

FIBI099-R4 Walkkill River

State Route 94

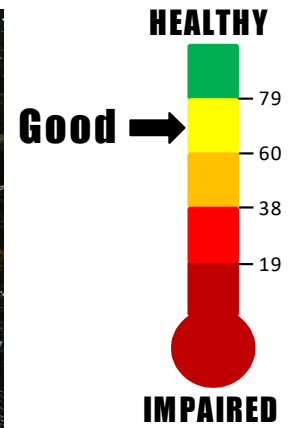
Municipality: Hamburg Boro

County: Sussex

Drainage Area (sq miles): 46

Sample Date: 8 /30/2017

Site Type: Fixed



IBI Metrics

Metric 1-%Rheophilic Richness	28.02
Metric 2-%Cold Non-tolerant Coolwater	72.43
Metric 3-%Generalist Richness	82.95
Metric 4-Tolerance Index	89.63
Metric 5-%Lithophilic Richness	45.75
Metric 6-%Cyprinidae	86.95
Metric 7-%Dominant 3 Taxa	41.49
Metric 8-%Benthic Insectivore Richness	55.77

Field Chemistry

Air Temp (°C)	22
Water Temperature (°C)	18.11
Dissolved Oxygen (mg/L)	9.5
% Saturation	100.9
pH	8.03
Conductivity (µS/cm)	872.2
Total Kjeldahl (mg/L)	0.47
Total Phosphorus (mg/L)	0.08
Nitrate/Nitrite (mg/L)	3.67

Northern Fish IBI Score (0-100): 62.87

IBI Rating: Good

High Gradient Habitat Score (0-200): 143

Habitat Rating: Suboptimal

Summary: This site has not been sampled since 2009 and despite the "good" rating several stressors were identified which could be impacting the resident fish assemblage. Two rheophilic species, blacknose dace and American brook lamprey were absent from this latest sampling event which resulted in a sharp decline in the metric when compared to results from 2004 and 2009. The conductivity measurement was the second highest and the nitrate/nitrate value of 3.67 mg/l was the highest of the 52 IBI sites sampled in Round 4.

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Wallkill River

Common Name	Scientific Name	Abundance
Longnose Dace	<i>Rhinichthys cataractae</i>	220
Cutlips Minnow	<i>Exoglossum maxillingua</i>	79
Redbreast Sunfish	<i>Lepomis auritus</i>	65
Pumpkinseed	<i>Lepomis gibbosus</i>	40
White Sucker	<i>Catostomus commersoni</i>	39
Tessellated Darter	<i>Etheostoma olmstedi</i>	37
Smallmouth Bass	<i>Micropterus dolomieu</i>	28
Margined Madtom	<i>Noturus insignis</i>	9
Common Shiner	<i>Luxilus cornutus</i>	6
Satinfin Shiner	<i>Cyprinella analostana</i>	5
Creek Chub	<i>Semotilus atromaculatus</i>	5
Spottail Shiner	<i>Notropis hudsonius</i>	4
Green Sunfish	<i>Lepomis cyanellus</i>	4
Banded Killifish	<i>Fundulus diaphanus</i>	3
Rock Bass	<i>Ambloplites rupestris</i>	2
Redfin Pickerel	<i>Esox americanus americanus</i>	2
Largemouth Bass	<i>Micropterus salmoides</i>	1
Yellow Bullhead	<i>Ameiurus natalis</i>	1
Chain Pickerel	<i>Esox niger</i>	1