Paw Paw River Watershed Planning Project
Steering Committee Meeting Summary
December 19, 2007 9:30 – 11:30 AM

PRESENT:

Name	Representing	Name	Representing
Marcy Colclough	*SWMPC*	Cameron Guenther	*Kieser & Assoc*
Matt Meersman	*SWMPC*	Joe Stepich	*Paw Paw Lake*
Don Main	*Watershed resident*	Geoff Cripe	*SWMLC*
Dave Foerster	*Waverly Twp resident*	Frank Jurenka	*Paw Paw Lake*
Joe Parman	*VB Drain Commissioner*	Gary Stock	*Antwerp Twp*
Chris Bauer	*MDEQ – WB*	Jo Taylor	*Coloma Twp resident*
Julia Kirkwood	*MDEQ – ESSD*	Nancy Edwards	*Almena Twp resident*
John Legge	*TNC*	Doug Stiles	*Almena Twp*
Sue DeVries	*TNC*	Gaye Blind	*Berrien County resident*
Steve Petersen	*Hamilton Twp PC*	Bob Harvey	*Paw Paw Village*
Lou Gibson	*Paw Paw Lake*	Larry Nielsen	*Paw Paw Village*

Project Updates:

1. Workshop Update – Marcy Colclough: Marcy briefly described the Farming for the Future agricultural expo which took place December 10th. The breakout sessions were very well attended with 76 attendees overall. The evaluations were very positive.

Watershed Management Plan Discussion:

Urban Critical Area Discussion – Matt Meersman: Matt explained how he developed a Geographic Information System (GIS) computer model to identify priority areas for urban and developing BMPs on a Quarter-Quarter (QQ) section basis (~40acres). The analysis assigned values to each QQ based on the following information: 1) amount of existing urban land cover, 2) hydrologic concerns, 3) development potential, and 4) accessibility. Each category is explained in the model summary. The points given to each attribute were broken out in another table. The discussion from the meeting is summarized below:

1. Existing Urban Land Cover – considers urban related land cover from existing GIS data and its proximity to water (lakes and streams). Since the GIS data is from 2001, Matt conducted a virtual flyover of the watershed with 2005 aerials to identify new development in the watershed. QQs with about 12 buildings or more, parking lots, several new roads, or other large impervious areas were identified from the photos. The amount of urban land cover within a 200 meter buffer of streams and 150 meter buffer of lakes greater than 25 acres was also considered. Approximately 44% of the maximum possible score in the model could come from the Urban Land Cover category.
2. Hydrologic Concerns – considers urban related TMDL waterbodies where the impairment is due to urban issues (Ox Creek). Groundwater recharge was considered because it is important to have urban stormwater runoff infiltrate in areas of high groundwater recharge. Historic and existing wetlands identified by MDEQ with high or medium ability to detain surface water and provide shoreline stabilization were also considered. Approximately 11% of the maximum possible score in the model could come from the Hydrologic Concerns category.
3. Development Potential – considers the number of parcels per QQ although the distribution of parcels may be more important than the total number. One or two large parcels are more attractive to a developer than many small parcels, but large parcels that have already been split

are ready for development. Many of the QQs with a lot of parcels in them also had large amounts of existing urban landcover. Parcel data was not available for Kalamazoo County. An automatic 10 points were given to QQs in this portion of the watershed because this is developing quickly due to its proximity to the City of Kalamazoo. Points were also given to platted, but undeveloped subdivisions. However, this only affected 15 QQs, mostly in the eastern part of the watershed. Future Land Use information from municipal master plans was considered, but environmental overlay areas were not incorporated because each municipality had differing levels of protection. The presence of desirable waterfront within the QQ was considered because people like to live near the water. Population change from 2000 to 2005 was also considered. Most growth has occurred in the eastern part of the watershed and in Lawrence Township. Except for Mattawan and Lawton, the cities and villages in the watershed have lost population during this period. Approximately 35% of the maximum possible score in the model could come from the Development Potential category.

4. Accessibility – considered the proximity of major roads (Red Arrow Hwy & State Hwys) and interstate exits to the QQ. Areas were given points if they intersected the major roads or they were within a buffer area of exit ramps off the expressways. The exit ramp areas also needed to have frontage on a road. This category could be considered another component of Development Potential, but it was treated seperately. Approximately 10% of the maximum possible score in the model could come from the Accessibility category.

Matt presented several maps showing each criteria with the accompanying values. A draft Built/Developing Related Critical Areas map was then presented showing the QQs with scores of 48 points or more separated into 6 classes. There was discussion about combining the developed and developing areas in the same map.

Selecting Critical Built/Developing Areas – Matt Meersman:
Statistics were calculated based on the average QQ score for each subwatershed as well as the number of high ranking QQs in each subwatershed. The 7 highest ranking subwatersheds in both tables were 6, 17, 3, 1, 12, 7, and 15. There was discussion about adding subwatersheds 4 & 5 to the final map. Development in these areas could have a tremendous impact on lakes. We do not want property values to decrease because of poor water quality. A decrease in water quality could also cause property assessments to go down. After further discussion there was a consensus to not include subwatersheds 4 & 5 because the primary issues in these areas are agricultural.

Marcy suggested creating 4 areas of concern that contain all or portions of subwatersheds 6, 17, 3, 1, 12, 7, and 15 as well as parts of 4 and 5. These areas would not need to follow subwatershed boundaries. There was a consensus to have Matt create a draft map in this manner. The critical area map will also display known fish passage impairments identified by MDNR Fisheries. There are several identified in Blue Creek and East Branch. It also includes dams such as the one at Maple Lake; old fish hatchery; and the Watervliet dam.

Ag Critical Areas Update – Matt Meersman: Cattle access points identified in the volunteer inventory have been added to the Critical Areas for Agricultural Restoration map. A draft of this map was presented.

Build-out Model Presentation by K&A – Cameron Guenther: Kieser & Associates and SWMPC have developed a tool to look at build out scenarios and the impact on runoff, sediment, phosphorus and nitrogen pollution. The model is GIS based. The layers of soils, existing land use, future land use,

subwatershed, municipality (village, township, city), regulated wetlands, and "no-change" areas (lakes, cemeteries, utility easements, etc.) were combined to create over 200,000 unique polygons.

- The LTHIA model was used to calculate runoff and loading values for each polygon based on land use and soils.
- The future land use layer was developed by SWMPC from municipal master plans. Master plans were not available for 4 municipalities (Arlington & Bloomingdale Townships in Van Buren County and Alamo & Prairie Ronde Townships in Kalamazoo County)
- The loading values are the pounds of pollutant per year that enter water bodies based on land use, soil type, and local rainfall data.
- Curve numbers take into account Michigan data (Rouge River).
- Cameron explained the difference between Suspended solids – particles in water – turbid vs. Dissolved solids - don't settle out unless stagnant water
- Cameron described the rules for creating the build out scenarios. First, areas that would not change in the build out scenarios were identified. These included water bodies, cemeteries and protected lands. Regulated Wetlands and agriculture preservation areas would build out, but at a slower rate.
- The runoff in some watersheds decreases as they build out. This is due to one of two reasons: 1) When forested land is converted to low density residential in type A/D soils it allows water to infiltrate better. These soils have a high water table and naturally do not drain very well, but when they are drained and ditched for development the runoff decreases. OR 2) When agricultural land is converted to low density residential, the runoff decreases due to increased infiltration in lawns, landscaping, and other vegetated areas.

Other Comments, Concerns, Ideas, etc….

Larry Nielsen – Larry recommended looking at watershed wide stormwater runoff regulations – City of Grand Rapids – zero discharge incentives are provided – use of green roofs, rain gardens, infiltration devices, etc.

Announcements – Dave Foerster was highlighted in an MSU Citizen Planner flyer about Van Buren County Farmland and Open Space Development. Gary Stock was featured in a Michgan Now article about the PPRW and eastern box turtles.

Next Steering Committee Meeting – January 30, 2008 at 9:30 AM at the Van Buren Conference Center in Lawrence