



City of Marco Island

Meeting Date: April 5, 2021
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 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 Project (Water and Sewer Reconstruction Component)

The installation of the water meters and abandonment of the 6-inch force main via grouting is completed. The Contractor continues working on the sewer lateral repairs, structural pipe lining, and cleanout replacements. Next, the structural liners will be applied to the sanitary manholes and the manhole covers will be adjusted upon completion of the lateral repairs and pipe lining. This project is on schedule to be completed in August and the water and sewer components are within the approved construction budget.



SWTP Electrical Improvements

The existing South Water Treatment Plant (SWTP) power system includes multiple transformers and an emergency generator that is designed to feed both the water treatment plant and supply power to the outside power grid for load shedding purposes. The antiquated system that is no longer needed for load shedding has proved to be unreliable and was at a point of failure during hurricane Irma. The City contracted with a consultant to evaluate the existing components and determined the items that need to be replaced as well as items that can be eliminated. The consultant has completed the engineering design documents for the electrical improvements. The project is slated to go out for bidding in April. Recommendation for award of the construction contract will be presented to City Council in May.



Precautionary Boil Water Notice Overview

Boil water notices (BWN) are common in Southwest Florida, caused by routine maintenance, water main breaks, construction mistakes, disruptions at the water treatment plant and natural disasters like floods and hurricanes. Anytime the pressure in the water lines that transport potable water falls below 20 pounds per square inch, a boil water notice is issued as a precaution, even when contamination is unlikely. The typical notice is issued as a precaution until water samples can be collected and analyzed. Any loss in water pressure creates the possibility of harmful bacteria entering the lines. Until laboratory

tests are completed to confirm the water has not been contaminated, the boil water notice remains in effect.

The City is required to use one form of the following notifications to inform our consumers of a precautionary BWN: hand/direct delivery, radio, television, and posting in conspicuous locations. Along with door tag notification, the City alerts our consumers with twitter, the City website (<https://marco.maps.arcgis.com/home/webmap/viewer.html?webmap=f6a2b67649f34c45833f4c359aabf232>) and the media is notified via email. For large areas or mandatory BWN, the City will use electronic messaging boards, Code Red (only goes to those that are signed up), television and radio. When a condominium complex is under a BWN, the condominium manager is notified and a BWN is put in common areas of the complex affected.

A BWN means tap water should not be used for drinking, cooking, or ice-making until tests verify the water is safe. Tests typically take 48 hours. In the meantime, any tap water used for drinking or in anything that humans and animals ingest, should be vigorously boiled for at least one full minute. The boiling kills any microorganisms that may be present. Remember the BWN applies to everything made from this water such as ice, juice mixes, coffee, and other beverages. Also, the response to BWN frequently asked questions can be found on the City Website (<https://www.cityofmarcoisland.com/watersewer/page/boil-water-notice-faqs>)

MARCO ISLAND UTILITIES
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Marco Island, Florida 34145
(239) 394-3880
WWW.CITYOFMARCOISLAND.COM

**IMPORTANT!!
PRECAUTIONARY BOIL
WATER NOTICE**

A Precautionary boil water notice is being issued due to the loss of pressure in the distribution systems. Due to this loss of pressure in the distribution system, the bacteriological quality of water is questionable.

Accordingly, we are recommending that all water used for consumption and cooking purposes be boiled until further notice. Please follow the instructions on the back of this card.

Marco Island Water & Sewer Department will be flushing the affected lines and will collect two consecutive days of bacteriological samples as soon as all flushing and disinfection is completed. This is a precautionary measure to ensure that the water meets all safe drinking water standards.

This notice will remain in effect until satisfactory bacteriological samples are received, and your door will be tagged with a resending notice.

For additional information feel free to view our Website - WWW.CityofMarcoisland.com - Boil Water Info - Frequently Asked Questions, call (239) 394-3880, or follow us on Twitter @CityofMarcoISL

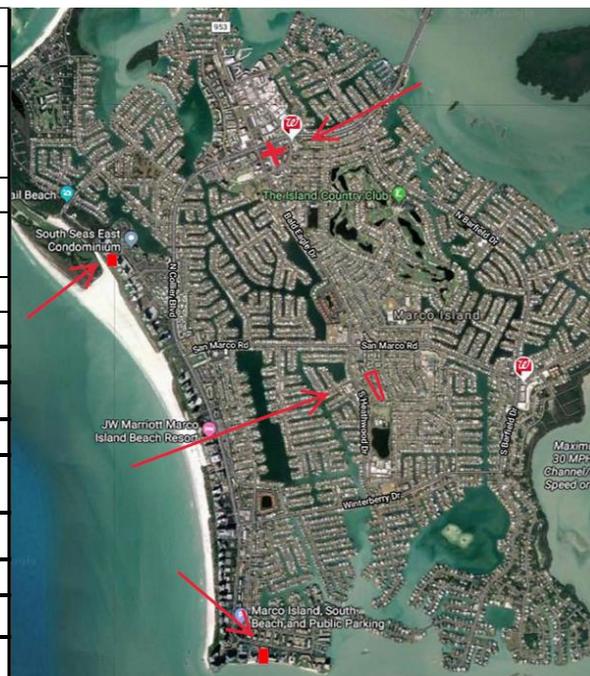
BOIL WATER INSTRUCTIONS

- 1 Run water from faucets for several seconds to flush any sediment or other contaminants from the plumbing.
- 2 Boil water for a minimum of one minute before use for food preparation or drinking until notified not to do so.
- 3 Do not add bleach, chlorine, or any other substances as a disinfectant to water in an effort to make it drinkable as this may be extremely hazardous to your health. The most effective means to insure your safety is to boil water.
- 4 Apply these procedures until notified not to do so. You can return to normal water use when notified.

For additional information feel free to view our Website - WWW.CityofMarcoisland.com, call (239) 394-3880, or follow us on Twitter @CityofMarcoISL

If you accidentally drink tap water under a BWN, do not panic – the chances of becoming ill are slight. See your doctor if you experience diarrhea, nausea, vomiting or abdominal cramps, but illnesses caused by waterborne germs usually are not serious.

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
March-20	2	76	1 Condo-57 Units
April-20	2	75	1 Condo-57 Units
May-20	2	19	
June-20	2	39	
July-20	2	57	
Aug-20	4	216	Jamaica/Echo area
Sept-20	9	236	Yellowbird-60
Oct-20	6	329	1 Condo-136 units and Mendel Crt-63
Nov-20	2	104	1 Condo - 80 Units
Dec-20	4	135	North Collier-80
Jan-21	3	203	Mainsail-100
Feb-21	4	358	2 Condos-333 Units



Treatment Plant Data

Starting Date: **1/1/2021**
 Ending Date: **1/31/2021**

Rain Fall for Time Period **0.60** Inches

Aquifer Storage & Recovery	Average Daily Flow (ADF)
ASR - Injection Avg. Daily Flow 0.00 MGD	Jan-21 Million Gallons per Day (MGD) "U" Undetected - results below detection limit
ASR - Recovery Avg. Daily Flow 0.00 MGD	

Marco Island Drinking Water			
	Max Day	Max Day	Flow
Combined Consumer ADF	8.77	1/2/2021	10.15 MGD
NWTP Consumer ADF	3.88	1/11/2021	4.35 MGD
SWTP Consumer ADF	4.89	1/2/2021	6.12 MGD

Finished Water Testing						
Minimum Chlorine Residual		3.30 mg/L				
	Maximum	Minimum		Maximum	Minimum	
Turbidity	0.01	0.01	NTU	Chlorides	136	104 mg/L
Total Dissolved Solids	302.00	292.00	mg/L	Color	9	4 mg/L
P-Alkalinity	6.00	0.00	mg/L	Phosphate	0.85	0.68 mg/L
M-Alkalinity	44.00	32.00	mg/L	Ammonia	0.72	0.6 mg/L
Cal-Hardness	102.00	82.00	mg/L	Aluminum	0.69	0.06 mg/L
Total Hardness	132.00	112.00	mg/L	pH	8.87	8 SU

Jan-21 Wastewater - RWPF						
Average Flow		Monthly Max Day		Monthly Testing		
Influent	2.41 MGD	1/1/2021	3.00	Influent	Effluent	
Reuse	2.13 MGD	1/6/2021	2.66	BOD	198.8	1.75 mg/L
Deep Well	0.427 MGD	1/1/2021	1.421	TSS	177.5	0.6 U mg/L
				NO3	NA	5.94 mg/L