

**Big Creek Snow Rd & Pearl Rd Branch Upstream of Big Creek Parkway**

**8/19/2016**

**River Mile: 0.20**

**Collection Method: Longline Electrofishing**

**Drainage Area: 2.5 miles<sup>2</sup>**

**Collection Distance: 0.15 km**

<b>Code</b>	<b>Species</b>	<b>Number</b>	<b>Pollution Tolerance</b>	<b>DELT #</b>	<b>Anomalies Description</b>
40-016	<i>Catostomus commersonii</i> Common white sucker	48	Highly Tolerant	0	---
43-003	<i>Notemigonus crysoleucas</i> Golden shiner	4	Highly Tolerant	0	---
43-011	<i>Rhinichthys atratulus</i> Western blacknose dace	101	Highly Tolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	109	Highly Tolerant	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	12	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	79	--	0	---
77-008	<i>Lepomis cyanellus</i> Green sunfish	53	Highly Tolerant	0	---
	<b>Totals</b>	<u><u>406</u></u>		<u><u>0</u></u>	

\*DELT anomalies were observed on 0.00 % of the fish collected.  
Index of Biotic Integrity (IBI) = 30 (Fair)

**Big Creek West Branch at Memphis Park**  
**8/16/2016**  
**River Mile: 0.02**  
**Collection Method: Longline Electrofishing**  
**Drainage Area: 11.9 miles<sup>2</sup>**  
**Collection Distance: 0.15 km**

Code	Species	Number	Pollution Tolerance	DELT Anomalies	
				#	Description
40-016	<i>Catostomus commersonii</i> Common white sucker	238	Highly Tolerant	0	---
43-011	<i>Rhinichthys atratulus</i> Western blacknose dace	33	Highly Tolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	275	Highly Tolerant	0	---
43-033	<i>Notropis dorsalis</i> Bigmouth Shiner	10	--	0	---
43-034	<i>Notropis stramineus</i> Sand shiner	11	Moderately Intolerant	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	13	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	196	--	0	---
47-004	<i>Ictalurus natalis</i> Yellow bullhead	1	Highly Tolerant	0	---
Totals		<u>777</u>		<u>0</u>	

\*DELT anomalies were observed on 0.00 % of the fish collected.  
 Index of Biotic Integrity (IBI) = 24 (Poor)

**Stickney Creek South of Memphis Avenue**  
**9/8/2016**  
**River Mile: 0.15**  
**Collection Method: Longline Electrofishing**  
**Drainage Area: 15.8 miles<sup>2</sup>**  
**Collection Distance: 0.15 km**

Code	Species	Number	Pollution Tolerance	DELT Anomalies	
				#	Description
40-016	<i>Catostomus commersonii</i> Common white sucker	29	Highly Tolerant	0	---
43-011	<i>Rhinichthys atratulus</i> Western blacknose dace	72	Highly Tolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	125	Highly Tolerant	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	31	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	38	--	0	---
Totals		<u>295</u>		<u>0</u>	

\*DELT anomalies were observed on 0.00 % of the fish collected.  
 Index of Biotic Integrity (IBI) = 22 (Poor)

**Big Creek Downstream of Pearl Road**  
**8/17/2016**  
**River Mile: 9.80**  
**Collection Method: Longline Electrofishing**  
**Drainage Area: 5.6 miles<sup>2</sup>**  
**Collection Distance: 0.15 km**

Code	Species	Number	Pollution Tolerance	DELT Anomalies	
				#	Description
40-016	<i>Catostomus commersonii</i> Common white sucker	5	Highly Tolerant	0	---
43-011	<i>Rhinichthys atratulus</i> Western blacknose dace	26	Highly Tolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	101	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	142	--	0	---
77-006	<i>Micropterus salmoides</i> Largemouth bass	1	--	0	---
77-008	<i>Lepomis cyanellus</i> Green sunfish	22	Highly Tolerant	0	---
77-009	<i>Lepomis macrochirus</i> Northern bluegill sunfish	7	Moderately Tolerant	0	---
77-013	<i>Lepomis gibbosus</i> Pumpkinseed sunfish	8	Moderately Tolerant	0	---
Totals		<u>312</u>		<u>0</u>	

\*DELT anomalies were observed on 0.00 % of the fish collected.  
 Index of Biotic Integrity (IBI) = 30 (Fair)

**Big Creek at Memphis Park**  
**8/16/2016**  
**River Mile: 4.40**  
**Collection Method: Longline Electrofishing**  
**Drainage Area: 19.3 miles<sup>2</sup>**  
**Collection Distance: 0.15 km**

Code	Species	Number	Pollution Tolerance	DELT Anomalies	
				#	Description
40-016	<i>Catostomus commersonii</i> Common white sucker	7	Highly Tolerant	0	---
43-003	<i>Notemigonus crysoleucas</i> Golden shiner	1	Highly Tolerant	0	---
43-011	<i>Rhinichthys atratulus</i> Western blacknose dace	185	Highly Tolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	106	Highly Tolerant	0	---
43-033	<i>Notropis dorsalis</i> Bigmouth Shiner	16	--	0	---
43-034	<i>Notropis stramineus</i> Sand shiner	10	Moderately Intolerant	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	6	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	90	--	0	---
Totals		<u>421</u>		<u>0</u>	

\*DELT anomalies were observed on 0.00 % of the fish collected.  
 Index of Biotic Integrity (IBI) = 30 (Fair)

**Big Creek Downstream of Jennings Road**

**September 6, 2016**

**River Mile: 0.15**

**Collection Method: Boat Electrofishing**

**Drainage Area: 37.1 miles<sup>2</sup>**

**Collection Distance: 0.2 km**

<b>Code</b>	<b>Species</b>	<b>Number</b>	<b>Weight (kg)</b>	<b>Pollution Tolerance</b>	<b>#</b>	<b>DELT Anomalies Description</b>
40-005	<i>Carpiodes cyprinus</i> Central quillback carpsucker	1	0.02	--	0	---
40-015	<i>Hypentelium nigricans</i> Northern hog sucker	2	0.2	Moderately Intolerant	0	---
40-016	<i>Catostomus commersonii</i> Common white sucker	18	0.15	Highly Tolerant	0	---
43-002	<i>Carassius auratus</i> Goldfish	11	3.1	Highly Tolerant	0	---
43-003	<i>Notemigonus crysoleucas</i> Golden shiner	1	0.004	Highly Tolerant	0	---
43-011	<i>Rhinichthys atratulus</i> Western blacknose dace	2	0.008	Highly Tolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	1	0.006	Highly Tolerant	0	---
43-020	<i>Notropis atherinoides</i> Common Emerald shiner	20	0.09	--	0	---
43-025	<i>Notropis chrysocephalus</i> Striped shiner	5	0.01	--	0	---
43-032	<i>Cyprinella spiloptera</i> Spotfin shiner	6	0.021	--	0	---
43-034	<i>Notropis stramineus</i> Sand shiner	24	0.08	Moderately Intolerant	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	14	0.03	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	9	0.04	--	0	---
47-004	<i>Ictalurus natalis</i> Yellow bullhead	11	0.4	Highly Tolerant	0	---
77-004	<i>Micropterus dolomieu</i> Smallmouth bass	1	0.01	Moderately Intolerant	0	---

## Big Creek Downstream of Jennings Road

September 6, 2016

River Mile: **0.15**

77-006	<i>Micropterus salmoides</i> Largemouth bass	2	0.745	--	0	---
77-008	<i>Lepomis cyanellus</i> Green sunfish	6	0.23	Highly Tolerant	0	---
80-011	<i>Percina caprodes</i> Northern logperch darter	5	0.04	Moderately Intolerant	0	---
87-001	<i>Neogobius melanostomus</i> Round goby	13	0.1	--	0	---
Totals		<u>152</u>	<u>5.284</u>		<u>0</u>	

*DELT anomalies were observed on	0.00	% of the fish collected.
Index of Biotic Integrity (IBI) =	24	(Poor)
Modified Index of Well-Being (MIwb) =	8.0	(Fair)
Shannon Diversity Index, no.	2.571	
Shannon Diversity Index, wt.	1.547	
N	375	
B	6.28	

**Big Creek Downstream of Jennings Road**

**October 6, 2016**

**River Mile: 0.15**

**Collection Method: Boat Electrofishing**

**Drainage Area: 37 miles<sup>2</sup>**

**Collection Distance: 0.2 km**

<b>Code</b>	<b>Species</b>	<b>Number</b>	<b>Weight (kg)</b>	<b>Pollution Tolerance</b>	<b>#</b>	<b>DELT Anomalies Description</b>
40-015	<i>Hypentelium nigricans</i> Northern hog sucker	2	0.1	Moderately Intolerant	0	---
40-016	<i>Catostomus commersonii</i> Common white sucker	6	0.223	Highly Tolerant	0	---
43-020	<i>Notropis atherinoides</i> Common Emerald shiner	15	0.03	--	0	---
43-032	<i>Cyprinella spiloptera</i> Spotfin shiner	2	0.01	--	0	---
43-034	<i>Notropis stramineus</i> Sand shiner	15	0.018	Moderately Intolerant	0	---
43-042	<i>Pimephales promelas</i> Northern fathead minnow	3	0.007	Highly Tolerant	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	3	0.014	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	8	0.019	--	0	---
47-002	<i>Ictalurus punctatus</i> Channel catfish	1	3.628	--	1	Multiple
47-004	<i>Ictalurus natalis</i> Yellow bullhead	7	0	Highly Tolerant	1	Erosion
70-001	<i>Labidesthes sicculus</i> Brook silverside	2	0.004	Moderately Intolerant	0	---
77-008	<i>Lepomis cyanellus</i> Green sunfish	2	0.047	Highly Tolerant	0	---
77-009	<i>Lepomis macrochirus</i> Northern bluegill sunfish	3	0.031	Moderately Tolerant	0	---
87-001	<i>Neogobius melanostomus</i> Round goby	10	0.072	--	0	---
	<b>Totals</b>	<u><b>79</b></u>	<u><b>4.203</b></u>		<u><b>2</b></u>	



## Big Creek Downstream of Jennings Road

October 6, 2016

River Mile: 0.15

*DELT anomalies were observed on	2.53	% of the fish collected.
Index of Biotic Integrity (IBI) =	30	(Fair)
Modified Index of Well-Being (MIwb) =	7.2	(Fair)
Shannon Diversity Index, no.	2.335	
Shannon Diversity Index, wt.	0.662	
N	240	
B	19.2	