leaching septic tanks into the lake. Other possible reasons making the nutrient level of the lake higher could be the decomposition and defrosting of various organic materials that had been frozen through winter and spring periods. Multiple brooks flowing into ML have the Phosphorus concentration areas by human activities (clear-cutting, spraying, etc.). Consequently, dissolved nutrients coming from those sources by rainfall-runoff and/or brooks wasting directly into the lake contribute to the growth of nutrient level in the waterbody. Micronutrients due to human activities rejected directly into the watershed contribute to the causes of bloom development. A profound study on the entire watershed is envisaged for a long term solution to this issue.

The formation of blooms can occur only when an optimal combination of favorable conditions including micronutrients, water temperature, PAR, etc. Two main categories of blooms were observed in the ML seasonally – one normal category of algal bloom from July to September, formed with non-toxic species *Mougeotia sp.* and another one with *Anabaena sp.*, especially *A.planctonica* starting from September until December, and this species generated blooms in the fall term lasting till December.

The research through this paper showed a very important insight: bloom patterns can be only well explained and predicted by coupling effects of all involving parameters. In order to combine all effects of all possible parameters, only mathematical model can help us to deal with this complex issue. Mathematical modeling is hence one of our avenues of future research.

ACKNOWLEDGMENT

TNQ acknowledges the Natural Science and Engineering Research Council of Canada via two grants NSERC RGPIN 03796 and NSERC EGP 484647, Canada Foundation for Innovation as well as Nova Scotia Research and Innovation Trust via Grant No 31188 for equipment. He also thanks his students for their contribution in the field trips. The authors acknowledge the ML Steward Committee for its collaboration along the field trips.

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