# Kinley Creek Monitoring Sites Monitoring Data Summary for January 10<sup>th</sup>, 2019 – February 13<sup>th</sup>, 2019

#### Data Gaps

- The specific conductivity probe became unsubmerged at the KINA station from January 13<sup>th</sup>-19<sup>th</sup>. The specific conductivity data during this period was removed from the dataset.
- The KINB station experienced fouling turbidity from February 11<sup>th</sup>-12<sup>th</sup>. This brief period of turbidity data was removed from the dataset.

#### SCDHEC Standards

- Both Kinley Creek monitoring stations recorded pH readings that were within the SCDHEC acceptable range of 6 to 8.5.
- The KINA station recorded an average DO concentration of 9.8 mg/L and the KINB station recorded an average DO concentration of 10.2 mg/L, which are well above the SCDHEC daily average standard of 5 mg/L.
- The instantaneous minimum DO values recorded at the KINA and KINB stations were 7.4 mg/L and 7.8 mg/L, respectively, which are both above the SCDHEC instantaneous minimum standard of 4.0 mg/L.

#### Storm Events

- The rain gauge along Kinley Creek recorded 5 storm events during this deployment period that resulted in 2.9 inches of precipitation.
- Both KINA and KINB stations recorded typical response patterns to the recorded storm events during this monitoring period.
- The maximum antecedent dry time since the last significant precipitation event (at least 0.1 inches) was approximately 10.1 days in the Kinley Creek watershed which occurred prior to the February 3<sup>rd</sup> storm event.

#### Potential Illicit Discharges and Abnormal Events

- A sudden increase in stage on January 11<sup>th</sup> and then an abrupt decrease in stage on January 13<sup>th</sup> was observed at both KINA and KINB, likely associated with activity occurring at the Lake Quail Valley dam upstream of the KINA station. This period of elevated stage coincided with an increase in turbidity and a decrease in specific conductivity.
- At the KINA station, brief periods of increased turbidity values occurred several times during January 27<sup>th</sup>-February 5<sup>th</sup>.

#### Flow Measurements

• No flow measurements were taken in the Kinley Creek watershed during this deployment period.





### Kinley Creek A (January 10, 2019 -- February 13, 2019)



Note: Data gaps appear when the sonde is removed for calibration or when the flow depth is below the sensors

### Kinley Creek A (January 10, 2019 -- February 13, 2019)

# **Explanation of Statistics:**

MINIMUM OBSERVED	The minimum of the values recorded by the datasonde in 15 minute intervals.
MAXIMUM OBSERVED	The maximum of the values recorded by the datasonde in 15 minute intervals.
MEDIAN OBSERVED	The median of all the values recorded by the datasonde in 15 minute intervals.
MEAN OBSERVED	The average of all the values recorded by the datasonde in 15 minute intervals.
STANDARD DEVIATION	The standard deviation of all the values recorded by the datasonde in 15 minute intervals.

### Grab Sample Data:

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	1/10/2019							
	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	8:40	218						
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: This sample was collected during dry weather conditions.





#### Kinley Creek B (January 10, 2019 -- February 13, 2019)



### Kinley Creek B (January 10, 2019 -- February 13, 2019)

# **Explanation of Statistics:**

MINIMUM OBSERVED	The minimum of the values recorded by the datasonde in 15 minute intervals.
MAXIMUM OBSERVED	The maximum of the values recorded by the datasonde in 15 minute intervals.
MEDIAN OBSERVED	The median of all the values recorded by the datasonde in 15 minute intervals.
MEAN OBSERVED	The average of all the values recorded by the datasonde in 15 minute intervals.
STANDARD DEVIATION	The standard deviation of all the values recorded by the datasonde in 15 minute intervals.

### Sampled Data:

Analyte (units)	Sample 1		Sample 2		Sample 3		Sample 4	
	1/10/2019							
	Time	Result	Time	Result	Time	Result	Time	Result
Escherichia coli (MPN/100mL)	9:00	322						
Total Suspended Solids (mg/L)								
Total Phosphorus (mg/L)								
Total Nitrogen (mg/L)								

Note: This sample was collected during dry weather conditions.