

# FIBI008a-R4

## Grandin Stream

Sidney Road

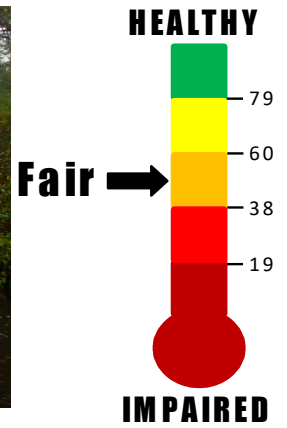
Municipality: Franklin Twp

County: Hunterdon

Drainage Area (sq miles): 5

Sample Date: 10/3 /2019

Site Type: Fixed



### IBI Metrics

Metric 1-%Rheophilic Richness	56.93
Metric 2-%Cold Non-tolerant Coolwater	72.27
Metric 3-%Generalist Richness	56.43
Metric 4-Tolerance Index	72.04
Metric 5-%Lithophilic Richness	51.74
Metric 6-%Cyprinidae	37.15
Metric 7-%Dominant 3 Taxa	57.77
Metric 8-%Benthic Insectivore Richness	37.84

### Field Chemistry

Air Temp (°C)	12
Water Temperature (°C)	18.10
Dissolved Oxygen (mg/L)	7.1
% Saturation	82.1
pH	7.09
Conductivity (µS/cm)	321
Total Kjeldahl (mg/L)	0.21
Total Phosphorus (mg/L)	0.03
Nitrate/Nitrite (mg/L)	0.68

***Northern Fish IBI Score (0-100): 55.27***

***IBI Rating: Fair***

***High Gradient Habitat Score (0-200): 140***

***Habitat Rating: Suboptimal***

**Summary:** FIBI008a has not been sampled since 2005. 2019 results indicate the biotic integrity has been declining over the years. Margined madtom were collected in the prior two sampling events, but were not collected in this latest round. This benthic insectivorous species has likely been impacted by the degradation to the streambed, as the substrate was covered in fine sediments and excessive filamentous algae growth, and concrete rubble was observed in several locations within the sampling reach.

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## **Grandin Stream**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Abundance</b>
Tessellated Darter	<i>Etheostoma olmstedii</i>	117
Blacknose Dace	<i>Rhinichthys atratulus</i>	84
Longnose Dace	<i>Rhinichthys cataractae</i>	64
White Sucker	<i>Catostomus commersonii</i>	33
Creek Chub	<i>Semotilus atromaculatus</i>	30
American Eel	<i>Anguilla rostrata</i>	30
Redbreast Sunfish	<i>Lepomis auritus</i>	13
Redfin Pickerel	<i>Esox americanus americanus</i>	4
Bluegill	<i>Lepomis macrochirus</i>	3
Common Shiner	<i>Luxilus cornutus</i>	2
Pumpkinseed	<i>Lepomis gibbosus</i>	1
Yellow Bullhead	<i>Ameiurus natalis</i>	1
Largemouth Bass	<i>Micropterus salmoides</i>	1
Fallfish	<i>Semotilus corporalis</i>	1