



Area Description:

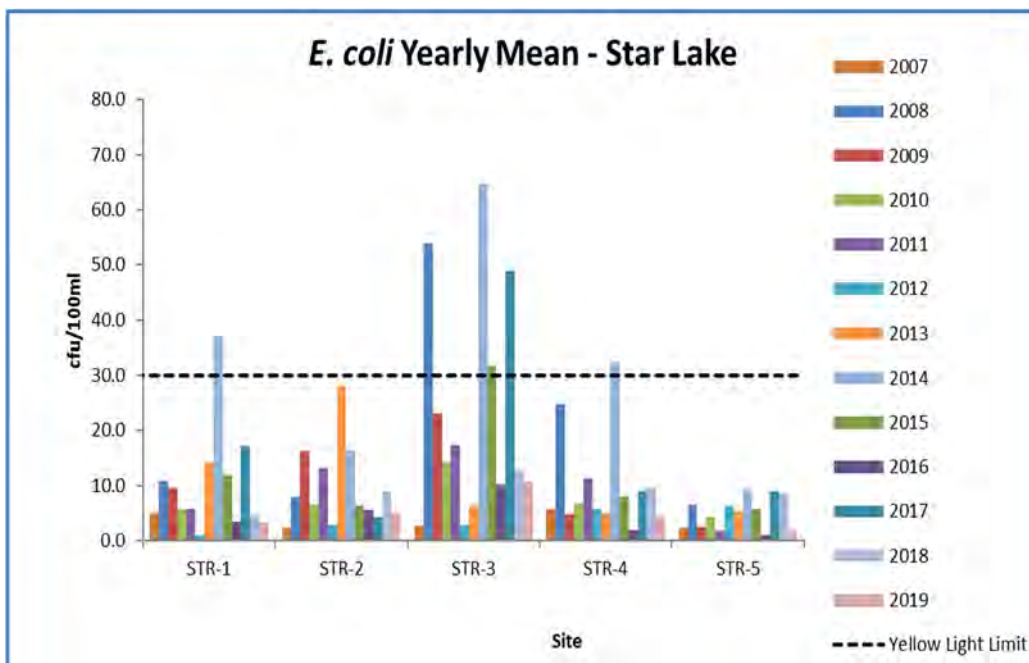
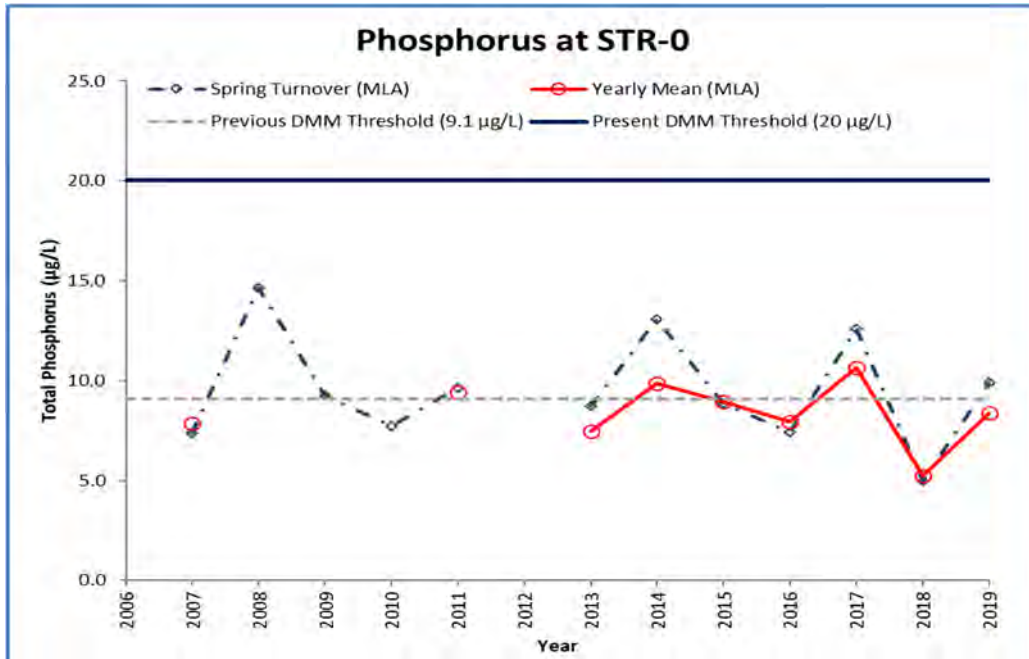
Star Lake is located in the Township of Seguin and is approximately 158 ha in area with a maximum depth of 23 m. This lake has a moderate to high level of shoreline development in the form of residential properties. Many of these properties maintain natural riparian vegetation along their shorelines, but some have extensive clearings and lawns. There is a large agricultural area adjacent to the northwestern shore and several roads located in close proximity to the lake. This lake has several inflow and outflow creeks, with limited wetland areas in the upper watershed. Monitoring started in 2007. All stations shown may not be sampled each year.

Volunteer Recognition: Karen Gillies, Melaney Kerley, and Jim Kerley.

Star Lake (STR)

2019 Water Quality Results: (Note: Hatched cell signifies not tested for in 2019)

| Station | Mean Secchi Disk (m) | Total Phosphorus (µg/L) | | <i>E. coli</i> Yearly Geometric Mean (cfu/100 ml) | Total Coliform Yearly Geometric Mean (cfu/100 ml) |
|---------|----------------------|-------------------------|-------------|---|---|
| | | Spring Turnover | Yearly Mean | | |
| STR-0 | 2.4 | 9.9 | 8.4 | | |
| STR-1 | | | | 3.2 | 128.2 |
| STR-2 | | | | 4.9 | 68.7 |
| STR-3 | | | | 10.8 | 175.8 |
| STR-4 | | | | 4.4 | 68.2 |
| STR-5 | | | | 1.7 | 75.3 |



Summary and Recommendations:



Although the spring phosphorus concentration at the deep station (STR-0) was above the Seguin threshold of 9.1 µg/L in 2019, all readings to date remain well below the present DMM threshold (20 µg/L). *E. coli* mean concentrations in 2019 at all stations were below the MLA stoplight limits (details in report Section 3). *E. coli* re-tests were required at STR-3 following the sampling in June. Volunteers noted that water levels were very high at STR-3, however, the old beaver dam was visible during the August 23rd sampling event. Secchi measurements vary through sampling years, ranging between 1.40 and 4.45 m (2007). **Beacon recommends that all sampling be continued to monitor long-term trends.**