

KITSAP PUBLIC HEALTH BOARD MEETING AGENDA

June 1, 2021
12:30 p.m. to 1:45 p.m.

**** Please note that this is a virtual / online meeting due to the COVID-19 pandemic. Electronic connection and viewing information for the meeting is provided at the end of the Agenda. ****

- 12:30 p.m. 1. Call to Order
Commissioner Charlotte Garrido, Chair
- 12:31 p.m. 2. Approval of May 4, 2021 Regular Meeting Minutes
Commissioner Charlotte Garrido, Chair Page 4
- 12:33 p.m. 3. Approval of Consent Items and Contract Updates
Commissioner Charlotte Garrido, Chair External Document

INFORMATION AND DISCUSSION ITEMS

- 12:35 p.m. 4. Chair Comments
Commissioner Charlotte Garrido, Chair
- 12:37 p.m. 5. Public Comment – PLEASE SEE NOTES AT END OF AGENDA
Commissioner Charlotte Garrido, Chair
- 12:47 p.m. 6. Health Officer and Administrator Reports
Dr. Gib Morrow, Health Officer & Keith Grellner, Administrator
- 12:55 p.m. 7. 2020 Water Quality Report for Clean Water Kitsap Page 12
John Kiess, Environmental Health Director
Grant Holdcroft, Pollution Identification & Correction Manager
- 1:25 p.m. 8. COVID-19 Update
Dr. Gib Morrow, Health Officer
- 1:45 p.m. 9. Adjourn

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

Instructions for virtual attendance at Kitsap Public Health Board meetings**

Health Board Meetings Via Zoom

The Kitsap Public Health Board will be held via Zoom webinar, broadcast live on Comcast channel 12, WAVE channel 3, the [BKAT website](#) and Facebook (please note: there is no physical location for this meeting. Board members and staff will all participate remotely). The Health Board and presenters are **panelists**, members of the public are **attendees**.

Webinar **attendees** do not interact with one another; they join in listen-only mode, and the host will unmute one or more attendees as needed.

How to Provide Public Comment

We apologize, but verbal public comment *during* the meeting may only be made through a Zoom connection. The public may make verbal comments during the Public Comment agenda item if they are attending the meeting via Zoom. To sign up for public comment in advance (recommended, not required), email: angie.berger@kitsappublichealth.org.

Written comments may be submitted *prior* to the meeting via regular mail or email to:

Regular Mail:

Kitsap Public Health Board
Attention: Executive Secretary
345 6th Street, Suite 300
Bremerton, WA 98337

Email:

keith.grellner@kitsappublichealth.org

Written comments must be received by midnight, Monday, May 31, 2021, to be included during the June 1, 2021, meeting.

How to Join the Zoom Meeting

To join the meeting online, please click the link:

<https://us02web.zoom.us/j/86186052497?pwd=TXcrQU1PRWVVVHgyWERXRFluTWloQT09>

Password: 109118

Or join by telephone:

Dial: +1 (253) 215-8782

Webinar ID: 861 8605 2497

*Zoom meeting is limited to the first 500 participants. A recording of the meeting will be made available on our website within 48 hours of the meeting.

Instructions for virtual attendance at Kitsap Public Health Board meetings**

Public Participation Guidelines

Below are recommendations for use by members of the public in meetings conducted via Zoom Webinar.

Identification: Upon entering the webinar, please enter your name, number or other chosen identifier, so that the host can call upon you during the public comment period.

Raise Hand (pictured below): You have the ability to virtually raise your hand for the duration of the meeting but you will not be acknowledged until you are called on during the public comment period. NOTE: If you have used your telephone to access the Zoom meeting, **you may press *9** to “raise your hand”. The host will unmute you when it is your turn to speak.



Public Comment Period: Use “Raise Hand” to be called upon by the host. The host will announce your name when it is your turn.

Mute/Unmute: Attendees will be muted and not audible to the Board except during times they are designated to speak. When you are announced, you will be able to unmute yourself.

Time Limit: Each speaker testifying or providing public comment will be limited to three (3) minutes.

Use Headphones/Mic for better sound quality and less background noise, if possible.

**KITSAP PUBLIC HEALTH BOARD
MEETING MINUTES
Regular Meeting
May 4, 2021**

The meeting was called to order by Board Chair, Commissioner Charlotte Garrido at 12:46 p.m.

BOARD MEETING MINUTES

Commissioner Rob Gelder moved and Mayor Becky Erickson seconded the motion to approve the minutes for the April 6, 2021, regular meeting. The motion was approved unanimously.

CONSENT AGENDA

The May consent agenda included the following contracts:

- 2158, *Office of Superintendent of Public Instruction, Summer Food Inspections*
- 2159, *Tina Davis-Munn, Settlement Agreement and Release of Claims*

Mayor Rob Putaansuu 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.

CHAIR COMMENT

Chair Garrido said Dr. Lillian Locket Robertson has been invited to speak at this meeting and she is looking forward to the presentation.

There was no further comment.

PUBLIC COMMENT

There was no public comment.

HEALTH OFFICER/ADMINISTRATOR'S REPORT

Health Officer Update:

Dr. Gib Morrow, Health Officer, deferred his remarks until the COVID-19 presentation.

There was no further comment.

Administrator Update:

Mr. Keith Grellner, Administrator, on behalf of the Health District, thanked Kitsap medical providers, pharmacies, and tribes who have helped get Kitsap residents and guests vaccinated. Mr. Grellner called out the groups who have provided the majority of Kitsap vaccinations: Medical Reserve Corps, Port Gamble S'Klallam Tribe, Suquamish Tribe, Peninsula Community Health Services, Bainbridge Island Community Pharmacy, Achieve Eye and Laser Specialists, Sound Family Health, The Manette Clinic, Pacifica Medicine and

Wellness, Dr. Eric Cole, Saver Pharmacy, Silverdale Pediatrics, Surgery Center of Silverdale, Genoa Healthcare, Olympic Internal Medicine, Dr. Donald Sharman, Kaiser Permanente, Saint Michael Medical Center, Fred Meyer, Kitsap Pharmacy at Central Market and Albertsons.

Mr. Grellner also thanked John Clauson with Kitsap Transit who has been a helpful partner consistently throughout pandemic.

Commissioner Garrido asked if we can do a formal thank you. Mr. Grellner replied in the affirmative and added that the public information officer is working to get a paid ad in Kitsap Sun.

Next, Mr. Grellner informed the Board that Governor Inslee announced a two-week pause on moving between phases for all counties in Washington State. Kitsap will remain in Phase 3 for at least the next two weeks. He hopes the community will use this break to get vaccinated and practice COVID safety so that we can lower case counts and hospitalizations for good.

Next, Mr. Grellner said the Health District launched a community survey yesterday to better understand the local impacts from COVID-19 and the perceptions around COVID-19 vaccinations. The link to the survey can be found on the Health District website. The survey is open through May 16.

Lastly, Mr. Grellner provided the Board with a legislative update.

- Although significantly amended, HB 1152, supporting measures to create comprehensive public health districts, did pass. The Health Board and Health District opposed this bill when it dropped but worked with the Washington State Association of Counties (WSAC) and Washington State Association of Local Public Health Officials (WSALPHO) to reframe the bill to something that was borderline acceptable. Based on his current reading of the final bill, if signed by the governor, he believes that it will require Kitsap Public Health to expand the membership of the Health Board to include two non-elected members and a tribal representative appointed by the American Indian Health Commission. Once the bill is signed and the Health District has a clearer understanding of the details, he will report back to the board.
- The new state operating budget, if signed by the governor, contains several vital funding provisions for public health:
 - Foundational Public Health Services (FPHS) are slated to be funded, in an ongoing manner, starting with \$147 million for the 2021-23 supplemental budget. This funding will expand in the 2023-25 budget to a total of \$296 million.
 - At this time, the Health District does not know how much of this funding will find its way to the local level and how much Kitsap Public Health will receive, but this is great news and is the culmination of nearly two decades of work.
 - On behalf of the Health District, Mr. Grellner thanked senators Rolfes and Randall, and representatives Hansen and Simmons for voting to approve the FPHS funding.

- Other areas of public health that the legislature funded include but are not limited to group b water systems, suicide prevention, updating of public health data systems use throughout the state, HIV client services, school-based health centers, and lead testing in school water systems.

There was no further comment.

COVID-19 UPDATE

Dr. Morrow thanked the community and providers for their vaccination efforts. He provided a brief overview of current COVID-19 data in Kitsap and noted cases are currently on the rise in Kitsap. He said that residents of South Kitsap and Bremerton are ten times more likely to get COVID-19 than residents of Bainbridge Island. He also pointed out that residents of South Kitsap and Bainbridge are about 30 percent less likely to get vaccinated than residents of Bainbridge Island.

Dr. Morrow said Kitsap is still in Phase 3 of the state's Roadmap to Recovery. He also reviewed the state's Roadmap to Recovery metrics. He said hospitalizations are still high in Kitsap and said 17 individuals are currently hospitalized with COVID-19 at Saint Michael Medical Center. He said he just received notification of the deaths of two previously healthy individuals from COVID-19.

Dr. Morrow emphasized the need to continue promoting vaccination to reduce case spread throughout Kitsap County. As of this meeting, 37.8 percent of Kitsap residents have initiated vaccination, and 29.7 percent are fully vaccinated. He noted the Navy has likely given about 30,000 vaccinations, but there is not very good integration between federal and state databases, so this data is not included in the total county numbers.

Dr. Morrow said only about 10 percent of appointment slots at the Health District's community vaccination sites are being filled. He said these sites are considering closure due to low volume.

There was no further comment.

PRESENTATION: "INCLUSIVE RECOVERY IN THE COVID-19 PANDEMIC"

Dr. Morrow introduced Dr. Lillian Lockett Robertson. Dr. Robertson is an experienced and highly respected practicing obstetrician and community leader and is the Executive Director of the Marvin Williams Recreation Center in Bremerton. She received her medical education and training at Creighton University Medical School and Baylor College of Medicine.

Dr. Robertson gave a presentation to the Board on inclusive recovery in the COVID-19 pandemic. She said this virus has impacted all of us in some way, from ourselves, loved ones or community members contracting the virus and from some of those individuals dying from it. She said COVID-19 has impacted education, businesses, and places of worship. This pandemic has

affected all races, all faces and all spaces, however, it has affected Black, Indigenous and People of Color at disproportionately higher rates than other groups of people.

She said cultural humility means we understand and acknowledge the historical distrust of the medical system by Black, Indigenous and People of Color. She provided the example of the Tuskegee Experiment from 1932-1972. In this study by the U.S. Public Health Service and the Centers for Disease Control and Prevention (CDC), provided participants (600 Black men, 399 with syphilis and 201 without the disease) placebo pills instead of penicillin for years, although at the time penicillin was known as standard of care for syphilis. The participants were told they were receiving treatment for syphilis. She said this study was shameful, unethical and traumatic and has had a multi-generational harm and impact.

Dr. Robertson also shared the story of Henrietta Lacks, an African American female who contracted cervical cancer at 31 years old in 1951. At the time, John Hopkins was the only facility that would treat her cancer. Without her consent, her doctor surveyed her cervical cells for research. Though she died, her cervical cells continued to grow and were sold to other research institutes for many years. In later years, Ms. Lacks' family found out her cells had been used to profit for institutions for research for cancer as well as smallpox and HIV. Her family felt it was shameful and dehumanizing to profit off of their deceased family member's body.

Lastly, Dr. Robertson shared the story of Dr. J. Marion Sims, nicknamed the father of gynecology. She explained that sometimes women experience vaginal rectal trauma during childbirth. Dr. Sims developed and perfected a surgical repair of the vesicovaginal fistula using enslaved black women without anesthesia. She said, perhaps, this may have been the start of the belief that Black women do not feel pain.

She said it is important to take these stories into account to understand that the healthcare industry, research, and public health sectors have all earned distrust as providers from Black, Indigenous and People of Color. It is important to earn back that trust.

Dr. Robertson explained that cultural humility also recognizes that historically disadvantaged populations have experienced ongoing systemic inequities, cultural biases, unstable immigration policies, racism, over-policing in neighborhoods, and voter suppression. She explained that all of this contributes to the distrust of the medical system and why Black people are hesitant to get the vaccine.

On April 10, Dr. Robertson gave a talk to the Olympic College nursing students to explain the gravity of the event for Black people sitting down to get their vaccines. She said to give these individuals a moment to pause while they consider if they can trust the nursing students and the vaccine.

Dr. Robertson said, today we acknowledge the harm and pain caused over time. She said, as providers, we owe that acknowledgement to these individuals. Yet, she said, we also realize the only way to get out of this pandemic is for all of us to get vaccinated. She said COVID-19 infectious rates, severe disease rates, and death rates are highest among historically

disadvantaged populations. According to the CDC, about one third of COVID-19 cases nationwide have affected black people, though they only make up 13 percent of the United States population. A Yale study found that Black people are three and a half times more likely to die from COVID-19 than white people. Latinx and Indigenous people are two times more likely to die from COVID-19 than white people. She said Black, Indigenous and People of color are more likely to have more severe outcomes from COVID-19 than white populations.

Research shows 80-90 percent of health outcomes are determined by factors outside of clinical medicine. Social determinants of health are key drivers of health outcomes and disparity among the historically disadvantaged community. Our vulnerable communities are less likely to have access to healthy foods, paid sick leave, or flexible jobs that allow working from home. During the pandemic, this has placed disadvantaged groups in essential jobs that put them at higher rates of exposure to COVID-19. Dr. Roberts said policies that address the conditions of where we live, learn, work, and play have the greatest potential for keeping people healthy.

Dr. Robertson said she believes the vaccine is safe for historically vulnerable populations. She said the increased awareness medical education institutions have around cultural competency and cultural humility is improving their programs. Education institutions are adding diversity research into their procedures and practices to ensure they are causing no harm to these at-risk groups. She noted about 10 percent of individuals involved in phase 3 trials of the COVID-19 vaccine development were Black. She noted the development of this vaccine was fast, but no steps were skipped in the process.

Dr. Robertson said she was proud to host the COVID-19 vaccination clinic at the Marvin Williams Center and provide vaccine to the area of highest need in the county. She said the clinic provided access and transportation to a hard-to-reach population. They also provided translators and worked to address concerns and ensure those individuals' voices were heard.

This year, the Marvin Williams Center also hosted on-site learning resources for middle and high school students who were struggling with their schoolwork at home. Monitors were hired to help students get logged into their Zoom classes and ensure they were completing their schoolwork. The center provided lunches, tutors, and counselors as well as socially distanced recreation time for the students.

The Marvin Williams Center is hosting a Super Saturday health clinic event, providing walk up vaccine with Moderna and J&J vaccine. They will also provide education on vaccine and other health issues. There will be food trucks and lots of other activities to share the importance of getting the vaccination.

She said inclusive recovery requires deliberate action and intentional efforts of decision makers in the community at various levels of government through policies and programs that address the underlying health and economic disparities and inequities that the pandemic has exacerbated.

She said we should all ask ourselves, “will the policies, program and practices I put forth to advance my interests, have a positive effect in the advancement of *all* communities?” If we can answer that in the affirmative, then we are truly engaging in inclusive recovery.

Mayor Greg Wheeler said it was valuable to hear Dr. Robertson’s presentation ahead of making a vote on the Racism resolution. He said he appreciates her doing this work in his neighborhood.

Mayor Erickson said she appreciates Dr. Robertson presenting at this meeting. She also recommended everyone read The Amazing Life of Henrietta Lacks. She said Dr. Robertson’s points about food insecurity and nutrition stood out to her, because this county lacks neighborhood grocery stores. She hopes to bring more small grocery stores to Poulsbo in the future.

Mayor Erickson announced there will be a walk-up vaccination clinic at St. Olaf’s tonight from 6-8 p.m. for the Spanish speaking community.

Dr. Robertson said, her work may look different from other Board members, but all their work is important.

There was no further comment.

RESOLUTION 2021-01: RACISM IS A PUBLIC HEALTH CRISIS

Commissioner Garrido introduced resolution 2021-01, Racism is a Public Health Crisis, and invited the Board to join her in reading the resolution aloud. Each board member took turns and read the resolution into the record.

Mayor Erickson moved and Deputy Mayor Kirsten Hytopoulos seconded the motion to approve resolution 2021-01, Racism is a Public Health Crisis. The motion was approved unanimously.

Dr. Robertson congratulated the Board on the passing of this resolution.

There was no further comment.

ADDITIONAL UPDATES

Mayor Erickson said the City of Poulsbo has announced a policy that all city employees are expected to be vaccinated for COVID-19. She said she still has emergency authority granted to her by the city council to make this decision. She encourages local boards to do the same. She said we are public servants and should show the vaccine is safe.

Mr. Grellner said the Health District is moving forward in the same direction and has informed staff that the District expects them to be vaccinated. As of yesterday, over 75 percent of District staff have been vaccinated.

Commissioner Gelder said the Board of County Commissioners released a Request for Qualifications (RFQ) for a diversity, equity, and inclusion consultant to work with the county.

Commissioner Garrido thanked Dr. Robertson again for her words of wisdom.

There was no further discussion.

ADJOURN

There was no further business; the meeting adjourned at 2:14 p.m.

Charlotte Garrido
Kitsap Public Health Board

Keith Grellner
Administrator

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

Board Members Absent: *None.*

Community Members Present: *See Attached.*

Staff Present: *Ornela Abazi, Disease Intervention Specialist, COVID-19; Kandice Atisme, Program Manager, Case and Contact Investigation, COVID-19; Gus Bell, Public Health Nurse, Communicable Disease; Angie Berger, Administrative Assistant, Administration; Holly Bolstad, COVID Community Outreach Specialist, Public Health Emergency Preparedness and Response; Elizabeth Davis, COVID Vaccine Public Health Nurse, COVID-19; Anna Diaz, Secretary Clerk 2, COVID-19; Kelly Dowless, Human Resources Analyst, Human Resources; April Fisk, Program Coordinator 2, Communicable Disease; Yolanda Fong, Director, Community Health Division; Keith Grellner, Administrator; Karen Holt, Program Manager, Human Resources; Siri Kushner, Assistant Director, Community Health Division; Melissa Laird, Manager, Accounting and Finance; Megan Moore, Community Liaison, Chronic Disease Prevention; Dr. Gib Morrow, Health Officer, Administration; Debbie Rassa, Public Health Nurse, Communicable Disease; Betti Ridge, Social Worker 3, Communicable Disease; Stephanie Schreiber, Community Liaison, Chronic Disease Prevention; Denise Turner, Senior Accounting Assistant, Payroll; Noelia Villarreal, Secretary Clerk 2, COVID-19; Garret Whitlock; Social Worker 1, HIV Case Management; Mark Wickhamshire, Community Health Worker, HIV Prevention.*

Kitsap Public Health Board Meeting (Virtual Attendance)

Webinar ID **Actual Start Time**
 861 8605 2497 5/4/2021 12:17

First Name	Last Name	First Name	Last Name
Ornela	Abazi	Cristina	Roark
Kandice	Atisme-Bevins	Lucretia	Robertson
Gus	Bell-KPHD	Bob	Russell
Angie	Berger	Mary	Schofield
Holly	Bolstad	Stephanie	Schreiber
John	Clauson	Katharine	Shaffer
Kristine	Cowan	Stacey	Smith
Peninsula	Credit Union	Michael	Spencer (BKAT)
Liz	Davis	Rachael	Taylor
Anna	Diaz	Denise	Turner
Kelly	Dowless	Noelia	Villarreal
David	Emmons	Terry	Walsh
April	Fisk	Garrett	Whitlock
Yolanda	Fong	Mark	Wickhamshire
Kathi	Foresee	michelle	
Keith	Grellner	Doug	
Karen	Holt	TonyL	
Debra	Hyre		
Richard	Kirton		
Siri	Kushner		
Melissa	Laird		
Nancy	Langwith		
Carol	Larsen		
Monte	Levine		
Dr. Lillian	Lockett Robertson		
Ruth	Miller		
Tracy	Miller		
Megan	Moore		
Gib	Morrow		
Irene	Moyer		
Jessie	Palmer		
Nathan	Pilling		
debbie	Rassa		
Betti	Ridge		

MEMO

To: Kitsap Public Health Board

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

Date: June 1, 2021

Re: **2020 Water Quality Annual Report and PIC Program Update**

Each year, the Health District's Pollution Identification and Correction Program (PIC) releases an annual report summarizing the previous year's water quality monitoring and clean-up work results. The *2020 Annual Water Quality Report* has recently been completed and is now available on our website at www.kitsappublichealth.org/environment/water_reports.php. 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, along with supplemental funds through temporary federal and state grants.

During today's meeting, Grant Holdcroft, PIC Program Manager, will provide a brief PIC program overview and present the background and notable findings of the *2020 Annual Water Quality Report*, including but not limited to the following:

- The updated report format has been fully implemented to make the report more readable by the general public.
- An overview of stream water quality status - Of the 69 streams monitored, only 6 failed both parts of the bacteria standard.
- A review of our 3 streams which have a Public Health Advisory in place due to elevated fecal coliform bacteria (FC) levels during summer months.
- PIC staff worked with USDA to fund the repair of a failed septic system and used the experience in a published success story.

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.

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Insert Photo
Here

4 x 6 ratio - or 400p x 267p at 100dpi

Obligation Amount:

Date of Obligation:

Congressional District:

Partners:

Demographics:

Impact:

2020 | Water Quality Report



Protecting public health,
preventing pollution



IN THIS REPORT

- 2020 PIC Program Highlights
- Health Advisories for Streams
- 2020 Water Quality Monitoring Results and Standards
- Water Quality in Lakes
- Pollution Sources and Prevention

2020 Water PIC Program Highlights



69

Streams monitored for pollution



340

Health advisory days for local lakes



3,642

Water samples collected



137

Acres of shellfish beds upgraded



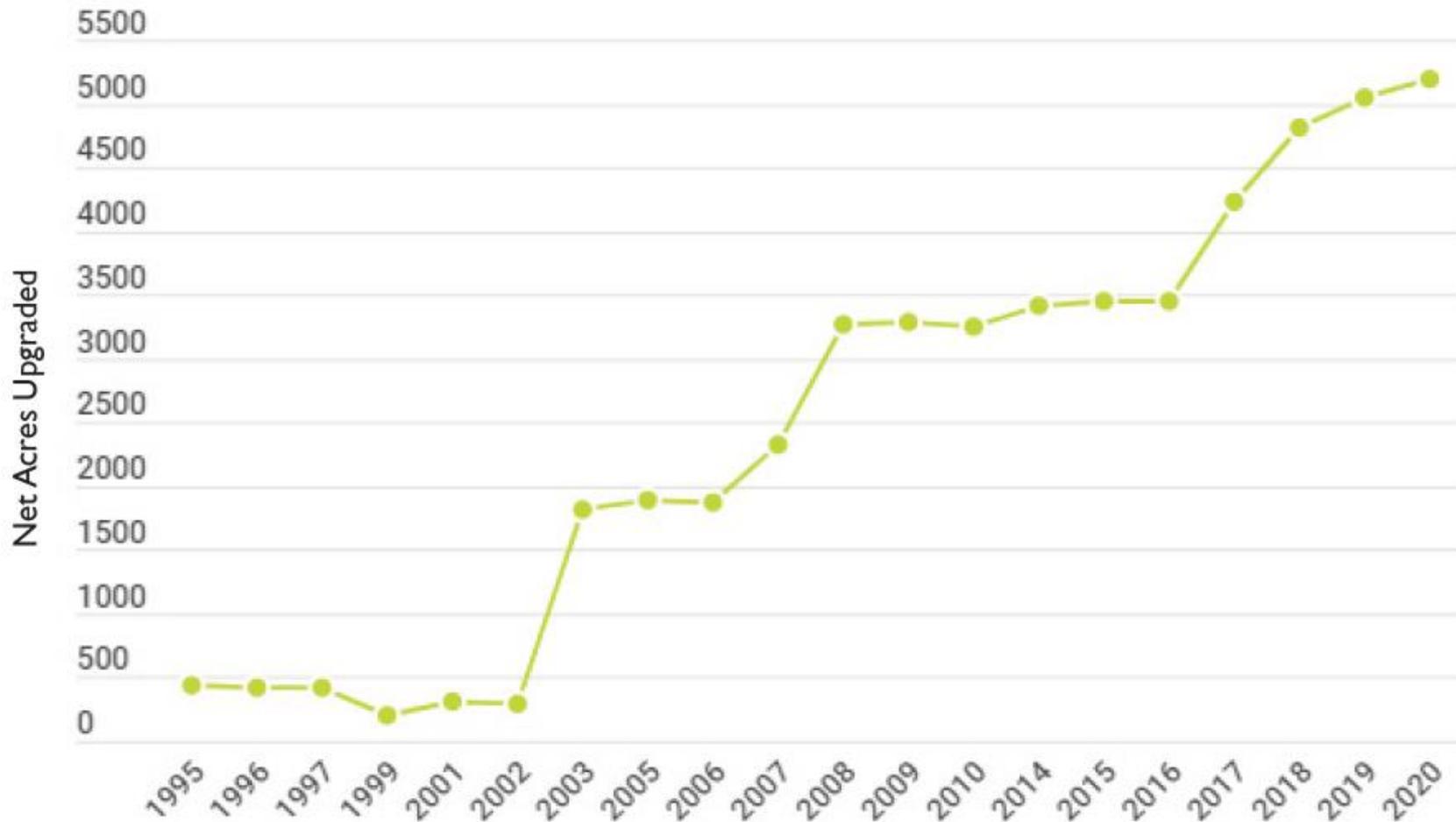
13,107

Staff hours logged

Protecting water quality while fighting a pandemic



Shellfish Harvesting Areas Approved



Public Health Stream Advisories

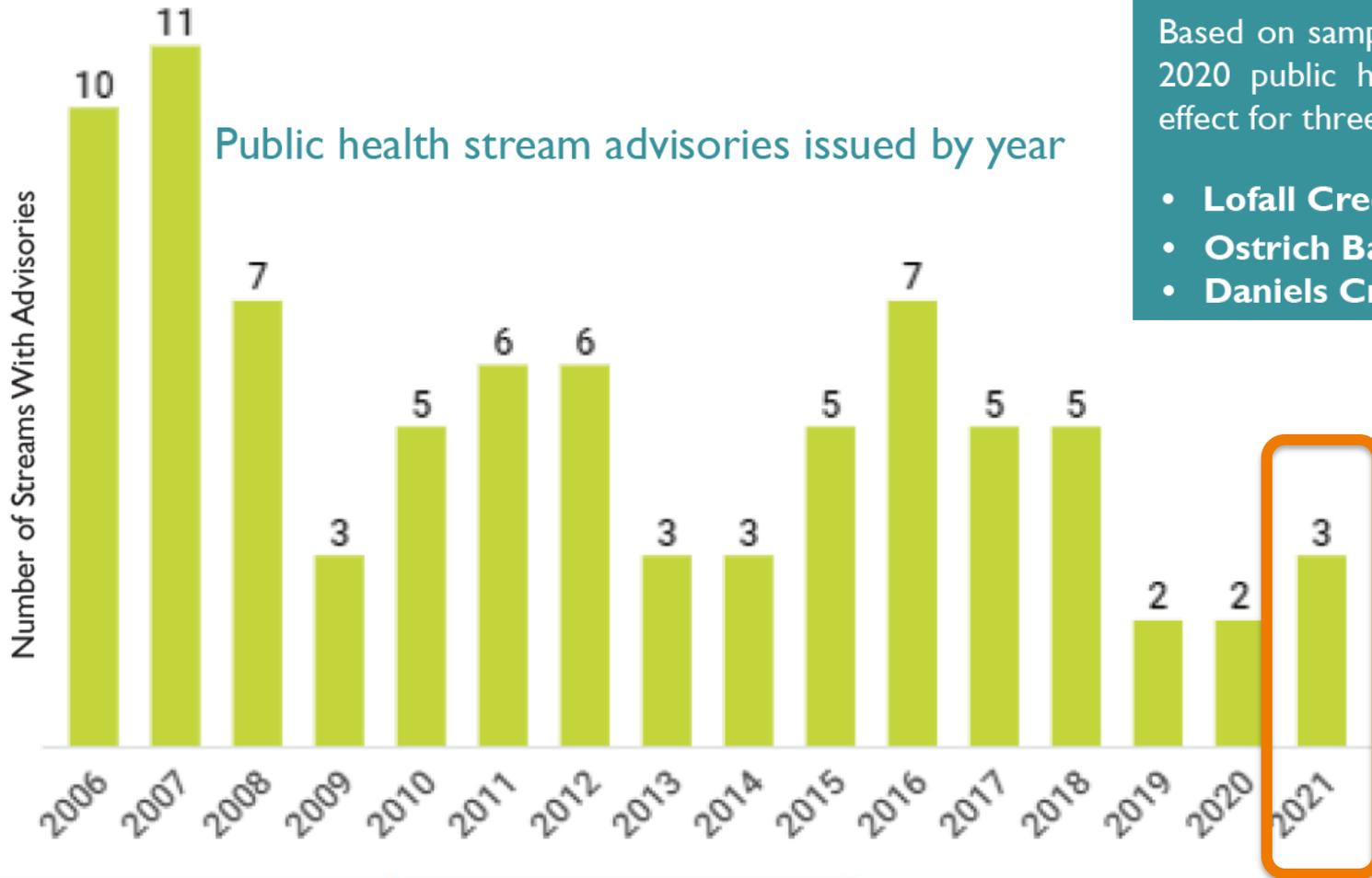


2021 Public Health Stream Advisories

Based on sampling results from 2018-2020 public health advisories are in effect for three streams:

- **Lofall Creek** (651 gmV)
- **Ostrich Bay Creek** (552 gmV)
- **Daniels Creek** (406 gmV)

Public health stream advisories issued by year



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

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.

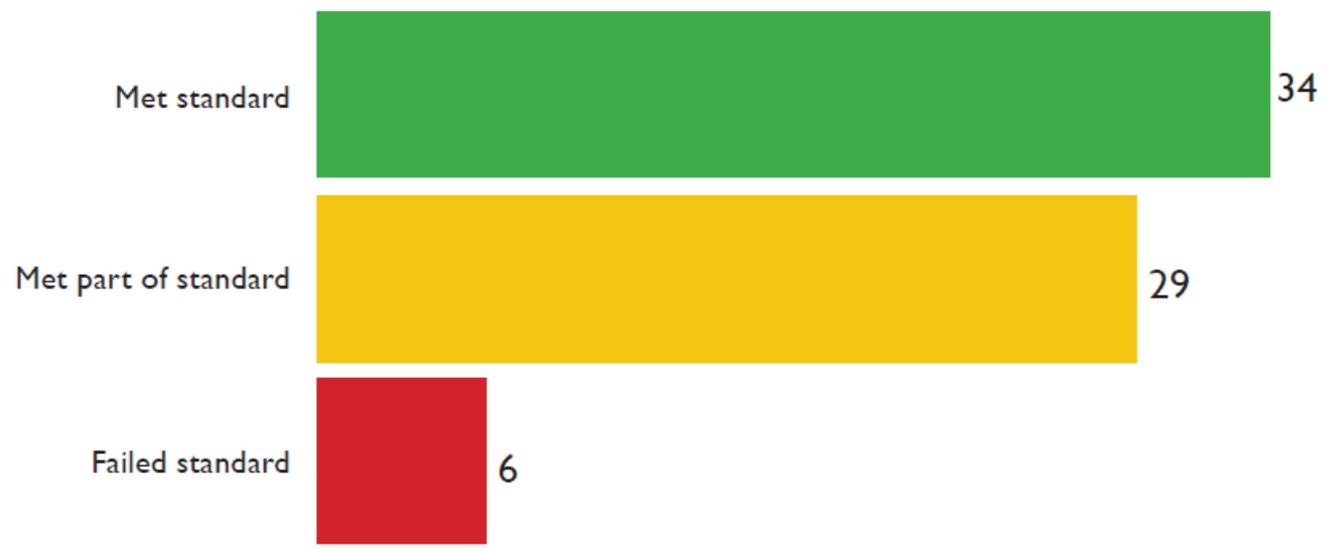


Met part 1 of standard: The stream had **periodic high bacteria** levels and failed part 2 of the standard.



Failed standard: The stream had **high bacteria** levels and failed both parts of the standard.

Water quality status for Kitsap streams in 2020



KINGSTON / UPPER HOOD CANAL



1 Martha John Creek
Annual GMV: 65

2 Gamble Creek
Annual GMV: 34

3 Kinman Creek
Annual GMV: 57

4 Lofall Creek
Annual GMV: 333
Health Advisory

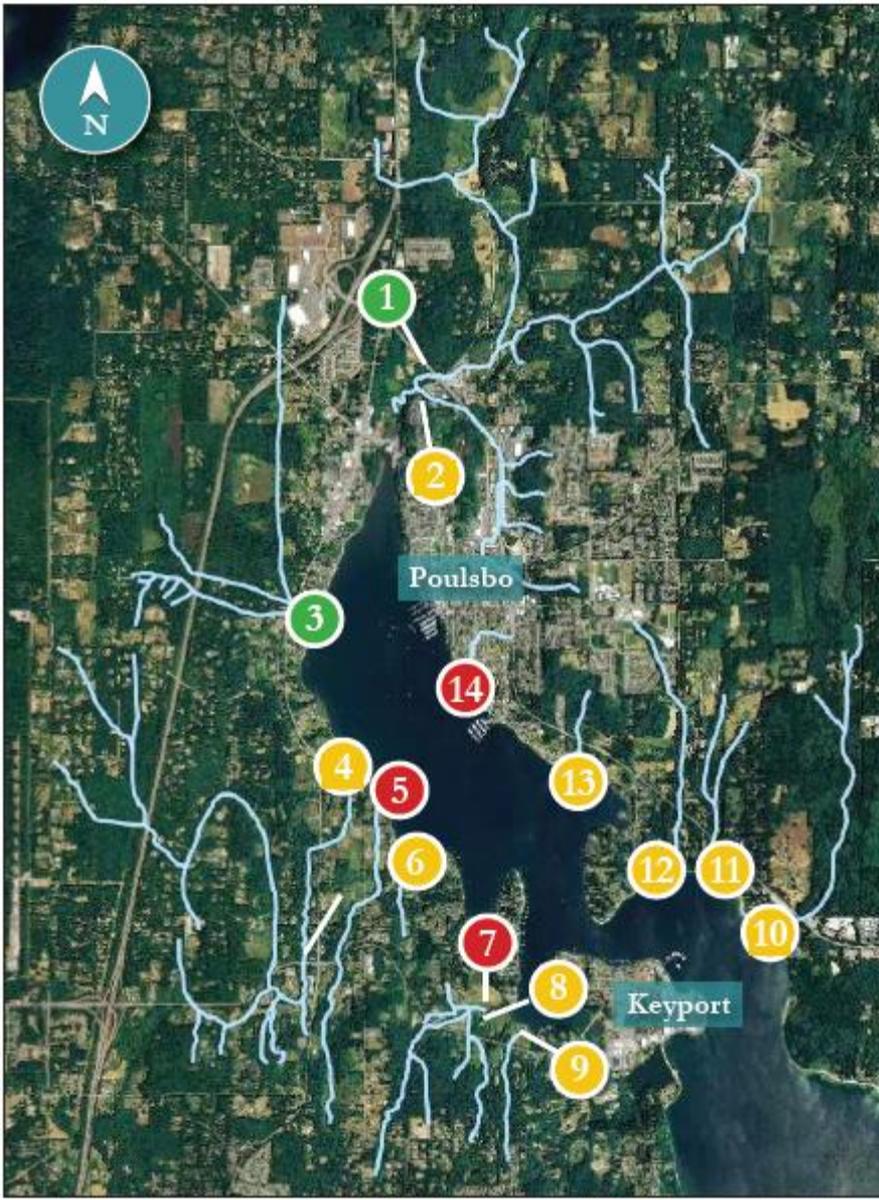
5 Jump Off Joe Creek
Annual GMV: 34

6 Vinland Creek
Annual GMV: 108

7 Cowling Creek
Annual GMV: 39

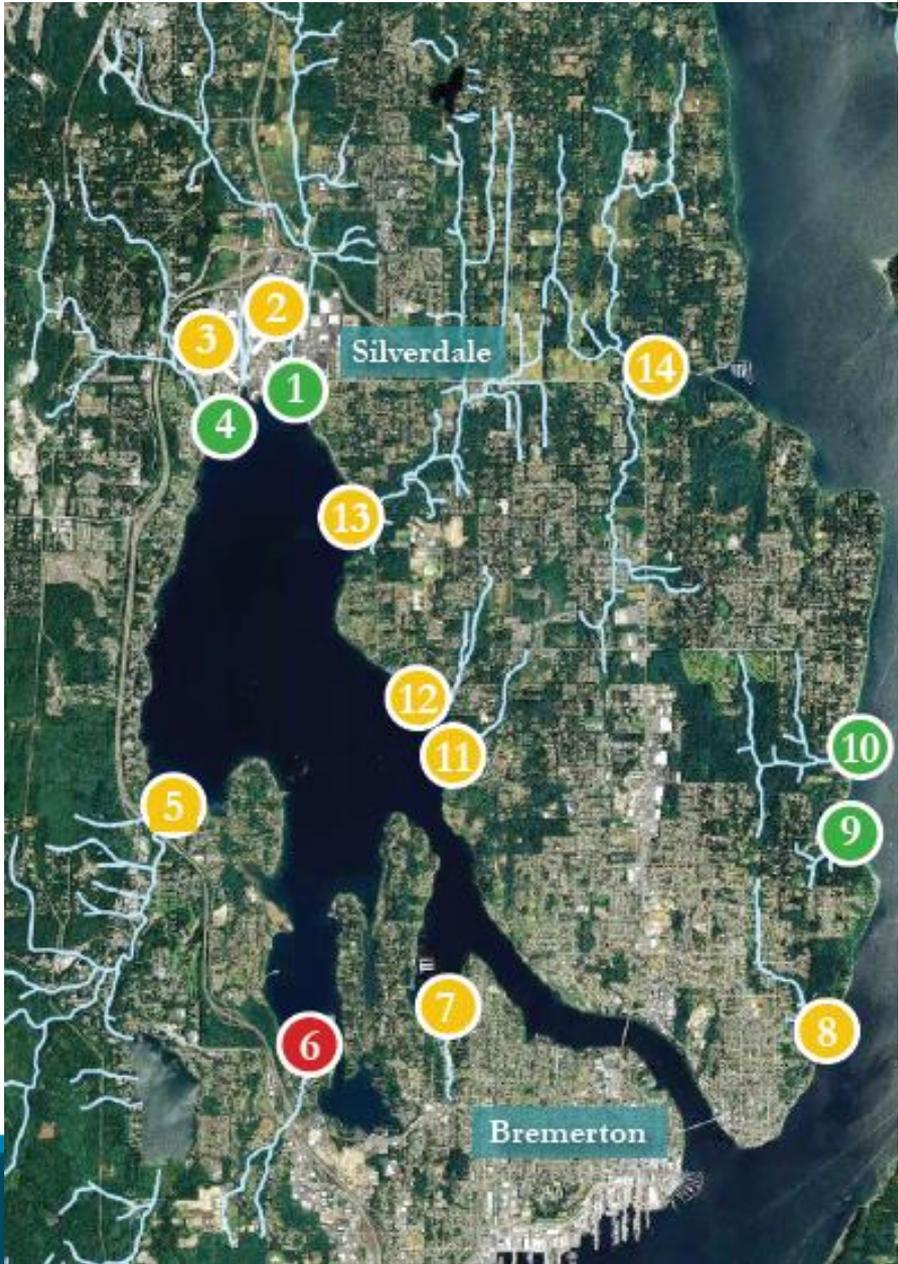
- Low bacteria
- Periodic high bacteria
- High bacteria

POULSBO / LIBERTY BAY



- 1** Dogfish Creek
Annual GMV: 23
- 2** South Dogfish Creek
Annual GMV: 65
- 3** Johnson Creek
Annual GMV: 12
- 4** Big Scandia Creek
Annual GMV: 39
- 5** Little Scandia Creek
Annual GMV: 137
- 6** Perry Creek
Annual GMV: 62
- 7** Daniels Creek
Annual GMV: 201
Health advisory
- 8** Unnamed Creek 00
Annual GMV: 27
- 9** Unnamed Creek 01
Annual GMV: 70
- 10** Sam Snyder Creek
Annual GMV: 24
- 11** Lemolo Creek
Annual GMV: 21
- 12** Bjorgen Creek
Annual GMV: 59
- 13** Barrantes Creek
Annual GMV: 51
- 14** Poulsbo Creek
Annual GMV: 149

SILVERDALE / BREMERTON



1 Clear Creek
Annual GMV: 25

2 Kitsap Mall Creek
Annual GMV: 56

3 Kitsap Mall Creek W.
Annual GMV: 56

4 Strawberry Creek
Annual GMV: 25

5 Chico Creek
Annual GMV: 51

6 Ostrich Bay Creek
Annual GMV: 562
Health Advisory

7 Phinney Creek
Annual GMV: 44

8 Enetai Creek
Annual GMV: 88

9 State Park Creek
Annual GMV: 24

10 Illahee Creek
Annual GMV: 31

11 Mosher Creek
Annual GMV: 56

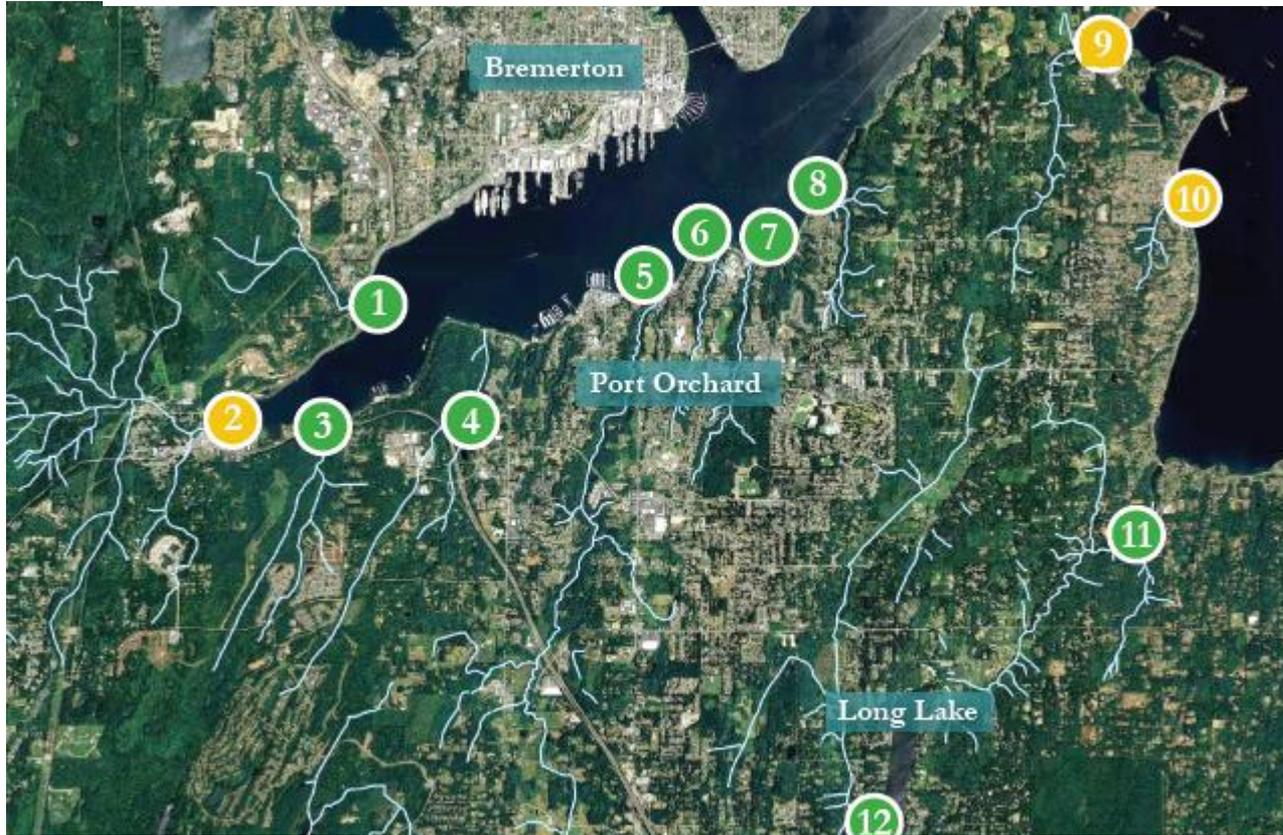
12 Pahrman Creek
Annual GMV: 69

13 Barker Creek
Annual GMV: 89

14 Steele Creek
Annual GMV: 50



PORT ORCHARD / SINCLAIR INLET



1 **Wright Creek**
Annual GMV: 11

2 **Gorst Creek**
Annual GMV: 58

3 **Anderson Creek**
Annual GMV: 21

4 **Ross Creek**
Annual GMV: 17

5 **Blackjack Creek**
Annual GMV: 30

6 **Annapolis Creek**
Annual GMV: 63

7 **Karcher Creek**
Annual GMV: 36

8 **Sacco Creek**
Annual GMV: 55

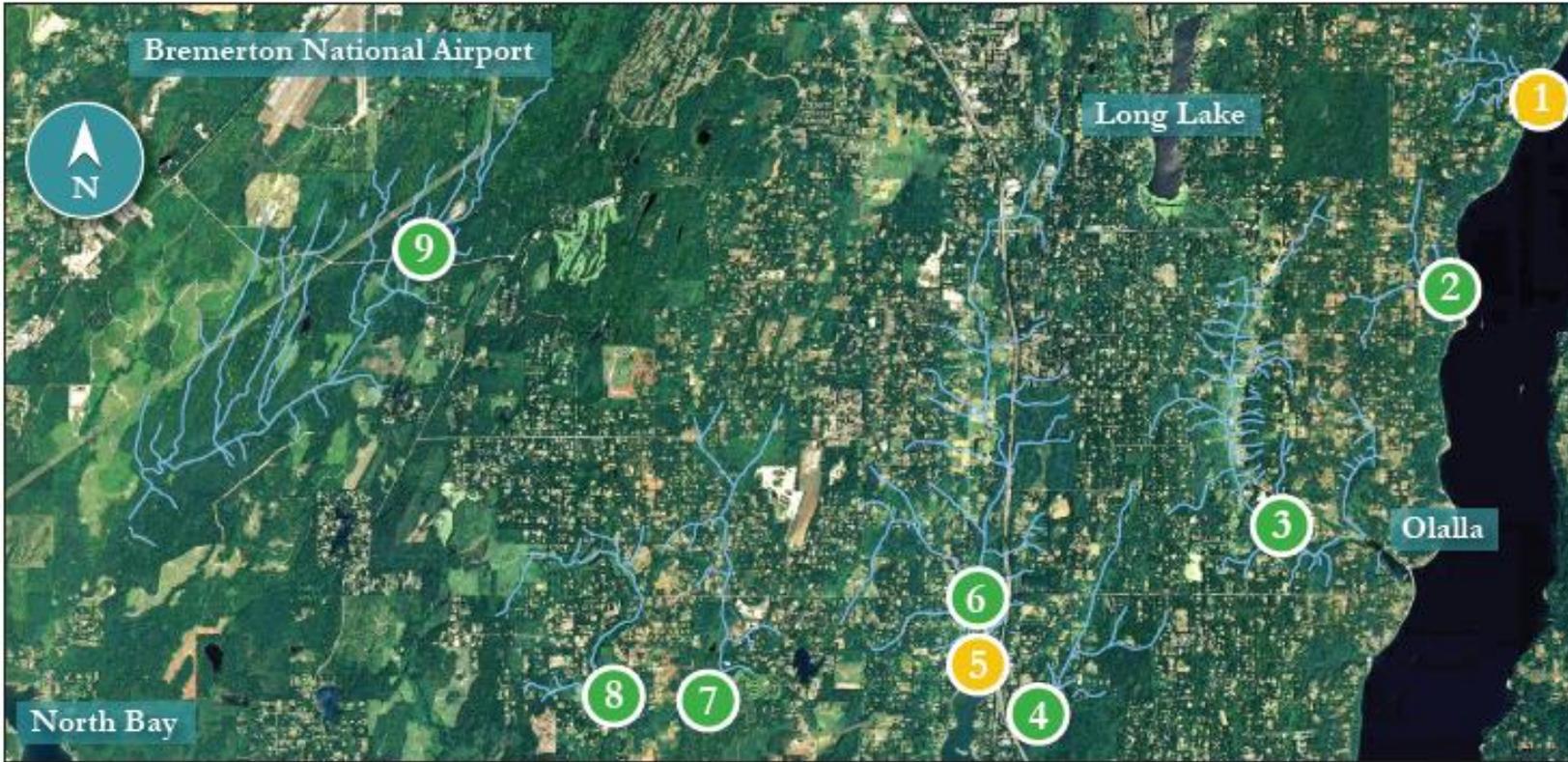
9 **Beaver Creek**
Annual GMV: 30

10 **Duncan Creek**
Annual GMV: 57

11 **Curley Creek**
Annual GMV: 32

12 **Salmonberry Creek**
Annual GMV: 11

BURLEY / OLALLA



1 **Wilson Creek**
Annual GMV: 37

2 **Fragaria Creek**
Annual GMV: 8

3 **Olalla Creek**
Annual GMV: 33

4 **Purdy Creek**
Annual GMV: 23

5 **Burley Creek**
Annual GMV: 56

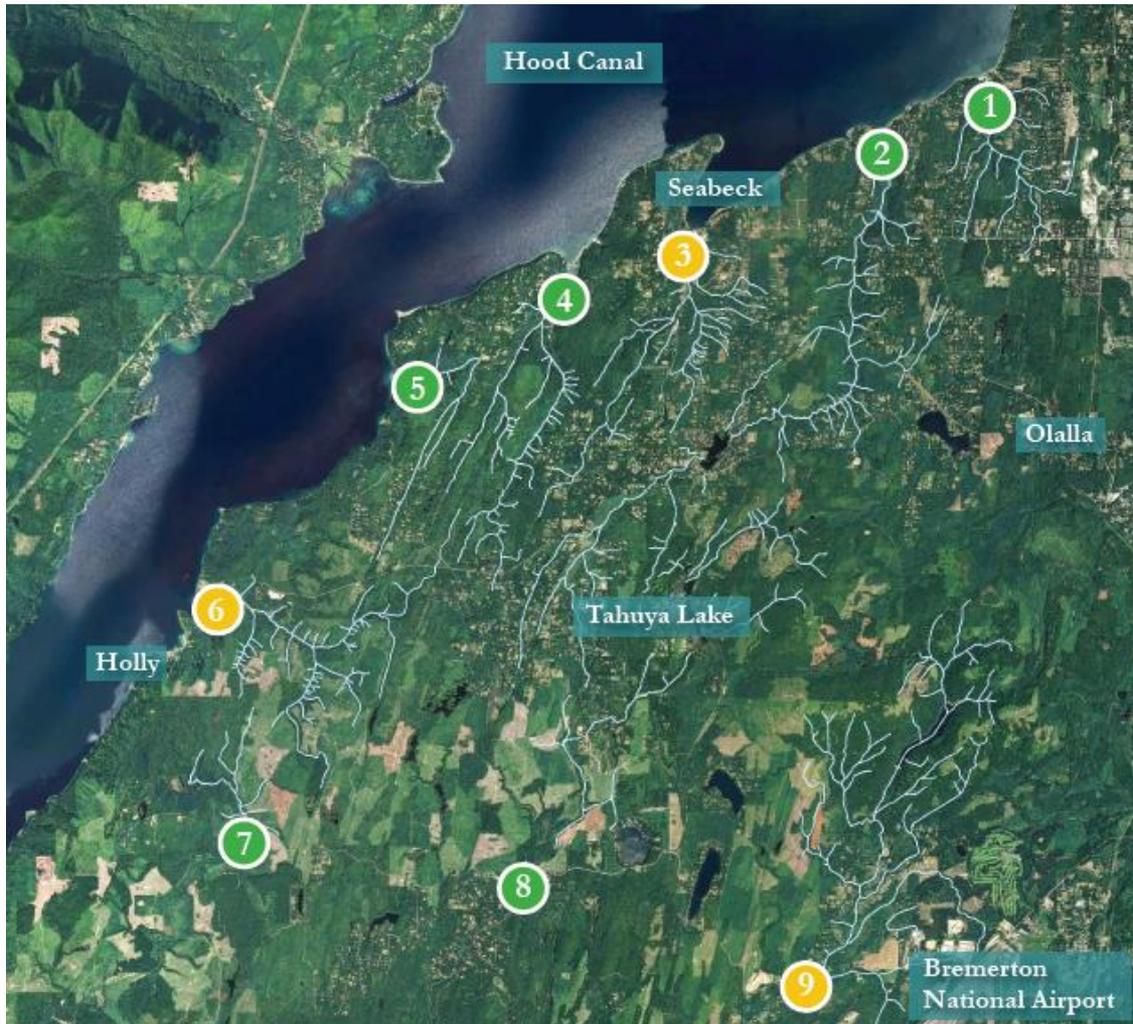
6 **Bear Creek**
Annual GMV: 61

7 **Minter Creek**
Annual GMV: 28

8 **Huge Creek**
Annual GMV: 35

9 **Coulter Creek**
Annual GMV: 9

SEABECK / HOOD CANAL



1 Little Anderson Creek
Annual GMV: 9

2 Big Beef Creek
Annual GMV: 15

3 Seabeck Creek
Annual GMV: 22

4 Stavis Creek
Annual GMV: 13

5 Boyce Creek
Annual GMV: 12

6 Big Anderson Creek
Annual GMV: 46 Page 27

7 Dewatto River
Annual GMV: 32

8 Tahuya River
Annual GMV: 7

9 Union River
Annual GMV: 90



Water Quality in Kitsap Lakes



Public Health Advisories for Lakes

The table below shows advisories issued during calendar 2020.

Lake	Advisory	Dates
Island Lake	<i>E. coli</i> bacteria	9/3/20 - 9/23/20
Kitsap Lake	<i>E. coli</i> bacteria	7/30/20 - 8/6/20 9/10/20 - 9/23/20
Kitsap Lake	Toxic cyanobacteria	8/27/19 - 1/8/20 6/19/20 - 11/30/20
Long Lake	Toxic cyanobacteria	12/14/20 - 11/13/20

Common Sources of Fecal Pollution



Illustration by Angie Berger

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.

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Questions ?