



Key Largo Wastewater Treatment District
103355 Overseas Hwy, Key Largo, FL
Tuesday, September 2, 2025

MINUTES

CALL TO ORDER (A)

Chairman Nicolas Rodriguez called the meeting to order at 4:01 p.m.

PLEDGE OF ALLEGIANCE (B)

Commissioner Sue Heim led the Pledge of Allegiance.

ROLL CALL (C)

Present were: Chairman Nicolas Rodriguez; Commissioners Sue Heim, Timothy Maloney, and Robert Majeska

Present Virtually (non-voting): Commissioner Philip Schwartz

Also present: General Manager Peter Rosasco; General Counsel Nicholas Mulick; District Clerk Shannon McCully; Finance Manager Connie Fazio; Field Manager Rudy Perez; Plant/Facilities Manager Ryan Dempsey; Weiler Engineering Lexi Connor; IT Support Manny Santana

Appeared Virtually: Weiler Engineering, Ed Castle

Guest Appeared Virtually: Brown and Brown Insurance, Tom Jones and Michelle Wilson

AGENDA ADDITIONS, CORRECTIONS, OR DELETIONS (D)

Approval of Agenda (D-1)

Mr. Rosasco requested the addition of item *G-3 Portal Grants Update*

Commissioner Heim requested the addition of item *P-1 Key Largo Fisheries*

Commissioner Majeska requested the addition of item *Q-1 CSAP: Satellite Collection Systems*

Motion: Commissioner Majeska made a motion to approve the Agenda as amended. Commissioner Heim seconded the motion. Motion passed without objection.

PUBLIC COMMENT (E)

No speakers.

APPROVAL OF MINUTES (F)

Minutes of August 19, 2025 (F-1)

Motion: Commissioner Majeska made a motion to approve the Minutes of August 19, 2025. Commissioner Maloney seconded the motion. Motion passed without objection.

GENERAL MANAGER (G)

Fiscal Year 2026 Insurance Renewal (G-1)

Mr. Tom Jones presented the 2025/2026 Property/Liability/WC Insurance Renewal.

Motion: Commissioner Heim made a motion to approve G-1 at the financial cost of \$498,684.00.
Commissioner Majeska seconded the motion.

Vote on Motion:

Commissioner Heim – Aye
Commissioner Majeska – Aye
Commissioner Maloney – Aye
Chairman Rodriguez – Aye

Fiscal Year 2026 Health Insurance Renewal (G-2)

Ms. Weinstock presented the 2025/2026 Health Insurance Renewal.

Motion: Commissioner Maloney made a motion to approve United Health Care Plan 4.
Commissioner Majeska seconded the motion.

Vote on Motion:

Commissioner Maloney – Aye
Commissioner Majeska – Aye
Commissioner Heim – Aye
Chairman Rodriguez – Aye

Portal Grants Update (G-3) (Laydown)

Ms. Connor gave an update on the Florida Keys Area of Critical Concern Grants and Resilient Florida Grants.

IT (H)

No report in agenda.

CUSTOMER SERVICE (I)

No report in agenda.

BUDGET AND FINANCE (J)

3rd Qtr. FY25 Financial Reports (J-1)

Ms. Fazio presented the 3rd quarter financial reports for the 2025 fiscal year.

FIELD (K)

No report in agenda.

PLANT/FACILITIES (L)

Plant/Facilities Report – July 2025

Mr. Dempsey presented the Plant/Facilities monthly report.

CAPITAL PROJECTS (M)

No report in agenda.

ENGINEERING (N)

No report in agenda.

LEGAL REPORT (O)

Letter of No Objection Reso. 16-2025 (O-1)

Mr. Mulick presented Resolution 16-2025.

Motion: Commissioner Maloney made a motion adopt Resolution 16-2025.
Commissioner Majeska seconded the motion.

Vote on Motion:

Commissioner Maloney – Aye
Commissioner Majeska – Aye
Commissioner Heim – Aye
Chairman Rodriguez – Aye

COMMISSIONER ITEMS (P)

P-1 Key Largo Fisheries (P-1)

Commissioner Heim requested an update on Key Largo Fisheries SIC. Mr. Mulick and Ms. Fazio advised that the District is evaluating water use data and will prepare an EDU recommendation for the Board.

ROUNDTABLE DISCUSSION (Q)

CSAP Satellite Collection Systems (Q-1) (Laydown)

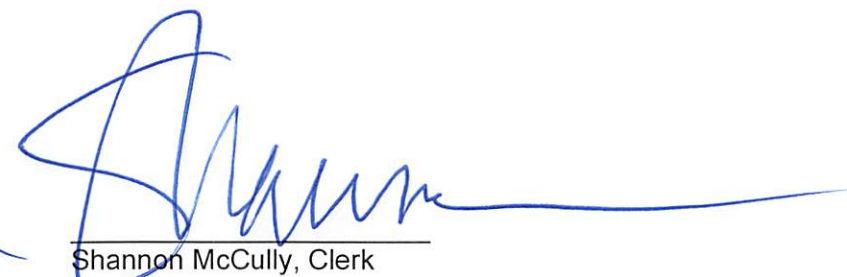
Commissioner Majeska requested more information on KLWTD's satellite collection systems procedures. Additional information will be brought to the Board.

ADJOURNMENT (R)

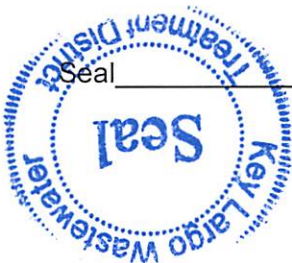
The meeting was adjourned at 6:21 p.m.



Nicolas Rodriguez, Chairman



Shannon McCully, Clerk



MEMORANDUM

To: Peter Rosasco, General Manager
From: Lexi Connor, Weiler Engineering
Date: September 2nd, 2025
Re: Florida Keys Area of Critical Concern & Resilient Florida Grant Summaries

KLWTD submitted applications for the Fiscal Year 2025–2026 funding cycle under two **Florida Department of Environmental Protection (FDEP)** programs: the Florida Keys Area of Critical State Concern Grant Program and the Resilient Florida Grant Program. The following summarizes the grant programs and projects submitted under each program.

Florida Keys Area of Critical State Concern (FKACSC)

The Florida Keys Area of Critical State Concern Grant Program is an FDEP funding program for local governments in the Florida Keys to advance projects that improve water quality and protect natural resources. Eligible work includes wastewater infrastructure, stormwater and canal restoration, eligible land acquisition, and other projects that safeguard water resources and fisheries.

1. WWTP Headworks, Screening, and Equalization Tank Upgrades

Installs a 1.0-MG CROM² influent equalization tank with fine-bubble diffusers and fully replaces headworks with fine screens and solids-handling system. The EQ tank buffers peak flows and evens out organic load, delivering a steady feed to the SBRs to prevent hydraulic shock and process upsets.

Funding:

- **Total Construction Cost:** \$11,523,215.00
- **Existing State Funds:** \$4,570,813.25 (LPA 0425)
- **FKACSC Request:** \$5,800,080.25
- **Proposed KLWTD Match:** \$1,152,321.50 (10% project cost)

Status:

- Design approx. 60% complete
- Design to be completed by December 2025
- Construction to begin July 2026
- Construction to be completed by July 2028

Benefits: Annual nutrient mass is computed as:

$$\text{Load} \left(\frac{\text{lbs}}{\text{yr}} \right) = \text{Permitted capacity (MGD)} \times 365 \times \text{Conc.} \left(\frac{\text{mg}}{\text{L}} \right) \times 8.34.$$

For the baseline, the AWT limits TN = 3 mg/L and TP = 1 mg/L are used; post-upgrade assumes a 10% concentration reduction (TN = 2.7 mg/L, TP = 0.9 mg/L) from stabilization from the EQ tank. Applying the formula at permitted capacity yields an estimated reduction of $\approx 3,150.64$ lbs/yr TN and $\approx 1,050.21$ lbs/yr TP.

2. Vacuum Tank Upgrades

Replaces original steel vacuum tanks with new corrosion-resistant, high strength, lighter weight, fiberglass reinforced plastic (FRP) tanks at each of the vacuum tanks. Upgrades foundations for flood resilience and integrates new valves, fittings, gaskets, and SCADA controls.

Funding:

- **Total Construction Cost:** \$12,370,312.50
- **Existing State Funds:** None
- **FKACSC Request:** \$11,133,281.25
- **Proposed KLWTD Match:** \$1,237,031.25 (10% project cost)

Status:

- Design approx. 30% complete
- Design to be completed by April 2026
- Construction to begin June 2026
- Construction to be completed by March 2027

Benefits: Avoided nutrient loading is estimated by converting a conservative share of yearly flow (1% of 2024 AADF) to pounds:

$$\text{Annual load} \left(\frac{\text{lbs}}{\text{yr}} \right) = \text{Flow (MGD)} \times \text{Prevented fraction} \times 365 \times \text{Conc.} \left(\frac{\text{mg}}{\text{L}} \right) \times 8.34$$

Using TN = 70 mg/L and TP = 12 mg/L gives $\approx 4,219$ lbs/yr of Total Nitrogen and ≈ 723 lbs/yr of Total Phosphorus avoided by restoring airtight integrity of the vacuum tanks.

3. Pipe Protection Project

Replace or rehabilitate ductile-iron process piping inside the plant: Cured in place pipe (CIPP) lining for larger lines, open-cut replacement of smaller mains with corrosion-resistant pipe (HDPE), plus new isolation valves, SCADA-integrated flow meters, and targeted cathodic protection in CIPP runs. The result is tighter, longer-lasting piping with better control and measurement, reducing leak and spill risk.

Funding:

- **Total Construction Cost:** \$2,401,285.49
- **Existing State Funds:** None
- **FKACSC Request:** \$2,161,156.94
- **Proposed KLWTD Match:** \$240,128.55 (10% project cost)

Status:

- Design approx. 30% complete
- Design to be completed by April 2026
- Construction to begin June 2026
- Construction to be completed by March 2027

Benefits: While nutrient reductions cannot be quantified, the project directly reduces risk of leaks and partial treatment events, protecting the WWTP's AWT performance. Benefits include safeguarding nearshore waters, preventing BOD/nutrient pulses, supporting seagrass and coral health, and avoiding economic losses from beach advisories or tourism impacts. Operationally, new valves/meters improve control and early detection of issues, reducing emergency costs and extending infrastructure life.

4. Enhanced Odor Management System

Modernizes odor control at six vacuum pump stations (A, D, E, G, I, J/K) by replacing indoor units with standardized outdoor dual activated-carbon vessels, relocating generators from inside to outdoors, upgrading to hurricane-rated enclosures, and deploying H₂S monitors.

Funding:

- **Total Construction Cost:** \$5,070,512.45
- **Existing State Funds:** \$953,966.45 (KG004)
- **FKACSC Request:** \$3,609,494.75
- **Proposed KLWTD Match:** \$507,051.24 (10% project cost)

Status:

- Design 100% complete, in construction
- Design completed April 2025
- Construction began April 2025
- Construction completed by March 2026

Benefits: Reduces nuisance odors, protects worker/public health, hardens critical assets, and improves system reliability during storms.

5. Power Conditioning, Electrical Upgrades, and Lighting Protection

Hardens WWTP electrical systems with automatic voltage regulators, surge suppression, lightning protection, and replacement of underground feeders with above-grade conduit.

Funding:

- **Total Construction Cost:** \$3,770,746.00
- **Existing State Funds:** \$3,131,450.00 (LPA0426)
- **FKACSC Request:** \$262,221.40
- **Proposed KLWTD Match:** \$377,074.60 (10% project cost)

Status:

- Design 100% complete, in construction
- Design completed February 2025

- Construction began February 2025
- Construction completed by July 2026.

Benefits: Prevents power-related upsets, reduces downtime/repair costs, strengthens storm resilience, and ensures consistent AWT compliance protecting nearshore waters.

Resilient Florida (Sea Level Rise)

The Resilient Florida Grant Program was created by the Florida Legislature to help communities prepare for the impacts of flooding, storm surge, and sea level rise. Administered by the FDEP, the program provides funding for projects that protect critical assets, strengthen infrastructure, and reduce risks to public health, the environment, and the economy. Eligible projects include wastewater and stormwater improvements, shoreline and habitat protection, and other resilience measures, with funding prioritized for cost-effective projects that address regionally significant assets and vulnerable communities.

1. KLWTD Influent Equalization System Mitigation & Resiliency Initiative

Installs a 1-million-gallon CROM² EQ tank and replaces the existing headworks. These improvements will stabilize flow, improve debris removal, and reduce chemical and energy use, resulting in more reliable treatment and lower operating costs.

Funding:

- **Total Cost (Construction + Engineering/CEI):** \$13,094,562.00
- **Existing State Funds:** \$4,570,813.25 (LPA 0425)
- **Resilient Florida Funding Request:** \$6,547,281.00
- **Required KLWTD Match:** \$6,547,281.00 (50% project cost)

Status: Design 60% complete; permitting is underway; construction July 2026–July 2028.

Benefits: Prevents hydraulic overloads and process upsets that threaten consistent AWT performance. The equalization tank and upgraded headworks safeguard nearshore waters by stabilizing flows, reducing the risk of bypasses, and preventing solids and nutrient pulses that can harm seagrass and coral habitats. Operationally, finer screening and improved solids handling reduce equipment wear, downtime, and emergency callouts, while steadier hydraulics lower chemical and energy use. These upgrades extend infrastructure life, cut operating costs, and help avoid economic losses tied to water quality advisories or service disruptions.

2. KLWTD Critical Systems Hardening & Mitigation Program

This is a \$15.96 million initiative that strengthens all eight of the District's critical wastewater facilities (the WWTP and seven vacuum stations) against flooding, sea level rise, and storm surge.

This initiative combines the two above-described **Vacuum Tank Replacements and Pipe Protection** projects, as well as adds **flood proofing panels, and electrical upgrades**.

In more detail, the proposed project includes the installation of flood barriers for the Operations Building and Vacuum Stations, the replacement of corroded steel vacuum tanks with corrosion-resistant FRP units at the Vacuum Stations, electrical upgrades such as relocation of the DCU-1 control panel and installation of SureVolt regulators and surge protection, and the upgrade of approximately 3,400 linear feet of corroded WWTP piping using cured in place pipe (CIPP) lining for larger pipe, and upgrading smaller diameter ductile iron sections with HDPE.

Funding:

- **Total Cost (Construction + Engineering/CEI):** \$15,957,588
- **Existing State Funds:** None
- **Resilient Florida Funding Request:** \$7,978,794
- **Required KLWTD Match:** \$7,978,794 (50% project cost)

Status: Design 30% complete; construction July 2026–July 2028.

Benefits: Protects eight critical wastewater facilities from flooding, prevents sewer overflows and leaks, reduces long-term maintenance and emergency repair costs, and ensures uninterrupted service that safeguards public health, nearshore waters, and the Florida Keys National Marine Sanctuary.

- (j) For Tampering Charges Refer to District Fee Schedule.
- (k) In cases of FKAA meter by-pass, or meter reversal, straight connection or other form of Tampering that results in a substantial reduction in the cost of service, the account of the customer shall be back billed based on the estimated amount of wastewater flow for which the District has not yet received payment. This estimate shall be based upon One hundred and fifty percent (150%) of the average water consumption during the previous six (6) Active Account months prior to the time such meter Tampering is found to have occurred, or in the event the customer does not have a history of six (6) active account months, one hundred and fifty percent (150%) of the average water consumption for a customer served by the District with a similar class of service during the most recent one (1) year period for which such figures are available :
- (l) The District may recover damages incurred as a result of Tampering, by any lawful means including, but not limited to, bringing a civil action in a court of competent jurisdiction for damages, including cost of suit and reasonable attorney fees.

Section 3.07 Inspection of Customer Installation.

- (a) All installations of wastewater facilities or changes therein are subject to inspection by the District to ensure that piping, equipment and other facilities have been installed in accordance with the District's Minimum Design and Construction Standards and Specifications.
- (b) The District has the right, but not the duty, to inspect the customer's installation prior to rendering service and from time to time thereafter to ascertain the customer's compliance with District rules and regulations, but the District assumes no responsibility whatsoever for any defects that are not detected by such inspection.

Section 3.08 Customer's Duty to Maintain.

- (a) The customer may not utilize any appliance or device which may adversely affect wastewater service. The District reserves the right to shut off wastewater service whenever any such apparatus or device is being used.
- (b) The customer's apparatus and equipment must be maintained in sound operating condition in accordance with standard practice, the rules and regulations of the District, and all other governmental regulations applicable thereto.
- (c) No changes in the customer's apparatus or equipment that materially affects the proper operation of the District's wastewater facilities may be made without the prior written consent of the District. The customer is liable for any damage resulting from a violation of this provision.
- (d) Violation of this subsection may result in shut off of service or any other action available to the District by law. The District may request declaratory relief; temporary or permanent equitable relief; imposition of fines, forfeiture, or other remedy provided by statute; or any combination of the foregoing. Refer to the District Fee Schedule.

Section 3.09 Customer Compliance with District Rules and Regulations.

- (a) The customer must comply with the District's rules and regulations as duly adopted or as they may subsequently be revised, or amended.
- (b) Failure to comply with the requirements of this subsection may result in shut off of service.