



Rivers Monitoring Report  
Survey Date: October 31, 2024

| Parameter                 | Unit       | Assiniboine River |                       |                              |                    | Red River              |                        |                   |                |                |                        |                 |
|---------------------------|------------|-------------------|-----------------------|------------------------------|--------------------|------------------------|------------------------|-------------------|----------------|----------------|------------------------|-----------------|
|                           |            | Headingly Bridge  | West Perimeter Bridge | Assiniboine Park Foot Bridge | Main Street Bridge | South Floodway Control | South Perimeter Bridge | Fort Garry Bridge | Norwood Bridge | Redwood Bridge | North Perimeter Bridge | Lockport Bridge |
| Sample Number             |            | 703237            | 703239                | 703236                       | 703238             | 703240                 | 703246                 | 703241            | 703244         | 703245         | 703243                 | 703242          |
| Temperature               | ° C        | 5.0               | 5.0                   | 4.5                          | 4.8                | 7.2                    | 7.0                    | 7.7               | 6.9            | 6.3            | 6.1                    | 6.8             |
| pH                        | units      | 8.56              | 8.59                  | 8.60                         | 8.59               | 8.64                   | 8.61                   | 8.61              | 8.62           | 8.61           | 8.44                   | 8.45            |
| Dissolved Oxygen          | mg/L       | 13.1              | 13.3                  | 13.2                         | 12.8               | 12.9                   | 12.8                   | 12.7              | 12.8           | 12.7           | 12.3                   | 12.4            |
| Oxygen Saturation         | %          | 102               | 103                   | 101                          | 99                 | 105                    | 104                    | 106               | 102            | 102            | 98                     | 101             |
| Biochemical Oxygen Demand | mg/L       | 6                 | <3                    | <3                           | 17                 | <3                     | 3                      | <3                | 6              | <3             | <3                     | 6               |
| Total Solids              | mg/L       | 696               | 654                   | 662                          | 672                | 824                    | 824                    | 812               | 818            | 752            | 762                    | 816             |
| Total Suspended Solids    | mg/L       | 34                | 33                    | 29                           | 30                 | 53                     | 39                     | 48                | 38             | 28             | 26                     | 22              |
| Turbidity                 | n.t.u.     | 23                | 22                    | 19                           | 22                 | 40                     | 41                     | 42                | 31             | 26             | 21                     | 23              |
| Chlorophyll a             | ug/L       | 28.3              | 33.1                  | 34.2                         | 26.2               | 34.7                   | 32.6                   | 32.0              | 27.8           | 24.6           | 24.6                   | 13.9            |
| Total Organic Carbon      | mg/L       | 11.7              | 10.0                  | 9.3                          | 10.8               | 14.4                   | 13.9                   | 13.9              | 17.1           | 12.7           | 12.6                   | 13.0            |
| Total Nitrogen            | mg/L N     | 0.9               | 0.8                   | 0.8                          | 0.9                | 1.2                    | 1.3                    | 1.4               | 1.3            | 1.3            | 2.5                    | 1.9             |
| Ammonia Nitrogen          | mg/L N     | <0.003            | <0.003                | <0.003                       | <0.003             | <0.003                 | 0.008                  | <0.003            | <0.003         | 0.008          | 0.782                  | 0.589           |
| Nitrate Nitrogen          | mg/L N     | 0.166             | 0.149                 | 0.144                        | 0.114              | 0.242                  | 0.253                  | 0.322             | 0.309          | 0.220          | 0.399                  | 0.490           |
| Soluble Phosphorus        | mg/L P     | 0.08              | 0.08                  | 0.08                         | 0.07               | 0.10                   | 0.10                   | 0.10              | 0.11           | 0.10           | 0.20                   | 0.19            |
| Total Phosphorus          | mg/L P     | 0.16              | 0.15                  | 0.15                         | 0.14               | 0.18                   | 0.22                   | 0.16              | 0.19           | 0.17           | 0.28                   | 0.25            |
| Escherichia coli          | MPN/100 mL | 50                | <10                   | 20                           | 60                 | 40                     | 30                     | <10               | 60             | 30             | 30                     | 40              |
| Fecal Coliform            | MPN/100 mL | 50                | 10                    | 20                           | 80                 | 20                     | 20                     | 10                | 40             | 40             | 20                     | 40              |

Notes: ns - no sample na - not analyzed nr - not recorded or no result

Weather conditions during monitoring:

Wind Direction: None  
Wind Speed: 0 km/h  
Cloud Coverage: 70 %  
Precipitation: <0.1 mm  
Air Temperature: 1 °C

Report Date:

February 19, 2025