



# City of Marco Island

Meeting Date: May 3, 2021  
To: City Council  
From: Jeffrey E. Poteet, General Manager- Water & Sewer  
Through: Mike McNeas, City Manager  
Re: Water and Sewer (W&S) Departmental Report

Both the City's drinking water and wastewater operations follow 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.

## Yellowbird Street Water and Sewer Reconstruction

The Contractor continues working on the sewer lateral lining. The installation of the air release valves have been completed, and all clean outs have been located and replaced. The contractor will continue installing the manhole chimney seals upon completing the coating. This project is ahead of schedule and is within the approved budget.



## Goldenrod Bridge Water Main Replacement

On 4/5/21, City Council approved the award of contract for replacement of the existing corroded 6-inch diameter steel water main attached to the Goldenrod Bridge that was installed in the mid 1980's. The City issued a purchase order to the contractor, and the pre-construction meeting is scheduled for the second week of May.



### Acidification of Brackish Groundwater Wells No.14 and No.19.

On 4/5/21, City Council approved the award of contract to treat two brackish water production wells (#14 and #19) with acid to decalcify the walls of the well. The contract has been fully executed, and the project will commence in May.



### Corrosion Inhibition Program

The W&S Department has millions of dollars' worth of structures located on four treatment plant sites and various other locations throughout the City's drinking water and wastewater service areas. These structures include office buildings, warehouse structures, modular buildings, pipes, motor housings, valves, tanks, pumps, fire hydrants, backflow preventers, meters, wellhead assemblies, etc. All these structures must be maintained, painted and/or coated to protect them against the elements. Failure to provide this protection will decrease the life span of these structures. Funding these repairs and improvements is in the W&S Capital Improvement Program (CIP)/Corrosion Inhibition Program. Maintaining the City's water and sewer infrastructure is an everyday ongoing process.

Two projects have been completed recently at the Reclaimed Water Production Facility (RWPF):

#### MBR Bridge Crane



#### Reclaimed Water Transfer Pumps



Water Service Interruptions with Boil Water Notice (BWN)			
Month	Number of Service Calls Resulting in a BWN	Total Number of Customers Affected in the Month	Large Interruptions 50 Customer or More
June-19	11	853	2 Condos-605 Units
July-19	1	132	1 Condo-132 Units
Aug-19	4	559	1 Hotel-350 Rms-Requested
Sept-19	6	305	2 Condos-167 Units
Oct-19	4	230	1 Condo-125 Units
Nov-19	5	123	1 Condo-42 Units
Dec-19	4	128	2 Condos--17 Units
Jan-20	7	379	2 Condos-66 Units-21 Commercial
Feb-20	1	14	No Condos
Mar-20	2	76	1 Condo-57 Units
April-20	2	75	1 Condo-57 Units
May-20	2	19	



## Treatment Plant Data

Starting Date: **2/1/2021**

Rain Fall for Time Period **4.40** Inches

Ending Date: **2/28/2021**

Average Daily Flow (ADF)

### Aquifer Storage & Recovery

ASR - Injection Avg. Daily Flow **0.00** MGD

Feb-21

ASR - Recovery Avg. Daily Flow **0.84** MGD

Million Gallons per Day (MGD)

"U" Undetected - results below detection limit

### Marco Island Drinking Water

		Max Day	Max Day	Flow
Combined Consumer ADF	<b>8.97</b> MGD	2/27/2021	<b>10.63</b>	MGD
NWTP Consumer ADF	<b>3.91</b> MGD	2/25/2021	<b>5.16</b>	MGD
SWTP Consumer ADF	<b>5.07</b> MGD	2/27/2021	<b>6.29</b>	MGD

### Finished Water Testing

Minimum Chlorine Residual **3.30** mg/L

	Maximum	Minimum		Maximum	Minimum
Turbidity	<b>0.01</b>	<b>0.01</b>	NTU	<b>132</b>	<b>96</b> mg/L
Total Dissolved Solids	<b>328.00</b>	<b>293.00</b>	mg/L	<b>8</b>	<b>5</b> mg/L
P-Alkalinity	<b>8.00</b>	<b>3.00</b>	mg/L	Phosphate	<b>1.15</b> <b>0.7</b> mg/L
M-Alkalinity	<b>74.00</b>	<b>30.00</b>	mg/L	Ammonia	<b>0.74</b> <b>0.61</b> mg/L
Cal-Hardness	<b>124.00</b>	<b>84.00</b>	mg/L	Aluminum	<b>0.13</b> <b>0.05</b> mg/L
Total Hardness	<b>154.00</b>	<b>114.00</b>	mg/L	pH	<b>8.94</b> <b>8.67</b> SU

Feb-21

### Wastewater - RWPF

	Average Flow		Monthly Max Day		Monthly Testing		
Influent	<b>2.61</b>	MGD	2/15/2021	<b>3.01</b>	Influent	Effluent	
Reuse	<b>2.29</b>	MGD	2/27/2021	<b>2.9</b>	BOD	<b>231</b>	<b>1.50</b> mg/L
Deep Well	<b>0.453</b>	MGD	2/16/2021	<b>1.538</b>	TSS	<b>186.5</b>	<b>0.6 U</b> mg/L
					NO3	<b>NA</b>	<b>3.96</b> mg/L