

FIBI045-R4

Beaver Dam Brook

Park Avenue

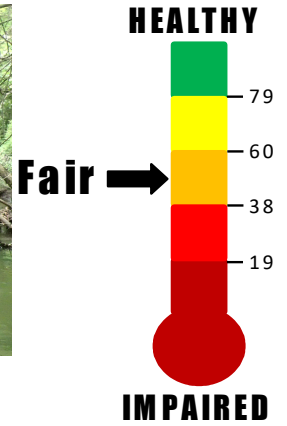
Municipality: Lincoln Park Boro

County: Morris

Drainage Area (sq miles): 13

Sample Date: 6 /1 /2018

Site Type: Fixed



IBI Metrics

Metric 1-%Rheophilic Richness	43.61
Metric 2-%Cold Non-tolerant Coolwater	50.52
Metric 3-%Generalist Richness	42.03
Metric 4-Tolerance Index	64.66
Metric 5-%Lithophilic Richness	41.40
Metric 6-%Cyprinidae	0.00
Metric 7-%Dominant 3 Taxa	37.32
Metric 8-%Benthic Insectivore Richness	37.84

Field Chemistry

Air Temp (°C)	21
Water Temperature (°C)	16.79
Dissolved Oxygen (mg/L)	7.1
% Saturation	72.5
pH	6.81
Conductivity (µS/cm)	539.6
Total Kjeldahl (mg/L)	0.51
Total Phosphorus (mg/L)	0.06
Nitrate/Nitrite (mg/L)	0.54

Northern Fish IBI Score (0-100): 39.67

IBI Rating: Fair

High Gradient Habitat Score (0-200): 108

Habitat Rating: Marginal

Summary: 2018 is the first time this station on Beaver Dam Brook was not considered impaired for aquatic life use. The associated fair rating is mainly a result of an increase in a few cold and non-tolerant coolwater species like fallfish, longnose dace, and rock bass. In addition, the lithophilic richness metric score was significantly higher than any previous survey indicating the presence of clean natural spawning substrate for these species.

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Common Name	Scientific Name	Abundance
Tessellated Darter	<i>Etheostoma olmstedii</i>	63
White Sucker	<i>Catostomus commersonii</i>	25
Redbreast Sunfish	<i>Lepomis auritus</i>	13
Bluegill	<i>Lepomis macrochirus</i>	12
Eastern Mudminnow	<i>Umbra pygmaea</i>	8
Creek Chub	<i>Semotilus atromaculatus</i>	7
Green Sunfish	<i>Lepomis cyanellus</i>	6
Redfin Pickerel	<i>Esox americanus americanus</i>	4
Pumpkinseed	<i>Lepomis gibbosus</i>	4
Yellow Bullhead	<i>Ameiurus natalis</i>	1
Rock Bass	<i>Ambloplites rupestris</i>	1
Longnose Dace	<i>Rhinichthys cataractae</i>	1
Bluespotted Sunfish	<i>Enneacanthus gloriosus</i>	1
Fallfish	<i>Semotilus corporalis</i>	1