#### Agenda

- Project progress
- Data update
  - Agriculture inventory
  - Water quality results
- Watershed goal setting
- Open discussion

# **Project Progress**

#### • Agriculture inventory

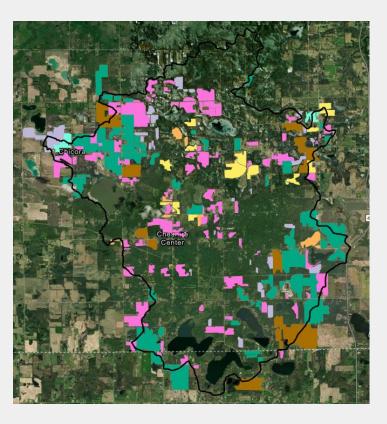
- <u>Completed</u>: tillage and residue surveys
- <u>Next</u>: Animal feeding operation survey, data analysis

#### • Water quality inventory

- <u>Completed</u>: June and July tributary samples, 2 of 3 wet weather samples, summer lake samples
- <u>Next</u>: continue tributary samples, *E. coli* and optical brightener samples, septic "inventory"
- Watershed management plan
  - <u>Completed</u>: draft background chapters and plan outline
  - <u>Next</u>: continue adding to background chapters

# Agriculture Inventory

Spring Residue	Fields	Acreage	Percentage
Planted no-till	15	290	6%
Greater than 30%	3	70	1.5%
Less than 30%	13	664	14%
No residue	59	1,783	38.5%
N/A	105	1,345	29%
Not Planted	10	106	2%
Skipped	36	368	8%
Total	241	4,629	



# Water Quality Monitoring

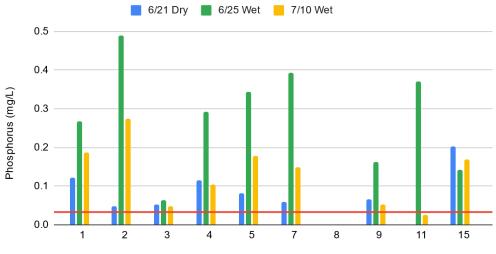




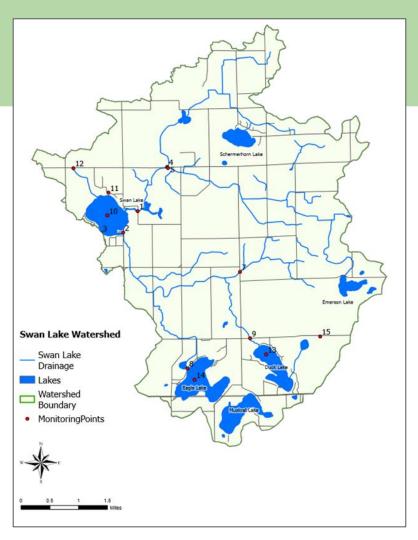


# Water Quality

#### Phosphorus Levels in the Swan Lake Watershed

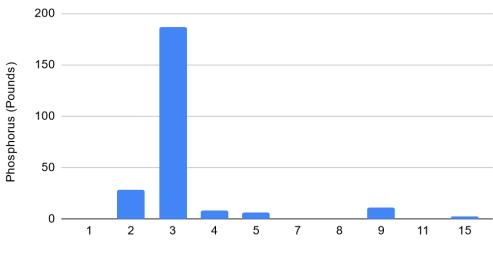


Site

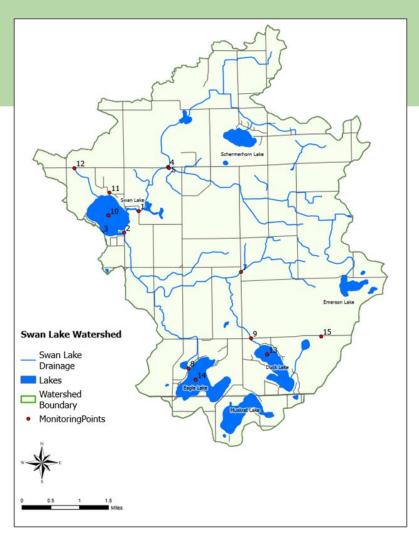


#### Water Quality

#### Total June Phosphorus Per Site



Site



# **Designated Uses**

- Cold Water Fishery
- Warm Water Fishery
- Other Indigenous Aquatic Life and Wildlife
- Partial Body Contact Recreation
- Total Body Contact Recreation
- Fish Consumption
- Navigation
- Agriculture
- Industrial Water Supply
- Public Water Supply

See EGLE's 2024 Integrated Report for Assessment Details

#### **Designated Use Impairments**

#### Listed Impairments

Location	Designated Use	Cause
Swan Lake	Other indigenous aquatic life and wildlife	Eutrophication, nutrients

#### **Suspected Impairments**

Location	Designated Use	Cause
Duck Lake	Other indigenous aquatic life and wildlife	Eutrophication, nutrients
Tributaries upstream of Swan Creek Pond	Warm water fishery	High temperature, low dissolved oxygen

#### **Desired Uses**

Examples:

- Groundwater for residential use
- Recreational trails
- Preservation of prime agricultural land
- Protection of unique terrestrial habitats
- Rural character

#### Watershed Goals

Examples:

- Reduce nonpoint source sediment, nutrient, and pathogen loading from agricultural fields by stabilizing sediment and minimizing runoff volume and pollutant load.
- Minimize pathogen and nutrient pollution from human waste.
- Reduce nonpoint source pollution caused by runoff from urbanized areas.
- Develop a trail system for Cheshire and Trowbridge Townships.
- Preserve wildlife habitat along riparian corridors.

#### Stakeholder Concerns Received to Date

- Leaking pump and haul septic holding tanks
- Runoff into Duck Lake over farm field and road at MacDougall St
- Runoff into Duck Lake from 36th St. drain at Baseline Rd
- Runoff into Burke Drain/Duck Lake from large livestock operation at 102nd
- Field runoff discharged through culvert under E Duck Lake Dr.
- Field runoff discharged into Swan Lake through culvert under Lakeview Dr.

# Upcoming

- Next meeting: Thursday, October 24 at 3pm
- Michigan Sea Grant 'Algae 101' Webinar tonight 6-7:30
  - Under Calendar section on the Michigan Sea Grant website, register online
- Michigan Inland Lakes Convention in Grand Rapids, October 2-4
  Hosted by the Michigan Inland Lakes Partnership
- November lake data collection on Swan, Eagle, and Duck Lakes

#### **Questions and Open Discussion**

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