

CIFA 2015 SRF Workshop

Cost and Effectiveness Analysis



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Background

- Dating back to the Construction Grants program, Minnesota has always required facilities plans that:
 - Provide an analysis of “all feasible treatment alternatives capable of meeting applicable effluent, water quality and public health requirements”
 - A comparison of the “cost-effectiveness” of alternatives
 - Including present worth analysis, O&M costs, salvage value
- When CWSRF program began, facilities plan requirements remained, but our review became less rigorous
 - Based on assumption that loans (vs. grants) create greater incentive for borrowers to choose cost-effective alternatives

Various Factors Have Challenged That Assumption

- State grant programs have grown
 - Affordability
 - Targeted to more stringent treatment requirements
- CWSRF principal forgiveness
- Strong preferences of local officials regarding certain non-monetary factors have at times threatened to overshadow good decision making
 - Example: projects serving unsewered areas
 - How the project service area is defined can greatly affect cost-effectiveness analysis of alternatives (decentralized vs. centralized)

Recent Developments

- WRRDA - each CWSRF recipient must certify that:
 - It has studied and evaluated the cost and effectiveness of the proposed project or activity, and
 - It has selected, to the maximum extent practicable, a project or activity that maximizes the potential for water and energy conservation, as appropriate
- State Sustainable Building Guidelines and Performance Standards
 - Focused on energy efficiency and benchmarking

Minnesota Sustainable Building Guidelines

- Created to promote energy and water conservation in state funded buildings
- To date, guidelines have primarily focused on buildings for residential, educational, entertainment, park and recreation purposes
- Recently, more consideration to energy usage in facilities such as wastewater treatment systems
 - Developing benchmarking tool (B3) to compare energy usage in facilities of similar type and size

Current Implementation of Cost and Effectiveness Requirements

- Certification form developed, required with all FP submittals
 - Municipality has studied and evaluated cost and effectiveness of the proposed project
 - Municipality has selected, to max extent practicable, a project that maximizes potential for water and energy conservation
- Currently revising and expanding facilities plan guidance
 - Reference state statute and rule requirements regarding analysis of needs and alternatives
 - Including state B3 guidance for energy and water conservation
 - Describe process for present worth cost analysis, including capital costs, O&M, equipment replacement, salvage values
 - Discuss potential non-monetary factors and methods to integrate with cost analysis

Desired Outcomes

- Ensure local officials receive a thorough and systematic analysis of needs and project alternatives to inform their decision-making
 - Consider potential to maximize water and energy conservation, as appropriate
 - Properly integrate monetary and nonmonetary factors
- Ensure a standardized approach to present worth analysis, including cost savings from water and energy efficiencies
- Integrate Minnesota sustainable building guidelines to promote and assist in the analysis of energy and water conservation elements
- Meet WRRDA requirements