STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
LANSING

GRETCHEN WHITMER
GOVERNOR

LIESL EICHLER CLARK
DIRECTOR

January 10, 2020

Dear NPDES Permittee:

SUBJECT: High Water Levels

You are likely aware of the high Great Lakes and inland water levels that have been causing significant erosion along coastal areas in Michigan. These high water levels have been reported in the media and from the Michigan Department of Environment, Great Lakes, and Energy (EGLE) as primarily causing erosion, but infrastructure issues are also a concern. These high water elevations can affect and have affected discharges from municipal wastewater treatment plants (WWTP) and industrial discharges, and could also affect sewer lines and storm water best management practices (BMP). There have been National Pollutant Discharge Elimination System (NPDES) permit violations caused by existing water levels. Based on information obtained from the U.S. Army Corps of Engineers, it is EGLE's understanding that Great Lakes water levels may increase in many places by roughly one foot in the next year.

To prepare for the predicted increasing water levels in 2020, we are asking all permittees to complete a vulnerability analysis to minimize potential impacts. Impacts may include WWTP bypasses from inability to discharge flow due to a changed hydraulic profile; increased infiltration and inflow into municipal collection systems that increase flow to WWTPs, potentially causing bypasses; and backflow into collection systems that can impact WWTPs. Discharges from storm water BMPs may also be affected. This letter cannot describe all items to review, but it offers some key items that may be appropriate to consider in your situation. Items to consider include:

- **WWTPs and collection systems.** Ensure you can discharge peak flow from your facility at higher water levels at the discharge point. You may need to pump or choose alternative discharge points to surface waters to ensure that your facility will not be bypassed and facilities are protected, or that tributary collection systems do not have unacceptable risk of overflows or basement backups. Higher water levels can cause increased infiltration/inflow into collection systems that may cause WWTP bypasses. Additionally, sewers near or adjacent to surface water may be vulnerable to impacts caused by erosion.

- **Industrial and commercial facilities**. These facilities can control production to discharge less flow. However, if this is not possible, you may need to seek alternative discharge locations or secure pumping as necessary.

- **Combined sewer overflows, retention treatment Basins, or other untreated combined sewer overflow outlets**. These may be affected by higher elevations that allow backflow into the system. Additional weir or dam height may be appropriate. Ability to limit flood flows into collection systems might also be needed. Backflow gates should be checked to ensure they have reliable seals to prevent inflow into the collection system. Any increased heights should be checked to ensure adequate discharge from the system.

- **Storm water BMPs.** These BMPs may not function properly given discharge to high water levels. These BMPs should be inspected and maintained to ensure they function in an appropriate manner. Removal of accumulated sediment may be needed to increase storage capacity within the BMP. The importance of inspection and maintenance of BMPs to minimize impacts should be messaged to owners of privately-owned BMPs within the municipality.

Please note that information on Great Lake water levels can be found at https://www.lre.usace.army.mil/. High water levels may also affect nearby rivers as well. EGLE believes that this vulnerability analysis can be useful to minimize environmental impact from higher water levels. EGLE's expectation is that you complete this vulnerability analysis as soon as possible and keep it on-site. If there are any NPDES permit violations due to high water levels, then this analysis and mitigating action you take may help regarding any potential compliance activity. If you have any questions, please contact Water Resources Division's (WRD) district office compliance or engineering staff; or Mr. Phil Argiroff, Assistant Director, WRD, at 517-284-6668 or ArgiroffP@Michigan.gov.

Sincerely,

Teresa Seidel

Teresa Seidel, Director
Water Resources Division

cc: Mr. Phil Argiroff, EGLE