



LUMMI ISLAND SCENIC ESTATES  
COMMUNITY CLUB

## Drinking Water Quality Report for 2020

LISECC Reservoir

### THE REPLACEMENT OF OUR WATER TREATMENT PLANT

Planning for, and replacement of, the water treatment plant has become the Board's primary focus. Over the course of the next three years, significant time and money will be expended on this project.

The current water treatment plant has performed well for decades. But changes in the source water in the lake have presented turbidity challenges that the plant was not designed for, nor has it been able to meet. Algae growth is a possible cause of increased turbidity and testing is underway to determine a definitive cause and establish a protocol for long term tracking.

In spite of the expertise of staff, the input of consultants, and the advice of experts at the Washington State Department of Health, attempts to modify treatment procedures have failed to resolve the turbidity violations. Repeated water turbidity violations have led the Department of Health to require that LISECC enter into a Formal Compliance Agreement that specifies actions we must take to return to acceptable water quality. Those requirements culminate in a new plant with membrane filtration, rather than the rapid sand filter system of the current plant.

The Board has retained Wilson Engineering to assist LISECC. Wilson has created a timeline and funding plan than begins with an assessment of water system capacity.

While the necessity of building a new plant has been established in the Formal Compliance Agreement with the Department of Health, additional decisions must be made regarding plant capacity, funding, potential distribution system upgrades, and the water rate cost structure. The Board will be looking to the community for help in making those decisions.



Our original treatment plant has been in operation for over 47 years.

# 2020 WATER QUALITY SUMMARY

## Contaminants Regulated at the Customer Tap

Substance	Highest Level Allowed - AL	Ideal Goal MCLG	Your Water 90%*	Sample Date	# of Samples	# of Samples Exceeding AL	Meets Standards	Potential Sources
Lead	15 ppb	zero	1 ppb	2020	5	zero	YES	Internal corrosion of household water plumbing; erosion of natural deposits
Copper	1.3 ppm	1.3 ppm	0.07 ppm	2020	5	zero	YES	

\*Lead and Copper 90th Percentile: Out of all the homes sampled, 90% were at or below this level.

## Contaminants Regulated in the Distribution System

Substance	Highest Level Allowed - MCL	Ideal Goal MCLG	Your Water	Sample Date	Meets Standards	Potential Sources
Dalapon	200 ppb	200 ppb	5 ppb	2015	YES	Runoff from herbicide used on rights of way
Dinoseb	7 ppb	7 ppb	1 ppb	2015	YES	Runoff from herbicide used on soybeans and vegetables
Nitrate	10 ppm	10 ppm	0.5 ppm	2021	YES	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Pentachlorophenol	1 ppb	zero	0.2 ppb	2015	YES	Discharge from wood preserving factories
Picloram	500 ppb	500 ppb	0.5 ppb	2015	YES	Runoff from herbicide use
2,4,5-TP (Silvex)	50 ppb	50 ppb	1 ppb	2015	YES	Residue of banned herbicide
Gross Alpha	15 pCi/L	zero	3 pCi/L	2021	YES	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation
Radium 228	5 pCi/L	zero	1 pCi/L	2021	YES	Erosion of natural deposits

## Disinfection

Disinfection Byproducts	Highest Level Allowed - MCL	Your Water	Sample Date	Meets Standards	Potential Sources
Total Trihalomethanes (TTHM)	80 ppb	64.6 ppb	2020	YES	By-product of drinking water disinfection
Haloacetic Acids (HAA)	60 ppb	43.6 ppb	2020	YES	

Disinfection Residual	Highest Level Allowed - MRDL	Ideal Goal MRDLG	2020 Annual Average	Range of Levels Detected in 2020	Meets Standards	Potential Sources
Chlorine (as Cl <sub>2</sub> )	4 ppm	4 ppm	0.7 ppm	0.1 - 1.8 ppm	YES	Water additive to control microbes

Bacteria	Highest Level Allowed - MCL	Ideal Goal MCLG	2020 Highest Monthly Number of Samples Containing Total Coliform	Meets Standards	Potential Sources
Total Coliform	1 sample CONTAINS TOTAL COLIFORM	zero	zero	YES	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.

Microbiological Contaminants	TT requirement	Results	Meets TT Requirement	2020 Annual Average	Potential Sources
Turbidity	Maximum of 1 NTU for any single measurement  Each month, at least 95% of the samples must be less than 0.3 NTU	Highest measurement: 1.5 NTU APRIL 29, 2020	NO	0.2 NTU	Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.
		JAN.-MARCH, JUNE, AUG.-OCT.	100%	YES	
		APRIL:	44.0%	NO	
		MAY:	69.7%	NO	
		JULY:	84.6%	NO	
		NOVEMBER:	94.0%	NO	
DECEMBER:	42.9%	NO			

## Secondary Contaminants

Secondary Maximum Contaminant Level (SMCL) standards are developed to protect the aesthetic qualities of drinking water (odor, taste, and color) and are not health based.

Substance	SMCL	Your Water	Sample Date	Meets Standards	Effects
Chloride	250 ppm	50 ppm	2013	YES	Odor and taste
Color	15 cu	15 cu	2013	YES	Color
Hardness	N/A	91 ppm	2013	YES	Water that has a hardness of 61-120 ppm is considered "moderately hard"
Manganese	50 ppb	10 ppb	2013	YES	Odor, taste, and color
Silver	0.1 ppm	0.1 ppm	2013	YES	Odor and taste
Sodium	N/A	6.2 ppm	2013	YES	Odor and taste. According to the EPA, drinking water containing between 30 and 60 ppm is unlikely to be perceived as salty by most individuals.
Sulfate	250 ppm	50 ppm	2013	YES	Odor and taste
Total Dissolved Solids	500 ppm	200 ppm	2013	YES	Color
Zinc	5 ppm	0.05 ppm	2013	YES	Odor and taste

## Unregulated Contaminants

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to help EPA determine their occurrence in drinking water and potential need for future regulation.

Substance	Your Water	Sample Date	Potential Sources
2,4-DB	1 ppb	2015	Runoff from herbicide use
2,4,5-T	0.4 ppb	2015	
Acifluorfen	2 ppb	2015	
DCPA Acid Metabolites	0.1 ppb	2015	
Dicamba	0.2 ppb	2015	
Dichloroprop	0.5 ppb	2015	

Your drinking water is regularly tested according to federal and state regulations for over 50 substances in both the water source and distribution system. The water quality information presented in this report is from the most recent round of testing. Only substances that were detected are listed in the water quality summary.

## DEFINITIONS

### AL - Action Level

The concentration of contaminant which, if exceeded, triggers treatment or other requirements that 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 known or expected risk to health. MCLGs allow for a margin of safety.

### MRDL - Maximum Residual Disinfection 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.

### 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.

### N/A - Not Applicable

### SMCL - Secondary Maximum Contaminant Level

These standards are developed to protect the aesthetic qualities of water and are not health based

### TT - Treatment Technique

A required process intended to reduce the level of a contaminant in drinking water.

## MEASUREMENTS

### PPM - Parts per Million

or milligrams per liter (mg/L)

### PPB - Parts per Billion

or micrograms per liter (ug/L)

### pCi/L - Picocuries per liter

### NTU - Nephelometric Turbidity Unit

### CU - Color Units

## YOUR WATER SYSTEM INFORMATION



### Public Water System (PWS) name:

Lummi Island Scenic Estates Community Club (LISECC)

City: Lummi Island

PWS ID Number: 42390

Website: [www.LISECC.com](http://www.LISECC.com)

### PWS Contact:

Kevin Southworth, Operations Manager

360-758-7055

[kevin@LISECC.com](mailto:kevin@LISECC.com)

### For billing information contact:

Allison Cash, Bookkeeper

360-758-2699

[business@LISECC.com](mailto:business@LISECC.com)

### Public Meetings:

The LISECC board of directors meet once a month and

members are encouraged to attend. Please check

[www.LISECC.com](http://www.LISECC.com) or call 360-758-2699 for schedule.

## WHERE DOES YOUR WATER COME FROM?

Your water comes from a surface water system called Dickenson Lake, located west of the Cabana and Holiday Lake (swim lake). This natural hard-rock ravine forms a reservoir with the capacity of about 16 million gallons. The reservoir is fed by a watershed (from rain and snow) that covers about 230 acres and consists of forested land owned by LISECC and the Department of Natural Resources (DNR).

**SOURCE: DICKENSON LAKE (ODW SOURCE #1)**

**SECONDARY SOURCE: HOLIDAY LAKE**

**TYPE: SURFACE WATER**

The overflow of the reservoir drains into Holiday Lake, and then down Aiston Creek to Hale Passage and Bellingham Bay. Holiday Lake is a back up emergency source of water for treatment.

At the Water Treatment Plant, water is disinfected and treated with flocculants. Flocculation is the process by which fine particulates are caused to clump together. Then the water flows through a rapid rate filter and is pumped into storage tanks for distribution. The performance of rapid rate filters for turbidity (particle) removal is a key element in protecting you from microbial contaminants and maximizing public health.

## PROTECTION OF YOUR DRINKING WATER

To ensure that tap water is safe to drink, the Department of Health and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and the Washington Department of Agriculture regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

### WHAT ABOUT COVID-19?

**The virus that causes COVID-19 has not been detected in drinking water.**

The Office of Drinking Water at the Washington State Department of Health and public water system operators work every day to protect public water supplies from bacteriological and viral contamination.

LISE follows drinking water regulations, using a multi-barrier approach to ensure safe and reliable drinking water including source water protection, treatment, and monitoring.

We use chlorine to disinfect your water. Chlorine is very effective in killing coronaviruses. COVID-19 is caused by a coronavirus and the Department of Health believes chlorine will be effective in killing the COVID-19 coronavirus as well.

## PROTECTION OF YOUR WATER SOURCE

Washington State Department of Health has compiled Source Water Assessment Program (SWAP) data for all community public water associations in the state. A source water assessment identifies potential sources of contamination to the water we use for your drinking water. These potential sources are: an AT&T communication station underground storage tank located on the mountain ridge above our watershed, the Dickenson Lake Dam site, the Holiday Lake Dam site (at the Swim Lake), and the Water Treatment Plant.

**SWAP information is available at**

[www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/Sourcewaterprotection/assessment](http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/Sourcewaterprotection/assessment)

## POSSIBLE CONTAMINANTS

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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

## VULNERABLE POPULATIONS

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 healthcare providers.

EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

## ABOUT LEAD

In Washington State, lead in drinking water comes primarily from materials and components used in household plumbing. The more time water has been sitting in pipes, the more dissolved metals, such as lead, it may contain. Elevated levels of lead can cause serious health problems, especially in pregnant women and young children.

To help reduce potential exposure to lead: for any drinking water tap that has not been used for 6 months or more, flush water through the tap until the water is noticeably colder before using for drinking or cooking. You can use flushed water for watering plants, washing dishes, or general cleaning. Only use water from a cold-water tap for drinking, cooking, and especially for making baby formula. Hot water is likely to contain higher levels of lead. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water is available from EPA's Safe Drinking Water Hotline at 1-800-426-4791 or online at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).