

7.8.1 Engineer Certification of Services

It is expected that studies funded through the Small Community Planning Grant will meet minimum requirements. A comprehensive study of the water or wastewater system must be conducted and a detailed report of the findings prepared. The report should provide the level of detail expected for a State Revolving Fund (SRF) facilities plan or a USDA Rural Development Preliminary Engineering Report (PER).

The following is a summary of items that must be addressed based on project type. Please review the applicable sections and sign the form. The signed form should be included with the scope of services provided to the project sponsor. A date of completion for the final report must also be provided on the form.

Minimum Information Expected in Final Reports

System-wide Wastewater Collection or Water Distribution Studies:

- A narrative description of the system to include age, present condition, known water loss, infiltration/inflow (I/I), etc.;
- A map of the system showing pipe, according to type and size, and appurtenances;
- A map or maps showing wetlands, historic properties, and other pertinent features that may be affected by any improvements;
- A narrative discussion of alternatives to include no-action, trenchless technology, and open trench construction; and
- Unit cost breakdowns and present worth evaluations of each feasible alternative.

Wastewater Collection or Water Distribution Extension Studies:

- Narrative explaining the need for the new utility;
- A map or maps showing the project location, wetlands, historic properties, and other pertinent features;
- Discussion of the ability of the existing infrastructure to accommodate the new flows/demand;
- Discussion of the direct and indirect impacts that will result from the project;
- A narrative discussion of the no-action alternative and any other viable alternatives considered; and
- Unit cost breakdowns and present worth evaluations of each feasible alternative.
- A detailed explanation of the methods used to determine the locations and extent of I/I including smoke testing, televising and flow measurement;

- A summary of the findings to include specific areas discovered to have I/I and the extent of I/I in each area; and
- Recommendations for improvements, if necessary, and unit cost breakdowns and present worth evaluations of each.

Wastewater Treatment Studies

- Narrative describing the condition of the existing facility and explaining the need for the new treatment facility;
- Evidence of consultation from the DENR Surface Water Quality program regarding potential stream reclassifications, change in permit conditions, etc.;
- A map or maps showing the project location, wetlands, historic properties, public and private water sources, airports, and other pertinent features;
- All data, records, and technical information used for the basis of the design;
- A narrative discussion of several possible alternatives, to include no-action and collection rehabilitation where excessive I/I is identified, and reasons for excluding certain types of treatment technologies;
- Unit cost breakdowns and present worth evaluations of each feasible alternative; and
- Design calculations for each feasible alternative (this may be omitted for extensive mechanical treatment options).

Water Treatment Studies

- Narrative describing the condition of the existing facility and explaining the need for the new treatment facility;
- A map or maps showing the project location, wetlands, historic properties, and other pertinent features;
- All data, records, and technical information used for the basis of the design;
- A narrative discussion of several possible alternatives, to include no-action and regionalization or consolidation of systems, and reasons for excluding certain types of treatment technologies;
- Formal proposals or correspondence from regional water system(s) stating ability and willingness to provide service and details and costs associated with the regional water system's proposals; and
- Unit cost breakdowns and present worth evaluations of each feasible alternative.

Water Supply or Storage Studies

- Narrative describing the condition of the existing facility and explaining the need for the new facilities;
- A map or maps showing the project location, wetlands, historic properties, and other pertinent features;
- Historical water use records for average and peak conditions;
- Average and peak water use projections;
- A narrative discussion of several possible alternatives, to include no-action and regionalization or consolidation of systems;
- Formal proposals or correspondence from regional water system(s) stating ability and willingness to provide service and details and costs associated with the regional water system's proposals; and
- Unit cost breakdowns and present worth evaluations of each feasible alternative.

I hereby certify that I have read and understand the requirements identified in this form and have provided a date of completion. I am aware that no funds will be disbursed until the engineering report is approved by the Department of Environment and Natural Resources.

The Report will be completed by and submitted to DENR by the following date:

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Date

Signature of Engineering Consultant

Date