

City of Marco Island

Meeting Date: May 6, 2019
To: City Council

From: Jeffrey E. Poteet, General Manager- Water & Sewer

Through: David Harden, Interim City Manager

Re: Water and Sewer (W&S) Departmental Report

Both the City's drinking water and wastewater operations are in compliance with Florida Department of Environmental Protection (FDEP) regulations and all other regulatory entity requirements. The Water and Sewer (W&S) Department is operating within the approved budget.

Marco Shores Drinking Water Service Area - Temporary Disinfection Modification

The treatment process for the potable (drinking) water in Marco Shores will be changed temporarily from 4/12/19 through 5/3/19. The water will be disinfected with free chlorine rather than chlorine combined with ammonia (chloramines). This conversion to free chlorine (a stronger disinfectant) from chloramines allows the City to perform a water distribution system purge, as recommended by the Florida Department of Environmental Protection for water utilities using chloramines, as their primary disinfectant. This temporary change in disinfection does not cause adverse health effects. However, during this period you may experience a change in the taste, odor and/or color of the water due to the change in treatment.

Multi-Departmental Building

The City advertised the Request for Qualifications (RFQ) for the architectural design, permitting, and architectural services during construction of the proposed multi-departmental building to be located at the City's North water and wastewater treatment complex on E. Elkcam Cir. The City received four (4) qualification proposals from Architects for this project. The scoring committee convened on 3/14/19. The deputy city clerk tallied the scoring during the meeting. The architectural firm of Synalovski Romanik Saye received the highest score. The City negotiated a scope and fee for the project and will present the RFQ selection and architectural services contract to City Council for approval at the 5/6//19 City Council meeting.

NWTP Membrane Softening

The City advertised an RFQ for engineering design services for the replacement of the NWTP lime softening system with membrane softening. The membrane softening system will consist of new low-pressure reverse osmosis (LPRO) filtering racks to replace the lime clarifier tank, lime sludge press, sludge pumps, and lime thickening tank. This will eliminate the need to purchase lime and pay for the hauling and disposal of spent lime cake. The City received one RFQ submittal from Jacobs Engineering on 4/11/19. City staff will present the RFQ selection and professional services contract to City Council on 5/20/19.

Water and Sewer Relocations on Collier Blvd. to Accommodate FDOT (update)

This is an update from last month's report. The Florida Department of Transportation (FDOT) will resurface Collier Blvd. from North of the Judge SS Jolley bridge to South of Fiddler's Creek. The City's infrastructure conflicts within FDOT's proposed Collier Blvd improvements have been relocated. The final restoration work for this project is expected to be completed in early May. The FDOT resurfacing project will commence this summer.

Marco Shores Alternative Water and Sewer Improvements Project

The contractor completed the horizontal drilling operations for the water main and sanitary force main under the Marco River on 4/23/19. The drilling machine will now be moved to the Collier



Blvd right-of-way, north of Marco Island for directional drills of the new mains including a drill under the Capri Blvd intersection. No traffic disruptions are anticipated with the drilling operations. The contractor is completing the construction of the new 12" sanitary forcemain along Fairlawn Ct. and Waikiki Ct. Construction along 6th Ave will commence during the week of 4/29/19. 6th Ave. from Barfield Dr. to Yellowbird St. will be closed for construction from 4/29 through 5/24. The City, engineering consultant, and the contractor are evaluating options for connection of the Marco Shores and Isles of Capri sanitary forcemains to the new master pump station that is located adjacent to the Collier Blvd right-of-way approximately 700 ft. North of the Capri Blvd. intersection. The City had anticipated using an existing old raw water main

for this connection since the new master sanitary pump station is located on the site of the old raw water booster pump station, but the Contractor and Engineer could not locate the old main. Consequently, a new main will have to be constructed under Collier Blvd.



Presentation to SFWMD Big Cypress Basin (BCB) Board

The W&S Department presented the proposed Isles of Capri septic tank replacement project to the SFWMD Big Cypress Basin Board (BCB) on Thursday 4/25/19. The BCB invited the City to present potential projects for grant funding. The City of Naples and Collier County also presented

potential projects. The City of Naples presented similar septic а replacement project for funding. Collier County representatives were very interested in the City of Marco Island's proposed Isles of Capri septic tank replacement project and indicated possibilities of collaborating with the City to possibly combine the City's septic tank replacement project with a proposed potential Collier County drainage improvements project on Isles of Capri. There is \$700,000 planned in FY22 for this design



Isles of Capri – Sewer Service Area

Staff Recognition

James J. & Bonnie L. von Rinteln 821 Apple Court Marco Island, FL 34145 (239) 877-7173

APR 0 2 2019

Marco Island City Manager 50 Bald Eagle Drive Marco Island, FL 34145

2 April, 2019

Dear Mr. Harding,

I am writing to highlight the outstanding response we received from your Utilities Department with a recent sewer issue we had at our home on Apple Court. Late in the afternoon on Friday March 22*, our plumber informed us that the issue we had called him about was actually resulting from a sewer connection that belonged to the City. We contacted the City and despite the late hour on a Friday afternoon, a utilities person was at our home within 20 minutes.

Mr. Frank Clark quickly had a full team on-site, including equipment and was able to affect a temporary fix for the weekend, continued to checked on our situation over the weekend and was back first thing on Monday morning to complete the repair. We couldn't have asked for anything more.

Mr. Clark and his team were extremely professional and helpful throughout our emergency, taking extra time to ensure that our yard and sidewalk were safely marked while they were working on it, and was put back together before they departed.

Please pass along our gratitude to your Utilities Department

Sincerely

Jim & Bonnie von Rinteln 821 Apple Court

Girl Scout Tour

Girl Scout Troop 276 visited the City's North treatment plant complex on 3/22/19

From: Rebecca Anderson < rebecca.g. anderson@hotmail.com >

Sent: Monday, March 25, 2019 11:11 AM

To: Lori Rizzo < LRizzo@cityofmarcoisland.com >

Subject: Thank you

Thanks so much for the amazing opportunity for the girls to tour the water treatment plant on Marco Your staff was wonderful with our girls

To all at the Utility Dept you again for the Open House you gave and the very informative presentation. It was excellent and the tour of the plant was amazing. informative, and very very exciting especially to be standing at the kop of khose 9 did'ut realize hour dedicated and hour hard you all work to give us clean water and hour much that water has to go through before it reacher our homes. I realize how precious it is and not to be wasted

I at the Utility Dept Stis sad not all people think I just wanted to thank that way. Anyway this is sain for the Open House Just a small thankeyor for se and the very all the great work you do.

Live presentation. It It's really amazing.

You made such a difference, and it is so deeply appreciated.

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Thankyon so much I really enjoyed the Open House

Sinceroly Jewinfer Reilly

Water Service Interruptions											
with Boil Water Notice (BWN)											
	Number of	Number of									
	Service Calls	Customers									
	Resulting in a	Affected in	Large Interuptions								
Month	BWN	the Month	50 Customer or More								
Apr-18	2	43	1 Condo-20 Units								
May-18	3	167	1 Condo-30 Units								
June-18	7	310	2 Condos-196 Units								
July-18	6	131	3 Condos-57 Units								
Aug-18	4	115	2 Condos-74 Units								
Sept-18	4	432	1 Condo-256 Units								
Oct-18	6	287	1 Condo-120 Units								
Nov-18	2	44	0 Condo								
Dec-18	2	69	1 Condo								
Jan-19	3	87	1 Condo								
Feb-19	4	70	1 Condo-Owners Request								
Mar-19	4	1023	All Mainsail and 1 Condo-988 Units								



		Troatm	ont Di	ant D	ata							
Treatment Plant Data												
S .						ain Fall for Time Period 2.10 Inches						
E	nding Date:	3/31/2019										
	/	Aquifer Storage & R	ecovery			Average Daily Flow (ADF) ir						
	ASR	- Injection Avg. Daily Flow	ection Avg. Daily Flow 0.00			Million Gallons						
ASR - Recovery Avg. Daily			3.43	MGD		Million Gallons per Day (MGD)						
Marco Island Drinking Water												
Mar-19					Max Day	Max Day	Flow					
		Combined Consumer ADF	F 9.41 MGD		3/27/2019	11.82	MGD					
		NWTP Consumer ADF	3.76 MGD		3/27/2019	5.39	MGD					
	SWTP Consumer ADF			MGD	3/13/2019	6.85	MGD					
Finished Water Testing												
Minimum Chlorine Residual 3.10 mg/L												
		Maximum	Minimum			Maximum Minimu						
Turb	idity	0.06	0.03	NTU	Chlorides	142	120	mg/L				
Total Disso	lved Solids	303.00	245.00	mg/L	Color	10	4	mg/L				
P-Alka	alinity	6.00	3.00	mg/L	Phosphate	7	0.44	mg/L				
M-Alka	alinity	37.00	33.00	mg/L	Ammonia	1.05	0.18	mg/L				
Cal-Hardness		125.00	84.00	mg/L	Aluminum	0.12	0.02	mg/L				
Total Hardness		150.00	110.00	mg/L	рН	8.91	8.59	SU				
Mar-19 Marco Shores Drinking Water Purchase												
Mo		nthly Flow - MGD		С	L2 Residual -	Minimum	2.1	mg/L				
ADF	Total Flow	Monthly Max Da	ıy									
0.205	6.4	3/14/2019	0.301									
Mar-19 Wastewater - RWPF												
<u>Average Flow</u>			Monthly N		Monthly Testing							
Influent	2.67		3/27/2019				Effluent					
Reuse	2.53		3/29/2019	3.12	BOD	231.3		mg/L				
Deep Well	0.372		3/19/2019	1.608		249.3	0.6 U	mg/L				
Mar-19		Waste	water - Ma	arco Sho	res WWT	Р						
<u>Average Flow</u>			Monthly f	Max Day	Monthly Testing							
Influent 0.128 MGD		3/23/2019	0.160		Influent							
					BOD	202		mg/L				
					TSS	306.5	1.80	mg/L				