

# **"Water Quality Report for 2017"**

## **Squaxin Consolidated**

### **Squaxin Island Tribe**

#### **Is my water safe?**

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. 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. 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 Safe Water Drinking Hotline (800-426-4791).

#### **Where does my water come from?**

Your water comes from two wells located in the Kamilche Valley near the Little Creek Casino and Resort. These wells along with a 250,000 gallon storage tank and water treatment building, were completed in 2006 as part of the Indian Health Services Squaxin Water System Improvement project. Your water system is operated and maintained by the Squaxin Island Utilities Department. Every day SIT Utilities Personnel reliably delivers high quality and safe drinking water to your home or business. In fact, we are proud to report that your water meets or exceeds all U.S. Environmental Protection Agency (EPA) standards. SIT Utilities vigilantly safeguards your water supplies. Each year we conduct hundreds of tests, including daily tests to ensure your water is safe. Monthly tests are performed by an independent and certified laboratory. While we do our utmost to protect your water, it's important for you also to help keep our water clean. The aquifer in which our wells are located is an underground deposit of sand and gravel where groundwater is stored. The aquifer is replenished by rainfall which seeps down through the soil. Contaminants such as motor oil, gasoline, pesticides and fertilizers can also seep through the soil and can pollute the groundwater.

You can help to protect and conserve groundwater. See the “**How can I get involved?**” section of this report.

### **Source water assessment and its availability**

“None”

### **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 (EPA) 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:

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 stormwater 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 stormwater 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 stormwater runoff, and septic systems; and 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.

### **How can I get involved?**

Have you ever wondered just how many groups are engaged in volunteer water-quality monitoring?

Depending on who you ask, the answer ranges from "*are you kidding, no where*" to "*isn't everyone doing it?*"

As of 2014, there are 350 Volunteer Monitoring Groups and 20 Volunteer Monitoring Service Providers that together assist and additional 1,350 efforts, equating to 1,720 groups across the USA conducting volunteer monitoring and associated activities.

Across the country, trained volunteers are monitoring the condition of their local streams, lakes, estuaries, wetlands, and groundwater resources. This action called "volunteer monitoring" is encouraged by the US Environmental Protection Agency (USEPA). It enables citizens to learn about their water resources while providing many benefits. Volunteer water monitors build community awareness of pollution problems, help identify and restore problem sites, become advocates for their watersheds, and increase the availability and amount of needed water-quality information.

Volunteer Water Quality Monitoring is an active movement and essential aspect in protecting and restoring America's water bodies. Hundreds of programs exist nationwide, all unique, creating a community through collective efforts. Volunteer Monitoring (VM) is not free. However, it can be made more cost effective by obtaining data and information through a strategy involving collaboration among interested parties, including academia, federal, state, local and tribal governments, private industry, citizens, and others.

You can learn more at <https://acwi.gov/monitoring/vm/>

For information about opportunities for public participation in decisions affecting water quality please contact Scott Semanko, Utilities manager at (360)432-3969

## **Description of Water Treatment Process**

Your water is treated by disinfection. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

The chlorine is added to the water thru chemical dosing pumps as it is pumped from the wells and into the water system.

## **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? 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 next month's water bill!
- Visit [www.epa.gov/watersense](http://www.epa.gov/watersense) for more information.

### **Cross Connection Control Survey**

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and insuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

- Boiler/ Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property
- Decorative pond
- Watering trough

### **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.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.

- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. 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.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

### **Monitoring and reporting of compliance data violations**

We failed to properly respond to a significant deficiency in our water system.

We failed to submit a report for coliform sample on time in March of 2017. The report was submitted late.

### **Significant Deficiencies**

We failed to provide to you, our drinking water customers, an annual report: that informs you about the quality of our drinking water and characterizes the risks from exposure to contaminants detected in our drinking water. Last year's Consumer Confidence Report was delivered in September, and not by the due date of July 1, 2017.

This is the annual report for the calendar year 2017, which will correct this deficiency.

The system does not have an Operations and maintenance manual.

The water system does in fact have an Operations and Maintenance Manual, however it was not made available at the time of the survey.

The water system does not have an Emergency response plan.

We are in the process of developing an Emergency Response Plan. The new plan should be in effect by July 30<sup>th</sup>, 2018.

The water system does not have a cross connection control program

We are in the process of developing a Cross Connection Control Program. The new Cross Connection Control Program should be in effect by July 30<sup>th</sup>, 2018.

Well AGH200, located between the two 67,000 gallon tanks should be properly decommissioned if no longer in use.

Well AGH200 is currently in use as source water for the pond and water features on campus.

## 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. The Squaxin Island Consolidated CWS 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>.

## Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. 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 us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

| Contaminants  | MCLG<br>or<br>MRDLG | MCL,<br>TT, or<br>MRDL | Detect<br>In<br>Your<br>Water | Range |      | Sample<br>Date | Violation | Typical Source |
|---|---------------------|------------------------|-------------------------------|-------|------|----------------|-----------|----------------|
|   |                     |                        |                               | Low   | High |                |           |                |
| <b>Disinfectants &amp; Disinfection By-Products</b> |                     |                        |                               |       |      |                |           |                |

| Contaminants  | MCLG or MRDLG | MCL, TT, or MRDL | Detect In Your Water | Range |       | Sample Date | Violation | Typical Source  |
|---|---------------|------------------|----------------------|-------|-------|-------------|-----------|---|
|   |               |                  |                      | Low   | High  |             |           |   |
| (There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants) |               |                  |                      |       |       |             |           |   |
| Chlorine (as Cl <sub>2</sub> ) (ppm)  | 4             | 4                | .4                   | .4    | .4    | 2017        | No        | Water additive used to control microbes   |
| TTHMs [Total Trihalomethanes] (ppb)   | NA            | 80               | 4.6                  | 4.6   | 5     | 2017        | No        | By-product of drinking water disinfection   |
| <b>Inorganic Contaminants</b>   |               |                  |                      |       |       |             |           |   |
| Copper - source water (ppm)   | NA            |                  | .89                  | 0     | .89   | 2017        | No        | Erosion of natural deposits; leaching from wood preservatives; Corrosion of household plumbing systems. |
| Lead - source water (ppm)   | NA            |                  | 3.8                  | 0     | 3.8   | 2017        | No        | Corrosion of household plumbing systems; Erosion of natural deposits                                    |
| Nitrate [measured as Nitrogen] (ppm)  | 10            | 10               | .53                  | .53   | 1     | 2017        | No        | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits             |
| <b>Radioactive Contaminants</b>   |               |                  |                      |       |       |             |           |   |
| Alpha emitters (pCi/L)  | 0             | 15               | 1.65                 | 1.65  | 1.65  | 2017        | No        | Erosion of natural deposits   |
| Radium (combined 226/228) (pCi/L)   | 0             | 5                | 2.498                | 2.498 | 2.498 | 2017        | No        | Erosion of natural deposits   |

| Unit Descriptions |  |
|-------------------|--|
| Term              | Definition   |
| ppm               | ppm: parts per million, or milligrams per liter (mg/L)   |
| ppb               | ppb: parts per billion, or micrograms per liter (µg/L)   |
| pCi/L             | pCi/L: picocuries per liter (a measure of radioactivity) |
| NA                | NA: not applicable                                       |
| ND                | ND: Not detected   |
| NR                | NR: Monitoring not required, but recommended.            |

| Important Drinking Water Definitions |   |
|--------------------------------------|---|
| Term                                 | Definition  |
| 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. |

| <b>Important Drinking Water Definitions</b> |   |
|---|---|
| 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, triggers 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 a 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   |

**For more information please contact:**

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