

FIBI004-R4

Lopatcong Creek

Uniontown Road

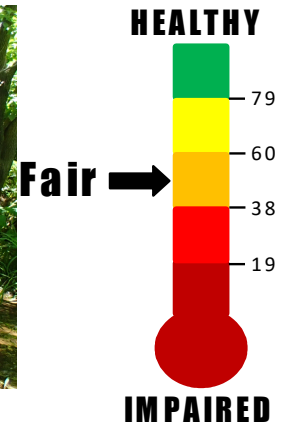
Municipality: Lopatcong Twp

County: Warren

Drainage Area (sq miles): 8

Sample Date: 6 /20/2017

Site Type: Fixed



IBI Metrics

Metric 1-%Rheophilic Richness	21.18
Metric 2-%Cold Non-tolerant Coolwater	66.15
Metric 3-%Generalist Richness	36.28
Metric 4-Tolerance Index	61.80
Metric 5-%Lithophilic Richness	28.98
Metric 6-%Cyprinidae	30.15
Metric 7-%Dominant 3 Taxa	67.35
Metric 8-%Benthic Insectivore Richness	26.49

Field Chemistry

Air Temp (°C)	26.2
Water Temperature (°C)	21.06
Dissolved Oxygen (mg/L)	8.4
% Saturation	94.5
pH	7.62
Conductivity (µS/cm)	260.6
Total Kjeldahl (mg/L)	0.16
Total Phosphorus (mg/L)	0.03
Nitrate/Nitrite (mg/L)	0.78

Northern Fish IBI Score (0-100): 42.30

IBI Rating: Fair

High Gradient Habitat Score (0-200): 144

Habitat Rating: Suboptimal

Summary: Scores at FIBI004 have fluctuated since the site was first sampled in 2000. The 2017 score and rating is the lowest in the four rounds of monitoring at Lopatcong Creek. Several sensitive species were absent from this most recent sampling event including wild brown trout and margined madtom. In addition, young-of-the-year brown trout, which indicate natural reproduction were collected in 2005 and 2010, but were absent in 2017 (see Table below).

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Common Name	Scientific Name	Abundance
Blacknose Dace	<i>Rhinichthys atratulus</i>	43
Sea Lamprey	<i>Petromyzon marinus</i>	32
White Sucker	<i>Catostomus commersoni</i>	26
Tessellated Darter	<i>Etheostoma olmstedii</i>	13
Creek Chub	<i>Semotilus atromaculatus</i>	9
American Eel	<i>Anguilla rostrata</i>	9
Bluegill	<i>Lepomis macrochirus</i>	5
Largemouth Bass	<i>Micropterus salmoides</i>	3
Green Sunfish	<i>Lepomis cyanellus</i>	2
Banded Killifish	<i>Fundulus diaphanus</i>	1

	Species		
Year	Wild Brown Trout	Wild Rainbow Trout	Native Brook Trout
2005	12*	0	0
2010	2*	0	0
2017	0	0	0

***Denotes young-of-the-year trout present**