



# FISCAL YEAR 2023 WATER LOSS AUDIT RESULTS

July 24, 2024

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## Water Loss Regulations

- 2017-2023 – Perform a Water Loss Audit, have it validated by a certified 3<sup>rd</sup> Party, and submit to DWR
- 2020-2022 – Real Loss Performance Standards set by DWR for each urban retail water supplier:
  - Mesa Water Real Loss standard is 16.7 gallons/connection/day
  - Mesa Water Apparent Loss standard is 11.4 gallons/connection/day
- 2023-2028 – Submit Water Loss Audit + three new questionnaires
- 2028 – Meet the Real Loss standard + Apparent Loss standard + Water Loss Audit + questionnaires

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# Changes for 2023

- Version 6.0 of AWWA Free Water Loss Software:
  - Different default values change the balance between Real Loss and Apparent Loss
  - No flexibility on data validation grading did not affect our overall Data Validity Score
- Initial Questionnaires submitted for:
  - Data Quality and Pressure Management in December 2023
  - Asset Management in June 2024

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# Real Loss and Apparent Loss

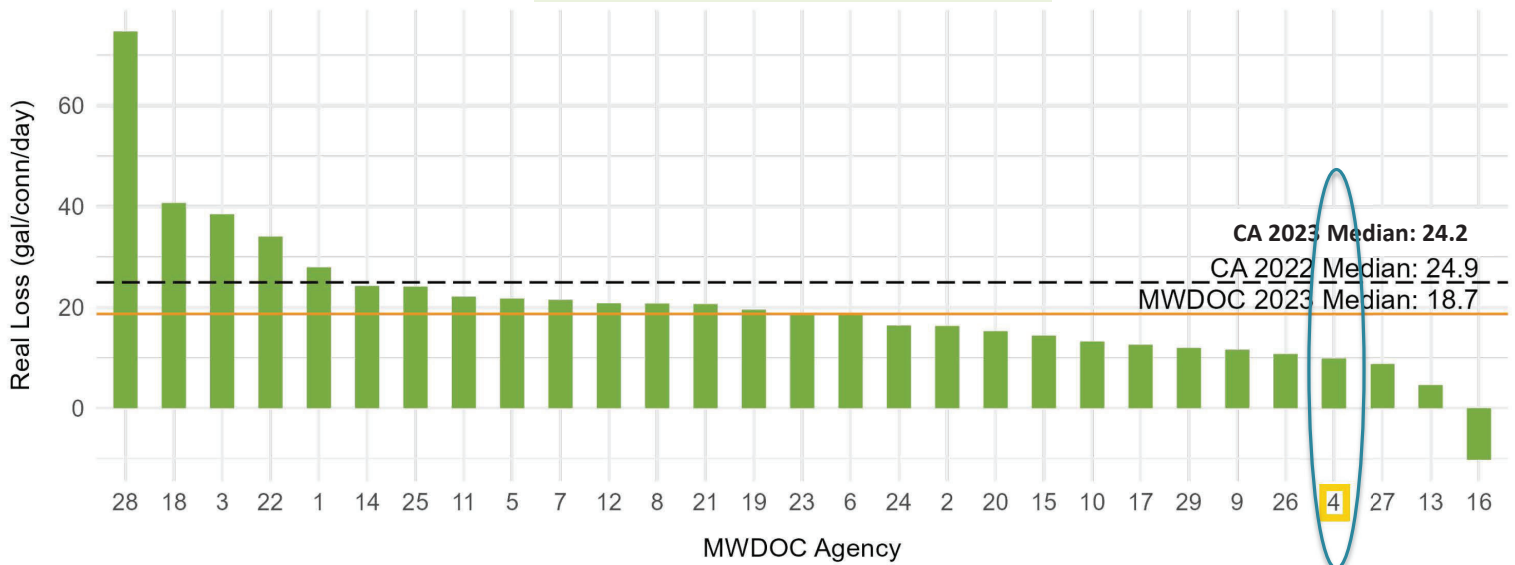
$$\begin{aligned} \text{Water Loss} &= \text{Water Supplied} && - && \text{Water Demand} \\ &\begin{aligned} &\bullet \text{ Clear Wells} \\ &\bullet \text{ MWRF} \end{aligned} && && \begin{aligned} &\bullet \text{ Customer meters} \\ &\bullet \text{ Authorized, unmetered} \\ &\quad \text{(ie, CMFD, CMSD)} \end{aligned} \\ \\ \text{Water Loss} &= \text{Apparent Loss} && + && \text{Real Loss} \\ &\begin{aligned} &\bullet \text{ Customer meter inaccuracy} \\ &\bullet \text{ Theft} \\ &\bullet \text{ Billing discrepancies} \end{aligned} && && \begin{aligned} &\bullet \text{ Main line breaks} \\ &\bullet \text{ Service line breaks} \\ &\bullet \text{ Background leakage} \end{aligned} \\ \\ \text{Real Loss} &= && \text{Water Loss} && - && \text{Apparent Loss} \end{aligned}$$

# FY 2023 Water Loss Audit Outputs-KPIs

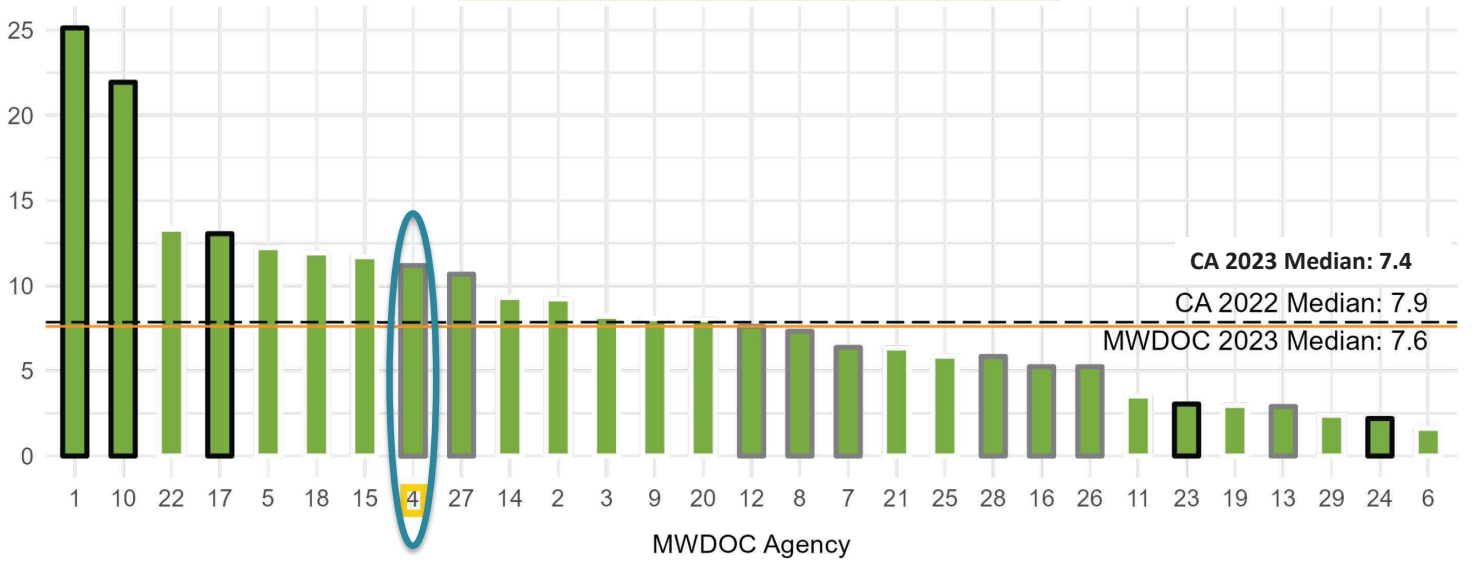
KPI	Mesa Water	California Percentile	MWDOC Member Agency Percentile
Real Loss (as percent of water supplied)	1.95%	NA	NA
Real Loss (Gal/connection/day)	9.9	Best 20%	Best Quartile
Apparent Loss (Gal/connection/day)	11.2	Bottom Quartile	Bottom third
Infrastructure Leakage Index (ILI)	0.6	Best 20%	Best Quartile
Data Validity Score	82	Best 2%	Best Score



MWDOC Agencies Real Losses

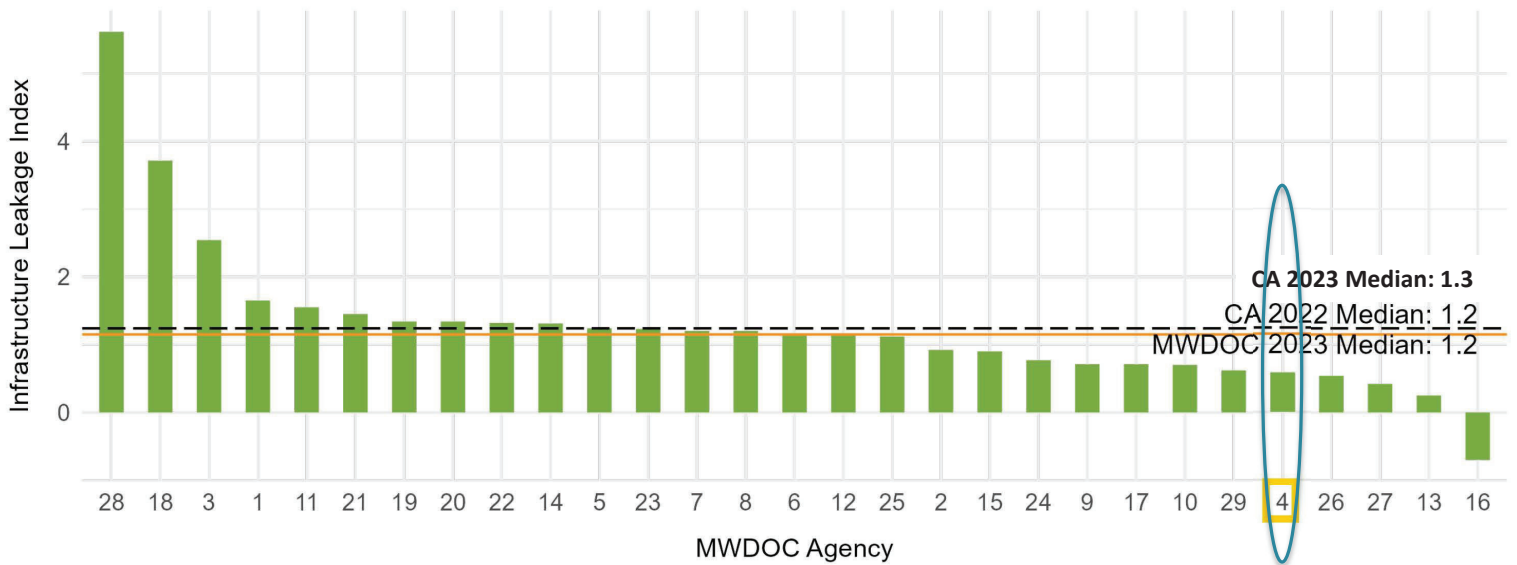


### MWDOC Agencies Apparent Losses

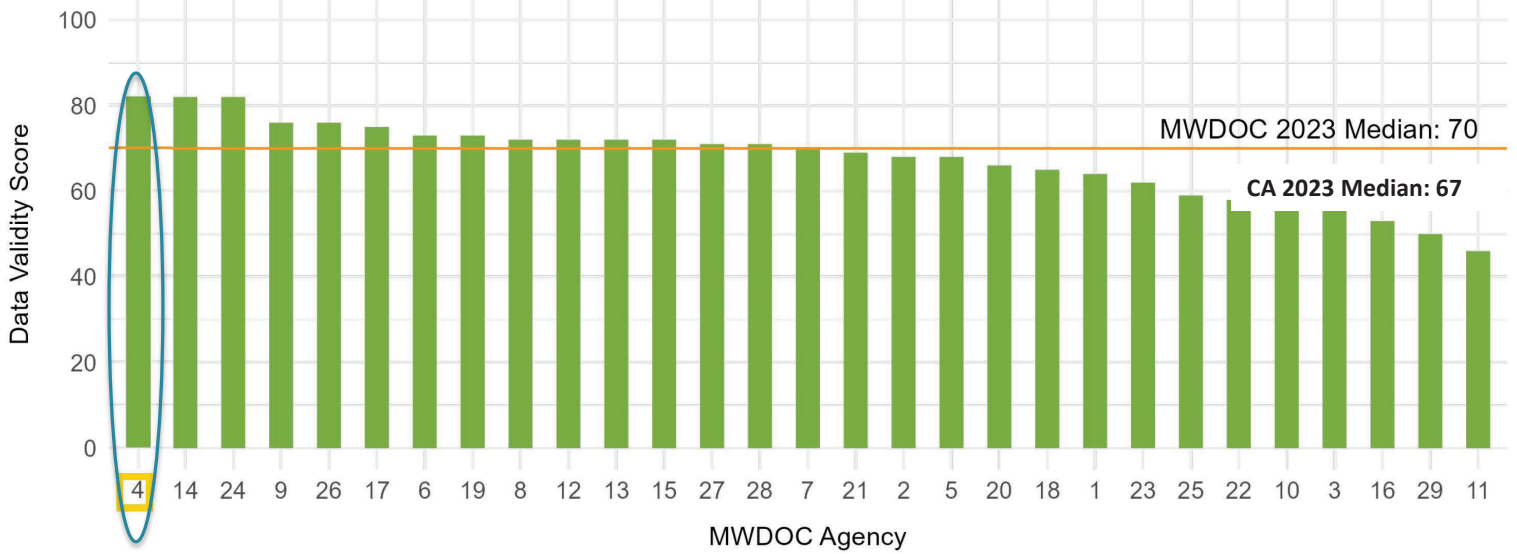


Was customer meter testing used to inform customer metering inaccuracies?   
■ Comprehensive Testing ■ Not Comprehensive Testing ■ Estimated

### MWDOC Agencies Infrastructure Leakage Index



### MWDOC Agencies Data Validity Score



### 2028 Performance Standards

	2028 Standard (gal/conn/day)	FY 2023 Result	Met the Standard?	Compliance Standard?
Real Loss	16.7	9.9	Yes	Yes
Apparent Loss	11.4	11.2	Yes	No

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# Questions

