



State Revolving Fund Loan Program
an Indiana Finance Authority Environmental Program

100 North Senate Avenue, Room 1275
Indianapolis, Indiana 46204
www.srf.in.gov

MEMORANDUM

TO: Official Loan File

FROM: Amanda Rickard

DATE: October 1, 2017

RE: Green Project Reserve (GPR) Business Case
Newton County RWSD Wastewater Treatment Plant Project
SRF Project WW 16 14 56 01

Newton County Regional Water and Sewer District (RWSD) will improve wastewater service to existing and proposed customers in the District's service area, including existing tourism centers, a new cheese and whey processing facility, and a new hotel located near the Interstate 65 and State Road 14 interchange. The proposed project includes a new 0.851 MGD wastewater treatment plant (WWTP) and conveyance system. Conveyance includes refurbished lift station, new and replaced lift stations, and sanitary sewer piping. Although the existing collection and treatment system are well maintained and in good condition, they cannot accommodate proposed future peak and average daily flow needs. The new plant is designed to incorporate the Integrated Fixed-Film Activated Sludge (IFAS) process, allowing for future expansion along with biological phosphorus removal.

By using a non-potable water reuse system at the new WWTP, several processes including washing the influent fine screen will regularly save potable water use. The business case developed by Wessler Engineering was reviewed and found to meet the GPR requirements for the water efficiency category.

The IFAS process integrates the advantages of activated sludge biological treatment with fixed-film biological treatment in a compact and energy efficient manner. In addition, the IFAS process will be designed to take advantage of full biological nutrient removal which will reduce cBOD, phosphorus, ammonia, and nitrate concentrations throughout the process. Installations of IFAS technology within the State of Indiana are limited; none are known that apply to full-scale municipal wastewater treatment. Therefore, the IFAS system qualifies under the environmentally innovative category.

The total GPR cost is \$1,546,744. Of this, the construction cost based on bids is \$26,744 (water efficiency components), \$1,100,000 (environmentally innovative components); and engineering cost is estimated at \$420,000. Newton County RWSD closed an SRF loan in the amount of \$17,037,000 on September 29, 2017.