

# **Thorne Bay PWSID:120216 CCR 2014**

## **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. Last year, we conducted tests for over 28 contaminants. We only detected 2 of those contaminants, and found only 2 at a level higher than the EPA allows. As we informed you at the time, our water exceeded drinking water standards. (For more information see the section labeled Violations at the end of the report.)

## **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?**

Thorne Bay's water is transported through 2400' feet of transmission line from Water Lake, northeast of the main town site, to the treatment plant where it is then filtered and disinfected with chlorine before it is sent into the distribution system.

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

Source water, per the Environmental Protection Agency is untreated water from streams, rivers, lakes or underground aquifers that is used to supply public drinking water. Preventing drinking water contamination at the source makes good public health sense, good economic sense, and good environmental sense. The City of Thorne Bay is taking steps to insure the Water Lake is protected from contamination. You too can assist in keeping drinking water safe by taking an active role to prevent contamination of Water Lake and Distribution System. Dispose properly of household chemicals, help keep the water shed clean, which is our source of community's water, help prevent cross-contamination with proper backflow devices, and attend public meetings to ensure that the community's need for safe drinking water is considered in making decisions about land use.

The source Water Assessment (SWA) Report prepared by ADEC Drinking Water Protection Program shows Thorne Bay having vulnerability rankings of: "HIGH" for bacteria/viruses, "HIGH" for nitrates/nitrites, "VERY HIGH" for volatile organic chemicals, heavy metals, "MEDIUM" for other organic chemicals, and for synthetic organic chemicals. These rankings do not necessarily indicate that these contaminants will reach Water Lake.

Completed source water assessments are available at ADEC's Drinking Water Protection Program website: [http://www.ded.state.ak.us/eh/dw/DWP/source\\_water.html](http://www.ded.state.ak.us/eh/dw/DWP/source_water.html), by calling 1-907-269-7521, or at 555 Cordova St, Anchorage, AK; or at the Alaska Resources Library and Information Services, 3150 C ST, Anchorage, AK. Contact the Alaska Rural Water Association at 1-907-694-6792 for more information on source water protection, or contact the Environmental Protection Agency (EPA) at 1-800-426-4791. You may also find information on EPA's website at [www.epa.gov/safewater/protect.html](http://www.epa.gov/safewater/protect.html).

### **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?**

Please contact the City of Thorne Bay on ways you can get involved and improve water quality to our community.

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

1<sup>st</sup> Qtr. DBP sample collection was missed. Received monitoring violation. Violation was returned to compliance with collection of 2<sup>nd</sup> Quarter 2014 DBP sample.

In February 2014, we only collected one out of the five routine follow up total coliform samples required during the month following a positive total coliform result with four clean repeat samples. Received monitoring violation for missed total coliform samples and their associated chlorine residual readings. Violations were returned to compliance with March sampling.

1<sup>st</sup> Qtr. DBP MCL violation due to running annual average (RAA) exceeding MCL. RAA results were: TTHM=0.212 mg/L & HAA5=0.197 mg/L

2<sup>nd</sup> Qtr. DBP MCL violation due to running annual average exceeding MCL. RAA results were: TTHM=0.212 mg/L & HAA5=0.197 mg/L

3<sup>rd</sup> Qtr. DBP MCL violation due to running annual average exceeding MCL. RAA results were: TTHM=0.215 mg/L & HAA5=0.145 mg/L

4<sup>th</sup> Qtr. DBP MCL violation due to running annual average exceeding MCL. RAA results were: TTHM=0.191 mg/L & HAA5=0.134 mg/L

## **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. City of Thorne Bay 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>.

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## **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 or MRDLG	MCL, TT, or MRDL	Your Water	Range Low   High		Sample Date	Violation	Typical Source
	<b>Disinfectants &amp; Disinfectant By-Products</b>							
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
TTHMs [Total Trihalomethanes] (ppb)	NA	80	195	128	250	2014	Yes	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	NA	60	125.5	73	163	2014	Yes	By-product of drinking water chlorination
Total Organic Carbon(% Removal)	NA	TT	58.8	NA		2014	No	Naturally present in the environment
<b>Inorganic Contaminants</b>								
Nitrate [measured as Nitrogen] (ppm)	1	1	0	0		2014	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Barium(ppm)	2	2	.00279	NA		2011	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source	
<b>Inorganic Contaminants</b>								
Copper - action level at consumer taps (ppm)	1.3	1.3	0.624	2014	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	
Lead - action level at consumer taps (ppb)	0	15	2.67	2014	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	
<b>Radioactive Contaminants</b>								
Gross Alpha (pCi/L)	0	15	2.9	2009	0	No	Erosion of natural deposits	
Radium (226/228) (pCi/L)	0	5	0.10	2009	0	No		
<b>Violations and Exceedances</b>								
<b>TTHMs [Total Trihalomethanes]</b>								
Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer. Our system exceeded the TTHM at 1 location with locational running annual average of 195(ug/L) for the 2014 calendar year. Keeping CL as low as possible, flushing hydrants, and looking for better water source are all ways we are trying to lower the trihalomethanes in the system.								
<b>Haloacetic Acids (HAA5)</b>								
Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. Our system exceeded the HAA5 MCL at one location with locational running annual average of 125.5 (ug/L), for the 2014 calendar year. Keeping CL as low as possible, flushing hydrants, and looking for better water source are all ways we are trying to lower the HaloaceticAcids in the system.								
<b>Unit Descriptions</b>								
Term	Definition							
ppm	ppm: parts per million, or milligrams per liter (mg/L)							
ppb	ppb: parts per billion, or micrograms per liter (µg/L)							
NA	NA: not applicable							

ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

<b>Important Drinking Water Definitions</b>	
<b>Term</b>	<b>Definition</b>
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, triggers treatment or other requirements which a water system must follow.
Variations and Exemptions	Variations 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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