

September 18, 2009

Ms. Carol Moen  
Pine Lake Restoration Society  
108 Heritage Lake Way  
Sherwood Park, AB  
T8A 6A6

Dear Ms. Moen:

Thank-you for your recent e-mail from September 9, 2009 regarding ongoing algal and macrophyte growth issues in Pine Lake. In general, there are two options when dealing with dead plant material that has accumulated on the shorelines of recreational lakes:

1. **Let the material remain in place.** Essentially, either let the dead plant material remain on the shoreline or move it back into the waterbody. This is generally cost effective and the least time consuming, however it does not assist in alleviating the issue of excessive plant growth in the lake, as this returns the material and associated nutrients back into the lake. In addition, decomposing material on the shoreline is aesthetically displeasing (both from a sight and smell perspective).
2. **Remove the material from the shoreline.** This involves physically gathering the dead plant material and removing to a site far enough from the lake that nutrients released through decomposition are less likely to be reintroduced into the lake. This is generally preferable from a water quality perspective, as it does remove some amount of nutrients and may improve water quality of the lake. However, this method is time consuming and can be expensive. In addition, locating sites for disposal of larger quantities of material may prove challenging.

Given the two options above, the general preference from a water quality perspective is to remove material from the shoreline, as this removes any associated nutrients and may provide benefits to the lake. I have conferred with our approvals staff, and they have indicated that removal of dead vegetation from the shoreline would not require an approval through Alberta Environment. If the society is considering removal of living vegetation, they would need to consult with Alberta Environment and Department of Fisheries and Oceans before proceeding. Contact at Alberta Environment is Angela Fulton (403-340-7736).

If you have any further questions or concerns, please do not hesitate to contact me either by e-mail or phone (403-341-8613). Thank-you again for the work the society has done and continues to do on Pine Lake.

Sincerely,



Chris Teichreb, P.Biol.

cc: Angela Fulton, Alberta Environment