

Snohomish County PUD Satellite Water Systems



Your Water is Safe to Drink!



2020 Annual Water Quality Report

Inside

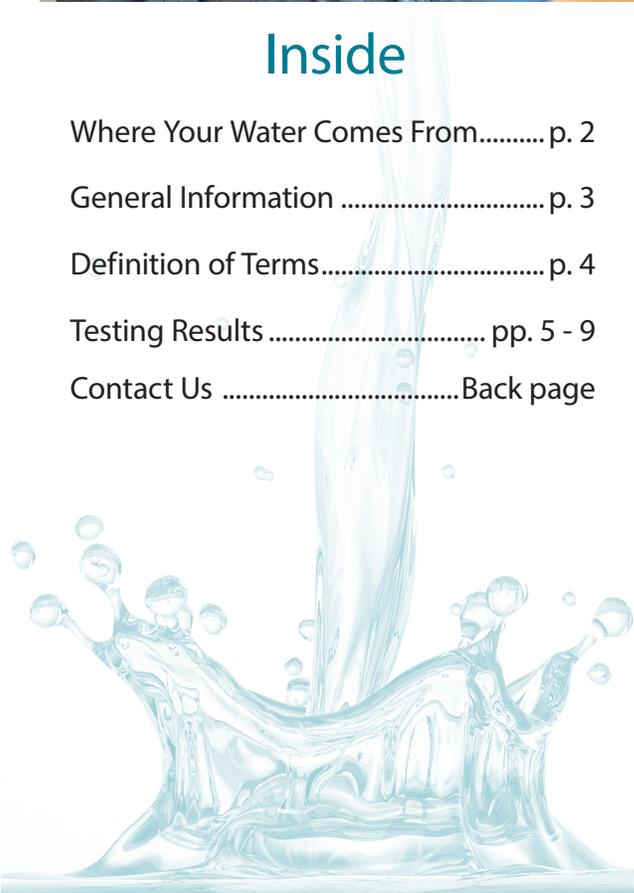
Where Your Water Comes From..... p. 2
General Information p. 3
Definition of Terms..... p. 4
Testing Results pp. 5 - 9
Contact UsBack page

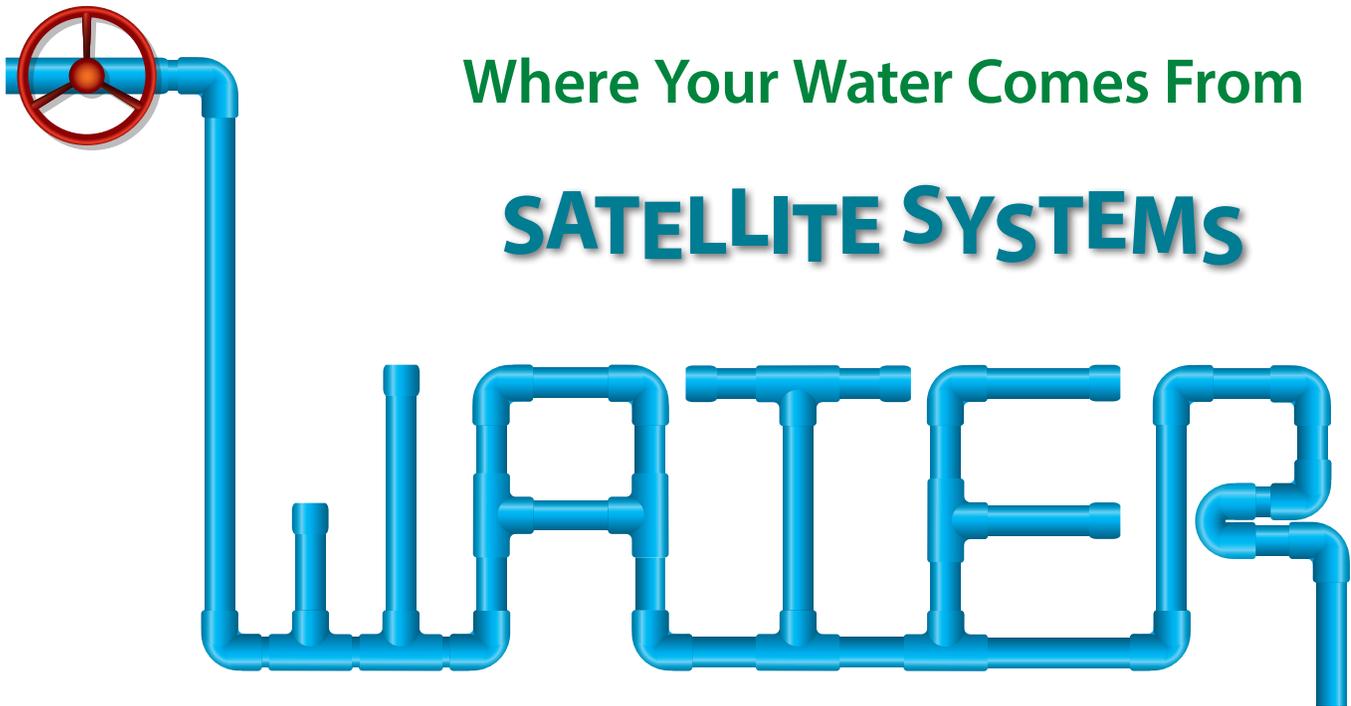
SNOHOMISH COUNTY PUD is pleased to report that your drinking water safely complies with federal and state drinking water quality standards. This report summarizes the key findings of the PUD's 2020 water quality testing program. It illustrates the utility's commitment to delivering the highest quality drinking water.

Each year, the PUD prepares a Water Quality Report for its customers. We want you to know where your water comes from, how it is treated and that it is safe to drink. The purpose of this report is to help people, especially those with special health needs, make informed decisions about their drinking water.

Special Health Information

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/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).





Where Your Water Comes From

SATELLITE SYSTEMS

The PUD relies on groundwater from wells to supply its satellite water systems, including the Kayak, May Creek, 212 Market & Deli, Skylite Tracts, Sunday Lake, Otis and Warm Beach systems.

The **KAYAK SYSTEM** is located on Port Susan Bay, about 10 miles northwest of Marysville. The system is supplied by wells. The water is treated for removal of iron and manganese, chlorinated and sent to the distribution system and a concrete storage reservoir.

The **MAY CREEK SYSTEM**, located near Gold Bar, supplies water to the May Creek community and surrounding area. The water is supplied by wells and is chlorinated before being sent to two concrete storage reservoirs and the distribution system. The system is anticipated to remain as a detached satellite system for the foreseeable future.

The **SKYLITE TRACTS SYSTEM** is supplied water from a well at the entrance to the development. The well water is chlorinated and sent to the adjacent concrete reservoir where it is aerated to reduce the levels of carbon dioxide in the groundwater as a corrosion control measure. Water is then pumped out of the reservoir to supply the distribution system.

The **SUNDAY LAKE** community is supplied water by a well located to the west of the lake. The water receives treatment for iron and manganese removal, is chlorinated and then sent to the distribution system and a concrete storage reservoir.

The **212 MARKET & DELI SYSTEM** supplies water to a gas station and convenience store located on Old Highway 99 North near Stanwood. The system is supplied by a well that pumps water to a concrete storage tank. The water is chlorinated as it is pumped to the tank, and then a service pump moves the treated water to three captive air tanks. The water is then delivered to the convenience store.

The **OTIS SYSTEM** supplies water to four homes (with a maximum of five), just north of 196th Street NE on Burn Road. The system is supplied by a well that provides water through four captive air/bladder tanks to the distribution system.

Otis is a Group B system (less than 15 water connections). Federal and state laws require annual bacteriological sampling and that nitrate and arsenic samples be collected every three years. All 2019 test results were significantly below the allowable levels. No unsatisfactory coliform samples were detected in 2019.

WARM BEACH is located on Port Susan Bay, about seven miles south of Stanwood. The system is supplied by two wells: one is treated for iron and manganese and the other is untreated. The water from both wells is sent to a steel storage reservoir and the distribution system. In 2020, the PUD focused on the design and permitting of several capital improvement projects associated with the newly acquired Warm Beach Water System, including roughly 12,050 feet of aging water main replacement, 2,450 feet of new water main installation to improve system hydraulics, and the study and preliminary design required to optimize the system's treatment processes.

General Information About Drinking Water

Substances Expected to be in Drinking Water

To ensure that tap water is safe to drink, the Washington State Department of Health (DOH) and the U.S. Environmental Protection Agency (EPA) set regulations limiting the amount of certain contaminants in the water provided by public water systems. The U.S. Food & Drug Administration (FDA) and the Washington State Department of Agriculture regulations establish limits for contaminants in bottled water that must provide the same protection for public health. 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 the 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 at 1-800-426-4791.

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 – in some cases, radioactive material – and substances resulting from the presence of animals or from human activity. The following substances may be present in source water (drinking water quality is determined by testing for these contaminants).

| | |
|---|--|
| Microbial contaminants <i>such as viruses and bacteria</i> | <i>May come from wildlife, agricultural livestock or septic systems.</i> |
| Inorganic contaminants <i>such as salts and metals</i> | <i>Can occur naturally or may result from urban storm-water runoff, industrial or domestic wastewater discharges, mining or farming.</i> |
| Pesticides & herbicides | <i>May come from a variety of sources such as farming, urban stormwater runoff, and homes or businesses.</i> |
| Organic contaminants <i>including synthetic & organic chemicals</i> | <i>Are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff and septic systems.</i> |
| Radioactive contaminants | <i>Can be naturally occurring or may be the result of oil and gas production and mining activities.</i> |

Water Conservation Requirements

The Water Use Efficiency Rule sets planning requirements, leakage standards and water conservation goal setting and reporting requirements. The PUD’s 2020 demand-side and supply-side conservation goal results:

| | Goal | 2020 Results | How Goal was Met |
|--------------------|--|---|---|
| Demand-Side | Participate in the Everett Water Utilities Committee regional conservation program to help reduce the regional demand for water. | The total regional savings were estimated to be 0.68 MGD. | Public outreach and education, including classroom presentations, plus distribution of indoor/outdoor conservation kits. |
| Supply-Side | Maintain the PUD’s distribution system leakage below the state standard of 10% and strive to progressively achieve lower percentages of non-revenue water, where possible. | 6.60% PUD Distribution System Leakage (combined result for all PUD water systems) | Continued emphasis on accurate water usage reporting with PUD crews and local fire departments and with repair of discovered leaks. |



Definition of Terms Used in This Report

How Do I Read This Report?

The **Maximum Allowable** column provides you with the maximum level established by the EPA or the DOH. These are standards that all drinking water suppliers serving over 15 customers must meet.

The **Minimum/Maximum Range** and **Average Value** show you the contaminant level detected in the water analysis test.

The **last column tells you whether or not the test complies** with regulations. A “YES” indicates that the range detected is within EPA regulations.

Snohomish County PUD also regularly performs tests for unregulated compounds for which state and federal agencies have not set standards at this time.



AL (Action Level): The concentration of a 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 no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): The highest level of disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant (e.g., chlorine, chloramines, chlorine dioxide) is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant 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: The EPA has not set MCLGs for these substances.

N/D: Not detected.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water.

ppm (parts per million): One part per million (corresponds to one dollar in \$1,000,000).

ppb (parts per billion): One part per billion (corresponds to one dollar in \$1,000,000,000).

pCi/L (picocuries per liter): a measure of radioactivity.

SMCL (Secondary Maximum Contaminant Level): These standards are developed to protect the aesthetic qualities of drinking water and are not health-based.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

Turbidity: Has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms that include bacteria, viruses and parasites. These organisms can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

KAYAK WATER SYSTEM (STANWOOD)

| Substance | Major Source | Units | EPA Regulations | | Your Water Testing Results | | |
|--------------------------------------|---|------------------|---------------------|-------------------------|----------------------------|---------------|---------|
| | | | Maximum Goal (MCLG) | Maximum Allowable (MCL) | Min./Max. Range | Average Value | Comply? |
| Arsenic | Erosion of natural deposits | ppb | N/A | 10 | 2 – 3 | 3 | YES |
| Nitrate | Erosion of natural deposits, animal waste | ppm | 10 | 10 | 0 | 0 | YES |
| Barium | Erosion of natural deposits/discharge of drilling waste | ppm | 2 | 2 | 0.02 | 0.02 | YES |
| Fluoride | Erosion of natural deposits | ppm | 2 | 4 | 0.12 – 0.15 | 0.14 | YES |
| Manganese | Erosion of natural deposits | ppm | N/A | 0.05 (SMCL) | 0.00 – 0.03 | 0.02 | YES |
| Iron | Erosion of natural deposits | ppm | N/A | 0.30 | 0.00 – 0.06 | 0.03 | YES |
| Total Coliform Bacteria ¹ | Naturally present in the environment | Samples positive | 0 | 1 positive per month | 0 | 0 | YES |
| Turbidity | Soil erosion | NTU | N/A | TT | 0.01 – 0.1 | 0.09 | YES |

¹ Coliform bacteria are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present. Total coliform bacteria testing is used to monitor microbial quality in the water distribution system. The PUD collects one routine coliform sample every month. No unsatisfactory results were detected in 2020.

| | | | | | | | |
|------------------------------------|---|-----|-----------|----------|-----------|-----|-----|
| Haloacetic Acids ² | By-product of drinking water chlorination | ppb | N/A | 60 | 0.0 | 0.0 | YES |
| Total Trihalomethanes ² | By-product of drinking water chlorination | ppb | N/A | 80 | 7.2 | 7.2 | YES |
| Free Chlorine Residual | Measure of disinfectant added to water | ppm | 4 (MRDLG) | 4 (MRDL) | 0.4 – 0.8 | 0.6 | YES |

² Haloacetic acids and Trihalomethanes form as by-products of the chlorination process that is used to kill or inactivate disease-causing microbes. Although goals have not been set for these compounds as a group, MCLGs for related individual compounds can be seen in the Unregulated Substances table below.

| Substance | Major Source | Units | EPA Regulations | | Your Water Testing Results | | |
|-----------|---------------------------------------|-------|---------------------|-------------------|----------------------------|------------------------|---------|
| | | | Maximum Goal (MCLG) | Action Level (AL) | 90th % Level | Homes Exceeding the AL | Comply? |
| Copper | Plumbing; erosion of natural deposits | ppm | 1.3 | 1.3 | 0.055 | None* | YES |
| Lead | Plumbing; erosion of natural deposits | ppb | 0 | 15 | 0 | None* | YES |

US Environmental Protection Agency (USEPA) regulations require monitoring for the presence of lead and copper at household taps every three years. The next round of required sampling will be conducted in 2021.

*The 90th percentile level is the highest result obtained in 90% of the samples collected when the results are ranked in order from lowest to highest.

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. Snohomish County PUD 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 two 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 the US Environmental Protection Agency’s website at www.epa.gov/safewater/lead.

UNREGULATED SUBSTANCES

| Substance | Maximum Goal (MCLG) | Your Water Testing Results | |
|--|---------------------|----------------------------|---------------|
| | | Min./Max. Range | Average Value |
| Chloroform (trichloromethane) ³ (ppb) | 70 | 2.0 | 2.0 |
| Bromodichloromethane ³ (ppb) | 0 | 2.4 | 2.4 |
| Chlorodibromomethane ³ (ppb) | 0 | 2.3 | 2.3 |
| Bromoform ³ (ppb) | 0 | 0.5 | 0.5 |

³ Although these substances are not regulated individually, their results are added together to obtain the Total Trihalomethane and Haloacetic Acid results in the above table.

VOLUNTARILY MONITORED SUBSTANCES

The information below is voluntary and describes additional characteristics of the Kayak Water System drinking water.

| | Min./Max. Range or Highest Value | Average Value |
|----------------------|----------------------------------|---------------|
| Alkalinity (ppm) | 1 – 30 | 15 |
| Total Hardness (ppm) | 85 – 162 | 107 |
| pH (standard unit) | 7.5 – 8.0 | 7.9 |
| Sodium (ppm) | 8.8 – 8.9 | 8.9 |
| Sulphate (ppm) | 5.5 – 6.3 | 5.9 |
| Chloride (ppm) | 6.7 | 6.7 |

Source Water Assessment and Protection Program (SWAP)

The SWAP program is designed to provide the community with information about the sources of their drinking water. An interactive map identifies protection areas and links to water quality sampling information. The Washington State Department of Health SWAP website, including interactive maps, can be found at <https://fortress.wa.gov/doh/swap/>.

MAY CREEK WATER SYSTEM (NEAR GOLD BAR)

| Substance | Major Source | Units | EPA Regulations | | Your Water Testing Results | | |
|--------------------------------------|---|------------------|---------------------|-------------------------|----------------------------|---------------|---------|
| | | | Maximum Goal (MCLG) | Maximum Allowable (MCL) | Min./Max. Range | Average Value | Comply? |
| Barium | Erosion of natural deposits/discharge of drilling waste | ppm | 2 | 2 | 0 – 0.001 | 0.001 | YES |
| Nitrate | Erosion of natural deposits, animal waste | ppm | 10 | 10 | 0.12 – 0.15 | 0.14 | YES |
| Total Coliform Bacteria ¹ | Naturally present in the environment | Samples positive | 0 | 1 positive per month | 0 | 0 | YES |
| Turbidity | Soil erosion | NTU | N/A | TT | 0.05 – 0.13 | 0.08 | YES |

¹Total coliform bacteria testing is used to monitor microbial quality in the water distribution system. The PUD collects two coliform samples per month. No unsatisfactory results were detected.

| Substance | Major Source | Units | EPA Regulations | | Your Water Testing Results | | |
|------------------------------------|---|-------|---------------------|-------------------------|----------------------------|---------------|---------|
| | | | Maximum Goal (MCLG) | Maximum Allowable (MCL) | Min./Max. Range | Average Value | Comply? |
| Haloacetic Acids ² | By-product of drinking water chlorination | ppb | N/A | 60 | 0 | 0 | YES |
| Total Trihalomethanes ² | By-product of drinking water chlorination | ppb | N/A | 80 | 1.6 | 1.6 | YES |
| Free Chlorine Residual | Measure of disinfectant added to water | ppm | 4 (MRDLG) | 4 (MRDL) | 0.58 – 1.05 | 0.83 | YES |

²Haloacetic acids and Trihalomethanes form as by-products of the chlorination process that is used to kill or inactivate disease-causing microbes. Although goals have not been set for these compounds as a group, MCLGs for related individual compounds can be seen in the Unregulated Substances table below.

| Substance | Major Source | Units | EPA Regulations | | Your Water Testing Results | | |
|-----------|---------------------------------------|-------|---------------------|-------------------|----------------------------|----------------------------|---------|
| | | | Maximum Goal (MCLG) | Action Level (AL) | 90th % Level | Homes Exceeding the AL | Comply? |
| Copper | Plumbing; erosion of natural deposits | ppm | 1.3 | 1.3 | 0.5 | None (90th% level* = 0.25) | YES |
| Lead | Plumbing; erosion of natural deposits | ppb | 0 | 15 | 0 | None (90th% level* = 0) | YES |

US Environmental Protection Agency (USEPA) regulations require monitoring for the presence of lead and copper at household taps every three years. The next round of required sampling will be conducted in 2023.

*The 90th percentile level is the highest result obtained in 90% of the samples collected when the results are ranked in order from lowest to highest.

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. Snohomish County PUD 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 two 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 the US Environmental Protection Agency's website at www.epa.gov/safewater/lead.

UNREGULATED SUBSTANCES

| Substance | Maximum Goal (MCLG) | Your Water Testing Results | |
|--|---------------------|----------------------------|---------------|
| | | Min./Max. Range | Average Value |
| Chloroform (trichloromethane) ³ (ppb) | 70 | 1.6 | 1.6 |

³Although these substances are not regulated individually, their results are added together to obtain the Total Trihalomethane and Haloacetic Acid results in the above table.

VOLUNTARILY MONITORED SUBSTANCES

The information below is voluntary and describes additional characteristics of May Creek Water System drinking water.

| | Min./Max. Range or Highest Value | Average Value |
|----------------------|----------------------------------|---------------|
| Alkalinity (ppm) | 7 – 15 | 10 |
| Conductivity (ppm) | 10 – 19 | 12 |
| pH (standard unit) | 7.1 – 7.6 | 7.4 |
| Total Hardness (ppm) | 18 – 82 | 37 |
| Sodium (ppm) | 1.51 – 2.44 | 1.98 |
| Chloride (ppm) | 0.8 – 1.5 | 1.15 |
| Sulfate (ppm) | 1.4 – 1.5 | 1.5 |

Cross Connections

Drinking water is, of course, used for much more than just drinking. Some uses of water – such as for irrigation systems, hydraulic boat lifts, boilers and portable hose connections like fertilizer sprayers – could **contaminate the drinking water**.

These potential sources of contamination are called *cross connections*. Pressure changes in the water system could cause these contaminants to be drawn back or to “backflow” into the drinking water.

Fortunately, backflow from a cross connection can be prevented. The PUD’s Cross Connection Control Program protects the water system from contaminants by ensuring that customers have properly installed and maintained backflow-prevention devices. Call the Water Utility at 425-397-3000 for more information.

SKYLITE TRACTS WATER SYSTEM (SOUTH OF SULTAN)

| Substance | Major Source | Units | EPA Regulations | | Your Water Testing Results | | |
|--------------------------------------|---|------------------|---------------------|-------------------------|----------------------------|---------------|---------|
| | | | Maximum Goal (MCLG) | Maximum Allowable (MCL) | Min./Max. Range | Average Value | Comply? |
| Barium | Erosion of natural deposits/discharge of drilling waste | ppm | 2 | 2 | 0.02 | 0.02 | YES |
| Nitrate | Erosion of natural deposits, animal waste | ppm | 10 | 10 | 0.93 | 0.93 | YES |
| Total Coliform Bacteria ¹ | Naturally present in the environment | Samples positive | 0 | 1 positive per month | 0 | 0 | YES |
| Free Chlorine Residual | Measure of a disinfectant added to water | ppm | 4 (MRDLG) | 4 (MRDL) | 0.3 – 1.3 | 0.9 | YES |
| Turbidity | Soil erosion | NTU | N/A | TT | 0.07 – 0.4 | 0.1 | YES |

¹Total coliform bacteria testing is used to monitor microbial quality in the water distribution system. The PUD collects one coliform sample per month. No unsatisfactory results were detected.

| Substance | Major Source | Units | EPA Regulations | | Your Water Testing Results | | |
|-----------|---------------------------------------|-------|---------------------|-------------------|----------------------------|----------------------------|---------|
| | | | Maximum Goal (MCLG) | Action Level (AL) | 90th % Level | Homes Exceeding the AL | Comply? |
| Copper | Plumbing; erosion of natural deposits | ppm | 1.3 | 1.3 | 0.05 | None (90th% level* = 0.05) | YES |
| Lead | Plumbing; erosion of natural deposits | ppb | 0 | 15 | 1 | None (90th% level* = 1) | YES |

US Environmental Protection Agency (USEPA) regulations require monitoring for the presence of lead and copper at household taps every three years. The next round of required sampling will be conducted in 2023.

*The 90th percentile level is the highest result obtained in 90% of the samples collected when the results are ranked in order from lowest to highest.

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. Snohomish County PUD 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 two 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 the US Environmental Protection Agency's website at www.epa.gov/safewater/lead.

212 MARKET & DELI WATER SYSTEM (NEAR STANWOOD)

| Substance | Major Source | Units | EPA Regulations | | Your Water Testing Results | | |
|--------------------------------------|---|------------------|---------------------|-------------------------|----------------------------|---------------|---------|
| | | | Maximum Goal (MCLG) | Maximum Allowable (MCL) | Min./Max. Range | Average Value | Comply? |
| Arsenic | Erosion of natural deposits | ppb | N/A | 10 | 3 | 3 | YES |
| Total Coliform Bacteria ¹ | Naturally present in the environment | Samples positive | 0 | 1 positive per month | 0 | 0 | YES |
| Barium | Erosion of natural deposits/discharge of drilling waste | ppm | 2 | 2 | 0.01 | 0.01 | YES |
| Fluoride | Erosion of natural deposits | ppm | 2 | 4 | 0.11 | 0.11 | YES |
| Turbidity | Soil erosion | NTU | N/A | TT | 0.24 – 0.91 | 0.5 | YES |

¹Total coliform bacteria testing is used to monitor microbial quality in the water distribution system. The PUD collects one coliform sample per month. No unsatisfactory results were detected.

| | | | | | | | |
|------------------------|--|-----|-----------|----------|-----------|-----|-----|
| Free Chlorine Residual | Measure of disinfectant added to water | ppm | 4 (MRDLG) | 4 (MRDL) | 0.2 – 1.0 | 0.6 | YES |
|------------------------|--|-----|-----------|----------|-----------|-----|-----|

SKYLITE TRACTS VOLUNTARILY MONITORED SUBSTANCES

The information below is voluntary and describes additional characteristics of Skylite Tracts Water System drinking water.

| | Min./Max. Range or Highest Value | Average Value |
|----------------------|----------------------------------|---------------|
| Alkalinity (ppm) | 6 – 40 | 16 |
| Conductivity (ppm) | 16 – 23 | 19 |
| pH (standard unit) | 7.0 – 7.3 | 7.2 |
| Total Hardness (ppm) | 27 – 81 | 43 |
| Sodium (ppm) | 3.4 | 3.4 |
| Chloride (ppm) | 2.2 | 2.2 |
| Sulfate (ppm) | 2.6 | 2.6 |
| Zinc (ppm) | 0.014 | 0.014 |

212 MARKET & DELI VOLUNTARILY MONITORED SUBSTANCES

The information below is voluntary and describes additional characteristics of 212 Market & Deli Water System drinking water.

| | Min./Max. Range or Highest Value | Average Value |
|----------------------|----------------------------------|---------------|
| Alkalinity (ppm) | 15 – 59 | 27 |
| Conductivity (ppm) | 42 – 46 | 44 |
| pH (standard unit) | 8.3 – 8.6 | 8.4 |
| Sodium (ppm) | 14 | 14 |
| Total Hardness (ppm) | 18 – 120 | 74 |
| Iron (ppm) | 0.05 | 0.05 |
| Manganese (ppm) | 0.02 | 0.02 |
| Chloride (ppm) | 4.8 | 4.8 |
| Sulfate (ppm) | 7.1 | 7.1 |
| Zinc (ppm) | 0.03 | 0.03 |

SUNDAY LAKE WATER SYSTEM (SOUTHEAST OF STANWOOD)

| Substance | Major Source | Units | EPA Regulations | | Your Water Testing Results | | |
|--------------------------------------|---|------------------|---------------------|-------------------------|----------------------------|---------------|---------|
| | | | Maximum Goal (MCLG) | Maximum Allowable (MCL) | Min./Max. Range | Average Value | Comply? |
| Arsenic ¹ | Erosion of natural deposits | ppb | N/A | 10 | 6.0 | 6.0 | YES |
| Nitrate | Erosion of natural deposits, animal waste | ppm | 10 | 10 | 0 | 0 | YES |
| Iron | Erosion of natural deposits | ppm | N/A | 0.3 (SMCL) | 0.01 – 0.05 | 0.03 | YES |
| Manganese | Erosion of natural deposits | ppm | N/A | 0.05 (SMCL) | 0.00 – 0.04 | 0.02 | YES |
| Barium | Erosion of natural deposits/discharge of drilling waste | ppm | 2 | 2 | 0.04 | 0.04 | YES |
| Fluoride | Erosion of natural deposits | ppm | 2 | 4 | 0.18 | 0.18 | YES |
| Total Coliform Bacteria ² | Naturally present in the environment | Samples positive | 0 | 1 positive per month | 0 | 0 | YES |
| Turbidity | Soil erosion | NTU | N/A | TT | 0.06 – 0.14 | 0.08 | YES |

¹While your drinking water meets Environmental Protection Agency's (EPA) standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects, such as skin damage and circulatory problems.

²Total coliform bacteria testing is used to monitor microbial quality in the water distribution system. The PUD collects one coliform sample per month. No unsatisfactory results were detected.

| | | | | | | | |
|------------------------------------|---|-----|-----------|----------|-------------|------|-----|
| Haloacetic Acids ³ | By-product of drinking water chlorination | ppb | N/A | 60 | 15.8 | 15.8 | YES |
| Total Trihalomethanes ³ | By-product of drinking water chlorination | ppb | N/A | 80 | 31.0 | 31.0 | YES |
| Free Chlorine Residual | Measure of disinfectant added to water | ppm | 4 (MRDLG) | 4 (MRDL) | 0.17 – 1.27 | 0.43 | YES |

³Haloacetic acids and Trihalomethanes form as by-products of the chlorination process that is used to kill or inactivate disease-causing microbes. Although goals have not been set for these compounds as a group, MCLGs for related individual compounds can be seen in the Unregulated Substances table below.

| Substance | Major Source | Units | EPA Regulations | | Your Water Testing Results | | |
|-----------|---------------------------------------|-------|---------------------|-------------------|----------------------------|----------------------------|---------|
| | | | Maximum Goal (MCLG) | Action Level (AL) | 90th % Level | Homes Exceeding the AL | Comply? |
| Copper | Plumbing; erosion of natural deposits | ppm | 1.3 | 1.3 | 0.05 | None (90th% level* = 0.05) | YES |
| Lead | Plumbing; erosion of natural deposits | ppb | 0 | 15 | 0 | None (90th% level* = 0.0) | YES |

US Environmental Protection Agency (USEPA) regulations require monitoring for the presence of lead and copper at household taps every three years. The next round of required sampling will be conducted in 2023.

*The 90th percentile level is the highest result obtained in 90% of the samples collected when the results are ranked in order from lowest to highest.

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. Snohomish County PUD 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 two 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 the US Environmental Protection Agency's website at www.epa.gov/safewater/lead.

UNREGULATED SUBSTANCES

| Substance | Maximum Goal (MCLG) | Your Water Testing Results | |
|--|---------------------|----------------------------|---------------|
| | | Min./Max. Range | Average Value |
| Bromodichloromethane ⁴ (ppb) | 0 | 4.2 | 4.2 |
| Chloroform (trichloromethane) ⁴ (ppb) | 70 | 26.2 | 26.2 |
| Chlorodibromomethane ⁴ (ppb) | 0 | 0.6 | 0.6 |
| Dichloroacetic Acid ⁴ (ppb) | 0 | 6.8 | 6.8 |
| Trichloroacetic Acid ⁴ (ppb) | 20 | 9.0 | 9.0 |
| Bromochloroacetic Acid ⁴ (ppb) | 0 | 1.0 | 1.0 |

⁴Although these substances are not regulated individually, their results are added together to obtain the Total Trihalomethane and Haloacetic Acid results in the above table.

VOLUNTARILY MONITORED SUBSTANCES

The information below is voluntary and describes additional characteristics of Sunday Lake Water System drinking water.

| | Min./Max. Range or Highest Value | Average Value |
|----------------------|----------------------------------|---------------|
| Alkalinity (ppm) | 9 – 47 | 23 |
| pH (standard unit) | 7.5 – 8.3 | 8.1 |
| Sodium (ppm) | 22 | 22 |
| Total Hardness (ppm) | 69 – 157 | 94 |
| Sulfate (ppm) | 0.3 | 0.3 |
| Chloride (ppm) | 6.3 | 6.3 |

WARM BEACH WATER SYSTEM (SOUTH OF STANWOOD)

| Substance | Major Source | Units | EPA Regulations | | Your Water Testing Results | | |
|--------------------------------------|---|------------------|---------------------|-------------------------|----------------------------|---------------|---------|
| | | | Maximum Goal (MCLG) | Maximum Allowable (MCL) | Min./Max. Range | Average Value | Comply? |
| Arsenic ¹ | Erosion of natural deposits | ppb | N/A | 10 | 3 – 4 | 4 | YES |
| Nitrate | Erosion of natural deposits, animal waste | ppm | 10 | 10 | 0 – 1.1 | 0.6 | YES |
| Iron | Erosion of natural deposits | ppm | N/A | 0.3 (SMCL) | 0.1 – 0.07 | 0.04 | YES |
| Manganese ² | Erosion of natural deposits | ppm | N/A | 0.05 (SMCL) | 0 – 0.10 | 0.03 | YES |
| Barium | Erosion of natural deposits/discharge of drilling waste | ppm | 2 | 2 | 0.04 | 0.04 | YES |
| Fluoride | Erosion of natural deposits | ppm | 2 | 4 | 0.23 – 0.27 | 0.25 | YES |
| Total Coliform Bacteria ³ | Naturally present in the environment | Samples positive | 0 | 1 positive per month | 0 | 0 | YES |
| Turbidity | Soil erosion | NTU | N/A | TT | 0.6 – 1.0 | 0.4 | YES |

¹While your drinking water meets Environmental Protection Agency's (EPA) standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects, such as skin damage and circulatory problems.

²In August and October 2020, manganese was detected at levels over the aesthetic Secondary Maximum Contaminant Level (SMCL) of 0.05 ppm after the treatment process during routine sampling. Follow-up samples were satisfactory. Drinking water may naturally have manganese, and, when concentrations are greater than 0.05 ppm, the water may be discolored and taste bad. Over a lifetime, the EPA recommends that people drink water with manganese levels less than 0.3 ppm, and, over the short-term, EPA recommends that people limit their consumption of water with levels over 1.0 ppm, primarily due to concerns about possible neurological effects. Children up to 1 year of age should not be given water with manganese concentrations over 0.3 ppm, nor should formula for infants be made with that water for longer than 10 days.

³Total coliform bacteria testing is used to monitor microbial quality in the water distribution system. The PUD collects one coliform sample per month. No unsatisfactory results were detected.

| | | | | | | | |
|------------------------------------|---|-----|-----------|----------|-------------|------|-----|
| Haloacetic Acids ⁴ | By-product of drinking water chlorination | ppb | N/A | 60 | 5.1 | 5.01 | YES |
| Total Trihalomethanes ⁴ | By-product of drinking water chlorination | ppb | N/A | 80 | 7.0 | 7.0 | YES |
| Free Chlorine Residual | Measure of disinfectant added to water | ppm | 4 (MRDLG) | 4 (MRDL) | 0.10 – 0.50 | 0.26 | YES |

⁴Haloacetic acids and Trihalomethanes form as by-products of the chlorination process that is used to kill or inactivate disease-causing microbes. Although goals have not been set for these compounds as a group, MCLGs for related individual compounds can be seen in the Unregulated Substances table below.

| Substance | Major Source | Units | EPA Regulations | | Your Water Testing Results | | |
|-----------|---------------------------------------|-------|---------------------|-------------------|----------------------------|---------------------------|---------|
| | | | Maximum Goal (MCLG) | Action Level (AL) | 90th % Level | Homes Exceeding the AL | Comply? |
| Copper | Plumbing; erosion of natural deposits | ppm | 1.3 | 1.3 | 1.1 | None (90th% level* = 1.1) | YES |
| Lead | Plumbing; erosion of natural deposits | ppb | 0 | 15 | 3 | None (90th% level* = 3.0) | YES |

US Environmental Protection Agency (USEPA) regulations require monitoring for the presence of lead and copper at household taps every three years. The next round of required sampling will be conducted in 2023.

*The 90th percentile level is the highest result obtained in 90% of the samples collected when the results are ranked in order from lowest to highest.

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. Snohomish County PUD 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 two 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 the US Environmental Protection Agency's website at www.epa.gov/safewater/lead.

UNREGULATED SUBSTANCES

| Substance | Maximum Goal (MCLG) | Your Water Testing Results | |
|--|---------------------|----------------------------|---------------|
| | | Min./Max. Range | Average Value |
| Chloroform (trichloromethane) ⁵ (ppb) | 70 | 5.5 | 5.5 |
| Dichloroacetic Acid ⁵ (ppb) | 0 | 4.0 | 4.0 |
| Trichloroacetic Acid ⁵ (ppb) | 20 | 1.1 | 1.1 |
| Bromochloroacetic Acid ⁵ (ppb) | 0 | 1.6 | 1.6 |
| Bromodichloromethane ⁵ (ppb) | 0 | 1.5 | 1.5 |

⁵Although these substances are not regulated individually, their results are added together to obtain the Total Trihalomethane and Haloacetic Acid results in the above table.

VOLUNTARILY MONITORED SUBSTANCES

The information below is voluntary and describes additional characteristics of Warm Beach Water System drinking water.

| | Min./Max. Range or Highest Value | Average Value |
|----------------------|----------------------------------|---------------|
| Alkalinity (ppm) | 10 – 39 | 22 |
| pH (standard unit) | 7.3 – 8.0 | 7.5 |
| Sodium (ppm) | 11 – 12 | 12 |
| Total Hardness (ppm) | 117 – 190 | 135 |
| Sulfate (ppm) | 1.4 – 50 | 26 |
| Chloride (ppm) | 17 | 17 |
| Zinc (ppm) | 0 – 1.3 | 0.7 |
| Cadium (ppm) | 0.002 | 0.002 |



Water Utility
PO Box 1107
Everett, WA 98206-1107

Customer Views Welcome

There are several ways you can get involved in water quality issues. You can call us at 425-397-3000 or communicate with elected officials, participate in public hearings and attend Snohomish County PUD Commission meetings. Check the local newspaper for information on public meetings regarding water quality, water policies and other issues.

The Snohomish County PUD Board of Commissioners meets at 1:30 PM on the first and third Tuesday of each month at Snohomish County PUD, 2320 California Street in Everett. Board sessions are open to the public. Please call 425-783-8611 in advance to confirm meeting dates and times, or check the meeting agenda on our website.

You can also find information for water customers at our website: snopud.com (click on *Water*).

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Snohomish PUD participates in the AT&T language line service. If you need help with the English language or need an interpreter, please contact a PUD customer service representative at 425-783-1000 (Monday through Friday, 8 AM to 5:30 PM) and an interpreter will be called (*Se llamará a un intérprete*).

Safe Drinking Water & Water System Security

The PUD is committed to a strong security program to protect water quality. The PUD's facilities are secured; however, we could use your assistance. If you see suspicious activity in or around PUD pump stations, reservoirs or hydrants, please contact us at 425-397-3000 (after regular working hours, holidays or on weekends, please contact us at 425-783-8000).

For More Information

- + PUD website: snopud.com (click on *Water*)
- + Safe Drinking Water Act (SDWA) hotline: 1-800-426-4791
E-mail: hotline-sdwa@epamail.epa.gov
- + Washington State Department of Health Division of Drinking Water: 253-395-6750
Website: www.doh.wa.gov/ehp/dw

Contact Us

Water Utility: 425-397-3000

Monday through Friday, 7:30 AM - 4:00 PM

Toll-free in Western Washington and outside the Everett local calling area at 1-877-783-1000, extension 3000

Prepared June 2021