



LEAD AND COPPER RULE REVISIONS AND PROPOSED RULE IMPROVEMENTS

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Focus on Change | 2024



LEAD AND COPPER RULE REVISIONS

PURPOSE OF THE LCRR

- The U.S. Environmental Protection Agency's (EPA) Lead and Copper Rule Revisions (LCRR) will enhance protection for children and community health from the risks of lead exposure by better safeguarding schools and childcare facilities, removing lead from our nation's drinking water, and empowering communities through information.



LEAD AND COPPER RULE REVISIONS

REGULATIONS, RULES AND RESOURCES

- **Regulations.**

- Federal Regulation; 40 CFR Subpart I (sections §141.80 through §141.91).

- **Rules.**

- LCRR – Florida has filed for an extension of time to make application for primacy.
- Florida maintains interim primacy for the LCRR.

- **Resources.**

- Lead Service Line guidance on the Florida Department of Environmental Protection's (DEP) Lead Service Line Inventory webpage, www.FloridaDEP.gov/LSLI .
- Local DEP district Office or Approved County Health Department (ACHD) website.
- EPA resources can be found at <https://www.epa.gov/dwreginfo/lead-and-copper-rule>.



LEAD AND COPPER RULE REVISIONS

PRESENTATION TOPICS

- Lead Service Line Inventory (LSLI).
- Utility and customer-side connections.
- Lead Service Line Replacement Plan (LSLRP).
- Lead and Copper Trigger and Action Level Exceedances (ALE).
- Public Education (PE) and Public Notification (PN).
- Consumer Confident Report (CCR).
- Monitoring for Lead in Schools and Childcare Facilities.
- Proposed Lead and Copper Rule Improvements (LCRI).
- Service Line Inventory (SLI) Submission.
- Initial submittal due Oct. 16, 2024.



LEAD SERVICE LINE INVENTORY

Lead and Copper Rule Revisions
and Proposed Rule Improvements



LEAD SERVICE LINE INVENTORY

APPROVED FORMAT FOR FLORIDA'S LSLI

- EPA developed a spreadsheet template for water systems to use to organize their LSLI.
- Florida has determined that to provide consistency throughout the state, and to efficiently manage, analyze and report data, Community Water Systems (CWSs) and Non-Transient Non-Community Water Systems (NTNCs) shall utilize the same format for the LSLI.
- The EPA template is the only approved template to be used by public water systems for the purposes of the LSLI.



LEAD SERVICE LINE INVENTORY (2)

DEVELOPMENT

- The LSLI shall include all service lines connected to the public water distribution system for both water system-owned and customer-owned portions.
 - Water systems are ultimately responsible for inventorying all service connections whether on the utility or customer's side.
 - Per 40 CFR §141.84(a), it is the utility's responsibility to complete the entire inventory.
- Water systems are encouraged to treat the inventory as a living dataset and continuously update the inventory until all service connection material is known.
 - The number of "unknowns" in the inventory should decrease as the water system gathers new information through normal operations and proactively identifies service line material as encountered.



LEAD SERVICE LINE INVENTORY (3)

INVENTORY OF ALL SERVICE CONNECTIONS

- All service lines connecting the water main to the interior plumbing in a building, regardless of actual or intended use, must be inventoried.
 - Service connections with non-potable applications (fire suppression or emergency uses).
 - Service connections connected to vacant or abandoned buildings (even if unoccupied and water service is disconnected).
- EPA requires these service connections to be included because of potential potable use.
 - Service lines connecting multiple units or buildings on a property.
 - Service lines connecting a well to a single building where the system meets the definition of a CWS or NTNC but does not have an extensive distribution system.



LEAD SERVICE LINE INVENTORY (4)

PROPOSED LEAD AND COPPER RULE IMPROVEMENTS

- Will the proposed LCRI change any requirements of the LCRR Initial Lead Service Line Inventory?
 - **No.** EPA is not proposing any change to the 2021 LCRR requirement for water systems to develop an initial inventory, make it publicly available and submit it to the state by Oct. 16, 2024.
- Will the proposed LCRI require any additional information to be collected and recorded on the LSLI?
 - **Yes.** In addition to the requirements of the LCRR, the proposed LCRI will require all systems to review records and record information on connector materials and include lead connectors in the **LCRI** baseline inventory.



LEAD SERVICE LINE INVENTORY (5)

PROPOSED LEAD AND COPPER RULE IMPROVEMENTS

- Will the proposed LCRI change how often a water system must update the LSLI?
 - **Yes.** The LCRR states that systems must update their LSLI according to their tap sampling frequency.
 - However, the proposed LCRI states that all systems must update their LSLI annually.
- The FDEP approved LSLI template can be found at [FloridaDEP.gov/LSLI](https://www.floridadep.gov/LSLI).



CUSTOMER SIDE CONNECTIONS

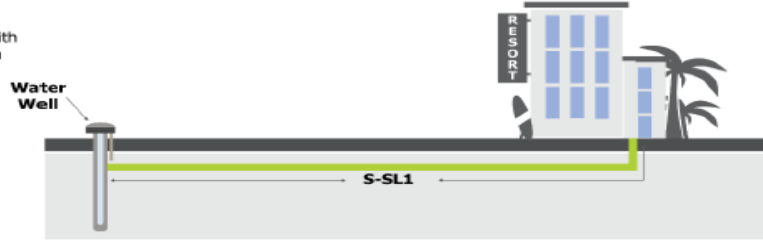
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CUSTOMER SIDE CONNECTIONS

MASTER METER CONNECTIONS

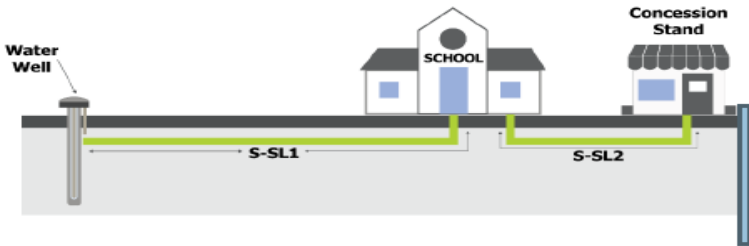
Example 1: NTCWS with well pumped directly to a building



Example 2: NTCWS with well connected to a pressure tank to a building



Example 3: NTCWS with well connected to a building connected to another building



KEY

NTCWS=Non-transient non-community water system

S=System-owned

SL=Service Line

System-owned Service line=

Meter

Pressure Tank

Well

KEY

C=Customer-owned

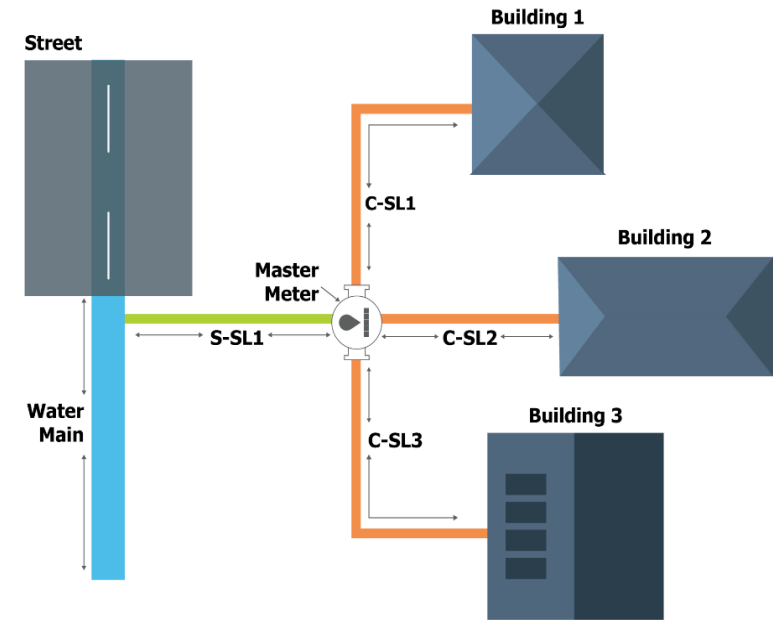
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SL=Service Line

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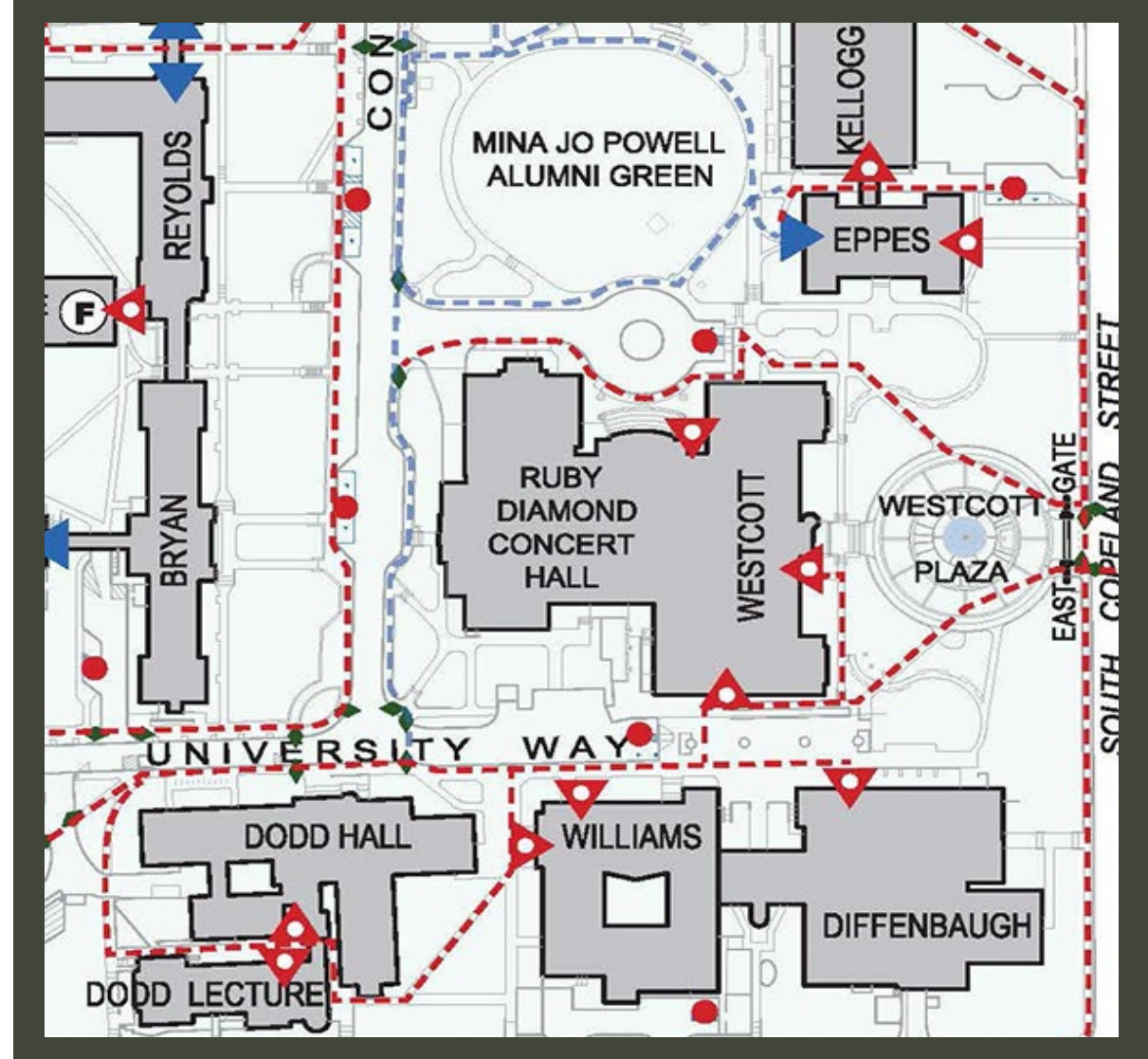
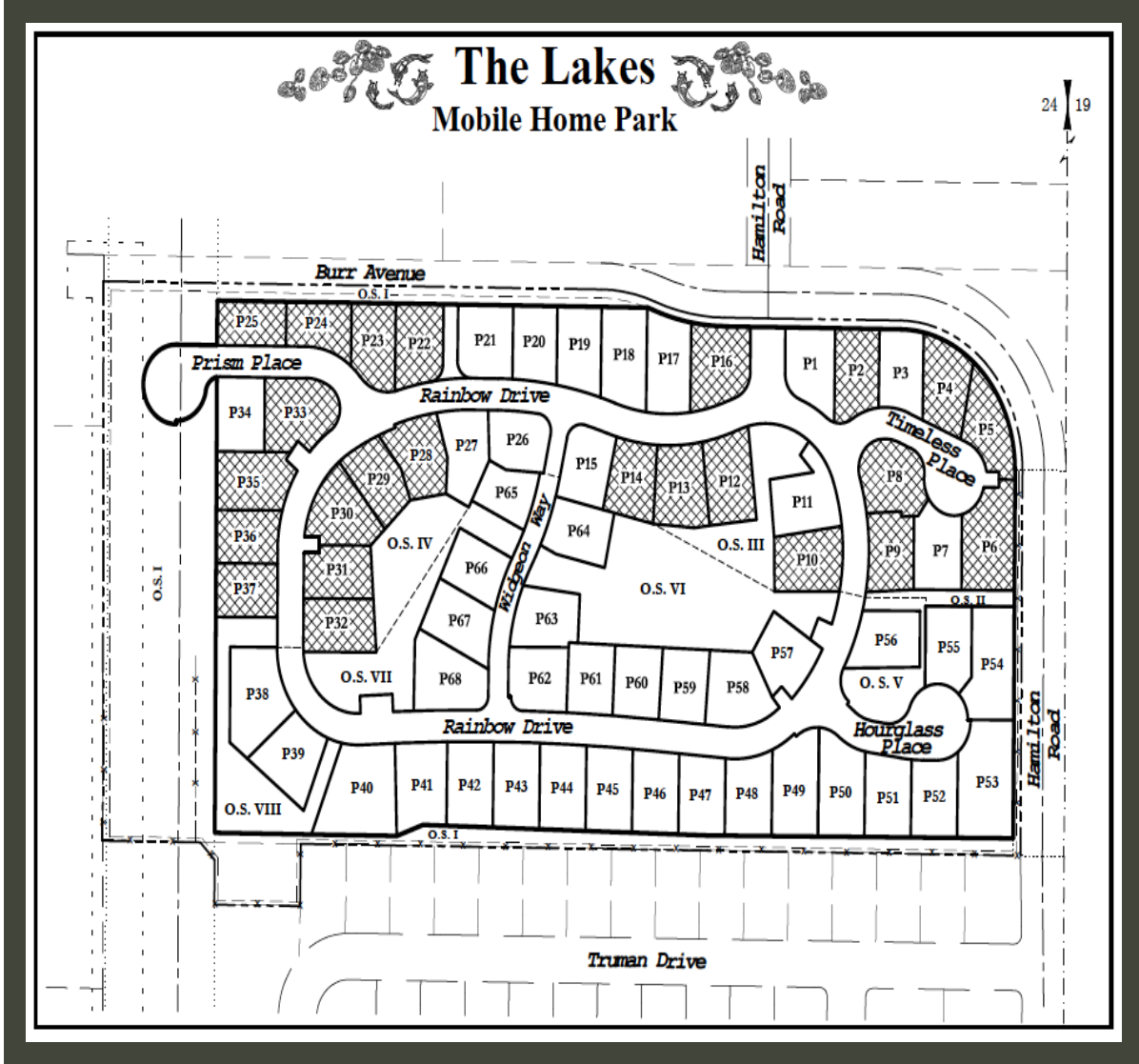
Meter





CUSTOMER SIDE CONNECTIONS (2)

MASTER METER CONNECTIONS





LEAD SERVICE LINE INVENTORY

QUICK REVIEW

- The due date for the initial LSLI and LSLRP is Oct. 16, 2024.
- The only approved format for the LSLI is the EPA template, [FloridaDEP.gov/LSLI](https://www.floridaDEP.gov/LSLI).
- All service connections, both utility side and customer side must be inventoried.
 - This includes those service connections beyond a master meter.



LEAD SERVICE LINE INVENTORY (2)

WHAT DO I SUBMIT?

- The LSLI template is designed for utilities to save a copy to their computer, enter information electronically and submit the entire file to the state.
 - Do not modify the template.
 - Maintain supportive documentation at the utility's office.
 - Do not submit pictures or historical documentation to the state unless requested.



LEAD SERVICE LINE REPLACEMENT PLAN (LSLRP)

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LEAD SERVICE LINE REPLACEMENT PLAN

- If a lead, galvanized requiring replacement (GRR), and/or unknown service connection is identified, the water system must develop and submit a LSLRP in accordance with 40 CFR §141.90(e).
 - The LSLRP will provide communities with a roadmap for how their water system plans to remediate service connections identified as lead, GRR and/or unknown.
 - The LSLRP will prioritize the replacement of all lead service lines (LSLs) within the water system service territory.
 - The LSLRP will include both the customer and utility portions of the service line.



LEAD SERVICE LINE REPLACEMENT PLAN (2)

WHAT INFORMATION IS INCLUDED?

- The LCRR states that the LSLRP must include the following.
 - Strategies for identifying unknowns.
 - Procedures for full-service line replacement.
 - A customer communication strategy.
 - Service line flushing instructions.
 - A strategy to prioritize service line replacement.
 - A funding strategy.



LEAD SERVICE LINE REPLACEMENT PLAN (3)

PROPOSED LCRI

- The proposed LCRI will require that the LSLRP include, in addition to the current requirements of the LCRR the following items.
 - The LSLRP must include a strategy to inform customers and consumers about the lead service line replacement plan and the service line replacement program.
 - The LSLRP will identify any legal requirements or water tariff agreement provisions that affect a system's ability to gain access to conduct full-service line replacement.
 - The proposed improvements will update the language regarding the utility's prioritization strategy.
 - Systems serving >50,000 people will be required to make the LSLRP available online.



LEAD SERVICE LINE REPLACEMENT PLAN (4)

COMPLIANCE DATES

When is the Initial Service Line Inventory due?

Oct. 16, 2024

When is the Lead Service Line Replacement Plan due?

Oct. 16, 2024



SERVICE LINE REPLACEMENT

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and Proposed Rule Improvements



SERVICE LINE REPLACEMENT

CALCULATING THE ANNUAL RATE OF REPLACEMENT

- The **LCRR** guidance states that lead service line replacement programs and replacement rates are based on 90th percentile lead levels and size of system. 100% replacement compliance must be obtained within 15 years or sooner.
 - The minimum average annual rate of replacement is 3%.
- Regardless of the 90th percentile lead levels, the **proposed LCRI will** require the identification and/or replacement of all unknowns as well as full replacement of all known lead and GRR service lines that are under the control of the water system within 10 years or less.
 - The minimum average annual rate of replacement will be 10%.



SERVICE LINE REPLACEMENT (2)

POINT OF USE DEVICES (POU)

When there is a disturbance to an identified lead and/or GRR service connection, the water system must provide a POU device and a 6-month supply of filters to the customer connected to that service connection.

For example:

- The water system decides to replace their side of the service line and the customer does not; the water system must supply the customer with a POU device and a 6-month supply of filters.
- A water main breaks during normal operating hours adjacent to two homes with identified lead service lines. The water system must provide both customers with POU devices and a 6-month supply of filters.



LEAD AND COPPER TAP MONITORING

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LEAD AND COPPER TAP MONITORING

SAMPLE SITE LOCATIONS

- The LCRR requires that tap monitoring locations reflect identified lead and/or GRR service connections.
- The LCRR prioritizes collecting samples from sites served by LSLs. All samples must be collected from sites served by LSLs, if available.
- Requires collection of the fifth-liter sample in homes with identified LSLs after water has remained stagnant for a minimum of 6 hours and maintains first liter sampling protocol in homes without LSLs.
- The LCRR also requires that tap samples be collected in wide-mouth bottles.



LEAD AND COPPER TAP MONITORING (2)

PROPOSED LCRI SAMPLE SITE SELECTION CRITERIA

- The proposed LCRI will retain the requirement that all samples be collected from sites served by identified LSLs, if available.
- The proposed LCRI streamlines the tap sample site selection tiering criteria for CWSs and NTNCs.
- The proposed LCRI revises Tier 3 sites to include sites served by a lead connector as well as sites served by a galvanized service line or containing galvanized premise plumbing that are identified as ever being downstream of an LSL or lead connector in the past.



TRIGGER AND ACTION LEVEL

TRIGGER LEVEL – LCRR VS LCRI

- The LCRR states that if a system has a tap sample that meets or exceeds 10 part per billion (ppb).
 - The system must do additional planning, monitoring and treatment requirements.
 - A goal-based lead service line replacement rate will be established.
 - Systems will be required to take steps towards corrosion control treatment (CCT) installation or re-optimization.
- The proposed LCRI, removes the trigger level and requires action if systems meet or exceed 10 ppb, a re-established action level exceedance (ALE).
- If systems meet or exceed the 10 ppb, they will be required to do the following.
 - Begin replacement activities for all LSLs and/or GRRs.
 - CCT and/or re-optimize system if CCT exists.
 - Systems will be required to provide PE and PN within 24 hours.



TRIGGER AND ACTION LEVEL (2)

ACTION LEVEL EXCEEDANCE – LCRR VS LCRI

- LCRR requires that a water system with an ALE do the following.
 - Replace 3% of LSLs and/or GRRs plus unknowns annually.
 - Establish a CCT program and/or begin re-optimization activities if CCT exists.
 - Provide the required PE and PN as soon as practical but no later than three days.
- Proposed LCRI.
 - Removes the replacement rate and requires water systems to conduct mandatory, full-service line replacement of LSLs and GRR service connections regardless of 90th percentile lead levels.



TAP MONITORING

SAMPLE SITE SELECTION

- **LCRR requirements.**

- All samples be collected from sites served by LSLs, if available.
- Collection of the fifth-liter sample in homes with LSLs.

- **Proposed LCRI.**

- Revises Tier 3 sites to include sites served by a lead connector as well as sites served by a galvanized service line or containing galvanized premise plumbing that are identified as ever being downstream of an LSL or lead connector in the past.



TAP MONITORING

COLLECTION OF THE FIFTH-LITER SAMPLE



- **The proposed LCRI will require the following.**
 - The collection of first and fifth-liter samples in homes with LSLs.
 - Will require the higher value of the first and fifth-liter lead concentration in homes with LSLs to be used to calculate the 90th percentile value for lead.



PUBLIC EDUCATION AND NOTIFICATION

**Lead and Copper Rule Revisions
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PUBLIC EDUCATION AND NOTIFICATION REQUIREMENTS FOR PUBLIC WATER SYSTEMS

- All community water systems must conduct annual outreach to local and state health agencies.
- CWSs and NTNCs with lead, galvanized requiring replacement, and/or lead status unknown service lines must deliver public education materials to those persons served by lead, galvanized requiring replacement or status unknown service connections.
- All CWSs serving more than 10,000 in population that fail to meet its annual lead service line replacement goal shall conduct additional outreach activities.



PUBLIC EDUCATION AND NOTIFICATION (2)

REQUIREMENTS FOR PUBLIC WATER SYSTEMS

- All water systems with lead, galvanized requiring replacement, or lead status unknown service lines in their inventory pursuant to § 141.84(a) must inform all persons served by the water system at the service connection with a lead, galvanized requiring replacement, or lead status unknown service line within 30 days of the completion of the lead service line inventory.
- For new customers, added after the initial inventory is complete, you must provide the notice at the time-of-service initiation.
 - The notification must be repeated annually until the entire service line is no longer a lead, GRR, or lead status unknown. Delivery can be by mail or another State-approved method.
- Water Systems must demonstrate that public notification was delivered and provide a copy of the notification and any information materials delivered to the State annually by July 1 for the previous calendar year. This coincides with the Consumer Confidence Report compliance date.



PUBLIC ACCESSIBILITY

**Lead and Copper Rule Revisions
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PUBLIC ACCESSIBILITY

REQUIREMENTS FOR PUBLIC WATER SYSTEMS

- Under the LCRR, water systems **must** make the initial inventory publicly accessible on the system's website, by mail or in-person at the water system's office.
 - For water systems serving more than 50,000 people, systems must make the initial inventory publicly accessible online.
 - For water systems serving 50,000 or fewer people, these systems are not required to have it accessible online, however it must be accessible to the public.
- **A web-based map** is an effective means for communicating service line inventory information to the public. Interested parties can view the service line materials anywhere there is internet access. The primary advantages of this format are user accessibility, data transparency and the ability to regularly update the data.



PUBLIC ACCESSIBILITY (2)

REQUIREMENTS FOR PUBLIC WATER SYSTEMS

- If circumstances do not allow for web-based sharing, EPA recommends that you develop a plan for effectively distributing your inventory. Potential options for providing information without the use of electronic data sharing include the following items.
 - Printed service line maps.
 - Printed tables of data.
 - Information in your water system's mailings or newsletters .
 - Information available at your water system's office.



PUBLIC ACCESSIBILITY (3)

CCR

- If your system is a CWS, you must include in your annual CCR, starting with reports delivered in 2025, a statement that you have prepared a service line inventory and instructions on how to access it.
- If all service lines are classified in the inventory as non-lead, you can provide a statement that the system does not have LSLs or GRRs with the description of methods used to make that determination.
- Regardless of the final LCRI requirements, EPA recommends that you provide inventory-related information in your CCR.



LCRR AND PROPOSED LCRI

- If you have additional questions and/or need further guidance, please visit [FloridaDep.gov/LSLI](https://www.floridadep.gov/LSLI).
- The website contains guidance and other resources.
 - The use of Florida's 1989 lead ban date.
 - Guidance on approved techniques used for field verification.
 - Information regarding the use of emerging technologies including the use of predictive modeling.
- You can always contact your local DEP district or ACHD for additional assistance.



THANK YOU

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