### **ISLAND COUNTY MARINE RESOURCES COMMITTEE**

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August 6, 2024

WHIDBEY/HYBRID MEETING

**PRESENT:** Jill Lipoti, Chair, Kelly Webb, Vice Chair, Scott Chase, Barbara Bennett, PaulBen McElwain, Greg Easton, Patrick Havel, Kelly Webb, Ken Collins, Andi Kopit, Exofficio, Kelly Zupich, MRC staff

**ABSENT:** Note if notified or un-notified – **Melanie Bacon**, un-notified, **Jennifer Schmitz**, notified

**VISITORS: James Watson**, WICD, **Jessica Reed**, Watershed Planner, **Carlie Miller**, Surface Water Quality, **Renee Zavas-Silva**, Surface Water Quality, **Jessica Owens**, NWSC, **Clea Barenburg**, Salmon Recovery, **Heather Teegarden**, WSU Extension, **Hiller West**, Public

**CALL TO ORDER:** Jill called the meeting to order at 4:00pm. **INTRODUCTIONS:** Introductions were made. **QUORUM:** A quorum was declared. **AGENDA:** The agenda was approved. **MINUTES:** June 4, 2024, minutes approved - July 2, 2024, minutes approved

#### **TRIBAL ACKNOWLEDGEMENT:**

We acknowledge the lands we're on today are the ancestral and current homelands of Indigenous Nations who have stewarded them since time immemorial. We respect their sovereignty, support their Treaty rights, their right to self-determination, and we honor their sacred spiritual connection with the land and water.

#### **CORRESPONDENCE:**

• Meredith Penny notified us that the funding they were seeking for the Saratoga Creek fish passage project did not work out. They plan to re-apply to another grant this fall.

#### IC SURFACE WATER QUALITY ANNUAL UPDATE: Carlie Miller

- Review of water year 2023, October 2022 September 2023
- For more details see the Power Point presentation at the end of the meeting minutes.

#### **COMP PLAN UPDATE:**

• The subcommittee team is working on finalizing the Transportation element. The Climate element is the last of the Comprehensive Plan elements to provide comments on.

#### **NWSC UPDATES:**

- The Senate bill to reauthorize the NWSI has passed out of the Senate Committee.
- Chris Kelly (Jefferson MRC) Alternatives to kelp surveys using satellite imagery.
- Skagit MRC has 50 people signed up to turn in their vessels.

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#### **DEI UPDATES:**

- We plan to introduce more Indigenous cultural items to further educate our committee members about the ongoing work of the tribes.
- The DEI subcommittee will work to draft an updated Tribal Acknowledgement that brings more action into the wording.

#### **COORDINATOR'S UPDATES**

• Jeff Wheeler a new MRC candidate from Camano has been approved by the committee. We will then send on our recommendation to the Board of Island County Commissioners.

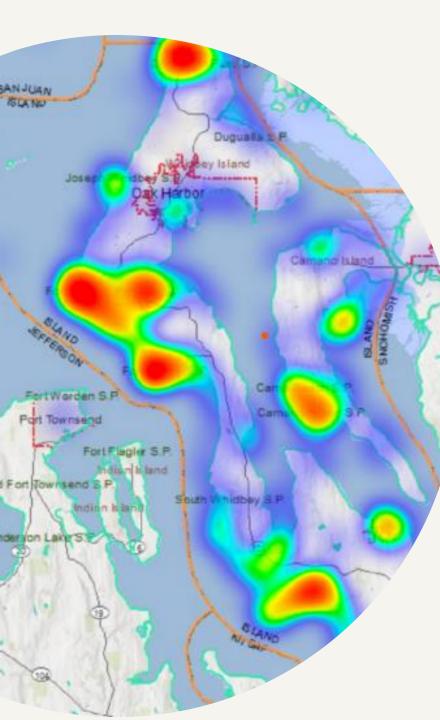
Meeting Adjourned 6:00pm



Island County Surface Water Quality Monitoring Program

> 2022-2023 Annual Report

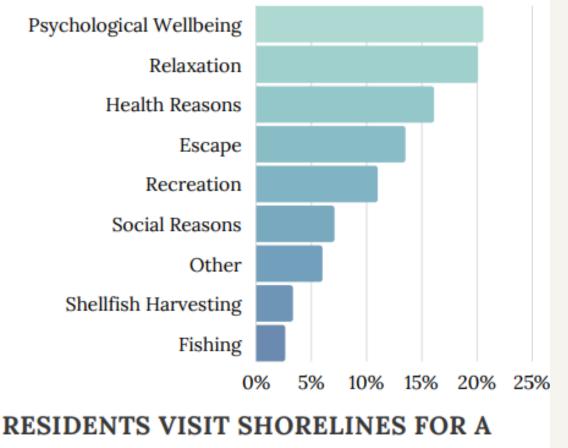
Island County Natural Resources





# What do Island County residents value?

1 CONTRACTOR



How can we ensure people have access to healthy and productive shorelines?

### RANGE OF REASONS

### Regular and Consistent Surface Water Quality Monitoring



## Data Collection

- Carlie Miller, Natural Resource Specialist IC SWQ
- Sage Ince, Natural Resource Specialist has since moved to Jefferson County and Renee Zavas Silva has been hired!
- Jessica Reed, Natural Resource Specialist, Watershed Planner

### **Surface Water Quality Monitoring Program Highlights**

37/ 200

Watersheds monitored across Island County, up 150% from 2022



MORE THAN 4000



OVER

Staff hours logged

OVER 450 Water samples analyzed



50

Source ID samples analyzed

#### MORE THAN



Source ID investigations referred to Adaptive Management

Surface Water Quality Monitoring Program (SWQMP) components:

Priority Watersheds, Core and Rotational Site Sampling

Source Identification (SID) Sampling

**Reconnaissance Sampling** 

**Effectiveness Sampling** 

Surface Water Quality Monitoring Program (SWQMP) components:

Priority Watersheds, Core and Rotational Site Sampling

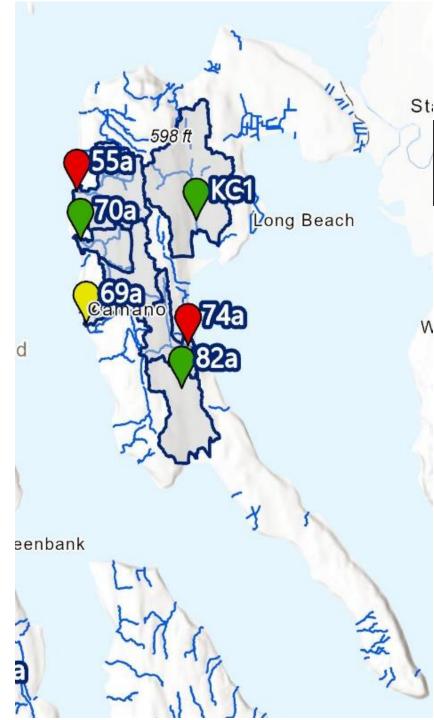
Source Identification (SID) Sampling

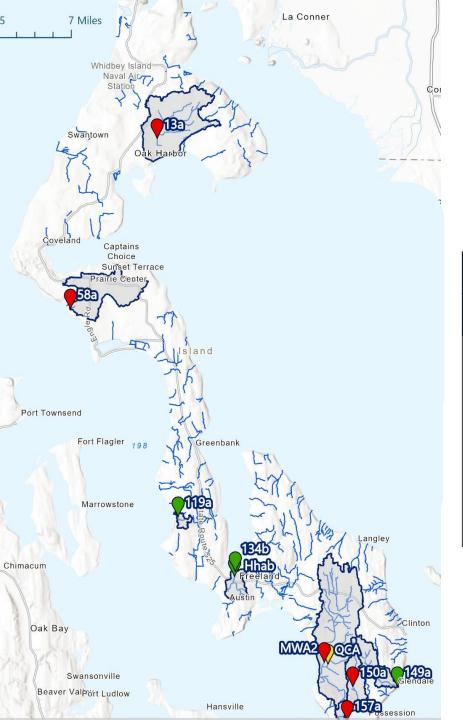
**Reconnaissance Sampling** 

**Effectiveness Sampling** 

### 2023 Priority Watersheds -Camano Island

Camano Island						
Core	Rotational					
55a - Carp Creek 69a - Chapman Creek 74a - Cavalero Creek KC1 - Kristoferson Creek	82a - Bonnie Ln 70a - Sunset W Camano					





## 2023 Priority Watersheds -Whidbey Island

Whidbey Island							
Core	Rotational						
<ul> <li>13a - Crescent Creek</li> <li>58a - Ebey's Reserve</li> <li>134a - Freeland Park</li> <li>Hhab – East Freeland Marsh</li> <li>MWA2 - Maxwelton Creek</li> <li>157a - Scatchet Creek</li> <li>149a - Glendale Creek</li> </ul>	119a - South Whidbey State Park 150a - Cultus Creek QCA - Quade Creek						

Water Quality Standards for Surface Waters of the State as per Chapter 173-201A WAC

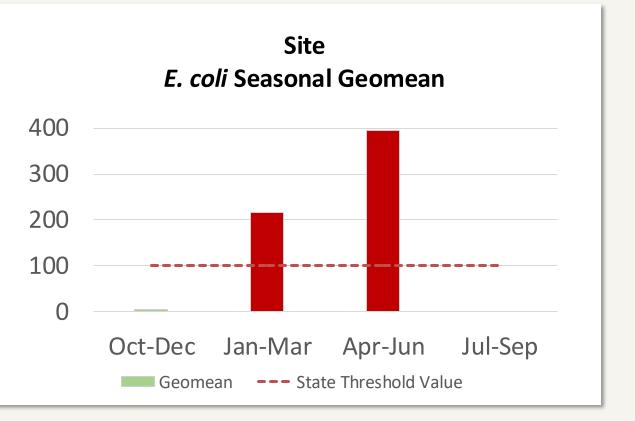
Salmonid	Temperature	7-day average of the daily maximum temperatures no
spawning, rearing		greater than 17.5°C (63.5°F)
and migration		
	Dissolved Oxygen (DO)	8.0 mg/L minimum*
	рН	Between 6.5 and 8.5
	Turbidity	Shall not exceed 5 NTU over background when
		background turbidity is 50 NTU or less
Primary Contact	E. Coli	E. coli organism levels within an averaging period must
Recreation	(Most Probable Number 🤇	not exceed a geometric mean value of 100 CFU or MPN
	MPN)	per 100 mL, with not more than 10 percent of all
		samples (or any single sample when less than ten sample
		points exist) obtained within the averaging period
		exceeding 320 CFU or MPN per 100 mL.

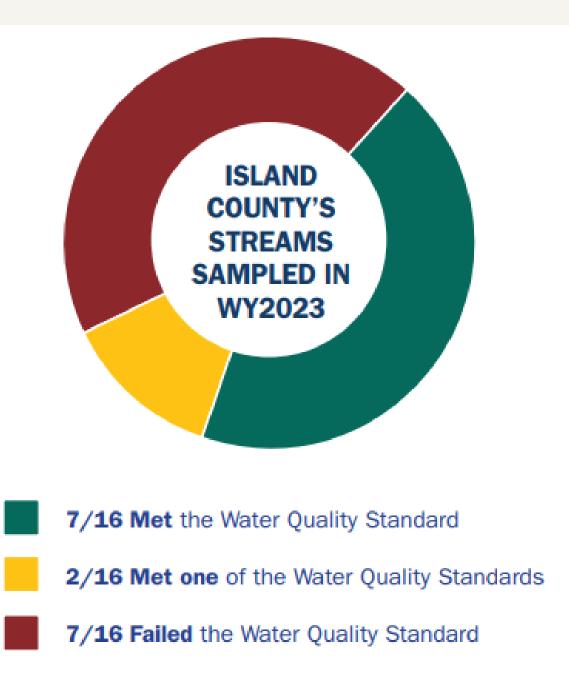
### How was Stream Health Defined?

Streams were evaluated based on Part 1 and Part 2 of the state standard for *E. coli*:

Averaging Period
 Geomeans < 100 MPN/100</li>
 mL

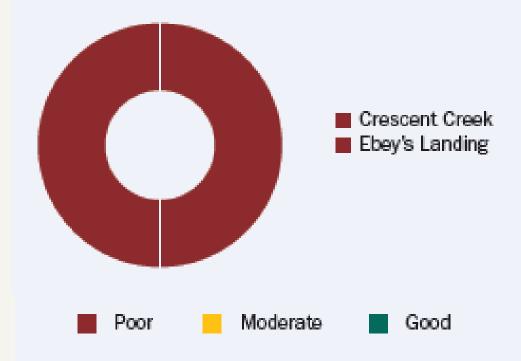
- Less than 10 percent of samples > 320

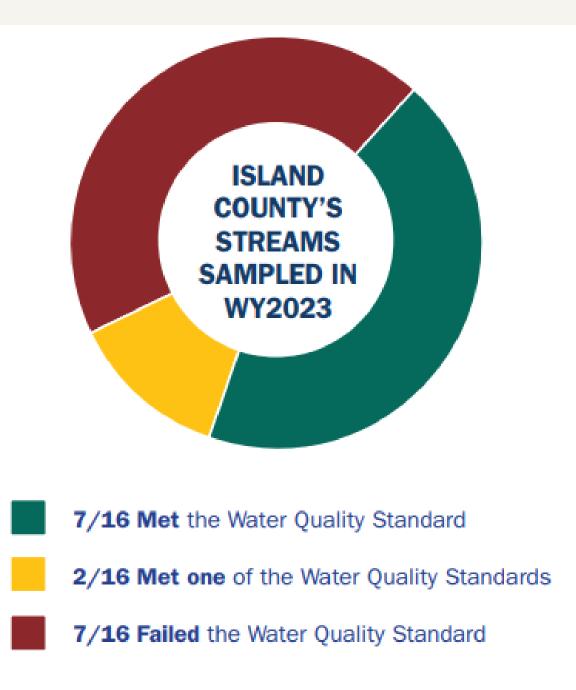




Water Quality Status of Island County Streams (2023)

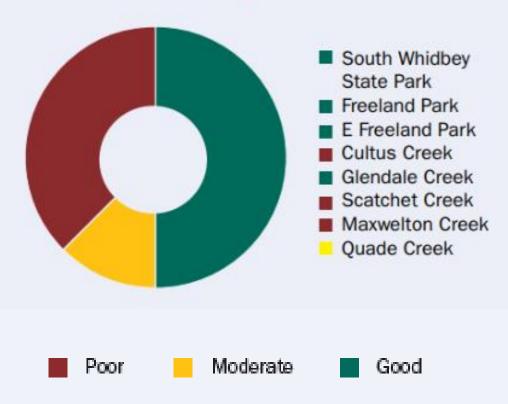
### **North Whidbey Area Results**

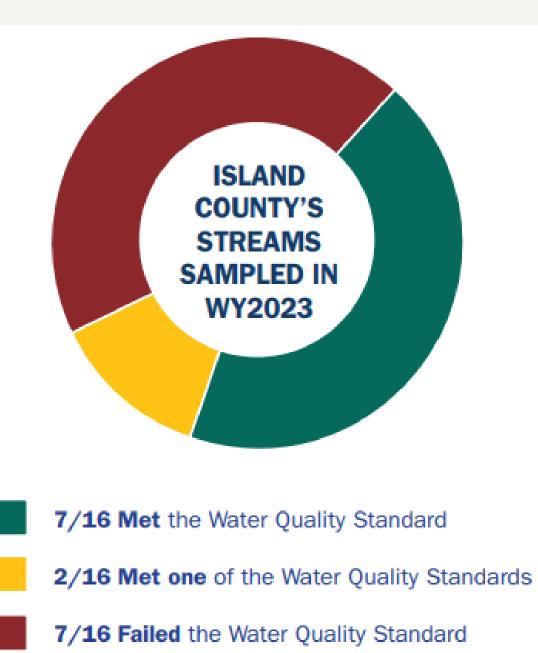




Water Quality Status of Island County Streams (2023)

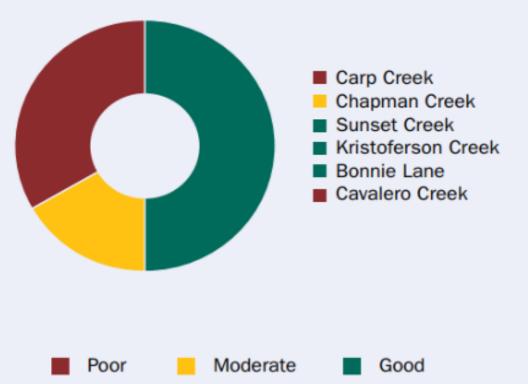
### **South Whidbey Area Results**





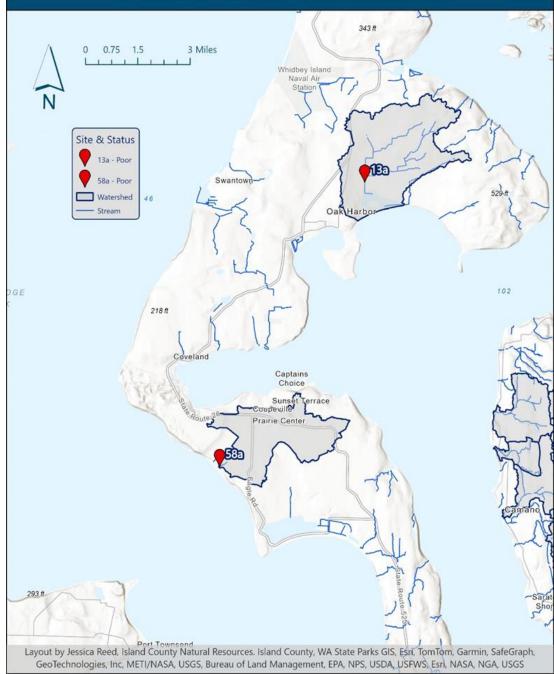
Water Quality Status of Island County Streams (2023)

### **Camano Island Results**



## WY2023 North Whidbey Results

Island County Watershed & Sample Site Map Water Year 2023 (WY17) - North Whidbey







## Water quality was <u>Poor</u> based on data collected in WY2023

Crescent Creek Summary Statistics \*Cells filled with light green meet state standards

Six Year Trends	2018	2019	2020	2021	2022	2023	State
Water Quality Status	Moderate	Moderate	Good	Poor	Moderate	Poor	Standard
Pt 1: Max GM FC / E. coli	FC 430	FC 155	FC 49	502	119	395	<100
Pt 2:% Exceedances	10	13	14	50	0	33	<10

\*\* WY2018-WY2020, WQI used to evaluate water quality status, WY2021-WY2023 E. coli data used \*\*

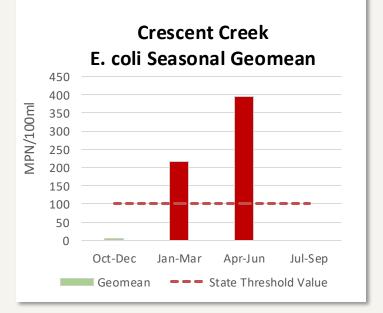


**33%** of samples exceeded 320 (5 out of 15 samples)

Crescent Creek



Stream Flow: 8 out of 12 months Discharge Max: 11 cfs, Min: Dry

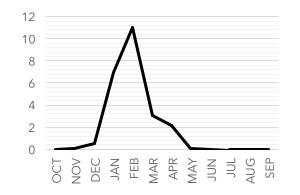


Levels high Jan - June; site failed both parts of the state standard.



Photo: Northwest Treaty Tribes

#### Crescent Creek Monthly Discharge (cfs)





Ebey's Landing

## Water quality was **Poor** based on data collected in WY2023

**Ebey's Landing Summary Statistics** \*Cells filled with light green meet state <u>standards</u>

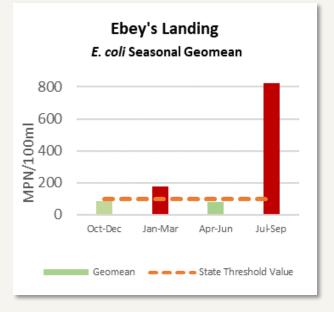
Six Year Trends	2018	2019	2020	2021	2022	2023	State Standard
Water Quality Status	Poor	Poor	Moderate	Good	Poor	Poor	Standard
Pt 1: Max GM FC / E. coli	FC 130	FC 702	FC 190	57	263	821	<100
Pt 2: % Exceedances	24	18	38	0	39	43	<10

\*\* WY2018-WY2021, WQI used to evaluate water quality status, WY2022-WY2023 only E. coli data used \*\*





43% of samples exceeded 320 (10 of 23 samples)



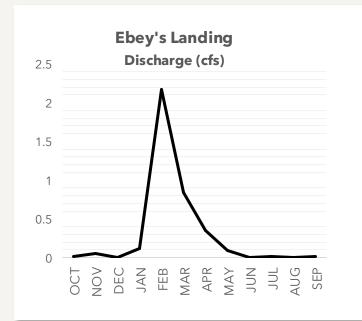
Levels high Jan - Mar and Jul - Sep; site failed both parts of state standard.



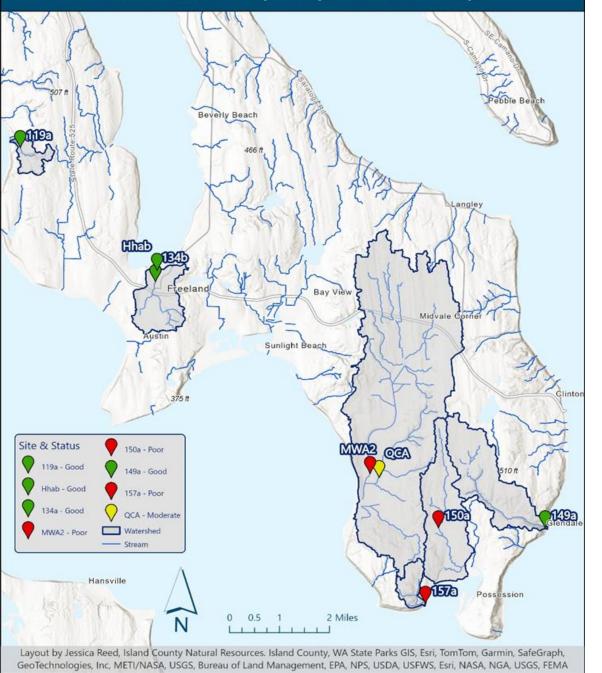


Flow

### Stream Flow: Year-round Discharge Max: 2.2 cfs, Min: 0.01



Island County Watershed & Sample Site Map Water Year 2023 (WY17) - South Whidbey



WY2023 South Whidbey Results





## Water quality was **Poor** based on data collected in WY2023

Six Year Trends	2018	2019	2020	2021	2022	2023	State
Water Quality Status	NA	NA	Moderate	NA	NA	Poor	Standard
Pt 1: Max GM FC / E. coli	NA	NA	FC 855	NA	NA	761	<100
Pt 2: % Exceedances	NA	NA	25	NA	NA	50	<10

\*\* WY2018-WY2021, WQI used to evaluate water quality status, WY2022-WY2023 only E. coli data used \*\*





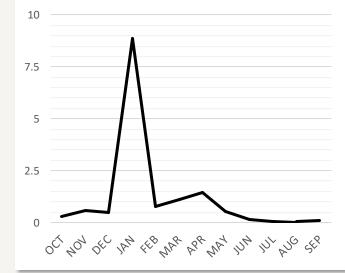
### **50%** of samples exceeded 320 (*12 of 24 samples*)





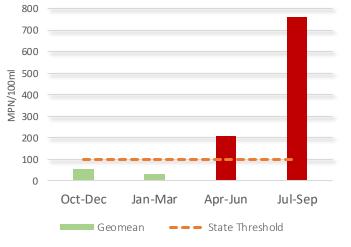
### Stream flow: Year-round Discharge: Max 8.87 cfs, Min: 0.03

Cultus Creek Stream Discharge (cfs)





Cultus Creek *E. coli* Seasonal Geomean



High hits Apr - Sep. Failed Part 1 and 2 of standard.



## Water quality was <u>Poor</u> based on data collected in WY2023

Six Year Trends	2018	2019	2020	2021	2022	2023	State
Water Quality Status	Moderate	Moderate	Moderate	Poor	Poor	Poor	Standard
Pt 1: Max GM FC / E. coli	FC 183	FC 225	FC 150	151	461	463	<100
Pt 2: % Exceedances	4	7	8	13	33	46	<10

\*\* WY2018-WY2021, WQI used to evaluate water quality status, WY2022-WY2023 only E. coli data used \*\*



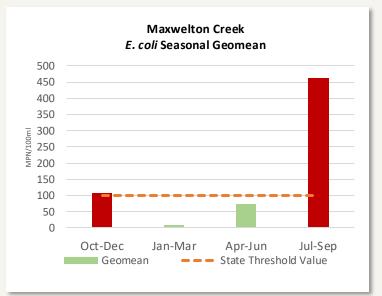


### 46% of samples exceeded 320 (12 of 26 samples)

# Maxwelton Creek

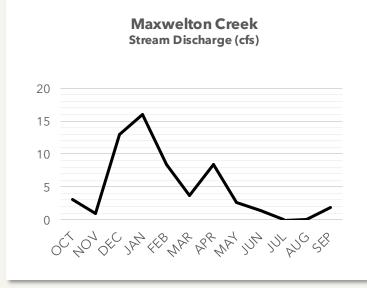


Stream Flow: Year-round Discharge: Max 8.87 cfs, Min: 0.03



Levels high Oct - Dec and Jul - Sep; site failed both parts of the standard.











## Water quality was **Poor** based on data collected in WY2023

Six Year Trends	2018	2019	2020	2021	2022	2023	State
Water Quality Status	Moderate	Poor	Moderate	Moderate	Moderate	Poor	Standard
Pt 1: Max GM FC / E. coli	FC 364	FC 398	FC 553	205	245	321	<100
Pt 2: % Exceedances	32	33	36	7	6	19	<10





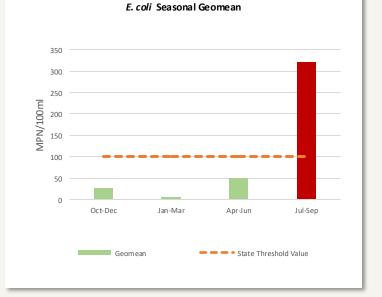
**17%** of samples exceeded 320 (3 out of 17 samples)

Scatchet Creek



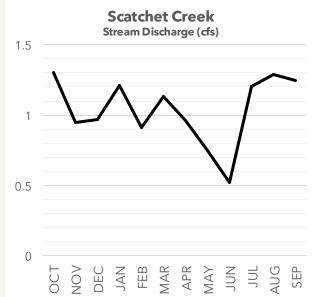


Stream flow: Year-round Discharge: Max 1.3 cfs, Min: 0.52



Annual lower than WY2022, but High hits Jul - Sep. Failed Part 1 and 2 of standard.







# WY2023 Camano Island Results

Island County Watershed & Sample Site Map Water Year 2023 (WY17) - Camano 0 0.5 1 2 Miles N Long Beach Site & Status 55a - Poor 69a - Moderate 70a - Good 74a - Poor 82a - Good KC1 - Good Watershed Stream McK Camp Diana Baby Island reenbank and County Natural Resources. Island County, WA State Parks GIS, Esri, TomTom, Garmin, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS, Esri, NASA, NGA, USGS







## Water quality was **Poor** based on data collected in WY2023

Six Year Trends	2018	2019	2020	2021	2022	2023	State
Water Quality Status	Moderat e	Poor	Good	Good	Good	Poor	Standard
Pt 1: Max GM FC / <i>E.</i> <i>coli</i>	FC 55	FC 210	FC 65	46	55	274	<100
Pt 2: % Exceedances	0	32	0	0	0	22	<10

\* WY2018-WY2021, WQI used to evaluate water quality status, WY2022-WY2023 only E. coli data used \*\*





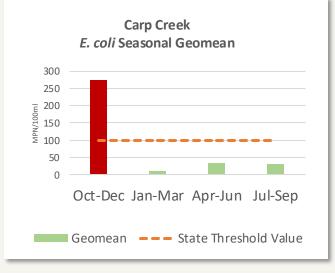
E. coli

**22%** of samples exceeded 320 (4 out of 18 samples)

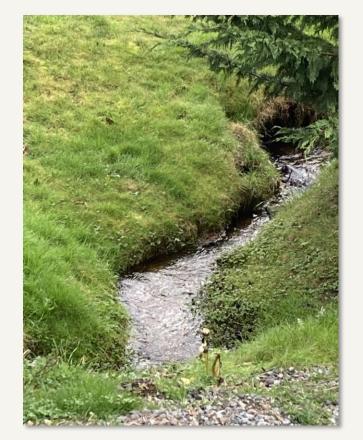


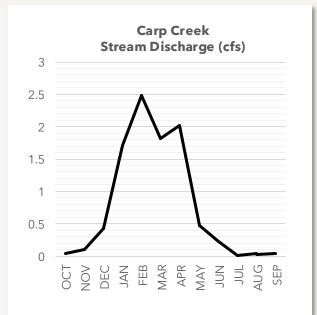
Flow

Stream flow: Year-round Discharge: Max 2.49 cfs, Min: 0.01



High hits during Oct-Dec. Failed Parts 1 and 2 of standard.











## Water quality was **Poor** based on data collected in WY2023

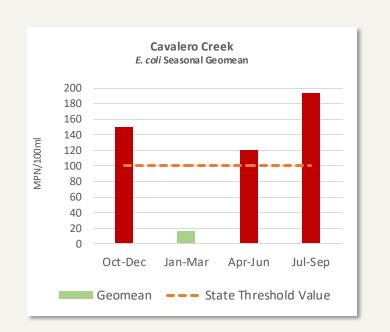
Six Year Trends	2018	2019	2020	2021	2022	2023	State
Water Quality Status	Moderate	Moderate	Moderate	Good	Moderate	Poor	Standard
Pt 1: Max GM FC / E. coli	116	289	143	64	120	193	<100
Pt 2: % Exceedances	0	14	7	0	0	18	<10

\*\* WY2018-WY2021, WQI used to determine water quality status, WY2022-WY2023 only E. coli data used \*\*





**19%** of samples exceeded 320 (5 out of 27 samples)



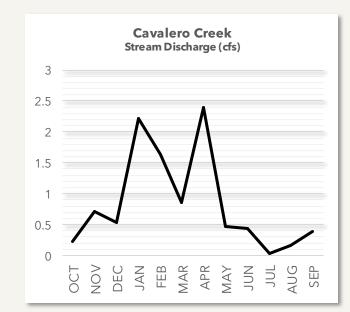
High hits Oct – Dec and Apr – Sep. Failed Parts 1 and 2 of standard.





**Flow** 

Stream flow: Year-round Discharge: Max 2.39 cfs, Min: 0.03



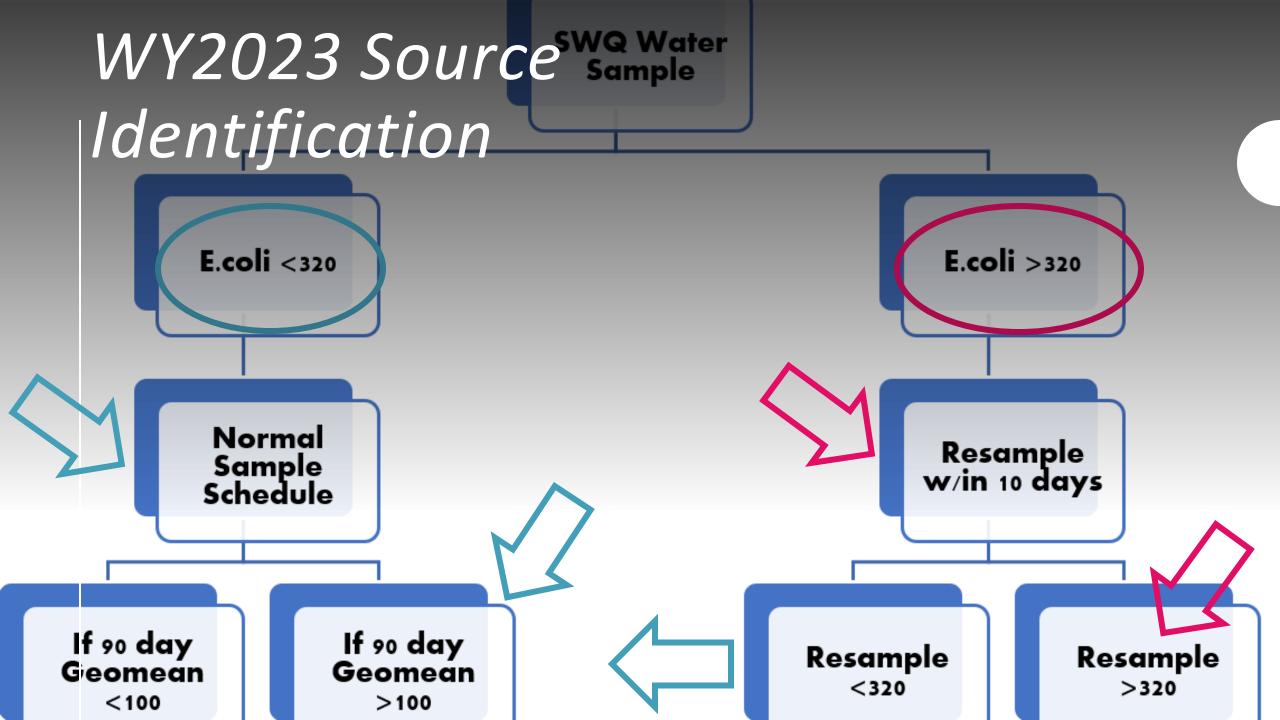
Surface Water Quality Monitoring Program (SWQMP) components:

Priority Watersheds, Core and Rotational Site Sampling

Source Identification (SID) Sampling

**Reconnaissance Sampling** 

**Effectiveness Sampling** 



## Adaptive Management Action Team



## Source ID and AMAT Successes

- Strawberry Point
- Cultus Creek
- Maxwelton Creek
- Maple Grove



Surface Water Quality Monitoring Program (SWQMP) components:

Priority Watersheds, Core and Rotational Site Sampling

Source Identification (SID) Sampling

**Reconnaissance Sampling** 

#### **Effectiveness Sampling**







## WY2023 Reconnaissance Sampling Activities

Surface Water Quality Monitoring Program (SWQMP) components:

Priority Watersheds, Core and Rotational Site Sampling

Source Identification (SID) Sampling

**Reconnaissance Sampling** 

**Effectiveness Sampling** 



# *Effectiveness monitoring plan*

#### **Continued focus on...**

- Culvert replacements
- Salmon Restoration Efforts
- 13a Crescent Creek
- KC1 Kristoferson Creek (upstream and downstream)
- 74a Cavalero Creek
- 38a Arrowhead Ave





# *Effectiveness monitoring plan*

#### **Future Plans**

- Livingston Bay Estuary restoration
- Cavalero outfall
- Swantown restoration
- Race Road Salmon restoration
- Fish passage culverts
- Utsalady culvert replacements

## WY2023 Education and Outreach Activities

Whidbey 101 Camano 101 Crescent Harbor Elementary Whidbey Island Fair Penn Cove Water Festival Sno-Isle Library Nurture Nature series



















How can we ensure people have access to healthy and productive shorelines?



### Requires Regular and Consistent Surface Water Quality Monitoring

A CONTRACTOR OF STREET



#### Continued SWQ Goals

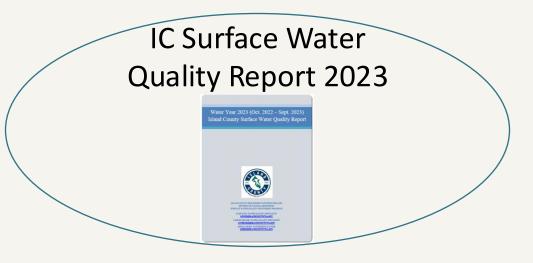
For more information and details about surface water quality and our monitoring programs...

#### Island County ICGeo Maps

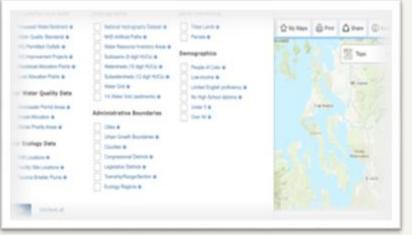


#### Washington State EIM Database

	Department of Ecology				EIM Search		Environmental Information Management System		
iear	ch Home	All	Studies	Locations	Results	Groundwater	Help Center	Contact EIM	EIM News
avk	gation Op	tions:							
۹	Edit Search	h Criteria	CI Ma	p All 🛛 🗣 Do	wnload All				
DE AI	RCH CRITERS								
Stu	dy Name (	contains	island c	ounty					
Stu	dy Name (	containe	island c	ounty					
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tu	dy List udies Study ID G0300092	Locati	ions St	Parameters	Agriculture Island Cou	al BMP Implement	Monitoring Pro	gram	



#### WA State Dept. of Ecology Water Quality Atlas





## Thank you!

### Questions?