

# Inventory Methodology

**Enter Date Last Updated:** 10/10/24

**Purpose of this worksheet:** For water systems to document the methods and resources they used to develop and update their inventory.

## Part 1: Historical Records Review

Type of Record	Describe the Records Reviewed for Your Inventory
1. Construction Records and Plumbing Codes <i>Examples: Local ordinance adopting an international plumbing code. Permits for replacing lead service lines.</i>	Utility development records (new installations); City Standard Details (allowable material types); Alameda County Assessors Office Data (building data); City Ordinance No. 87-022 and City Council Resolution No. 95-218 (related to adopting Building/Plumbing Codes)
2. Water System Records <i>Examples: Capital improvement plans. Standard operating procedures. Engineering standards.</i>	Utility billings, work orders, and customer account records; Capital Improvement Programs; engineering procedures
3. Distribution System Inspections and Records <i>Examples: Distribution system maps. Tap cards. Service line repair/replacement records. Inspection records. Meter installation records.</i>	Meter installation records (year and material type for original service line installation and subsequent renewals or abandonments); GIS mapbooks (construction year and material type for water mains)
4. Other Records	Historical aerial photography (to verify tract developments); Google Maps Street View (to verify demolished buildings)

## Part 2: Identifying Service Line Material During Normal Operations

1. During which normal operating activities are you collecting information on service line material? Check all that apply.

- |  |  |
|--|--|
| <input type="checkbox"/> Water meter reading<br><input type="checkbox"/> Water meter repair or replacement<br><input checked="" type="checkbox"/> Service line repair or replacement | <input checked="" type="checkbox"/> Water main repair or replacement<br><input type="checkbox"/> Backflow prevention device inspection<br><input type="checkbox"/> Other |
|--|--|

If "Other", please explain:

2. Did you develop or revise standard operating procedures to collect service line material information during normal operation? No

If "Yes", please describe:

## Part 3: Service Line Investigations

1. Identify the service line investigation methods your system used to prepare the inventory (check all that apply).

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Visual Inspection<br><input type="checkbox"/> Customer Self-Identification<br><input checked="" type="checkbox"/> Pipe Dating<br><input checked="" type="checkbox"/> Pipe Diameter<br><input type="checkbox"/> Water Quality Sampling - Targeted<br><input type="checkbox"/> Water Quality Sampling - Flushed<br><input type="checkbox"/> Water Quality Sampling - Sequential | <input type="checkbox"/> Water Quality Sampling - Other<br><input type="checkbox"/> Predictive Models or Statistical Analysis<br><input checked="" type="checkbox"/> Interpolation<br><input type="checkbox"/> Interviews<br><input type="checkbox"/> Emerging Methods<br><input type="checkbox"/> Other |
|---|--|

If "Other" or "Emerging Methods," please explain:

2. If "Predictive Modeling" or "Interpolation," please briefly describe the model and inputs used.

1) A randomized subset of services were visually inspected (to achieve 95% Confidence Level). Material type was interpolated based on confirmed material type of other services installed in the same decade. 2) Material type was interpolated for some services located in tract developments.

3. How did you prioritize locations for service line materials investigations? For example, did you consider environmental justice and/or sensitive populations, did you use predictive modeling, and/or did you target areas with high number of unknowns?

Services were randomly selected for visual inspection using a random number generator.

# Inventory Summary

Enter Date Last Updated: **10/10/24**

**Purpose of this worksheet:** For water systems to provide a summary of their service line inventory, including information on ownership, inventory format, and the number of service lines for each of the four required materials classifications.

Note that water systems may submit their completed LCRR initial inventories before October 16, 2024. Pursuant to 40 CFR 141.85(e), water systems must provide public notification to customers served by lead, galvanized requiring replacement, and/or lead status unknown service lines within 30 days after DDW's approval of the completed inventory. DDW will notify water systems by email when their inventory submission is approved.

## Part 1. General Information

1. Is this the <b>Initial Inventory</b> or an <b>Inventory Update</b> ?	<i>Initial Inventory</i>
2. Who <b>owns the service lines</b> in your system? <i>If other, please explain below.</i>	<i>Ownership is split, meaning that the system owns and portion and the customer owns a portion</i>
3. When were lead service lines banned in your system? Reference the state or local ordinance that banned the use of lead in your system.	
<b>1985 (California Health and Safety Code Section 300.6)</b>	
4. Do you have lead goosenecks, pigtails or connectors in your system?	<i>No</i>

## Part 2. Inventory Format

Describe your inventory format in the space provided below (e.g., the **Detailed Inventory** worksheet, custom spreadsheet, GIS map). Provide the filename and/or web address if applicable.

**Detailed Inventory worksheet**

## Part 3. Inventory Summary Table <sup>1</sup>

If you are using the **Detailed Inventory** worksheet, the classifications you select in the Column "Entire Service Line Material Classification" will be used to calculate the total number of service lines for each of the four material classifications below. Otherwise, enter the number of service lines blue- and aqua colored-cells.

**Table 3.1. Inventory Summary by Ownership**

Service Line Material Classification	Number of Water System Owned Service Lines	Number of Customer Owned Service Lines
<b>Lead</b>	0	0
<b>Galvanized</b>	0	153
<b>Galvanized Requiring Replacement</b>	0	0
<b>Non-Lead - Copper</b>	17762	1422
<b>Non-Lead - Plastic</b>	8971	54
<b>Non-Lead - Other</b>	9622	34726
<b>Unknown</b>	0	0
<b>TOTAL</b>	36355	36355

**Table 3.2. Inventory Summary Total**

Service Line Material Classification	Definition	Total
<b>Lead</b>	Any portion of the service line is known to be made of lead.	0
<b>Galvanized Requiring Replacement (GRR)</b>	The service line is not made of lead, but a portion is galvanized and the system is unable to demonstrate that the galvanized line was never downstream of a lead service line.	0
<b>Non-Lead</b>	All portions of the service line are known NOT to be lead or GRR through an evidence-based record, method, or technique.	36,355
<b>Lead Status Unknown</b>	The service line material is not known to be lead, GRR, or non-lead line. For the entire service line or a portion of it (in cases of split ownership), there is no evidence to support material classification.	0
<b>Lead Gooseneck/Fitting</b>	A short section of piping, typically not exceeding two feet, which can be bent and used for connections between rigid service piping.	0
<b>Total Number of Service Lines</b>		36,355

### Notes

This summary table is for reporting material for the entire service line connecting the water main to the customer's plumbing. See the Section 4 of the Inventory Instructions or Exhibit 2-2 of U.S. EPA's Guidance for Developing and Maintaining a Service Line Inventory (US EPA, 2022).

# Public Accessibility Documentation

Enter Date Last Updated:

10/10/24

**Purpose of this worksheet:** For systems to provide documentation to states on how they met the public accessibility requirements of the LCRR.

1. Select the location identifiers that you use for your service line inventory. Check all that apply.

- Address
- Street
- Block
- Intersection
- Landmark
- GPS Coordinates
- Other

*If "Other", please describe:*

2. Does **every service line** have a location identifier?

Select "Yes" or "No"

*If "No", explain. Remember that location identifiers are required for service lines that are lead and galvanized requiring replacement.*

**Yes**

3. How are you making your inventory publicly accessible? Check all that apply. *Remember that if your system serves > 50,000 people, you **must** provide the inventory online.*

- Interactive online map
- Static online map
- Online spreadsheet
- Printed service line map
- Printed tabular data
- Information on water utility mailings or newsletter
- Hard copy information available in water system office
- Other

*If "Other", please describe:*

<https://www.hayward-ca.gov/services/city-services/water-quality>