



Primary Headwater Habitat Evaluation Form

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

44

SITE NAME/LOCATION Stream 9SITE NUMBER Stream 9RIVER BASIN ELRO1DRAINAGE AREA (mi²) 0.00LENGTH OF STREAM REACH (ft) 200 LAT. 41.30165 LONG. -82.07833 RIVER CODE RIVER MILE DATE 05/09/14 SCORER TK/AG/LZ COMMENTS

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

STREAM CHANNEL MODIFICATIONS:

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

1. **SUBSTRATE** (Estimate percent of every type of substrate present. Check **ONLY** two 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 & B.

| TYPE | PERCENT | TYPE | PERCENT |
|--|------------------------------|---|------------------------------|
| <input type="checkbox"/> BLDR SLABS [16 pts] | <input type="checkbox"/> 0% | <input checked="" type="checkbox"/> SILT [3 pt] | <input type="checkbox"/> 10% |
| <input type="checkbox"/> BOULDER (>256 mm) [16 pts] | <input type="checkbox"/> 0% | <input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts] | <input type="checkbox"/> 10% |
| <input type="checkbox"/> BEDROCK [16 pt] | <input type="checkbox"/> 0% | <input type="checkbox"/> FINE DETRITUS [3 pts] | <input type="checkbox"/> 10% |
| <input type="checkbox"/> COBBLE (65-256 mm) [12 pts] | <input type="checkbox"/> 0% | <input type="checkbox"/> CLAY or HARDPAN [0 pt] | <input type="checkbox"/> 0% |
| <input type="checkbox"/> GRAVEL (2-64 mm) [9 pts] | <input type="checkbox"/> 0% | <input type="checkbox"/> MUCK [0 pts] | <input type="checkbox"/> 10% |
| <input checked="" type="checkbox"/> SAND (<2 mm) [6 pts] | <input type="checkbox"/> 60% | <input type="checkbox"/> ARTIFICIAL [3 pts] | <input type="checkbox"/> 0% |

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock 0.00%

(A)

Substrate Percentage Check 100%

(B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 9TOTAL NUMBER OF SUBSTRATE TYPES: 5

HHEI Metric Points

Substrate Max = 40

14

A + B

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):

| | |
|--|---|
| <input type="checkbox"/> > 30 centimeters [20 pts] | <input checked="" type="checkbox"/> > 5 cm - 10 cm [15 pts] |
| <input 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] |

COMMENTS MAXIMUM POOL DEPTH (centimeters): 10

Pool Depth Max = 30

15

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

| | |
|---|--|
| <input type="checkbox"/> > 4.0 meters (> 13') [30 pts] | <input checked="" type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] |
| <input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] | <input type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts] |
| <input type="checkbox"/> > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] | |

COMMENTS AVERAGE BANKFULL WIDTH (meters): 1.50

Bankfull Width Max=30

15

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY

☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH

| L | R | (Per Bank) |
|-------------------------------------|-------------------------------------|----------------|
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Wide >10m |
| <input type="checkbox"/> | <input type="checkbox"/> | Moderate 5-10m |
| <input type="checkbox"/> | <input type="checkbox"/> | Narrow <5m |
| <input type="checkbox"/> | <input type="checkbox"/> | None |

FLOODPLAIN QUALITY

| L | R | (Most Predominant per Bank) |
|-------------------------------------|-------------------------------------|-------------------------------------|
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Mature Forest, Wetland |
| <input type="checkbox"/> | <input type="checkbox"/> | Immature Forest, Shrub or Old Field |
| <input type="checkbox"/> | <input type="checkbox"/> | Residential, Park, New Field |
| <input type="checkbox"/> | <input type="checkbox"/> | Fenced Pasture |

| L | R | |
|--------------------------|--------------------------|------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | Conservation Tillage |
| <input type="checkbox"/> | <input type="checkbox"/> | Urban or Industrial |
| <input type="checkbox"/> | <input type="checkbox"/> | Open Pasture, Row Crop |
| <input type="checkbox"/> | <input type="checkbox"/> | Mining or Construction |

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

| | |
|---|--|
| <input checked="" type="checkbox"/> Stream Flowing | <input 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 SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check **ONLY** one box):

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

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☒ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

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: Grafton NRCS Soil Map Page: NRCS Soil Map Stream Order
County: Lorain Township / City: Carlisle Township

MISCELLANEOUS

Base Flow Conditions? (Y/N): Y Date of last precipitation: 05/07/14 Quantity: 0.17
Photograph Information: See Appendix E
Elevated Turbidity? (Y/N): N Canopy (% open): 85%
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 (S.U.) Conductivity (µmhos/cm)
Is the sampling reach representative of the stream (Y/N) Y If not, please explain:

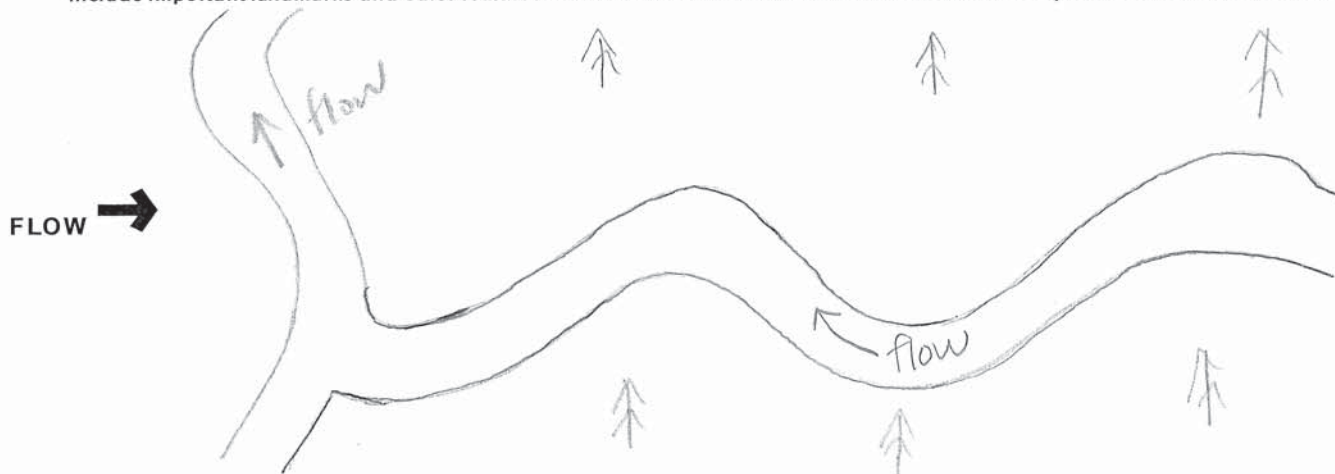
Additional comments/description of pollution impacts:

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) Voucher? (Y/N) Salamanders Observed? (Y/N) Voucher? (Y/N)
Frogs or Tadpoles Observed? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebrates Observed? (Y/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





Primary Headwater Habitat Evaluation Form

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

33

SITE NAME/LOCATION Stream 10SITE NUMBER Stream 10RIVER BASIN ELRO1DRAINAGE AREA (mi²) 0.00LENGTH OF STREAM REACH (ft) 200 LAT. 41.30157 LONG. -82.07823 RIVER CODE RIVER MILE DATE 05/09/14 SCORER TK/AG/LZ COMMENTS

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

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

1. **SUBSTRATE** (Estimate percent of every type of substrate present. Check *ONLY* two 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 & B.

| TYPE | PERCENT | TYPE | PERCENT |
|--|------------|---|------------|
| <input type="checkbox"/> BLDR SLABS [16 pts] | <u>0%</u> | <input checked="" type="checkbox"/> SILT [3 pt] | <u>50%</u> |
| <input type="checkbox"/> BOULDER (>256 mm) [16 pts] | <u>0%</u> | <input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts] | <u>0%</u> |
| <input type="checkbox"/> BEDROCK [16 pt] | <u>0%</u> | <input type="checkbox"/> FINE DETRITUS [3 pts] | <u>0%</u> |
| <input type="checkbox"/> COBBLE (65-256 mm) [12 pts] | <u>0%</u> | <input type="checkbox"/> CLAY or HARDPAN [0 pt] | <u>0%</u> |
| <input type="checkbox"/> GRAVEL (2-64 mm) [9 pts] | <u>10%</u> | <input type="checkbox"/> MUCK [0 pts] | <u>20%</u> |
| <input checked="" type="checkbox"/> SAND (<2 mm) [6 pts] | <u>20%</u> | <input type="checkbox"/> ARTIFICIAL [3 pts] | <u>0%</u> |

Total of Percentages of
Bldr Slabs, Boulder, Cobble, Bedrock 0.00%

(A)

Substrate Percentage
Check 100%

(B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 9TOTAL NUMBER OF SUBSTRATE TYPES: 4HHEI
Metric
PointsSubstrate
Max = 40

13

A + B

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):

| | |
|--|--|
| <input type="checkbox"/> > 30 centimeters [20 pts] | <input type="checkbox"/> > 5 cm - 10 cm [15 pts] |
| <input type="checkbox"/> > 22.5 - 30 cm [30 pts] | <input checked="" 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] |

COMMENTS MAXIMUM POOL DEPTH (centimeters): 3Pool Depth
Max = 30

5

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

| | |
|---|--|
| <input type="checkbox"/> > 4.0 meters (> 13') [30 pts] | <input checked="" type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] |
| <input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] | <input type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts] |
| <input type="checkbox"/> > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] | |

COMMENTS AVERAGE BANKFULL WIDTH (meters): 1.50Bankfull
Width
Max=30

15

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY

☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH

| L | R | (Per Bank) |
|-------------------------------------|-------------------------------------|----------------|
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Wide >10m |
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| <input type="checkbox"/> | <input type="checkbox"/> | Narrow <5m |
| <input type="checkbox"/> | <input type="checkbox"/> | None |

FLOODPLAIN QUALITY

| L | R | (Most Predominant per Bank) |
|-------------------------------------|-------------------------------------|-------------------------------------|
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| <input type="checkbox"/> | <input type="checkbox"/> | Fenced Pasture |

| L | R | |
|--------------------------|--------------------------|------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | Conservation Tillage |
| <input type="checkbox"/> | <input type="checkbox"/> | Urban or Industrial |
| <input type="checkbox"/> | <input type="checkbox"/> | Open Pasture, Row Crop |
| <input type="checkbox"/> | <input type="checkbox"/> | Mining or Construction |

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

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|---|--|
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COMMENTS 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 type="checkbox"/> 0.5 | <input type="checkbox"/> 1.5 | <input type="checkbox"/> 2.5 | <input checked="" type="checkbox"/> >3 |

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☒ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☐ Moderate to Severe ☐ Severe (10 ft/100 ft)

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

USGS Quadrangle Name: Grafton NRCS Soil Map Page: NRCS Soil Map Stream Order
County: Lorain Township / City: Carlisle Township

MISCELLANEOUS

Base Flow Conditions? (Y/N): Y Date of last precipitation: 05/07/14 Quantity: 0.17
Photograph Information: See Appendix E
Elevated Turbidity? (Y/N): N Canopy (% open): 80%
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 (S.U.) Conductivity (µmhos/cm)
Is the sampling reach representative of the stream (Y/N) Y If not, please explain:

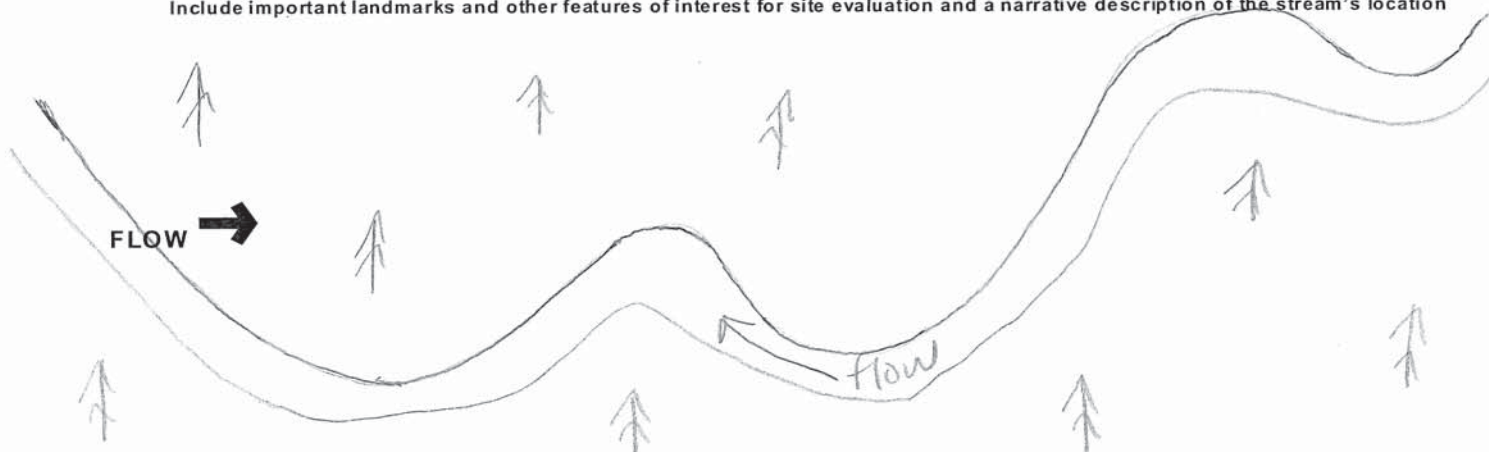
Additional comments/description of pollution impacts:

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)
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Frogs or Tadpoles Observed? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebrates Observed? (Y/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



Appendix E

Photolog

| | | | |
|--|--|--|--|
| ERM | | PHOTOGRAPHIC LOG | |
| | | Photographer: Travis Kessler | |
| Project Name: Avon Lake Gas Addition Project | | Site Location: Lorain County, Ohio | |
| | | Project No. 0237278 | |

| | | |
|--|--------------------------|---|
| Photo No. 1 | Date: 05/16/14 |  |
| Direction Photo Taken: West | | |
| Description: Wetland 1 forested and scrub-shrub wetland. | | |

| | | |
|--|--------------------------|--|
| Photo No. 2 | Date: 05/16/14 |  |
| Direction Photo Taken: South | | |
| Description: Wetland 1 forested and scrub-shrub wetland. | | |

| | | | |
|--|--|--|--|
| ERM | | PHOTOGRAPHIC LOG | |
| | | Photographer: Travis Kessler | |
| Project Name: Avon Lake Gas Addition Project | | Site Location: Lorain County, Ohio | |
| | | Project No. 0237278 | |

| | | |
|--|--------------------------|---|
| Photo No. 3 | Date: 05/16/14 |  |
| Direction Photo Taken: Northeast | | |
| Description: Wetland 2 forested and scrub-shrub wetland. | | |

| | | |
|--|--------------------------|--|
| Photo No. 4 | Date: 05/16/14 |  |
| Direction Photo Taken: Southeast | | |
| Description: Wetland 3 forested wetland characteristics. | | |


| | | | |
|--|--|--|--|
| ERM | | PHOTOGRAPHIC LOG | |
| | | Photographer: Travis Kessler | |
| Project Name: Avon Lake Gas Addition Project | | Site Location: Lorain County, Ohio | |
| | | Project No. 0237278 | |

| | | |
|---|--------------------------|---|
| Photo No. 5 | Date: 05/16/14 |  |
| Direction Photo Taken: Northwest | | |
| Description: Wetland 3 scrub-shrub wetland characteristics. | | |

| | | |
|--|--------------------------|--|
| Photo No. 6 | Date: 05/16/14 |  |
| Direction Photo Taken: East | | |
| Description: Wetland 4 forested and scrub-shrub wetland. | | |

| | | | |
|--|--|--|--|
| ERM | | PHOTOGRAPHIC LOG | |
| | | Photographer: Travis Kessler | |
| Project Name: Avon Lake Gas Addition Project | | Site Location: Lorain County, Ohio | |
| | | Project No. 0237278 | |

| | | |
|--|--------------------------|---|
| Photo No. 7 | Date: 05/15/14 |  |
| Direction Photo Taken: North | | |
| Description: Wetland 5 emergent wetland. | | |

| | | |
|--|--------------------------|--|
| Photo No. 8 | Date: 05/15/14 |  |
| Direction Photo Taken: South | | |
| Description: Wetland 5 emergent wetland. | | |

| | | | |
|--|--|--|--|
| ERM | | PHOTOGRAPHIC LOG | |
| | | Photographer: Travis Kessler | |
| Project Name: Avon Lake Gas Addition Project | | Site Location: Lorain County, Ohio | |
| | | Project No. 0237278 | |

| | | |
|---|--------------------------|---|
| Photo No. 9 | Date: 05/15/14 |  |
| Direction Photo Taken: South | | |
| Description: Stream 1 and northern terminus of Wetland 6. | | |

| | | |
|---|--------------------------|--|
| Photo No. 10 | Date: 05/15/14 |  |
| Direction Photo Taken: Northeast | | |
| Description: Southern terminus of Wetland 6 emergent and scrub-shrub wetland. | | |

| | | | |
|--|--|--|--|
| ERM | | PHOTOGRAPHIC LOG | |
| | | Photographer: Travis Kessler | |
| Project Name: Avon Lake Gas Addition Project | | Site Location: Lorain County, Ohio | |
| | | Project No. 0237278 | |

| | | |
|--|--------------------------|---|
| Photo No. 11 | Date: 05/15/14 |  |
| Direction Photo Taken: East | | |
| Description: Logging operation within Wetland 7. | | |

| | | |
|---|--------------------------|--|
| Photo No. 12 | Date: 05/15/14 |  |
| Direction Photo Taken: North | | |
| Description: Wetland 7 emergent forested, emergent and scrub-shrub wetland. | | |

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|--|--|--|--|
| ERM | | PHOTOGRAPHIC LOG | |
| | | Photographer: Travis Kessler | |
| Project Name: Avon Lake Gas Addition Project | | Site Location: Lorain County, Ohio | |
| | | Project No. 0237278 | |

| | | |
|--|--------------------------|---|
| Photo No. 13 | Date: 05/15/14 |  |
| Direction Photo Taken: Northwest | | |
| Description: Blue Line Stream - French Creek south of Colorado Avenue/Route 611 and Mile Marker 3. | | |

| | | |
|---|--------------------------|--|
| Photo No. 14 | Date: 05/15/14 |  |
| Direction Photo Taken: North | | |
| Description: Blue Line Stream – Unnamed Stream 1 located at the northeastern terminus of Wetland 8. | | |


| | | | |
|--|--|--|--|
| ERM | | PHOTOGRAPHIC LOG | |
| | | Photographer: Travis Kessler | |
| Project Name: Avon Lake Gas Addition Project | | Site Location: Lorain County, Ohio | |
| | | Project No. 0237278 | |

| | | |
|--|--------------------------|---|
| Photo No. 15 | Date: 05/15/14 |  |
| Direction Photo Taken: North | | |
| Description: Wetland 8 emergent and scrub-shrub wetland characteristics. | | |

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|--|--------------------------|--|
| Photo No. 16 | Date: 05/15/14 |  |
| Direction Photo Taken: South | | |
| Description: Wetland 8 emergent wetland characteristics. | | |

| | | | |
|--|--|--|--|
| ERM | | PHOTOGRAPHIC LOG | |
| | | Photographer: Travis Kessler | |
| Project Name: Avon Lake Gas Addition Project | | Site Location: Lorain County, Ohio | |
| | | Project No. 0237278 | |

| | | |
|--|--------------------------|---|
| Photo No. 17 | Date: 05/15/14 |  |
| Direction Photo Taken: Northwest | | |
| Description: Wetland 8 emergent wetland characteristics. | | |

| | | |
|--|--------------------------|--|
| Photo No. 18 | Date: 05/15/14 |  |
| Direction Photo Taken: East | | |
| Description: Stream 2 located along the south side of Interstate 90. | | |

| | | | |
|--|--|--|--|
| ERM | | PHOTOGRAPHIC LOG | |
| | | Photographer: Travis Kessler | |
| Project Name: Avon Lake Gas Addition Project | | Site Location: Lorain County, Ohio | |
| | | Project No. 0237278 | |

| | | |
|--|--------------------------|---|
| Photo No. 19 | Date: 05/15/14 |  |
| Direction Photo Taken: Northeast | | |
| Description: Stream 3 at northern terminus of Wetland 9. | | |

| | | |
|--|--------------------------|--|
| Photo No. 20 | Date: 05/15/14 |  |
| Direction Photo Taken: West | | |
| Description: Wetland 9 forested and scrub-shrub wetland. | | |

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| ERM | | PHOTOGRAPHIC LOG | |
| | | Photographer: Travis Kessler | |
| Project Name: Avon Lake Gas Addition Project | | Site Location: Lorain County, Ohio | |
| | | Project No. 0237278 | |

| | | |
|--|--------------------------|---|
| Photo No. 21 | Date: 05/15/14 |  |
| Direction Photo Taken: Southwest | | |
| Description: Stream 3 adjacent to Wetland 9. | | |

| | | |
|---|--------------------------|--|
| Photo No. 22 | Date: 05/14/14 |  |
| Direction Photo Taken: North | | |
| Description: Wetland 10 forested and scrub-shrub wetland. | | |

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| ERM | | PHOTOGRAPHIC LOG | |
| | | Photographer: Travis Kessler | |
| Project Name: Avon Lake Gas Addition Project | | Site Location: Lorain County, Ohio | |
| | | Project No. 0237278 | |

| | | |
|--|--------------------------|---|
| Photo No. 23 | Date: 05/14/14 |  |
| Direction Photo Taken: North | | |
| Description: Wetland 11 emergent wetland just north of proposed access road and residential development. | | |

| | | |
|--|--------------------------|--|
| Photo No. 24 | Date: 05/14/14 |  |
| Direction Photo Taken: North | | |
| Description: Wetland 11 emergent wetland soil. | | |

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|--|--|--|--|
| ERM | | PHOTOGRAPHIC LOG | |
| | | Photographer: Travis Kessler | |
| Project Name: Avon Lake Gas Addition Project | | Site Location: Lorain County, Ohio | |
| | | Project No. 0237278 | |

| | | |
|--|--------------------------|---|
| Photo No. 25 | Date: 05/14/14 |  |
| Direction Photo Taken: East | | |
| Description: Wetland 12 emergent wetland along transmission line corridor just south of Mile Marker 5. | | |

| | | |
|--|--------------------------|--|
| Photo No. 26 | Date: 05/14/14 |  |
| Direction Photo Taken: West | | |
| Description: Wetland 12 emergent and forested wetland. | | |

| | | | |
|--|--|--|--|
| ERM | | PHOTOGRAPHIC LOG | |
| | | Photographer: Travis Kessler | |
| Project Name: Avon Lake Gas Addition Project | | Site Location: Lorain County, Ohio | |
| | | Project No. 0237278 | |

| | | |
|---|-------------------------|---|
| Photo No. 27 | Date: 5/14/14 |  |
| Direction Photo Taken: South | | |
| Description: Stream 5 just south of Wetland 13. | | |

| | | |
|---|-------------------------|--|
| Photo No. 28 | Date: 5/14/14 |  |
| Direction Photo Taken: North | | |
| Description: Wetland 13 emergent wetland. | | |

| | | | |
|--|--|--|--|
| ERM | | PHOTOGRAPHIC LOG | |
| | | Photographer: Travis Kessler | |
| Project Name: Avon Lake Gas Addition Project | | Site Location: Lorain County, Ohio | |
| | | Project No. 0237278 | |

| | | |
|--|-------------------------|---|
| Photo No. 29 | Date: 5/13/14 |  |
| Direction Photo Taken: South | | |
| Description: Wetland 14 just north of Jungbluth Ditch. | | |

| | | |
|---|-------------------------|--|
| Photo No. 30 | Date: 5/13/14 |  |
| Direction Photo Taken: West | | |
| Description: Blue Line Stream - Jungbluth Ditch south of Wetland 14 and north of Mile Marker 6. | | |

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|--|--|--|--|
| ERM | | PHOTOGRAPHIC LOG | |
| | | Photographer: Travis Kessler | |
| Project Name: Avon Lake Gas Addition Project | | Site Location: Lorain County, Ohio | |
| | | Project No. 0237278 | |

| | | |
|---|-------------------------|--|
| Photo No. 31 | Date: 5/13/14 |  |
| Direction Photo Taken: North | | |
| Description: Wetland 15 forested wetland. | | |

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|---|-------------------------|--|
| Photo No. 32 | Date: 5/13/14 |  |
| Direction Photo Taken: South | | |
| Description: Wetland 17 forested and scrub-shrub wetland. | | |

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| ERM | | PHOTOGRAPHIC LOG | |
| | | Photographer: Travis Kessler | |
| Project Name: Avon Lake Gas Addition Project | | Site Location: Lorain County, Ohio | |
| | | Project No. 0237278 | |

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|--|-------------------------|---|
| Photo No. 33 | Date: 5/13/14 |  |
| Direction Photo Taken: South | | |
| Description: West side of Wetland 18 forested and scrub-shrub wetland. | | |

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|---|-------------------------|--|
| Photo No. 34 | Date: 5/13/14 |  |
| Direction Photo Taken: East | | |
| Description: Wetland 19 forested and scrub-shrub wetland. | | |

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| ERM | | PHOTOGRAPHIC LOG | |
| | | Photographer: Travis Kessler | |
| Project Name: Avon Lake Gas Addition Project | | Site Location: Lorain County, Ohio | |
| | | Project No. 0237278 | |

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|---|-------------------------|---|
| Photo No. 35 | Date: 5/13/14 |  |
| Direction Photo Taken: Southwest | | |
| Description: Wetland 20 forested and scrub-shrub wetland. | | |

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|--|-------------------------|--|
| Photo No. 36 | Date: 5/13/14 |  |
| Direction Photo Taken: N/A | | |
| Description: Stream 6 located within Wetland 21. | | |

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|--|--|--|--|
| ERM | | PHOTOGRAPHIC LOG | |
| | | Photographer: Travis Kessler | |
| Project Name: Avon Lake Gas Addition Project | | Site Location: Lorain County, Ohio | |
| | | Project No. 0237278 | |

| | | |
|---|-------------------------|---|
| Photo No. 37 | Date: 5/13/14 |  |
| Direction Photo Taken: NA | | |
| Description: Example of soil observed within a Wetland. | | |

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|---|-------------------------|--|
| Photo No. 38 | Date: 5/14/14 |  |
| Direction Photo Taken: North | | |
| Description: Wetland 21 forested and scrub-shrub wetland. | | |

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

12/19/2014 12:43:01 PM

in

Case No(s). 14-1717-GA-BLN

Summary: Application of NRG Ohio Pipeline Company LLC continued - Attachment I (Part 7)
electronically filed by Teresa Orahod on behalf of Sally Bloomfield