



Kawkawlin River Watershed Planning

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Spicer Group, Inc.

DEP Office of Bay County Drain Commissioner Spicer Group

Meeting Agenda

- Review of Corridor Assessment Committee meetings
- Sub-watershed surveys in progress
- Next Meeting Date: October, 20, 2009 Tentative

Tasks Accomplished

- Agricultural surveys completed in Sub-watersheds 7, 6, 3, 2, and 5
- Livestock surveys completed in 90% of Watershed, including Sub-watersheds 4 and 1
- No surveys done in 8
- Watershed survey map is on web site.

Sub-Committee Reports



- ◆ Nutrient Sub-Committee
 - Chair, Joel Strauss
- ◆ Corridor Assessment
 - Chair, Jim Hergott
- ◆ Water Course Assessment
 - Chair, Russ Beaubien

Nutrient

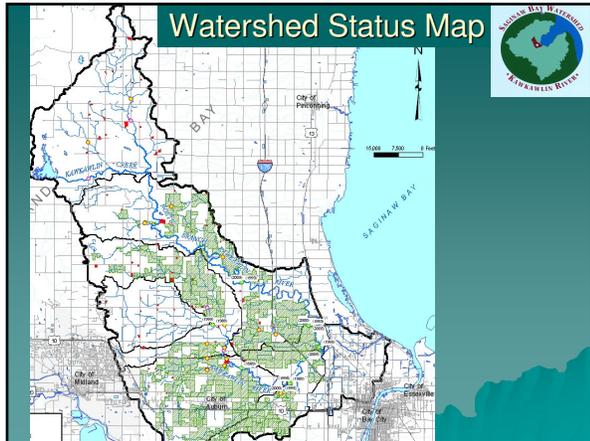


- ◆ Report:

Corridor



- ◆ Has had two more meetings
- ◆ Completed agricultural survey
 - Over 700+ survey forms completed
- ◆ Domestic livestock survey completed
 - 77 survey forms completed
- ◆ In the process of data mining now
- ◆ Trying to get more agricultural involvement



Corridor: Agricultural Survey

- ◆ Tilling Practices
 - 5% No-till
 - 43% Minimum tillage
 - 52% Conventional tillage
- ◆ 90% of crops planted by Conservation Crop Rotation
- ◆ 5% have planted buffer strips (avg 30')

Corridor: Livestock Survey

- ◆ 75% horses, 30% cattle, 5% both
 - Mix of outside feedlots and pasture land
 - Avg numbers: 18 cattle, 4 horses, 4 other
- ◆ 10% have manure storage problems
- ◆ About 40% border a drain/waterway
 - 2 major problems found: Direct animal access to waterway

Corridor



- ◆ Identify BMPs based on results of surveys
- ◆ Complete maps to identify:
 - PA116 lands
 - Conservation and Recreation lands in watershed

Water Course



- ◆ Met twice
- ◆ Have obtained crossing data
- ◆ Identified 2 areas for surveyor to assess
- ◆ Working toward pollutant causes / sources - must still be completed
- ◆ Started probe water sampling in critical area along with ag. survey

Water Course



- ◆ Additional water quality sampling
- ◆ Reports from sub-consultant on spring/summer assessment to be evaluated
- ◆ Contact with USGS made

Sampling Results – April



Location #	1	2	3
	N43 36.6215	N43 35.5445	N43 35.2270
	W84 0.0986	W84 1.9173	W84 2.9825
Temp (F)	46.1	52.2	53.0
SpC (mS/cm)	0.790	0.750	0.739
D.O (mg/L)	11.55	11.21	10.89
pH (units)	8.27	8.36	8.30
TDS (g/L)	0.5	0.5	0.5
Turbidity (NTU)	4.1	4.7	2.1

Sampling Results - July



Location #	1	2	3
	N43 36.6215	N43 35.5445	N43 35.2270
	W84 0.0986	W84 1.9173	W84 2.9825
Temp (F)	67.0	64.7	62.4
SpC (mS/cm)	0.720	0.715	0.686
D.O (mg/L)	11.7	8.14	5.35
pH (units)	8.71	8.34	8.16
TDS (g/L)	0.5	0.5	0.4
Turbidity (NTU)	1.5	14.7	7.9

Locations



- ◆ Culver Creek, N. side of North Union
- ◆ East side of 7 mile Rd, S. of US-10
- ◆ East side of 8 mile Rd, N. of Salzburg

Differing Ag Practices



Stakeholder Meetings



Stakeholder Meeting 5

- October, 19, 2009 (Location, Monitor Twp Hall)

Information for Participation



- Come to the Watershed Meetings
- Contact Your Local Government and Agricultural Representatives – See if They Are Involved!
- Check the Web Site as information becomes available:

www.baycounty-mi.gov/DrainCommissioner/KawkawlinRiverWMP.aspx



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

Questions?