

2017

Gulf Shores Utilities Board



W A T E R R E P O R T



Consumer Confidence Report

The Safe Drinking Water Act Amendments of 1996 require all public utilities to supply their customers with an Annual Water Quality Report. We are pleased to provide you with the 2017 Report. We want to keep you, the customer, informed about the quality of our drinking water and service we have delivered to you over the past year. Our goal is, and always has been, to provide you with a safe and dependable supply of drinking water.

Gulf Shores potable water supply is obtained from groundwater and is pumped from the A2 and A3 Aquifers. The water is withdrawn from the ground by eight wells, ranging in depth from 200 to 535 feet, and pumped to three water treatment facilities. The treatment process includes chlorination, fluoridation, corrosion control and filtration where required by ADEM. The Board's treatment capacity is 6,750 gallons per minute, or 9,720,000 gallons per day. We have 7,250,000 gallons of storage capacity within 7 storage tanks. We produced 1,344,899,000 gallons of potable water in 2017. Annually, the Board distributes to our customers approximately 3.684 million gallons of water per day with our one day summer peak production of 6.378 million gallons.

After collecting 787 water samples in 2017, we are pleased to report our water is safe and meets or exceeds all State and Federal drinking water requirements.

Gulf Shores Utilities Board has a Source Water Protection Plan and it is available for viewing at our Main Office located at 1629 East 1st Street, Gulf Shores, AL. This plan will provide additional information such as a geologic and hydrologic evaluation of the area where our wells are located, a delineation of the Source Water Area boundaries, and an inventory of potential sources of groundwater contamination sites within those areas.

If you have any questions concerning this report or your drinking water, please contact Albert Bonifay at (251) 968-6148 or Clifford Johnson at (251) 968-6323. We want our customers to be informed about their water quality. If you want to learn more about Gulf Shores Utilities Board's operations, please attend any of our regularly scheduled Board meetings. The meetings are held on the last Thursday of each month at 8:30 A.M. at the Utilities Office.

Board of Directors

The Utilities Board of the City of Gulf Shores (Gulf Shores Utilities Board) is a municipal corporation governed by a Board of Directors. The Board Members are appointed by the Gulf Shores' City Council for a six year term and serve without pay. Once appointed by the City Council, a board member may not be removed by the City Council during their term.

The Utilities Board is empowered to set usage rates, policies and procedures by which Gulf Shores Utilities Board operates. Gulf Shores Utilities Board's sole source of revenue is from the operation of water and sewer utilities. No funding is provided by the City, County, State or Federal Government. Likewise, Gulf Shores Utilities Board is solely responsible for its debt, capital expenditures and operational expenses.

The current members of the Utilities' Board of Directors are:

- | | |
|-------------------|---------------|
| Michael Diehl | Philip Harris |
| John W. McCormick | Greg Kennedy |
| Tom Giles | Robert Craft |
| Billy Adcock | |

As shown in the following table, the Board monitors for contaminants in your drinking water according to State and Federal regulations. This table shows the results of our monitoring for the period of January 1 to December 31, 2017, EPA has determined that your water is safe at these levels of detection.

The sources of drinking water (both tap 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. The water may pick up substances resulting from the presence of animals or from human activity.

All 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 may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. People who are immuno-compromised, such as cancer patients undergoing chemotherapy, organ transplant recipients, HIV/AIDS positive or other immune system disorders, some elderly and infants may be particularly at risk from infections. People at risk should seek advice about their drinking water from their health care provider. EPA/CDC guidelines on appropriate means to lessen the risk of infections by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Gulf Shores Utilities Board is responsible for providing high quality drinking water; however we are unable to control the variety of materials used in home 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. If you have concerns about lead in your water, you may have your water tested by an

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 <http://www.epa.gov/safewater/lead>.

Based on a study conducted by Alabama Department of Environmental Management with approval of EPA, a statewide waiver was issued for the monitoring of asbestos and dioxin. Thus, these contaminants do not require monitoring.

Gulf Shores Utilities Board works very hard to provide quality water to every customer. We ask all our customers to help in protecting our water sources, which are the heart of our community, our way of life and our children's future. Let's work together for the benefit of the residents and visitors of our community.

To ensure protection of the area's water sources, Gulf Shores Utilities Board has engaged into a long term study of the A-2 and A-3 Aquifers in our area. We have installed seven 2" and three 4" wells at six different locations in the Gulf Shores area. Each well is equipped with recording devices to monitor the water levels in the wells.

Please read and follow all instructions on pesticides and herbicides used on your lawn and gardens. Always properly dispose of household chemicals, paints, cleaning supplies, and used motor oils according to label instructions.

For More Information About:

Water Quality – call the U.S. Environmental Protection Agency's Safe Drinking Water Hotline. 800-426-4941.
For additional information on this report, the water treatment process or a group presentation – contact the Gulf Shores Utilities Board.

Test Results Gulf Shores Utilities

Contaminant	Violation Y/N	Level Detected	Unit Measure	MCLG	MCL	Potential Source of Contamination
Bacteriological						
Total Coliform Bacteria (including fecal coliform and E. coli)	N	1		0	MCLG=0 MCL=Presence of coliform bacteria in 2 monthly samples, or if a routine sample and a follow up repeat sample are total coliform positive and one is also fecal coliform or E. coli positive	Human and animal fecal waste
Fecal Indicators (GWR)						
i. E. coli	NO	0		0	TT	
ii. Enterococci	NO	ND		None	TT	Human & animal fecal waste
iii. Coliphage	NO	ND		None	TT	

Radiological

Beta/photon emitters	NO	ND	mrem/yr.	0	4	Decay of natural & man-made deposits
Alpha emitters (pCi/l)	NO	2.2+/-0.5	pCi/l	0	15	Erosion of natural deposits
Combined radium (pCi/l)	NO	1.2+/-0.5	pCi/l	0	5	Erosion of natural deposits
Uranium	NO	ND	30pCi/L	0	30 ppb	Erosion of natural deposits

Inorganic Chemicals

Antimony	NO	ND	ppb	5	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic	NO	ND	ppb	n/a	50	Erosion of natural deposits; runoff from orchards; glass & electronic production waste
Asbestos	NO	ND	MFL	7	7	Decay of asbestos cement water mains; erosion of natural deposits
Barium	NO	ND	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium	NO	ND	ppb	4	4	Discharge from metal refineries & coal-burning factories; discharge from electrical, aerospace & defense industries
Bromate	NO	ND	ppb	0	10	By-product of drinking water chlorination
Cadmium	NO	ND	ppb	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff for waste batteries & paint
Chloramines	NO	ND	ppm	4 mrdlg	4	Water additive used to control microbes
Chlorine dioxide	NO	ND	ppb	800mrdlg	800 ppb	Water additive used to control microbes
Chlorite	NO	ND	ppb	800mrdlg	1 ppm	By-product of drinking water chlorination
Chromium	NO	ND	ppb	100	100	Discharge from steel & pulp mills; erosion of natural deposits
Copper	NO	<0.050	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Cyanide	NO	ND	ppb	200	200	Discharge from steel/metal factories; discharge from plastic & fertilizer factories
Fluoride	NO	0.88	ppm	4	4	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer & aluminum factories
Lead	NO	<0.005	ppb	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits
Mercury	NO	ND	ppb	2	2	Erosion of natural deposits; discharge from factories & refineries; runoff from landfills & cropland
Nitrate as NO3-N	NO	0.9	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits
Nitrite as NO2-N	NO	ND	ppm	1	1	Runoff from fertilizer use; leaching from septic tanks; sewerage; erosion of natural deposits
Total Nitrate and Nitrite	NO	0.9	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks; sewerage; erosion of natural deposits
Selenium	NO	ND	ppb	50	50	Discharge from petroleum & metal refineries; erosion of natural deposits; discharge from mines.
Thallium	NO	ND	ppb	0.5	2	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories
Turbidity	NO	0.37	NTU	n/a	TT	Soil runoff

Test Results Gulf Shores Utilities

Contaminant	Violation Y/N	Level Detected	Unit Measure	MCLG	MCL	Potential Source of Contamination
Volatile Organic Chemicals						
Acrylamide	NO	ND	n/a	0	TT	Added to water during wastewater treatment
Alachor	NO	ND	ppb	0	2	Runoff from herbicide used on row crops
Atrazine	NO	ND	ppb	3	3	Runoff from herbicide used on row crops
Benzene	NO	ND	ppb	0	5	Discharge form factories; Leaching from gas storage tanks and landfills
Benzo(a)pyrene(PAHs)	NO	ND	ppt	0	200	Leaching from linings of water staoage tanks and distribution lines.
Carbofuran	NO	ND	ppb	40	40	Leaching of soil fumigant used on rice and alfalfa
Carbon Tetrachloride	NO	ND	ppb	0	5	Dicharge from chemical plants and othe industrail activities
Chlordane	NO	ND	ppb	0	2	Residual of banned termiticide
Chlorobenzene	NO	ND	ppb	100	100	Discharge from chemical and agricultural chemical factories
2,4-D	NO	ND	ppb	70	70	Runoff from herbicide used on row crops
Dalapon	NO	ND	ppb	200	200	Runoff from herbicide used on rights of way
Dibromochloropropane	NO	ND	ppt	0	200	Runoff/leaching from soil fumigant used on soybeans,cotton.pineapples,and orchards
o-Dichlorobenzene	NO	ND	ppb	600	600	Discharge from industrial chemical factories
p-Dichlorobenzene	NO	ND	ppb	75	75	Discharge form industrial chemical factories
1,2 Dichloroethane	NO	ND	ppb	0	5	Discharge from industrial chemical factories
1,1-Dichloroethylene	NO	ND	ppb	7	7	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene	NO	ND	ppb	70	70	Discharge from industrial chemical factories
trans-1-2-Dichloroethylene	NO	ND	ppb	100	100	Discharge from industrial chemical factories
Dichloromethane	NO	ND	ppb	0	5	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane	NO	ND	ppb	0	5	Discharge from industrial chemical factories
Di(2-ethyhexyl)adipate	NO	ND	ppb	400	400	Discharge from chemical factories
Di(2-ethyhexyl)phthalate	NO	ND	ppb	0	6	Discharge from rubber and chemical factories
Dinoseb	NO	ND	ppb	7	7	Runoff from herbicide used on soybeans and vegetables
Dioxion(2,3,7,8-TCDD)	NO	ND	ppb	0	30	Emissions from waste incineration and other combustion;Discharge from chemical factories
Diquat	NO	ND	ppb	20	20	Runoff form herbicide use
Endothall	NO	ND	ppb	100	100	Runoff from herbicide used
Endrin	NO	ND	ppb	2	2	Residual of banned insecticide
Epichlorohydrin	NO	ND	n/a	0	TT	Discharge from industrial chemical factories;Added to water during treatment process;Impurity of some chemicals
Ethylbenzene	NO	ND	ppb	700	700	Discharge from petroleum refineries
Ethylene dibromide	NO	ND	ppt	0	5	Discharge from petroleum refineries
Glyphosate	NO	ND	ppb	700	700	Runoff from herbicide used
Haloacetic Acids (HAA5)	NO	1.61	ppb	n/a	60	By-product of drinking water chlorintation
Heptachlor	NO	ND	ppt	0	400	Residual of banned pesticide
Heptachlor epoxide	NO	ND	ppt	0	200	Breakdown of Heptachlor
Hexachlorobenzene	NO	ND	ppb	0	1	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclopentadiene	NO	ND	ppb	50	50	Discharge for chemical factories
Lindane	NO	ND	ppt	200	200	Runoff/Leaching form insecticide used on cattle,lumber and gardens
Methoxychlor	NO	ND	ppb	40	40	Runoff/Leaching form insecticide used on fruits,vegetables,alfalfa,livestock
Pentachlorophenol	NO	ND	ppb	0	1	Dicharge for wood preserving factories
Oxamyl(Vydate)	NO	ND	ppb	200	200	Runoff/leaching form insecticide used on apples, potatoes and tomatoes
Picloram	NO	ND	ppb	500	500	Herbicide runoff
PCBs(Polychlorinated biphenyls)	NO	ND	ppt	0	500	Runoff from landfills;Discharge of waste chemicals
Simazine	NO	ND	ppb	4	4	Herbicide runoff
Styrene	NO	ND	ppb	100	100	Discharge from rubber and plastic factories; leaching from landfills
Tetrachloroethylene	NO	ND	ppb	0	5	Leaching from PVC pipes; Discharge from factories and dry cleaners
Toluene	NO	ND	ppm	1	1	Discharge from petroleum factories
TOC (Total Organic Carbon)	NO	ND	ppm	n/a	TT	Naturally present in the environment
TTHM (Total Trihalomethanes)	NO	9.17	ppb	n/a	80	By-product of drinking water chlorintation
Toxaphene	NO	ND	ppb	0	3	Runoff/leaching from insecticide used on cotton and cattle
2,4,5-TP (Silvex)	NO	ND	ppb	50	50	Residue of banned herbicide
1,2,4-Trichlorobenzene	NO	ND	ppb	70	70	Discharge from textile finishing factories
1,1,1-Trichloroethane	NO	ND	ppb	200	200	Discharge from metal degreasing sites and other factories
1,1,2-Trichloroethane	NO	ND	ppb	3	5	Discharge from industrial chemical factories
Trichloroethylene	NO	ND	ppb	0	5	Discharge from metal degreasing sites and other factories
Vinyl Chloride	NO	ND	ppb	0	2	Leaching from PVC pipe;Discharge from plastics factories
Xylenes	NO	ND	ppm	10	10	Discharge from petroleum factories; Discharge from chemical factories

DEFINITIONS

Parts per million (ppm) or Milligrams per liter (mg/l)

One part per million corresponds to one minute in two years or a single penny in \$10,000.00

Parts per billion (ppb) or Microgram per liter -

One part per billion corresponds to one minute in 2000 years, or a single penny in \$10,000,000.00

Parts per trillion (ppt) or Nanogram per liter -

One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.00

Picocuries per liter (pCi/l) -

A measure of radioactivity

Maximum Contaminant Level Goal (MCLG) -

The goal (MCLG's) is the level of a contaminant in drinking water below where there is no known or expected risk to health.

Maximum Contaminant Level (MCL) -

The maximum allowed (MCL) is the highest level of a contaminant that is allowed in drinking water.

Maximum Residual Disinfectant Level Goal (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.

Maximum Residual Disinfectant Level (MRDL) -

The highest level of a disinfectant allowed in drinking water.

Treatment Technique (TT) -

A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Action Level -

The concentrations of a contaminant which, if expected, triggers treatment, or other requirements, which a water system must follow.

NR - Not regulated.

ND - Not detected.

