You are legally responsible to provide this water quality information to your renters. Please provide them with a copy – additional copies are available upon request. Thank you.

# MARTIN CREEK COMMUNITY ASSOCIATION

Public Water System #51877 N – Kettle Falls, Washington 2023 Consumer Confidence Report

This annual report is designed for consumers of drinking water within the Martin Creek Community Association Water System (MCCA), and provides information about the quality, source, and potential health effects of contaminants in our local and source water systems. This report conforms to the Federal regulation, contained within the Safe Drinking Water Act, which requires that this information be provided annually. This report contains a summary of the water quality test results from the MCCA source water and distribution system. The data contained in this report was collected during or prior to 2022.

#### **DEFINITIONS**

The following definitions may be used in this report:

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

**MCL** – Maximum Contaminant Level (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.)

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

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

**mg/L** – milligrams per liter (This unit is equivalent to measurements in parts per million.)

**ug/L** – micrograms per liter (This unit is equivalent to measurements in parts per billion.)

**pCi/L** – picoCuries per liter (A measurement of radioactivity.)

#### **SOURCE WATER**

The source water for MCCA is supplied by three wells (S01, S02, and S03) drilled approximately 300, 400, and 440 feet, respectively, into an underground source of water, or aquifer. Two wells are located west and south of Hillside Court; the third is south of Crestview Drive. MCCA restricts any activity that could potentially contaminate these sources. The waters from these wells are pumped to a 35,000 gallon reservoir before being delivered to your homes.

Source water tests are mandated by the Washington State Department of Health (DOH) to monitor the quality of the MCCA source water. This provides information on the quality of the water that is being pumped from the aquifer. Further information about the MCCA source water can be found in the source water assessment, on file with the Department of Health and Alpine Environmental. The assessment evaluates the potential risk of contamination that may be posed by activities or conditions in the area. For a copy of this information, contact Alpine Environmental at the numbers listed at the end of this report.

# SOURCE WATER TESTING SUMMARY

The following tests were performed on the MCCA source water in or prior to 2022. These samples were collected from sampling taps at the wells, and represent the water served from the sources.

WELL 1 (S01) TESTING						
Substance Analyzed	Date Collected	Detected Level	MCL	MCLG	Unit of Measure	Passed
Inorganic Chemicals (IOC) – primary contaminants with health effects						
Nitrate	4/5/22	No Detect	10	10	mg/L	Yes
Nitrite	4/10/19	No Detect	1	1	mg/L	Yes
Arsenic	4/10/19	No Detect	10	0	ug/L	Yes
Barium	4/10/19	0.02	2	2	mg/L	Yes
Cadmium	4/10/19	1.02	5	5	ug/L	Yes
Chromium	4/10/19	No Detect	100	100	ug/L	Yes
Mercury	4/10/19	No Detect	2	2	ug/L	Yes
Selenium	4/10/19	4.02	50	50	ug/L	Yes
Beryllium	4/10/19	No Detect	4	4	ug/L	Yes
Nickel	4/10/19	10.4	100	100	ug/L	Yes
Antimony	4/10/19	No Detect	6	6	ug/L	Yes
Thallium	4/10/19	No Detect	2	0.5	ug/L	Yes
Cyanide	4/10/19	No Detect	200	200	ug/L	Yes
Fluoride	4/10/19	0.77	4	4	mg/L	Yes
Inorganic Chemicals	(IOC) – second	dary contamii	nants with t	aste, odo	r, color effe	cts
Iron	4/5/22	721	300	N/A	ug/L	No
Manganese	4/5/22	32.9	50	N/A	ug/L	No
Silver	4/10/19	No Detect	100	N/A	ug/L	Yes
Chloride	4/10/19	1.70	250	N/A	mg/L	Yes
Sulfate	4/10/19	290	250	N/A	mg/L	No
Zinc	4/10/19	6.63	5	N/A	mg/L	No
Hardness	4/10/19	560	N/A	N/A	mg/L	Yes
Volatile Organic Chen	nicals (VOC) -	includes pet	roleum pro	ducts and	other chen	nicals
All VOCs (58 tested)	6/15/21	No Detect	Varies	Varies		Yes
Synthetic Organic Ch	emicals (SOC)	– includes p	esticides a	nd herbic	ides	
SOCs (15 tested)	10/15/18	No Detect	Varies	Varies		Yes

Per/polyfluoroalkyl substances (25 tested)	11/9/21	No Detect	Varies	Varies		Yes
Radioactivity						
Radium	11/5/19	0.23	5	0	pCi/L	Yes
Gross alpha particles	6/15/21	3.32	15	0	pCi/L	Yes

WELL 2 (S02) TESTING						
Substance Analyzed	Date Collected	Detected Level	MCL	MCLG	Unit of Measure	Passed
Inorganic Chemicals	(IOC) – primar	y contaminan	its with hea	Ith effects	6	
Nitrate	4/5/22	No Detect	10	10	mg/L	Yes
Nitrite	4/10/19	No Detect	1	1	mg/L	Yes
Arsenic	4/10/19	No Detect	10	0	ug/L	Yes
Barium	4/10/19	0.02	2	2	mg/L	Yes
Cadmium	4/10/19	No Detect	5	5	ug/L	Yes
Chromium	4/10/19	No Detect	100	100	ug/L	Yes
Mercury	4/10/19	No Detect	2	2	ug/L	Yes
Selenium	4/10/19	No Detect	50	50	ug/L	Yes
Beryllium	4/10/19	No Detect	4	4	ug/L	Yes
Nickel	4/10/19	No Detect	100	100	ug/L	Yes
Antimony	4/10/19	No Detect	6	6	ug/L	Yes
Thallium	4/10/19	No Detect	2	0.5	ug/L	Yes
Cyanide	4/10/19	No Detect	200	200	ug/L	Yes
Fluoride	4/10/19	1.68	4	4	mg/L	Yes
Inorganic Chemicals	(IOC) – second	dary contamir	nants with t	aste, odo	r, color effe	cts
Iron	4/10/19	176	300	N/A	ug/L	Yes
Manganese	4/10/19	4.45	50	N/A	ug/L	Yes
Silver	4/10/19	No Detect	100	N/A	ug/L	Yes
Chloride	4/10/19	2.73	250	N/A	mg/L	Yes
Sulfate	4/10/19	125	250	N/A	mg/L	Yes
Zinc	4/10/19	0.29	5	N/A	mg/L	Yes
Hardness	4/10/19	214	N/A	N/A	mg/L	Yes
Volatile Organic Chemicals (VOC) – includes petroleum products and other chemicals						

All VOCs (62 tested)	5/7/18	No Detect	Varies	Varies		Yes
Synthetic Organic Chemicals (SOC) – includes pesticides and herbicides						
SOCs (15 tested)	10/15/18	No Detect	Varies	Varies		Yes
Per/polyfluoroalkyl substances (25 tested)	11/9/21	No Detect	Varies	Varies		Yes
Radioactivity						
Radium	7/21/20	1.32	5	0	pCi/L	Yes
Gross alpha particles	7/21/20	No Detect	15	0	pCi/L	Yes

WELL 3 (S03) TESTING						
Substance Analyzed	Date Collected	Detected Level	MCL	MCLG	Unit of Measure	Passed
Inorganic Chemicals (	(IOC) – primar	y contaminan	ts with hea	Ith effects	5	
Nitrate	4/5/22	No Detect	10	10	mg/L	Yes
Nitrite	4/10/19	No Detect	1	1	mg/L	Yes
Arsenic	4/10/19	No Detect	10	0	ug/L	Yes
Barium	4/10/19	0.02	2	2	mg/L	Yes
Cadmium	4/10/19	No Detect	5	5	ug/L	Yes
Chromium	4/10/19	No Detect	100	100	ug/L	Yes
Mercury	4/10/19	No Detect	2	2	ug/L	Yes
Selenium	4/10/19	1.14	50	50	ug/L	Yes
Beryllium	4/10/19	No Detect	4	4	ug/L	Yes
Nickel	4/10/19	3.09	100	100	ug/L	Yes
Antimony	4/10/19	No Detect	6	6	ug/L	Yes
Thallium	4/10/19	No Detect	2	0.5	ug/L	Yes
Cyanide	4/10/19	No Detect	200	200	ug/L	Yes
Fluoride	10/11/22	5.21*	4	4	mg/L	No
Inorganic Chemicals (	Inorganic Chemicals (IOC) – secondary contaminants with taste, odor, color effects					
Iron	4/5/22	85.0	300	N/A	ug/L	Yes
Manganese	4/10/19	3.42	50	N/A	ug/L	Yes
Silver	4/10/19	No Detect	100	N/A	ug/L	Yes
Chloride	4/10/19	10.9	250	N/A	mg/L	Yes
Sulfate	4/10/19	173	250	N/A	mg/L	Yes
Zinc	4/10/19	1.20	5	N/A	mg/L	Yes

Hardness	4/10/19	73.0	N/A	N/A	mg/L	Yes	
Volatile Organic Chen	Volatile Organic Chemicals (VOC) – includes petroleum products and other chemicals						
All VOCs (62 tested)	4/10/19	No Detect	Varies	Varies		Yes	
Synthetic Organic Ch	Synthetic Organic Chemicals (SOC) – includes pesticides and herbicides						
All SOCs (76 tested)	N/A		Varies	Varies			
Per/polyfluoroalkyl substances (25 tested)	11/9/21	No Detect	Varies	Varies		Yes	
Radioactivity							
Radium	10/11/22	0.29	5	0	pCi/L	Yes	
Gross alpha particles	10/11/22	No Detect	15	0	pCi/L	Yes	

<sup>\*</sup>Fluoride result shown for Well 3 is the highest of four tests completed on that source in 2022.

# WHAT DOES "NO DETECT" MEAN?

Many of the contaminants listed in the results tables show an analytical result of "No Detect." This does not mean that the contaminant was not present in the water, but that the concentration, if any, was undetectable with the analytical methods used.

## **DELIVERED WATER**

MCCA is required to test for contaminants throughout the distribution system. Samples are collected from at least six residences throughout the system to satisfy the DOH sampling recommendations and to best represent the conditions existing in the system. At least one water sample per month is analyzed for the presence of coliform bacteria. In 2022, coliform bacteria were detected in seven of the collected samples.

Whenever coliform is detected, chlorine is added to the system, and lines are

flushed to remove contaminants. Follow-up samples are collected to ensure the lines have been cleaned. In December, the coliform appears to have entered the system through gaps in the hatch on the reservoir roof. Repairs are being made to ensure a watertight seal.

Lead and copper testing is typically required every three years, with samples collected from homes throughout the system after the water has stood in the pipes for at least six hours. The table below summarizes the most recent lead and copper sampling results.

Substance Analyzed	Dates Collected	Contaminant Level	AL	MCLG	Unit of Measure	Passed
Lead (lot 2)	7/31/21	No Detect	15	0	ug/L	Yes
Lead (lot 3)	7/31/21	0.002	15	0	ug/L	Yes
Lead (lot 8)	7/31/21	No Detect	15	0	ug/L	Yes
Lead (lot 13)	8/2/21	No Detect	15	0	ug/L	Yes
Lead (lot 18)	7/31/21	No Detect	15	0	ug/L	Yes
Copper (lot 2)	7/31/21	0.045	1.3	1.3	mg/L	Yes
Copper (lot 3)	7/31/21	0.213	1.3	1.3	mg/L	Yes
Copper (lot 8)	7/31/21	0.269	1.3	1.3	mg/L	Yes
Copper (lot 13)	8/2/21	0.041	1.3	1.3	mg/L	Yes
Copper (lot 18)	7/31/21	0.009	1.3	1.3	mg/L	Yes

Some contaminants can have serious health implications if they are ingested in high quantities or over long periods of time. The table below provides information on those contaminants with potential health effects that were detected in your drinking water during or prior to 2022. While these contaminants were detected, they were at levels below the allowable limits set by the state, and therefore should not pose a health risk to most individuals. Your doctor can provide more information about any special concerns you may have regarding your drinking water and its effects on your health.

Contaminant	Known or likely source	Potential health effects
Barium	Erosion of natural deposits; discharge from metal refineries; discharge of drilling wastes	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
Cadmium	Corrosion of galvanized pipes; Erosion of natural deposits; Dis- charge from metal refineries; Runoff from waste batteries and paints	Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.
Copper	Erosion of natural deposits	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
Fluoride	Erosion of natural deposits; discharge from fertilizer and aluminum factories; water additive which promotes strong teeth	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.
Gross alpha particles	Erosion of natural deposits	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
Lead	Corrosion of household plumbing systems; erosion of natural deposits	Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning disabilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Radium	Erosion of natural deposits	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.
Selenium	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines	Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.

#### **FLUORIDE**

The water in well #3 (S03) is routinely measuring fluoride levels above the MCL of 4.0 mg/L. The Washington State Department of Health has required that MCCA hire an engineer to assess the water system and develop a plan to treat the water and reduce the overall fluoride levels being delivered to your home. Options include the installation of a treatment plant to remove the fluoride, redesigning the system to allow blending with non-fluoridated water to dilute the levels, or eliminating the well and developing a new source.

#### **VIOLATIONS**

MCCA experienced violations for the presence of coliform bacteria in September and December, 2022. In both instances, the system was assessed for vulnerabilities, chlorinated, and flushed to disinfect the water mains. Follow-up samples have shown that the treatments were effective and the coliform bacteria has been eliminated. Repairs to the reservoir are on-going.

## **MONITORING WAIVERS**

MCCA has received waivers for reduced monitoring schedules for the following contaminants:

# Every nine years

- Asbestos
- Complete inorganics (S01/S02)
- Herbicides

# Every six years

• Volatile organics (S01/S02)

# Every three years

- Pesticides
- Soil fumigants

#### **SANITARY SURVEY**

Periodically, public water systems receive inspections to ensure that water is being delivered in a sanitary manner and that the system is being managed according to industry standards. The MCCA system was inspected on September 28<sup>th</sup>, 2021. There were no significant deficiencies identified during the sanitary survey.

## **COMMUNITY INVOLVEMENT**

For more information regarding upcoming meetings or to learn how to become more involved in the operation of your water system, please contact one of the following board representatives:

Scott Odom (509) 738-2620 Connie David (509) 738-6468

This Consumer Confidence Report has been prepared by Alpine Environmental of Tonasket, Washington, serving north central Washington water systems since 2003. As your contract water operator, Alpine Environmental is proud to be providing you with the highest quality of service and oversight available. If you have any questions or comments regarding the information presented in this report, please call Alpine Environmental at (509) 826-1653 or (509) 322-0581.

# A MESSAGE FROM THE EPA

Throughout Washington State, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material. At the same time, this water can also pick up substances resulting from the presence of animals or from human activity.

All sources of 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 Environmental Protection Agency (EPA) Safe Drinking Water Hotline at 1-800-426-4791. Contaminants that may be present in source water, and that are routinely tested for, include:

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

<u>INORGANIC CONTAMINANTS</u> such as salts and metals, which can be naturally-occurring or may result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

PESTICIDES AND HERBICIDES, which may come from a variety of sources such as agricultural and residential uses.

**RADIOACTIVE CONTAMINANTS**, which are naturally-occurring.

**ORGANIC CHEMICAL CONTAMINANTS** including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that our water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in the water provided by your water system. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Washington State allows some contaminants to be monitored less than once per year because the concentration of these contaminants is not expected to vary significantly from year to year.

#### **Additional Information**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The EPA and the Center for Disease Control (CDC) provides guidelines on appropriate methods to lessen the risk of infection by Cryptosporidium and other microbial contaminants, and this information is available from the EPA Safe Drinking Water Hotline at 1-800-426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Martin Creek Community Association 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 thirty seconds to two minutes before using drinking 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>.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue-baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.