



2021 Stream Survey Report

CHAFFEE CREEK TREND SITE

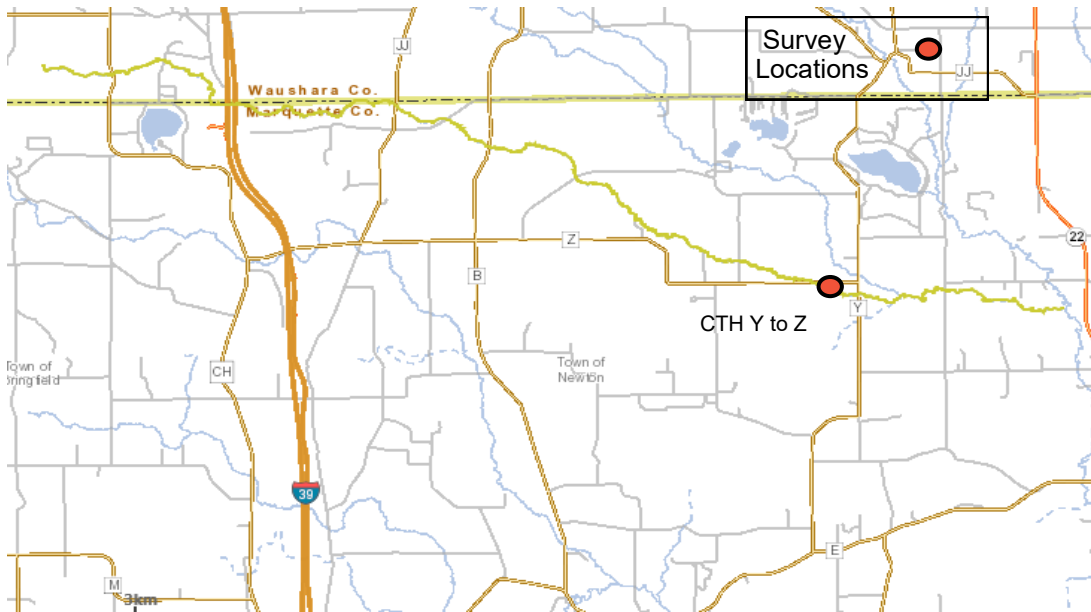
(WBIC 155900)
Marquette County

INTRODUCTION AND OBJECTIVES

Chaffee Creek is a Class I or II trout water stream and consists of 15.62 miles of trout water. The Chaffee Creek stretches through both Waushara and Marquette Counties and is part of the Mecan River watershed. This trend site has had habitat development work done on it in the past. Objectives of the trend survey are to monitor relative abundance and size structure.

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Regulations
 Category: Red
 Daily Bag and Size Limit:
 3 in total and 12" Brown and Brook 8"



Survey Method

- The Chaffee Creek trend site has been surveyed annually since 2007. This particular site is 4000 feet in length and is electrofished with a towed barge stream shocker. All captured trout are identified to species, measured for length, and examined for fin clips.
- Metrics used to evaluate fish populations include catch rate (CPUE) by size and proportions of length.

SURVEY INFORMATION

Site location	Survey Date	Station Length	Water Temperature (F)	GPS (Start/Finish)	Gear	Dippers
CTH Y to Z Trend	08/04/2021	4000 ft.	55	43.9502,-89.3654 43.9522,-89.3749	Towed Barge Shocker	3

Metric Descriptions

- **Catch per effort (CPUE)** is an indirect method of measuring fish population relative abundance. For all trout surveys we typically quantify CPUE by the number and size of trout captured per mile of stream. CPUE indexes are compared to statewide streams by percentile (PCTL). For example, if a CPUE is in the 90th percentile, it is higher than 90% of the other CPUEs in the state. CPUE percentiles can also be used to categorize trout abundance by 33rd (low density), 66th (moderate), 90th (high), and 95th (very high) percentile benchmarks.
- **Length frequency distribution** describes size structure and is the number of trout captured and grouped by one inch size intervals.

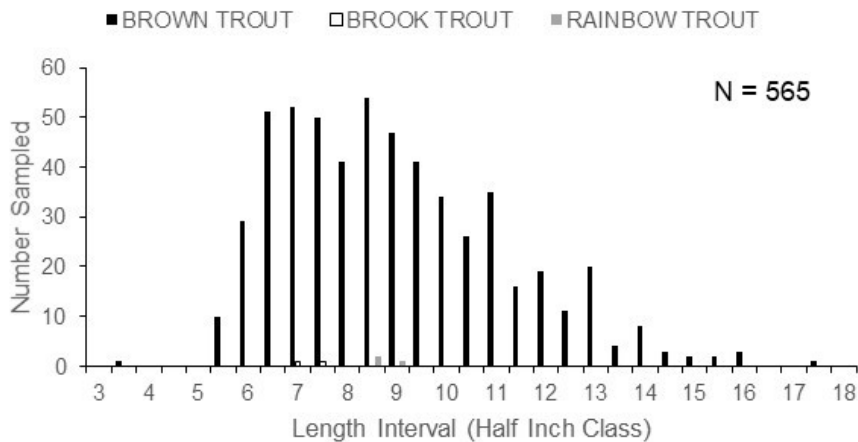


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Chaffee Creek Trend Trout Length Distribution



SIZE AND ABUNDANCE (CPUE) METRICS - BROWN TROUT

Year	Average Length (Inches)	Length Range (Inches)	Number Sampled	CPUE (Number per Mile)						
				Total (PCTL)	YOY	>6" (PCTL)	>8" (PCTL)	>10" (PCTL)	>12" (PCTL)	>15" (PCTL)
2008	9.4	(6.0-15.3)	286	416 (70th)	0	416 (80th)	310 (85th)	191 (85th)	54 (80th)	3 (65th)
2009	10.0	(6.0-16.1)	223	294 (60th)	1	292 (75th)	231 (80th)	197 (85th)	41 (75th)	4 (65th)
2010	10.0	(5.7-16.9)	159	210 (55th)	0	208 (70th)	194 (75th)	135 (80th)	45 (75th)	7 (75th)
2011	9.7	(5.7-17.2)	215	284 (60th)	0	280 (75th)	160 (75th)	140 (80th)	61 (85th)	17 (90th)
2012	9.4	(5.6-19.6)	489	645 (80th)	0	640 (90th)	420 (90th)	338 (95th)	92 (90th)	18 (90th)
2013	9.0	(3.5-17.0)	318	420 (70th)	1	414 (80th)	244 (80th)	185 (85th)	40 (75th)	4 (65th)
2014	9.2	(5.4-16.4)	324	427 (70th)	0	421 (80th)	202 (80th)	149 (85th)	30 (70th)	4 (65th)
2015	9.9	(6.1-16.8)	169	223 (55th)	0	222 (70th)	153 (70th)	122 (80th)	37 (75th)	1 (60th)
2016	9.1	(5.6-14.2)	337	451 (70th)	0	442 (80th)	207 (80th)	129 (80th)	18 (60th)	0
2017	9.5	(3.1- 16.8)	310	409 (70th)	13	395 (80th)	331 (85th)	208 (90th)	67 (85th)	3 (65th)
2018	9.3	(3.0-15.0)	315	416 (72nd)	4	409 (80th)	232 (83rd)	144 (84th)	71 (88th)	1 (63rd)
2019	9.8	(5.5-15.8)	263	347 (65th)	0	344 (80th)	244 (80th)	144 (80th)	54 (80th)	4 (65th)
2021	9.9	(3.5 - 17.6)	560	739 (82nd)	1	725 (91st)	484 (92nd)	243 (92nd)	96 (92nd)	11 (83rd)

Summary

- The 2021 survey indicated brown trout density for adult fish was at high levels with CPUEs ranking at the 92st percentile for >6+inch trout which is the highest density sampled since before 2008. Catch per unit efforts for 8.0 and 10.0 inch trout are at high levels and have also increased significantly over the past 10 years.
- The size structure and abundance levels have increased since the last survey in 2019, and is above average when looking at sampling over the last 10 years..
- We sampled one young-of-year (YOY) was sampled this year, but considering the lack of gravel and woody debris in this stretch of stream , it was expected. In years past a few YOY were sampled. In the upper reaches of the Chaffee Creek the habitat is more conducive to YOY trout.
- The Chaffee Creek has proven to produce good numbers of mid - size (8-12 inch) trout, while also a chance at capturing a trout over 15 inches.
- Chaffee Creek is one of the few trout streams in the area where brown, rainbow, and brook trout all reside in the same stream. While in low numbers a few brook and rainbow trout were sampled in this section of stream.