

**Wadable Stream Qualitative Fish Habitat Rating  
 for Streams < 10 m wide**

Form 3600-532A (R 6/07)

Instructions: Bold fields must be completed. Record all measurements in metric units.

**Station Summary**

Stream Name <i>Darien Creek</i>	Waterbody ID Code <i>791800</i>	SWIMS Station ID <i>10048186</i>	FH Database ID <i>10048186</i>
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Date (MMDDYYYY) <i>07/06/2017</i>	Station Name <i>Darien Creek @ North</i>
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Latitude - Longitude Determination Method Used <i>GPS</i>	Datum Used <i>NAD83</i>
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Start Latitude <i>42.5907391</i>	Start Longitude <i>-88.7615097</i>	End Latitude <i>42.59039</i>	End Longitude <i>-88.759186</i>	County <i>Walworth</i>
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**Water Characteristics**

Time (24-hr clock) <i>0930</i>	Air Temperature (C)	Water Temperature (C) <i>17.58</i>	Conductivity (µs/cm) <i>897.1</i>	Transparency (cm) <i>63</i>
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Dissolved Oxygen (mg/l)	Dissolved Oxygen % Saturation	pH <i>7.35</i>
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Flow (m³/sec) <i>0.211</i>	Water Level (check one - measure distance if Above or Below Normal): <input type="checkbox"/> Normal <input type="checkbox"/> Below: _____ (m) <input checked="" type="checkbox"/> Above: <i>0.05</i> (m)	Water Clarity: <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Stained
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**Channel and Basin Characteristics**

Mean Stream Width (m) <i>4.3</i>	Station Length (m) <i>100</i>
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Channel Condition: (check one)  Natural  > 20-year-old Channelization  10- to 20-year-old Channelization  < 10-year-old Channelization  Concrete Channel

Percent Channelization <i>0</i>	Sinuosity <i>1.14</i>	Gradient (m/km) <i>0.20</i>	Stream Order <i>3</i>	Basin Area (km²) <i>59.71</i>
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Comments / Notes  
*TDS = 0.574*

*(Other sheet has flow data)*

Dunbar  
North

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Rating Item	Excellent	Good	Fair	Poor	Score
<b>Riparian Buffer Width (m)</b> Width of contiguous undisturbed land uses; meadow, shrubs, woodland, wetland, exposed rock	Riparian zone well protected; buffer wide (> 10.0 m) 15	Riparian zone protected, but buffer width moderate (5.0 - 10.0 m) 10	Riparian zone moderately disturbed, buffer narrow (1.0 - 4.9 m) 5	Most of the riparian zone disturbed, buffer very narrow or absent (< 1.0 m) 0	10
<b>Bank Erosion</b> Width of bare soil on bank, along transects	No significant bank erosion; < 0.20 m of bank is bare soil 15	Limited erosion; 0.20 - 0.50 m of bank is bare soil 10	Moderate erosion; 0.51 - 1.0 m of bank is bare soil 5	Extensive erosion; > 1.0 m of bank is bare soil 0	10
<b>Pool Area</b> % of stream length in pools	Pools common; wide, deep, slow velocity habitat, balanced by other habitats; 40 to 60% of station 10	Pools present; not frequent or over-abundant; 30 to 39% or 61 to 70% of station 7	Pools present, but either rare or overly dominant, few other habitats present; 10 to 29% or 71 to 90% of station 3	Pools either absent or dominant, not balanced by other habitats; < 10% or > 90% of station 0	3
<b>Width:Depth Ratio</b> Average stream width divided by average thalweg depth in runs and pools	Streams very deep and narrow; width/depth ≤ 7 15	Stream relatively deep and narrow; width/depth 8-15 10	Stream moderately deep and narrow; width/depth 16-25 5	Stream relatively wide and shallow; width/depth > 25 0	10
<b>Riffle:Riffle or Bend:Bend Ratio</b> Average distance between riffles or bends divided by average stream width	Diverse habitats; meandering stream with deep bends and riffles common; ratio < 10 15	Diverse habitats; bends and riffles present, but not abundant; ratio 10 to 14 10	Habitat diversity low; occasional riffles or bends, ratio 15 to 25 5	Habitat monotonous; riffles or bends rare; generally continuous run habitat; ratio > 25 0	5
<b>Fine Sediments</b> % of the substrate that is < 2 mm (sand, silt, or clay)	Fines rare or absent, < 10% of the stream bed 15	Fines present but limited, generally in stream margins or pools; 10 to 20% of stream bed 10	Fines common in mid-channel areas, present in riffles and extensive in pools; 21 to 60% 5	Fines extensive in all habitats; > 60% of stream bed covered 0	5
<b>Cover for Fish</b> % of the stream area with cover	Cover/shelter for fish abundant; > 15% of stream 15	Cover common, but not extensive; 10 - 15% of stream 10	Occasional cover, limited to one or two areas; 5 - 9% of stream 5	Cover rare or absent; limited to < 5% of stream 0	15
<b>Total Score</b>					58

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#### Station Summary

Stream Name <i>Darien Creek</i>	Waterbody ID Code <i>791800</i>	SWIMS Station ID <i>10048186</i>	FH Database ID <i>10048186</i>
Date (MMDDYYYY) <i>07/06/2017</i>	Station Name <i>Darien Creek @ North</i>		
Latitude - Longitude Determination Method Used <i>GPS</i>			Datum Used <i>NAD 83</i>
Start Latitude <i>42.590739</i>	Start Longitude <i>-88.7615097</i>	End Latitude <i>42.59039</i>	End Longitude <i>-88.759186</i>
			County <i>Walworth</i>

#### Water Characteristics

Time (24-hr clock) <i>930</i>	Air Temperature (C)	Water Temperature (C) <i>17.58</i>	Conductivity (µs/cm) <i>897.1</i>	Transparency (cm) <i>63</i>
Dissolved Oxygen (mg/l)		Dissolved Oxygen % Saturation		pH <i>7.35</i>
Flow (m³/sec) <i>0.211</i>	Water Level (check one - measure distance if Above or Below Normal): <input type="checkbox"/> Normal <input type="checkbox"/> Below: _____ (m) <input checked="" type="checkbox"/> Above: <i>0.05</i> (m)		Water Clarity: <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Stained	

#### Channel and Basin Characteristics

Mean Stream Width (m) <i>4.3</i>	Station Length (m) <i>160</i>			
Channel Condition: (check one) <input checked="" type="checkbox"/> Natural	<input type="checkbox"/> > 20-year-old Channelization	<input type="checkbox"/> 10- to 20-year-old Channelization	<input type="checkbox"/> < 10-year-old Channelization	<input type="checkbox"/> Concrete Channel
Percent Channelization <i>0</i>	Sinuosity <i>1.14</i>	Gradient (m/km) <i>0.20</i>	Stream Order <i>3</i>	Basin Area (km²) <i>59.71</i>

Comments / Notes  
*total width = 16.5 ft*  
*16.5/20 = 0.825*

Distance	Depth	Flow	Distance	Depth	Flow
.8	.5	.30	12.8	1.3	.54
1.6	1.3	.63	13.6	1.0	.63
2.4	1.6	.77	14.4	1.0	.51
3.2	1.7	.81	15.2	1.0	.45
4	1.9	.84	16	0.9	.39
4.8	1.9	.72	<i>Bank #2</i>		
5.6	1.9	.76	<i>D = 16.5</i>		
6.4	2.0	.71		0.8	.18
7.2	2.0	.63			
8	1.9	.64	<i>Bank #1</i>		
8.8	1.8	.65	<i>D = 8</i>		
9.6	1.8	.62			
10.4	1.7	.59			
11.2	1.6	.56			
12	1.6	.58			

*TDS = .574*

