

Ohio EPA Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) :

SITE NAME/LOCATION 60000000000000000000 SITE NUMBER ALP K-1-S-302
LENGTH OF STREAM REACH (ft) _____ RIVER BASIN _____ DRAINAGE AREA (mi²) _____
LAT. _____ LONG. _____ RIVER CODE _____ RIVER MILE _____
DATE 07/11/12 SCORER B.A./A.B.T. COMMENTS channel cut

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

STREAM CHANNEL ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☒ RECOVERING ☐ RECENT OR NO RECOVERY

MODIFICATIONS: 5/20/04 RECOVERED RECOVERING ☐ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY 7 most predominant substrate TYPE boxes (Max. of 40). Add total number of significant substrate types (max Max of 8). Final metric score is sum of boxes A-B.

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> BLDR SLABS [16 pts]		<input checked="" type="checkbox"/> SILT [3 pt]	10
<input type="checkbox"/> BOULDER (>256 mm) [16 pts]		<input checked="" type="checkbox"/> LEAF PACKWOODY DEBRIS [3 pts]	
<input type="checkbox"/> BEDROCK [16 pt]		<input checked="" type="checkbox"/> FINE DETRITUS [3 pts]	
<input checked="" type="checkbox"/> COBBLE (63-256 mm) [12 pts]	10	<input checked="" type="checkbox"/> CLAY or HARDPAN [0 pt]	
<input type="checkbox"/> GRAVEL (2-64 mm) [9 pts]		<input type="checkbox"/> MUCK [0 pts]	
<input type="checkbox"/> SAND (<2 mm) [6 pts]		<input type="checkbox"/> ARTIFICIAL [3 pts]	

Total of Percentages of
Blr, Slabs, Boulder, Cobble, Bedrock

2. SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES:

(A) ☒ (B) ☒

3. Maximum Pool Depth (Measure the maximum pool depth within the 51 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunging pools from road culverts or storm water pipes) (Check ONLY one box):

☐ > 30 centimeters [20 pts] ☐ > 5 cm - 10 cm [15 pts]

☐ > 22.5 - 30 cm [10 pts] ☐ < 5 cm [5 pts]

☐ > 10 - 22.5 cm [5 pts] ☐ NO WATER OR MOST CHANNEL [0 pts]

COMMENTS:

BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box):

☐ > 4.0 meters [0] [10 pts] ☐ > 1.0 m - 1.5 m (3'-3" - 5'-0") [15 pts]

☐ > 3.0 m - 4.0 m (9'-7" - 13 pts) ☐ < 1.0 m (3'-3") [5 pts]

☐ > 1.5 m - 3.0 m (4'-8" - 9'-7") [20 pts]

COMMENTS:

4. BANKFULL WIDTH (meters)

5. AVERAGE BANK WIDTH (meters)

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This information **must** also be completed

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

RIPARIAN WIDTH (Per Bank)		L R (Most Predominant per Bank)		Conservation Tillage	
<input type="checkbox"/>	Wide >10m	<input type="checkbox"/>		<input type="checkbox"/>	Urban or Industrial
<input type="checkbox"/>	Moderate 5-10m	<input type="checkbox"/>		<input type="checkbox"/>	Open Pasture, Row
<input type="checkbox"/>	Narrow <5m	<input checked="" type="checkbox"/>		<input type="checkbox"/>	Crop
<input type="checkbox"/>	None	<input type="checkbox"/>		<input type="checkbox"/>	Mining or Construction

COMMENTS *R L V* *5000 W-Wp*

FLOW REGIME (At Time of Evaluation) (Check ONLY one box):
☐ Stream Flowing ☒ Most Channel, isolated pools, no flow (Intermittent)
☐ Subsurface flow with isolated pools (Intermittal) ☐ Dry channel, no water (Epheermal)

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):
☐ None ☐ 1.0 ☐ 2.0 ☐ 3.0
☐ 0.5 ☐ 1.5 ☒ 2.5 ☐ >3

STREAM GRAZIENT ESTIMATE
☐ Flat (0.0001) ☒ Flat to Moderate ☐ Moderate to Severe ☐ Severe (0.0010)

Jan 11, 2000 Review
PHWH Form Page - 1

Mod. Class I Stream 9 #H-Bio-07412-01

Ohio EPA Primary Headwater Habitat Evaluation Form

SITE NAME/LOCATION: ACP 346 Street to Kicker HHEI Score (sum of metrics 1, 2, 3): 8

LENGTH OF STREAM REACH (ft): 100 LAT: 40° 41' 20" N LONG: 84° 07' 11" W RIVER CODE: 100 RIVER MILE: 1.0

DATE: 7/11/2012 SCORER: My BHO COMMENTS: Ephemeral

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

STREAM CHANNEL: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☒ RECOVERING ☐ RECENT OR NO RECOVERY

MODIFICATIONS: Stream w/ in existing utility right of way; riparian habitat has been cleared

SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY TWO predominant substrate TYPE boxes (Max. of 40). Add total number of significant substrate types found (Max. of 8). Final metric score is sum of boxes A & B.	
TYPE	PERCENT
<input type="checkbox"/> BLOR SLABS (16 pis)	<input type="checkbox"/> SILT (3 pi)
<input type="checkbox"/> BOULDER (125-256 mm) (16 pis)	<input type="checkbox"/> LEAF PACK/WOODY DEBRIS (3 pis)
<input type="checkbox"/> BEDROCK (16 pi)	<input type="checkbox"/> FINE DETRITUS (3 pis)
<input type="checkbox"/> COBBLE (63-256 mm) (12 pis)	<input checked="" type="checkbox"/> CLAY or HARDPAN (0 pi)
<input type="checkbox"/> GRAVEL (2-64 mm) (9 pis)	<input type="checkbox"/> MUCK (0 pis)
<input type="checkbox"/> SAND (<2 mm) (6 pis)	<input type="checkbox"/> ARTIFICIAL (3 pis)

Total of Percentages of
Blor Slabs, Boulder, Cobble, Bedrock 10 (A) 0 (B) 3

SCORE OF TWO MOST PREDOMINANT SUBSTRATE TYPES: (A) 0 (B) 3

1. Maximum Pool Depth (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):

☐ > 30 centimeters (120 pis)
☐ > 22.5 - 30 cm (10 pis)
☒ > 10 - 22.5 cm (25 pis)

2. Maximum Pool Depth (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):

☐ > 1.0 m - 1.5 m (3-3' - 4'8") (15 pis)
☒ > 0.5 m - 1.0 m (3-3' - 3'5") (15 pis)
☐ > 15 m - 3.0 m (4-8' - 9'7") (20 pis)

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements). (Check ONLY one box):

☐ > 3.0 meters (10 pis)
☒ > 3.0 m (10 pis)
☐ > 1.5 m - 3.0 m (4-8' - 9'7") (20 pis)

COMMENTS: NO WATER OR MOIST CHANNEL (0 pis)

COMMENTS: NO WATER OR MOIST CHANNEL (0 pis)

COMMENTS: NO WATER OR MOIST CHANNEL (0 pis)

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STREAM 9

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: _____ Distance from Evaluated Stream: _____

☐ 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 Quadrangle Name: _____ NRCS Soil Map Page: _____ NRCS Soil Map Stream Order: _____

County: Licking Township / City: _____

MISCELLANEOUS

Base Flow Conditions? (Y/N): Y Date of last precipitation: unknown Quantity: high

Photograph information: 3 photos

Elevated Turbidity? (Y/N): N Canopy (% open): 100

Were samples collected for water chemistry? (Y/N): N (Note lab sample no. or id. and attach results) Lab Number: _____

Field Measures: Temp (°C): _____ Dissolved Oxygen (mg/l): _____ pH (SU): _____ Conductivity (umhos/cm): _____

Is the sampling reach representative of the stream (Y/N): Y If not, please explain: _____

Additional comments/description of pollution impacts: _____

BIOLOGIC EVALUATION

Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N): N Voucher? (Y/N): N Salamanders Observed? (Y/N): N Voucher? (Y/N): _____

Frogs or Toads Observed? (Y/N): N Voucher? (Y/N): _____ Aquatic Macroinvertebrates Observed? (Y/N): N Voucher? (Y/N): _____

Comments Regarding Biology: _____

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



Mod. Class II

Stream 10

hh-bao-07112-03

Ohio EPA Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3):

34

SITE NAME/LOCATION: hh-bao-07112-03

LENGTH OF STREAM/REACH (ft): 750

DATE: 2/11/12

SCORE: 34

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

STREAM CHANNEL: ☐ NONE/NATURAL CHANNEL ☒ RECOVERED ☐ RECENT OR NO RECOVERY

MODIFICATIONS: Stream in ROW / cleared ROW / some Willow

SUBSTRATE: Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 40). Add total number of significant substrate types found (Max of 5). Final metric score is sum of boxes A & B.

TYPE PERCENT TYPE PERCENT

BLOR SLABS [16 pts] ☐ SILT [3 pts] ☐

BOULDER [256 pts] [16 pts] ☐ LEAF PACK/WOODY DEBRIS [3 pts] ☐

BEDROCK [16 pts] ☐ FINE DETRITUS [3 pts] ☐

COBBLE [65-256 mm] [12 pts] ☐ CLAY or HARDPAN [0 pts] ☐

GRAVEL [2-64 mm] [9 pts] ☐ MUCK [0 pts] ☐

SAND (<2 mm) [0 pts] ☐ ARTIFICIAL [3 pts] ☐

Total of Percentages of Bdr Slabs, Boulder, Cobble, Bedrock: 30

SCORE OF TWO MOST PREDOMINANT SUBSTRATE TYPES: (A) 15 (B) 19

Maximum Pool Depth (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):

> 30 centimeters [20 pts] ☐

> 22.5 - 30 cm [30 pts] ☐

> 10 - 22.5 cm [25 pts] ☐

> 1.0 m - 1.5 m [15 pts] ☐

> 1.5 m - 3.0 m [10 pts] ☐

> 3.0 m - 4.0 m [5 pts] ☐

> 4.0 m - 6.0 m [5 pts] ☐

> 6.0 m - 10.0 m [5 pts] ☐

> 10.0 m - 15.0 m [5 pts] ☐

> 15.0 m - 30.0 m [5 pts] ☐

> 30.0 m - 60.0 m [5 pts] ☐

> 60.0 m - 120.0 m [5 pts] ☐

> 120.0 m - 240.0 m [5 pts] ☐

> 240.0 m - 480.0 m [5 pts] ☐

> 480.0 m - 960.0 m [5 pts] ☐

> 960.0 m - 1920.0 m [5 pts] ☐

> 1920.0 m - 3840.0 m [5 pts] ☐

> 3840.0 m - 7680.0 m [5 pts] ☐

> 7680.0 m - 15360.0 m [5 pts] ☐

> 15360.0 m - 30720.0 m [5 pts] ☐

> 30720.0 m - 61440.0 m [5 pts] ☐

> 61440.0 m - 122880.0 m [5 pts] ☐

> 122880.0 m - 245760.0 m [5 pts] ☐

> 245760.0 m - 491520.0 m [5 pts] ☐

> 491520.0 m - 983040.0 m [5 pts] ☐

> 983040.0 m - 1966080.0 m [5 pts] ☐

> 1966080.0 m - 3932160.0 m [5 pts] ☐

> 3932160.0 m - 7864320.0 m [5 pts] ☐

> 7864320.0 m - 15728640.0 m [5 pts] ☐

> 15728640.0 m - 31457280.0 m [5 pts] ☐

> 31457280.0 m - 62914560.0 m [5 pts] ☐

> 62914560.0 m - 125829120.0 m [5 pts] ☐

> 125829120.0 m - 251658240.0 m [5 pts] ☐

> 251658240.0 m - 503316480.0 m [5 pts] ☐

> 503316480.0 m - 1006632960.0 m [5 pts] ☐

> 1006632960.0 m - 2013265920.0 m [5 pts] ☐

> 2013265920.0 m - 4026531840.0 m [5 pts] ☐

> 4026531840.0 m - 8053063680.0 m [5 pts] ☐

> 8053063680.0 m - 16106127360.0 m [5 pts] ☐

> 16106127360.0 m - 32212254720.0 m [5 pts] ☐

> 32212254720.0 m - 64424509440.0 m [5 pts] ☐

> 64424509440.0 m - 128849018880.0 m [5 pts] ☐

> 128849018880.0 m - 257698037760.0 m [5 pts] ☐

> 257698037760.0 m - 515396075520.0 m [5 pts] ☐

> 515396075520.0 m - 1030792151040.0 m [5 pts] ☐

> 1030792151040.0 m - 2061584302080.0 m [5 pts] ☐

> 2061584302080.0 m - 4123168604160.0 m [5 pts] ☐

> 4123168604160.0 m - 8246337208320.0 m [5 pts] ☐

> 8246337208320.0 m - 16492674416640.0 m [5 pts] ☐

> 16492674416640.0 m - 32985348833280.0 m [5 pts] ☐

> 32985348833280.0 m - 65970697666560.0 m [5 pts] ☐

> 65970697666560.0 m - 131941395333120.0 m [5 pts] ☐

> 131941395333120.0 m - 263882790666240.0 m [5 pts] ☐

> 263882790666240.0 m - 527765581332480.0 m [5 pts] ☐

> 527765581332480.0 m - 1055531162664960.0 m [5 pts] ☐

> 1055531162664960.0 m - 2111062325329920.0 m [5 pts] ☐

> 2111062325329920.0 m - 4222124650659840.0 m [5 pts] ☐

> 4222124650659840.0 m - 8444249301319680.0 m [5 pts] ☐

> 8444249301319680.0 m - 16888498602639360.0 m [5 pts] ☐

> 16888498602639360.0 m - 33776997205278720.0 m [5 pts] ☐

> 33776997205278720.0 m - 67553994410557440.0 m [5 pts] ☐

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> 135107988821114880.0 m - 270215977642229760.0 m [5 pts] ☐

> 270215977642229760.0 m - 540431955284459520.0 m [5 pts] ☐

> 540431955284459520.0 m - 1080863910568919040.0 m [5 pts] ☐

> 1080863910568919040.0 m - 2161727821137838080.0 m [5 pts] ☐

> 2161727821137838080.0 m - 4323455642275676160.0 m [5 pts] ☐

> 4323455642275676160.0 m - 8646911284551352320.0 m [5 pts] ☐

> 8646911284551352320.0 m - 17293822569102704640.0 m [5 pts] ☐

> 17293822569102704640.0 m - 34587645138205409280.0 m [5 pts] ☐

> 34587645138205409280.0 m - 69175290276410818560.0 m [5 pts] ☐

> 69175290276410818560.0 m - 138350580552821637120.0 m [5 pts] ☐

> 138350580552821637120.0 m - 276701161105643274240.0 m [5 pts] ☐

> 276701161105643274240.0 m - 553402322211286548480.0 m [5 pts] ☐

> 553402322211286548480.0 m - 1106804644422573096960.0 m [5 pts] ☐

> 1106804644422573096960.0 m - 2213609288845146193920.0 m [5 pts] ☐

> 2213609288845146193920.0 m - 4427218577690292387840.0 m [5 pts] ☐

> 4427218577690292387840.0 m - 8854437155380584775680.0 m [5 pts] ☐

> 8854437155380584775680.0 m - 17708874310761169551360.0 m [5 pts] ☐

> 17708874310761169551360.0 m - 35417748621522339102720.0 m [5 pts] ☐

> 35417748621522339102720.0 m - 70835497243044678205440.0 m [5 pts] ☐

> 70835497243044678205440.0 m - 141670994486089356410880.0 m [5 pts] ☐

> 141670994486089356410880.0 m - 283341988972178712821760.0 m [5 pts] ☐

> 283341988972178712821760.0 m - 566683977944357425643520.0 m [5 pts] ☐

> 566683977944357425643520.0 m - 1133367955888714851287040.0 m [5 pts] ☐

> 1133367955888714851287040.0 m - 2266735911777429702574080.0 m [5 pts] ☐

> 2266735911777429702574080.0 m - 4533471823554859405148160.0 m [5 pts] ☐

> 4533471823554859405148160.0 m - 9066943647109718810296320.0 m [5 pts] ☐

> 9066943647109718810296320.0 m - 18133887294219437620592640.0 m [5 pts] ☐

> 18133887294219437620592640.0 m - 36267774588438875241185280.0 m [5 pts] ☐

> 36267774588438875241185280.0 m - 72535549176877750482370560.0 m [5 pts] ☐

> 72535549176877750482370560.0 m - 145071098353755500964741120.0 m [5 pts] ☐

> 145071098353755500964741120.0 m - 290142196707511001929482240.0 m [5 pts] ☐

> 290142196707511001929482240.0 m - 580284393415022003858964480.0 m [5 pts] ☐

> 580284393415022003858964480.0 m - 1160568786830044007717928960.0 m [5 pts] ☐

> 1160568786830044007717928960.0 m - 2321137573660088015435857920.0 m [5 pts] ☐

> 2321137573660088015435857920.0 m - 4642275147320176030871715840.0 m [5 pts] ☐

> 4642275147320176030871715840.0 m - 9284550294640352061743431680.0 m [5 pts] ☐

> 9284550294640352061743431680.0 m - 18569100589280704123486863360.0 m [5 pts] ☐

> 18569100589280704123486863360.0 m - 37138201178561408246973726720.0 m [5 pts] ☐

> 37138201178561408246973726720.0 m - 74276402357122816493947453440.0 m [5 pts] ☐

> 74276402357122816493947453440.0 m - 148552804714245632987894906880.0 m [5 pts] ☐

> 148552804714245632987894906880.0 m - 297105609428491265975789813760.0 m [5 pts] ☐

> 297105609428491265975789813760.0 m - 594211218856982531951579627520.0 m [5 pts] ☐

> 594211218856982531951579627520.0 m - 1188422437713965063903159255040.0 m [5 pts] ☐

> 1188422437713965063903159255040.0 m - 2376844875427930127806318510080.0 m [5 pts] ☐

> 2376844875427930127806318510080.0 m - 4753689750855860255612637020160.0 m [5 pts] ☐

> 4753689750855860255612637020160.0 m - 9507379501711720511225274040320.0 m [5 pts] ☐

> 9507379501711720511225274040320.0 m - 19014759003423441022450548080640.0 m [5 pts] ☐

> 19014759003423441022450548080640.0 m - 38029518006846882044901096161280.0 m [5 pts] ☐

> 38029518006846882044901096161280.0 m - 76059036013693764089802192322560.0 m [5 pts] ☐

> 76059036013693764089802192322560.0 m - 152118072027387528179604384645120.0 m [5 pts] ☐

> 152118072027387528179604384645120.0 m - 304236144054775056359208769290240.0 m [5 pts] ☐

> 304236144054775056359208769290240.0 m - 608472288109550112718417538580480.0 m [5 pts] ☐

> 608472288109550112718417538580480.0 m - 1216944576219100225436835077160960.0 m [5 pts] ☐

> 1216944576219100225436835077160960.0 m - 2433889152438200450873670154321920.0 m [5 pts] ☐

> 2433889152438200450873670154321920.0 m - 4867778304876400901747340308643840.0 m [5 pts] ☐

> 4867778304876400901747340308643840.0 m - 9735556609752801803494680617287680.0 m [5 pts] ☐

> 9735556609752801803494680617287680.0 m - 19471113219505603606989361234575360.0 m [5 pts] ☐

> 19471113219505603606989361234575360.0 m - 38942226439011207213978722469150720.0 m [5 pts] ☐

> 38942226439011207213978722469150720.0 m - 77884452878022414427957444938301440.0 m [5 pts] ☐

> 77884452878022414427957444938301440.0 m - 155768905756044828855914889876602880.0 m [5 pts] ☐

> 155768905756044828855914889876602880.0 m - 311537811512089657711829779753205760.0 m [5 pts] ☐

> 311537811512089657711829779753205760.0

Mod. Class I. Stream 11 HH-BAO 07112-4

OhioEPA Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3): **6**

SITE NAME/LOCATION: h h BAO 07112-4 RIVER BASIN: 461 KRE-03 DRAINAGE AREA (mi²): 6
LENGTH OF STREAM REACH (ft): 27412 SITE NUMBER: BA0686 RIVER CODE: BA0686 RIVER MILE: 27412
DATE: 7/11/12 SCORER: BA0686 COMMENTS: Stream 11
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHHW Streams" for Instructions
STREAM CHANNEL: ☐ NONE ☐ NATURAL CHANNEL ☐ RECOVERING ☒ RECENT OR NO RECOVERY
MODIFICATIONS: Stream in ROW, riparian veg has been cleared

1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 40). Add total number of significant substrate types found (Max of 6). Final metric score is sum of boxes A & B.

TYPE	PERCENT	TYPE	PERCENT
BLR SLABS (16 pts)	<input type="checkbox"/>	SILT (3 pt)	<input type="checkbox"/>
BOULDER (>256 mm) (16 pts)	<input type="checkbox"/>	LEAF PACKWOODY DEBRIS (3 pts)	<input type="checkbox"/>
BEDROCK (16 pt)	<input type="checkbox"/>	FINE DETRITUS (3 pts)	<input type="checkbox"/>
COBBLE (64-256 mm) (12 pts)	<input checked="" type="checkbox"/>	CLAY or HARDPAN (0 pt)	<input type="checkbox"/>
GRAVEL (2-64 mm) (9 pts)	<input type="checkbox"/>	MUCK (0 pts)	<input type="checkbox"/>
SAND (<2 mm) (6 pts)	<input type="checkbox"/>	ARTIFICIAL (3 pts)	<input type="checkbox"/>

Total of Percentages of Substrate Types: 100
Blr Slabs, Boulder, Cobble, Bedrock
SCORE OF TWO MOST PREDOMINANT SUBSTRATE TYPES: (A) 0 (B) 1

2. Maximum Pool Depth (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):
☐ > 30 centimeters (20 pts)
☐ > 22.5 - 30 cm (30 pts)
☒ > 10 - 22.5 cm (25 pts)
NO WATER OR MOIST CHANNEL (0 pts)

3. BANK FULL WIDTH Measured as the average of 3-4 measurements:
☐ < 0.9 m (3' 3") (10 pts)
☐ > 0.9 m (3' 3") (15 pts)
☒ > 1.5 m (4' 9") (25 pts)
CHECK ONLY one box:
☐ > 1.0 m (3' 3") (15 pts)
☒ > 1.0 m (3' 3") (25 pts)

COMMENTS: Stream in ROW, riparian veg has been cleared

4. AVERAGE BANKFULL WIDTH (meters): 1.1

5. FLOODPLAIN QUALITY (This information must also be completed. Check ONLY one box):
RIPARIAN ZONE AND FLOODPLAIN QUALITY: ☒ NONE ☐ POOR ☐ MODERATE ☐ GOOD ☐ EXCELLENT
FLOODPLAIN QUALITY: ☐ L ☐ R ☐ L ☐ R
(Most Predominant Vegetation)
☐ L ☐ R ☐ L ☐ R
Moist Forest/Wetland ☐ L ☐ R ☐ L ☐ R
Immature Forest, Shrub or Old ☐ L ☐ R ☐ L ☐ R
Field ☐ L ☐ R ☐ L ☐ R
Residential, Park, New Field ☐ L ☐ R ☐ L ☐ R
Open Pasture, Row Crop ☐ L ☐ R ☐ L ☐ R
Mining or Construction ☐ L ☐ R ☐ L ☐ R

6. FLOW REGIME (At Time of Evaluation) (Check ONLY one box):
☐ Stream Flowing ☐ Most Channel, isolated pools, no flow (intermittent)
☐ Subsurface flow with isolated pools (interstitial) ☒ Dry channel, no water (epifaunal)
COMMENTS: Stream in ROW, riparian veg has been cleared

7. SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):
☐ None ☐ 0.5 ☐ 1.0 ☐ 1.5 ☐ 2.0 ☐ 3.0
☒ 0.5 ☐ 1.0 ☐ 1.5 ☐ 2.0 ☐ 3.0

8. STREAM GRADIENT ESTIMATE (Check ONLY one box):
☐ Flat (< 0.01%) ☐ Moderate (0.01-0.1%) ☐ Moderate to Severe (0.1-0.5%) ☐ Severe (> 0.5%)

Stream 11 HH-BAO 07112-4

ADDITIONAL STREAM INFORMATION (This information must also be completed):

OHEI PERFORMED? ☐ Yes ☒ No OHEI Score: 0 (If Yes, Attach Completed OHEI Form)
DOWNSTREAM DESIGNATED USE(S):
☐ WWH Name: Distance from Evaluated Stream:
☐ 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 Quadrangle Name: Pataskulla NRCS Soil Map Page: NRCS Soil Map Stream Order:
County: Licking Township/City:

MISCELLANEOUS

Base Flow Conditions? (Y/N): Y Date of last precipitation: 06/2 Quantity: 0.2
Photograph Information: 2
Elevated Turbidity? (Y/N): N Canopy (% open): 100
Were samples collected for water chemistry? (Y/N): Y (Note lab sample no. or id. and attach results) Lab Number:
Field Measures: Temp (°C): Dissolved Oxygen (mg/l): pH (S.U.): Conductivity (µmhos/cm):
Is the sampling reach representative of the stream (Y/N): If not, please explain:
Additional comments/description of pollution impacts:

BIOTIC EVALUATION

Performed? (Y/N): Y (If Yes, Record all observations. Voucher collections optional. NOTE: All voucher samples must be added with the site number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)
Fish Observed? (Y/N): Y Voucher? (Y/N): Y Salamanders Observed? (Y/N): Y Voucher? (Y/N): Y
Frogs or Toads Observed? (Y/N): Y Voucher? (Y/N): Y Aquatic Macroinvertebrates Observed? (Y/N): Y Voucher? (Y/N): Y
Comments Regarding Bioty:

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



Mod. Class I.

STREAM 12

44-BAD-0412-02

Ohio EPA Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3): **10**

SITE NAME/LOCATION: ALP LAR-KAR RIVER BASIN: 02 RIVER CODE: EPH
LENGTH OF STREAM REACH (ft): 0412 SCORER: BAD COMMENTS: EPH
DATE: 04/12/02 LAT: 39 LONG: 82 DRAINAGE AREA (mi²): 10

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHHW Streams" for Instructions
STREAM CHANNEL: ☐ NONE/NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☒ RECENT OR NO RECOVERY
MODIFICATIONS: STREAM HAS BEEN CHANNELIZED & EPIHEMAL AREA IS MOWED FREQUENTLY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 40). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.)

TYPE	PERCENT	TYPE	PERCENT
BLUR SLABS (16 pis)	<input type="checkbox"/>	SILT (3 pi)	<input type="checkbox"/>
BOULDER (≥256 mm) (16 pis)	<input type="checkbox"/>	LEAF PACK/WOODY DEBRIS (3 pis)	<input type="checkbox"/>
BEDROCK (16 pi)	<input type="checkbox"/>	FINE DETRITUS (3 pis)	<input type="checkbox"/>
COBBLE (65-256 mm) (12 pis)	<input type="checkbox"/>	CLAY or HARDPAN (0 pi)	<input type="checkbox"/>
GRAVEL (2-64 mm) (9 pis)	<input type="checkbox"/>	MUCK (0 pis)	<input type="checkbox"/>
SAND (<2 mm) (6 pis)	<input type="checkbox"/>	ARTIFICIAL (3 pis)	<input type="checkbox"/>

Total of Percentages of Substrate Types: **50**

2. SCORE OF TWO MOST PREDOMINANT SUBSTRATE TYPES:

(A) **3** (B) **2** TOTAL NUMBER OF SUBSTRATE TYPES: **2**

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements):

> 30 centimeters (20 pis) ☐ (Check ONLY one box):
> 10 m - 3.0 m (> 33' - 10') (15 pis) ☐
> 15 m - 3.0 m (> 49' - 97') (20 pis) ☐

COMMENTS: EPH-NATURAL

4. MAXIMUM POOL DEPTH (centimeters):

> 30 centimeters (20 pis) ☐
> 10 m - 3.0 m (> 33' - 10') (15 pis) ☐
> 15 m - 3.0 m (> 49' - 97') (20 pis) ☐

COMMENTS: NO WATER OR MOIST CHANNEL (0 pis)

5. AVERAGE BANKFULL WIDTH (meters):

> 30 centimeters (20 pis) ☐
> 10 m - 3.0 m (> 33' - 10') (15 pis) ☐
> 15 m - 3.0 m (> 49' - 97') (20 pis) ☐

COMMENTS: 1

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

PER BANK	FLOODPLAIN QUALITY	PER BANK	FLOODPLAIN QUALITY
L	R	L	R
Most Predominant per Bank	Most Predominant per Bank	Most Predominant per Bank	Most Predominant per Bank
Wetland	Wetland	Wetland	Wetland
Conservation Tillage	Conservation Tillage	Conservation Tillage	Conservation Tillage
Urban or Industrial	Urban or Industrial	Urban or Industrial	Urban or Industrial
Open Pasture, Row Crop	Open Pasture, Row Crop	Open Pasture, Row Crop	Open Pasture, Row Crop
Mining or Construction	Mining or Construction	Mining or Construction	Mining or Construction

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

Stream Flowing ☐ Most Channel, isolated pools, no flow (Intermittent)
Subsurface flow with isolated pools (Intermittent) ☒ Dry channel, no water (Exemplary)

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

None ☐ 0.5 ☐ 1.0 ☐ 1.5 ☐ 2.0 ☐ 2.5 ☐ 3.0 ☐ >3 ☐

9. STREAM GRADIENT ESTIMATE

Full to Moderate ☐ Moderate to Severe ☐ Severe ☐

STREAM 12

44-BAD-0412-02

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

OHEI PERFORMED: ☐ Yes ☒ No OHEI Score: 0 (If Yes, Attach Completed OHEI Form)
DOWNSTREAM DESIGNATED USE(S):
☐ WWH Name: Distance from Evaluated Stream:
☐ 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 Quadrangle Name: NRCS Soil Map Page: NRCS Soil Map Stream Order:
County: LICKING Township/City:

MISCELLANEOUS
Base Flow Conditions? (Y/N): N Date of last precipitation: UNK Quantity: UNK
Photograph Information:
Elevated Turbidity? (Y/N): N Canopy (% open): 100
Were samples collected for water chemistry? (Y/N): NA (Note lab sample no. or id. and attach results) Lab Number:
Field Measures: Temp (°C): Dissolved Oxygen (mg/l): pH (SU): Conductivity (µmhos/cm):
Is the sampling reach representative of the stream? (Y/N): X If not, please explain:
Additional comments/description of pollution impacts: LAWN FERTILIZERS

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

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

PHHW Form Page - 2

Mod. Class L. STREAM 15 HH-BAO-07112-06 6

Ohio EPA Primary Headwater Habitat Evaluation Form

SITE NAME/LOCATION: HEPDAVE-INTAL 134 RV RIVER BASIN: BAO, A6 RIVER CODE: INTERMITTENT
LENGTH OF STREAM REACH (ft): 1112 LAT: 41.112 LONG: 84.0 DRAINAGE AREA (mi²): 21
DATE: 07/11/12 SCORER: BAO, A6 COMMENTS: INTERMITTENT
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PWH Streams" for Instructions
STREAM CHANNEL: ☐ NONE/NATURAL CHANNEL ☐ RECOVERING ☐ RECENT OR NO RECOVERY
MODIFICATIONS: STREAM CHANNELIZED, NOISE BLD, & VARIAN BUFFER SMALL

1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 40). Add total number of significant substrate types found (Max of 6). Final metric score is sum of boxes A & B.)

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> BLR SLABS (16 pts)		<input type="checkbox"/> SILT (3 pts)	
<input type="checkbox"/> BOULDER (>25 mm) (16 pts)		<input type="checkbox"/> LEAF PACKWOODY DEBRIS (3 pts)	
<input type="checkbox"/> BEDROCK (16 pts)		<input type="checkbox"/> FINE DETRITUS (3 pts)	
<input type="checkbox"/> COBBLE (65-256 mm) (12 pts)		<input type="checkbox"/> CLAY or HARDPAN (10 pts)	
<input type="checkbox"/> GRAVEL (2-64 mm) (9 pts)		<input type="checkbox"/> MUCK (10 pts)	
<input type="checkbox"/> SAND (<2 mm) (6 pts)		<input type="checkbox"/> ARTIFICIAL (3 pts)	

Total Percentages of: 3 (A) 3 (B) 3 TOTAL NUMBER OF SUBSTRATE TYPES:
Bdr Slabs, Boulder, Cobble, Bedrock

2. SCORE OF TWO MOST PREDOMINANT SUBSTRATE TYPES:
Maximum Pool Depth (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):
☐ > 30 centimeters (20 pts) ☐ > 5 cm - 10 cm (15 pts) ☐ > 1.0 m - 1.5 m (10 pts) ☐ > 1.0 m (10 pts)
☐ > 22.5 - 30 cm (30 pts) ☐ < 5 cm (5 pts) ☐ < 1.0 m (10 pts) ☐ NO WATER OR MOIST CHANNEL (0 pts)

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements):
☐ > 40 m (10 pts) ☐ > 10 m - 40 m (10 pts) ☐ > 3.0 m - 10 m (10 pts) ☐ > 1.5 m - 3.0 m (10 pts)
☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts)

COMMENTS: 414 - 414 - 414 AVERAGE BANKFULL WIDTH (meters): 4

COMMENTS: 414 - 414 - 414

4. BANK FULL WIDTH (Measured as the average of 3-4 measurements):
☐ > 40 m (10 pts) ☐ > 10 m - 40 m (10 pts) ☐ > 3.0 m - 10 m (10 pts) ☐ > 1.5 m - 3.0 m (10 pts)
☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts)

5. BANK FULL WIDTH (Measured as the average of 3-4 measurements):
☐ > 40 m (10 pts) ☐ > 10 m - 40 m (10 pts) ☐ > 3.0 m - 10 m (10 pts) ☐ > 1.5 m - 3.0 m (10 pts)
☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts)

6. BANK FULL WIDTH (Measured as the average of 3-4 measurements):
☐ > 40 m (10 pts) ☐ > 10 m - 40 m (10 pts) ☐ > 3.0 m - 10 m (10 pts) ☐ > 1.5 m - 3.0 m (10 pts)
☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts)

Mod. Class L. STREAM 15 HH-BAO-07112-06

Ohio EPA Primary Headwater Habitat Evaluation Form

SITE NAME/LOCATION: HEPDAVE-INTAL 134 RV RIVER BASIN: BAO, A6 RIVER CODE: INTERMITTENT
LENGTH OF STREAM REACH (ft): 1112 LAT: 41.112 LONG: 84.0 DRAINAGE AREA (mi²): 21
DATE: 07/11/12 SCORER: BAO, A6 COMMENTS: INTERMITTENT
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PWH Streams" for Instructions
STREAM CHANNEL: ☐ NONE/NATURAL CHANNEL ☐ RECOVERING ☐ RECENT OR NO RECOVERY
MODIFICATIONS: STREAM CHANNELIZED, NOISE BLD, & VARIAN BUFFER SMALL

1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 40). Add total number of significant substrate types found (Max of 6). Final metric score is sum of boxes A & B.)

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> BLR SLABS (16 pts)		<input type="checkbox"/> SILT (3 pts)	
<input type="checkbox"/> BOULDER (>25 mm) (16 pts)		<input type="checkbox"/> LEAF PACKWOODY DEBRIS (3 pts)	
<input type="checkbox"/> BEDROCK (16 pts)		<input type="checkbox"/> FINE DETRITUS (3 pts)	
<input type="checkbox"/> COBBLE (65-256 mm) (12 pts)		<input type="checkbox"/> CLAY or HARDPAN (10 pts)	
<input type="checkbox"/> GRAVEL (2-64 mm) (9 pts)		<input type="checkbox"/> MUCK (10 pts)	
<input type="checkbox"/> SAND (<2 mm) (6 pts)		<input type="checkbox"/> ARTIFICIAL (3 pts)	

Total Percentages of: 3 (A) 3 (B) 3 TOTAL NUMBER OF SUBSTRATE TYPES:
Bdr Slabs, Boulder, Cobble, Bedrock

2. SCORE OF TWO MOST PREDOMINANT SUBSTRATE TYPES:
Maximum Pool Depth (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):
☐ > 30 centimeters (20 pts) ☐ > 5 cm - 10 cm (15 pts) ☐ > 1.0 m - 1.5 m (10 pts) ☐ > 1.0 m (10 pts)
☐ > 22.5 - 30 cm (30 pts) ☐ < 5 cm (5 pts) ☐ < 1.0 m (10 pts) ☐ NO WATER OR MOIST CHANNEL (0 pts)

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements):
☐ > 40 m (10 pts) ☐ > 10 m - 40 m (10 pts) ☐ > 3.0 m - 10 m (10 pts) ☐ > 1.5 m - 3.0 m (10 pts)
☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts)

COMMENTS: 414 - 414 - 414 AVERAGE BANKFULL WIDTH (meters): 4

COMMENTS: 414 - 414 - 414

4. BANK FULL WIDTH (Measured as the average of 3-4 measurements):
☐ > 40 m (10 pts) ☐ > 10 m - 40 m (10 pts) ☐ > 3.0 m - 10 m (10 pts) ☐ > 1.5 m - 3.0 m (10 pts)
☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts)

5. BANK FULL WIDTH (Measured as the average of 3-4 measurements):
☐ > 40 m (10 pts) ☐ > 10 m - 40 m (10 pts) ☐ > 3.0 m - 10 m (10 pts) ☐ > 1.5 m - 3.0 m (10 pts)
☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts)

6. BANK FULL WIDTH (Measured as the average of 3-4 measurements):
☐ > 40 m (10 pts) ☐ > 10 m - 40 m (10 pts) ☐ > 3.0 m - 10 m (10 pts) ☐ > 1.5 m - 3.0 m (10 pts)
☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts)

Mod. Class L. STREAM 15 HH-BAO-07112-06

Ohio EPA Primary Headwater Habitat Evaluation Form

SITE NAME/LOCATION: HEPDAVE-INTAL 134 RV RIVER BASIN: BAO, A6 RIVER CODE: INTERMITTENT
LENGTH OF STREAM REACH (ft): 1112 LAT: 41.112 LONG: 84.0 DRAINAGE AREA (mi²): 21
DATE: 07/11/12 SCORER: BAO, A6 COMMENTS: INTERMITTENT
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PWH Streams" for Instructions
STREAM CHANNEL: ☐ NONE/NATURAL CHANNEL ☐ RECOVERING ☐ RECENT OR NO RECOVERY
MODIFICATIONS: STREAM CHANNELIZED, NOISE BLD, & VARIAN BUFFER SMALL

1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 40). Add total number of significant substrate types found (Max of 6). Final metric score is sum of boxes A & B.)

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> BLR SLABS (16 pts)		<input type="checkbox"/> SILT (3 pts)	
<input type="checkbox"/> BOULDER (>25 mm) (16 pts)		<input type="checkbox"/> LEAF PACKWOODY DEBRIS (3 pts)	
<input type="checkbox"/> BEDROCK (16 pts)		<input type="checkbox"/> FINE DETRITUS (3 pts)	
<input type="checkbox"/> COBBLE (65-256 mm) (12 pts)		<input type="checkbox"/> CLAY or HARDPAN (10 pts)	
<input type="checkbox"/> GRAVEL (2-64 mm) (9 pts)		<input type="checkbox"/> MUCK (10 pts)	
<input type="checkbox"/> SAND (<2 mm) (6 pts)		<input type="checkbox"/> ARTIFICIAL (3 pts)	

Total Percentages of: 3 (A) 3 (B) 3 TOTAL NUMBER OF SUBSTRATE TYPES:
Bdr Slabs, Boulder, Cobble, Bedrock

2. SCORE OF TWO MOST PREDOMINANT SUBSTRATE TYPES:
Maximum Pool Depth (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):
☐ > 30 centimeters (20 pts) ☐ > 5 cm - 10 cm (15 pts) ☐ > 1.0 m - 1.5 m (10 pts) ☐ > 1.0 m (10 pts)
☐ > 22.5 - 30 cm (30 pts) ☐ < 5 cm (5 pts) ☐ < 1.0 m (10 pts) ☐ NO WATER OR MOIST CHANNEL (0 pts)

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements):
☐ > 40 m (10 pts) ☐ > 10 m - 40 m (10 pts) ☐ > 3.0 m - 10 m (10 pts) ☐ > 1.5 m - 3.0 m (10 pts)
☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts)

COMMENTS: 414 - 414 - 414 AVERAGE BANKFULL WIDTH (meters): 4

COMMENTS: 414 - 414 - 414

4. BANK FULL WIDTH (Measured as the average of 3-4 measurements):
☐ > 40 m (10 pts) ☐ > 10 m - 40 m (10 pts) ☐ > 3.0 m - 10 m (10 pts) ☐ > 1.5 m - 3.0 m (10 pts)
☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts)

5. BANK FULL WIDTH (Measured as the average of 3-4 measurements):
☐ > 40 m (10 pts) ☐ > 10 m - 40 m (10 pts) ☐ > 3.0 m - 10 m (10 pts) ☐ > 1.5 m - 3.0 m (10 pts)
☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts)

6. BANK FULL WIDTH (Measured as the average of 3-4 measurements):
☐ > 40 m (10 pts) ☐ > 10 m - 40 m (10 pts) ☐ > 3.0 m - 10 m (10 pts) ☐ > 1.5 m - 3.0 m (10 pts)
☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts) ☐ > 10 - 22.5 cm (25 pts)

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Summary: Letter of Notification and Attachments for Kirk-Jug 138 kV Circuit Project (Part 11 of 12) electronically filed by Erin C Miller on behalf of AEP Ohio Transmission Company, Inc.