

MICHIGAN: ACHIEVE AND MAINTAIN PHOSPHORUS REDUCTIONS AT FOUR KEY WASTEWATER TREATMENT FACILITIES

There are four wastewater treatment plants (WWTPs) that will be addressed in the Michigan DAP, including the Great Lakes Water Authority Detroit Wastewater Recovery Facility, the Wayne County Downriver Wastewater Treatment Facility (WTF), the Ypsilanti Community Utilities Authority (YCUA) WWTP, and the Monroe Metro WTF. These facilities discharge over 90 percent of the total phosphorus point source load to the Detroit River and Lake Erie.

National Pollutant Discharge Elimination System permits for Michigan's four key municipal WWTPs include reduced total phosphorus concentration limits. The Great Lakes Water Authority Detroit Wastewater Recovery Facility and YCUA WWTP are already meeting reduced permit limits, while the Wayne County Downriver WTF and Monroe Metro WTF will be achieved by 2020. The goal is to achieve and maintain, with no significant noncompliance, total phosphorus limits of 0.7 milligram/liter (mg/L) as a monthly average and 0.6 mg/L as a growing season average (April – Sept.) at each main secondary treated outfall at the wastewater treatment facilities.

Efforts to reduce phosphorus at key wastewater treatment facilities are already yielding significant reductions.

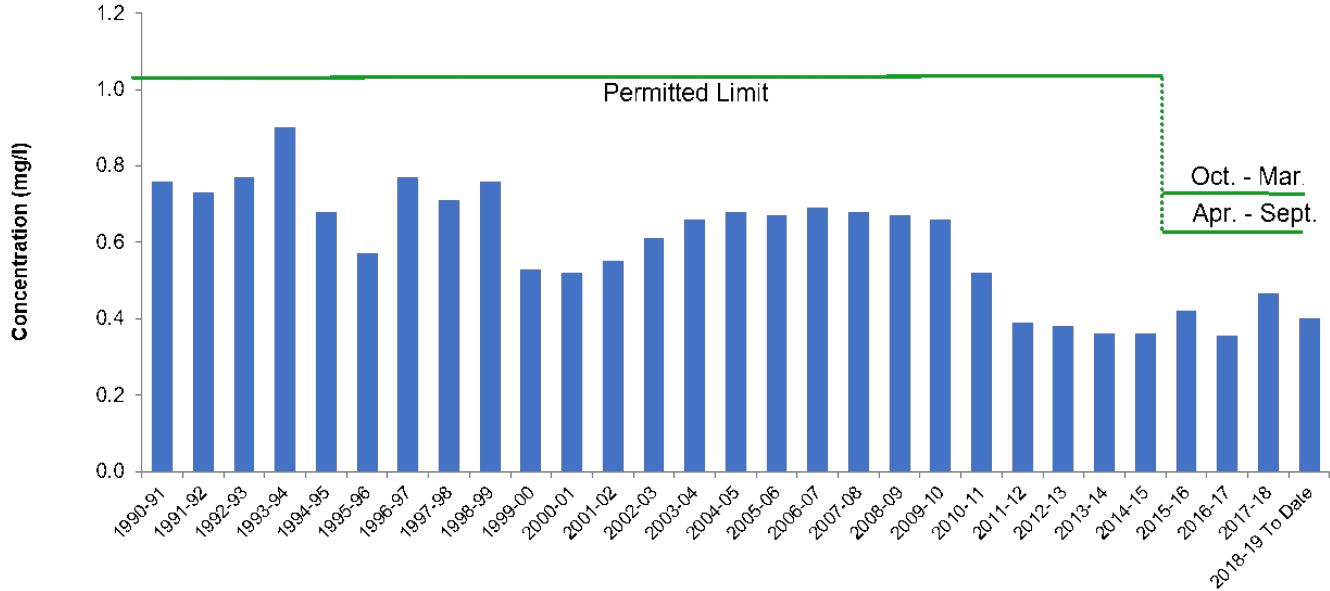
The Great Lakes Water Authority (GLWA), Michigan's largest drinking water and wastewater treatment service provider, has long been below their phosphorus permit limits, as shown below. In May 2019, they announced an additional milestone achievement: achieving tighter limits based on optimization of the WRRF and surpassing the goal for a 40% reduction in phosphorus levels by 2025. The reductions at this facility have resulted in an approximate 400 metric ton reduction in total phosphorus from 2008 levels.



Great Lakes Water Authority treatment plant.

GLWA *exceeded* the federal and state 40% reduction goal by reducing phosphorus by approximately 60% in treated and discharged waters from its Water Resource Recovery Facility.

GLWA Effluent Phosphorus Concentration 1990 - 2019



The YCUA WWTP has already achieved its tighter effluent limits. The Monroe Metro WTF's annual reduced permit limits came into effect in April 2019, with growing season requirements coming in effect for the 2020 growing season. The Downriver WTF's reduced permit limits will come into effect in 2020. All facilities are anticipated to be in compliance with the reduced permit limits in 2020.

TYPE

[Investment](#)

ISSUE

[ErieStat](#)