# Paw Paw River Watershed Planning Project Steering Committee Meeting Summary December 20, 2006 9:30 – 11:00 AM

#### PRESENT:

NAME	REPRESENTING	NAME	RESPRESENTING
Charles Goodrich	Michigan Nature Ass.	Dave Foerster	Landowner
Mark Parrish	Pokagon Band	Chris Bauer	MDEQ
Gaye Blind	Berrien County	Sue DeVries	The Nature
	Conservation District		Conservancy
Chuck Nelson	Sarett Nature Center	Julia Kirkwood	MDEQ
John Small	Paw Paw Village	Peter Vincent	MDEQ
Mindy Walker	Sarett Nature Center	Amy Lockhart	VB Conservation
			District
Mark Kieser	Kieser & Assoc	Doug Stiles	Almena Twp
Gary Stock	Landowner	Rob Zbiciak	MDEQ – LWMD
Steve Petersen	Hamilton Twp	Del Sipes	Watervliet Twp
Nancy Edwards	Landowner	Marcy Colclough	SWMPC
Bob Harvey	Paw Paw Village	Matt Meersman	SWMPC
Dave Fongers	MDEQ	Pete Deboer	SWMLC
Don Main	Landowner	Lisa Phillips	Porter Twp
Darrin Schaer		Joe Stepich	Paw Paw Lake
Frank Jurenka	Paw Paw Lake	Lou Gibson	Paw Paw Lake

#### Introductions

#### **Project Updates:**

- •<u>Land Protection Committee</u> The GIS model was built by SWMLC and refined by SWMPC. A first draft map was produced and presented to the committee. Further refinements will be made to this map, but overall the committee was pleased with the lands selected as critical for preservation.
- •MDEQ flow monitoring MDEQ installed flow monitoring equipment (data loggers) in two locations in the watershed (East Branch and Brandywine Creek). A rain gage was installed in Paw Paw. The data loggers and rain gage have been removed.
- •SWAT modeling –Mark Kieser presented an update on SWAT modeling. The SWAT model is a predictive tool used to forecast what if scenarios and to compare and contrast sub-watersheds (for example those with different land uses urban vs. natural). The model can assist in identifying sensitive areas needing protection and subwatersheds to target for agricultural best management practices (bmps) or restoration work. The model can estimate the amount of water quality improvement for certain types of bmps and help determine which bmp is the most cost effective. The model has been calibrated with USGS and MDEQ flow data. The validation of the model entailed comparing 1997-2004 model predictions to real data from that period. The statistics show that the model is reasonably predicting future conditions. The model looks at flow, Total Suspended Solids (TSS) and Total Phosphorus (TP).

Suspended solids (sediment) contribute to the filling of impoundments. They are also destructive to habitat and fisheries. Phosphorus causes eutrophication of impoundments and also impairs habitat and fisheries.

There is a lack of water quality data (TSS and TP with accompanying flow data) in the watershed, so it has been difficult to calibrate/validate the model for the water quality parameters. The model is better calibrated/validated for flow. There is some usable data for TSS and little or old data for TP (from STORET). The model will be more weak for predicting water quality than for flow. The calibration/validation process is helping to identify where data gaps are.

There was some discussion about collecting TP and TSS data. Paw Paw Lake Foundation members stated that TP and Nitrogen data has been collected for the lake and its tributaries. Data on the height of Paw Paw Lake and rainfall each week since 1984 is also available. Chris Bauer encouraged Kieser to review MDEQ's biosurvey data.

Gary Stock asked what it would cost to get additional TSS and TP data. Kieser stated that the Rocky River Project spent \$12,000 over two years to get samples at 2 station once per month for flow, TSS and TP. Julia mentioned that the Gun River is using local Wastewater Treatment Plants to get TP data. Kieser estimated that the PPRW would need about 2-4 locations sampled monthly for flow, TSS and TP to build a useful dataset.

Julia Kirkwood reminded the group that with the grant timeline there is probably not enough time to begin collecting new data for use in the plan. The management plan will address future monitoring needed. A sub-committee can be formed to focus on future monitoring. There will be an effort to collect any available data from Paw Paw Lake, Western Michigan University and EPA/MDEQ that could be useful for the SWAT model or the management plan.

•Information & Education – The Watershed Short Course was completed Oct 31, 2006; about 25 people took the course. The Community EXPO on Oct 31 had good attendance. Another edition of LID NEWS was sent to all municipalities in the Paw Paw, Black and Galien River Watersheds. The newsletter addresses Low Impact Development. Citizen Planner is being offered by Allegan County during Feb. and March, 2007. Workshops targeted to Local Officials are being planned for March and April. These will be offered in partnership with the Black River Watershed Project. A Wetlands 101 class and a landscaping for water quality class are also being planned - these will be targeted toward the general public.

<u>Watershed Management Plan Draft Review</u> – Draft components of the management plan are available on-line at <u>www.swmpc.org/pprw.asp</u>. Matt Meersman encouraged stakeholders to give feedback via the website. He demonstrated the on-line comment function – how to register and how to make a comment on the plan. He will be sending an email to the group with instructions and updates soon. Please visit the plan and offer

comments. The management plan is a work in progress and will become a great plan with input from the stakeholders.

## Hydrological Studies for NPS Planning Grants Dave Fongers, MDEQ

Dave gave an overview of the types of information included in a hydrological study for watersheds.

- 1. Characterize a Watershed elevation, river profile, land use comparison (1800, 1978, 2005), soils (A,B,C,D), stream order analysis from MDNR Fisheries.
- 2. Hydrologic Changes runoff volume/area (1800, 1978, 2005); yield (peak flow/area for 1800, 1978, 2005); percent imperviousness (using population data and land use); flashiness analysis for USGS gages; curve number, etc.
- 3. Provide basis for stormwater management recommendations recommend first flush and channel shape flows for the watershed to base stormwater ordinances or guidelines on. MI best management guidelines recommend 0.5 inch of runoff that should be captured and treated. (Dave asked what the release rate was for the Van Buren and Berrien County Drain Commissioners.)
- 4. Determine Critical Areas rank subwatersheds, identify cold water streams

Dave reported on the flow monitoring that took place on Brandywine Creek and the East Branch from May through October 2006. An initial look at the graph seemed to show Brandywine Creek to be more flashy. Rain data from Paw Paw, Bloomingdale, and Lawton was compared. Dave was concerned about local differences in rainfall causing differences in the graph that should not be attributed to flashiness or curve numbers. Air and water temperatures were measured and seemed stable for both locations. This data was collected for validation/calibration of the SWAT model.

### Other Comments, Concerns, Ideas, etc....

<u>Harbor Shores</u> -An MDEQ public hearing is scheduled for Jan 9 at 7:00 pm in Benton Harbor for the wetland/floodplain fill/stream enclosure application. EPA has withdrawn its opposition.

<u>Paw Paw Wal-Mart</u> – A public hearing was held and public comment was closed on this permit application with MDEQ. USFWS, EPA and Army Corps of Engineers submitted comments on the application. Students sent in pictures of box turtles. About 6 comments were received from the Paw Paw Village residents. The MDEQ asked Wal-Mart to withdraw the permit or MDEQ would deny it.

Rob Zbiciak explained the administrative law hearing for appealing MDEQ's denial of wetland permits. The law was just changed to give the MDEQ Director final say on the matter. However, if a case reaches this point there are no public notices. The interested party must stay in contact with the field staff.

Concerns were raised about polyphosphate being added to municipal water supplies for iron removal in Coloma and Lawrence.

**Next Steering Committee Meeting** – February 21, 2007 at 9:30am at the Van Buren Conference Center in Lawrence.