Background

*[Below is a customizable template to document lead service line replacement (LSLR) planning and capacity development activities at a water system. The template can be filled out by either a TA provider or the water system staff. Note that not all fields and tasks may be applicable for each water system, and this document should be adapted to fit the needs of the system. The Community and System Summary will provide documentation of the community and water system information. The second half of the template is the LSLR Needs Assessment and Workplan to document the community/water systems’ LSLR needs and how to address them. Information in yellow highlight and brackets should be modified or removed before this document is finalized, including the Background section. Note that the provided tables are not highlighted but need to be completed.]*

Purpose

This Lead Service Line Replacement (LSLR) Needs Assessment and Workplan documents LSLR planning and capacity development activities for [Community Name]. These activities are intended to support the community’s compliance with Lead and Copper Rule Revisions (LCRR) requirements (initial service line inventory due October 16, 2024), and ultimately work toward the goal of replacing 100 percent of the nations’ lead service lines.

A summary of the LSLR-related infrastructure and capacity development needs is provided below, followed by a draft plan for addressing those needs.

Community and System Summary

Community Characteristics

*[Community characteristics can help a system determine whether they qualify for funding from various sources.]*

|  |  |
| --- | --- |
| Community Name |  |
| Location *(City, County, State/Territory)* |  |
| State Definition of Disadvantaged Community *(include reference/source)* |  |
| Does community meet state definition of disadvantaged community? *(Y/N, elaborate if needed)* |  |
| Does the community meet other disadvantaged or under-resourced criteria? *(CEIJST, EJScreen, etc.)* |  |

System Information

*[System information can help a system determine regulatory requirements and the possibility of the presence of lead/lead contamination.]*

*[Attach map(s) of location and system components if available.]*

|  |  |
| --- | --- |
| System Name |  |
| PWSID | [XX#######] |
| System Type | o Community Water System (CWS)  o Nontransient Noncommunity Water System (NTNCWS)  o Transient Noncommunity Water System (TNCWS) |
| Water System Representative *(e.g., name, title, organization, email phone)* |  |
| Population Served by the Water System |  |
| Current Governance Type *(e.g., private vs. public ownership, how many on the board, appointed or elected, etc.)* |  |
| Primacy Agency Contact *(e.g., name, title, agency, program, email, phone)* |  |
| Number of Service Connections *(include reference/source)* |  |
| For CWS only, do multi-family residences comprise at least 20% of the structures you serve? *(if yes, multi-family residences may be included in Tier 1 monitoring locations under LCRR)* |  |
| Treatment System *(e.g., summarize the systems’ treatment process, and any corrosion control treatment)* |  |
| LCR Compliance Status *(include any previous violations or action level exceedances)* |  |
| Link to State-specific Inventory Requirements or Template *(if applicable)* |  |
| Service Line Inventory Started or Completed? | o Not started o Started o Completed |
| Summary of Service Line Material by Count *(if started)* | Public/Water System Side, number of service lines that are:   * Lead: \_\_\_\_ * Galvanized Requiring Replacement (GRR): \_\_\_\_ * Non-Lead: \_\_\_\_ * Unknown: \_\_\_\_   Private/Customer Side, number of service lines that are:   * Lead: \_\_\_\_ * GRR: \_\_\_\_ * Non-Lead: \_\_\_\_ * Unknown: \_\_\_\_ |

Service Line Inventory

Short description of past inventory efforts:

|  |
| --- |
| *Briefly summarize what progress (if any) has been made to develop a service line inventory and/or minimize the number of service lines classified as “unknown” material in that inventory.* |

TA Needs: (if any?)

|  |
| --- |
| *Briefly summarize the TA needs associated with LSL identification and inventory development.* |

*[The table below can be used to track a system’s Service Line Inventory progress. Read each task and determine whether it has been completed, needs to be completed/is in progress of being completed, or does not apply to your system and check the applicable box.]*

| Complete | Needed/In Progress | Not Applicable | Task Name | Task Description |
| --- | --- | --- | --- | --- |
|  |  |  | Develop format for service line inventory | * Determine the water system’s preferred record keeping format for data and information. Develop or update a sustainable platform (e.g., web), format (e.g., shapefile), and/or database. Train staff from the water system to incorporate data and information. * Confirm the water system’s data collection method will match the fields and inputs needed for the [state primacy agency's] materials inventory template spreadsheet (if applicable) - this may include ensuring that for each customer account/property, the database has a field for entering lead service line (LSL) material on both the public and private sides. * (If applicable) If using a shapefile, choose a unique identifier format for the GIS database and [state primacy agency’s] materials inventory template spreadsheet. * Create a unique identifier (if necessary) for each service line in the community and populate the database with all unique identifiers (e.g., one for each property). The identifiers should be confirmed as unique and covering all service lines for the community. (There will likely not be one-to-one correspondence between customers and service lines. Some customer accounts will have more than one service line, and some service lines may not have any customer accounts). |
|  |  |  | Collect service line inventory information from historical records review | * Compile (digitize if necessary) all available water system records that contain service line material information and incorporate into inventory (i.e., tap cards, maintenance records, existing GIS databases). * Create a "building year" database, spreadsheet, or data layer in GIS for building year information and other relevant assessor information, incorporate construction year and other information from the property assessor’s electronic records (confirm that the paper records found at the water system have been digitized), and identify how to match the information to a unique identifier. * Identify properties with no known construction year. For those properties, identify other records that could help identify construction year (e.g., aerial photos and subdivision/mobile home park plat maps). * Use the "building year" file to determine buildings constructed prior to [state’s] lead ban ([year]) and having the potential for LSLs. * Search for additional (e.g., off-site) water system records that may be owned by or stored with other entities (e.g., county zoning department plumbing records, previous contractors, plumbers, and water system employees, including former employees). Prioritize the search for those buildings constructed before [state’s] lead ban and how likely the record may be to improve the quality of the service line inventory. Incorporate the review of any documents located into the database based upon anticipated level of confidence in the records. |
|  |  |  | Coordinate with water system staff to plan inventory process | * Communicate with water system staff to identify resources (e.g., level of effort) needed to complete the inventory. Identify where staff or the contractor team, if applicable, can expand inventory and record keeping success in the short term. * Conduct initial individualized training, as needed, with staff responsible for service line inventory development to ensure they are trained to complete the tasks they are responsible for. * Develop a timeline for initial service line inventory completion (e.g., Gantt Chart (see [example format](#_Workplan_Schedule_(Example)), electronic calendar). |
|  |  |  | Collect service line inventory information during routine distribution service work | * Develop Standard Operating Procedures for routine work tasks that incorporate service line inventory data collection such as meter service, plumbing inspections, construction records, curb stop repair, and service line leaks. * Provide information about service line inventory planning and coordinate recommendations for existing and planned construction projects. |
|  |  |  | Develop a field verification program | * Identify applicable field verification methods for properties with limited to no service line information. This may require a combination of methods, including: * Property service line verification**:** Verifying service line material by accessing customer properties. * Customer self-identification: Customers submitting photos of service lines visible within property. May require additional verification by knowledgeable staff. * Lead sampling program**:** A (large-scale) lead sampling plan (consistent with EPA recommended protocols). Individual sampling results having detectable amounts of lead have a higher probability of having LSL. * Potholing**:** Investigating underground service lines by exposing through trenching. Identify/prioritize properties where potholing may be needed to verify service line information. * Develop a field verification plan based on the field verification methods identified. The plan will identify individual tasks and responsible parties for each task. |
|  |  |  | Implement the field verification program | * Implement the field verification plan. |
|  |  |  | Submit the inventory to the primacy agency | * Complete and submit the inventory spreadsheet (in [state primacy agency] required/preferred format*, if applicable*) to the water system based on the information gathered from the historical records review, routine system maintenance, field verification. The water system is responsible for submitting the inventory to [state primacy agency] no later than October 16, 2024. |

LSLR Planning

Short description of past LSLR planning efforts:

|  |
| --- |
| *Briefly summarize what progress (if any) has been made to develop an LSLR plan.* |

TA Needs:

|  |
| --- |
| *Briefly summarize the TA needs associated with LSLR planning.* |

*[The table below can be used to track a system’s LSLR progress. Read each task and determine whether it has been completed, needs to be completed/is in progress of being completed, or does not apply to your system by checking the applicable box.]*

| Complete | Needed/In Progress | Not Applicable | Task Name | Task Description |
| --- | --- | --- | --- | --- |
|  |  |  | Establish an LSLR policy with the water system | * Develop an LSLR policy, defining procedures for what to do when encountering an LSL or GRR line during routine work or capital projects. This will be done in concert with a broader LSLR Plan. * Incorporate water system feedback prior to completion. |
|  |  |  | Develop an outline of the LSLR Plan | * Develop the LSLR Plan outline in concert with an LSLR policy. * Discuss details of the LSLR outline and incorporate water system feedback prior to completion of the outline. * Conduct discussion and/or interviews with water system staff and other stakeholders on anticipated LSLR planning approaches for incorporation into the plan. * Develop an LSLR Plan that the system can use to efficiently identify and remove service lines that require replacement. Among other elements, the LSLR Plan will consider prioritization of replacements, coordination with property owners, coordination with state and municipal authorities, and disposal of the lead pipes. The plan will be developed to include all required elements as specified in LCRR/Lead and Copper Rule Improvements (LCRI), as applicable. * Provide the LSLR Plan to the water system and stakeholders (if applicable) for review. * Incorporate feedback on the LSLR Plan and finalize. |

Community Engagement

Short description of past community engagement efforts:

|  |
| --- |
| *Briefly summarize past efforts to engage the community and/or develop a community engagement plan (not necessarily limited to engagement related to LSLs).* |

TA Needs:

|  |
| --- |
| *Briefly summarize the TA needs associated with community engagement and community engagement planning.* |

*[The table below can be used to track a system’s Community Engagement progress. Read each task and determine whether it has been completed, needs to be completed/is in progress of being completed, or does not apply to your system by checking the applicable box.]*

| Complete | Needed/In Progress | Not Applicable | Task Name | Task Description |
| --- | --- | --- | --- | --- |
|  |  |  | Develop Community Engagement Plan to identify service line materials | * Conduct discussion and/or interviews with water system staff and other stakeholders and identify the communication methods that can be used to communicate the need for customers to engage in service line inventory data collection. * Together with the water system, identify and confirm any language translation needs (e.g., Spanish) for the community. * Develop a Community Engagement Plan using the water system's preferred communication methods that:  1. Communicates the existing service line inventory status and the steps that are being taken to address public health concerns. 2. Specifies the customer outreach process to identify and report to the water system the service line materials within their residence or business (e.g., door hangers, water bills, etc.). For customers that are unsure of their service line materials, include information on how to contact the water system to request an employee or contractor to come to the residence and verify the service line material.  * Discuss details of the service line inventory Community Engagement Plan and incorporate water system feedback prior to completion of the plan. * Prepare a schedule to implement the service line inventory Community Engagement Plan. * Discuss details of the schedule to implement the service line inventory Community Engagement Plan and incorporate water system feedback prior to completion of the schedule. |
|  |  |  | Implement Community Engagement Plan to identify service line materials | * Support the water system’s implementation of the service line inventory Community Engagement Plan with prepared statements, flyers, draft letters and notices, newspaper publicity, statements to include in the consumer confidence or water quality reports, and other supporting tasks as needed. * Support the water system’s implementation of the service line inventory Community Engagement Plan with event support, as needed, such as with community events, local area Chamber of Commerce, American Legion Post, schools, churches, and other in-person outreach. |
|  |  |  | Develop a draft LSL Ordinance | * Support development of an LSLR Ordinance that the system can use to mandate the identification and removal of service lines that require replacement on customer side.  1. Discuss key elements for the ordinance to be acceptable to the water system, including a funding component (e.g., contingency) to trigger required replacements. 2. Develop a draft ordinance for water system review. 3. Refine ordinance based on water system/community staff feedback. 4. As needed, prepare draft educational materials (e.g., PowerPoint presentation slides, fact sheets, infographics, webpages, social media posts, local tv/radio spotlights) explaining the LSLR Ordinance that could be used with a variety of audiences (e.g., trustees, general public). 5. If needed, provide community engagement and meeting support for water system staff during committee, commission and/or municipal government meetings where the ordinance would be discussed. |
|  |  |  | Develop Community Engagement Plan for the removal of service lines that require replacement | * Conduct discussion and/or interviews with water system staff and other stakeholders and communication methods that can be used to communicate with customers about planned LSLR. * Together with the water system, identify and confirm any language translation needs (e.g., Spanish) for community. * Develop a Community Engagement Plan using the water system's preferred communication methods that:  1. Communicates the water system’s LSLR Plan (existing or newly completed), including locations and timing for planned replacements. 2. If applicable, specifies the process affected customers will need to follow to provide payment or apply for funding assistance for customer-side service line replacement. 3. Communicates what individual customers can expect if their service line is replaced (i.e., duration of water outage, use of filters, follow-up sampling, etc.).  * Discuss details of the LSLR Community Engagement Plan and incorporate water system feedback prior to completion of the plan. * Prepare a schedule to implement the LSLR Community Engagement Plan. * Discuss details of the schedule to implement the LSLR Community Engagement Plan and incorporate water system feedback prior to completion of the schedule. |
|  |  |  | Implement Community Engagement Plan for the removal of service lines that require replacement | * Support the water system’s implementation of the LSLR Community Engagement Plan with prepared statements, flyers, draft letters and notices, newspaper publicity, statements to include in the consumer confidence or water quality reports, and other supporting tasks as needed. * Support the water system’s implementation of the LSLR Community Engagement Plan with event support, as needed, such as with community events, local area Chamber of Commerce, American Legion Post, schools, churches, and other in-person outreach. |

LSLR Funding Support

Short description of past funding efforts:

|  |
| --- |
| *Briefly summarize what progress (if any) has been made to identify and apply for LSLR funding.* |

TA Needs:

|  |
| --- |
| *Briefly summarize the TA needs associated with accessing LSLR funding.* |

*[The table below can be used to track a system’s LSLR Funding Support progress. Read each task and determine whether it has been completed, needs to be completed/is in progress of being completed, or does not apply to your system and check the applicable box.]*

| Complete | Needed/In Progress | Not Applicable | Task Name | Task Description |
| --- | --- | --- | --- | --- |
|  |  |  | Identify potential funding sources | * Identify additional sources of funding (e.g., LSLR, particularly customer side). Research applicable deadlines and requirements. * Discuss the funding options with the water system. Document the desired funding approach. |
|  |  |  | Develop SRF LSLR funding application(s) | * Develop funding application related to service line inventory and/or removal of service lines that require replacement. This will likely include preparing information related to [state primacy agency’s] disadvantaged community application for financial assistance program for replacement of customer-side service lines and State Revolving Fund (SRF) application development, if needed. |

LSLR Construction Support

Short description of past construction efforts:

|  |
| --- |
| *Briefly summarize what progress (if any) has been made or resources are available to support LSLR construction activities.* |

TA Needs:

|  |
| --- |
| *Briefly summarize the TA needs associated with LSLR construction support.* |

*[The table below can be used to track a system’s LSLR Construction Support progress. Read each task and determine whether it has been completed, needs to be completed/is in progress of being completed, or does not apply to your system and check the applicable box.]*

| Complete | Needed/In Progress | Not Applicable | Task Name | Task Description |
| --- | --- | --- | --- | --- |
|  |  |  | Prepare a Request for Proposal (RFP) or model contract | * Evaluate existing contract language and provide RFP/ Model Contract language to include high road labor practices. * Incorporate contract language and approaches that could benefit the community financially. Facilitate communication with the water system or community attorneys. * Identify contract compliance language requirements which need to be included to receive maximum principal forgiveness from [state primacy agency] SRF program. |
|  |  |  | Identify and prepare Construction Support Templates and Tools | * Identify construction support services to the water system that may include contractor evaluations (i.e., budget, work quality, percent complete, etc.). Scope and timing of support to be determined on initiation of construction contract. * Working closely with the water system, prepare any templates or tools to be used by the water system to support removal of service lines that require replacement-related construction. |

# Workplan Schedule (Example Format)

The Workplan Schedule is important to ensure everyone’s expectations are the same. The schedule should be established at the beginning of the project and should be maintained and updated as necessary as the project progresses. Add in the appropriate timeframe on the top row and then add X’s for when each task needs to be completed by. Columns can be added or deleted as necessary.

| Task | [Month 1] | [Month 2] | [Month 3] | [Month 4] | [Month 5] | [Month 6] | [Month 7] | [Month 8] | [Month 9] | [Add months as necessary] |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Develop format for service line inventory |  |  |  |  |  |  |  |  |  |  |
| Collect service line inventory information from historical records review |  |  |  |  |  |  |  |  |  |  |
| Coordinate with water system staff to plan inventory process |  |  |  |  |  |  |  |  |  |  |
| Collect service line inventory information during routine distribution service work |  |  |  |  |  |  |  |  |  |  |
| Develop a field verification program |  |  |  |  |  |  |  |  |  |  |
| Implement the field verification program |  |  |  |  |  |  |  |  |  |  |
| Submit the inventory to the primacy agency |  |  |  |  |  |  |  |  |  |  |
| Establish an LSLR policy with the water system |  |  |  |  |  |  |  |  |  |  |
| Develop an outline of the LSLR Plan |  |  |  |  |  |  |  |  |  |  |
| Develop Community Engagement Plan to identify service line materials |  |  |  |  |  |  |  |  |  |  |
| Implement Community Engagement Plan to identify service line materials |  |  |  |  |  |  |  |  |  |  |
| Develop a draft LSL Ordinance |  |  |  |  |  |  |  |  |  |  |
| Develop Community Engagement Plan for the removal of service lines that require replacement |  |  |  |  |  |  |  |  |  |  |
| Implement Community Engagement Plan for the removal of service lines that require replacement |  |  |  |  |  |  |  |  |  |  |
| Identify potential funding sources |  |  |  |  |  |  |  |  |  |  |
| Develop SRF LSLR funding application(s) |  |  |  |  |  |  |  |  |  |  |
| Prepare a Request for Proposal (RFP) or model contract |  |  |  |  |  |  |  |  |  |  |
| Identify and prepare Construction Support Templates and Tools |  |  |  |  |  |  |  |  |  |  |

Detailed Workplan Template (Example Format)

The Workplan is essential to keeping track of goals, responsible parties, and timing of project activities. Complete the detailed workplan before activities are started and update it regularly. Rows can be added or deleted as necessary. This information could also be visualized using a Gantt chart or spreadsheet format.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Task Name | Responsibility  (Person or Org) | Anticipated Timing | Anticipated System Time Commitment | Anticipated Start Date | Anticipated Completion Date |
| Develop format for service line inventory |  |  |  |  |  |
| Collect service line inventory information from historical records review |  |  |  |  |  |
| Coordinate with water system staff to plan inventory process |  |  |  |  |  |
| Collect service line inventory information during routine distribution system work |  |  |  |  |  |
| Develop a field verification program |  |  |  |  |  |
| Implement the field verification program |  |  |  |  |  |
| Submit the inventory to the primacy agency |  |  |  |  |  |
| Establish an LSLR policy with the water system |  |  |  |  |  |
| Develop an outline of the LSLR Plan |  |  |  |  |  |
| Develop Community Engagement Plan to identify service line materials |  |  |  |  |  |
| Implement Community Engagement Plan to identify service line materials |  |  |  |  |  |
| Develop a draft LSL Ordinance |  |  |  |  |  |
| Develop Community Engagement Plan for the removal of service lines that require replacement |  |  |  |  |  |
| Implement Community Engagement Plan for the removal of service lines that require replacement |  |  |  |  |  |
| Identify potential funding sources |  |  |  |  |  |
| Develop SRF LSLR funding application(s) |  |  |  |  |  |
| Prepare a Request for Proposal (RFP) or model contract |  |  |  |  |  |
| Identify and prepare Construction Support Templates and Tools |  |  |  |  |  |