

Reliable Flow for a South Florida Municipality Pumping System Upgrade

Project Overview

A South Florida municipality undertook a pumping system upgrade to improve reliability and ensure consistent flow across critical applications. The existing installation relied on mismatched pumps that were no longer performing to specification, resulting in uneven operation and reduced system efficiency. To support long-term performance and simplify operations, the municipality sought a standardized, purpose-built pumping solution that could integrate seamlessly with the existing plant layout.

The Challenge

The facility's legacy pumps were underperforming and delivering lower-than-expected flow rates. Differences in pump configurations across applications created operational inconsistencies, increased maintenance complexity, and complicated spare parts management. Furthermore, alignment and piping variations contributed to inefficiencies that limited the system's overall reliability.

The Wilo Solution

American-Marsh, a Wilo Brand, supplied a complete, standardized pumping solution designed to match the plant's original specifications and existing footprint. The upgrade included:

- Two Vertical Turbine 14MFLZ-1 Back Wash Pumps
- Two 14WCA-2 High Service Pumps

Each pump package was delivered as a complete assembly, including pump bowls, shafts, discharge heads, motors, and base plates. By designing the equipment to align with the existing infrastructure, American-Marsh enabled a smooth installation while ensuring optimal hydraulic performance.

The standardized pump design resolved prior inconsistencies, improved alignment and piping uniformity, and positioned the municipality for future expansion. Based on the success of this phase, the pumping system application is scheduled for expansion next year with the addition of two High Service Pumps.

Results & Customer Benefits

The upgrade delivered immediate and long-term operational improvements:

- **Consistent Performance:** Standardized pumps now provide reliable, uniform flow across applications.
- **Improved Reliability:** Proper alignment and uniform piping eliminated previous inefficiencies.
- **Simplified Maintenance:** Common pump designs streamline maintenance procedures and spare parts inventory.
- **Future-Ready Design:** The system is configured for easy expansion as demand grows.



Figure 1: American Marsh Vertical Turbine 14MFLZ-1 Back Wash Pump

Why Wilo?

The American-Marsh brand was selected for its ability to deliver a complete, engineered solution that balanced performance, reliability, and ease of integration. By matching the original plant specifications while modernizing the pumping equipment, American-Marsh helped the municipality achieve dependable operation today and confidence in tomorrow's expansion plans.

Project Partners

Sales Partner: [PSI Technologies, Inc. of Florida](#)

Client / End User: A South Florida municipality

Key Products

[American-Marsh Vertical Turbine Pumps](#)

- 14MFLZ-1 Back Wash Pumps
- 14WCA-2 High Service Pumps

Complete assemblies, including pump bowls, shafts, discharge heads, motors, and base plates.

Summary

This South Florida municipal upgrade highlights how Wilo, and the family of brands, delivered reliable, standardized pumping solutions for water infrastructure applications. By replacing mismatched, underperforming equipment with purpose-built Vertical Turbine Pumps, the municipality achieved consistent performance, simplified maintenance, and a clear path for future system growth—supported by American-Marsh expertise and trusted local partnership.



**Figure 2: American Marsh
Vertical Turbine 14WCA-2**