



MISSOURI DEPARTMENT OF NATURAL RESOURCES

Desloge

Drinking Water State Revolving Fund Green Project Reserve
Business Case

State Fiscal Year 2012 Intended Use Plan

Project Number DW291258-01

Loan Date: October 4, 2012

Green Estimated Costs: \$1,564,000

Water System Improvements for Desloge, Missouri

Business Case

Summary

- The purpose of the project is to provide the replacement of approximately 24,000 feet of old cast-iron drinking water distribution lines throughout the city of Desloge. The replacement of the water mains for this project is to provide looping, to address system failures, such as water main breaks, and provide the expected capacity due to the forecasted growth.
- SRF Assistance Amount: \$1,564,000.00
 - pipe replacement = \$1,564,000= 100%

Background

- The water source for the city's water system comes from two wells with a total pumping capacity of approximately 1.12 MGD.
- The distribution system consists of approximately 71 miles of water mains. The distribution system also includes a total system storage capacity of 315,000 gallons.
- The city's drinking water system currently serves approximately 2000 meters, with an average daily water demand of 428,400 gpd and a peak day demand of approximately 642,600 gpd. Recent history indicates that the water demand for the city has been steady. The future estimated connections to be served for the year 2030 are predicted to be approximately 2,247 with an average daily demand of approximately 576,000 gpd and 864,000 gpd for peak daily demand.

Results/Conclusion

- Replacing the old, leaking water mains will increase water efficiency by decreasing the amount of water lost.
- Benefits from water main replacement include reductions in unnecessary pumping and operation and maintenance expenditures, and eliminating potential health hazards associated with waterborne pathogens entering the water distribution system.