## MCDOWELL COUNTY PSD ECKMAN

### WV3302405

# Consumer Confidence Report – 2022

## Covering Calendar Year – 2021

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 MAVIS BREWSTER at 304-297-2622.

Your water comes from:

Source Name	Source Water Type	
SPRING - MINE	Ground Water	
OF THIT OF WHITE	Ground water	

Buyer Name	Seller Name	
There are no additional purc	hases to display.	

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.

<u>Inorganic contaminants</u>, 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.

<u>Pesticides and herbicides</u>, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

<u>Radioactive contaminants</u>, which can be naturally occurring or the result of mining activity.

<u>Organic contaminants</u>, 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 118 and is required to test a minimum of 1 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 2021 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 2021. 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.

<u>Maximum Contaminant Level Goal (MCLG)</u>: 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.

<u>Maximum Contaminant Level (MCL)</u>: 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.

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

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

<u>Treatment Technique (TT)</u>: a required process intended to reduce levels of a contaminant in drinking water.

<u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.

<u>Nephelometric Turbidity Unit (NTU)</u>: 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.

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

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

### Testing Results for: MCDOWELL COUNTY PSD ECKMAN

Microbiological Result	MOI		W ST	
	ricodit	MCL	MCLG	Typical Source
No Detected Results were Fo	ound in the Calendar Year	of 2021		

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
BARIUM	12/3/2019	0.0351	0.0351	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	12/3/2019	0.1	0.1	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	3/17/2021	0.35	0.35	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	6/19/2018	0.24	0.24	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SELENIUM	12/3/2019	6.3	6.3	ppb	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCL G	Typical Source
No Detected Results were Fo	und in the Calenda	ar Year of 2021		1				

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2017 - 2019	0.0529	0.0089 - 0.0857	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2017 - 2019	0.8	0.2 - 1	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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

Chlorine/Chloramines  Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
07/01/2021 - 07/31/2021	2.2	MG/L	1.7	MG/L

Unresolved Deficiency	Facility	Comments
Date Identified		
04/01/2021	TREATMENT PLANT	The treatment facility utilized by this system is very old, in poor condition and does not meet any current functional standards expected of a 21st century water system. The PSD obtained his system as a receiver resulting from the failure of a previous utility. This action was mandated by the WV Public Service Commission and other entities. The PSD has diligently tried to maintain the facility and provide service to 37 customers that rely on the system for potable water. The ultimate plan is to extend service from the adjacent McDowell County PSD Maybeury system and eliminate all facilities associated with the Ekman system. The cost to repair the current treatment and distribution system is not feasible for the small number of customers served. Currently the PSD is awaiting approval and funding to proceed with the extension project.
04/01/2021	DISTRIBUTION SYSTEM	This system delivers water to the customers via gravity flow with no pumping whatsoever. Neither the raw nor finished water is metered making it impossible to calculate the unaccounted-for water. However, given the condition of other facilities associated with this system it is highly likely unaccounted for water exceeds 40%. The PSD should make every reasonable effort to reduce this number to 15% or less.

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred

No Detected Results were Found in the Calendar Year of 2021

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
GROSS ALPHA, EXCL. RADON & U	12/12/2019	2.61	2.61	pCi/L	15	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
CHLORIDE	12/3/2019	2.8	0.0		
OULORNIE	12/0/2010	2.0	2.8	MG/L	250
CHLORINE	12/12/2019	1.5	1.5	MG/L	4
SODIUM	10/0/0			IVICIL	4
	12/3/2019	112	112	MG/L	1000
SULFATE	12/3/2019	000			
	12/3/2019	320	320	MG/L	250

During the 2021 calendar year, we had the below noted violation(s) of drinking water regulations.

Analyte	Comments	
ODOLINGWATER		
GROUNDWATER RULE	FAILURE ADDRESS DEFICIENCY (GWR)	
CDOLINDWATER SHIP		
GROUNDWATER RULE	FAILURE TO CONSULT, GWR	
DUDLIO NOTICE		
PUBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION	
	Analyte  GROUNDWATER RULE  GROUNDWATER RULE  PUBLIC NOTICE	GROUNDWATER RULE  FAILURE ADDRESS DEFICIENCY (GWR)  GROUNDWATER RULE  FAILURE TO CONSULT, GWR

There are no additional required health effects notices.

There are no additional required health effects violation notices.

Water System	Туре	Category	Analyte	Compliance Period
Violations Occurred in the Calendar	Year of 2021			

There are no additional required health effects violation notices.

There are no additional required health effects notices.

## MCDOWELL COUNTY PSD TIDEWATER

### WV3302407

## Consumer Confidence Report – 2022

## Covering Calendar Year - 2021

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 MAVIS BREWSTER at 304-297-2622.

Your water comes from:

Source Water Type	
Ground Water	

Buyer Name	Seller Name	
There are no additional purc	nases to display.	West of the second seco

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).

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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.

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Our water system has an estimated population of 188 and is required to test a minimum of 1 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.

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The following tables list all of the drinking water contaminants which were detected during the 2021 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, 2021. 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.

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## Testing Results for: MCDOWELL COUNTY PSD TIDEWATER

icrobiological	Result	MCL	8801.0	
			MCLG	Typical Source
Detected Regults ware	Found in the Calendar Year			
bottotted riesuits were i	round in the Calendar Year	r of 2021		

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
BARIUM	12/3/2019	0.0495	0.0495	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	12/3/2019	0.13	0.13	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	3/17/2021	0.36	0.36	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	12/3/2019	0.54	0.54	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRITE	12/3/2019	0.29	0.29	ppm	1	1	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Disinfection Byproducts	Sample Point			Danes (1- #1:1)	T				
	- mileto i Onte	Monitoring	Highest	Range (low/high)	Unit	MCL	MCL	Typical Source	
							IVICIL	7,	

	Period	LRAA	G	
No Detected Results were Found in the	Calendar Year of 20:	21		

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2018 - 2020	0.0678	0.0206 - 0.0856	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2018 - 2020	1.2	0.18 - 1.6	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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

Chlorine/Chloramines  Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
07/01/2021 - 07/31/2021	0.0	No.		
07/01/2021	2.2	MG/L	1.7	MG/L

Unresolved Deficiency	Facility	Comments
Date Identified		
08/23/2017	WATER SYSTEM	The PSD has not addressed the significant deficiencies noted in the last Sanitary Survey dated. December 18, 2012.
08/23/2017	WELL 1 (SPRING)	Raw water is supplied to this system from an abandoned coal mine adjacent to the treatment facility. A superficial inspection of the rock wall enclosing the water source revealed some openings large enough for small animals to enter. The PSD should seal these openings as recommended by he WV Department of Environmental Protection and divert surface water away from this feature.
08/23/2017	TREATMENT PLANT	All of the water treatment facilities associated with this system are dilapidated and have exceeded their useful life span. The PSD should make every effort to expedite the construction of the regional water system near Maybeury in order to provide service to the customers currently served by this system.
08/23/2017	TREATMENT PLANT	This system does not provide adequate chlorine contact time to provide 4-log removal of viruses as required by the Revised Total Coliform Rule. This information was provided to the PSD in a let er dated November 25, 2009. The PSD must install an adequate chlorine contact tank.

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
No Detected Results were Found in the C	alendar Year of 2021			

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
GROSS ALPHA, EXCL. RADON & U	12/12/2019	0.69	0.69	pCi/L	15	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
CHLORIDE	12/3/2019	9.6			
CHIODINE	12.0/2010	9.0	9.6	MG/L	250
CHLORINE	12/12/2019	2.5			200
CODILINA	1212010	2.5	2.5	MG/L	4
SODIUM	12/3/2019	74.0			
SULFATE	12/0/2019	74.8	74.8	MG/L	1000
SULFATE	12/3/2019	00.0			1000
	12/0/2013	88.2	88.2	MG/L	250

During the 2021 calendar year, we had the below noted violation(s) of drinking water regulations.

mpliance Period	Analyte	
	· many to	Comments
Violations O		
Violations Occurred in the C	alendar Year of 2021	
	TOUR OF LOLI	

There are no additional required health effects notices.

There are no additional required health effects violation notices.

Water System	Type	Category	Ameliate	T
		datogory	Analyte	Compliance Period
ations Occurred in the Calendar	V ( 000 )			+ omphanoc r enou
mone obtained in the Galeridal	rear of 2021			

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## MCDOWELL COUNTY PSD PREMIER

### WV3302411

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Our drinking water is supplied from another water system through a Consecutive Connection (CC). To find out more about our drinking water sources and additional chemical sampling results, please contact our office at the number provided above. Your water comes from :

Source Name	Source Water Type	
No other sources to display.		

Buyer Name			Seller Name
MCDOWELL PREMIER	COUNTY	PSD	WELCH CITY OF

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).

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## Testing Results for: MCDOWELL COUNTY PSD PREMIER

Microbiological	Result		MCL			MCLG	Typical Source	
No Detected Results were Fou	und in the Calenda	r Year of 2021						
Pogulated Contaminant	Collection	Highest	Range					
Regulated Contaminants	Date	Value	(low/high)	Unit	MCL	MCLG	Typical Source	

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCL G	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	88 BOOKER T STEPHENS WAY	2021	21	14.1 - 21.2	ppb	60	0	By-product of drinking water disinfection
ТТНМ	88 BOOKER T STEPHENS WAY	2021	94	0.082 - 82.2	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	2021	0.0725	0.0396 - 0.0856	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from vrood preservatives
LEAD	2021	1.7	0.35 - 1.9	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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

Chlorine/Chloramines				
Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
06/01/2021 - 06/30/2021	2.2	MG/L	1.6	
		WIGIL	1.0	MG/L

Analyte	Facility			
	,	Highest Value	Unit of Measure	Month Occurred
No Detected Results were Found in the Ca	alendar Year of 2021			

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Four	nd in the Calend	ar Year of 2021					

During the 2021 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
6/30/2021 - 6/28/2021	TTHM	FAILURE SUBMIT OEL REPORT FOR TTHM
1/1/2021 - 3/31/2021	TTHM	MCL, LRAA
4/1/2021 - 6/30/2021	TTHM	MCL, LRAA
7/1/2021 - 9/30/2021	TTHM	MCL, LRAA
9/1/2021 - 11/30/2021	TRIHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR
9/1/2021 - 11/30/2021	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR
10/29/2021 - 11/9/2021	PUBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION

# Additional Required Health Effects Language:

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

There are no additional required health effects violation notices. Some or all of our drinking water is supplied from another water system. The table below lists all of the drinking water contaminants, which were detected during the 2021 calendar year from the water systems that we purchase drinking water from.

Regulated Contaminants	Collection Date	Water System	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
ARSENIC	3/2/2017	WELCH CITY OF	1.1	1.1	ppb	10		Erosion of natura deposits; Runoff fron orchards; Runoff fron glass and electronics production wastes
BARIUM	3/2/2017	WELCH CITY OF	0.257	0.257	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE .	3/2/2017	WELCH CITY OF	0.92	0.92	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
GROSS ALPHA, EXCL. RADON & U	1/15/2019	WELCH CITY OF	4.5	4.5	pCi/L	15	0	Erosion of natural deposits
NITRATE	1/19/2021	WELCH CITY OF	0.35	0.35	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NTRATE-NITRITE	1/19/2021	WELCH CITY OF	0.87	0.87	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
ITRITE	1/19/2021	WELCH CITY OF	0.52	0.52	ppm	1	1	Runoff from fertilizer use; Leaching from septic tanks, sewaçe; Erosion of natural deposits

Disinfection Byproducts	Monitoring Period	Water System	Highest RAA	Range	Unit	MCL	MCLG	Typical Source
No Detected Results	were Found in the	Calendar Year of 2021						· yprodr oddree

Secondary Contaminants	Collection Date	Water System	Highest Value	Range (low/high)	Unit	SMCL
SODIUM	3/2/2017	WELCH CITY OF	242	242	MG/L	1000
SULFATE	3/2/2017	WELCH CITY OF	2.5	2.5	MG/L	250

Please Note: Because of sampling schedules, results may be older than 1 year.

During the 2021 calendar year, the water systems that we purchase water from had the below noted violation(s) of drinking water regulations.

Water System	Туре	Category	Analyte	Compliance Period
Violations Occurred in the Calendar	Year of 2021			

There are no additional required health effects violation notices.

There are no additional required health effects notices.

### **ASHLAND COMMUNITY**

### WV3302417

## Consumer Confidence Report – 2022

## Covering Calendar Year - 2021

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 MAVIS BREWSTER at 304-297-2622.

Your water comes from:

Source Water Type	
Ground Water	-

Buyer Name	Seller Name	
There are no additional purcl	nases to display.	

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.

<u>Inorganic contaminants</u>, 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.

<u>Pesticides and herbicides</u>, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

<u>Radioactive contaminants</u>, which can be naturally occurring or the result of mining activity.

<u>Organic contaminants</u>, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also corne 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 70 and is required to test a minimum of 1 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 we've detected during the 2021 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, 2021. 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.

<u>Maximum Contaminant Level Goal (MCLG)</u>: 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.

<u>Maximum Contaminant Level (MCL)</u>: 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.

<u>Secondary Maximum Contaminant Level (SMCL):</u> 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.

<u>Treatment Technique (TT)</u>: a required process intended to reduce levels of a contaminant in drinking water.

<u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.

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.

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

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

### Testing Results for: ASHLAND COMMUNITY

Microbiological	Result	MCL	MCLG	Typical Source
COLIFORM (TCR)	In the month of October, 1 sample(s) returned as positive	Treatment Technique Trigger	0	Naturally present in the environment

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
BARIUM	11/24/2019	0.0585	0.0585	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	11/24/2019	0.1	0.1	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertil zer and aluminum factories
NITRATE	3/17/2021	0.34	0.34	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	6/19/2018	0.38	0.38	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRITE	4/14/2021	0.17	0.17	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	MCL G	Typical Source
No Detected Results were Fo	und in the Calenda	ar Year of 2021						

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2019 - 2021	0.129	0.0855 - 0.129	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2019 - 2021	0.62	0.57 - 0.62	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 <a href="https://www.epa.gov/safewater/lead">https://www.epa.gov/safewater/lead</a>.

Chlorine/Chloramines					
Maximum Disinfection Level	MPA	.evel MPA	MPA Units	RAA	RAA Units
07/01/2021 - 07/31/2021	2	MG/L	10		
	-	IVIC/L	1.0	MG/L	

Unresolved Deficiency  Date Identified	Facility	Comments
02/07/2019	WATER SYSTEM	This public water system received violations for the monitoring period of Jan. 1, 2014 to Dec. 31, 2016 for either not collecting VOC samples or submitting the results late. The system should endeavor to submit all required samples in a timely manner to avoid future violation.
02/07/2019	TREATMENT PLANT	
02/07/2019	WATER SYSTEM	This public water system received violations for the monitoring period of July 1, 2017 to July 31, 2017 for either not collection TCR samples or submitting the results late. The system should endeavor to submit all required samples in a timely manner to avoid future violation.

Total Organic Carbon	Collection	Highest				
Lowest Month for Removal	Date	Value	Range	Unit	TT	Typical Source
CARBON, TOTAL	12/10/2019	1 20	1.00	1107		
or the ort, TOTAL	12/10/2019	1.39	1.39	MG/L	0	Naturally present in the environment

Analyte	Facility	Lilabaat Value	11.2. 688	
1	Facility	Highest Value	Unit of Measure	Month Occurred

No Detected Results were Found in the Calendar Year of 2021

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
GROSS ALPHA, EXCL. RADON & U	12/12/2019	0.063	0.063	pCi/L	15	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
ALKALINITY, TOTAL	12/10/2019	184	184	MG/L	10000
CAPPON TOTAL			104	IVIG/L	10000
CARBON, TOTAL	12/10/2019	3.06	1.39 - 3.06	ppm	10000
CHLORIDE	11/24/2019	1.7	1.7	1400	
		1.7	1.7	MG/L	250
SODIUM	11/24/2019	73.2	73.2	MG/L	1000
SULFATE	44/04/0040				1000
	11/24/2019	75.7	75.7	MG/L	250

During the 2021 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 2021		

## Additional Required Health Effects Language:

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

There are no additional required health effects violation notices.

Water System	Туре	Category	Analyte	Compliance Period
o Violations Occurred in the Calendar	Voor of 2021			

There are no additional required health effects violation notices.

There are no additional required health effects notices.

# MCDOWELL COUNTY PSD KIMBALL

## WV3302431

## Consumer Confidence Report - 2022

## Covering Calendar Year - 2021

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 MAVIS BREWSTER at 304-297-2622.

Your water comes from:

Source Name	Source Water Type
No other sources to display.	

Buyer Name	Seller Name	
There are no additional purch	nases to display.	

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.

<u>Inorganic contaminants</u>, such as salts and metals, which can be naturallyoccurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

<u>Pesticides and herbicides</u>, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

<u>Radioactive contaminants</u>, which can be naturally occurring or the result of mining activity.

<u>Organic contaminants</u>, 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 605 and is required to test a minimum of 1 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 2021 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 37, 2021. 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.

<u>Maximum Contaminant Level Goal (MCLG)</u>: 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.

<u>Maximum Contaminant Level (MCL)</u>: 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.

<u>Secondary Maximum Contaminant Level (SMCL):</u> 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.

 $\underline{\textbf{Treatment Technique (TT)}}\!\!: \text{a required process intended to reduce levels of a contaminant in drinking water.}$ 

<u>Maximum Residual Disinfectant Level (MRDL):</u> 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.

<u>Nephelometric Turbidity Unit (NTU)</u>: 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.

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

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

## Testing Results for: MCDOWELL COUNTY PSD KIMBALL

NAMES OF THE PROPERTY OF THE P		MCLG	Typical Source
Calandar Vanu of 2004			
Calendar Year of 2021			
	e Calendar Year of 2021	Calendar Year of 2021	Calendar Year of 2021

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
ANTIMONY, TOTAL	5/5/2021	0.38	0.38	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
BARIUM	5/5/2021	0.066	0.066	ppm	. 2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CHROMIUM	5/5/2021	3.9	3.9	ppb	100	100	Discharge from steel and pulp mills; Erosion of natural deposits
FLUORIDE	5/5/2021	0.16	0.16	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertil zer and aluminum factories
NITRATE	3/17/2021	0.35	0.35	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	6/19/2018	0.17	0.17	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SELENIUM	5/5/2021	4.1	4.1	ppb	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
							mines
THALLIUM, TOTAL	5/5/2021	0.014	0.014	ppb	2	0.5	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCL G	Typical Source
No Detected Results were Fo	ound in the Calenda	ar Year of 2021						

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2018 - 2020	0.0876	0.0074 - 1.23	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2018 - 2020	2.2	0 - 2.5	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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

Chlorine/Chloramines  Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
08/01/2021 - 08/31/2021	2	MG/L	1.7	MG/L

Unresolved Deficiency  Date Identified	Facility	Comments
08/23/2017	WATER SYSTEM	The PSD has not addressed the significant deficiencies noted in the past two Sanitary Surveys. These deficiencies noted poor plant condition, lack of fencing, inaccessible tank site as well as other items.
08/23/2017	TREATMENT PLANT	This water treatment facility is dilapidated and has reached the end of its useful service life. The PSD must make every effort to expedite phase 2 of the Elkhorn water extension project in order to take this treatment plant out of service.
08/23/2017	TREATMENT PLANT	On the day this system was inspected the water line feeding the chlorine educator was broken and leaking within the treatment plant. The chlorine system must be regularly monitored and repaired to insure continuous disinfection of the distributed water.
08/23/2017	STORAGE 2	This tank was again inaccessible as noted in the last Sanitary Survey. The operator noted that the tank is in poor repair and likely not holding water. If so, this tank must be replaced immediately as

it poses a public health threat.	

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
lo Detected Results were Found in the C	Calendar Year of 2021			

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Four	nd in the Calenda	ar Year of 2021					

Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
CHLORINE	12/12/2019	1			
	12/12/2010	4	2	MG/L	4
NICKEL	5/5/2021	0.0005			
	3/3/2021	0.0025	0.0025	MG/L	0.1
SODIUM	E/E/0004				
	5/5/2021	69.4	69.4	MG/L	1000
SULFATE					1000
JOLIATE	5/5/2021	91.3	91.3	MG/L	250
			III ANNALYDO TO TON	IVICI/L	250

During the 2021 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
2/13/2021	PUBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION
2/14/2021 - 3/13/2021	PUBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION
2/14/2021	PUBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION

There are no additional required health effects notices.

There are no additional required health effects violation notices.

Water System	Туре	Category	Analyte	Compliance Period
Violations Occurred in the Calendar	/ear of 2021			

There are no additional required health effects violation notices.

There are no additional required health effects notices.	
Your CCR is available at WWW:// mcdowellpsd.com. To receive a paper copy in the mail, please contact us at the phone number above.	

## MCDOWELL COUNTY PSD BARTLEY

### WV3302434

# Consumer Confidence Report – 2022

# Covering Calendar Year – 2021

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 MAVIS BREWSTER at 304-297-2622.

Your water comes from:

Source Name	Source Water Type
WELL - MINE	Ground Water under the Influence of Surface Water

Buyer Name	Seller Name	
There are no additional purch	nases to display.	

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:

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

<u>Inorganic contaminants</u>, 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.

 $\underline{\textit{Pesticides and herbicides}},$  which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

 $\underline{\textit{Radioactive contaminants}},$  which can be naturally occurring or the result of mining activity.

<u>Organic contaminants</u>, 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 1632 and is required to test a minimum of 2 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 2021 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, 2021. 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.

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.

<u>Maximum Contaminant Level (MCL)</u>: 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.

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

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

<u>Treatment Technique (TT)</u>: a required process intended to reduce levels of a contaminant in drinking water.

<u>Maximum Residual Disinfectant Level (MRDL):</u> 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.

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.

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

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

## Testing Results for: MCDOWELL COUNTY PSD BARTLEY

licrobiological	Result	MCL	3101.0	
			MCLG	Typical Source
Detected Regulto was	Found in the Calendar Yea			71
perceited Headits Well	e Found in the Calendar Yea	of 2021		
		01 202 1		

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
ANTIMONY, TOTAL	4/14/2021	0.045	0.045	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
BARIUM	4/14/2021	0.251	0.251	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CHROMIUM	4/14/2021	3.5	3.5	ppb	100	100	Discharge from steel and pulp mills; Erosior of natural deposits
FLUORIDE	4/14/2021	1	0.38 - 1	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE-NITRITE	4/16/2019	0.55	0.55	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

isinfection Byproducts	Sample Point							
71	oumpie i onti	Monitoring	Highest	Range (low/high)	Unit	MCL		Typical Carrier
		monntoning	riighest	5 (	Oine	MOT	MCL	Typical Source
					1		INI O Im	3.50

		Period	LRAA				G	
TOTAL HALOACETIC ACIDS (HAA5)	16202 MARSHALL HWY	2021	7	7.3 - 7.3	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	BIG CREEK PIA	2021	12	10.1 - 10.1	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	TIPPLE HOLLOW	2021	10	0.0108 - 9.3	ppb	60	0	By-product of drinking water disinfection
ТТНМ	16202 MARSHALL HWY	2021	34	30.2 - 30.2	ppb	80	0	By-product of drinking water chlorination
ГТНМ	TIPPLE HOLLOW	2021	36	36.3 - 36.3	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	0.223	0.0103 - 0.305	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD present, elevated leve	2017 - 2019	0.55	0 - 0.7	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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

Chlorine/Chloramines				
Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
10/01/2021 - 10/31/2021	2	MO/I		
10,0112021	3	MG/L	2.2	MG/L

Unresolved Deficiency  Date Identified	Facility	Comments
07/15/2019	WATER SYSTEM	This system has undergone numerous extensions that justify reevaluating the disinfection byproduct sampling plan. The system should sample at the maximum residence location that is likely in the Paynesville area.
07/15/2019	TREATMENT PLANT	The chlorine leak detector was not functional on the day the treatment plant was inspected.
07/15/2019	BARTLEY TANK	The tank site is poorly drained and most of the tank site is saturated which could lead to foundation failure. Better site drainage must be installed to prevent future tank damage and or failure.
07/15/2019	WATER SYSTEM	The PSD has not addressed two of the Significant Deficiencies noted in the last Sanitary Survey. The Bartley tank site still has inadequated drainage and the surrounding ground is saturated, and the chlorine leak detector is still inoperative.

Total Organic Carbon	Collection	Highest				
Lowest Month for Removal	Date	Value	Range	Unit	TT	Typical Source
CARBON, TOTAL	7/10/0001					
	7/19/2021	1.2	0.78 - 1.2	MG/L	0	Naturally present in the environment

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred	
Detected Results were Found in the C				month occurred	
otooted riesuits were round in the C	Calendar Year of 2021				

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source	
GROSS ALPHA, EXCL. RADON & U	12/12/2019	0.068	0.068	pCi/L	15	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
ALKALINITY, TOTAL	11/10/2021	545	241 - 545	MG/L	10000
ALUMINUM	8/4/2021	0.505	0.505	MG/L	0.05
CARBON, TOTAL	10/6/2021	1.3	0.78 - 1.3	ppm	10000
IRON	8/4/2021	0.202	0.202	MG/L	
MANGANESE	8/4/2021	0.889	0.889	MG/L	0.3
NICKEL	4/14/2021	0.00067	0.00067		0.05
PH	8/4/2021			MG/L	0.1
RESIDUAL CHLORINE		8	8	SU	8.5
	8/4/2021	2	2	MG/L	
GODIUM	4/14/2021	118	118	MG/L	1000
SULFATE	4/14/2021	62.2	62.2	MG/L	250

During the 2021 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments	
3/1/2021 - 5/31/2021	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR	
3/1/2021 - 5/31/2021	TRIHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR	
7/1/2021 - 9/30/2021	TRIHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR	
7/1/2021 - 9/30/2021	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR	

7/1/2021 - 9/30/2021	CARBON, TOTAL	MONITORING, ROUTINE (DBP), MAJOR	
7/1/2021 - 9/30/2021	ALKALINITY, TOTAL	MONITORING, ROUTINE (DBP), MAJOR	-
10/1/2021 - 12/31/2021	TRIHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR	
10/1/2021 - 12/31/2021	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR	-
7/1/2021 - 9/30/2021	NITRITE	MONITORING, ROUTINE MAJOR	
2/13/2021	PUBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION	

There are no additional required health effects notices.

There are no additional required health effects violation notices.

Water System	Туре	Category	Analyte	Compliance Period
Violations Occurred in the Calendar	Vear of 2021			

There are no additional required health effects violation notices.

There are no additional required health effects notices.

## MCDOWELL COUNTY PSD BERWIND

### WV3302435

# Consumer Confidence Report – 2022

# Covering Calendar Year – 2021

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 MAVIS BREWSTER at 304-297-2622.

Your water comes from:

Source Name	Source Water Type					
BERWIND WELL	Ground Water under the Influence of Surface Water					

Buyer Name	Seller Name	
There are no additional purch	ases to display.	

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:

 $\underline{\textit{Microbial contaminants}}$ , such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.

<u>Inorganic contaminants</u>, 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.

<u>Pesticides and herbicides</u>, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

 $\underline{\textit{Radioactive contaminants}},$  which can be naturally occurring or the result of mining activity.

<u>Organic contaminants</u>, 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 863 and is required to test a minimum of 1 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 2021 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 2021. 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.

<u>Maximum Contaminant Level Goal (MCLG)</u>: 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.

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

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

<u>Treatment Technique (TT)</u>: a required process intended to reduce levels of a contaminant in drinking water.

<u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.

<u>Nephelometric Turbidity Unit (NTU)</u>: 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.

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

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

### Testing Results for: MCDOWELL COUNTY PSD BERWIND

Microbiological	Result	MCL	MCLG	Typical Source	
No Detected Results wer	e Found in the Calendar Year	of 2021			

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
ANTIMONY, TOTAL	4/14/2021	0.042	0.042	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
BARIUM	4/14/2021	0.0751	0.0751	ppm	2	2	Discharge of drilling wastes; Discharge rom metal refineries; Erosion of natural deposits
CHROMIUM	4/14/2021	1.1	1.1	ppb	100	100	Discharge from steel and pulp mills; Erosicn of natural deposits
FLUORIDE	4/14/2021	0.59	0.59	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

Disinfection	on Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCL G	Typical Source
TOTAL	HALOACETIC	9095 ROCKET	2021	15	4.9 - 22.4	ppb	60	0	By-product of drinking water

ACIDS (HAA5)	BOYS DRIVE							
								disinfection
TTHM	35 PALM STREET	2021	17	0.003 - 17.6	ppb	80	0	By-product of drinking wa
								chlorination

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2019 - 2021	0.0285	0.0264 - 0.0285	ppm	1.3	0	Corrosion of household plumbing systems Erosion of natural deposits; Leaching from wood preservatives
LEAD	2019 - 2021	0.059	0 - 0.066	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 Hotlir e at <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

Chlorine/Chloramines  Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units		
03/01/2021 - 03/31/2021	3.8	MG/L				
	0.0	WG/L	2.4	MG/L		

Unresolved Deficiency  Date Identified	Facility		Comments
08/19/2019	TREATMENT BERWIND	PLANT-	As noted in past Sanitary Surveys, the media within the filter units has likely never been evaluated for consistency with the required size and uniformity specifications. Any future repairs to the filter units must include installation of new filter media.
08/19/2019	WATER SYSTEM		While the PSD has addressed most of the significant deficiencies noted in the last Sanitary Survey, the excessive rust and corrosion of the filter units is still an outstanding issue. In accordance with responses from the PSD dated October 17, 2016 and November 20, 2017, these deficiencies will be addressed in some future project when funding is available. Given the scope of the work needed to make these repairs, it is not likely the PSD could complete any of the required repairs with staff on hand.

Total Organic Carbon	Collection	Highest				
Lowest Month for Removal	Date	Value	Range	Unit	TT	Typical Source
CARBON, TOTAL	11/10/2021	1.6	0.68 - 1.6	MG/L	0	Ali
		,,,,	0.00 - 1.0	IVIG/L	0	Naturally present in the environment

Analyte	Eu .11.			
	Facility	Highest Value	Unit of Measure	Month Occurred

TURBIDITY	TDEATAGE DIALES			
TORBIDITY	TREATMENT PLANT-BERWIND	0.22	NTU	MAR 2021

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
GROSS ALPHA, EXCL. RADON & U	10/15/2019	0.454	0.454	pCi/L	15	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
ALKALINITY, TOTAL	12/9/2021	187	113 - 187	MG/L	10000
CARBON, TOTAL	4/14/2021	1.2	0.68 - 1.2	ppm	10000
CHLORIDE	3/19/2020	30	30	MG/L	250
NICKEL	4/14/2021	0.0028	0.0028	MG/L	0.1
PH	9/7/2018	7.7	7.7	SU	8.5
SODIUM	4/14/2021	50.8	50.8	MG/L	1000
SULFATE	4/14/2021	108	108	MG/L	250

During the 2021 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments					
9/1/2021 - 11/30/2021	TRIHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR					
9/1/2021 - 11/30/2021	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR					
2/13/2021	PUBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION					
2/14/2021	PUBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION					

There are no additional required health effects notices.

There are no additional required health effects violation notices.

Water System	Туре	Category	Analyte	Compliance Period
No Violations Occurred in the Calendar	Year of 2021		<u>I</u>	

There are no additional required health effects violation notices.

There are no additional required health effects notices.

### **BRADSHAW WATER WORKS**

### WV3302437

## Consumer Confidence Report – 2022

## Covering Calendar Year - 2021

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 Mavis Brewster at (304) 297-2622.

Your water comes from:

Source Water Type					
Ground Water					

Buyer Name	Seller Name	
There are no additional purcl	nases to display.	

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).

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

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

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

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

### Testing Results for: BRADSHAW WATER WORKS

Microbiological	Result	MCL	MCLG	Typical Source
No Detected Results were	Found in the Calendar Year	of 2021		

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
BARIUM	8/8/2019	1.3	1.3	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CHROMIUM	8/8/2019	2.6	2.6	ppb	100	100	Discharge from steel and pulp mills; Erosicn of natural deposits
FLUORIDE	8/8/2019	0.34	0.34	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
THALLIUM, TOTAL	8/8/2019	0.2	0.2	ppb	2	0.5	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCL G	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	10002 MARSHALL HIGHWAY	2021	22	22.4 - 22.4	ppb	60	0	By-product of drinking water disinfection

	(TOWN HALL)						T	
TTHM	10002 MARSHALL HIGHWAY (TOWN HALL)	2021	69	69.1 - 69.1	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	2021	0.00864	0.00746 - 0.0107	ppm	1.3	0	Corrosion of household plumbing systems Erosion of natural deposits; Leaching from wood preservatives
LEAD	2021	0.724	0.466 - 0.95	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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

Chlorine/Chloramines				
Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
07/01/2021 - 07/31/2021		MO		
	2	MG/L	1.2	MG/L

Unresolved Deficiency  Date Identified	Facility	Comments
03/25/2019	WATER SYSTEM	The Town received multiple violations in 2016 for failure to properly monitor and record chloring levels in the finished water. This and several other violations correspond with the time period the Town did not have a certified operator. All water testing and reporting must be done in a timely manner to avoid further violations.

Analyte	Facility Highest Value			
	achity	Highest Value	Unit of Measure	Month Occurred
Detected Results were Found in the C				
beledied nesults were round in the C	alendar Year of 2021		<u> </u>	

Radiolog	ical Contaminan	S Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
GROSS	ALPHA, EXC	8/8/2019	2.99	2.99	pCi/L	15	0	Erosion of natural deposits

RADON & U					
Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
SODIUM	8/8/2019	263	263	MG/L	1000
SULFATE	8/8/2019	1.46	1.46	MG/L	250

During the 2021 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
12/30/2020 - 9/16/2021	LEAD & COPPER RULE	LEAD CONSUMER NOTICE (LCR)
12/30/2021	LEAD & COPPER RULE	LEAD CONSUMER NOTICE (LCR)
10/1/2021 - 12/31/2021	CHLORINE	MONITORING, ROUTINE (DBP), MAJOR
4/1/2021 - 6/30/2021	NITRITE	MONITORING, ROUTINE MAJOR
11/14/2021	PUBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION
12/3/2021	PUBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION

There are no additional required health effects notices.

There are no additional required health effects violation notices.

Water System	Туре	Category	Analyte	Compliance Period
Violations Occurred in the Calendar	Year of 2021			

There are no additional required health effects violation notices.

There are no additional required health effects notices.

# MCDOWELL COUNTY PSD COALWOOD

### WV3302439

# Consumer Confidence Report – 2022

## Covering Calendar Year - 2021

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 MAVIS BREWSTER at 304-297-2622.

Your water comes from:

Source Name	Source Water Type
WELL NO. 2	Ground Water
WELL-MINE	Ground Water

Buyer Name	Seller Name	
There are no additional purcl	nases to display.	

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:

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

<u>Inorganic contaminants</u>, 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.

 $\underline{\textit{Pesticides and herbicides}},$  which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

 $\underline{\textit{Radioactive contaminants}}, \text{ which can be naturally occurring or the result of mining activity}.$ 

<u>Organic contaminants</u>, 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 1008 and is required to test a minimum of 2 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 2021 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, 2021. 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.

<u>Maximum Contaminant Level Goal (MCLG)</u>: 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.

<u>Maximum Contaminant Level (MCL)</u>: 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.

<u>Secondary Maximum Contaminant Level (SMCL):</u> 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.

<u>Treatment Technique (TT)</u>: a required process intended to reduce levels of a contaminant in drinking water.

<u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.

<u>Nephelometric Turbidity Unit (NTU)</u>: 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.

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

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

## Testing Results for: MCDOWELL COUNTY PSD COALWOOD

		MCL	MCLG	Tunical Course
1.5.1.15			mond.	Typical Source
lo Detected Results were Fo	ound in the Calendar Yea	r of 2021		

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
BARIUM	5/20/2019	0.706	0.706	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	5/20/2019	0.47	0.47	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
MERCURY	5/20/2019	0.1	0.1	ppb	2	2	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCL G	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	1185 SANDYHUFF RD	2021	15	0.0135 - 23.8	ppb	60	0	By-product of drinking water disinfection

TOTAL HALOACETIC ACIDS (HAA5)	5351 COAL HERITAGE ROAD	2021	14	0.0119 - 13.4	ppb	60	0	By-product of drinking water disinfection
TTHM	1185 SANDYHUFF RD	2021	24	0.024 - 22.3	ppb	80	0	By-product of drinking water chlorination
ТТНМ	5351 COAL HERITAGE ROAD	2021	22	0.019 - 21.7	ppb	80	0	By-product of drinking water chlorination

Lead and Copper	Monitoring Period	90th Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2017 - 2019	0.263	0.0053 - 0.336	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD present, elevated level	2017 - 2019	0.65	0 - 0.79	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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

Chlorine/Chloramines				
Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
02/01/2021 - 02/28/2021	2.2	MO#		
	2.3	MG/L	2.0	MG/L

Unresolved Deficiency  Date Identified	Facility	Comments
10/17/2019	TREATMENT PLANT	The chlorine feed and storage area does not have a leak detector. Given that this treatment plant is a public area that conducts meetings, houses administrative staff, receives in person payment from customers, etc., it is imperative that proper chlorine leak detections equipment is installed as soon as possible. Additionally, ventilation and exhaust fan equipment should be checked daily to ensure the safety of PSD staff and the general public,

Analyte	Facility	Highest Value	Unit of Measure	M
	,	riightst value	onit of weasure	Month Occurred
Detected Results were Found in the (	alandar Voor of 2001			
Sill til Ditto Loud Moto Loutin till file (	alendar Year of 2021			

adiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
ROSS ALPHA, EXCL. ADON & U	10/15/2019	1.11	1.11	pCi/L	15	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
SODIUM	5/20/2019	49.2	49.2	MG/L	1000
SULFATE	5/20/2019	5.54	5.54	MG/L	250

During the 2021 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments	
9/1/2021 - 11/30/2021	TRIHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR	
2/13/2021	PUBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION	

There are no additional required health effects notices.

There are no additional required health effects violation notices.

Water System	Туре	Category	Analyte	Compliance Period
Violations Occurred in the Calendar Ye	ear of 2021			

There are no additional required health effects violation notices.

There are no additional required health effects notices.

## MCDOWELL COUNTY PSD HAVACO

### WV3302440

# Consumer Confidence Report – 2022

# Covering Calendar Year – 2021

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 MAVIS BREWSTER at 304-297-2622.

Our drinking water is supplied from another water system through a Consecutive Connection (CC). To find out more about our drinking water sources and additional chemical sampling results, please contact our office at the number provided above. Your water comes from :

Source Name	Source Water Type	
No other sources to display.		

Buyer Name			Seller Name
MCDOWELL HAVACO	COUNTY	PSD	WELCH CITY OF

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:

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

<u>Inorganic contaminants</u>, 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.

<u>Pesticides and herbicides</u>, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

 $\underline{\textit{Radioactive contaminants}}, \text{ which can be naturally occurring or the result of mining activity}.$ 

<u>Organic contaminants</u>, 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 370 and is required to test a minimum of 1 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 2021 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, 2021. 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.



<u>Maximum Contaminant Level Goal (MCLG)</u>: 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.

<u>Maximum Contaminant Level (MCL)</u>: 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.

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

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

 $\underline{\textbf{Treatment Technique (TT)}}\text{: a required process intended to reduce levels of a contaminant in drinking water.}$ 

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.

No Detected Results were Found in the Calendar Year of 2021

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.

<u>Nephelometric Turbidity Unit (NTU)</u>: 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.

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

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

## Testing Results for: MCDOWELL COUNTY PSD HAVACO

Microbiological	Result		MCL				MCLG	Typical Source
No Detected Results were Fo	und in the Calenda	Year of 2021						Typical Godice
			Land of the second of the seco					
Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG		

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCL G	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	100 HEADQUART ERS LANE	2021	14	10.8 - 19.7	ppb	60	0	By-product of drinking water disinfection
TTHM	100 HEADQUART ERS LANE	2021	53	0.066 - 53.3	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	2021	0.103	0.0301 - 0.121	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2021	0.82	0.35 - 0.87	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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

Chlorine/Chloramines				
Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
02/01/2021 - 02/28/2021	2.4	MG/L	2.1	MG/L

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
No Detected Results were Found in the Caler	ndar Year of 2021			

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Fou	nd in the Calenda	ar Year of 2021					

During the 2021 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments	
9/1/2021 - 11/30/2021	TRIHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR	
9/1/2021 - 11/30/2021	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR	

#### Additional Required Health Effects Language:

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

There are no additional required health effects violation notices. Some or all of our drinking water is supplied from another water system. The table below lists all of the

drinking water contaminants, which were detected during the 2021 calendar year from the water systems that we purchase drinking water from.

Regulated Contaminants	Collection Date	Water System	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
ARSENIC	3/2/2017	WELCH CITY OF	1.1	1.1	ppb	10		Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM	3/2/2017	WELCH CITY OF	0.257	0.257	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	3/2/2017	WELCH CITY OF	0.92	0.92	ppm	4	4	Erosion of ratural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
GROSS ALPHA, EXCL. RADON & U	1/15/2019	WELCH CITY OF	4.5	4.5	pCi/L	15	0	Erosion of natural deposits
IITRATE	1/19/2021	WELCH CITY OF	0.35	0.35	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
IITRATE-NITRITE	1/19/2021	WELCH CITY OF	0.87	0.87	ppm	10	10	Runoff from ferilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
ITRITE	1/19/2021	WELCH CITY OF	0.52	0.52	ppm	1	1	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Disinfection Byproducts	Monitoring Period	Water System	Highest RAA	Range	Unit	MCL	MCLG	Typical Source
No Detected Results	were Found in the (	Calendar Year of 2021						

Secondary Contaminants	Collection Date	Water System	Highest Value	Range (low/high)	Unit	SMCL
SODIUM	3/2/2017	WELCH CITY OF	0.40			
OLUCATO			242	242	MG/L	1000
SULFATE	3/2/2017	WELCH CITY OF	0.5			
			2.5	2.5	MG/L	250

Please Note: Because of sampling schedules, results may be older than 1 year.

During the 2021 calendar year, the water systems that we purchase water from had the below noted violation(s) of drinking water regulations.

Water System	Type	Category		
		outegory	Analyte	Compliance Period
olations Occurred in the Calendar	Vacuational			oomphance remou
The Galerida	rear of 2021			

There are no additional required health effects violation notices.

There are no additional required health effects notices.

# MCDOWELL COUNTY PSD HEMPHILL

## WV3302441

# Consumer Confidence Report – 2022

## Covering Calendar Year - 2021

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 MAVIS BREWSTER at 304-297-2622.

Our drinking water is supplied from another water system through a Consecutive Connection (CC). To find out more about our drinking water sources and additional chemical sampling results, please contact our office at the number provided above. Your water comes from :

Source Name	Source Water Type	
No other sources to display.		

Buyer Name			Seller Name
MCDOWELL HEMPHILL	COUNTY	PSD	WELCH CITY OF

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:

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

<u>Inorganic contaminants</u>, 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.

 $\underline{\textit{Pesticides and herbicides}}$ , which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

 $\underline{\textit{Radioactive contaminants}}, \text{ which can be naturally occurring or the result of mining activity.}$ 

<u>Organic contaminants</u>, 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 322 and is required to test a minimum of 1 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 2021 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 2021. 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.



Microbiological

<u>Maximum Contaminant Level Goal (MCLG)</u>: 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.

<u>Maximum Contaminant Level (MCL)</u>: 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.

<u>Secondary Maximum Contaminant Level (SMCL):</u> 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.

<u>Treatment Technique (TT)</u>: a required process intended to reduce levels of a contaminant in drinking water.

<u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.

Popula

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.

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.

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

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

## Testing Results for: MCDOWELL COUNTY PSD HEMPHILL

- more brotogica;	nesun		MCL				MCLG	Typical Source	
No Detected Results were Fo	ound in the Calenda	r Year of 2021							
Regulated Contaminants	Collection	Highest	Range						-
- January - Januarin idillo	Date	Volue		Unit	MCL	MCLG	Typical Source	9	

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Four	Ind in the Calendar \	ear of 2021					

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCL G	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	530 COPPER RIDGE RD	2021	9	6.9 - 7.2	ppb	60	0	By-product of drinking water disinfection
TTHM	530 COPPER RIDGE RD	2021	33	0.02 - 32.5	ppb	80	0	By-product of drinking water chlorination

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range	Unit	AL	Sites Over AL	Typical Source

			(low/high)				
000000							Correction of household by
COPPER, FREE	2021	0.117	0.0142 - 1.34	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD present, elevated lev	2021	1.2	0.2 - 1.5	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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

Chlorine/Chloramines  Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
2/01/2021 - 02/28/2021	2.6	MG/L	2.2	MG/L

	Facility	Highest Value	Unit of Measure	Month Occurred
Detected Results were Found in the Calen	1 // /			Month Occurred
botocled results were round in the Calen	dar Year of 2021			

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Fou	nd in the Calenda	r Year of 2021					

Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
ALKALINITY, TOTAL	4/15/2021	624	455 - 624	MG/L	10000
CALCIUM	4/30/2020	3.2	3.2	MG/L	
CALCIUM	9/2/2021	17.6	2 - 17.6	MG/L	
CALCIUM HARDNESS	4/2/2020	10	7 - 10	MG/L	
CHLORINE	6/23/2021	3.8	2 - 3.8	MG/L	4
CONDUCTIVITY @ 25 C UMHOS/CM	7/26/2018	1270	1080 - 1270	UMHO/CM	
HARDNESS, CALCIUM MAGNESIUM	2/17/2021	42	2.8 - 42	MG/L	
HARDNESS, TOTAL (AS CACO3)	9/2/2021	44	6 - 44	MG/L	
ORTHOPHOSPHATE	4/29/2021	21	0.1 - 21	MG/L	
PH	2/17/2021	8.3	7.7 - 8.3	SU	8.5
TEMPERATURE (CENTIGRADE)	8/26/2021	22.9	17.4 - 22.9	C	
TOTAL CHLORINE	8/29/2019	2.6	2.5 - 2.6	MG/L	

During the 2021 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments	
10/1/2021 - 12/31/2021	TRIHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR	
10/1/2021 - 12/31/2021	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR	

## Additional Required Health Effects Language:

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

There are no additional required health effects violation notices. Some or all of our drinking water is supplied from another water system. The table below lists all of the drinking water contaminants, which were detected during the 2021 calendar year from the water systems that we purchase drinking water from.

Regulated Contaminants	Collection Date	Water System	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
ARSENIC	3/2/2017	WELCH CITY OF	1.1	1.1	dqq	10		Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM	3/2/2017	WELCH CITY OF	0.257	0.257	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE  GROSS ALPHA,	3/2/2017	WELCH CITY OF	0.92	0.92	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
EXCL. RADON & U	1/15/2019	WELCH CITY OF	4.5	4.5	pCi/L	15	0	Erosion of natural deposits
NITRATE	1/19/2021	WELCH CITY OF	0.35	0.35	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
JITRAȚE-NITRITE	1/19/2021	WELCH CITY OF	0.87	0.87	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
ITRITE	1/19/2021	WELCH CITY OF	0.52	0.52 <sub>F</sub>	ppm	1	1	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Disinfection Byproducts	Monitoring Period	Water System	Highest RAA	Range	Unit	MCL	MCLG	Typical Source
No Detected Results	were Found in the (	Lalendar Year of 2021						

Secondary Contaminants	Collection Date	Water System	Highest Value	Range (low/high)	Unit	SMCL
SODIUM	3/2/2017	WELCH CITY OF	242	040		
SULFATE			444	242	MG/L	1000
SULFATE	3/2/2017	WELCH CITY OF	2.5	O.F.		
			4.0	2.5	MG/L	250

Please Note: Because of sampling schedules, results may be older than 1 year.

During the 2021 calendar year, the water systems that we purchase water from had the below noted violation(s) of drinking water regulations.

Water System	Type	Category		
		oategory	Analyte	Compliance Period
olations Occurred in the Calendar	1/			oomphance remod
rations occurred in the Calendar	Year of 2021			
- Inditional	1001012021			

There are no additional required health effects violation notices.

There are no additional required health effects notices.

## CRUMPLER COMMUNITY WATER

### WV3302448

# Consumer Confidence Report – 2022

## Covering Calendar Year - 2021

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 MAVIS BREWSTER at 304-297-2622.

Your water comes from:

Source Name	Source Water Type	
SPRING 1-MINE/ZENITH	Ground Water	
SPRING 2-MINE/JOYCE	Ground Water	
SPRING 3 MINE/KERMIT	Ground Water	

Buyer Name	Seller Name	
There are no additional purch	ases to display.	

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

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

<u>Inorganic contaminants</u>, 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.

<u>Pesticides and herbicides</u>, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

<u>Radioactive contaminants</u>, which can be naturally occurring or the result of mining activity.

<u>Organic contaminants</u>, 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 318 and is required to test a minimum of 1 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 2021 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, 2021. 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.

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.

<u>Maximum Contaminant Level (MCL)</u>: 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.

<u>Secondary Maximum Contaminant Level (SMCL):</u> 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.

 $\label{eq:Treatment Technique (TT):} \mbox{a required process intended to reduce levels of a contaminant in drinking water.}$ 

<u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.

<u>Nephelometric Turbidity Unit (NTU)</u>: 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.

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

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

# Testing Results for: CRUMPLER COMMUNITY WATER

icrobiological	obiological Result	MCL	2001.0		
Detected Results were Found in the Calendar Year	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	MCLG	Typical Source		
Detected Populta was	е Гентин С			- ) produce	
beleeted Hesuits wel	e Found in the Calendar Year	of 2021			
	Track Tour	01 2021			

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
NITRATE	3/17/2021	0.36	0.36	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	6/19/2018	0.31	0.31	ppm	10	10	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	MCL	Typical Source
No Detected Results were Fo	und in the Calenda	I ar Year of 2021					· ·	

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source

COPPER, FREE	2021	0.024	0.0032 - 0.0289	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2021	0.42	0.081 - 0.48	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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

MPA	MPA Units	RAA	RAA Units
2	MG/L	1.5	MG/L
	MPA 2		TIME TIME

Unresolved Deficiency	Facility	Comments
Date Identified		
02/07/2019	WATER SYSTEM	This public water system received violations for failure to submit a monthly operational report for the monitoring period of Feb. 1, 2018 to Feb. 28, 2018. The system must submit a monthly operational report by the 10th of the following month to avoid future violation.
02/07/2019	WATER SYSTEM	This public water system received violations for the monitoring period of Feb. 1, 2018 to Feb 28, 2018 for either not collection T.C.R. samples or submitting the results late. The system should endeavor to submit all required samples in a timely manner to avoid future violation.
02/07/2019	CRUMPLER STORAGE TANK	The foundation of this storage facility is badly deteriorated, and the structure is likely beyond repair. The PSD should have a plan in place to replace this structure and to provide temporary finished water storage in the event of tank failure.
02/07/2019	CRUMPLER STORAGE TANK	The overflow pipe for this tank is continuous and lacks a sanitary airgap and screen.
02/07/2019	WATER SYSTEM	The system has not address significant deficiencies noted in several of the past sanitary surveys.

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
o Detected Results were Found in the Ca	lendar Year of 2021			

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
GROSS ALPHA, EXCL.	12/16/2019	0.844	0.844	pCi/L	15	0	Erosion of natural deposits

RADON & U		
HADON & U		

During the 2021 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments	
2/14/2021	DUDI IO NOTICE		
tour I II long V lans	PUBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION	
12/4/2021	PUBLIC NOTICE		
	FOBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION	

There are no additional required health effects notices.

There are no additional required health effects violation notices.

Water System	Type	Category	A I	
	71	outegory	Analyte	Compliance Period
tions Occurred in the Calendar				1 1100
nons occurred in the Calendar	Year of 2021			
are occarred in the Galeridal	1 ear 01 2021			la.

There are no additional required health effects violation notices.

There are no additional required health effects notices.

## MCDOWELL COUNTY PSD MAYBEURY

### WV3302460

# Consumer Confidence Report – 2022

## Covering Calendar Year - 2021

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 MAVIS BREWSTER at 304-297-2622.

Your water comes from:

Source Name	Source Water Type
WELL 1	Ground Water

Buyer Name	Seller Name	
There are no additional pur	chases to display.	-

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).

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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.

<u>Inorganic contaminants</u>, 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.

<u>Pesticides and herbicides</u>, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

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<u>Organic contaminants</u>, 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 871 and is required to test a minimum of 1 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 2021 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, 2021. 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.

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

 $\underline{\text{Treatment Technique (TT)}}\text{: a required process intended to reduce levels of a contaminant in drinking water.}$ 

<u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.

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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.

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.

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

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

## Testing Results for: MCDOWELL COUNTY PSD MAYBEURY

	Result		MCL			MCLG	Typical Source	
No Detected Results were Fo	ound in the Calenda	r Year of 2021						Typiour double
Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source	

Disinfection Byproducts	Sample Point	Monitoring	Highest			,		
Distribution byproducts		Period LRAA	Range (low/high)	Unit	MCL	MCL	Typical Source	
No Detected Results were Fo	ound in the Calonda	or Voor of 0004						

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2017 - 2019	0.105	0.0174 - 0.243	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

LEAD	2017 - 2019	2.4	0 - 2.4	dqq	15		Corrosion of household plumbing system	ns:
If present, elevated le	evels of lead can cause				1.5		Erosion of natural deposits	10,
materials and some	vois of lead carr caus	se serious he	ealth problems, espe	cially for pregnar	nt women	and young	a phildren I and in I i i i	

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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

Chlorine/Chloramines  Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
/01/2021 - 10/31/2021	2.3	MG/L	2.0	MG/L

Unresolved Deficiency  Date Identified	Facility	Comments
04/01/2021	DIST SYSTEM	The control
	- STOTEM	The system is pumping approximately 400,000 gallons of water daily to supply service to 494 residential customer and approximately 30 commercial customers. This equates to approximately 80% unaccounted for water produced. The PSD should make every effort to locate and repair leaks in order to reduce this number to 15% or lower.
04/01/2021	PAGETON TANK	The tank site is saturated and poorly draining. The PSD must rectify the drainage issue to evoid potential failure of the tank foundation.
04/01/2021	ANAWALT TANK	
04/01/2021	JENKINJONES TANK	
	SENTINGONES TANK	This storage facility is not fenced and the climbing ladder is easily accessible. This is not only a threat to the finished water stored in the facility, but it is also a liability due to potential injuries sustained by unauthorized people trying to climb the structure.
4/01/2021	ANAWALT TANK	The tank site is saturated and poorly draining. The PSD must rectify the drainage issue to avoid potential failure of the tank foundation.
4/01/2021	JENKINJONES TANK	This tank site is not fenced.
4/01/2021	ANAWALT TANK	This storage facility is not fenced and is lacking any type of cage to impede access to the climbing ladder. This is not only a threat to the finished water stored in the facility, but it is also a liability due to potential injuries sustained by unauthorized people trying to climb the structure.

Facility	Highest Value	Unit of Measure	Month Occurred
			month occurre
of 2021			
	of 2021	of 2021	of 2021

Collection Highest Range Unit MCL MCLG Typical Source	Radiological Contaminants	0 " .		I D	1				
		Collection	Highest	Range	Unit	MCL	MCLG	Typical Source	
The state of the s			3					Typical Source	

	Date	Value	(low/high)	
No Detected Results were F	Found in the Cale	endar Year of 202	1	

During the 2021 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments	
8/27/2021	CDOLINDIMATED THE		
	GROUNDWATER RULE	FAILURE ADDRESS DEFICIENCY (GWR)	
5/29/2021 - 6/1/2021	CDOLINDMATED DIVIS		
	GROUNDWATER RULE	FAILURE TO CONSULT, GWR	
11/13/2021	DUDUC NOTICE		
	PUBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION	

There are no additional required health effects notices.

There are no additional required health effects violation notices.

Water System	Type	Category	A	1
	.,,,,	Category	Analyte	Compliance Period
-1-1' 0				1 01100
olations Occurred in the Calendar	Year of 2021			
	1 OUI OI 2021			

There are no additional required health effects violation notices.

There are no additional required health effects notices.

## MCDOWELL COUNTY PSD GREENBRIER

## WV3302465

# Consumer Confidence Report – 2022

# Covering Calendar Year - 2021

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 MAVIS BREWSTER at 304-297-2622.

Your water comes from:

Source Name	Source Water Type
SPRING/MINE	Ground Water

Buyer Name	Seller Name	
There are no additional pur	chases to display.	

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.

<u>Inorganic contaminants</u>, 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.

<u>Pesticides and herbicides</u>, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

<u>Radioactive contaminants</u>, which can be naturally occurring or the result of min ng activity.

<u>Organic contaminants</u>, 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 165 and is required to test a minimum of 1 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 2021 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 3<sup>+</sup>, 2021. 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.

<u>Maximum Contaminant Level Goal (MCLG)</u>: 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.

<u>Maximum Contaminant Level (MCL)</u>: 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.

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

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

<u>Treatment Technique (TT)</u>: a required process intended to reduce levels of a contaminant in drinking water.

<u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.

<u>Nephelometric Turbidity Unit (NTU)</u>: 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.

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

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

## Testing Results for: MCDOWELL COUNTY PSD GREENBRIER

Microbiological	Result	MCL	MCLG	Typical Source	
No Detected Results we	re Found in the Calendar Yea	of 2021		- yprodroodroc	

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
BARIUM	11/24/2019	0.0618	0.0618	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	11/24/2019	0.11	0.11	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	3/17/2021	0.35	0.35	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	6/19/2018	0.24	0.24	ppm	10	10	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	MCL G	Typical Source
No Detected Results were Fo	ound in the Calenda	ar Year of 2021						

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2018 - 2020	0.0543	0.0104 - 0.0629	ppm	1.3	0	Corrosion of household plumbing systems Erosion of natural deposits; Leaching from wood preservatives
LEAD  present, elevated leve	2018 - 2020	0.83	0.21 - 0.84	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
03/01/2021 - 03/31/2021	1.9	MG/L	1.8	MG/L

Unresolved Deficiency  Date Identified	Facility	Comments
05/03/2017	WATER SYSTEM	The PSD has not addressed the poor physical condition of this system as noted in the last Sanitary Survey. A planned regional water system, operated by the PSD, will eventually replace this water system.
05/03/2017	TREATMENT PLANT	All of the water treatment facilities associated with this system are dilapidated and have exceeded their useful life span. The PSD should make every effort to expedite the construction of the regional water system near Maybeury to provide service to the customers currently served by this system.
05/03/2017	TREATMENT PLANT	The state of the s

Analyte	Facility	Highort Value	11.11.41.	
	,	Highest Value	Unit of Measure	Month Occurred
etected Results were Found in the				monar occurred
ciected results were round in the	Calendar Year of 2021			

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
GROSS ALPHA, EXCL.	12/12/2019	0.05	0.05	pCi/L	15		
THE THIS EXOL.			0.00	POIL	15	0	Erosion of natural deposits

Secondary Contaminants-Non Health Based					
Contaminants-No Federal Maximum	Collection Date	Highest Value	Range		
Contaminant Level (MCL) Established.		riigitest value	(low/high)	Unit	SMCL
CHLORIDE	11/04/0010				
2001111	11/24/2019	2.9	2.9	MG/L	250
SODIUM	11/24/2019	60.8			200
NH FATE		00.0	60.8	MG/L	1000
SULFATE	11/24/2019	40.0			1000
	11/24/2019	48.2	48.2	MG/L	250

During the 2021 calendar year, we had the below noted violation(s) of drinking water regulations.

ompliance Period	Analyte	Commente	
	30	Comments	
Violationa Occument : II	Calendar Year of 2021		
violations occurred in the	Calendar Year of 2021		
	1001012021		

There are no additional required health effects notices.

RADON & U

There are no additional required health effects violation notices.

Water System	Type	Category	A 1 - 1	
		ducgory	Analyte	Compliance Period
ations Occurred in the Calendar \				Infinance i criod
ations occurred in the Calendar	Year of 2021			
and data in a	1 641 01 2021			

There are no additional required health effects violation notices.

There are no additional required health effects notices.

## MCDOWELL COUNTY PSD BIG FOUR

## WV3302471

# Consumer Confidence Report - 2022

## Covering Calendar Year - 2021

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 MAVIS BREWSTER at 304-297-2622.

Your water comes from:

Source Name	Source Water Type
WELL 1	Ground Water

Buyer Name	Seller Name	
There are no additional purcl	nases to display.	

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.

<u>Inorganic contaminants</u>, 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.

<u>Pesticides and herbicides</u>, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

<u>Radioactive contaminants</u>, which can be naturally occurring or the result of mining activity.

<u>Organic contaminants</u>, 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 363 and is required to test a minimum of 1 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 2021 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, 2021. 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.

<u>Maximum Contaminant Level Goal (MCLG)</u>: 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.

<u>Maximum Contaminant Level (MCL)</u>: 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.

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

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

<u>Treatment Technique (TT)</u>: a required process intended to reduce levels of a contaminant in drinking water.

<u>Maximum</u> Residual <u>Disinfectant</u> <u>Level</u> (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.

<u>Nephelometric Turbidity Unit (NTU)</u>: 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.

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

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

## Testing Results for: MCDOWELL COUNTY PSD BIG FOUR

licrobiological	Result	MCL		
		MOL	MCLG	Typical Source
- D-1 - 1 - 1 D - 1:		was a second of the second of		- Jprodu Godiroc
o Detected Results we	re Found in the Calendar Yea	r of 2021		

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
BARIUM	12/3/2019	0.0787	0.0787	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	12/3/2019	0.08	0.08	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	3/17/2021	0.19	0.19	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	6/19/2018	0.15	0.15	ppm	10	10	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	MCL G	Typical Source
No Detected Results were Fo	ound in the Calenda	ar Year of 2021						

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2021	0.66	0.0121 - 0.727	ppm	1.3	0	Corrosion of household plumbing systems Erosion of natural deposits; Leaching from wood preservatives
present, elevated leve	2021	0.59	0.053 - 0.76	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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

Chlorine/Chloramines	113001			
Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
0/01/2021 - 10/31/2021	21	MO		
	2.1	MG/L	1.7	MG/L

25.0	Facility	Highest Value	Unit of Measure	Month Occurred
Detected Deviller 5			- mododio	Month Occurred
Detected Results were Found in the Ca	alendar Year of 2021			

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Fou	nd in the Calenda	ar Year of 2021					

Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
CHLORIDE	12/3/2019	9.9	9.9	MG/L	250
CHLORINE	12/12/2019	1.1	1.1	MG/L	4
SODIUM	12/3/2019	38.5	38.5	MG/L	1000
SULFATE	12/3/2019	51.6	51.6	MG/L	250

During the 2021 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
2/13/2021	PUBLIC NOTICE	PUBLIC NOTICE RULE LINKED TO VIOLATION

There are no additional required health effects notices.

There are no additional required health effects violation notices.

	Туре	Category	Analyte	Compliance Period
				Compliance Period
ations Occurred in the Calenda	r Voor of 2004			
- Todan da in the Odienda	1 Teal 01 2021			

There are no additional required health effects violation notices.

There are no additional required health effects notices.

# MCDOWELL COUNTY PSD BISHOP WV3302475

# Consumer Confidence Report – 2022

# Covering Calendar Year - 2021

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 MAVIS BREWSTER at 304-297-2622.

Our drinking water is supplied from another water system through a Consecutive Connection (CC). To find out more about our drinking water sources and additional chemical sampling results, please contact our office at the number provided above. Your water comes from :

Source Name	Source Water Type
No other sources to display.	

Buyer Name			Seller Name
MCDOWELL BISHOP	COUNTY	PSD	TOWN OF TAZEWELL, VA

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).

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<u>Radioactive contaminants</u>, which can be naturally occurring or the result of mining activity.

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Our water system has an estimated population of 100 and is required to test a minimum of 1 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 2021 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 2021. 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.



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

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

 $\underline{ \mbox{Treatment Technique (TT):}} \mbox{ a required process intended to reduce levels of a contaminant in drinking water.}$ 

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.

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

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

## Testing Results for: MCDOWELL COUNTY PSD BISHOP

Microbiological	Result		MCL			
			CONT. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10		MCLG	Typical Source
No Detected Results were Fo	und in the Calenda	r Year of 2021				
Regulated Contaminants	Collection	Highest	Range			

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Fou	ınd in the Calendar	Year of 2021	A				

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCL G	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	130 SKYGUSTY HIGHWAY	2021	30	8.8 - 48.9	ppb	60	0	By-product of drinking water disinfection
ТТНМ	130 SKYGUSTY HIGHWAY	2021	33	0.051 - 28.7	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	2019 - 2021	0.0288	0.0281 - 0.0289	ppm	1.3	0	Corrosion of household plumbing systems Erosion of natural deposits; Leaching from woo preservatives
Dresent, elevated level	2019 - 2021	0.06	0 - 0.11	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 at <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

Chlorine/Chloramines  Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
0/01/2021 - 10/31/2021	2.3	MG/L	1.8	MG/L

Analyte	Facility	Llighant V. I	1	
	,	Highest Value	Unit of Measure	Month Occurred
etected Results were Found in the				Monar occurred
steered results were round in the	Calendar Year of 2021			

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Fou	nd in the Calenda	ar Year of 2021					

During the 2021 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
6/1/2021 - 6/30/2021	CHLORINE	
	CITLONINE	FAILURE TO COMPLETE OR SUBMIT MOR

There are no additional required health effects notices.

There are no additional required health effects violation notices. Some or all of our drinking water is supplied from another water system. The table below lists all of the drinking water contaminants, which were detected during the 2021 calendar year from the water systems that we purchase drinking water from.

Disinfection Byproducts	Monitoring Period	Water System	Highest RAA	Range	Unit	MCL	MCLG	Typical Source
No Detected Results	were Found in the (	Lalendar Year of 2021	100000000000000000000000000000000000000					,,

Please Note: Because of sampling schedules, results may be older than 1 year.

During the 2021 calendar year, the water systems that we purchase water from had the below noted violation(s) of drinking water regulations.

Water System	Туре	Category		
9		Jategory	Analyte	Compliance Perio
ns Occurred in the Calenda	. V (222)			oomphance Fello
no occurred in the Calenda	If Year of 2021			New Address Ad

There are no additional required health effects violation notices.

There are no additional required health effects notices.