

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

Meeting Date:
April 2, 2019

Agenda Item Number: G-2

Agenda Item Type:
Information / Presentation

Agenda Item Scope:
Review / Discussion

Recommended Action:
Discussion

Department:
General Manager

Sponsor:
Peter Rosasco

Subject:
February 2019 Monthly Report

Summary of Discussion:

Department heads will present their section of the Monthly Report.

Reviewed / Approved

Financial Impact

Attachments

Operations: _____
Customer Service: _____
Finance: _____
District Counsel: _____
District Clerk: _____
Engineering: _____

\$

Funding Source:

Budgeted:
N/A

Monthly Report

Approved By: _____
General Manager

Date: 3-28-19



February 2019 Monthly Report



Key Largo Wastewater Treatment District

103355 Overseas Highway

Tel: (305)451-4019

Wastewater Plant Operations

The wastewater treatment plant processed an average of 1.88 million gallons of influent per day (MGD) and zero plant related odor complaints were received.

Reynolds construction is still onsite repairing the south chlorine contact chamber. After completed, work will begin on the north side. Solar panel structure materials arrived for the chlorine contact chamber.



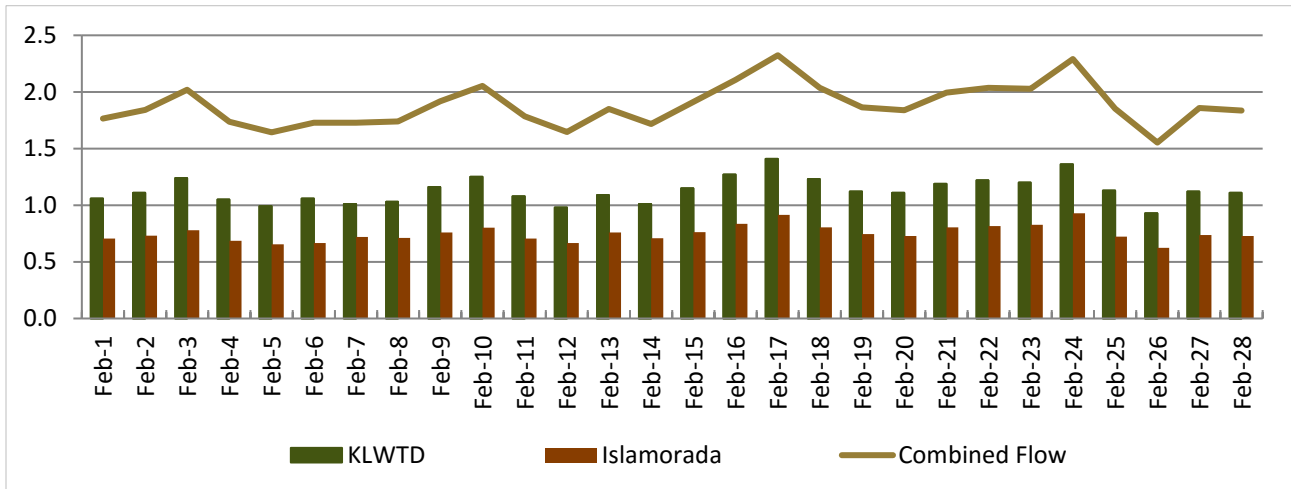
Effluent Quality Reports

Determines the quality of discharge from the wastewater treatment plant.

Effluent Quality Report	AWT Limit Annual Average	February 2019 Plant Performance
CBOD5 (Carbonaceous Biochemical Oxygen Demand)	5	1.0
TSS (Total Suspended Solids)	5	0.58
TN (Total Nitrogen)	3	1.21
TP (Total Phosphorous)	1	0.45

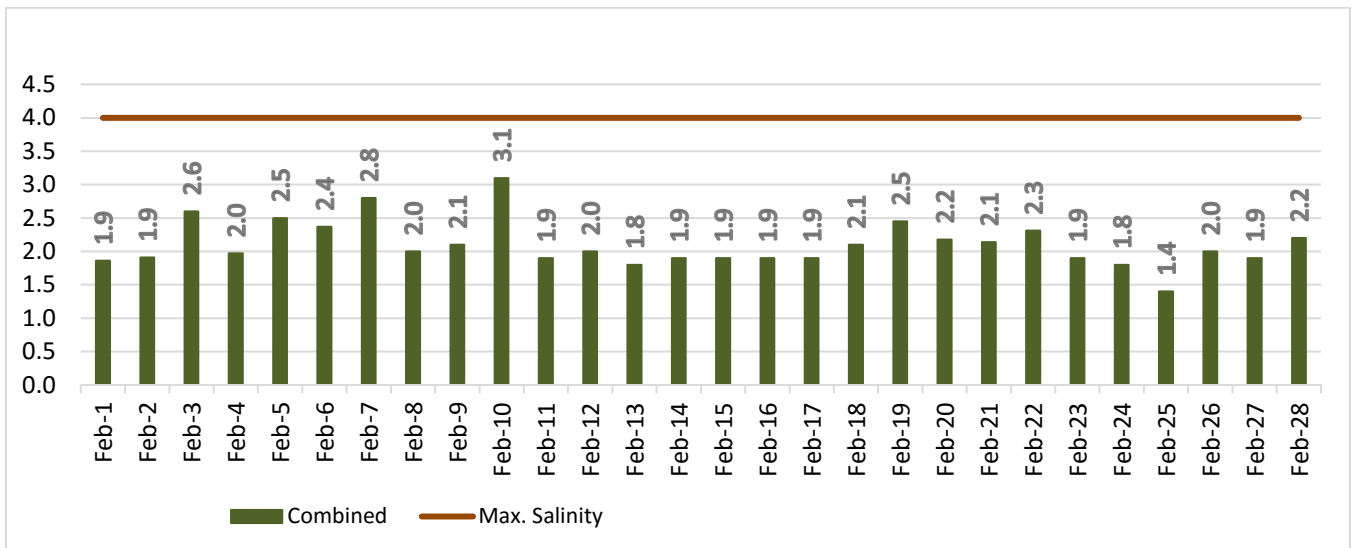
Current Flow (MGD)

The total flow of influent through the wastewater treatment plant each day.



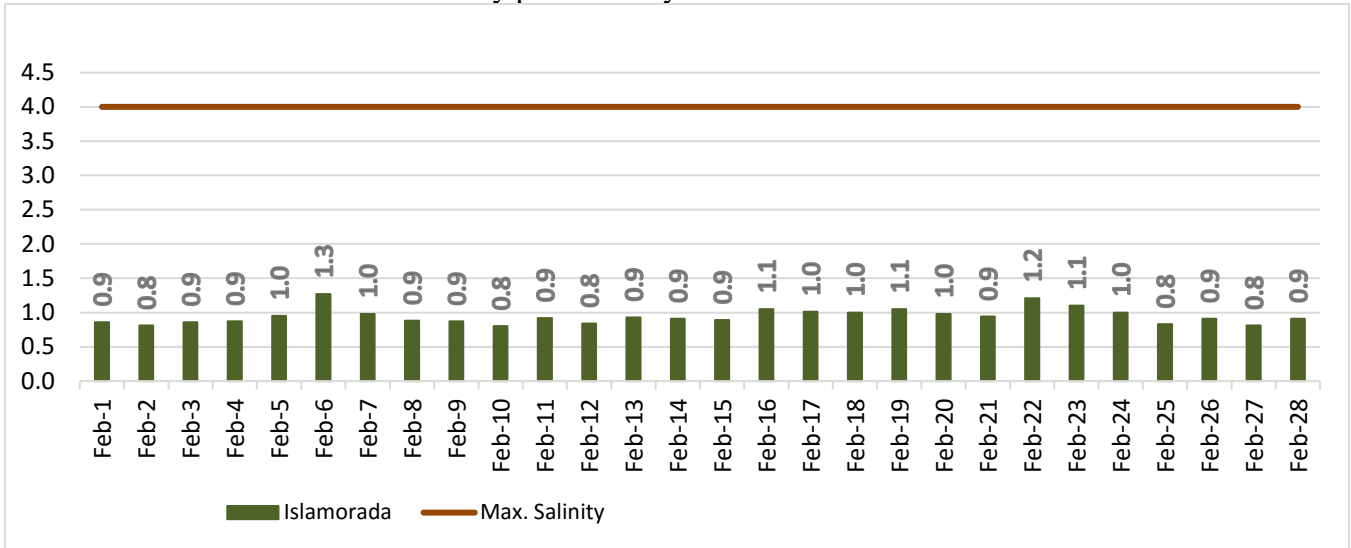
Composite Daily Peak Salinity (PPT)

The daily peak salinity for the current month.



Islamorada

Islamorada Daily Peak Salinity (PPT)
The daily peak salinity for the current month.



Average Daily Flow	Monthly Peak Salinity	Days over 4.0 PPT Salinity
0.751 Million Gallons per Day	1.3 Parts per Thousand	0

Wastewater Field Operations

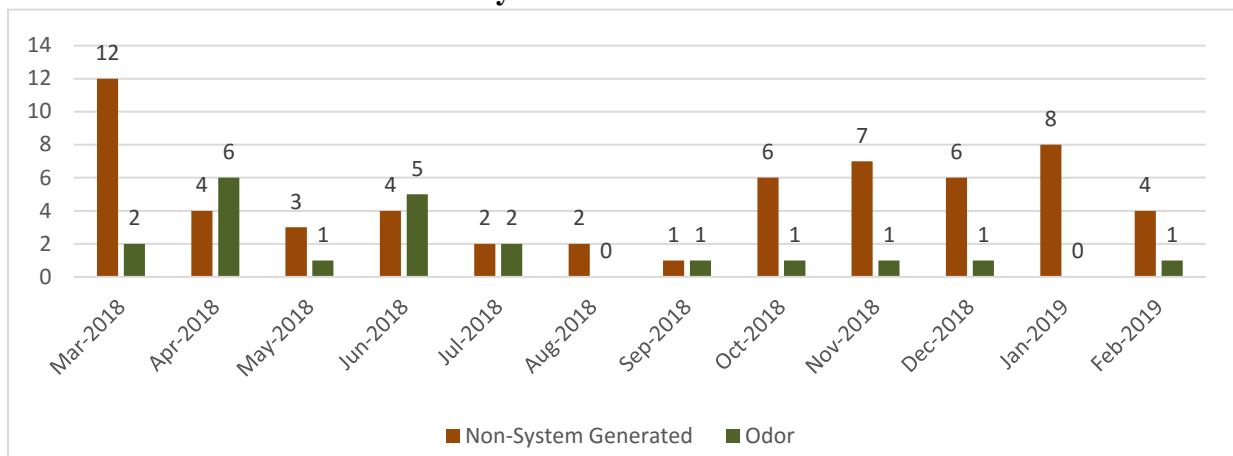
There was a total of 30 service calls for the current month. Of these, 29 were system generated, mostly by low vacuum detection at a vacuum station. These system generated service calls caused no damage and had no effect on the District’s customers. The problems were corrected quickly by the field staff. The remaining 5 service calls are as follows:

Date	Address	Incident	Response
February 6	1012 Snapper Lane	Homeowner called stating that their toilets were not flushing, and back flow preventer was backed up.	The 4" vacuum main was damaged on 2/5 by a contractor working on Snapper Lane. The backup was caused by debris from the damaged main. Crews cleared the line and made repairs.
February 7	146 S. Ocean Shores Drive	Homeowner noticed a stain in shower after returning from vacation. They called to confirm the system was working properly.	KLWTD's system was working properly. Homeowner issue.
February 7	220 Cuba Road	Homeowner called and stated that the box outside his home was damaged.	Was not a KLWTD's issue. Broken water meter box.
February 10	5 Ocean View Blvd.	Homeowner stated they had a back-up in the apartment downstairs.	KLWTD's system was working properly. Homeowner issue.

Odor Related Service Calls

Date	Address	Incident	Response
February 8	325 Calusa Street, Unit 91	Customer called about an odor coming from under the trailer.	Odor was due to a propane leak. Homeowner issue.

Non-System Generated Calls



Maintenance

Injection Well Pump Vibration Analysis Report

A vibration analysis helps to determine the condition of the bearings and balance of the pump and motor components. Measurements taken with a vibration meter will give an indication of the pump alignment and show any damage to the pump shaft and impeller.

Below is this year's report indicating that our injection well pumps are in good working order.

Location	Equipment	Test Date
Key Largo Wastewater Treatment Plant	Injection Well Field Pumps	03/20/2019

Test Conditions

Pump #	Runtime	Rpm	Hz	Load %
1	8361 HRS	1789	60	100
2	10181 HRS	1792	60	100



Injection well pump and test points

Injection Well Pump #	Test Point					
	1x	1y	2x	2y	3x	3y
1	0.09 IPS	0.09 IPS	0.20 IPS	0.19 IPS	0.29 IPS	0.27 IPS
2	0.05 IPS	0.06 IPS	0.09 IPS	0.09 IPS	0.12 IPS	0.14 IPS

Good	0 - .35 IPS
Low Alarm	.35 - .45 IPS
High Alarm	.45 - .55 IPS

Construction

Current Construction Projects

Project	Contract Amount	Contract Start	Contract Total Paid to Date	Contract Balance Remaining
Solar Arrays	\$366,600.00	7/31/18	\$180,300.00	\$186,300.00
<p>The Solar Arrays project includes solar panels over the disinfection basin and on the roof of the Operations Building. During the month of February, SALT resolved the issue with the inverter for the east half of the rooftop solar array and the entire rooftop array was producing electricity. The District hosted a solar kick-off celebration on February 28th with attendance by local residents, politicians and press. The final shop drawings for the aluminum framework for the array above the disinfection chamber were approved in February with delivery scheduled for March 6, 2019.</p>				
Capital Upgrades Reynolds Contract	\$1,115,955.78	8/13/18	\$482,831.70	\$633,124.08
Owner Direct Purchase Items (Original Contract)	\$218,472.90	N/A	\$177,832.40	\$40,640.50
Owner Direct Purchase of Screening Box	\$29,955.00	N/A	\$27,443.50	\$2,511.50
<p>Reynolds Construction continued working on bypass piping coating and on conduit replacement at headworks portion of the Capital Upgrades Project in February. They also installed the access ladder and railing for the bypass filter structure. The 4” process water piping was completed, with thrust blocks in place. One filter booster pump was replaced, and the piping header was modified. New conduit, power wiring and control wiring were run to all 4 booster pumps. Re-programming of the booster pumps is scheduled for March 2019.</p> <p>The Capital Upgrade project consists of four separate scopes of work that are described below.</p>				
Scope 1 Headworks Bypass Piping	Allocation of Reynolds Contract Price \$791,910.65	This project consists of 18” ductile iron pipe and fittings, electrically actuated 18” valves, replacement of corroded metallic conduit on the headworks and cleaning, concrete repairs and re-coating of the influent channels.		
Scope 2 Process Water Pumping System	Allocation of Reynolds Contract Price \$125,743.24	The process water pumping system consists of four variable speed water pumps to provide treated effluent for use as seal water, chemical mixing water, centrifuge wash water and general wash-down water around the plant. This system replaces a single pump system with bladder tanks.		

Project scope continued on next page.

Scope 3 Bridge to SBR #3	Allocation of Reynolds Contract Price \$26,399.93	The bridge to SBR #3 includes a walkway, handrails and support columns to bridge the gap between the 3 rd floor exterior walkway of the Operation Building and SBR #3. The bridge will allow for improved access to SBR #3.			
Scope 4 Filter Booster Pump Upgrades	Allocation of Reynolds Contract Price \$171,901.96	The filter booster pump upgrade includes removal of one 30 HP pump and replacement with a 14 HP pump, removal of the local control panel and replacement of all conduit and wiring between the pump station and the Operations Building. The project also includes re-programming to improve operator control of the pumping system.			
Disinfection Basin Repairs and Modifications	\$346,686.00	3/25/19	\$0.00	\$346,686.00	
The Disinfection Basin Repairs and Modifications project was awarded to Reynolds Construction. The Pre-Construction meeting was held on February 26th at the WWTP meeting room. The south side if the disinfection basin was taken off line on February 25th and Reynolds began power washing and abrasive blasting to remove the existing coatings.					

Upcoming Construction Projects

Project	Estimate	Status
Steel Storage Building	\$175,250.00	The Field Operations department has included a steel storage building in its capital budget for FY 19. The proposed building would be approximately 37' X 25' and would be tall enough to drive a forklift into. The building is proposed to be at the WWTP site adjacent to the Vacuum Station E building. It is anticipated that this item will be discussed in March 12th meeting and may be authorized by the Board to be advertised.
Fire Safety	\$737,297.00	The FY 2018-19 budget includes funding for fire detection for the vacuum pump stations and installation of clean agent fire suppression for the major electrical panels at the WWTP and vacuum stations. Since that time, chlorine leak detection and a mass notification system for the WWTP has been added. Fire detection for the Administration Building with clean agent suppression for the server room has also been added. Weiler Engineering worked on the scope of work, drawings and technical specifications through February. The item is scheduled to be brought to the Board for discussion at the March 26th meeting

IT

Active IT Projects

Project	Description
<p>Continuing Database Services RFQ</p>	<p>RFQ to develop, build and support database modules that will facilitate the District’s operations was advertised for proposals on May 9, 2018. Deadline to submit proposals was July 16, 2018. Three proposals were received and evaluated by a 5 person committee. There was a public meeting on August 28, 2018 to announce the results. This project was presented to the Board on October 2, 2018 and January 8, 2019.</p> <p>One vendor is currently being negotiated with by GM and IT Consultant.</p>
<p>KLWTD Website</p>	<p>Staff started looking for a vendor to redesign and rebuild the District’s website. The main focus of this project to make the website ADA compliant while not losing any functionality.</p> <p>This project was presented and approved by the Board in January. A contract with Link2City is being reviewed by IT Consultant and District attorney.</p>
<p>Server OS Refresh</p>	<p>The operating system on the District’s servers were changed from Red Hat Linux to Windows Server. This change was suggested by the IT Consultant and will enable the IT Department to better manage the internal work environment.</p> <p>The change was done on a weekend and had no impact on the users. It also allowed time to conduct the annual disaster recovery testing. A simulation of a complete loss situation was run, and the system was able to completely recover all data.</p>

Customer Service

Customer Service Call-Ins

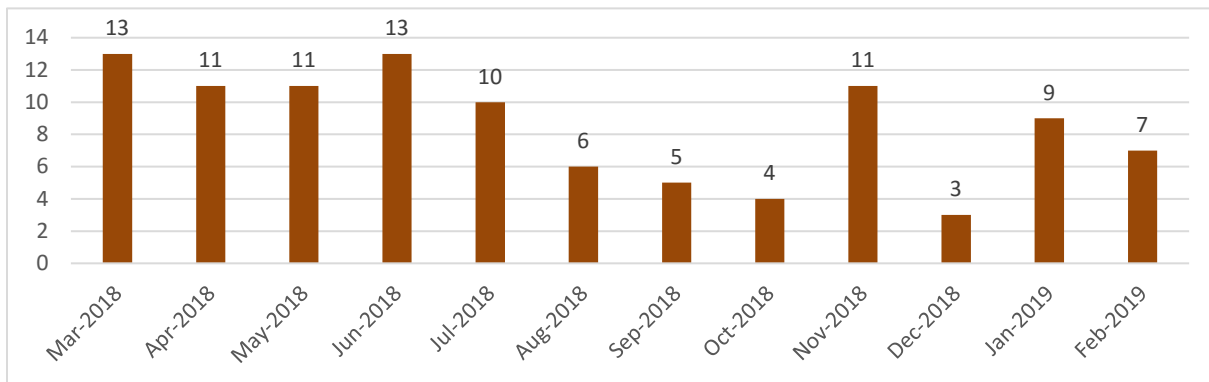
	Total
Approval to Proceed	15
Collections	9
Commercial Tie-In	1
Damage	1
Demo	1
Hydro Test	2
Locate	1
Odor	1
Tie-Ins (Calls)	9
Total	40

Code Enforcement

	February 2019	Current Total
Agenda	0	0
Grant	0	2
Deferred	1	2
In Contract	0	14
Final Notice	1	0
Door Hanger	0	0
Code Enforcement	0	43

*Code Enforcement files are taken to the Monroe County Code Enforcement Department the last week of the month.

Number of Tie-Ins



Budget & Finance

Current Debt Status

SRF Loan – KLNC01P	\$14,251,953.14
SRF Bonded Loan - KLNC 464010	\$6,445,146.43
BB&T 2013 Bond	\$6,164,775.05
BB&T 2014 Bond	\$6,165,786.54
Current Balance of all loans:	\$33,027,661.16

Cash Flow

	Deposits	Withdrawals
Wastewater Billing Deposits	\$559,749.47	
Assessment Revenue Received (Non-Ad Valorem & SDC Prepayments)	\$173,063.22	
Islamorada Revenue	\$97,803.45	
Interest Income	\$3,612.92	
District Expenditures		\$536,814.73
Payroll		\$101,509.56
Total	\$834,229.06	\$638,324.29

FKAA Wastewater Revenue Statistics

Date	Number of Customers Billed	\$ WW Rev. Received During Month	Date	Number of Customers Billed	\$ WW Rev. Received During Month
March 2017	9,469	\$770,909.62	March 2018	9,760 9094 Residential 666 Non-Res	\$841,530.30
April 2017	9,455	\$721,011.82	April 2018	9,792 9122 Residential 670 Non-Res	\$750,841.91
May 2017	9,479	\$707,089.63	May 2018	9,822 8974 Residential 848 Non-Res	\$716,326.84
June 2017	9,498	\$757,922.07	June 2018	9,785 8935 Residential 850 Non-Res	\$739,474.29
July 2017	9,494	\$715,129.80	July 2018	9,736 8888 Residential 848 Non-Res	\$725,237.60
Aug. 2017	9,511	\$710,629.16	Aug. 2018	9,744 8897 Residential 847 Non-Res	\$762,732.81
Sept. 2017	9,676	\$726,024.58	Sept. 2018	9,746 8901 Residential 845 Non-Res	\$708,046.38
Oct. 2017	9,817	\$687,892.06	Oct. 2018	9,740 8891 Residential 849 Non-Res	\$559,228.99
Nov. 2017	9,756 9087 Residential 669 Non-Res	\$679,991.13	Nov. 2018	9,765 8917 Residential 848 Non-Res	\$682,580.47
Dec. 2017	9,738 9071 Residential 667 Non-Res	\$690,237.59	Dec. 2018	9,751 8901 Residential 850 Non-Res	\$757,659.72
Jan. 2018	9,746 9075 Residential 671 Non-Res	\$700,383.90	Jan. 2019	9,782 8925 Residential 857 Non-Res	\$657,903.66
Feb. 2018	9,748 9082 Residential 666 Non-Res	\$731,836.88	Feb. 2019	Billing report not received as of 3/08/19	\$559,749.47