



City of Marco Island

Meeting Date: August 17, 2020
To: City Council
From: Jeffrey E. Poteet, General Manager- Water & Sewer
Through: Mike McNees, 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.

Yellowbird Street Roadway and Utility Reconstruction Project

The contractor mobilized to the project site on July 27 and broke ground on July 29. This project will be completed in three phases. Phase 1 (pictured) is taking place from Bald Eagle to Echo Circle. Construction of Phase 1 will continue into November. Phase 2 will begin upon the completion of phase 1, which will take place from Echo Circle (south) to Fruitland Ave. Phase 3 is expected to begin in March and will take place from Fruitland Avenue to North Collier Blvd. Signs redirecting traffic are in place and for the duration of this construction project, Yellowbird Rd. will be opened for local traffic. The mail and garbage services will not be disrupted during the construction. The contractor installed the silt fence around the temporary use vacant lot. The contractor implemented the erosion control plan around the stormwater structures. The contractor obtained the dewatering permit and installed the well points on each side of Bali Ct. The contractor is currently installing the proposed underground 8-inch water main.



Purchase of 60 Standby Generators

On 7/20, City Council denied the bid protest filed by the second lowest bidder and approved preparation of contract documents to award the bid to the low bidder. Approval of the contract is scheduled for the 8/17 City Council meeting.

Marco Shores Properties

The appraiser for the Marco Shores property is in the process of finalizing the appraisal reports.

Source Water Generator

The vendor is on schedule to deliver 60% design documents mid-August for the source water generator.

SWTP Electric Switchgear Construction

This project is scheduled to be advertised for bid mid-October. Staff is currently preparing the bid package.

West High Service Pump Station Replacement Construction

Design is complete. This project is dependent on infrastructure being constructed in the SWTP Electric Switchgear project. Therefore, this project will go out to bid in 2021, after construction of the SWTP Electric Switchgear Construction is underway.

Corrosion Inhibition Program

The corrosion inhibition program consists of identifying existing infrastructure that is corroded/worn and needs to be re-coated to protect the asset. The North Water Treatment Plant bulk chemical storage containment area and the Reclaimed Water Production Facility diesel storage tank containment area were corroded. Work on both is nearly complete.



Before



After

Source Water CO₂ Tank Canopy

The Source Water Facility CO₂ tank canopy was damaged during Hurricane Irma. The contractor is designing the new canopy and will be submitting the permit application to Collier County in the next couple of weeks. They expect the permit process will go smoothly and will be able to install the canopy mid-September.

Reject Pond Cleaning

This project will require a public bid. Staff is in the process of preparing the bid package.

RWPF Bleach Roof Structure Project

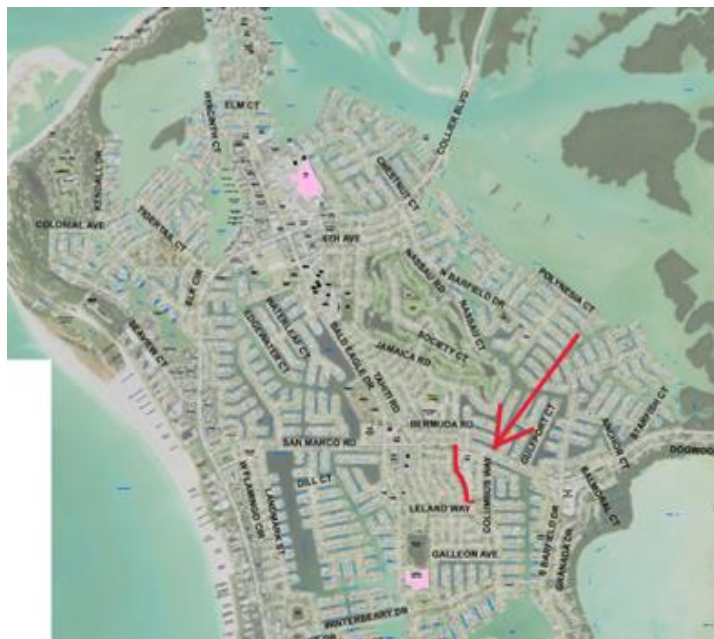
The construction is in progress. The contractor installed the metal columns, beams, and trusses. The contractor is currently installing the panel concrete roof deck. Once the roof deck is installed, then the contractor will continue with the aluminum roofing and coating system. The original bleach structure design was modified to accommodate two 4" x 4" steel angles on each side of the column with gusset plate to weld together in the top. This modification was done to increase its durability under extreme wind loads. This project is on schedule to be completed in October and is within budget.



Grease Damage Prevention Program

The City's Grease Damage Prevention (GDP) Program's ordinance requires "food service facilities" (FSF) to submit renewals for the annual grease trap permit from 8/1/20 to 11/1/20. There are 100 active (FSF) operating within the Water and Sewer district, which includes Isle of Capri and Marco Shores. There is no fee for the GDP permit if it is submitted by the deadline of 11/1/20.

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
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	
Dec-19	4	128	
Jan-20	7	379	2 Condos 66 Units-21 Commerical
Feb-20	1	14	
March-20	2	76	1 Condo-57 Units
April-20	2	75	1 Condo-57 Units
May-20	2	19	
June-20	2	39	



Treatment Plant Data

Starting Date: **6/1/2020**

Rain Fall for Time Period **10.90** Inches

Ending Date: **6/30/2020**

Aquifer Storage & Recovery

ASR - Injection Avg. Daily Flow **0.00** MGD Jun-20
 ASR - Recovery Avg. Daily Flow **2.66** MGD

Average Daily Flow (ADF) in
 Million Gallons
 Million Gallons per Day (MGD)

Marco Island Drinking Water

		Max Day	Max Day	Flow
Combined Consumer ADF	7.12 MGD	6/29/2020	9.60	MGD
NWTP Consumer ADF	3.28 MGD	6/25/2020	4.11	MGD
SWTP Consumer ADF	3.84 MGD	6/29/2020	5.88	MGD

Finished Water Testing

Minimum Chlorine Residual **3.30** mg/L

	Maximum	Minimum		Maximum	Minimum	
Turbidity	0.02	0.01	NTU	Chlorides	152	128 mg/L
Total Dissolved Solids	323.00	281.00	mg/L	Color	6	2 mg/L
P-Alkalinity	8.00	3.00	mg/L	Phosphate	60	0.42 mg/L
M-Alkalinity	50.00	34.00	mg/L	Ammonia	0.79	0.64 mg/L
Cal-Hardness	108.00	76.00	mg/L	Aluminum	0.07	0.01 mg/L
Total Hardness	138.00	106.00	mg/L	pH	8.89	8.63 SU

Jun-20

Wastewater - RWPF

Average Flow		Monthly Max Day		Monthly Testing		
				Influent	Effluent	
Influent	2.45 MGD	6/2/2020	3.756	BOD	119.8	2.00 mg/L
Reuse	1.58 MGD	6/29/2020	2.68	TSS	115.8	0.6 U mg/L
Deep Well	1.054 MGD	6/19/2020	2.01	NO3	NA	7.04 mg/L