

PORTAGE-ARCADIA CREEKS WATERSHED MANAGEMENT PLAN KALAMAZOO COUNTY, MI

A Section 319 Watershed Management Planning grant from the Michigan Department of Environmental Quality, Surface Water Quality Division (MDEQ) sought to develop a unique, internet-based Watershed Management Plan (WMP) for Portage and Arcadia Creeks. Two significant tributaries to Portage Creek (Axtell Creek and the West Fork of Portage Creek) combine with Portage and Arcadia Creeks to discharge into the Kalamazoo River in the City of Kalamazoo. The objective of the project was to obtain and compile information necessary to allow stakeholders in the affected jurisdictions to collaboratively develop the framework and documentation for this watershed management plan for these two primary drainage areas.



Portage and Arcadia Creeks drain 36,344 acres of land in Oshtemo and Texas Township, and within the cities of Portage and Kalamazoo. The upper reaches of the watersheds are predominantly rural, agriculture and suburban while the lower reaches drain more urban areas with significant stormwater runoff. Portage Creek

and Arcadia Creek are significant contributors of phosphorus to the Kalamazoo River. New Phase II Storm Water Regulations and federal Clean Water Act limits for a Total Maximum Daily Load (TMDL) were driving local efforts to reduce total phosphorus (TP) and other nonpoint source (NPS) pollutants flowing into the Kalamazoo River.

The General Scope of this project included the following elements:

- Elicit community stakeholder participation
- Assess water pollution concerns
- Build upon ongoing efforts
- ISCO automated flow, TP, TSS and rainfall monitoring for effective watershed planning at 20 locations along Portage and Arcadia Creeks spanning over 22 miles of stream length
- Develop solutions on a watershed scale
- Capitalize on objectives, needs and issues associated with regulatory and non-regulatory programs for participants
- Create a web-based plan accessible to anyone
- Secure and build upon watershed partnerships
- Create a Project Steering Committee
- Conduct all technical elements
- Conduct Steering Committee meetings
- Create a project web page (www.kalamazooriver.net)
- Develop an approvable WMP

In 2006, K&A updated this plan to be EPA 9-elements compliant. Flow, water quality, stormwater loadings and riparian conditions were examined to determine and document future improvement needs and protection goals for prioritizing implementation efforts and funding opportunities. In 2014-15, K&A replicated detailed watershed monitoring that showed almost 40% reductions in TP and TSS, as well as significantly improved hydraulics following a decade of BMP implementation, largely led by K&A.

Contact:

Mr. Bill Reed
The FORUM of Greater Kalamazoo
1120 Lake Street
Kalamazoo, Michigan 49006
(269) 329-0882

Project Costs:

\$450,000 (K&A)

Project Duration:

2001-03, 2006, 2014-15