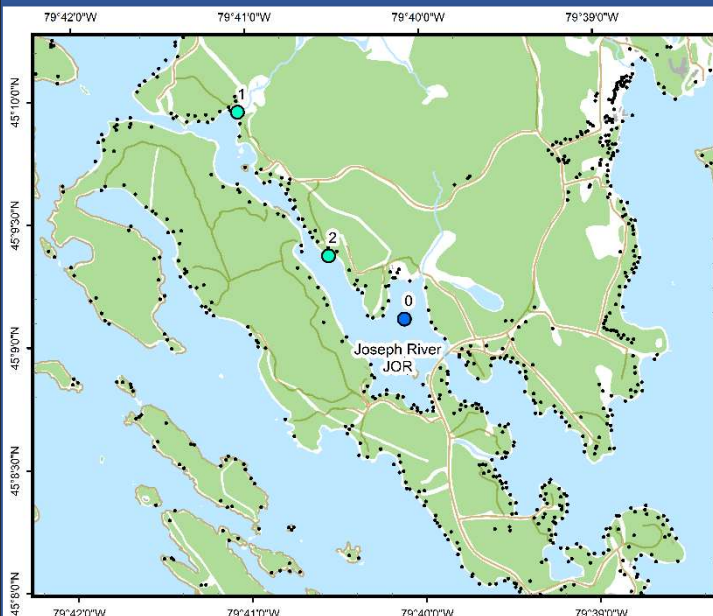




Joseph River (JOR)



Area Description:

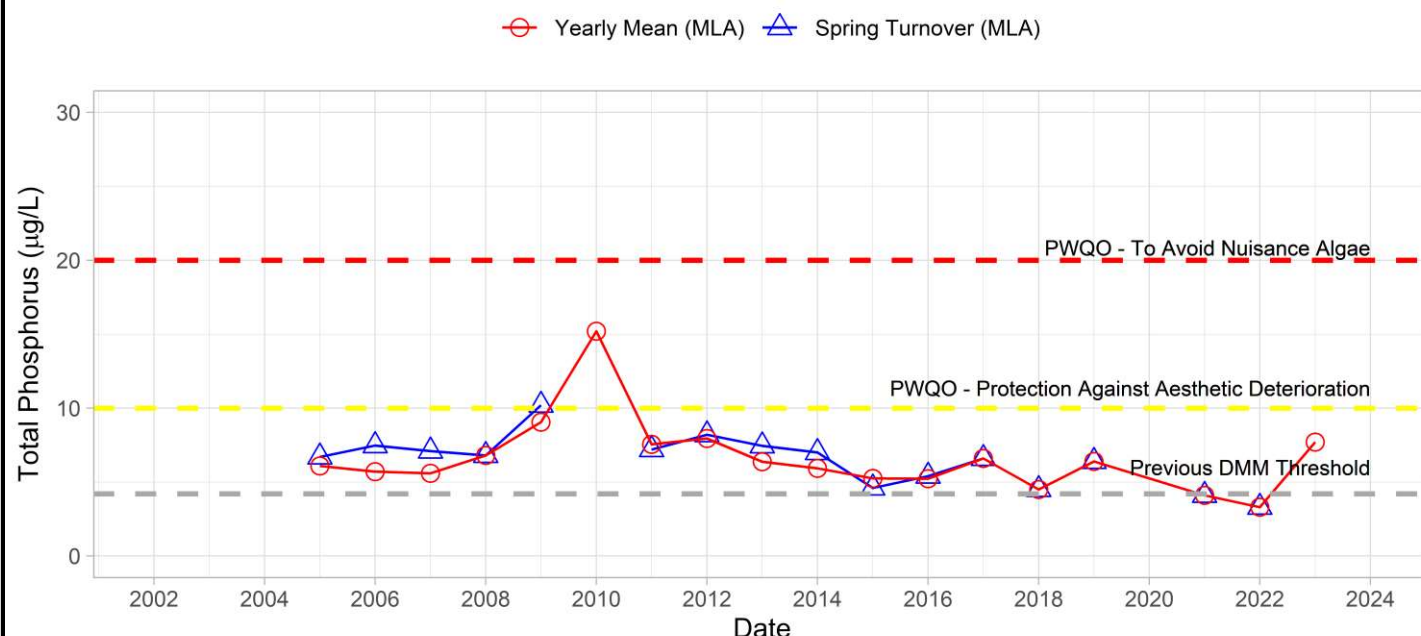
The Joseph River is heavily developed watercourse which flows from Lake Joseph to Lake Rosseau. The river is 1.37 km² in surface area and has a maximum depth of 8 m. Development in the watershed includes a marina, and a bridge crossing for Peninsula Road. The river is the primary waterway between Lake Joseph and Lake Rosseau and therefore receives a high level of boat traffic. The Joseph River was historically classified as moderately sensitive by the DMM. MLA monitoring of the Joseph River began in 2005.

Volunteer Recognition: Beth Guy, Laurie Leiser and James Woodruff.

2023 Water Quality Results:

| | Mean Secchi Disk (m) | Total Phosphorus (µg/L) | | E. coli Yearly Geometric Mean (cfu/100mL) | Total Coliforms Yearly Geometric Mean (cfu/100 mL) |
|-------|----------------------|-------------------------|-------------|---|--|
| | | Spring Turnover | Yearly Mean | | |
| JOR-0 | 2.9 | | 7.7 | | |
| JOR-1 | | | 5.1 | | |

Phosphorus at JOR-0



Note: Grubbs test indicated annual average phosphorus data collected in 2010 are considered an outlier as a result of a single measurement which has been removed from the dataset as suspected contamination.



Annual average phosphorus concentrations at the deep-water station (JOR-0) were based on a single sample collected in August which was above the historic DMM threshold of 4.2 µg/L but below the Provincial Water Quality Monitoring Objectives for Protection Against Aesthetic Deterioration (10 µg/L) and Nuisance Algal Growth (20 µg/L). Nearshore monitoring of annual phosphorus concentrations at JOR-1 was within the range of variability of previous monitoring, no spring data were collected in 2023. Average annual Secchi disk depth (2.9 m) was consistent with previous monitoring (2.4 and 5.38 m). **HESL recommends ongoing sampling to continue to monitor for long-term trends and emerging issues.**