



FACT SHEET

Engineering Report/Environmental Information Document for Lead Service Line Replacement (LSLR) Projects May 2024

The Division of Water Infrastructure (Division) has prepared this factsheet as guidance for preparation of an Engineering Report and Environmental Information Document (ER/EID) for a Lead Service Line Replacement (LSLR) Project funded by the Division. The applicant must submit the ER/EID by the deadline indicated in the Letter of Intent to Fund.

LSLR Projects that will require submittal of an ER/EID are summarized in the table below.

LSLR Project Type	ER/EID Required?
Inventory Only	Not required
Find and Replace	Required (for replacement portion)
Replacement Only	Required

Required Elements of the ER/EID

The required elements of the ER/EID are described below.

1. **Engineer Information:** The cover sheet of the ER/EID must provide the following information:
 - a) The Engineer's contact information including name, phone number and mailing address.
 - b) The seal and signature of the design engineer in accordance with 21 NCAC 56 .1103. The design engineer must be a Professional Engineer (PE) licensed to practice in North Carolina.
2. **Applicant Information:** The ER/EID must provide the applicant's contact information including name and title of the Authorized Representative, phone number, mailing address and Public Water System Identification (PWSID) number.
3. **Project Information:** The ER/EID must provide the following:
 - a) Name of the project as shown in the funding application.
 - b) Funding number of the project, which can be found in the *Letter of Intent to Fund (LOIF)*
 - c) Project Description. The project description must describe both the project and its purpose. To this end, this section must describe the following:
 - i) The proposed project and whether it represents a phase of a multi-phase project.
 - ii) The objective(s) of the project.
 - iii) The location of the project.
 - iv) The water system related to this project along with the system's PWSID number. The system's service area must be shown on a map and the description must include the population served, total number of service connections and the number of connections included in the project.

4. Consideration of Alternatives: The ER/EID must address alternative solutions to meet the project objective(s) as follows:
- a) The alternatives **must** always include the “do-nothing” alternative, as well as the preferred alternative.
 - b) Feasibility of Alternatives: The ER/EID must classify each alternative as either feasible or infeasible. The ER/EID must clearly explain why an alternative is deemed infeasible.
 - c) Comparative Analysis: The ER/EID must include a table that lists each alternative considered and describe why it was or was not chosen. The table must include the estimated cost of each alternative and any other factor that determines the choice of alternative (e.g., construction timeline, customer refusal, etc.). Table 1 below provides an example of the table format.

Table 1: Presentation of Alternatives (EXAMPLE)

Alt. No.	Description	Feasible?	Estimated Cost	Notes
0	Do-nothing	Yes	\$ - 0 -	Does not address the objective
1	Partial replacement	Yes	\$1M	Replaces only as many confirmed LSLs as the budget allows
2	Total replacement	Yes	>\$1M	Replace all confirmed LSLs. May require additional funding and time to complete scope.

5. The Proposed Alternative: The ER/EID must demonstrate that the proposed alternative will meet the project objective(s) and include a detailed project budget. This budget must be at least as detailed as the budget included in the funding application and must include both the estimated total cost of the project and the funds available to complete the project.
6. Environmental Information Document: Most LSLR projects are expected to require obtaining a Categorical Exclusion (CE) from the Division. Guidance on how to obtain a CE is provided in the *Factsheet: Instructions for Applicants Seeking a Federal Categorical Exclusion* that can be found on the Division website at <https://www.deq.nc.gov/about/divisions/water-infrastructure/lead-service-line-replacement-funding>.
7. Rate Impact of the Project : Required only for projects funded with a repayable loan portion. Not required for projects receiving 100% principal forgiveness. Calculate the rate impact of the project as follows:
 - a) Calculate the annual loan repayment (principal only, no interest) based on the terms described in the Letter of Intent to Fund and amortize the cost of the project over five (5) years for inventory-only projects, or twenty (20) years for projects involving replacement of lead service lines.

b) Calculate the monthly rate impact of the amortized payments:

- i) By default, assume the full cost of repaying the loan is equally shared by each residential customer. The rate impact is the system's annual repayment amount divided by twelve (12), divided by the number of residential customers.
- ii) As an alternative, you can document your assumption of the share of the loan repayment borne by residential customers.
- iii) Report the Projected Rate as follows:

Current residential rate for average consumption	_____ \$/month
+ rate impact of the project	_____ \$/month
= Projected Rate	_____ \$/month