

This Second Public Service Announcement has been shared with the Keuka Lake Association by the Village of Penn Yan and the Commissioners of the Keuka Lake Outlet Compact (KLOC). Any specific questions should be referred to KLOC or the Penn Yan Village.

Public Service Announcement
October 10, 2019

"The Keuka Lake Outlet Compact held a special Meeting on Monday September 30 at the request of the Penn Yan Department of Public Works and the New York State Department of Health. The Keuka Lake Outlet Compact (KLOC) is charged with managing the level of Keuka Lake and for the operation and maintenance of the six flood control gates at the Main Street Bridge in the Village of Penn Yan. The group consists of one elected representative from the six towns and two villages that border Keuka Lake.

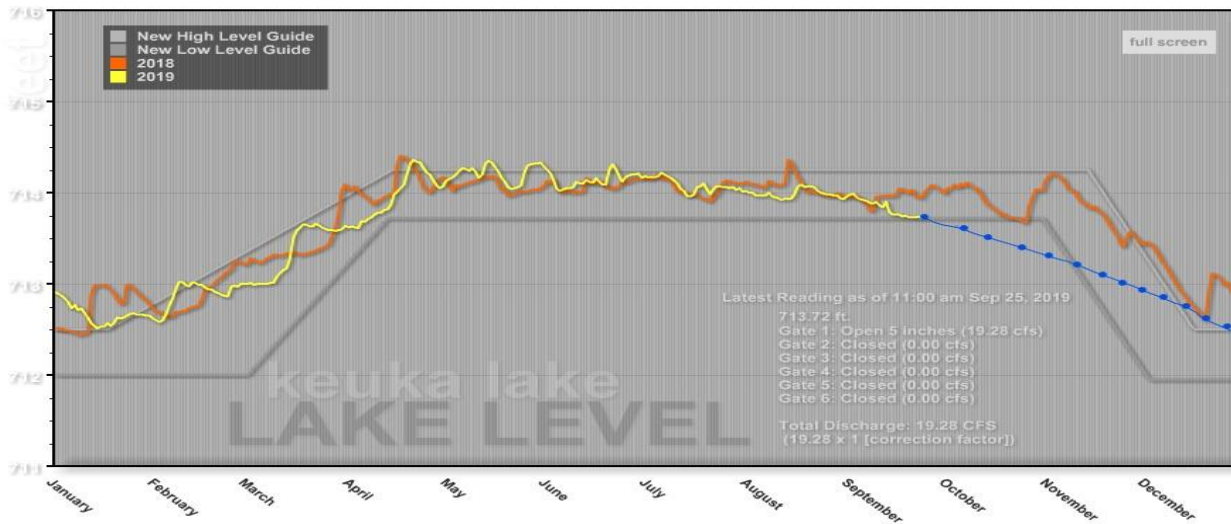
KEUKA LAKE WATER QUALITY

There have been several public beach closures on Keuka Lake this summer due to harmful algal blooms (HAB). These HABs have the potential to contain a cyanobacteria (commonly referred to as blue-green algae) known as Microcystis. The cyanobacteria may produce microcystin, a liver toxin. The ability to produce toxins results in calling these blooms a harmful algal bloom.

At the request of the Geneva District Office of the New York State Department of Health, the Penn Yan Village Water treatment plant has been monitoring for the presence of microcystin in raw and finish water at the plant. The raw water samples show levels of the toxin from 0.4 ug/l (parts per billion) to 2.34 ug/l (ppb). **No microcystin toxin has been detected in Penn Yan Village's finished (treated) water.**

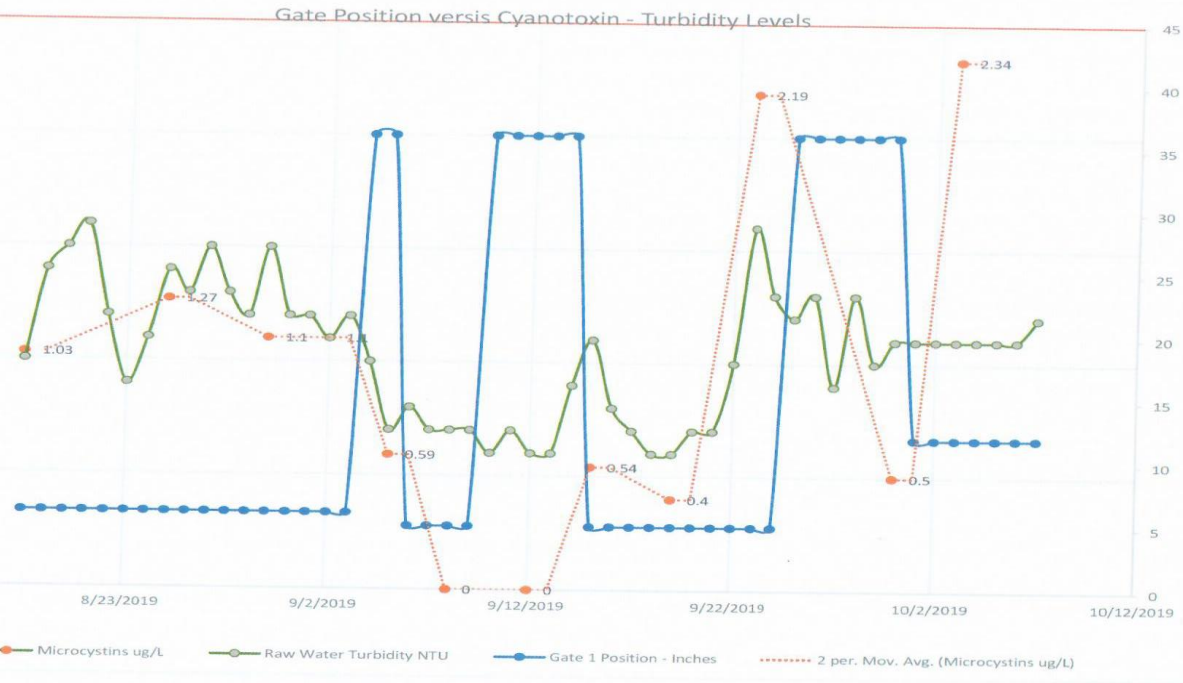
In order to protect public health, for both the Village and the surrounding communities that purchase Village water, Penn Yan Village water treatment plant operators have taken steps to optimize water treatment at the plant. These actions include increasing the level of disinfectant (chlorine residual), reducing plant production rate to allow more time in contact with the granular activated carbon which removes contaminants and adjusting flow out of the Lake as authorized by the Keuka Lake Outlet Compact (KLOC) to move water past the water plant intake. All these actions have led to a reduction of microcystin levels at the raw water intake. Long-term solutions besides lowering the lake level outside of normal level management are being investigated by Penn Yan's engineering consultant, the New York State Department of Health and other agencies to address the situation and ensure no contaminants enter the finish water produced by the treatment plant.

Upon the request from the Penn Yan Water Plant and the NYS Department of Health, the Keuka Lake Outlet Compact authorized a modified drawdown of Keuka Lake for 2019. Chairman Mark Illig (Town Supervisor of Pulteney) summarized the actions taken by the Outlet Compact: "The Board of the Compact has authorized a modified drawdown of the lake beginning in early October to support the efforts of the Penn Yan Water Plant to address the cyanotoxin in the lake." Illig explained that under normal conditions the drawdown of the lake to its winter level begins on November 1. The lake's winter level is about 12 inches lower than the normal summer levels. The modified drawdown will be affected by the amount of rain we receive during the next month and the levels of cyanotoxins found in the lake. Water Quality data indicates that by increasing the outlet flow of the lake there is a reduction in the cyanotoxin. Hence, the reason for KLOC to authorize a modified drawdown of the lake - if necessary.



Sample of Temporary Draw Down Curve

The Keuka Lake Outlet Compact stated at their special meeting that the earlier drawdown of the lake is a temporary action to support water quality at the Penn Yan Water Treatment Plant. The Compact expects this situation will be resolved so that in 2020 normal lake levels will be in effect for Keuka Lake. The Compact also expressed their support to the Penn Yan Department of Public Works for their cooperation during this temporary change to Keuka's lake level."



Graph of Gate Position versus Cyanotoxin-Turbidity Levels