



# Kawkawlin River Watershed Planning

Presentation by:  
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Spicer Group, Inc.



Office of Bay County Drain  
Commissioner



# Watershed Plan Goals

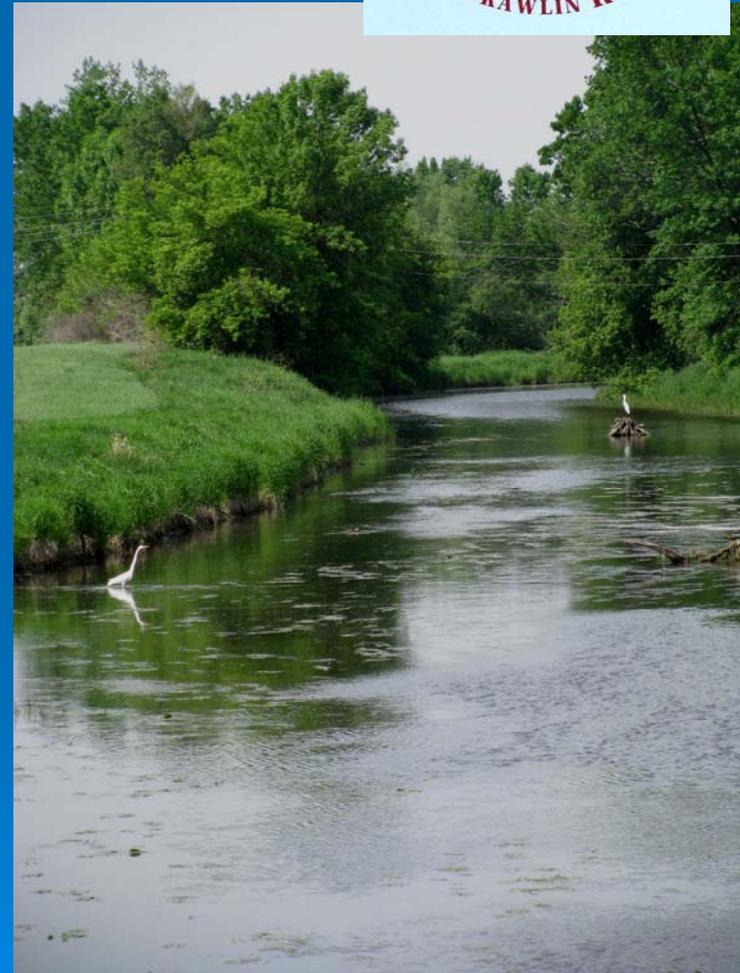


- Develop a plan that identifies and prioritizes environmental concerns along the Kawkawlin River
- Identify measures and enhancement projects in the plan to address concerns along Kawkawlin River
- Leverage plan to obtain future funding for implementation of measures to address concerns

# Watershed Planning Mission



- 💧 Safeguard and enhance the existing watershed
- 💧 Cleaner river water into the Saginaw Bay
- 💧 Restoration of the river corridor



*Kawkawlin River Near Monitor Road*

# Initiation of Watershed Plan



- 💧 History of problems along river
  - 💧 Poor water quality
  - 💧 Elevated levels of pollutants, E.coli and nutrients
  - 💧 Sedimentation of river
  - 💧 Beach closings
  - 💧 Flooding
  - 💧 Others
- 💧 Support of public and stakeholders to address
- 💧 319 planning grant pursued and obtained `

# Watershed Planning Grant



- ◆ Applicant is Bay County Drain Commissioner
- ◆ Supported by local government and agencies
- ◆ \$230,400 granted by MDEQ
- ◆ Local match of \$23,040 required
- ◆ Watershed plan must meet minimum requirements of MDEQ and EPA to gain eligibility for future funding
- ◆ Work plan developed to secure grant
- ◆ Stakeholder input critical in development of plan

# Purpose of Meeting



- Inform of / kickoff the watershed planning effort
- Obtain input and list of concerns
- Identify and encourage stakeholder participation



*Watershed Boundary Signs Can Be Found throughout the Kawkawlin River Watershed*

# Meeting Agenda

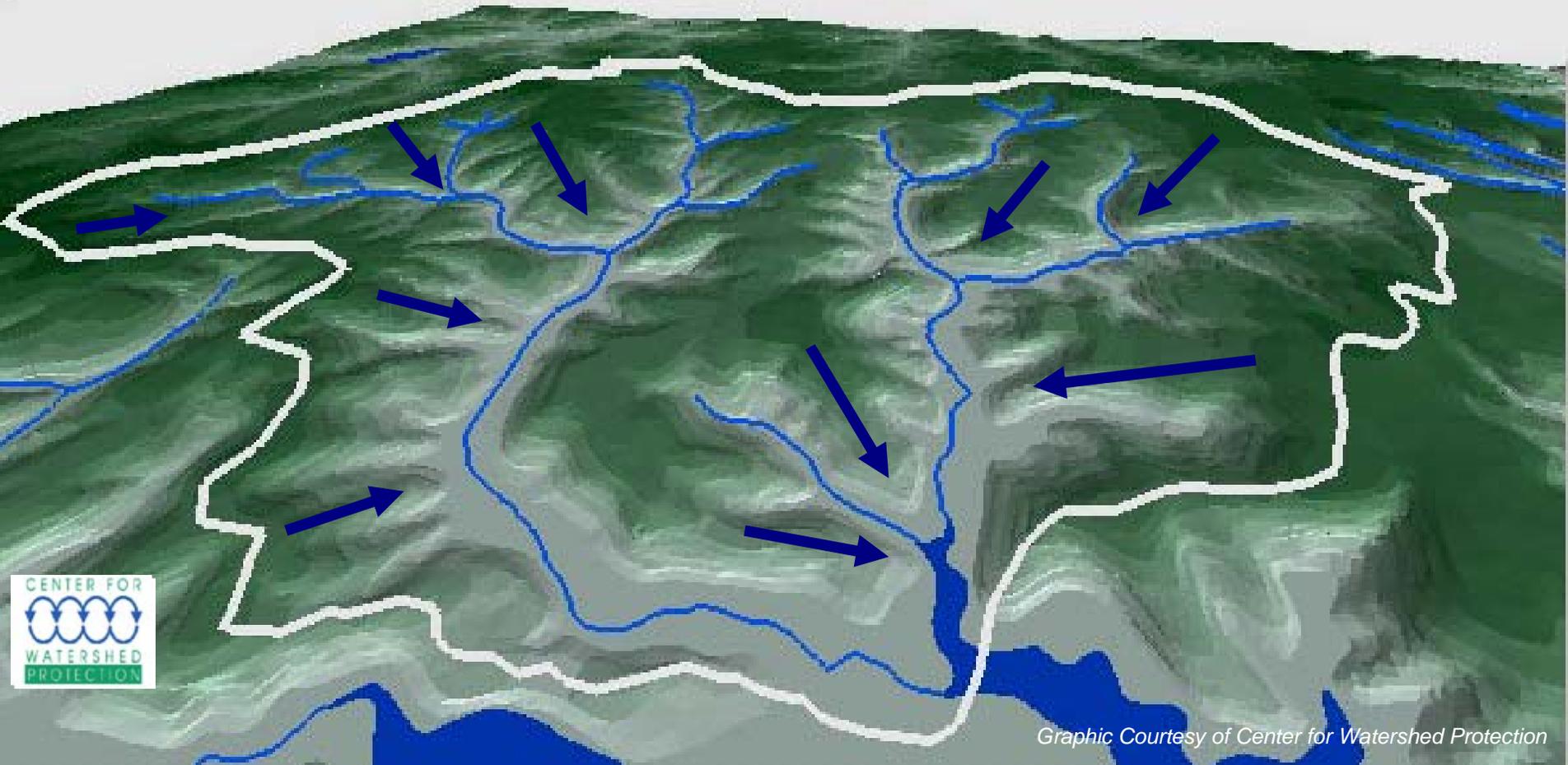


- 💧 Review watershed facts
- 💧 Review MDEQ approved work plan
- 💧 Solicit input and ideas and stakeholder participation for watershed planning
- 💧 Stakeholder meeting dates
- 💧 Actions items for next stakeholder meeting

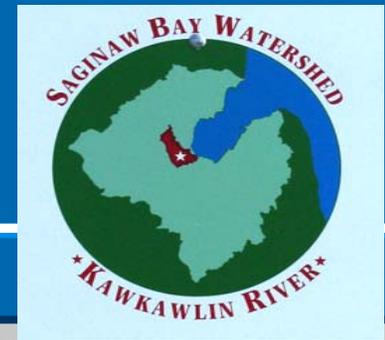
# What Is a Watershed?



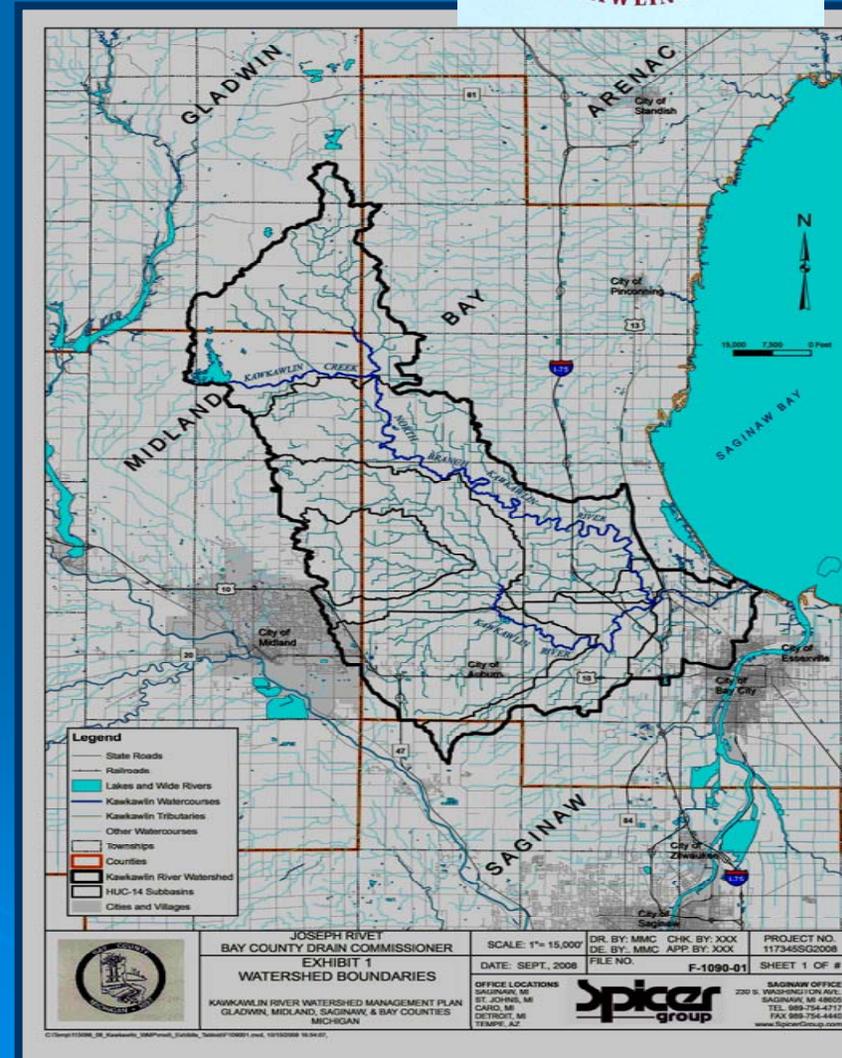
*A watershed is the area of land that drains to a particular point along a stream.*



# The “Watershed”



- Watershed facts
  - 225 square miles
  - 37 miles long
  - 450 miles of tributaries
  - 4 counties, 3 cities
  - 14 townships
  - 30+ stakeholder groups



# Public Involvement



- 💧 Stakeholder involvement from:
  - 💧 Municipalities
  - 💧 State and Local Agencies
  - 💧 Interest Groups
  - 💧 Educational Institutions
- 💧 Working together to provide public input and support to improve the watershed



*View of Kawkawlin River from State Park Drive Bridge*

# Planning Process Summary



- 💧 Conduct quarterly stakeholder meetings
- 💧 Conduct technical committee meetings
- 💧 Identify and Prioritize concerns
- 💧 Complete technical reviews of concerns
- 💧 Define sources and causes of concerns
- 💧 Identify feasible, sustainable solutions
- 💧 Review solutions with stakeholders
- 💧 Develop watershed management plan (WMP)
- 💧 Use the WMP to obtain funding for implementation

# MDEQ Approved Work Plan



- Task 1: Establish Stakeholder Meetings
  - 💧 Bay County Drain Commissioner
    - Establish steering committee
    - Hold quarterly meetings
    - Establish subcommittees (focus groups) for various tasks such as Best Management Practices (BMPs), Public Education, etc.

# Work Plan *(continued)*



## ➤ Task 2: Wetland Assessment

### 💧 Wetland & Coastal Resources, Inc. (WCR)

- Wetland restoration and protection strategies with a summary map in the WMP
- Quantification of sources and causes of wetland reduction in the watershed
- Quantify the acres of restoration of wetlands



*Kawkawlin River  
Wetland Areas*

# Work Plan *(continued)*



## ➤ Task 3: Geomorphic Assessment

### 💧 Spicer Group and WCR

- Provide a geomorphic assessment section in WMP
- Prioritized list for implementation of BMPs including a map summarizing results
- Geomorphology assessment of high priority implementation areas will be identified
- We have complete survey data from the late 1940s with which to work. No other WMP has this type of historical data.

# Work Plan (continued)



## ➤ Task 4: Riparian Corridor Ecological Assessment

### 💧 WCR

- Prioritized list or inventory for riparian corridor restoration and/or conservation activities
- A riparian corridor assessment section in WMP with a map summarizing results



# Work Plan *(continued)*



## ➤ Task 5: Hydrologic and Hydraulic Assessment

### 💧 Spicer Group

- Prioritized list for critical floodplain and greenway conservation
- List for critical flooding areas
- Statement of hydrology for high priority implementation areas



*Greenway in Lower Reach of Kawkawlin River*

# Work Plan (continued)



## ➤ Task 6: *E. coli* Assessment

### 💧 Bay County Health Department

- *E. coli* assessment section in the WMP including summary of suspected natural sources
- Map summarizing results of sanitary service investigations



Domestic Animals Often Contribute to *E. coli* Contamination

# Work Plan *(continued)*



- Task 7: Identification of Critical Areas
  - 💧 Spicer Group, WCR, and the MDEQ
    - Identify planning level solutions for each area of concern and rank the sites
    - Prioritized list of areas of concern
    - Assessment for high priority implementation areas
    - A map showing BMPs placement and practices
    - Action Plans for 1–3 year time period and 3–5 years for sustainability

# Work Plan *(continued)*



- Task 8: Public Outreach, Review, and Comment
  - Bay County Drain Commissioner
    - Web site for Kawkawlin River information
    - Summary of public comment and feedback
    - Public information and education plan for the Kawkawlin River Watershed

# Work Plan *(continued)*



- Task 9: Final Revisions and Approval of WMP
  - 💧 Project Team
    - Revise the WMP with documentation of Clean Michigan Initiative (CMI) and US Environmental Protection Agency (EPA) Section 319 grant approval. This is to be submitted 90 days prior to end of contract for review and approval.

# Work Plan *(continued)*



## ➤ Task 10: Project Evaluation

### 💧 Project Team

- Evaluation of project and its meeting of MDEQ criteria
- Evaluation of WMP by the project team

# Work Plan *(continued)*



- Task 11: Grant Administration and Closeout
  - 💧 Bay County Drain Commissioner
    - 💧 Quarterly reports for the 2-year duration of the project
    - 💧 Five hard copies and one electronic copy submittal
    - 💧 Draft of final project report
    - 💧 Project fact sheet developed
    - 💧 Release of claims statement

# Participation in Watershed Plan



- 💧 Voice concerns and ideas
- 💧 Participate in meetings
- 💧 Provide your opinion on draft documents
- 💧 Fill out surveys
- 💧 Goal for today – obtain input and develop a list of items you feel should be considered in watershed plan

# Your Concerns/Comments



- Restoration of river, use of DU and SB Walleye Club
- Improvement of warm water fishery, walleye and perch
- Sediment loads
- Increase participation in CREP and other vegetated buffer programs – education
- Looking at zoning changes

# Your Concerns/Comments



- Look at Agricultural Practices and education
- Water Recreation and public access
- Wildlife and fisheries

# Your Concerns/Comments



# Goals for the Watershed



# Action Items for Next Meeting



- Establish Technical Committees
- Review Specific Problems, Comments and Concerns and Prioritize

For Example

- Nutrient loading
- *E. coli*
- Hydrology
- Other listed concerns



Wheeler Road Bridge Over Kawkawlin River

# Action Items for Next Meeting



- DEQ Work Plan Tasks to be worked on
  - Wetland Assessment
  - Geomorphic Assessment
  - Hydrologic and Hydraulic Assessment
  - Initial screening of BMPs
  - Website development

# Public Meetings



## 💧 Public Meeting 1

- 💧 Identify Watershed Problems
- 💧 Examine Project Goals

## 💧 Public Meeting 2

- 💧 January 2009 (Location and Date, To Be Announced)
- 💧 Communicate Watershed Data
- 💧 Prioritize Needed Actions
- 💧 BMPs discussed for action items

# Public Meetings



## Public Meeting 3

- Public Meeting 3
  - April 2009 (Location and Date, To Be Announced)
  - Communicate findings

## Public Meeting 4

- Public Meeting 4
  - July 2009 (Location and Date, To Be Announced)
  - Communicate findings

# Public Meetings



## Public Meeting 5

- October 2009 (Location and Date, To Be Announced)
- Agenda to be announced

## Public Meeting 6

- January 2010 (Location and Date, To Be Announced)
- Agenda to be announced

# Information for Participation



- 💧 **Come to the Watershed Meetings**
- 💧 **Contact Your Local Government Representatives – See if They Are Involved!**
- 💧 **Check the Web Site When It is Available:**

[www.baycounty-mi.gov/DrainCommissioner/KawkawlinRiverWMP.aspx](http://www.baycounty-mi.gov/DrainCommissioner/KawkawlinRiverWMP.aspx)



*Let your voice be heard! Participate in the public involvement process.*

Questions?

