

Water Quality Team Meeting Notes (Burley Lagoon, Filucy Bay, Rocky Bay, Vaughn Bay, and Minter Bay)



02/08/2022 via Teams

Moderator: Lindsay Tuttle

Notes: Erica Welborn

Attendees:

- Paul Borne (Pierce Conservation District)
- Erica Marbet (Squaxin Island Tribe)
- Cindy Callahan (Tacoma-Pierce County Health Department, TPCHD)
- Helen Jones (Kitsap Conservation District)
- Scott Chernoff (Department of Health)
- Kent Kingman (Minterbrook Oyster Co)
- Alena Reynolds (Ecology, Non-Point Water Quality)
- Ty Booth (Pierce County SWM)
- Lindsay Tuttle (TPCHD)
- Jeff Barney (Pierce County SWM)
- Erica Welborn (TPCHD)
- Barbara Ann Smolko (Pierce County SWM)
- Leslie Banigan (Kitsap Public Health District)

Agenda Item	Water Quality Burley Lagoon
Discussion Summary	<p>Scott Chernoff – DOH No stations failing. 2 stations exceed the 90th Percentile. Sorting out rain events improved numbers. Compared to last year numbers are higher, but not drastically.</p> <p>Lindsay Tuttle - TPCHD Burley special sampling will be done in February 2022.</p> <p>Hot Spots BL024/5/26 are in the NW corner of Burley Lagoon.</p> <ul style="list-style-type: none"> The two remaining properties are being pursued for an administrative search warrant. We need to send the series of letters again to be sure we receive the certified mail receipts which were not all returned the previous time. <p>BL209 in the SW corner of Burley Lagoon:</p> <ul style="list-style-type: none"> New system has been installed. Site resampled to determine if water quality impacts have been resolved on 11/4/21. Results below criteria. <p>BLU002 SW corner of Burley Lagoon</p> <ul style="list-style-type: none"> Brackett sampling was done 10/27/21 and 12/16/21. Counts were low on both resampling events. Monthly sampling is done at this location. Results are now below criteria. Geometric mean of the last 3 samples is also below criteria currently (Table 1).

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Upland Tributary Sampling

Map 1: Burley Upland Tributary Sampling Sites

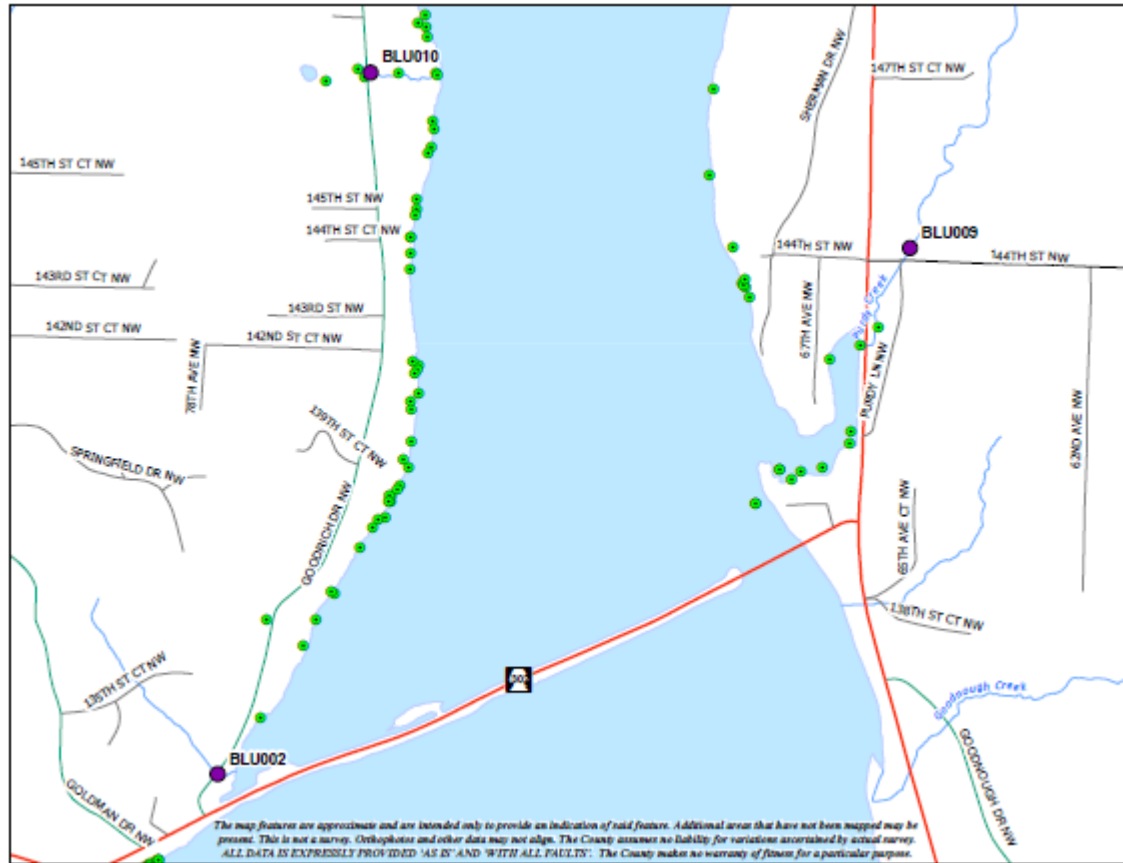


Table 1: Burley Upland Tributary Sampling Results

E. coli levels MPN/100 ml	Oct-21	*Nov-21	Dec-21	Jan-22	Geometric Mean (last 3 sample dates)
BLU002	648.8		37.2	3.1	44.6
BLU009	197.8		60.2	108.1	108.8
BLU010	172.5		7.4	0.9	10.5

*Not sampled due to weather conditions and safety concerns

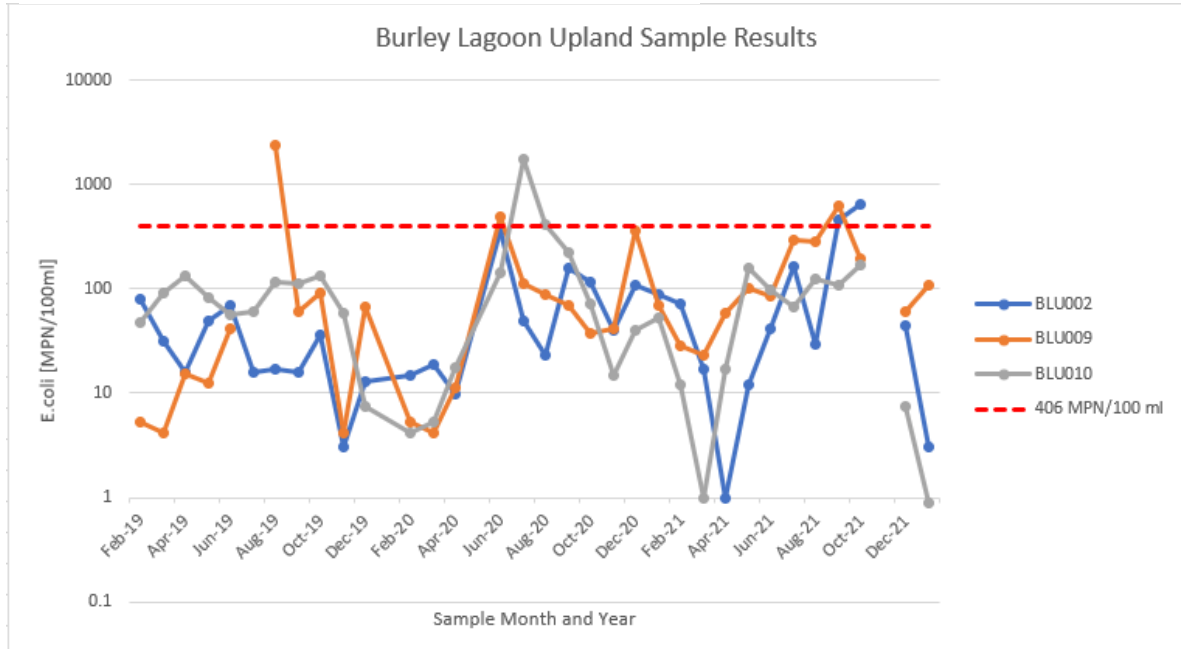
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Graph 1: Burley Bay Upland Tributary Sample Results



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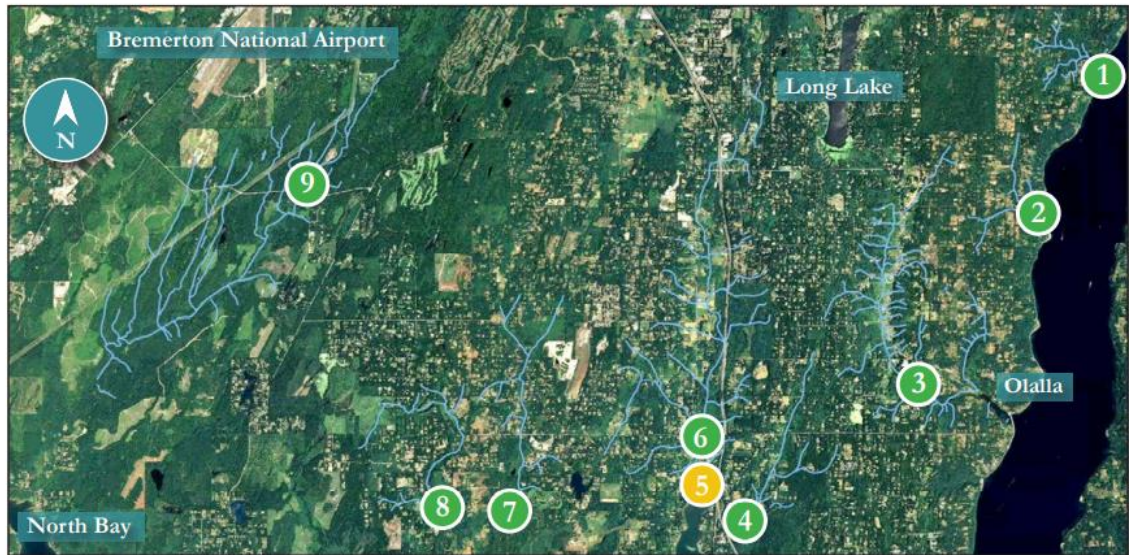


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Leslie Bannigan – Kitsap HD

2021 Monitoring Results by Stream BURLEY / OLALLA



● Low bacteria ● Periodic high bacteria ● High bacteria

1 Wilson Creek Annual GMV: 49	4 Purdy Creek Annual GMV: 26	7 Minter Creek Annual GMV: 30
2 Fragaria Creek Annual GMV: 5	5 Burley Creek Annual GMV: 62	8 Huge Creek Annual GMV: 17
3 Olalla Creek Annual GMV: 44	6 Bear Creek Annual GMV: 66	9 Coulter Creek Annual GMV: 9

2021 WORK PERFORMED

Water quality

- Burley Creek
 - 2020-2021 Water Year failed Part 2 of the State Water Quality standard for E. coli (EC Standard). Part 1 GMV was 61 EC
 - Bear Creek met both Parts of the EC Standard. Part 1 GMV was 66 EC.
- Purdy Creek
 - 2020-2021 Water Year met both Parts of the EC Standard. Part 1 GMV was 26 EC.

Pollution Identification and Correction

Burley and Bear Creek Watershed

23 parcel surveys

- Found six failures: two had minor repairs, one disconnected an RV discharge, two have new gravity OSS, one has a new alternative OSS,

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	Purdy Creek Watershed Two parcel surveys: one failure had a minor repair Barbara Ann Smolko - PC SWM: they are looking at putting out a water quality grade report specifically for Burley. KP News doesn't really cover that area so they are looking at different ways to reach Burley residents. Could grade sections of the bay.		
Action Items	What	Who	When

Agenda Item	Water Quality Minter Bay				
Discussion Summary	Scott Chernoff - DOH				
	There are no threatened or failing stations in Minter Bay. We do not sort the Minter Bay data for rainfall since there is no Rainfall Condition. And the sharpest decreases in Estimated 90 th Percentiles were in Stations 306, 307, 308, and 850. Minter Bay is showing some signs of water quality improvement. Minter data is not sorted for rainfall. The amount of rain we had did not seem to influence the water quality as it does in some other bays. As we add new data, we are seeing good numbers replace the higher counts that are falling off the rolling average.				
	Lindsay Tuttle - TPCHD				
	Additional NTA funding will be focused in Minter Bay during the first half of 2022. TPCHD was awarded a Centennial Grant for work in Minter Bay for 2022-2024.				
	Hot Spots				
	The Minter Bay special shoreline was walked in August. No resampling efforts needed. The whole shoreline will be walked in March 2022.				
	Site Investigations				
	There are no ongoing site investigations in Minter Bay.				
	<i>Table 5: Minter Bay Upland Tributary Sample Results</i>				
	E. coli levels	Geometric Mean (last 3 samples)			
	MPN/100 ml	Aug-21	Oct-21	Dec- 21	
	MBU001	52.9	579.4	20.9	44.8
	MBU002	19.9	38.4	25.9	39.2
	MBU003	2.0	16.0	13.4	15.4
	MBU004	39.9	166.4		65.9

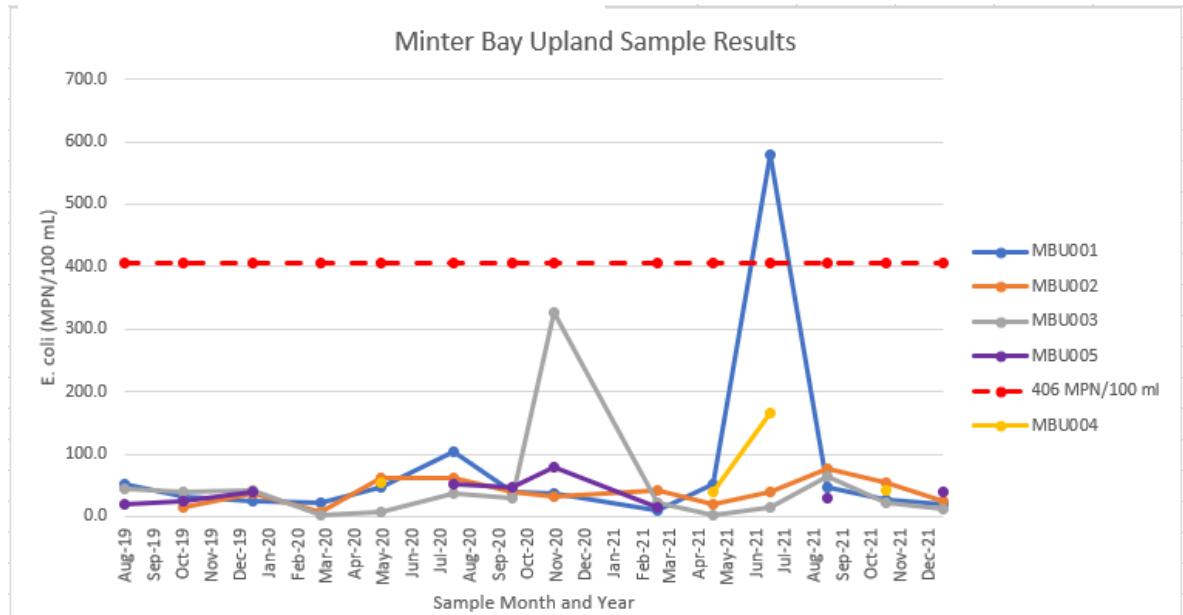
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Graph 5: Minter Bay Upland Tributary Sample Results



Map 5: Minter Bay Upland Tributary Sample Sites

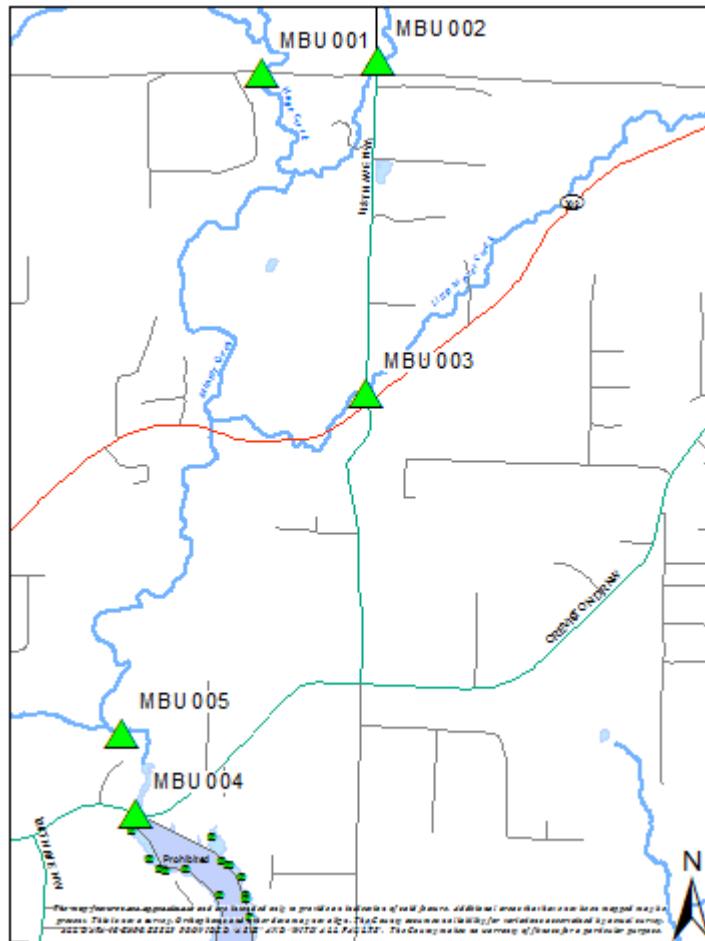
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Leslie Bannigan – Kitsap HD

2021 WORK PERFORMED

Water quality

- Minter Creek
 - 2020-2021 Water Year met both Parts of the EC Standard. Part 1 GMV was 30 EC.
- Huge Creek
 - 2020-2021 Water Year met both Parts of the EC Standard. Part 1 GMV was 17 EC.

Pollution Identification and Correction

Minter Creek Watershed

Two parcel surveys

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	Paul Borne - PCD: property owner by horseshoe lake is getting bids for some farm improvements.		
Action Items	What	Who	When
Agenda Item	Water Quality Rocky Bay		
Discussion Summary	<p>Scott Chernoff – DOH Sorting for rain improved numbers. Numbers are looking a little higher but mostly in the same range. Doesn't expect classifications to change.</p>		
	<p>Lindsay Tuttle – TPCHD Complaint received (12-2021) about property with junk vehicles, trash and bulkhead concerns NW side of Rocky Bay. Cloudy water getting to bay. Recent RME showed no deficiencies on septic system. Referred to DOE for follow-up.</p> <ul style="list-style-type: none"> Three active PC CE cases: Solid waste still case ongoing, junk vehicle case was closed and a shoreline correction notice case Number #74453 sent 12/20/21 is ongoing. This is to address the reported work done behind the bulkhead 		
	<p>Hot Spots The Rocky Bay special shoreline was walked in Oct. of 2022. No sites exceeded criteria for resampling. It will be walked again in April 2022.</p>		
	<p>Site Investigations We do not have any ongoing site investigations.</p>		

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Upland Tributary Sampling

Map 3: Rocky Bay Upland Tributary Sample Sites

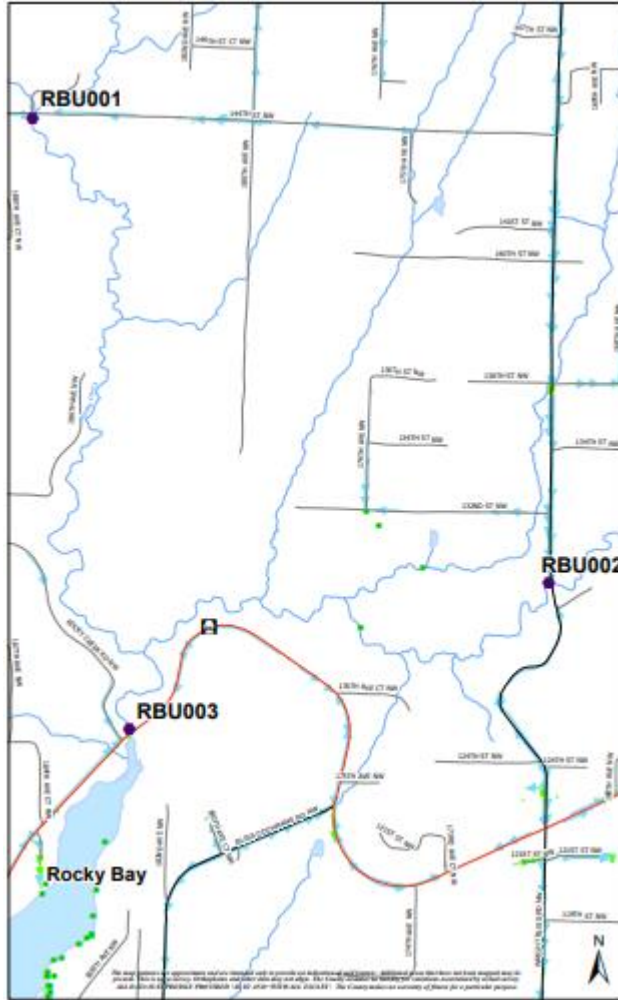


Table 3: Rocky Bay Upland Sample Results

E. coli levels MPN/100 mL	Oct-21	Nov-21	Dec-21	Jan-22	Geometric Mean (last 3 samples)
RBU002*		12.0	1.0	19.4	6.2
RBU001	12.0	7.0	5.2	16.0	8.4
RBU003	82.0	4.0	4.1	12.0	5.8

*RBU002 flows sporadically.

Water Quality Team Meeting Notes (Burley Lagoon, Filucy Bay, Rocky Bay, Vaughn Bay, and Minter Bay)

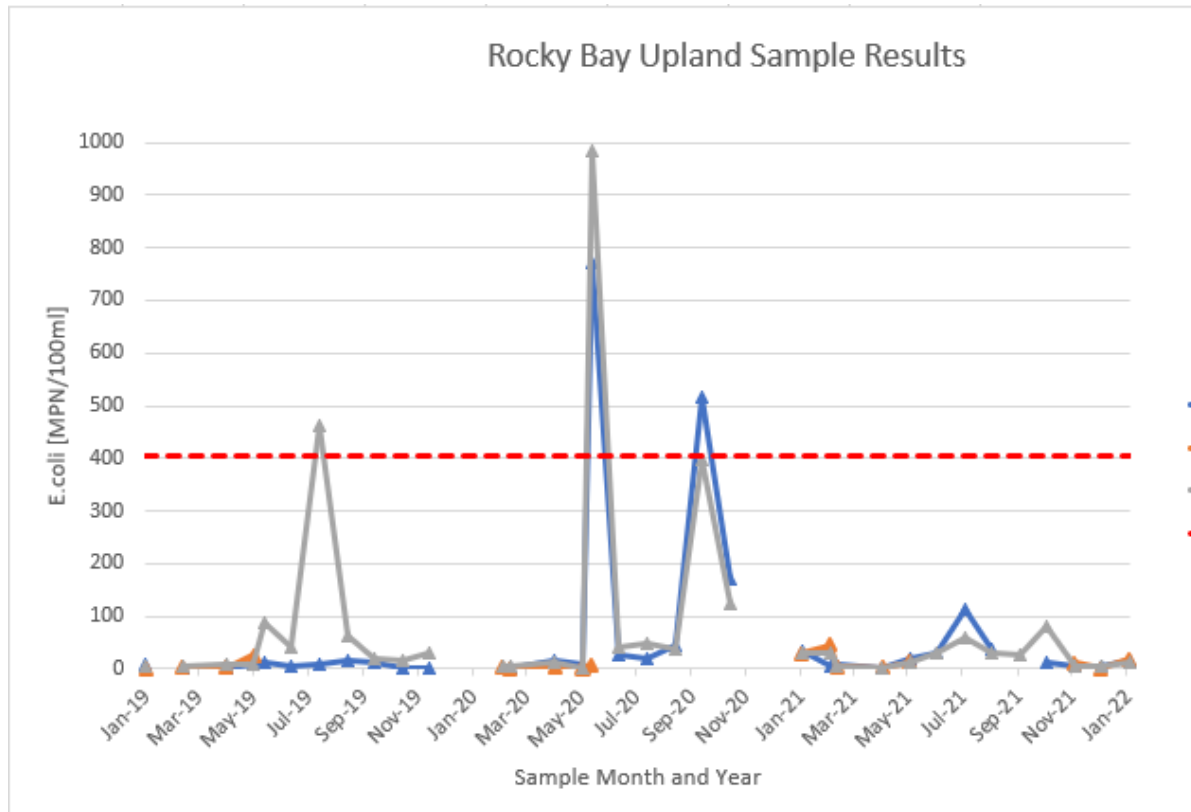
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Graph 3: Rocky Bay Upland Sample Results



Leslie Bannigan – Kitsap HD

2021 WORK PERFORMED

Water quality

- Coulter Creek
 - 2020-2021 Water Year met both Parts of the EC Standard. Part 1 GMV was 9 EC.

Pollution Identification and Correction

Coulter Creek Watershed

Two parcel surveys: one failure had a minor repair

Rocky Creek Watershed

Two parcel surveys: one failure has a new alternative OSS

Kent Kingman – Minterbrook Oyster: Derelict vessel, occupied. Has relocated and come back.

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Action Items	What	Who	When

Discussion Summary	Water Quality Filucy Bay
	<p>Scott Chernoff - DOH No proposed downgrades. Meets its classifications. 764 is only station threatened.</p> <p>Lindsay Tuttle – TPCHD The Filucy Bay special shoreline sampling was completed in November. Two sites need to be resampled when tides allow. It is being walked again in June 2022.</p> <p>Filucy Bay subgroup meetings are being held monthly in 2022.</p> <p>Hot Spots None currently.</p> <p>Site Investigations: Property with septic concerns and an occupied bus had recent septic inspection showing no deficiency and PC CE has followed up on occupied bus. TPCHD CE to verify fix of tank indicated in recent RME report.</p> <p>Rain event sampling on 1/6/22 was done along Reeves Rd below sheep farm. They are currently working with PCD to implement BMPs. This sampling had very high results. PCD will continue to work with this site.</p>

Water Quality Team Meeting Notes (Burley Lagoon, Filicy Bay, Rocky Bay, Vaughn Bay, and Minter Bay) 02/08/2022 via Teams



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Upland Tributary Sampling

Map 2: Filicy Upland Tributary Sampling Sites

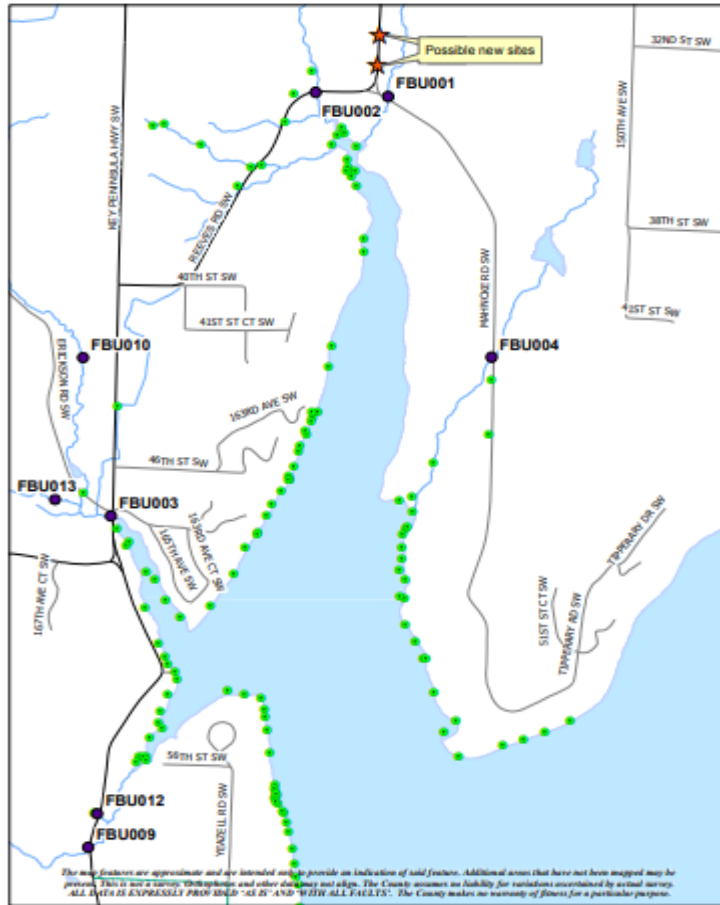


Table 2: Filicy Bay Upland Sample Results

E. coli levels MPN/100 ml	E. coli levels				Geometric Mean (last 3 samples)
	Oct-21	*Nov-21	Dec-21	Jan-22	
FBU001	131.4		36.4	275.5	109.6
FBU002	71.2		33.1	15.8	33.4
FBU004	48.1		2.6	9.2	9.2
FBU009	32.8		20.1	4.1	13.9
FBU010	5.2		3.0	0.9	2.4
FBU012	344.8		0.9	0.9	6.5
FBU013			1.0	0.9	2.6

*Not sampled due to weather conditions and safety concerns

Water Quality Team Meeting Notes (Burley Lagoon, Filicy Bay, Rocky Bay, Vaughn Bay, and Minter Bay)

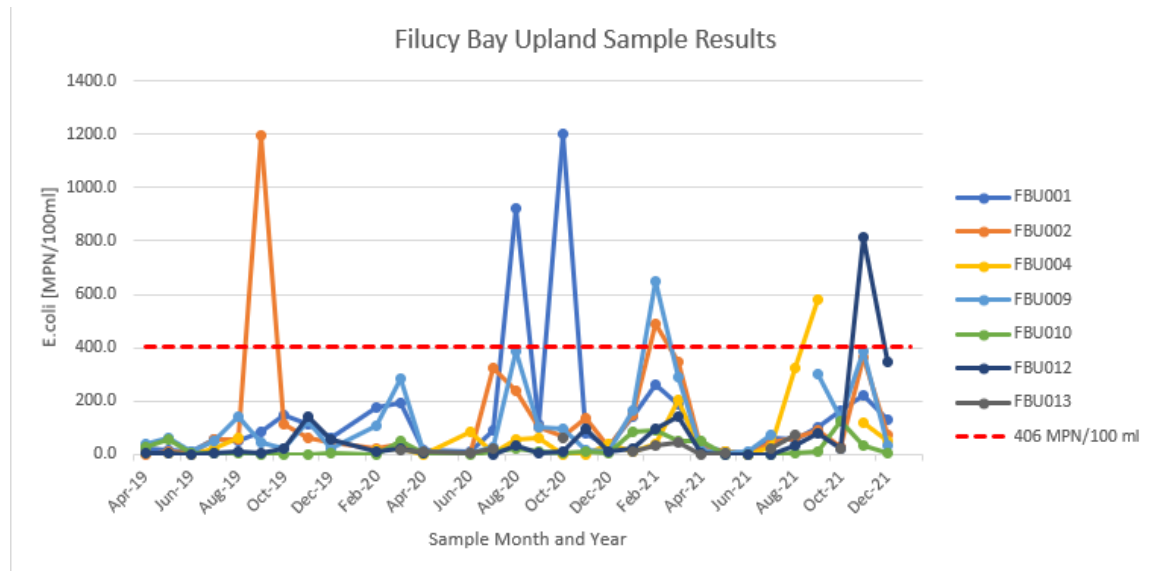
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Graph 2: Filicy Bay Upland Sample Results



Paul Borne – PCD:

Working with Filicy Farms. He was out today. There is a lot of water coming through the properties in that area.

Action Items	What	Who	When

Agenda Item	Water Quality Vaughn Bay
Discussion Summary	<p>Scott Chernoff – DOH 2 failing stations 613 and 650 (unsorted for rain). Not sure how it will impact the classifications, but it is not good. 603 is threatened. Mixed increase and decrease of yearly numbers.</p>
	<p>Lindsay Tuttle -TPCHD Pet waste station at the Vaughn Bay boat launch ready to be installed. The pet waste station will be placed on a boat launch information signpost. We will help support along with a local resident.</p>

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Hot Spots

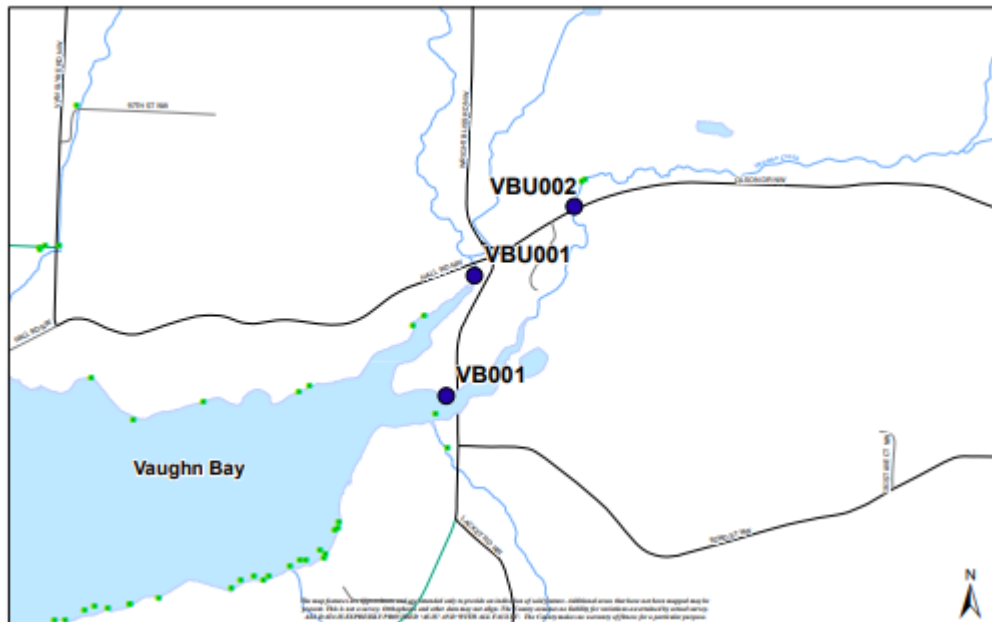
The Vaughn Bay shoreline was sampled June 2021. There were two sites that exceeded criteria for resampling but did not meet criteria as a hot spot. It will be sampled again in February 2022.

Site Investigations

Worked with DOE and Pierce County CD to investigate stockpiling of manure at horse farm. Manure pile has been removed/relocated. Shoreline sampling had high counts downstream of horse farm during a moderate rain event. On 1/6/22 sampling was conducted under a significant rain event with high counts from two flows originating from the horse farm. It may take more time for the impacts from the manure stockpiling to be completely gone. Will sample again when there is flow.

Upland Tributary Sampling

Map 4: Vaughn Bay Upland Tributary Sample Sites



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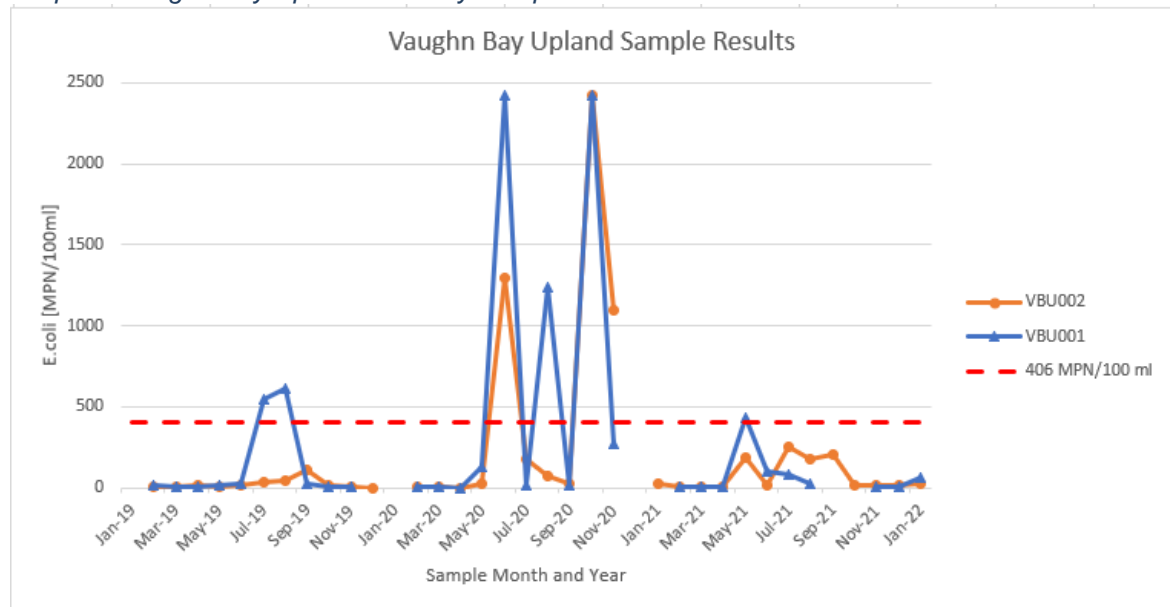
Notes: Erica Welborn

Table 4: Vaughn Bay Upland Tributary Sample Results

E. coli levels	Oct-21	Nov-21	Dec-21	Jan-22	Geometric Mean (last 3 samples)
MPN/100 ml					
VBU001*		9.1	6.3	60.2	15.1
VBU002	15.5	13.2	12.2	24.9	15.9

*VBU001 is not sampled when influenced by tide

Graph 4: Vaughn Bay Upland Tributary Sample Results



Erica Marbet – Squaxin Tribe: Past MST results showed issues with bird waste. Lindsay confirmed that is an ongoing struggle.

Paul Borne – PCD: asked where the elementary school Onsite system is.

Action Items	What	Who	When
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	Filucy Subgroup now will be Filucy-Vaughn Subgroup and the meeting will be combined.	Lindsay	It was done today.
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Agenda Item	Round Table		
Discussion Summary	<p>Lindsay Tuttle -TPCHD Outreach and Education Events organized by TPCHD Planning for 2022 Education and Outreach opportunities</p> <ul style="list-style-type: none"> Webinar, septic social and possible in person events. <p>Jeff Barney – PC SWM: Work continues on the Filucy permanent pump out station. Mobile pumpout station served 280 vessels, +56,000 gallons. June- October. At the Seattle Boat Show this week. Very successful first year. Working on a solution for derelict vessel removal/disposal.</p> <p>Barbara Ann Smolko – PC SWM Before Craft 3, Health Dept tried to get septic repair program that PC took over. Found there are still holes in the net (people that are not able to get funding assistance for a multitude of reasons). SWM budgeted \$60,000 each year for the next two years. Leveraged with Centennial Funding it gives us more to offer for assistance when they can't qualify for Craft 3.</p> <p>Cindy Callahan – TPCHD: Centennial grant has some money for small repairs. Found we have to do a cultural resource review even if the digging is in the footprint of the existing system.</p> <p>Alena Reynolds - Dept of Ecology: New grant cycle starting. Offered guidance document available from Ecology for anyone working on applications for funding. https://apps.ecology.wa.gov/publications/documents/2110028.pdf</p>		
	Action Items	What	Who