

Water Action Volunteers Stream Monitoring Data Recording Form - Version 2015.1.4

| | |
|---------------------|---|
| Station Info | WAV Station Number*: <u>10039 200</u> Date*: <u>08/30/2023</u> Time*: <u>11:15</u> (AM) or PM |
| | WAV Station Name*: <u>Rice Creek at Bear Lake Road</u> |
| | Team Member Name(s)*: <u>Michele Jasik + LYN Kirschner</u> |

*Denotes required field

| | | |
|----------------|--|--|
| Weather | Weather: (circle one) <u>Sunny</u> Partly Sunny Cloudy Rain Thunderstorm Snow | Sampling Date: (circle one) <u>Primary</u> Safety Other |
| | Weather over past two days: <u>rain at night sun/part sun day</u> | |
| | Current Stream Condition : (circle one) <u>Normal</u> Flooding Dry Stagnant Frozen Other | |
| | Observations: <u>less macroinvertebrates than previous times</u> | |

| | | | | | | | |
|----------------------------------|---|--|--|--------------------------------------|----------------|--------------|----|
| WAV Monitoring Parameters | Parameters Tested | Your Results | | | | Units | |
| | Air Temperature | 22.5 | | | | °C | |
| | Water Temperature | 20 | | | | °C | |
| | Dissolved Oxygen (D.O.) Sampling Method | Circle One: | <u>Hach Kit</u> | LaMotte Kit | YSI 550A Meter | Other: _____ | |
| | D.O. mg/L | No. of Titration Drops: <u>17</u> | No. of Plastic Measuring Tubes: <u>2</u> | Dissolved Oxygen Content: <u>8.5</u> | mg/L | | |
| | D.O. % Saturation | 95 | | | | % | |
| | pH | | | | | - | |
| | Transparency | Tube Length (circle one) | | Trial #1 | Trial #2 | Average | - |
| | | 60 cr | 100 cm | <u>120 cm</u> | <u>120</u> | <u>120</u> | cm |
| | Specific Conductance | ECTestr reading: _____ ms/cm or µS/cm (circle units displayed) | | | | | |
| Chloride Sample | Collected? Y ___ N <u>X</u> Point/Outfall Number: _____ | | | | | | |
| Total Phosphorus Sample | Collected? Y ___ N <u>X</u> Point/Outfall Number: _____ | | | | | | |

| | | | | | | | | | | |
|------------------------------|--|------------------------|------------|--|--|--|--|-----------------------------------|--|--|
| Streamflow Monitoring | Streamflow was monitored this sampling event (select one): Yes <u>X</u> No _____ | | | | | | | Length Assessed: <u>20</u> ft | | |
| | If No, why not? _____ | | | | | | | Stream Width*: <u>23.8</u> ft | | |
| | Stream Depth Measurements | | | | | | | | *If stream ≤ 20 ft. wide, measure depth every foot across the width. If stream is > 20 ft. wide, measure depth at 20 equal intervals across the entire width | |
| | Depth Conversion Chart | | | | | | | | | |
| | Point | Depth | Point | Depth | Ft/In | 10 ^{ths} Ft | Ft/In | 10 ^{ths} Ft | | |
| | | 10 ^{ths} Feet | | 10 ^{ths} Feet | | | | | | |
| | <u>1</u> | <u>0</u> | <u>11</u> | <u>0.9</u> | <u>3/8-7/8</u> | <u>0.05</u> | <u>6^{3/8}-6^{7/8}</u> | <u>0.55</u> | | |
| | <u>2</u> | <u>0.6</u> | <u>12</u> | <u>0.8</u> | <u>1-1^{1/2}</u> | <u>0.1</u> | <u>7-7^{3/8}</u> | <u>0.6</u> | | |
| | <u>3</u> | <u>0.9</u> | <u>13</u> | <u>0.7</u> | <u>1^{5/8}-2</u> | <u>0.15</u> | <u>7^{1/2}-8</u> | <u>0.65</u> | | |
| | <u>4</u> | <u>1.1</u> | <u>14</u> | <u>0.7</u> | <u>2^{1/8}-2^{5/8}</u> | <u>0.2</u> | <u>8^{1/8}-8^{5/8}</u> | <u>0.7</u> | | |
| <u>5</u> | <u>1.0</u> | <u>15</u> | <u>0.7</u> | <u>2^{3/4}-3^{1/4}</u> | <u>0.25</u> | <u>8^{3/4}-9^{1/4}</u> | <u>0.75</u> | | | |
| <u>6</u> | <u>0.9</u> | <u>16</u> | <u>0.9</u> | <u>3^{3/8}-3^{7/8}</u> | <u>0.3</u> | <u>9^{3/8}-9^{7/8}</u> | <u>0.8</u> | | | |
| <u>7</u> | <u>0.9</u> | <u>17</u> | <u>0.8</u> | <u>4-4^{3/8}</u> | <u>0.35</u> | <u>10-10^{3/8}</u> | <u>0.85</u> | | | |
| <u>8</u> | <u>1.0</u> | <u>18</u> | <u>0.9</u> | <u>4^{1/2}-5</u> | <u>0.4</u> | <u>10^{1/2}-11</u> | <u>0.9</u> | | | |
| <u>9</u> | <u>1.0</u> | <u>19</u> | <u>1.0</u> | <u>5^{1/8}-5^{5/8}</u> | <u>0.45</u> | <u>11^{1/8}-11^{5/8}</u> | <u>0.95</u> | | | |
| <u>10</u> | <u>1.0</u> | <u>20</u> | <u>1.2</u> | <u>5^{3/4}-6^{1/4}</u> | <u>0.5</u> | <u>11^{3/4}-12</u> | <u>1.0</u> | | | |
| | | | | | | | | Velocity Float Trials | | |
| | | | | | | | | Trial Number | Time (Seconds) | |
| | | | | | | | | <u>1</u> | <u>16.97</u> | |
| | | | | | | | | <u>2</u> | <u>23.09</u> | |
| | | | | | | | | <u>3</u> | <u>21.44</u> | |
| | | | | | | | | <u>4</u> | <u>21.06</u> | |
| | | | | | | | | Velocity Correction Factor | | |
| | | | | | | | | Circle the bottom type | | |
| | | | | | | | | Rough | 0.8 | |
| | | | | | | | | <u>Smooth</u> | 0.9 | |

| | |
|---|------------------------------|
| Monitoring Equipment Calibration | DO Meter: Yes _____ No _____ |
| | pH Meter: Yes _____ No _____ |
| | ECTestr Yes _____ No _____ |

| Expected Ranges for Parameters ☺ | |
|----------------------------------|----------|
| H2O Temperature: | 12-30 °C |
| Dissolved Oxygen: | 3-7 mg/L |
| D.O % Saturation: | 90-110 % |
| pH: | 6.0-9.0 |
| Transparency Tube: | ≤120 cm |

| | |
|--|--|
| Equipment Cleaning and Disinfection | Boots/Waders/Footwear and other monitoring materials cleaned and disinfected? Yes _____ No _____ |
|--|--|

Thermistor

Serial #: _____ Type: HOBO (long grey) TIDBIT (yellow) TIDBIT V2 (orange)

Activity Performed (circle one): Deployment Retrieval Monthly Check

Deployment/Retrieval Time: _____ AM or PM Monthly Check - thermistor submersed? Yes ___ No ___

Describe location of thermistor if you deployed it today, or action(s) taken if thermistor was not submersed:

Biotic Index (monitored in May and late September/early October)

****You may use the Key to Macroinvertebrate Life in the River to help you identify macroinvertebrates**

Group 1: These are sensitive to pollutants. Circle each animal found.



Stonefly Larva



Dobsonfly Larva



Alderfly Larva

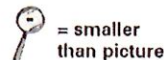
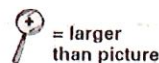


Water Snipe Fly Larva

No. of group 1 animals circled:



Relative Size Key:



Key Aquatic Invasive Species (AIS)

Circle AIS shown below if you think you found any:

Rusty Crayfish



Asian Clam



New Zealand Mudsnail

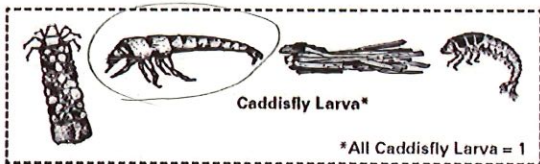


Faucet Snail



If found, collect voucher or photo and report to DNR or WAV Coordinator.

Group 2: These are semi-sensitive to pollutants. Circle each animal found.



Caddisfly Larva*

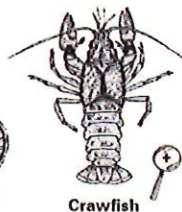
*All Caddisfly Larva = 1



Dragonfly Larva



Water Penny

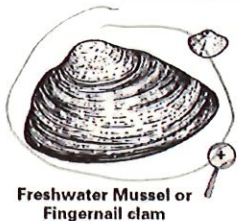


Crawfish

No. of group 2 animals circled:



Crane Fly Larvae



Freshwater Mussel or Fingernail clam



Mayfly Larva



Damselfly tail (side view)

Damselfly Larva



Riffle Beetle Larva*



Riffle Beetle Adult*

*All Riffle Beetles = 1

Group 3: These are semi-tolerant of pollutants. Circle each animal found.



Black Fly Larva



Non-Red Midge Larva



Snails: Orb or Gilled (right side opening)



*All Snails = 1



Amphipod or Scud

No. of group 3 animals circled:



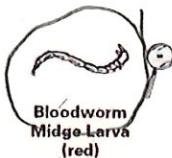
Group 4: These are tolerant of pollutants. Circle each animal found.



Pouch Snail (left side opening)



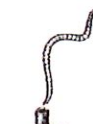
Isopod or Aquatic Sowbug



Bloodworm Midge Larva (red)



Leech



Tubifex Worm

No. of group 4 animals circled:



Date data entered into SWIMS? 08/30/2023

Data Entry Volunteer Initials: WJ