

FIBI044-R3

Deepavaal Brook

Daniel Road

Municipality: Fairfield Twp

County: Essex

Drainage Area (sq miles): 6.2

Sample Date: 09/20/2013

Site Type: Fixed



IBI Metrics

Metric 1-%Rheophilic Richness	0.00
Metric 2-%Cold Non-tolerant Coolwater	26.19
Metric 3-%Generalist Richness	22.84
Metric 4-Tolerance Index	34.52
Metric 5-%Lithophilic Richness	9.66
Metric 6-%Cyprinidae	0.00
Metric 7-%Dominant 3 Taxa	30.70
Metric 8-%Benthic Insectivore Richness	17.66

Field Chemistry

Air Temp (°C)	23.5
Water Temperature (°C)	15.88
Dissolved Oxygen (mg/L)	6.4
% Saturation	63.1
pH	7.04
Conductivity (µS/cm)	790.9

Northern Fish IBI Score (0-100): 17.70

IBI Rating: Very Poor

High Gradient Habitat Score (0-200): 81

Habitat Rating: Marginal

Summary: Deepavaal Brook has endured years of bank erosion and streambed scouring which has resulted in a slow moving, turbid stream of uniform depth. As a result, there were no flow dependent (rheophilic) species and just one cyprinidae species was collected. The stream is bordered very closely by industrial parks on both sides and has little riparian buffer.

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Common Name	Scientific Name	Abundance
Tessellated Darter	<i>Etheostoma olmstedii</i>	91
Pumpkinseed	<i>Lepomis gibbosus</i>	61
Green Sunfish	<i>Lepomis cyanellus</i>	31
Carp	<i>Cyprinus carpio</i>	25
Banded Killifish	<i>Fundulus diaphanus</i>	11
Redbreast Sunfish	<i>Lepomis auritus</i>	8
Redfin Pickerel	<i>Esox americanus americanus</i>	5
Largemouth Bass	<i>Micropterus salmoides</i>	4
Yellow Bullhead	<i>Ameiurus natalis</i>	4
Bluegill	<i>Lepomis macrochirus</i>	3
White Sucker	<i>Catostomus commersoni</i>	3
Western Mosquitofish	<i>Gambusia affinis</i>	2
Black Crappie	<i>Pomoxis nigromaculatus</i>	1
Eastern Mudminnow	<i>Umbra pygmaea</i>	1
Creek Chub	<i>Semotilus atromaculatus</i>	1