

FIBI046-R4

Clove Brook

State Route 23

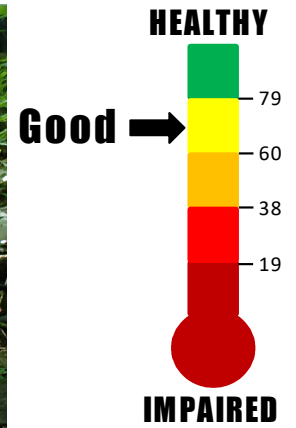
Municipality: Montague Twp

County: Sussex

Drainage Area (sq miles): 10

Sample Date: 8/1/2017

Site Type: Fixed



IBI Metrics

Metric 1-%Rheophilic Richness	61.30
Metric 2-%Cold Non-tolerant Coolwater	77.80
Metric 3-%Generalist Richness	76.58
Metric 4-Tolerance Index	79.83
Metric 5-%Lithophilic Richness	43.47
Metric 6-%Cyprinidae	78.76
Metric 7-%Dominant 3 Taxa	100.00
Metric 8-%Benthic Insectivore Richness	52.98

Field Chemistry

Air Temp (°C)	29
Water Temperature (°C)	20.06
Dissolved Oxygen (mg/L)	8.1
% Saturation	89.5
pH	7.43
Conductivity (µS/cm)	291.2
Total Kjeldahl (mg/L)	0.30
Total Phosphorus (mg/L)	0.06
Nitrate/Nitrite (mg/L)	0.07

Northern Fish IBI Score (0-100): 71.34

IBI Rating: Good

High Gradient Habitat Score (0-200): 127

Habitat Rating: Suboptimal

Summary: Despite receiving a "Good" rating, the number of wild brown trout collected at FIBI046 has significantly declined from prior sampling events (see Table below). Unlike 2007 and 2012, we did not collect any young-of-the-year trout in 2017 which would indicate a decline in natural trout reproduction. The 2007 and 2012 sampling events resulted in the capture of 32 and 50 wild brown trout respectively, compared to just seven in 2017. Also, of those trout collected in 2007 and 2012, 24% and 60% respectively, were young-of-the-year compared to zero in 2017. This FW2-TP stream should be re-evaluated to determine the trout production status.

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Common Name	Scientific Name	Abundance
Blacknose Dace	<i>Rhinichthys atratulus</i>	347
Redbreast Sunfish	<i>Lepomis auritus</i>	45
White Sucker	<i>Catostomus commersoni</i>	35
Bluegill	<i>Lepomis macrochirus</i>	24
Tessellated Darter	<i>Etheostoma olmstedii</i>	20
American Eel	<i>Anguilla rostrata</i>	18
Brown Trout	<i>Salmo trutta</i>	7
Longnose Dace	<i>Rhinichthys cataractae</i>	6
Chain Pickerel	<i>Esox niger</i>	1
Largemouth Bass	<i>Micropterus salmoides</i>	1

Year	Species		
	Wild Brown Trout	Wild Rainbow Trout	Native Brook Trout
2007	32*	0	0
2012	50*	0	0
2017	7	0	0
*Denotes young-of-the-year trout present			