

# PUTNAM P S D

WV3304011

## Consumer Confidence Report – 2021 Covering Calendar Year – 2020

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. If you would like to observe the decision-making process that affect drinking water quality, please call WILLIAM MILLER. at 304-757-6509.

Your water comes from :

Source Name	Source Water Type
POPULAR FORK RESERVOIR	Surface Water
LARCK RESERVOIR-INACTIVE	Surface Water

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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 (800-426-4791).

The sources of drinking water (both tap water and bottled water) included 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 water before we treat it include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, 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 storm water run-off, agriculture, and residential users.

Radioactive contaminants, which can be naturally occurring or the result of mining activity.

Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug

Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system has an estimated population of 22859 and is required to test a minimum of 25 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

### Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2020 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2020. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

### Terms & Abbreviations

**Maximum Contaminant Level Goal (MCLG):** the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** the "Maximum Allowed" MCL is 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.

**Secondary Maximum Contaminant Level (SMCL):** recommended level for a contaminant that is not regulated and has no MCL.

**Action Level (AL):** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

**Treatment Technique (TT):** a required process intended to reduce levels of a contaminant in drinking water.

**Maximum Residual Disinfectant Level (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 contaminants.

**Non-Detects (ND):** lab analysis indicates that the contaminant is not present.

**Parts per Million (ppm)** or milligrams per liter (mg/l)

**Parts per Billion (ppb)** or micrograms per liter (µg/l)

**Picocuries per Liter (pCi/L):** a measure of the radioactivity in water.

**Millirems per Year (mrem/yr):** measure of radiation absorbed by the body.

**Monitoring Period Average (MPA):** An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

**Running Annual Average (RAA):** an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

**Nephelometric Turbidity Unit (NTU):** a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

**Locational Running Annual Average (LRAA):** Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**Testing Results for: PUTNAM P S D**

The following are results of parameters tested with detections from 2020 samples or from our most recent sampling period during the past five years since some parameters are on a frequency less than every year by rule:

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2020				

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
BARIUM	10/26/2020	0.031	0.031	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CHROMIUM	10/26/2020	2.5	2.5	ppb	100	100	Discharge from steel and pulp mills; Erosion of natural deposits
FLUORIDE	10/2/2020	0.69	0.66 - 0.69	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRITE	11/18/2019	0.29	0.29	ppm	1	1	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	COAL MT. TANK	2020	28	19.3 - 21.8	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	COLEMAN CREEK BOOSTER	2020	31	24.5 - 35.8	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	SHAWNEE LIFT STATION	2020	27	21.5 - 28.1	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	TRACE CREEK	2020	28	20 - 25.6	ppb	60	0	By-product of drinking water disinfection
TTHM	COAL MT. TANK	2020	36	20.5 - 31.7	ppb	80	0	By-product of drinking water chlorination
TTHM	COLEMAN CREEK BOOSTER	2020	36	24.6 - 44.2	ppb	80	0	By-product of drinking water chlorination
TTHM	SHAWNEE LIFT STATION	2020	35	27.8 - 44.6	ppb	80	0	By-product of drinking water chlorination
TTHM	TRACE CREEK	2020	36	21.6 - 47.5	ppb	80	0	By-product of drinking water chlorination

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2017 - 2019	0.296	0.0498 - 0.37	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2017 - 2019	1.3	0 - 11.9	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

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. 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. 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>.

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
06/01/2020 - 06/30/2020	1.5	MG/L	1.4	MG/L

Total Organic Carbon Lowest Month for Removal	Collection Date	Highest Value	Range	Unit	TT	Typical Source
CARBON, TOTAL	5/1/2020	6.7	1.7 - 6.7	MG/L	0	Naturally present in the environment

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
TURBIDITY	TREATMENT PLANT	0.08	NTU	AUG 2020

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
GROSS ALPHA, EXCL. RADON & U	11/8/2019	0.199	0.199	pCi/L	15	0	Erosion of natural deposits
Radium-228	11/8/2019	0.596	0.596	pCi/L	5	0	Erosion of natural deposits

Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
ACETONE	11/18/2019	11	11	UG/L	
CARBON, TOTAL	5/1/2020	6.7	1.7 - 6.7	ppm	10000
SODIUM	10/26/2020	22.1	22.1	MG/L	1000
SULFATE	11/8/2019	14.3	14.3	MG/L	250

We participated in the Unregulated Contaminate Monitoring Rule 4 (UCMR4) testing to assist the EPA in determining the occurrence of unregulated contaminants in drinking water. Below are the results of the parameters we tested for and had detections during the UCMR4. Note these are unregulated and no legal limit is set on any of these parameters.

UCMR4 Results	Collection Year	Average Value	Range (low/high)	Unit	Typical Source
Bromide, Raw Water	2018 - 2019	13.25	0 - 31	ppb	Mineral that occurs naturally in soil, runoff from road deicing and possibly from industry such as coal fired power plants.
TOC, Raw Water	2018 - 2019	3200	2100 - 4500	ppb	Runoff from natural material in the environment
Manganese	2018 - 2019	1.12	0.52 – 1.7	ppb	Mineral that occurs naturally in soil and possibly from mining.
2456 HAA5	2018 - 2019	30.62	19.3 – 47.84	ppb	Possible by-product from disinfection.
2457 HAA6Br	2018 - 2019	8.38	6.11 – 11.41	ppb	Possible by-product from disinfection.
2459 HAA9	2018 - 2019	38.76	25.41 – 58.41	ppb	Possible by-product from disinfection.

During the 2020 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
No Violations Occurred in the Calendar Year of 2020		

**Additional Required Health Effects Language:**

Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

There are no additional required health effects violation notices.

There are no additional required health effects notices.

This Consumer Confidence Report is being mailed to each customer. It can also be viewed by going to our website

<https://www.putnampsd.com/water-quality>