# Lake LeAnn LAKE CONTROL COMMITTEE

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# TimberChar™ FAQ's

#### What is TimberChar™ and what does it do?

It starts with wood from dead pine trees. Cutting them down helps keep forests healthy. They heat the timber to a high temperature in a vacuum kiln for several hours. They then load the TimberChar™ into mesh nutrient harvesting filters for maximum exposure to water. The movement of the water around the lake from both boating and wind is what moves the water through the filters. This works very efficiently; this is also the reason for having some filters horizontal and the others vertical. With the movement of the water, we are able to filter it on its way in past the filters and as it returns back to the lake.

In areas of low boating traffic and low water movement from the wind, extra filters will be added. In these areas we are making use of the CEC (Cation Exchange Capacity) and AEC (Anion Exchange Capacity) of the filters. This is a positive and negative charge on the surface of the TimberChar™ that trick, the nutrients from the water sequestering them into the filters and holding them there. The TimberChar™ has been tested by the USDA - ARS labs and has been found to be the only Char, so far, to have both a positive and negative charge on its surface. In summary it's a combination of the number of filters in the lake, the placement of the filters, the CEC and AEC charges on their surface, the surface area, (one tablespoon of TimberChar™ has <u>476 sq yds</u> of surface area) along with the continual movement of the water as you all enjoy your lake.

#### How does TimberChar™ work?

In the water, TimberChar™ removes phosphorus, nitrogen, suspended solids, and other pollutants through a natural electro-chemical process (Cation Exchange Capacity & Anion Exchange Capacity). By removing these nutrients from the water if helps deplete the food source the algae are feeding on.

### How long do the filter last?

Our plan is to replace the filters every three years at a maximum. We will start in 2025 with targeting about 33% of the filters to be replaced, this process will continue annually and will be reassessed as we progress. We will be relying on Eden Lakes and RLS for guidance on how we identify the filters that need to be replaced annually.

#### What do I do with the old filter once I get a new one?

You have options.

- 1. You can keep it and cut the filter open and mix the contents into the soil around your landscaping or use it as a soil additive when you plant your flowers in the spring. It is loaded with phosphorus and nitrogen which are both ingredients that promote healthy plant growth. The TimberChar™ nutrients will not be released back into the ecosystem but your plant roots can attach to it and absorb the nutrients out of it.
- 2. You can turn it into the LLPOA, and we will take care of it for you.

### How long do we keep the filters in the water?

We would ask that you place the filters in the water when you put your dock in and pull them out when you remove your dock no later than October 31<sup>st</sup>. If you have a permanent structure, we will ask you pull the filters out on or before October 31<sup>st</sup>.

You can store the filters outside. We would ask that you protect them from getting damaged so you can use them again the next year.

ALL FILTERS MUST BE OUT OF THE WATER BY OCTOBER 31st PER OUR EGLE PERMIT

## What happens if a TimberChar™ Filter bag breaks open?

Nothing, this is a natural product that is environmentally safe. We would ask that you remove what is left of the filter and contact the office for a replacement.

Sincerely, LLPOA LCC