Vernon

## Save lakes while we can

## Water treatment expert says more needs to be done to prevent algae blooms in our lakes

Jon Manchester - Oct 21, 2021 / 4:00 am

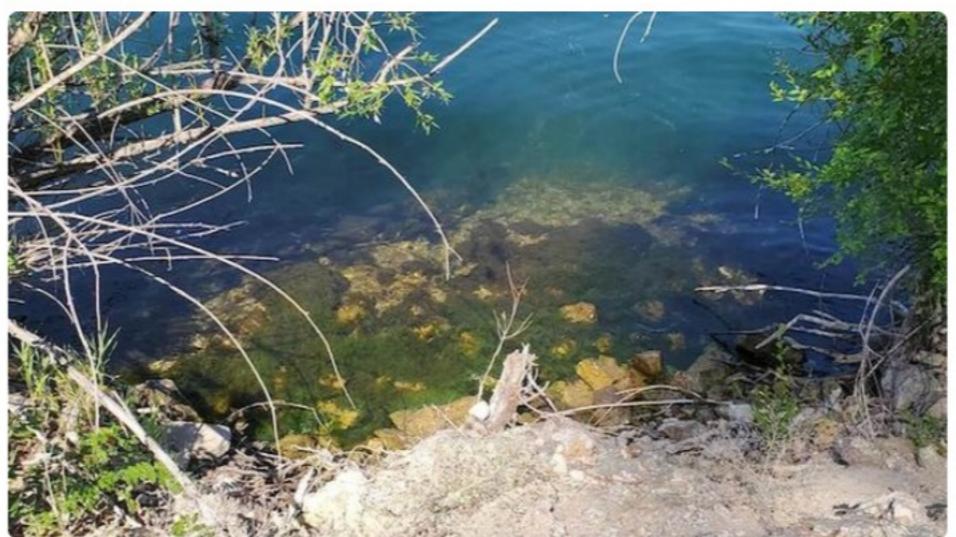


Photo: Contributed

A water treatment expert says action must be taken to preserve Wood Lake – and others – after this past summer's toxic algae bloom.

"Did anyone go swimming in woods lake this year?" asks industrial water treatment professional Kevin Brown of Vernon. "Seeing Woods Lake in its current state is something that we must take action on so that we can preserve this paradise of the Okanagan Valley."

The District of Lake Country confirmed the algae bloom in April after residents began noticing a green, pea-soup like consistency to the water around the shores of the lake.

Interior Health advised the public not to swim in the lake over the summer.

The district said the bloom was a naturally occurring phenomenon, and the Okanagan Basin Water Board confirmed conditions that trigger the blooms are forecast to become a more-frequent occurrence due to climate change.

However, only about 5% of such blooms produce toxins.

Brown says the process that affected the lake is known as eutrophication, derived from the Greek word eutrophos, meaning "well nourished."

Brown says this is having a profound effect on lakes as "increased urban runoff and nutrient loading is providing enhanced growth opportunities for algae."

The primary nutrients are nitrate and phosphate, commonly found in fertilizer, domestic waste water discharge and from agricultural activity.

Without increased treatment including phosphate removal and denitrification, the demands placed on the environment will only grow, says Brown.

"Action is needed to ensure we can sustain our expansion."

and pH swings as a result of these algae blooms."

Brown says governments must do a better job, as the province's current focus is rely on citizen reporting of outbreaks.

Algae blooms were also reported in Shuswap, Kalamalka and Edith lakes in the Thompson-Okanagan over the summer.

"To only monitor the eutrophication of Woods Lake every year during the summer and lose this natural resource would be a shame, as Wood Lake is connected to Kalamalka, which then flows to Okanagan Lake."

Brown says more water treatment plants need to use spray irrigation, as Vernon does, putting treated waste water on land instead of into lakes.

"Let's not miss this opportunity to ensure that Wood Lake can handle the nutrient loading that it is able to sustain before we experience the fish kills that will follow with decreased oxygen levels

The OBWB said over the summer that "increased development, and the resulting nutrients are one of the causes of sudden excessive algae growth, which occurs under the right conditions of light, temperature, nutrients and pH."