### **Wetland Benefits**



 Water Quality Protection
 Wetlands filter sediment and nutrients from stormwater.



Flood Damage Prevention
 Wetlands reduce flood impacts
 by holding and slowly releasing
 runoff from rain and snowmelt.



Wildlife Habitat
 Wetlands provide critical habitat
 for birds, fish, turtles, mammals
 and reptiles.



This brochure was created by the Van Buren Conservation District as part of the Paw Paw and Black Rivers Wetland Protection & Restoration Project with support from the Michigan Department of Environmental Quality, the Two Rivers Coalition, the Southwest Michigan Land Conservancy and Ducks Unlimited.



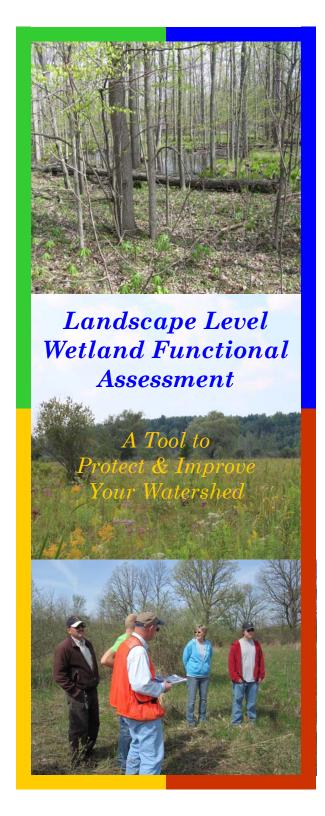
Michigan's Nonpoint Source Program







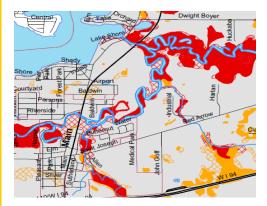
This Nonpoint Source Pollution Control project has been funded wholly through the Michigan Nonpoint Source Program by the United States Environmental Protection Agency under assistance agreement C9975474-10 to the Van Buren Conservation District for the Paw Paw & Black Rivers Wetland Protection & Restoration project. The contents of the document do not necessarily reflect the views and policies of the EPA, nor does the mention of trade names or commercial products constitute endorsement or recommendation for use.



# Landscape Level Wetland Functional Assessment (LLWFA)

The Landscape Level Wetland Functional Assessment (LLWFA) is a tool for targeting wetland protection and restoration efforts in your watershed. The LLWFA includes an analysis of wetland trends and a database with important information about each wetland.

The LLWFA can help prioritize wetlands for protection or restoration based on how well those wetlands serve specific functions. Each existing wetland, as well as every historic wetland in the watershed is ranked for functional significance. These rankings can be combined with parcel information to identify landowners for outreach efforts.



Maps produced with LLWFA data can help government officials, residents and developers understand the impact of wetland loss on local water quality and the economic benefits of protecting remaining wetlands through planning and zoning techniques.

# Wetland functions evaluated in the study:

**Nutrient Transformation** – ability of the wetland to remove nutrients from the water.

**Sediment Retention** – ability of the wetland to retain the sediment that would otherwise move downstream and build up in rivers, streams and lakes.

**Shoreline Stabilization** – ability of the wetland to protect shorelines by minimizing bank erosion caused by wave action and currents.

**Pathogen Retention** – ability of the wetland to retain bacteria such as *E. coli* that would otherwise move downstream and pollute rivers and lakes.

**Streamflow Maintenance** – ability of the wetland to provide a base flow of water for streams, especially critical during dry periods.

*Floodwater Storage* – ability of the wetland to store excess water during flood events.

**Stream Shading** – ability of the wetland to buffer water temperature fluctuations.

*Fish/Shellfish Habitat* – ability of the wetland to provide habitat for fish and shellfish.

*Waterfowl/Bird Habitat* – ability of the wetland to provide habitat for waterfowl, shorebirds and forest birds.

*Amphibian Habitat* – ability of the wetland to provide habitat for amphibians and other invertebrates.



## **Accessing the Data**

- •The Landscape Level Wetland Functional Assessment (LLWFA) has been completed for several watersheds in Michigan.
- •LLWFA data for the Paw Paw and Black River Watersheds is available from the Van Buren Conservation District.
- •The Water Resources Division of the Michigan Department of Environmental Quality can provide LLWFA data for several other watersheds in the state.



#### Michigan Department of Environmental Quality

Water Resources Division P.O. Box 30458 Lansing, MI 48909-7958

Phone: 517.335.6928 Email: fizzellc@michigan.gov

#### Van Buren Conservation District

1035 East Michigan Ave Paw Paw, MI 49079

Phone: 269.657.4030 ext.5 Fax: 269.657.4925

Website: www.VanBurenCD.org