Team: TruePani Category: Inventory, Equity



With the EPA's newly minted Lead and Copper Rule Revisions (LCRR) and the development of the Lead and Copper Rule Improvements, water systems are tasked with new requirements such as increased communications, school and child care sampling, and additional sampling protocols. Among the key updates is the requirement for water systems to complete a service line inventory, detailing both private-side and public-side materials for every service line connection in the distribution system.

## The Problem

As the materials inventory contributes to the calculation to determine how many lead service lines need to be replaced annually, it is advantageous for a water utility to have fewer lines marked as "lead status unknown." Services lines assigned "lead status unknown" are treated as lead service lines requiring replacement in the event of a trigger level exceedance or action level exceedance.

A comprehensive and thorough service line inventory is vital in ensuring that a water utility can design an equitable prioritization plan for lead service line replacement. Predictive modeling and historical records can fill in gaps, but the most accurate way to determine the presence of a lead service line is a comprehensive approach, which includes visual inspection.

## **Our Solution**

The Locate Your Line crowdsourced inventory tool is a digital survey that will instruct and educate users on how to complete a visual inspection of the private side service line material. While the city typically owns the public side of a service line, the private side is often owned by the private property owner. Water systems often must obtain a right to entry to gain access to inspect the private side of a service line.

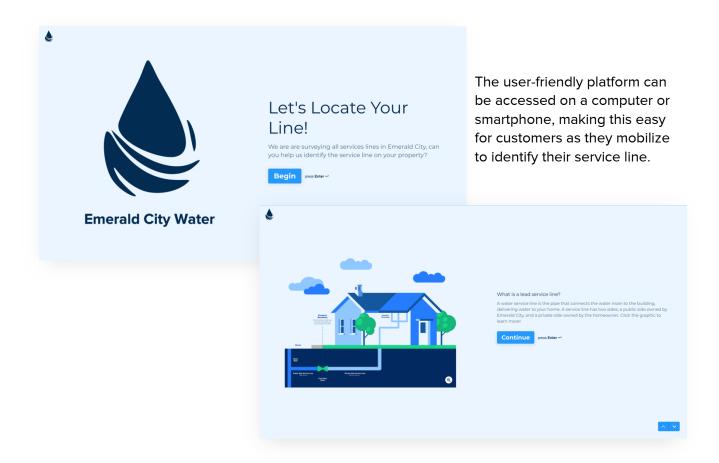
The Locate Your Line tool collects photos and material information associated with geospatial data. This data can then be fed back into an existing service line inventory database and using location data can be matched to existing records.

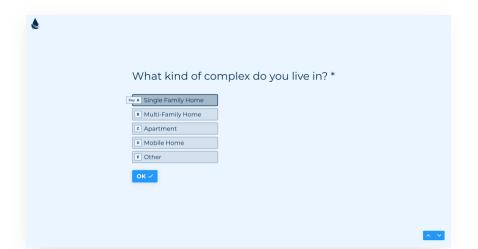
The value of the Locate Your Line tool extends beyond time and money saved:

- Demonstrates that the water utility values customer input
- Drives awareness by engaging community in the program
- Empowers customers to take a role in improving community health
- Ease the challenge of gaining access to private property
- Decreases human capital required by the utility to complete the LSL inventory
- Decreases number of service lines categorized as "Lead Status Unknown"
- Improve accuracy of predictive modeling efforts

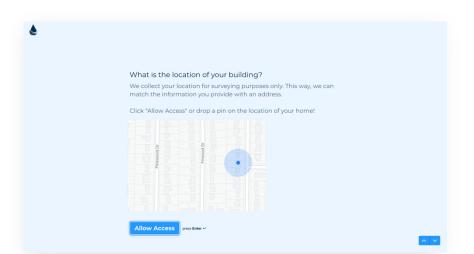
Crowdsourcing inventory data not only helps a water utility meet the requirements of the Lead and Copper Rule Revisions, but it pushes water utility one step closer to removing lead service lines in the distribution network and increases public awareness and education.

While existing tools help the customer identify service line material, this data is typically not shared with the water system, unless through an additional form. The **Locate Your Line** tool provides tailored and simplified instructions that can be completed on a smartphone, as opposed to lengthy and intimidating forms and instructions.

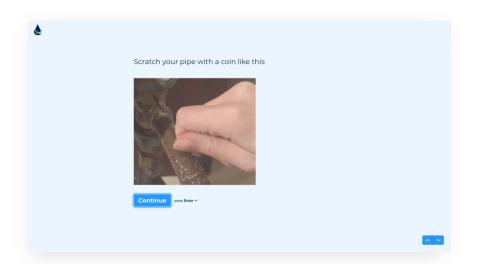




Conditional logic creates a unique form for each customer, cutting down on unnecessary information that could complicate understanding.



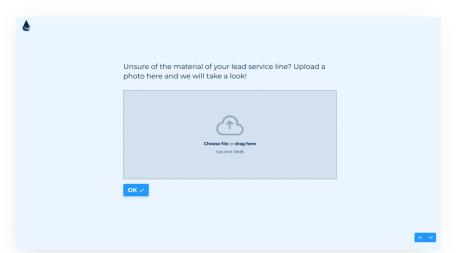
To aid in inventory requirements for the water utility, the Locate Your Line tool collects addresses and is linked to a secure database.



The Locate Your Line uses GIFs to instruct customers on how to complete identification steps. The imbedded GIFs supplement lengthy videos and reduce file size.

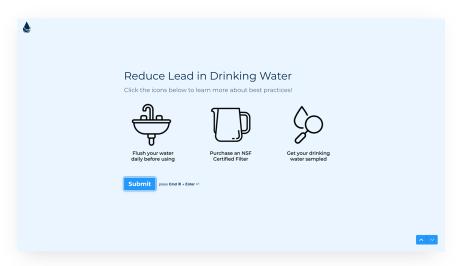


To ensure accessibility of the Locate Your Line tool, the form can be translated to languages relevant to customers in the region.

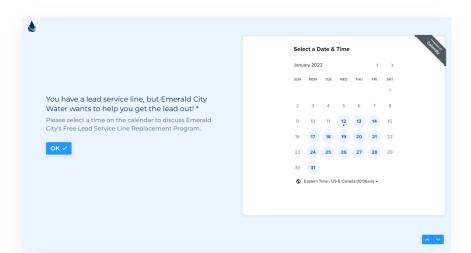


Some customers may be unsure if they've correctly located their service line or the material of their service line.

Our tool offers the ability for a customer to upload a photo of their service line, to be verified by experts at the water utility.



The Locate Your Line tool guides customers through actionable next steps regardless of service line status. We have aligned this tool with the goal of advancing awareness of lead in drinking water for all customers.



For those customers who do identify a lead service line, utilities can offer an immediate call-to-action through our tool. This could be scheduling a call, signing a Right of Entry, or enrolling in the utility's filter program, as applicable.

TruePani's Locate Your Line tool can be customized with each water utility's branding, program offerings, desired call-to-action, and any geographic differences such as typical location of water meters. Water utilities can provide can embed this tool within their lead service line inventory maps or printed program flyers through a QR code, as the platform is conducive to smartphone users. Through widespread adoption of the Locate Your Line tool, water utilities can engage their customers in lead service line education, while harnessing their knowledge to drive private-side inventory compliance.