

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: B280031- NC 8 over Lick Creek City/County: City: Healing Springs Co.: Davidson Sampling Date: 12/16/2016
 Applicant/Owner: North Carolina Department of Transportation State: NC Sampling Point: WA/WB Upl
 Investigator(s): Mason, J. Barrett, B. Dilday, J. Section, Township, Range: ---
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): None Slope (%): 0-2
 Subregion (LRR or MLRA): P Lat: 35.61312 Long: -80.17340 Datum: NAD83
 Soil Map Unit Name: Oakboro silt loam, 0 to 2 percent slopes, frequently flooded (OkA) NWI classification: Upland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒	No ☐	Is the Sampled Area within a Wetland?	Yes ☐	No ☒
Hydric Soil Present?	Yes ☐	No ☒			
Wetland Hydrology Present?	Yes ☐	No ☒			
Remarks:					

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) ☐ Surface Water (A1) ☐ True Aquatic Plants (B14) ☐ High Water Table (A2) ☐ Hydrogen Sulfide Odor (C1) ☐ Saturation (A3) ☐ Oxidized Rhizospheres on Living Roots (C3) ☐ Water Marks (B1) ☐ Presence of Reduced Iron (C4) ☐ Sediment Deposits (B2) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ Drift Deposits (B3) ☐ Thin Muck Surface (C7) ☐ Algal Mat or Crust (B4) ☐ Other (Explain in Remarks) ☐ Iron Deposits (B5) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Water-Stained Leaves (B9) ☐ Aquatic Fauna (B13)		Secondary Indicators (minimum of two required) ☐ Surface Soil Cracks (B6) ☐ Sparsely Vegetated Concave Surface (B8) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Stunted or Stressed Plants (D1) ☒ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ Microtopographic Relief (D4) ☐ FAC-Neutral Test (D5)	
Field Observations: Surface Water Present? Yes ☐ No ☒ Depth (inches): _____ Water Table Present? Yes ☐ No ☒ Depth (inches): _____ Saturation Present? Yes ☐ No ☒ Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes ☐ No ☒	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: Saturation and H2O table >12 in.			

VEGETATION (Five Strata) – Use scientific names of plants.

Sampling Point: WA/WB Upl

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Pinus virginiana</u>	<u>15.0</u>	<u>Y</u>	<u>UPL</u>
2. <u>Acer rubrum</u>	<u>15.0</u>	<u>Y</u>	<u>FAC</u>
3. <u>Liquidambar styraciflua</u>	<u>10.0</u>	<u>Y</u>	<u>FAC</u>
4. _____	_____	_____	Select
5. _____	_____	_____	Select
6. _____	_____	_____	Select
<u>40.0</u> = Total Cover			
50% of total cover: <u>20.00</u>		20% of total cover: <u>8.00</u>	

Sapling Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>See Shrub Stratum</u>	_____	_____	Select
2. _____	_____	_____	Select
3. _____	_____	_____	Select
4. _____	_____	_____	Select
5. _____	_____	_____	Select
6. _____	_____	_____	Select
<u>0.0</u> = Total Cover			
50% of total cover: <u>0.00</u>		20% of total cover: <u>0.00</u>	

Shrub Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Juniperus virginiana</u>	<u>10.0</u>	<u>Y</u>	<u>FACU</u>
2. <u>Liquidambar styraciflua</u>	<u>5.0</u>	<u>Y</u>	<u>FAC</u>
3. <u>Ulmus alata</u>	<u>5.0</u>	<u>Y</u>	<u>FACU</u>
4. <u>Ligustrum sinense</u>	<u>2.5</u>	<u>N</u>	<u>FACU</u>
5. _____	_____	_____	Select
6. _____	_____	_____	Select
<u>22.5</u> = Total Cover			
50% of total cover: <u>11.25</u>		20% of total cover: <u>4.50</u>	

Herb Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Microstegium vimineum</u>	<u>60.0</u>	<u>Y</u>	<u>FAC</u>
2. <u>Andropogon virginicus</u>	<u>2.5</u>	<u>N</u>	<u>FACU</u>
3. _____	_____	_____	Select
4. _____	_____	_____	Select
5. _____	_____	_____	Select
6. _____	_____	_____	Select
7. _____	_____	_____	Select
8. _____	_____	_____	Select
9. _____	_____	_____	Select
10. _____	_____	_____	Select
11. _____	_____	_____	Select
<u>62.5</u> = Total Cover			
50% of total cover: <u>31.25</u>		20% of total cover: <u>12.50</u>	

Woody Vine Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>None</u>	_____	_____	Select
2. _____	_____	_____	Select
3. _____	_____	_____	Select
4. _____	_____	_____	Select
5. _____	_____	_____	Select
<u>0.0</u> = Total Cover			
50% of total cover: <u>0.00</u>		20% of total cover: <u>0.00</u>	

Dominance Test worksheet:Number of Dominant Species That Are OBL, FACW, or FAC: 4.0 (A)Total Number of Dominant Species Across All Strata: 7.0 (B)Percent of Dominant Species That Are OBL, FACW, or FAC: 57.14 (A/B)
(NaN: Not a Number)**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = <u>0.00</u>
FACW species _____	x 2 = <u>0.00</u>
FAC species _____	x 3 = <u>0.00</u>
FACU species _____	x 4 = <u>0.00</u>
UPL species _____	x 5 = <u>0.00</u>
Column Totals: <u>0.00</u> (A)	<u>0.00</u> (B)
Prevalence Index = B/A = <u>NaN</u> (NaN: Not a Number)	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is $\leq 3.0^1$
- ☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**Definitions of Five Vegetation Strata:****Tree** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).**Sapling** – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.**Shrub** – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.**Herb** – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.**Woody vine** – All woody vines, regardless of height.**Hydrophytic Vegetation Present?**Yes ☒ No ☐

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: WA/WB Up

Sampling Point: WA/WB Up

[illegible]