

SITE NAME/LOCATION Unnamed Tributary #2 to Blanchard River  
 SITE NUMBER S3a RIVER BASIN Maumee River DRAINAGE AREA (mi<sup>2</sup>) 1.03  
 LENGTH OF STREAM REACH (ft) 200 LAT. 41.052171 LONG. 83.671095 RIVER CODE \_\_\_\_\_ RIVER MILE 0.03  
 DATE 07/25/12 SCORER Michael de Villiers COMMENTS \_\_\_\_\_

**NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions**

**STREAM CHANNEL MODIFICATIONS:**  NONE / NATURAL CHANNEL  RECOVERED  RECOVERING  RECENT OR NO RECOVERY

<p>1. <b>SUBSTRATE (Estimate percent of every type of substrate present.</b> Check ONLY <u>two</u> predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A &amp; B.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">TYPE</th> <th style="width: 20%;">PERCENT</th> <th style="width: 15%;">TYPE</th> <th style="width: 20%;">PERCENT</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> BLDR SLABS [16 pts]</td> <td>_____</td> <td><input checked="" type="checkbox"/> SILT [3 pts]</td> <td style="text-align: center;">50</td> </tr> <tr> <td><input type="checkbox"/> BOULDER (&gt;256 mm) [16 pts]</td> <td>_____</td> <td><input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]</td> <td style="text-align: center;">10</td> </tr> <tr> <td><input type="checkbox"/> BEDROCK [16 pts]</td> <td>_____</td> <td><input type="checkbox"/> FINE DETRITUS [3 pts]</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> COBBLE (65-256 mm) [12 pts]</td> <td style="text-align: center;">10</td> <td><input type="checkbox"/> CLAY or HARDPAN [0 pts]</td> <td style="text-align: center;">10</td> </tr> <tr> <td><input type="checkbox"/> GRAVEL (2-64 mm) [9 pts]</td> <td style="text-align: center;">10</td> <td><input type="checkbox"/> MUCK [0 pts]</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> SAND (&lt;2 mm) [6 pts]</td> <td style="text-align: center;">10</td> <td><input type="checkbox"/> ARTIFICIAL [3 pts]</td> <td>_____</td> </tr> </tbody> </table> <p style="text-align: center;">Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock <u>10</u> (A) (B)</p> <p><b>SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES:</b> <span style="border: 1px solid black; padding: 2px 10px;">6</span> <b>TOTAL NUMBER OF SUBSTRATE TYPES:</b> <span style="border: 1px solid black; padding: 2px 10px;">6</span></p> <p>2. <b>Maximum Pool Depth</b> (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box):</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td><input type="checkbox"/> &gt; 30 centimeters [20 pts]</td> <td><input type="checkbox"/> &gt; 5 cm - 10 cm [15 pts]</td> </tr> <tr> <td><input checked="" type="checkbox"/> &gt; 22.5 - 30 cm [30 pts]</td> <td><input type="checkbox"/> &lt; 5 cm [5 pts]</td> </tr> <tr> <td><input type="checkbox"/> &gt; 10 - 22.5 cm [25 pts]</td> <td><input type="checkbox"/> NO WATER OR MOIST CHANNEL [0 pts]</td> </tr> </table> <p>COMMENTS _____ <b>MAXIMUM POOL DEPTH (centimeters):</b> <span style="border: 1px solid black; padding: 2px 10px;">27</span></p> <p>3. <b>BANK FULL WIDTH (Measured as the average of 3-4 measurements)</b> (Check ONLY one box):</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td><input type="checkbox"/> &gt; 4.0 meters [30 pts]</td> <td><input type="checkbox"/> &gt; 1.0 - 1.5 m [15 pts]</td> </tr> <tr> <td><input checked="" type="checkbox"/> &gt; 3.0 m - 4.0 m [25 pts]</td> <td><input type="checkbox"/> ≤ 1.0 m [5 pts]</td> </tr> <tr> <td><input type="checkbox"/> &gt; 1.5 m - 3.0 m [20 pts]</td> <td></td> </tr> </table> <p>COMMENTS _____ <b>AVERAGE BANKFULL WIDTH (meters):</b> <span style="border: 1px solid black; padding: 2px 10px;">3.5</span></p>	TYPE	PERCENT	TYPE	PERCENT	<input type="checkbox"/> BLDR SLABS [16 pts]	_____	<input checked="" type="checkbox"/> SILT [3 pts]	50	<input type="checkbox"/> BOULDER (>256 mm) [16 pts]	_____	<input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	10	<input type="checkbox"/> BEDROCK [16 pts]	_____	<input type="checkbox"/> FINE DETRITUS [3 pts]	_____	<input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	10	<input type="checkbox"/> CLAY or HARDPAN [0 pts]	10	<input type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	10	<input type="checkbox"/> MUCK [0 pts]	_____	<input type="checkbox"/> SAND (<2 mm) [6 pts]	10	<input type="checkbox"/> ARTIFICIAL [3 pts]	_____	<input type="checkbox"/> > 30 centimeters [20 pts]	<input type="checkbox"/> > 5 cm - 10 cm [15 pts]	<input checked="" type="checkbox"/> > 22.5 - 30 cm [30 pts]	<input type="checkbox"/> < 5 cm [5 pts]	<input type="checkbox"/> > 10 - 22.5 cm [25 pts]	<input type="checkbox"/> NO WATER OR MOIST CHANNEL [0 pts]	<input type="checkbox"/> > 4.0 meters [30 pts]	<input type="checkbox"/> > 1.0 - 1.5 m [15 pts]	<input checked="" type="checkbox"/> > 3.0 m - 4.0 m [25 pts]	<input type="checkbox"/> ≤ 1.0 m [5 pts]	<input type="checkbox"/> > 1.5 m - 3.0 m [20 pts]		<p><b>HHEI METRIC POINTS</b></p> <p>Substrate Max = 40</p> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto; text-align: center; line-height: 40px;">12</div> <p>A + B</p> <hr/> <p>Pool Depth Max = 30</p> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto; text-align: center; line-height: 40px;">30</div> <hr/> <p>Bankfull Width Max = 30</p> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto; text-align: center; line-height: 40px;">25</div>
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**This information must also be completed**

**RIPARIAN ZONE AND FLOODPLAIN QUALITY** ☆ NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH		FLOODPLAIN QUALITY	
L	R	L	R
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(Per Bank)		(Most Predominant per Bank)	
Wide > 10m		Mature Forest, Wetland	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Moderate 5-10m		Immature Forest, Shrub or Old Field	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Narrow < 5m		Residential, Park, New Field	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
None		Fenced Pasture	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Mining or Construction	

COMMENTS \_\_\_\_\_

**FLOW REGIME (At Time of Evaluation)** (Check ONLY one box):

<input type="checkbox"/> Stream Flowing	<input checked="" type="checkbox"/> Moist Channel, isolated pools, no flow (Intermittent)
<input type="checkbox"/> Subsurface flow with isolated pools (Interstitial)	<input type="checkbox"/> Dry Channel, no water (Ephemeral)

COMMENTS Long, deep, stagnant pools

**SINUOSITY (Number of bends per 61 m (200 ft) of channel)** (Check ONLY one box):

<input type="checkbox"/> None	<input type="checkbox"/> 1.0	<input type="checkbox"/> 2.0	<input type="checkbox"/> 3.0
<input checked="" type="checkbox"/> 0.5	<input type="checkbox"/> 1.5	<input type="checkbox"/> 2.5	<input type="checkbox"/> >3

**STREAM GRADIENT ESTIMATE**

<input type="checkbox"/> Flat (0.5 ft/100 ft)	<input checked="" type="checkbox"/> Flat to Moderate	<input type="checkbox"/> Moderate (2 ft/100 ft)	<input type="checkbox"/> Moderate to Severe	<input type="checkbox"/> Severe (10 ft/100 ft)
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**ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):**

**QHEI PERFORMED?** -  Yes  No QHEI Score \_\_\_\_\_ (If Yes, Attach Completed QHEI Form)

**DOWNSTREAM DESIGNATED USE(S)**

WWH Name: Blanchard River Distance from Evaluated Stream 150 feet  
 CWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_  
 EWH Name: \_\_\_\_\_ Distance from Evaluated Stream \_\_\_\_\_

**MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION**

USGS Quadrangel Name: Findlay NRCS Soil Map Page: 14 NRCS Soil Map Stream Order 2  
County: Hancock Township / City Liberty / Findlay

**MISCELLANEOUS**

Base Flow Conditions? (Y/N): Y Date of last precipitation: 7-24-12 Quantity: 0.09 inch  
Photograph Information: 84-upstream, 85-downstream  
Elevated Turbidity? (Y/N): N Canopy (% open): 30  
Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: N/A  
Field Measures: Temp (°C) 27.3 Dissolved Oxygen (mg/l) 9.32 pH (S.U.) 7.13 Conductivity (µmhos/cm) 636  
Is the sampling reach representative of the stream (Y/N) Y If not, please explain: \_\_\_\_\_  
Additional comments/description of pollution impacts: Heavy siltation, some urban trash

**BIOTIC EVALUATION**

Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)  
Fish Observed? (Y/N) Y Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N  
Frogs or Tadpoles Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) Y Voucher? (Y/N) N  
Comments Regarding Biology: Minnnows, leeches, water striders

**DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):**

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

