

# 80 Mill Creek at Shield Road

## Adopt-a-Stream Site Report

— Updated August 2021 —



### Site Condition: **FAIR**

At this site there are several kinds of bugs and a few of them are sensitive. The stream banks and streamside vegetation are healthy here but the stream bed is very mucky. Unfortunately, one side of the creek has no natural riparian buffer at all (the stream bank is a residential lawn). Overall the stream is ranked "fair" for a decent insect community and stream habitat.



Photo credit: Lydia Austin

### Sampling Experience

#### Site Access: **MEDIUM**

Parking is at the high school and requires a walk along a path.

#### Team Operations: **MEDIUM**

Depending on river depth, there may or may not be room to set up a team.

#### Collection: **MEDIUM**

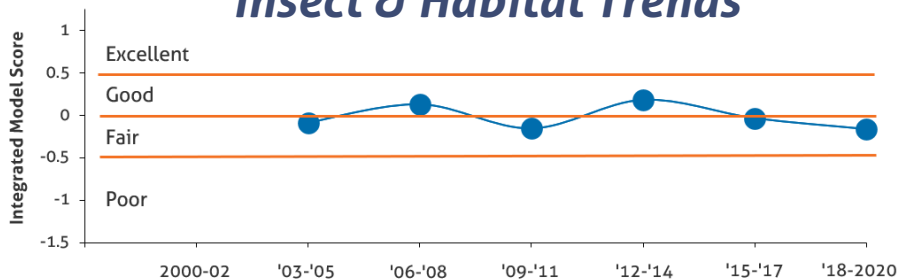
Again, depends on depth. The creek can have deep holes here.

### Measuring Stream Quality

#### Why bugs?

When a stream is rich in habitat variety, it will have many diverse kinds of bugs (called families). Some bugs (known as "sensitive") can only live in good quality streams. Thus, streams with sensitive families have the clean water and good habitat required by those bugs to survive.

### Insect & Habitat Trends



### Monitoring Data

		2000 - 2009	2010 - 2019	2020 - 2030
Number of Site Visits	Fall	6	5	0
	Spring	6	4	0
	Winter	6	8	1
Average Insect Diversity		12.9	12.9	-
Average Sensitive Diversity		1.8	1.9	-
Average Winter Stonefly Families		1.8	1.9	2
Habitat	# of Surveys	2 (2004, 2007)	2 (2011, 2016)	1 (2020)
	Summer Water T (F)	66.5 - 76.5 (2002, 2006)	66.5 - 73.5 (2010)	-
	Stream Width (ft)	37.61	37	35.7
	% Big Rocks	6.0	10.0	16.5
	% Rocks & Gravel	19.1	49.4	45.5
	% Sand	31	22.6	14.9
	% Muck	39	11.3	16.5

# Mill Creekshed

## Adopt-a-Stream Creekshed Profile

— Updated January 2020 —



### Creekshed Profile

Mill Creekshed spans 143 square miles, and is the largest and most agricultural creekshed in the Huron River watershed. While there are many beautiful places on Mill Creek, some portions fail to meet minimum water quality standards. The Michigan DEQ has listed the creek as “impaired” due to excess phosphorus and poor fish and aquatic insect populations.

**71**

### Water Quality Parameters Grade

75-100	Healthy to Pristine	Land Use	B
		Natural Areas	C
50-74	Slightly Impacted	Stream Flow	C
		Stream Habitat	B
25-49	Highly Impacted	Macroinvertebrates	C
		Fish Community	B
0-24	Extremely Disturbed	Phosphorus	D
		E. coli	F
		Total Suspended Solids	A
		Stream Temperature	A
		Conductivity	A
		Dams	A
		Contaminants	F

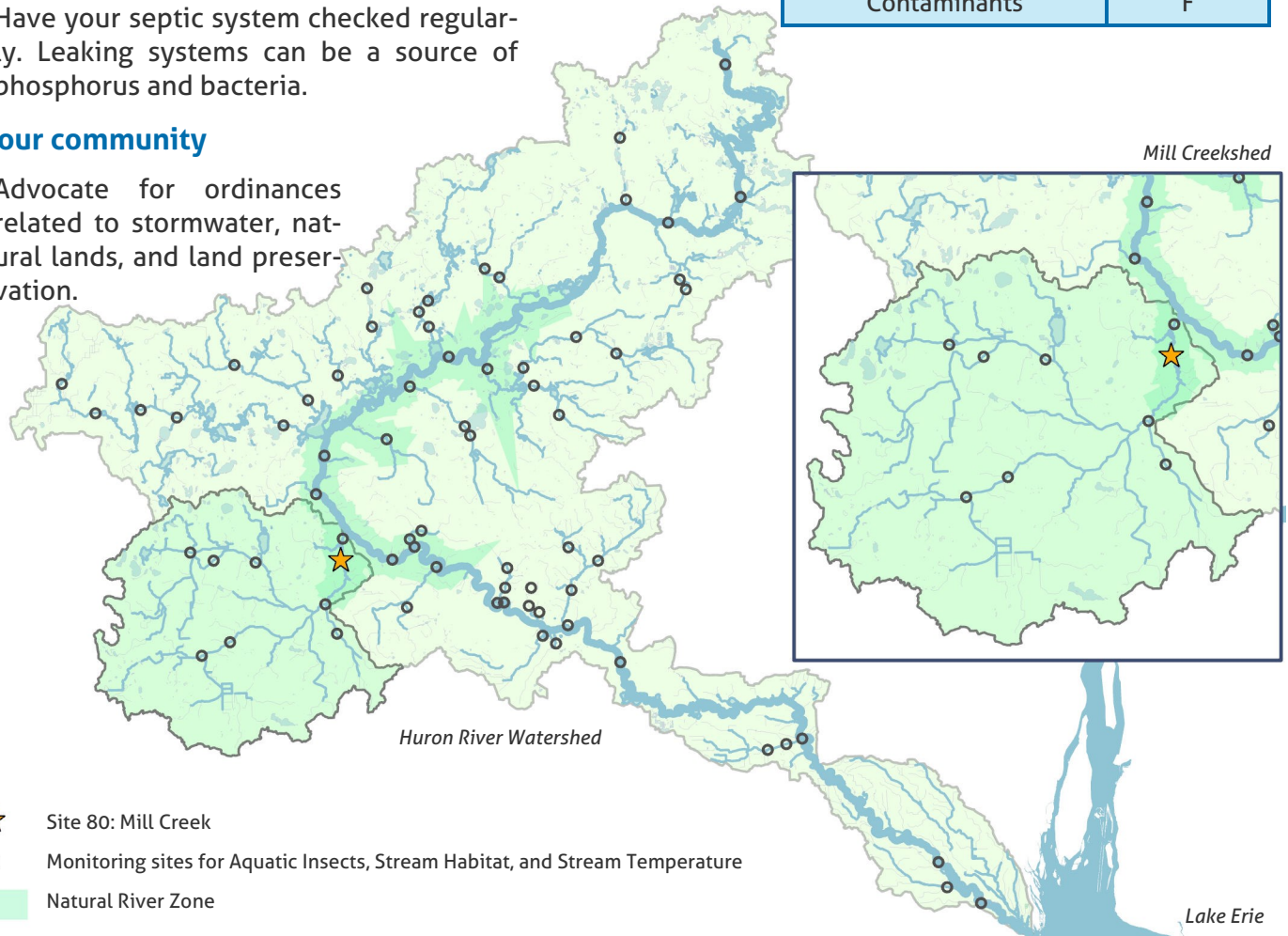
### What You Can Do!

#### At home

- Maintain a 25 foot vegetated buffer from all ditches, creeks, and water bodies.
- Have your septic system checked regularly. Leaking systems can be a source of phosphorus and bacteria.

#### In your community

- Advocate for ordinances related to stormwater, natural lands, and land preservation.



- ★ Site 80: Mill Creek
- Monitoring sites for Aquatic Insects, Stream Habitat, and Stream Temperature
- Natural River Zone

Lake Erie