

KITSAP PUBLIC HEALTH BOARD MEETING AGENDA

February 4, 2020
12:30 p.m. to 1:45 p.m.
Norm Dicks Government Center, First Floor Chambers Room
Bremerton, Washington

- 12:30 p.m. 1. Call to Order
Mayor Rob Putaansuu, Chair
- 12:32 p.m. 2. Approval of January 7, 2020 Meeting Minutes
Mayor Rob Putaansuu, Chair *Page 2*
- 12:33 p.m. 3. Approval of Consent Items and Contract Updates: See Warrant and EFT
Registers and Contracts Signed Report
Mayor Rob Putaansuu, Chair *External document*
- 12:35 p.m. 4. Public Comment
Mayor Rob Putaansuu, Chair
- 12:45 p.m. 5. Health Officer and Administrator Reports
Dr. Susan Turner, Health Officer & Keith Grellner, Administrator

INFORMATION AND DISCUSSION ITEMS

- 12:55 p.m. 6. Regulatory Overview of Wastewater Management in Kitsap County
John Kiess, Environmental Health Division Director
Eric Evans, Environmental Health Assistant Director *Page 13*
- 1:25 p.m. 7. 2019 Surface Water Quality Annual Report
John Kiess, Environmental Health Division Director
Grant Holdcroft, Pollution Identification and
Correction Program Manager *Page 24*
- 1:45 p.m. 8. Adjourn

All times are approximate. Board meeting materials are available online at
www.kitsappublichealth.org/about/board-meetings.php

**KITSAP PUBLIC HEALTH BOARD
MEETING MINUTES
Regular Meeting
January 7, 2020**

The meeting was called to order by Board Chair, Mayor Robert Putaansuu at 10:31 a.m.

REVIEW AND APPROVE AGENDA

There were no changes to the agenda.

BOARD MEETING MINUTES

Mayor Becky Erickson moved and Commissioner Charlotte Garrido seconded the motion to approve the minutes for the December 3, 2019, regular meeting. The motion was approved unanimously.

CONSENT AGENDA

The January consent agenda included the following contracts:

- 1560 Amendment 3 (2037), *City of Bremerton, Reimbursement Agreement*
- 1689 Amendment 1 (2050), *Washington State Department of Ecology, Water Quality Combined Financial Assistance Agreement*
- 2045, *Kitsap County, Kitsap Connect*
- 2046, *Clallam County, Communicable Disease / Opioid Dashboard*
- 2049, *Kitsap County, Therapeutic Court Tax Programs*
- 2053, *Kitsap County, Clean Water Kitsap*

Commissioner Garrido moved and Mayor Erickson seconded the motion to approve the consent agenda, including the Contracts Update and Warrant and Electronic Funds Transfer Registers. The motion was approved unanimously.

PUBLIC COMMENT

Monte Levine, a resident of Kitsap, provided public comment regarding the new syringe exchange model. Mr. Levine said he has recently been involved in a project as a recovery coach. He said the program, led by the Suquamish Tribe, is based on behavior change theory and motivational interviewing. He said he believes this program would fit well with goals and objectives that the Board has previously noted. He explained this program moves people into treatment for addiction slowly. He shared an anecdote from a user at a recent conference, who said addiction is like climbing a ladder, step by step, and when you reach the top, there are people at the bottom yelling “jump!”. He said this program could be very beneficial because change happens in incremental steps.

There was no further comment.

HEALTH OFFICER/ADMINISTRATOR'S REPORT

Health Officer Update:

Dr. Susan Turner, Health Officer, provided the Board with four updates regarding mumps, flu, EVALI and Kitsap Community Health Priorities (KCHP).

Mumps:

Kitsap has been experiencing an elevated number of mumps cases, with no obvious connections, except for in the cluster of cases associated with a Navy crew. Yesterday, the Health District sent a Provider Advisory asking health care providers to heighten their suspicion for mumps cases and report cases to the Health District immediately, while advising the patient to isolate themselves completely to prevent spread. Health District staff continue to work with the Navy and with Washington State Department of Health (DOH) to ensure we're doing our best to prevent ongoing transmission.

Flu:

Local flu activity is high. The number of positive tests is high, although testing itself is occurring at much higher levels than usual, indicating that docs are seeing a lot of sick people. Influenza like illness (ILI) visits to emergency departments (EDs) have increased to levels higher than in prior years, which also may reflect the fact that many people are sick. There have been two flu related deaths this season, both in adults, as of December 31, 2019. Additionally, there have been five reports of long-term care facilities experiencing influenza cases so far this season. *

Washington State flu activity is increasing and elevated, with nine adult flu-associated deaths and two pediatric. The University of Washington (UW) Respiratory Virus Lab has seen a large and notable increase in positive respiratory syncytial virus (RSV) tests. Rhinovirus is still the leading pathogen identified in their testing.

Nationally more than half of states are reporting high ILI activity compared to the prior week. Widespread activity is occurring in most states. The country is seeing increases in ILI visits to Eds similar to Kitsap.

Dr. Turner reminded the Board that it is not too late to get vaccinated and said it only takes two weeks to build immunity from the flu.

EVALI:

Centers for Disease Control and Prevention (CDC) reports that the number of new hospitalized e-cigarette vaping associated lung injury (EVALI) cases has been declining nationally since a peak in September. ED visits have also been declining but have not returned to pre-June 2019 levels, indicating that EVALI remains a concern.

Dr. Turner explained that vitamin E Acetate (VEA) is still a substance of concern. A newer, larger study found vitamin E acetate in 48 of 51 lung tissues of EVALI cases from 16 states; compared to 99 tissue samples from "healthy comparators," finding no VEA. However, only 18

*Flu death and long-term care facility information was updated to reflect current numbers.

of these vaped and none vaped THC. It is unclear if the 51 EVALI cases were newly examined tissue or whether they included 26 from prior study and 25 new cases.

The most recent case count nationally is 2,561, with 55 deaths. Demographics of cases nationally have not changed — 60% male and slightly less than 40% female. Most of the cases are under 35 years of age.

The latest report for the state, as of December 12, 2019, was a total of 21 cases, with the majority at or younger than 39 years of age.

Dr. Turner informed the Board that, at the end of the year, Congress signed into law an increase in the legal cigarette and vapor product purchase age to 21, and last week put in place a ban of flavored vaping pods, popular among youth. Washington's Tobacco Vapor 21 law became effective last week, and a communication campaign is planned, including resources to assist youth with cessation.

Recommendations from CDC and WA DOH are unchanged:

- People should not use THC-containing vapor products, especially those from informal sources like friends, family, or in-person or online sellers.
- The best way to ensure people are not at risk while the investigation continues to identify the cause is to refrain from the use of all e-cigarette or vaping products.
- Those not using e-cigarettes should not begin doing so, especially youth, young adults and pregnant or breastfeeding women.
- Adults using e-cigarettes to stop smoking should not go back to smoking cigarettes, but should use an approved smoking cessation medication and counseling.

KCHP:

The assessment and prioritization process was completed in November, and the 2019 priorities were announced at the KCHP summit on December 11, 2019. Dr. Turner said staff will provide a more in-depth description of the process and outcomes to the Board in February, but the five priorities selected, based on a high-level review of the most concerning data and based on community input are:

1. Wellbeing (mental health and suicide)
2. Substance use
3. Obesity/healthy eating/active living (HEAL)
4. Housing
5. Health care access

The data discussion also resulted in the identification of some more focused areas where additional work is needed, which can be used in follow-on discussions of the workgroups. Four workgroup leaders committed to follow-up meetings related to the priorities.

Dr. Turner said the Board may recall that the Steering Committee for KCHP is much larger this year, and most of the members of the steering committee provided financial support. The financial support provided covered the data report, the data review and prioritization meetings

and the summit. Currently, there is not financial support for ongoing KCHP activities, although Health District staff believe there is a little bit of the provided funding remaining that can be used for maintenance of the KCHP website.

The Health District will be providing “backbone” support to the HEAL efforts, and there was good discussion at the summit about next steps to begin addressing policy systems and environment change in this multi-sector workgroup. The other three workgroups, should they continue to meet, will require ongoing backbone support by other agencies/entities.

There was no further comment.

Administrator Update:

Mr. Keith Grellner, Administrator, provided the Board with three brief updates:

First, he said staff are working with the Foundational Public Health Services (FPHS) steering committee and DOH to seek the Governor’s support to include in his budget funding to replace a \$10.5 million gap in the FPHS funds the Legislature promised to the state public health system last spring. During the 2019 session, the Legislature approved \$22 million for FPHS, about \$12 million of which was tagged to the new vapor tax revenues. Due to a combination of factors, including the recent ban on flavored vaping products, there is a \$10.5 million revenue shortfall in the vapor tax revenues and consequently the FPHS funding promised by the Legislature.

The Governor’s budget includes \$10.5 million for backfilling the vapor tax shortfall for FPHS, but does not include any new revenue. Mr. Grellner said now staff will have to wait and work with the Legislature to include this backfill funding in the House and Senate budgets.

Over the last three years, the Health District has received \$147,000 per year for FPHS, which has been used to bolster the communicable disease program. If the vapor tax revenue shortfall is backfilled, the Health District is in line to get a \$28,000 per year increase for 2020, for a total of \$175,000 per year.

Next, Mr. Grellner announced that on Saturday, January 11, Dr. Turner and Kelsey Stedman, Kitsap Connect Coordinator, will participate in Senator Randall’s town hall meeting, focused on health and long-term care, at Olympic College 9:30 a.m. – 10:30 a.m.

Lastly, he announced that Public Health Day at the Legislature is February 5th and the Health District will once again be participating in this event to advocate for the Health District’s legislative priorities.

There was no further comment.

RESOLUTION 2020-01, APPROVING AN UPDATED POLICY FOR CLAIMS AND DEFENSE OF CLAIMS AGAINST HEALTH DISTRICT OFFICERS, EMPLOYEES, AND VOLUNTEERS

Mr. Grellner approached the Board regarding Resolution 2020-01, Approving an Updated Policy for Claims and Defense of Claims Against Health District Officers, Employees, and Volunteers.

After consulting with the Health District's legal counsel concerning the processing of claims, and reviewing the District's current claims policy, Policy A-15, counsel recommended that the Health District update and modify its claims handling procedures. Draft District Policy L-4 is the proposed policy update for the handling of claims and is intended to replace Policy A-15. Policy L-4 was drafted in consultation with legal counsel.

District Policy L-4 is modeled after the Kitsap County risk management policy. He said proposed Policy L-4 seeks to create a "risk committee," which includes the Board Chair as one of its members; hence the need for Board approval.

Mayor Putaansuu asked how often the committee would meet. Mr. Grellner said the committee will only meet as needed, and likely only once or twice per year.

Commissioner Garrido considered this is a reasonable request.

Commissioner Garrido moved and Mayor Erickson seconded the motion to approve Resolution 2020-01, Approving an Updated Policy for Claims and Defense of Claims Against Health District Officers, Employees, and Volunteers.

Commissioner Ed Wolfe said he believes this was strongly recommended by the County's risk council. Mayor Erickson said the prior one was done in 2007, so even just personnel laws changing in the time since would require an update to this policy.

The motion was approved unanimously.

There was no further comment.

SUBSTITUTE HOUSE BILL 1551, MODERNIZING THE CONTROL OF CERTAIN COMMUNICABLE DISEASES

Dr. Turner approached the Board regarding Substitute House Bill (SHB) 1551, Modernizing the Control of Communicable Disease. SHB 1551 was submitted during the 2019 legislative session to reduce HIV "exceptionalism" in the sexually transmitted disease law, RCW 70.24, and to improve the public health process for reducing behaviors endangering the public's health. The bill did not pass out of committee in the 2019 legislative session and is being considered again in the 2020 session. Dr. Turner, along with Dr. Tom Locke (Jefferson County's Health Officer), and Dr. Bob Lutz (Spokane Regional Health District's Health Officer) have been representing the statewide Health Officers Committee in the development and discussions about the bill, as

well as collateral materials being used in advocacy for the bill. This bill is included in the Kitsap Public Health Board-approved legislative priorities.

In 2019, the state Department of Health (DOH) proposed legislation to modernize the control of sexually transmitted diseases (STD) and blood-borne pathogens (BBP), by reducing HIV exceptionalism. Current HIV laws were enacted during the height of the AIDS epidemic, when little was known about the infection and most people died within twelve months of diagnosis. Today, we have medications that are able to treat and prevent HIV, making many of the HIV provisions in the current statute outdated and unnecessary. The proposal reduces HIV exceptionalism, improves access to preventive care, ensures the efficacy of health orders for the control of sexually transmitted diseases, and modernizes the control of sexually transmitted diseases and blood-borne pathogens (BBP).

In summary, the proposal:

- Modernizes the public health options and expands authority of health officers to effectively work with an individual to understand and manage their HIV by:
 - Extending the maximum length of a health order to 12 months;
 - Allowing health orders to include HIV treatment to achieve viral suppression; and
 - Providing a list of intervention options, including medical examination or testing, receiving counseling or medical treatment, or any combination of options.
- Expands the statute to also cover BBP, and defines them as hepatitis B and C, HIV, and other pathogens identified by the State Board of Health (SBOH);
- Permits a minor 14 years or older to consent to medical treatment to prevent HIV infection;
- Creates a misdemeanor when a person has sexual intercourse and fails to notify their partner that they have HIV, does not take practical means to prevent transmission, and transmission occurs; and creates a gross misdemeanor when, additionally, the person knowingly misrepresents their infection status;
- Removes the statutory classification of intentional HIV exposure or transmission as first degree assault (Class A felony);
- Removes penalties for persons with an STD (other than HIV) who have sexual intercourse with another person, unless such other persons are informed of the presence of the STD, currently classified as assault in the second degree (Class B felony);
- Aligns various statutes authorizing BBP testing for at-risk employees who may be exposed to BBP while on the job;
- Allows public health disease investigators to collect specimens, including through finger stick puncture, to test for STD, BBP, and other infections, as determined by the SBOH, while working under a physician's authorization or by a physician's standing order;
- Eliminates outdated and duplicative statutory requirements for HIV/AIDS occupational exposure education and training for health care professionals and certain categories of employees;
- Expands public school student education requirements to include all STD, rather than just AIDS, and public school employee education requirements to cover BBP;

- Repeals statutes that are no longer used or are not based on current science, including statutes related to HIV/AIDS testing and counseling for certain categories of people; preparation and dissemination of educational materials including emphasizing abstinence as an approach to prevent STD; the UW Center for AIDS Education; and the AIDS Advisory Committee; and
- Consolidates and clarifies rulemaking authority.

There was no further comment.

SYRINGE EXCHANGE NETWORK UPDATE

Dr. Turner and Ms. Yolanda Fong, Director of Community Health, provided the Board with a presentation update on the syringe exchange network.

On October 1, 2019, Dr. Turner provided an update to the Kitsap Public Health Board about planned and implemented improvements to the syringe exchange program, developed utilizing guidance from the Board's Policy Committee. At that meeting, she reviewed with the Board concerns related to program changes, a status update on the program's workplan, the proposed network model, and the anticipated timeline for development of the network. The program's procedure was provided. The Board concurred with the proposed model and timeline at the conclusion of the presentation.

Dr. Turner and Ms. Fong provided an updated presentation to the Board on the development of the syringe exchange network model. Topics to be covered include network meetings, outreach efforts, data collection, and partner updates.

Since Dr. Turner made her last presentation, Health District staff have applied for and were awarded funding from National Association of County and City Health Officials (NACCHO) to develop the new syringe exchange network and work with peer counties across the nation. The request for proposals (RFP) for mobile services closed and the successful proposer was Peoples Harm Reduction Alliance (PHRA). The Health District is in negotiations with PHRA to enter into a contract. Mr. Grellner said that contract would be brought before the Board at the February meeting for approval.

Mayor Erickson asked if this contract was for mobile exchange services in rural areas only and said that is what she recalled the Board agreeing upon. Mr. Grellner explained that the last guidance received from the Board was to move toward a model with mobile exchanges in just rural areas, but the Board was not yet ready to begin that model until the new network was fully up and running, to avoid gaps in services.

Mayor Erickson said she would like to revisit this conversation and noted that needle exchanges are already set up in fixed locations.

Dr. Turner, acknowledged Mayor Erickson's concerns, and as a refresher reminded the Board that the approved model included a year of transition. She said that moving to fixed site

exchanges in urban areas is a priority of the model but she recalls that the Board previously emphasized they would not like to create a gap in services for any individuals during this transition. She said there is currently not high enough utilization of fixed sites to reduce the mobile exchange without creating gaps. Dr. Turner said she expects to work toward this in the next year as the network develops.

Mayor Erickson said there are now fixed locations in the City of Poulsbo, which is a very small area. She said she was very grateful to Peninsula Community Health Services (PCHS) for partnering in this network and moving forward with fixed syringe exchange locations. She added that she would like to be very clear about her expectations for de-emphasizing mobile exchange services.

Dr. Turner said the Health District hears the Board's concerns and said they are addressed in the plan. She further explained that Health District staff continue to communicate with network partners and get numbers about utilization and will keep the Board updated on these numbers as things progress. She said over the next year, communication to mobile exchange users will be important to get them transitioned to fixed locations.

Mayor Erickson added that the City of Poulsbo now has signed contracts with every city in the county for behavioral specialists for their navigator team. She said the team will be hiring an addiction specialist. She explained that Poulsbo is ramping up their involvement in this issue and increasing outreach.

Dr. Turner said she and Kaela Moontree, HIV case manager, toured the new opioid treatment center in Kitsap County. She said the treatment center is currently awaiting the Washington State Board of Pharmacy to approve their proposals to achieve their federal and state licensure. She said they anticipate beginning accepting patients next week. Additionally, the treatment center said they currently have a wait list of over 100 people and hope to accommodate all those individuals once they receive approval from the state.

Additionally, Dr. Turner said the Port Angeles treatment center is also open and had a waitlist of 100 individuals.

Dr. Turner handed over the presentation to Ms. Fong. Ms. Fong introduced Ms. Moontree as the main contact at the Health District for syringe exchange.

Ms. Fong explained that since the last Board meeting, Health District staff have met with Suquamish Wellness Center, which has an array of services related to behavioral health and substance use prevention. She also noted that the Suquamish Wellness Center has been a long-standing partner of PHRA and the mobile exchange in support of access to medication assisted treatment for syringe exchange participants. Health District staff also have plans to meet with Kitsap Recovery Center. The recovery center and opioid treatment clinic BAART are both invited to participate in the new syringe exchange network.

The program receives data from two sources: Washington State Department of Health Smartsheets for local data, which is populated from network partners; and University of Washington Alcohol and Drug Abuse Institute (ADAI) 2019 state level survey results.

Some preliminary data shows that 134 individuals enrolled in the new program between October 1 and December 11, 2019. There were 249 encounters during this time period.

According to the ADAI 2019 Drug Injector Health Survey results, the following data was collected statewide (there was not enough data for Kitsap County to report.)

- 75% of drug injectors in Washington reported they are very (50%) or somewhat (25%) interested in help stopping or reducing their opioid use (716 surveys)
- Types of help they are interested in:
 - 68% methadone/buprenorphine/naltrexone
 - 54% detox
 - 48% 1:1 counseling/talking with someone
 - 46% someone to help navigate services
- 45% of survey participants received medical care from a doctor office/clinic/tribal clinic in the last 12 months
- 92% have some form of health care coverage (81% Medicaid)

Lastly, Ms. Fong shared a partner update from Peninsula Community Health Services. PCHS averages one to four exchanges per week, with most occurring in their sixth street location. She said PCHS shared two anecdotal stories: One individual visited them at multiple sites, which shows that PCHS is able to meet participants where they are; and a homeless participant was seen for syringe exchange and they were also able to assess for the patient's other needs and provide the individual with a Hepatitis A vaccination.

Mayor Rob Putansuu said that he can see that this program is rolling out, but echoes concerns from Mayor Erickson. He asked what the incentive is for individuals to transition from mobile exchanges to physical locations. Ms. Fong explained that the solution for this has not yet been determined and will need to be discussed.

Dr. Turner said she envisions the network of experts and partners guiding the conversation and determining the next steps to moving participants toward treatment options. She explained that the meetings of network partners are meant to support the development of the network moving through successful transitions.

Mayor Putansuu said it is important to identify a date for transition to physical locations and to start informing participants of the upcoming move.

Dr. Turner agreed and said the current workplan identifies a year for transition, but she expects it will take two years to fully develop.

Mayor Wheeler said he feels comfortable with the network and work that has been done so far. He believes that when the network reaches a certain point, Health District staff will provide the Board with an update presentation and recommendation for next phase toward fixed location. He said he can see this transition taking some time to achieve success. Additionally, he said he hopes the City of Bremerton can partner with the Health District and said the city is integrating their medical officer into this system to help users get into treatment. His hope is that the mobile treatment units can move PCHS services to specified locations. He said the program is new and still developing, and said the Board will work with the Health District to ensure nobody falls through the cracks.

Mayor Erickson thanked Health District staff for their work on this program. She said it is important to get folks into treatment and help them get their lives back. She added that one of the things the City of Poulsbo has discussed with their behavioral health team is distributing physical flyers. She said once their addictive specialist is on board, she will connect them with Health District staff to coordinate with the network.

Mayor Wheeler said the City of Bremerton is committed to the Kitsap Connect and navigator programs and has devoted a position in the fire department to serve people with addiction. He said he visited the new opioid treatment center and noted that it is located near densely populated Bremerton neighborhoods, but he can't think of another place it should be. He said the City of Bremerton is supportive of methadone treatment in the city.

Commissioner Ed Wolfe said he also toured the treatment center and attended a briefing for Kitsap County and City of Bremerton leaders. He said he walked away from briefing with two things: the importance of collaboration and communication will be key to this success.

Mayor Erickson said local government is taking responsibility for solving some of these problems out of necessity. She said that, unless cities and counties work together to solve these issues, they are not going to get solved. She said she is appreciative of the Health District for stepping up and leading this activity and she is proud of all the jurisdictions working together to solve this.

Lastly, Ms. Fong said the program is still in the process of facilitating participant discussion and she agreed with Mayor Putaansuu that it is important to assure participants have a voice at the table and that their needs are addressed.

There was no further comment.

ADJOURN

There was no further business; the meeting adjourned at 11:27 p.m.

Robert Putaansuu
Kitsap Public Health Board

Keith Grellner
Administrator

Board Members Present: *Mayor Becky Erickson; Commissioner Charlotte Garrido; Mayor Robert Putaansuu; Mayor Greg Wheeler; Commissioner Ed Wolfe.*

Board Members Absent: *Commissioner Robert Gelder; Mayor Kol Medina.*

Community Members Present: *Lisa Al-Hakim; Peoples Harm Reduction Alliance; Lauren Fanning, WA HIV Justice Alliance; Lauren Funk, Peoples Harm Reduction Alliance; Roger Gay, South Kitsap Taxpayers; Jessica Guidry, League of Women Voters – Kitsap; Monty Levine, Self; Austen Macalus, Kitsap Sun*

Staff Present: *Amy Anderson, Public Health Educator, Public Health Emergency Preparedness and Response; Angie Berger, Administrative Assistant, Administration; Karen Boysen-Knapp, Community Liaison, Chronic Disease Prevention; Ashley Duren, Social Worker, HIV Case Management; April Fisk, Program Coordinator 2, Communicable Disease; April Fisk, Program Coordinator, Contracts Manager, Public Records & Safety Officer, MAC, Administration; Yolanda Fong, Director, Community Health Division; Keith Grellner, Administrator, Administration; Karen Holt, Program Manager, Human Resources; John Kiess, Director, Environmental Health Division; ; Melissa Laird, Manager, Accounting and Finance; Kaela Moontree, Social Worker 1, HIV Case Management; Beth Phipps, Public Health Nurse Supervisor, Communicable Disease; Support Services; Betti Ridge, Social Worker 3, HIV Prevention; Tad Sooter, Communications Coordinator and Public Information Officer; Dr. Susan Turner, Health Officer, Administration.*

MEMO

To: Kitsap Public Health Board

From: John Kiess, Environmental Health Director
Eric Evans, Assistant Environmental Health Director

Date: February 4, 2020

Re: Regulatory Overview of Wastewater Management in Kitsap County

At the Board's request, during today's meeting we will present a regulatory overview of wastewater management in Kitsap County. This overview will include the following:

- Agencies involved with wastewater management;
- Applicable laws and rules pertaining to wastewater;
- The regulatory organizational structure of wastewater management; and
- Pros/Cons of various wastewater management options.

Recommended Action

None at this time --- for information and discussion only.

Please contact me at (360) 728-2290, or john.kiess@kitsappublichealth.org with any questions or comments.

Regulatory Overview of Wastewater Management in Kitsap County



KITSAP PUBLIC HEALTH DISTRICT

Wastewater – Who Regulates What and How?

- Various Rules

- Kitsap Public Health Board Ordinance 2008A-01
- Reclaimed Water - WAC 173-219
- State Waste Discharge Permit Program - WAC 173-216
- Large Onsite Sewage Systems – WAC 246-272B
- Greywater Reuse for Subsurface Irrigation – WAC 246-274
- Local Building Codes – Kitsap County and cities



- Various Agencies

- Kitsap Public Health District
- Washington State Department of Ecology
- Washington State Department of Health
- Local Community Development Departments



How to define water – Where is it and what is in it?

- Sewage

 - Blackwater

 - Greywater

- Reclaimed Water

 - No longer wastewater by definition

- Stormwater

 - Not regulated by wastewater rules



Municipal Sewer Systems and Wastewater Treatment Plants

- Regional solution
- Massive public expense
- GMA/UGA requirements
- No water reuse
- Regulated by the Washington State Department of Ecology



Large Onsite Sewage Systems (LOSS)

- Community solution
- Decreased public expense
- Regulated by the Washington State Department of Health
- Require management entity
- Need suitable undeveloped land for drainfield area



Onsite Sewage Systems

- Regulated by Kitsap Public Health
- Decentralized wastewater treatment and disposal
- Not a public expense
- Allows for groundwater recharge
- Requires management
- Challenging for small lot development – UGA lots



Greywater Disposal

- Long term solution
- Regulated by KPHD under the WA DOH rules – like a “second” septic system
- Greywater is not just “sudsy” water – presents health risks
- Can only be utilized during the growing season
- Not a “substitute” - requires secondary connection to approved wastewater disposal system



Composting / Incinerating Toilets

- Can be used in conjunction with septic systems
- Most units require electrical connection
- Requires handwashing facilities
- Price per unit can be prohibitive, the units do require maintenance and proper disposal of finished waste

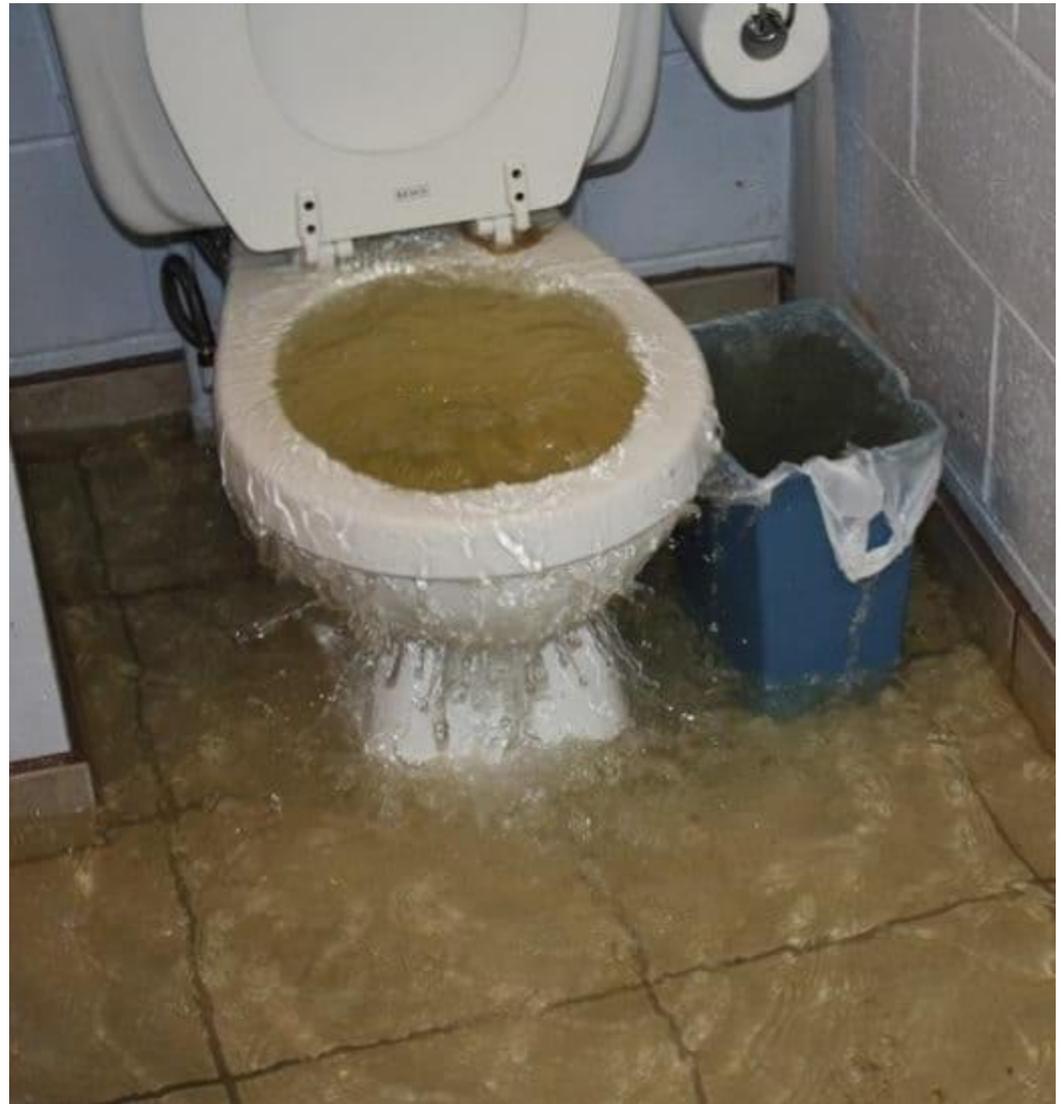


Reclaimed Water

- Decreases demand on limited water resources
- Requires treatment plant performance and a separate distribution network
- Persistent chemicals of concern
- Regulated by both the Washington State Departments of Ecology and Health



Questions?



MEMO

To: Kitsap Public Health Board

From: John Kiess, Environmental Health Director
Grant Holdcroft, PIC Program Manager

Date: February 4, 2020

Re: 2019 Water Quality Annual Report

Each year, the Health District's Pollution Identification and Correction Program (PIC) releases an annual report summarizing the previous year's surface water quality monitoring and clean-up work results. The *2019 Annual Water Quality Report* has recently been completed and is now available on our website at www.kitsappublichealth.org/environment/water_reports.php. The report is also attached for your review. The majority of the Health District's water quality monitoring and clean-up work is funded through **Clean Water Kitsap**, Kitsap County's storm water utility (see www.cleanwaterkitsap.org for more information), along with supplemental funds through temporary federal and state grants.

During today's Board meeting, Grant Holdcroft, PIC Program Manager, will provide a brief PIC program overview and present the background and notable findings of the *2019 Annual Water Quality Report*, including but not limited to the following:

- The updated format of the report, to make the report more readable by the general public.
- Ongoing success in the historically polluted Burley Creek watershed.
- Impacts of the change to the Washington State water quality standards.
- An overview of stream water quality status, as 65% of all streams met both parts of the bacteria standard.
- A review of our 2 streams which have a Public Health Advisory in place due to elevated fecal coliform bacteria (FC) levels during summer months.

Recommended Action

None at this time --- for information and discussion only.

Please contact me at (360) 728-2290, or john.kiess@kitsappublichealth.org with any questions or comments.

kitsappublichealth.org



2019 | Water Quality Report



Protecting public health, preventing pollution

The Kitsap Public Health District's Water Pollution Identification and Correction (PIC) program protects public health and prevents fecal pollution in Kitsap County surface waters.



Health District staff sample dozens of streams and swimming beaches across the county for fecal bacteria, an indicator of fecal pollution caused by human or animal waste. Fecal pollution can carry viruses and harmful bacteria that make people sick.

We use water sampling results to notify the public of potential health risks, and to find and fix fecal pollution problems. This helps keep our streams, swimming beaches and shellfish beds safe and healthy for the public to enjoy.

Our Water Quality Report summarizes water quality monitoring results and highlights from the 2019 water year (Oct. 1, 2018 to Sept. 30, 2019).

IN THIS REPORT

- 2019 PIC Program Highlights
- Health Advisories for Streams
- 2019 Water Quality Monitoring Results and Standards



Monitoring Results by Area:

- Kingston/Upper Hood Canal
- Poulsbo/Liberty Bay
- Silverdale/Bremerton
- Port Orchard/Sinclair Inlet
- Burley/Olalla
- Seabeck/Hood Canal
- Water Quality in Lakes
- Pollution Sources and Prevention

2019 Water PIC Program Highlights



69
Streams monitored
for pollution



206
Health advisory days
for local lakes



3,475
Water samples collected



236
Acres of shellfish beds
upgraded



12,234
Staff hours logged



30
Education events
participated in by PIC staff



Burley/Minter Watersheds: A PIC Success Story

A decades-long effort to improve water quality in the Burley and Minter watersheds is showing results.

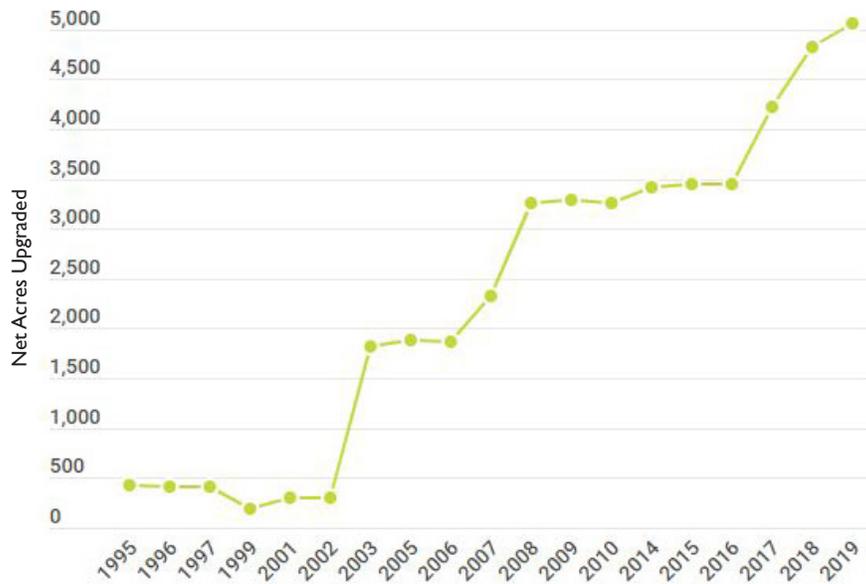
Bacteria levels have declined in many streams across the complex drainage system, which spans Kitsap and Pierce counties. Burley Creek — a stream with historically high bacteria levels — met the state freshwater standard for the first time in 2018, and again in 2019.

More than 50 failing septic systems were repaired within the watersheds between 2014 and 2017, helping to reduce fecal pollution. [See monitoring results on page 9.](#)

“*We’ve never seen such low bacterial numbers since I started working here in the ’90s.*”

Leslie Banigan
Kitsap Public Health District

Shellfish Harvesting Areas Approved



All creek systems in Kitsap County eventually drain into Puget Sound and many streams empty into shellfish growing areas. Because of this, pollution in surface water frequently contributes to contamination of shellfish beds.

By reducing pollution in surface waters, the Health District's PIC program improves water quality in shellfish growing areas. Since PIC work began about 24 years ago, there has been a net increase of more than 5,000 acres of shellfish beds approved for harvest in Kitsap.

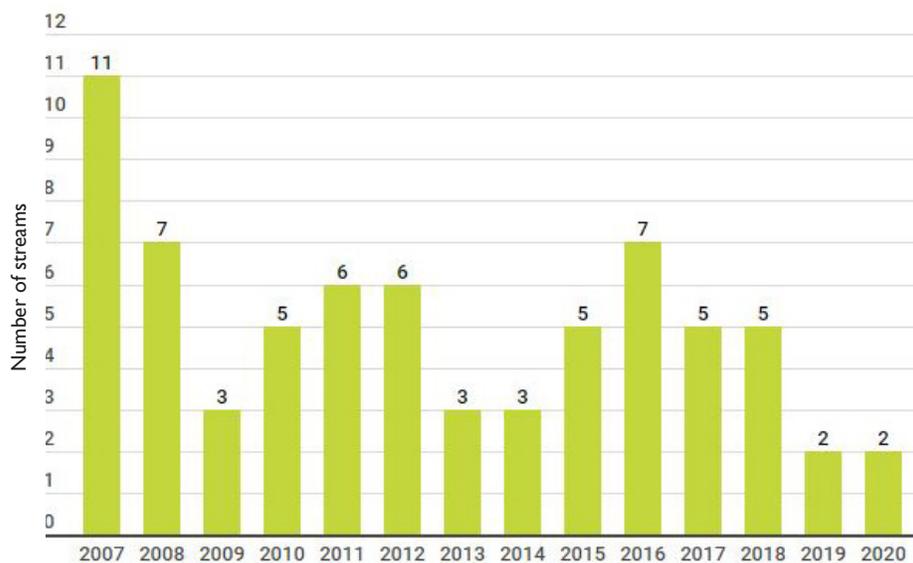
Public Health Stream Advisories

The Health District issues public health advisories for streams that have ongoing problems with high bacteria levels during the summer. Advisories are posted to protect the health of people who might come into contact with stream water — especially children.

The Health District issues an advisory when fecal coliform (FC) bacteria in water samples collected over a three-year period exceeds a geometric mean value (GMV) of 270 FC per 100 milliliters. (See page 4 for an explanation of how FC bacteria are quantified.)

The number of public health advisories issued for streams in Kitsap has decreased dramatically since 2007.

Public health stream advisories issued by year



2020 Public Health Stream Advisories

Based on sampling results from 2017-2019, public health advisories remain in effect for two streams:

- **Lofall Creek** (653 gmV)
- **Ostrich Bay Creek** (298 gmV)

2019 Water Quality Monitoring Results



Explaining the state water quality standard

The Washington State Department of Ecology establishes standards for surface water quality. The freshwater standard is applied to “primary contact” water bodies, where people are likely to become submerged in water or ingest water through recreational activities such as wading and swimming.

The state standard for freshwater is based on the geometric mean value (GMV) of fecal coliform (FC) bacteria identified in 100 milliliter (100 ML) water samples. The geometric mean represents the central tendency of a dataset. Bacterial concentrations can be highly variable, so the geometric mean is useful for assessing trends.

Changes to the state standard

The freshwater standard changed for 2019. In prior years, some streams were assessed using a more stringent standard for “extraordinary primary contact.” That standard has been removed. As a result, more streams now meet the state standard.

The Freshwater Standard

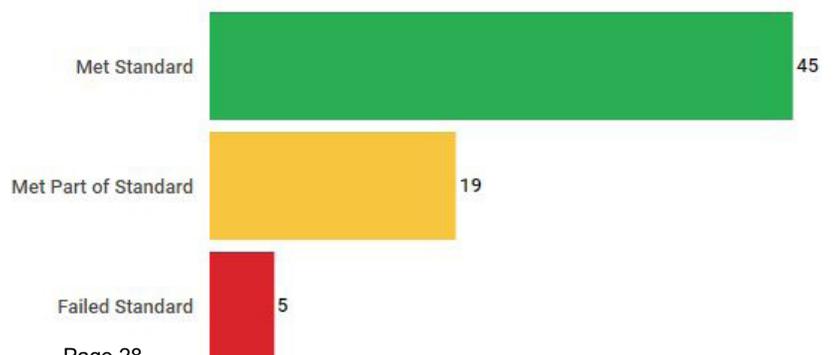
Part 1: Annual GMV <100 FC per 100ML

Part 2: Not more than 10% of all samples collected for calculating geometric mean > 200 FC/100 ML

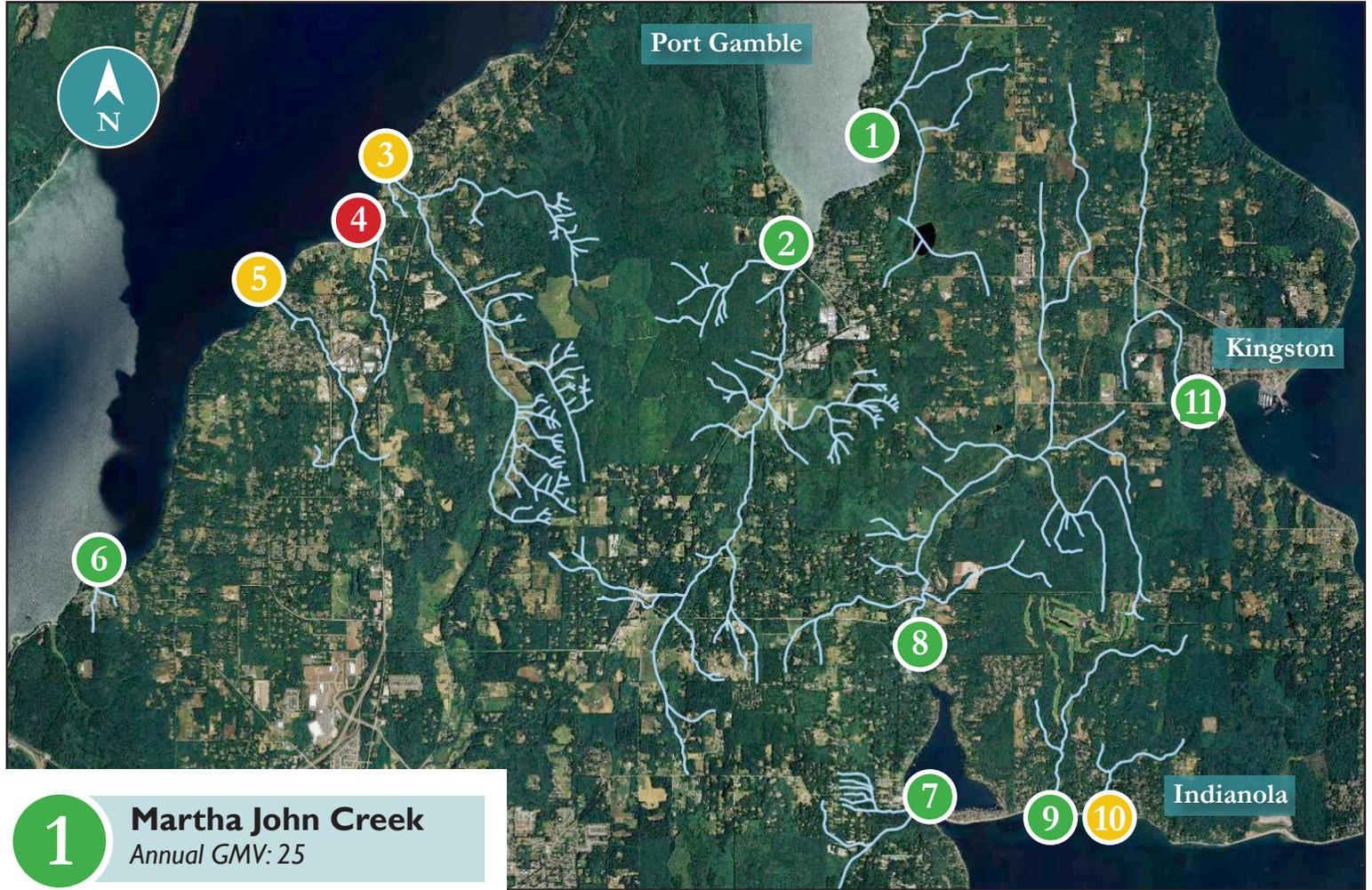
This report notes how each stream performed under the state standard based on bacteria levels:

-  **Met standard:** The stream had **low bacteria** levels and met both parts of the standard.
-  **Met part 1 of standard:** The stream had **periodic high bacteria** levels and failed part 2 of the standard.
-  **Failed standard:** The stream had **high bacteria** levels and failed both parts of the standard.

Water quality status for Kitsap streams in 2019



KINGSTON / UPPER HOOD CANAL



1 **Martha John Creek**
Annual GMV: 25

2 **Gamble Creek**
Annual GMV: 37

3 **Kinman Creek**
Annual GMV: 52

4 **Lofall Creek**
Annual GMV: 563
Health Advisory

5 **Jump Off Joe Creek**
Annual GMV: 46

6 **Vinland Creek**
Annual GMV: 35

7 **Cowling Creek**
Annual GMV: 16

● Low bacteria ● Periodic high bacteria ● High bacteria

8 **Grovers Creek**
Annual GMV: 34

9 **Kitsap Creek**
Annual GMV: 22

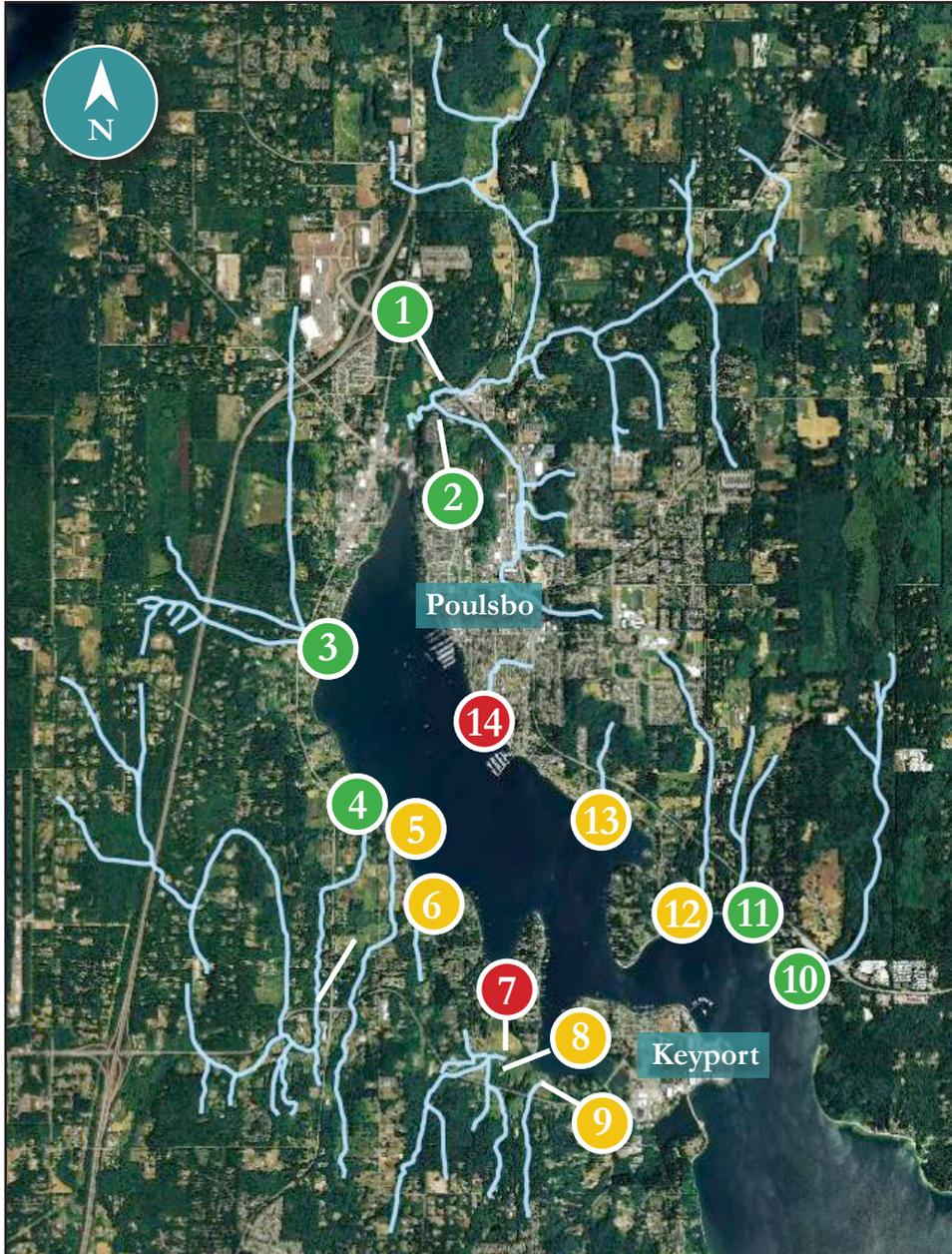
10 **Indianola Creek**
Annual GMV: 27

11 **Carpenter Creek**
Annual GMV: 21



Kinman Creek flows into Hood Canal near Lofall.

POULSBO / LIBERTY BAY



● Low bacteria
 ● Periodic high bacteria
 ● High bacteria



- 1
Dogfish Creek
Annual GMV: 35
- 2
South Dogfish Creek
Annual GMV: 17
- 3
Johnson Creek
Annual GMV: 14
- 4
Big Scandia Creek
Annual GMV: 23
- 5
Little Scandia Creek
Annual GMV: 64
- 6
Perry Creek
Annual GMV: 60
- 7
Daniels Creek
Annual GMV: 249
- 8
Unnamed Creek 00
Annual GMV: 63
- 9
Unnamed Creek 01
Annual GMV: 48
- 10
Sam Snyder Creek
Annual GMV: 17
- 11
Lemolo Creek
Annual GMV: 13
- 12
Bjorgen Creek
Annual GMV: 41
- 13
Barrantes Creek
Annual GMV: 26
- 14
Poulsbo Creek
Annual GMV: 141

Sampling Big Scandia Creek near Keyport, one of 14 streams monitored around Liberty Bay.

SILVERDALE / BREMERTON

1 **Clear Creek**
Annual GMV: 27

2 **Kitsap Mall Creek**
Annual GMV: 31

3 **Kitsap Mall Creek W.**
Annual GMV: 27

4 **Strawberry Creek**
Annual GMV: 23

5 **Chico Creek**
Annual GMV: 32

6 **Ostrich Bay Creek**
Annual GMV: 298
Health Advisory

7 **Phinney Creek**
Annual GMV: 106

8 **Enetai Creek**
Annual GMV: 21

9 **State Park Creek**
Annual GMV: 51

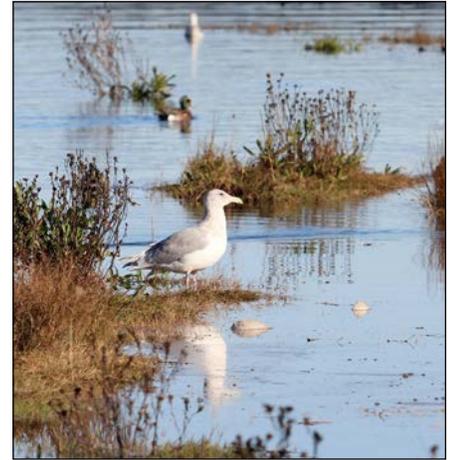
10 **Illahee Creek**
Annual GMV: 24

11 **Mosher Creek**
Annual GMV: 40

12 **Pahrmann Creek**
Annual GMV: 29

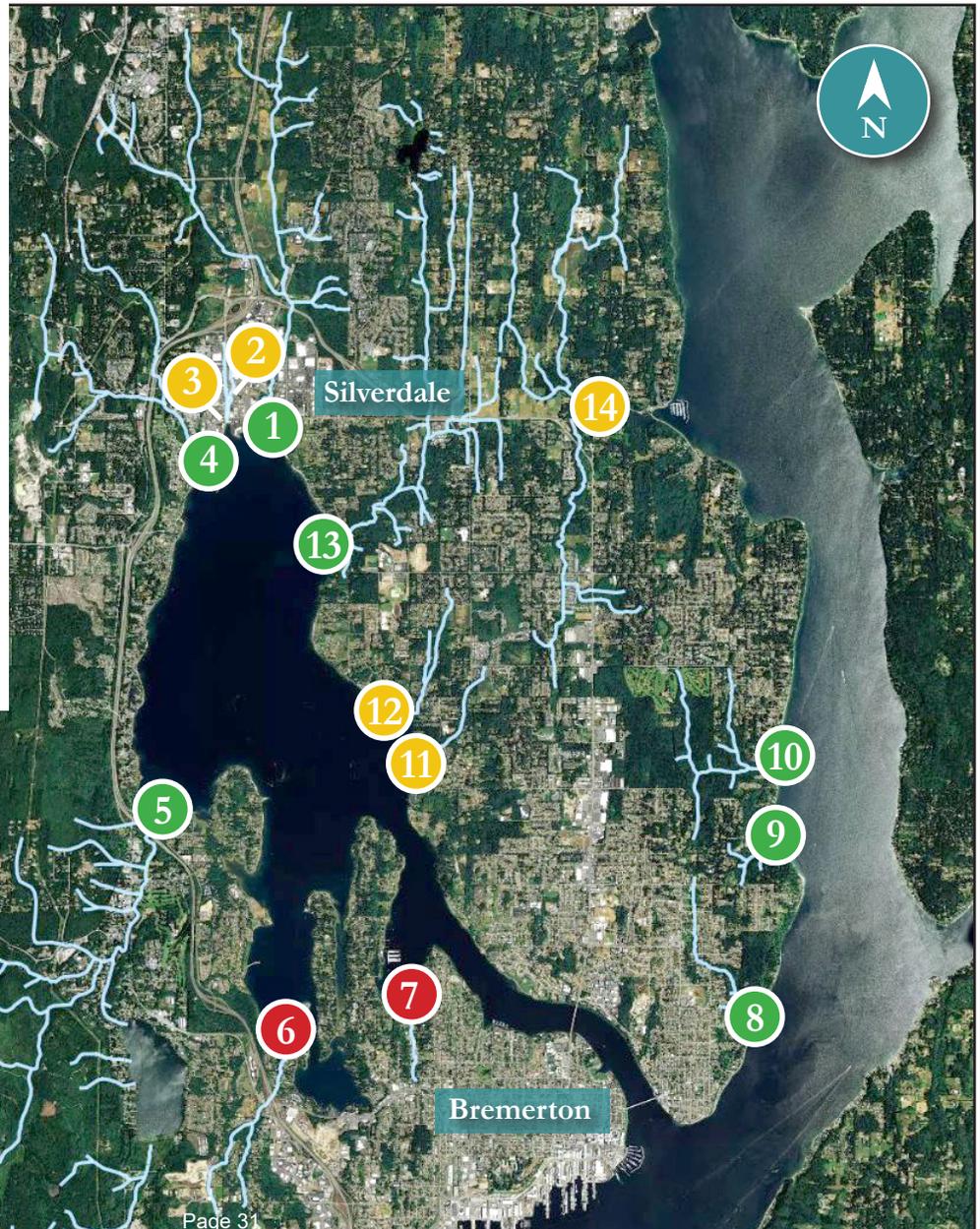
13 **Barker Creek**
Annual GMV: 23

14 **Steele Creek**
Annual GMV: 54

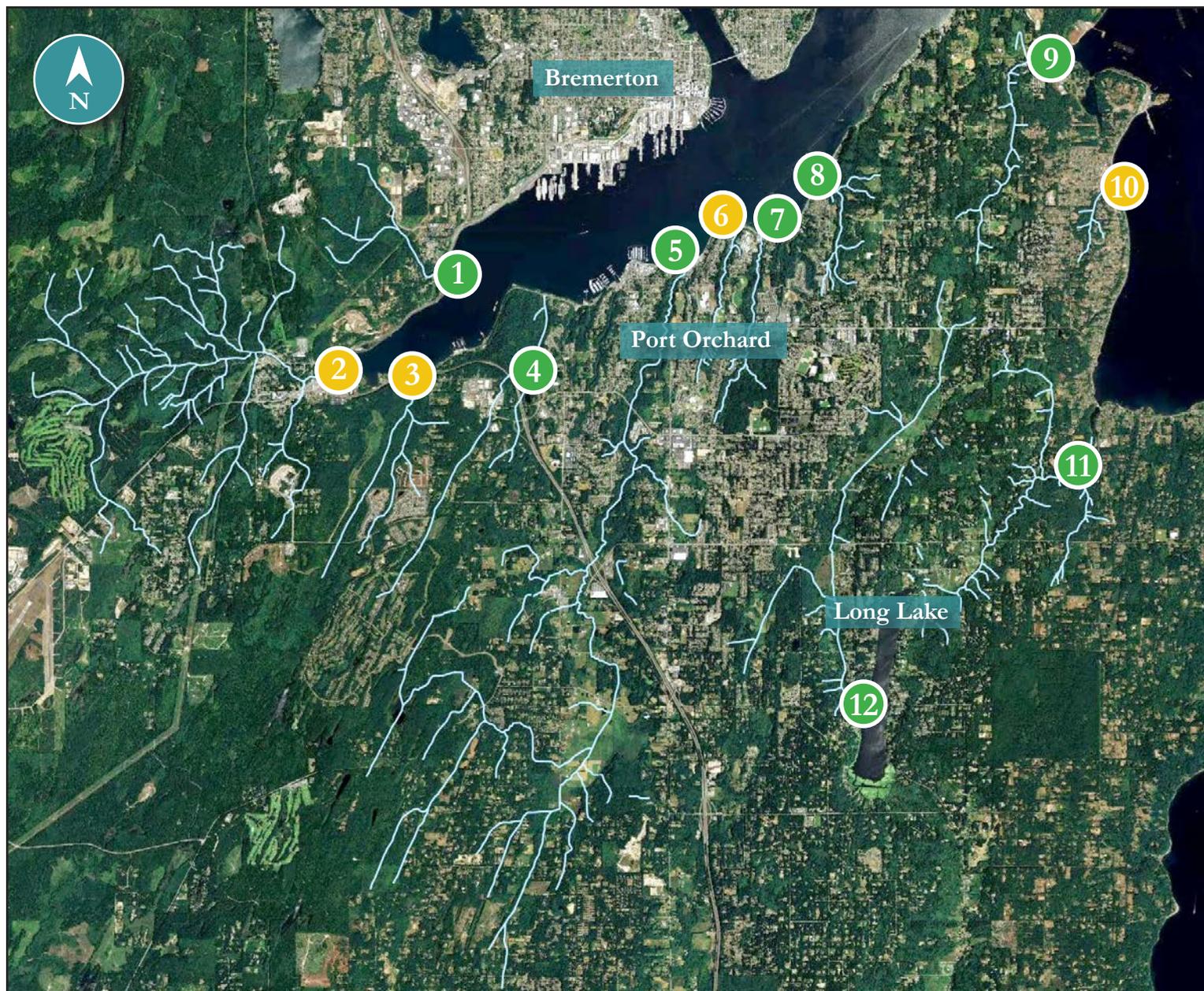


The Chico Creek estuary provides rich habitat.

● Low bacteria ● Periodic high bacteria ● High bacteria



PORT ORCHARD / SINCLAIR INLET



● Low bacteria
 ● Periodic high bacteria
 ● High bacteria

1 **Wright Creek**
Annual GMV: 12

2 **Gorst Creek**
Annual GMV: 50

3 **Anderson Creek**
Annual GMV: 22

4 **Ross Creek**
Annual GMV: 27

5 **Blackjack Creek**
Annual GMV: 39

6 **Annapolis Creek**
Annual GMV: 78

7 **Karcher Creek**
Annual GMV: 15

8 **Sacco Creek**
Annual GMV: 27

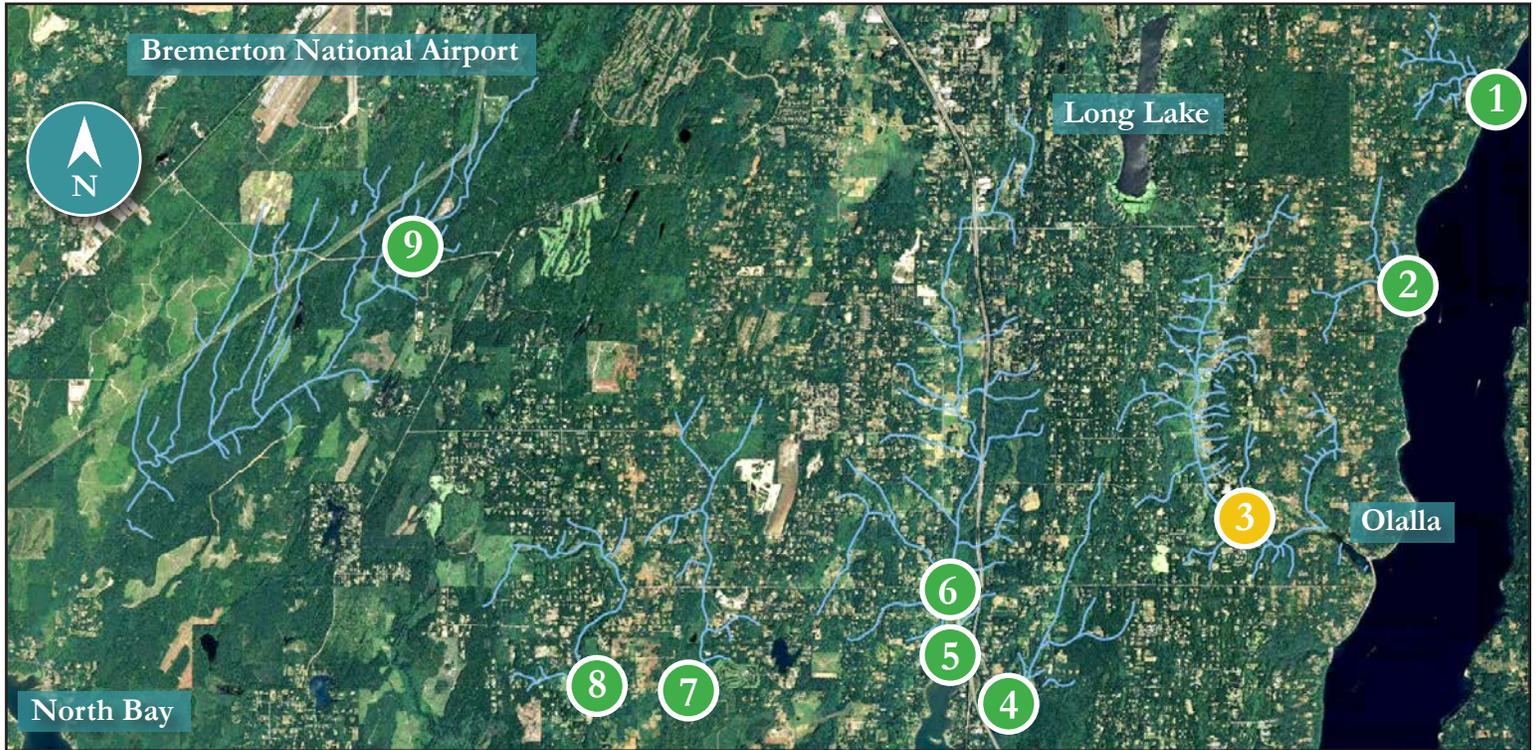
9 **Beaver Creek**
Annual GMV: 26

10 **Duncan Creek**
Annual GMV: 36

11 **Curley Creek**
Annual GMV: 26

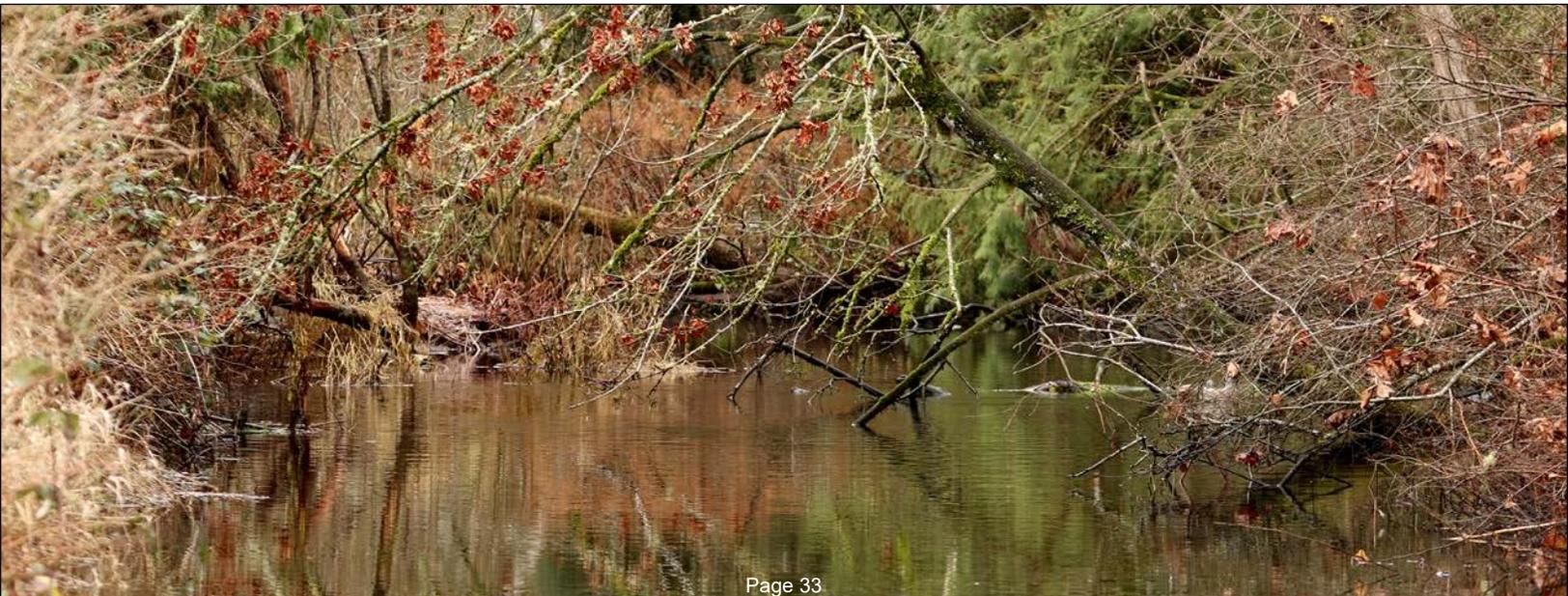
12 **Salmonberry Creek**
Annual GMV: 17

2019 Monitoring Results by Stream
BURLEY / OLALLA



● Low bacteria ● Periodic high bacteria ● High bacteria

1	Wilson Creek Annual GMV: 25	4	Purdy Creek Annual GMV: 13	7	Minter Creek Annual GMV: 17
2	Fragaria Creek Annual GMV: 10	5	Burley Creek Annual GMV: 32	8	Huge Creek Annual GMV: 15
3	Olalla Creek Annual GMV: 61	6	Bear Creek Annual GMV: 30	9	Coulter Creek Annual GMV: 8



SEABECK / HOOD CANAL



● Low bacteria
 ● Periodic high bacteria
 ● High bacteria

<p>1 Little Anderson Creek Annual GMV: 4</p>	<p>4 Stavis Creek Annual GMV: 6</p>	<p>7 Dewatto River Annual GMV: 5</p>
<p>2 Big Beef Creek Annual GMV: 7</p>	<p>5 Boyce Creek Annual GMV: 15</p>	<p>8 Tahuya River Annual GMV: 8</p>
<p>3 Seabeck Creek Annual GMV: 9</p>	<p>6 Big Anderson Creek Annual GMV: 6</p>	<p>9 Union River Annual GMV: 56</p>

Explore water quality online using our interactive stream map portal.

Go to [KitsapPublicHealth.org](https://www.kitsappublichealth.org)

Water Quality in Kitsap Lakes

The Health District monitors for health risks at 17 lakes across Kitsap County during summer months to help prevent swimmers from getting sick. The Health District issues health advisories when water samples show high levels of *E. coli* bacteria at swimming areas, and when toxic cyanobacteria (blue-green algae) blooms are present.

E. coli indicate the presence of fecal pollution. Fecal pollution can carry viruses, harmful bacteria and other pathogens that make people sick. Some cyanobacteria blooms produce toxins. At high levels the toxins can make people sick and kill animals.

Public Health Advisories for Lakes

The table below shows advisories issued during water year 2019.

Lake	Advisory	Dates
Island Lake	<i>E. coli</i> bacteria	8/29/19 - 9/18/19
Kitsap Lake	<i>E. coli</i> bacteria	10/16/18 - 1/04/19 6/13/19 - 6/19/19 7/11/19 - 7/17/19 7/24/19 - 9/25/19
Kitsap Lake	Toxic cyanobacteria	6/12/19 - 7/31/19 8/27/19 - ongoing
Long Lake	<i>E. coli</i> bacteria	8/29/19 - 9/18/19



Sign up for alerts

If your family frequents swimming beaches during the summer, sign up to receive health advisories by email or text. Go to [KitsapPublicHealth.org/subscribe](https://www.kitsappublichealth.org/subscribe).

Current water quality advisories are posted at [KitsapPublicHealth.org/beaches](https://www.kitsappublichealth.org/beaches). You can also follow the Health District on Facebook, Twitter and Instagram to stay up to date.

Common Sources of Fecal Pollution

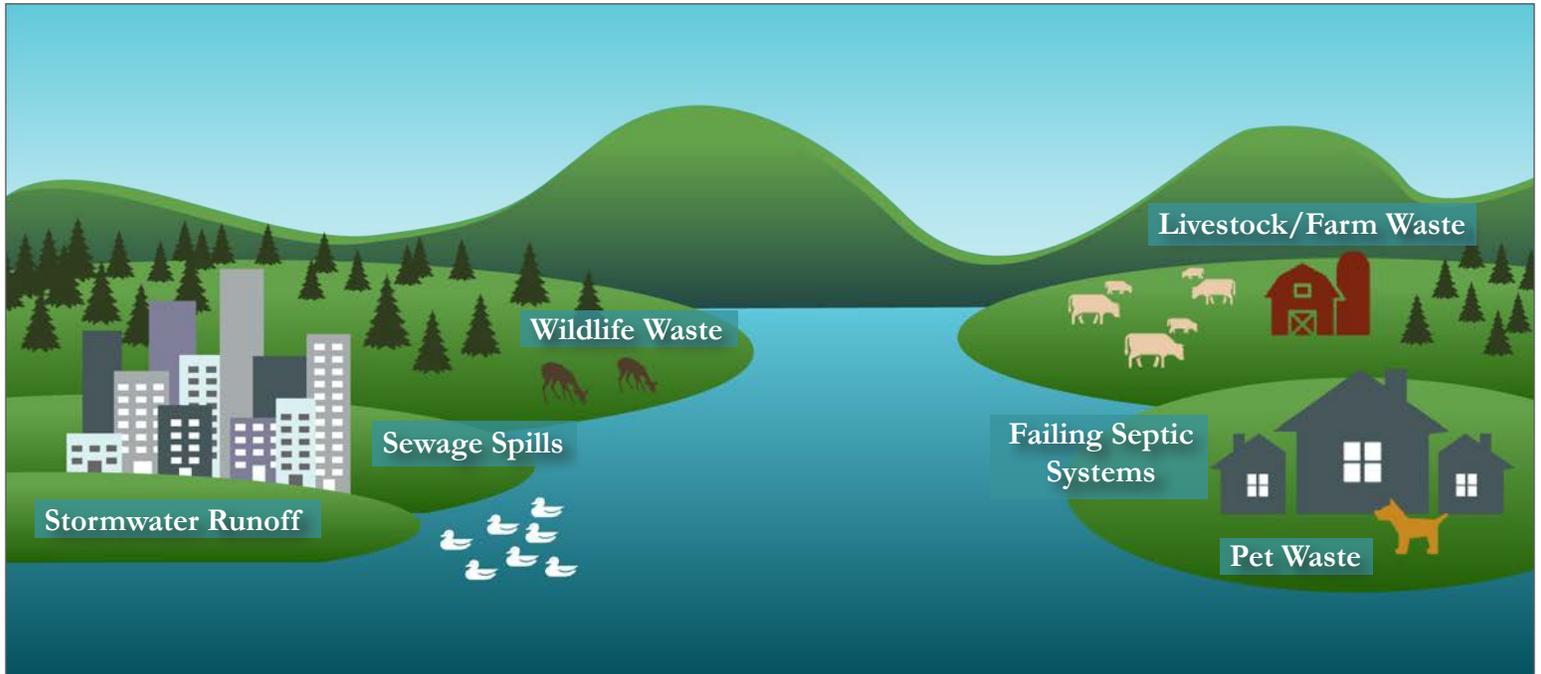


Illustration by Angie Berger

There are many sources of fecal pollution in surface water. Some sources, such as waste from wildlife, are difficult to prevent. Other sources, including sewage leaks and pet waste, can be prevented by people and organizations.

Simple steps to prevent water pollution



If your home has a septic system, be sure it's properly maintained.



Properly dispose of medications. Go to MED-Project.org to find free disposal sites.



Manage waste from your farm, garden or livestock.



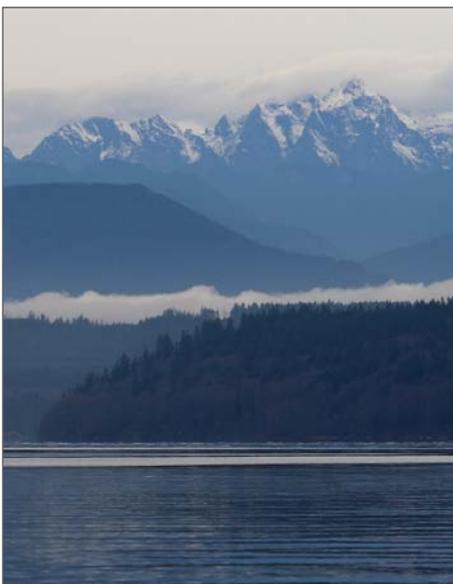
Pick up after your pets at home and in public.



Use natural lawn care products.



Find more great ideas at CleanWaterKitsap.org.



Clean Water Kitsap
Partners in Stormwater Solutions

The Kitsap Public Health District's water quality work is made possible by Clean Water Kitsap, a multi-agency partnership that receives funding from county stormwater fees.

Clean Water Kitsap protects people, property and natural resources by reducing flooding and stormwater runoff, and preventing stormwater pollution. Learn more at CleanWaterKitsap.org.



**KITSAP PUBLIC
HEALTH DISTRICT**

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kitsappublichealth.org

Photos and design by Tad Sooter
Map imagery from
Mapbox and Open Streetmap

2019 | Water Quality Report

Protecting public health, preventing pollution

The Kitsap Public Health District's Water Pollution Identification and Correction (PIC) program protects public health and prevents fecal pollution in Kitsap County surface waters.



Health District staff sample dozens of streams and swimming beaches across the county for fecal bacteria, an indicator of fecal pollution caused by human or animal waste. Fecal pollution can carry viruses and harmful bacteria that make people sick.

We use water sampling results to notify the public of potential health risks, and to find and fix fecal pollution problems. This helps keep our streams, swimming beaches and shellfish beds safe and healthy for the public to enjoy.

Our Water Quality Report summarizes water quality monitoring results and highlights from the 2019 water year (Oct. 1, 2018 to Sept. 30, 2019).

IN THIS REPORT

- 2019 PIC Program Highlights
- Health Advisories for Streams
- 2019 Water Quality Monitoring Results and Standards



Monitoring Results by Area:

- Kingston/Upper Hood Canal
- Poulsbo/Liberty Bay
- Silverdale/Bremerton
- Port Orchard/Sinclair Inlet
- Burley/Olalla
- Seabeck/Hood Canal
- Water Quality in Lakes
- Pollution Sources and Prevention

Grant Holdcroft, PIC Program Manager



“ We’ve never seen such low bacterial numbers since I started working here in the ’90s. ”

Leslie Banigan
Kitsap Public Health District

Burley/Minter Watersheds



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206

Health advisory days
for local lakes



236

Acres of shellfish beds
upgraded



30

Education events
participated in by PIC staff



69

Streams monitored
for pollution



3,475

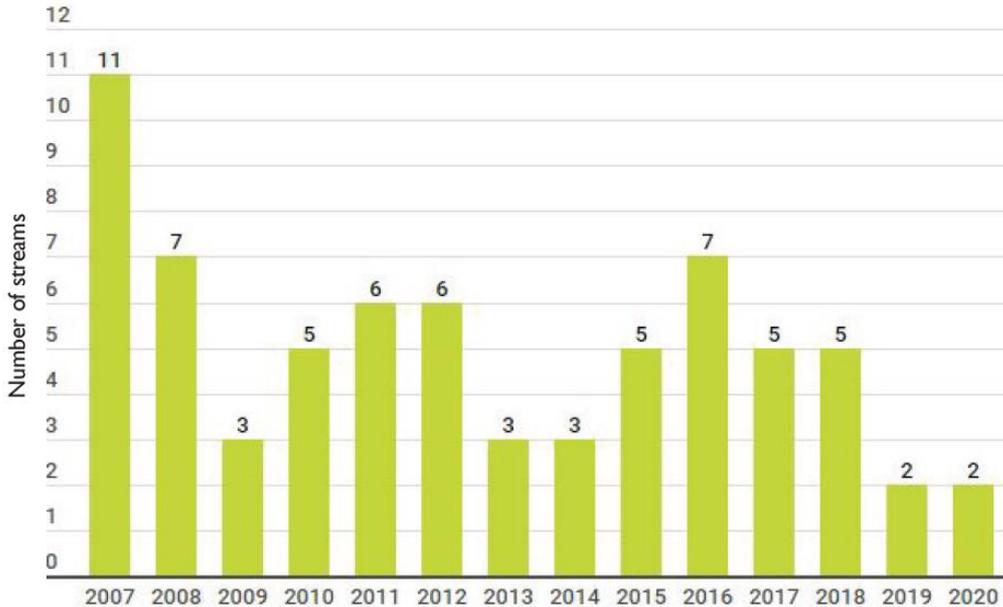
Water samples collected

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Public health stream advisories issued by year



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2020 Public Health Stream Advisories

Based on sampling results from 2017-2019, public health advisories remain in effect for two streams:

- **Lofall Creek** (653 gmV)
- **Ostrich Bay Creek** (298 gmV)

The Freshwater Standard

Part 1: Annual GMV <100 FC per 100ML

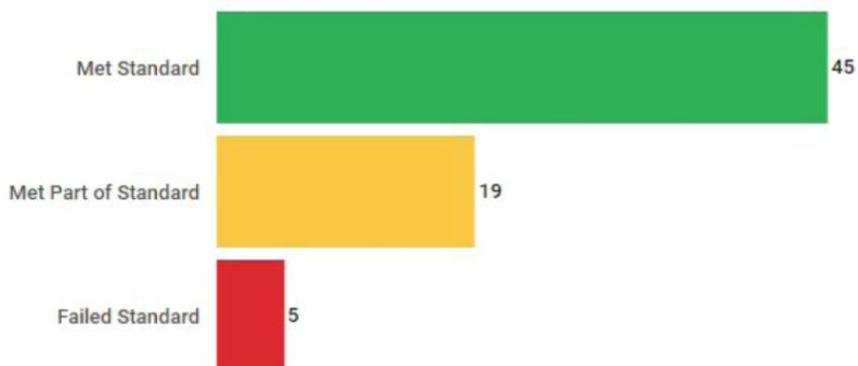
Part 2: Not more than 10% of all samples collected for calculating geomean > 200 FC/100 ML

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 - **2019 Water Quality Monitoring Results and Standards**
 - Water Quality in Lakes
 - Pollution Sources and Prevention

Water quality status for Kitsap streams in 2019



2019 Monitoring Results by Stream

SILVERDALE / BREMERTON

5

Chico Creek

Annual GMV: 32

6

Ostrich Bay Creek

Annual GMV: 298

Health Advisory

7

Phinney Creek

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State Park Creek

Annual GMV: 51

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Illahee Creek

Annual GMV: 24



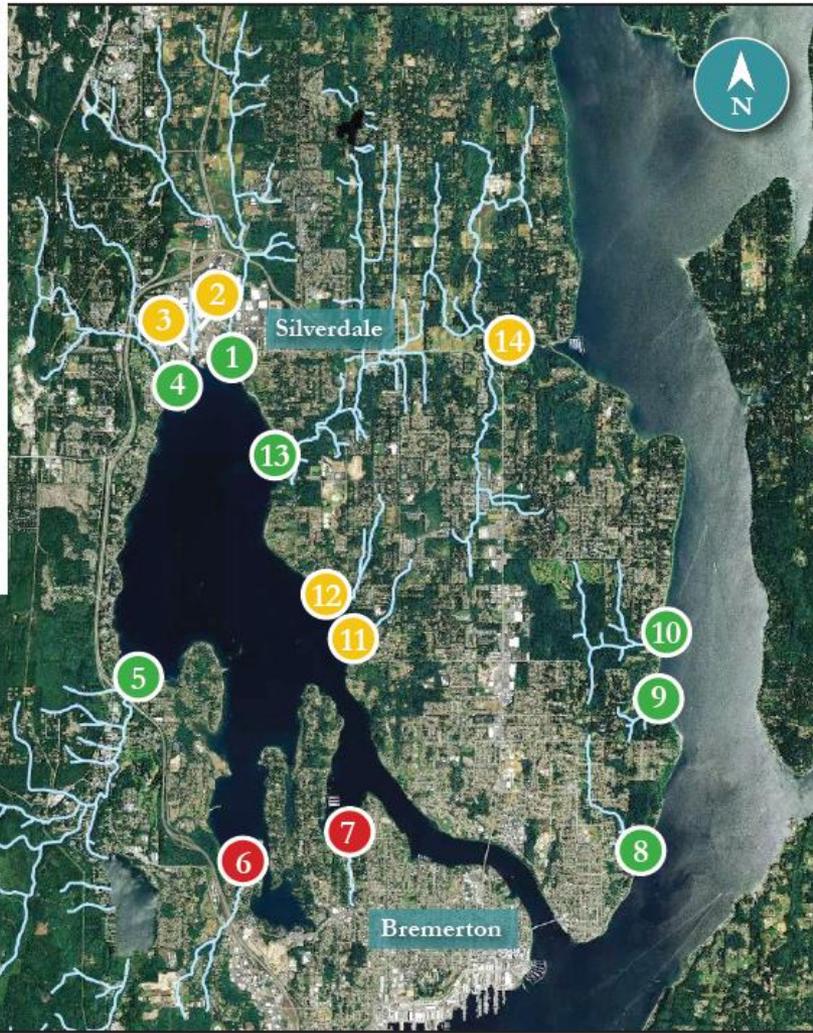
Low bacteria



Periodic high bacteria



High bacteria

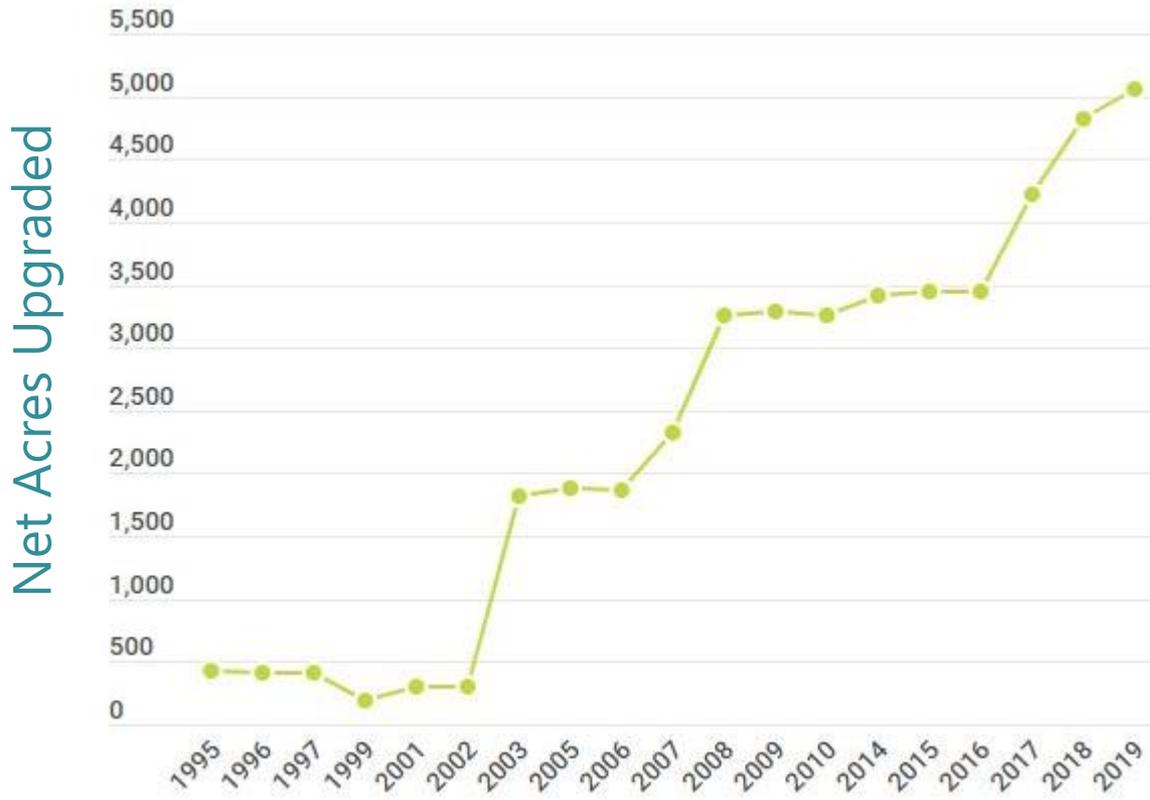


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Shellfish Harvesting Areas Approved



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Water Quality in Kitsap Lakes



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Common Sources of Fecal Pollution



Illustration by Angie Berger

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- 2019 Water Quality Monitoring Results and Standards
- Water Quality in Lakes
- **Pollution Sources and Prevention**

Simple steps to prevent water pollution



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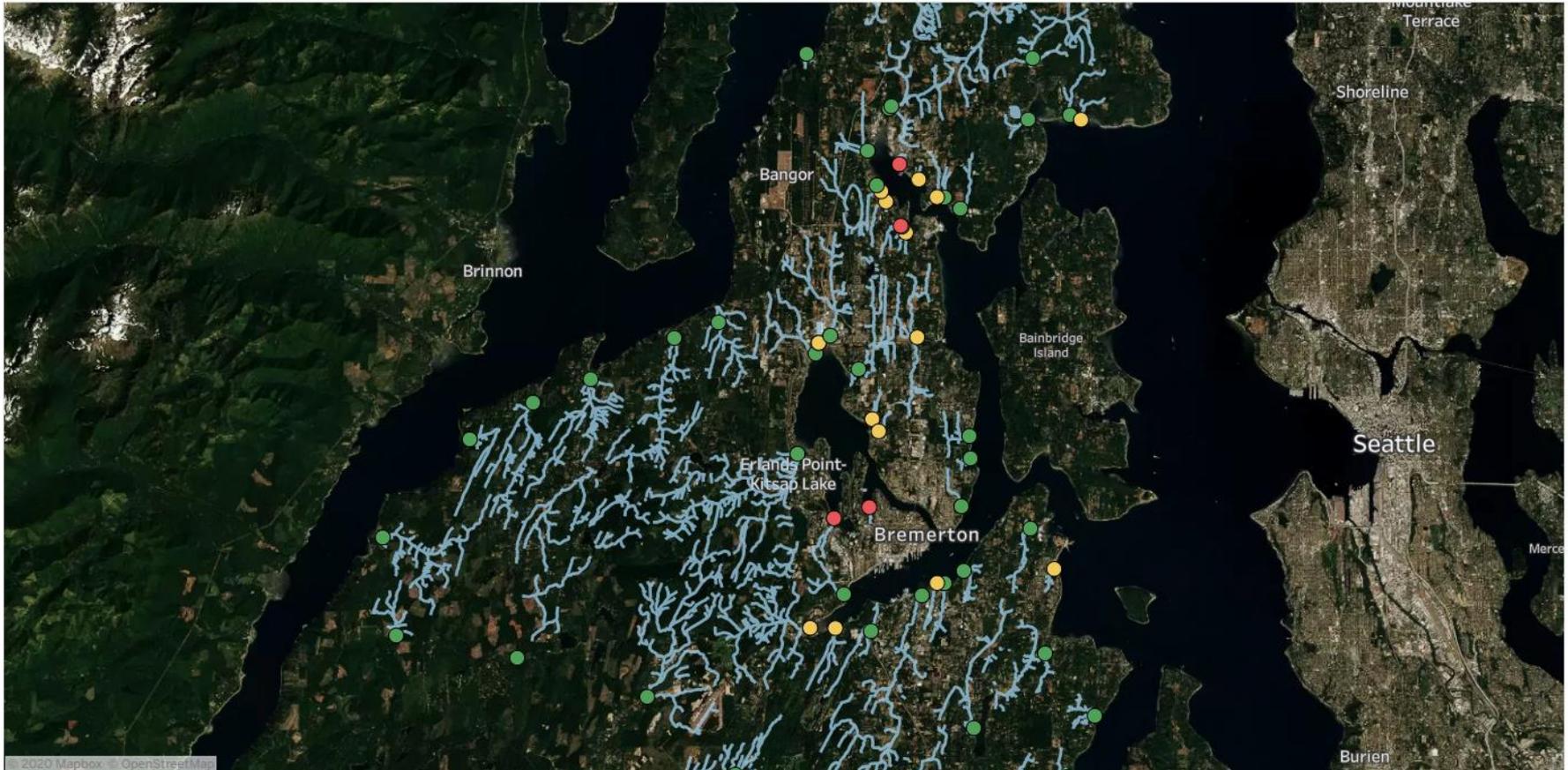


Find more great ideas at CleanWaterKitsap.org.

2019 | Water Quality Report

Select Creeks
(All)

- High Bacteria
- Low Bacteria
- Periodic High Bacteria



2019 | Water Quality Report



Questions ?