



MEMORANDUM

To: Mayor and Members of the City Council

From: Montrè Freeman, City Manager
Dwan Bell, Public Utilities Director
Alicia Steward, Finance Director
Jon Hawley, Grants Administrator

Date: April 21, 2023

Re: Consideration - Request to Apply for Lead Service Line Replacement Funding

BACKGROUND:

The US Environmental Protection Agency regulates against lead in drinking water; lead is a toxic element and an amendment to the Safe Water Drinking Act in 1986 banned its use in drinking water infrastructure. Lead can cause grave harm to those who ingest it, particularly children. Water systems have long monitored lead through regular testing and, as needed, modify their water treatment processes to prevent pipe corrosion that could introduce lead in drinking water.

On December 16, 2021, the EPA announced Lead and Copper Rule Improvements that take even stricter action against lead. As a step towards beginning to replace all Lead Service Lines (LSLs), the EPA is requiring water systems to complete an initial LSL inventory by October 16, 2024. In North Carolina, the NC Department of Environmental Quality is overseeing implementation of the new lead requirements.

Federal funds are available now to help meet these major new lead mandates. The Bipartisan Infrastructure Law (BIL) of 2021 allocated \$15 billion nationwide over the next five years, which is providing additional funding through the Drinking Water State Revolving Fund (DWSRF) for projects to find and replace LSLs. In North Carolina, guidance for the DWSRF-Lead Service Line Replacement Program is still evolving, but NCDEQ is now able to solicit projects for funding.

City staff propose to submit a solicitation for Phase II of the Lead Detection and Removal Plan, which NCDEQ funded this spring. Our solicitation will request \$500,000 in partially forgivable loan for field sampling necessary to map the LSLs in our system.

ANALYSIS:

The Lead Detection and Removal Plan, Phase I, is the City's starting effort to comply with the EPA mandate for an initial inventory by October 16, 2024. Phase I is funded through a \$100,000 Asset Inventory and Assessment grant, which is still in its beginning stages.

Our Phase I work consists of:

1. Develop a tentative inventory of areas suspected to have LSLs, based on GIS data, system records, property records, etc. (Generally speaking, houses constructed before 1990 carry a risk of having lead lines or lead solder, unless there is data to confirm otherwise.)
2. Develop a sampling program to build a predictive model. (Physical inspection of all service lines across the City is infeasible from a labor and cost standpoint. With enough field tests/samples, a model can predict the presence of lead with very high confidence, providing a suitable basis for planning replacements.)
3. Develop an LSL inventory and replacement program. This will address the EPA's initial inventorying deadline – the inventory must show good-faith efforts even if incomplete – and provide the "road map" for completing the inventory and planning LSL replacements.

The single largest expense of Phase I is the field sampling necessary for our predictive model to be accurate. At \$100,000, Phase I will only cover about 25 samples. The City's project engineer estimates as many as 360 samples are needed to achieve a 95-percent confidence interval. Therefore, City staff propose a much broader sampling effort under Phase II. At \$500,000, we would complete the majority of necessary sampling, and position the City for future state funding for LSL replacements.

The DWSRF Program offers long-term, low-interest loans with partial principal forgiveness. Functionally, this is a grant with a financed local match. Based on DEQ's prior affordability criteria, the City would potentially qualify for 50-percent principal forgiveness, meaning \$250,000 would be forgiven and \$250,000 would be repayable. This is a significant sum to finance, but City staff recommend pursuing this opportunity for two reasons. First, this project is necessary to meet the quickly approaching federal requirement for an initial inventory. Second, a timely LSL inventory is essential to taking advantage of future federal and state funds that prioritize LSL replacement – and ultimately to eliminate this health risk to our community.

City staff also encourage requesting the maximum possible award because, in submitting this solicitation, we will still have the flexibility to request a smaller award, if necessary to minimize the debt burden on the City's Water-Sewer Fund. Further Council action would be required to finalize our request, if DEQ agrees to consider its funding.

STAFF RECOMMENDATION:

By motion, authorize City staff to submit a solicitation for DWSRF-LSLR funding in the amount of \$500,000 for Phase II of the Lead Detection and Removal Plan, and authorize necessary signatures.