



### Area Description:

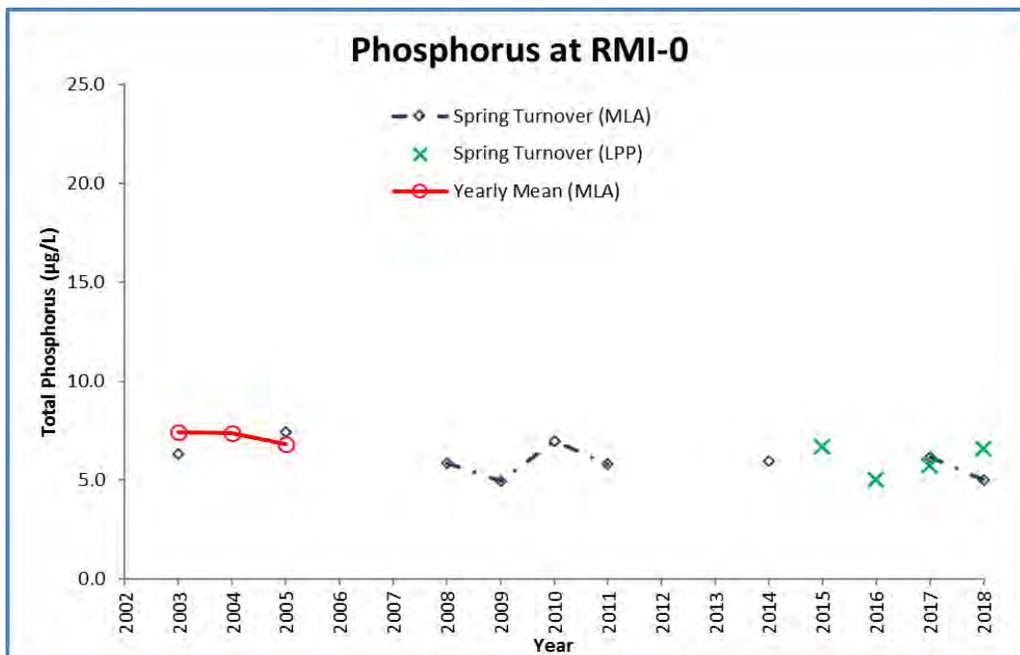
Royal Muskoka Island has one deep-water sampling site located in the central portion of Lake Rosseau. This is a highly developed residential island with many roads and cottages along the shoreline. A large proportion of the interior of the island is cleared or otherwise altered. The eastern shore, opposite RMI-0, is less developed with residences spread out along the shore. Northwest winds and a long fetch would result in significant wave action.

**Volunteer Recognition: Jayne Schipper, Jeremy Schipper, Stuart Schipper, and the Lake Partnership Program.**

## Royal Muskoka Island (RMI)

2018 Water Quality Results: (Note: Hatched cell signifies not tested for in 2018)

Station	Mean Secchi Disk (m)	Total Phosphorus (µg/L)		E. coli Yearly Geometric Mean (cfu/100 ml)	Total Coliform Yearly Geometric Mean (cfu/100 ml)
		Spring Turnover	Yearly Mean		
RMI-0	4.2	5.0			
RMI-6		8.0		1.4	29.4



## Summary and Recommendations:



The spring phosphorus concentration at the deep station (RMI-0) was the lowest recorded to date. The 2018 Grubb's Test for outliers identified the 2004 spring phosphorus (9.8 µg/L) as an outlier, and it was removed from the analysis. Lake Partner Program spring phosphorus data was available in 2015, 2016, 2017 and 2018, and is included in the graph. Only one spring phosphorus sample was collected at each of the two stations in 2018, therefore no yearly means could be calculated, and no values are reported for 2018. The RMI-6 site was added in 2017 and data will be analyzed following additional years of gathering samples. The Secchi depth in 2018 was the deepest measured to date and depths have ranged through sampling years, varying between 2.20 and 3.70 (recorded in 2011). **Beacon recommends that the MLA rely on the Lake Partner Program data when it is available, and the MLA should continue to monitor this location to analyse long-term trends.**