



Annual Drinking Water Quality Report

January 1, 2015 – December 31, 2015



Wiyot Tribe – Table Bluff Reservation

Public Water System #0605124

Is my water safe?

Last year, your tap water met all U.S. Environmental Protection Agency (USEPA) primary drinking water health standards. Here at Table Bluff Reservation (TBR), we vigilantly safeguard our water supplies and are proud to report that our system has not violated a primary drinking water maximum contaminant level. 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. From April 2010 to present day, the Tribe has been receiving water from two new water wells on TBR. Potassium permanganate was removed from treatment because water quality from the new wells showed iron and manganese levels well below regulatory limits. Chloride levels are far below regulatory standards and pH levels are elevated (pH levels ~7.90-8.10) but meet secondary regulations (pH levels 6.5-8.5). The pH level of our water is not associated with negative health impacts.

How does water get to my faucet?



In a typical community water supply system, water is transported under pressure through a distribution network of buried pipes. Smaller pipes, called house service lines, are attached to the main water lines to bring water from the distribution network to your house. In TBR's community water supply system, next to the 100,500 gallon water storage tank on the west side of the Reservation, water pressure is provided by booster pumps and a hydro-pneumatic tank. As the water is pumped into the storage tank, it is treated with fluoride for children's teeth and then disinfected with chlorine to eliminate biological contaminants (i.e. coliforms). The water is then pumped into the distribution lines, which deliver the water to each house.

Where does my water come from?

Your water was supplied from two sources located on TBR:

- The first is a 600' deep well (the water is pumped from the well at a depth of 260') located on the west boundary of the Reservation
- The second is 500' deep well (the water is pumped from the well at a depth of 180') located on the southeast boundary of the Reservation.

The Sphere of Influence encompasses an area of 1000' surrounding each wellhead that could have impact on our water from potential contaminant sources.



Figure 1. Sphere of Influence for well #1 on Table Bluff Reservation



Figure 2. Sphere of Influence for well #2 on Table Bluff Reservation

Presently, the significant sources of possible contamination to our water source on TBR are: agriculture (dairy farming), hydrocarbons and heavy metals from vehicles (both operational and non-operational), and illegal dumping.

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 US EPA'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.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, 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, that 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, 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, that 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, US 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 that must provide the same protection for public health.

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

Additional Information

How much water did we use last year?

| Month | Water Usage (gallons) | Average Daily Use (gallons) |
|--------------|--------------------------------|------------------------------------|
| January | 121,900 | 3932 |
| February | 134,000 | 4786 |
| March | 136,700 | 4410 |
| April | 156,100 | 5203 |
| May | 137,500 | 4435 |
| June | 194,900 | 6497 |
| July | 162,400 | 5239 |
| August | 140,500 | 4532 |
| September | 155,240 | 5175 |
| October | 136,800 | 4413 |
| November | 159,300 | 5310 |
| December | 142,900 | 4610 |
| TOTAL | 1,778,240 total gallons | 4872 gallons/day |

Water Quality Data Table

The table below lists all of the regulated drinking water contaminants that we were required to test for in the past calendar year. If the presence of contaminants is found, this 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 USEPA requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

| Contaminant | Sample Date | Violation Y/N | Your Water | Range | | MCL or Action Level (lead/copper only) | MCLG | Likely Source of Contamination |
|---|-------------|---------------|----------------------|---------------------------|-----|--|------|---|
| | | | | High | Low | | | |
| Microbial Contaminants | | | | | | | | |
| Contaminant | | | | | | | | |
| Total Coliform Bacteria Units: | 2015 | N | All results negative | N/A | N/A | 2 or more positive samples/month | 0 | Naturally present in the environment |
| Fecal coliform/ <i>E. Coli</i> Units: | 2015 | N | All results negative | N/A | N/A | 2 or more positive samples/month | 0 | Human and animal waste |
| Lead and Copper Rule | | | | | | | | |
| Copper Units: ppm – 90 th Percentile | 2013 | N | 0.086 | 0 sites over Action Level | | 1.3 | 1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Disinfection By-Products | | | | | | | | |
| Total Trihalomethanes (TTHMs) Units: ppb | 2013 | N | 36 | N/A | N/A | 80 | N/A | By-product of drinking water chlorination |
| Inorganic Contaminants | | | | | | | | |
| Barium Units: ppm | 2013 | N | 0.038 | N/A | N/A | 2 | 2 | Discharge from oil drilling wastes and from metal refineries; erosion of natural deposits |
| Fluoride Units: ppm | 2013 | N | 1.3 | N/A | N/A | 4 | 4 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Nitrate (as Nitrogen) Units: ppm | 2015 | N | 0.4 | ND | 0.4 | 10 | 10 | Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Sodium Units: ppm | 2013 | N/A | 26 | N/A | N/A | | | Erosion of natural deposits; salt water intrusion |

Unit Descriptions

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

AL – Action Level; The concentration of a contaminant which, if exceeded, trigger treatment or other requirements which a water system must follow.

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.

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.

N/A – Not Applicable.

ND – Not Detected; laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) – One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (µg/l) – One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Positive Samples/Month – samples taken monthly that were positive

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>.

News: Continued Excellent Water Quality & Future Maintenance

The Tribe's water/wastewater operations lead, George Buckley, continues to treat and monitor the Tribe's drinking water to ensure excellent water quality for the Tribal citizens on TBR. As stated earlier in the report, the system has met all primary drinking water health standards as required by the USEPA and the Tribe has taken extra efforts to prevent degradation via saltwater intrusion by working closely with Indian Health Service. Due to the previous year's drought, and forecasted future droughts, continued effort to conserve water on an individual basis will make a cumulative impact to both water quality and quantity not only for the TBR community, but in our local communities as well.

This past year, the Tribe's water and wastewater systems did not require any improvements as they are functioning properly. This upcoming year, we will be performing routine inspection and cleaning of the Tribe's water storage tank to continue providing pristine water for you all. Thank you for helping to do your part to conserve water and please do not hesitate to contact us with any questions or concerns related to your water on TBR.

How can I get involved?

The water system is governed by the Tribal Council and public forums can be held at the Tribal Business Council Meetings. Please feel free to contact the number and/or email(s) provided below for more information. Your input is important to us!

For more information contact:

George Buckley (h2o@wiyot.us)

Tim Nelson (tim@wiyot.us)

Wiyot Tribe

1000 Wiyot Drive

Loleta, CA 95551

707-733-5055