Mitchell Creek – Cold Spring Creek Subwatershed

Site ID #: MWA-02-25-03
Site Details: City park with excessive removal of streamside vegetation and canopy.
Location Coord.(dd): 43.70010° N, -85.48307° W
Township: Big Rapids
Stream Order: 2
Site Map:

Description

Monitoring Location: Mitchell Creek Park beginning 12 feet downstream of north footbridge to 10 feet upstream of big tree at south footbridge. 300 feet downstream accessed.

Site Photos:

Monitoring Data

Summary of Monitoring Data:

Mitchell Creek

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Score</td>
<td>40</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
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</tbody>
</table>

Stream Quality Score:
- Excellent
- Good
- Fair
- Poor
Site ID #: MWA-02-25-13

Site Details: Heavily used rustic public trail with excessive stream bank erosion and flooding.

Location Coord.(dd): 43.69780° N, -85.49432° W

Township: Big Rapids

Stream Order: 2

Site Map:

Description

Monitoring Location: 300 feet upstream from the starting point of the Clay Cliffs erosion site.

Site Photos:

Monitoring Data

Summary of Monitoring Data:

Mitchell Creek-Clay Cliffs

Stream Quality Scores

<table>
<thead>
<tr>
<th>Year</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
</tr>
</tbody>
</table>

Legend
- Excellent
- Good
- Fair
- Poor
Tamarack Creek – Weatherby Drain Subwatershed

Site ID #: MWA-04-31-05

Site Details: Bridge site found to be unsuitable for monitoring due to high water and limited access.

Location Coord. (dd): 43.39921° N, -85.41095° W

Township: Winfield

Stream Order: 3

Site Map:

Description

Monitoring Location: Deaner Road monitoring location was never determined.

Site Photos:

Monitoring Data

Summary of Monitoring Data:
Site ID #: MWA-04-31-06
Site Details: Agricultural drain with culvert replacement coordinated by MRWA in 2016.
Location Coord.(dd): 43.40878° N, -85.41246° W
Township: Winfield
Stream Order: 1
Site Map:

Description

Monitoring Location: 300 feet downstream from the culvert located on Marble Road off from West Almy Road.

Site Photos:

Monitoring Data

Summary of Monitoring Data:

Tamarack Creek-Marble Road

<table>
<thead>
<tr>
<th>Year</th>
<th>Spring</th>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Stream Quality Scores:
- Excellent
- Good
- Fair
- Poor

Year

Tamarack Creek – Weatherby Drain Subwatershed
Tamarack Creek – Weatherby Drain Subwatershed

Site ID #: MWA-04-31-07
Site Details: Culvert replacement coordinated by MRWA in 2016. Downstream from agricultural and livestock operations.
Location Coord.(dd): 43.41017° N, -85.39702° W
Township: Winfield
Stream Order: 3
Site Map:

Description

Monitoring Location: 300 feet upstream from culvert located on West Almy Road just past North Bailey Road.

Site Photos:

Monitoring Data

Summary of Monitoring Data:

Tamarack Creek-Almy Road

Year

Stream Quality Scores

- Excellent
- Good
- Fair
- Poor

2018 2019

Spring Fall
Site ID #: MWA-04-31-08

Site Details: Heavily used city park. Streambank stabilization coordinated by MRWA in 2016. Suspected nutrient loading from road.

Location Coord.(dd): 43.39837° N, -85.46263° W

Township: Reynolds

Stream Order: 3

Site Map:

Description

Monitoring Location: 300 feet downstream of the flowing well located at Minnie Farmer Park, Howard City, Michigan.

Site Photos:

Monitoring Data

Summary of Monitoring Data:

Tamarack Creek-Minnie Farmer Park

![Graph showing stream quality scores for Tamarack Creek-Minnie Farmer Park from 2018 to 2019, with scores ranging from Poor to Excellent. Spring scores are consistently lower than Fall scores.]
Site ID #: MWA-05-39-01

**Site Details:** Old culvert/road stream crossing on a secondary paved road. Previous studies have shown excessive nutrients.

**Location Coord.(dd):** 43.31456° N, -86.18715° W

**Township:** Dalton

**Stream Order:** 2

**Site Map:**

---

**Description**

**Monitoring Location:** 300 feet downstream of the culvert located on Pillion Road.

**Site Photos:**

- Downstream
- Upstream

---

**Summary of Monitoring Data:**

- **Bear Creek**
  - **Spring**
  - **Fall**

![Graph showing Stream Quality Score for Bear Creek from 2018 to 2019]
Cedar Creek – Cedar Creek Subwatershed

Site ID #: MWA-05-37-02

Site Details: Paved bridge located on a heavily used paved highway. Downstream from major livestock and agricultural operations.

Location Coord.(dd): 43.38605° N, -86.12810° W

Township: Cedar Creek

Stream Order: 3

Site Map:

Description

Monitoring Location: 300 feet upstream from Holton Road Bridge.

Site Photos:

Monitoring Data

Summary of Monitoring Data:

Cedar Creek

Stream Quality Scores

<table>
<thead>
<tr>
<th>Year</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>Excellent</td>
<td>Good</td>
</tr>
<tr>
<td>Fall</td>
<td>Poor</td>
<td>Fair</td>
</tr>
</tbody>
</table>

Stream Quality Scores:

- Excellent
- Good
- Fair
- Poor
Brooks Creek – Fourmile Creek Subwatershed

Site ID #: MWA-06-43-05
Site Details: A heavily developed residential area with dual culverts and a flow control device on the outlet from Brooks Lake.
Location Coord.(dd): 43.40038° N, -85.76092° W
Township: Brooks
Stream Order: 3
Site Map:

Description

Monitoring Location: 300 feet downstream from the dual culverts on Vista Drive.

Site Photos:

Monitoring Data

Summary of Monitoring Data:

Brooks Creek-Vista Drive

<table>
<thead>
<tr>
<th>Year</th>
<th>Spring</th>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>Poor</td>
<td>Poor</td>
</tr>
<tr>
<td>2019</td>
<td>Poor</td>
<td>Poor</td>
</tr>
</tbody>
</table>

Stream Quality Scores:
- Excellent
- Good
- Fair
- Poor
Brooks Creek – Fourmile Creek Subwatershed

Site ID #: MWA-06-31-06

Site Details:  Well maintained public park and hiking trail. High flow with steep banks and diverse habitat.

Location Coord.(dd): 43.41681° N, -85.80463° W

Township: Garfield

Stream Order: 3

Site Map:

Description

Monitoring Location: 300 feet downstream of the first access point on creek at Marshall Memorial Park.

Site Photos:

Monitoring Data

Summary of Monitoring Data:

Brooks Creek-Marshall Memorial Park

<table>
<thead>
<tr>
<th>Year</th>
<th>Spring</th>
<th>Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td></td>
<td></td>
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<tr>
<td>2019</td>
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<td></td>
</tr>
</tbody>
</table>

Legend:
- Excellent
- Good
- Fair
- Poor

Stream Quality Scores
Sand Creek – Minnie Creek Subwatershed

Site ID #: MWA-06-37-01
Site Details: Dual culverts on a paved secondary road. Downstream from livestock and agricultural operations with livestock access to creek.
Location Coord.(dd): 43.33575° N, -85.87646° W
Township: Ashland
Stream Order: 2
Site Map:

Monitoring Location: 300 feet upstream from the footbridge towards the dual culverts on Wisner Avenue and 120th Avenue.

Site Photos:

Monitoring Data

Summary of Monitoring Data:

![Stream Quality Score Chart]

- Poor
- Fair
- Good
- Excellent

<table>
<thead>
<tr>
<th></th>
<th>Spring</th>
<th>Fall</th>
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<tbody>
<tr>
<td>2018</td>
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<tr>
<td>2019</td>
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