

# MUSKEGON RIVER WATER MONITORING PROGRAM

## SITE INFORMATION/MACROINVERTEBRATE REPORT

### SPRING 2009

**CID:** 02-24-01

SID: 1

STOREID:

HUC: 04060102070010

Collection Information	
<b>Date</b>	5/19/2009
<b>Time</b>	10:30 AM 1:00 PM
Collectors	
Roger	Vajda
Megan	Vajda
<b>Datasheet completed by:</b>	
Megan	Vajda
<b>Identifications made by:</b>	
Roger	Vajda

Stream Information	County: Mecosta	Latitude: N43 43.897
Stream: Dalziel Creek	Township: Green	Longitude: W85 29.214
Location: Spruce Rd.	TownshipNum: 16	Datum: GPS
Watershed: Muskegon River	TownshipDir: N	Range: 10
Subwatershed: Buckhorn	RangeDir: W	Section: 35
	Quarter: SW	300 Feet <input checked="" type="checkbox"/>
	QuarterQuarter	Feet-other
		If not 300, why?

Stream Conditions
<b>Average Depth</b> 2 ft
<b>Air Temperature</b> 67 F
<b>Current Conditions</b>
Clear
<b>last storm:</b> 5/14/2009
<b>Excessive Silt</b> <input type="checkbox"/>
<b>Substrate Embeddedness</b>
0-25 <input checked="" type="checkbox"/> >50 <input type="checkbox"/>
25-50 <input type="checkbox"/> unsure <input type="checkbox"/>
<b>Fish/wildlife Observed</b>
minnow, fish hatchling

Group 1 - Sensitive	2-Somewhat Sensitive	Group 3-Tolerant
Rare Common	Rare Common	Rare Common
<input type="checkbox"/> caddisfly larvae <input checked="" type="checkbox"/>	<input type="checkbox"/> alderfly larvae <input type="checkbox"/>	<input checked="" type="checkbox"/> aquatic worm <input type="checkbox"/>
<input checked="" type="checkbox"/> hellgrammites <input type="checkbox"/>	<input checked="" type="checkbox"/> beetle adults <input type="checkbox"/>	<input type="checkbox"/> leeches <input type="checkbox"/>
<input checked="" type="checkbox"/> mayfly nymphs <input type="checkbox"/>	<input type="checkbox"/> beetle larvae <input type="checkbox"/>	<input checked="" type="checkbox"/> midge larvae <input type="checkbox"/>
<input type="checkbox"/> gilled snails <input type="checkbox"/>	<input type="checkbox"/> black fly larvae <input checked="" type="checkbox"/>	<input type="checkbox"/> pouch snails <input type="checkbox"/>
<input checked="" type="checkbox"/> stonefly nymphs <input type="checkbox"/>	<input type="checkbox"/> clams <input type="checkbox"/>	<input type="checkbox"/> True Bugs <input type="checkbox"/>
<input type="checkbox"/> water penny <input type="checkbox"/>	<input type="checkbox"/> crane fly larvae <input type="checkbox"/>	<input type="checkbox"/> Other True Flies <input type="checkbox"/>
<input type="checkbox"/> water snipe fly <input type="checkbox"/>	<input type="checkbox"/> crayfish <input type="checkbox"/>	
	<input type="checkbox"/> damselfly nymphs <input type="checkbox"/>	
	<input type="checkbox"/> dragonfly nymphs <input type="checkbox"/>	
	<input type="checkbox"/> net-spinning caddis <input type="checkbox"/>	
	<input checked="" type="checkbox"/> scuds <input type="checkbox"/>	
	<input type="checkbox"/> sowbugs <input type="checkbox"/>	

Stream Quality Score
<b>Group 1</b>
Rare: 15
Common: 5.3
<b>Group 2</b>
Rare: 6
Common: 3.2
<b>Group 3</b>
Rare: 2.2
Common: 0
<b>Total: 32</b>
<b>Quality Score</b>
Fair

**Comments:**

**Number of jars** 1 **Confidence Level** 3

# MUSKEGON RIVER WATER MONITORING PROGRAM

## SITE INFORMATION/MACROINVERTEBRATE REPORT

### SPRING 2009

**CID: 02-25-01**

SID: 1

STOREID:

HUC: 04060102070020

Collection Information	
<b>Date</b>	5/4/2009
<b>Time</b>	3:15 PM 4:30 PM
Collectors	
Bill	Burmeister
Nancy	Burmeister
<b>Datasheet completed by:</b> Bill & Nancy Burmeister	
<b>Identifications made by:</b> Bill & Nancy Burmeister	

Stream Conditions	
<b>Average Depth</b>	3 ft
<b>Air Temperature</b>	68 F
<b>Current Conditions</b> Calm, cloudy	
<b>last storm:</b>	4/27/2009
<b>Excessive Silt</b>	<input checked="" type="checkbox"/>
<b>Substrate Embeddedness</b>	
0-25 <input type="checkbox"/>	>50 <input type="checkbox"/>
25-50 <input checked="" type="checkbox"/>	unsure <input type="checkbox"/>
<b>Fish/wildlife Observed</b> fish, crayfish, frogs, water mites, birds	

Stream Information		County: Mecosta	Latitude: N43 42.258
Stream: Ryan Creek	Location: Off 180th Ave. by a picnic area	Township: Colfax	Longitude: W85 26.488
Watershed: Muskegon River	Subwatershed: Ryan/Mitchell Creek	TownshipNum: 15	Datum: GPS
		TownshipDir: N	
		Range: 10	
		RangeDir: W	
		Section: 7	300 Feet <input checked="" type="checkbox"/>
		Quarter: SW	Feet-other
		QuarterQuarter	If not 300, why?

Group 1 - Sensitive		2-Somewhat Sensitive		Group 3-Tolerant		Stream Quality Score	
Rare	Common	Rare	Common	Rare	Common	Rare:	Common
<input type="checkbox"/> caddisfly larvae	<input checked="" type="checkbox"/>	<input type="checkbox"/> alderfly larvae	<input type="checkbox"/>	<input type="checkbox"/> aquatic worm	<input checked="" type="checkbox"/>	5	10.6
<input type="checkbox"/> hellgrammites	<input type="checkbox"/>	<input type="checkbox"/> beetle adults	<input type="checkbox"/>	<input type="checkbox"/> leeches	<input type="checkbox"/>	<b>Group 2</b>	
<input type="checkbox"/> mayfly nymphs	<input checked="" type="checkbox"/>	<input type="checkbox"/> beetle larvae	<input type="checkbox"/>	<input checked="" type="checkbox"/> midge larvae	<input type="checkbox"/>	Rare	12
<input checked="" type="checkbox"/> gilled snails	<input type="checkbox"/>	<input type="checkbox"/> black fly larvae	<input checked="" type="checkbox"/>	<input type="checkbox"/> pouch snails	<input type="checkbox"/>	Common	6.4
<input type="checkbox"/> stonefly nymphs	<input type="checkbox"/>	<input checked="" type="checkbox"/> clams	<input type="checkbox"/>	<input type="checkbox"/> True Bugs	<input type="checkbox"/>	<b>Group 3</b>	
<input type="checkbox"/> water penny	<input type="checkbox"/>	<input type="checkbox"/> crane fly larvae	<input type="checkbox"/>	<input type="checkbox"/> Other True Flies	<input type="checkbox"/>	Rare	1.1
<input type="checkbox"/> water snipe fly	<input type="checkbox"/>	<input checked="" type="checkbox"/> crayfish	<input type="checkbox"/>	<b>Total: 36</b>			
		<input checked="" type="checkbox"/> damselfly nymphs	<input type="checkbox"/>	<b>Quality Score</b>			
		<input checked="" type="checkbox"/> dragonfly nymphs	<input type="checkbox"/>	Good			
		<input type="checkbox"/> net-spinning caddis	<input type="checkbox"/>				
		<input type="checkbox"/> scuds	<input checked="" type="checkbox"/>				
		<input type="checkbox"/> sowbugs	<input type="checkbox"/>				

Comments:

Number of jars      2      Confidence Level      1

# MUSKEGON RIVER WATER MONITORING PROGRAM

## SITE INFORMATION/MACROINVERTEBRATE REPORT

### SPRING 2009

**CID: 02-25-03**

SID: 1

STOREID:

HUC: 04060102070020

<b>Collection Information</b>	
<b>Date</b>	5/13/2009
<b>Time</b>	10:00 AM 11:50 AM
<b>Collectors</b>	
Cindy	Fitzwilliams-Heck
Fred	Heck
<b>Datasheet completed by:</b>	
Cindy	Fitzwilliams-Heck
<b>Identifications made by:</b>	
Cindy	Fitzwilliams-Heck

<b>Stream Conditions</b>	
<b>Average Depth</b>	2.2 ft
<b>Air Temperature</b>	52 F
<b>Current Conditions</b>	
Cloudy	
<b>last storm:</b>	5/9/2009
<b>Excessive Silt</b>	<input type="checkbox"/>
<b>Substrate Embeddedness</b>	
0-25 <input type="checkbox"/>	>50 <input type="checkbox"/>
25-50 <input checked="" type="checkbox"/>	unsure <input type="checkbox"/>
<b>Fish/wildlife Observed</b>	
fish, squirrel, robins, blue jays, crows, freshwater sponge	

<b>Stream Information</b>	County: Mecosta	Latitude: N43 42.006
Stream: Mitchell Creek	Township: Big Rapids	Longitude: W85 28.984
Location: Mitchell Creek Park - beginning 12 ft south of north footbridge to 10'	TownshipNum: 15	Datum: GPS
Watershed: Muskegon River	TownshipDir: N	Range: 10
Subwatershed: Ryan/Mitchell Creek	RangeDir: W	Section: 11
	Quarter: SW	300 Feet <input checked="" type="checkbox"/>
	QuarterQuarter	Feet-other
		If not 300, why?

	<b>2-Somewhat Sensitive</b>	
	Rare                      Common	
<b>Group 1 - Sensitive</b>		<b>Group 3-Tolerant</b>
Rare                      Common		Rare                      Common
<input type="checkbox"/> caddisfly larvae <input type="checkbox"/>	<input type="checkbox"/> alderfly larvae <input type="checkbox"/>	<input checked="" type="checkbox"/> aquatic worm <input type="checkbox"/>
<input checked="" type="checkbox"/> hellgrammites <input type="checkbox"/>	<input checked="" type="checkbox"/> beetle adults <input type="checkbox"/>	<input type="checkbox"/> leeches <input type="checkbox"/>
<input checked="" type="checkbox"/> mayfly nymphs <input type="checkbox"/>	<input type="checkbox"/> beetle larvae <input type="checkbox"/>	<input type="checkbox"/> midge larvae <input checked="" type="checkbox"/>
<input type="checkbox"/> gilled snails <input type="checkbox"/>	<input type="checkbox"/> black fly larvae <input checked="" type="checkbox"/>	<input type="checkbox"/> pouch snails <input checked="" type="checkbox"/>
<input type="checkbox"/> stonefly nymphs <input checked="" type="checkbox"/>	<input type="checkbox"/> clams <input type="checkbox"/>	<input type="checkbox"/> True Bugs <input type="checkbox"/>
<input type="checkbox"/> water penny <input type="checkbox"/>	<input type="checkbox"/> crane fly larvae <input type="checkbox"/>	<input checked="" type="checkbox"/> Other True Flies <input type="checkbox"/>
<input type="checkbox"/> water snipe fly <input type="checkbox"/>	<input checked="" type="checkbox"/> crayfish <input type="checkbox"/>	
	<input checked="" type="checkbox"/> damselfly nymphs <input type="checkbox"/>	
	<input checked="" type="checkbox"/> dragonfly nymphs <input type="checkbox"/>	
	<input type="checkbox"/> net-spinning caddis <input checked="" type="checkbox"/>	
	<input checked="" type="checkbox"/> scuds <input type="checkbox"/>	
	<input type="checkbox"/> sowbugs <input type="checkbox"/>	

<b>Comments:</b>		<b>Number of jars</b>	1	<b>Confidence Level</b>	1
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<b>Stream Quality Score</b>	
<b>Group 1</b>	
Rare:	10
Common:	5.3
<b>Group 2</b>	
Rare:	15
Common:	6.4
<b>Group 3</b>	
Rare:	2.2
Common:	2
<b>Total: 41</b>	
<b>Quality Score</b>	
Good	

# MUSKEGON RIVER WATER MONITORING PROGRAM

## SITE INFORMATION/MACROINVERTEBRATE REPORT

### SPRING 2009

**CID: 02-25-05**

SID: 1

STOREID:

HUC: 04060102070020

<b>Collection Information</b>	
<b>Date</b>	5/15/2009
<b>Time</b>	10:25 AM 11:05 AM
<b>Collectors</b>	
Karen Bailey	
Alex & Gwe Graham	
4 others	
<b>Datasheet completed by:</b>	
Karen Bailey	
<b>Identifications made by:</b>	
Karen Bailey	

<b>Stream Information</b>	County: Mecosta	Latitude: N43 41.941
Stream: Mitchell Creek	Township: Big Rapids	Longitude: W85 29.405
Location: 100 feet below footbridge at Big Rapids Community Pool	TownshipNum: 15	Datum: GPS
Watershed: Muskegon River	TownshipDir: N	
Subwatershed: Ryan/Mitchell Creeks	Range: 10	
	RangeDir: W	
	Section: 10	300 Feet <input type="checkbox"/>
	Quarter: SE	Feet-other 290
	QuarterQuarter	If not 300, why? Overhanging branches - deep very slippery

<b>Stream Conditions</b>	
<b>Average Depth</b>	1.25 ft
<b>Air Temperature</b>	54 F
<b>Current Conditions</b>	
overcast	
<b>last storm:</b>	
Excessive Silt <input type="checkbox"/>	
<b>Substrate Embeddedness</b>	
0-25 <input checked="" type="checkbox"/>	>50 <input type="checkbox"/>
25-50 <input type="checkbox"/>	unsure <input type="checkbox"/>
<b>Fish/wildlife Observed</b>	
trout	

	<b>2-Somewhat Sensitive</b>	
	Rare                      Common	
<b>Group 1 - Sensitive</b>		<b>Group 3-Tolerant</b>
Rare                      Common		Rare                      Common
<input checked="" type="checkbox"/> caddisfly larvae <input type="checkbox"/>	<input type="checkbox"/> alderfly larvae <input type="checkbox"/>	<input checked="" type="checkbox"/> aquatic worm <input type="checkbox"/>
<input type="checkbox"/> hellgrammites <input type="checkbox"/>	<input checked="" type="checkbox"/> beetle adults <input type="checkbox"/>	<input checked="" type="checkbox"/> leeches <input type="checkbox"/>
<input type="checkbox"/> mayfly nymphs <input checked="" type="checkbox"/>	<input type="checkbox"/> beetle larvae <input type="checkbox"/>	<input type="checkbox"/> midge larvae <input checked="" type="checkbox"/>
<input type="checkbox"/> gilled snails <input type="checkbox"/>	<input type="checkbox"/> black fly larvae <input checked="" type="checkbox"/>	<input type="checkbox"/> pouch snails <input type="checkbox"/>
<input type="checkbox"/> stonefly nymphs <input checked="" type="checkbox"/>	<input type="checkbox"/> clams <input type="checkbox"/>	<input checked="" type="checkbox"/> True Bugs <input type="checkbox"/>
<input type="checkbox"/> water penny <input type="checkbox"/>	<input checked="" type="checkbox"/> crane fly larvae <input type="checkbox"/>	<input type="checkbox"/> Other True Flies <input type="checkbox"/>
<input type="checkbox"/> water snipe fly <input type="checkbox"/>	<input type="checkbox"/> crayfish <input type="checkbox"/>	
	<input checked="" type="checkbox"/> damselfly nymphs <input type="checkbox"/>	
	<input checked="" type="checkbox"/> dragonfly nymphs <input type="checkbox"/>	
	<input type="checkbox"/> net-spinning caddis <input checked="" type="checkbox"/>	
	<input checked="" type="checkbox"/> scuds <input type="checkbox"/>	
	<input checked="" type="checkbox"/> sowbugs <input type="checkbox"/>	

<b>Stream Quality Score</b>	
<b>Group 1</b>	
Rare:	5
Common:	10.6
<b>Group 2</b>	
Rare:	18
Common:	6.4
<b>Group 3</b>	
Rare:	3.3
Common:	1
<b>Total: 44</b>	
<b>Quality Score</b>	
Good	
<b>Comments:</b>	
<b>Number of jars</b>	3
<b>Confidence Level</b>	1

# MUSKEGON RIVER WATER MONITORING PROGRAM

## SITE INFORMATION/MACROINVERTEBRATE REPORT

### SPRING 2009

**CID:** 02-25-07

SID: 1

STOREID:

HUC: 04060102070020

**Collection Information**

**Date** 5/8/2009  
**Time** 5:10 PM 8:30 PM

**Collectors**

Beth Scsavnicki  
 Daniel Scsavnicki

**Datasheet completed by:**

Beth Scsavnicki

**Identifications made by:**

Beth Scsavnicki

**Stream Conditions**

**Average Depth** 1 ft

**Air Temperature** 74 F

**Current Conditions**

clear

**last storm:** 5/1/2009

**Excessive Silt**

**Substrate Embeddedness**

0-25  >50

25-50  unsure

**Fish/wildlife Observed**

minnows, snapping turtle

**Stream Information**

Stream: Unnamed Tributary

Location: East of Rogers Dam Pond

Watershed: Muskegon River

Subwatershed: Ryan/Mitchell Creek

County: Mecosta

Township: Mecosta

TownshipNum: 14

TownshipDir: N

Range: 10

RangeDir: W

Section: 11

Quarter: NE

QuarterQuarter

Latitude: N43 50.834

Longitude: W85 56.221

Datum: GPS online

300 Feet

Feet-other

If not 300, why?

	<b>2-Somewhat Sensitive</b>																																																								
<b>Group 1 - Sensitive</b>	Rare                  Common	<b>Group 3-Tolerant</b>	<b>Stream Quality Score</b>																																																						
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Rare</td> <td style="text-align: center;">Common</td> </tr> <tr> <td><input type="checkbox"/> caddisfly larvae</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> hellgrammites</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> mayfly nymphs</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> gilled snails</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> stonefly nymphs</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> water penny</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> water snipe fly</td> <td><input type="checkbox"/></td> </tr> </table>	Rare	Common	<input type="checkbox"/> caddisfly larvae	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> hellgrammites	<input type="checkbox"/>	<input type="checkbox"/> mayfly nymphs	<input checked="" type="checkbox"/>	<input type="checkbox"/> gilled snails	<input type="checkbox"/>	<input type="checkbox"/> stonefly nymphs	<input checked="" type="checkbox"/>	<input type="checkbox"/> water penny	<input type="checkbox"/>	<input checked="" type="checkbox"/> water snipe fly	<input type="checkbox"/>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td><input type="checkbox"/> alderfly larvae</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> beetle adults</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> beetle larvae</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> black fly larvae</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> clams</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> crane fly larvae</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> crayfish</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> damselfly nymphs</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> dragonfly nymphs</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> net-spinning caddis</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> scuds</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> sowbugs</td> <td><input type="checkbox"/></td> </tr> </table>	<input type="checkbox"/> alderfly larvae	<input type="checkbox"/>	<input type="checkbox"/> beetle adults	<input checked="" type="checkbox"/>	<input type="checkbox"/> beetle larvae	<input type="checkbox"/>	<input type="checkbox"/> black fly larvae	<input checked="" type="checkbox"/>	<input type="checkbox"/> clams	<input type="checkbox"/>	<input checked="" type="checkbox"/> crane fly larvae	<input type="checkbox"/>	<input type="checkbox"/> crayfish	<input type="checkbox"/>	<input type="checkbox"/> damselfly nymphs	<input type="checkbox"/>	<input checked="" type="checkbox"/> dragonfly nymphs	<input type="checkbox"/>	<input type="checkbox"/> net-spinning caddis	<input type="checkbox"/>	<input type="checkbox"/> scuds	<input type="checkbox"/>	<input type="checkbox"/> sowbugs	<input type="checkbox"/>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Rare</td> <td style="text-align: center;">Common</td> </tr> <tr> <td><input checked="" type="checkbox"/> aquatic worm</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> leeches</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> midge larvae</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> pouch snails</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> True Bugs</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Other True Flies</td> <td><input type="checkbox"/></td> </tr> </table>	Rare	Common	<input checked="" type="checkbox"/> aquatic worm	<input type="checkbox"/>	<input type="checkbox"/> leeches	<input type="checkbox"/>	<input type="checkbox"/> midge larvae	<input checked="" type="checkbox"/>	<input type="checkbox"/> pouch snails	<input type="checkbox"/>	<input type="checkbox"/> True Bugs	<input type="checkbox"/>	<input type="checkbox"/> Other True Flies	<input type="checkbox"/>	<p><b>Group 1</b></p> <p>Rare: 10 Common: 15.9</p> <p><b>Group 2</b></p> <p>Rare: 6 Common: 6.4</p> <p><b>Group 3</b></p> <p>Rare: 1.1 Common: 1</p> <p><b>Total: 40</b></p> <p><b>Quality Score</b></p> <p style="text-align: center; font-size: 1.2em;">Good</p>
Rare	Common																																																								
<input type="checkbox"/> caddisfly larvae	<input checked="" type="checkbox"/>																																																								
<input checked="" type="checkbox"/> hellgrammites	<input type="checkbox"/>																																																								
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<input type="checkbox"/> sowbugs	<input type="checkbox"/>																																																								
Rare	Common																																																								
<input checked="" type="checkbox"/> aquatic worm	<input type="checkbox"/>																																																								
<input type="checkbox"/> leeches	<input type="checkbox"/>																																																								
<input type="checkbox"/> midge larvae	<input checked="" type="checkbox"/>																																																								
<input type="checkbox"/> pouch snails	<input type="checkbox"/>																																																								
<input type="checkbox"/> True Bugs	<input type="checkbox"/>																																																								
<input type="checkbox"/> Other True Flies	<input type="checkbox"/>																																																								

Comments:

Number of jars

1

Confidence Level

2

# MUSKEGON RIVER WATER MONITORING PROGRAM

## SITE INFORMATION/MACROINVERTEBRATE REPORT

### SPRING 2009

**CID:** 02-25-08  
**SID:** 1  
**STOREID:**  
**HUC:** 04060102070020

**Collection Information**  
**Date** 5/12/2009  
**Time** 4:00 PM 5:30 PM  
**Collectors**  
 Jean LaLonde  
**Datasheet completed by:**  
 Jean LaLonde  
**Identifications made by:**  
 Jean LaLonde

**Stream Conditions**  
**Average Depth** 1 ft  
**Air Temperature** 70 F  
**Current Conditions**  
 clear  
**last storm:** 5/9/2009  
**Excessive Silt**   
**Substrate Embeddedness**  
 0-25  >50   
 25-50  unsure   
**Fish/wildlife Observed**

<b>Stream Information</b>	County: Mecosta	Latitude: N43 41.061
Stream: Higginson Creek	Township: Colfax	Longitude: W85 27.459
Location: New Millpond and McKinley Rd	TownshipNum: 15	Datum: GPS
Watershed: Muskegon River	TownshipDir: N	Range: 10
Subwatershed: Ryan/Mitchell Creek	RangeDir: W	Section: 300 Feet <input checked="" type="checkbox"/>
	Quarter: QuarterQuarter	Feet-other If not 300, why?

	2-Somewhat Sensitive		
	Rare                      Common	<b>Group 3-Tolerant</b>	<b>Stream Quality Score</b>
<b>Group 1 - Sensitive</b>		Rare                      Common	<b>Group 1</b>
Rare                      Common	<input type="checkbox"/> alderfly larvae <input type="checkbox"/> <input type="checkbox"/> beetle adults <input type="checkbox"/> <input type="checkbox"/> beetle larvae <input type="checkbox"/> <input type="checkbox"/> black fly larvae <input type="checkbox"/> <input type="checkbox"/> clams <input type="checkbox"/> <input type="checkbox"/> crane fly larvae <input type="checkbox"/> <input type="checkbox"/> crayfish <input type="checkbox"/> <input type="checkbox"/> damselfly nymphs <input type="checkbox"/> <input type="checkbox"/> dragonfly nymphs <input type="checkbox"/> <input checked="" type="checkbox"/> net-spinning caddis <input type="checkbox"/> <input checked="" type="checkbox"/> scuds <input type="checkbox"/> <input type="checkbox"/> sowbugs <input type="checkbox"/>	<input checked="" type="checkbox"/> aquatic worm <input type="checkbox"/> <input type="checkbox"/> leeches <input type="checkbox"/> <input type="checkbox"/> midge larvae <input type="checkbox"/> <input type="checkbox"/> pouch snails <input type="checkbox"/> <input type="checkbox"/> True Bugs <input type="checkbox"/> <input type="checkbox"/> Other True Flies <input type="checkbox"/>	Rare: 15 Common: 0 <b>Group 2</b> Rare: 9 Common: 0 <b>Group 3</b> Rare: 1.1 Common: 0 <b>Total: 25</b> <b>Quality Score</b>  Fair
<b>Comments:</b>			

**Number of jars** 2      **Confidence Level** 2

# MUSKEGON RIVER WATER MONITORING PROGRAM

## SITE INFORMATION/MACROINVERTEBRATE REPORT

### SPRING 2009

**CID:** 02-26-01

SID: 1

STOREID:

HUC: 04060102070030

Collection Information	
<b>Date</b>	5/6/2009
<b>Time</b>	10:45 AM 11:15 AM
Collectors	
Stephen	Ross
<b>Datasheet completed by:</b>	
Stephen	Ross
<b>Identifications made by:</b>	
Stephen	Ross

Stream Information	County: Mecosta	Latitude: N43 35.689
Stream: Betts Creek	Township: Mecosta	Longitude: W85 31.607
Location: West of 220th Ave	TownshipNum: 14	Datum: GPS
Watershed: Muskegon River	TownshipDir: N	Range: 10
Subwatershed: Hardy Dam Pond	RangeDir: W	Section: 20
	Quarter: NE	300 Feet <input checked="" type="checkbox"/>
	QuarterQuarter: SE	Feet-other
		If not 300, why?

Stream Conditions
<b>Average Depth</b> 0.67 ft
<b>Air Temperature</b> 65 F
<b>Current Conditions</b> overcast
<b>last storm:</b> 4/30/2009
<b>Excessive Silt</b> <input type="checkbox"/>
<b>Substrate Embeddedness</b>
0-25 <input checked="" type="checkbox"/> >50 <input type="checkbox"/>
25-50 <input type="checkbox"/> unsure <input type="checkbox"/>
<b>Fish/wildlife Observed</b> fish

Group 1 - Sensitive	2-Somewhat Sensitive	Group 3-Tolerant	Stream Quality Score																																																																																
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Comments:

**Number of jars** 1      **Confidence Level** 1

# MUSKEGON RIVER WATER MONITORING PROGRAM

## SITE INFORMATION/MACROINVERTEBRATE REPORT

### SPRING 2009

**CID:** 02-26-02

SID: 1

STOREID:

HUC: 04060102070030

Collection Information	
<b>Date</b>	5/6/2009
<b>Time</b>	9:40 AM 10:15 AM
Collectors	
Stephen	Ross
<b>Datasheet completed by:</b>	
Stephen	Ross
<b>Identifications made by:</b>	
Stephen	Ross

Stream Information	County: Mecosta	Latitude: N43 30.280
Stream: Rosy Run	Township: Aetna	Longitude: W85 32.771
Location: East of Newcosta Road between Two and Three Mile Roads	TownshipNum: 13	Datum: GPS
Watershed: Muskegon River	TownshipDir: N	Range: 10
Subwatershed: Hardy Dam Pond	RangeDir: W	Section: 19
	Quarter: NW	300 Feet <input checked="" type="checkbox"/>
	QuarterQuarter	Feet-other
		If not 300, why?

Stream Conditions
<b>Average Depth</b> 0.67 ft
<b>Air Temperature</b> 62 F
<b>Current Conditions</b> overcast
<b>last storm:</b> 4/30/2009
<b>Excessive Silt</b> <input type="checkbox"/>
<b>Substrate Embeddedness</b>
0-25 <input checked="" type="checkbox"/> >50 <input type="checkbox"/>
25-50 <input type="checkbox"/> unsure <input type="checkbox"/>
<b>Fish/wildlife Observed</b> millions of collembola

Group 1 - Sensitive	2-Somewhat Sensitive	Group 3-Tolerant	Stream Quality Score																																																																																
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Comments:

**Number of jars** 1      **Confidence Level** 1

# MUSKEGON RIVER WATER MONITORING PROGRAM

## SITE INFORMATION/MACROINVERTEBRATE REPORT

### SPRING 2009

**CID:** 02-26-03

SID: 1

STOREID:

HUC: 0460102070030

**Collection Information**

**Date** 5/20/2009  
**Time** 2:30 PM 3:30 PM

**Collectors**

Linda Sanderson

**Datasheet completed by:**

Linda Sanderson

**Identifications made by:**

Linda Sanderson

**Stream Conditions**

**Average Depth** 1 ft

**Air Temperature** 78 F

**Current Conditions**

sunny, windy

**last storm:**

**Excessive Silt**

**Substrate Embeddedness**

0-25  >50

25-50  unsure

**Fish/wildlife Observed**

minnows, birds, water striders

**Stream Information**

Stream: Bennett Creek

Location: end of Pierce Road

Watershed: Muskegon River

Subwatershed: Hardy Dam Pond

County: Mecosta

Township: Mecosta

TownshipNum: 14

TownshipDir: N

Range: 10

RangeDir: W

Section: 30

Quarter:

QuarterQuarter

Latitude: N43 34.506

Longitude: W85 33.035

Datum: GPS

300 Feet

Feet-other

If not 300, why?

**2-Somewhat Sensitive**

Rare Common

- alderfly larvae
- beetle adults
- beetle larvae
- black fly larvae
- clams
- crane fly larvae
- crayfish
- damselfly nymphs
- dragonfly nymphs
- net-spinning caddis
- scuds
- sowbugs

**Group 3-Tolerant**

Rare Common

- aquatic worm
- leeches
- midge larvae
- pouch snails
- True Bugs
- Other True Flies

**Group 1 - Sensitive**

Rare Common

- caddisfly larvae
- hellgrammites
- mayfly nymphs
- gilled snails
- stonefly nymphs
- water penny
- water snipe fly

**Stream Quality Score**

**Group 1**

Rare: 10  
Common: 10.6

**Group 2**

Rare: 21  
Common: 9.6

**Group 3**

Rare: 1.1  
Common: 0

**Total: 52**  
**Quality Score**  
Excellent

Comments:

Number of jars

1

Confidence Level

1

# MUSKEGON RIVER WATER MONITORING PROGRAM

## SITE INFORMATION/MACROINVERTEBRATE REPORT

### SPRING 2009

**CID: 04-31-01**

SID: 1

STOREID:

HUC: 04060102080050

Collection Information	
<b>Date</b>	5/11/2009
<b>Time</b>	5:00 PM    5:30 PM
Collectors	
Lee	Olsen
Karlee	Olsen
<b>Datasheet completed by:</b>	
Lee	Olsen
<b>Identifications made by:</b>	
Lee	Olsen

<p><b>Stream Information</b></p> <p>Stream: Tamarack Creek</p> <p>Location: Artman Park - near US 131 - Howard City Exit</p> <p>Watershed: Muskegon River</p> <p>Subwatershed: Lower Tamarack Creek</p>	<p>County: Montcalm</p> <p>Township: Reynolds</p> <p>TownshipNum: 12</p> <p>TownshipDir: N</p> <p>Range: 10</p> <p>RangeDir: W</p> <p>Section: 28</p> <p>Quarter: SE</p> <p>QuarterQuarter</p>	<p>Latitude: N43 22.980</p> <p>Longitude: W85 30.662</p> <p>Datum: GPS</p> <p>300 Feet <input checked="" type="checkbox"/></p> <p>Feet-other</p> <p>If not 300, why?</p>
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Stream Conditions	
<b>Average Depth</b>	3 ft
<b>Air Temperature</b>	59 F
<b>Current Conditions</b>	
partly sunny	
<b>last storm:</b>	5/9/2009
<b>Excessive Silt</b>	<input type="checkbox"/>
<b>Substrate Embeddedness</b>	
0-25 <input checked="" type="checkbox"/>	>50 <input type="checkbox"/>
25-50 <input type="checkbox"/>	unsure <input type="checkbox"/>
<b>Fish/wildlife Observed</b>	
fish	

Group 1 - Sensitive		2-Somewhat Sensitive		Group 3-Tolerant	
Rare	Common	Rare	Common	Rare	Common
<input type="checkbox"/> caddisfly larvae	<input type="checkbox"/>	<input type="checkbox"/> alderfly larvae	<input type="checkbox"/>	<input type="checkbox"/> aquatic worm	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> hellgrammites	<input type="checkbox"/>	<input type="checkbox"/> beetle adults	<input type="checkbox"/>	<input type="checkbox"/> leeches	<input type="checkbox"/>
<input type="checkbox"/> mayfly nymphs	<input checked="" type="checkbox"/>	<input type="checkbox"/> beetle larvae	<input type="checkbox"/>	<input type="checkbox"/> midge larvae	<input type="checkbox"/>
<input type="checkbox"/> gilled snails	<input type="checkbox"/>	<input checked="" type="checkbox"/> black fly larvae	<input type="checkbox"/>	<input type="checkbox"/> pouch snails	<input type="checkbox"/>
<input checked="" type="checkbox"/> stonefly nymphs	<input type="checkbox"/>	<input type="checkbox"/> clams	<input type="checkbox"/>	<input type="checkbox"/> True Bugs	<input type="checkbox"/>
<input type="checkbox"/> water penny	<input type="checkbox"/>	<input checked="" type="checkbox"/> crane fly larvae	<input type="checkbox"/>	<input type="checkbox"/> Other True Flies	<input type="checkbox"/>
<input type="checkbox"/> water snipe fly	<input type="checkbox"/>	<input type="checkbox"/> crayfish	<input type="checkbox"/>		
		<input type="checkbox"/> damselfly nymphs	<input type="checkbox"/>		
		<input checked="" type="checkbox"/> dragonfly nymphs	<input type="checkbox"/>		
		<input checked="" type="checkbox"/> net-spinning caddis	<input type="checkbox"/>		
		<input type="checkbox"/> scuds	<input type="checkbox"/>		
		<input checked="" type="checkbox"/> sowbugs	<input type="checkbox"/>		

Stream Quality Score	
<b>Group 1</b>	
Rare:	10
Common:	5.3
<b>Group 2</b>	
Rare:	15
Common:	0
<b>Group 3</b>	
Rare:	0
Common:	1
<b>Total:</b>	<b>31</b>
<b>Quality Score</b>	
Fair	

Comments:

**Number of jars**    1    **Confidence Level**    1

# MUSKEGON RIVER WATER MONITORING PROGRAM

## SITE INFORMATION/MACROINVERTEBRATE REPORT

### SPRING 2009

**CID: 04-31-02**

SID: 1

STOREID:

HUC: 04060102080050

Collection Information	
<b>Date</b>	5/11/2009
<b>Time</b>	6:00 PM    6:30 PM
Collectors	
Lee	Olsen
Karlee	Olsen
<b>Datasheet completed by:</b>	
Lee	Olsen
<b>Identifications made by:</b>	
Lee	Olsen

Stream Conditions	
<b>Average Depth</b>	2 ft
<b>Air Temperature</b>	59 F
<b>Current Conditions</b>	
partly sunny	
<b>last storm:</b>	5/9/2009
<b>Excessive Silt</b>	<input checked="" type="checkbox"/>
<b>Substrate Embeddedness</b>	
0-25 <input type="checkbox"/>	>50 <input type="checkbox"/>
25-50 <input checked="" type="checkbox"/>	unsure <input type="checkbox"/>
<b>Fish/wildlife Observed</b>	
fish	

Stream Information		County: Montcalm	Latitude: N43 23.752
Stream: Rice Creek		Township: Reynolds	Longitude: W85 30.270
Location: North of W. Lake-Montcalm Rd - Olsen property		TownshipNum: 12	Datum: GPS
Watershed: Muskegon River		TownshipDir: N	
Subwatershed: Tamarack Creek		Range: 10	
		RangeDir: W	
		Section: 33	300 Feet <input checked="" type="checkbox"/>
		Quarter:	Feet-other
		QuarterQuarter	If not 300, why?

Group 1 - Sensitive		2-Somewhat Sensitive		Group 3-Tolerant		Stream Quality Score	
Rare	Common	Rare	Common	Rare	Common	Rare	Common
<input type="checkbox"/> caddisfly larvae	<input checked="" type="checkbox"/>	<input type="checkbox"/> alderfly larvae	<input type="checkbox"/>	<input checked="" type="checkbox"/> aquatic worm	<input type="checkbox"/>		
<input type="checkbox"/> hellgrammites	<input type="checkbox"/>	<input checked="" type="checkbox"/> beetle adults	<input type="checkbox"/>	<input type="checkbox"/> leeches	<input type="checkbox"/>		
<input type="checkbox"/> mayfly nymphs	<input checked="" type="checkbox"/>	<input type="checkbox"/> beetle larvae	<input type="checkbox"/>	<input type="checkbox"/> midge larvae	<input type="checkbox"/>		
<input type="checkbox"/> gilled snails	<input type="checkbox"/>	<input type="checkbox"/> black fly larvae	<input checked="" type="checkbox"/>	<input type="checkbox"/> pouch snails	<input type="checkbox"/>		
<input checked="" type="checkbox"/> stonefly nymphs	<input type="checkbox"/>	<input type="checkbox"/> clams	<input type="checkbox"/>	<input type="checkbox"/> True Bugs	<input type="checkbox"/>		
<input type="checkbox"/> water penny	<input type="checkbox"/>	<input type="checkbox"/> crane fly larvae	<input type="checkbox"/>	<input type="checkbox"/> Other True Flies	<input type="checkbox"/>		
<input type="checkbox"/> water snipe fly	<input type="checkbox"/>	<input checked="" type="checkbox"/> crayfish	<input type="checkbox"/>				
		<input type="checkbox"/> damselfly nymphs	<input type="checkbox"/>				
		<input checked="" type="checkbox"/> dragonfly nymphs	<input type="checkbox"/>				
		<input checked="" type="checkbox"/> net-spinning caddis	<input type="checkbox"/>				
		<input checked="" type="checkbox"/> scuds	<input type="checkbox"/>				
		<input type="checkbox"/> sowbugs	<input type="checkbox"/>				

Comments:

**Number of jars**    1    **Confidence Level**    1

# MUSKEGON RIVER WATER MONITORING PROGRAM

## SITE INFORMATION/MACROINVERTEBRATE REPORT

### SPRING 2009

**CID: 04-31-03**

SID: 1

STOREID:

HUC: 40600102080050

<b>Collection Information</b>	
<b>Date</b>	5/17/2009
<b>Time</b>	2:10 PM 2:35 PM
<b>Collectors</b>	
Margaret Feravich	Lorissa Feravich
<b>Datasheet completed by:</b>	
Margaret Feravich	
<b>Identifications made by:</b>	
Lorissa Feravich	

<b>Stream Information</b>	County: Montcalm	Latitude: N43 25.139
Stream: Indian Creek	Township: Reynolds	Longitude: W85 27.151
Location: Downstream from Jones Road	TownshipNum: 12	Datum: GPS
Watershed: Muskegon River	TownshipDir: N	Range: 10
Subwatershed: Lower Tamarack Creek	RangeDir: W	Section: 24
	Quarter: NW	300 Feet <input checked="" type="checkbox"/>
	QuarterQuarter	Feet-other
		If not 300, why?

<b>Stream Conditions</b>	
Average Depth	1 ft
Air Temperature	59 F
<b>Current Conditions</b>	
sunny	
last storm:	5/14/2009
Excessive Silt	<input checked="" type="checkbox"/>
<b>Substrate Embeddedness</b>	
0-25	<input type="checkbox"/>
>50	<input type="checkbox"/>
25-50	<input type="checkbox"/>
unsure	<input checked="" type="checkbox"/>
<b>Fish/wildlife Observed</b>	
frogs, fish	

	<b>2-Somewhat Sensitive</b>		
	Rare                      Common		
<b>Group 1 - Sensitive</b>		<b>Group 3-Tolerant</b>	
Rare                      Common		Rare                      Common	
<input type="checkbox"/> caddisfly larvae	<input type="checkbox"/> alderfly larvae	<input type="checkbox"/> aquatic worm	
<input type="checkbox"/> hellgrammites	<input type="checkbox"/> beetle adults	<input type="checkbox"/> leeches	<input checked="" type="checkbox"/>
<input type="checkbox"/> mayfly nymphs	<input type="checkbox"/> beetle larvae	<input type="checkbox"/> midge larvae	<input checked="" type="checkbox"/>
<input type="checkbox"/> gilled snails	<input checked="" type="checkbox"/> black fly larvae	<input type="checkbox"/> pouch snails	
<input type="checkbox"/> stonefly nymphs	<input type="checkbox"/> clams	<input type="checkbox"/> True Bugs	
<input type="checkbox"/> water penny	<input type="checkbox"/> crane fly larvae	<input type="checkbox"/> Other True Flies	
<input type="checkbox"/> water snipe fly	<input type="checkbox"/> crayfish		
	<input type="checkbox"/> damselfly nymphs		
	<input type="checkbox"/> dragonfly nymphs		
	<input type="checkbox"/> net-spinning caddis		
	<input type="checkbox"/> scuds		
	<input checked="" type="checkbox"/> sowbugs		

<b>Stream Quality Score</b>	
<b>Group 1</b>	
Rare:	0
Common:	0
<b>Group 2</b>	
Rare:	3
Common:	6.4
<b>Group 3</b>	
Rare:	0
Common:	2
<b>Total:</b>	<b>11</b>
<b>Quality Score</b>	
Poor	

Comments:

Number of jars                      1                      Confidence Level                      1

# MUSKEGON RIVER WATER MONITORING PROGRAM

## SITE INFORMATION/MACROINVERTEBRATE REPORT

### SPRING 2009

**CID: 06-34-11**

SID: 1

STOREID:

HUC: 04060102090020

Collection Information	
<b>Date</b>	5/7/2009
<b>Time</b>	4:45 PM 5:45 PM
Collectors	
Russ	Bachman
<b>Datasheet completed by:</b>	
Russ	Bachman
<b>Identifications made by:</b>	
Russ	Bachman

<b>Stream Information</b>	County: Newaygo	Latitude: N43 27 30.69
Stream: Penoyer Creek	Township: Brooks	Longitude: W85 47 40.03
Location: Creek's outflow from Emerald Lake on Centerline Road	TownshipNum: 12	Datum: GPS
Watershed: Muskegon River	TownshipDir: N	
Subwatershed: Bigelow Creek Watershed	Range: 12	
	RangeDir: W	
	Section: 6	300 Feet <input checked="" type="checkbox"/>
	Quarter:	Feet-other
	QuarterQuarter	If not 300, why?

Stream Conditions	
<b>Average Depth</b>	2 ft
<b>Air Temperature</b>	70 F
<b>Current Conditions</b>	
mostly sunny	
<b>last storm:</b>	5/8/2009
<b>Excessive Silt</b>	<input checked="" type="checkbox"/>
<b>Substrate Embeddedness</b>	
0-25 <input checked="" type="checkbox"/>	>50 <input type="checkbox"/>
25-50 <input type="checkbox"/>	unsure <input type="checkbox"/>
<b>Fish/wildlife Observed</b>	
bass, bluegills, red-wing blackbirds	

Group 1 - Sensitive		2-Somewhat Sensitive		Group 3-Tolerant		Stream Quality Score	
Rare	Common	Rare	Common	Rare	Common		
<input checked="" type="checkbox"/> caddisfly larvae	<input type="checkbox"/>	<input type="checkbox"/> alderfly larvae	<input type="checkbox"/>	<input type="checkbox"/> aquatic worm	<input checked="" type="checkbox"/>	<b>Group 1</b>	
<input type="checkbox"/> hellgrammites	<input type="checkbox"/>	<input type="checkbox"/> beetle adults	<input checked="" type="checkbox"/>	<input type="checkbox"/> leeches	<input type="checkbox"/>	Rare: 5	
<input type="checkbox"/> mayfly nymphs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> beetle larvae	<input type="checkbox"/>	<input type="checkbox"/> midge larvae	<input type="checkbox"/>	Common: 10.6	
<input type="checkbox"/> gilled snails	<input checked="" type="checkbox"/>	<input type="checkbox"/> black fly larvae	<input type="checkbox"/>	<input checked="" type="checkbox"/> pouch snails	<input type="checkbox"/>	<b>Group 2</b>	
<input type="checkbox"/> stonefly nymphs	<input type="checkbox"/>	<input checked="" type="checkbox"/> clams	<input type="checkbox"/>	<input type="checkbox"/> True Bugs	<input type="checkbox"/>	Rare: 12	
<input type="checkbox"/> water penny	<input type="checkbox"/>	<input type="checkbox"/> crane fly larvae	<input type="checkbox"/>	<input type="checkbox"/> Other True Flies	<input type="checkbox"/>	Common: 9.6	
<input type="checkbox"/> water snipe fly	<input type="checkbox"/>	<input checked="" type="checkbox"/> crayfish	<input type="checkbox"/>			<b>Group 3</b>	
		<input type="checkbox"/> damselfly nymphs	<input checked="" type="checkbox"/>			Rare: 1.1	
		<input checked="" type="checkbox"/> dragonfly nymphs	<input type="checkbox"/>			Common: 1	
		<input type="checkbox"/> net-spinning caddis	<input type="checkbox"/>			<b>Total: 39</b>	
		<input type="checkbox"/> scuds	<input checked="" type="checkbox"/>			<b>Quality Score</b>	
		<input type="checkbox"/> sowbugs	<input type="checkbox"/>			Good	

**Comments:**

**Number of jars** 1      **Confidence Level** 1

# MUSKEGON RIVER WATER MONITORING PROGRAM

## SITE INFORMATION/MACROINVERTEBRATE REPORT

### SPRING 2009

**CID:** 06-34-12

SID: 1

STOREID:

HUC: 04060102090020

Collection Information	
<b>Date</b>	5/7/2009
<b>Time</b>	5:15 PM 7:00 PM
Collectors	
Russ	Bachman
<b>Datasheet completed by:</b>	
Russ	Bachman
<b>Identifications made by:</b>	
Russ	Bachman

<p><b>Stream Information</b></p> <p>Stream: Penoyer</p> <p>Location: Pickerel Lake outflow on Centerline Road</p> <p>Watershed: Muskegon River</p> <p>Subwatershed: Bigelow Creek Watershed</p>	<p>County: Newaygo</p> <p>Township: Brooks</p> <p>TownshipNum: 12</p> <p>TownshipDir: N</p> <p>Range: 12</p> <p>RangeDir: W</p> <p>Section: 6</p> <p>Quarter: QuarterQuarter</p>	<p>Latitude: N43 27 23.36</p> <p>Longitude: W85 47 54.87</p> <p>Datum: GPS</p> <p>300 Feet <input checked="" type="checkbox"/></p> <p>Feet-other</p> <p>If not 300, why?</p>
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Stream Conditions	
<b>Average Depth</b>	2 ft
<b>Air Temperature</b>	65 F
<b>Current Conditions</b>	
partly cloudy	
<b>last storm:</b>	4/30/2009
<b>Excessive Silt</b>	<input checked="" type="checkbox"/>
<b>Substrate Embeddedness</b>	
0-25 <input checked="" type="checkbox"/>	>50 <input type="checkbox"/>
25-50 <input type="checkbox"/>	unsure <input type="checkbox"/>
<b>Fish/wildlife Observed</b>	
bullfrogs, tadpole, bass, bluegills, red-wing blackbirds	

Group 1 - Sensitive		2-Somewhat Sensitive		Group 3-Tolerant	
Rare	Common	Rare	Common	Rare	Common
<input type="checkbox"/> caddisfly larvae	<input type="checkbox"/>	<input type="checkbox"/> alderfly larvae	<input type="checkbox"/>	<input type="checkbox"/> aquatic worm	<input checked="" type="checkbox"/>
<input type="checkbox"/> hellgrammites	<input type="checkbox"/>	<input type="checkbox"/> beetle adults	<input checked="" type="checkbox"/>	<input type="checkbox"/> leeches	<input type="checkbox"/>
<input type="checkbox"/> mayfly nymphs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> beetle larvae	<input type="checkbox"/>	<input type="checkbox"/> midge larvae	<input type="checkbox"/>
<input type="checkbox"/> gilled snails	<input checked="" type="checkbox"/>	<input type="checkbox"/> black fly larvae	<input type="checkbox"/>	<input checked="" type="checkbox"/> pouch snails	<input type="checkbox"/>
<input type="checkbox"/> stonefly nymphs	<input type="checkbox"/>	<input checked="" type="checkbox"/> clams	<input type="checkbox"/>	<input type="checkbox"/> True Bugs	<input type="checkbox"/>
<input type="checkbox"/> water penny	<input type="checkbox"/>	<input type="checkbox"/> crane fly larvae	<input type="checkbox"/>	<input type="checkbox"/> Other True Flies	<input type="checkbox"/>
<input type="checkbox"/> water snipe fly	<input type="checkbox"/>	<input type="checkbox"/> crayfish	<input type="checkbox"/>		
		<input type="checkbox"/> damselfly nymphs	<input checked="" type="checkbox"/>		
		<input checked="" type="checkbox"/> dragonfly nymphs	<input type="checkbox"/>		
		<input type="checkbox"/> net-spinning caddis	<input type="checkbox"/>		
		<input type="checkbox"/> scuds	<input checked="" type="checkbox"/>		
		<input checked="" type="checkbox"/> sowbugs	<input type="checkbox"/>		

Stream Quality Score	
<b>Group 1</b>	
Rare:	0
Common:	10.6
<b>Group 2</b>	
Rare:	12
Common:	9.6
<b>Group 3</b>	
Rare:	1.1
Common:	1
<b>Total:</b>	<b>34</b>
<b>Quality Score</b>	
Good	

**Comments:**

**Number of jars** 1      **Confidence Level** 1

# MUSKEGON RIVER WATER MONITORING PROGRAM

## SITE INFORMATION/MACROINVERTEBRATE REPORT

### SPRING 2009

**CID: 06-36-02**  
 SID: 1  
 STOREID:  
 HUC: 04060102090040

<p><b>Stream Information</b></p> <p>Stream: Daisy Creek</p> <p>Location:</p> <p>Watershed: Muskegon River</p> <p>Subwatershed: Brooks Creek</p>	<p>County: Newaygo</p> <p>Township: Dayton</p> <p>TownshipNum:</p> <p>TownshipDir:</p> <p>Range:</p> <p>RangeDir:</p> <p>Section: 300 Feet <input checked="" type="checkbox"/></p> <p>Quarter: Feet-other</p> <p>QuarterQuarter: If not 300, why?</p> <p>Latitude: N43 28.655</p> <p>Longitude: W85 56.569</p> <p>Datum: GPS</p>
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<b>Collection Information</b>	
<b>Date</b>	5/12/2009
<b>Time</b>	9:00 AM 11:20 AM
<b>Collectors</b>	
Darrell	Crawford
Tom	Moore
<b>Datasheet completed by:</b>	
Darrell	Crawford
<b>Identifications made by:</b>	
Tom Moore & Darrell Crawford	

<b>Stream Conditions</b>	
Average Depth	2 ft
Air Temperature	55 F
<b>Current Conditions</b>	
last storm:	4/10/2009
Excessive Silt	<input type="checkbox"/>
<b>Substrate Embeddedness</b>	
0-25	<input type="checkbox"/>
>50	<input checked="" type="checkbox"/>
25-50	<input type="checkbox"/>
unsure	<input type="checkbox"/>
<b>Fish/wildlife Observed</b>	

	<b>2-Somewhat Sensitive</b>	
	Rare                      Common	
<p><b>Group 1 - Sensitive</b></p> <p>Rare                      Common</p> <p><input checked="" type="checkbox"/> caddisfly larvae    <input type="checkbox"/></p> <p><input checked="" type="checkbox"/> hellgrammites      <input type="checkbox"/></p> <p><input type="checkbox"/> mayfly nymphs     <input checked="" type="checkbox"/></p> <p><input checked="" type="checkbox"/> gilled snails       <input type="checkbox"/></p> <p><input checked="" type="checkbox"/> stonefly nymphs   <input type="checkbox"/></p> <p><input type="checkbox"/> water penny        <input type="checkbox"/></p> <p><input checked="" type="checkbox"/> water snipe fly     <input type="checkbox"/></p>	<p><input type="checkbox"/> alderfly larvae    <input type="checkbox"/></p> <p><input type="checkbox"/> beetle adults      <input type="checkbox"/></p> <p><input type="checkbox"/> beetle larvae      <input checked="" type="checkbox"/></p> <p><input type="checkbox"/> black fly larvae   <input type="checkbox"/></p> <p><input checked="" type="checkbox"/> clams                <input type="checkbox"/></p> <p><input checked="" type="checkbox"/> crane fly larvae   <input type="checkbox"/></p> <p><input checked="" type="checkbox"/> crayfish             <input type="checkbox"/></p> <p><input type="checkbox"/> damselfly nymphs <input type="checkbox"/></p> <p><input type="checkbox"/> dragonfly nymphs <input type="checkbox"/></p> <p><input type="checkbox"/> net-spinning caddis <input type="checkbox"/></p> <p><input type="checkbox"/> scuds                <input checked="" type="checkbox"/></p> <p><input type="checkbox"/> sowbugs             <input type="checkbox"/></p>	<p><b>Group 3-Tolerant</b></p> <p>Rare                      Common</p> <p><input type="checkbox"/> aquatic worm      <input type="checkbox"/></p> <p><input checked="" type="checkbox"/> leeches             <input type="checkbox"/></p> <p><input type="checkbox"/> midge larvae       <input checked="" type="checkbox"/></p> <p><input type="checkbox"/> pouch snails       <input checked="" type="checkbox"/></p> <p><input type="checkbox"/> True Bugs          <input type="checkbox"/></p> <p><input type="checkbox"/> Other True Flies   <input type="checkbox"/></p>
<b>Stream Quality Score</b>		
<b>Group 1</b>		
Rare: 25		
Common: 5.3		
<b>Group 2</b>		
Rare: 9		
Common: 6.4		
<b>Group 3</b>		
Rare: 1.1		
Common: 2		
<b>Total: 49</b>		
<b>Quality Score</b>		
<b>Excellent</b>		

Comments:

**Number of jars**                      2                      **Confidence Level**                      3

# MUSKEGON RIVER WATER MONITORING PROGRAM

## SITE INFORMATION/MACROINVERTEBRATE REPORT

### SPRING 2009

**CID: 07-22-01**

SID: 1

STOREID:

HUC: 04060102060010

**Collection Information**  
**Date** 5/10/2009  
**Time** 12:45 PM 2:45 PM

**Collectors**  
 Doug Trembath  
 Jean LaLonde  
 Eliz Trembath

**Datasheet completed by:**  
 Doug Trembath

**Identifications made by:**  
 Doug Trembat Jean LaLonde

**Stream Conditions**

**Average Depth** 0.86 ft  
**Air Temperature** 53 F  
**Current Conditions**  
 partly cloudy  
**last storm:** 5/8/2009

**Excessive Silt**

**Substrate Embeddedness**  
 0-25  >50   
 25-50  unsure

**Fish/wildlife Observed**

<p><b>Stream Information</b></p> <p>Stream: Twin Creek</p> <p>Location: Mouth of Creek at Riverside Park</p> <p>Watershed: Muskegon River</p> <p>Subwatershed: Strawberry Lake</p>	<p>County: Osceola          Township: City of Evert          TownshipNum: 17          TownshipDir: N          Range: 8          RangeDir: W          Section: 3          Quarter: NW          QuarterQuarter</p> <p>Latitude: N43 53.820          Longitude: W85 15.487          Datum: GPS          300 Feet <input checked="" type="checkbox"/>          Feet-other          If not 300, why?</p>
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<p><b>Group 1 - Sensitive</b></p> <p>Rare Common</p> <p><input type="checkbox"/> caddisfly larvae <input checked="" type="checkbox"/></p> <p><input type="checkbox"/> hellgrammites <input type="checkbox"/></p> <p><input checked="" type="checkbox"/> mayfly nymphs <input type="checkbox"/></p> <p><input type="checkbox"/> gilled snails <input type="checkbox"/></p> <p><input type="checkbox"/> stonefly nymphs <input type="checkbox"/></p> <p><input type="checkbox"/> water penny <input type="checkbox"/></p> <p><input type="checkbox"/> water snipe fly <input type="checkbox"/></p>	<p><b>2-Somewhat Sensitive</b></p> <p>Rare Common</p> <p><input type="checkbox"/> alderfly larvae <input type="checkbox"/></p> <p><input type="checkbox"/> beetle adults <input type="checkbox"/></p> <p><input type="checkbox"/> beetle larvae <input type="checkbox"/></p> <p><input type="checkbox"/> black fly larvae <input type="checkbox"/></p> <p><input type="checkbox"/> clams <input type="checkbox"/></p> <p><input type="checkbox"/> crane fly larvae <input type="checkbox"/></p> <p><input type="checkbox"/> crayfish <input type="checkbox"/></p> <p><input type="checkbox"/> damselfly nymphs <input type="checkbox"/></p> <p><input type="checkbox"/> dragonfly nymphs <input type="checkbox"/></p> <p><input type="checkbox"/> net-spinning caddis <input type="checkbox"/></p> <p><input checked="" type="checkbox"/> scuds <input type="checkbox"/></p> <p><input type="checkbox"/> sowbugs <input type="checkbox"/></p>	<p><b>Group 3-Tolerant</b></p> <p>Rare Common</p> <p><input type="checkbox"/> aquatic worm <input type="checkbox"/></p> <p><input type="checkbox"/> leeches <input type="checkbox"/></p> <p><input type="checkbox"/> midge larvae <input type="checkbox"/></p> <p><input checked="" type="checkbox"/> pouch snails <input type="checkbox"/></p> <p><input type="checkbox"/> True Bugs <input type="checkbox"/></p> <p><input checked="" type="checkbox"/> Other True Flies <input type="checkbox"/></p>	<p><b>Stream Quality Score</b></p> <p><b>Group 1</b>          Rare: 5          Common: 5.3</p> <p><b>Group 2</b>          Rare: 3          Common: 0</p> <p><b>Group 3</b>          Rare: 2.2          Common: 0</p> <p><b>Total: 16</b>  <b>Quality Score</b></p>
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**Comments:**

**Number of jars** 2      **Confidence Level** 1

Poor

# MUSKEGON RIVER WATER MONITORING PROGRAM

## SITE INFORMATION/MACROINVERTEBRATE REPORT

### SPRING 2009

**CID: 07-23-01**

SID: 1

STOREID:

HUC: 04060102060020

Collection Information	
<b>Date</b>	5/10/2009
<b>Time</b>	3:00 PM 4:30 PM
Collectors	
April	Heilman
Nathan	Heilman
Nicholas	Heilman
<b>Datasheet completed by:</b>	
April	Heilman
<b>Identifications made by:</b>	
April & Nichol	Heilman

<b>Stream Information</b>	County: Osceola	Latitude: N43 51.157
Stream: Hersey River	Township: Hersey	Longitude: W85 26.742
Location: Hersey Park (former dam site)	TownshipNum: 27	Datum: GPS
Watershed: Muskegon River	TownshipDir: N	Range: 10
Subwatershed: Hersey	RangeDir: W	Section: 24
	Quarter: NE	300 Feet <input checked="" type="checkbox"/>
	QuarterQuarter	Feet-other
		If not 300, why?

Stream Conditions	
<b>Average Depth</b>	3 ft
<b>Air Temperature</b>	55 F
<b>Current Conditions</b>	overcast
<b>last storm:</b>	5/9/2009
<b>Excessive Silt</b>	<input type="checkbox"/>
<b>Substrate Embeddedness</b>	
0-25 <input checked="" type="checkbox"/>	>50 <input type="checkbox"/>
25-50 <input type="checkbox"/>	unsure <input type="checkbox"/>
<b>Fish/wildlife Observed</b>	pair of nesting geese

Group 1 - Sensitive	2-Somewhat Sensitive	Group 3-Tolerant	Stream Quality Score
Rare                  Common	Rare                  Common	Rare                  Common	
<input type="checkbox"/> caddisfly larvae <input checked="" type="checkbox"/>	<input type="checkbox"/> alderfly larvae <input type="checkbox"/>	<input type="checkbox"/> aquatic worm <input type="checkbox"/>	<b>Group 1</b>
<input type="checkbox"/> hellgrammites <input type="checkbox"/>	<input checked="" type="checkbox"/> beetle adults <input type="checkbox"/>	<input type="checkbox"/> leeches <input type="checkbox"/>	Rare: 0
<input type="checkbox"/> mayfly nymphs <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> beetle larvae <input type="checkbox"/>	<input type="checkbox"/> midge larvae <input checked="" type="checkbox"/>	Common 10.6
<input type="checkbox"/> gilled snails <input type="checkbox"/>	<input type="checkbox"/> black fly larvae <input type="checkbox"/>	<input type="checkbox"/> pouch snails <input type="checkbox"/>	<b>Group 2</b>
<input type="checkbox"/> stonefly nymphs <input type="checkbox"/>	<input checked="" type="checkbox"/> clams <input type="checkbox"/>	<input type="checkbox"/> True Bugs <input type="checkbox"/>	Rare 12
<input type="checkbox"/> water penny <input type="checkbox"/>	<input type="checkbox"/> crane fly larvae <input type="checkbox"/>	<input type="checkbox"/> Other True Flies <input type="checkbox"/>	Common 0
<input type="checkbox"/> water snipe fly <input type="checkbox"/>	<input checked="" type="checkbox"/> crayfish <input type="checkbox"/>		<b>Group 3</b>
	<input type="checkbox"/> damselfly nymphs <input type="checkbox"/>		Rare 0
	<input type="checkbox"/> dragonfly nymphs <input type="checkbox"/>		Common 1
	<input type="checkbox"/> net-spinning caddis <input type="checkbox"/>		<b>Total: 24</b>
	<input type="checkbox"/> scuds <input type="checkbox"/>		<b>Quality Score</b>
	<input type="checkbox"/> sowbugs <input type="checkbox"/>		Fair

**Comments:**

**Number of jars**          1          **Confidence Level**          2

# MUSKEGON RIVER WATER MONITORING PROGRAM

## SITE INFORMATION/MACROINVERTEBRATE REPORT

### SPRING 2009

**CID: 08-02-01**

SID: 1

STOREID:

HUC: 04060102010020

<b>Collection Information</b>	
<b>Date</b>	5/14/2009
<b>Time</b>	1:00 PM 1:20 PM
<b>Collectors</b>	
Claude	Schmitt
Joe	Crnkovich
<b>Datasheet completed by:</b>	
Claude	Schmitt
<b>Identifications made by:</b>	
Claude Schmi	Joe Crnkovich

<p><b>Stream Information</b></p> <p>Stream: The Cut</p> <p>Location: Downstream from Marl Lake</p> <p>Watershed: Muskegon River</p> <p>Subwatershed: Backus Creek</p>	<p>County: Roscommon</p> <p>Township: Higgins</p> <p>TownshipNum: 24</p> <p>TownshipDir: N</p> <p>Range: 3</p> <p>RangeDir: W</p> <p>Section: 34</p> <p>Quarter: NE</p> <p>QuarterQuarter: SE</p>	<p>Latitude: N44 25.73</p> <p>Longitude: W84 39.27</p> <p>Datum: GPS</p> <p>300 Feet <input checked="" type="checkbox"/></p> <p>Feet-other</p> <p>If not 300, why?</p>
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<b>Stream Conditions</b>	
<b>Average Depth</b>	2.5 ft
<b>Air Temperature</b>	58 F
<b>Current Conditions</b>	
<b>last storm:</b>	5/14/2009
<b>Excessive Silt</b>	<input checked="" type="checkbox"/>
<b>Substrate Embeddedness</b>	
0-25 <input checked="" type="checkbox"/>	>50 <input type="checkbox"/>
25-50 <input type="checkbox"/>	unsure <input type="checkbox"/>
<b>Fish/wildlife Observed</b>	

	<b>2-Somewhat Sensitive</b>		
	Rare                      Common	<b>Group 3-Tolerant</b>	
<b>Group 1 - Sensitive</b>		Rare                      Common	
Rare                      Common	<input type="checkbox"/> alderfly larvae <input type="checkbox"/> <input type="checkbox"/> beetle adults <input type="checkbox"/> <input type="checkbox"/> beetle larvae <input type="checkbox"/> <input type="checkbox"/> black fly larvae <input type="checkbox"/> <input type="checkbox"/> clams <input type="checkbox"/> <input type="checkbox"/> crane fly larvae <input type="checkbox"/> <input type="checkbox"/> crayfish <input type="checkbox"/> <input checked="" type="checkbox"/> damselfly nymphs <input type="checkbox"/> <input checked="" type="checkbox"/> dragonfly nymphs <input type="checkbox"/> <input type="checkbox"/> net-spinning caddis <input type="checkbox"/> <input type="checkbox"/> scuds <input checked="" type="checkbox"/> <input type="checkbox"/> sowbugs <input type="checkbox"/>	<input type="checkbox"/> aquatic worm <input checked="" type="checkbox"/> <input type="checkbox"/> leeches <input type="checkbox"/> <input checked="" type="checkbox"/> midge larvae <input type="checkbox"/> <input type="checkbox"/> pouch snails <input type="checkbox"/> <input type="checkbox"/> True Bugs <input type="checkbox"/> <input checked="" type="checkbox"/> Other True Flies <input type="checkbox"/>	<b>Stream Quality Score</b>
			<b>Group 1</b>
			Rare: 5 Common 10.6
			<b>Group 2</b>
			Rare 6 Common 3.2
			<b>Group 3</b>
			Rare 2.2 Common 1
			<b>Total: 28</b>
			<b>Quality Score</b>
			Fair

Comments: will not be able to continue monitoring

Number of jars                      2                      Confidence Level                      3

# MUSKEGON RIVER WATER MONITORING PROGRAM

## SITE INFORMATION/MACROINVERTEBRATE REPORT

### SPRING 2009

**CID: 08-03-01**

SID: 1

STOREID:

HUC: 4060102010030

Collection Information	
<b>Date</b>	5/31/2009
<b>Time</b>	2:00 PM    2:45 PM
Collectors	
Craig	Cotterman
Emily	Cotterman
Emma	Yan
<b>Datasheet completed by:</b>	
Craig	Cotterman
<b>Identifications made by:</b>	
Craig	Cotterman

Stream Information	County: Roscommon	Latitude: N44 18.048
Stream: Denton Creek	Township: Roscommon	Longitude: W84 38.271
Location: 318 Arrowhead Drive, Houghton Lake	TownshipNum: 22	Datum: GPS
Watershed: Muskegon River	Range: 4	Section: 11      300 Feet <input checked="" type="checkbox"/>
Subwatershed: Houghton Lake Watershed	RangeDir: W	Quarter:      Feet-other
	QuarterQuarter	If not 300, why?

Stream Conditions
<b>Average Depth</b> 3 ft
<b>Air Temperature</b> 57 F
<b>Current Conditions</b>
<b>last storm:</b> 5/30/2009
<b>Excessive Silt</b> <input type="checkbox"/>
<b>Substrate Embeddedness</b>
0-25 <input type="checkbox"/> >50 <input checked="" type="checkbox"/>
25-50 <input type="checkbox"/> unsure <input type="checkbox"/>
<b>Fish/wildlife Observed</b>
birds

Group 1 - Sensitive	2-Somewhat Sensitive	Group 3-Tolerant	Stream Quality Score																																																																																
<table style="width: 100%;"> <tr> <th style="text-align: left;">Rare</th> <th style="text-align: left;">Common</th> </tr> <tr> <td><input checked="" type="checkbox"/> caddisfly larvae</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> hellgrammites</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> mayfly nymphs</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> gilled snails</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> stonefly nymphs</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> water penny</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> water snipe fly</td> <td><input type="checkbox"/></td> </tr> </table>	Rare	Common	<input checked="" type="checkbox"/> caddisfly larvae	<input type="checkbox"/>	<input type="checkbox"/> hellgrammites	<input type="checkbox"/>	<input checked="" type="checkbox"/> mayfly nymphs	<input type="checkbox"/>	<input type="checkbox"/> gilled snails	<input type="checkbox"/>	<input type="checkbox"/> stonefly nymphs	<input type="checkbox"/>	<input type="checkbox"/> water penny	<input type="checkbox"/>	<input type="checkbox"/> water snipe fly	<input type="checkbox"/>	<table style="width: 100%;"> <tr> <th style="text-align: left;">Rare</th> <th style="text-align: left;">Common</th> </tr> <tr> <td><input type="checkbox"/> alderfly larvae</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> beetle adults</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> beetle larvae</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> black fly larvae</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> clams</td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> crane fly larvae</td> <td><input 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colspan="2" style="text-align: center;">Group 3</th> </tr> <tr> <td>Rare:</td> <td style="text-align: right;">2.2</td> </tr> <tr> <td>Common:</td> <td style="text-align: right;">0</td> </tr> <tr> <td><b>Total:</b></td> <td style="text-align: right;"><b>27</b></td> </tr> <tr> <td colspan="2" style="text-align: center;"><b>Quality Score</b></td> </tr> <tr> <td colspan="2" style="text-align: center;">Fair</td> </tr> </table>	Group 1		Rare:	10	Common:	0	Group 2		Rare:	12	Common:	3.2	Group 3		Rare:	2.2	Common:	0	<b>Total:</b>	<b>27</b>	<b>Quality Score</b>		Fair	
Rare	Common																																																																																		
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Comments: high water prevented earlier monitoring

Number of jars      1      Confidence Level      2

# MUSKEGON RIVER WATER MONITORING PROGRAM

## SITE INFORMATION/MACROINVERTEBRATE REPORT

### SPRING 2009

**CID: 08-04-01**

SID: 1

STOREID:

HUC: 04060102020010

Collection Information	
<b>Date</b>	5/31/2009
<b>Time</b>	12:30 PM 1:30 PM
Collectors	
Craig	Cotterman
Emily	Cotterman
Emma	Yan
<b>Datasheet completed by:</b>	
Craig	Cotterman
<b>Identifications made by:</b>	
Craig	Cotterman

<b>Stream Information</b>	County: Roscommon	Latitude: N44 24.517
Stream: Muskegon River	Township: Lake	Longitude: W84 48.307
Location: Meads Landing	TownshipNum: 23	Datum: GPS
Watershed: Muskegon River	TownshipDir: N	Range: 4
Subwatershed: Dead Stream	RangeDir: W	Section: 3
	Quarter: 3	300 Feet <input checked="" type="checkbox"/>
	QuarterQuarter	Feet-other
		If not 300, why?

Stream Conditions	
<b>Average Depth</b>	5.5 ft
<b>Air Temperature</b>	56 F
<b>Current Conditions</b>	
<b>last storm:</b>	5/30/2009
<b>Excessive Silt</b>	<input type="checkbox"/>
<b>Substrate Embeddedness</b>	
0-25 <input type="checkbox"/>	>50 <input type="checkbox"/>
25-50 <input checked="" type="checkbox"/>	unsure <input type="checkbox"/>
<b>Fish/wildlife Observed</b>	
frogs, minnows, ducks, birds	

Group 1 - Sensitive	2-Somewhat Sensitive	Group 3-Tolerant	Stream Quality Score
Rare Common	Rare Common	Rare Common	
<input checked="" type="checkbox"/> caddisfly larvae <input type="checkbox"/>	<input type="checkbox"/> alderfly larvae <input type="checkbox"/>	<input type="checkbox"/> aquatic worm <input type="checkbox"/>	<b>Group 1</b>
<input type="checkbox"/> hellgrammites <input type="checkbox"/>	<input type="checkbox"/> beetle adults <input type="checkbox"/>	<input checked="" type="checkbox"/> leeches <input type="checkbox"/>	Rare: 10
<input checked="" type="checkbox"/> mayfly nymphs <input type="checkbox"/>	<input type="checkbox"/> beetle larvae <input type="checkbox"/>	<input type="checkbox"/> midge larvae <input checked="" type="checkbox"/>	Common: 0
<input type="checkbox"/> gilled snails <input type="checkbox"/>	<input type="checkbox"/> black fly larvae <input type="checkbox"/>	<input type="checkbox"/> pouch snails <input type="checkbox"/>	<b>Group 2</b>
<input type="checkbox"/> stonefly nymphs <input type="checkbox"/>	<input checked="" type="checkbox"/> clams <input type="checkbox"/>	<input type="checkbox"/> True Bugs <input type="checkbox"/>	Rare: 3
<input type="checkbox"/> water penny <input type="checkbox"/>	<input type="checkbox"/> crane fly larvae <input type="checkbox"/>	<input type="checkbox"/> Other True Flies <input type="checkbox"/>	Common: 6.4
<input type="checkbox"/> water snipe fly <input type="checkbox"/>	<input type="checkbox"/> crayfish <input type="checkbox"/>		<b>Group 3</b>
	<input type="checkbox"/> damselfly nymphs <input checked="" type="checkbox"/>		Rare: 1.1
	<input type="checkbox"/> dragonfly nymphs <input type="checkbox"/>		Common: 1
	<input type="checkbox"/> net-spinning caddis <input type="checkbox"/>		<b>Total: 22</b>
	<input type="checkbox"/> scuds <input checked="" type="checkbox"/>		<b>Quality Score</b>
	<input type="checkbox"/> sowbugs <input type="checkbox"/>		Fair

Comments: high water prevented earlier monitoring

Number of jars 1      Confidence Level 2