

Si Ud. es residente de la Ciudad de Palmetto y tiene alguna pregunta concerniente a este reporte ó a la calidad del agua potable por favor llamenos al 723-4580. Asistencia en Español esta disponible Lunes a Viernes de 7:00 am a 4:00 pm. If you live in the City of Palmetto and have any questions regarding this report or your drinking water, please call 723-4580. Assistance in Spanish is available Monday thru Friday, 7:00 am to 4:00 pm.

**Get Involved:** Please get involved with discussions regarding drinking water quality. The Manatee County Board of County Commissioners welcomes written comments or public input at regularly scheduled Board Meetings concerning issues related to drinking water. Agenda information can be obtained on the Manatee County website (http://www.mymanatee.org) or by calling 941-745-3724.

**Attention Property Managers:** If you are a property owner or manager, please provide this water quality report to your tenants. This report may be photocopied or posted in a prominent location at your facility. More copies are available by calling 941-746-3020.

**The Bottom Line:** Last year, as in years past, Manatee County met all EPA and State drinking water health standards. The Manatee County Water Purification Plant uses what is known as the multiple barrier approach to ensure the safety of the water. This approach includes source protection, optimized particle removal at the purification plant and appropriate disinfection.

2017
DRINKING
WATER QUALITY
SUMMARY

The City of Palmetto purchases its water from Manatee County and distributes it through our distribution system to the residents of Palmetto.

The City of Palmetto Public Works Department is committed to maintaining our distribution system, water service and high water quality on a 24 hour basis. Your comments or questions are always welcome. The Palmetto City Commissioners or Public Works Department may be accessed at www.palmettofl.org. You may also reach Palmetto City Hall by phone at 723-4570, or Palmetto Public Works at 723-4580.



# **CITY OF PALMETTO Public Works Department**

# 2017 Drinking Water Quality Summary

Manatee County Utilities Department makes a commitment daily to provide the highest quality drinking water to the residents of Manatee County, Sarasota County and cities served. This report reflects on that commitment and represents a summary of the drinking water quality during 2017.

## **Protecting Manatee County's Water Sources...**

Drinking water for the customers of Manatee County Utilities Department is a blend of purified groundwater and purified surface water. In 2017, an average of 16.14 million gallons per day of deep ground water and 24.46 million gallons per day of surface water was used.

The groundwater is pumped from the Floridan Aquifer from seven, 1200-foot deep wells located in eastern Manatee County. This water is pumped through a 36-inch pipe approximately 13 miles to the Purification Plant. Surface water is taken from the Lake Manatee Reservoir located in central Manatee County.

In 2017 the Florida Department of Environmental Protection (FDEP) performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells or surface water intakes. There are twelve potential sources of contamination identified for the Manatee County Water Purification Plant with susceptibility levels of low and moderate. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp or they can be obtained from the Manatee County Water Purification Plant at 941-746-3020.

The County has taken stringent measures to protect these water sources. In the late 1980s Manatee County voters approved the purchase of 20,500 acres of the 82,000 acre watershed area, which drains into and includes the Reservoir and Wellfield. County and State agencies have continued to purchase additional watershed acreage, and today approximately 35,000 acres are in public ownership. This ownership ensures that activities detrimental to water quality or quantity will not occur on these public lands.

#### **Health And Safety Standards...**

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- A. **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife..
- B. **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- C. **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

- D. **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- E. **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.
  - In order to ensure that tap water is safe to drink, EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

### **How Your Water is Purified...**

The Manatee County Water Purification Plant, located on the shore of Lake Manatee, purifies both groundwater and surface water. The groundwater is purified by aeration, lime-softening and filtration. These processes remove odor, a portion of the hardness, and undesirable elements such as suspended matter and microbiological organisms.

The surface water is purified by carbon adsorption, coagulation, sedimentation and filtration. These processes remove odor, color, and undesirable elements such as suspended matter and microbiological organisms. The filtered water from the two sources is then combined. The combined water is further enhanced before leaving the plant.

The water is disinfected to destroy microbes and provide protection against microbial regrowth in the distribution system and your plumbing. The water is also made less corrosive, thus prolonging your home plumbing and fixtures. Natural fluoride levels are slightly increased to optimal levels as a public health measure to help develop decay resistant teeth and strong bones.

The purification plant is staffed with dedicated, professionally trained, State certified operational, laboratory and maintenance personnel. This staff operates and maintains the advanced water purification facility as well as monitors and researches water quality issues.

# Find Out The Facts...

Concerns about drinking water quality have caused many residents to use bottled water or to install home treatment devices. Be sure to learn about the quality of the alternate water or the expected water quality from home treatment devices. If you need help in understanding water quality issues, or have questions about this report or have a water quality concern, please give us a call at 941-746-3020.

Additional information can be found on the Manatee County website (http://www.mymanatee.org/water). Just click on the "Water Quality Report" link.

														THE CITY O
					٨	MICROBIOLOGICAL								
Contaminant and Unit of Measurement	Dates of Sampling MCL Vic		olation Y/N	Highest Month	/ Percentage	e MCLG		MCL				Likely	Source of Contamination	PLMETIC
Total Coliform Bacteria	01/17-12/17	01/17-12/17		19/		0	>5% <sup>A</sup>			Naturally present in the		present in the environmen	t	
Contaminant and Unit of Measurement	Dates of Sampling MCL Vio		olation Y/N	ation Y/N Total Number of Positive for the Year		ples MCLG		MCL			Likely Source of Contamination			
Fecal Coliform and E. coli in the distribution system	01/17-12/17		No <sup>B</sup>	1 <sup>B</sup>		0	0				Human and animal fecal waste			
Contaminant and Unit of Measurement	Dates of Sampling M		olation Y/N	Highest Single Measurement			Percentage of S egulatory Limit	centage of Samples ulatory Limits		MCLG		MCL Likely Source of Contamination		ontamination
Filter turbidity (NTU)	01/17-12/17	No		0.67		9	8.9% <sup>c</sup>	<b>)</b> % <sup>c</sup>		N/A		TTC Soil runoff		noff
INORGANIC														
Contaminant and Unit of Measureme	nt and Unit of Measurement Dates of Sa		MCL Violation		ax. etected	Range of Results	MCI	LG	MCL			Likely Source of Contamination		on
Antimony (ppb)	01/17–1	2/17	No	0	57	ND - 0.57	6	;	6		ı	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder		
Arsenic (ppb)	01/17–1	2/17	No	0	73	ND - 0.73	0		10	10 Erosion o		of natural deposits; runoff from orchards; runoff from glass and electronics production wastes		
Barium (ppm)	01/17–1	2/17	No	0.	)18	0.010- 0.018	2	!	2		Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits			
Fluoride (ppm)	01/17-1	2/17	No	0	60	0.54 - 0.60	4	ļ	4		Water additive which promotes strong teeth			
Nitrate (as Nitrogen) (ppm)	01/17–1	2/17	No	0	21	0.044 - 0.21	10	0	10		Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits			
Sodium (ppm)	01/17–1	01/17-12/17		15.2		13 – 15.2	N/	'A	160		Salt water intrusion, leaching from soil			
			SYNTI	IETIC ORGANIC	CONTAMI	INANTS INCLUDING P	ESTICIDES AI	ND HER	BICIDES					
Diquat (ppb) 0°		/17-12/17 No		0.97		ND - 0.97	2	0 20		0	Runoff from herbicide use			
VOLATILE ORGANIC CONTAMINANTS														
Toluene (ppb)	01/17–1	01/17-12/17		0	0.34		ND - 0.34 1000		1000			Discharge from petroleum factories		
Toluene (ppb) 01/17—12/17 No 0.34 ND — 0.34 1000 1000 Discharge from petroleum factories  RADIOLOGICAL CONTAMINANTS														
Radium 226 (pCi/L)	01/17–1	01/17-12/17		No 1.03		ND -1.03		0		5 <sup>0</sup>		Erosion of natural deposits		
Radium 228 (pCi/L)	Radium 228 (pCi/L) 01/17—1:		/17 No		1.05		(	0		5 <sup>D</sup>	Erosion of natu		Erosion of natural deposit	s
	•		STAGE	2 DISINFECTAL	T AND DI	SINFECTION BY-PROD	OUCTS (D/DB	P) PAR	AMETERS	;				
Disinfectant or Contaminant and Unit Measurement	of Dates of San	pling	MCL or TT Violat Y/N	ion Level De	ected	Range of Results	MCLG or N	MCLG or MRDLG		MCL or MRDL		Likely Source of Contamination		
Chloramines (ppm)	01/17-12	/17	No	3.9		ND – 6.1 <sup>F</sup>	MRDLG	MRDLG = 4		MRDL = 4		Water additive used to control microbes		ol microbes
Haloacetic acids (ppb)	01/17-12	/17	No	36.	н	8.7 - 47.9 <sup>F</sup>	N/A		MCL = 60			By-product of drinking water disinfection		disinfection
Total trihalomethanes (ppb)	Total trihalomethanes (ppb) 01/17–12/17		No	No 52.4 <sup>H</sup>		22.1 – 71.4 <sup>F</sup>	N/A	N/A		MCL = 80		By-product of drinking water disinfection		disinfection
Total organic carbon (ratio) <sup>1</sup>	01/17-12	01/17–12/17		1.3	,	1.11 – 1.62	N/A	N/A		π		Naturally present in the environment		vironment
					LEAD A	AND COPPER (TAP WA	TER)							
Contaminant and Unit of Measureme	ontaminant and Unit of Measurement Dates of Samplin		ng AL Violation Y/N			of Sampling Sites Exceed the AL	_	g MCLG		AL (Action Leve		Likely Source of Contamination		
Lead (ppb)	2016 <sup>K</sup>	2016 <sup>K</sup> No		0.59		1	0		15			Corrosion of household plumbing systems; erosion of natural deposits		
Copper (ppm)	2016 <sup>K</sup>		No	0.15		0	1.3	1.3		1.3		Corrosion of household plumbing systems; erosion of natur deposits; leaching from wood preservatives		

ADDITIONAL WATER QUALITY INFORMATION (2017)... The accompanying table lists additional regulated (secondary) and non-regulated parameters that were detected in the finished water during 2017. No adverse health effects are generally associated with the secondary drinking water contaminants. At considerably higher concentrations than the Maximum Contaminant Levels (MCLs), health implications may exist as well as aesthetic degradation. Note that all maximum values are below the MCLs.

TABLE KEY & DEFINITIONS CU: Color Units ND: not detected NR: not regulated MCL: Maximum Contaminant Level ug/L: micrograms per liter or parts per billion mg/L: milligrams per liter or parts per million. Other contaminants that were tested for but not detected include: nitrite, cadmium, chromium, cyanide, lead, mercury, nickel, selenium, beryllium, thalium, silver, foaming agents, gross alpha, combined uranium, 1,2,4-trichlorobenzene, cis-1,2-dichloroethylene, xylenes, dichloromethane, o-dichlorobenzene, para-dichlorobenzene, vinyl chloride, 1,1-dichloroethylene, trans-1,2-dichloroethylene, 1,2-dichloroethane, 1,1,1-trichloroethane, carbon tetrachloride, 1,2-dichloropropane, trichloroethylene, 1,1,2-trichloroethane, tetrachloroethylene, monochlorobenzene, benzene, ethylbenzene, styrene, endrin, lindane, methoxychlor, toxaphene, dalapon, endothall, qlyphosate, di(2-ethylhexyl)adipate, oxamyl, simazine, di(2-ethylhexyl)phthalate, picloram, dinoseb, hexachlorocyclopentadiene, carbofuran, atrazine, alachlor, 2,3,7,8-TCDD (dioxin), heptachlor, heptachlor epoxide, 2,4-D, 2,4,5-TP (silvex), hexachlorobenzene, benzo(a)pyrene, pentachlorophenol, PCBs, dibromochloropropane, ethylene dibromide (EDB), chlordane, dicamba, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, 1,1- dichloroethane, 1,1-dichloropropene, 1,2,3-trichloropropane, 1,3-dichlorobenzene, 1,3-dichloropropane, 1,3- dichloropropene, 2,2-dichloropropane, 2-clorotoluene, 4-clorotoluene, bromobenzene, bromomethane, chloroethane, chloromethane, dibromomethane, dichlorodifluoromethane, methyl-t-butyl-ether, trichlorofluoromethane, aldrin, butachlor, dieldrin, metolachlor, metribuzin, propachlor, 3-hydroxycarbofuran, aldicarb, aldicarb sulfone, aldicarb sulfoxide, carbaryl, methomyl, 2,4,6-trichlorophenol, 2,4-dinitrotoluene, 2- chlorophenol, 4,6-dinitro-2-methylphenol, butylbenzylphthalate, diethylphthalate, dimethylphthalate, di-n-butylphthalate, di-n-octylphthalate, isophorone, phenol, radon, Cryptosporidium, Giardia

Additional Parameters	MCL	Maximum Value	Range of Results
Aluminum (ug/L)	200	92	25 — 92
Chloride (mg/L)	250	18.1	12.9 — 18.1
Color (CU)	15	5	ND — 0.5
Copper (ug/L)	1000	1.1	ND — 1.1
Iron (ug/L)	300	64	ND — 64
Manganese (ug/L)	50	24	5.6 — 24
pH (units)	6.5 — 8.5	7.6	7.5 — 7.6
Odor (TON)	3	3	1—3
Sulfate (mg/L)	250	111	81.5 — 111
Total alkalinity (mg/L as CaCO3)	NR	64.0	14.4 — 64.0
Total dissolved solids (mg/L)	500	217	174 — 217
Total hardness (mg/L as CaCO3)	NR	187*	100 — 187
Zinc (ug/L)	5000	160	111 — 160

<sup>\*</sup> To calculate hardness in grains per gallon, divide by 17.1

LEAD: If present, elevated levels of lead can cause serious health problems, especially for pregnant women IMMUNO-COMPROMISED INDIVIDUALS: Some people may be more vulnerable to contaminants and young children. Lead in drinking water is primarily from materials and components associated with in drinking water than the general population. Immuno-compromised persons such as persons with service lines and home plumbing. The Manatee County Water Purification Plant is responsible for providing cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/ high quality drinking water, but cannot control the variety of materials used in plumbing components. When AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing infections. These people should seek advice about drinking water from their health care providers. your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791). These methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline precautions apply to publicly supplied water, bottled water, private well water or water from home at 800-426-4791 or at http://www.epa.gov/safewater/lead.

total coliform detections must not exceed 5% of all monthly samples

- when *E. coli* is detected, the utility is required by rule to report the result and collect repeat samples in the immediate area within 24 hours and analyze them for bacteria. The results of repeat samples collected showed no presence of *E. coli* or total coliform bacteria, thus no MCL violation occurred.
- filter turbidity may never exceed 1 NTU and must not exceed 0.3 NTU in 95% of daily samples in any month.
- D MCL limit of Radium-226 and Radium-228 combined.
- the value is the highest running annual average, computed quarterly.
- these values represent values at individual sample sites.
- G a public water system (PWS) is in compliance with the MRDL when the running annual average of monthly averages of samples taken in the distribution system, computed quarterly, is less than or equal to the MRDL.
- $^{f H}$  the value is the highest locational running annual average, computed quarterly.
- 1 these values represent the % total organic carbon removal achieved at the treatment plant divided by the % removal required.
- this value is the lowest running annual average, computed quarterly, of monthly removal ratio. This value must be above 1.0 for compliance.
- the State allows us to monitor for some contaminants less than once per year because concentrations of these contaminants do not change frequently. Some of our data, though

treatment devices.

Action Level or AL: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. Filter Turbidity (NTU): Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good

indicator of the effectiveness of our filtration system. High turbidity can hinder the effectiveness of disinfectants. **Maximum Contaminant Level or MCL:** The highest level of a contaminant that is allowed in drinking water. MCLs

are set as close to the MCLGs as feasible using the best available treatment technology. Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is

no known or expected risk to health. MCLGs allow for a margin of safety. Maximum residual disinfectant level or MRDL: The highest level of a disinfectant allowed in drinking water.

There is convincing evidence that addition of a disinfectant is necessary for control of microbial contam Maximum residual disinfectant level goal or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Total trihalomethanes: Disinfection by-products expressed as the sum of chloroform, dibromochloromethane,

bromodichloromethane and tribromomethane. Not Detected or ND: Indicates the substance was not found by laboratory analysis.

**Treatment Technique or TT:** A required process intended to reduce the level of a contaminant in drinking water.

TABLE KEY DEFINITION

per liter (ug/L) per liter (mg/L) TT: Treatment Technique

AL: Action Level

MCL: Maximum Contaminant Level MCLG: Maximum Contaminant Level Goal N/A: not applicable

ND: not detected NTU: Nephelometric Turbidity Units

pCi/L: picocuries per liter (a measure of radioactivity) **ppb:** parts per billion or micrograms

ppm: parts per million or milligrams

representative, are more than one year old.