

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

Meeting Date:
July 21, 2026

Agenda Item Number: N-1

Action Required:
No

Department:
Engineering

Sponsor:
Steve Suggs

Subject:
Monroe County SLR - Cost Breakdown

Summary of Discussion:

Steve Suggs will present an overview of engineering and construction costs incurred and anticipated by KLWTD in connection with Monroe County's Sea Level Rise projects.

<u>Reviewed / Approved</u>	<u>Financial Impact</u>	<u>Attachments</u>
Operations: _____	\$ 0.00	1. Monroe County SLR - Cost Breakdown Memo
Administration: _____		
Finance: _____	Funding Source:	
District Counsel: _____	N/A	
District Clerk: _____	Budgeted:	
Engineering: _____	No	

Approved By:  Date: 7-16-26
General Manager



Memorandum

Date: July 21, 2026
 To: Peter Rosasco, KLWTD General Manager
 From: Richard Lindsay, Project Engineer
 CC: KLWTD Board of Commissioners
 Regarding: Monroe County SLR – Cost Breakdown

The purpose of this memorandum is to summarize engineering costs incurred by the Key Largo Wastewater Treatment District (KLWTD) in connection with Monroe County's Sea Level Rise (SLR) projects at Stillwright Point, Twin Lakes, and Winston Waterways.

The accompanying table presents KLWTD's engineering costs incurred to date and projected future costs based on the latest available information regarding each project's scope, schedule, progression, and community acceptance. The level of engineering effort varies substantially among the projects based on the extent to which the proposed roadway and stormwater improvements affect KLWTD infrastructure.

Monroe County SLR Costs to KLWTD FY25-FY26 and Future							
Project Name:			Stillwright Point	Twin Lakes	Winston Waterways	Subtotals:	Totals:
Engineering	Plan Review	To Date	\$6,806.20	\$9,987.50	\$30,018.40	\$46,812.10	\$59,312.10
		Est. Future	\$5,000.00	\$0.00	\$7,500.00	\$12,500.00	
	Design	To Date	\$0.00	\$15,042.80	\$102,431.77	\$117,474.57	\$127,474.57
		Est. Future	\$0.00	\$0.00	\$10,000.00	\$10,000.00	
	CEI	To Date	\$0.00	\$54,162.27	\$0.00	\$54,162.27	\$446,877.94
		Est. Future	\$10,000.00	\$0.00	\$382,715.67	\$392,715.67	
	Coordination	To Date	\$2,922.46	\$8,524.70	\$22,487.65	\$33,934.81	\$39,934.81
		Est. Future	\$1,000.00	\$0.00	\$5,000.00	\$6,000.00	
Project To Date Eng. Subtotal			\$9,728.66	\$87,717.27	\$154,937.82	\$252,383.75	\$673,599.42
Project Est. Future Eng. Subtotal			\$16,000.00	\$0.00	\$405,215.67	\$421,215.67	
Construction	Construction	To Date	\$0.00	\$69,956.63	\$0.00	\$69,956.63	\$5,292,832.21
		Est. Future	\$120,000.00	\$0.00	\$5,102,875.58	\$5,222,875.58	
Total to Date Cost to KLWTD connected to Monroe County SLR Projects:						\$322,340.38	\$5,966,431.63
Total Est. Future Cost to KLWTD connected to Monroe County SLR Projects:						\$5,644,091.25	

Stillwright Point

Apex's engineering services for the Stillwright Point project have included:

- Reviewing Monroe County's proposed roadway and stormwater plans.
- Evaluating potential impacts to KLWTD infrastructure, including vacuum pits, valve collars, and other wastewater collection system components.
- Participating in coordination meetings with KLWTD, Monroe County, and the County's design team regarding anticipated infrastructure impacts.
- Assessing changes associated with the County's subsequently reduced project scope, which is now understood to consist primarily of milling and resurfacing.

Based on the latest available information, only minor impacts to KLWTD infrastructure are anticipated. Accordingly, Apex's services have remained limited primarily to plan review, infrastructure impact assessment, and project coordination. No major KLWTD utility relocations or conflict-resolution designs have been required.

Twin Lakes

Apex's engineering services for the Twin Lakes project have included:

- Reviewing the proposed roadway elevations and stormwater piping plans.
- Evaluating potential conflicts with KLWTD infrastructure.
- Preparing a conflict matrix identifying potential utility conflicts.
- Participating in coordination meetings with KLWTD, Monroe County, and the County's design team.
- Developing and coordinating isolated conflict resolutions with Monroe County.
- Resolving two additional conflicts encountered during construction due to discrepancies in the available as-built information.
- Providing full-time construction inspection during the portion of construction with the potential to affect KLWTD facilities.
- Coordinating conflict resolutions that Monroe County elected to implement at its own cost for conflicts identified during the plan-review phase.

At the outset of construction, full-time inspection by Apex was not anticipated because KLWTD staff were available to periodically observe work occurring near District infrastructure. However, early this year, KLWTD became aware that ongoing construction activities were affecting its facilities. KLWTD subsequently requested that Apex provide full-time inspection so District staff could continue performing their regular operational duties while maintaining appropriate observation of construction near KLWTD infrastructure.

These inspection services have since been discontinued because the stormwater piping work with the potential to affect KLWTD facilities has been completed and the additional conflicts encountered during construction have been resolved.

The construction cost attributed to KLWTD for Twin Lakes is substantially lower than the projected construction cost for Winston Waterways because Monroe County elected to resolve, at its own cost, the conflicts identified during the Twin Lakes plan-review phase. This differs from the approach currently indicated for Winston Waterways, under which KLWTD is anticipated to bear the cost of the required wastewater infrastructure modifications.

Winston Waterways

Apex's engineering services for the Winston Waterways project have included:

- Reviewing Monroe County's proposed roadway, stormwater, drainage, and injection pump facility plans.
- Identifying more than 400 potential conflicts between the original County design and KLWTD infrastructure.
- Attending weekly coordination meetings over a period of several months to review the identified conflicts individually.
- Working with Monroe County and its design team to determine whether the County's plans could be revised to accommodate existing KLWTD infrastructure and avoid unnecessary utility relocations.
- Developing detailed conflict-resolution designs where modifications to the County's plans could not eliminate the impacts.
- Designing major vacuum-main reroutes, relocations of existing vacuum pits, installation of new vacuum pits, and associated infrastructure modifications.
- Preparing the related design documentation and coordinating the proposed utility work.

Although Winston Waterways is generally similar in nature to Twin Lakes, its impacts on KLWTD infrastructure are substantially greater. Apex's services have therefore progressed beyond plan review and impact assessment into extensive coordination and detailed design. Projected future engineering costs also account for anticipated construction-phase services associated with the required modifications to KLWTD infrastructure.

Summary

The costs associated with the three projects are not directly comparable because each has a materially different scope and level of impact on KLWTD infrastructure:

- **Stillwright Point:** Plan review, infrastructure impact assessment, and limited coordination under a subsequently reduced County scope.
- **Twin Lakes:** Plan review, conflict identification, coordination, isolated conflict-resolution design, and full-time inspection during the portion of construction affecting KLWTD facilities.
- **Winston Waterways:** Review of more than 400 initially identified conflicts, several months of weekly coordination meetings, and extensive design services for substantial modifications to KLWTD's wastewater infrastructure.

Future costs to KLWTD remain difficult to forecast because the required level of engineering effort will depend on the final scope, schedule, and progression of each Monroe County project. Monroe County is continuing the design and planning of the Winston Waterways project and currently anticipates beginning construction of the Stillwright Point project early next year.