LANDLORDS

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.

NESPELEM WATER DEPARTMENT

Public Water System #59000 Q – Nespelem, Washington

2021 Consumer Confidence Report

This annual report is designed for consumers of drinking water within the Nespelem Water Department (NWD), 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 NWD source water and distribution system. The data contained in this report was collected during or prior to 2020.

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.)*

MFL>10um *– Million fibers per liter measuring more than 10 micrometers.*

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 NWD is supplied by two wells (S03 and S04) drilled into an underground source of water, or aquifer. The wells are located northeast of town, on property owned by the Town of Nespelem and situated east of Highway 155. NWD restricts any activity that could potentially contaminate these sources. The water pumped from the wells is stored in a 405,000-gallon aboveground reservoir before delivery to your homes.

Source water tests are mandated by the Washington State Department of Health (DOH) to monitor the quality of the NWD source water. This provides information on the quality of the water that is being pumped from the aquifer. Further information about the NWD 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 NWD source water in or prior to 2020. These samples were collected from sampling taps at the wells, and represent the water served from the source.

WELL 3 (S03) TESTING – RETURNED TO SERVICE IN 2020						
Substance Analyzed	**Date Collected**	**Detected Level**	**MCL**	**MCLG**	**Unit of Measure**	**Passed**
Inorganic Chemicals (IOC) – primary contaminants with health effects						
Nitrate	9/15/20	**0.59**	10	10	mg/L	Yes
Nitrite	9/15/20	No Detect	1	1	mg/L	Yes
Arsenic	9/15/20	**5.36**	10	0	ug/L	Yes
Barium	9/15/20	**0.019**	2	2	mg/L	Yes
Cadmium	9/15/20	No Detect	5	5	ug/L	Yes
Chromium	9/15/20	**2.11**	100	100	ug/L	Yes
Mercury	9/15/20	No Detect	2	2	ug/L	Yes
Selenium	9/15/20	**1.30**	50	50	ug/L	Yes
Beryllium	9/15/20	No Detect	4	4	ug/L	Yes
Nickel	9/15/20	**18.8**	100	100	ug/L	Yes
Antimony	9/15/20	No Detect	6	6	ug/L	Yes
Thallium	9/15/20	No Detect	2	0.5	ug/L	Yes
Cyanide	9/15/20	No Detect	200	200	ug/L	Yes
Fluoride	9/15/20	**0.70**	4	4	mg/L	Yes
Inorganic Chemicals (IOC) – secondary contaminants with taste, odor, color effects						
Iron	9/15/20	**740**	300	N/A	ug/L	No
Manganese	9/15/20	**17.1**	50	N/A	ug/L	Yes
Silver	9/15/20	No Detect	100	N/A	ug/L	Yes
Chloride	9/15/20	**10.3**	250	N/A	mg/L	Yes
Sulfate	9/15/20	**24.9**	250	N/A	mg/L	Yes
Zinc	9/15/20	**0.01**	5	N/A	mg/L	Yes
Hardness	9/15/20	**163**	N/A	N/A	mg/L	Yes
Volatile Organic Chemicals (VOC) – includes petroleum products and other chemicals						
All VOCs (56 contaminants tested)	9/15/20	No Detect	Varies	Varies	--	Yes
Chloromethane	9/15/20	**0.82**	N/A	N/A	ug/L	Yes

Synthetic Organic Chemicals (SOC) – includes pesticides and herbicides						
All SOCs (63 contaminants tested)	9/15/20	No Detect	Varies	Varies	--	Yes
Radioactivity						
Radium	9/15/20	**0.03**	5	0	pCi/L	Yes
Gross alpha particles	9/15/20	**3.56**	15	0	pCi/L	Yes

WELL 4 (S04) TESTING						
Substance Analyzed	**Date Collected**	**Detected Level**	**MCL**	**MCLG**	**Unit of Measure**	**Passed**
Inorganic Chemicals (IOC) – primary contaminants with health effects						
Nitrate	10/20/20	No Detect	10	10	mg/L	Yes
Nitrite	8/23/16	No Detect	1	1	mg/L	Yes
Arsenic	9/10/19	**7.34**	10	0	ug/L	Yes
Barium	8/23/16	**0.019**	2	2	mg/L	Yes
Cadmium	8/23/16	No Detect	5	5	ug/L	Yes
Chromium	8/23/16	No Detect	100	100	ug/L	Yes
Mercury	8/23/16	No Detect	2	2	ug/L	Yes
Selenium	8/23/16	No Detect	50	50	ug/L	Yes
Beryllium	8/23/16	No Detect	4	4	ug/L	Yes
Nickel	8/23/16	No Detect	100	100	ug/L	Yes
Antimony	8/23/16	No Detect	6	6	ug/L	Yes
Thallium	8/23/16	No Detect	2	0.5	ug/L	Yes
Cyanide	8/23/16	No Detect	200	200	ug/L	Yes
Fluoride	8/23/16	**0.498**	4	4	mg/L	Yes
Inorganic Chemicals (IOC) – secondary contaminants with taste, odor, color effects						
Iron	8/23/16	**173**	300	N/A	ug/L	Yes
Manganese	10/8/19	**99.3**	50	N/A	ug/L	No
Silver	8/23/16	No Detect	100	N/A	ug/L	Yes
Chloride	8/23/16	**3.96**	250	N/A	mg/L	Yes
Sulfate	8/23/16	**15.0**	250	N/A	mg/L	Yes
Zinc	8/23/16	**0.019**	5	N/A	mg/L	Yes
Hardness	8/23/16	**113**	N/A	N/A	mg/L	Yes

Volatile Organic Chemicals (VOC) – includes petroleum products and other chemicals						
All VOCs (60 contaminants tested)	10/16/18	No Detect	Varies	Varies	--	Yes
Synthetic Organic Chemicals (SOC) – includes pesticides and herbicides						
All SOCs (64 contaminants tested)	11/10/20	No Detect	Varies	Varies	--	Yes
Radioactivity						
Radium	5/3/15	No Detect	5	0	pCi/L	Yes
Radium	9/14/15	**0.18**	5	0	pCi/L	Yes
Gross alpha particles	7/5/17	No Detect	15	0	pCi/L	Yes

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

NWD is required to test for contaminants throughout the distribution system. Samples are collected from at least three locations 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 2020, coliform bacteria were detected in five of the 21 collected samples.

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 tables below summarize the most recent lead and copper sampling results.

Substance Analyzed	Date Collected	Contaminant Level	AL	MCLG	Unit of Measure	Passed
Lead (HUD #2009)	8/7/18	No Detect	15	0	ug/L	Yes
Lead (Old HUD #1003)	8/3/18	No Detect	15	0	ug/L	Yes
Lead (HUD #4003)	8/1/18	No Detect	15	0	ug/L	Yes
Lead (HUD #99)	8/2/18	No Detect	15	0	ug/L	Yes
Lead (HUD #1048)	8/1/18	No Detect	15	0	ug/L	Yes
Lead (HUD #3016)	8/1/18	No Detect	15	0	ug/L	Yes
Lead (5018 9th St)	8/1/18	No Detect	15	0	ug/L	Yes
Lead (HUD #70)	8/1/18	No Detect	15	0	ug/L	Yes
Lead (HUD #13)	8/1/18	No Detect	15	0	ug/L	Yes
Lead (HUD #26)	8/1/18	No Detect	15	0	ug/L	Yes

Substance Analyzed	Date Collected	Contaminant Level	AL	MCLG	Unit of Measure	Passed
Copper (HUD #2009)	8/7/18	**0.037**	1.3	1.3	mg/L	Yes
Copper (Old HUD #1003)	8/3/18	**0.008**	1.3	1.3	mg/L	Yes
Copper (HUD #4003)	8/1/18	**0.029**	1.3	1.3	mg/L	Yes
Copper (HUD #99)	8/2/18	**0.024**	1.3	1.3	mg/L	Yes
Copper (HUD #1048)	8/1/18	**0.019**	1.3	1.3	mg/L	Yes
Copper (HUD #3016)	8/1/18	**0.011**	1.3	1.3	mg/L	Yes
Copper (5018 9th St)	8/1/18	**0.052**	1.3	1.3	mg/L	Yes
Copper (HUD #70)	8/1/18	**0.033**	1.3	1.3	mg/L	Yes
Copper (HUD #13)	8/1/18	**0.042**	1.3	1.3	mg/L	Yes
Copper (HUD #26)	8/1/18	**0.008**	1.3	1.3	mg/L	Yes

When added to drinking water, chlorine can potentially combine with organic matter to create byproducts that are suspected carcinogens. Public water systems that continuously chlorinate their water are required to test for disinfection byproducts, including haloacetic acids and trihalomethanes. The results of the most recent testing are summarized below:

Substance Analyzed	Date Collected	Contaminant Level	MCL	MCLG	Unit of Measure	Passed
Haloacetic acids	8/11/20	No Detect	60	N/A	ug/L	Yes
Trihalomethanes	8/11/20	No Detect	80	N/A	ug/L	Yes

Water systems that contain a certain percentage of asbestos cement piping are required to test for the presence of asbestos in the areas served by those pipes. There is a percentage of such piping in the Town of Nespelem distribution system and the result of the most recent asbestos test is as follows:

Substance Analyzed	Date Collected	Contaminant Level	MCL	MCLG	Unit of Measure	Passed
Asbestos	8/15/18	No Detect	7	7	MFL>10um	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 2020. 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
Arsenic	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes	Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
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.
Chromium	Discharge from steel and pulp mills; erosion of natural deposits	Some people who drink water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.
Copper	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	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	Erosion of natural deposits; corrosion of household plumbing systems	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 abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.
Nitrate	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
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.
Total Coliform Bacteria	Naturally present in the environment	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.

Water Use Efficiency

NWD has set a goal of reducing summer outdoor watering by 2% by 2020. Some actions that you can take include shutting off water if it isn't needed, installing low-flow fixtures, and restricting outdoor watering to nights and early mornings.

Violations

There were no violations of any applicable regulations during 2020, thanks to the diligent efforts of town employees and the members of the town council. Be sure to thank them for all

the time and effort they have contributed to ensure you have safe water to drink!

Monitoring Waivers

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

Every nine years

- Asbestos
- Complete inorganics
- Herbicides

Every six years

- Volatile organics

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 NWD system was inspected on October 9, 2019. There were three significant deficiencies identified during the sanitary survey and repaired immediately, as follows:

Reservoir vents were in place but were an outdated style that had the potential to allow contaminants to drop through the screens. New vents were constructed and installed with downward facing openings so that contaminants could not drop into the reservoir.

The hatches on the reservoirs had seals that were not entirely weathertight. The seals have been replaced.

An opening for a cable conduit was discovered that had the potential for insects to enter the reservoir. Screening was added to the opening to prevent access.

To Learn More

Your involvement in the management of the NWD water system is important. To participate or provide input, contact the town council or attend one of their monthly meetings. Contact the Nespelem Town Hall at 509-634-4691 for more information.

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:

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

INORGANIC CONTAMINANTS such as salts and metals, which can be naturally-occurring or 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. Nespelem Water Department 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 http://www.epa.gov/safewater/lead.

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.