## Camano Water Association 82 W Monticello Dr, Camano Island, WA 98282

## **CONSUMER CONFIDENCE REPORT** 2014 Annual Drinking Water Quality Report

#### 1.The Report

This is an annual report on the quality of water delivered by Camano Water Association (CWA). It meets the federal Safe Drinking Water Act (SDWA) requirement for "Consumer Confidence Reports". It contains information on water sources and the health risks, if any, associated with any contaminants. Safe water is vital.

The purpose of this report is to keep you informed about water quality, and how quality was monitored as the water was delivered over the past year. The goal is and always has been, to provide a safe and dependable supply of drinking water. The Board of Trustees and the staff strive continually to improve the water treatment process and to protect the water resource. Employee Dan Peterson is the Treatment Plant and Distribution Operator.

#### Water Use Efficiency

In addition to the water quality reporting outlined in the following document, CWA also gathers "Water Use Efficiency" information for annual performance reporting to the State Department of Health. For 2014 this includes a total production volume for the water system of 53,917,746 gallons. Authorized consumption (including customer use, filter backwashing, and flushing for maintenance operations) was equal to 49,836,600 gallons. Loss/leakage was approximately 4,081,146 gallons. This represents approximately 7.6% of the distribution system leakage, and the three-year average is approximately 7.0% The "Water Use Efficiency" goal for CWA is: "Maintain single family sales per single family connection at less than 250 gallons per day on an average annual basis". This goal has been consistently met; in 1995 the average annual use per single-family connection dropped below 250 and has remained there since then. This success has been largely due to the efforts of CWA to fully meter the system and bill customers on a conservation rate structure. More information on the conservation plan or water use efficiency is available from the CWA office by calling (360) 387-9136.

#### 2. Water Source

CWA's water source is entirely from wells, i.e. ground water, from a deep aquifer, aquifer C in US Geological Service notation, commonly known as a sea level aquifer. Such deep aquifers are regarded as protected from surface water contamination. The primary source of CWA's water is the three wells, numbers 6, 7, and 8, in the well field on Bonnie Lane. The water is treated by adding potassium permanganate and chlorine for oxidation, and filtered through pyrolucite media which adsorbs the iron and manganese to remove it from the water. Most of the system is gravity fed from reservoirs.

One other well (Number 5) is available for use if extra water is required or if there is a problem in the well field. Well number 4 is reserved for emergency use. Hypochlorite is added at the well head when these wells are in use.

### 3. Coliform Testing

As required by State law, the water is tested three times monthly for coliform bacteria by an independent lab. The water meets federal and state requirements.

#### Water Quality Analysis Table

Substance	Date Tested	Unit	MCL	MCLG	Detected	Range	Major Sources	Violation
Inorganic Chemicals								
5 Arsenic	7_11_11	nnm	0.10		ND	Ι	Erosion of natural	No
J.Misellie	/-11-11	ppm	0.10		ND		deposits	110
Barium	7-11-11	ppm	2		0.047		Erosion of natural deposits	No
1.Flouride	7-11-11	ppm	4.0		0.18		Erosion of natural deposits, discharge from fertilizer and aluminum factories	No
Nitrate		ppm	10		ND		Runoff from fertilizer use; leaching from septic tanks	Yes
Copper	10-21-14	ppm	AL = 1.3	1.3	0.099	0.015- 1.223	Corrosion of plumbing systems	No
Lead	10-21-14	ppm	0.015	0	0.001	0.00- 0.003	Corrosion of plumbing systems	No
Chloride	4-23-12	ppm	250		20		Indicator of sea water intrusion	No
Iron	7-11-11	ppm	0.3		0.131		Erosion of natural deposits	No
2.Manganese	7-11-11	ppm	SMCL =0.05		0.184		Erosion of natural deposits	No
3.Radium 228 (Wellfield)	7-31-12	pCi/L	5		ND		Radioactive waste	No
3.Gross Beta	7-20-09	pCi/L	50		4.5		Radioactive waste	No
3.Gross Beta (Wellfield)	7-20-09	pCi/L	50		3.1		Radioactive waste	No
4/5.Sodium	7-20-09	ppm	LOC=2 0		22.8		Erosion of natural deposits	No
Sulfate	7-20-09	ppm	250		8.3		Erosion of natural deposits	No
Zinc	7-20-09	ppm	5		0.063		Erosion of natural deposits	No
Volatile Organic Compounds (V	/OCs)							-
Trihalomethanes:								
Chloroform		ppb			40.2			
Bromodichloromethane		ppb			19.7			
Chlorodibromomethane		ppb			6.3			
Bromoform		ppb			ND			
Total Trihalomethanes	8-28-14	ppb	80		68.1		By-product of drinking water chlorination	No
Halo-Acetic Acids:								
Monochloracetic Acid		ppb			ND			
Dichloracetic Acid		ppb			6.2			
Trichloracetic Acid		ppb			11.6			
Monobromoacetic Acid		ppb			ND			
Dibromoacetic Acid		ppb			ND			
HAA (5) Total	8-28-14				7.500		By-product of drinking water chlorination	
Other:								
Bromochloroacetic Acid	8-28-14	ppb			1.0			

*CWA* did not submit a test sample for Nitrate monitoring by the due date in 2014 and is therefore in violation of the National Primary Drinking Water Regulations. This was due to an oversight on our part. A sample was submitted when this error was brought to our attention.

#### 4. How to Contact CWA

Please read this report carefully and, if you have questions, call our staff at 360-387-9136. We can help answer questions about Camano Water Association and the water quality or operations.

The Monticello office is staffed from 8:00 am to 3:00 pm Monday through Friday; telephone 360-387-9136. For emergencies, Dan Peterson, or a contract employee are on call twenty four hours a day, seven days a week, and can be reached by dialing 360-387-9136 and following the instructions given.

Members are always welcome to attend the regular board meetings. Currently these are scheduled on the third Tuesday of the month at 82 W. Monticello Drive from 8:30 am until approximately noon. Due to scheduling conflicts however, dates and times change, so please call ahead to confirm the schedule.

The members' annual meeting is held on the morning of the first Saturday in November.

#### 5. National Primary Drinking Water Regulation Compliance

The data presented in this report is from the most recent testing done in accordance with regulations. All data is from approved laboratories. Inorganic chemicals do not have to be measured every year: It is required that the most recent data be shown. Hundreds of regulated contaminants, which were undetected in the required testing, are omitted from the table.

The table shows the results of the water-quality analyses. Every regulated contaminant that was detected in the water, even in the most minute traces, is listed here. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health (MCLG), the amount detected, and the usual sources of such contamination. Neither alpha or beta particles were detected. Substances not detected are not reported.

#### Water-Quality Table Footnotes

- 1. CWA does not add fluoride to the water:
- 2. Manganese is a secondary, rather than a primary contaminant. Its presence is not a violation.
- 3. Radium is measured in Pica curies per liter; reduced monitoring is expected due to these results
- 4. Sodium is monitored as a possible indicator of sea water intrusion. 100 ppm triggers increased monitoring.

#### Key to Abbreviations

$\Delta I - Action I e vel$	MFL = million fibers per liter				
NO = Non Detect	ppb = parts per billion, or micrograms per liter ( $\mu$ g/l)				
N/A = Not Applicable	ppm = parts per million, or milligrams per liter (mg/1)				
IOC = Level of concern	SMCL = Secondary Maximum Contaminant Level				
MCL = Maximum Contaminant Level	SKL = state reporting level				

MCLG = Maximum Contaminant Level Goal

#### 6. Variances and Exemptions

None

# 7. Unregulated Contaminants MANGANESE

*Duration:* Manganese has always been found in the water supplied by CWA. The treatment plant consistently reduces the amount of manganese sent to distribution to below the MCL of 0.05 ppm.

Health Effects: Manganese is a secondary contaminant, the effects are aesthetic (staining of fixtures), not health related. Action Taken: The Camano Water Association has installed a state of the art pyrolucite filtration system at their treatment plant to take care of the problem with both iron and manganese.

*Copper, Lead and Sodium:* Although the state board of health has not established MCLs for copper, lead, and sodium, there is sufficient public health significance connected with copper, lead, and sodium levels to require inclusion in inorganic chemical and physical source monitoring. For lead and copper, the EPA has established distribution system related levels at which a system is required to consider corrosion control. These levels, called "action levels," are 0.015 mg/L for lead and 1.3 mg/L for copper and are applied to the highest concentration in ten percent of all samples collected from the distribution system. CWA achieved this action level and has since hired an engineer to recommend a corrosion treatment for the system. The EPA has also established a recommended level of twenty mg/L for sodium as a level of concern for those consumers who may be restricted for daily sodium intake in their diets.

CWA did not test for cryptosporidium, as it is a surface water contaminant and we use ground water.

CWA did not test for Radon as Congress has set no limits.

#### 8. Require Additional Health Information

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 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:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
- (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
- (E) 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 which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some individuals may be more vulnerable to contaminants in drinking water than is the general population.- Immunecompromised persons, for example those with cancer undergoing chemotherapy or have undergone organ transplants, people with HIV/AIDS or other immune system disorders, and some elderly or infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium or answers to other drinking water questions are available from the **Safe Drinking Water Hotline (800-426-4791**). This report was prepared using technical assistance provided by the American Water Works Association, Douglas Kelly, Island County Hydro geologist, and the Washington State Department of Health Drinking Water Division. Edited by Camano Water Association. Water Quality Data for community water systems throughout the United States is available at www.waterdata.com.