APRIL 2024

Lead Service Line Replacement Plan

Draft Report

Prepared for:

Aqua-IL Philo

WATER SYSTEM NO.: IL0190600

CDM Smith

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Acronyms and Abbreviations

AL	Action Level (for the federal Lead and Copper Rule)
AWWA	American Water Works Association
CDC	Centers for Disease Control and Prevention
CIP	Capital Improvement Plan
EPA	Environmental Protection Agency
FAQ	Frequently Asked Questions
GIS	Geographic Information System
GRR	Galvanized Requiring Replacement
HDD	Horizontal Directional Drilling
ICC	Illinois Commerce Commission
IDPH	Illinois Department of Public Health
IEPA	Illinois Environmental Protection Agency
LCR	Lead and Copper Rule
LCRI	Lead and Copper Rule Improvements (proposed)
LCRR	Lead and Copper Rule Revisions
LSL	Lead Service Line
LSLR	Lead Service Line Replacement
MHI	Median Household Income
ppb	Parts Per Billion, units for lead in water (equivalent to micrograms per liter [µg/L])
Public Act 102-0613	Illinois' Lead Service Line Replacement and Notification Act
PVC	Polyvinyl Chloride
SB	Senate Bill
SRF	State Revolving Fund
WIFIA	Water Infrastructure Financing and Innovation Act
WIIN	Water Infrastructure Improvements for the Nation

State and Federal LSLR Plan Requirements

IL State Listed LSLR Plan Requirements

Location in Report	Required Section
Section 1.1	The name and identification number of the community water supply. *415 ILCS 5/17.12 (q)(1)*
Section 2.2	The number of service lines connected to the distribution system of the community water supply. *415 ILCS 5/17.12 (q)(2)*
Section 2.2 and Figure 2-1	The total number and location of suspected lead service lines connected to the distribution system of the community water supply. *415 ILCS 5/17.12 (q)(3)*
Section 2.2 and Figure 2-1	The total number and location of known lead service lines connected to the distribution system of the community water supply. *415 ILCS 5/17.12 (q)(4)*
Table 3-3	The total number and locations of lead service lines connected to the distribution system of the community water supply that have been replaced since 2020. *415 ILCS 5/17.12 (q)(5)*
Table 3-2	A proposed lead service line replacement schedule that includes one-year, 5-year, 10-year, 15-year, 20-year, 25-year, 30-year goals. *415 ILCS 5/17.12 (q)(6)*
Section 4	An analysis of costs and financing options for replacing the lead service lines connected to the community water supply's distribution system. *415 ILCS 5/17.12 (q)(7)*
Section 4.1	A detailed accounting of costs associated with replacing lead service lines and galvanized lines requiring replacement. *415 ILCS 5/17.12 (q)(7)(A)*
Section 4.3	Measures to address affordability and prevent service shut-offs for customers or ratepayers. *415 ILCS 5/17.12 (q)(7)(B)*
Section 4.2-4.3	Consideration of different scenarios for structuring payments between the utility and its customers over time. *415 ILCS 5/17.12 (q)(7(C)*
Section 3.2	A plan for prioritizing high risk facilities such as preschools, daycare centers, group day care properties, parks, playgrounds, hospitals, and clinics, as well as high-risk areas identified by the community water supply. *415 ILCS 5/17.12 (q)(8)*
Section 3.2 and Figure 3-1	A map of the areas where lead service lines are expected to be found and the sequence with which those areas will be inventoried, and lead service lines replaced. *415 ILCS 5/17.12 (q)(9)*
Section 6.2	Measures for how the community water supply will inform the public of the plan and provide opportunity for public comment. *415 ILCS 5/17.12 (q)(10)*
Section 4.1.1	Measures to encourage diversity in hiring in the workforce required to implement the plan as identified under subsection (n). *415 ILCS 5/17.12 (q)(11)*
Section 5 (construction) and Section 6 (outreach)	Procedure for conducting full lead service line replacement. *40 CFR 141.84 (b)(2)*
Section 6.5	Procedure for informing customers before a lead service line replacement and flushing directions to remove particulate lead form service lines and premise plumbing. *40 CFR 141.84 (b)(3) & 40 CFR 141.84 (b)(5)*

Federal Lead and Copper Rule Revisions (LCRR) Listed LSLR Plan Requirements

Location in the Report	Requirement
Section 2.3	A strategy for determining the composition of lead status unknown service line in its inventory. *40 CFR 141.84 (b)(1)*
Section 5 and Section 6	Procedure for conducting full lead service line replacement. *40 CFR 141.84 (b)(2)*
Section 6.5	A strategy for informing customers before a full or partial lead service line replacement. *40 CFR 141.84 (b)(3)*
Section 3.1	A lead service line replacement goal rate recommended by the system in the event of a lead trigger level exceedance. *40 CFR 141.84 (b)(4)*
Section 6.5	A procedure for customers to flush service lines and premise plumbing of particulate lead. *40 CFR 141.84 (b)(5)*
Section 3	A lead service line replacement prioritization strategy based on factors including but not limited to the targeting of known lead services lines, lead service line replacement for disadvantaged consumers and the populations most sensitive to the effects of lead. *40 CFR 141.84 (b)(6)*
Section 4	A funding strategy for conducting lead service line replacements which considers ways to accommodate customers that are unable to pay to replace the portion they own. *40 CFR 141.84 (b)(7)*

Note: This LSLR plan is written to comply with the components listed in the IL state law and the Federal LCRR. The detailed guidance from the LCRR has not been issued, however, and so how the components may need to be included could change when that guidance is released. Additionally, the proposed LCRI has additional draft requirements for the LSLR plan. When the final LCRI is passed, this plan may need to be revised and/or updated to meet those requirements.

Executive Summary

Illinois's Lead Service Line Replacement and Notification Act (Public Act 102-0613) requires Illinois utilities to develop and submit lead service line replacement (LSLR) plans. Federally, the Lead and Copper Rule Revisions (LCRR) also require utilities to develop and submit LSLR plans. Aqua Illinois-Philo (Philo) has developed this draft LSLR plan to comply with Public Act 102-0613 and the federal LCRR. It will be updated annually and resubmitted to IEPA until the final plan and final inventory are submitted in April 2027.

ES.1 Current Inventory

Table ES-1 shows the service line material inventory for the 620 services in Philo as of March 15, 2024.

ES-1: Philo Service Line Material Inventory (as of March 15, 2024)

Material	Summary Count[1]
Lead	0
Galvanized Requiring Replacement (GRR)	23
Unknown	473
Non-lead	124

Based on discussions with staff, 19 to 35 percent of the listed unknowns (90 to 166 services) are expected to be determined to be lead or GRR in the final 2027 inventory.

ES.2 Replacement Timeline and Prioritization

Per Public Act 102-0613, Aqua-IL will be required to replace 7 percent of LSLs annually in Philo so that lead and unknown services are removed from the system within 15 years starting in 2027. Replacements will occur as mandated during infrastructure work (including water main replacements and leak and break repairs) and through prioritized replacements based on high risk customer connections.

ES.3 Program Budget

Based on previous LSLR work in the region, the average cost for replacing a full LSL from the water main to inside the house is estimated to be approximately $15,000 and a single side replacement is estimated to cost $8,000. For the anticipated 113 to 189 LSL/GRRs in the distribution system, Aqua-IL's Philo LSLR program is anticipated to cost approximately $890,000 to $1,600,000 in 2024 dollars. Aqua-IL anticipates paying for the LSLR program through water rates. This cost estimate assumes that Aqua-IL will be able to replace the customer side at no direct cost to Philo customers and pay for the replacements through water rates. However, the use of water rates on the customer side will require approval of the Illinois Commerce Commission (ICC).

[1] The summary count is based on the classification for the full service line material outlined in the EPA's Guidance for Developing and Maintaining a Service Line Inventory (Aug 2022)

1.0 Objectives and Background

This report describes the Lead Service Line Replacement (LSLR) draft plan to be implemented by the Aqua Illinois-Philo (Philo), a water system owned by Aqua-IL. It is written in compliance with Illinois Public Act 102-0613, the Lead Service Line Replacement and Notification Act and will be updated annually until the final replacement plan is submitted by April 15, 2027[2].

1.1 System Background

Philo is located roughly 9 miles southeast of Champaign, Illinois. Philo can be reached by car in roughly 2.5 hours from downtown Chicago (Figure 1-1). It serves a population of 1,300 people through 22 miles of water main.

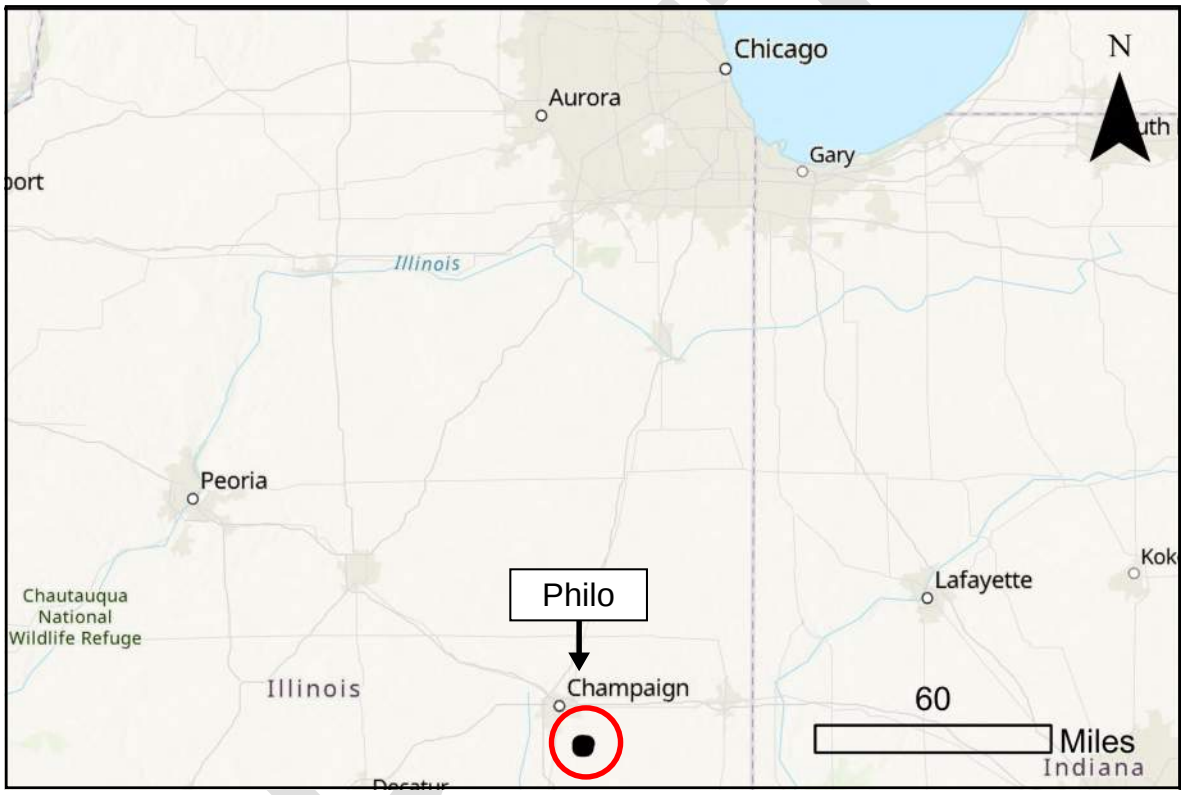


Figure 1-1: Location Map for Aqua Illinois-Philo

[2] This report also includes the topics listed in the federal Lead and Copper Rule LSLR plan requirements. The more recent proposed Lead and Copper Rule Improvements also lists requirements for LSLR plans, but since this rule has not been finalized, its requirements have not been incorporated. This plan may need to be revised as additional federal guidance is released.

The water system serving Philo is Aqua Illinois-Philo, System Number IL0190600. Water for Philo is purchased from Illinois American-Champaign which comes from a groundwater aquifer.

Philo is privately owned and operated by Aqua Illinois (Aqua-IL). Aqua-IL owns 32 public water systems, which include 13 water treatment facilities and 48 water wells. Statewide, Aqua-IL has 69,000 water connections and operations 1,535 miles of water main to service 277,000 people.

Aqua-IL samples the Philo distribution system for lead and copper per the requirements of the Federal Lead and Copper Rule (LCR). Under the LCR, utilities have a lead action level exceedance if the 90th percentile of lead measured in the first liter of stagnated water is above 15 parts per billion (ppb). Philo is below the Action Level for lead in its most recent sampling in 2021. Its 90th percentile for lead was 1.3 ppb.

1.2 Sources of Lead in Drinking Water

Lead is not present in the Philo raw water source or the treated water leaving the water treatment plant. Instead, lead enters the water as it travels through the lead water service lines connecting individual properties to water mains, or through lead-containing interior plumbing, fixtures and/or solder present inside the property or building.

New construction materials typically are lead free. In April 1986, the Illinois Administrative Code was modified so that pipes and fittings had to have a lead content below 8%, and solder had to have a lead content below 0.2%. In 2014, the allowable lead content for pipes and fittings was further reduced to 0.25%.

1.2.1 Service Line Ownership

The service lines are the pipes going from the water main to the property, and ownership of each service line is split typically between the water utility (Aqua-IL) and the property owner. Aqua-IL owns the service line from the water main to the meter box or corp. (corporation) stop (see **Figure 1-2**), and the property owner owns the line from the meter box or corp. to the house. The responsibility for maintaining and paying to replace an LSL is therefore also legally split between the water utility and the property owner.

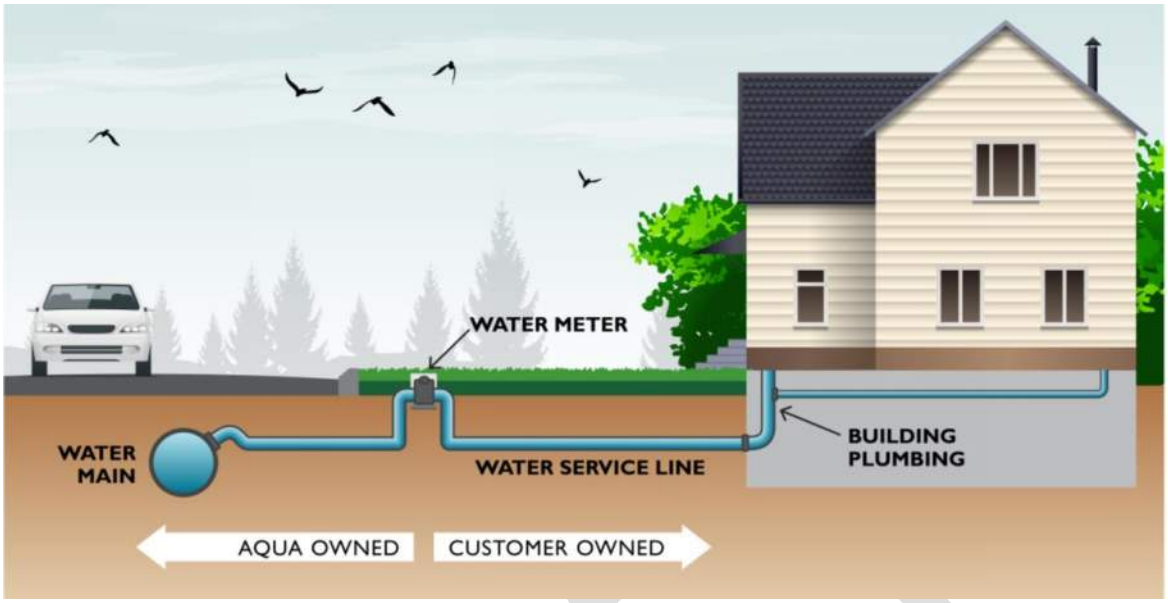


Figure 1-2: Diagram of a Water Service Line

1.2.2 Full Versus Partial LSL Replacement

A full LSLR removes all of the lead-containing sections of the service line from the water main to the building interior. If a side of the service line is not lead, the non-lead portion can remain in place, and the replacement still qualifies as a 'full LSLR.' Typically, the replacement ends at the first shut-off valve or after 18 inches inside the building, whichever is shorter. The remaining interior (premise) plumbing is left in place. While the interior plumbing is not typically made of lead, it can still have sources of lead, such as lead solder, lead brass fittings, or lead particles attached to the pipe scale. Therefore, a full LSLR does not guarantee that the water will be completely lead-free.

A partial LSLR is defined as when only a portion of the lead-containing sections of the service line are removed and some lead-containing sections remain. Typically, this situation would occur when a utility replaces only the utility-owned portion of the LSL and leaves the customer-owner portion of the LSL in place. In Illinois, the Lead Service Line Replacement and Notification Act has banned partial LSLRs, except for emergency repairs or when private access is not granted by the property owner. The LCRR provides similar restrictions at the federal level. Under the proposed LCRI, the ban on partial LSLR will be extended to cases where the property owner refuses to participate, and the replacement is only occurring as part of an LSLR program (outside of infrastructure work or emergency repairs).

1.3 Legislation on Lead and Drinking Water

1.3.1 Lead and Copper Rule Revisions (LCRR)

On January 15, 2021, the EPA overhauled the 1991 Lead and Copper Rule and released the final Lead and Copper Rule Revisions (LCRR). The initial compliance date of the revisions is October 16, 2024. The LCRR includes requirements for community water systems to develop a service line material inventory and develop a plan for LSLR. This LSLR plan is intended to meet both the state and federal LCRR requirements.

The LCRR requires that the service material inventory be made publicly available. The inventory must be updated and shared annually or triennially, based on the system's tap monitoring schedule. Residents served by an unknown material, LSL, or GRR service line must be notified 30 days after each inventory and annually until the service connection is no longer lead if they are served by an LSL. The notification includes information regarding the health effects of lead and what they can do to mitigate their risk. When a customer initiates an LSLR, the system has 45 days from the date of notification to replace the utility-owned side of the LSL (or 180 days with an approved extension).

Per the LCRR, the LSLR plan with a minimum replacement rate is not required to be implemented unless there is an exceedance of the lead action level (15 ppb) or newly established trigger level (10 ppb). If the system's 90th percentile lead exceeds the trigger level, but is below the action level, a replacement goal needs to be proposed and approved by the state. If the 90th percentile lead is above the action level, the system will be required to replace 3% of LSLs annually, based on a 2-year rolling average. Unlike the previous LCR, partial replacements of the utility-owned side only (where the customer-owned side is lead) or lead sampling showing low lead in the water will not count towards required LSLR goals. The LSLR plan must include strategies for identifying unknown service line materials, procedures for completing full LSLR, a strategy for communicating with residents for LSLR, a goal replacement rate in the event of an exceedance, flushing procedures, a prioritization strategy, and a strategy for funding and financing LSLR. Any galvanized steel service lines that were downstream of lead (or may have been downstream of lead, but status is unknown) must also be included.

1.3.2 Proposed Lead and Copper Rule Improvements (LCRI)

The Lead and Copper Rule Improvements (LCRI) proposed language was released by EPA on November 29, 2023, and contains several changes that would affect Aqua-IL's LSLR plan for Philo if maintained in the final rule.

- The LCRI mandates replacement of all LSLs for all utilities regardless of water quality in 10 years at 10%/year based on a rolling 3-year average.
- Services listed as "unknown" in the service line material inventory must be identified in 10 years (by the end of the replacement period).
- The LCRI creates a new procedure for validating service lines identified as non-lead without field inspections or records.

The ban on partial LSLR is expanded to ban partial replacements when property owners refuse to replace the customer-owned side when the replacement is occurring solely due to an LSLR program. Partials may only proceed when the property owner refuses to participate AND the service line must be impacted due to infrastructure work or an emergency repair.

Because the LCRI is a proposal as of April 2024, its requirements are not incorporated into this plan. While the LCRI proposal includes a delay of the LCRR, this delay in LCRR enforcement is not anticipated to occur in Illinois.

1.3.3 Illinois Lead Service Line Replacement Act

In 2021, Illinois passed Public Act 102-0613, the Lead Service Line Replacement and Notification Act. This act requires that LSLs (defined to include GRR and unknowns) in the water system must be removed over a timeframe set by the number of LSLs in the system as shown in **Table 1-1**.

Table 1-1: Replacement Rate Required under Illinois Public Act 102-0613

Number of Known and Suspected LSLs	Replacement Rate	Number of Years to Complete Replacements
<1,200	7%	15
1,201-4,999	6%	17
5,000-9,999	5%	20
10,000-99,999	3%	34

Aqua-IL expects to have between 113 and 189 LSLs in 2027 Philo inventory and so anticipates being required to replace at least 7% of the LSLs annually and have removed all LSLs within 15 years (beginning in 2027).

The state's LSLR requirement applies to all water systems, regardless of lead sampling results. The LCRR sets a 3% replacement rate target in the event of an action limit exceedance. Therefore, the State replacement rate requirement is stricter than the Federal LCRR. However, Aqua-IL will continue to monitor the proposed LCRI and revise this plan as needed.

Under the Illinois LSLR and Notification Act, water systems have until April 15, 2024, to submit a draft LSLR plan. This plan is updated annually until the final replacement plan is submitted by April 15, 2027.

In developing LSLR locations, the Illinois LSLR and Notification Act also bans partial LSLR. This means that during infrastructure projects, such as water main replacements, or repairs following a leak or a break on a water service line, Philo must provide a full LSLR (unless the property owner opts out of the customer-owned side replacement). This requirement will set a minimum number of LSLR annually and in fixed locations based on Philo's other planned work. Additionally, when the property owner notifies a utility that they have replaced the customer-owned side of an LSL, the utility must replace the utility-owned side.

While utilities are not required to pay for the customer-owned side replacement, utilities are required to consider extended repayment options for property owners to ensure that participation in the LSLR is accessible to low-income residents. Additionally, partial replacements do not count towards the required LSLR rate and will continue to be listed as LSLs so long as a portion of the service line is lead or GRR.

2.0 Service Line Material Inventory

2.1 Inventory Requirements

Illinois' Lead Service Line Replacement and Notification Act (Public Act 102-0613) became effective January 1, 2022. Under the new legislation, utilities must submit the material for each service line connected to the system. The Illinois Environmental Protection Agency (IEPA) requirements for completing the inventories are:

- Prioritize the inspection of high-risk areas identified;
- Review historical documents to determine service line material;
- Visually inspect service lines and document material when doing maintenance;
- Identify any time period service lines would have been connected to the distribution system and were primarily lead service lines; and
- Discuss service line repairs and installation with other employees, contractors, plumbers, and other workers who worked on service lines connected to the community water system.

2.2 Current Inventory

Aqua-IL has 620 service line connections in Philo and currently maintains a material inventory for each of their individual connections based on utility records, field observations, building age, and connection size. Aqua-IL is continuously updating the Philo inventory based on field observations and verifications.

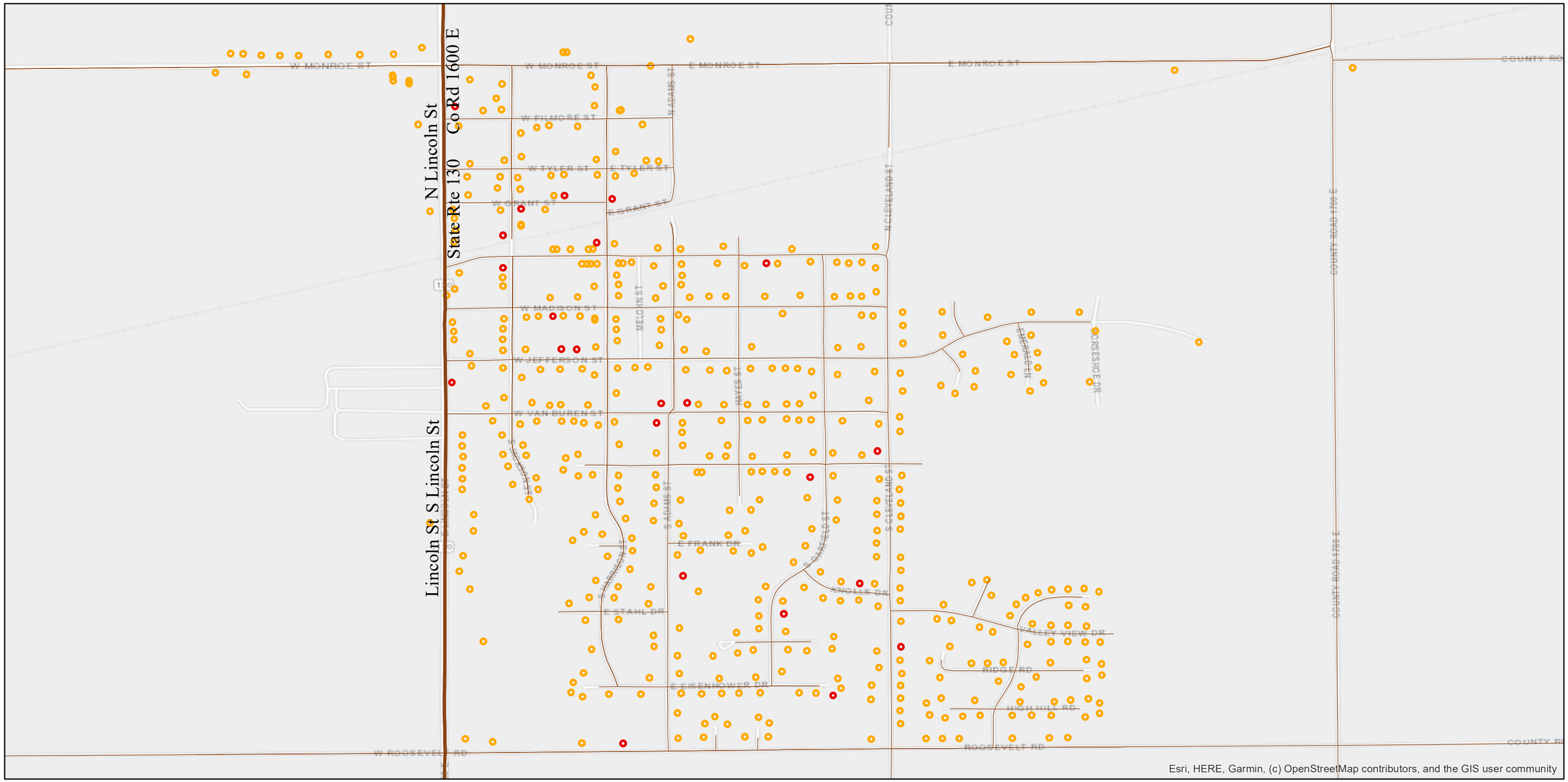
As of March 15, 2024[3], Aqua-IL has the following records for Philo's service line material inventory for known lead, known galvanized requiring replacements (GRR), and suspected (unknown) lead services shown in **Table 2-1**. Locations of known and suspected (unknown) lead service lines are shown in **Figure 2-1**.

Table 2-1: Summary of Materials for Entire Service Line Classification (as of March 15, 2024)

IEPA Classification of Entire Service Line	Number of Services
Lead	0
Galvanized Requiring Replacement (GRR)	23
Unknown	473
Non-Lead	124

Aqua-IL, across all its systems in the state, plans to treat properties served by a galvanized service line as GRR because of the likelihood that galvanized services historically could have been connected to a lead gooseneck, which under IL state law, classifies galvanized as GRR. Per regulations, GRR services are treated the same as properties served by lead service lines. Throughout this report, the term LSLs is used to refer to both lead AND GRR service lines.

[3] The inventory is continuously updated through field observations and customer self-reports. All updates to the inventory since March 15, 2024 will be reflected in the next submission deadline for the LSLR plan.



Philo Services Requiring Replacement

Figure 2-1: Locations of Known and Unknown (Suspected) LSLs Connected to the Distribution System

Legend

Material Inventory

- Lead/GRR
- Unknown

This inventory data is from March 15, 2024. The inventory is being continuously updated as new information is received.

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Table 2-2 below summarizes the individual Aqua-owned and Customer-owned materials per the IEPA material classifications[4].

Table 2-2: Summary of Materials in Material Inventory By Ownership (as of March 15, 2024)

IEPA Classification	Aqua-Owned Side	Customer-Owned Side
Lead	0	0
Galvanized Requiring Replacement	0	23
Unknown	1	473
Copper with Lead Solder	0	0
Copper/Non-Lead Solder	618	66
Plastic	1	33
Cast/Ductile Iron	0	1
Unknown – Not Lead	0	24

Local staff were interviewed on what materials are typically observed in the distribution system during work and what they expect the unknown services to be. Staff report a low number of lead services within the distribution system. Currently, no lead service lines have been positively identified while 23 services have been identified as galvanized requiring replacement.

Based on this information, the unknowns in Philo are expected to be between approximately 19% and 35% LSLs. **Table 2-3** shows the estimated upper and lower bounds of the number of expected LSLRs. For planning purposes in program schedule and budget, the upper bound estimate is used. This estimate will continue to be updated in subsequent LSLR plan submittals as the inventory is advanced.

Table 2-3: Estimated 2027 Final Material Inventory Lower and Upper Bounds

Material	Estimate of Service Materials for the Lower Range of LSLs Among the Unknowns	Estimate of Service Materials for the Higher Range of LSLs Among the Unknowns
Lead/GRR	113	189
Non-Lead	507	431

2.3 Advancing the Inventory

Aqua-IL will continue to verify and advance Philo's inventory through the following methods:

- Field Staff Meter Work Observations: During meter work, the contractor records (where it is possible to observe) the Aqua-side, customer-side and customer's interior material of services in a standardized spreadsheet. This information is being transferred into the inventory in Qlik on a monthly basis.
- Field Staff Service Work Observations: During standard field work, utility staff are noting service line materials observed during the work and documenting it with the work order. This

[4] Gooseneck material is being tracked when encountered in the updated inventory and gooseneck materials, where known, are included in the full inventory submitted to the IEPA.

documentation is then brought in automatically to the inventory, and the system is flagged in the material is changed to lead or galvanized.

- Water Main Replacement Projects: Service line materials are sent to the Aqua-IL engineering group when lead or galvanized is found during a water main replacement project. From there, it is entered into a standardized LSLR tracking spreadsheet. This information is being transferred into the inventory in Qlik on a monthly basis.
- Service Line Replacement Work Orders: Stand-alone LSLR through the work order system is tracked with the same spreadsheet as the LSLR occurring with the water main replacement projects and transferred to the inventory in Qlik on a monthly basis.
- Customer Self-Reporting: Aqua-IL is sending mailers to Philo customers explaining how to identify their service line and report this information online. A copy of this mailer is included in Appendix A.

The unknown services are on the customer-owned side and so Aqua-IL will focus on customer self-reporting and potentially consider sending staff or contractors to perform interior inspections of service lines. Aqua-IL will additionally track how many of the unknowns in Philo can be removed through utility work and meter replacements and customer self-reporting. Pot holing some unknowns may be used as needed to finalize the inventory by 2027.

3.0 Lead Service Line Replacement Program Development

3.1 LSLR Replacement Schedule

Table 3-1 summarizes the required replacement rate based on the current 2024 inventory and the expected inventory in 2027. The 2024 inventory includes all of the service lines currently labeled as unknown. However, as discussed in the previous section, these unknowns are not expected to all be lead in the final 2027 inventory. This draft LSLR plan sets the annual planned replacement rate based on the expected number of LSLs in the 2027 inventory.

Table 3-1*:* Replacement Requirements for Known and Expected Material Inventory

Inventory Type	Number of Knowns/Suspected LSL Services	Required Replacement Rate	Number of LSLR per Year	Year to Finish Replacements
All Lead, GRR, and Current Unknowns (2024 inventory)	496	7	34	15
All Lead, GRR and Upper Estimate LSLs in Unknows (Estimated 2027 inventory)	189	7	13	15

In the event of a lead trigger level exceedance, Aqua-IL would recommend that the EPA set Philo's replacement goal rate at the 7% replacement rate required by the state, which is above the 3% required following a lead action level exceedance under the Federal LCRR requirements.

Table 3-2 below shows Aqua-IL's proposed LSLR schedule for Philo with specific year goals based on the number of LSLs estimated to be in the 2027 inventory.

Table 3-2*:* Cumulative Number of LSLR Schedule Goal by Target Year

Year	Cumulative Number of LSLR by Goal Year
1-year (2027)	13
5-year (2031)	65
10-year (2036)	130
15-year (2036)	189 (LSLR Program Completed)
20-year (2046)	189
25-year (2051)	189
30-year (2056)	189

Table 3-3 below shows the number of services that have been replaced since 2020. Philo has not had any recent LSLR.

Table 3-3*:* Number of Annual LSLR Since 2020

Year	Number of LSLR
2020	0
2021	0
2022	0
2023	0

3.2 LSLR Program Replacement Goals

The annual total LSLRs will be a mixture of mandatory and prioritized replacements. Mandatory replacements are those required by Public Act 102-0613 to avoid partial LSLR, and include attempting full LSLR for services connected to replaced water mains, following a leak or break repair, and following a customer replacement of the customer-owned portion of an LSL. Prioritized LSLR target replacements in more potentially vulnerable or disadvantaged areas.

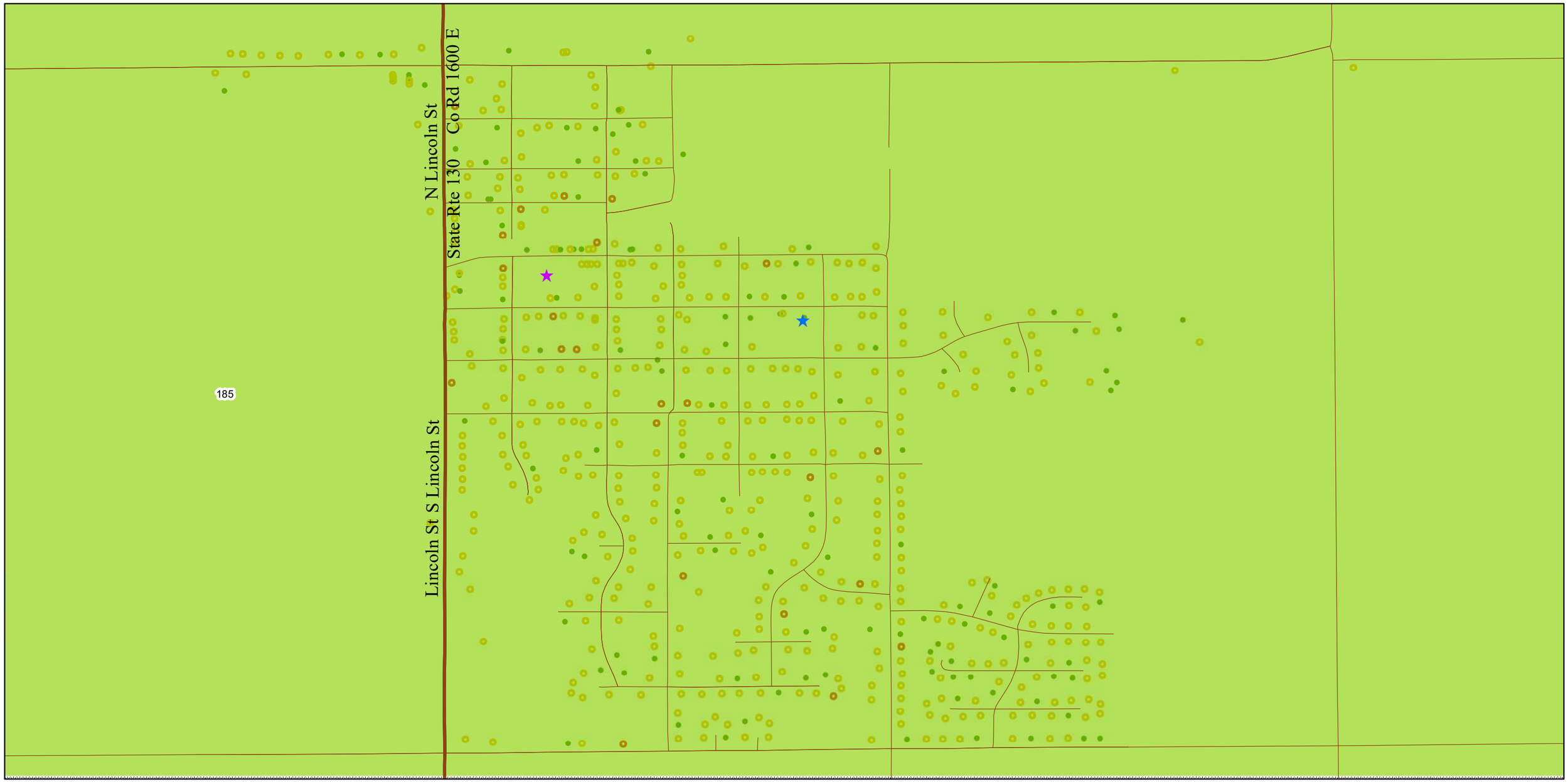
- Mandatory Replacements (Required by Public Act 102-0613)
  - LSLR Alongside Water Main Replacements: LSLs encountered impacted by water main replacements will be replaced in full (with property owner consent). Replacing the full LSL alongside water main projects is a cost-effective way to replace LSLs because crews are already mobilized to these locations, and in-person outreach is more efficient. Aqua-IL has approximately 22 miles of water main in the Philo distribution system. Aqua-IL does not currently have any water main projects proposed in the planned CIP for Philo, but water main replacement projects vary year to year. Based on typical past CIP project sizes, this planning assumes that in a year where water main work is done, approximately 20 water services would be affected. Assuming that 35% of affected services are lead, this would lead to aproximatley 7 replacements associated with CIP work in the year this work ocurrs.
  - Leaks and Breaks: Where a leak or a break in a service line occurs on an LSL, the service line will be replaced in full. While this number will vary from year to year, estimating it at 1% of services would mean that Aqua-IL would anticipate 2 in a typical year in Philo.
  - Customer Initiated Replacements: Aqua-IL is required to replace the Aqua-owned side of an LSL whenever a property owner notifies Aqua-IL that the property owner has replaced their customer-owned side of the LSL. Aqua-IL does not have control over where and when these LSLRs occur but will still need to reserve resources and be prepared to replace the Aqua-owned side of LSLs in Philo when notified by a customer of the customer-side replacement.
- Prioritized Replacements
  - Individual Prioritized Replacements: Preschools, daycare centers, day care properties, group day care properties, parks, playgrounds, hospitals, and clinics will be prioritized for service line verifications and individual replacements, as required by Illinois Public Act 102-0613 within the first years of the program.

Aqua-IL will reach out to licensed daycares and schools in Philo for prioritized LSLR because these locations regularly serve children, who are most susceptible to lead. Philo has 1 licensed daycare as of April 2024 and 1 school. If the service lines for these locations are currently unknown, they will be prioritized for identification and offered free replacements if the material is lead. As new daycare locations are opened, these locations can be offered LSLR if the property is served by an LSL.

Other potentially vulnerable customers, including parks, playgrounds, hospitals, and clinics, will receive similar outreach on the service line material confirmation and the offer of a free LSLR where lead is found.

- LSLR in Advance of Street Resurfacing: When notified by the local municipalities of upcoming road work in Philo, Aqua-IL will strive to replace LSLs in advance of the work in order to maximize the number of LSLs that can be replaced each year within the budgetary limits.

Figure 3-1 shows the water service line locations with their material summary (lead, non-lead, or unknown). Material verifications for unknown services would be prioritized in the same order as replacements.



Philo Prioritization

Figure 3 1: Prioritization Map for Service Line Material Inventory Development and LSLR

Legend

- ★ Daycares
- ★ Schools
- ★ Hospitals

Material Inventory

- Lead/GRR
- Non Lead
- Unknown

This inventory data is from March 15, 2024. The inventory is being continuously updated as new information is received.

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Miles

4.0 LSLR Program Funding

Aqua-IL is interested in offering full LSLR at no direct cost to property owners in Philo when financially feasible. The LSLR program is proposed to be paid through water rates, and Aqua-IL is also reviewing financing and grant options to reduce the impact on water rates.

4.1 Total Program Costs

Typical construction costs for an individual LSLR are shown in Table 4-1 below and are based on regional LSLR experience and typical industry costs.

Table 4-1: LSLR Program Quantity and Cost Estimates

Expense Category	Single Side Replacement	Both Side Replacement (Full Replacement)
LSLR Construction	$6,000	$11,000
Engineering and Program Management	$1,300	$2,500
Contingency (10%)	$700	$1,500
Individual LSLR Cost	$8,000	$15,000
Estimated Total Number of Replacements	111 to 189	0
Program Cost Range (in 2024 dollars)	$890,000 to $1,600,000 ($60,000 to $110,000 per year)	

The estimated number of replacements assumes full participation by property owners. The single side replacements represent properties where only one side of the service is currently lead and the other side is identified as a non-lead material. These are not locations where property owners are anticipated to refuse to participate in removing their LSL, resulting in a partial replacement. This cost estimate is a budgetary range only based on typical values in 2024 and not escalated for future years. The total program cost will be refined as the inventory is advanced.

4.1.1 Diversity in Hiring for Plan Implementation

Aqua-IL will hire contractors for the majority of the construction work associated with the LSLR program locally. Contracts for the program will include Minority Owned Enterprise (MBE) and Women Owned Enterprise (WBE) goals consistent with federal and state law as applicable. This will include compliance with the good faith effort requirement in compliance with the Illinois Public Act 102-0613 as legally applicable.

4.2 Funding and Financing Sources

While there is federal and state grant funding available over the next few years to support LSLR programs, it will not be sufficient to cover the full program costs across the nation and Illinois. Additionally, some of the funding options typically used by public utilities are not available to Aqua-IL since it is a private company.

While Aqua-IL is not required to pay for the replacement on the customer-owned side, Aqua-IL is interested in offering full LSLR at no direct cost to the customers in Philo. However, meeting this goal in the short and long term will depend on the overall final program costs, including available grants and the ability to use water rate funds on the customer-owned side of the water services.

4.2.1 Funding Sources

4.2.1.1 Water Rates

Aqua-IL sets a state-wide water rate for all of its water systems, including Philo, based on the total costs for all of the systems across the state. Aqua-IL is a regulated utility, and so water rates are approved by the Illinois Commerce Commission (ICC). Aqua-IL submits its water rate case to the ICC and provides supporting documentation of operating costs and infrastructure investments, including LSLR. The ICC has the ultimate authority to review this application and make a recommendation for the final water rate. The ICC will need to approve the use of water rates for customer-owned LSLR in order for Aqua-IL to proceed with that work at no direct costs to customers.

4.2.1.2 State Revolving Funds (SRF)

The SRF uses funds from both the federal and state government to provide low-interest loans to drinking water projects. Total eligible project costs for this loan include administrative, engineering, legal, and construction costs. The SRF loans can also be used to fund site restoration to pre-construction conditions.

For SRF-financed projects, the interest rate is set at the beginning of the Illinois fiscal year at half the market interest rate. Loan repayment is typically set over a period of 20 years from project completion.

In addition to standard SRF loans, under the Bipartisan Infrastructure Law (BIL) Drinking Water SRF Service Line Replacement Funding provides additional capital to issue zero interest loans and loans with principal forgiveness over five years. From the BIL, the IEPA has $106,964,000 available in FY2024 (Year 1) and anticipates $203,177,000 of funding in FY2025 (Year 2). Future annual state allocations have not yet been announced. In FY2024, systems can apply for up to $2,755,000 as principal forgiveness. Prioritization for this funding is based on the scoring for “disadvantaged community” as defined in the SRF project plan. Systems can also apply for up to $2,027,000 in zero-interest loans that would be repayable over 30 years instead of the traditional 20. Both funds are only available for full LSLR[5].

Aqua-IL has not submitted a project plan for SRF funds for Philo in this funding cyle but may consider it in future years.

[5] Since a full LSLR is removing the remainder of the lead or GRR material, if a property has lead or GRR on only one side, only that side needs to be replaced to qualify as a full LSLR.

4.2.1.3 Other Grant Options

As a private company, Aqua-IL is not eligible for several common grant opportunities. The current understanding is that Aqua-IL would not be eligible to apply for the federal WIIN program or CDBG funding to conduct replacements in Philo.

4.2.1.4 Other Taxes

As a private company, Aqua-IL is not anticipated to have access to other taxing mechanisms to Philo residents that some public utilities have used to pay for LSLR, such as special assessments or property taxes. Therefore, these options were not reviewed in detail for this draft plan.

4.2.1.5 Other Financing Options

Other financing options were considered but are not appropriate for Aqua-IL for use in Philo:

Federal WIFIA loans: While these loans have very flexible terms for issuing contracts that make them attractive for LSLR programs, the WIFIA program is designed to issue larger loans to projects with over $20 million in eligible costs. This project is anticipated to be too small to participate unless it can be joined with other water systems owned by Aqua-IL.

Bond Issuance: While Aqua-IL could issue bonds for Philo, as a private company, these bonds would not be taxed advantaged. Since this project is unlikely to exceed the project cap for SRF loans, the SRF loans will likely offer a lower interest rate and longer repayment term than bonds. If this changes, bonds could be reviewed for increased financing.

4.3 Customer-Owned Side Replacement

Aqua-IL already has the outreach and construction procedures in place to offer to replace the customer-owned side of an LSL when the Aqua-owned side is replaced in Philo. Section 6 discusses the outreach program to encourage individual participation in the LSLR program.

4.3.1 Funding Limitations on the Customer-Owned Side

Aqua-IL is interested in offering all customers a full LSLR at no direct cost to customers in Philo to ensure that access to this program is universal and equitably includes low incomes customers. This would also result in higher participation rates which allow for more efficient removal of LSLs from the system. However, funding limitations will determine the feasibility of avoiding direct customer charges for customers to participate in the customer-owned LSLRs. Aqua-IL will pursue grant funding that it is eligible for in Philo. However, due to limited grant availability, Aqua-IL anticipates relying on water rates to pay for this program. The ICC must approve Aqua-IL water rates and sets what work can be reimbursed through water rates. Therefore, payment for the customer-owned side will depend on the ICC's decision on allowing water rates for customer-owned side replacements.

Using water rates to pay for the customer-owned side replacements is the most direct manner to structure payments between Aqua-IL and its Philo customers over time. However, if the ICC determines that water rates cannot be used on the customer-owned side, Aqua-IL will look for grant opportunities to reduce costs for low-income Philo residents. Aqua-IL would also review other options to allow property owners in Philo to pay for the customer-side replacement over time.

4.3.2 Measures to Address Affordability and Prevent Service Shut-Offs

If Aqua-IL is approved to use water rates to pay for customer-owned LSLR over time, Aqua-IL already has systems in place to ensure that low-income Philo customers can afford their water bills and avoid water shut-offs. These programs include:

- Deferred payment arrangements for low-income customers: Customers can pay 20% downpayment towards the past due amount to have their service restored and past due amounts can be paid over a period of up to 12 months.
- Late payment fee waiver for low-income customers: Customers qualified as low income are not assessed late payment fees.

To qualify as a low-income customer, Aqua-IL uses the income criteria of Section 6 of the Energy Assistance Act of 1989. The Low Income Property Energy Assistance Program administrator is able to notify Aqua-IL of a customer's low-income status or customers may directly notify and provide proof to Aqua-IL to participate.

Aqua-IL's intention is to work with property owners whenever possible to avoid situations where water cutoffs are necessary due to LSLR costs.

5.0 Construction and Post-Construction Activities

5.1 Summary of the Procedure for Conducting Full LSLR

Aqua-IL is currently offering full LSLR in Philo when LSLs are encountered during infrastructure work or during emergency replacements.

LSLRs under this plan are typically anticipated to be conducted by contractors and not in-house crews, except in the case of emergency repairs. The contractors will be responsible for installing the new water service lines in compliance with applicable Plumbing Codes or submitting an appropriate variance. Replacement procedures vary between planned, emergency work, and customer initiated as described below.

Outreach will be a joint effort between the contractors and Aqua-IL staff. The outreach plan, including the post-construction public education on the risks of lead and flushing instructions, is in Section 6.

5.1.1 Planned Work

For planned work, one contractor is hired to replace both the Aqua-owned and customer-owned side of the LSL at the same time. This work would include both LSLR associated with water main replacements as well as LSLR through the prioritization plan.

5.1.2 Emergency Repair Work

For emergency repair work, the Aqua-owned and customer-owned sides may be replaced on different days. The Aqua-owned side of any LSL may be replaced when repairing the leak or the break. In-house crews may be used to perform the repair and Aqua-owned replacement in this case. A contractor is used to complete the full replacement as soon as possible following the repair.

5.1.3 Customer-Initiated Work

For customer-initiated work, the Aqua-owned and customer-owned side will typically be replaced on different days. Whenever a customer notifies Philo that they have replaced the customer-owned side of an LSL, Philo will send a contractor to replace the Aqua-owned side of the service within 45 days of receiving the notice. If notice is provided to Philo prior to the customer performing the replacement, Philo will attempt to coordinate the Aqua-owned side replacement to occur on the same day as the customer-owned side replacement.

5.1.4 Project Tracking and Data Management

5.1.4.1 Property Owner Approval

In order to participate in customer side replacement work, the property owner will be required to sign “License Agreement to Replace the Customer Owned Lead Service Line ” (provided in Attachment A). This form has the customer acknowledge that they own the property and have the right to consent to the work. It states that the contractor may enter the customer’s property and reiterates that ownership of the customer-side remains with the customer. The agreement provides a twelve-month warranty for the work and limits Philo’s liability to repairing or replacing the service line.

5.1.4.2 Contractor Work

Work orders to the LSLR contractor are created in Service Link, which is connected to the Banner system. The Contractor is responsible for taking and uploading before and after pictures of the site to the work order in Service Link to verify the restoration. Quantities used for the replacement, separated between Aqua-owned and customer-owned portions of the LSL, are also tracked in the work order.

5.1.4.3 Compliance with State and Federal Replacement Requirements

An Aqua-IL standard spreadsheet is used to track LSLR at each address. This spreadsheet is also used to track the delivery of post-replacement flushing and lead education materials, a filter certified to NSF/ANSI 53 and NSF/ANSI 42 for the reduction of lead and particulates with six months of filter cartridges, and the offer of a follow-up lead water samples three to six months after the LSLR. The same sheet also tracks the outreach attempts by Aqua-IL staff or their designees, property owners that do not respond to outreach efforts, and property owners that decline to participate in the program.

5.1.4.4 Program Dashboards

Aqua-IL tracks Philo's service line material inventory and LSLR counts through Qlik. This system is updated approximately monthly with service line material changes and verifications through construction work. It maintains records of when materials in the inventory were changed based on corresponding record sources. The Qlik system can create maps, graphs, and summary tables to track program progress.

5.2 Methods to Complete Lead Service Line Replacements

Currently, Aqua-IL primarily uses trenchless construction methods for LSLR in Philo. Open cut installations are allowed on a case-by-case basis when local site conditions make open cut more cost effective than trenchless construction.

5.2.1 Trenchless Technologies

Trenchless technologies perform subsurface utility work while minimizing surface disruptions. By reducing the area disturbed at the ground surface, these technologies typically shorten installation timeframes and reduce installation and restoration costs. Several different technologies fall under the category of 'trenchless technologies', including:

- Pipe Pulling
- Horizontal Boring
- Horizontal Directional Drilling
  - Surface Launched
  - Pit Launched

5.2.1.1 Pipe Pulling

Pipe pulling is where a new water service is pulled behind the old water service being removed. Because longer lengths cause additional stresses to the pipe during this technique, it is typically limited to shorter water services.

This technique is typically one of the cheapest of the trenchless options. Another major advantage of this method is that the contractor is using an existing borehole for the new water service to follow the exact alignment of the existing pipe, and so the risk of hitting adjacent utilities or other obstructions is reduced. This makes this method efficient, easy to use and train staff on, and minimally disruptive if successful.

However, this method cannot be used in all locations. If water services were initially installed with coils or have since been deformed to a non-circular form, it will typically not be possible to insert a cable to perform the replacement, and another replacement method will need to be selected.

Pipe pulling can also fail during the attempted replacement. The existing pipe or cable can rip apart during the removal. This risk can be reduced by using pipe pulling equipment such as the Kobus Pipe Puller, which attaches to the arm of an excavator to minimize additional stresses on the pipe and cable. Additionally, the expander at the connection to the new pipe can catch below grade utilities, rock, tree roots, or other items. If either of these scenarios occur, an alternative method of service line installation would need to be used.

5.2.1.2 Horizontal Boring

Horizontal boring (also referred to as the Bullet or Moling) is a pneumatic piercing tool which is driven by an air compressor. The tool is placed at the required elevation and uses equal friction on all sides to drive the tool forward. In a typical setup the tool is set level at the required elevation in the launching pit and then travels to the receiving pit.

This method is typically more expensive than pipe pulling but cheaper than horizontal directional drilling. An advantage of this technique is that more contractors are familiar with this trenchless method than the other trenchless methods presented here. Additionally, because it is less complicated to operate than the other trenchless methods, new contractors can be trained in a relatively short period of time.

The main disadvantage of this technique is that there is the potential for the bore head to divert from its intended alignment, potentially damaging other utilities or site features. It can also travel onto adjacent property. To minimize this possibility, it is important to track the bore head to continuously monitor its location. Additionally, the distance between excavated pits is typically limited to approximately 30-feet to maintain control of the tool. Because of the limitations on steering, this technique is also typically recommended where the water service already enters the front of the building to limit using it under concrete slabs.

5.2.1.3 Horizontal Directional Drilling (HDD)

For HDD installations, a steerable head is used to drill a pilot hole to a target excavation inside the property (receiving shaft). The new pipe is installed to the end of the boring head at the receiving shaft, and a new water service line is pulled back through the hole to the HDD machine.

Disturbance from HDD consists of the pit to start the drilling and a receiving pit inside the property where the pipe to be pulled is located and the final connection takes place. Typically, the standard HDD technique is precise enough that it can enter the property through a small pit (approximately 2-foot by 2-foot). Because this technique provides better control of the borehole, it performs better than horizontal boring at avoiding impacts to existing utilities. Because the equipment is located outside, time inside the property is minimized.

HDD is typically more expensive than horizontal boring, but it can be the most appropriate technique when precision work is needed. First, when performing trenchless construction under a street, the precision of HDD makes this technology the more reliable choice to minimize the risk of impacting other utilities. Second, HDD would be recommended for properties where the water service enters the back of the house. Using HDD, the bore head can be controlled to enter the property at specific locations, such as the property owner's utility room, which may be located at the rear of the house. This would allow for a direct connection to the property owner's interior plumbing without significant interior copper installed within the property.

There are two main types of HDD equipment, classified by where the HDD borehead is launched.

Surfaced Launched HDD

Surfaced launched HDD utilizes a drill rig located outside of the property. The surface launched HDD technique drills down at angle from the surface to reach the target depth. Therefore, to achieve a depth of approximately 5 feet below ground surface, the head of the drill rig will need to be offset at least 30 feet horizontally from where the water service needs to be at its final depth. As a result, this method would most likely result in a partial or full road closure of the street.

Pit Launched HDD

Pit launched HDD is a fairly new technology where the machine is lowered into an excavation pit at least one foot deeper than the final pipe elevation. The pilot/reamed hole is then drilled from the pit elevation. This technology reduces the working area required at ground surface relative to a surface launched HDD. While the pit launched HDD maintains the control and functionality of a standard HDD machine, it cannot drill for distances as far as the surface launched units can. However, the pit launched unit can be easily rotated in the street using a backhoe to perform water service replacements on both sides of the street from the same excavation.

5.2.2 Open Cut

For open cut installations, a trench is dug to expose the LSL, and the existing service line is removed and replaced with a new water service line. The trench is then backfilled, and the surface area of the trench restored to hydroseed or its previous asphalt/concrete cover. This technique can be appropriate in locations where the water service enters the front of the house, and the house is located very close to the street.

Open cut techniques are only used on a case-by-case basis because of the increased disturbance to the resident. When working on private property, property owners may have extensive landscaping, porches, fences, walkway lights, irrigation systems, and other features that may be disturbed during the work. When preserving these features is not feasible during construction due to open cut, property owners will be more likely to refuse to participate in the program. Sidewalks, curbs, gutters, and pavement need to be restored to their previous condition. The extensive restoration requirements for this technique typically result in this construction method having the longest construction timelines for each LSLR.

5.2.3 Construction Methods Summary

A summary of the trenchless methods described above, including advantages and disadvantages, is included in **Table 5-1** below.

Table 5-1: Comparison of Construction Methods

Technology	Description	Advantages	Disadvantages
Pipe Pulling	Insert cable into water service and pull existing water service out while simultaneously pulling new water service in.	▪ Relatively inexpensive ▪ Minimize risk to impact other utilities ▪ Minimal operating space	▪ Some LSL installations make pipe pulling not work ▪ Cable could break resulting in open cut being required ▪ Cannot relocate service to an alternate alignment
Horizontal Boring	Pneumatic piercing tool (also referred to as the Bullet or Moling) that cannot be steered or otherwise guided.	▪ Relatively inexpensive ▪ Minimal operating space ▪ Lightweight ▪ Can use in a variety of soil conditions	▪ Cannot steer or maneuver bore head ▪ Not accurate in certain soil conditions ▪ No ability to control if it goes off alignment
Surface Launched Horizontal Directional Drilling (HDD)	Standard directional drilling from surface.	▪ High level of bore head control ▪ Bore head steerable and maneuverable ▪ Can install water services long distances	▪ Large amount of working space required ▪ High level of training and experience required
Pit Launched HDD	Directional drilling from inside a pit when space limitations exist.	▪ Steering head is maneuverable ▪ Good control ▪ Less work area required than HDD ▪ Potential to do services on either side of the street from the same pit	▪ Limited pool of contractors ▪ Operators may require training
Open Cut	Trench is dug along the length of the service line to remove the existing line and place a new line in the ground	▪ Works in locations where trenchless methods may fail ▪ Allows new service to be placed in a location different than the existing service	▪ Longer period of disruption to residents and traffic ▪ More restoration work required

5.3 Restoration

By primarily using trenchless technologies, the required restoration can be minimized. However, restoration costs can still vary substantially between properties, depending on exterior landscaping,

interior property finishes, and location of the water main. Currently, Aqua-IL restores the property as reasonably as practicable to its former condition. Typically, this means that the exterior surfaces are restored to the pre-existing condition, and the interior is made watertight. For locations where the water service enters the house behind drywall, for example, the customer is responsible for restoring the drywall.

LSLR dollars are limited, and this restoration policy ensures that the maximum number of LSLR can occur with the available funds, and that more expensive properties with expensive landscaping or interior finishes do not receive a disproportionate amount of LSLR funds.

The construction procedure includes clear early communication with the property owners regarding what level of restoration they can expect from the Aqua-IL versus what they will need to restore themselves. Additionally, Aqua-IL contractors take pro-active steps to minimize the disturbance to the customers property through use of trenchless installation techniques and placing the excavation pits to avoid disturbing surface features where possible.

6.0 Outreach and Communication

This section details Aqua-IL LSLR Program public outreach and education planning for Philo.

6.1 Philo Language Background

The estimated population of Philo, per the U.S. Census Bureau, in July 2022 was 1300 individuals. According to the U.S. Census Bureau American Community Survey, 0% are limited English speaking households. Aqua-IL will work to accommodate customers who speak languages other than English or who have a first language other than English in outreach.

6.2 Public Comment and Education on the LSLR Plan

In order to inform the public of the LSLR plan and provide opportunity for public comment, Aqua-IL will post Philo's LSLR plan on the Aqua-IL website with contact information to provide feedback or comments. Water bills and the annual Consumer Confidence Report (CCR) will also include information noting that the LSLR draft plan is available on the website for public comment and provide information for the public to request a copy.

6.3 Baseline Communications

Aqua-IL currently communicates with Philo customers about a lead in drinking water through information on Aqua's website, in the Consumer Confidence Report (CCR), and through other program mailers.

6.3.1 Website

Customers can access information on the health effects of lead, what Aqua-IL does to prevent lead in drinking water, and how customers can protect themselves from lead through Aqua-IL's company website https://www.aquawater.com/about-water/water-quality/lead.php.

6.3.2 Contact for Customer Inquiries

Aqua-IL has a website, phone number, and e-mail associated with lead in drinking water for customers to use that is consistent across communications. This contact information is:

- Website: https://www.aquawater.com/about/states-we-serve/illinois.php
- Phone: 815-614-2032
- Email: AquaILLead@AquaAmerica.com

6.3.3 Annual Consumer Confidence Report (CCR)

Aqua-IL will add content to Philo's annual CCR to update customers on where customers can request a copy of the draft LSLR plan and provide a snapshot of LSLR activities and what it is doing to proactively protect their health from lead in drinking water. Aqua-IL is monitoring the status of the proposed LCRI legislation and will update the CCR per the final requirements of the LCRI.

6.4 Inventory Notifications

Within thirty days of finalizing the service line inventory, Aqua-IL will provide written notice to residents in Philo distribution area served by a lead, galvanized requiring replacement, or unknown service line.

For customers with a confirmed lead or galvanized requiring replacement service line, the notice will include the notification of the lead service line, information on the health effects of lead, steps the customer can take to reduce their exposure to lead in water, a notice of this LSLR plan with its opportunities to replace their LSLs, including options for financial assistance, and the notice that Aqua-IL will replace the utility-owned portion of the service line (if it is lead) if the customer replaces the customer-owned portion.

For customers with lead status unknown service lines, the notice will include the information that their service line could be lead, information on the health effects of lead, steps the customer can take to reduce their exposure to lead in water, and information on how to identify their service line material and report that verification to Philo.

These notices will be re-sent when the inventory is updated annually and when a new customer is initiated until the service line is no longer lead, galvanized requiring replacement, or unknown.

6.5 LSLR Communication

6.5.1 LSL Disturbance Notifications

When performing investigative work for inventory development or a full or partial LSLR in Philo, Aqua-IL will provide education material following any kind of disturbance to meet the guidelines for a disturbance in state and federal requirements. This information will include:

- A notice that the work may result in sediment, and possible lead, in the water supply system.
- Information on safe practices to prevent the consumption of lead in drinking water
- Flushing procedures to reduce particulate lead
- Information on the health effects of lead and the dangers of lead to children and pregnant women.
- The following statement in the Spanish, Polish, Chinese, Tagalog, Arabic, Korean, German, Urdu, and Gujarati: “This notice contains important information about your water service and may affect your rights. We encourage you to have this notice translated in full into a language you understand and before you make any decisions that may be required under this notice.”
- Contact information for customers looking for more information

Aqua-IL will also provide a pitcher filter certified to reduce lead with six months of cartridges.

6.5.2 Communications Before An LSLR

Aqua-IL will make a good faith effort to contact every property owner in Philo impacted by an LSLR to attempt to receive permission to conduct a full LSLR. The primary methods of outreach will typically

be phone calls, mailers, and doorhangers. In-person outreach, emails, and text messages may also be employed.

For planned LSLR, outreach to impacted property owners and residents begins a minimum of 45 days in advance of the work with a mailed letter requesting access to the building and permission to replace the customer-side LSL. An attempt is made to post the participation request at the entrance of the building if no response is received within 15 days of sending the notice.

For LSLR associated with water main replacements, the contractor's staff additionally door knock on the affected streets to talk with residents and directly solicit participation. If no one is reached, the contractor will leave a doorhanger with the participation request.

For replacements following an emergency repair, outreach to the impacted property owner begins immediately. At the time of the repair, the repair crew will attempt to contact the resident at the property to obtain their consent for the replacement of the customer side and leave a door hanger if unable to make contact. Where phone numbers are available for the property, a phone call attempt will typically be made to reach the person. Where a phone number is not available, a mailer or postcard will be sent to the address. Other outreach methods may include phone calls, emails, or letters.

Property owners willing to participate must sign a "License Agreement to Replace the Customer Owned Lead Service Line" form consenting to grant access to their property for the purpose of replacing the lead service line. This form includes an acknowledgement that ownership for the customer-side of the service line will remain with the property owner.

6.5.3 Communication Before Operating the New Water Service

Prior to putting the new service line into service, the LCRR requires additional customer communication around the health risks of lead, protecting themselves from lead, and flushing instructions per the requirements for a disturbance in Section 6.5.1. Aqua-IL has developed materials compliant with this requirement for Philo. Examples of this material is available in Appendix A.

Per the state and federal requirements, Aqua-IL distributes filters after a full or partial LSLR in Philo. Filters distributed to property owners are certified by an accredited third-party certification body to NSF/ANSI 53 and NSF/ANSI 42 for the reduction of lead and particulate matter.

6.5.4 Communication After the Replacement

The LCRR requires utilities to offer to collect a follow up tap sample between three months and six months after completion of LSLR. For samples that exceed 15 ppb of lead, the customer must be notified of the results within three calendar days of the water system receiving the results. Aqua-IL has 30 days to notify customers when the results are less than 15 ppb. In compliance with the federal LCRR[6], notice can be delivered electronically, by phone, by mail, hand delivery, or by other state-approved methods. If the notice is delivered via mail, the letter must be postmarked within the

[6] The proposed LCRI as drafted includes additional requirements for notifications of lead results, including a 3-day notification requirement regardless of lead test result, that would apply to all water samples collected by the water system.

relevant number of calendar days. Using certified mail can help document that the 3-day requirement is met. The notice explains the health effects of lead, list of steps consumers can take to reduce exposure, provide contact information for Aqua-IL, and describe the maximum contaminant level goal and the action level for lead along with definitions for the two terms.

Appendix A Example Outreach Materials

Notification Regarding Upcoming Water Main Project

Notification Regarding Upcoming Water Main Project

Dear Resident and/or Customer:

Perhaps you have noticed the surveying crews and others working in the area between Cuba Road and Lakeshore Drive. All this activity is in preparation for Aqua Illinois' water main replacement project to improve service and reliability in your area. Here are some frequently asked questions and answers related to this work:

What is happening, and why?
Aqua has evaluated the water main between Cuba Road and Lakeshore Drive and has determined that it needs to be replaced. The water main replacement will specifically benefit residents connected to the water main between Cuba Road and Lakeshore Drive.

When will the work take place?
The contractor may provide more specific information, but the project is scheduled to start on or around October 11, 2021. Once construction starts, the majority of the work should be completed within three weeks. Work hours are typically between 7 a.m. and 5 p.m., Monday through Friday.

Will my service be interrupted?
The only time an interruption should occur will be when your water service line is connected to the new water main. Advanced notification will be made before your service is interrupted.

Will there be any work on my property?
While installing the water main or the services, some driveways and lawns along the project route might be affected. These areas will be restored before the completion of the project. Driveways will be restored with the same type of material as existed prior to construction, and lawns will be restored with topsoil and grass seed.

Will the service line to my building or residence be impacted?
At each building or residence that is supplied water from the water main, there is an existing service. Typically, there is a shutoff valve for each service near the property line that is considered the dividing point between two portions. The customer owned portion is between the shutoff valve and the building. AQUA owns and is responsible for the portion that extends from the shutoff valve to the main, including the shutoff valve. More likely than not, the entire section of the service that is AQUA's will be

replaced. At a minimum, the existing service will be reconnected to the new water main.

Will the water main replacement affect my water quality?
While replacing the water main or service line, loss of pressure, discolored water, or sediment possibly containing lead might occur. Residents should flush their lines during and after the completion of work and should also remove and clean faucet aerator screens. AQUA will flush the water main when it is put into service to remove any sediment that might occur during construction. The presence of lead might occur if your existing service line is lead pipe. If the contractor encounters lead service lines during construction activities, AQUA's portion of the line will be replaced. The customer will be notified that their service line contains lead. For more information about lead, see the included insert, or contact Customer Service at (877) 987-2782.

Is there anything I need to do?
If your contact information has changed recently, please call (877) 987-2782 or send an email to custserv@aquaamerica.com to provide updated information. With your updated information, AQUA will be able to notify you of any service interruptions associated with this system improvement project. You can also receive notifications about service issues by visiting the WaterSmart Alerts section at aquaamerica.com.

Please watch for workers who might knock on your door or place a door hanger to communicate information about outages or other related information. Once work in the area begins, please avoid parking in the roadway between 7 a.m. and 5 p.m.

Who should I contact if there are special questions or concerns?
Contractor: IHC Construction Companies, LLC – (847) 742-1516
AQUA Construction Coordinator: Stephen Palinski - (815) 614-2047
AQUA Customer Service: (877) 987-2782

We appreciate your patience and cooperation as we work to upgrade your water system.

Information About Lead and Drinking Water

AQUA℠

How does lead get into drinking water?

Lead is not typically found in the streams, reservoirs or wells that serve as our water supplies. The main water lines that carry water from treatment plants to customers don't contribute to lead. The main source of lead in drinking water is from lead service lines (the pipelines that deliver water from the water mains in the street to homes) and from household plumbing that contains lead.

Before the use of copper for water pipes, lead was once a material of choice. Before 1986, lead was also a key component of the solder used by plumbers when installing home plumbing. Lead is even found in brass and bronze plumbing fixtures. The chemical properties of water can cause lead and other metals to leach into the water. Water utilities, including Aqua, treat drinking water to reduce the chance for metals to leach into the water.

Customers who have, or think they might have, lead service lines are strongly encouraged to consider replacing their service lines. If customers choose to replace their household plumbing, they should use certified lead-free solder and fixtures.

How Aqua Protects Its Customers

Aqua conducts required testing for drinking water contaminants, including lead and copper, to ensure compliance with state and federal drinking water standards. Aqua tests the water at our treatment plants. Aqua also tests for lead in high-risk sample homes to comply with the U.S. Environmental Protection Agency's (EPA) lead and copper rule. According to the EPA, sampling locations must be selected based on priority tied to possible lead exposure. Aqua also works with individual customers who request lead information for their home. Test results, including those for lead and copper, are summarized in our annual water quality reports, which are produced for every water system we own and operate. You can find your community's water quality report on AquaAmerica.com.

Changes in water sources are not common. However, if we ever need to use a new water source, Aqua works with state environmental regulators to perform an early evaluation of the new source to anticipate water quality concerns and identify potential treatment needs.

Once a new water source is approved, Aqua further verifies the acceptability of water quality by conducting testing at approved high-risk homes for a sustained period of time to ensure water quality.

Health Effects of Lead

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys and can interfere with the production of red blood cells that carry oxygen to all parts of your body. **The greatest risk of lead exposure is to infants, young children and pregnant women.** Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

If your home's water shows elevated levels of lead, or if you are concerned about the potential of lead in your water, here are ways you can minimize exposure.

- **Run your tap to flush out lead.** If your water hasn't been used for several hours, run water for at least 15 to 30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking.
- **Use cold water to cook and prepare baby formula. Don't boil water to reduce lead.** Lead dissolves more easily into hot water. Boiling water won't reduce lead.
- If you buy a water filter, make sure it's approved to reduce lead. You can contact NSF International at 800.NSF.8010 or NSF.org.
- If you are concerned about exposure, contact your local health department or healthcare provider to find out how you can get your child tested for lead. Call Aqua at 877.987.2782 for information about testing your water for lead.
- Brass faucets, fittings and valves – even those advertised as lead free – might contribute lead to drinking water. The law allows end-use fixtures, such as faucets, with wetted surfaces containing a maximum weighted average of 0.25 percent lead to be labeled as lead free. Visit NSF International at NSF.org to learn more.

For more information on reducing lead exposure in your home and the health effects of lead, visit the EPA at EPA.gov/lead or contact your healthcare provider.

Lead Information Notice

Lead Informational Notice

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Dear Water Customer: Today's Date:_____

This notice contains important information about your water service and may affect your rights. We encourage you to have this notice translated in full into a language you understand and before you make any decisions that may be required under this notice.

Diese Mitteilung beinhaltet wichtige Informationen über Ihre Wasserversorgung und könnte Ihre Rechte beeinflussen. Wir bitten Sie, dass Sie diese Mitteilung vollständig in eine Sprache übersetzen lassen, die Sie verstehen, bevor Sie eventuelle Entscheidungen treffen, welche im Zusammenhang mit dieser Benachrichtigung erforderlich sind.

Ang abisong ito ay naglalaman ng mahalagang impormasyon tungkol sa iyong serbisyo sa tubig at maaaring makaapekto sa iyong mga karapatan. Hinihikayat namin kayo na isalin nang buo ang abisong ito sa wikang naiintindihan ninyo at bago kayo gumawa ng anumang mga desisyon na maaaring kailanganin sa abisong ito.

આ સૂચનામાં તમારી પાણીની સેવા વિશે મહત્વપૂર્ણ માહિતી શામેલ છે અને તમારા અધિકારોને અસર કરી શકે છે. અમે તમને પ્રોત્સાહિત કરીએ છીએ કે તમે આ સૂચના હેઠળ જરૂરી હોય તેવા કોઈપણ નિર્ણયો લો તે પહેલાં તમે આ સૂચનાને તમે સમજો છો તે ભાષામાં સંપૂર્ણ ભાષાંતર કરો.

Niniejsze zawiadomienie zawiera ważne informacje na temat Państwa przyłącza wodociągowego i może mieć wpływ na Państwa prawa. Przed podjęciem jakichkolwiek decyzji, które mogą być wymagane na mocy niniejszego zawiadomienia, zachęcamy Państwa do przetłumaczenia całości niniejszego zawiadomienia na język, który będzie dla Państwa zrozumiały.

يحتوي هذا الإشعار على معلومات مهمة حول خدمة المياه لديك، وقد يؤثر على حقوقك. قبل اتخاذ أي قرارات قد تكون مطلوبة بموجب هذا الإشعار فإننا نشجعك على ترجمته بالكامل إلى لغة تفهمها.

اس نوٹس میں آپ کی پانی کی سروسز سے متعلق اہم ترین معلومات موجود ہیں اور یہ آپ کے حقوق کو متاثر کر سکتا ہے۔ ہم آپ کو ترغیب دیں گے کہ آپ اس نوٹس کا مکمل طور پر اس زبان میں ترجمہ کروائیں جو آپ سمجھتے ہوں اور ممکن ہے کہ آپ کے کوئی فیصلہ لینے سے قبل اس نوٹس کے تحت یہ درکار بھی ہو۔

Este aviso contiene información importante sobre su servicio de agua y puede afectar sus derechos. Lo animamos a que traduzca este aviso a un idioma que comprenda antes de tomar cualquier decisión que pueda ser necesaria en virtud del mismo.

이 통지서에는 귀하의 권리에 영향을 미칠 수 있는 수도 서비스에 관한 중요한 정보가 제시되어 있습니다. 이 통지서에서 요구하는 결정을 내리기 전에 이 통지서를 귀하가 이해할 수 있는 언어로 번역하시기 바랍니다.

本通知包含有关您的供水服务的重要信息，可能会影响到您的权利。在您做出本通知所要求的任何决定之前，我们鼓励您将本通知完整地翻译成您可理解的语言。

Lead Informational Notice

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Our water system will soon begin a water line maintenance and/or construction project that may affect the lead concentrations in your drinking water. Lead, a metal found in natural deposits, is harmful to human health, especially young children, and pregnant women. It can cause damage to the brain and kidneys and can interfere with the production of red blood cells that can carry oxygen to all parts of your body. The most common exposure to lead is swallowing or breathing in lead paint chips and dust. However, lead in drinking water can also be a source of lead exposure. In the past, lead was used in some water service lines and household plumbing materials. Lead in water usually occurs through corrosion of plumbing products containing lead; however, disruption (construction or maintenance) of lead service lines may also temporarily increase lead levels in the water supply. This disruption may be sometimes caused by water main maintenance/replacement.

The purpose of this notice is for informational purposes only. While it's not known for certain whether this construction project will adversely affect the lead (if present) plumbing in and outside your home, below describes some information about the project and some preventative measures you can take to help reduce the amount of lead in drinking water.

Project Start Date:_____ Project expected to be completed by:_____

Project location and description:_____

_____

_____

What you can do to reduce lead exposure in drinking water during this construction project:

- *Run your water to flush out lead.* If the plumbing in your home is accessible; you may be able to inspect your own plumbing to determine whether you have a lead service line or lead solder. Otherwise, you will most likely have to hire a plumber.
  - If you do not have a lead service line, running the water for 1 – 2 minutes at the kitchen tap should clear the lead from your household plumbing to the kitchen tap. Once you have done this, fill a container with water and store it in the refrigerator for drinking, cooking, and preparing baby formula throughout the day.
  - If you do have a lead service line, flushing times can vary based on the length of your lead service line and the plumbing configuration in your home. The length of lead service lines varies considerably. Flushing for at least 3 – 5 minutes is recommended.
- *Use cold water for drinking, cooking, and preparing baby formula.* Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water. Do not use water from the hot water tap to make baby formula.
- *Look for alternative sources or treatment of water.* You may want to consider purchasing bottled water or a water filter that is certified to remove "total lead".
- *Clean and remove any debris from faucet aerators on a regular basis.*
- *Do not boil water to remove lead. Boiling water will not reduce lead.*
- *Purchase lead-free faucets and plumbing components.*
- *Remove the entire lead service line.*
- *Test your water for lead.* Call us at: 877.987.2782 to find out how to get your water tested for lead. While we do not do the testing, we can provide a list of laboratories certified to do the testing. Laboratories will send you the bottles for sample collection. Please note that we are not affiliated with any laboratory, and they will charge you a fee.
  - If test results indicate a lead level above 15 ug/L, bottled water should be used by pregnant women, breast-feeding women, young children, and formula-fed infants.

License Agreement to Replace the Customer Owned Lead Service Line

Customer Lead Service Line Replacement License Agreement

LICENSE AGREEMENT TO REPLACE THE CUSTOMER OWNED LEAD SERVICE LINE

The undersigned customer(s) or property owner(s) (the "Customer"), through this License Agreement, grants Aqua Illinois, Inc. ("Aqua" or the "Company") and its contractors and/or subcontractors a license to enter upon the Customer's property at the service address set forth below (the "Property") for the purpose of replacing the Customer-owned lead service line with a new Customer-side service line and connecting the new Customer-side service line to the Company's facilities, at no direct cost to the Customer.

Service Address:_____

City:_____State:_____Zip:_____

The Customer represents that the Customer is the sole legal owner of the Property and has sole authority to agree to this License Agreement. The term of this License Agreement shall be twelve (12) months following the date this License Agreement is countersigned by the Company.

The Company or the Company's contractor and/or subcontractor has installed the Company-side service line from the Company's water main to the curb stop, meter pit, or valve (as applicable) at or near the Customer's property line. The Company, in its sole discretion has determined the location of the Company-side service line. The Company-side service line will be owned and maintained by the Company.

The Company or the Company's contractor and/or subcontractor shall replace the Customer-owned lead service line with a new service line of size and material determined by the Company. The Customer-owned lead service line will be abandoned in place. The Company shall connect the new Customer-side service line to the Company's connecting facilities and the Customer's premises. It may be necessary for the Company or Company's contractor to gain entry into the Customer's premises to make the connection at the meter with the new Customer-side service line. The ownership of the new Customer-side service line will be dedicated to the Customer at the completion of the replacement. Ownership and maintenance responsibilities of the new Customer-side service line will remain with the Customer.

Following the replacement of the Customer-side service line, the Company will restore the Customer's Property as reasonably as practicable to its former condition prior to the commencement of the replacement under this Licenese Agreement. The Company warrants the workmanship and materials of the installation of the new Customer-side service line for a period of twwelve (12) months from the date the replacement is completed. The Company's liability is limited to repairing or replacing the Customer-side service line.

In consideration of the Company performing the Customer-side service line replacement at the Company's cost and receiving the associated warranty on workmanship and materials as set forth above, the Customer agrees to indemnify, release and hold harmless the Company and its affiliates, agents, and contractors and/or subcontractors from and against all claims, liabilities, and costs resulting from acts and omissions of the Company and/or its contractors and/or subcontractors in replacing and installing the new customer-side service line that are outside of the associated warranty on workmanship and materials. The Customer specifically agrees to accept dedication of the newly installed Customer-owned portion of the service line upon completion of its installation.

PLEASE RETURN A SIGNED COPY OF THIS AGREEMENT IN THE PRE-ADDRESSED, POSTAGE PAID, ENVELOPE TO:

Aqua Illinois, Inc.
1000 S. Schuyler Ave.,
Kankakee IL, 60901
Attention: Environmental Compliance

Contract No.

CUSTOMER	AQUA ILLINOIS, INC.
Signature: _____	Signature: _____
Printed Name: _____	Printed Name: _____
Date: _____	Date: _____

Phone: _____

Flushing Instructions and Education Materials Following a Disturbance

AQUA℠

An Essential Utilities Company

Premises No.: _____ Tap Serial No.: _____ Date: _____

Address: _____

Prepared by: _____

PWSID: _____ PWS Name: _____

¡Favor de no consumir el agua sin antes comunicarse con nuestro Departament de Servicio al Cliente al **877.987.2782!**

An Important Health Notice From Aqua

PLEASE READ THIS BEFORE USING YOUR WATER!

During our maintenance/construction activities today, Aqua encountered:

☐ An Aqua-owned lead service line that provides water to your premises

- ☐ It has been replaced
- ☐ It will be replaced by: _____

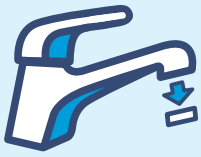
☐ A customer-owned lead service line that provides water to your premises

Customer side material _____

☐ You might have a customer-owned lead service line. Your plumber can make this determination. Please contact us if you would like additional information at 877.987.2782.

As standard practice, Aqua replaces the portion of the lead service lines we own when found during maintenance and construction activities. If an Aqua-owned lead service line was found, it was replaced. If we encounter lead in the portion of the service line you own, we strongly encourage you to replace it. Please call a licensed plumber for more information.

Please review and follow these very important **instructions*** to minimize your exposure to metals, such as lead, which might have been stirred up due to the service-line replacement work. Please flush all your faucets using these steps:

1.  **If possible, remove faucet aerators from all water faucets in the home.**
2. **Beginning in the lowest level of the home, fully open the cold water faucets throughout the home.**
3. **Let the water run for at least 30 minutes at the last faucet you opened (which was on your top floor).**
4. **Turn off each faucet starting with the faucets in the highest level of the home. Be sure to run water in bathtubs and showers as well as faucets.**
5. **Clean and reinstall any aerators you might have removed in Step 1.**
6. **Do not consume tap water, open hot water faucets, or use icemaker or filtered water dispenser until after flushing is complete.**

**Based on the American Water Works Association-recommended safety procedures (awwa.org).*

You might also wish to use a NSF-approved home filter for water to be used for drinking and cooking, particularly if you are pregnant or have children under age six. Go to NSF.org for more information.

Please see the other side of this notice for more information on lead. Thank you for letting Aqua serve you! For questions or concerns, please contact Aqua customer service at **877.987.2782**.

More helpful information on the back

Information About Lead and Drinking Water

How does lead get into drinking water?

Lead is not typically found in the streams, reservoirs or wells that serve as our water supplies. The main water lines that carry water from treatment plants to customers don't contribute to lead. The main source of lead in drinking water is from lead service lines (the pipelines that deliver water from the water mains in the street to homes) and from household plumbing that contains lead.

Before the use of copper for water pipes, lead was once a material of choice. Before 1986, lead was also a key component of the solder used by plumbers when installing home plumbing. Lead is even found in brass and bronze plumbing fixtures. The chemical properties of water can cause lead and other metals to leach into the water. Water utilities, including Aqua, treat drinking water to reduce the chance for metals to leach into the water.

Customers who have, or think they might have, lead service lines are strongly encouraged to replace their service lines. If customers choose to replace their household plumbing, they should use certified lead-free solder and fixtures.

How Aqua protects its customers:

Aqua conducts required testing for drinking water contaminants, including lead and copper, to ensure compliance with state and federal drinking water standards. Aqua also tests for lead in high-risk sample homes to comply with the U.S. Environmental Protection Agency's (EPA) lead and copper rule. According to the EPA, sampling locations must be selected based on priority tied to possible lead exposure. Aqua also works with individual customers who request lead information for their home. Test results, including those for lead and copper, are summarized in our annual water quality reports, which are produced for every water system we own and operate. You can find your community's water quality report on AquaAmerica.com.

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Once a new water source is approved, Aqua further verifies the acceptability of water quality by conducting testing at approved high-risk homes for a sustained period of time to ensure water quality.

Health effects of lead:

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys and can interfere with the production of red blood cells that carry oxygen to all parts of your body. **The greatest risk of lead exposure is to infants, young children and pregnant women.** Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

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- If you buy a water filter, make sure it's approved to reduce lead. You can contact NSF International at800.NSF.8010 or NSF.org.
- If you are concerned about exposure, contact your local health department or healthcare provider to find out how you can get your child tested for lead. Call Aqua at 877.987.2782 for information about testing your water for lead.
- Brass faucets, fittings and valves – even those advertised as lead free – might contribute lead to drinking water. The law allows end-use fixtures,such as faucets, with wetted surfaces containing a maximum weighted average of 0.25 percent lead to be labeled as lead free. Visit NSF International at NSF.org to learn more.

For more information on reducing lead exposure in your home and the health effects of lead, visit the EPA at EPA.gov/lead or contact your healthcare provider.

Customer Service Line Material Self-Identification Instructions

AQUA℠

An Essential Utilities Company

You will need this for the Online Questionnaire

Premise Number: 111111111

Premise Address:
111 Maple Avenue
Apt. 1
Anytown, PA 16161

M1-001
John A. Sample
111 MAPLE AVENUE
ANYTOWN, PA 16161

Dear Customer,

As part of our commitment to providing you with clean, safe, and reliable water, we are replacing lead and some galvanized service lines to reduce the risk of lead exposure. It is expected that there will be no direct cost to the homeowner. To do this, we need your help to identify the type of service line material in your home, the types are: **Copper, Galvanized, Plastic and Lead.** See Instructions below.

Take a few minutes to complete your questionnaire!

Before you begin the questionnaire:

1. Grab a coin to scratch the surface of the pipe and a fridge magnet if you have one.
2. Locate your water service line in your basement or utility closet. You will find photo examples on the second page of what your water service line will look like.
3. Identify your Service Line Material Type. On the second page you will find identifying details.
4. Complete the questionnaire using one of the following methods:

On your Phone:

1. Scan the QR code to the right using the camera app on your phone or tablet.
2. Review the Material Types on the website or on page two.
3. Click on the Service Line Materials Questionnaire button:
   - Add your Premise Number (from this sheet) and fill out a few quick questions.
   - Snap a photo of your Water Service Line and upload.
   - Check the reCAPTCHA box.
   - Click Submit and you are done!

On your Computer:

1. Go to http://www.aquaservicelinematerials.com/
2. Review the Material Types on the website or on page two.
3. Click on the Service Line Materials Questionnaire button:
   - Add your Premise Number (from this sheet) and fill out a few quick questions.
   - Snap a photo of your Water Service Line on your phone and upload it to your computer, and questionnaire.
   - Check the reCAPTCHA box.
   - Click Submit and you are done!

Through the Mail:

1. Review the Materials on the second page.
2. Complete the Service Line Materials Questionnaire on page three:
   - Make sure your last name and address is correct or provide the correct information in the form.
   - Provide all other necessary information within the form.
   - Place form inside the attached prepaid envelope. Then seal the envelope.
     - Or please mail to **AQUA SERVICE LINE MATERIALS PO Box 950, Lansdale, PA 19446**
   - Drop in your mailbox, at your local post office, or in a postbox and you are done!

AQUA SM

An Essential Utilities Company

Frequently Asked Questions

When should I respond by?

Please respond within a few days. We will accept your responses at any time.

What happens if I don't respond?

We will continue to contact you until we can obtain this information.

What if I choose not to participate?

We will need to visit your home to collect this information. If you do not allow access into your home, we may need to dig a small hole in your front yard to inspect your service line.

How do I know this isn't a scam?

Please visit https://www.epa.gov/lead to understand this federal requirement. You may also visit https://aquawater.com/about-water/water-quality/lead.php to learn about lead in drinking water.

How do I scan a QR code?

On your phone or tablet, open the camera app, then position the phone or tablet above the code so that it appears on the screen. Tap the notification that appears on the screen to go to the website.

Why do I need to participate?

Water companies are required to know what water service line materials are made of so that we can remove service lines that could add lead to your drinking water.

What will happen if I do have lead or galvanized pipes?

If you have lead or galvanized service lines, we will contact you to verify its material. All lead and some galvanized service lines require replacement.

How much is it going to cost me if my pipes need to be replaced?

It is expected there will be no direct cost to the homeowner.

If I complete this questionnaire, when will I hear back about next steps?

We will contact you within the coming weeks if you have lead or galvanized service lines to explain the next steps. We will not need to contact you if you do not have lead or galvanized service lines.

What if I can't get to where the pipes are located, do I have any other options?

Yes, please let us know if you cannot access your service line and we will arrange for a service representative to visit your property at a scheduled time.

Am I checking the pipes coming into the house from the outside or all pipes in my house?

Please check the water pipe immediately entering your house from the exterior wall or floor. Many times, there is a water meter near this location. Please see examples on the following page.

Is this only happening in my area, state, or is it nationwide?

The United States Environmental Protection Agency is requiring the removal of all lead and some galvanized pipes across the entire country.

If there are lead pipes elsewhere, how do I have them addressed?

We encourage you to request a plumber to investigate your home further if you suspect that you have lead water pipes elsewhere in your home.

AQUA℠

An Essential Utilities Company

Service Line Material Types

COPPER

- Color of a penny or has a greenish corrosion
- Is **NOT** magnetic
- Easily Scratched

GALVANIZED

- Color is a dull gray or silver
- Noticeable threads
- Is magnetic
- Tends to rust

PLASTIC

- Color is black, white, or blue
- Usually engraved with a code
- Is **NOT** magnetic

LEAD

- Color is a dull gray or silver
- Noticeable solder bulbs
- Is **NOT** magnetic
- Easily scratched
- Easily bent

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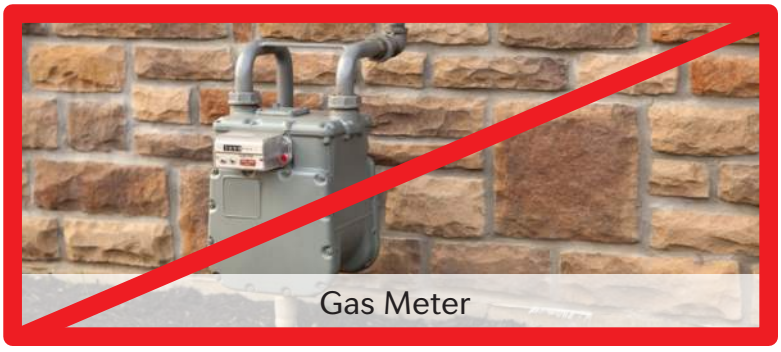
Water Service Line Material Examples

Water service line penetrating the wall

Water service line penetrating the floor

DO NOT USE THESE LINES

Sewer Line



Gas Meter

Hot Water Heater Line

AQUA℠

An Essential Utilities Company

Service Line Materials Questionnaire

Premise Number: 111111111

Last Name: Sample

Please complete if Last Name is incorrect:*

E-mail:

Phone Number:

Premise Address:
111 Maple Avenue
Apt. 1
Anytown, PA 16161

Complete this section if the Premise Address above is incorrect*

Updated Street Address:

Updated Address Line 2:

Updated City:

Updated State:

Updated Zip Code:

Service Line Material Type*

☐ Copper ☐ Galvanized ☐ Plastic ☐ Lead

☐ Other

Year Home was Built:

Required*

Please fill out the questionnaire at http://www.aquaservicelinematerials.com or fill out the physical form above and mail it in using the provided envelope.
If you have questions please contact the **Call Center at (610) 727-5850**.

PM-TEST-111111111