



Lake Dalecarlia Watershed Diagnostic Study Public Meeting

PRESENTER:
Tom Estrem with Cardno

June 21, 2021

Topics Discussed

- Project Introduction and Goals

- Review of Watershed

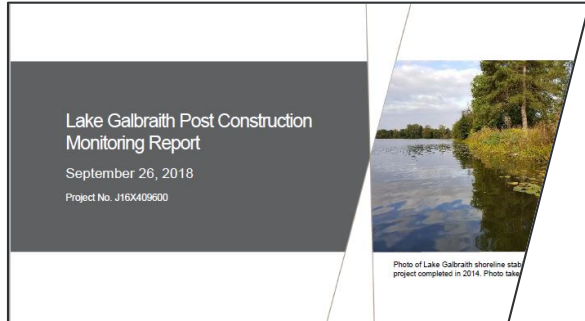
- Work Completed to Date

- Review of Data Collected

- Remaining Project Timeline

- Questions

Lake Dalecarlia Watershed Diagnostic Study Overview

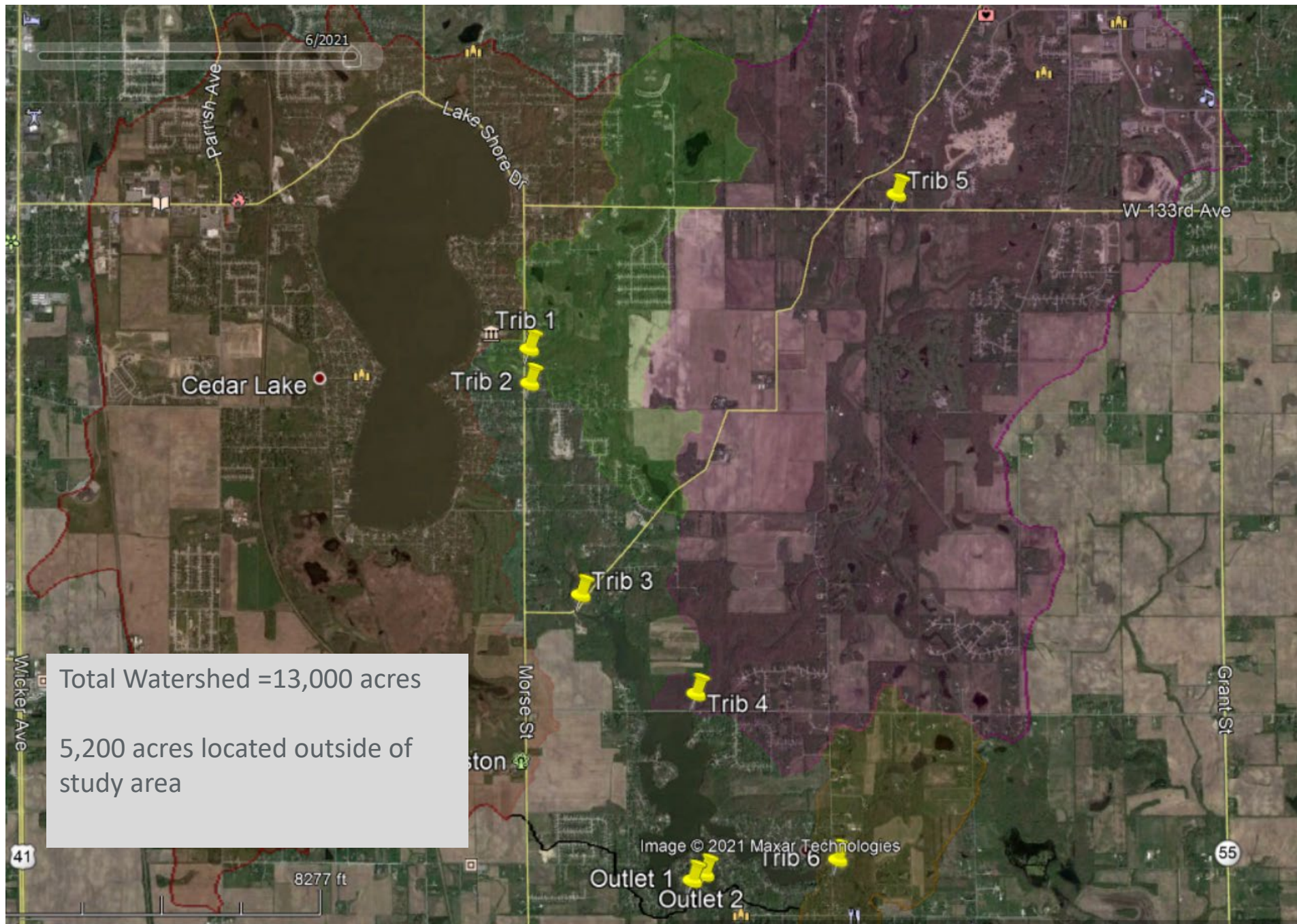


> Goal of Study

- Document existing water quality conditions within the watershed (Tributaries) and in Lake Dalecarlia
- Develop management recommendations
- Study includes watershed downstream of Cedar Lake

> Study Tasks

- Watershed tour
- Tributary Sampling – 8 sites – 6 events
- In-lake sampling – 1 event in summer
- Sediment assessment in lake and Foss Ditch trap
- Phosphorus modeling
- Comprehensive project report
- Two public meetings
- **In-kind service credit provided to LDPOA (\$2,600 available)**



Tasks Completed to Date

- > **Watershed tour via vehicle**
 - **Identify Issues:**
 - Numerous ravine instability issues around lake
 - Streambank erosion
 - Potential animal access to stream
 - Shoreline erosion
 - Increased residential development
 - **Positive Items:**
 - Modified tillage practices on most agricultural fields
 - Cedar Creek nice floodplain in locations
 - Stable stream reaches
- > **Tributary Sampling April 29 (storm event)**
- > **Tributary Sampling May 19 (base flow event)**

Tributary Sampling Data

-Too early in study to draw conclusion at this time. Four (4) events remaining

Notes to Date:

- Elevated *E. coli* concentrations during April event in all tributary locations
- Reduced *E. coli* concentrations during May event in all but one location
- Phosphorus concentrations elevated in storm event
- Nitrate concentrations acceptable
- Total Suspended Solids (TSS) elevated but not exceedingly high
- Dissolved oxygen, temperature, pH, conductivity parameters were acceptable

Remaining Items to complete

- (4) Tributary sampling events: June, July, August, September
- (1) Lake Sampling event: July or August
- Sediment assessments – lake and Foss Ditch sediment trap: July-September
- Investigate group of watershed tour problem sites for further assessment
- Develop project report
- Final public meeting in November

Thank you

For more information

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