

**Paw Paw River Watershed Project
Steering Committee Meeting
March 18, 2008**

Present:

Name	Representing	Name	Representing
Geoffrey Cripe	Southwest MI Land Conservancy	Joe Parman	VB Drain Commissioner
Chris Bauer	MDEQ	Nancy Edwards	Landowner
Sue DeVries	TNC	John Legge	TNC
Julia Kirkwood	MDEQ	Laurence Picq	K&A
Brian Gunderman	MDNR Fisheries	Steve Petersen	Hamilton Twp PC
Dave Foerster	Landowner	Marcy Colclough	SWMPC
Matt Meersman	SWMPC		

Project Updates

1. PPRW/BRW Workshops

15 people attended the Raingarden Workshop in March.
Healthy Home workshop is scheduled for April 1.

PPRW Watershed Management Plan

1. Draft Plan – the first draft was submitted to MDEQ at end of Feb. Matt plans to have a copy posted on the website by the next meeting.

2. Discussion on the Prioritization of Pollutants and Sources

Prioritization is mostly based on known impairments when possible.

Reviewed maps of high priority restoration (agricultural and urban) and protection areas.
There was a suggestion to prioritize urban and agricultural areas.

Note - Change septic systems to septage waste to be more inclusive (includes spreading of septage waste on fields by wastewater treatment plants and failure of municipal sewer infrastructure).

a) Restoration – 2 types agricultural and urban

Urban Areas

Pollutants - urban

- Sediment – a known pollutant causing impairments in urban areas like Benton Harbor and the Village of Paw Paw. Sediment is the highest priority pollutant throughout watershed. Most biosurveys found sedimentation occurring in all of the streams with impairments.

- Nutrients – Paw Paw Lake study attributed low dissolved oxygen to excess nutrients and other lakes with residential development are experiencing similar problems.

- Oil/grease/metals – Ox Creek TMDL (heavy metals, evidence of oil and grease)

- Bacteria – septic systems along highly developed lakes is a big issue

- Temperature – most of the cold water streams are not located in urban areas

- Pesticides – suspected – not much evidence on presence or affect

Sources – urban

- Stormwater runoff – suspected to be responsible for most of the pollutants impairing designated uses in urban areas.
- Streambanks – impervious surfaces in urban areas can cause streambank erosion by increasing flashiness. However, most urban areas are located directly on the mainstem. The affect of existing urban areas on hydrology may be less than new development in protection areas where impervious surfaces are increasing along the tributaries
- Septic systems – no evidence of problems

Note - Add sewer infrastructure system failure as a source.

b) Agricultural Areas

Pollutants -agriculture

- Sediment – a known pollutant causing impairments throughout watershed. Most biosurveys found sedimentation occurring in all of the streams with impairments. Sediment from agricultural runoff also carries nutrients like nitrogen and phosphorus.
- Bacteria – TMDLs are scheduled for development in agricultural areas due to extremely high *E. coli* levels. Cattle access sites have also been identified in agricultural areas.
- Nutrients – TMDL is scheduled for development in the West Branch due to low dissolved oxygen. Nutrients from agricultural runoff in the watershed are suspected to be causing the impairment.
- Pesticides – suspected but no real evidence
- Temperature - impervious surfaces are minimal – changes in hydrology could affect temp but no evidence that temp has been affected to date. Removal of tree cover along streams in agricultural areas is a concern with temperature.

Note - Add oil/grease/metals to ag areas- leaks/dumping, storage

Sources- agriculture

- Streambanks – Biosurveys found streambank erosion occurring on many of the waterbodies in agricultural areas. They are the only known source of the highest priority pollutant - sediment.
- Livestock – Two waterbodies with TMDLs in the agricultural areas have a high concentration of livestock.
- Stormwater runoff – Unmanaged runoff from agricultural lands carries sediment and nutrients directly to surface water.
- Septic systems- suspected, but no evidence

Note - Add manure runoff - causes – improper manure management

Note - Add stormwater runoff from roads – salt application, vehicle maintenance

Note - There was discussion about changing the cause “improper manure management” to “manure runoff.” Improper may not be a good word to use because it may not be good for establishing relationships with landowners. It was decided to leave it improper so that the plan is not watered down.

c) Protection Areas

Pollutants

- Sediment – a known pollutant causing impairments throughout watershed. Most biosurveys found sedimentation occurring in all of the streams with impairments. Sedimentation can increase with development during construction and from the effects of impervious surfaces on hydrology.
- Nutrients – around lakes, residential lawns, golf courses increase with development
- Temperature – because many of the cold water streams are located in the protection areas – increased impervious surface and removal of buffers are a concern
- Bacteria – septic systems especially around lakes – expect more building to occur near lakes and rivers.
- Pesticides – suspected, but no evidence (no testing)
- Oil/grease/metals – increase in development will increase these pollutants in stormwater runoff

Sources

- Streambanks – increase in impervious surface can alter hydrology and cause streambank erosion if runoff is not managed properly. Removal of riparian corridor for waterfront development in protection areas also leads to streambank erosion.
- Stormwater runoff – suburban development and associated impervious surface is expected to increase in protection areas. Stormwater runoff from these surfaces as well as construction sites can carry sediment to surface waterbodies.
- Septic systems – increase in number of systems with development
- Livestock – existing access site problems in protection areas

Next Steps

Complete Action Plan

Estimate Pollutant Loadings

Plan Review and Comment

Other Comments, Concerns

- 1. Correction to build-out results** – Matt presented corrected loading and runoff numbers from the build-out model. The results were summarized by subwatershed.
- 2. Antwerp Native Planting project** – Antwerp Twp is seeking volunteers to assist in planning and planting a retention basin on the township hall property. Any interested volunteers should contact Marcy.
- 3. PPRW/BRW Sustainability Forum Planning Mtg** – 3/26 10:00am Bangor City Hall – discuss possibility of working with the Black River Watershed project to ensure that watershed activities (such as implementing the watershed mgt plan) continues after grant funding from MDEQ ends. PPRW stakeholders expressed interest in pursuing this topic with the BRW stakeholders.
- 4. St. Joseph River Watershed Council Annual Mtg** – 3/26 5:30 – 9:00 pm in Sturgis. Matt and Marcy encouraged PPRW stakeholders to attend this watershed meeting to know what other things are happening in the St. Joseph River Watershed.

Next Meeting: Thursday, April 24 at 9:30 pm