## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 364360 |
| Survey Date | 06/27/2023 |
| User | Joseph Knight |
| **General Information** | |
| Project ID # | 26-ST004 |
| Site | 21028 Hoffman Falls |
| Date | 06/27/2023 |
| Time | 02:18 PM |
| Location | |
| Latitude | 42.92447433 |
| Longitude | -75.70154017 |
| Datum | NAD83/2011 |
| Investigator(s) | JK, AL |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Stream appears to be entirely within forested upland slope. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | Successional upland forested slope. Steam originates from wetland and flows into same wetland downslope |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | |
| Undercut Bank | |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |

| Sediment Indicators | |
|---|---|
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | |

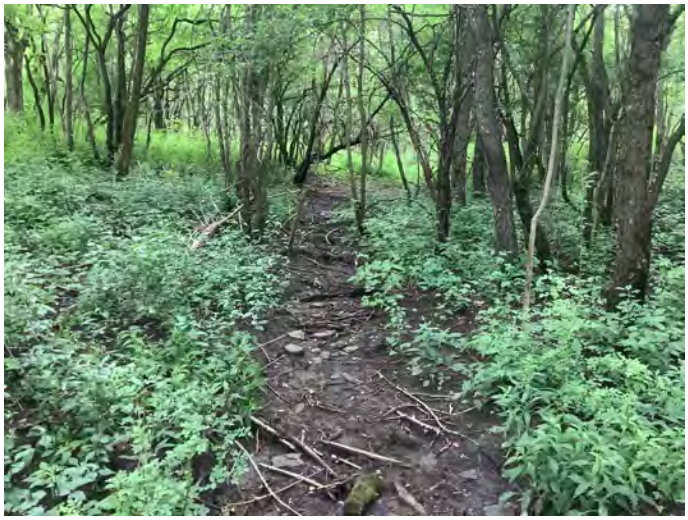
| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| Vegetation Change From | vegetation absent |
| Vegetation Change To | forbs |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |

| Ancillary Indicators | |
|---|---|
| Wracking/presence of organic litter | Present |
| Wracking Indicator Location | x |
| Presence of large wood | |
| Leaf litter disturbed or washed away | |
| Water staining | |
| Weathered clasts or bedrock | |
| Other observed indicators? | No |

| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | Change in vegetation density from absent to forbs was one of the most consistent indicators of OHWM along the stream reach, in addition to both a break in slope and wracking. |
| Additional observations or notes | |

| Photos | |
|---|---|
| Photo log attached? | Yes |
| Photos | |



Vegetation transition

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 363809 |
| Survey Date | 06/28/2023 |
| User | Andrew Leonardi |
| **General Information** | |
| Project ID # | 26-ST005 |
| Site | 21028 Hoffman Falls |
| Date | 06/28/2023 |
| Time | 12:34 PM |
| Location | |
| Latitude | 42.93853783 |
| Longitude | -75.68380017 |
| Datum | NAD83/2011 |
| Investigator(s) | AL ME |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | No significant precipitation events occurred within 48 of delineation. Deciduous forest borders stream. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | Stream collects water from adjacent land, compacted access road allows for water to gather in this stream. Disturbed leaf litter and organic matter indicate water flow. Water collected within this stream drain into wetland 26-W014 and it eventually leaves the wetland to join with a larger intermittent stream. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | Present |
| On the bank Indicator Location | x |
| Undercut Bank | |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | |
| Channel bar | |
| Instream bedforms and | |

| | |
|---|---|
| other bedload transport evidence | |
| Secondary channels | |

| Sediment Indicators | |
|---|---|
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | |

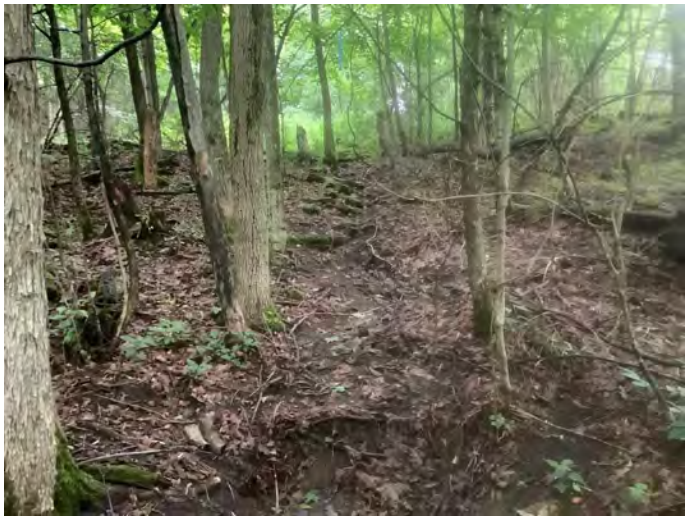
| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |

| Ancillary Indicators | |
|---|---|
| Wracking/presence of organic litter | Present |
| Wracking Indicator Location | x |
| Presence of large wood | |
| Leaf litter disturbed or washed away | |
| Water staining | |
| Weathered clasts or bedrock | |
| Other observed indicators? | No |

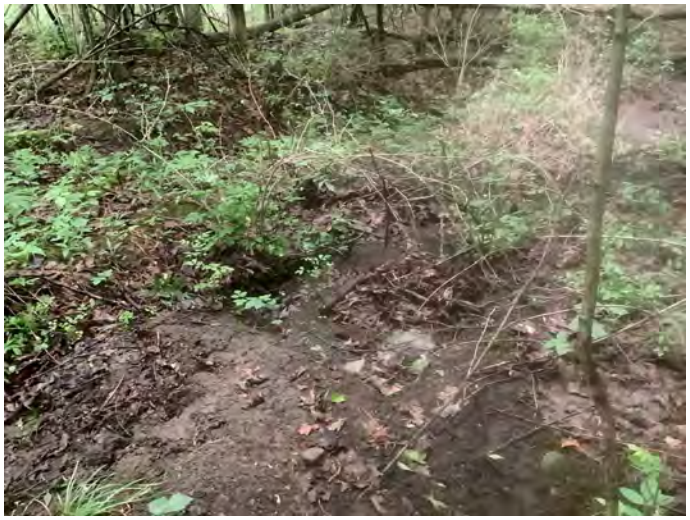
| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | OHWM was determined by a break in slope which defined the bed and bank of this stream. Organic litter washout also provided sufficient evidence of an OHWM. No significant change in vegetation as this stream was a thin feature diverting water down slope in an upland forest. |
| Additional observations or notes | Stream connects to a delineated wetland feature. |

| Photos | |
|---|---|
| Photo log attached? | Yes |
| Photos | |



Photograph depicting significant leaf litter washout within the stream channel. Break in slope also evident.



End of stream where it meets with wetland 26-W014.

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 363810 |
| Survey Date | 06/28/2023 |
| User | Andrew Leonardi |
| **General Information** | |
| Project ID # | 26-ST006 |
| Site | 21028 Hoffman Falls |
| Date | 06/28/2023 |
| Time | 12:59 PM |
| Location | |
| Latitude | 42.93850467 |
| Longitude | -75.68340867 |
| Datum | NAD83/2011 |
| Investigator(s) | AL ME |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Deciduous forest borders stream. There was also heavy rain the week prior to delineation as well as consistent drizzle during the time of the survey. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | The stream flowed through an access trail. There was consistent rain throughout the day of delineation. The trail was very compacted. Very little change in vegetation, the stream was adjacent to an upland forest. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | |
| Undercut Bank | |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |

| Sediment Indicators | |
|---|---|
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | |

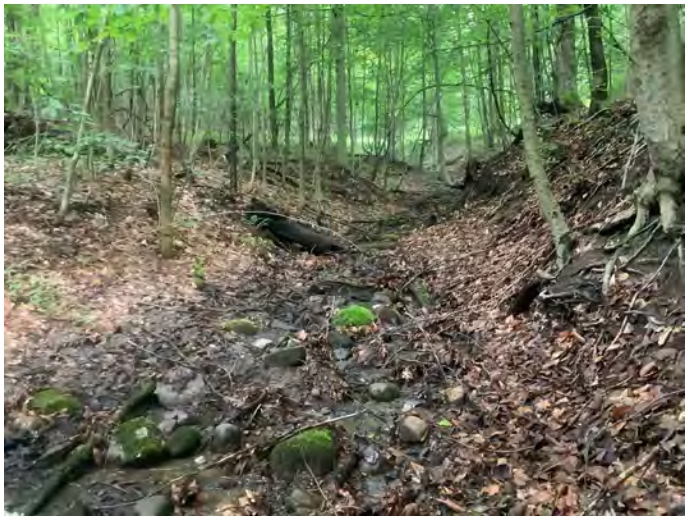
| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |

| Ancillary Indicators | |
|---|---|
| Wracking/presence of organic litter | |
| Presence of large wood | Present |
| Presence of Large Wood Indicator Location | x |
| Leaf litter disturbed or washed away | Present |
| Leaf Litter Indicator Location | x |
| Water staining | Present |
| Water Staining Indicator Location | x |
| Weathered clasts or bedrock | |
| Other observed indicators? | No |

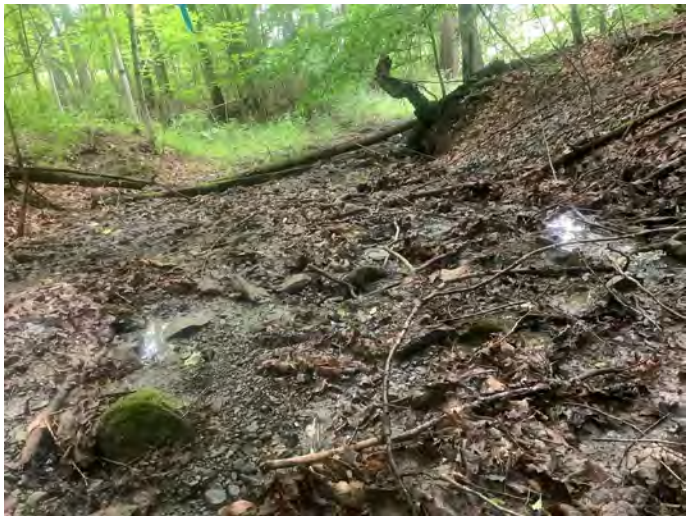
| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | The break in slope was at the OHWM defined channel bed and bank. The presence of large wood, disturbed leaf litter, and water staining were indicators used to define the OHWM which occurred throughout the delineated reach of stream. The large wood suspended over the stream bed was supported by the stream bank and allowed for definable OHWM. |
| Additional observations or notes | 26-ST007 drains into 26- ST006 |

| Photos | |
|---|---|
| Photo log attached? | Yes |
| Photos | |



Leaf litter pushed to the side due to downward flow of water. Water staining in stream bed below OHWM.



Presence of large wood hanging off of stream banks

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 363811 |
| Survey Date | 06/28/2023 |
| User | Andrew Leonardi |
| **General Information** | |
| Project ID # | 26-ST007 |
| Site | 21028 Hoffman Falls |
| Date | 06/28/2023 |
| Time | 01:01 PM |
| Location | |
| Latitude | 42.938543 |
| Longitude | -75.68332967 |
| Datum | ITRF14 |
| Investigator(s) | AL ME |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Stream is bordered by deciduous forest. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | Wetland 26-W014 outlets into 26-ST007 and then converges with stream 26-ST006 to create stream 26-ST008. There was consistent rain the week prior to delineation as well as a consistent drizzle throughout the day the stream was delineated. Well defined channel with little to no baseflow. There was a very definable channel bed and bank, the stream was five to six feet deep with high stream banks. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | Present |
| On the bank Indicator Location | x |
| Undercut Bank | |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | |
| Channel bar | |

| | |
|---|---|
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |

| Sediment Indicators | |
|---|---|
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | |

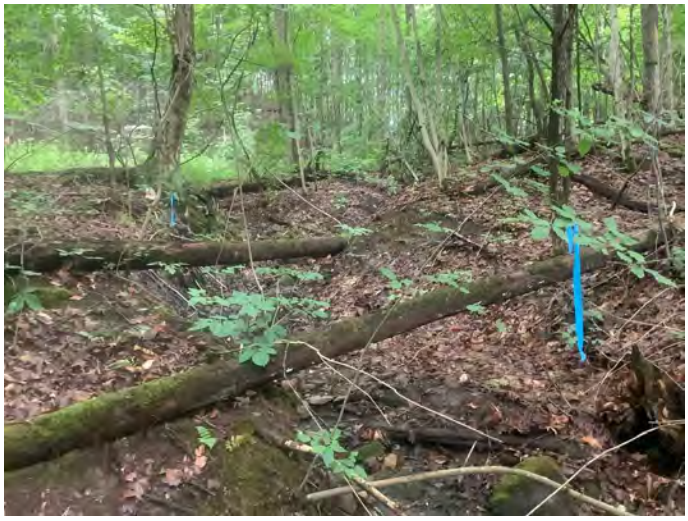
| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |

| Ancillary Indicators | |
|---|---|
| Wracking/presence of organic litter | Present |
| Wracking Indicator Location | b |
| Presence of large wood | Present |
| Presence of Large Wood Indicator Location | x |
| Leaf litter disturbed or washed away | |
| Water staining | Present |
| Water Staining Indicator Location | b |
| Weathered clasts or bedrock | |
| Other observed indicators? | |

| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | Break in slope on the bank defines stream channel and OHWM. Presence of large woody debris occur at the OHWM. The presence of organic litter and water-stained leaves were below the OHWM. |
| Additional observations or notes | Stream 26-ST007 drains from Wetland 26-W014 and then converges with stream 26-ST006 to create stream 26-ST008. |

| Photos | |
|---|---|
| Photo log attached? | Yes |



Presence of large wood, logs resting on the OHWM being suspended over the stream bed.

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 363812 |
| Survey Date | 06/28/2023 |
| User | Andrew Leonardi |
| **General Information** | |
| Project ID # | 26-ST008 |
| Site | 21028 Hoffman Falls |
| Date | 06/28/2023 |
| Time | 01:03 PM |
| Location | |
| Latitude | 42.93857783 |
| Longitude | -75.68340217 |
| Datum | ITRF14 |
| Investigator(s) | AL, ME |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | 26-ST008 begins at the confluence of 26-ST006 and 26-007. Significant precipitation occurred the week prior to this survey. Rain occurred during the time of the survey. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | This stream was surrounded by an upland forest with a thick canopy. The stream bed was composed of gravel of cobble with significant amounts of detritus. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | |
| Undercut Bank | |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | |
| Channel bar | Present |
| Channel Bar Indicator Location | x |
| Shelving (berms) on bar | |
| Unvegetated | |

| | |
|---|---|
| Vegetation transition (go to veg. indicators) | |
| Sediment transition (go to sed. indicators) | |
| Upper limit of deposition on bar: | |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |

| Sediment Indicators | |
|---|---|
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | |

| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| Vegetation Change From | vegetation absent |
| Vegetation Change To | forbs |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |

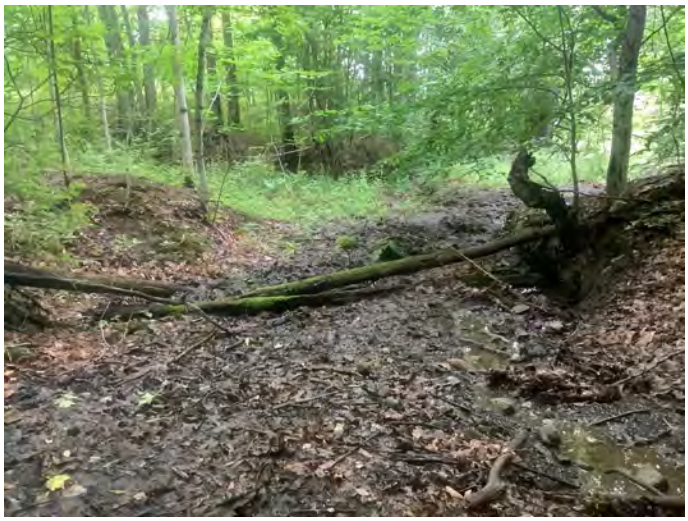
| Ancillary Indicators | |
|---|---|
| Wracking/presence of organic litter | Present |
| Wracking Indicator Location | b |
| Presence of large wood | Present |
| Presence of Large Wood Indicator Location | x |
| Leaf litter disturbed or washed away | |
| Water staining | Present |
| Water Staining Indicator Location | b |
| Weathered clasts or bedrock | |
| Other observed indicators? | No |

| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

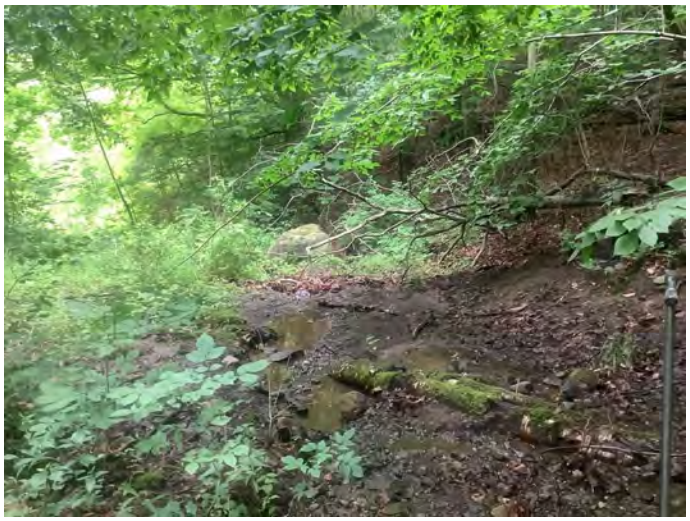
| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | Break in slope, channel bar, absent vegetation to forbs, and presence of large wood along extent of stream define the OHWM. Break in slope, and transition in vegetation were persistent throughout the delineated reach of stream. Wracking, water staining and development of channel barspresent through stream duration below the OHWM. |
| Additional observations or notes | |

| Photos | |
|---|---|
| Photo log attached? | Yes |

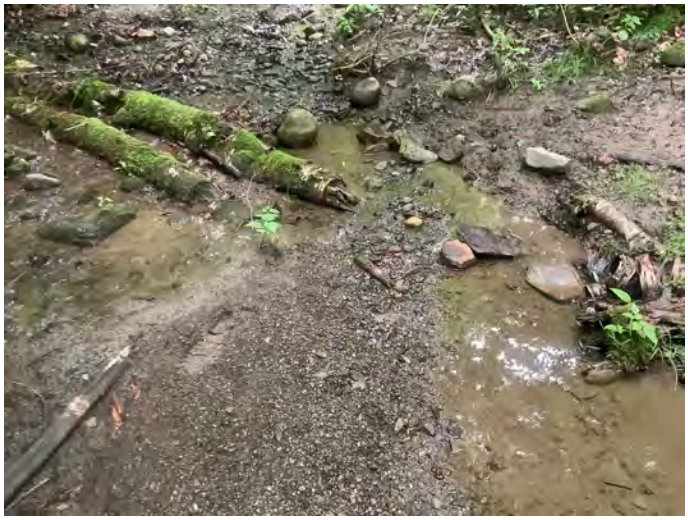
Photos



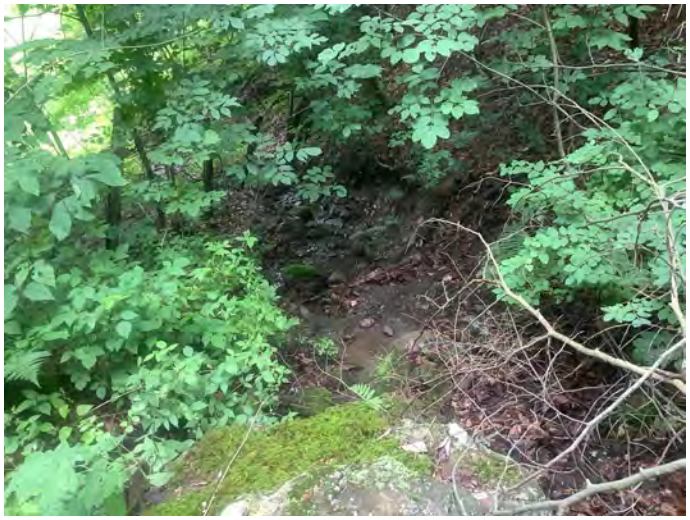
Large wood found at stream OHWM, water staining found below OHWM and wracking within stream channel.



View of stream break in slope found at the streams OHWM. View of change in vegetation from absent to forbs at OHWM.



View of in stream channel bar and large wood found below the streams OHWM.



View of stream break in slope.

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 365510 |
| Survey Date | 07/05/2023 |
| User | Andrew Leonardi |
| **General Information** | |
| Project ID # | 26-ST009 |
| Site | 21028 Hoffman Falls |
| Date | 07/05/2023 |
| Time | 01:49 PM |
| Location | |
| Latitude | 42.94409417 |
| Longitude | -75.73135733 |
| Datum | NAD83/2011 |
| Investigator(s) | AL ME |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Stream flows through upland forest with sharp banks. Eventually flows under roadway. Regular flow conditions at time of survey. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | Steep banks of stream and change in vegetation make stream OHWM easily definable. Stream connects to wetland 26-W018 and flows under roadway. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | |
| Undercut Bank | |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | |
| Channel bar | Present |
| Channel Bar Indicator Location | b |
| Shelving (berms) on bar | Present |
| Shelving on bar Indicator Location | b |

| | |
|---|---|
| Unvegetated | |
| Vegetation transition (go to veg. indicators) | Present |
| Vegetation Transition Indicator Location | x |
| Sediment transition (go to sed. indicators) | Present |
| Sediment Transition Indicator Location | x |
| Upper limit of deposition on bar: | |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |
| **Sediment Indicators** | |
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | Present |
| Changes in particle-sized distribution Indicator Location | x |
| transition from | cobbles to silt |
| Upper limit of sand-sized particles | |
| Silt deposits | |
| **Vegetation Indicators** | |
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| Vegetation Change From | vegetation absent |
| Vegetation Change To | forbs |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |
| **Ancillary Indicators** | |
| Wracking/presence of organic litter | |
| Presence of large wood | |
| Leaf litter disturbed or washed away | |
| Water staining | |

| | |
|---|---|
| Weathered clasts or bedrock | |
| Other observed indicators? | No |

## Step 4: Additional Information

| | |
|---|---|
| Is additional information needed to support this determination? | No |

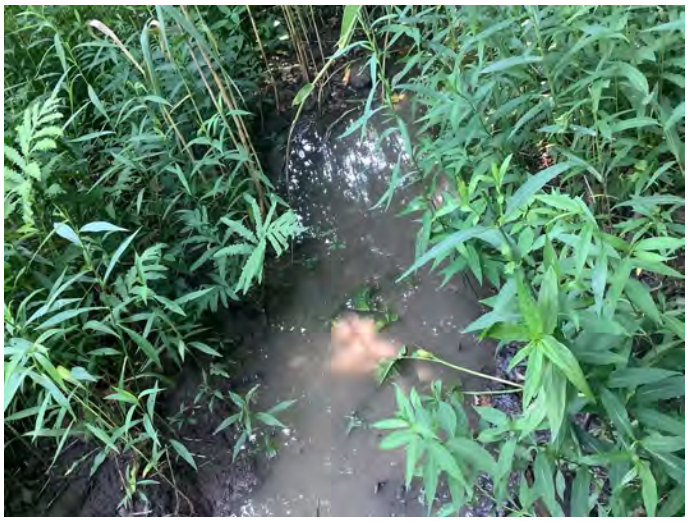
## Step 5: Rationale

| | |
|---|---|
| Describe rationale for location of OHWM | Break in slope, change in vegetation density from absent to forbs, change in particle size distribution all present at the streams OHWM. Channel bar observed below the OHWM. |
| Additional observations or notes | |

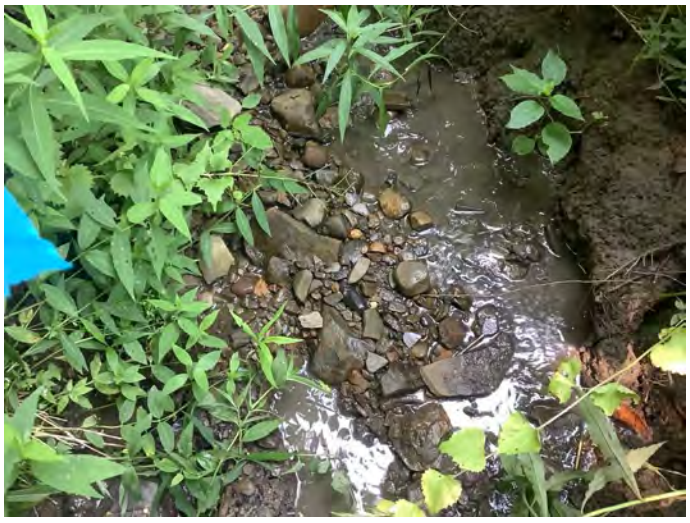
## Photos

| | |
|---|---|
| Photo log attached? | Yes |

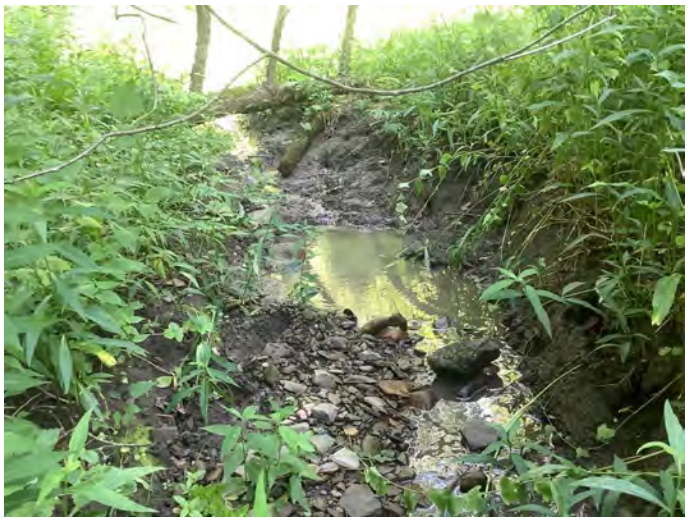
Photos



View of change in vegetation from absent to forbs within stream.



View of change in sediment from cobbles to silt. Change in vegetation density from absent to forbs



View of change in sediment size distribution, break in slope, and change in vegetation found at the OHWM. Also a view of the channel bar forming within the stream bed.

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 365513 |
| Survey Date | 07/05/2023 |
| User | Andrew Leonardi |
| **General Information** | |
| Project ID # | 26-ST010 |
| Site | 21028 Hoffman Falls |
| Date | 07/05/2023 |
| Time | 03:06 PM |
| Location | |
| Latitude | 42.94778583 |
| Longitude | -75.73393733 |
| Datum | NAD83/2011 |
| Investigator(s) | AL ME |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | No abnormal flow conditions at time of survey. Stream is fed by multiple wetland features, one to the west, and one to the north. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | Stream 26-ST010 enters the Study area from the north, connects to a large wetland complex and continues flowing south until it exits the project area. No apparent influence besides nearby ATV trail. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | |
| Undercut Bank | Present |
| Undercut Bank Indicator Location | b |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | Present |
| Shelving Indicator Location | x |
| Shelf at top of bank | |
| Natural Levee | |

| | |
|---|---|
| Man-made Berms or Levees | |
| Other Berms Description | |
| Channel bar | Present |
| Channel Bar Indicator Location | b |
| Shelving (berms) on bar | |
| Unvegetated | |
| Vegetation transition (go to veg. indicators) | Present |
| Vegetation Transition Indicator Location | x |
| Sediment transition (go to sed. indicators) | |
| Upper limit of deposition on bar: | |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |
| **Sediment Indicators** | |
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | |
| **Vegetation Indicators** | |
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| Vegetation Change From | vegetation absent |
| Vegetation Change To | forbs |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |
| **Ancillary Indicators** | |
| Wracking/presence of organic litter | Present |
| Wracking Indicator Location | x |
| Presence of large wood | Present |
| Presence of Large Wood Indicator Location | x |
| Leaf litter disturbed or washed away | |

| | |
|---|---|
| Water staining | |
| Weathered clasts or bedrock | |
| Other observed indicators? | No |

## Step 4: Additional Information

| | |
|---|---|
| Is additional information needed to support this determination? | No |

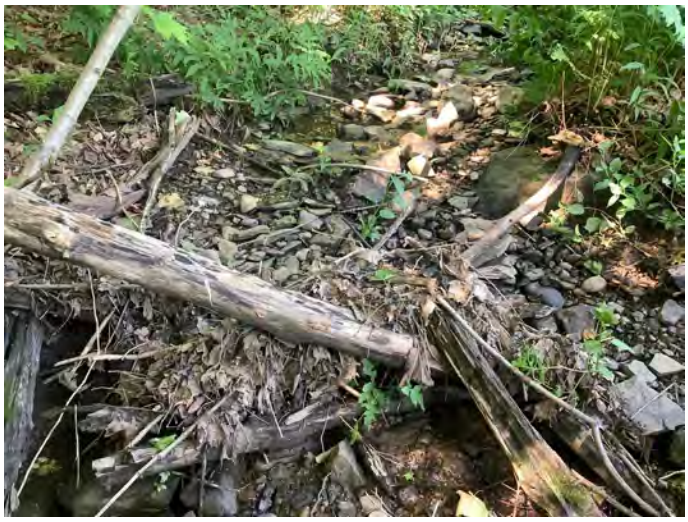
## Step 5: Rationale

| | |
|---|---|
| Describe rationale for location of OHWM | Break in slope, shelving, change in vegetation type from absent to forbs, and presence of large woody debris were all observed at the streams OHWM. |
| Additional observations or notes | |

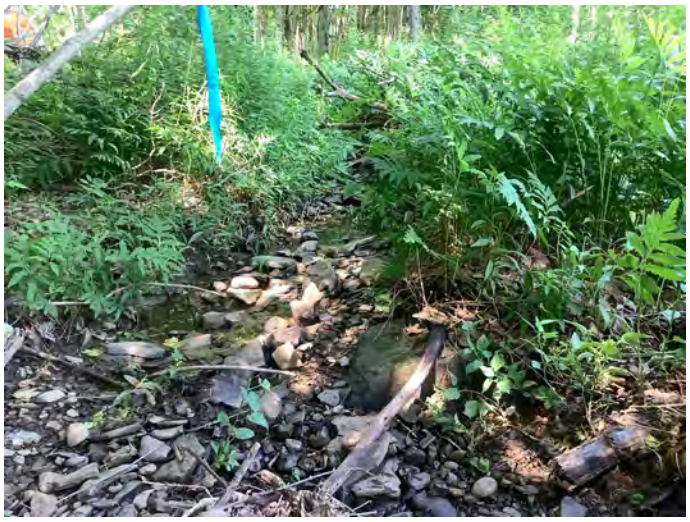
## Photos

| | |
|---|---|
| Photo log attached? | Yes |

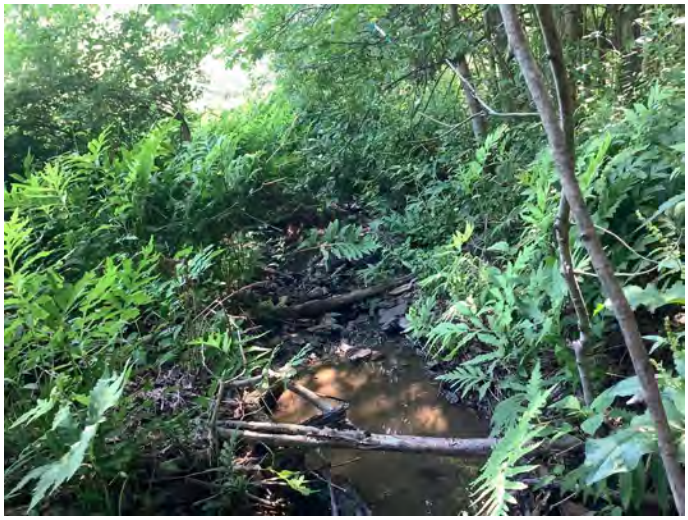
Photos



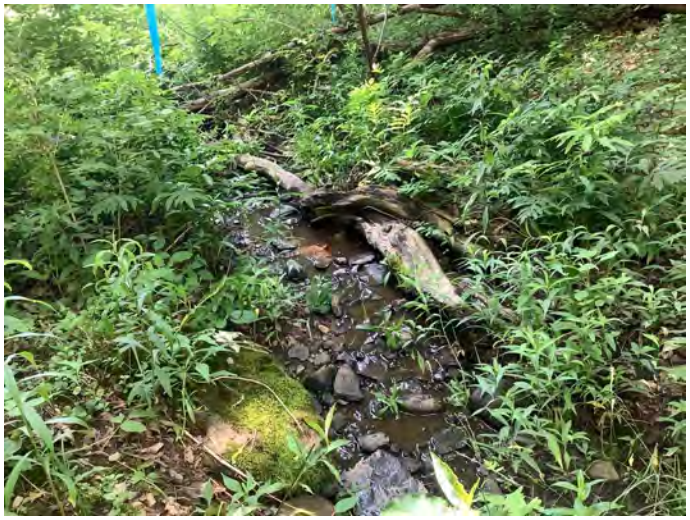
View of significant wracking and large woody debris observed at the stream OHWM.



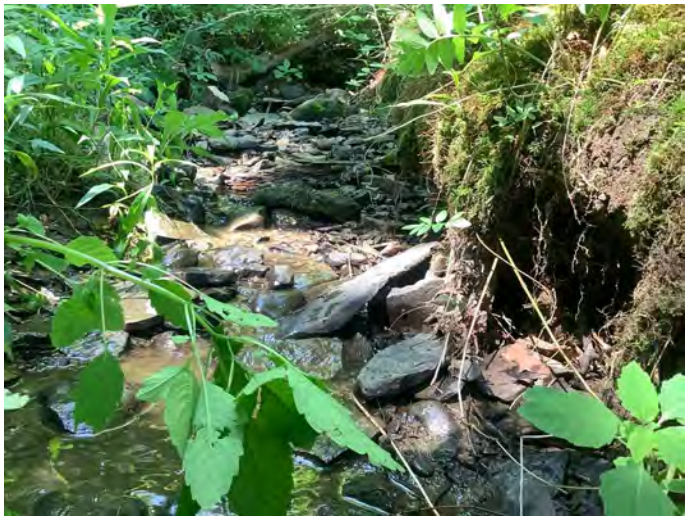
View of change in vegetation type and density from absent to forbs below the OHWM, change in particle size distribution below the OHWM and break in slope at the OHWM of the stream.



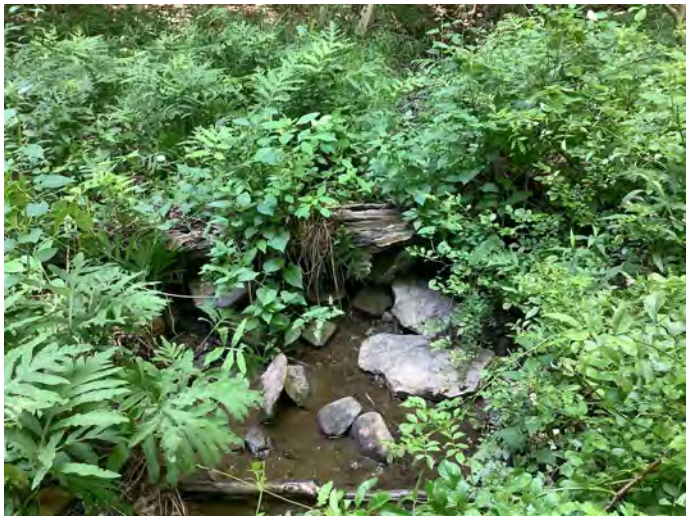
View of change in vegetation type and density, and break in slope within stream bed.



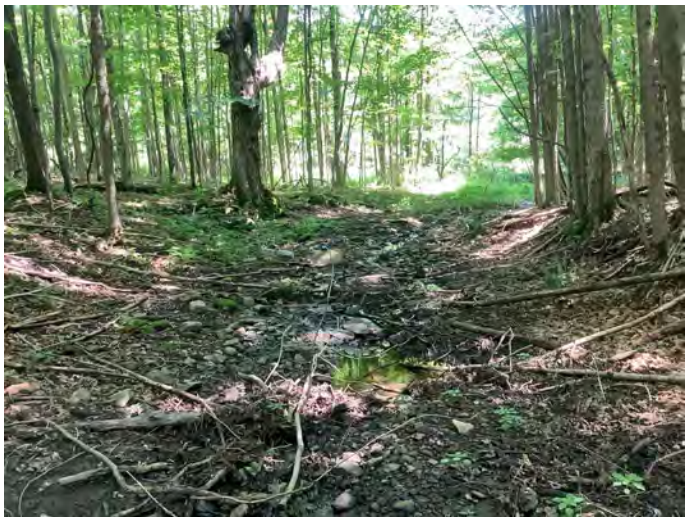
View of large woody debris, change in particle size distribution and change in vegetation type and density.

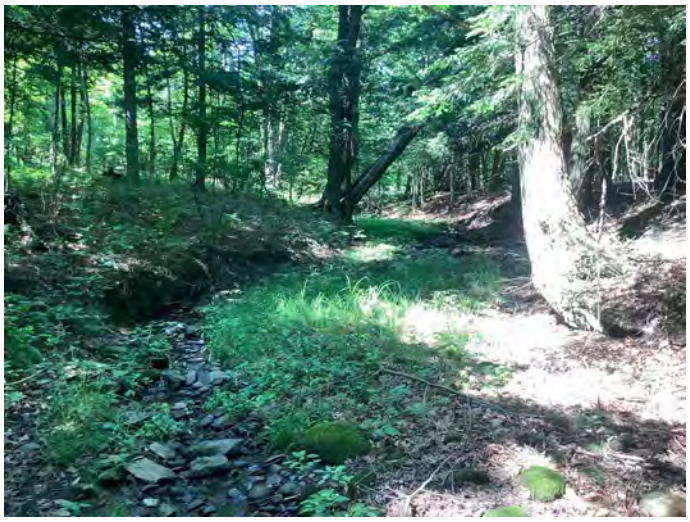


view of undercut bank, above stream OHWM.

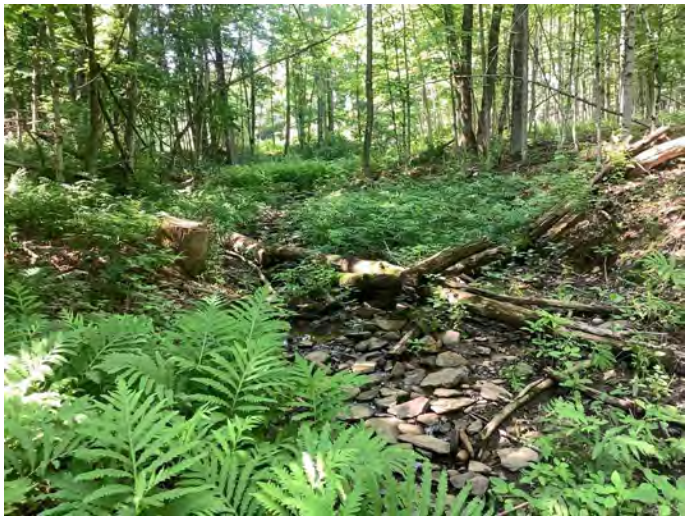


Change in veg density and particle size distribution.

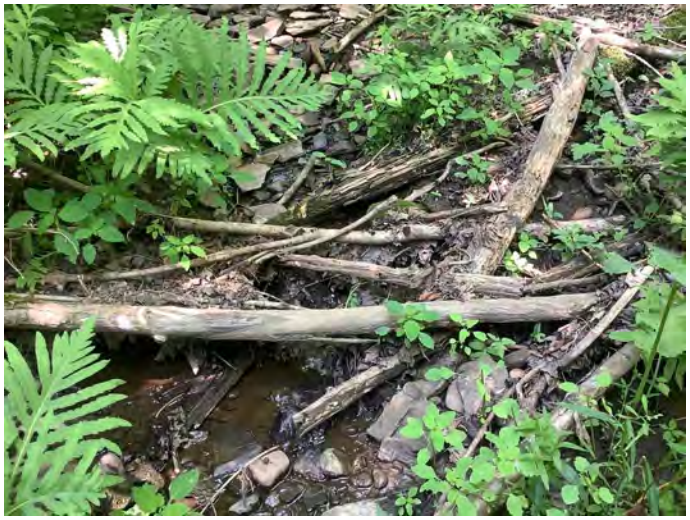




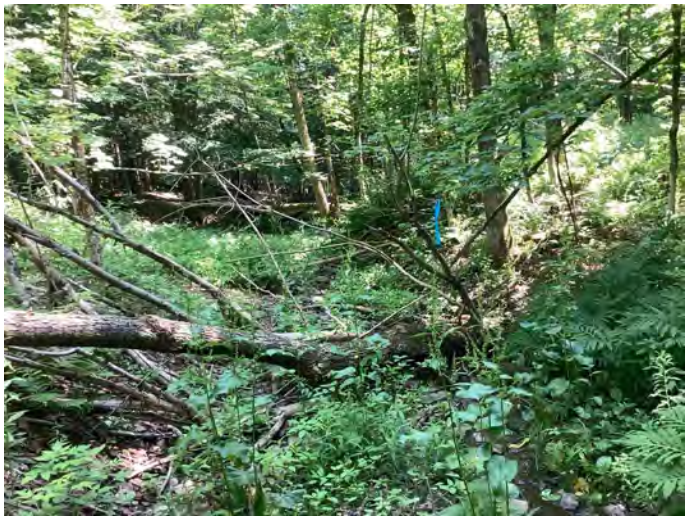
Break in slope, change in vegetation density, change in particle size distribution.



View of large woody debris, change in vegetation type and density



View of woody debris within stream channel.



View of large woody debris within stream channel.

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 365516 |
| Survey Date | 07/06/2023 |
| User | Andrew Leonardi |
| **General Information** | |
| Project ID # | 26-ST011 |
| Site | 21028 Hoffman Falls |
| Date | 07/06/2023 |
| Time | 11:08 AM |
| Location | |
| Latitude | 42.95058133 |
| Longitude | -75.73884017 |
| Datum | NAD83/2011 |
| Investigator(s) | AL ME |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Land surrounding stream is upland forest. normal flow conditions at time of survey. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | Stream drains wetland and travels southwest until it exits the project area. No apparent impact from humans observed at time of survey. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | |
| Undercut Bank | |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |

| Sediment Indicators | |
|---|---|
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | |

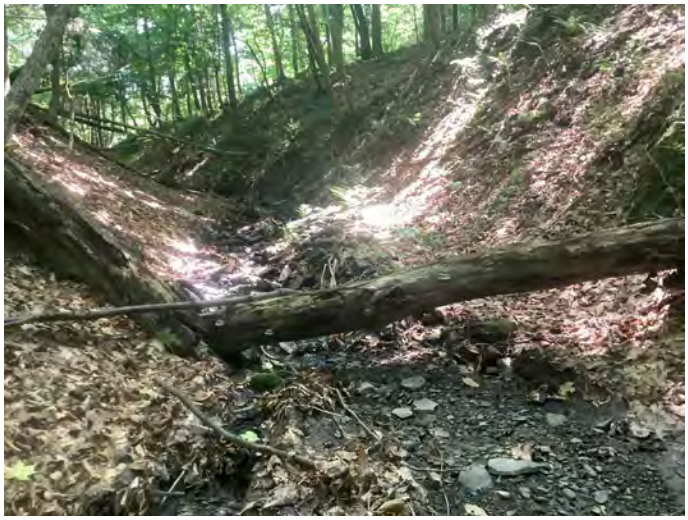
| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |

| Ancillary Indicators | |
|---|---|
| Wracking/presence of organic litter | Present |
| Wracking Indicator Location | x |
| Presence of large wood | Present |
| Presence of Large Wood Indicator Location | x |
| Leaf litter disturbed or washed away | |
| Water staining | Present |
| Water Staining Indicator Location | x |
| Weathered clasts or bedrock | |
| Other observed indicators? | No |

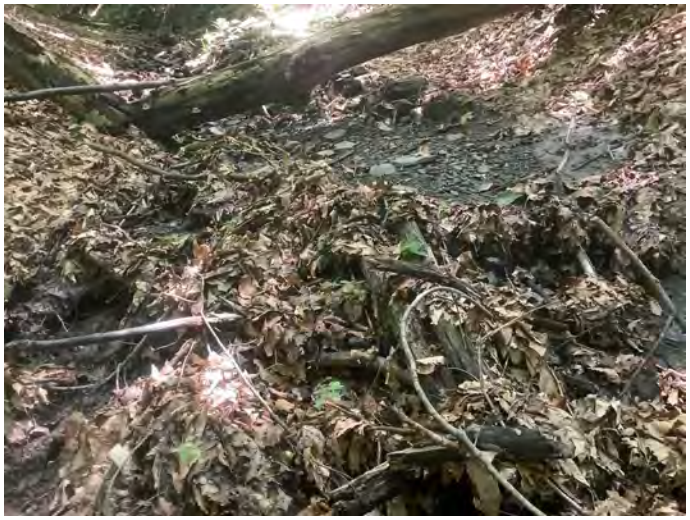
| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | Break in slope, wracking, presence of large woody debris, and water staining were all observed at the streams OHWM. |
| Additional observations or notes | |

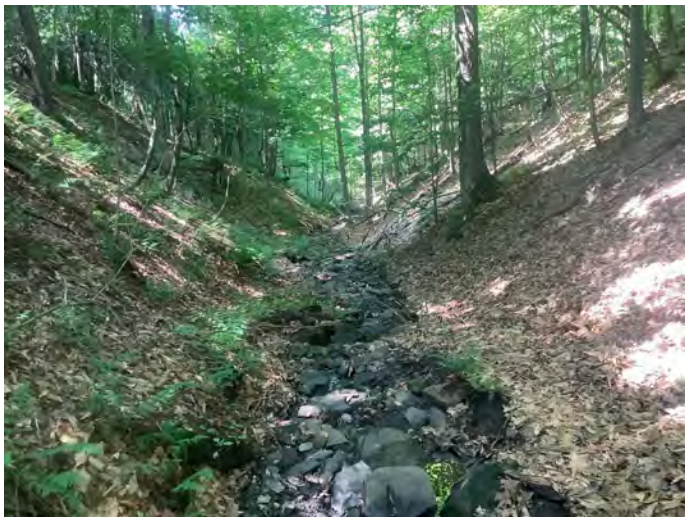
| Photos | |
|---|---|
| Photo log attached? | Yes |
| Photos | |



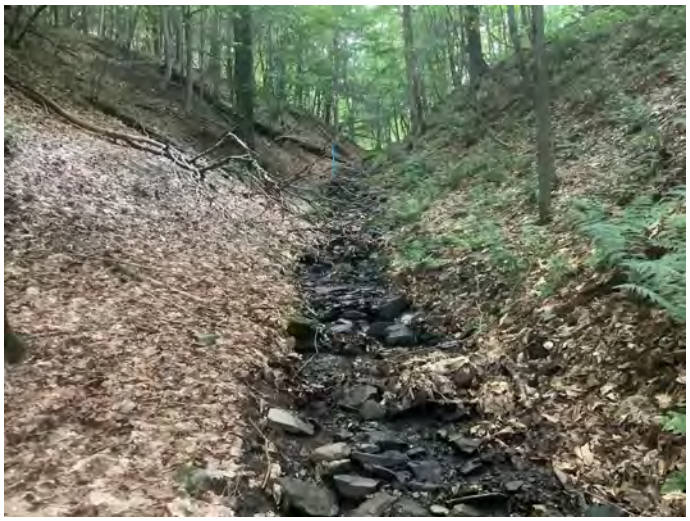
View of large wood located at the stream OHWM.



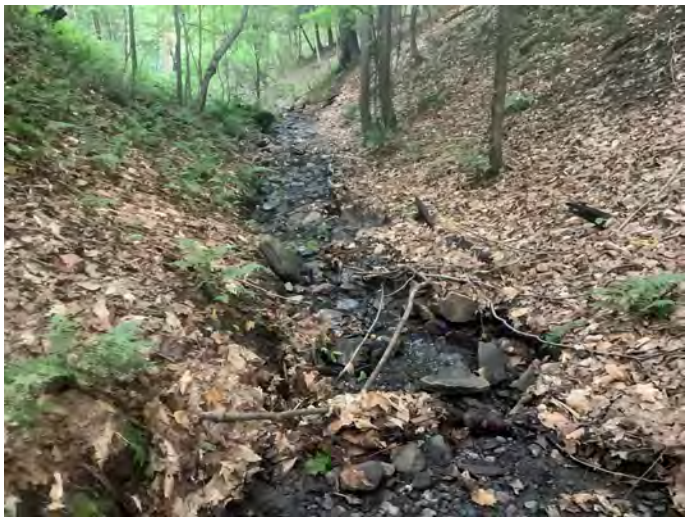
View of wracking at OHWM.



View of water staining, change in particle size distribution and break in slope located the the streams OHWM.



View of water staining, change in particle size distribution and break in slope located the the streams OHWM.



View of wracking within streams OHWM.

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 362798 |
| Survey Date | 06/28/2023 |
| User | Bennett Amberger |
| **General Information** | |
| Project ID # | 33-ST007 |
| Site | 21028 Hoffman Falls |
| Date | 06/28/2023 |
| Time | 11:46 AM |
| Location | |
| Latitude | 42.92279633 |
| Longitude | -75.67907783 |
| Datum | NAD83/2011 |
| Investigator(s) | BA, GH |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | This stream is bordered by deciduous forest. Drains into NWI mapped wetland PEM1E. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | Several excavated pits within stream, fill is deposited within the stream bed. Cloudy day with rain and weak baseflow present. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | Present |
| On the bank Indicator Location | x |
| Undercut Bank | |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | Present |

| | |
|---|---|
| Instream bedforms Indicator Location | b |
| Deposition bedload indicators (e.g., poofs, riffles, steps, etc.) | Present |
| Deposition Bedload Indicator Location | b |
| Bedforms (e.g., imbricated clasts, gravel sheets, etc.) | |
| Erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.) | |
| Secondary channels | |
| **Sediment Indicators** | |
| Soil development | |
| Changes in character of soil | Present |
| Changes in character of soil Indicator Location | b |
| Mudcracks | |
| Changes in particle-sized distribution | Present |
| Changes in particle-sized distribution Indicator Location | x |
| transition from | Silt to gravel |
| Upper limit of sand-sized particles | |
| Silt deposits | |
| **Vegetation Indicators** | |
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| Vegetation Change From | vegetation absent |
| Vegetation Change To | forbs |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | Present |
| Exposed Roots Indicator Location | b |
| **Ancillary Indicators** | |
| Wracking/presence of organic litter | Present |
| Wracking Indicator Location | x |
| Presence of large wood | |

| | |
|---|---|
| Leaf litter disturbed or washed away | |
| Water staining | |
| Weathered clasts or bedrock | |
| Other observed indicators? | No |

## Step 4: Additional Information

| | |
|---|---|
| Is additional information needed to support this determination? | No |

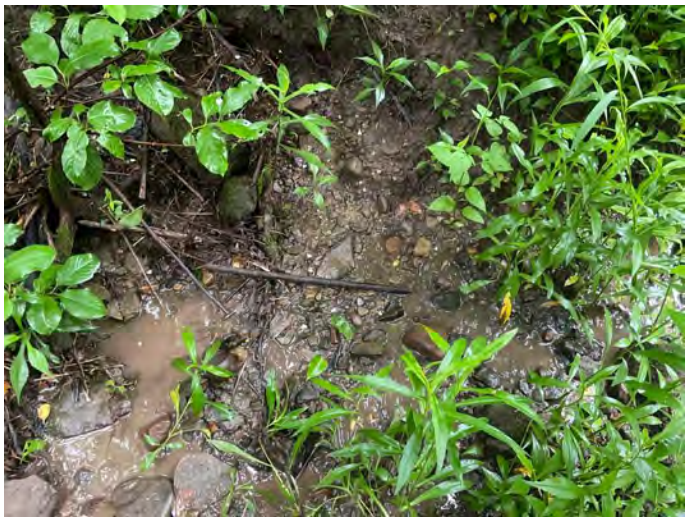
## Step 5: Rationale

| | |
|---|---|
| Describe rationale for location of OHWM | Break in slope along the bank, changes in particle size (gravel to silt), transition from absent vegetation to graminoids, and wracking occur at OHWM throughout entirety of stream. Additionally, exposed roots, soil characteristic changes, instream bedforms, and bedload deposition occurs below the OHWM. |
| Additional observations or notes | |

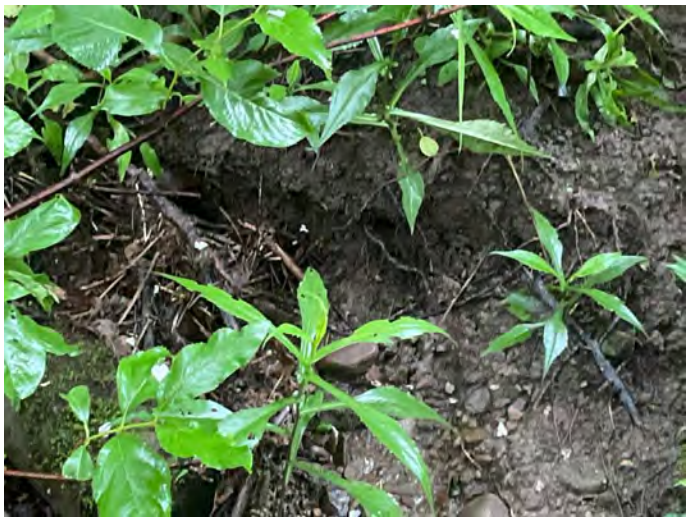
## Photos

| | |
|---|---|
| Photo log attached? | Yes |

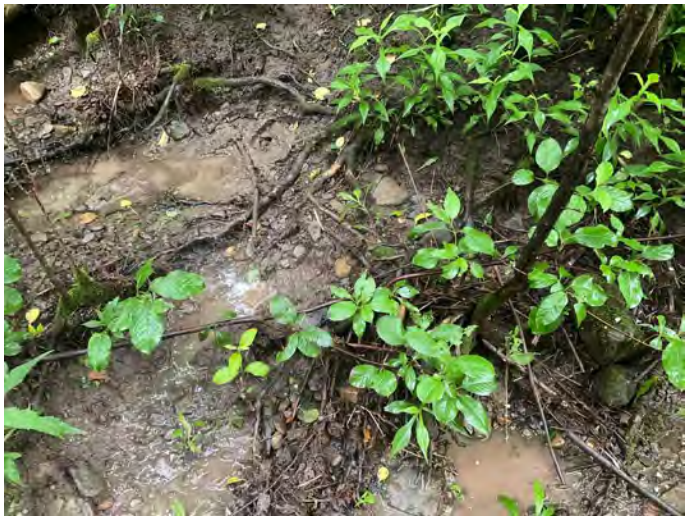
Photos



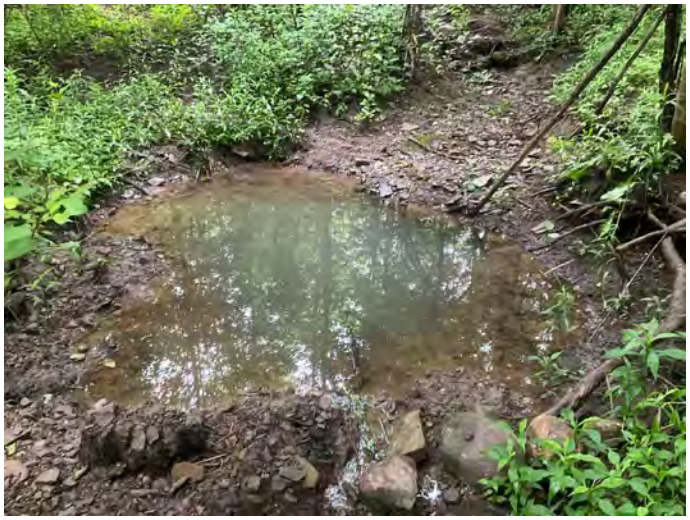
Stream substrate with absent vegetation transitioning to forbs.



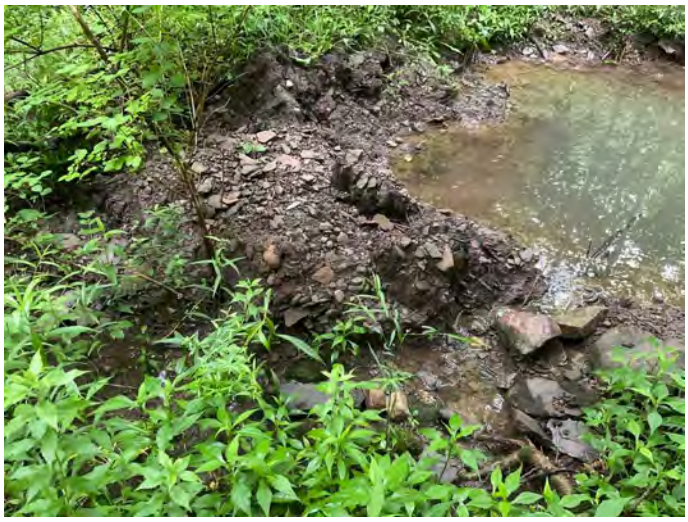
Exposed roots within the stream bank.



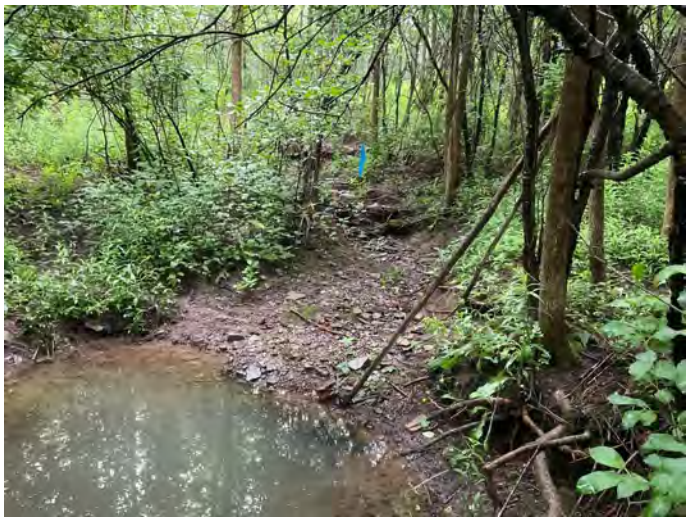
Wracking of organic material and exposed roots.



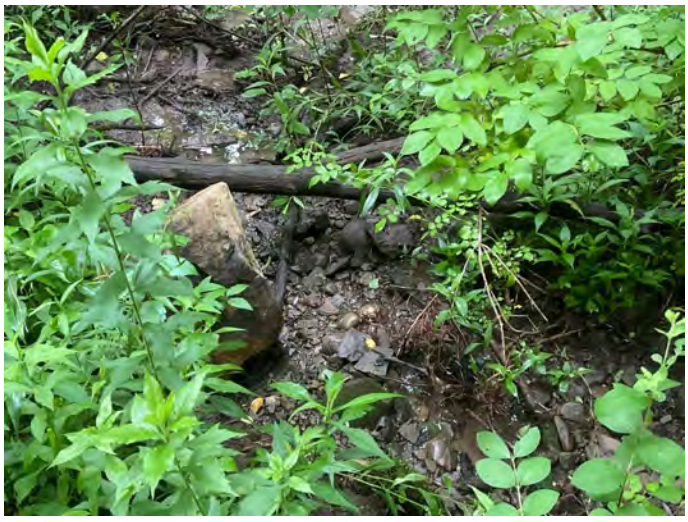
Upstream photograph, with deep excavated pool.



Outflow from excavated portion of stream.



Upstream photograph, with break in slope present.



Vegetation transition present within stream bed.

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 362916 |
| Survey Date | 06/28/2023 |
| User | Bennett Amberger |
| **General Information** | |
| Project ID # | 33-ST008 |
| Site | 21028 Hoffman Falls |
| Date | 06/28/2023 |
| Time | 02:57 PM |
| Location | |
| Latitude | 42.93873 |
| Longitude | -75.71191967 |
| Datum | NAD83/2011 |
| Investigator(s) | BA, GH |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | No state mapped stream present, adjacent land use is agricultural. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | At one point stream was ditched, not recent digging. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | Present |
| On the bank Indicator Location | x |
| Undercut Bank | |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | Present |
| Shelving Indicator Location | a |
| Shelf at top of bank | Present |
| Shelf at top of bank Indicator Location | a |

| | |
|---|---|
| Natural Levee | |
| Man-made Berms or Levees | Present |
| Man-made berms or levees Indicator Location | a |
| Other Berms Description | |
| Channel bar | Present |
| Channel Bar Indicator Location | x |
| Shelving (berms) on bar | Present |
| Shelving on bar Indicator Location | x |
| Unvegetated | Present |
| Unvegetated Indicator Location | x |
| Vegetation transition (go to veg. indicators) | |
| Sediment transition (go to sed. indicators) | |
| Upper limit of deposition on bar: | |
| Instream bedforms and other bedload transport evidence | Present |
| Instream bedforms Indicator Location | x |
| Deposition bedload indicators (e.g., poofs, riffles, steps, etc.) | Present |
| Deposition Bedload Indicator Location | b |
| Bedforms (e.g., imbricated clasts, gravel sheets, etc.) | |
| Erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.) | |
| Secondary channels | |
| **Sediment Indicators** | |
| Soil development | |
| Changes in character of soil | Present |
| Changes in character of soil Indicator Location | a |
| Mudcracks | |
| Changes in particle-sized distribution | Present |
| Changes in particle-sized distribution Indicator Location | b |

| | |
|---|---|
| transition from | Cobble to gravel |
| Upper limit of sand-sized particles | |
| Silt deposits | Present |

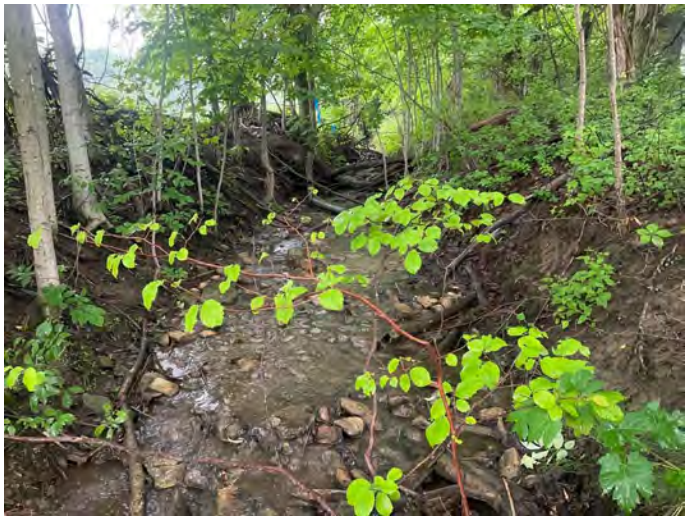
| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| Vegetation Change From | vegetation absent |
| Vegetation Change To | deciduous trees |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | Present |
| Exposed Roots Indicator Location | x |

| Ancillary Indicators | |
|---|---|
| Wracking/presence of organic litter | Present |
| Wracking Indicator Location | x |
| Presence of large wood | Present |
| Presence of Large Wood Indicator Location | a |
| Leaf litter disturbed or washed away | Present |
| Leaf Litter Indicator Location | x |
| Water staining | |
| Weathered clasts or bedrock | |
| Other observed indicators? | No |

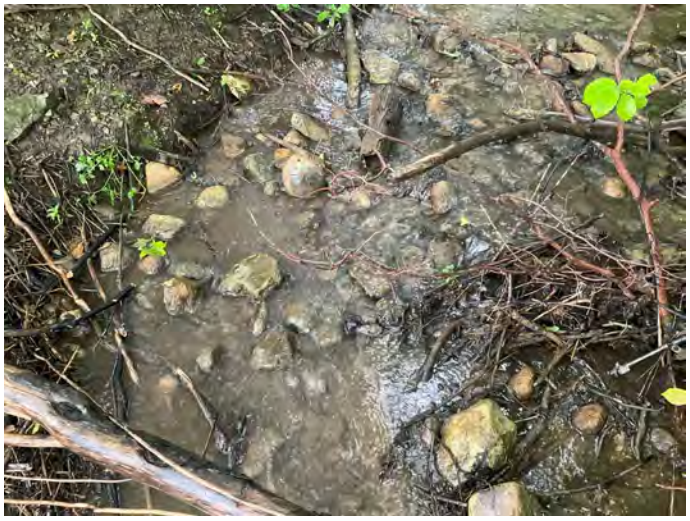
| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | Break in slope along the bank, channel bar with shelving, instream bedforms, vegetation absent to deciduous trees, exposed roots, wracking, and disturbed leaf litter all present at OHWM. Additionally, shelving at the top of the bank, presence of large wood, and a manmade berm appear above OHWM with bedload deposition and changes in particle size appearing below the OHWM. |
| Additional observations or notes | |

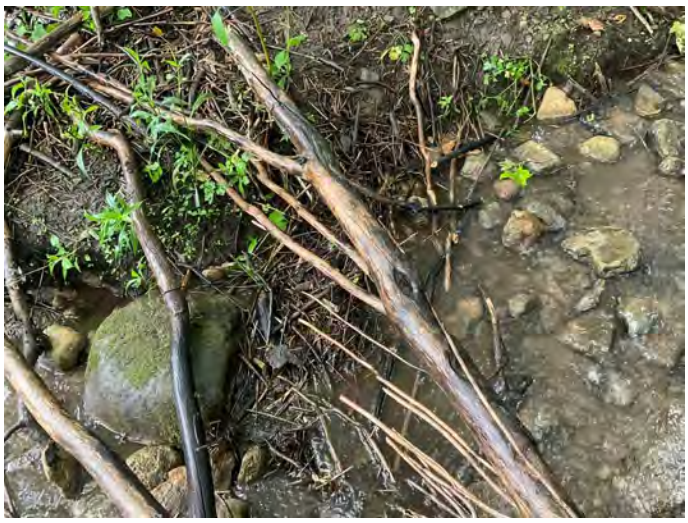
| Photos | |
|---|---|
| Photo log attached? | Yes |



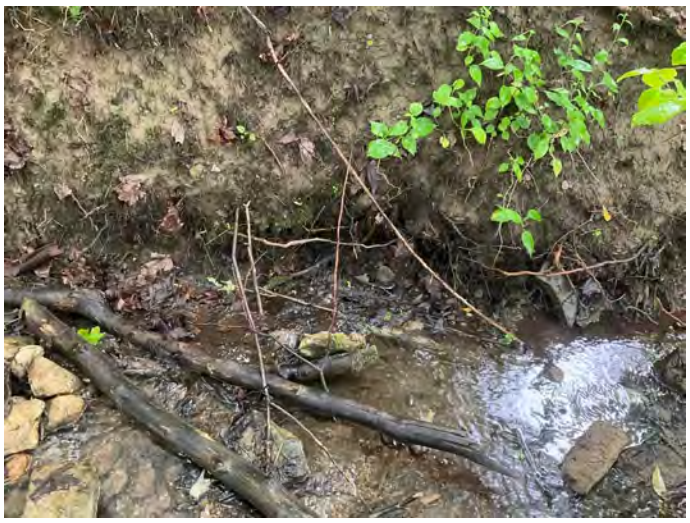
Indicators represented in this photo include a break in slope on the bank, shelving within the stream, instream bedforms (riffles), the presence of large wood, and disturbed leaf litter.



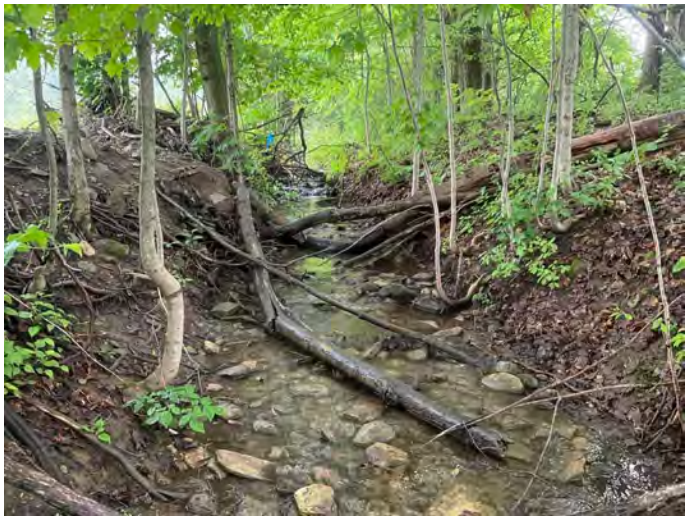
Indicators represented in this photo include changes in particle size distribution, wracking, exposed fibrous roots, disturbed leaf litter, and a break in slope on the bank.



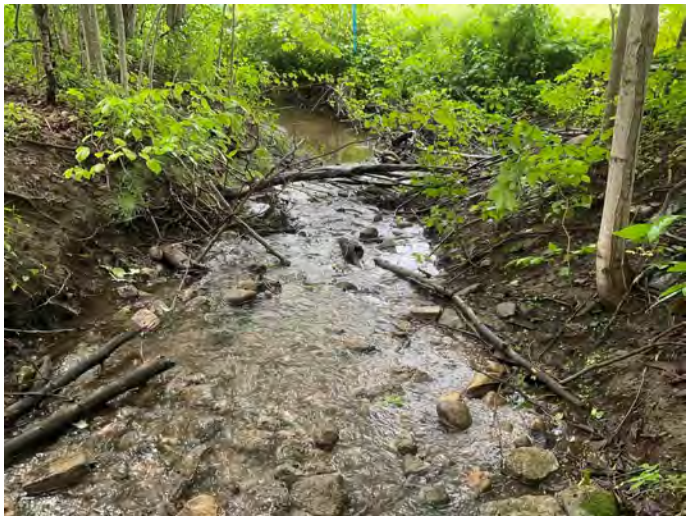
Indicators represented in this photo include changes in particle size distribution, wracking, exposed fibrous roots, disturbed leaf litter, and a break in slope on the bank.



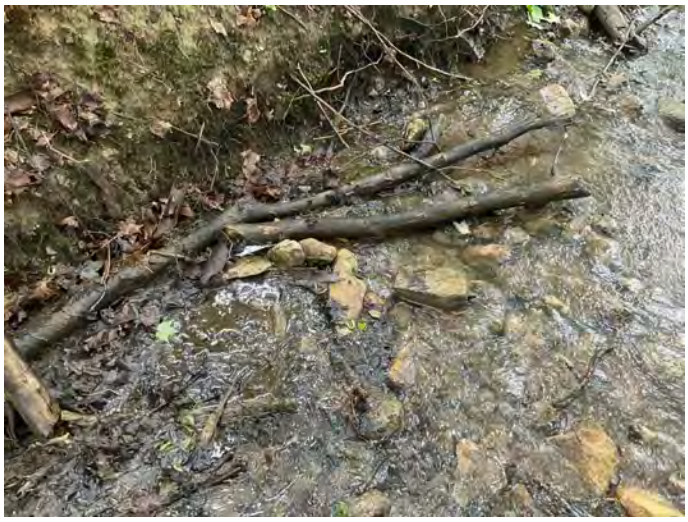
Indicators represented in this photo include changes in particle size distribution, wracking, disturbed leaf litter, a break in slope on the bank, and the manmade berm.



Indicators represented in this photo include a break in slope on the bank, shelving within the stream, instream bedforms (riffles), the presence of large wood, and disturbed leaf litter.



Indicators represented in this photo include a break in slope on the bank, shelving within the stream, instream bedforms (riffles), the presence of large wood, exposed fibrous roots, and disturbed leaf litter.



Indicators represented in this photo include a break in slope on the bank, disturbed leaf litter, changes in particle size distribution, exposed fibrous roots, and riffles.

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 367723 |
| Survey Date | 07/05/2023 |
| User | Bennett Amberger |
| **General Information** | |
| Project ID # | 33-ST010 |
| Site | 21028 Hoffman Falls |
| Date | 07/05/2023 |
| Time | 10:13 AM |
| Location | |
| Latitude | 42.94061933 |
| Longitude | -75.71194033 |
| Datum | NAD83/2011 |
| Investigator(s) | BA GH |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Stream corresponds to NYSDEC mapped class C(T) stream. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | Flows through active ag field and large man made culvert that is failing in the center |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | |
| Undercut Bank | |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | Present |
| Shelving Indicator Location | x |
| Shelf at top of bank | |
| Natural Levee | |
| Man-made Berms or Levees | Present |
| Man-made berms or levees Indicator Location | a |

| | |
|---|---|
| Other Berms Description | |
| Channel bar | Present |
| Channel Bar Indicator Location | b |
| Shelving (berms) on bar | |
| Unvegetated | Present |
| Unvegetated Indicator Location | x |
| Vegetation transition (go to veg. indicators) | Present |
| Vegetation Transition Indicator Location | x |
| Sediment transition (go to sed. indicators) | Present |
| Sediment Transition Indicator Location | x |
| Upper limit of deposition on bar: | |
| Instream bedforms and other bedload transport evidence | Present |
| Instream bedforms Indicator Location | b |
| Deposition bedload indicators (e.g., poofs, riffles, steps, etc.) | Present |
| Deposition Bedload Indicator Location | b |
| Bedforms (e.g., imbricated clasts, gravel sheets, etc.) | |
| Erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.) | |
| Secondary channels | Present |
| Secondary Channels Indicator Location | x |
| **Sediment Indicators** | |
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | Present |
| Changes in particle-sized distribution Indicator Location | b |
| transition from | Cobble to gravel |
| Upper limit of sand-sized | |

| | |
|---|---|
| particles | |
| Silt deposits | |

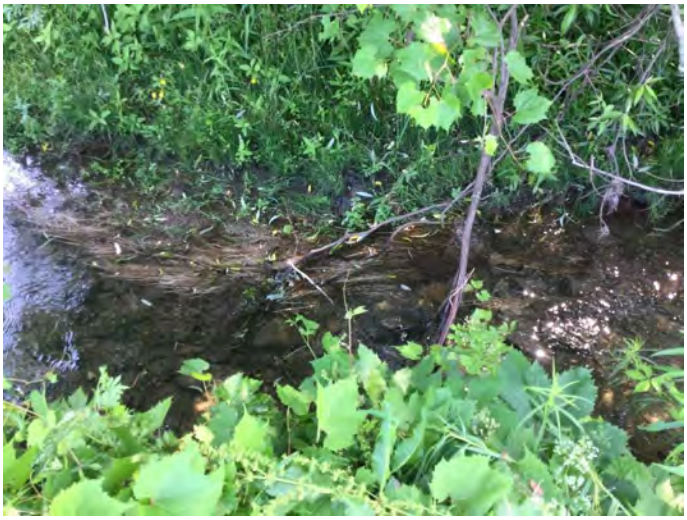
| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| Vegetation Change From | vegetation absent |
| Vegetation Change To | forbs |
| Vegetation matted down and/or bent: | Present |
| Matted/Bent Vegetation Indicator Location | b |
| Exposed roots below intact soil layer: | |

| Ancillary Indicators | |
|---|---|
| Wracking/presence of organic litter | Present |
| Wracking Indicator Location | x |
| Presence of large wood | |
| Leaf litter disturbed or washed away | Present |
| Leaf Litter Indicator Location | b |
| Water staining | |
| Weathered clasts or bedrock | |
| Other observed indicators? | No |

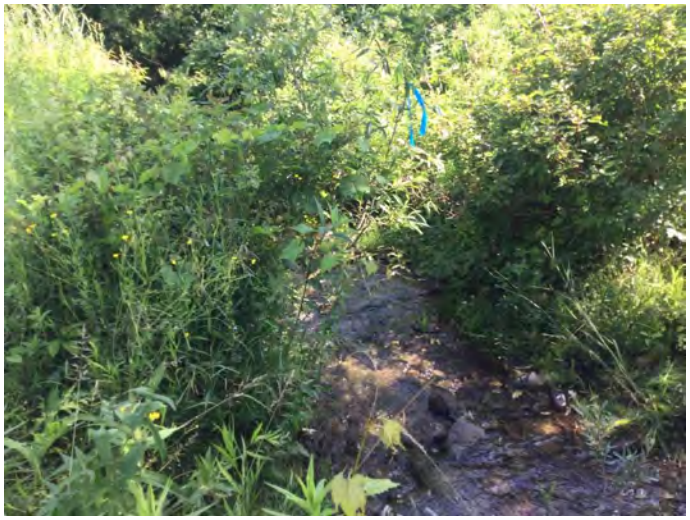
| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | OHWM occurs at the transition in absent vegetation to forbs and woody shrubs and a sharp break in slope. |
| Additional observations or notes | |

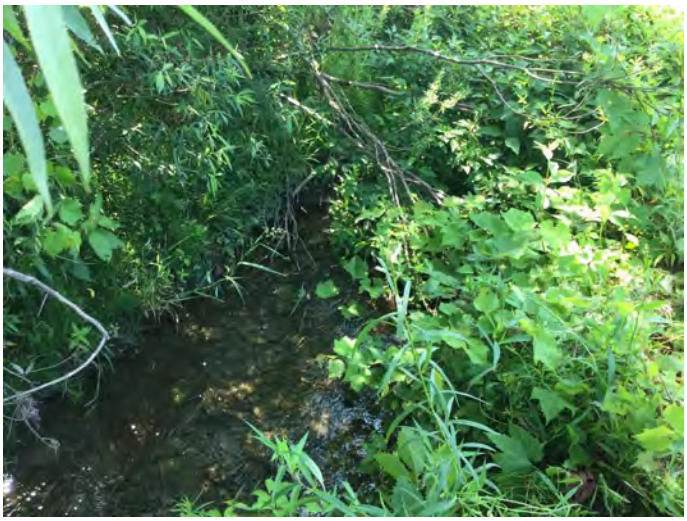
| Photos | |
|---|---|
| Photo log attached? | Yes |
| Photos | |



view across stream showing break in slope



downstream, note the particle size of the substrate



upstream, note the dense vegetation on the stream banks

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 367745 |
| Survey Date | 07/05/2023 |
| User | Bennett Amberger |
| **General Information** | |
| Project ID # | 33-ST011 |
| Site | 21028 Hoffman Falls |
| Date | 07/05/2023 |
| Time | 01:03 PM |
| Location | |
| Latitude | 42.94068117 |
| Longitude | -75.71017067 |
| Datum | NAD83/2011 |
| Investigator(s) | BA, GH |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Adjacent area is active agriculture to the west and forested to the east. Flow during delineation was low to moderate. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | This stream is a maintained drainage feature along an active agriculture field. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | a |
| On the bank | Present |
| On the bank Indicator Location | x |
| Undercut Bank | |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |

| Sediment Indicators | |
|---|---|
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | Present |
| Changes in particle-sized distribution Indicator Location | x |
| transition from | Cobble to loam |
| Upper limit of sand-sized particles | |
| Silt deposits | |

| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| Vegetation Change From | vegetation absent |
| Vegetation Change To | deciduous trees |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |

| Ancillary Indicators |
|---|
| Wracking/presence of organic litter |
| Presence of large wood |
| Leaf litter disturbed or washed away |
| Water staining |
| Weathered clasts or bedrock |
| Other observed indicators? |

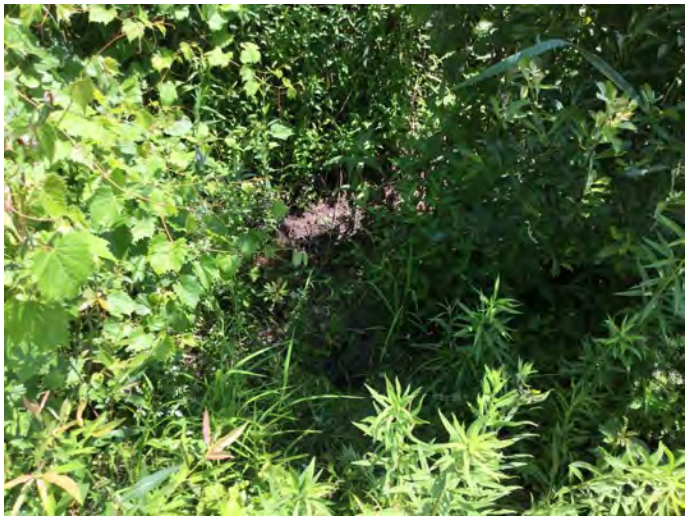
| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | Break in slope on the bank and changes in particle size distribution define the OWHM. This is the location is where the stream banks transition to the stream channel. The stream banks are near vertical. Bank full with is equal to OHWM width. |
| Additional observations or notes | |

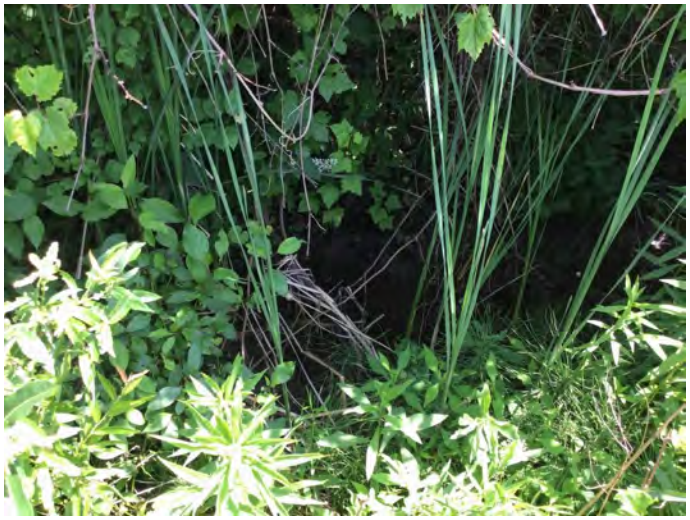
## Photos

| | |
|---|---|
| Photo log attached? | Yes |

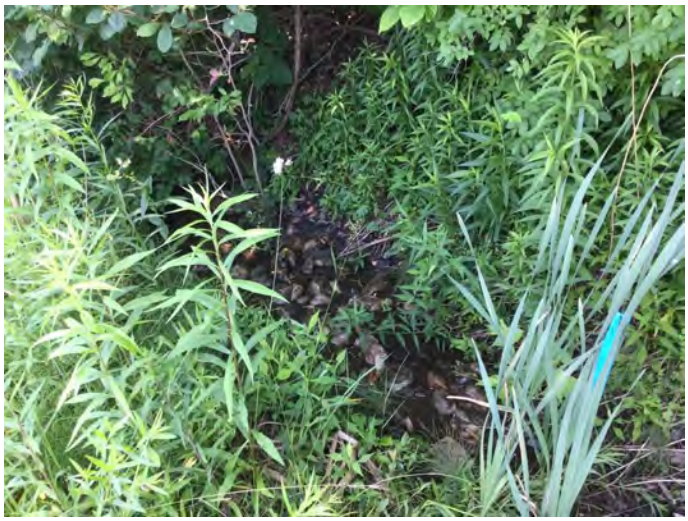
### Photos



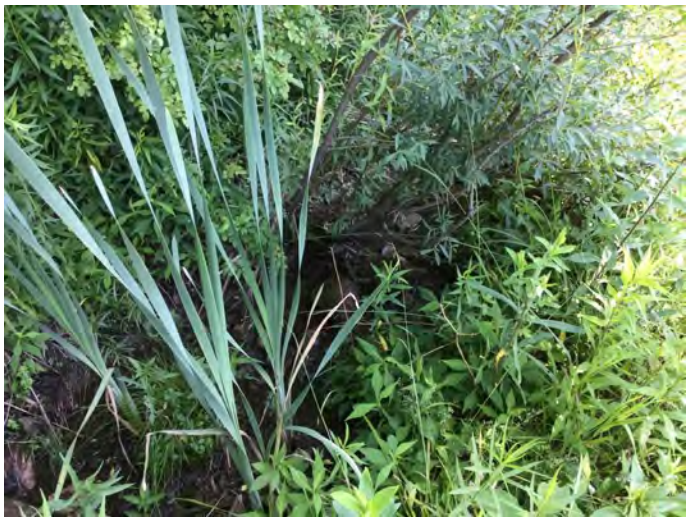
Dense vegetation begins at OHWM.



Dense vegetation begins at OHWM.



Stream substrate photograph.



Stream substrate photograph

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 367792 |
| Survey Date | 07/06/2023 |
| User | Bennett Amberger |
| **General Information** | |
| Project ID # | 33-ST013 |
| Site | 21028 Hoffman Falls |
| Date | 07/06/2023 |
| Time | 09:02 AM |
| Location | |
| Latitude | 42.93955483 |
| Longitude | -75.71363883 |
| Datum | NAD83/2011 |
| Investigator(s) | BA, GH |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Surrounding land use is active row cropland and active pastureland. Baseflow was low during the delineation. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | Stream flow is diverted through multiple culverts. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | |
| Undercut Bank | |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | Present |
| Shelving Indicator Location | b |
| Shelf at top of bank | |
| Natural Levee | |
| Man-made Berms or Levees | |
| Other Berms Description | |
| Channel bar | |

| | |
|---|---|
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |

| Sediment Indicators | |
|---|---|
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | |

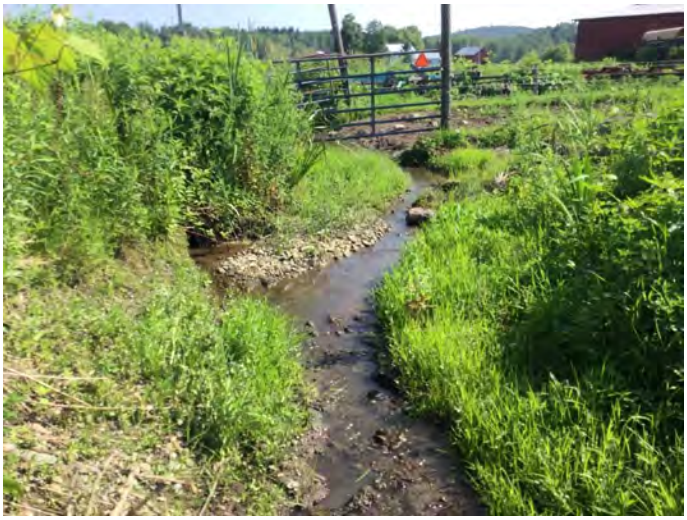
| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | b |
| Vegetation Change From | vegetation absent |
| Vegetation Change To | graminoids |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |

| Ancillary Indicators | |
|---|---|
| Wracking/presence of organic litter | |
| Presence of large wood | |
| Leaf litter disturbed or washed away | |
| Water staining | |
| Weathered clasts or bedrock | |
| Other observed indicators? | No |

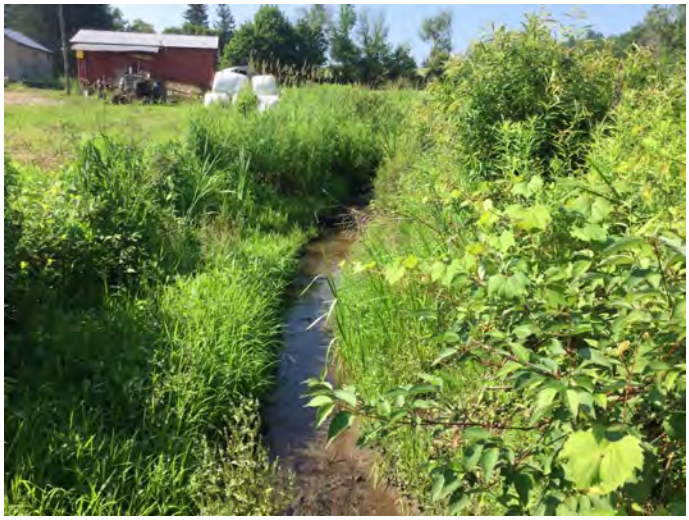
| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | The OHWM occurs at the break in slope and just above the transition in vegetation. |
| Additional observations or notes | |

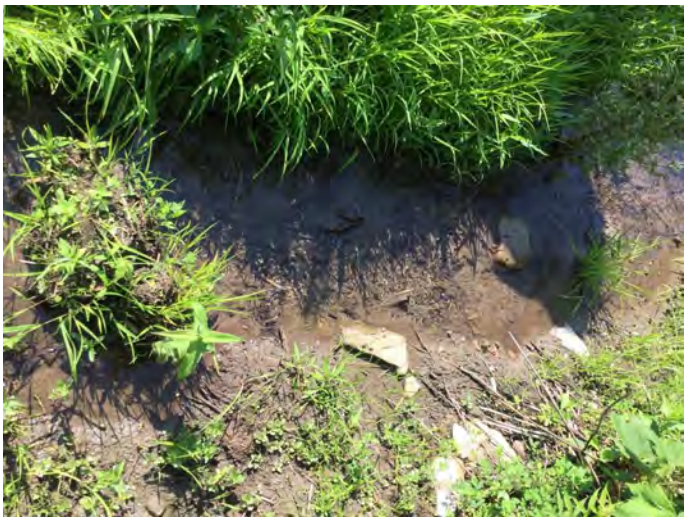
| Photos | |
|---|---|
| Photo log attached? | Yes |
| Photos | |



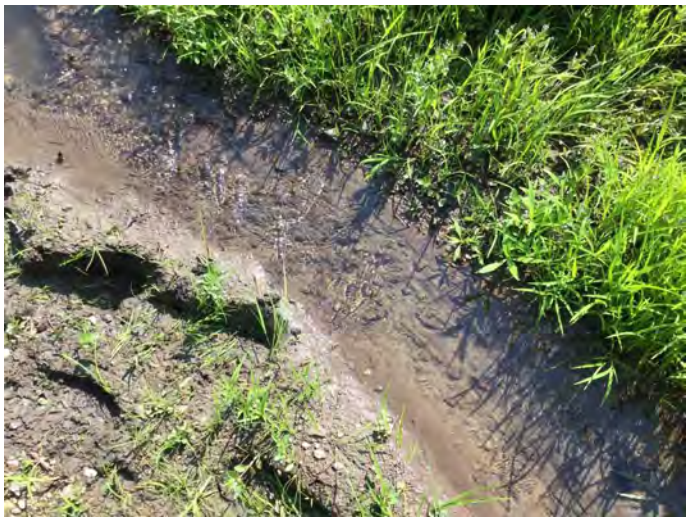
Downstream photo



Upstream photo



Stream substrate



Stream substrate

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 367796 |
| Survey Date | 07/06/2023 |
| User | Bennett Amberger |
| **General Information** | |
| Project ID # | 33-ST014 |
| Site | 21028 Hoffman Falls |
| Date | 07/06/2023 |
| Time | 10:13 AM |
| Location | |
| Latitude | 42.93857 |
| Longitude | -75.71372617 |
| Datum | NAD83/2011 |
| Investigator(s) | BA, GH |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Stream is bordered by active agriculture and farm road. Weak baseflow was observed during the delineation. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | This stream occurs within a man-made ditch alongside farm road and is likely maintained. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | a |
| On the bank | Present |
| On the bank Indicator Location | x |
| Undercut Bank | |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |

| Sediment Indicators | |
|---|---|
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | |

| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| Vegetation Change From | vegetation absent |
| Vegetation Change To | deciduous trees |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | Present |
| Exposed Roots Indicator Location | x |

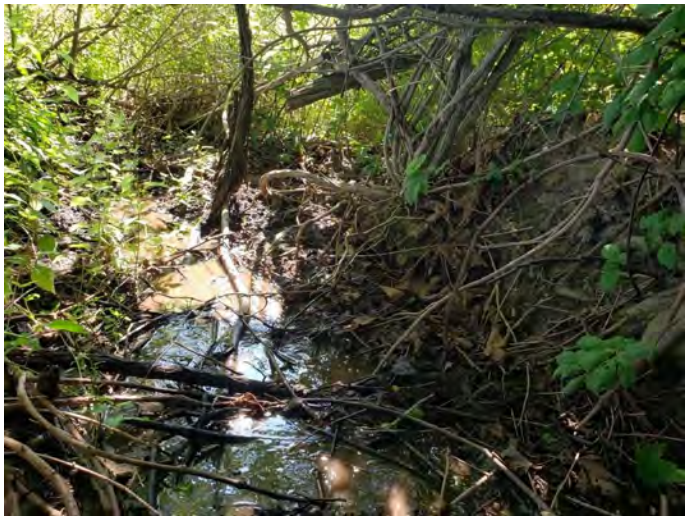
| Ancillary Indicators | |
|---|---|
| Wracking/presence of organic litter | Present |
| Wracking Indicator Location | a |
| Presence of large wood | |
| Leaf litter disturbed or washed away | |
| Water staining | |
| Weathered clasts or bedrock | |
| Other observed indicators? | No |

| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

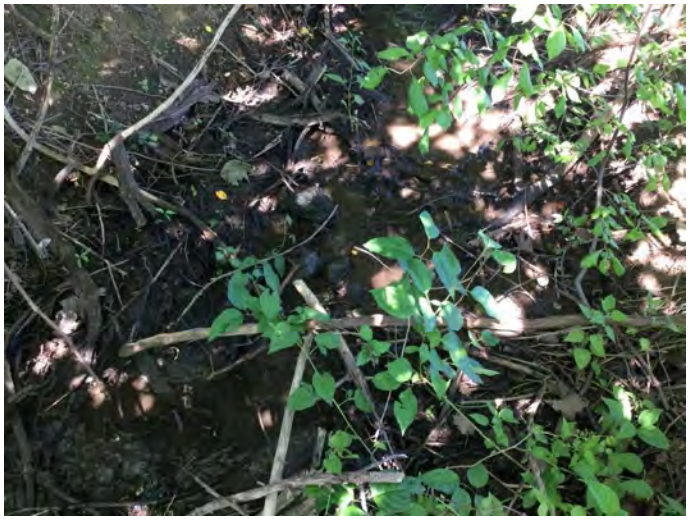
| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | The OHWM is defined by the break in slope on the bank and a transition in vegetation. These indicators were persistent throughout the delineated reach of stream. |
| Additional observations or notes | |

| Photos | |
|---|---|
| Photo log attached? | Yes |

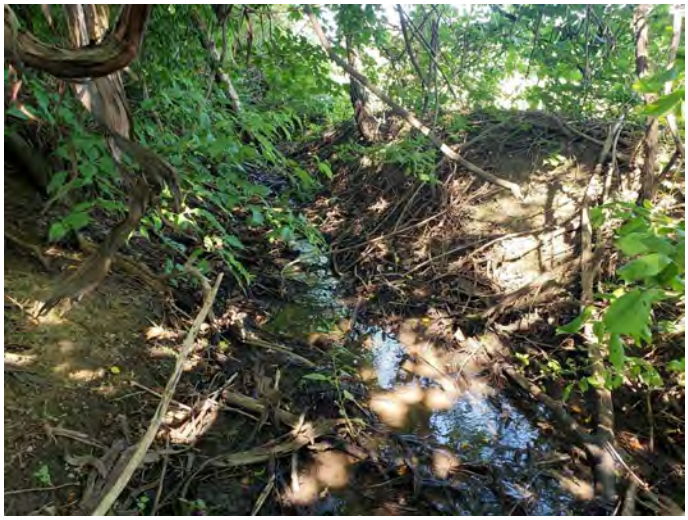
Photos



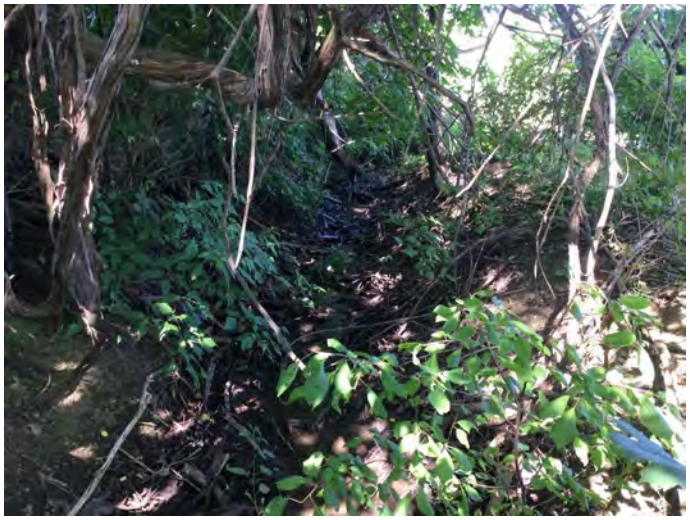
Downstream photograph with break in slope present, and a transition from absent vegetation to deciduous trees.



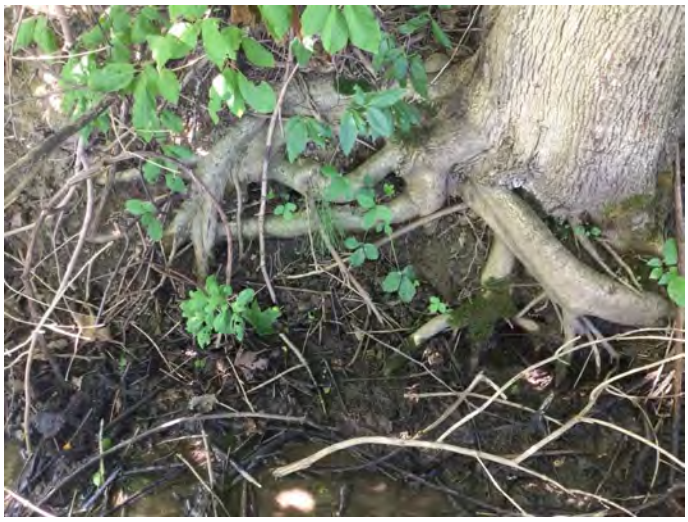
Stream substrate photograph.



Upstream photograph with wracking present on stream banks.



Upstream photograph with wracking present on stream banks.



Exposed roots below intact soil layer.

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 367845 |
| Survey Date | 07/06/2023 |
| User | Bennett Amberger |
| **General Information** | |
| Project ID # | 33-ST015 |
| Site | 21028 Hoffman Falls |
| Date | 07/06/2023 |
| Time | 12:53 PM |
| Location | |
| Latitude | 42.9396115 |
| Longitude | -75.71367717 |
| Datum | NAD83/2011 |
| Investigator(s) | BA, GH |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Surrounding land use is active agriculture and active pastureland. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | This stream flow is diverted through a culvert. Flows east, parallel with gravel farm road. Low baseflow at the time of the survey. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | |
| Undercut Bank | |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |

| Sediment Indicators | |
|---|---|
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | |

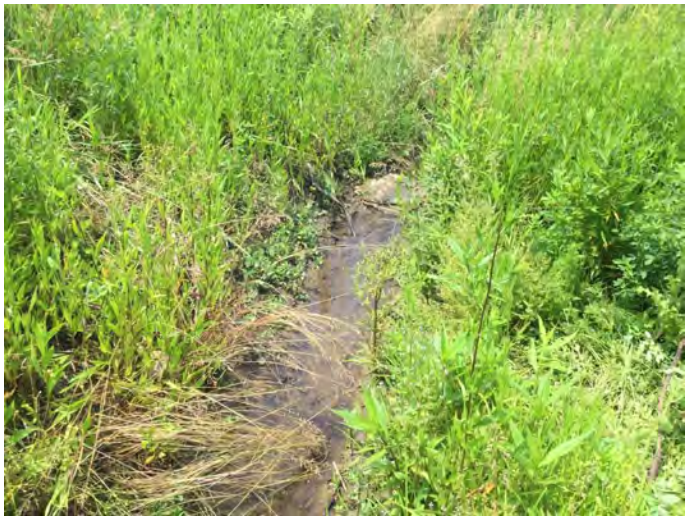
| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| Vegetation Change From | vegetation absent |
| Vegetation Change To | graminoids |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | Present |
| Exposed Roots Indicator Location | x |

| Ancillary Indicators | |
|---|---|
| Wracking/presence of organic litter | |
| Presence of large wood | |
| Leaf litter disturbed or washed away | |
| Water staining | |
| Weathered clasts or bedrock | |
| Other observed indicators? | No |

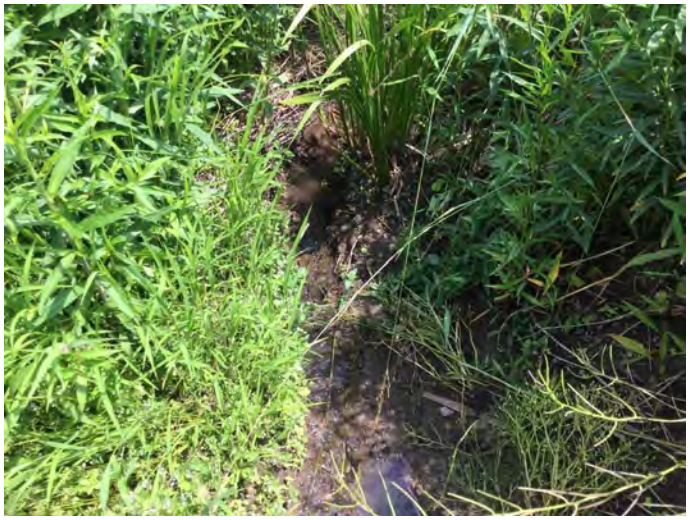
| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | The OHWM occurs at the break in slope from the surrounding area and where vegetation transitions from absent to graminoids. |
| Additional observations or notes | |

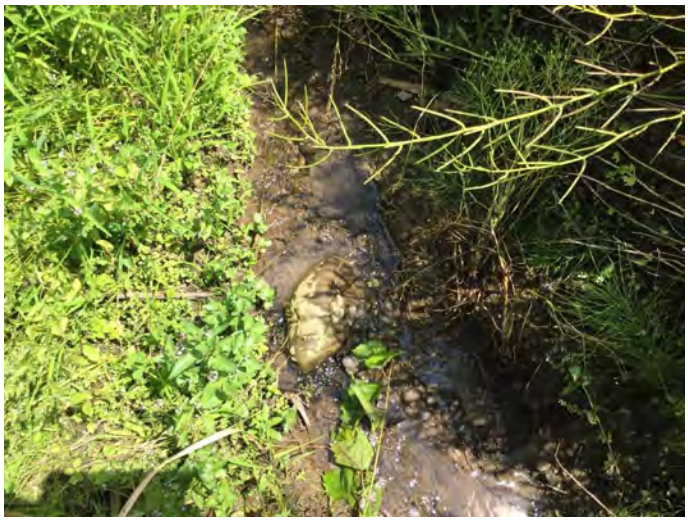
| Photos | |
|---|---|
| Photo log attached? | Yes |
| Photos | |



Upstream photograph



Downstream photograph



Stream substrate.

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 367870 |
| Survey Date | 07/07/2023 |
| User | Bennett Amberger |
| **General Information** | |
| Project ID # | 33-ST016 |
| Site | 21028 Hoffman Falls |
| Date | 07/07/2023 |
| Time | 10:13 AM |
| Location | |
| Latitude | 42.94035217 |
| Longitude | -75.71693833 |
| Datum | NAD83/2011 |
| Investigator(s) | BA, GH |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | No state mapped stream present; however, topography mapping indicates the presence of a channel. Surrounding land use is active pastureland. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | This stream occurs within an active cow pasture. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | |
| Undercut Bank | |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | Present |
| Instream bedforms Indicator Location | b |
| Deposition bedload | Present |

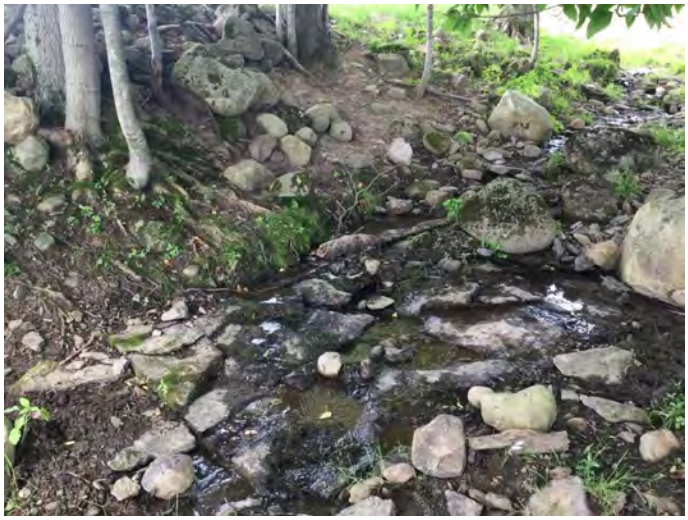
| | |
|---|---|
| indicators (e.g., poofs, riffles, steps, etc.) | |
| Deposition Bedload Indicator Location | b |
| Bedforms (e.g., imbricated clasts, gravel sheets, etc.) | |
| Erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.) | Present |
| Erosional Bedload Indicator Location | b |
| Secondary channels | |
| **Sediment Indicators** | |
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | |
| **Vegetation Indicators** | |
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | b |
| Vegetation Change From | vegetation absent |
| Vegetation Change To | deciduous trees |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | Present |
| Exposed Roots Indicator Location | a |
| **Ancillary Indicators** | |
| Wracking/presence of organic litter | |
| Presence of large wood | |
| Leaf litter disturbed or washed away | |
| Water staining | |
| Weathered clasts or bedrock | Present |
| Weathered clasts or bedrock Indicator Location | b |
| Other observed indicators? | |
| **Step 4: Additional Information** | |
| Is additional information needed to support this | No |

| | |
|---|---|
| determination? | |

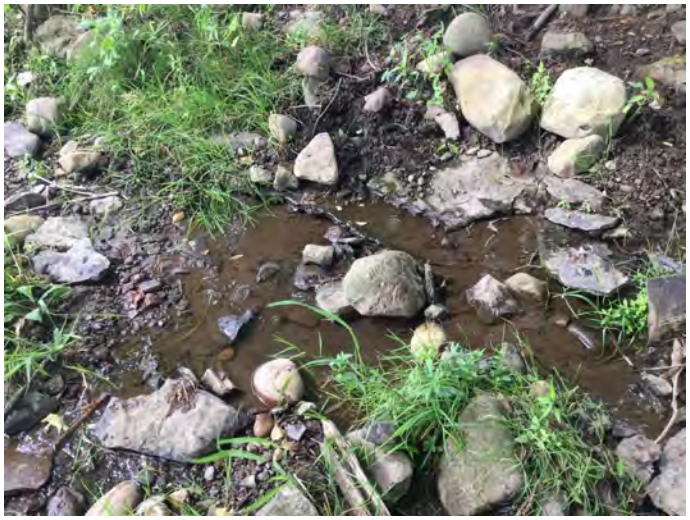
| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | Break in slope was the only indicator consistent along the entirety of stream and used to define the OHWM. |
| Additional observations or notes | |

| Photos | |
|---|---|
| Photo log attached? | Yes |

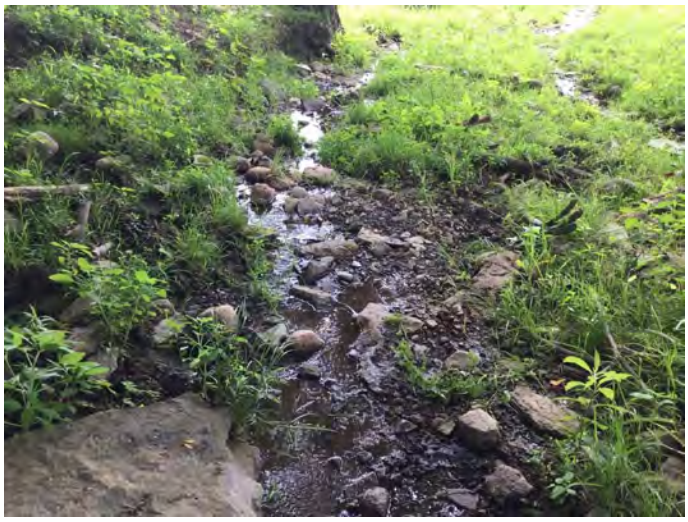
Photos



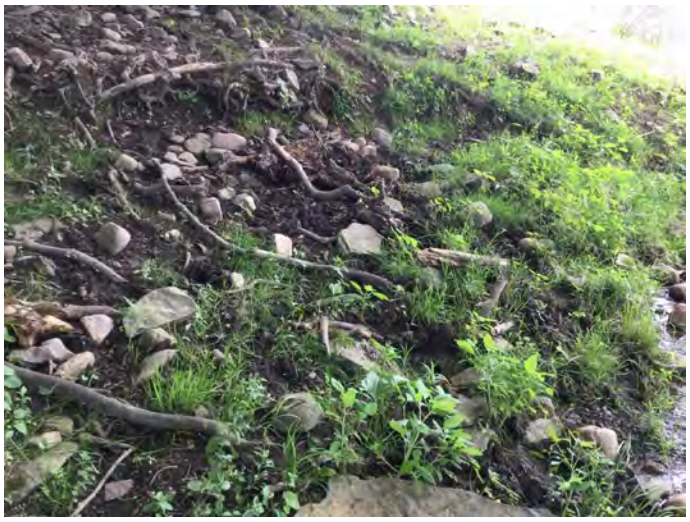
Break in slope clearly visible.



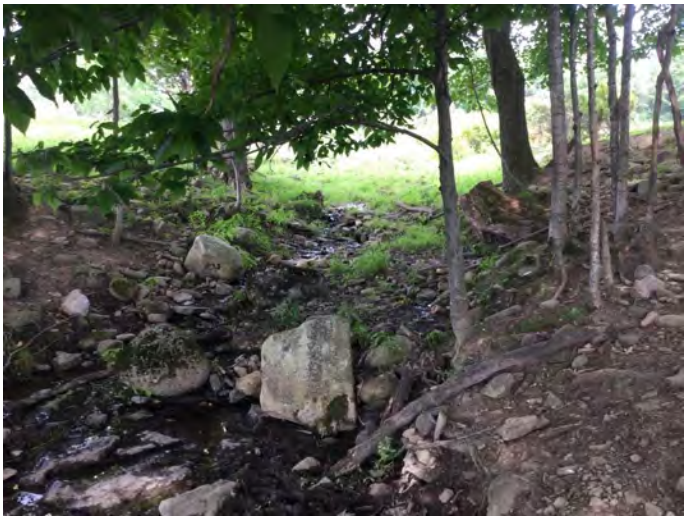
Stream substrate.



Vegetation observed within the streambed, and below the OHWM.



Exposed roots above the OHWM.



Downstream facing photograph.

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 368042 |
| Survey Date | 07/13/2023 |
| User | Bennett Amberger |
| **General Information** | |
| Project ID # | 33-ST017 |
| Site | 21028 Hoffman Falls |
| Date | 07/13/2023 |
| Time | 09:43 AM |
| Location | |
| Latitude | 42.94054867 |
| Longitude | -75.76203317 |
| Datum | NAD83/2011 |
| Investigator(s) | BA GH |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Surrounding land use is active pastureland. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | No sign of man made disturbances that affect flow. No flow was observed during the time of the survey. Drains PEM wetland. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | |
| Undercut Bank | |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |

| Sediment Indicators | |
|---|---|
| Soil development | |
| Changes in character of soil | Present |
| Changes in character of soil Indicator Location | x |
| Mudcracks | |
| Changes in particle-sized distribution | Present |
| Changes in particle-sized distribution Indicator Location | x |
| transition from | Silt to gravel and cobble |
| Upper limit of sand-sized particles | |
| Silt deposits | |

| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| Vegetation Change From | forbs |
| Vegetation Change To | graminoids |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |

| Ancillary Indicators | |
|---|---|
| Wracking/presence of organic litter | |
| Presence of large wood | |
| Leaf litter disturbed or washed away | |
| Water staining | |
| Weathered clasts or bedrock | |
| Other observed indicators? | No |

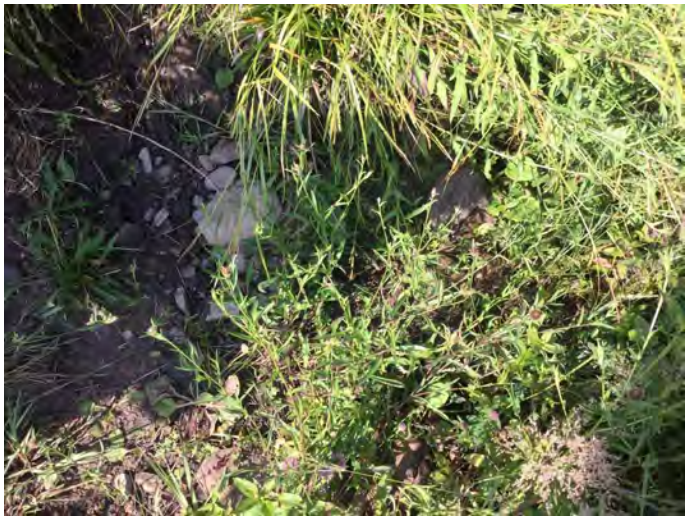
| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | The OHWM occurs at the transition from silt to gravel, break in slope and vegetation density transition. |
| Additional observations or notes | |

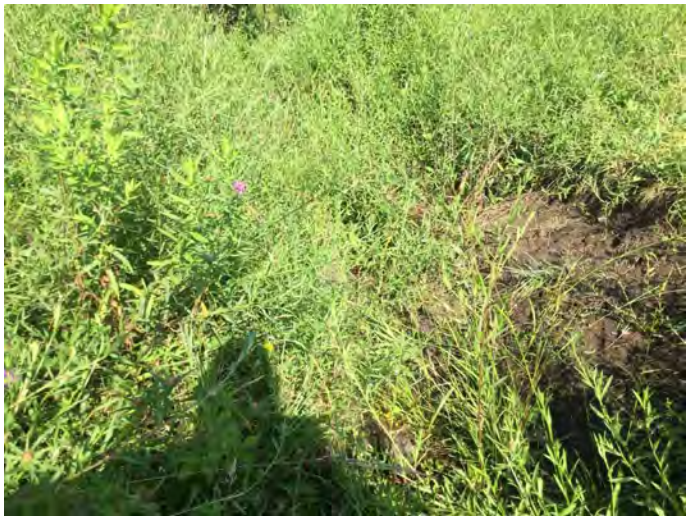
## Photos

| | |
|---|---|
| Photo log attached? | Yes |

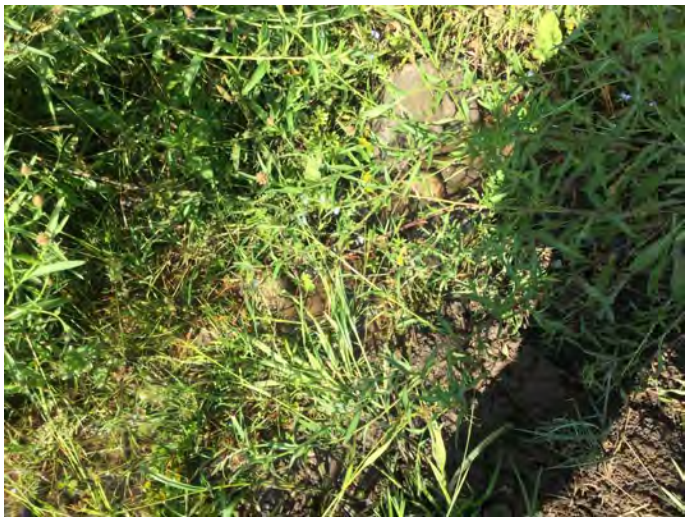
### Photos



Stream substrate photograph



Transition from graminoids to absent vegetation.



Stream substrate.

Stream channel where vegetation present.

| 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1 | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 366233 |
| Survey Date | 07/05/2023 |
| User | Bennett Amberger |
| **General Information** | |
| Project ID # | 66-ST005 |
| Site | 21028 Hoffman Falls |
| Date | 07/05/2023 |
| Time | 02:10 PM |
| Location | |
| Latitude | 42.94294433 |
| Longitude | -75.732497 |
| Datum | NAD83/2011 |
| Investigator(s) | JB, RS |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Topographic mapping indicates the presence of a channel. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | Recent rain, not much flow in intermittent stream. Connects to perennial stream |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | |
| Undercut Bank | Present |
| Undercut Bank Indicator Location | x |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | Present |
| Shelving Indicator Location | x |
| Shelf at top of bank | |
| Natural Levee | |
| Man-made Berms or Levees | |

| | |
|---|---|
| Other Berms Description | |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |

| Sediment Indicators | |
|---|---|
| Soil development | |
| Changes in character of soil | Present |
| Changes in character of soil Indicator Location | x |
| Mudcracks | |
| Changes in particle-sized distribution | |

| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| Vegetation Change From | vegetation absent |
| Vegetation Change To | forbs |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |

| Ancillary Indicators | |
|---|---|
| Wracking/presence of organic litter | Present |
| Wracking Indicator Location | b |
| Presence of large wood | |
| Leaf litter disturbed or washed away | |
| Water staining | |
| Weathered clasts or bedrock | |
| Other observed indicators? | No |

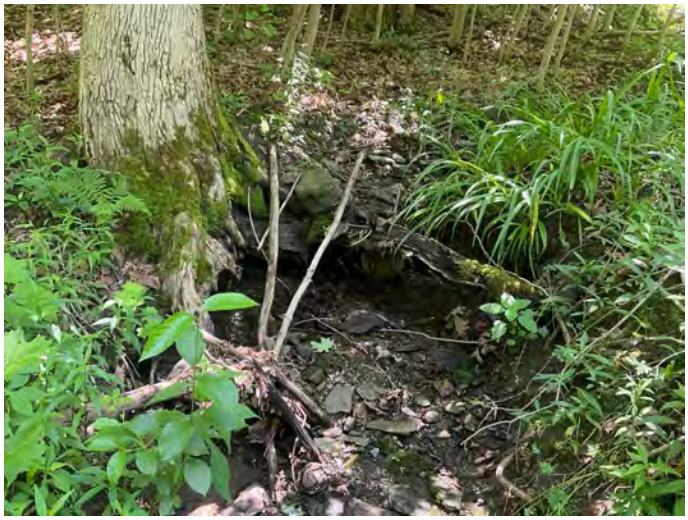
| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | OHWM occurs where shelving, breakin slope, and absent veg to forbs occur. |
| Additional observations or notes | |

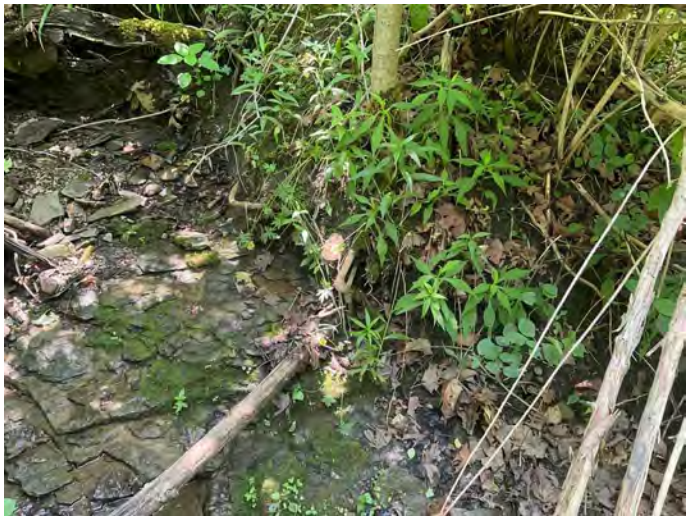
## Photos

| | |
|---|---|
| Photo log attached? | Yes |

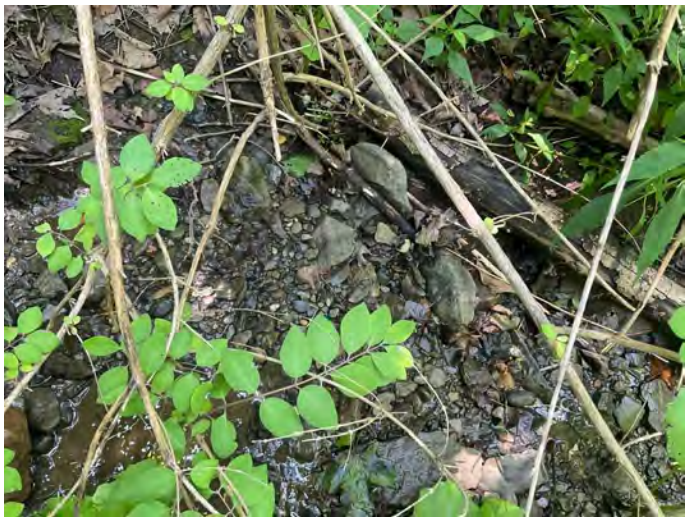
### Photos



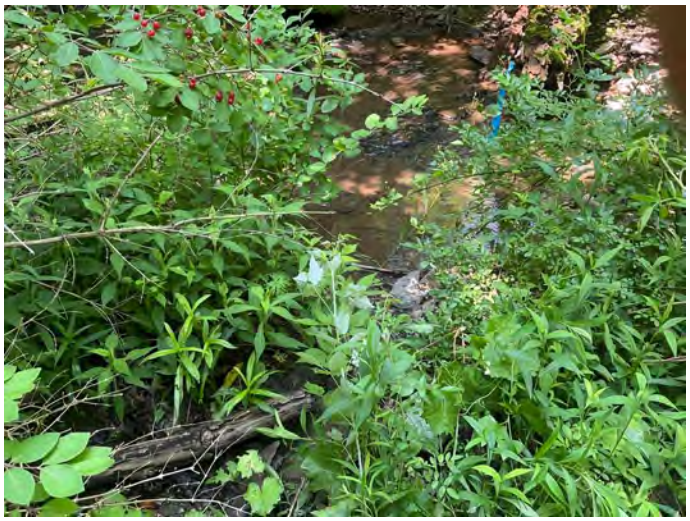
Shelving and upstream



Soil development change from silt to gravel



Substrate gravel



Downstream connects to perennial stream

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 366235 |
| Survey Date | 07/05/2023 |
| User | Bennett Amberger |
| **General Information** | |
| Project ID # | 66-ST006 |
| Site | 21028 Hoffman Falls |
| Date | 07/05/2023 |
| Time | 02:32 PM |
| Location | |
| Latitude | 42.94227667 |
| Longitude | -75.73114533 |
| Datum | NAD83/2011 |
| Investigator(s) | JB, RS |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Stream corresponds to NYSDEC mapped class C(T) stream. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | Stream has very defined channel until it diffuses into wetland 66-W011. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | |
| Undercut Bank | |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | Present |
| Shelving Indicator Location | x |
| Shelf at top of bank | |
| Natural Levee | |
| Man-made Berms or Levees | |
| Other Berms Description | |
| Channel bar | |

| | |
|---|---|
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |
| **Sediment Indicators** | |
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | Present |
| Changes in particle-sized distribution Indicator Location | x |
| transition from | cobble to silt |
| Upper limit of sand-sized particles | |
| Silt deposits | |
| **Vegetation Indicators** | |
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| Vegetation Change From | vegetation absent |
| Vegetation Change To | forbs |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |
| **Ancillary Indicators** | |
| Wracking/presence of organic litter | |
| Presence of large wood | |
| Leaf litter disturbed or washed away | |
| Water staining | |
| Weathered clasts or bedrock | |
| Other observed indicators? | No |
| **Step 4: Additional Information** | |
| Is additional information needed to support this determination? | No |
| **Step 5: Rationale** | |
| Describe rationale for location of OHWM | This is a very large, well-defined stream with several indicators present at the OHWM |

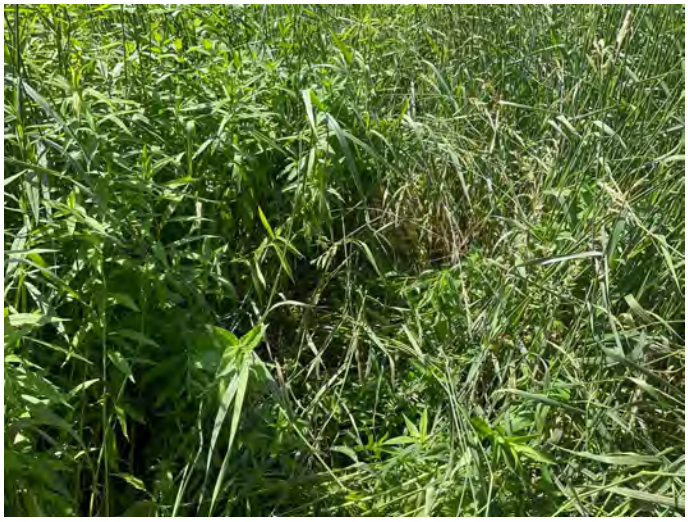
consistently throughout the reach of the stream.

| | |
|---|---|
| Additional observations or notes | |

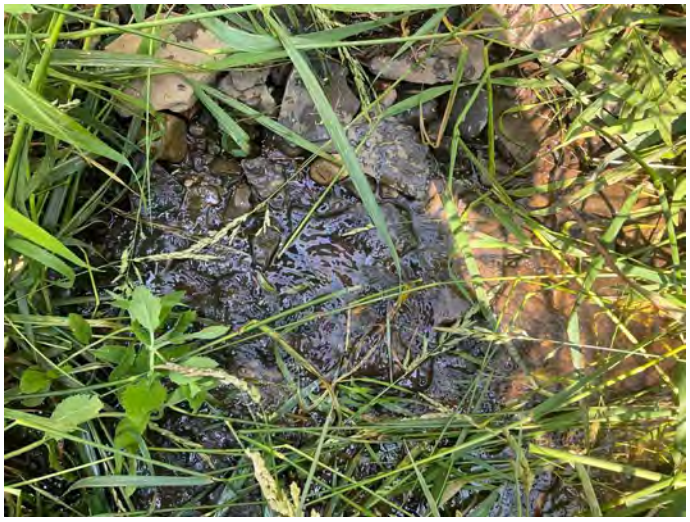
## Photos

| | |
|---|---|
| Photo log attached? | Yes |

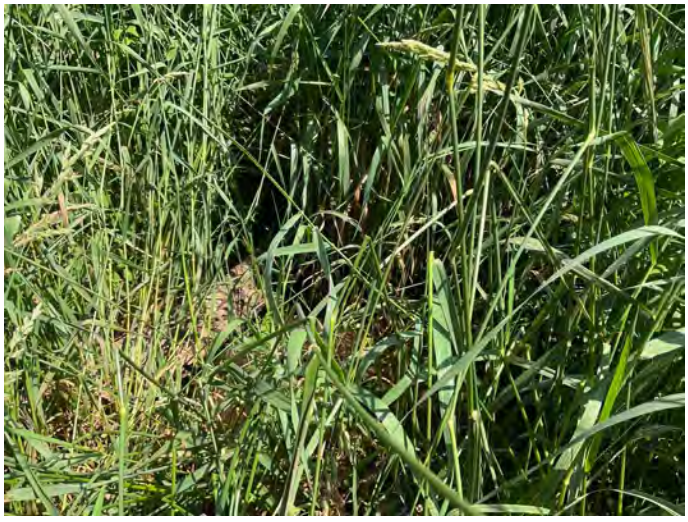
Photos



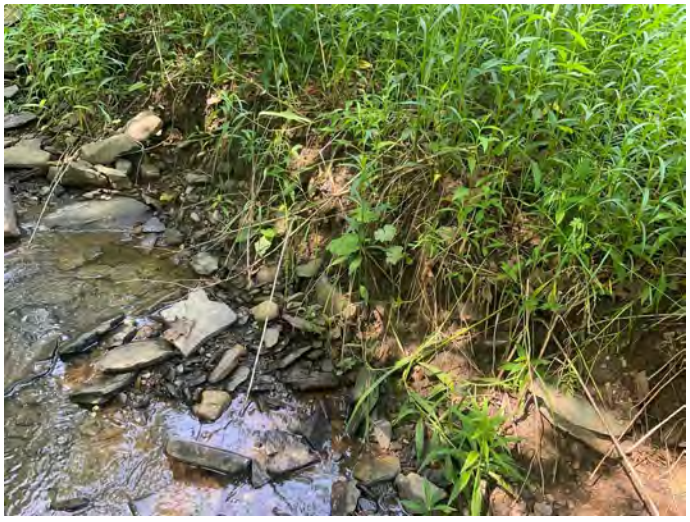
stream diffuses into wetland



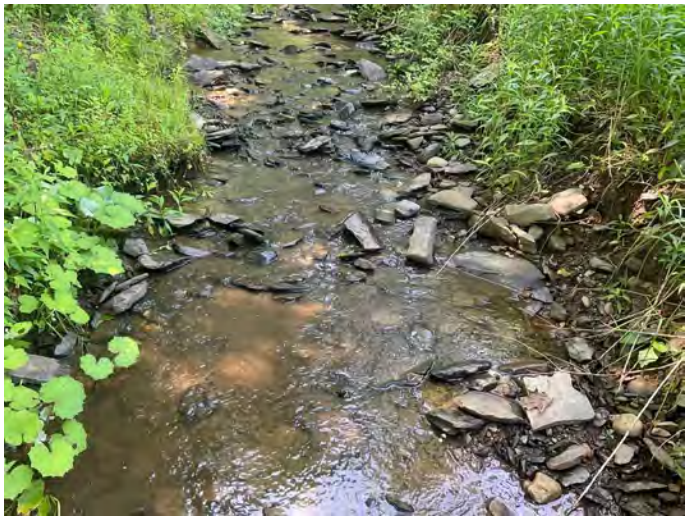
substrate



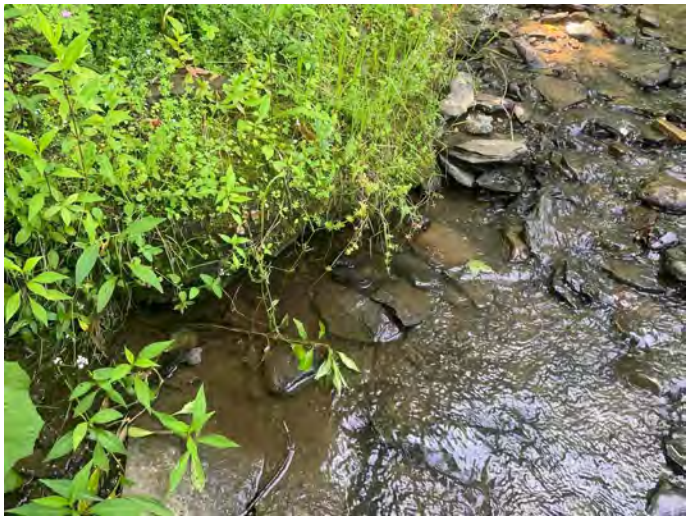
Downstream into wetland



break in slope and particle size change



vegetation transition



shelving

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 370109 |
| Survey Date | 07/19/2023 |
| User | Rachel Nazak |
| **General Information** | |
| Project ID # | 66-ST007 |
| Site | 21028 Hoffman Falls |
| Date | 07/19/2023 |
| Time | 09:39 AM |
| Location | |
| Latitude | 42.944109 |
| Longitude | -75.77011533 |
| Datum | NAD83/2011 |
| Investigator(s) | JB, GH |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Woody riparian buffer occurs between stream and agriculture field. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | PSS wetland occurs adjacent to stream. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | Present |
| On the bank Indicator Location | x |
| Undercut Bank | Present |
| Undercut Bank Indicator Location | x |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | |
| Channel bar | |
| Instream bedforms and other bedload transport | |

| | |
|---|---|
| evidence | |
| Secondary channels | |

| Sediment Indicators | |
|---|---|
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | |

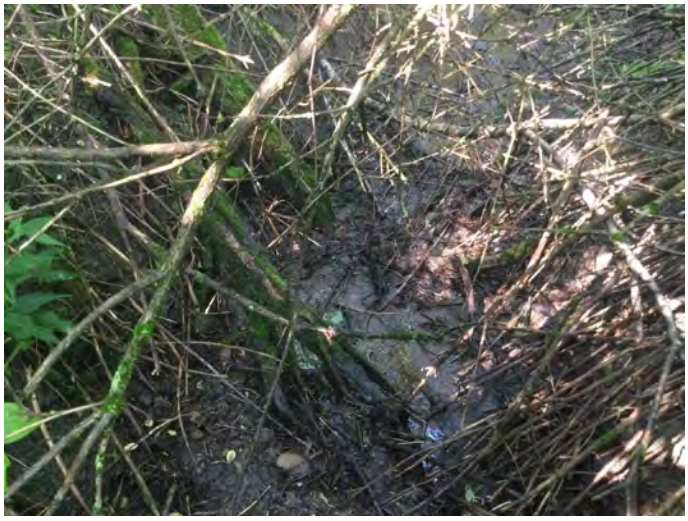
| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| Vegetation Change From | vegetation absent |
| Vegetation Change To | deciduous trees |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | Present |
| Exposed Roots Indicator Location | x |

| Ancillary Indicators | |
|---|---|
| Wracking/presence of organic litter | Present |
| Wracking Indicator Location | b |
| Presence of large wood | |
| Leaf litter disturbed or washed away | |
| Water staining | |
| Weathered clasts or bedrock | |
| Other observed indicators? | No |

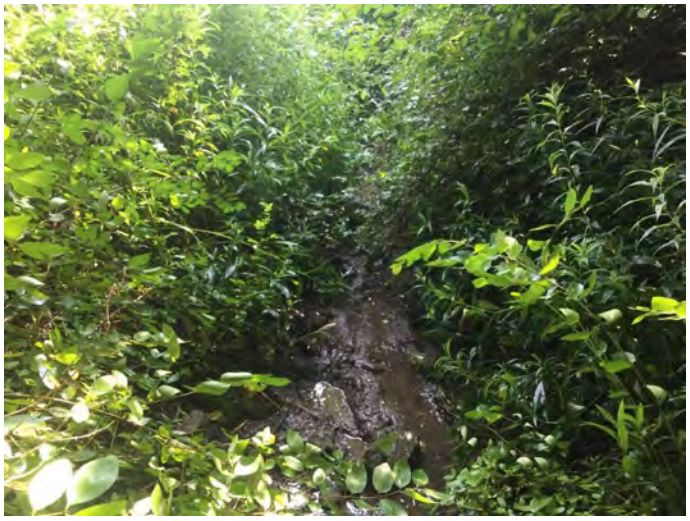
| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | The OWHM was determined using the break in slope on the bank and the transition in vegetation. These indicators were persistent throughout the delineated reach of stream. |
| Additional observations or notes | |

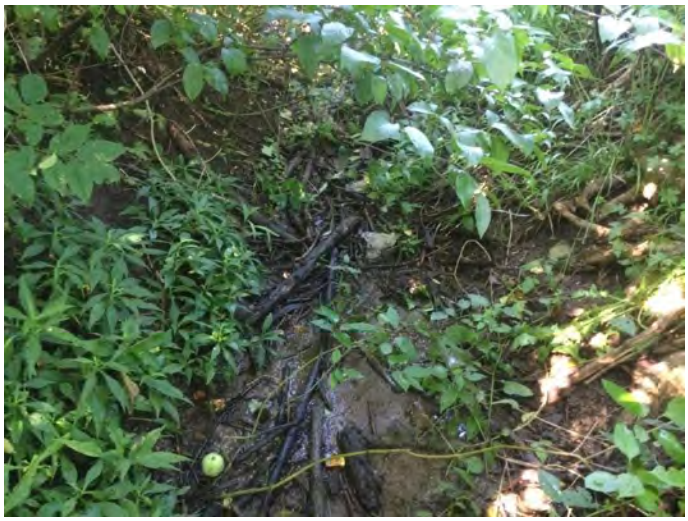
| Photos | |
|---|---|
| Photo log attached? | Yes |



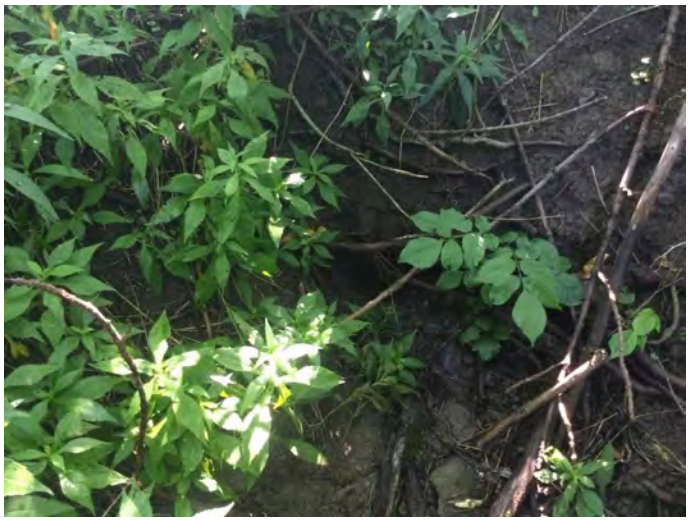
Break in slope and exposed roots.



Transition in vegetation.



Stream channel.



Undercut bank.

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 407301 |
| Survey Date | 11/20/2023 |
| User | RJ Sciarrone |
| **General Information** | |
| Project ID # | 66-ST008 |
| Site | 21028 Hoffman Falls |
| Date | 11/20/2023 |
| Time | 12:32 PM |
| Location | |
| Latitude | 42.96601667 |
| Longitude | -75.7530895 |
| Datum | NAD83/2011 |
| Investigator(s) | JB RS |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Environmental Resource Mapper |
| Describe land use and flow conditions from online resources. | No extreme weather conditions occurred prior to survey. Stream is bordered by successional scrub scrub shrub. Drains into NYS DEC mapped wetland CA-11 |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | Natural channel where water flows from top of slope down into wetland. No disturbances occur affecting flow and channel. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | b |
| On the bank | Present |
| On the bank Indicator Location | b |
| Undercut Bank | |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | Present |
| Shelving Indicator Location | x |
| Shelf at top of bank | Present |
| Shelf at top of bank Indicator Location | x |

| | |
|---|---|
| Natural Levee | |
| Man-made Berms or Levees | |
| Other Berms Description | |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |

| Sediment Indicators | |
|---|---|
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | |

| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| Vegetation Change From | vegetation absent |
| Vegetation Change To | forbs |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |

| Ancillary Indicators | |
|---|---|
| Wracking/presence of organic litter | |
| Presence of large wood | |
| Leaf litter disturbed or washed away | |
| Water staining | |
| Weathered clasts or bedrock | |
| Other observed indicators? | No |

| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

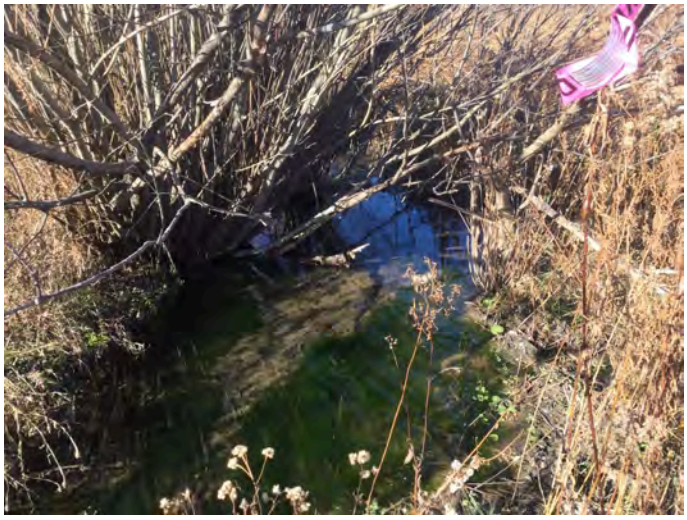
| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | The OHWM is defined by where the the stream channel transitions to a shelf at top of the bank. The stream channel is void of vegetation and transitions to forbs where the shelf begins. For this stream the bank full width is equal to the OWHM. |
| Additional observations or | |

notes

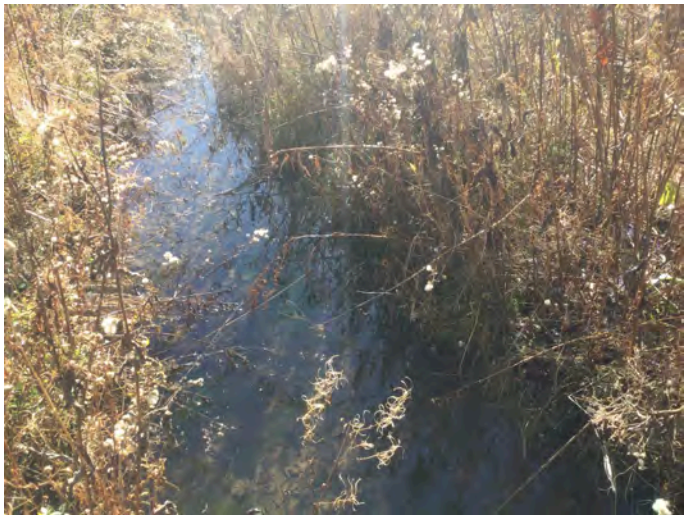
## Photos

| | |
|---|---|
| Photo log attached? | Yes |

Photos



Downstream



Upstream, shelf at top of bank, transition in vegetation.

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 373738 |
| Survey Date | 07/27/2023 |
| User | Josh Bean |
| **General Information** | |
| Project ID # | 93-ST006 |
| Site | 21028 Hoffman Falls |
| Date | 07/27/2023 |
| Time | 03:13 PM |
| Location | |
| Latitude | 42.93334067 |
| Longitude | -75.705337 |
| Datum | NAD83/2011 |
| Investigator(s) | RS GH |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Recent rain within past 24 hours and current rain. Stream drains from pond. NWI feature PSS1/EM1Ed borders stream. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | Stream dissipates into wetland. Recent rain within past 24 hours and current rain. POW portion of wetland outlets into the stream |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | |
| Undercut Bank | Present |
| Undercut Bank Indicator Location | x |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | |

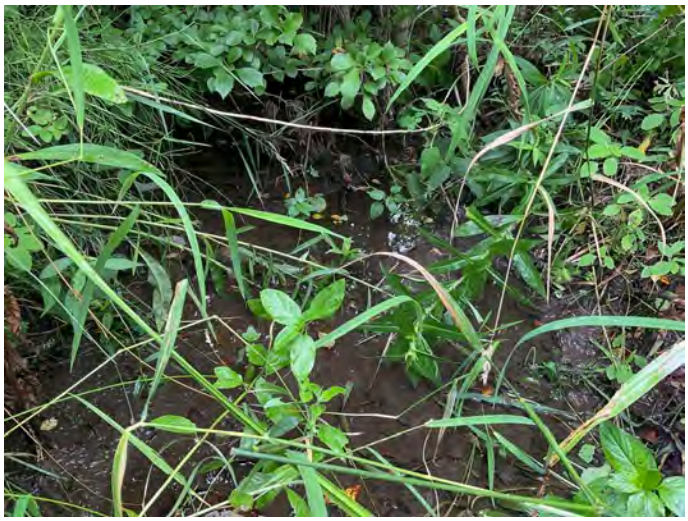
| | |
|---|---|
| Secondary channels | |
| **Sediment Indicators** | |
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | Present |
| Changes in particle-sized distribution Indicator Location | x |
| transition from | Cobble to clay |
| Upper limit of sand-sized particles | |
| Silt deposits | |
| **Vegetation Indicators** | |
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| Vegetation Change From | vegetation absent |
| Vegetation Change To | forbs |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | Present |
| Exposed Roots Indicator Location | x |
| **Ancillary Indicators** | |
| Wracking/presence of organic litter | |
| Presence of large wood | |
| Leaf litter disturbed or washed away | |
| Water staining | |
| Weathered clasts or bedrock | |
| Other observed indicators? | |
| **Step 4: Additional Information** | |
| Is additional information needed to support this determination? | No |
| **Step 5: Rationale** | |
| Describe rationale for location of OHWM | OWHM was determined using break in slope, transition in vegetation and changes in particle size. These indicators were persistent throughout the entire stream. |

Additional observations or notes

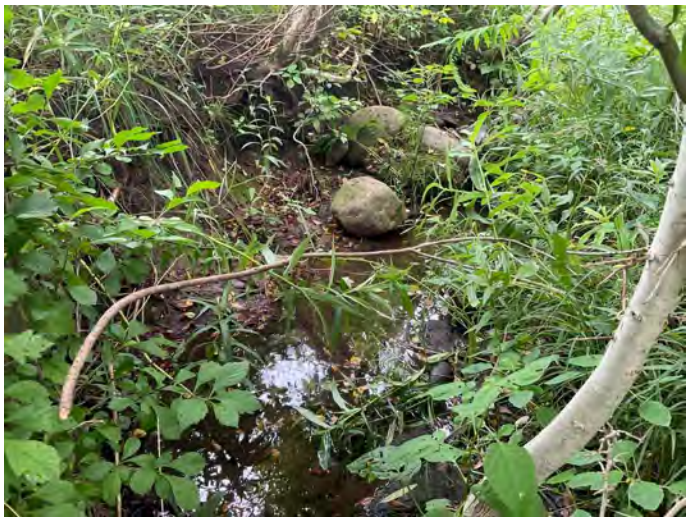
## Photos

Photo log attached? Yes

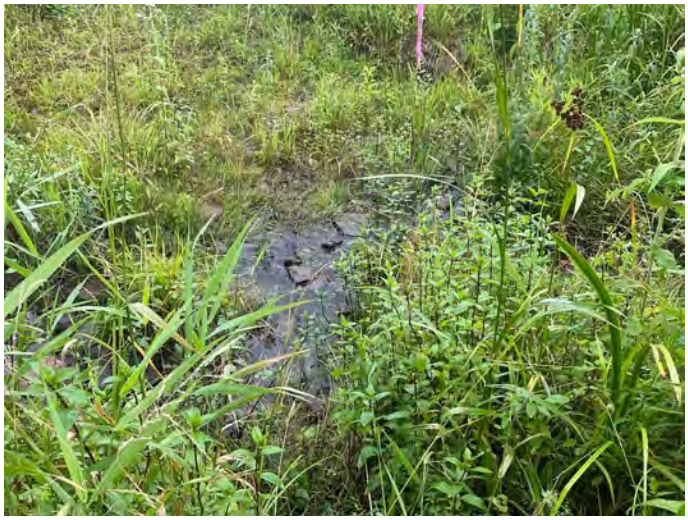
Photos



substrate in stream and undercut bank



exposed roots below intact soil layer and upstream with cobbles and lack of vegetation in stream



downstream where stream dissipates into PSS wetland

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 373668 |
| Survey Date | 07/27/2023 |
| User | Josh Bean |
| **General Information** | |
| Project ID # | 93-ST007 |
| Site | 21028 Hoffman Falls |
| Date | 07/27/2023 |
| Time | 02:05 PM |
| Location | |
| Latitude | 42.93341192 |
| Longitude | -75.70350625 |
| Datum | WGS84 |
| Investigator(s) | JB |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Stream is bordered by evergreen forest and agricultural land. Flows west into NWI wetland complex PSS1/EM1Ed. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | No man-made disturbances affecting natural flow regime were observed. Intermittent showers occurred during the day of survey. Drains PEM wetland 66-W018 into 93-W004. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | Present |
| On the bank Indicator Location | x |
| Undercut Bank | |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | Present |
| Shelving Indicator Location | a |
| Shelf at top of bank | Present |
| Shelf at top of bank Indicator Location | a |

| | |
|---|---|
| Natural Levee | |
| Man-made Berms or Levees | |
| Other Berms Description | |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | Present |
| Instream bedforms Indicator Location | b |
| Deposition bedload indicators (e.g., poofs, riffles, steps, etc.) | Present |
| Deposition Bedload Indicator Location | b |
| Bedforms (e.g., imbricated clasts, gravel sheets, etc.) | |
| Erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.) | |
| Secondary channels | |
| **Sediment Indicators** | |
| Soil development | Present |
| Soil Development Indicator Location | x |
| Changes in character of soil | Present |
| Changes in character of soil Indicator Location | x |
| Mudcracks | |
| Changes in particle-sized distribution | |
| **Vegetation Indicators** | |
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| Vegetation Change From | vegetation absent |
| Vegetation Change To | deciduous trees |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |
| **Ancillary Indicators** | |
| Wracking/presence of organic litter | |
| Presence of large wood | |
| Leaf litter disturbed or | |

| | |
|---|---|
| washed away | |
| Water staining | Present |
| Water Staining Indicator Location | x |
| Weathered clasts or bedrock | |
| Other observed indicators? | No |

## Step 4: Additional Information

| | |
|---|---|
| Is additional information needed to support this determination? | No |

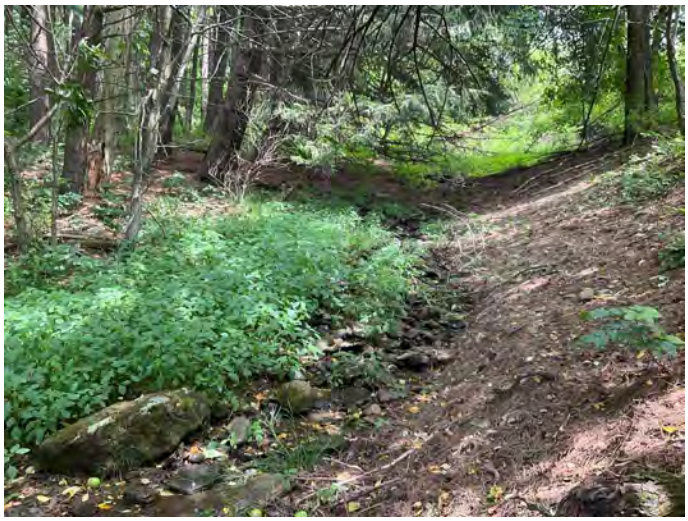
## Step 5: Rationale

| | |
|---|---|
| Describe rationale for location of OHWM | Break in slope, changes in character of the soil, and transition in vegetation were the primary indicators used to determine the OHWM for this stream. These indicators were the most reliable and were persistent throughout the entire stream. |
| Additional observations or notes | |

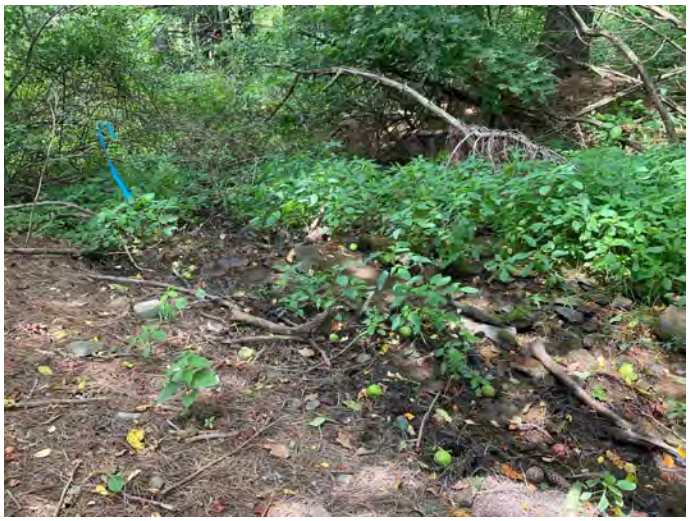
## Photos

| | |
|---|---|
| Photo log attached? | Yes |

Photos



Upstream photo. Break in slope on the bank and transition in vegetation. Shelf at top of bank



Downstream photo. Water staining

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 373737 |
| Survey Date | 07/27/2023 |
| User | Josh Bean |

### General Information

| | |
|---|---|
| Project ID # | 93-ST008 |
| Site | 21028 Hoffman Falls |
| Date | 07/27/2023 |
| Time | 02:18 PM |
| Location | |
| Latitude | 42.93380317 |
| Longitude | -75.70362783 |
| Datum | NAD83/2011 |
| Investigator(s) | RS, GH |

### Step 1: Site overview from remote and online resources

| | |
|---|---|
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | A deciduous forest borders stream. This stream drains into NWI mapped feature PSS1/EM1Ed, and borders a delineated scrub shrub wetland. Rainfall during the delineation and within past 24 hours. Moderate baseflow during the time of the survey. |

### Step 2: Site conditions during field assessment

| | |
|---|---|
| Describe Site Condition | No evidence of man-made or natural disturbances were present during the delineation. |

### Step 3 Indicators

### Geomorphic Indicators

| | |
|---|---|
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | |
| Undercut Bank | |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |

### Sediment Indicators

| | |
|---|---|
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | Present |
| Changes in particle-sized distribution Indicator Location | x |
| transition from | Cobble to clay loam |
| Upper limit of sand-sized particles | |
| Silt deposits | |

| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| Vegetation Change From | vegetation absent |
| Vegetation Change To | forbs |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |

| Ancillary Indicators | |
|---|---|
| Wracking/presence of organic litter | |
| Presence of large wood | |
| Leaf litter disturbed or washed away | |
| Water staining | |
| Weathered clasts or bedrock | |
| Other observed indicators? | |

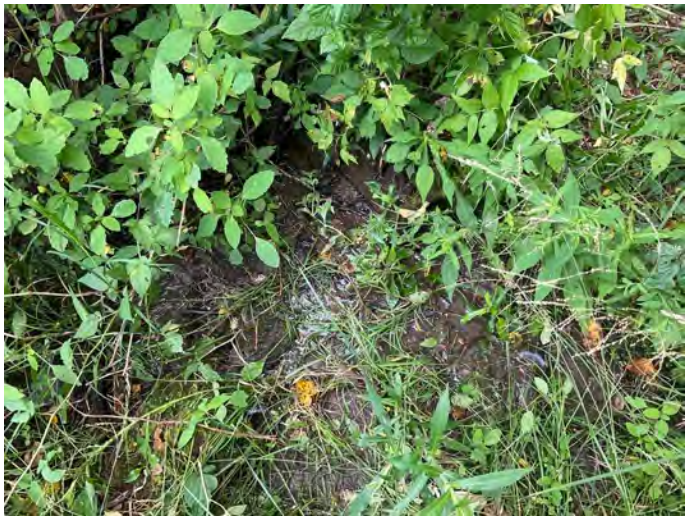
| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | The OHWM occurs where cobble meets clay loam soil layer, and coincides with the break in slope on the bank. These indicators were persistent throughout the entire reach of the delineated stream. |
| Additional observations or notes | |

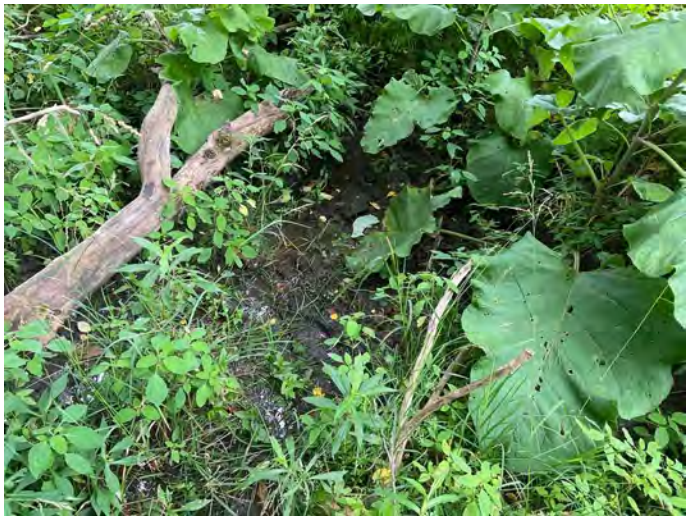
## Photos

| | |
|---|---|
| Photo log attached? | Yes |

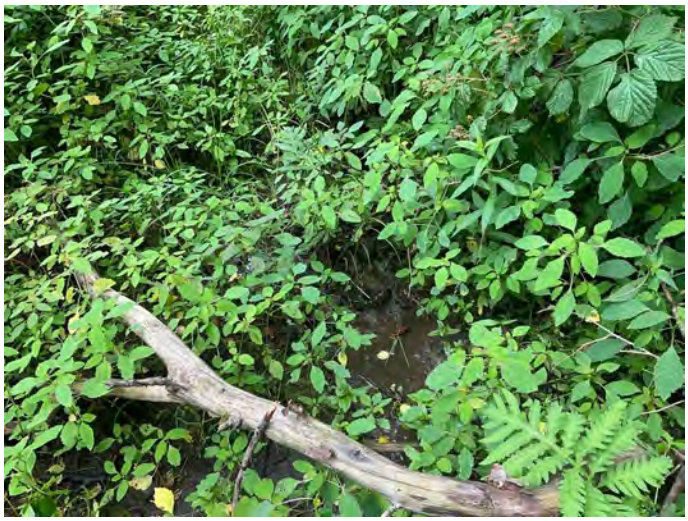
Photos



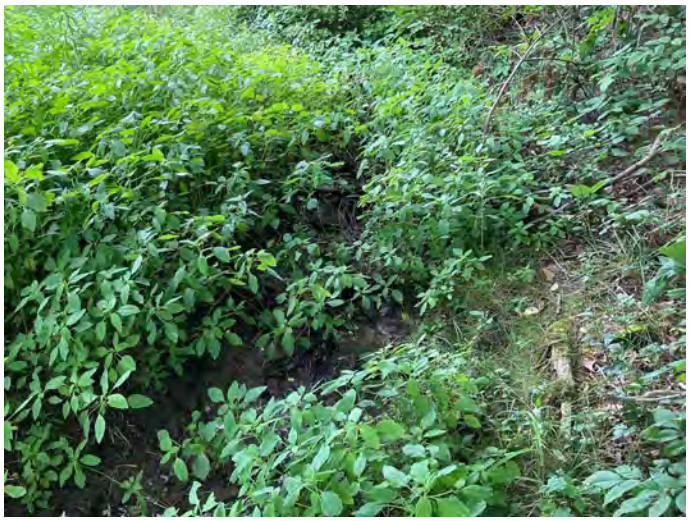
Stream substrate photograph, with a transition in vegetation density present.



Stream substrate photograph, where cobble in stream bed transitions to clay loam above the bank.



Upstream photograph with baseflow.



Downstream photograph with break in slope present.

## 21028 Hoffman Falls - Rapid Ordinary High Water Mark (OHWM) 1.1

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 373742 |
| Survey Date | 07/28/2023 |
| User | Josh Bean |
| **General Information** | |
| Project ID # | 93-ST009 |
| Site | 21028 Hoffman Falls |
| Date | 07/28/2023 |
| Time | 09:20 AM |
| Location | |
| Latitude | 42.93914917 |
| Longitude | -75.69396117 |
| Datum | NAD83/2011 |
| Investigator(s) | RN RS |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Recent rain in past 24 hours. No flow in stream, but has a defined bed and banks composed of cobble |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | stream flows from man made pond on property. Stream was likely man made and is composed mainly of cobble and gravel. Terminates near road. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| On the bank | |
| Undercut Bank | |
| Valley Bottom | |
| Other break in slope description | |
| Shelving | |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |

| Sediment Indicators | |
|---|---|
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | Present |
| Changes in particle-sized distribution Indicator Location | x |
| transition from | Cobble to silt |
| Upper limit of sand-sized particles | |
| Silt deposits | |

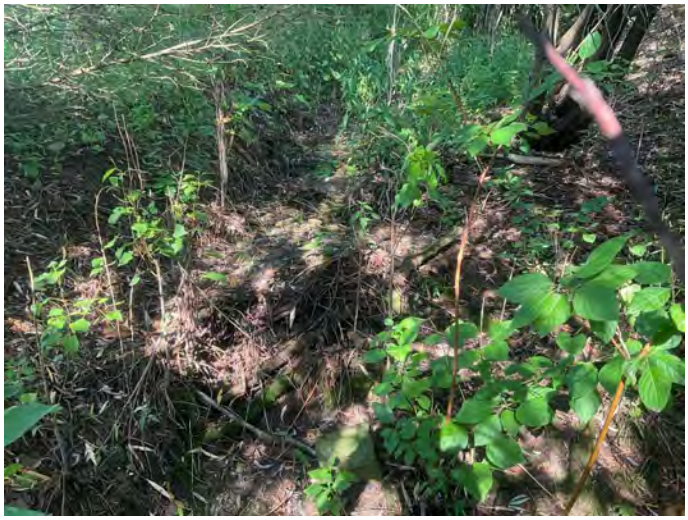
| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |

| Ancillary Indicators | |
|---|---|
| Wracking/presence of organic litter | Present |
| Wracking Indicator Location | x |
| Presence of large wood | |
| Leaf litter disturbed or washed away | |
| Water staining | |
| Weathered clasts or bedrock | |
| Other observed indicators? | No |

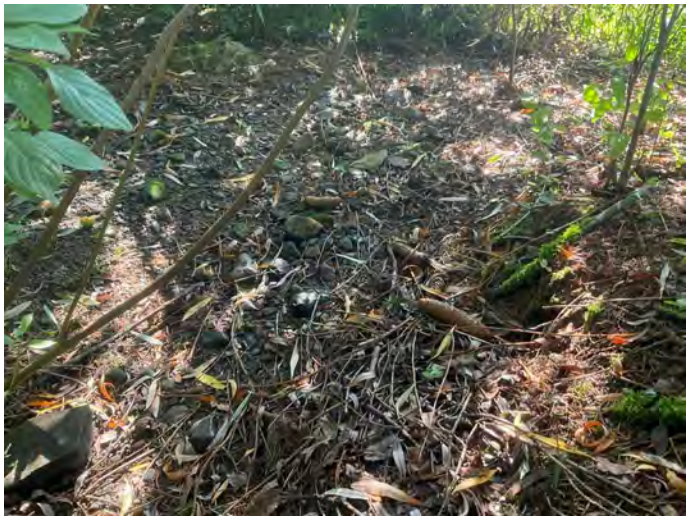
| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | OHWM was demined using break in slope and the change in particle size which were persistent throughout the delineated reach of stream. Wracking aided in the determining the location of the OHWM. |
| Additional observations or notes | |

| Photos | |
|---|---|
| Photo log attached? | Yes |
| Photos | |



Upstream and wracking



Downstream view.

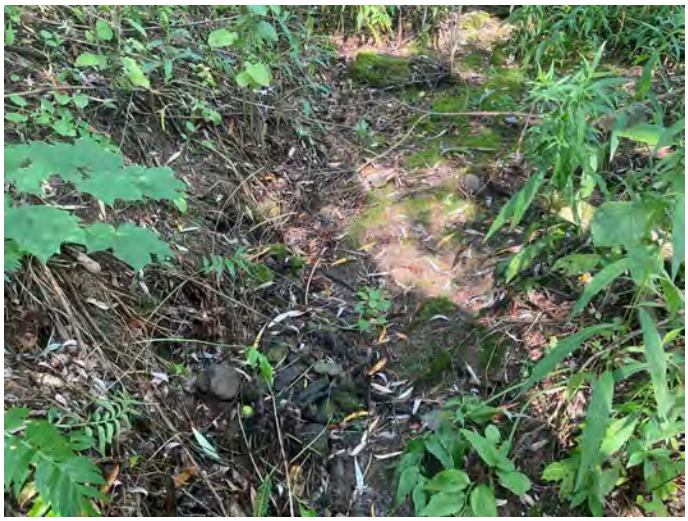


Photo of substrate, change from silt to cobble.

## - Rapid Ordinary High Water Mark (OHWM) 1.0

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 348663 |
| Survey Date | 05/25/2023 |
| User | Joseph Knight |
| **General Information** | |
| Project ID # | 05-D001 |
| Site Name | Hoffman Falls |
| Date | 05/25/2023 |
| Time | 11:30 AM |
| Location | |
| Latitude | 42.96505337 |
| Longitude | -75.75115581 |
| Investigator(s) | JK |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Adjacent land use is forested and active agricultural fields. No baseflow was present during the delineation. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | This feature originates from tile drainage, and follows a man-made, excavated channel, into a DEC wetland. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | a |
| Other break in slope indicators | |
| Shelving | |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |
| **Sediment Indicators** | |
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |

| | |
|---|---|
| Changes in particle-sized distribution | |

| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |

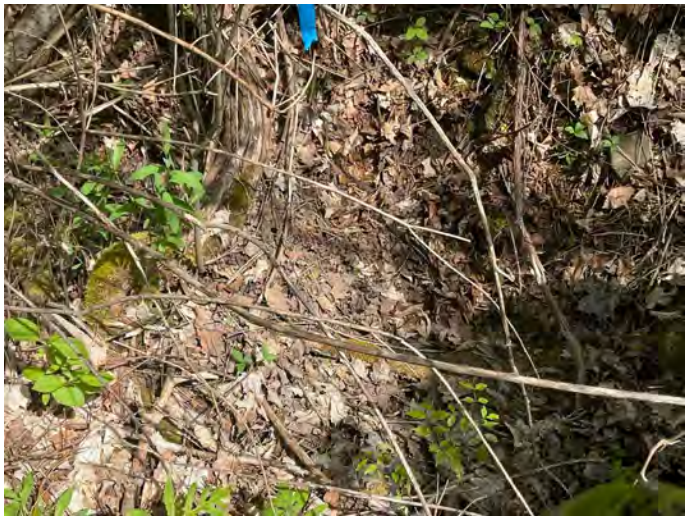
| Ancillary Indicators | |
|---|---|
| Ancillary Indicators | Water staining: |
| Water Staining Indicator Location | x |
| Other observed indicators? | No |

| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

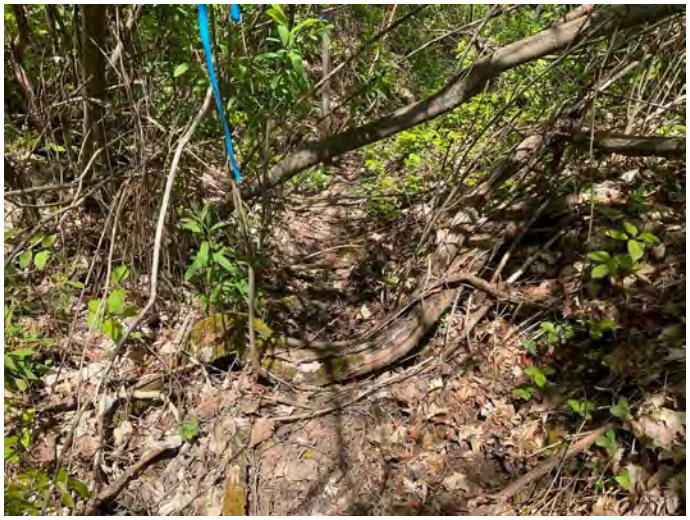
| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | Break in slope above OHWM and water staining at OHWM are strongest indicators for this ephemeral stream. |
| Additional observations or notes | |

| Photos | |
|---|---|
| Photo log attached? | Yes |

Photos



Stream substrate, with a break in slope occurring above the OHWM. Some water staining is present below leaf litter.



Downstream photograph, with break in slope present above the OHWM. Water staining below leaf litter is present.

## - Rapid Ordinary High Water Mark (OHWM) 1.0

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 350132 |
| Survey Date | 05/25/2023 |
| User | Megan Aubertine |
| **General Information** | |
| Project ID # | 10-ST001 |
| Site Name | Hoffman Falls |
| Date | 05/25/2023 |
| Time | 12:50 PM |
| Location | |
| Latitude | 42.96346783 |
| Longitude | -75.74608267 |
| Investigator(s) | MA, AT |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Adjacent land use is primarily forested. No baseflow present during the delineation. A distinct channel was visible on topographic mapping services. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | Some man-made trails are located within the adjacent forested upland, however, no observations of man-made or natural disturbances were present within the stream. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| Other break in slope indicators | |
| Shelving | |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |
| **Sediment Indicators** | |
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |

| | |
|---|---|
| Changes in particle-sized distribution | |

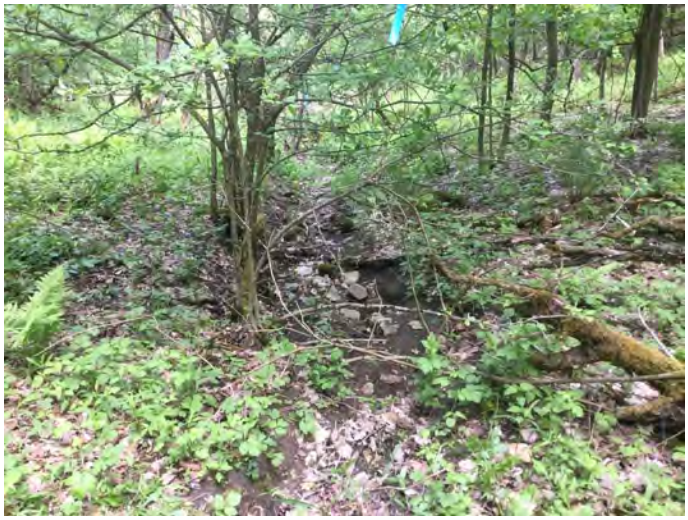
| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| General Vegetation Change | vegetation absent to: |
| vegetation absent to: | forbs |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |

| Ancillary Indicators | |
|---|---|
| Ancillary Indicators | Wracking/presence of organic litter:, Leaf litter disturbed or washed away: |
| Wracking Indicator Location | b |
| Leaf Litter Indicator Location | b |
| Other observed indicators? | No |

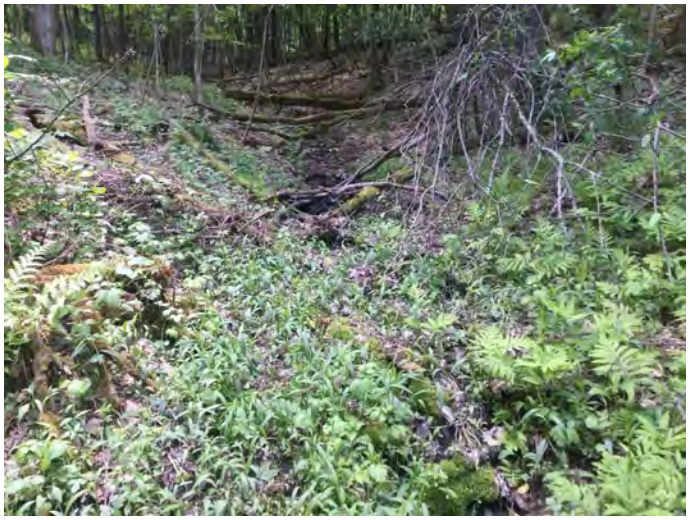
| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | Break in slope with vegetation absent to forbs along entirety of stream at the OHWM. Wracking and disturbed leaf litter present below the OHWM. |
| Additional observations or notes | |

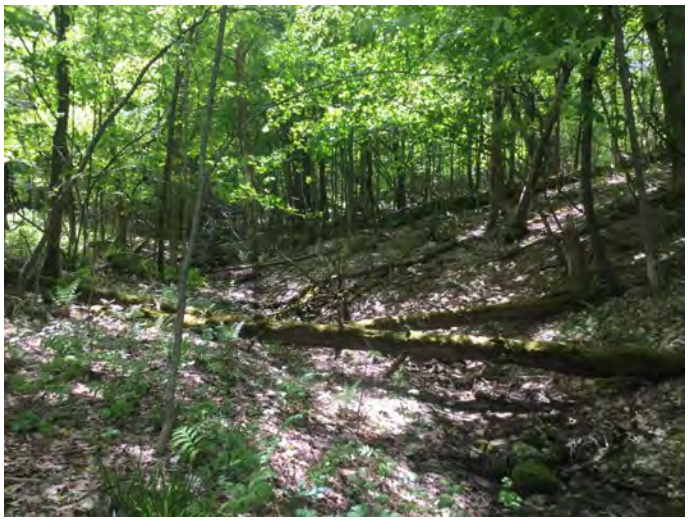
| Photos | |
|---|---|
| Photo log attached? | Yes |
| Photos | |



Transition in absent vegetation to forbs, facing downstream.



Break in slope present, facing upstream.



Break in slope and vegetation transition, facing upstream.

## - Rapid Ordinary High Water Mark (OHWM) 1.0

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 350113 |
| Survey Date | 05/30/2023 |
| User | Rachael Foote |
| **General Information** | |
| Project ID # | 23-ST001 |
| Site Name | Hoffman Falls |
| Date | 05/30/2023 |
| Time | 01:26 PM |
| Location | |
| Latitude | 42.91295033 |
| Longitude | -75.6565185 |
| Investigator(s) | RN RS |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | The surrounding land use is primarily forested upland and wetland. Moderate baseflow was present during the delineation. No rainfall has occurred within the previous 24 hours. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | No evidence of natural or man-made disturbances were observed during the delineation. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | |
| Shelving | |
| Channel bar | Present |
| Channel Bar Indicator Location | b |
| Other Channel Indicators | unvegetated |
| Unvegetated Indicator Location | x |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |
| **Sediment Indicators** | |
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |

| | |
|---|---|
| Changes in particle-sized distribution | |

| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| General Vegetation Change | vegetation absent to: |
| vegetation absent to: | forbs |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |

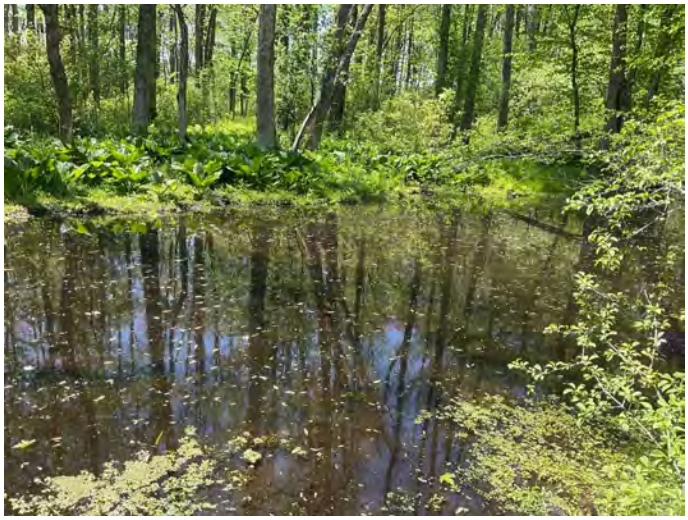
| Ancillary Indicators | |
|---|---|
| Ancillary Indicators | |
| Other observed indicators? | No |

| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

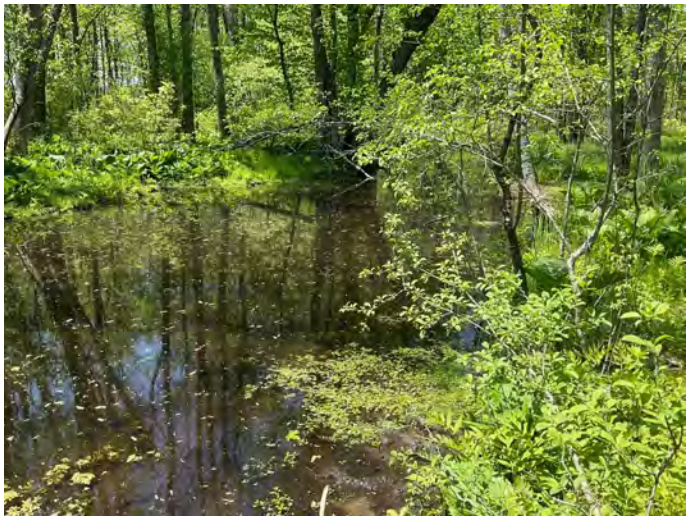
| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | The OHWM occurs at the transition from absent vegetation to forbs and this indicator persisted throughout the entire reach of the delineated stream. Additionally, channel bars have developed on this stream but occur below the OHWM. |
| Additional observations or notes | |

| Photos | |
|---|---|
| Photo log attached? | Yes |

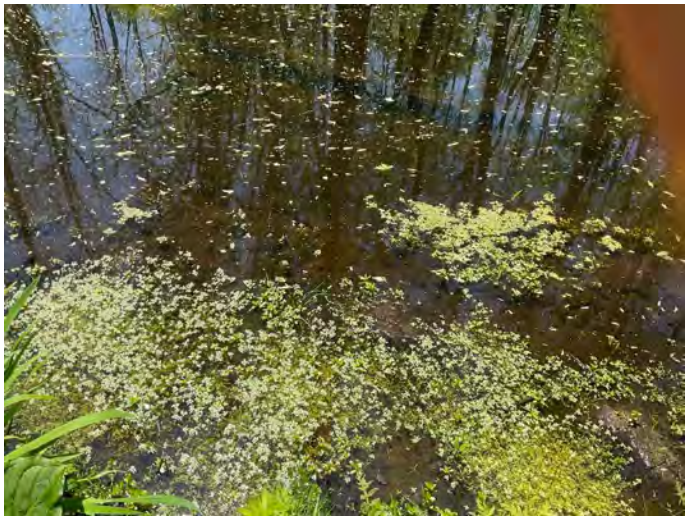
Photos



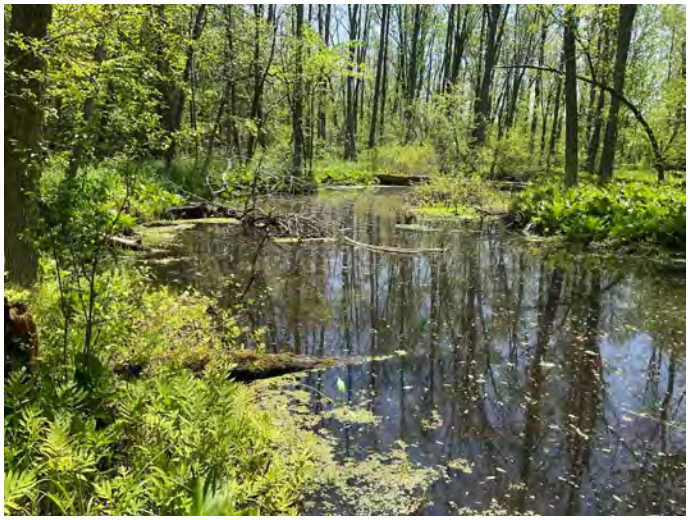
Transition from absent vegetation to forbs.



Upstream photograph.



Silt channel bars below the OHWM.



Downstream photograph, with transition from unvegetated stream channel to forbs.

## - Rapid Ordinary High Water Mark (OHWM) 1.0

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 350114 |
| Survey Date | 05/30/2023 |
| User | Rachael Foote |
| **General Information** | |
| Project ID # | 23-ST002 |
| Site Name | Hoffman Falls |
| Date | 05/30/2023 |
| Time | 02:53 PM |
| Location | |
| Latitude | 42.91623183 |
| Longitude | -75.65908817 |
| Investigator(s) | RN RS |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | This stream occurs within NYSDEC mapped wetland MO-6, and is hydrologically connected to delineated streams 23-ST001 and 23-ST004. Moderate baseflow was observed during the delineation. No rainfall has occurred within the previous 24 hours. The surrounding land use is primarily active agriculture and forested wetland. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | No evidence of natural or man-made disturbances were observed during the delineation. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| Other break in slope indicators | |
| Shelving | |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |
| **Sediment Indicators** | |
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |

| | |
|---|---|
| Changes in particle-sized distribution | |

| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | a |
| General Vegetation Change | vegetation absent to: |
| vegetation absent to: | forbs |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | Present |
| Exposed Roots Indicator Location | x |

| Ancillary Indicators | |
|---|---|
| Ancillary Indicators | |
| Other observed indicators? | No |

| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | The OHWM occurs at the break in slope and where exposed roots within the intact soil layer were present. These indicators were persistent throughout the entire reach of the delineated stream. |
| Additional observations or notes | |

| Photos | |
|---|---|
| Photo log attached? | Yes |
| Photos | |

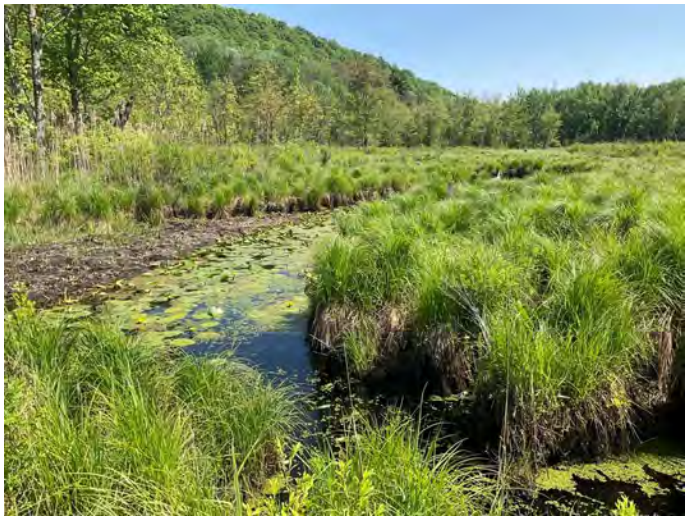
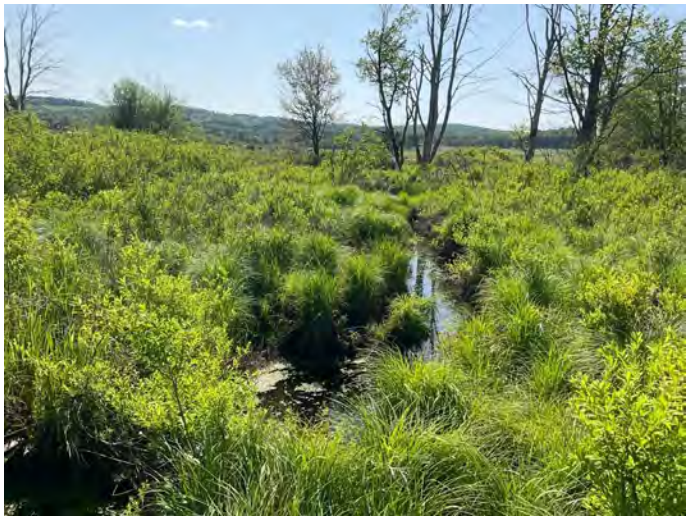


Photo of the confluence of streams 23-ST002 and 23-ST004, with a break in slope present, facing downstream.



Upstream photograph, with a break in slope present.

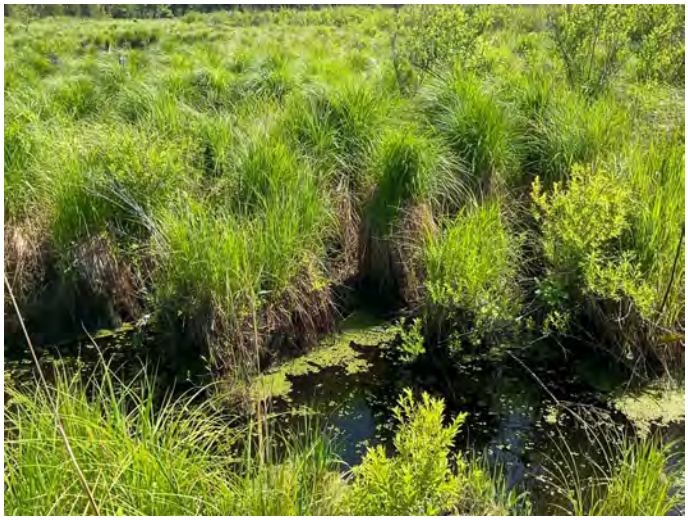


Photo facing across stream channel, exhibiting both a break in slope at the OHWM and a change in vegetation density above the OHWM.

## - Rapid Ordinary High Water Mark (OHWM) 1.0

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 350849 |
| Survey Date | 05/30/2023 |
| User | Bennett Amberger |
| **General Information** | |
| Project ID # | 33-ST001 |
| Site Name | Hoffman Falls |
| Date | 05/30/2023 |
| Time | 03:28 PM |
| Location | |
| Latitude | 42.92417383 |
| Longitude | -75.65048783 |
| Investigator(s) | BA GH |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Surrounding land use is active agriculture. No baseflow was present during the delineation. This stream connects to an unprotected NYSDEC mapped stream outside the study area. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | This stream occurs adjacent to active agricultural land where seasonal tilling and farming occurs. Additionally, this stream has an excavated bed and bank that are likely frequently maintained. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| Other break in slope indicators | |
| Shelving | Present |
| Shelving Indicator Location | x |
| Other Shelving Indicators | man-made berms or levees |
| Man-made berms or levees Indicator Location | x |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |

| Sediment Indicators | |
|---|---|
| Soil development | |
| Changes in character of soil | Present |
| Changes in character of soil Indicator Location | b |
| Mudcracks | |
| Changes in particle-sized distribution | Present |
| Changes in particle-sized distribution Indicator Location | b |
| Other changes in particle-sized distribution | |

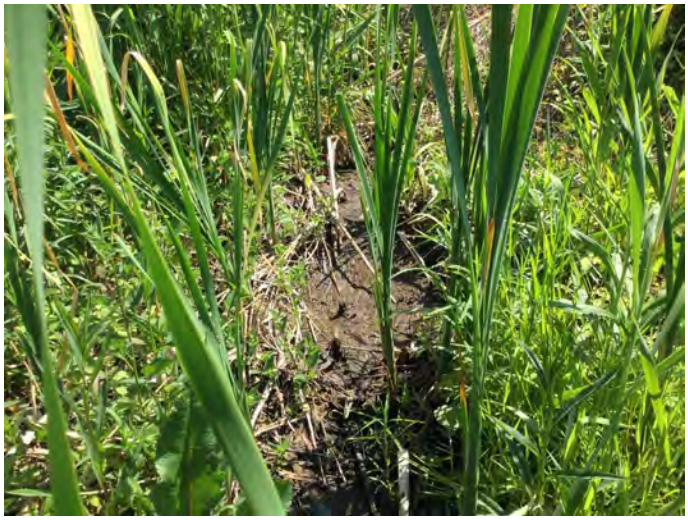
| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | b |
| General Vegetation Change | vegetation absent to: |
| vegetation absent to: | graminoids |
| Vegetation matted down and/or bent: | Present |
| Matted/Bent Vegetation Indicator Location | x |
| Exposed roots below intact soil layer: | |

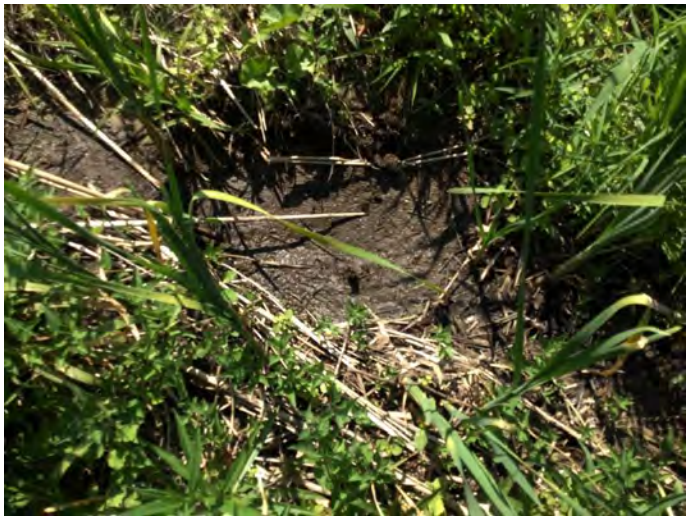
| Ancillary Indicators | |
|---|---|
| Ancillary Indicators | Wracking/presence of organic litter: |
| Wracking Indicator Location | x |
| Other observed indicators? | No |

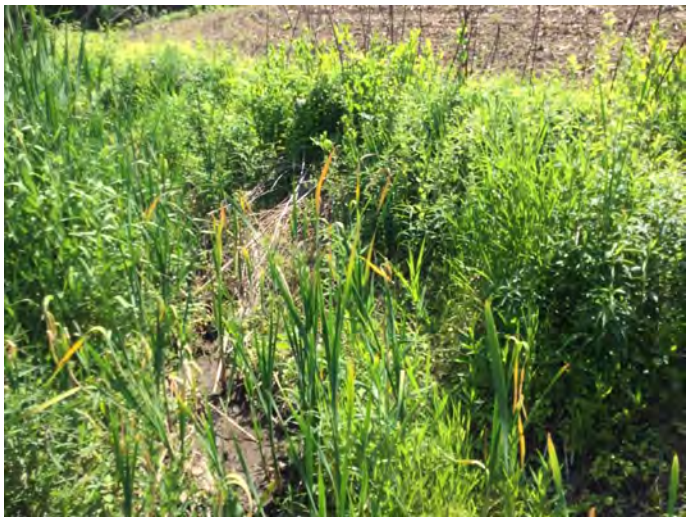
| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

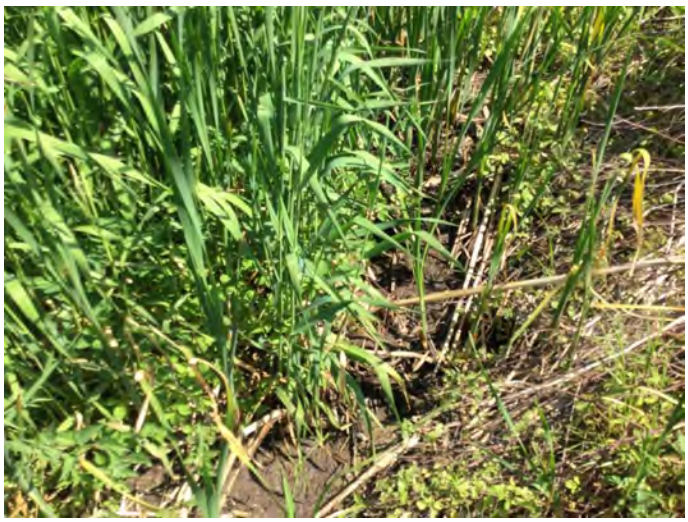
| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | The OHWM occurs at the break in slope and where vegetation wracking has occurred. These indicators persisted throughout the entire reach of the delineated stream. |
| Additional observations or notes | This stream flows through, and is hydrologically connected to, delineated wetland 33-W001. |

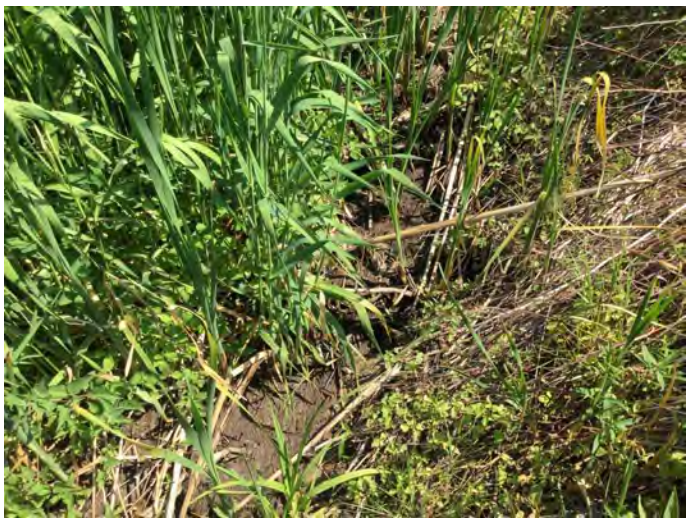
| Photos | |
|---|---|
| Photo log attached? | Yes |
| Photos | |











## - Rapid Ordinary High Water Mark (OHWM) 1.0

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 350566 |
| Survey Date | 05/31/2023 |
| User | Josh Bean |
| **General Information** | |
| Project ID # | 23-ST003 |
| Site Name | Hoffman Falls |
| Date | 05/31/2023 |
| Time | 09:13 AM |
| Location | |
| Latitude | 42.91484383 |
| Longitude | -75.65797017 |
| Investigator(s) | RZ RS JB |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | A DEC mapped, floodplain wetland borders this intermittent stream on both banks. Moderate baseflow was observed during the delineation, with no observed rainfall in previous 24 hours. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | No evidence of man-made or natural disturbances were present within the reach of the delineated stream. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| Other break in slope indicators | |
| Shelving | Present |
| Shelving Indicator Location | a |
| Other Shelving Indicators | shelf at top of bank |
| shelf at top of bank Indicator Location | a |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |

| Sediment Indicators | |
|---|---|
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | |

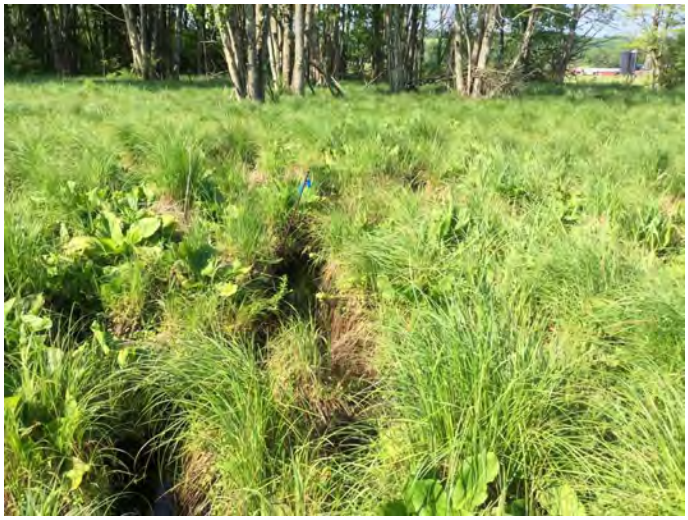
| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| General Vegetation Change | vegetation absent to: |
| vegetation absent to: | graminoids |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | Present |
| Exposed Roots Indicator Location | x |

| Ancillary Indicators | |
|---|---|
| Ancillary Indicators | |
| Other observed indicators? | No |

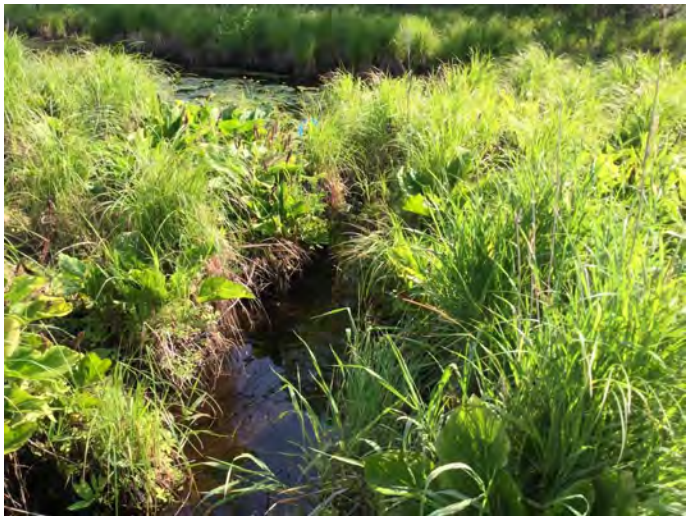
| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | A break in slope, with a transition from absent vegetation to graminoids, and exposed roots defined the OHWM. Additionally, shelving at the top of bank occurred above the OHWM. These indicators persisted throughout the entire reach of the delineated stream. |
| Additional observations or notes | This stream provides a surface water connection to two additional delineated streams, 23-ST001 and 23-ST004. |

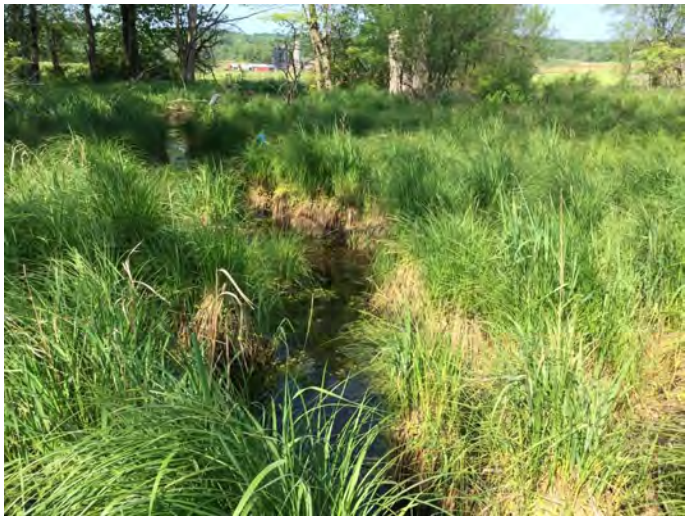
| Photos | |
|---|---|
| Photo log attached? | Yes |
| Photos | |



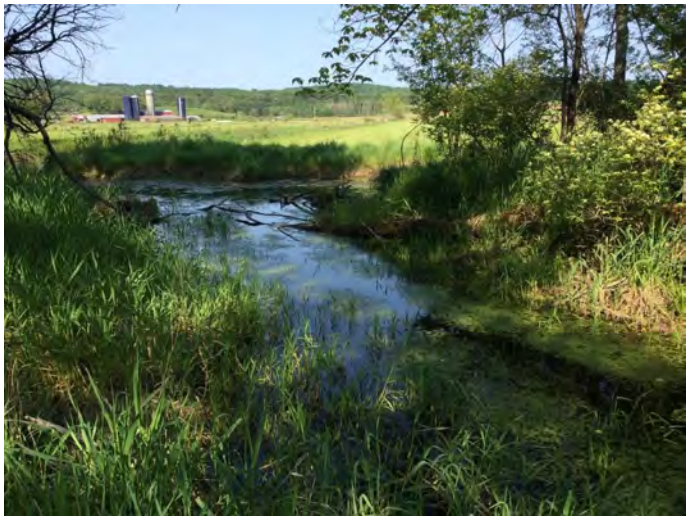
Upstream photograph, with break in slope and vegetation transition present.



Upstream photograph, with break in slope and vegetation transition present.



Downstream photograph, with break in slope and vegetation transition present.



Upstream photograph at confluence of delineated stream 23-ST004.

## - Rapid Ordinary High Water Mark (OHWM) 1.0

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 350567 |
| Survey Date | 05/31/2023 |
| User | Josh Bean |
| **General Information** | |
| Project ID # | 23-ST004 |
| Site Name | Hoffman Falls |
| Date | 05/31/2023 |
| Time | 09:39 AM |
| Location | |
| Latitude | 42.91320133 |
| Longitude | -75.65872717 |
| Investigator(s) | RZ RS JB |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | A DEC wetland complex and active agricultural field borders stream. Moderate baseflow was observed during the delienation. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | Beaver damn obstructs flow. Man-made agricultural drainages ditches provide baseflow to this stream. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | a |
| Other break in slope indicators | |
| Shelving | Present |
| Shelving Indicator Location | a |
| Other Shelving Indicators | shelf at top of bank |
| shelf at top of bank Indicator Location | a |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |
| **Sediment Indicators** | |

| | |
|---|---|
| Soil development | |
| Changes in character of soil | |
| Mudcracks | |
| Changes in particle-sized distribution | |

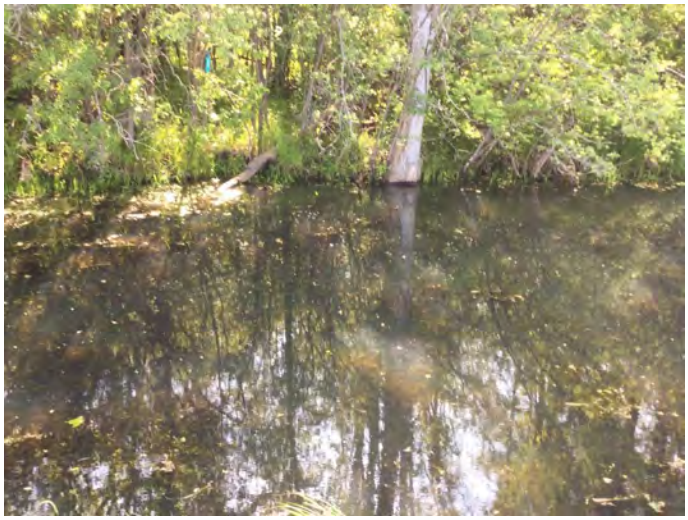
| Vegetation Indicators | |
|---|---|
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| General Vegetation Change | vegetation absent to: |
| vegetation absent to: | graminoids |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |

| Ancillary Indicators | |
|---|---|
| Ancillary Indicators | Wracking/presence of organic litter:, Water staining: |
| Wracking Indicator Location | b |
| Water Staining Indicator Location | x |
| Other observed indicators? | No |

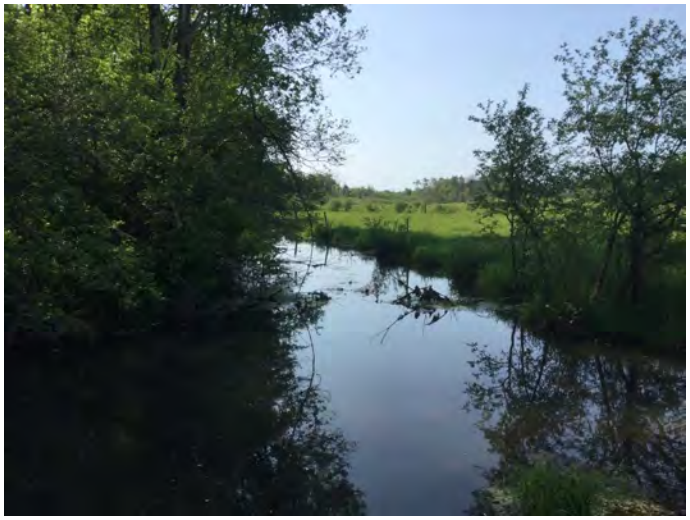
| Step 4: Additional Information | |
|---|---|
| Is additional information needed to support this determination? | No |

| Step 5: Rationale | |
|---|---|
| Describe rationale for location of OHWM | A break in slope and shelving were present at the top of the bank above the OHWM. Wracking was present below the OHWM. A transition from absent vegetation to graminoids, as well as water staining, defined the location of the OHWM, and persisted throughout the reach of the delineated stream. |
| Additional observations or notes | |

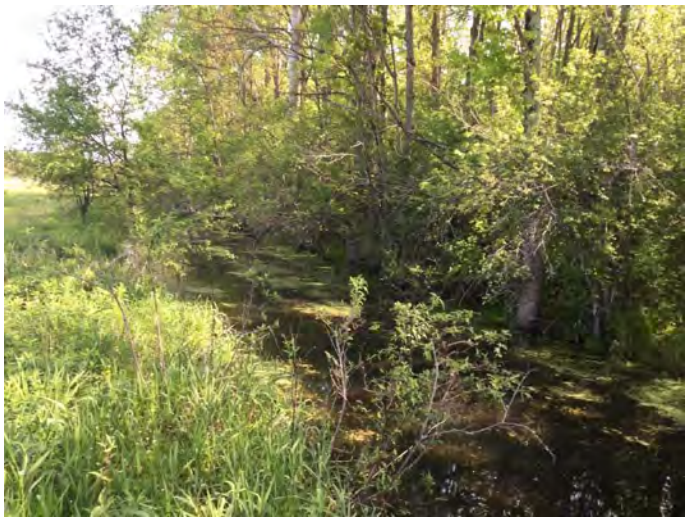
| Photos | |
|---|---|
| Photo log attached? | Yes |
| Photos | |



Transition in vegetation present within stream channel.



Downstream photograph.



Upstream photograph.

## - Rapid Ordinary High Water Mark (OHWM) 1.0

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 350853 |
| Survey Date | 05/31/2023 |
| User | Bennett Amberger |
| **General Information** | |
| Project ID # | 33-ST002-1 |
| Site Name | Hoffman Falls |
| Date | 05/31/2023 |
| Time | 11:40 AM |
| Location | |
| Latitude | 42.94250633 |
| Longitude | -75.759507 |
| Investigator(s) | BA, GH |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Corresponds to NYSDEC mapped class C stream. Moderate to low baseflow was observed during the delineation. Surrounding land use is primarily active agriculture and active pastureland. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | This stream flows over a gravel farm road. Some off-road trails border the eastern reach of this delineated stream. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| Other break in slope indicators | undercut bank |
| Undercut Bank Indicator Location | x |
| Shelving | |
| Channel bar | Present |
| Channel Bar Indicator Location | b |
| Other Channel Indicators | |
| Instream bedforms and other bedload transport evidence | Present |
| Instream bedforms Indicator | b |

| | |
|---|---|
| Location | |
| Other instream bedforms and bedload transport evidence | deposition bedload indicators (e.g., poofs, riffles, steps, etc.) |
| Deposition Bedload Indicator Location | |
| Secondary channels | |
| **Sediment Indicators** | |
| Soil development | |
| Changes in character of soil | Present |
| Changes in character of soil Indicator Location | x |
| Mudcracks | |
| Changes in particle-sized distribution | |
| **Vegetation Indicators** | |
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| General Vegetation Change | vegetation absent to: |
| vegetation absent to: | forbs |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | Present |
| Exposed Roots Indicator Location | x |
| **Ancillary Indicators** | |
| Ancillary Indicators | Wracking/presence of organic litter: |
| Wracking Indicator Location | x |
| Other observed indicators? | No |
| **Step 4: Additional Information** | |
| Is additional information needed to support this determination? | No |
| **Step 5: Rationale** | |
| Describe rationale for location of OHWM | The OHWM occurs at the extent of wracking, at the break in slope, and where undercut banks are present. These indicators persisted throughout the entire reach of the delineated stream. |
| Additional observations or notes | This OHWM represents the second data point taken on this stream. Additionally, this stream has a direct surface water connection to delineated wetlands 33-W003, 33-W005, and 33-W006. |

## Photos

| | |
|---|---|
| Photo log attached? | Yes |

### Photos

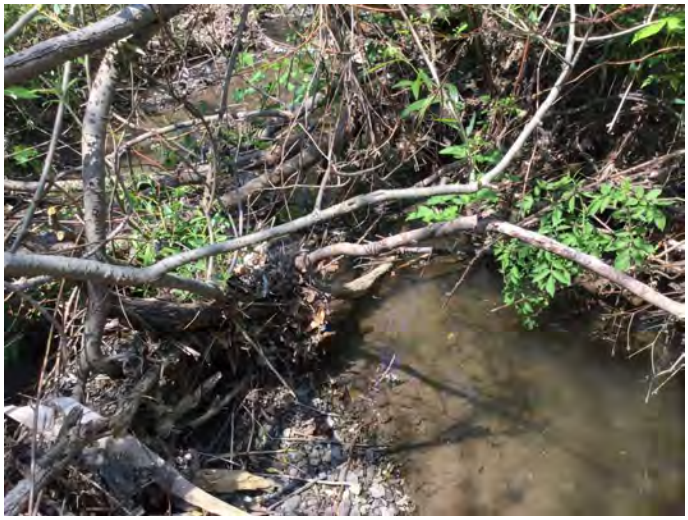


Photo of wracking, facing downstream.

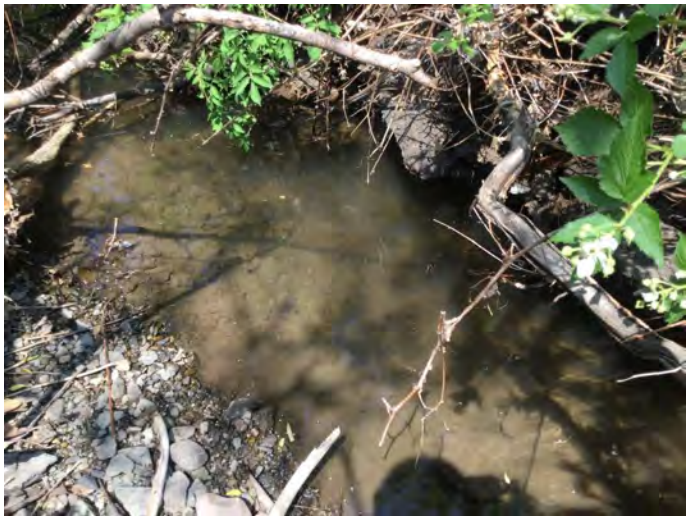
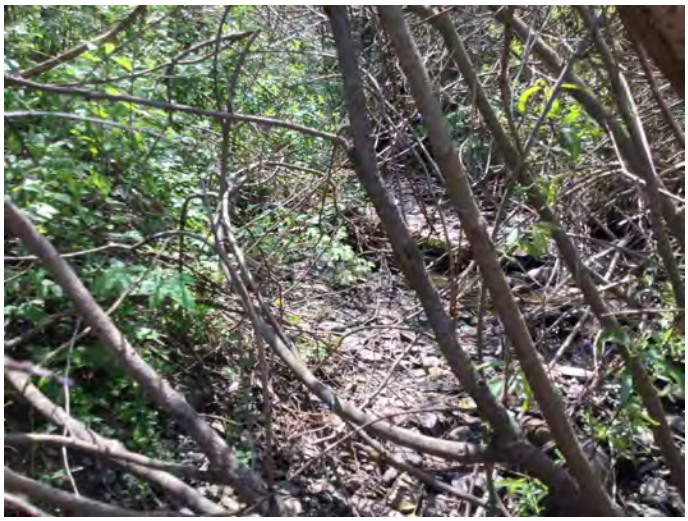
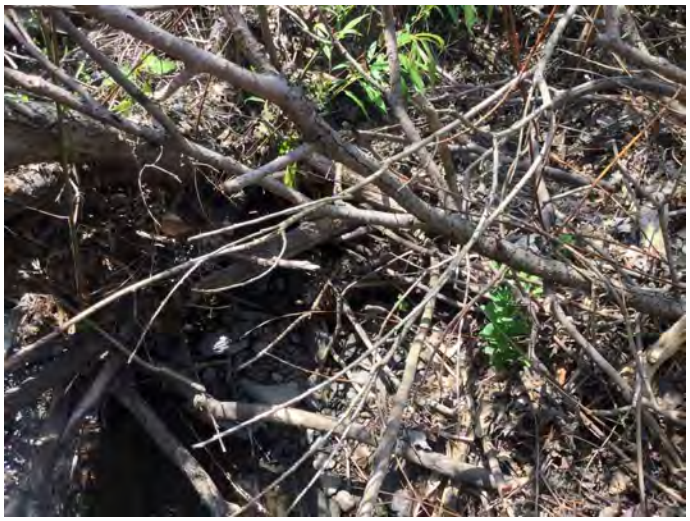


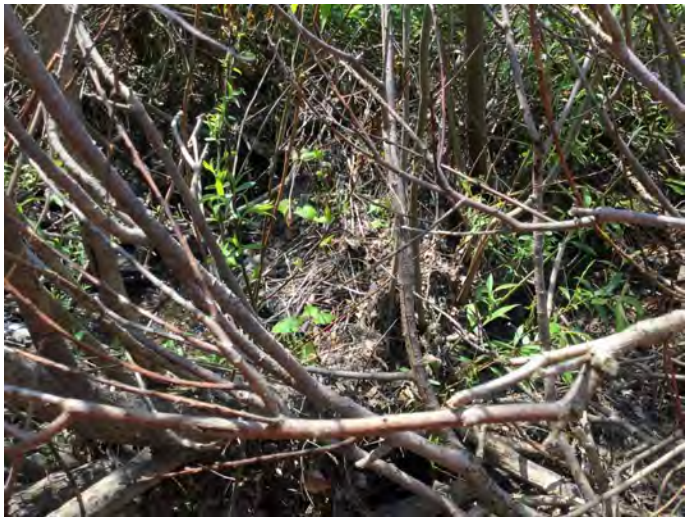
Photo of undercut bank and stream substrate.



Upstream photo, with break in slope present.



Additional wracking of organic material.



Additional wracking of organic material.

## - Rapid Ordinary High Water Mark (OHWM) 1.0

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 350859 |
| Survey Date | 05/31/2023 |
| User | Bennett Amberger |
| **General Information** | |
| Project ID # | 33-ST003 |
| Site Name | 21028 Hoffman Falls |
| Date | 06/01/2023 |
| Time | 11:18 AM |
| Location | |
| Latitude | 42.918788 |
| Longitude | -75.640201 |
| Investigator(s) | BA GH |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | Surrounding land use is successional pastureland and active agriculture. No baseflow was observed during the delineation. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | No observations of man-made disturbances in stream bed present. Stream bank appears to have been artificially constructed. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| Other break in slope indicators | |
| Shelving | Present |
| Shelving Indicator Location | x |
| Other Shelving Indicators | man-made berms or levees |
| Man-made berms or levees Indicator Location | x |
| Channel bar | |
| Instream bedforms and other bedload transport evidence | |
| Secondary channels | |
| **Sediment Indicators** | |

| | |
|---|---|
| Soil development | |
| Changes in character of soil | Present |
| Changes in character of soil Indicator Location | b |
| Mudcracks | |
| Changes in particle-sized distribution | Present |
| Changes in particle-sized distribution Indicator Location | b |
| Other changes in particle-sized distribution | transition |
| transition from | Silt to gravel |

## Vegetation Indicators

| | |
|---|---|
| Change in vegetation type and/or density | |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | |

## Ancillary Indicators

| | |
|---|---|
| Ancillary Indicators | |
| Other observed indicators? | No |

## Step 4: Additional Information

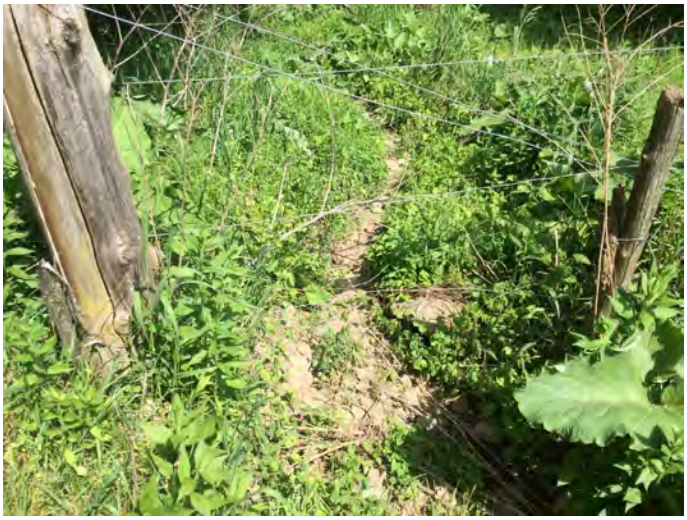
| | |
|---|---|
| Is additional information needed to support this determination? | No |

## Step 5: Rationale

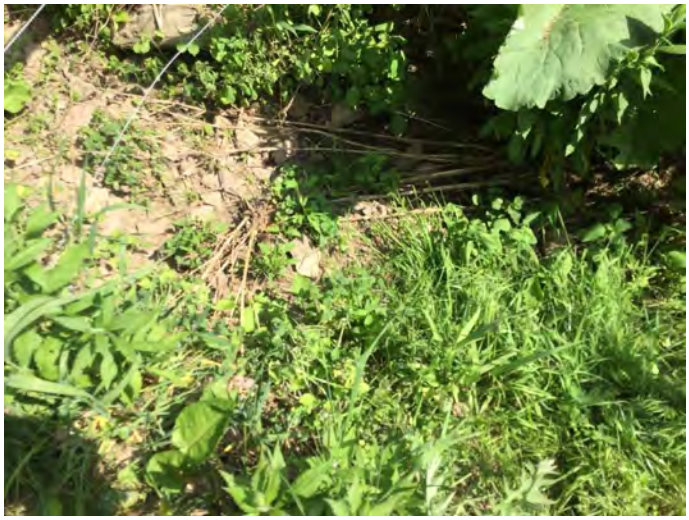
| | |
|---|---|
| Describe rationale for location of OHWM | Ditched ephemeral stream with man made banks that flows east. The OHWM occurs at the break in slope at the stream bed and where man-made berms terminate at stream bed. |
| Additional observations or notes | |

## Photos

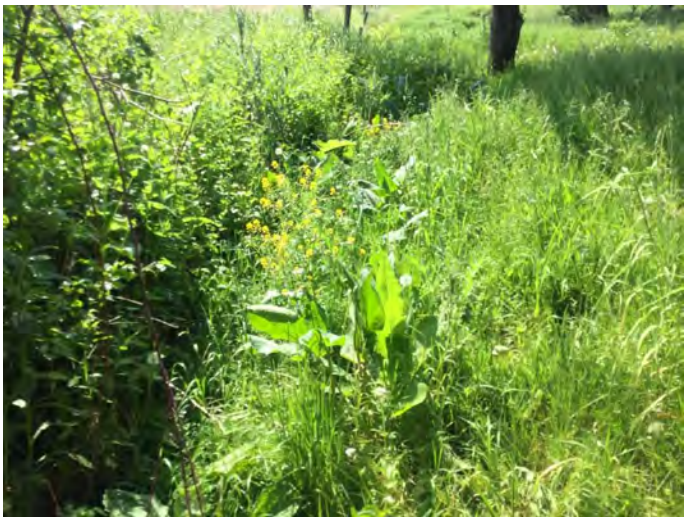
| | |
|---|---|
| Photo log attached? | Yes |
| Photos | |



Downstream photograph.



Stream substrate.



Upstream photograph, with man made berms.

## - Rapid Ordinary High Water Mark (OHWM) 1.0

| | |
|---|---|
| Project | 21028 Hoffman Falls Wetland Delineation |
| ID | 351080 |
| Survey Date | 06/01/2023 |
| User | Bennett Amberger |
| **General Information** | |
| Project ID # | 93-ST001-1 |
| Site Name | 21028 Hoffman Falls |
| Date | 06/01/2023 |
| Time | 11:14 AM |
| Location | |
| Latitude | 42.9453538 |
| Longitude | -75.7544422 |
| Investigator(s) | BA RS GH |
| **Step 1: Site overview from remote and online resources** | |
| Check boxes for online resources used to evaluate site | LiDAR, climatic data, geologic maps, land use maps, other, satellite imagery, topographic maps |
| Other | Natural Resource Mapper |
| Describe land use and flow conditions from online resources. | The surrounding land is successional scrub-shrub that borders residential properties. Moderate baseflow observed during the delineation. |
| **Step 2: Site conditions during field assessment** | |
| Describe Site Condition | No in-stream man-made or natural disturbances were present within this stream. |
| **Step 3 Indicators** | |
| **Geomorphic Indicators** | |
| Break in slope | Present |
| Break in Slope Indicator Location | x |
| Other break in slope indicators | undercut bank |
| Undercut Bank Indicator Location | x |
| Shelving | |
| Channel bar | Present |
| Channel Bar Indicator Location | b |
| Other Channel Indicators | |
| Instream bedforms and other bedload transport evidence | Present |
| Instream bedforms Indicator Location | b |

| | |
|---|---|
| Other instream bedforms and bedload transport evidence | |
| Secondary channels | Present |
| Secondary Channels Indicator Location | a |
| **Sediment Indicators** | |
| Soil development | Present |
| Soil Development Indicator Location | x |
| Changes in character of soil | Present |
| Changes in character of soil Indicator Location | x |
| Mudcracks | |
| Changes in particle-sized distribution | |
| **Vegetation Indicators** | |
| Change in vegetation type and/or density | Present |
| Vegetation Indicator Location | x |
| General Vegetation Change | vegetation absent to:, forbs to: |
| vegetation absent to: | forbs |
| forbs to: | |
| Vegetation matted down and/or bent: | |
| Exposed roots below intact soil layer: | Present |
| Exposed Roots Indicator Location | x |
| **Ancillary Indicators** | |
| Ancillary Indicators | Wracking/presence of organic litter: |
| Wracking Indicator Location | b |
| Other observed indicators? | No |
| **Step 4: Additional Information** | |
| Is additional information needed to support this determination? | No |
| **Step 5: Rationale** | |
| Describe rationale for location of OHWM | The OHWM occurs where undercut banks are developed, a vegetation transition occurs, and where stream substrate and sorting forms. These indicators were the most consistent of those observed and persisted throughout the entire reach of the delineated stream. |
| Additional observations or notes | This OHWM dataform represents stream 93-ST001 above the confluence of stream |