

DIGESTER UPGRADE

STATE PROGRAM: Florida Department of Environmental Protection

ASSISTANCE RECIPIENT: City of Graceville

ASSISTANCE AMOUNT: \$1M



PROJECT DESCRIPTION

Graceville, a rural community of 2,212 people with a low median household income operates a relatively new treatment plant, but the aeration tank and blowers it uses for sludge processing are old and inefficient. This project will replace the existing blowers with new high efficiency models coupled with a jockey pump that offers an adjustable aeration rate. The level of aeration is determined by an innovative, patent pending process that calculates the rate needed based on real time data supplied by sensors in the digester. Not only will this technology greatly reduce the aeration requirement, but it will also keep phosphorus bound in the sludge so that it is not returned to the headworks. Because the phosphorus will be removed with the sludge, the alum required to remove phosphorus during the treatment process can be greatly reduced. It is anticipated that this project will result in cost savings of more than twice the debt service on the CWSRF loan, allowing the City to make other critical improvements to the system.

To read more about this case study, please visit https://www.epa.gov/sites/default/files/2017-11/documents/pisces_compendium_final2.pdf.