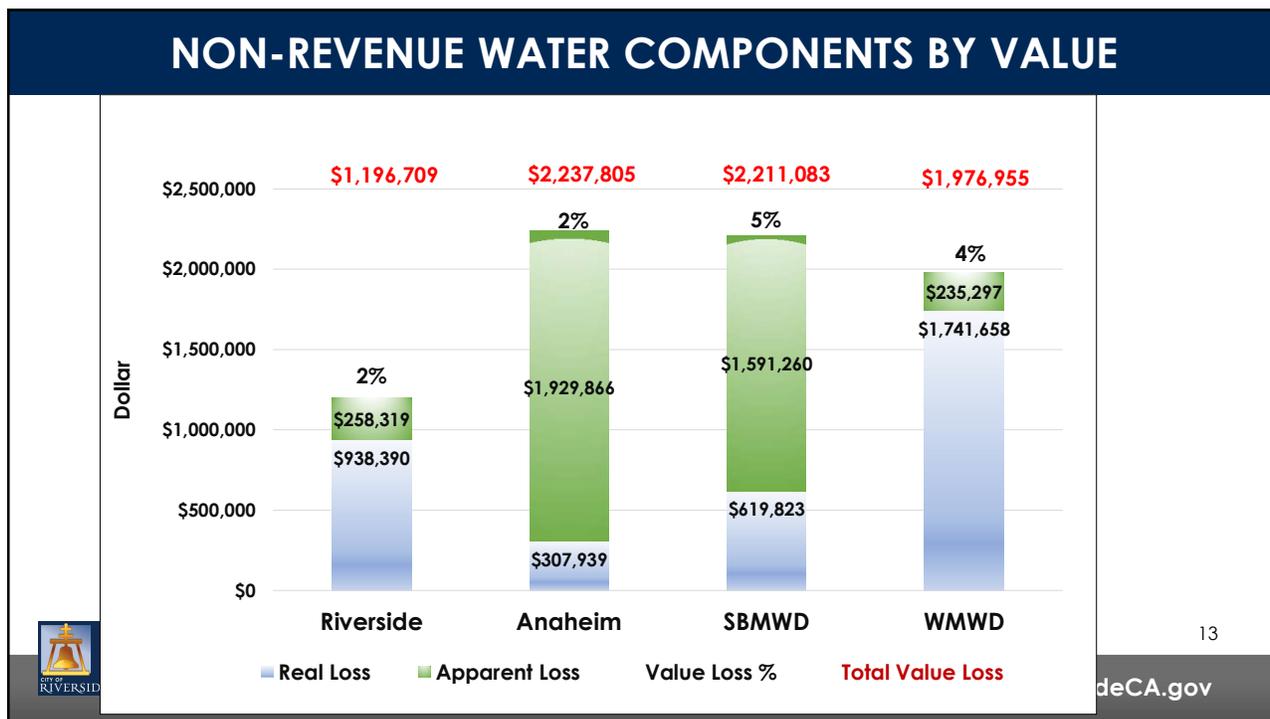
WATER LOSS VS. MILES OF PIPELINE



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■ Miles of Pipeline
 ■ Water Loss %
 ■ Water Audit Validity Score
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- ### ONGOING WATER LOSS CONTROL EFFORTS
1. Annual water audits and benefit-cost analysis
 2. Hydrant Meter Check Valves
 3. Service Lateral Replacement
 4. Expansion of Meter Replacement
 5. Meter Calibration
 6. Leak Detection Equipment Pilot Programs
 7. Water Theft Ordinance
 8. Pump-Pod System
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HYDRANT CHECK VALVES



Before installing the valve



After installing the valve

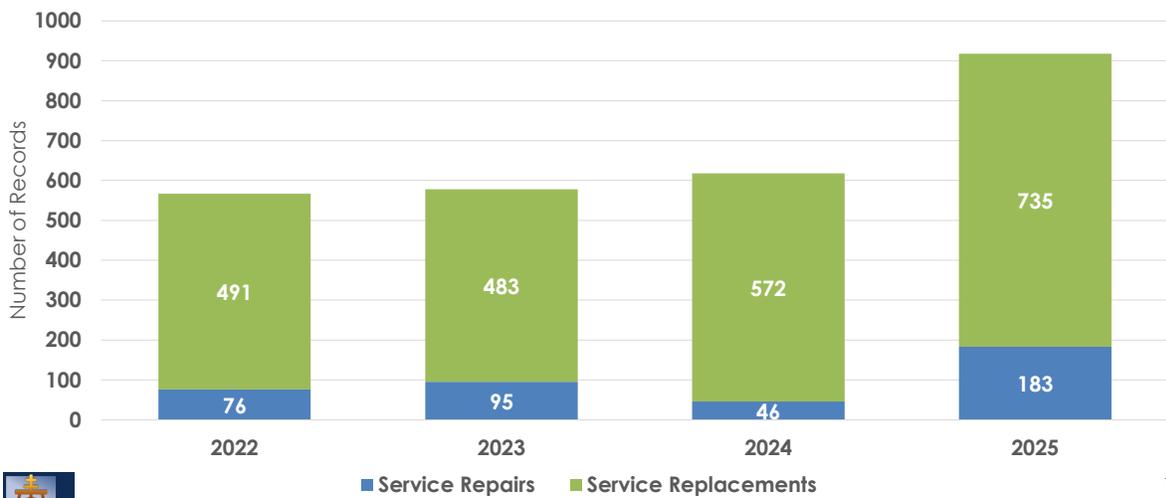


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SERVICE LATERAL REPLACEMENTS



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SERVICE LATERAL REPLACEMENT

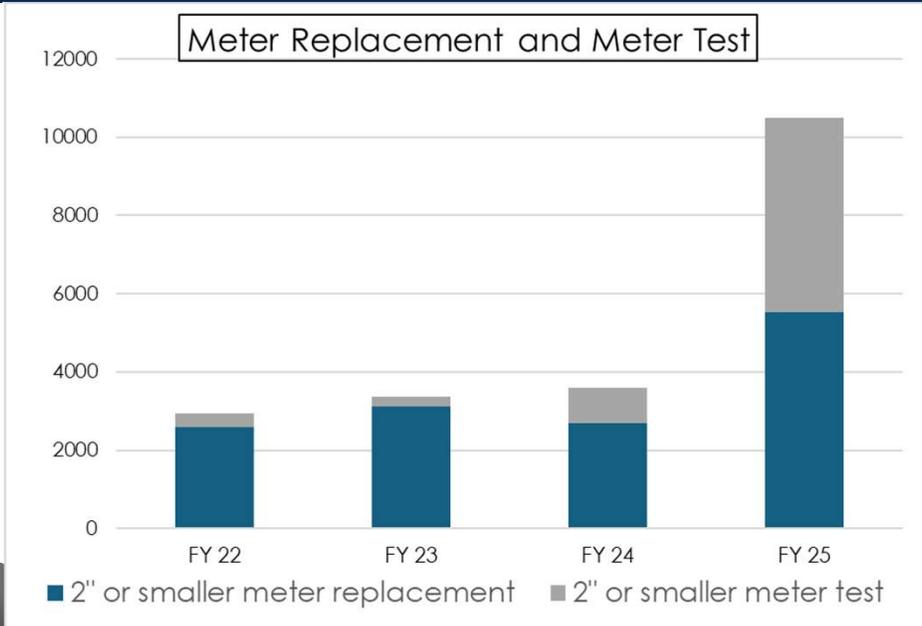


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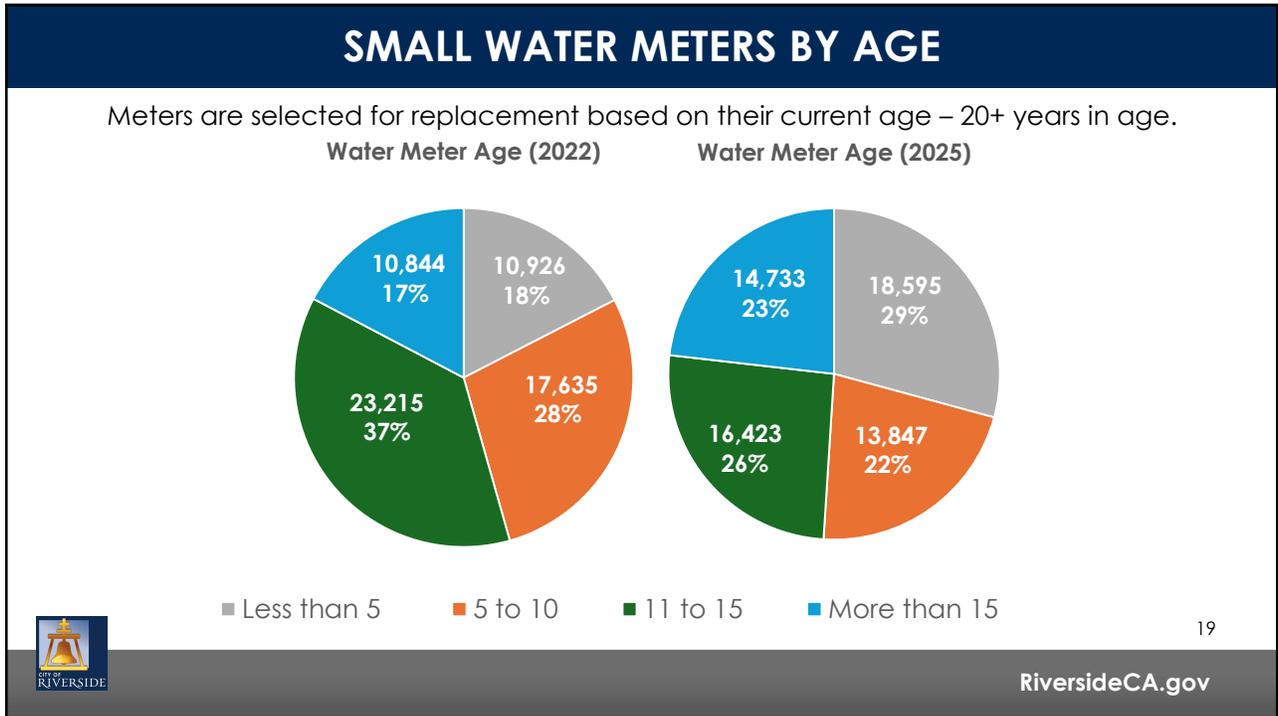
METER REPLACEMENTS AND TESTING



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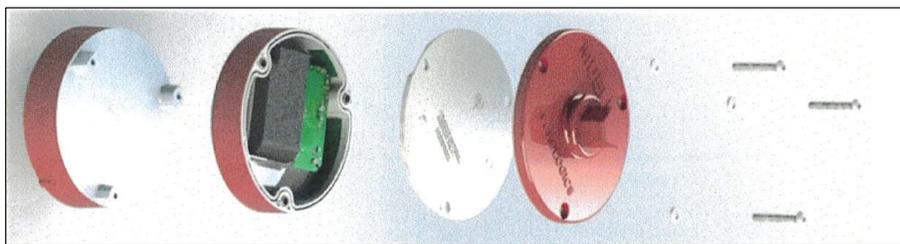
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LEAK DETECTION PILOT PROGRAMS

1. Two 90-day Leak Detection Equipment Pilot (LEDP) Program:
 - a. Muller Echologics (2023): 40 units, 6 leaks, ~25 AF
 - b. Fluid Conservation Systems (2025): 40 units, 2 leaks, ~12 AF



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PUMP-POD SYSTEM



Grant Funded joint project to capture water during Firefighter Training.

Agency	Funding
Metropolitan Water District	\$70,746
Western Water District	\$20,000
Riverside Public Utilities	\$15,604
Riverside Fire Department	\$12,500
Total	\$118,850



Estimated
4.5 million gallons saved
annually



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RECOMMENDATION

That the Board of Public Utilities receive and file an update on Water Loss.

