

# NORTH DAKOTA STATE REVOLVING FUND OUTLINE FOR FACILITIES PLANNING

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All Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF) projects require submittal and approval of a facility plan/preliminary engineering report. This information is used to complete the environmental review of the project. Providing complete information will help expedite the process and reduce delays. The level of detail necessary will depend on the size and complexity of the project. All of the items below must be addressed. **The facility plan must be sealed by a Professional Engineer (PE) licensed in the state of North Dakota.**

## Problem Definition and Background Data

- A. Describe the need for the project and problems to be solved
  - Evaluate the condition of existing facilities
  - Describe problems associated with the facilities
- B. Identify regulatory, public health, environmental and safety issues
- C. Show the planning area and existing/potential service area using maps or drawings
  - Include population or number of connections over the design life of the project
  - Include any available land use and/or development information
  - Include FEMA flood map and discussion of flood mitigation measures (if applicable)
- D. Provide a summary of any geotechnical investigations (topography, soils, geologic conditions, depth to bedrock, groundwater level, etc.) that have been conducted

## Analysis of Alternatives (Cost and Effectiveness Analysis\*)

- A. Alternatives must include (but are not limited to):
  - Optimum operation of the existing system
  - Upgrade of the existing system or new system
  - Regionalization (for DWSRF projects considering source or treatment changes)
- B. The comparison of alternatives shall include:
  - Present worth or annual equivalent cost analysis
    - Capital cost of the project
    - Operation and maintenance costs
    - Replacement costs
    - Salvage value
  - Non-monetary factors
    - Public and environmental health impacts
    - Water conservation and energy efficiency
    - Reliability, feasibility and operability

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- C. Discuss compliance with regulations and permit requirements at the national, regional, state and local levels
- D. Describe the alternative selection process

## Selected Alternative

### A. Describe:

- Design criteria and justification (for example - water demand, flow requirements, hydraulic loading, and organic loading under existing and future conditions)
- Drawings or schematics showing process units and operation
- Financial data describing capital costs, O&M costs, and proposed fee schedule
- Project components' design life and associated costs
- Discharge permit requirements
- Impacts on existing and new facilities
- Schedule for completion of design and construction
- Funding sources

### B. Discuss environmental benefits and impacts:

- Include comments from any parties affected by the project, including, but not limited to:
  - North Dakota State Water Commission
  - North Dakota Game and Fish Department
  - North Dakota State Historic Preservation Officer
  - U.S. Fish and Wildlife Service
  - U.S. Department of Agriculture, Natural Resources Conservation Service
  - U.S. Army Corps of Engineers (local and district offices)
  - North Dakota Department of Health
  - Local planning authorities
- Describe impacts related to the following, as applicable:
  - Social/economic profile (development, property values, aesthetics, noise, etc.)
  - Public health
  - Wetlands
  - Wild and scenic rivers
  - Agricultural lands

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- Cultural resources (archaeological/historical)
- Flora and fauna (including endangered species)
- Air quality
- Water quality
- Solid waste (including biosolids)
- Energy
- Describe mitigation measures for any identified adverse impacts

## **Public Participation**

The applicant must conduct a public meeting to discuss proposed alternatives and allow for public comment. Public meetings should be well publicized in local publications at least 30 days prior to the meeting and should include a time and place best suited for public attendance. The facility plan shall include public comments and how they were addressed or a copy of the minutes from the public meeting.

\* For CWSRF projects only: attach a signed copy of the Certification of Cost and Effectiveness Analysis form to the facility plan.

### ***For more information, contact:***

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