

FIBI066a-R4r

Big Flat Brook

Rt 560 end of Flatbrook Road

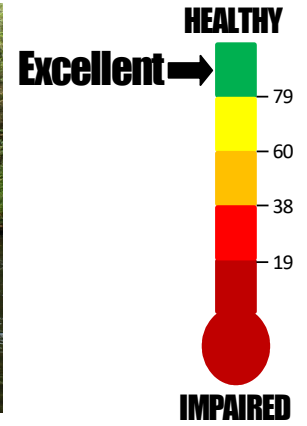
Municipality: Sandyston Twp

County: Sussex

Drainage Area (sq miles): 28

Sample Date: 8 /27/2018

Site Type: Sentinel



IBI Metrics

Metric 1-%Rheophilic Richness	88.38
Metric 2-%Cold Non-tolerant Coolwater	76.29
Metric 3-%Generalist Richness	86.07
Metric 4-Tolerance Index	80.11
Metric 5-%Lithophilic Richness	68.18
Metric 6-%Cyprinidae	75.73
Metric 7-%Dominant 3 Taxa	78.94
Metric 8-%Benthic Insectivore Richness	77.91

Field Chemistry

Air Temp (°C)	20.6
Water Temperature (°C)	18.26
Dissolved Oxygen (mg/L)	9.3
% Saturation	98.5
pH	7.14
Conductivity (µS/cm)	99.5
Total Kjeldahl (mg/L)	0.09
Total Phosphorus (mg/L)	0.01
Nitrate/Nitrite (mg/L)	0.09

Northern Fish IBI Score (0-100): 78.95

IBI Rating: Excellent

High Gradient Habitat Score (0-200): 180

Habitat Rating: Optimal

Summary: The 2018 score represents the lowest IBI score for this site over the four sampling events at this location on Big Flat Brook. Since 2012 there has been a steady decline in the abundance of cold and non-tolerant coolwater species. In addition, scores for cyprinidae abundance and benthic insectivore richness were the lowest in the four years of monitoring.

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Common Name	Scientific Name	Abundance
Blacknose Dace	<i>Rhinichthys atratulus</i>	111
American Eel	<i>Anguilla rostrata</i>	70
Slimy Sculpin	<i>Cottus cognatus</i>	34
Longnose Dace	<i>Rhinichthys cataractae</i>	25
Cutlips Minnow	<i>Exoglossum maxillingua</i>	21
White Sucker	<i>Catostomus commersonii</i>	12
Tessellated Darter	<i>Etheostoma olmstedii</i>	9
Creek Chub	<i>Semotilus atromaculatus</i>	6
Common Shiner	<i>Luxilus cornutus</i>	6
Largemouth Bass	<i>Micropterus salmoides</i>	3
Pumpkinseed	<i>Lepomis gibbosus</i>	2
Rock Bass	<i>Ambloplites rupestris</i>	1
Smallmouth Bass	<i>Micropterus dolomieu</i>	1
Redbreast Sunfish	<i>Lepomis auritus</i>	1
Brook Trout	<i>Salvelinus fontinalis</i>	1
Bluegill	<i>Lepomis macrochirus</i>	1
Margined Madtom	<i>Noturus insignis</i>	1