

# Pine and Calvin Creek – Frontal Lake Michigan TWA WQM Plan 2017

*Sevenmile and Silver Creeks (MA01)*



Mary Gansberg, DNR Stream Biologist

 Throughout the presentation when you see this symbol,  put your cursor over the box to read more detail.

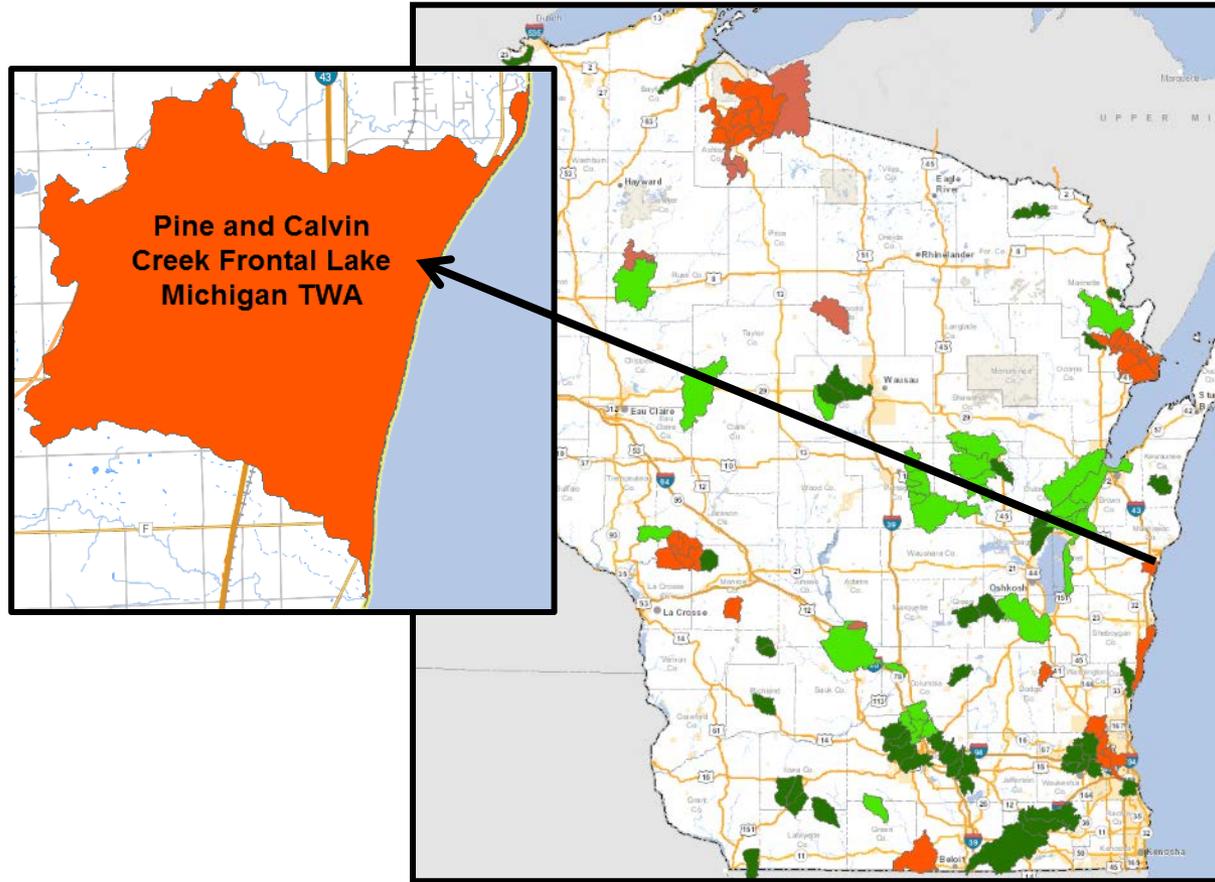
The cover of the report features a photograph of Calvin Creek at County LS, showing a rocky stream bed with water flowing through dense green trees. Below the photo, the text reads: "Calvin Creek at County LS Photo by Mary Gansberg 10/04/2016". The main title is "PINE & CALVIN CREEK FRONTAL LAKE MICHIGAN TWA WQM 2017 Sevenmile and Silver Creeks (MA01) HUC: 040301010702, Monitored 2016". At the bottom left, there are two maps: a larger map of Wisconsin with various colored regions, and a smaller inset map highlighting the Pine and Calvin Creek Frontal Lake Michigan TWA in orange. At the bottom right is the Wisconsin Department of Natural Resources logo and the text: "EGAD # 3200-2017-10 Water Quality Bureau, Wisconsin DNR".

Calvin Creek at County LS  
Photo by Mary Gansberg 10/04/2016

**PINE & CALVIN CREEK FRONTAL  
LAKE MICHIGAN TWA WQM 2017**  
*Sevenmile and Silver Creeks (MA01)*  
HUC: 040301010702, Monitored 2016

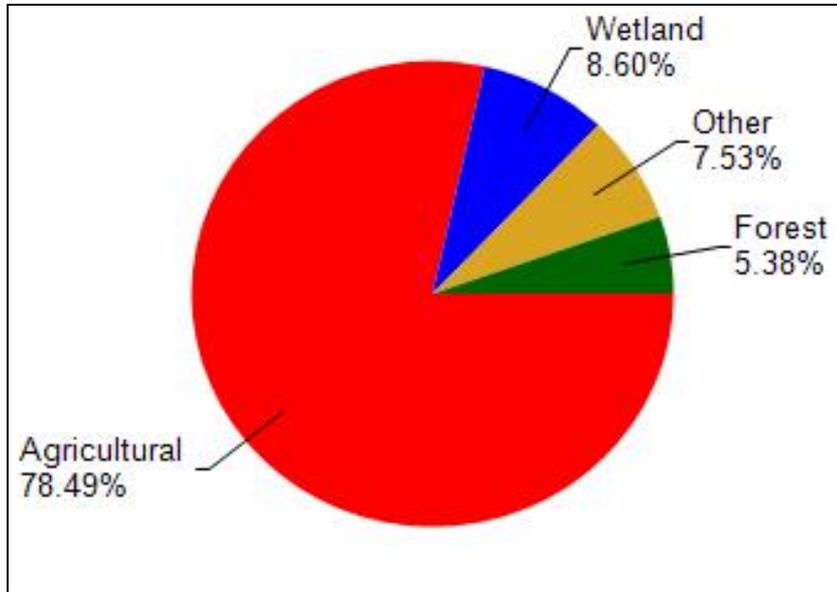
  
EGAD # 3200-2017-10  
Water Quality Bureau,  
Wisconsin DNR

# Pine and Calvin Creeks TWA Project Location



Pine and Calvin Creeks TWA study is located in the Sevenmile and Silver Creeks Watershed

# Land Use



The Sevenmile and Silver Creeks watershed is primarily agricultural (73%), wetland (8%), forest (5%) and other uses (7%). This watershed has 184 stream miles, 10,578 lake acres and 4,732.70 wetland acres.



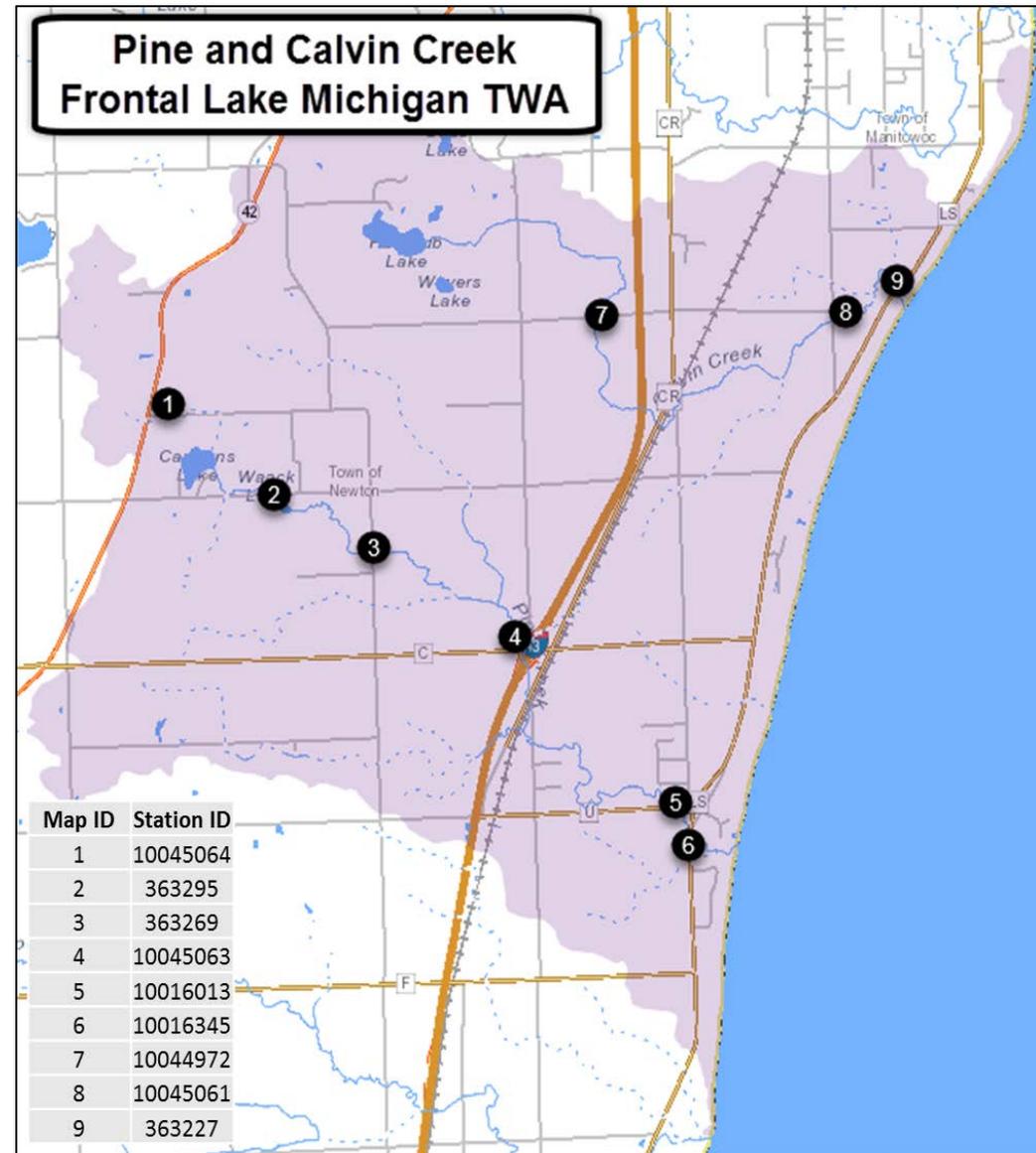
Pine Creek at CTH U



Calvin Creek at Clover Road

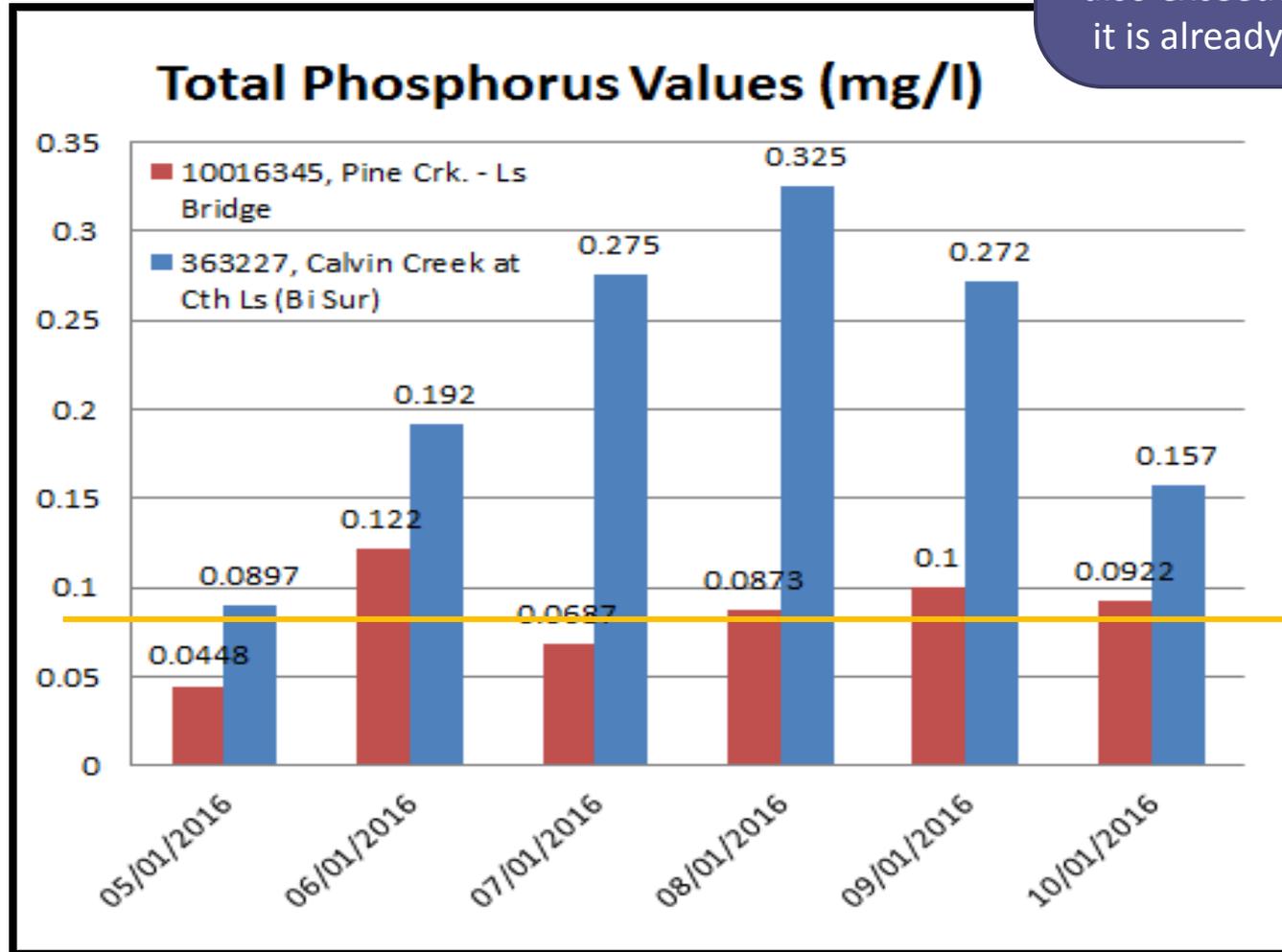
# Purpose

- This study of the Pine Creek and Calvin Creek subwatersheds was initiated to assess the overall chemical, physical and biological condition of waters that discharge directly to Lake Michigan.
- Parameters measured: fish community, habitat condition, macroinvertebrate assemblage, and water chemistry.



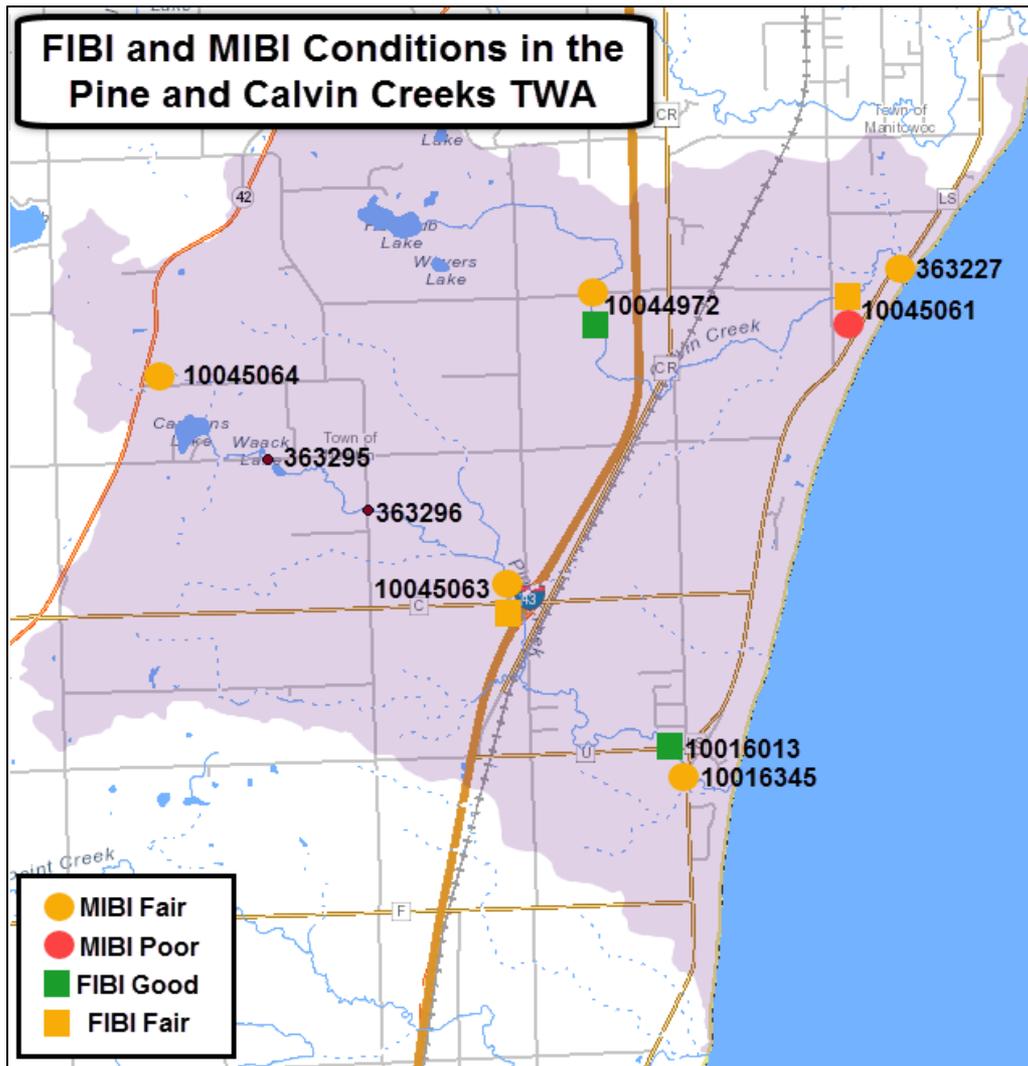
# Study Results – Phosphorus

Samples from Calvin Creek exceeded the phosphorus standard with a mean value of 232 mg/l, exceeding the standard of 75 mg/L. Pine Creek also exceeded the standard but it is already listed as impaired.



Water Quality Standard = 0.075 mg/l

# Study Results – Fish IBI and MIBI



Of the five fish surveys completed two had a condition of good, two had a condition of fair and one site (Pine Creek at Carstens Road) had no fish.

The macroinvertebrate locations sampled for this project indicated watershed disturbance, with three stations sampled on each of Calvin and Pine Creek. Results indicated that mIBI values were fair for all sites sampled with the exception of Calvin Creek downstream of South 26<sup>th</sup> Street with a Poor value.

# Management Priorities

- Work with landowners to decrease the amount of agricultural runoff reaching surface and groundwater
- Establish riparian buffers to protect water quality
- Monitor and control invasive species
- Minimize fish barriers
- Restore the water quality of Pine Creek and Calvin Creek



Perched Culvert on Calvin Creek

# Recommendations

- Calvin Creek should be added to Wisconsin's 303d List of impaired waters for high phosphorus concentrations
- DNR work with partners to reduce phosphorus runoff
- Engage local units of governments and watershed residents in stream restoration



Calvin Creek at Clover Road

# For more information:

## Contact:

- Email: Mary Gansberg, DNR Biologist Eastern District
- [Link to the TWA WQM Plans website](#)
- [Link to Draft Report](#)