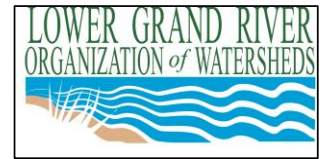


SUBWATERSHED MANAGEMENT UNIT SUMMARY SHEET

Subwatershed

Management Unit: Coopers, Clear, and Black Creeks
Major Watershed Name: Flat River
Hydrologic Unit Code: 04050006-0106, -0107, -0108



WATERSHED DESCRIPTION:

Size (acres):	65,401	Land Use (% of total)	
Counties:	Kent, Montcalm	<i>Agricultural</i>	52%
Cities, Villages & Townships:	Pierson, Sand Lake, Maple Valley, Pine, Montcalm, Spencer, Oakfield, Nelson, Eureka	<i>Forest Land</i>	19%
Critical Area for Restoration:	Medium	<i>Lakes</i>	3%
Priority Area for Preservation:	Medium	<i>Open Land</i>	3%
		<i>Urban</i>	4%
		<i>Wetlands</i>	19%
Pollutant Loadings			
Sediment (tons/yr)	637		
Phosphorus (lbs/yr)	16,680		
Nitrogen (lbs/yr)	100,640		

Priority Pollutant Pathogens

Priority Sources Cropland Livestock Septic tanks

Priority Causes Over or improper application of manure Uncontrolled livestock access Aging systems

Trout Streams/Miles Butternut Creek 1.3

Streams with Total Maximum Daily Loads & Dates of Implementation Lincoln Lake Pine Resort Beach TMDL E.Coli 2006

Wellhead Protection Area(s) NO

PLANS & STUDIES:

Watershed Management Plan None

Other Studies No

MDNRE Surface Water Quality Assessment Surveys 25300, MI/DEQ/SWQ-02/004/25300

MDNRE Hydrologic Studies NA

Local Water Quality Monitoring / Inventories

WATERSHED PARTNERS:

Watershed Organization(s) LGROW

NPDES Municipal Separate Storm Sewer System (MS4) Communities

Last Update: 9/9/2010