SUBWATERSHED MANAGEMENT UNIT SUMMARY SHEET

Subwatershed

Management Unit:Upper Thornapple RiverMajor Watershed Name:Thornapple RiverHydrologic Unit Code:04050007-0101

LOWER GRAND RIVER ORGANIZATION of WATERSHEDS

WATERSHED DESCRIPTION:

<u> </u>				
Size (acres):	166,535		Land Use (% of total)	_
County:	Barry, Eaton, Ionia	_	Agricultural	69%
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	Nachville Vermontville	, Charlotte, Potterville, Maple		
0	Grove, Kalamo, Bellevu			
		enton, Woodland, Sunfield,		
		Windsar, Eaton Rapids	Forest Land	15%
Critical Area for Restorati	ion:	High	Lakes	1%
Priority Area for Preserva	ation:	Low	Open Land	2%
			Urban	3%
Dellestant Lagary				
Pollutant Loadings			Wetlands	10%
Sediment (tons/yr)	1,584	<u></u>		
Phosphorus (lbs/yr)	32,689			
Nitrogen (lbs/yr)		_		
Millogen (ibs/yi)	190,190	_		
Priority Pollutant		Nutrients		
-				
Driarity Sources		Livestock	Septic tanks	Cropland
Priority Sources		Livestock	Septic tarks	Cropiano
		Over or improper		Over or improper
Priority Causes		application of manure	Aging systems	application of fertilizers
•		3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		
Trout Streams/Miles		Quaker Prook Unnamed trib to Quaker Prook		
		Quaker Brook, Unnamed trib. to Quaker Brook		
		8.1		
Streams with Total Maximum Daily Loads		Little Thornapple River TMDL Other anthropogenic substrate alterations & Other		
		flow regime alterations, date NA; Unnamed Tributary to Butternut Creek TMDL		
& Dates of Implementation		Unknown 2016, Thornapple River TMDL Dissolved Oxygen 2023		
& Dates of Implementatio	/11	Uliknown 2016, Thomappie	e River TWIDL DISSUIVED OF	kygen 2023
Wellhead Protection Area	a(e)	YES		
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DI ANS & STIIDIES:				
PLANS & STUDIES:	.(0)			
PLANS & STUDIES:				
Watershed Management		Thornapple River/Flat Rive	r/None	
		Thornapple River/Flat Rive	r/None	
Watershed Management			r/None	
		Thornapple River/Flat Rive	r/None	
Watershed Management I	Plan	None		
Watershed Management	Plan	None 003900, 25300, MI/DEQ/S\		-92/320, MI/DEQ/SWQ-
Watershed Management I Other Studies MDNRE Surface Water Qu	Plan	None		-92/320, MI/DEQ/SWQ-
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Watershed Management I Other Studies MDNRE Surface Water Qu Surveys	Plan uality Assessment	None 003900, 25300, MI/DEQ/S\ 98/029	WQ-02/001, MI/DNR/SWQ	
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