

Oldman Creek Water Quality Data

Open Water Sampling Season 2019



CreekWatch is a program of the non-profit RiverWatch Institute of Alberta, specializing in community-based environmental monitoring and award-wining science education for twenty-five years. This 2019 Report shares our findings with the public, governments, and water quality professionals to collaboratively work towards the base-line monitoring and improvement of our urban creeks in Alberta.

This annual CreekWatch Report examines the state of Sherwood Park's Oldman Creek based on the water quality data collected with the assistance of community-based environmental monitoring groups and water quality technicians. You can view a snapshot of data in the attached graphs generated by the RiverWatch online and responsive **graphing tool**. Thank you to all of our dedicated volunteers and funders who have made this sampling season possible – we couldn't have done it without you!

Oldman Creek By-the-Numbers April – October 2019

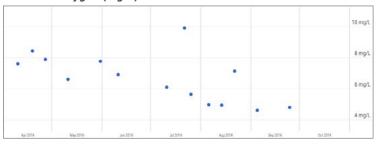
Number of Sampling Events	14
Number of Data Points	158
Number of Stormwater Outfalls	1

Oldman Creek Water Quality Data April – October 2019 Median Values

Parameter	Median Value
Dissolved Oxygen (mg/L)	6.8
Water Temperature (°C)	15
Turbidity (NTU)	10
рН	7.7
Ammonia Nitrogen (mg/L)	0.13
Phosphorus (mg/L)	0.55
Chloride (mg/L)	100



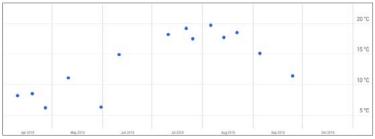
Dissolved Oxygen (mg/L)



Median 6.8

Dissolved oxygen concentrations are measured using either a YSI probe or a Hach kit with a drop-by-drop titration to show a change in water color until totally clear. Dissolved oxygen is tested during daylight while macrophyte and algae photosynthesis is underway and generating oxygen.

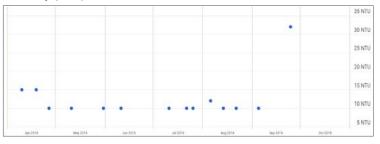
Water Temperature (°C)



Median 15

Water temperatures are measured using a thermometer placed in flowing, shallow water near shore.

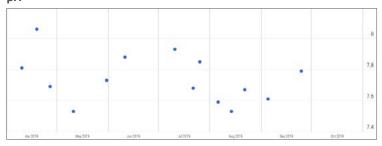
Turbidity (NTU)



Median 1

Turbidity is measured by slowly pouring water into a graduated cylinder marked with "Nephelometric Turbidity Units" or NTU's.

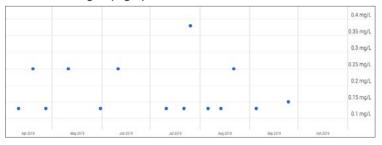
рΗ



Median 7.

Creek pH is measured using Hach kits that compare a change in water color.

Ammonia Nitrogen (mg/L)

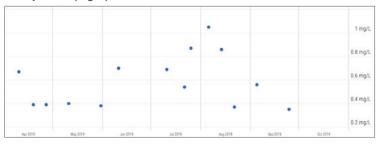


Median 0.1

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 $Ammonia\ nitrogen\ concentrations\ are\ measured\ by\ dipping\ Hach\ test\ strips\ into\ water\ and\ noting\ the\ color\ change.$

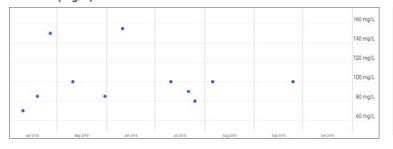
Phosphorus (mg/L)



Median

Orthophosphate concentrations are measured with Hach kits that compare a change in water color.

Chloride (mg/L)



Median 100

Chloride concentrations are measured using Hach kits with a drop-by-drop titration to show a change in water color from yellow to orange.

To review data with our online graphing tool, visit <u>riverwatch.ab.ca/science/data</u>

