

LCRWC Agenda Slides 7/13/21

- Capacity Budget Update
- Seining Grounds, Columbia River Estuary
- Lamprey Website
- Clatskanie Floodplain Initiative (NFWF Funding Opportunity)
- WQ Report Summary



LCRWC Capacity Budget

Item	Unit Type	Unit Number	Unit Cost	OWEB Funds	External Cash	External In-Kind	Total Costs
Salaries, Wages and Benefits							
Coordinator Salary	Hours	2810	\$39.00	\$109,590	\$0	\$0	\$109,590
Category Sub-total				\$109,590	\$0	\$0	\$109,590
Contracted Services							
Marketing and outreach - newspaper, website, social media, mailings, etc	Each	1	\$1,800.00	\$1,800	\$0	\$0	\$1,800
IT Maintenance	Each	1	\$1,000.00	\$0	\$0	\$1,000	\$1,000
Administration Services	Each	1	\$12,000.00	\$12,000 *	\$0	\$0	\$12,000
Category Sub-total				\$13,800	\$0	\$1,000	\$14,800
Travel and Training							
mileage	Miles	3000	\$0.56	\$1,680	\$0	\$0	\$1,680
lodging for conferences and meetings	Days	6	\$96.00	\$576	\$0	\$0	\$576
Conference/meeting registration	Each	2	\$600.00	\$1,200	\$0	\$0	\$1,200
Board Training	Each	1	\$1,000.00	\$1,000	\$0	\$0	\$1,000
Category Sub-total				\$4,456	\$0	\$0	\$4,456
Materials and Supplies							
Office Supplies	Each	1	\$1,200.00	\$1,200	\$0	\$0	\$1,200
Computer Upgrades	Each	1	\$1,800.00	\$1,800	\$0	\$0	\$1,800
Board Meeting Expenses	Each	6	\$100.00	\$600	\$0	\$0	\$600
Category Sub-total				\$3,600	\$0	\$0	\$3,600
Equipment							
			\$0	\$0	\$0	\$0	\$0
Category Sub-total				\$0	\$0	\$0	\$0
Other							
Use of office space	Months	24	\$50.00	\$0	\$0	\$1,200	\$1,200
Category Sub-total				\$0	\$0	\$1,200	\$1,200
Modified Total Direct Cost Amounts				\$131,446	\$0	\$2,200	\$133,646
Total				\$131,446	\$0	\$2,200	\$133,646

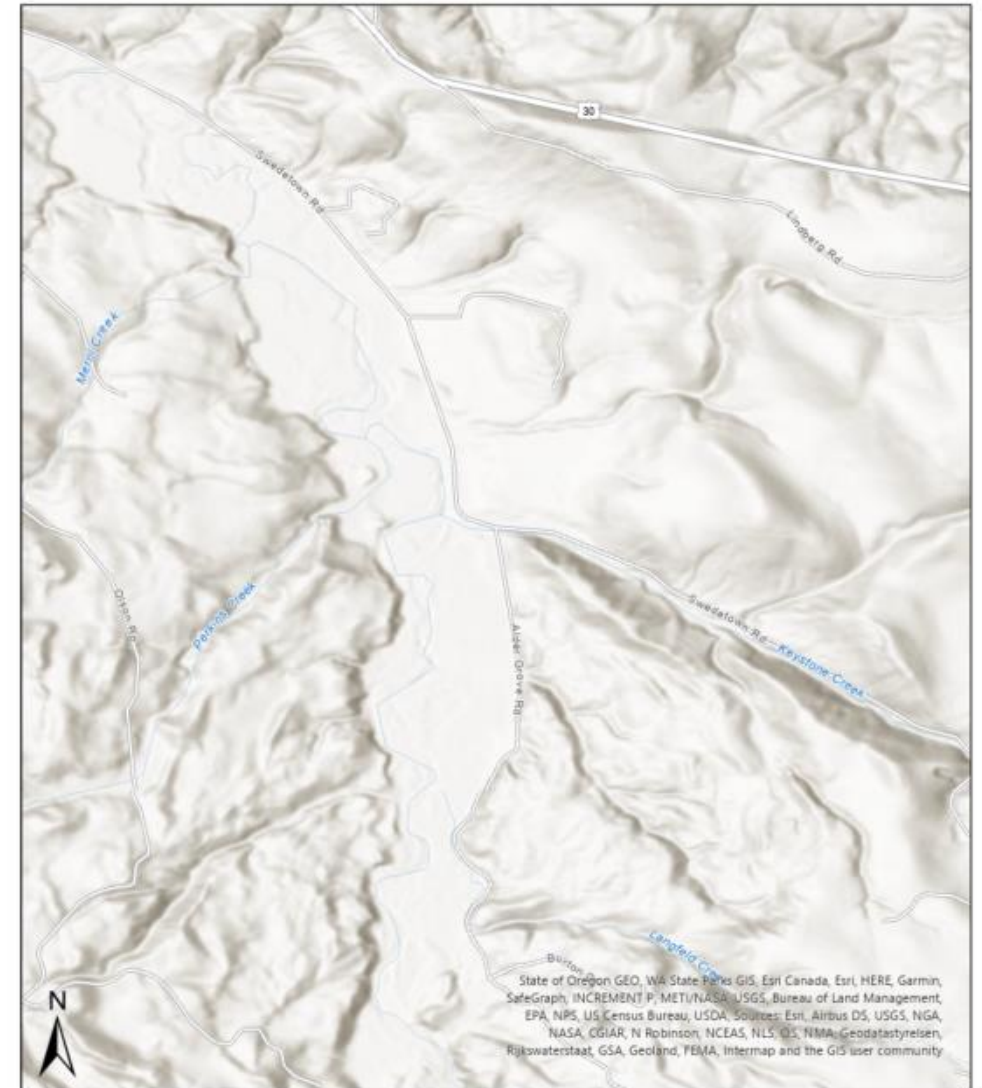
Seining Grounds Video

- https://youtu.be/B2_pNYy8h38

Clatskanie Floodplain

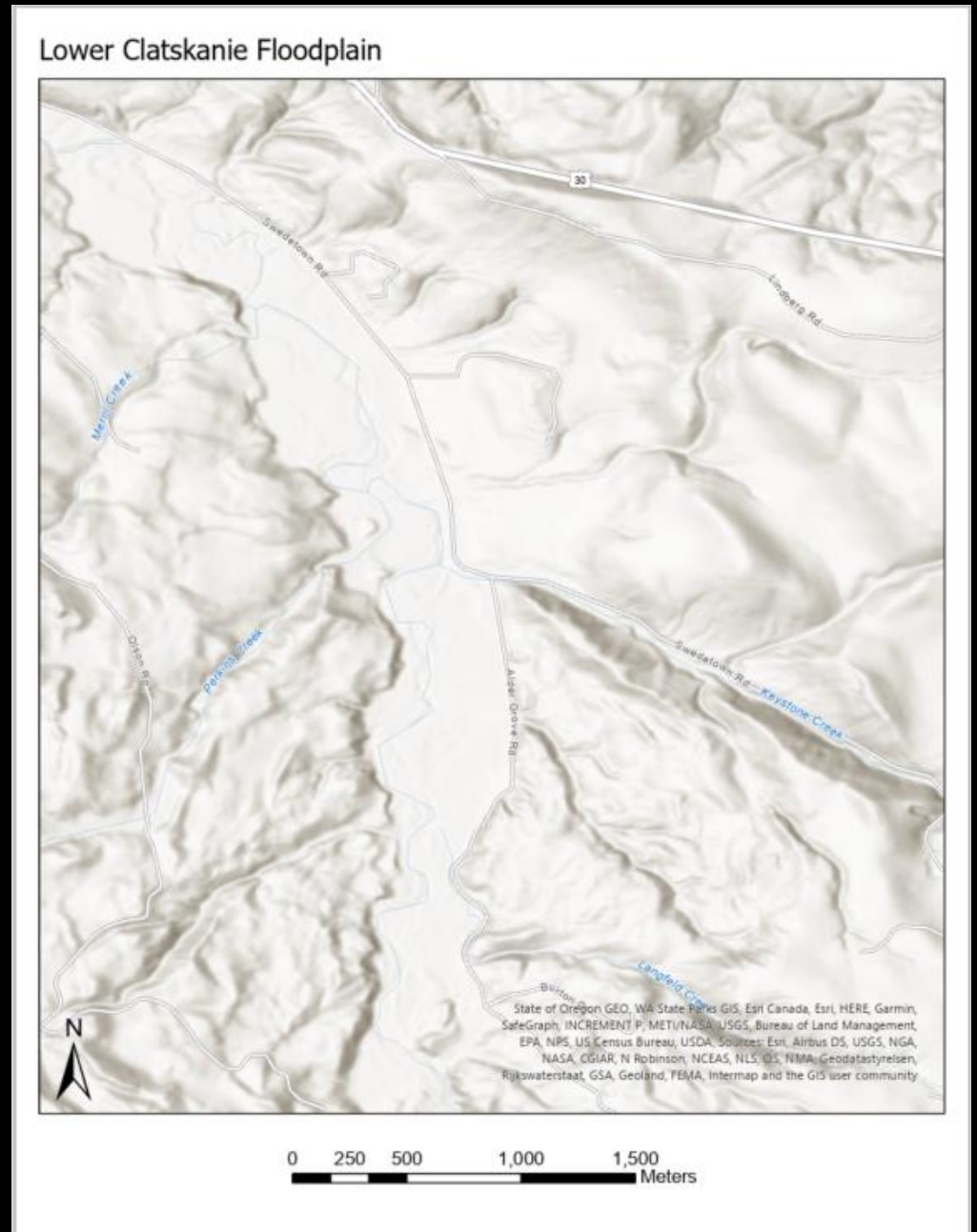


Lower Clatskanie Floodplain

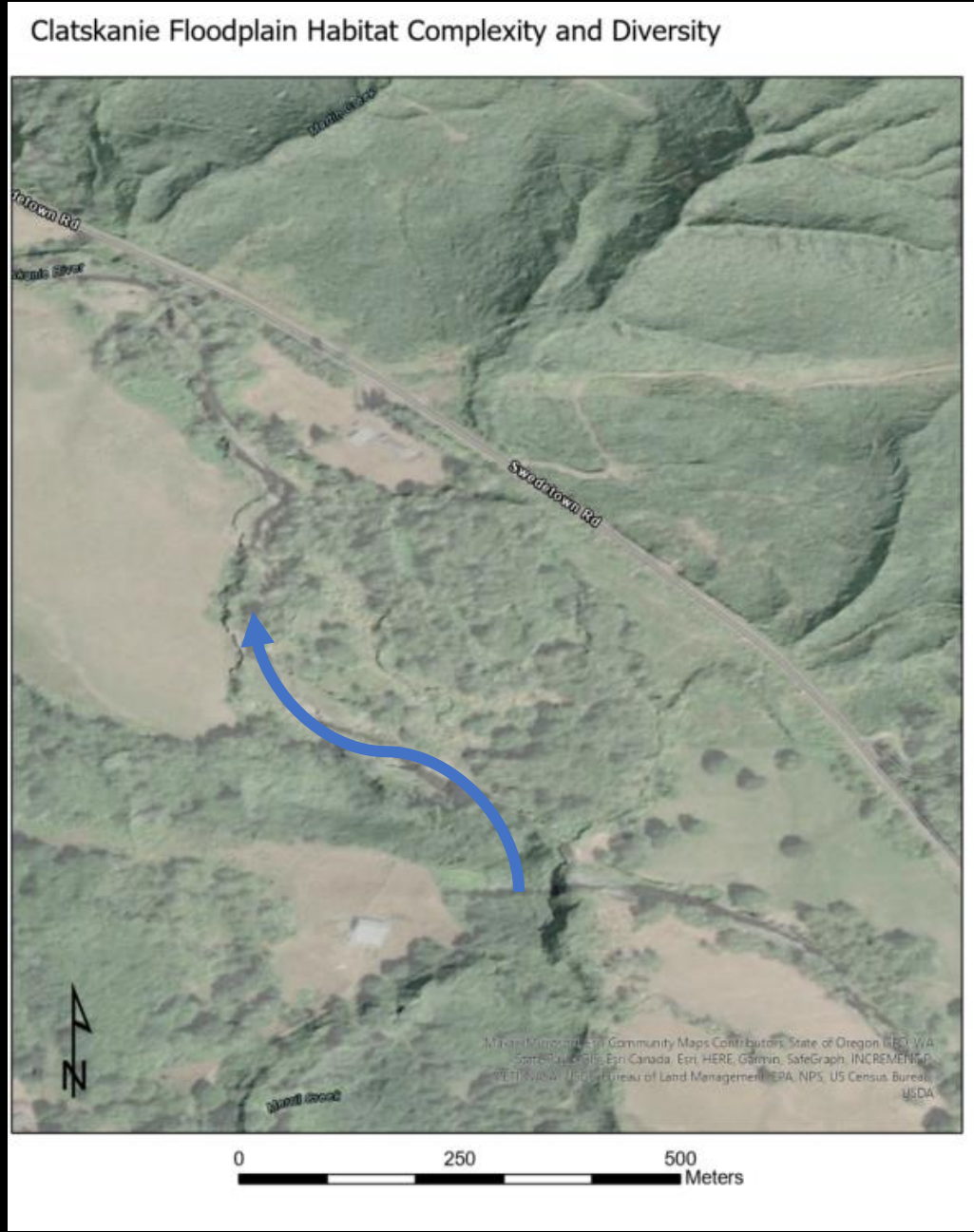


0 250 500 1,000 1,500
Meters

Clatskanie Floodplain



Clatskanie Floodplain



Lamprey Passage Website

- [Lamprey — LOWER COLUMBIA RIVER WATERSHED COUNCIL](#)

WQ Monitoring Report

**WATER QUALITY MONITORING REPORT
COLUMBIA COUNTY SOIL AND WATER CONSERVATION DISTRICT
WATER QUALITY TRENDS MONITORING PROGRAM
2017-2020**

PREPARED FOR



Columbia County SWCD
35285 Millard Road
St. Helens, OR 97051
Phone: (503) 693-5700

PREPARED BY



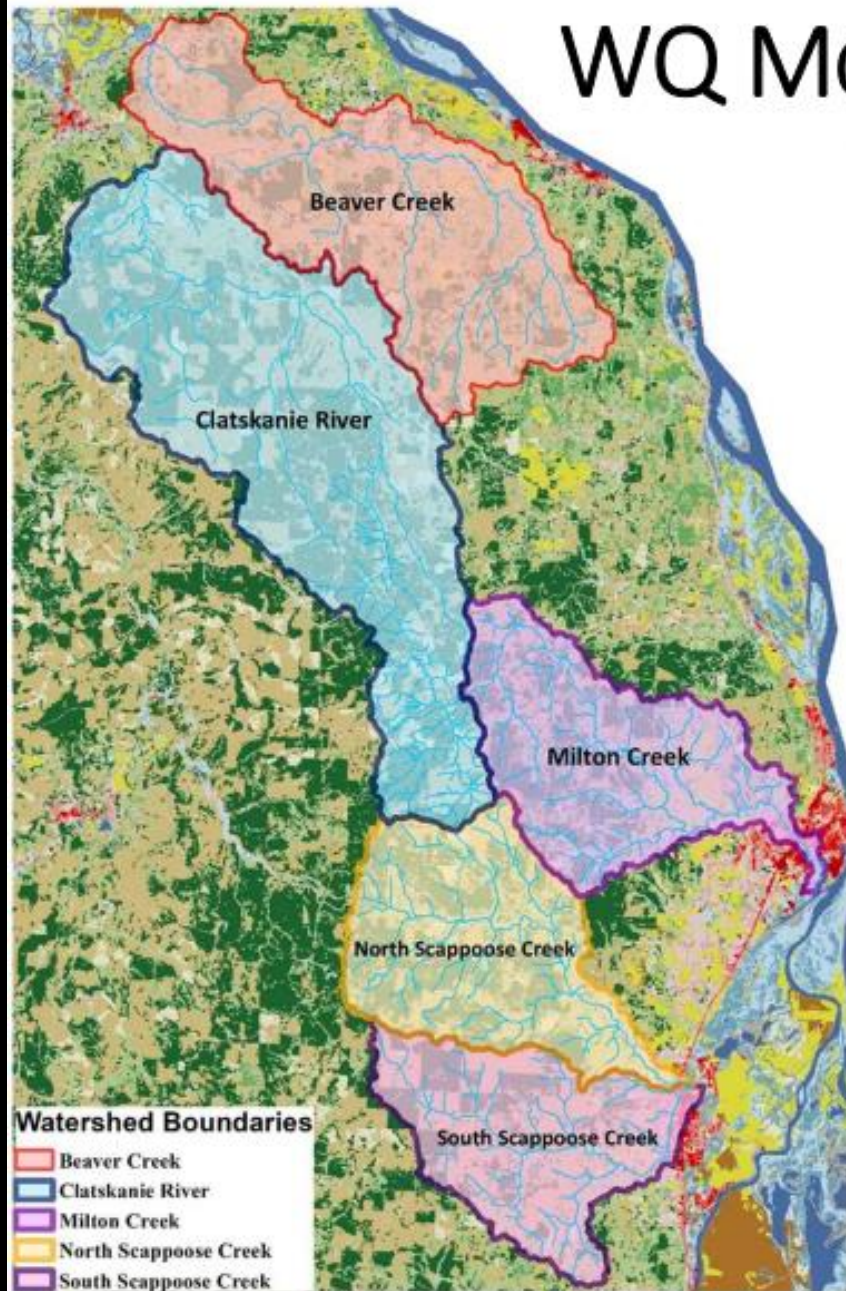
Lower Columbia Estuary Partnership
811 SW Naito Pkwy #410, Portland, OR 97204
Phone: (503) 226-1565
www.estuarypartnership.org

Project Goal

- *Create a long-term trend monitoring network to characterize ambient water quality conditions for temperature, bacteria, and turbidity in the Clatskanie River, Beaver Creek, Milton Creek, and Scappoose River watersheds*



WQ MONITORING METRICS



Grab Samples

✓ *E. Coli* Bacteria

- Monthly samples were collected during the summer at a few sites in 2017 and this was expanded to year long monthly sampling and summer bi-monthly sampling at all locations in fall 2019 - Current.

✓ Turbidity

- Monthly samples collected at all sites 2017-Current

✓ Conductivity

- Monthly samples collected starting in 2018-Current

✓ pH and Dissolved Oxygen

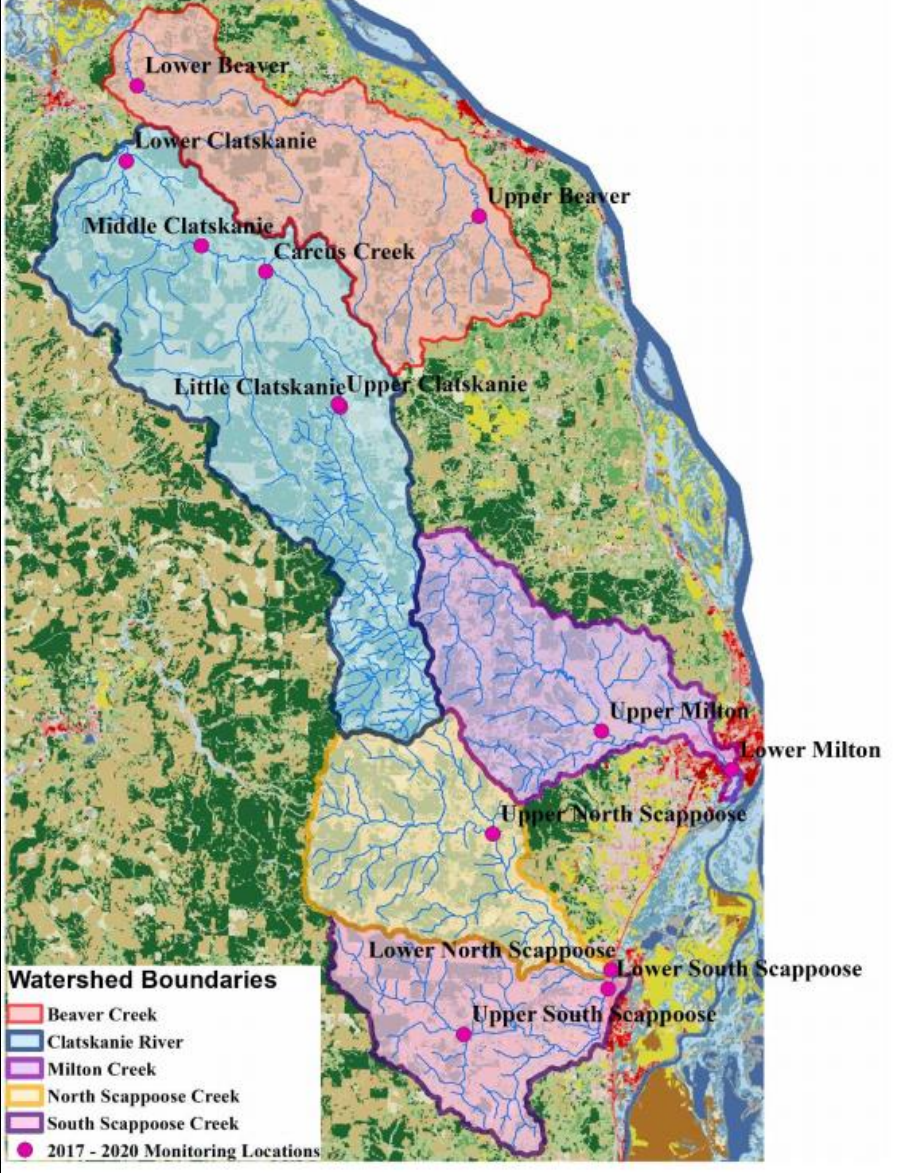
- Monthly Samples collected Starting February 2021 – Current

Continuous Monitoring

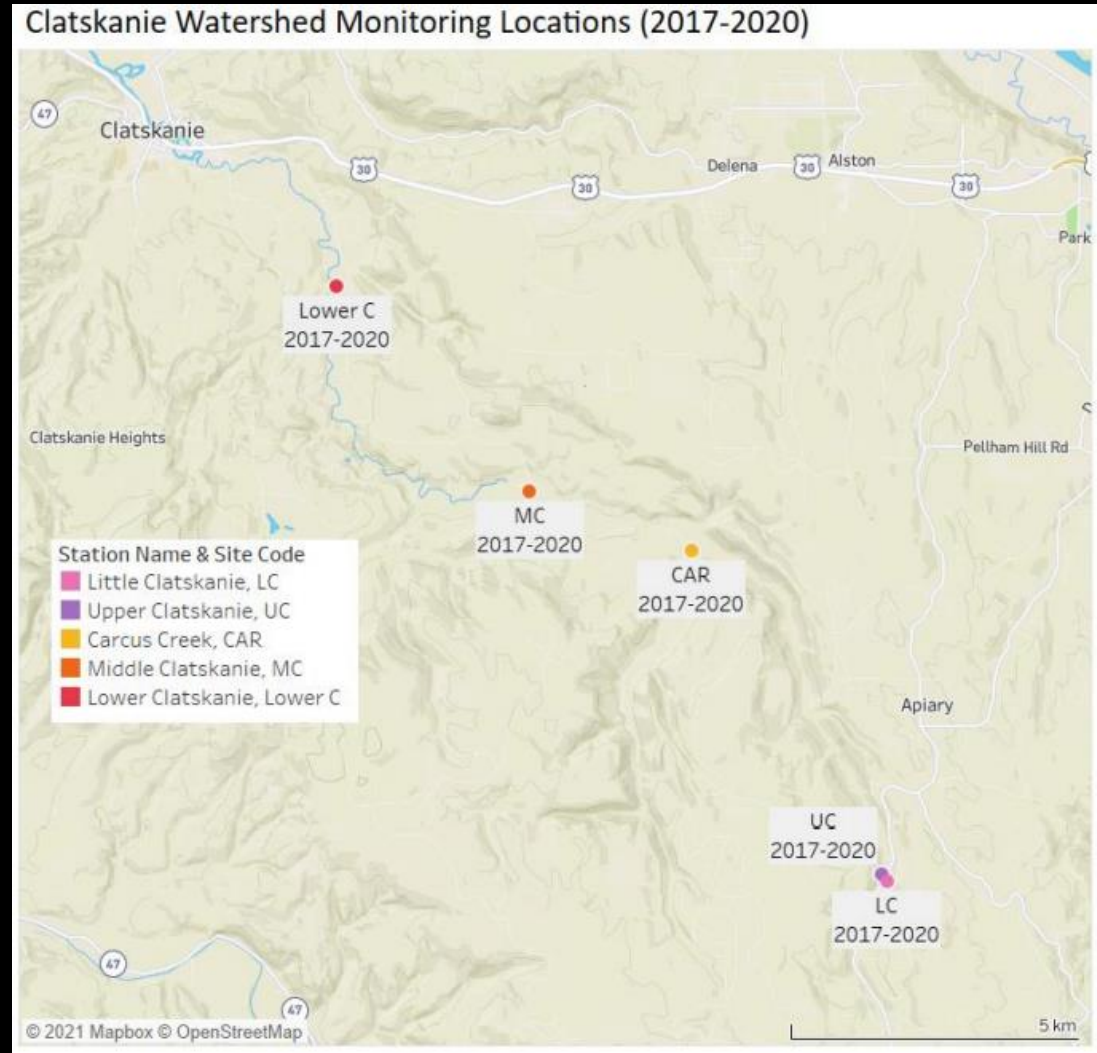
✓ Temperature Monitoring

- Half-hourly logging of stream temperatures from 2017-Current, however data gaps have occurred due to equipment failure or loss

Monitoring Site Locations



Monitoring Site Locations-Clatskanie River Watershed



Data Summary-Clatskanie River Watershed



WATER QUALITY THRESHOLDS

Monitoring is done following a Sample and Analysis Plan (SAP) and data collected is publicly available through the ODEQ :

Water Quality Parameter	Equipment	Accuracy
<i>E. coli</i> Bacteria Counts	Lab Analysis	(+/-) 0.5 log (MPN/100ml)
Turbidity	Hach Turbidity Meter	(+/-) 5% of standard value (NTU)
Stream Water Temperature	HOBO Data Logger and NIST Digital Thermometer	(+/-) 0.5 °C

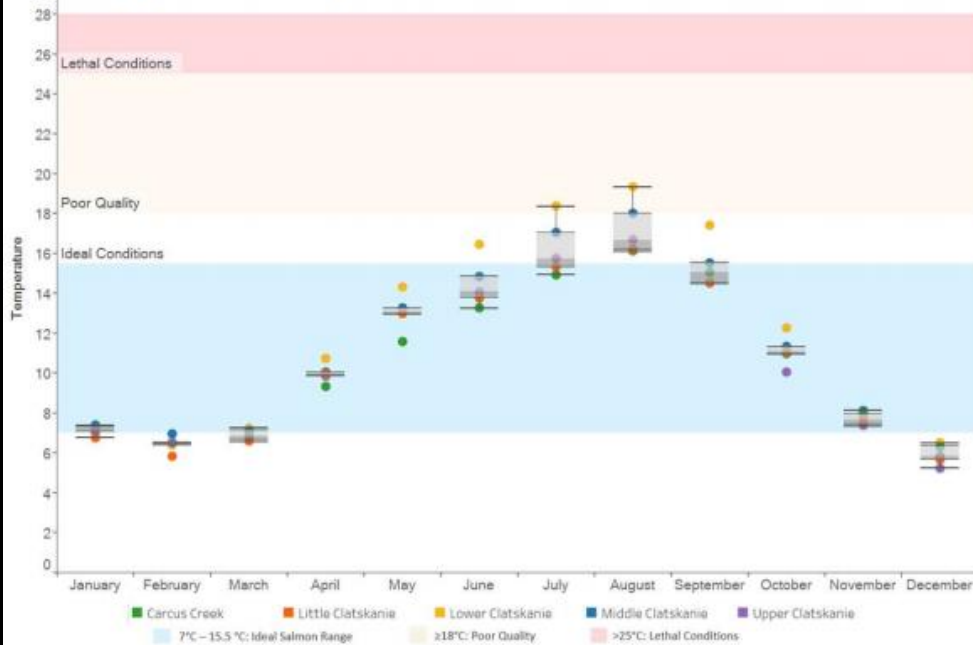
Parameters	Need	Acceptable Range	Source
<i>E. coli</i> Bacteria	General	<406 MPN/100ml (DEQ) or <235 MPN/100ml (EPA)	DEQ regulatory standards (OAR 340-041), EPA recommended Criteria
Turbidity	Salmon Habitat	<10 NTU	University of Wisconsin Extension 2006
Temperature	Salmon Habitat: Year-round	18°C 7-day moving average maximum (7dMAM)	DEQ regulatory standards for salmonid rearing habitat
Temperature	Salmon Habitat: Healthy Adult	7.2-15.6°C (>25 °C Lethal)	OWEB Water Quality Technical Manual
Temperature	Salmon Habitat: Healthy Juvenile	12.2-13.9°C (>25 °C Lethal)	OWEB Water Quality Technical Manual

More: <https://www.estuarypartnership.org/sites/default/files/2020-03/Kidd2011WaterQualityStandardsSummary.pdf>

Data Summary-Temperature, Clatskanie River Watershed

CLATSKANIE RIVER WATERSHED: TEMPERATURE

Monthly 7dMAM: 2017-2020



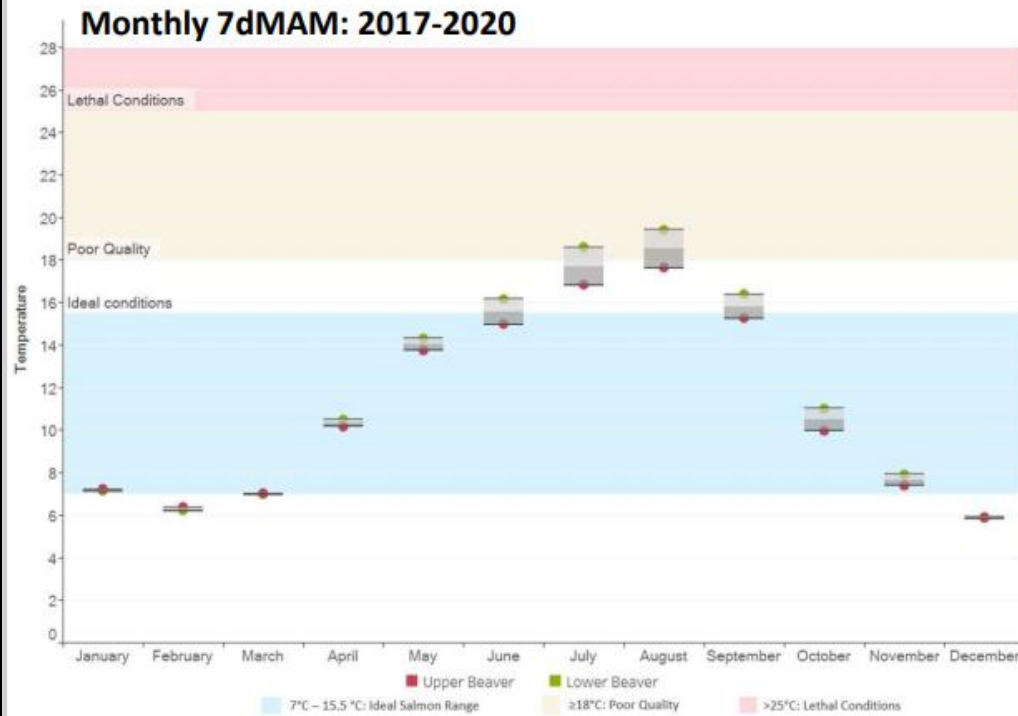
- Warmest conditions observed in Middle and Lower Clatskanie monitoring locations
- Lower Clatskanie having most days in July and August above the 18 °C threshold
- Middle Clatskanie having about half the days of July and August above 18 °C in the summer

7dMAM Temp (°C) for August (2017-2020)



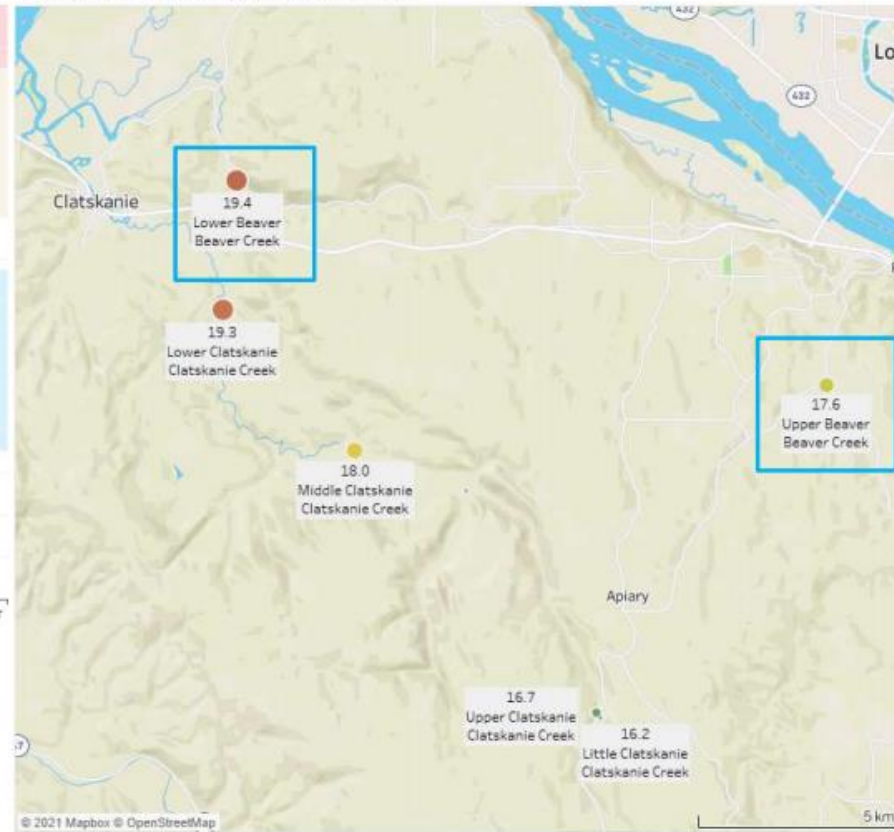
Data Summary-Temperature, Beaver Creek Watershed

BEAVER CREEK WATERSHED: TEMPERATURE



- Warmest conditions observed in Lower Beaver Creek
- Lower Beaver Creek having most days in July and August above the 18 °C threshold
- Upper Beaver Creek remaining below the 18 °C threshold for most of July and August

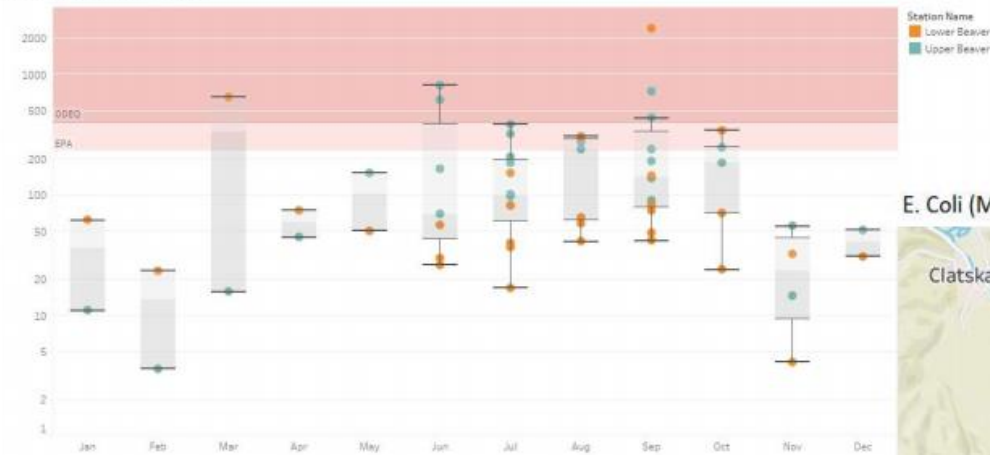
7dMAM Temp (°C) for August (2017-2020)



Data Summary-E. Coli, Beaver Creek Watershed

BEAVER CREEK WATERSHED: *E. COLI* BACTERIA

Beaver Creek Watershed Monthly *E. coli* (MPN/100 ml) Levels
2017-2020 Grab Samples



E. Coli (MPN/100 ml) Levels - Max 90 Day Geometric Mean



Beaver Creek Watershed

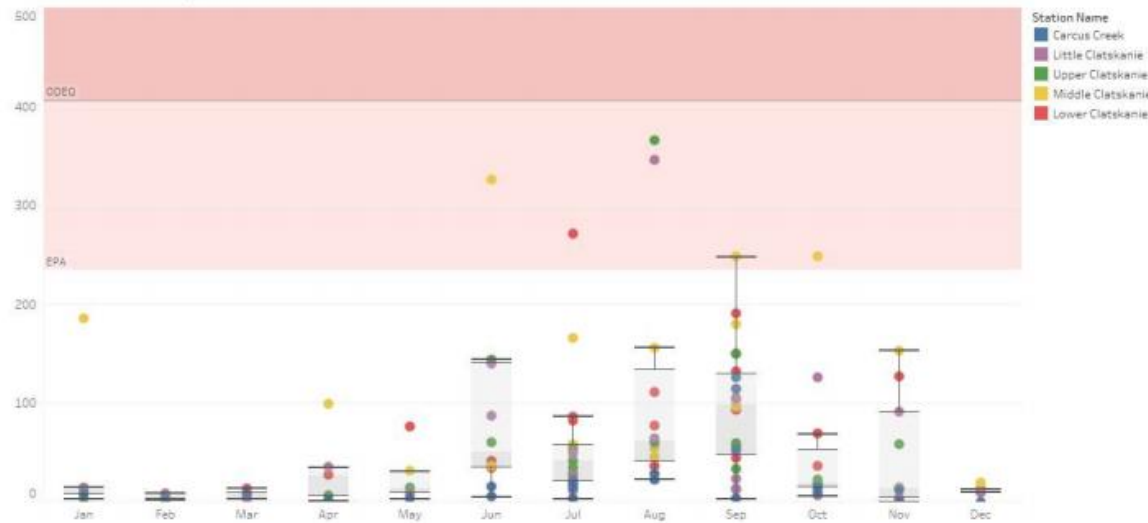
- Generally, the greatest *E. Coli* Levels have been observed in Upper Beaver Creek
- Greater than the geometric mean threshold of (126 MPN/100 ml) for **June-October of 2019** and **all year in 2020**
- Lower Beaver stays consistently below all thresholds, with only a few occurrences above EPA and DEQ daily limits



Data Summary-E. Coli, Clatskanie River Watershed

CLATSKANIE RIVER WATERSHED: *E. COLI* BACTERIA

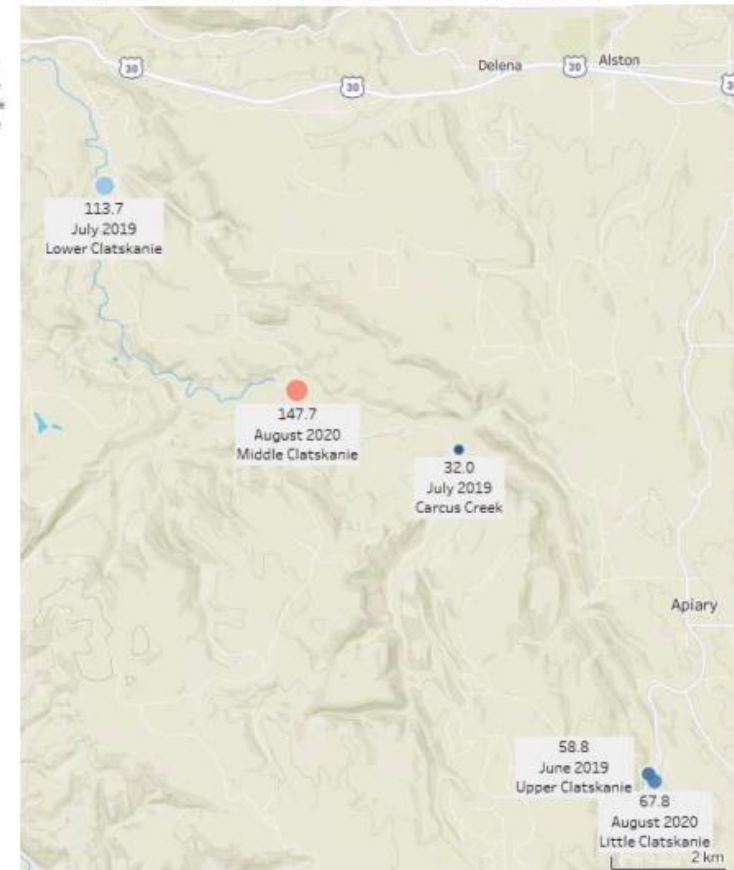
Clatskanie Watershed Monthly *E. coli* (MPN/100 ml) Levels
2017-2020 Grab Samples



Clatskanie Watershed

- Middle Clatskanie consistently experienced the greatest *E. Coli* levels including a geometric mean > 126 MPN/100 ml June-Sept (2019), and July-Nov (2020)
- All locations except Carcus Creek had at least one sample > 235 MPN/100 ml (EPA Threshold)

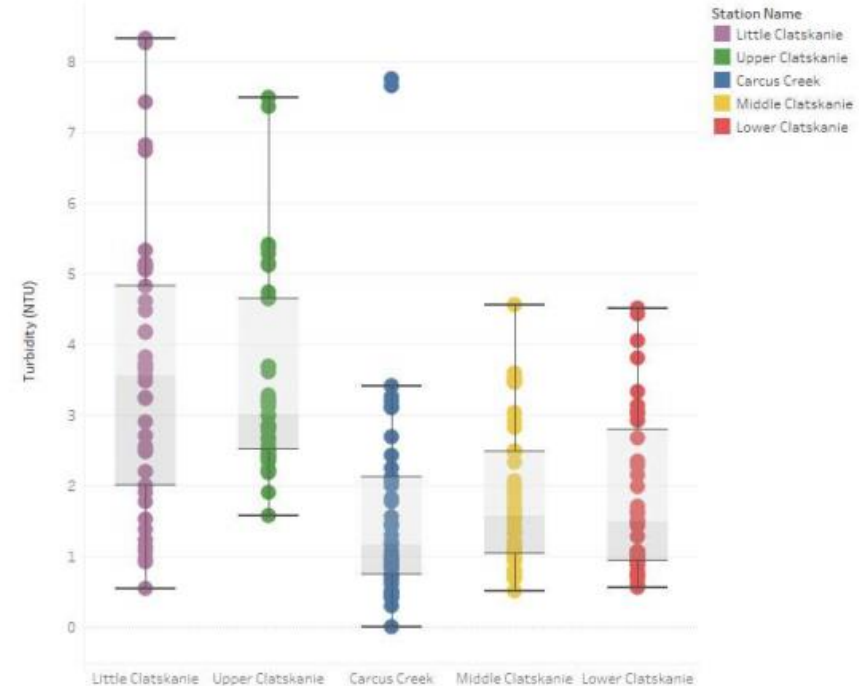
E. Coli (MPN/100 ml) Levels - Max 90 Day Geometric Mean



Data Summary-Turbidity, Clatskanie River Watershed

CLATSKANIE RIVER WATERSHED: TURBIDITY

Turbidity (NTU) 2017-2020 Grab Samples (Overall Mean)



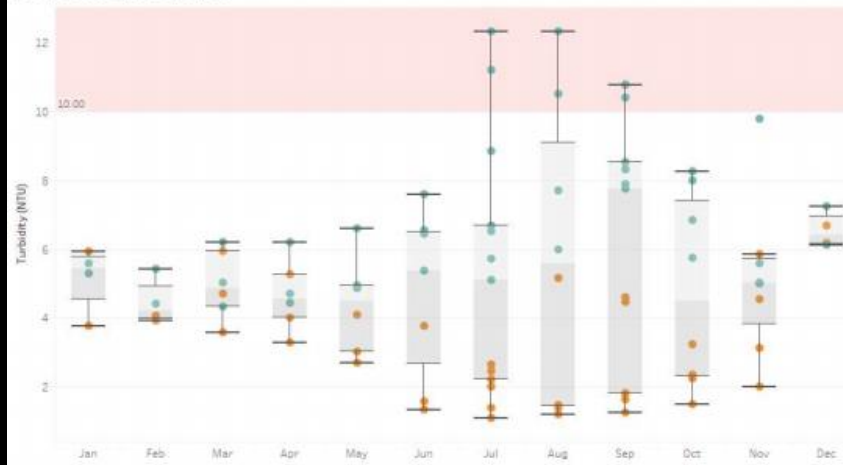
Clatskanie Watershed

- No occurrences > 10 NTU observed
- Upper reach monitoring locations, Little and Upper Clatskanie, had highest turbidity levels in the watershed
- Carcus creek generally had the lowest levels

Data Summary-Turbidity, Beaver Creek Watershed

BEAVER CREEK WATERSHED: TURBIDITY

Beaver Creek Watershed Monthly Turbidity (NTU)
2017-2020 Grab Samples



Station Name
Upper Beaver
Lower Beaver

Turbidity (NTU) 2017-2020 Grab Samples (Overall Mean)



Beaver Creek Watershed

- Greatest Turbidity levels observed in Upper Beaver Creek, with occurrences of >10 NTU July-September
- Lower Beaver Creek generally found below 6 NTU