

BARNES®

Mobile County, AL

Application Overview

Mobile County sits on the coast of the Gulf of Mexico, and is home to the deep water port City of Mobile. The Mobile County Water, Sewer and Fire Protection Authority serves over 14,000 customers in the southern part of the county, and is one of the largest rural water systems in the State of Alabama. The Sewer Department serves around 1,500 people with a Barnes Low Pressure Sewer System.

In the southern half of the county, the terrain is mostly marshy lowlands and coastal areas with a high water table. This type of geography poses challenges when designing a sewer system. Hazards like inflow and infiltration, overflows and sewer leaks can be prevalent. This is especially true in Mobile County, where a large portion of the population makes their living in the Gulf by shrimping, oyster farming, and fishing, among others. Thus, keeping the Gulf clean and avoiding any hazards is important, not only to the county, but also to its residents.

Project Details and Installation

Low Pressure Sewer systems are ideal for areas like Mobile County, because the chances for infiltration and inflow, sewer leaks and overflow are low. So when the county received a grant from the Alabama Coastal Impact Assistance Program to connect current septic tank customers to a city sewer system, that was their first choice. During the design phase, they studied what other area municipalities had used and learned what the pros and cons were of various brands and manufacturers. During the bid period, Pump & Process Equipment, the Barnes distributor for Alabama, presented the county with their Pitless Adapter Basin package, which utilizes Barnes OGV and OGP series pumps. The easy maintenance and affordable cost of both the package and the pumps won the job, and now there are about 500 grinder pump stations in the system, with plans for expansion in the near future. The system is mostly residential stations, with the occasional commercial station servicing a church or business. The stations are owned by the homeowner, but maintained by the Sewer Department. All grinder stations discharge to lift stations, except for a few which go directly to a small package treatment plant.

Because the system is only about 4-5 years old, the Sewer Department has not needed to replace pumps yet, aside from upgrades for increased build outs. They have also specified generator receptacle for their control panels, which came in handy during the 2020 hurricane season. Homeowners connected generators to the panels, which allowed them to run their grinder stations during extended power outages. Forrest Sellew, the Sewer Department Supervisor for Mobile County, said "We want to be as easy for the customer as possible," and Barnes, along with Pump & Process Equipment, has done that for them!



PUMP

Barnes Low Pressure Sewer System



OPERATIONAL IMPROVEMENT

Reduced Costs & Maintenance



MUNICIPALITY POPULATION

189,000



INSTALL DATE

December 2014

Key Takeaways

Pain Points

- A large population of Mobile County makes their living from the Gulf, making the cleanliness of the Gulf very important
- They realized due to the high water table, traditional sewer options were risky

Benefits

- Mobile selected Barnes OGV and OGP pumps packaged with Pump & Process Equipment's package system as the solution
- No pumps have needed replaced since installation, saving the municipality money and time savings