Energy Management Workshop for Small Water Systems

June 12, 2013
Wilson Community College
Wilson, NC
USDA/Rural Development

- Rural Utilities Service
- Water & Environmental Programs
WEP Typical Year Funding

Loan – $36,000,000 – $40,000,000

Grant – $12,000,000 – $15,000,000

Total – $48,000,000 – $55,000,000
Types of Eligible Projects

- Drinking Water Facilities
- Sanitary Sewer Facilities
- Storm Water Drainage Facilities
- Solid Waste Disposal Facilities
Typical Drinking Water Projects

- New Water Systems (Distribution and/or Treatment Facilities)
- Water Lines Extensions
- Improvements to Existing Distribution and/or Treatment Facilities
- Water Storage Facilities (Tanks and/or Reservoirs)
Typical Sewer Projects

- New Sewer Systems (Collection and/or Treatment Facilities)
- Sewer Line Extensions
- Improvements to Existing Collection and/or Treatment Facilities
Typical Solid Waste Disposal Projects

➢ New Landfills

➢ Purchase Trash Trucks

➢ Construct Transfer Stations

➢ Construct Convenience Centers
Eligible Applicants

• Public Bodies:
  ➢ Counties
  ➢ Towns & Cities
  ➢ Water & Sewer Districts
  ➢ Water & Sewer Authorities
  ➢ Metropolitan Sewerage Districts
  ➢ Sanitary Districts
Eligibility Requirements

- Must serve rural area - any area not in a city or town with a population in excess of 10,000 people according to 2000 US Census

- Must not be able to finance the proposed project from own resources and/or from commercial sources at reasonable rates and terms

- Must have the legal capacity and financial ability to borrow, give security, and repay any debt
Eligibility Requirements Con’t

- Applicant must be financially sound and have a tax collection rate of 90% or greater

- Water and sewer facilities to be constructed must be consistent with appropriate State, County, and local development plans

- Applicant may arrange for a third party to operate, maintain, or manage the system/facility by a contract or management agreement
Interest Rates
(subject to change Oct. 1, Dec. 1, Apr. 1 & July 1)

- **Poverty** – 2.125%
  MHI below poverty or 80% of State non-metropolitan MHI and a health and sanitary problem exists

- **Intermediate** - 2.7500%
  MHI is 80-100% of State non-metropolitan MHI without any health issues

- **Market** – 3.500%
  MHI exceeds 100% of State non-metropolitan MHI
Terms

• Repayment period
  ➢ 40 years or useful life of facility
  ➢ Principal payments may be deferred up to 2 years
Debt Security

- **Public Body**
  - General Obligation Bond (Pledge of taxes)
  - Revenue Bond (Pledge of Revenues)
  - Combined General Obligation and Revenue Bonds (Pledge of taxes and revenues)
  - Installment/Purchase (Only if loan amount is $200,000 or less)
Preparation of Preliminary Engineering Report

• **Existing Facilities**
  
  ➢ Describe present condition of existing facilities, including a brief analysis of overall current energy consumption
  
  ➢ Reference an asset management plan, if available
  
  ➢ Provide annual O&M cost, including a breakout of current energy cost
  
  ➢ Discuss any water, energy, and/or waste audits which have been conducted and outcomes of audit
Preparation of Preliminary Engineering Report

- **Need for Project**
  - Describe current water loss, inflow and infiltration, management adequacy, and inefficient design
  - Describe any safety concerns
Preparation of Preliminary Engineering Report

• Alternatives Considered

  ➢ Documentation of alternative considered, including resource efficiency or green alternatives

  ➢ Reference an asset management plan, if available
Preparation of Preliminary Engineering Report

• **Sustainability Considerations**

  - Discuss water reuse, water efficiency, water conservation, energy efficient design (i.e. reduction in electrical demand), and/or renewable generation of energy, and/or minimization to carbon footprint, if applicable to the alternatives

  - Discuss the water and energy usage for this option as compared to other alternatives

  - Discuss aspects of project that preserve or mimic natural resources (i.e. green infrastructure)
Preparation of Preliminary Engineering Report

- **Selection of Alternatives**

  - Analysis should include consideration of the non-monetary factors, including social and environmental aspects (i.e. sustainability considerations, operator training requirements, permit issues, community objections, reduction of greenhouse gas emissions, wetland relocation) should be considered in determining which alternatives is recommended and may be factored into the calculations.
For additional information about the USDA Water & Environmental Program

National Website:


NC State Website:

Questions????
Thank You!

Committed to the future of rural communities.