

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Bridge 125 City/County: Alamance Sampling Date: 3/22/12
 Applicant/Owner: NC DOT State: NC Sampling Point: W1
 Investigator(s): Pete Stafford Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Riparian/Floodplain Local relief (concave, convex, none): Flat Slope (%): 41%
 Subregion (LRR or MLRA): MLFA 136 Lat: 35.96769068 Long: -79.41458105 Datum: NAD83
 Soil Map Unit Name: LC (Local Alluvial) + Mc (Mixed Alluvial) NWI classification: PFO1B
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation NO, Soil NO, or Hydrology YES significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
 Are Vegetation NO, Soil NO, or Hydrology NO 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 ☐
 Hydric Soil Present? Yes ☒ No ☐
 Wetland Hydrology Present? Yes ☒ No ☐

Is the Sampled Area within a Wetland? Yes ☒ No ☐

Remarks:

Wetland 1 is the result of beaver activity that has flooded most of the project study area. Hydric soils were not consistent.

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): 24
 Water Table Present? Yes ☒ No ☐ Depth (inches): surface
 Saturation Present? Yes ☒ No ☐ Depth (inches): surface
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

The hydrology of wetland 1 is a function of the beaver activity and flooding. Due to the extensive beaver alterations, wetland hydrology is present.

Bridge 125
Wetland

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

Sampling Point: _____

Tree Stratum (Plot size: <u>10m²</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Red maple (Acer rubrum)</u>	<u>5</u>		<u>Fac</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)
2. <u>Loblolly pine (Pinus taeda)</u>	<u>25</u>	☒	<u>Fac</u>	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. <u>Water oak (Quercus nigra)</u>	<u>5</u>		<u>Fac</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
4. _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. _____				
6. _____				
7. _____				
8. _____				
Sapling Stratum (Plot size: <u>10m²</u>) <u>35</u> = Total Cover				Hydrophytic Vegetation Indicators: ☒ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ☐ Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Sweet gum (Liquidambar styraciflua)</u>	<u>10</u>	☒	<u>Fac</u>	
2. <u>Red maple (Acer rubrum)</u>	<u>10</u>	☒	<u>Fac</u>	
3. _____				
4. _____				
Shrub Stratum (Plot size: <u>10m²</u>) <u>20</u> = Total Cover <u>N/A</u>				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>N/A</u>	<u>N/A</u>			
2. _____				
3. _____				
4. _____				
Herb Stratum (Plot size: <u>10m²</u>) <u>N/A</u> = Total Cover				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.
1. <u>Japanese stiltgrass (Microstegium vimineum)</u>	<u>50</u>	☒	<u>Fac</u>	
2. _____				
3. _____				
4. _____				
Woody Vine Stratum (Plot size: <u>10m²</u>) <u>50</u> = Total Cover				Hydrophytic Vegetation Present? Yes ☒ No _____
1. <u>Green briar (Smilax rotundifolia)</u>	<u>30</u>	☒	<u>Fac</u>	
2. <u>Poison ivy (Toxicodendron radicans)</u>	<u>5</u>		<u>Fac</u>	
3. _____				
4. _____				
<u>35</u> = Total Cover				

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

