#### **Threats to Ecological Value**

Most of the floodplain is subject to annual flooding and, consequently, would be difficult to develop. Still, human ingenuity is remarkable, and some areas of the floodplain could be filled and developed.

The floodplain is a collection of smaller floodplain swamp units that occur on either side



Beaver dam in a small tributary

of the river. Consequently, development into the center of a small forest unit would likely disturb the entire unit because of the resulting edge effect.



Inundated Shrub Swamp

### **Management Recommendations**

PCA 13 is an excellent candidate for conservation priority. This area includes a large and diverse collection

of plant communities and wildlife habitat that is generally intact and has not changed considerably since



Spring Peeper

European settlement. Because these larger natural areas are locally uncommon, maintaining them should be a priority in the fourtownship area.

Any development into the floodplain forest would have a large impact on the immediate vicinity due to edge effect and should be avoided.

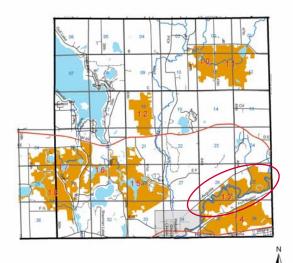
In addition, development into floodplains often does not properly plan for 50- and 100-year floods, during which floodwaters can reach record heights and seriously threaten human settlements on the floodplain.

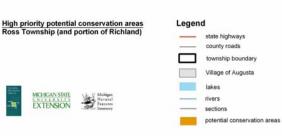
For these reasons, which take into account habitat preservation and human safety, development should not occur on the Kalamazoo River floodplain.

# Ross Township Kalamazoo River Floodplain PCA 13

#### Location

Potential Conservation Area (PCA) 13 is located in sections 25, 26, 34, and 35 of Ross Township. The 831-acre site is generally bounded by Augusta Dr., the Calhoun-Kalamazoo county line, Fort Custer Dr., and M-96.

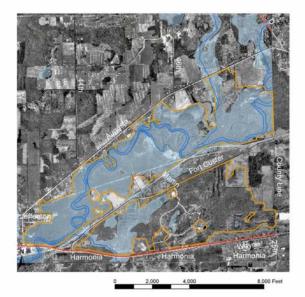




# Diverse Ecosystems

## Site Description

This Potential Conservation Area (PCA) is one of the largest PCAs in this study. Nearly all of the property is floodplain forest along the Kalamazoo River just upstream of the village of Augusta. The property is bordered by roads, agricultural fields, and low-density housing.



Potential conservation area 13 and 14 Ross Township Area 13: 831 acres



# Legend potential conservation area roads wetlands

# **Communities and Ecosystems**

The majority of PCA 13 comprises an extensive floodplain forest along the Kalamazoo River. Other wetland habitats occur throughout the floodplain; some areas near or on the floodplain grade into southern shrubcarr communities.

There is an oxbow lake at the eastern end of the property. The oxbow lake, a prior river



An Oxbow Lake

channel, is now a long, arching span of stagnant water.

The floodplain provides a valuable ecosystem service: temporary floodwater storage. The cities and towns located downstream of Augusta along the river benefit from the flood control throughout the year.

The southern floodplain forest represents a unique plant community in the four-township area. Some plant species reach their northern limits in southern Lower Michigan and occur almost exclusively along floodplain corridors.

#### **Plants and Animals of Interest**

The floodplains of the Kalamazoo River and its tributaries offer a rich wildlife habitat. Presence of white-tail deer and wild turkey is apparent throughout the PCA. The wet and woody environment is excellent habitat for the Eastern box turtle. The temporary ponds and oxbow lake offer ideal breeding sites for several frogs, salamanders and turtles.

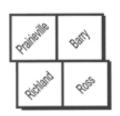
Birds such as the Prothonotary warbler, barred owl and the red-shoulder hawk nest in large swamps such as those along major river corridors like the Kalamazoo River. The 2003 Michigan Breeding Birds Census identified 29 species in this area.

Cardinal flower, with its vibrant red

flowers, occurs throughout the floodplain, but is less common in other wetlands.



Cardinal Flower



#### Four Township Water Resources Council

P.O. Box 634 Richland, MI 49083-0634 www.ftwrc.org