

FIBI025-R3r

Peters Brook

Park Avenue @ park

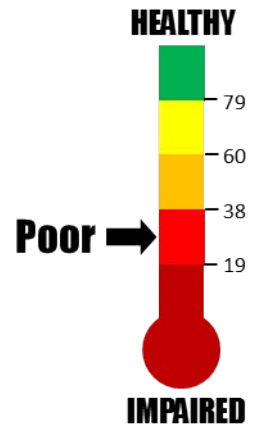
Municipality: Somerville Boro

County: Somerset

Drainage Area (sq miles): 9.6

Sample Date: 06/11/2014

Site Type: Fixed



IBI Metrics

Metric 1-%Rheophilic Richness	27.38
Metric 2-%Cold Non-tolerant Coolwater	20.50
Metric 3-%Generalist Richness	45.23
Metric 4-Tolerance Index	28.88
Metric 5-%Lithophilic Richness	48.30
Metric 6-%Cyprinidae	0.00
Metric 7-%Dominant 3 Taxa	33.44
Metric 8-%Benthic Insectivore Richness	58.87

Field Chemistry

Air Temp (°C)	18
Water Temperature (°C)	19.56
Dissolved Oxygen (mg/L)	7.05
% Saturation	76.6
pH	7.37
Conductivity (µS/cm)	869

Northern Fish IBI Score (0-100): 32.82

IBI Rating: Poor

High Gradient Habitat Score (0-200): 106

Habitat Rating: Marginal

Summary: The specific conductance measured at Peters Brook was one of the highest measured in the Fish IBI network and has been increasing since 2001. Despite collecting 7 different minnow species, only 35 individuals were collected which resulted in a score of zero for the %Cyprinidae metric. Also, over 40% of the fish community was comprised of green sunfish, an invasive sunfish species which outcompetes native sunfish.

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Common Name	Scientific Name	Abundance
Green Sunfish	<i>Lepomis cyanellus</i>	170
Tessellated Darter	<i>Etheostoma olmstedii</i>	67
Redbreast Sunfish	<i>Lepomis auritus</i>	37
American Eel	<i>Anguilla rostrata</i>	24
White Sucker	<i>Catostomus commersoni</i>	15
Banded Killifish	<i>Fundulus diaphanus</i>	15
Blacknose Dace	<i>Rhinichthys atratulus</i>	14
Margined Madtom	<i>Noturus insignis</i>	9
Longnose Dace	<i>Rhinichthys cataractae</i>	9
Pumpkinseed	<i>Lepomis gibbosus</i>	9
Creek Chub	<i>Semotilus atromaculatus</i>	5
Swallowtail Shiner	<i>Notropis procne</i>	4
Oriental Weatherfish	<i>Misgurnus anguillicaudatus</i>	2
Fathead Minnow	<i>Pimephales promelas</i>	1
Common Shiner	<i>Luxilus cornutus</i>	1
Comely Shiner	<i>Notropis amoenus</i>	1
Bluegill	<i>Lepomis macrochirus</i>	1
Yellow Bullhead	<i>Ameiurus natalis</i>	1