

DESIGN-BUILD TREATMENT FACILITY

STATE PROGRAM: Missouri Department of Natural Resources

ASSISTANCE RECIPIENT: City of Liberty

ASSISTANCE AMOUNT: \$79M



PROJECT DESCRIPTION

The City of Liberty previously sent their wastewater to Kansas City to get treatment from another plant. However, when this facility had to respond to a consent decree to reduce CSOs, an increase in rates for Liberty would have been a result. Liberty decided to forgo transferring their wastewater and instead took out a \$79 million CWSRF loan to build a new state of the art wastewater treatment facility of their own and perform conveyance system improvements. The new facility was the first Missouri CWSRF project to use a design-build approach. Under a design-build contract, the owner contracts with a single design and construction team. In a traditional design bid-build project, the owner manages separate contracts for design and construction. Some of the potential advantages of design-build include quicker project delivery; fewer changes, claims, and litigation; enhanced project coordination; and firm costs. The new facility built using this design-build approach has a 5 MGD capacity and includes treatment processes for activated sludge, bio-phosphorus, and nitrogen reduction. This facility has received a Design-Build Institute of America 2017 National Award for Merit in water/wastewater and was named Project of the Year for 2017 by the Design-Build Institute of America-Mid-America Region.

To read more about this case study, please visit https://www.epa.gov/sites/default/files/2018-11/documents/pisces_2018_compendium_0.pdf.