

Key Largo Wastewater Treatment District Board of Commissioners Meeting Agenda Item Summary

Meeting Date:

October 20, 2026

Agenda Item Number: M-1

Action Required:

No

Department:

Capital Projects

Sponsor:

Robert Mather

Subject:

Capital Projects Report - September 2026

Summary:

Mr. Mather will present the Capital Projects monthly report.

Reviewed / Approved

Operations: _____

Administration: _____

Finance: _____

District Counsel: _____

District Clerk: _____

Engineering: _____

Financial Impact

\$

Funding Source:

N/A

Budgeted:

N/A

Attachments

1. Monthly Report

Approved By: _____

General Manager

Date: _____

10-15-26

Key Largo Wastewater Treatment District Capital Projects Report

Including updates through September 2026

Current Capital Projects

Effluent Filtration Upgrades (LPA0243)			
Original Contract Amount:	\$3,043,820.00	Funding Source:	FDEP Stewardship (LPA0243)
Current Contract (Including ODP's, CO's, Amendments):	\$3,343,823.76	Estimated Engineering and Other Costs Percentage:	15%
Construction Paid to Date:	\$2,882,800.16	Engineering Paid to Date:	\$509,964.71 (15.3%)
Retainage Held?	Yes, 5%	Project Completion:	88%
Balance to Complete:	\$461,023.60	On Schedule?	No
Contract Start Date:	05/18/2023	In Liquidated Damages?	Yes
Contract Substantial Completion:	06/17/2025	Days in Liquidated Damages and Rate:	490 days at \$1,000/day
Contract Final Completion:	07/17/2025	Total Liquidated Damages:	\$490,000

Project Updates:

- Evoqua submitted their Final Inspection Report Summary on July 18th, 2025, attributing the corrosion issues to process/reuse water and stagnant conditions rather than workmanship.
- Filter start-up was scheduled for the week of April 27th, 2026 with Evoqua on-site. Fitting spray bar nozzles, testing of control panel and disc drive occurred. During start-up, an issue was identified with the backwash pump motor, which required repair or replacement before the system can be fully tested and placed into operation.
- Evoqua's startup activities were halted after the backwash pump failed, preventing completion of filter commissioning and placement into service.
- Evoqua has ordered an exact stainless steel cased replacement backwash pump from Grundfos in mid-June, with a lead time of 30-weeks expected for arrival.
- Due to the unresolved pump failure, incomplete commissioning, and other outstanding work and Contract requirements, KLWTD and Apex issued a Notice to Cure to Reynolds Construction requiring a recovery plan to accomplish timely completion of the remaining work.
- Reynolds installed the temporary Cast Head backwash pump on September 9th and are waiting for Evoqua before starting the pump. Benson Electric has the soft starter ready for install.
- Evoqua is scheduled to be on-site the week of October 26th through October 30th, for startup and commissioning of the filter with the new temporary Cast Head backwash pump. Reynolds is scheduled to complete the integration work concurrently with the startup.

Collection System Monitoring (LPA0424)			
Original Contract Amount:	\$7,575,677.00	Funding Source:	USACE & FDEP Stewardship (LPA0424)
Current Contract (Including ODP's, CO's, Amendments):	\$9,464,730.86	Estimated Engineering and Other Costs Percentage:	15%
Construction Paid to Date:	\$9,082,691.75	Engineering Paid to Date:	\$1,132,327.25 (12%)
Retainage Held?	Yes, 5%	Project Completion:	96%
Balance to Complete:	\$382,039.11	On Schedule?	Yes
Contract Start Date:	07/26/2022	In Liquidated Damages?	No
Contract Substantial Completion:	08/31/2026	Days in Liquidated Damages and Rate:	0 days at \$500/day
Contract Final Completion:	09/30/2026	Total Liquidated Damages:	N/A
<u>Project Updates:</u> • Work is completed in Basins A, B, C, D, F, G, H, I and JK. • Sensor installation is 100% complete (Note: This is only sensors and does not include other aspects of the project). Walkthroughs and final completions have been completed for all basins. • Valve rebuilds have been completed with a total of 3,000 rebuilds. • IVC and Flovac have completed installation of the vacuum monitoring system across all 2,967 vacuum pits and buffer tanks. Completion documentation was finalized in January and provided to KLWTD. • Grinder Pump/Low-Pressure monitoring installation has been completed with all 156 monitoring sensors installed for the project. • Substantial completion documentation for the valve rebuilds was completed in June. • Coordination continued through September to review, approve, and procure the necessary materials. A portion of the required materials was delivered on August 27, with the remaining items delivered on September 14th. • The install resumed through late September with 8/30 force main pressure monitoring modules being installed. • In mid-September, Flovac installed an additional gateway and concrete pole in Basin B (498 Sound Dr) to remedy connection issues with some modules in this Basin. • The construction progress meeting was delayed allowing for the monitoring equipment to be procured.			

Power Conditioning and Electrical Upgrades at the WWTP (LPA0426)			
Original Contract Amount:	\$2,670,450.00	Funding Source:	R&R & FDEP Stewardship (LPA0426)
Current Contract (Including ODP's, CO's, Amendments):	\$3,221,662.94	Estimated Engineering and Other Costs Percentage:	15%
Construction Paid to Date:	\$2,664,168.28	Engineering Paid to Date:	\$560,021.80 (17.4%)
Retainage Held?	Yes, 5%	Project Completion:	83%
Balance to Complete:	\$557,494.66	On Schedule?	Yes
Contract Start Date:	01/22/2025	In Liquidated Damages?	No
Contract Substantial Completion:	11/30/2026	Days in Liquidated Damages and Rate:	0 days at \$1,000/day
Contract Final Completion:	12/30/2026	Total Liquidated Damages:	N/A
<u>Project Updates:</u> - Exterior conduit installation is 100% complete, providing infrastructure for power, signal, and camera systems serving plant equipment and instrumentation throughout the facility, including the SBR/digester areas, Post EQ tank area, CCC platform, and other site infrastructure. - Pedro Falcon's Change Order No. 5 was approved at the August 18 Board meeting. Pedro Falcon completed the required lightning protection mast extension in mid-September. The system has officially been certified with the modifications made to allow for the coverage of the high mast on the headworks. - In early September, Pedro Falcon was on-site to install steel plate covers in the electrical junction box in the ATS room. - The Voltage Regulation Transformer (SureVolt) was delivered in a two-part shipment, with a pallet of additional parts and spares with the device on a separate shipment. The pallet of additional parts and spares arrived on Wednesday, August 26th. The device was delivered on Monday, September 28th and has been placed in the ATS room awaiting final positioning. - Pedro Falcon, KLWTD, and APEX staff attended construction progress meetings on September 9th and 23rd.			

Vacuum Stations Odor Control (KG004)			
Original Contract Amount:	\$4,009,141.26	Funding Source:	R&R & FDEP Stewardship (KG004)
Current Contract (Including ODP's, CO's, Amendments):	\$4,176,452.89	Estimated Engineering and Other Costs Percentage:	15%
Construction Paid to Date:	\$3,878,745.60	Engineering Paid to Date:	\$356,203.75 (8.5%)
Retainage Held?	Yes, 5%	Project Completion:	93%
Balance to Complete:	\$297,707.29	On Schedule?	Yes
Contract Start Date:	03/28/2025	In Liquidated Damages?	No
Contract Substantial Completion:	01/20/2027	Days in Liquidated Damages and Rate:	0 days at \$1,000/day
Contract Final Completion:	02/19/2027	Total Liquidated Damages:	N/A
<u>Project Updates:</u> - As of October 22nd, 2025, all (6) sets of Odor Control Tanks arrived at their respective vacuum station; All tanks have been delivered in acceptable condition. - Final connections have been completed at all vacuum stations. The new Odor Control systems are operational at all vacuum stations. - Vacuum Station E effluent odor line drainage has been installed. - Contractor has completed removal of existing Odor Control Systems. - CO #3 was approved by the Board on July 21, 2026. - Vacuum Station A & D's generators were delivered on July 28th. Both generators have been fastened in place and their belly tanks filled with fuel. Load testing and startup have been completed at both Vacuum Station A and D. - Contractor has completed installation of additional maintenance flanges at each Vacuum Station. - Contractor has begun ordering materials for the Vacuum Station E belly tank replacement; Apex is awaiting fabrication shop drawings submittal for review. - Apex is awaiting pricing from the Contractor to re-route odor control line at Vacuum Station E to the odor control tanks above grade to prevent identified ground water intrusion. - Belle Construction, KLWTD, and Apex staff attended a construction progress meeting on September 10th, 2026.			

Upcoming Capital Projects

EQ Tanks and Headworks Project (LPA0425)			
Expected Project Cost	\$15,440,000	Est. Design	90%
Existing State Funds	\$6,547,280	Est. Design Completion	Dec 2026
Funding Sources	FDEP Resilient Florida, Stewardship (LPA0425)	Est. Construction Dates	March 2027 – March 2029

Project Status: The EQ Tanks and Headworks Project includes two (2) new 500,000-gallon pre-equalization tanks, a new headworks screening system, and related appurtenances and improvements. The project has reached the 90% design milestone, and a 90% progress plan set has been issued to the Owner and the Village of Islamorada for review and comments as the design progresses towards 100% completion. The Village subsequently provided comments and questions regarding the 90% progress plans, which have been reviewed and responded to by the design team. Coordination with CROM remains ongoing, and updated tank drawings reflecting the dual-tank configuration are anticipated to be received soon for integration into the overall plan set. Coordination with equipment manufacturers and vendors, such as TSC Jacobs and Heyward, remains ongoing to finalize equipment selection for key components such as odor control, aeration diffusers, headworks screens, conveyors, control panels and the screening disposal system. Evaluation of the existing electrical system remains ongoing, along with coordination of the electrical improvements necessary to support the proposed equipment and facility upgrades. Process and instrumentation design is continuing to progress. An RAI for the ERP application has been received, and the design team is has prepared the required response. The draft FDEP wastewater operating permit has been received and was reviewed by Apex and KLWTD staff with comments returned to FDEP.

Critical Systems Resilience and Mitigation Upgrades			
Expected Project Cost	\$15,957,588	Funding Sources	FDEP Resilient Florida, Stewardship/ACOE
Existing State Funds	\$7,978,794	Est. Construction Dates	Apr 2027 – Jun 2030

Project Status: Vacuum Tank Upgrades: This project includes replacement of existing steel vacuum tanks at all KLWTD vacuum stations with new corrosion-resistant fiberglass reinforced plastic tanks. Design work remains underway for Vacuum Station A and E tanks. Spot digs have been completed at Vac E & A to survey the tie in elevations and depth of excavation for the temporary tank. We are in process of obtaining ACOE funding for the Critical Systems projects.

Ductile Iron Pipe Rehabilitation Project: This project replaces ~4,200 linear ft of corroded ductile iron pipes at the Key Largo Wastewater Treatment Plant using corrosion resistant HDPE open-cut replacement. The project also includes asphalt work, replacement of the PVC fire main, new isolation valves and SCADA-integrated flow meters and salinity meters on NTM & STM, improving system control.

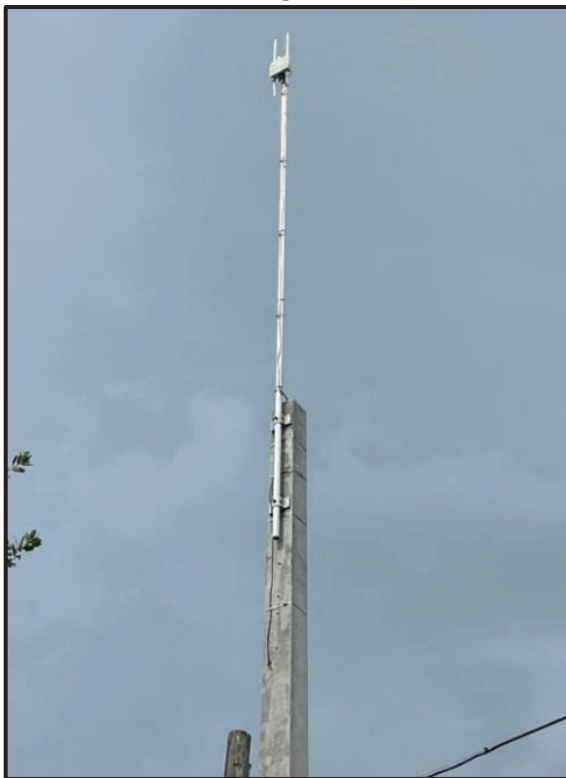
Floodproofing WWTP & Vacuum Stations: Project is in the conceptual design phase and was included within the Resilient Florida grant funding project request. We are requesting ACOE funding as well.

Power Conditioning at Vacuum Stations: Project is in the preliminary design phase and was included within the Resilient Florida grant funding project request. We are requesting ACOE funding as well.

Project Construction Photos



Figures 1 & 2: Cast Iron Backwash Pump & Placement



Figures 3 & 4: New Gateway & Pole in Basin B and Layout of Pressure Monitoring Parts



Figures 5 & 6: Installation of Pressure Monitoring



Figures 7 & 8: Voltage Regulation Transformer placed in ATS room awaiting final positioning



Figures 9 & 10: Vacuum Station A Load Testing & Start-up