

# Bishop Paiute-Shoshone Tribe Annual Water Quality Report

Public Water System #090600122

2015

## Message from the Public Works Director

It is our mission to provide you with safe, reliable drinking water. We are committed to ensuring the quality of your drinking water by maintaining an excellent maintenance, operations, and monitoring program for the community drinking water supply. Staff works hard to provide safe drinking water with a minimum cost to the Tribe by doing a majority of the work in-house. Staff is on-call 7 days a week, 24 hours a day to take care of complications that come about. We have ongoing programs to monitor the drinking water for specific contaminants on a regular basis according to an EPA defined schedule in order to ensure that your drinking water is safe. We are committed to providing information about the drinking water and are happy to answer any questions you may have about your drinking water system.

## Is my water safe?

This report is a snapshot of your water quality. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with information because informed customers are our best allies.

## Do I need to take special precautions?

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 Environmental Protection Agency (EPA) and Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

## Where does my water come from?

Water is pumped from three well sites including Pa Me, Winuba, and Siebu. The water you receive at your tap comes from the groundwater aquifer within the Reservation exterior boundaries. After your water is pumped from the aquifer, it is disinfected with chlorine to kill any bacteria that is in your water. The amount of chlorine left when it gets to your tap is equal to 3 pennies out of 1,000,000 pennies.

## Why are there contaminants in my drinking water?

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's Safe Drinking Water Hotline (800-426-4791).

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

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming; pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses;
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems;
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

## Other Information

### Bishop Public Works Emergency Call List

In the event of a residential area water leak or wastewater problem (outside of the home) the on call operator can be notified by phone or through the administrative office. Any tribal member or Tribal Police who may see a major problem during normal working hours should call the Public Works Department (Monday-Friday 8:00AM to 5:00PM). On weekends and holidays you may call the Public Works Department office and let it ring through to a cell phone.

- Public Works - Utilities Office 760-873-6638
- Peter Bernasconi, PE, Public Works Department Director Mobile Phone 760-920-7109
- Sonja Velarde, Administrative Assistant, Phone 760-873-6638
- Dan Stone, Water Operator II Mobile Phone 760-937-1289
- Richard Summers, Water Operator I Mobile Phone 760-937-2484
- David Weaver, Irrigation System and Water Operator Mobile Phone 760-920-5942

For interior residential home plumbing problems, contact Community Development Department (CDD), CDD Office Phone 760-872-4356 or Gaylene Moose, Housing Management Officer 760-263-4711

### Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Locally our community uses over 900gpd in the summer and 600gpd in the winter. Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce water use.
- Visit [www.epa.gov/watersense](http://www.epa.gov/watersense) for more information.

### Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- For those few homes that still have their own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system. Contact the Public Works Department and we can assist with the evaluation of sewer connection options. Our groundwater is about 5 feet deep and subject to pollution from septic systems.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in the community to protect the watershed. The Public Works Department (PWD) or the Environmental Management Organization (EMO) can assist in the formation of a volunteer group. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.

## WATER QUALITY TABLE

The table below lists all of the drinking water contaminants detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires monitoring for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

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Contaminants

Your

Range Sample

	MCLG	MCL	Water	Low	High	Date	Violation	Typical Source
<b>Microbial Contaminants</b>								
Total Coliform Units:	0	2 or more positive samples / month	All Results Negative	N/A	N/A	2015	No	Naturally present in the environment.
Fecal coliform/E. Coli Units:	0	2 or more positive samples / month	All Results Negative	N/A	N/A	2015	No	Human and animal waste.

Contaminants	MCLG	MCL	Your Water	Range Low	High	Sample Date	Violation	Typical Source
<b>Inorganic Contaminants</b>								
Fluoride Units: ppm	4	4	0.2	N/A	N/A	2013	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Contaminants	MCLG	Action Level	Your Water	Range	Sample Date	A.L. Exceeded	Typical Source
<b>Lead and Copper Rule</b>							
Copper Units: ppm - 90th Percentile	1.3	1.3	0.019	0 sites over Action Level	2013	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead Units: ppb - 90th Percentile	0	15	1	0 sites over Action Level	2013	No	Corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

## Special Education Statements

### Additional Information for Lead

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. PWS 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 1-800-426-4791 or at <http://www.epa.gov/safewater/lead/leadfactsheet.html>.

### Additional Information for Fluoride

No Fluoride is added to your drinking water but occurs naturally as shown in the Water Quality Table of 0.2 MGL. Locally groundwater as is similar to in most groundwater Fluoride occurs as the anion F<sup>-</sup>. Waters with high fluoride content are found mostly in calcium-deficient ground waters in many basement aquifers, such as granite and gneiss, in geothermal waters and in some sedimentary basins. Groundwater with high fluoride concentrations occur in many areas of the world. Fluoride is found in vegetables, fruit, tea and other crops. Although drinking water is usually the largest contributor to the daily fluoride intake. Fluoride is also found in the atmosphere, originating from the dusts of fluoride-containing soils, from gaseous industrial wastes, from the burning of coal fires in

populated areas and from gases of volcanic activity. Thus fluoride, in varying concentrations, is freely available in nature. Most of the studies of fluoride intake have been done in developed countries. In temperate climates, daily exposure is about 0.6mg/adult/day if the water is not fluoridated. The WHO guideline value for fluoride is 1.5mg/liter, with a target of between 0.8–1.2mg/l to maximize benefits and minimize harmful effects. Acceptable levels depend on climate, volumes of water intake and the likely intake of fluoride in other sources. Much depends on whether other sources, such as those mentioned above, also have high levels.

### The effects of too little—and too much—Fluoride

Fluoride can be a desirable substance: it can prevent or reduce dental decay and strengthen bones, thus preventing bone fractures in older people. Where the fluoride level is naturally low, studies have shown higher levels of both dental caries (tooth decay) and fractures. Because of its positive effect, fluoride is added to water during treatment in some areas with low levels. But you can have too much of a good thing; and in the case of fluoride, water levels above 1.5mg/liter may have long-term undesirable effects (Table 1: see also fact file on fluorosis). Much depends on whether other sources, such as vegetables, also have high levels. The risk of toxic effect rises with the concentration. It only becomes obvious at much higher levels than 1.5mg/l. The natural level can be as high as 95mg/l in some waters, such as in Tanzania where the rocks are rich in fluoride-containing minerals. Severe effects of excess fluoride have recently been reported from the Assam state in India (Box).

[https://www.epa.gov/sites/production/files/2015-10/documents/2011\\_fluoride\\_questionsanswers.pdf](https://www.epa.gov/sites/production/files/2015-10/documents/2011_fluoride_questionsanswers.pdf)

## Unit Descriptions

Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or microgram per liter (ug/L)
positives samples	positive samples/yr: the number of positive samples taken that year
% positive samples/month	% positive samples/month: % of samples taken monthly that were positive
N/A	N/A: Not applicable
ND	ND Not detected
NR	NR: Monitoring not required, but recommended.
MCLG	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	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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, trigger treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
MRDL	MRDL: Maximum residual disinfectant level. The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level
mrem/yr	mrem/yr: Millirem per year

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## Monitoring and Reporting Violations

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Contaminant Name Rule	Type of Violation	Begin/End Date	Comments	Steps Taken to Correct the Violation	Return to Compliance	Return Date	Action Comment
Total Coliform	Major monitoring/reporting violation for routine bacteriological monitoring.	4/1/2015 4/30/2015	No routines reported	Subsequent reporting of all required results.	Yes	6/1/2015	

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### How can I get involved?

Please feel free to contact the number provided below for more information. Your input is important to us!

#### For more information please contact:

Sonja Velarde, Administrative Assistant, 630 Brockman Lane, CA Bishop, California 93514

**Phone:** (760) 873-6638

**Fax:** (760) 873-0018