



Presentation to

Water Supply Citizen's Advisory Committee

Update on Lead and Copper Rule

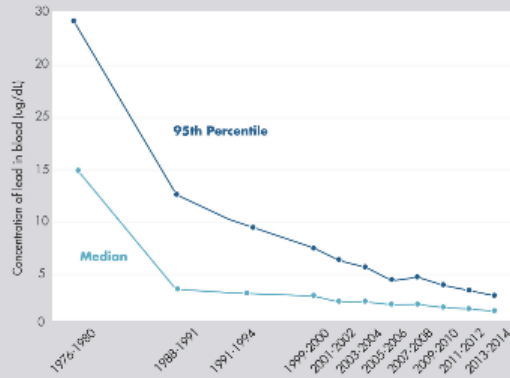
November 12, 2024
CWTP



Reminding ourselves why we care!

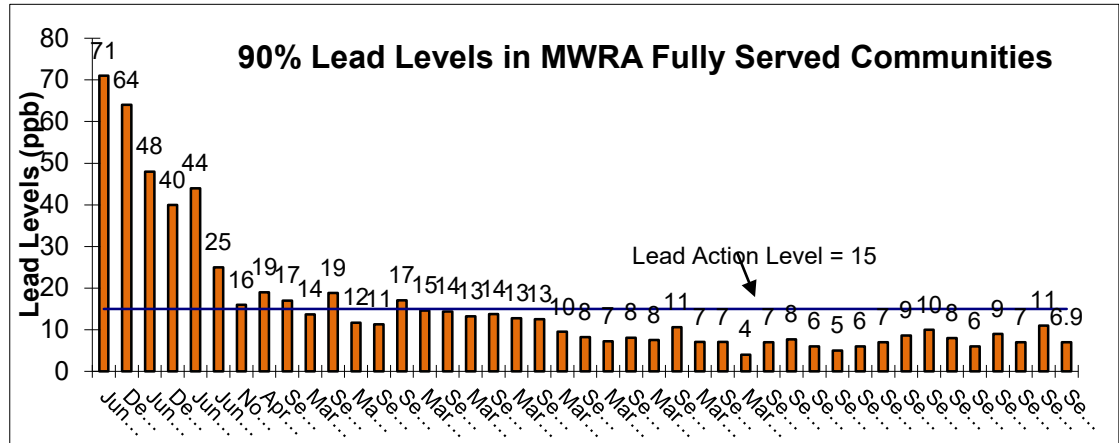
- Our goal is public health protection
- Children's blood lead levels are down 90 percent
- Lead levels at customer's taps have declined dramatically
- But still more to be done – get as close to zero as possible

Lead in U.S. children ages 1 to 5 years: Median and 95th percentile concentrations in blood, 1976-2014



Data: Centers for Disease Control and Prevention, National Center for Health Statistics and National Center for Environmental Health, National Health and Nutrition Examination Survey

EPA, America's Children and the Environment, Third Edition, Updated February 2016





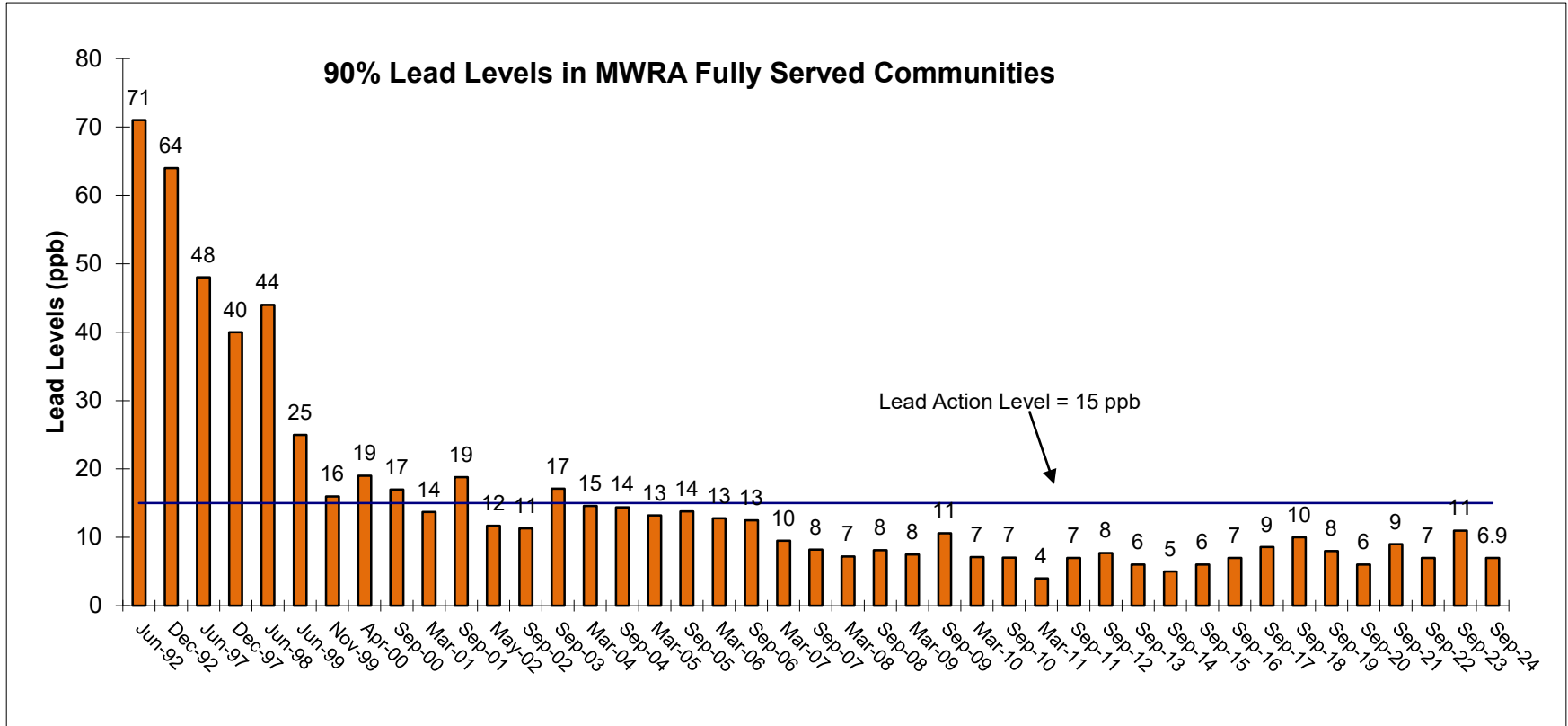
Managing the risk of lead in water is a shared responsibility

- Long Term Goals
 - Reducing lead corrosion
 - Removing lead from contact with our water
- MWRA - Effective Corrosion Control Treatment
- Communities – Removing LSL, Informing the Public
- Residents – Cooperate in LSL Replacement, Premise Plumbing
- Health Professionals – Effective Communication about Risks





2024 Lead Results – 6.9 ppb compared to 15 ppb Action Level





- 16 of 595 samples were over the Action Level
- 15 of the 16 were at sites with lead service lines
 - (In 2023 -- 31 of the 35 were at sites with LSL)
 - (In past 10 years -- over 90% of elevated samples were LSL)
- Only one community was individually over the Action Level
 - Required to do the 24-hour Public Notice
 - Will mail Public Education brochure with December bills
 - Continue lead service line replacement



Regulatory Changes – October/November 2024

- Every community was required to submit a service line inventory
 - All MWRA communities met October 16th deadline
 - Staff reviewing the data
- By November 15 -- Every community required to mail information to everyone with:
 - Lead service line
 - Galvanized service line requiring replacement (GRR)
 - Unknown material service line
- 24-hour hour Public Notice now required for all systems over the Action Level



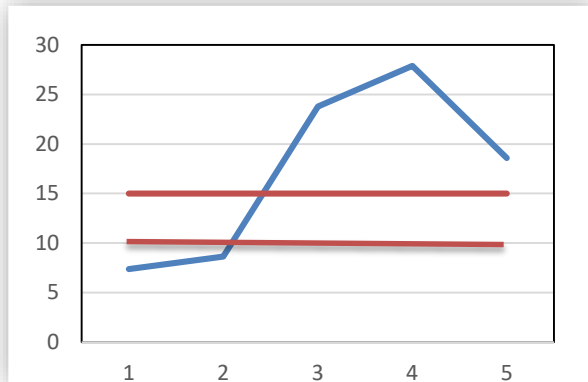
Regulatory Changes – after October 2027

- Lead Action Level lowered from 15 parts per billion (ppb) to ten ppb
- All lead service lines to be replaced within ten years, regardless of lead sample results
- Changed sampling and 90th calculation (will raise reported levels)
- Allowing deferral of changes to corrosion control if all lead service lines are replaced within five years of the exceedance
 - MWRA target: replace all lead service lines by end of 2032



New Five Bottle Sampling Will Make Results Higher

- New 5-Bottle Sampling Procedure for Homes with LSL starting in 2028
 - EPA believes that a 5th liter sample will better characterize water in the LSL
1. Provide owner with 5 1-liter bottles.
 2. After stagnation period of at least 6 hours, bottles should be filled in sequence (1 through 5) with tap running
 3. Bottles No. 1 and 5 will be analyzed
 4. Higher of two included in 90th Percentile





90th Percentile Results Significantly Lower for Non LSL Sites

Year	2018	2019	2020	2021	2022	2023	2024
90th Percentile Full System	10	8	6	9	7	11	7
90th Percentile Just LSL	12	11	8	13	9	14	8
90th Percentile Just Lead Solder	3	3	2	3	2	3	2

Red shows results over new Action Level of 10 ppb (effective 10/27)
Five bottle sampling will tend to increase reported lead levels



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 (current \$)
- 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 (done by 2032)
 - Defer action on treatment changes while in process
- Protect public health and eliminate the problem, rather than just add another chemical to our drinking water



What Could Prevent “Getting the Job Done”

- Current estimates are that there are at around 15,400 LSLs (2.9%)
 - *Will update numbers when all inventories available*
- Only get credit if all of the LSLs and GRRs are replaced.
- Private side replacement required, but can be difficult to get participation



MWRA Lead Loan Program

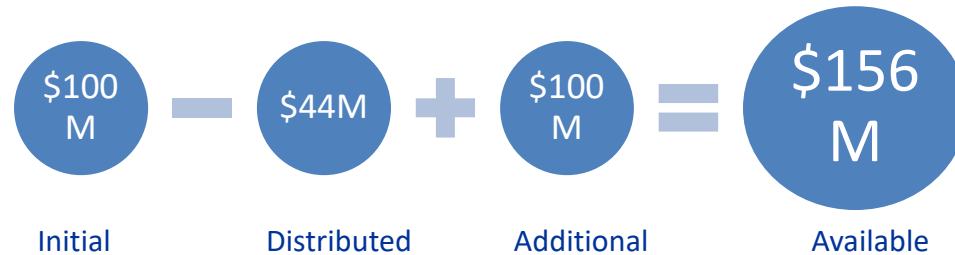
- Launched in 2016 - \$100 Million for community projects
- 10 year interest-free loans
- Must replace **ALL** lead pipe within a service line - **BOTH** public and private portions
- If any portion of service is lead or brass, entire service is eligible for replacement
- \$43.8 Million distributed to 17 communities
- MWRA's water programs have funded more than **7,900 LSL** replacements & **1,400 lead gooseneck** replacements





Revisions to the Program

- The Board of Directors authorize the inclusion of a 25% grant and addition of \$100 million to program
- Fully funded removal of private side will be required for grant/loan. Communities that do not fully fund the private side can still apply for 0% interest loan
- Eligible projects LSL replacements, Investigations, Consulting Services, Public Education, Filters.



Enough to get the job done



Lead Service Line Replacement

- Changes to MWRA Service Line Replacement Program
 - 25% grant if paying for private side - effective July 2024
 - First two applications , Chelsea and Revere
 - Expect disbursement in February 2025
- Provided assistance to 3 communities for EPA grants
 - Awaiting EPA decision
- Continue to work with SRF for additional assistance to accelerate replacements



Questions or Comments?

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Drink with Confidence

Flush with Pride

This presentation represents the opinions of the authors and not necessarily those of the MWRA