



Presentation to

MWRA Advisory Board Operations Committee

Lead and Copper Rule Changes and
Recommendations

April 1, 2024



Goals for Today

- Brief Update on Anticipated Changes to the LCR
- Root Cause of Elevated Lead Levels
- Options for Long Term Health Risk Reduction
- Obstacles to Success
- Potential Changes to the Lead Service Line Replacement Program



Significant Changes to the Lead and Copper Rule

- DRAFT Lead and Copper Rule Improvements (LCRI)
 - Issued December 2023
 - Expected FINAL October 2024; Effective October 2027
- Builds On and Modifies/Defers the LCR Revisions (LCRR)
- Key LCRR Requirements Still Due October 16, 2024
 - Service Line Inventory
 - Related Outreach
 - 24-Hour Public Notice if over Action Level

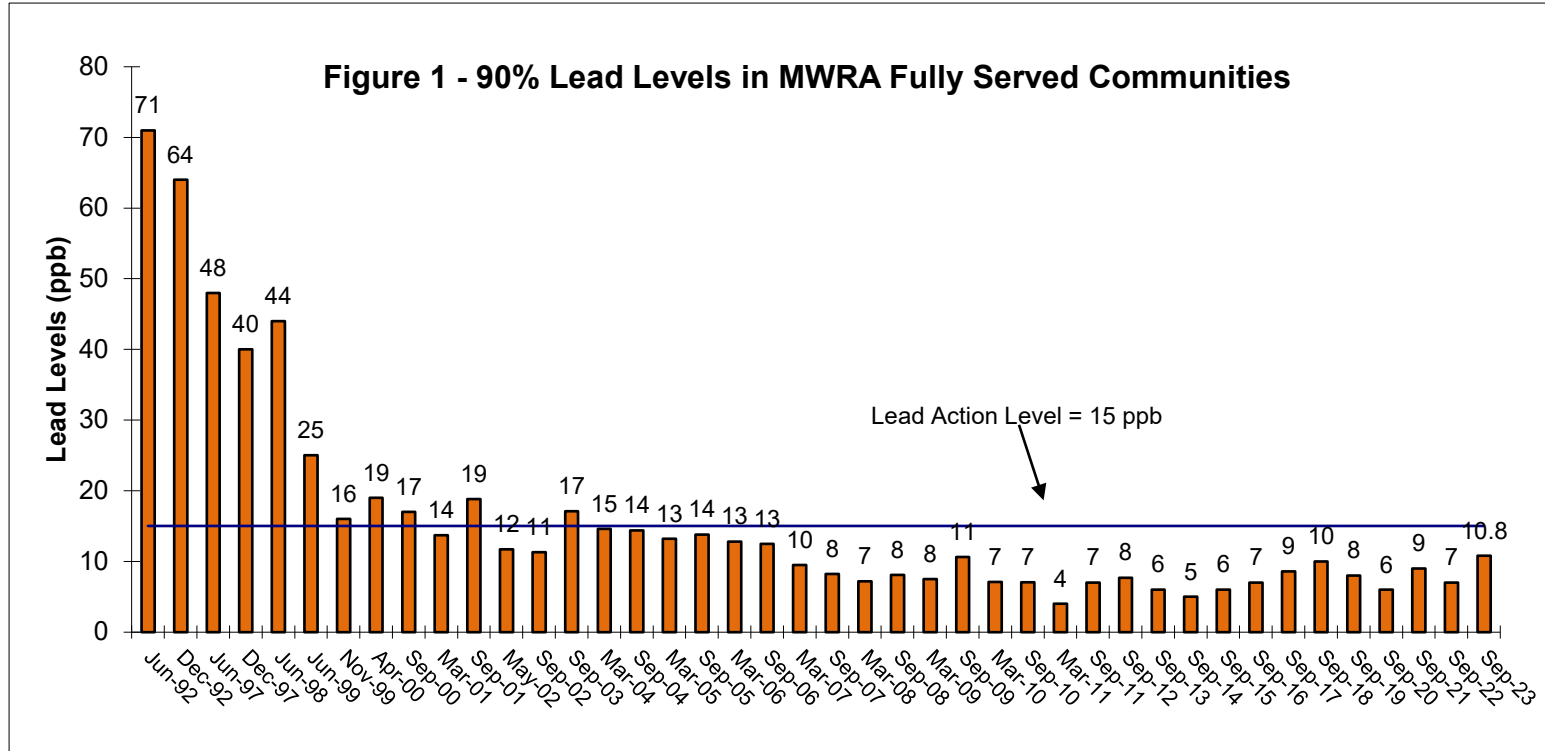


LCRI Changes

- All systems must replace all lead service lines within 10 years
 - Regardless of lead sample results
- Lower Action Level from 15 ppb to 10 ppb
 - More systems will exceed
- Changes to sampling and compliance calculation
 - Reported levels will be higher
- More stringent requirements if over Action Level 3 times in 5 years
 - More outreach
 - Offer filters to all customers

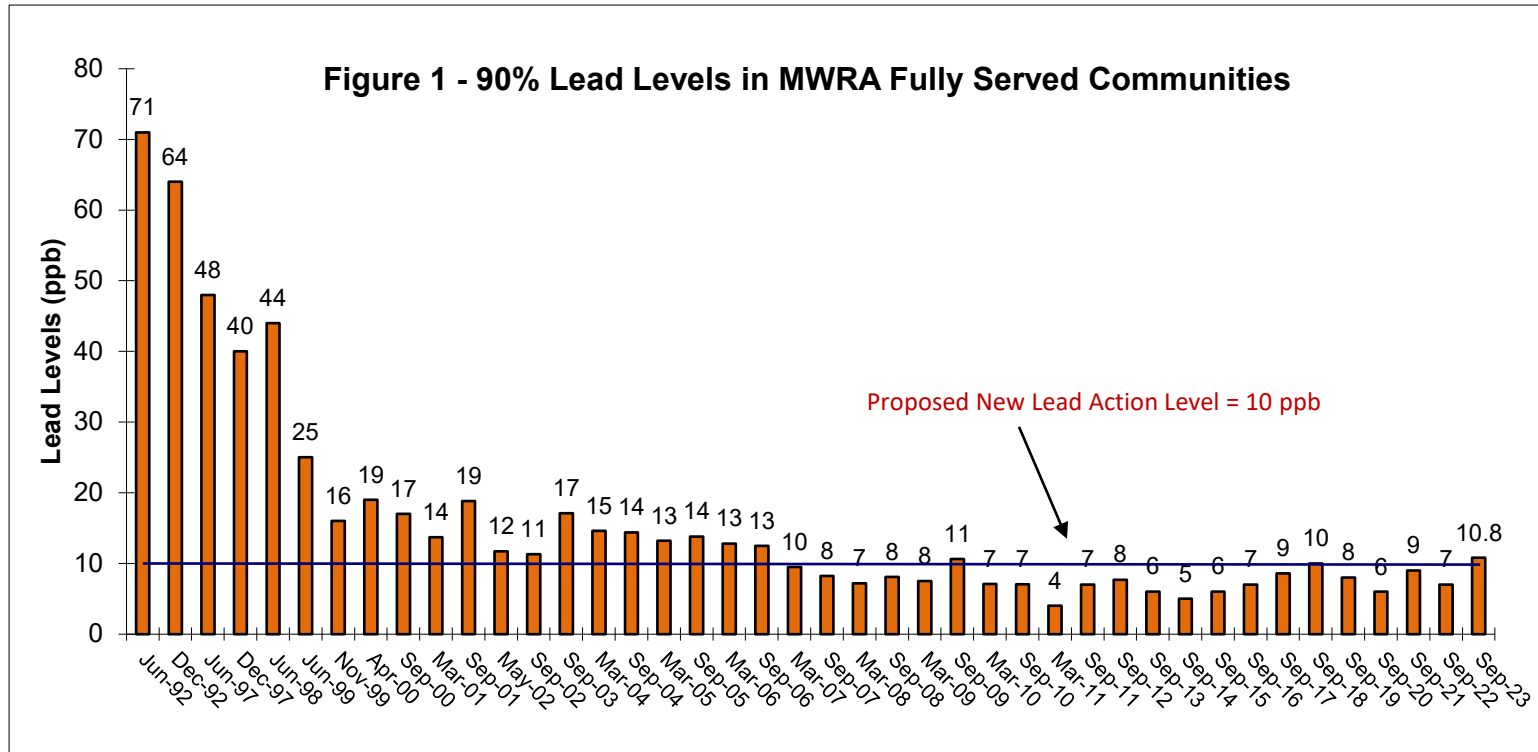


System – wide results





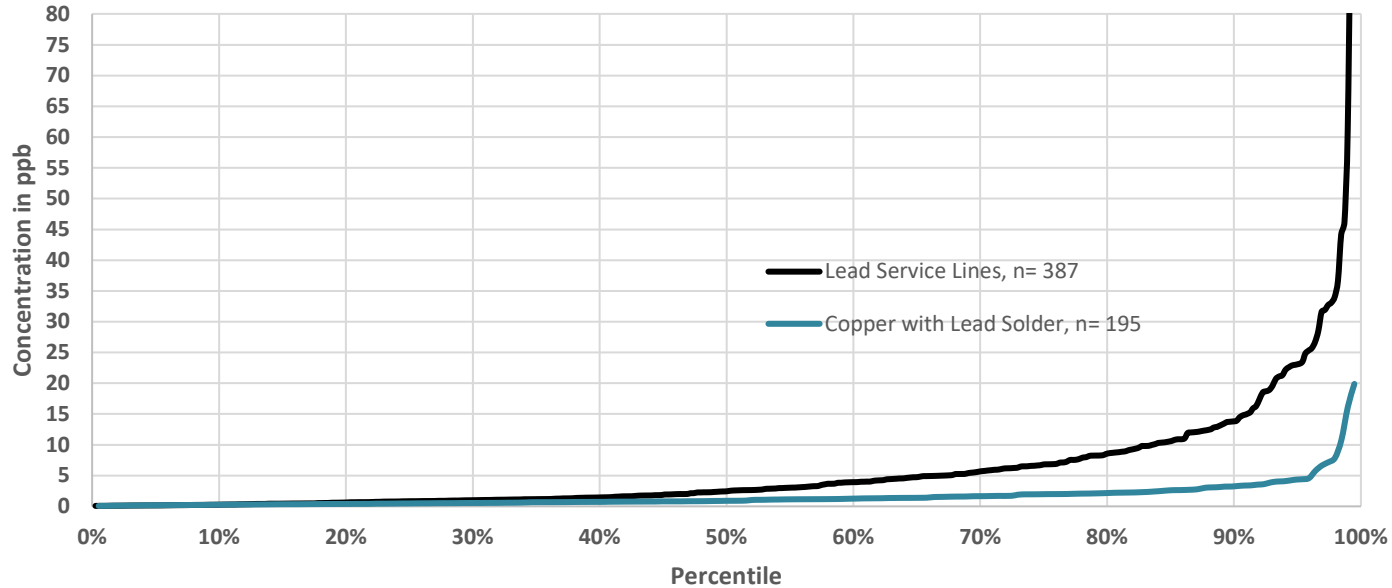
System – wide results





2023 Sampling Results – 10.8 ppb

2023 Sampling Round Results



Type	Median	75 th Percentile	90 th Percentile	95 th Percentile	% of Total
LSL	2	7	13	23	65
CULS	1	2	3	4	33



90th Percentile Results Significantly Lower for Non LSL Sites

Year	2018	2019	2020	2021	2022	2023
90th Percentile Full system	10	8	6	9	7	11
90th Percentile Just LSL	12	11	8	13	9	14
90th Percentile Just Lead Solder	3	3	2	3	2	3

Red shows results over proposed new Action Level of 10 ppb



Most high values from sites with lead service lines

- In 2023 sampling round:
 - 35 of 595 samples were over the action level
 - 31 of the 35 were from sites with lead service lines
- In 2022 sampling round:
 - 18 of 595 samples were over the action level
 - 17 of the 18 were from sites with lead service lines



Option to Defer Change to Corrosion Treatment

- If MWRA exceeds the lead Action Level, we must re-optimize corrosion control treatment
 - Most likely option is adding orthophosphate
- Estimated capital and operating costs - \$60 to \$80 million
- LCRI offers an option to accelerate lead service line replacement rather than change corrosion control treatment
 - Replace all LSL within 5 years at 20% per year
 - Defer action on treatment changes while in process



What Could Prevent “Getting the Job Done”

- Current estimates are that there are at around 15,400 LSL (2.9%)
- Only get credit if all of the LSL is replaced.
- Private side replacement required, but can be difficult to get participation



MWRA's Zero-Interest Lead Service Line Loan Program

- \$100 Million loan program approved in 2016
- Provided \$41 million in loans to 17 communities
- Current best estimate of remaining lead services is 15,400 (2.9%)
- Better data available this October
- Estimated total cost - \$150 million



Potential Program Changes to Accelerate Replacement

- Demonstrate MWRA and Community commitment to full replacement
 - Fully fund program with additional \$100 million phase
- Facilitate private side replacement with 25 percent grant portion
 - Estimated cost \$40 million
- Significant outreach effort to ensure local participation
- Required completion date – 2033, assuming LCRI in effect in 2027



Next Steps

- Potentially include new phase in FY25 budget
- Revise program guidelines
- Training planned on upcoming requirements at May Advisory Board Meeting
- Inventories due by October 16, 2024
- Letters to all LSL, GRR and unknowns by November 15, 2024