

FIBI093a-R4

NB Raritan River

Mosle Road

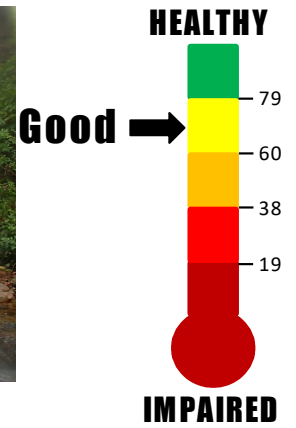
Municipality: MENDHAM TWP

County: Morris

Drainage Area (sq miles): 21

Sample Date: 9 /9 /2019

Site Type: Fixed



Field Chemistry

IBI Metrics	
Metric 1-%Rheophilic Richness	100.00
Metric 2-%Cold Non-tolerant Coolwater	99.21
Metric 3-%Generalist Richness	56.43
Metric 4-Tolerance Index	81.01
Metric 5-%Lithophilic Richness	62.09
Metric 6-%Cyprinidae	100.00
Metric 7-%Dominant 3 Taxa	34.15
Metric 8-%Benthic Insectivore Richness	37.84

Air Temp (°C)	18.7
Water Temperature (°C)	17.80
Dissolved Oxygen (mg/L)	9.8
% Saturation	100.5
pH	7.16
Conductivity (µS/cm)	391
Total Kjeldahl (mg/L)	0.15
Total Phosphorus (mg/L)	0.02
Nitrate/Nitrite (mg/L)	1.75

Northern Fish IBI Score (0-100): 71.34

IBI Rating: Good

High Gradient Habitat Score (0-200): 161

Habitat Rating: Optimal

Summary: Scores from this station (FIBI093a) and the previously sampled upstream location (FIBI093) differed by just 1.4 points since 2009. The two stations are separated by less than 200-m and the habitat and stream conditions are similar between the two. Despite consistent results over time, the number of wild trout has declined substantially. In 2009, 68 wild brown trout representing 21% of the total catch were collected compared to just 16 wild brown trout in 2019 which represented only 2.6% of the total catch.

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Common Name	Scientific Name	Abundance
Longnose Dace	<i>Rhinichthys cataractae</i>	323
Blacknose Dace	<i>Rhinichthys atratulus</i>	88
Fallfish	<i>Semotilus corporalis</i>	60
White Sucker	<i>Catostomus commersonii</i>	42
Tessellated Darter	<i>Etheostoma olmstedii</i>	29
Brown Trout	<i>Salmo trutta</i>	16
Largemouth Bass	<i>Micropterus salmoides</i>	10
American Eel	<i>Anguilla rostrata</i>	9
Green Sunfish	<i>Lepomis cyanellus</i>	9
Bluegill	<i>Lepomis macrochirus</i>	4
Creek Chub	<i>Semotilus atromaculatus</i>	3
Pumpkinseed	<i>Lepomis gibbosus</i>	3
Hybrid Green Sunfish x Pumpkinseed	<i>Lepomis cxg</i>	2
Yellow Bullhead	<i>Ameiurus natalis</i>	2
American Brook Lamprey	<i>Lethenteron appendix</i>	1