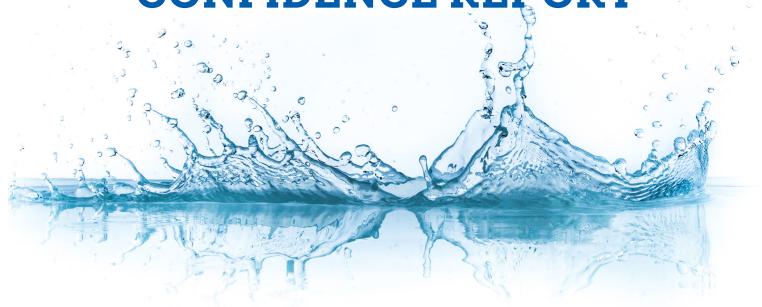






Daphne Utilties Water Quality

CONSUMER **CONFIDENCE REPORT**



2019 ANNUAL WATER QUALITY DATA | TESTING PERFORMED JANUARY - DECEMBER 2018

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Welcome!

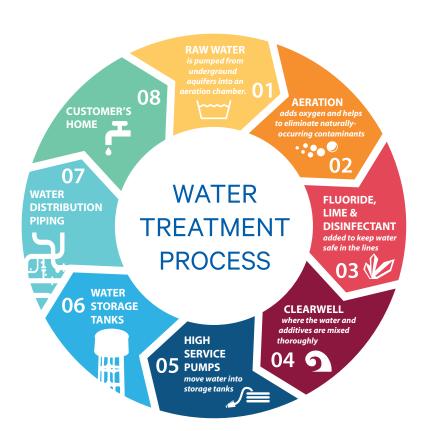
Welcome to the 2019 Consumer Confidence Report (CCR) for Daphne Utilities. Once again, we are proud to present this annual report of our water quality to the residents of our Eastern Shore community.

For more than 60 years, Daphne Utilities has been serving this Daphne Community and surrounding areas on the Eastern Shore. We are committed to delivering an exceptional level of service while providing you with reliable, safe, and high-quality utility services. We are able to meet your needs and exceed your expectations only through the remarkable efforts of a dedicated team of employees and our passionate pursuit of excellence.

This CCR explains where your drinking water comes from, how it is treated and tested to ensure it is safe for you and your family, and the ongoing steps we take to protect our valuable natural resources. It provides information on water quality and the results of the hundreds of tests we perform every day of the year from sampling locations throughout our service area. These daily tests ensure your water is safe, clean, and healthy.

Where Does Our Water Come From?

The source of our drinking water is a natural underground reservoir called the Miocene Aquifer that encompasses an area of about 6,500 square miles in southwest Alabama and western Florida. This aquifer is recharged primarily through precipitation and discharge is primarily to streams, bays, sounds, and wells. At Daphne Utilities, we pump water from this aquifer through a series of twelve wells ranging in depth from 250-450 feet. We have the capacity to pump nearly 9 million gallons per day with an average daily withdrawal of approximately 3 million gallons of safe and clean drinking water.





In our water treatment process,

raw water is pumped from underground aquifers into an aeration chamber. Aerating the raw water adds Oxygen to it and helps eliminate certain naturally-occurring contaminants, such as Iron. After aeration, Fluoride is added to promote good dental health, Lime is added to adjust the pH of the water to an optimum level and a Disinfectant is added to keep the water safe in the water lines all the way to the customer's home. The water and additives are mixed thoroughly inside a Clearwell, a large tank that allows mixing to be completed before entering the distribution system. Once the treated water meets all quality standards, high service pumps are used to move the water into Storage Tanks and then through the distribution system to the Customer.



Table of Detected Contaminants

This 2019 Consumer Confidence Report contains results from the most recent monitoring (testing performed January - December 2018) which was performed in accordance with the regulatory schedule. We have learned through our monitoring and testing that some constituents have been detected.



We are pleased to report that our drinking water <u>meets or exceeds</u> all federal and state requirements!

CONTAMINANTS	VIOLATION Y/N	LEVEL DETECTED		UNIT MSMT	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
		LOW	HIGH				
Alpha emitters	NO (Avg. 1.8)	1.6	2.0	PCi/l	0	15	Erosion of natural deposits
Combined radium 226 & 228	NO (Avg. 1.8)	0.2	2.5	PCi/l	0	5	Erosion of natural deposits
Copper (consumer tap)	NO	90th percentile: 0.058*		ppm	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood
Lead (consumer tap)	NO	90th percentile: ND*		ppb	0	AL =	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen)	NO	0.21	2.55	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHM [Total trihalomethanes]	NO (LRAA)	ND	2.68	ppb	0	80	By-product of drinking water chlorination
HAA5 [Total haloacetic acids]	NO (LRAA)	ND	0.38	ppb	0	60	By-product of drinking water chlorination
UNREGULATED CONTAMINAN	TS						
Chloroform	NO	0.71	0.86	ppb	70	none	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
SECONDARY CONTAMINANTS	VIOLATION Y/N	LEVEL D	LEVEL DETECTED		MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
Chloride	NO	9.08	9.08		none	250	Naturally occurring in the environment or as a result of agricultural runoff
Color	NO	10	10		none	15	Naturally occurring in the environment or as a result of treatment with water additives
Hardness	NO	18.2	18.2		none	none	Naturally occurring in the environment or as a result of treatment with water additives
Iron	NO	0.16		ppm	none	0.30	Naturally occurring in the environment; erosion of natural deposits; leaching from pipes
Manganese	NO	0.08	0.08		none	0.05	Erosion of natural deposits; leaching from pipes
рН	NO	7.58		S.U.	none	none	Naturally occurring in the environment or as a result of treatment with water additives
Sodium	NO	17.4		ppm	none	none	Naturally occurring in the environment
Sulfate	NO	7.26		ppm	none	250	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Total Dissolved Solids	NO	76.0		ppm	none	500	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff

^{*} Number of sites above the Action Level (AL) = 0

UNREGULATED CONTAMINANT RULE 3 (UCMR3) DETECTED-2013 **CONTAMINANTS** VIOLATION LEVEL UNIT LIKELY SOURCE Y/N DETECTED MSMT. **OF CONTAMINATION** ND-0.20 ppb Chromium NO Naturally occurring in the environment or as a result of industrial discharge Cobalt ND-1.20 NO ppb Industrial or medical discharge; waste runoff NO 11.0-130 Strontium ppb Naturally occurring in the environment or as a result of discharge ND-0.20 Vanadium NO Naturally occurring in the environment or as a result of runoff from mining or industrial discharge ppb Chromium, Hexavalent NO 0.03-0.17 ppb Naturally occurring in the environment or as a result of industrial discharge NO ND-250 ppb Naturally occurring in the environment or from water treatment techniques 1,2,3-Trichloropropane NO ND-0.06 Result of industrial discharge or from hazardous waste or pesticide runoff

Standard List of Primary Drinking Water Contaminants

Daphne Utilities routinely monitors for contaminants in your drinking water according to Federal and State laws, using EPA-approved methods and a State-certified laboratory. ADEM allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken. All test results were well within state and federal standards. Following is a list of Primary Drinking Water Contaminants and a list of Unregulated Contaminants for which our water system routinely monitors. These contaminants were not detected in your drinking water unless they are listed in the Table of Detected Drinking Water Contaminants.

CONTAMINANT	MCL	UNIT OF MSMT
BACTERIOLOGICAL CONTAIN	MINANTS	
Total Coliform Bacteria	< 5%	present/absent
Fecal coliform and E. Coli	0	present/absent
Fecal Indicators	0	present/absent
Turbidity	TT	NTU
Cryptosporidium	TT	Calculated organisms/liter
RADIOLOGICAL CONTAMIN	ANTS	
Beta / photon emitters	4	mrem/yr
Alpha emitters	15	pCi/l
Combinded radium	5	pCi/l
Uranium	30	pCi/l
INORGANIC CHEMICALS		
Antimony	6	ppb
Arsenic	10	ppb
Asbestos	7	MFL
Barium	2	ppm
Beryllium	4	ppb
Cadmium	5	ppb
Chromium	100	ppb
Copper	AL=1.3	ppm
Cyanide	200	ppb
Fluoride	4	ppm
Lead	AL=15	ppb
Mercury	2	ppb
Nitrate	10	ppm
Nitrite	1	ppm
Selenium	.05	ppm
Thallium	.002	ppm
ORGANIC CONTAMINANTS		
2,4 D	70	ppb
Acrylamide	TT	TT
Alachlor	2	ppb
Atrazine	3	ppb
Benzene	5	ppb
Benzo(a)pyrene [PAHs]	200	ppt
Carbofuran	40	ppb
Carbon tetrachloride	5	ppb
Chlordane	2	ppb
Chlorobenzene	100	ppb
Dalapon	200	ppb
Dibromochloropropane	200	ppt
o-Dichlorobenzene	600	ppb

CONTAMINANT	MCL	UNIT OF MSMT
ORGANIC CONTAMINANTS (CONT.)	
p-Dichlorobenzene	75	ppb
1,2-Dichloroethane	5	ppb
1,1-Dichloroethylene	7	ppb
cis-1,2-Dichloroethylene	70	ppb
trans-1,2-Dichloroethylene	100	ppb
Dichloromethane	5	ppb
1,2-Dichloropropane	5	ppb
Di(2-ethylhexyl)adipate	400	ppb
Di(2-ethylhexyl)phthlates	6	ppb
Dinoseb	7	ppb
Dioxin (2,3,7,8-TCDD)	30	ppq
Diquat	20	ppb
Endothall	100	ppb
Endrin	2	ppb
Epichlorohydrin	TT	TT
Ethylbenzene	700	ppb
Ethylene dibromide	50	ppt
Glyphosate	700	ppb
Heptachlor	400	ppt
Heptachlor epoxide	200	ppt
Hexachlorobenzene	1	ppb
Hexachlorocyclopentadiene	50	ppb
Lindane	200	ppt
Methoxychlor	40	ppb
Oxamyl (Vydate)	200	ppb
Polychlorinated biphenyls (PCBs)	0.5	ppb
Pentachlorophenol	1	ppb
Picloram	500	ppb
Simazine	4	ppb
Styrene	100	ppb
Tetrachloroethylene	5	ppb
Toluene	1	ppm
Toxaphene	3	ppb
2,4,5-TP (Silvex)	50	ppb
1,2,4 - Trichlorobenzene	.07	ppm
1,1,1-Trichloroethane	200	ppb
1,1,2-trichloroethane	5	ppb
Trichloroethylene	5	ppb
Vinyl Chloride	2	ppb
Xylenes	10	ppm

CONTAMINANT	MCL	UNIT OF MSMT			
DISINFECTANTS & DISINFECTION BYPRODUCTS					
Chlorine (ppm)	4	ppm			
Chlorine dioxide	800	ppb			
Chloramines	4	ppm			
Bromate	10	ppb			
Chlorite	1	ppm			
HAA5	60	ppb			
[Total haloacetic acids]					
TTHM	80	ppb			
[Total trihalomethanes]					

UNREGULATED CONTAMINA	ANTS
1,1-Dichloropropene	Chloroform
1,1,1,2-Tetrachloroethane	Chloromethane
1,1,2,2-Tetrachloroethane	Dibromomethane
1,1-Dichloroethane	Dicamba
1,2,3-Trichlorobenzene	Dichlorodifluoromethane
1,2,3-Trichloropropane	Dieldrin
1,2,4-Trimethylbenzene	Hexachlorobutadiene
1,3-Dichloropropane	Isoprpylbenzene
1,3-Dichloropropene	M-Dichlorobenzene
1,3,5-Trimethylbenzene	Methomyl
2,2-Dichloropropane	MTBE
3-Hydroxycarbofuran	Metolachlor
Aldicarb	Metribuzin
Aldicarb Sulfone	N-Butylbenzene
Aldicarb Sulfoxide	Naphthalene
Aldrin	Naphthalene
Atrazine	N-Propylbenzene
Bromobenzene	O-Chlorotolunene
Bromochloromethane	P-Chlorotoluene
Bromodichloromethane	P-Isopropyltoluene
Bromoform	Propachlor
Bromomethane	Sec-Butylbenzene
Butachlor	Tert-Butylbenzene
Carbaryl	Trichlorfluoromethane
Chlorodibromomethane	
Chloroethane	



Source Water Assessment

In compliance with the Alabama Department of Environmental Management (ADEM), **Daphne Utilities** has developed a Source Water Assessment plan that will assist in protecting our water sources. This plan provides additional information such as potential sources of contamination. It includes a susceptibility analysis, which classifies potential contaminants as high, moderate, or non-susceptible to contaminating the water source. The assessment was performed, public notification was completed, and the plan was approved by ADEM. A copy of the report is available in our office for review during normal business hours.

Please help us make this effort worthwhile by protecting our source water. <u>Carefully follow instructions on pesticides and herbicides you use for your lawn and garden, and properly dispose of household chemicals, paints and waste oil.</u>

Cease the Grease Program

Grease is the main cause of sewer back-ups and negatively impacts our environment. The oil recycling program involves placing recycle stations in convenient locations around the community. Customers can drop off containers of used grease and cooking oil and pick-up empty containers for future disposal free of charge. Daphne Utilities then converts it into clean-burning and environmentally-safe biodiesel fuel.

Find a used oil recycling station near you!

Daphne Utilities Main Office Lawson Shell Spanish Fort BP Station Riviera Utilities - Daphne Malbis Shell Station Eastern Shore BP East Bay Apartments Pelican Bay Apartments Lake Forest Shell Station Daphne Public Works Facility Grand Pointe Apartments



For more information visit:

www.daphneutilities.com/environment/cease-the-grease-program/



Planning a home improvement job?

Planting a tree?

Installing a fence or deck?

WAIT! Before you start, call 8-1-1. It's FREE and IT'S THE LAW.





Our board of directors meets once a month at Daphne City Hall.
We welcome you to join in!

Our meetings are held on the last Wednesday of every month at 5:00 pm at 1705 Main Street, Daphne, AL 36526. You can also stop by our main office at 900 Daphne Avenue or call **251-626-2628**.

www.daphneutilities.com
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GENERAL INFORMATION

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. MCL's, defined in a **LIST OF DEFINITIONS** in this report, are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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 radioactive material, and it can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:



Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.



Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water run-off, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.



Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water run-off, and residential uses.



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 storm water runoff, and septic systems.



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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/ AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. People at risk should seek advice about drinking water from their health care providers.

Based on a study conducted by ADEM with the approval of the EPA a statewide waiver for the monitoring of asbestos and dioxin was issued. Thus, monitoring for these contaminants was not required.

INFORMATION ABOUT LEAD: Elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. However, lead is rarely found in source water. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Your water system is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking.

Use only water from the cold-water tap for drinking, cooking, and especially for making baby formula. Most of the lead in household water usually comes from the plumbing in your house, not from the local water supply, and hot water is more likely to cause lead to leach from plumbing materials. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water hotline or at www.epa.gov/safewater

LIST OF DEFINITIONS

Action Level (AL): The concentration of a contaminant that triggers treatment or other requirements which a water system must follow.

Coliform Absent (ca): Laboratory analysis indicates that the contaminant is not present.

Disinfection byproducts (DBPs): Formed when disinfectants used in water treatment plants react with bromide and/or natural organic matter (i.e., decaying vegetation) present in the source water.

Initial Distribution System Evaluation (IDSE): A one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs).

Locational Running Annual Average (LRAA): Yearly average of all the DPB results at each specific sampling site in the distribution system. The highest distribution site LRAA is reported in the Table of Detected Contaminants.

Maximum Contaminant Level (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 (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 (MRDL): The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Millirems per year (mrem/yr): Measure of radiation absorbed by the body.

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present above detection limits of lab equipment.

PPB (parts per billion): micrograms per liter (ug/l).

PPM (parts per million): milligrams per liter (mg/l).

PPQ (parts per quadrillion): picograms per liter

PPT (parts per trillion): nanograms per liter.

pCi/L (**picocuries per liter**): a measure of radioactivity.

RAA: Running annual average

Standard Units (S.U.): pH of water measures the water's balances of acids and bases and is affected by temperature and carbon dioxide gas. Water with less than 6.5 could be acidic, soft, and corrosive. A pH greater than 8.5 could indicate that the water is hard.

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

Variances & Exemptions (V&E): State or EPA permission not to meet an MCL or a treatment technique under certain conditions.



