

## 2017 CONSUMER CONFIDENCE REPORT (CCR)

### Windfern Forest UD

(PWS ID: TX1010924)

Annual Water Quality Report for the period of January 1 to December 31, 2017

*THIS REPORT IS INTENDED TO PROVIDE YOU WITH IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER AND THE EFFORTS MADE BY THE WATER SYSTEM TO PROVIDE SAFE DRINKING WATER.*



Issued June 2018

### Where do we get our drinking water?

The source of drinking water used by Windfern Forest Utility District is both ground water and surface water. Our water comes from the Chicot Aquifer and also the Trinity River in Harris County. The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact TOPS. The complete source water assessment can be found at <http://dww.tceq.texas.gov/DWW/>.

*Windfern Forest was on interconnect with the City of Houston to supplement the drinking water supply for all of 2017. Attached you will find a table of the regulated contaminants that were detected in 2017 from the City of Houston.*

### PUBLIC PARTICIPATION OPPORTUNITIES

**DATE: BOARD OF DIRECTORS MEET ON THE THIRD TUESDAY OF EACH MONTH.**

**TIME: 4:00 P.M.**

**LOCATION: 14410 MAUNA LOA LN. HOUSTON, TX 77040**

**PHONE: 281-807-9500**

To learn about future public meetings (concerning your drinking water), or to request one be scheduled, please call us or email us at [customerservice@topswater.com](mailto:customerservice@topswater.com).

### 6 Signs You're Overwatering



- Your plant is wilting but it looks like it has plenty of water
- Soft limp brown leaves
- Blisters will form and erupt then a tan, brown or white warty growth will begin to form
- Stunted slow growth accompanied by yellow leaves.
- Falling leaves combined with buds not opening
- Tips of the leaves turn brown

### Is my water safe?

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. 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 sources 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 runoff, 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, urban storm water runoff, and residential uses.

-Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, 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.

### ALL drinking water may contain contaminants

When drinking water meets federal standards there may not be any health based benefits to purchasing bottled water or point of use devices. 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

### Information about Unregulated Contaminants

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted. Many constituents (such as calcium, sodium, or iron) which are often found in drinking water can cause taste, color, and odor problems but are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the systems business office.

### En Español

*Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al teléfono (281)807-9500.*

*In the last water loss audit submitted to the Texas Water Development Board for the time period of Jan-Dec 2017, our system lost an estimated 14,613,400 gallons of water, which is equivalent to about 4.4% of total gallons produced. If you have any questions about the water loss audit please call TOPS at 281-807-9500.*

### Special Notice

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly or immune-compromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids and people with HIV/AIDs or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800)426-4791.

The State of Texas monitors for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.

**Regulated Contaminants**

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic*	2016	2.1	0-2.1	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2016	0.243	0.126-0.243	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2017	70	0-70	200	##	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories
Fluoride	2017	0.56	0.34-0.56	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Selenium	2016	10.1	0-10.1	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Nitrate [measured as Nitrogen]	2017	0.42	0.42 - 0.42	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite [Measured as Nitrogen]	2015	0.01	0-0.01	1	1	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Synthetic Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2017	0.13	0.13	3	3	ppb	N	Runoff from herbicide used on row crops.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	2017	1.11	0-1.11	0	5	pCi/L	N	Erosion of natural deposits.
Beta/photon emitters	2017	11.2	0-11.2	0	15	pCi/L *	N	Decay of natural and man-made deposits.
Gross alpha excluding radon and uranium	2017	5	0-5	0	15	pCi/L	N	Erosion of natural deposits.
Uranium	2017	19.8	0-19.8	0	30	ug/l	N	Erosion of natural deposits.

\* EPA Considers 50 pCi/L to be the level of concern for beta particles.

**Maximum Residual Disinfectant Level**

Year	Disinfectant	Minimum Level	Average Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2017	Chlorine	0.5	1.93	5.7	4.0	< 4.0	ppm	Disinfectant added to control microbes

**LEAD AND COPPER**

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. WINDFERN FOREST UD 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. 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 [HTTP://WWW.EPA.GOV/SAFEWATER/LEAD](http://www.epa.gov/safewater/lead).

Lead/ Copper	Year	MCLG	Action Level	The 90 <sup>th</sup> Percentile	# of Sites Over AL	Units	Was This a Violation	Likely Source of Contaminant
Copper	2017	1.3	1.3	0.1591	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2017	0	15	3	1	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits.

LEAD AND COPPER RULE PROTECTS PUBLIC HEALTH BY MINIMIZING LEAD AND COPPER LEVELS IN DRINKING WATER, PRIMARILY BY REDUCING WATER CORROSION. LEAD AND COPPER ENTER DRINKING WATER MAINLY FROM CORROSION OF LEAD AND COPPER IN PLUMBING MATERIALS.

TOTAL COLIFORM- NONE DETECTED  
 FECAL COLIFORM-NONE DETECTED  
 TURBIDITY – NOT REQUIRED

ORGANIC CONTAMINANTS – NOT TESTED FOR OR NOT DETECTED  
 UNREGULATED CONTAMINANTS – NOT TESTED FOR OR NOT DETECTED  
 E.COLI – NONE DETECTED

**Unregulated Contaminants**

Unregulated Contaminants	Collection Date	Your Water	Lowest Level Detected	Highest Level Detected	Units
Chlorodibromomethane	2017	2.2	0	2.2	ppb
Chloroform	2017	12	0	12	ppb
Bromodichloromethane	2017	7	0	7	ppb

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

**Violations Table**

Combined Uranium			
Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, Average	2015	2017	Erosion of natural deposits. The water from the well identified to have uranium is mixed with water from other sources to dilute the total amount of uranium to well below the MCL.

## Abbreviations and Definitions

PPQ - parts per quadrillion, or picograms per liter

NTU - Nephelometric Turbidity Units

MFL - million fibers per liter (a measure of asbestos)

pCi/L - picocuries per liter (a measure of radioactivity)

PPM - parts per million, or milligrams per liter (mg/L)

PPB - parts per billion, or micrograms per liter (ug/L)

PPT - parts per trillion, or nanograms per liter

**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 contamination.

**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.

**Maximum Contaminant Level (MCL)** – The highest permissible level of a contaminant 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 health risk. MCLGs allow for a margin of safety.

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

**Action Level** – The concentration of a contaminant, which if exceeded triggers treatment or other requirements, which a water system must follow.

**Action Level Goal (ALG)**- The level of contaminant in drinking water below which there is not known or expected risk to health. ALGs allow for a margin of safety.

**MREM/year**- millirems per year (a measure of radiation absorbed by the body)

**NA** - not applicable

**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.

**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 contamination.

If a water system has performed additional monitoring which indicates the presence of other contaminants in the finished water, TCEQ recommends that systems find out if EPA has proposed a National Primary Drinking Water Regulation or issued a health advisory for that contaminant by calling the Safe Drinking Water Hotline (800-426-4791). TCEQ considers detects above a proposed MCL or health advisory level to indicate possible health concerns. To learn more about your water, please refer to the Source Water Assessment Viewer available at the following URL:

<http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=>

### City of Houston – EP141

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2017	0.06	0.0597-0.0597	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Nitrate [measured as Nitrogen]	2017	0.71	0.71-0.71	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2017	0.91	0.91-0.91	3	3	ppb	N	Runoff from herbicides used on row crops.
Di (2-ethylhexyl) phthalate	2017	0.61	0.61-0.61	0	6	ppb	N	Discharge from chemical factories.

City of Houston – EP003								
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2017	0.0472	0.0472-0.0472	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2017	0.45	0.45-0.45	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2017	0.88	0.88-0.88	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Synthetic Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2017	0.37	0.37-0.37	3	3	ppb	N	Runoff from herbicide used on row crops.
Di (2-ethylhexyl) phthalate	2017	0.92	0.92-0.92	0	6	ppb	N	Discharge from chemical factories.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	2017	5.9	5.9-5.9	0	15	pCi/L *	N	Decay of natural and man-made deposits.

\* EPA Considers 50 pCi/L to be the level of concern for beta particles.

City of Houston – EP101								
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2017	0.0462	0.0462-0.0462	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2017	0.05	0.05-0.05	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories
Fluoride	2017	0.21	0.21-0.21	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2017	0.41	0.41-0.41	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2017	0.11	0.11-0.11	3	3	ppb	N	Runoff from herbicides used on row crops.

City of Houston – EP054								
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2017	0.0493	0.0493-0.0493	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2017	0.08	0.08-0.08	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories
Fluoride	2017	0.46	0.46-0.46	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2017	0.95	0.95-0.95	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Simazine	2017	0.09	0.09-0.09	3	3	ppb	N	Herbicides runoff.
Di (2-ethylhexyl) phthalate	2017	0.67	0.67-0.67	0	6	ppb	N	Discharge from chemical factories.
Atrazine	2017	0.33	0.33-0.33	3	3	ppb	N	Runoff from herbicide used on row crops.

**EWPP3 & NEWPP Combined**

**100.0**  
**Lowest Monthly Percentage of Samples < 0.3 NTU:** %  
**Yearly Maximum [NTU]:** **0.31**  
**Aug-17**

**EWPP3**

**100%**  
**Lowest Monthly Percentage of Samples < 0.3 NTU:** %  
**Yearly Maximum [NTU]:** **0.31**  
**Aug-17**

Month (2017)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
# of Monthly Turbidity Samples	186	168	186	180	186	180	186	186	180	186	180	186
# of samples above 0.3 NTU	0	0	0	0	0	0	0	0	0	0	0	0
Average Turbidity [NTU]	0.08	0.06	0.08	0.08	0.09	0.07	0.11	0.13	0.13	0.11	0.13	0.14
Max Turbidity Reading [NTU]	0.28	0.14	0.22	0.19	0.18	0.20	0.28	0.31	0.25	0.19	0.25	0.22
% below 0.3 NTU	100	100	100	100	100	100	100	100	100	100	100	100

**NEWPP**

**100%**  
**Lowest Monthly Percentage of Samples < 0.3 NTU:** %  
**Yearly Maximum [NTU]:** **0.22**  
**May-17**

Month (2017)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
# of Monthly Turbidity Samples	186	168	186	180	186	180	186	186	180	186	180	186
# of samples above 0.3 NTU	0	0	0	0	0	0	0	0	0	0	0	0
Average Turbidity [NTU]	0.08	0.09	0.09	0.10	0.11	0.10	0.11	0.08	0.09	0.08	0.10	0.09
Max Turbidity Reading [NTU]	0.11	0.12	0.13	0.15	0.22	0.18	0.20	0.17	0.14	0.12	0.17	0.14
% below 0.3 NTU	100	100	100	100	100	100	100	100	100	100	100	100

**Year: 2017**

**Acres Homes (EP003), Jersey Village (EP054) EWPP 3 (EP101) NEWPP(EP141)**

**Regulated Contaminants**

CONTAMINANT	MCL	MCLG	Acres Homes Reading	Jersey Village Reading	EWPP 3 Reading	NEWPP Reading	MIN	AVG	MAX
Atrazine (µg/L)	3	3	0.37	0.33	0.11	0.91	0.11	0.43	0.91
Di(2-ethylhexyl) phthalate (µg/L)	6	0	0.92	0.67	ND	0.61	ND	0.55	0.92
Cyanide (mg/L)	0.2	0.2	ND	0.08	0.05	N/A	ND	0.04	0.08
Barium (mg/L)	2	2	0.0472	0.0493	0.0462	0.0597	0.0462	0.05	0.06
Gross Beta (pCi/L)	50	0	5.9	ND	ND	N/A	ND	1.97	5.9
Fluoride (mg/L)	4	4	0.4500	0.46	0.21	ND	ND	0.28	0.46
Nitrate (mg/L)	10	10	0.88	0.95	0.41	0.71	0.41	0.74	0.95
Simazine (µg/L)	4	4	0.19	0.09	ND	ND	ND	0.07	0.19