



## LUMMI ISLAND SCENIC ESTATES COMMUNITY CLUB

## DRINKING WATER QUALITY REPORT FOR 2022

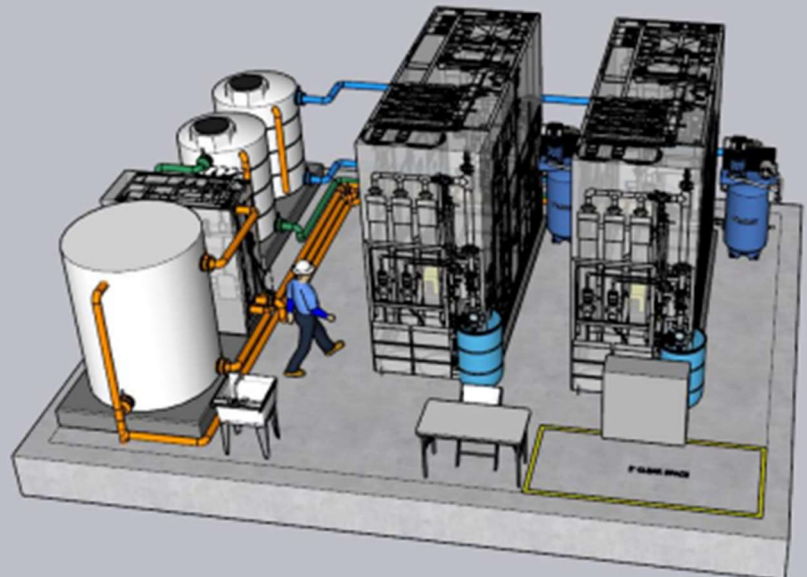
LISECC Reservoir

### NEW WATER TREATMENT PLANT UPDATE

LISECC is currently in the pre-design phase of the new water treatment plant project. The planned location of the new treatment plant will be on Dogwood Terrace, next to the water tanks. The new treatment plant is being designed using dual redundancy low pressure membrane filtration skids. Membrane filtration was introduced to the municipal water treatment market in 1987 and has proven effective in the removal of suspended solids, turbidity, and large biological contaminants such as *Giardia* oocyst, *Cryptosporidium* oocyst, algae, and some bacterial species.

The new treatment plant will be capable of exceeding the anticipated production demand of the water system, while managing unexpected abnormal high turbidity events like those LISECC has experienced in the past.

#### NEW WATER TREATMENT PLANT DESIGN CONCEPT



LISECC's next steps to ensure the project continues moving toward a DOH review of the complete construction documents in March-April of 2024 are:

- USDA-RD Loan application
- Design and conditional use permits
- Planning, specs, and estimates

# 2022 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	1.8 ppb	2022	5	zero	YES	Internal corrosion of household water plumbing; erosion of natural deposits
Copper	1.3 ppm	1.3 ppm	0.19 ppm	2022	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	2022	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)	80.4 ppb	42.4 ppb	2022	YES	By-product of drinking water disinfection
Haloacetic Acids (HAA)	60.4 ppb	28.7 ppb	2022	YES	

Disinfection Residual	Highest Level Allowed - MRDL	Ideal Goal MRDLG	2022 Annual Average	Range of Levels Detected in 2022	Meets Standards	Potential Sources
Chlorine (as Cl <sub>2</sub> )	4 ppm	4 ppm	0.6 ppm	0.2 - 1.4 ppm	YES	Water additive to control microbes

Bacteria	Highest Level Allowed - MCL	Ideal Goal MCLG	2022 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	2022 Annual Average	Potential Sources
Turbidity	Maximum of 1 NTU for any single measurement	Highest measurement: 0.29 NTU June 13, 2022	YES	0.11 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 reduce the effectiveness of disinfectants.
	Each month, at least 95% of the samples must be less than 0.3 NTU	JAN. - DEC. 100%	YES		

## Secondary Contaminants

Secondary Maximum Contaminant Level (SMCL) standards are developed to protect the aesthetic qualities of drinking water (odor, taste, 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	2019	YES	Odor, taste, and color
Iron	0.3 ppm	0.1 ppm	2019	YES	Odor and taste
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	
Dichlorprop	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 maximum level of a contaminant in drinking water at which there is no known or anticipated adverse effect on public health, allowing an adequate margin of safety.

### MRDL – Maximum Residual Disinfection Level

The highest level of disinfectant allowed in drinking water. There is evidence that the 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.

## 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



### Water System (PWS) name:

Lummi Island Scenic Estates Community Club (LISECC)

City: Lummi Island

PWS ID Number: 43290

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

### PWS Contact:

Nick Kluge, Assistant Operations Manager  
360-758-7055  
[nick@lisecc.com](mailto:nick@lisecc.com)

### For billing information contact:

Allison Cash, General Manager  
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 a 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 backup 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.

## 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 underground storage tank at the AT&T communication station 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**

<https://doh.wa.gov/community-and-environment/drinking-water/source-water/source-water-protection>

## POSSIBLE CONTAMINANTS

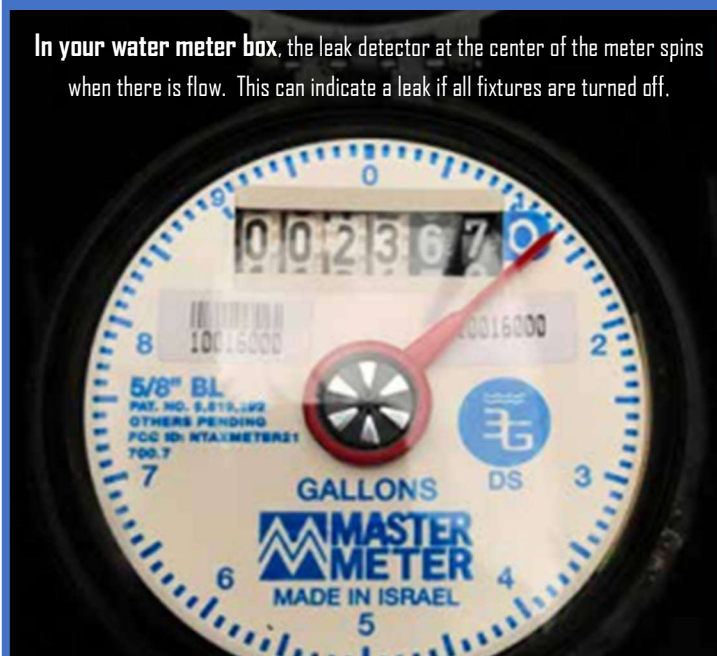
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling 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).

## TIP FOR IDENTIFYING A LEAK

In your water meter box, the leak detector at the center of the meter spins when there is flow. This can indicate a leak if all fixtures are turned off.



## 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 coldwater 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).