Lake Rosalind/Marl Lake Water Quality Committee Communication August 2022

The summer is flying by and we will soon be entering the fall months. Over the past weeks, the water testing team has been busy collecting samples and sending these to the laboratory for analysis.

The latest test results are below:

In Lake Rosalind (2) the toxin fell from 4.72 μ g/L (Aug 2) to 4.37 μ g/L (Aug 16)

In Marl Lake (1) the toxin fell from 3.53 μ g/L (Aug 2) to 2.99 μ g/L (Aug 16)

It is a good sign that the toxin numbers are going down and all lakes continue to be below the Recreational Standard meaning that it is safe to swim and play in the water. We are most fortunate that this has been a consistent result throughout the entire summer. Both lakes are holding clarity as the two blooms of B-G Algae and Green Algae (Chlorella) battle it out for dominance which contributes to the murky water appearance. The exception is the second lake of Marl and the third lake of Rosalind which seem to be getting clearer.

B-G Algae scums are still present after calm nights and may collect along the shoreline. Please remember to allow these to clear before allowing young children and pets in the water.

There is a **very interesting** observation to be made when comparing Algal ID and Toxin results for the last two years in Lake Rosalind.

Last year on Aug 3, 2021 there were 5700 cells/mL of the species Microcystis in LR-2 and **7.66 µg/L** of toxin

This year on Aug 2, 2022 there were 14000 cells/mL of the species Microcystis in LR-2 and **4.72 μg/L** of toxin

That is 2.5 times the number of toxin producing cells and much lower toxin results for this year!

Thanks to the Lake Rosalind residents, there are **3x** the number of Biochar Bags throughout the 3 lakes this year which may point to the positive correlation between Biochar Bags and lower toxins.

The Water Quality Committee is recommending to residents who purchased Biochar Bags this year to take these out as late as possible prior to any ice forming. Experience has been that if the bags are taken out and allowed to dry, the coating will flake off and then the bag will be able to be reinserted again next spring. The bags can be stored outside anywhere where it will not become damaged.

The LRMLWQC (Lake Rosalind Marl Lake Water Quality Committee) will continue to analyze the water test results to determine the opportune number of biochar bags required for Lake Rosalind and will continue to research how many years the same bags may be used without losing effectiveness.

Enjoy these last beautiful days of summer!