

**PLRS Meeting July 23, 2010**

Hub Centre, Pine Lake AB

7:30 PM

**Attendance Carol, Dave, Colin, Ed, Larry H., Patti**

**Agenda reviewed and approved** - Motioned by Colin, seconded by Dave

**Minutes from last meeting reviewed and approved** - motioned by Dave, seconded by Colin

Al Sosiak joined in by phone to **review 2007 testing performed by Alberta Environment.**

In summary:

- The 2002 and 2007 testing years were very different hydrologic ally so certain adjustments needed to be made to account for different stream flow rates

- In general, the society has done what they set out to do, which was to reduce phosphorus levels in this lake – something no one else has done in Alberta, but we are not consistently low enough to limit blooms.

- Natural factors and human activities may have increased P loading from the watershed.

- At times Pine Lake may be nitrogen limited, but most of the year phosphorus (P) limits productivity. Some types of blue-green algae can fix atmospheric nitrogen, so they have an unlimited source of nitrogen, and phosphorus ultimately limits them. The consensus of opinion is that phosphorus control is still the best strategy for temperate zone lakes.

- Should continue to sample for all the critical nutrient forms (TDP, TP, TKN, TN), plus total ammonia, and nitrate + nitrite. Don't bother with non-fecal coliforms

- Most productive lakes in Alberta (including Pine Lake) receive the bulk of their phosphorus from the sediments. Sediment release was about two-thirds of all the phosphorus input in 1992, and oddly enough most eutrophic lakes are around that two thirds %. The P budget can and should be done again before we get into further in-lake treatment, to check that it is still the most important source.

- Significant TP increase in stream 6. Problematic because this was a past BMP stream. Need to look into this in detail and remedy. Streams 2 and 7 should also be reviewed. Further analysis available in the report.

**Lake level** today 889.915 - all logs out and screens out. We got an extension from AB EN to continue until Aug 15 because of high water levels. The highest level this summer was 889.955 - we need to be at 889.550

The Board received a letter from Tom Nicholson regarding problems with water on his land related to the weir and the stilling pond downstream from him. Ed and Dave will respond to the letter. Will monitor this situation, looking for possible solutions.

Colin reported the letter sent to Mary Duborg regarding cows on the lake was returned - Colin will follow up.

Treasurers report - Outstanding bills Atco \$XX.XX, Sunset Printing \$XXX.XX - approved for payment

Patti requested a \$XXX.XX advance for Clean Lake Day - to pay for salads, cakes, ice and the float. - approved

Patti gave an update on Clean Lake Day organization - see you all Aug 14 at the Hub