

478-743-7175

hhnt.com

3920 Arkwright Road, Suite 101 Macon, GA 31210

February 14, 2025

US Army Corps of Engineers Charleston Regulatory Office 69A Hagood Avenue Charleston, South Carolina 29403

Re: Luck Companies / Proposed Luck Cherokee

Cherokee County, SC Delineation Concurrence

HHNT Project Number: 4780-025

To Whom It May Concern:

On behalf of Greenfield Timber, LLC, Hodges, Harbin, Newberry & Tribble, Inc., (HHNT) is herein submitting the enclosed Delineation Concurrence (DC) Request for the above-referenced site. The study area for the project, henceforth referred to as the Proposed Luck Cherokee, is a ~567.13-acre tract of land located north of I-85 and west of Old Post Road in Cherokee County, South Carolina (Appendix A, Figures 1 and 2).

Attached please find all appropriate mapping and documentation of the project area and a GPS delineation map overlaid on an aerial photograph. It is the opinion of HHNT that all the U.S. Army Corps of Engineers (USACE) Waters of the United States limits have been identified and flagged within the project study area consistent with current jurisdictional guidelines.

At your earliest convenience, we respectfully request that the attached DC request be processed for the subject property. Please contact us to schedule a field visit and for access to the property, if necessary. In advance, we thank you for your timely review of this project and if you should have any questions or require additional information, please do not hesitate to call.

Sincerely,

HODGES, HARBIN, NEWBERRY & TRIBBLE, INC.

Brandon F. Smith, PWS

Senior Ecologist

BFS

U.S. Army Corps of Engineers – Charleston District - Regulatory Division REQUEST FOR CORPS JURISDICTIONAL DETERMINATION (JD) / DELINEATION

(For Jurisdictional Status and Identifying Wetlands and Other Aquatic Resources)

The Regulatory Division is now offering paperless/electronic documents as a primary means of accepting project submittals and responding to requests. While electronic submittals are preferred, we will continue to accept paper documents that meet our file requirements in order to accommodate those with limited computer access. Depending on the project location, requests should be submitted to the appropriate office below. Please visit https://www.sac.usace.army.mil/Missions/Regulatory/Electronic-Submittals/ for additional information on electronic submittals.

Charleston Office: Columbia Office: Conway Office: Greenville Office: 1949 Industrial Park Road, Room 140 150 Executive Center Drive, Suite 205 69A Hagood Avenue 2567 Essayons Way Charleston, SC 29403 Fort Jackson, SC 29207 Conway, SC 29526 Greenville, SC 29615 843-329-8044 803-253-3444 843-365-4239 864-609-4326 SAC.RD.Charleston@usace.army.mil SAC.RD.Columbia@usace.army.mil SAC.RD.Conway@usace.army.mil SAC.RD.Greenville@usace.army.mil

I. PROPERTY AND AGENT INFORMATION

| A. Site Details/Location: | |
|--|--|
| Site Name: | Date: |
| City/Township/Parish: | County: Acreage: |
| Latitude/Longitude: | Acreage: |
| | · |
| Property Address(es): | |
| | nust be provided (survey, tax map, OR GPS coordinates). Tax maps may only be used if |
| the site includes the entire tax map parcel. and proper submittal. | See the attached Checklist for information that should be submitted for a complete |
| | ation/Delineation (if there are multiple property owners, please attach additional pages) Company Name (if applicable): |
| Address: | |
| Phone: | Email: |
| Check one: ☐ I currently own this proper | rty |
| Consultant/Agent Name: | ing on Behalf of the Requestor (if applicable): |
| Company Name: | |
| Address: | Phone: |
| Email: | |
| II. REASON FOR REQUEST (check all th | at apply): |
| \square I intend to construct/develop a project of | or perform activities on this site which would be designed to avoid all aquatic resources. |
| ☐ I intend to construct/develop a project or resources under Corps authority. | or perform activities on this site which would be designed to avoid all jurisdictional aquatic |
| | or perform activities on this site which may require authorization from the Corps, and the d to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in |
| | or perform activities on this site which may require authorization from the Corps; this ication and the jurisdictional determination is to be used in the permitting process. |
| $\ \square$ I intend to construct/develop a project of the tide. | or perform activities in a navigable water of the U.S. which is subject to the ebb and flow of |
| $\hfill \square$ A Corps jurisdictional determination is r | required in order to obtain my local/state authorization. |
| ☐ I intend to contest jurisdiction over a pa not exist over the aquatic resource on the p | rticular aquatic resource and the request the Corps to confirm that jurisdiction does/does parcel. |
| ☐ I believe that the site may be comprised | d entirely of dry land. |
| ☐ Other: | |
| | |

under the regulatory authorities referenced above.

Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.

Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an jurisdictional determination cannot be evaluated nor can a jurisdictional determination be issued.

^{*}Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.

Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction

III. TYPE OF REQUEST:

<u>Delineation Concurrence</u> (DC) – A DC provides concurrence that the delineated boundaries of wetlands on a property are a reasonable representation of the aquatic resources on-site. A DC does not address the jurisdictional status of the aquatic resources. (NOTE: A DC is generally the quickest type of standalone request for the Corps to review and process.)

²<u>Approved</u> – An AJD is defined in Corps regulations at 33 CFR 331.2. As explained in further detail in RGL 16-01, an AJD is used to indicate that this office has identified the presence or absence of wetlands and/or other aquatic resources on a site, including their accurate location(s) and boundaries, as well as their jurisdictional status. AJDs are valid for 5 years.

³Preliminary – A PJD is defined in Corps regulations at 33 CFR 331.2. As explained in further detail in RGL 16-01, a PJD is used to indicate that this office has identified the approximate location(s) and boundaries of wetlands and/or other aquatic resources on a site that are presumed to be subject to regulatory jurisdiction of the Corps of Engineers. Unlike an AJD, a PJD does not represent a definitive, official determination that there are, or that there are not, jurisdictional aquatic resources on a site, and does not have an expiration date.

4 "No Permit Required" (NPR) Letter- A NPR letter may be provided by the Corps to notify the requestor that an activity will not require a permit (authorization) from the Corps; this letter can only be used if the proposed activity is not a regulated activity, regardless of where the activity may occur. A NPR letter cannot be used to indicate the presence or absence of wetlands and/or other aquatic resources, nor can it be used to determine their jurisdictional status.

NOTE 1: Pre-approved Delineations and/or JDs are NOT a pre-requisite for submitting a DA permit application. Requests for JDs and/or DCs that are not associated with a DA permit application (Standalone Delineation / JD requests) will be reviewed and processed as time allows and based on available resources.

NOTE 2: Although not a requirement, it is recommended that Standalone requests be prepared and submitted by an environmental consultant to expedite the review process.

| Select the Appropriate Request: | |
|--|---|
| ☐ Pre-Construction Notification or Department of the A | rmy permit application |
| \square with Delineation only (no written concurrence of de | elineation) |
| ☐ with Delineation Concurrence¹ | |
| ☐ with Preliminary Jurisdictional Determination (PJD) |) 3 |
| ☐ with Approved Jurisdictional Determination (AJD) ² | 2 |
| Standalone Delineation / Jurisdictional Determination Standalone Delineation / Jurisdictional Determination requests will be revi Delineation Concurrence1 | |
| ☐ Preliminary Jurisdictional Determination (PJD) ³ | |
| Approved Jurisdictional Determination (AJD) ² | |
| priorities, the Charleston District Regulatory Division will only pro (typically 1 acre or less). With the attached Pre-Construction Notification or I | for private property owners for minor actions. Due to current workload and ovide this service on a limited basis for private individuals on small tracts of land |
| ☐ "No Permit Required" (NPR) Letter as I believe my prop | posed activity is not regulated ⁴ |
| Unclear and require additional information to inform my c | |
| authority, to and do hereby grant U.S. Army Corps of Engine this request for the purposes of conducting on-site investigati | am acting as the duly authorized agent of a person or entity with such ers personnel right of entry to legally access the property(ies) subject to ions (e.g., digging and refilling shallow holes) and issuing a jurisdictional ation that I possess the requisite property rights to request a jurisdictional |
| Mailing Address | Property Address / TMS #(s) |
| Email Address | Daytime Phone Number |
| *Signature: | Printed Name and Date |

under the regulatory authorities referenced above.

Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made

2

*Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.

Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction

Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an jurisdictional determination cannot be evaluated nor can a jurisdictional determination be issued.

available to the public on the District's website and on the Headquarters USACE website.

JURISDICTIONAL DETERMINATION AND DELINEATION CHECKLIST:

This checklist is to assist prospective requesters in submitting complete and proper information. This is NOT a comprehensive list nor are all items mandatory for all projects. However, the list contains general information typically necessary for this office to confirm jurisdictional and/or wetland delineations as part of the permitting process. Required items are indicated by an asterisk (*). To reduce delays in verifying Jurisdictional Determinations and Delineations, it is recommended that the information provided is a complete and true representation of wetlands and other aquatic resources that may be present onsite. It is also recommended that submissions be prepared and submitted by an environmental consultant. Although this is not a requirement, it will significantly expedite the review process.

Following these standards will help to expedite our review. Flexibility of these standards may be determined by the Regulatory Division on a case-by-case basis only. Please note the Corps has the ability to reject delineation work that is incomplete or inaccurate.

| □ *Completed Request For Corps Jurisdictional Determination (JD) / Delineation AND Legal Right of Entry |
|---|
| □ <u>Site Information</u> : |
| □ *Location Maps: large-scale and small-scale maps, including streets, intersections, cities and an accurate depiction of the site boundary shown. |
| Note: Only contiguous/adjoining parcels can be submitted under one JD request. If there is an area not within the JD request that separates the areas of review (i.e., a road, utility line, etc.), a separate JD request should be submitted each area. |
| □ *Overlay of site boundary on aerial photo, USGS topographic map, soil survey, NWI Map, etc. |
| □ *Site's coordinates should be based on a standard coordinate system, i.e., Geographic (at least to the nearest tenth of a second), State Plane or UTM. Indicate the coordinate system (and zone for UTM), units (English or metric) and the corresponding geodetic datum, either NAD27 or NAD83. |
| □ *Property lines with measurements illustrating all existing land features, including streams, ditches, trails, etc. |
| ☐ Landscape photos of representative upland areas and aquatic resources, with the photo locations and directions of photos marked on a depiction. |
| ☐ Current land use and plant communities located on and adjacent to the area under review (i.e., agricultural, industrial, residential, cropland, lawn, forested, etc.). If known, a brief history of the previous land use will be helpful. |
| ☐ Proposed & existing structures clearly defined as such. |
| Dimensions of proposed structures such as a driveway, house, garage, and other structures which are proposed in wetlands. |
| ☐ Sewage/septic system: location, dimensions and type. |
| ☐ Drainage ditches and/or berms: location and dimensions. |
| □ *Wetland Determination Data Forms: Record wetland delineation information for both the upland and wetland side of various points along the boundary. Current version from appropriate Regional Supplement found at: https://www.sac.usace.army.mil/Missions/Regulatory.aspx |
| ☐ Elements for Depictions of All Sites: |
| □ *Title Block with project name, applicant, county, state, date. |
| □ *North arrow □ *Solid bold line depicting project area boundary with label. The project area boundary should be accurate and may be |
| represented by survey, tax map, or GPS coordinates with coordinates provided. Please note that a survey is NOT required. Tax maps may only be used if the project area includes the entire parcel(s). Include the Tax Map Parcel Numbers, Property Identification Numbers, etc., the source of the map, and date of preparation (print date). |
| □ *Clearly marked boundaries of all wetlands and/or other aquatic resources and other pertinent features that are present |
| (Wetlands, Tributaries, Lakes, Borrow Pits, Ponds, Rivers, Drainage Features, Ditches) and have been flagged in the field. |
| Surveyed or GPS coordinates of the boundaries should be provided. (At a minimum, potentially non-jurisdictional linear features should be included on a supplement sketch/depiction.) |
| □ *Labels of wetlands and/or other aquatic resources. Refer to the below tables for the standardized labels that should be used for AJDs, PJDs and/or Delineation Concurrence. |
| □ *Size (acres) and length (linear feet) of each individual wetlands or aquatic resource included on the depiction. |
| *Wetland Determination Data Form point locations with labels. (At a minimum, this should be included on a supplement sketch/depiction.) |

under the regulatory authorities referenced above.

Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.

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^{*}Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.

Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction

*Standardized Labels for Depictions of Wetlands and Aquatic Resources

Table 1: Labels for PJDs and Delineation Concurrence

| Label | Description |
|--|---|
| Wetland X (tidal, non-tidal) | All wetlands, including tidal wetlands. |
| Non-wetlands waters X (tidal, non-tidal) | All non-wetland aquatic resources (ponds, linear features, tributaries, tidal open water. |
| Upland | Uplands should be labeled |
| Non-aquatic resource X (Optional) * | Features determined by the Corps to be non-aquatic resources. |

Table 2: Labels for AJDs

| Jurisdictional Feature Label | Description |
|--|---|
| TNW X | Traditionally Navigable Water, tidal wetland, or and/or OCRM Critical Area Wetland |
| Jurisdictional Tributary X | Tributary, relatively permanent water, or stream bed |
| Jurisdictional Wetland X | Meeting 3-parameters per 1987 Delineation Manual |
| Other Jurisdictional WOUS X | Other Waters of the United States such as ponds, lakes, ditches, impoundments, etc. |
| Non-jurisdictional Wetland X | Wetland determined by the Corps to be non-jurisdictional |
| Non-jurisdictional Feature X (Optional)* | Non-jurisdictional ponds, borrow-pits, linear features, ditches, etc. |
| Upland | Uplands should be labeled when wetlands or other waters, regardless of jurisdictional status, are present. When no wetlands or other waters are present, the "Upland" label is not necessary. |

April 29, 2022

^{*}Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.

Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.

Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.

Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an jurisdictional determination cannot be evaluated nor can a jurisdictional determination be issued.

PROJECT UPLOAD REQUEST DETAILS*

| | DA | # | | N/A |
|--|----|---|--|-----|

So that the ORM team may accurately understand the requirements for this project upload, please provide the details of how the included data is to be loaded.

Specify clearly which data needs to be uploaded to ORM, and which is to be finalized. Provide Required Additional Information as described in the explanation below.

| | Load | Finalize | | Required Additional Information |
|----------------------------------|------|----------|---------------------------|--|
| Aquatic Resources | YES | YES | Loaded at District? | Has not been loaded by District Administrators |
| Impacts | NO | NO | Permit Action ID? | N/A |
| Mitigation-Permittee Responsible | NO | NO | Permit Action ID? | N/A |
| Mitigation Bank / ILF | NO | NO | Permit Action ID? | N/A |
| NWP | NO | NO | JD ID? Reasons for Delay? | N/A |
| Pre2015_Post_Sackett_JD | NO | NO | | N/A |
| RGP / PGP | NO | NO | JD ID? Reasons for Delay? | N/A |

Required Additional Information explanation:

Loaded at District? For ARs, please indicate whether the data has been already loaded by the District Administrators.

Permit Action ID? When Impact and/or Mitigation are provided, but not loading a Permit, you must provide the ACTION ID of one unfinalized Permit to which the data is to be tied.

JD ID? For NWP or RGP/PGP: if the permit is to be tied to a JD, but the JD information is not included for upload, please provide the ID of the JD to which the uploaded permits should be associated.

(The id can be viewed by hovering over the specific JD in the JD lists.) Also consider including the Begin and End dates for the JD.

Reasons For Delay? For NWP or RGP/PGP, if the Permit End Date is more than 60 days past the Date Received, then please specifiy the Delay Reason information. (Multiple Delay Reasons may be provided.)

SHAPEFILE UPLOAD REQUEST DETAILS **

Specify the Filenames that contain geometry data for the ARs and/or Project Location to be loaded into ORM.

| | Filename(s) | Notes |
|-------------------|----------------------|---|
| Aquatic Resources | AquaticResources.zip | Coordinate system: NAD 1983 StatePlane SC |
| Project Boundary | ProjectArea.zip | Coordinate system: NAD 1983 StatePlane SC |

* The zip archive of upload template documents must first be downloaded and saved to your local disk.

The template file(s) must then be extracted from the zip archive and also saved to your local disk before using them.

If the template file is not first saved to your local disk, the data validation macros will not function.

** Please be aware that the .shp, .shx, .dbf, and .prj files at a minimum must be received in order to be a complete submission.

For Aquatic Resources, ORM must receive both an AR worksheet and a shapefile in the submission.

- In the Shapefile, each geometry must include an attribute for WatersName and each WatersName MUST be unique within and across all files.
- Furthermore, there must be a one to one relationship between the WaterName in the AR Worksheet and the WatersName in the Shapefile.
- When uploading Aquatic Resources via shapefile, the Latitude / Longitude in the AqResources worksheet is not required.

For Project Boundary, the submitted file must contain only one Geometry.

PROJECT UPLOAD REQUEST DETAILS*

| | DA | # | | N/A |
|--|----|---|--|-----|

So that the ORM team may accurately understand the requirements for this project upload, please provide the details of how the included data is to be loaded.

Specify clearly which data needs to be uploaded to ORM, and which is to be finalized. Provide Required Additional Information as described in the explanation below.

| | Load | Finalize | | Required Additional Information |
|----------------------------------|------|----------|---------------------------|--|
| Aquatic Resources | YES | YES | Loaded at District? | Has not been loaded by District Administrators |
| Impacts | NO | NO | Permit Action ID? | N/A |
| Mitigation-Permittee Responsible | NO | NO | Permit Action ID? | N/A |
| Mitigation Bank / ILF | NO | NO | Permit Action ID? | N/A |
| NWP | NO | NO | JD ID? Reasons for Delay? | N/A |
| Pre2015_Post_Sackett_JD | NO | NO | | N/A |
| RGP / PGP | NO | NO | JD ID? Reasons for Delay? | N/A |

Required Additional Information explanation:

Loaded at District? For ARs, please indicate whether the data has been already loaded by the District Administrators.

Permit Action ID? When Impact and/or Mitigation are provided, but not loading a Permit, you must provide the ACTION ID of one unfinalized Permit to which the data is to be tied.

JD ID? For NWP or RGP/PGP: if the permit is to be tied to a JD, but the JD information is not included for upload, please provide the ID of the JD to which the uploaded permits should be associated.

(The id can be viewed by hovering over the specific JD in the JD lists.) Also consider including the Begin and End dates for the JD.

Reasons For Delay? For NWP or RGP/PGP, if the Permit End Date is more than 60 days past the Date Received, then please specifiy the Delay Reason information. (Multiple Delay Reasons may be provided.)

SHAPEFILE UPLOAD REQUEST DETAILS **

Specify the Filenames that contain geometry data for the ARs and/or Project Location to be loaded into ORM.

| | Filename(s) | Notes |
|-------------------|----------------------|---|
| Aquatic Resources | AquaticResources.zip | Coordinate system: NAD 1983 StatePlane SC |
| Project Boundary | ProjectArea.zip | Coordinate system: NAD 1983 StatePlane SC |

* The zip archive of upload template documents must first be downloaded and saved to your local disk.

The template file(s) must then be extracted from the zip archive and also saved to your local disk before using them.

If the template file is not first saved to your local disk, the data validation macros will not function.

** Please be aware that the .shp, .shx, .dbf, and .prj files at a minimum must be received in order to be a complete submission.

For Aquatic Resources, ORM must receive both an AR worksheet and a shapefile in the submission.

- In the Shapefile, each geometry must include an attribute for WatersName and each WatersName MUST be unique within and across all files.
- Furthermore, there must be a one to one relationship between the WaterName in the AR Worksheet and the WatersName in the Shapefile.
- When uploading Aquatic Resources via shapefile, the Latitude / Longitude in the AqResources worksheet is not required.

For Project Boundary, the submitted file must contain only one Geometry.

U.S. Army Corps of Engineers Charleston District, Regulatory Division Global Positioning Systems (GPS) Datasheet Delineation of Wetlands, Streams and Other Waters Within the State of South Carolina

Date of Delineation November 11-13, 2024 USACE File Number Name of Delineator Present Make and Model of GPS Device Used (must be capable of sub-meter accuracy) Geographic Coordinate System Used Name of Continually Operated Reference Station Used for Post-processing Date Post-processing Performed Percent Dilution of Position (PDOP) (6 or less is required) Name and Coordinates of Known Property Corner and/or Monument GPS Reading of Known Property Corner and/or Monument Frequency of Waypoints Taken During Survey Note: GPS data must be provided, if requested. If GPS data and/or GPS delineation is determined unacceptable by

the Savannah District, a survey sealed by a surveyor licensed in South Carilina will be required.

APPENDICES

Appendix A: Figures

Appendix B: Wetland Data Forms
Appendix C: Upland Data Forms
Appendix D: Stream Forms
Appendix E: Site Photographs

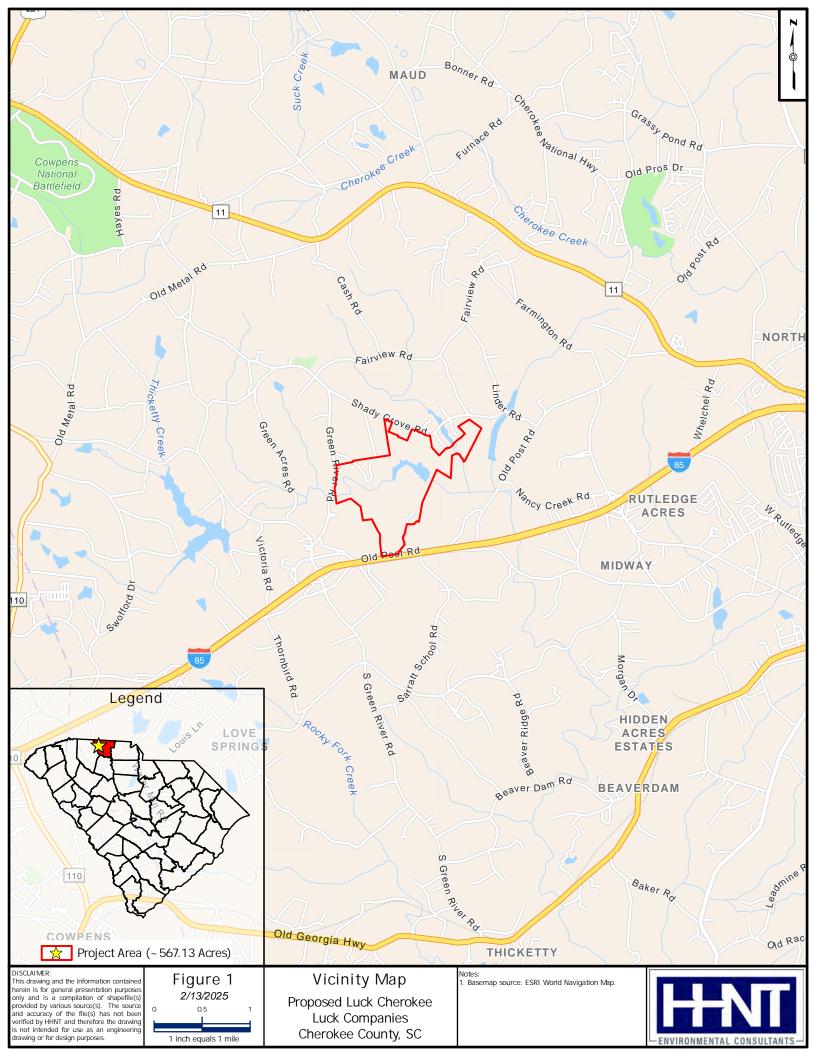
Appendix F: Precipitation and Drought Data

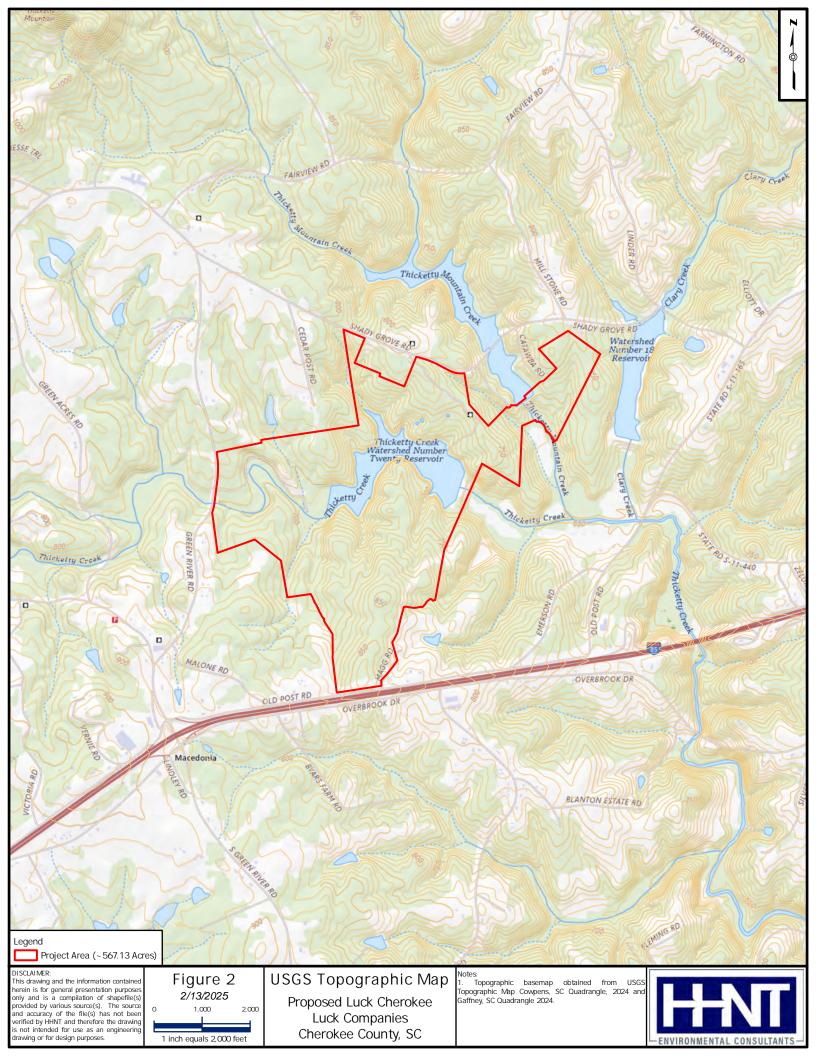


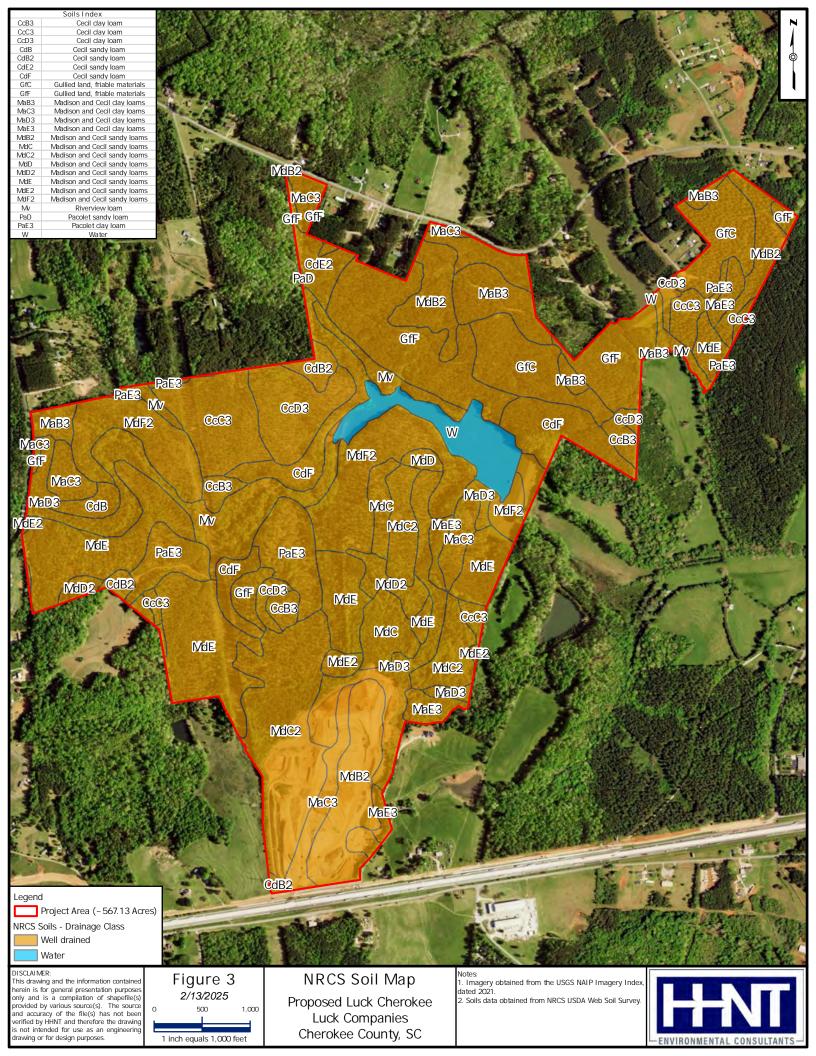
APPENDIX A FIGURES

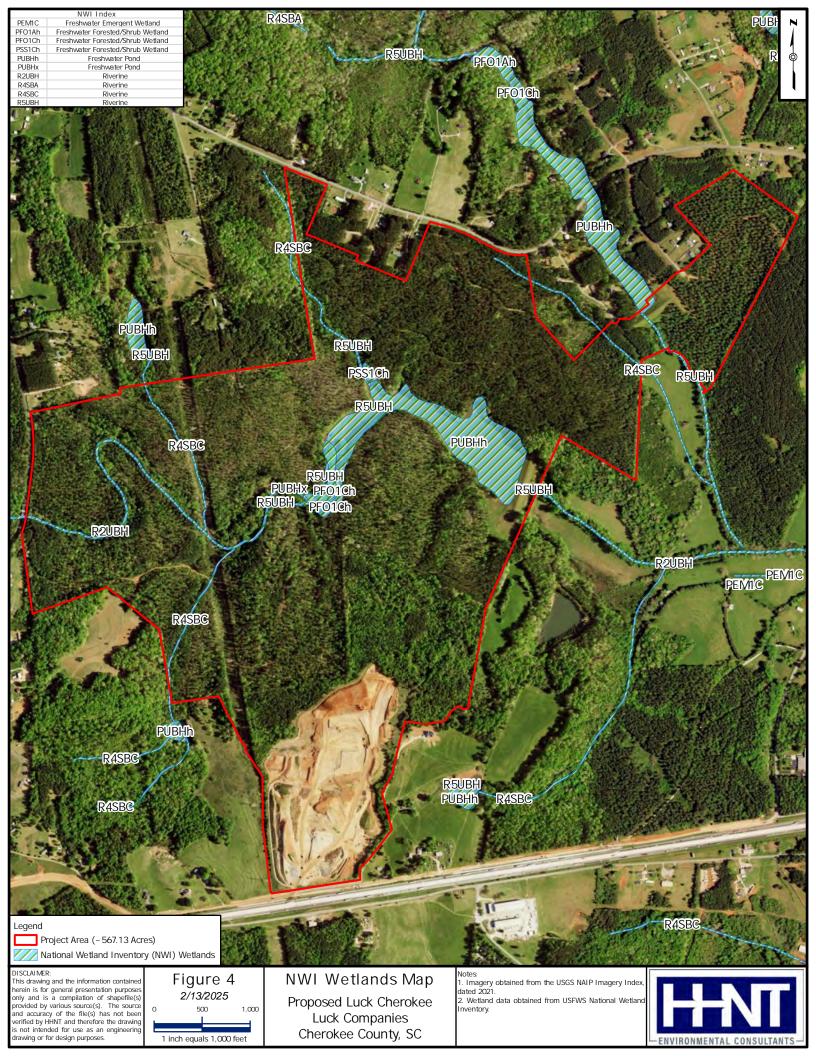
- 1. Vicinity Map
- 2. USGS Topographic Map
- 3. NRCS Soil Map
- 4. NWI Wetlands Map
- 5. FEMA Floodplain Map
- 6. Delineation Map
- 7. Photo Location Map

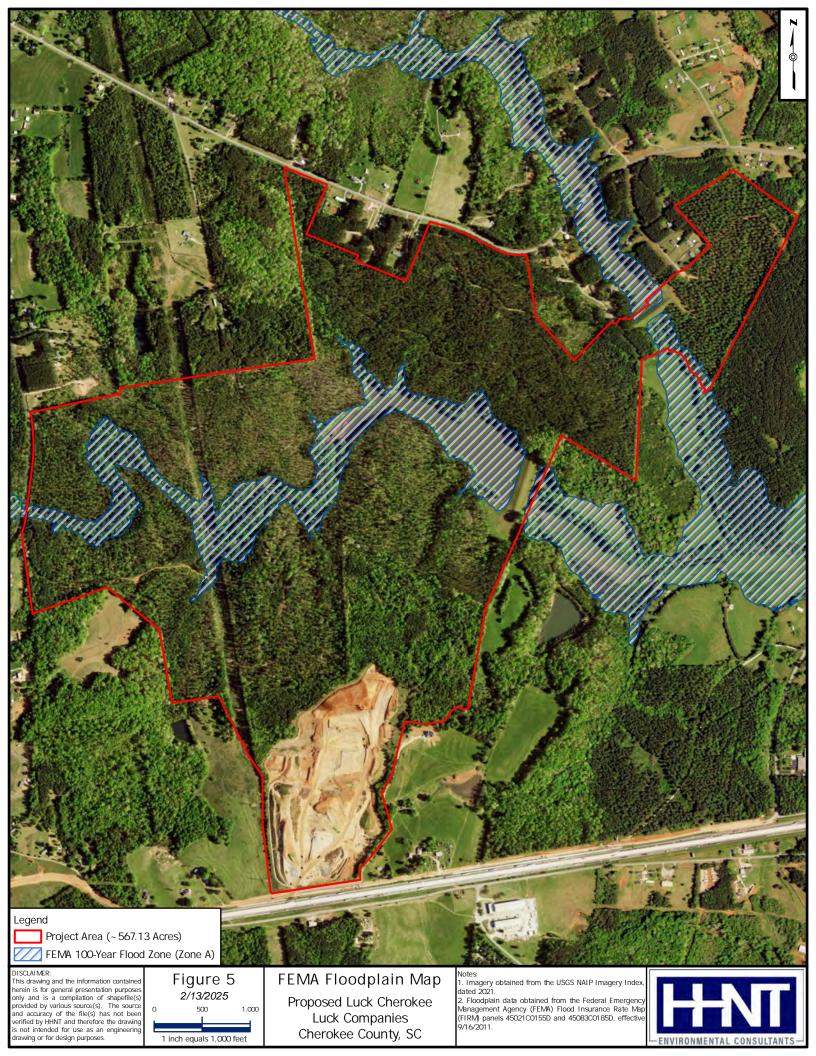


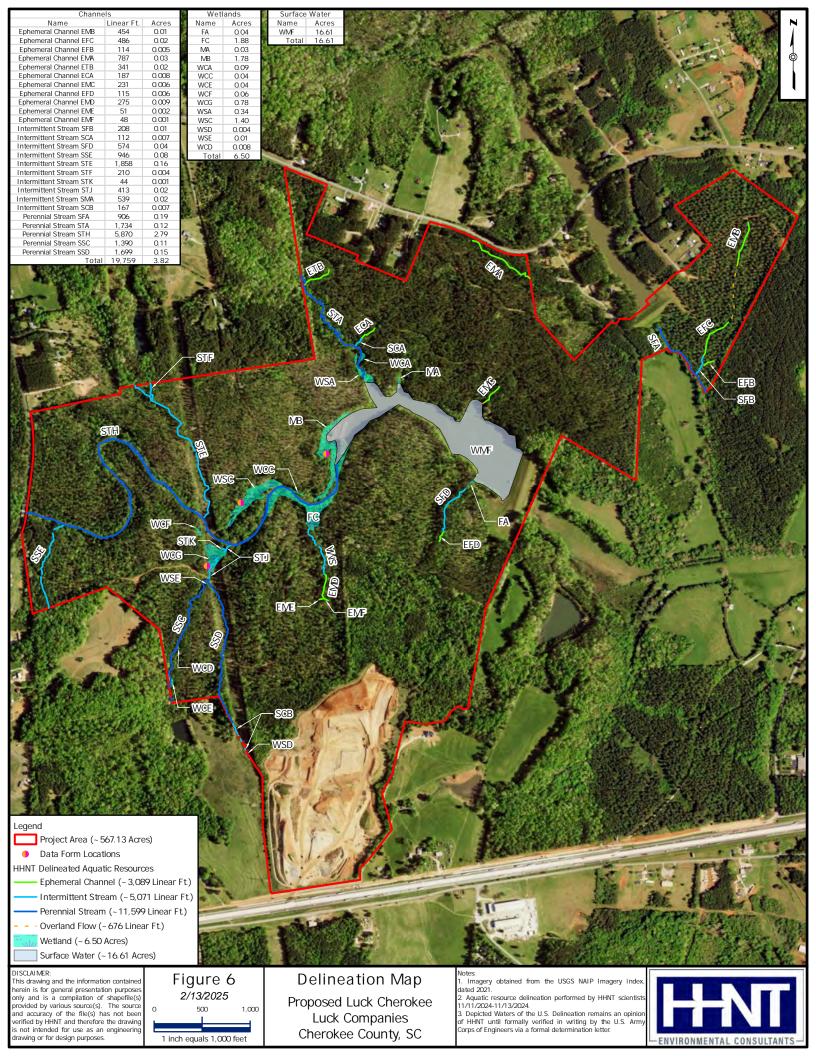


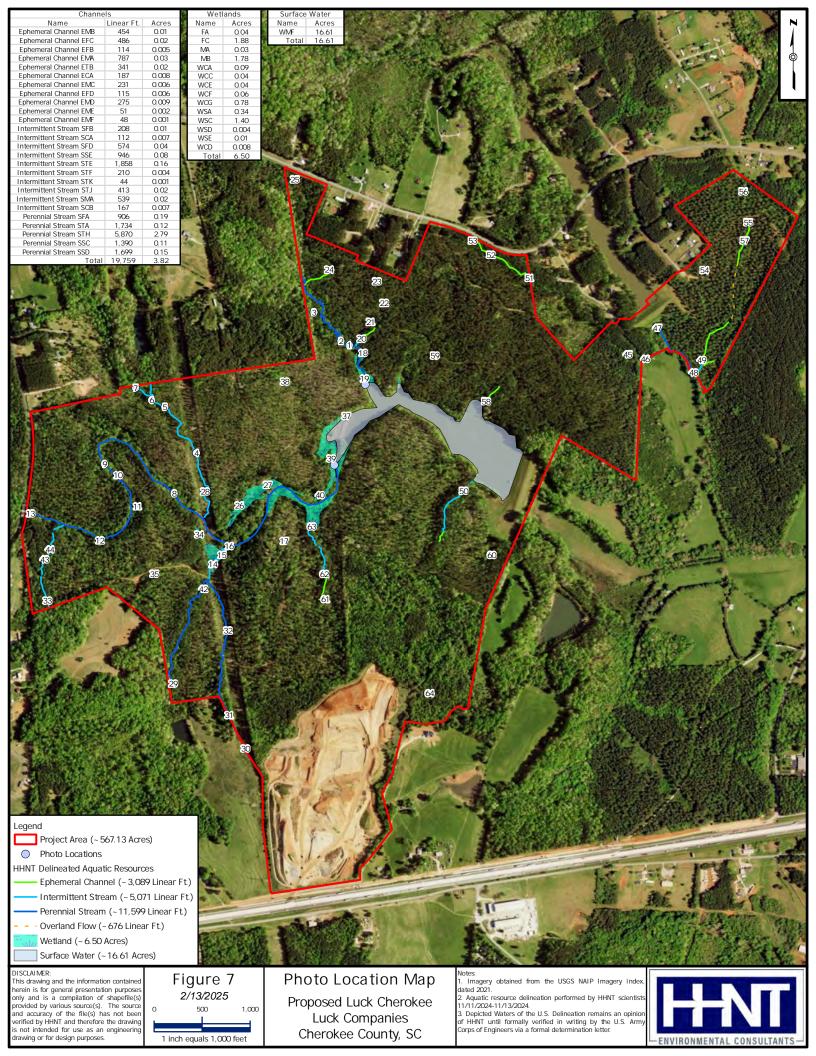












APPENDIX B WETLAND DATA FORMS



WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region

OMB Control #: 0710-0024, Exp:11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

See ERDC/EL TR-12-9; the proponent agency is CECW-CO-R

| Project/Site: Proposed Luck Cherokee | City/County: Cherokee County Sampling Date: 11/13/2024 |
|---|--|
| Applicant/Owner: Luck Companies | State: SC Sampling Point: WCG11 Wet |
| Investigator(s): M. McKnight, T. Williams, S. Long, C. Quade | Section, Township, Range: |
| Landform (hillside, terrace, etc.): Slope | Local relief (concave, convex, none): Concave Slope (%): 2% |
| Subregion (LRR or MLRA): LRR P, MLRA 136 Lat: 35.083 | |
| Soil Map Unit Name: PaE3 - Pacolet clay loam | NWI classification: PEM |
| · · · · · · · · · · · · · · · · · · · | |
| Are climatic / hydrologic conditions on the site typical for this tim | |
| Are Vegetation, Soil, or Hydrologysignific | |
| Are Vegetation, Soil, or Hydrologynatural | ly problematic? (If needed, explain any answers in Remarks.) |
| SUMMARY OF FINDINGS – Attach site map show | wing sampling point locations, transects, important features, etc. |
| Hydrophytic Vegetation Present? Yes X No | Is the Sampled Area |
| Hydric Soil Present? Yes X No | within a Wetland? Yes X No |
| Wetland Hydrology Present? Yes X No | |
| Remarks: | _ |
| According to the Antecedent Precipitation Calculator, conditions | s were normal during the time of the delineation. |
| | · |
| | |
| | |
| | |
| HYDROLOGY | |
| Wetland Hydrology Indicators: | Secondary Indicators (minimum of two required) |
| Primary Indicators (minimum of one is required; check all that a | apply) Surface Soil Cracks (B6) |
| Surface Water (A1) True Aquatic | Plants (B14) Sparsely Vegetated Concave Surface (B8) |
| High Water Table (A2) Hydrogen Su | Ifide Odor (C1) Drainage Patterns (B10) |
| X Saturation (A3) Oxidized Rhiz | zospheres on Living Roots (C3) Moss Trim Lines (B16) |
| Water Marks (B1) Presence of F | Reduced Iron (C4) Dry-Season Water Table (C2) |
| Sediment Deposits (B2) Recent Iron F | Reduction in Tilled Soils (C6) Crayfish Burrows (C8) |
| Drift Deposits (B3) Thin Muck Su | |
| | n in Remarks) Stunted or Stressed Plants (D1) |
| Iron Deposits (B5) | X Geomorphic Position (D2) |
| Inundation Visible on Aerial Imagery (B7) | Shallow Aquitard (D3) |
| Water-Stained Leaves (B9) | Microtopographic Relief (D4) |
| Aquatic Fauna (B13) | FAC-Neutral Test (D5) |
| Field Observations: | |
| Surface Water Present? Yes No X Dept | th (inches): |
| Water Table Present? Yes X No Dept | th (inches): 18 |
| | th (inches):0 Wetland Hydrology Present? Yes X No |
| | |
| Describe Recorded Data (stream gauge, monitoring well, aerial | priotos, previous inspections), ii available. |
| | |
| Remarks: | |
| Saturated at surface | |
| | |
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VEGETATION (Four Strata) – Use scientific names of plants.

| Tree Stratum (Plot size) 20 | Absolute | Dominant | Indicator | Dominance Test worksheet: |
|---|---------------|------------------------------|-----------|---|
| Tree Stratum (Plot size: 30') | % Cover | Species? | Status | |
| 2. | | | | Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A) |
| 3. | | | | Total Number of Dominant |
| 4. | | | | Species Across All Strata:1 (B) |
| 5 | | | | Percent of Dominant Species |
| 6 | | | | That Are OBL, FACW, or FAC:100.0%(A/B) |
| 7. | | | | Prevalence Index worksheet: |
| | | =Total Cover | | Total % Cover of: Multiply by: |
| 50% of total cover: | 20% | of total cover: | | OBL species 0 x 1 = 0 |
| Sapling/Shrub Stratum (Plot size: 30') | | | | FACW species 12 x 2 = 24 |
| 1. | | | | FAC species 50 x 3 = 150 |
| 2. | | | | FACU species 0 x 4 = 0 |
| 3. | | | | UPL species 0 x 5 = 0 |
| 4 | | | | Column Totals: 62 (A) 174 (B) |
| 5 | | | | Prevalence Index = B/A = 2.81 |
| 6. | | | | Hydrophytic Vegetation Indicators: |
| 7 | | | | 1 - Rapid Test for Hydrophytic Vegetation |
| 8. | | | | X 2 - Dominance Test is >50% |
| 9. | | | | X 3 - Prevalence Index is ≤3.0 ¹ |
| 50% of total cover: | | =Total Cover of total cover: | | 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) |
| Herb Stratum (Plot size: 30') | | or total cover. | | Problematic Hydrophytic Vegetation ¹ (Explain) |
| Dichanthelium clandestinum | 50 | Yes | FAC | |
| Juncus effusus | 10 | No | FACW | ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 3. Scirpus cyperinus | 2 | No | FACW | Definitions of Four Vegetation Strata: |
| 4. | | | | Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or |
| 5. | | | | more in diameter at breast height (DBH), regardless of |
| 6. | | | | height. |
| 7. | | | | Sapling/Shrub – Woody plants, excluding vines, less |
| 8. | | | | than 3 in. DBH and greater than or equal to 3.28 ft |
| 9. | | | | (1 m) tall. |
| 10 | | | | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| | 62 | =Total Cover | | Woody Vine – All woody vines greater than 3.28 ft in |
| 50% of total cover: 3 | | of total cover: | 13 | height. |
| Woody Vine Stratum (Plot size: 30') | | | | |
| 1 | | | | |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |
| 5. | | | | |
| | | =Total Cover | | Hydrophytic Vegetation |
| 50% of total cover: | | of total cover: | | Present? Yes X No |
| Demarka: (Include photo numbers here or on a cond | roto choot) | | | |
| Remarks: (Include photo numbers here or on a sepa | irate sneet.) | | | |
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Sampling Point: WCG11 Wet

SOIL Sampling Point: WCG11 Wet

| Profile Desc | ription: (Describe t | o the dep | th needed to docu | ıment t | he indica | ator or co | onfirm the abs | sence of ind | icators.) | | |
|----------------------|-------------------------|------------|--------------------|------------|-------------------|------------------|---------------------------------|--------------|-------------------------|-----------------------------|--|
| Depth | Matrix | | Redo | x Featur | res | | | | | | |
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | Texture | | Remark | (S | |
| 0-6 | 10YR 5/1 | 80 | 10YR 5/6 | 20 | С | M | Loamy/Clay | /ey | | | |
| 6-24 | 10YR 4/2 | 90 | 10YR 4/6 | 10 | С | M | Loamy/Clay | /ey | | | |
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| | | | | | | | | | | | |
| ¹Type: C=Co | oncentration, D=Deple | etion, RM: | =Reduced Matrix, N | IS=Mas | ked Sand | d Grains. | ² Lo | ocation: PL= | Pore Lining, M=N | Matrix. | |
| Hydric Soil I | ndicators: | | | | | | | Indicators | for Problematic | Hydric Soils ³ : | |
| Histosol (| (A1) | | Polyvalue Be | elow Sui | rface (S8 | (MLRA | 147, 148) | 2 cm M | /luck (A10) (MLR | A 147) | |
| Histic Ep | ipedon (A2) | | Thin Dark Su | urface (S | 59) (MLR | A 147, 1 | 48) | Coast | Prairie Redox (A1 | 16) | |
| Black His | stic (A3) | | Loamy Muck | y Miner | al (F1) (N | ILRA 130 | 3) | (MLF | RA 147, 148) | | |
| Hydroger | n Sulfide (A4) | | Loamy Gleye | ed Matri | x (F2) | | | Piedmo | ont Floodplain Sc | oils (F19) | |
| Stratified | Layers (A5) | | Depleted Ma | trix (F3) |) | | | (MLF | RA 136, 147) | | |
| | ck (A10) (LRR N) | | Redox Dark | | | | | | arent Material (F2 | • | |
| | Below Dark Surface | (A11) | Depleted Da | | | | | - | side MLRA 127, | - | |
| | rk Surface (A12) | | Redox Depre | | | | Very Shallow Dark Surface (F22) | | | | |
| | ucky Mineral (S1) | | Iron-Mangan | | sses (F12 | 2) (LRR I | ١, | Other (| (Explain in Rema | rks) | |
| | leyed Matrix (S4) | | MLRA 136 | | S) (841 B.4 | 400 40 | | 31 | | | |
| | edox (S5) | | Umbric Surfa | | | | - | | of hydrophytic ve | - | |
| Stripped Dark Sur | Matrix (S6) | | Piedmont Florent I | | | | - | | d hydrology must | * | |
| | ayer (if observed): | | Red Falenti | viateriai | (FZ1) (IVI | LKA 121 | , 147, 140) | uniess | disturbed or prob | nemanc. | |
| Type: | ayer (ii observed). | | | | | | | | | | |
| Depth (in | iches): | | | | | | Hydric Soil | Present? | Yes X | No | |
| Remarks: | | | | | | | , , | | | | |
| Remarks. | | | | | | | | | | | |
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WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region

See ERDC/EL TR-12-9; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

| Project/Site: Proposed Luck Cherokee | Cherokee County Sampling Date: 11/13/2024 | | | | | | | |
|--|---|---|--------------------------------------|-------------------|-----------|--|--|--|
| Applicant/Owner: Luck Companies | | State: SC Sampling Point: WSI | | | | | | |
| Investigator(s): M. McKnight, T. Williams, S | . Long, C. Quade | Section, Township, Range: | | _ | | | | |
| Landform (hillside, terrace, etc.): Slope | | ocal relief (concave, convex, no | one): Concave | Slope (%): | 2% | | | |
| | | • | | | NAD83 | | | |
| Subregion (LRR or MLRA): LRR P, MLRA | Lat. 33.007 | Long: <u>-81</u> | NWI classifica | | INADOS | | | |
| Soil Map Unit Name: Mv - Riverview loam | | | | | | | | |
| Are climatic / hydrologic conditions on the sit | • | | | explain in Remark | s.) | | | |
| Are Vegetation, Soil, or Hydro | | | cumstances" present | ? Yes X | No | | | |
| Are Vegetation, Soil, or Hydro | ologynaturally prob | ematic? (If needed, expla | ain any answers in Re | emarks.) | | | | |
| SUMMARY OF FINDINGS – Attach | site map showing | sampling point location | ns, transects, im | portant featu | res, etc. | | | |
| Hydrophytic Vegetation Present? | Yes X No | Is the Sampled Area | | | | | | |
| Hydric Soil Present? | Yes X No | within a Wetland? | Yes X | No | | | | |
| Wetland Hydrology Present? | Yes X No | | | <u> </u> | | | | |
| Remarks: | | | | | | | | |
| According to the Antecedent Precipitation C | Calculator, conditions were | normal during the time of the | delineation. | | | | | |
| | | - | | | | | | |
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| HYDROLOGY | | | | | | | | |
| Wetland Hydrology Indicators: | | <u> </u> | Secondary Indicators | (minimum of two | required) | | | |
| Primary Indicators (minimum of one is requ | ired; check all that apply) | | Surface Soil Crac | cks (B6) | | | | |
| X Surface Water (A1) | True Aquatic Plants | (B14) | Sparsely Vegetat | ed Concave Surfa | ce (B8) | | | |
| X High Water Table (A2) | Hydrogen Sulfide Od | or (C1) Drainage Patterns (B10) | | | | | | |
| X Saturation (A3) | Oxidized Rhizosphe | oheres on Living Roots (C3) X Moss Trim Lines (B16) | | | | | | |
| X Water Marks (B1) | Presence of Reduce | uced Iron (C4) Dry-Season Water Table (C2) | | | | | | |
| Sediment Deposits (B2) | | uction in Tilled Soils (C6) X Crayfish Burrows (C8) | | | | | | |
| Drift Deposits (B3) | Thin Muck Surface (| | | | | | | |
| Algal Mat or Crust (B4) | Other (Explain in Re | | | | | | | |
| Iron Deposits (B5) | 7 \ | X Geomorphic Position (D2) | | | | | | |
| Inundation Visible on Aerial Imagery (B X Water-Stained Leaves (B9) | 7) | - | Shallow Aquitard | | | | | |
| Aquatic Fauna (B13) | | - | Microtopographic FAC-Neutral Test | | | | | |
| <u> </u> | | <u> </u> | TAC-Neutral Test | (D3) | | | | |
| Field Observations: Surface Water Present? Yes X | No Depth (inch | nes): 2 | | | | | | |
| Water Table Present? Yes X | No Depth (inch | | | | | | | |
| Saturation Present? Yes X | No Depth (inch | · | /drology Present? | Yes X | No | | | |
| (includes capillary fringe) | | | , a | <u>//</u> | | | | |
| Describe Recorded Data (stream gauge, mo | onitoring well, aerial photos | s, previous inspections), if ava | ilable: | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Remarks: | | | | | | | | |
| Saturation at surface | | | | | | | | |
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VEGETATION (Four Strata) – Use scientific names of plants.

| | Absolute | Dominant | Indicator | |
|---|--------------|-----------------|-----------|---|
| Tree Stratum (Plot size:) | % Cover | Species? | Status | Dominance Test worksheet: |
| 1. Carpinus caroliniana | 20 | Yes | FAC | Number of Dominant Species |
| 2. Betula nigra | 10 | Yes | FACW | That Are OBL, FACW, or FAC: 2 (A) |
| 3. | | | | Total Number of Dominant |
| 4. | | | | Species Across All Strata: 2 (B) |
| 5. | | | | · · · · · · · · · · · · · · · · · · · |
| 6. | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) |
| 7. | | | | Prevalence Index worksheet: |
| 1. | | T-1-1 0 | | |
| | | =Total Cover | _ | Total % Cover of: Multiply by: |
| 50% of total cover:1 | 5 20% | of total cover: | 6 | OBL species 0 x 1 = 0 |
| Sapling/Shrub Stratum (Plot size: 30') | | | | FACW species 10 x 2 = 20 |
| 1. Acer rubrum | 2 | No | FAC | FAC species 22 x 3 = 66 |
| 2. | | | | FACU species 0 x 4 = 0 |
| 3 | | | | UPL species0 x 5 =0 |
| 4. | | | | Column Totals: 32 (A) 86 (B) |
| 5. | | | | Prevalence Index = B/A = 2.69 |
| 6. | | | | Hydrophytic Vegetation Indicators: |
| 7. | | | | 1 - Rapid Test for Hydrophytic Vegetation |
| 8. | | | | X 2 - Dominance Test is >50% |
| | | | | X 3 - Prevalence Index is ≤3.0 ¹ |
| 9 | | | | |
| 500/ 11 / | | =Total Cover | 4 | 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) |
| | 20% | of total cover: | 1 | · · · · · · · · · · · · · · · · · · · |
| Herb Stratum (Plot size:) | | | | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 1. | | | | ¹ Indicators of hydric soil and wetland hydrology must be |
| 2 | | | | present, unless disturbed or problematic. |
| 3 | | | | Definitions of Four Vegetation Strata: |
| 4. | | | | Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or |
| 5. | | | | more in diameter at breast height (DBH), regardless of |
| 6. | | | | height. |
| 7. | | | | Sapling/Shrub – Woody plants, excluding vines, less |
| 8. | | | | than 3 in. DBH and greater than or equal to 3.28 ft |
| 9. | | | | (1 m) tall. |
| <u> </u> | | | | Howle All hanks assure (and woods) release regardless |
| 10. | | | | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| 11 | | | | |
| | | =Total Cover | | Woody Vine – All woody vines greater than 3.28 ft in |
| 50% of total cover: | 20% | of total cover: | | height. |
| Woody Vine Stratum (Plot size: 30') | | | | |
| 1 | | | | |
| 2 | | | | |
| 3. | | | | |
| 4. | | | | |
| 5. | | | | |
| | | =Total Cover | | Hydrophytic |
| 50% of total cover: | | of total cover: | | Vegetation Present? Yes X No |
| 50% of total cover. | 2070 | or total cover. | | Tresent: Tes A NO |
| Remarks: (Include photo numbers here or on a sepa | rate sheet.) | | | |
| | | | | |

Sampling Point: WSB14 Wet

SOIL Sampling Point: WSB14 Wet

| Profile Desci | ription: (Describe t | o the dep | oth needed to doc | ument t | he indica | ator or c | onfirm the abs | ence of ind | icators.) | | |
|-------------------------|---------------------------------------|-----------|--------------------|-------------|-------------------|-------------------|--|-------------------------|--------------------|-----------------------------|--|
| Depth | Matrix | | Redo | x Featu | res | | | | | | |
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | Texture | | Remark | (S | |
| 0-8 | 7.5YR 4/1 | 80 | 7.5YR 4/4 | 20 | С | M | Loamy/Clay | ey | | | |
| 8-24 | 7.5YR 3/1 | 90 | 7.5YR 4/6 | 10 | С | М | Loamy/Clay | еу | | | |
| | | | _ | | | | | | | | |
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| | | | _ | | | | | | | | |
| ¹ Type: C=Co | ncentration, D=Depl | etion, RM | =Reduced Matrix, N | //S=Mas | ked San | d Grains. | ² Lc | cation: PL= | Pore Lining, M=N | Matrix. | |
| Hydric Soil II | ndicators: | | | | | | | Indicators | for Problematic | Hydric Soils ³ : | |
| Histosol (| (A1) | | Polyvalue Be | elow Su | rface (S8 | (MLRA | 147, 148) | | luck (A10) (MLR | - | |
| Histic Epi | pedon (A2) | | Thin Dark S | | | | - | Coast | Prairie Redox (A1 | 6) | |
| Black His | tic (A3) | | Loamy Muck | ky Miner | al (F1) (N | ILRA 13 | 6) | - | RA 147, 148) | | |
| | Sulfide (A4) | | Loamy Gley | | | | | | ont Floodplain So | ils (F19) | |
| | Layers (A5) | | Depleted Ma | , , | | | | • | RA 136, 147) | | |
| | ck (A10) (LRR N) | | X Redox Dark | | | | | | arent Material (F2 | * | |
| | Below Dark Surface | (A11) | Depleted Da | | , , | | | - | side MLRA 127, | - | |
| | rk Surface (A12) ucky Mineral (S1) | | Redox Depre | | | 2) /I DD I | Very Shallow Dark Surface (F22) R N, Other (Explain in Remarks) | | | | |
| | eyed Matrix (S4) | | MLRA 13 | | 5562 (F 17 | 2) (LKK I | ٧, | Other (| Explain in Remai | K5) | |
| Sandy Re | | | Umbric Surfa | | 3) (MLRA | 122, 13 | 6) | ³ Indicators | of hydrophytic ve | getation and | |
| | Matrix (S6) | | Piedmont Fl | | | | - | | d hydrology must | - | |
| Dark Surf | | | Red Parent | | | | - | | disturbed or prob | - | |
| _ | ayer (if observed): | | | | · / · | | | | <u> </u> | | |
| Type: | | | | | | | | | | | |
| Depth (in | ches): | | | | | | Hydric Soil | Present? | Yes X | No | |
| Remarks: | | | | | | | | | | | |
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WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region

OMB Control #: 0710-0024, Exp:11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

See ERDC/EL TR-12-9; the proponent agency is CECW-CO-R

| Project/Site: Proposed Luck Cherokee | | City/County: Cherok | tee County | Sampling Date: 11/13/2024 | | | |
|---|--------------------------------|---|--|---------------------------|--|--|--|
| Applicant/Owner: Luck Companies | | | State: SC | Sampling Point: WSC8 Wet | | | |
| Investigator(s): M. McKnight, T. Williams, | S. Long, C. Quade | _ Section, Township, Rang | ge: | | | | |
| Landform (hillside, terrace, etc.): Slope | L | _ .ocal relief (concave, conve | ex, none): Concave | Slope (%): 1% | | | |
| Subregion (LRR or MLRA): LRR P, MLRA | 136 Lat: 35.0856 | Long | g: -81.7501 | Datum: NAD83 | | | |
| Soil Map Unit Name: Mv - Riverview loam | | | NWI classifica | ation: PFO | | | |
| Are climatic / hydrologic conditions on the s | ite typical for this time of v | rear? Yes X | No (If no, e | explain in Remarks.) | | | |
| Are Vegetation, Soil, or Hyd | | · · · · · · · · · · · · · · · · · · · | al Circumstances" present | | | | |
| Are Vegetation, Soil, or Hyd | | | explain any answers in Re | | | | |
| SUMMARY OF FINDINGS – Attac | | | | , | | | |
| Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? | Yes X No Yes X No Yes X No | Is the Sampled Area within a Wetland? | Yes X | No | | | |
| Remarks: According to the Antecedent Precipitation | Calculator, conditions were | e normal during the time of | the delineation. | | | | |
| HYDROLOGY | | | | | | | |
| Wetland Hydrology Indicators: | | | Secondary Indicators | (minimum of two required) | | | |
| Primary Indicators (minimum of one is req | uired; check all that apply) | | Surface Soil Crac | :ks (B6) | | | |
| X Surface Water (A1) | True Aquatic Plants | s (B14) | Sparsely Vegetate | ed Concave Surface (B8) | | | |
| X High Water Table (A2) | Hydrogen Sulfide C | Odor (C1) | Drainage Patterns | s (B10) | | | |
| X Saturation (A3) | | oheres on Living Roots (C3) X Moss Trim Lines (B16) | | | | | |
| Water Marks (B1) | Presence of Reduc | | | | | | |
| Sediment Deposits (B2) | | duction in Tilled Soils (C6) X Crayfish Burrows (C8) | | | | | |
| Drift Deposits (B3) | Thin Muck Surface | | | | | | |
| Algal Mat or Crust (B4) Iron Deposits (B5) | Other (Explain in R | emarks) | | ` , | | | |
| Inundation Visible on Aerial Imagery (| R7) | | X Geomorphic Position (D2) Shallow Aquitard (D3) | | | | |
| X Water-Stained Leaves (B9) | 21) | | Microtopographic | | | | |
| Aquatic Fauna (B13) | | | FAC-Neutral Test | | | | |
| Field Observations: | | | | . , | | | |
| Surface Water Present? Yes X | No Depth (inc | ches): 2 | | | | | |
| Water Table Present? Yes X | No Depth (inc | :hes): 2 | | | | | |
| Saturation Present? Yes X | No Depth (inc | thes): 0 Wetlan | nd Hydrology Present? | Yes <u>X</u> No | | | |
| (includes capillary fringe) | | | | | | | |
| Describe Recorded Data (stream gauge, r | nonitoring well, aerial photo | os, previous inspections), it | f available: | | | | |
| | | | | | | | |
| Demodes | | | | | | | |
| Remarks: Saturated at surface | | | | | | | |
| Catalana at Callace | | | | | | | |
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VEGETATION (Four Strata) – Use scientific names of plants.

| | Absolute | Dominant | Indicator | |
|---|-----------------|-----------------|-----------|--|
| Tree Stratum (Plot size:) | % Cover | Species? | Status | Dominance Test worksheet: |
| 1. Salix nigra | 2 | Yes | OBL | Number of Dominant Species |
| 2. Carpinus caroliniana | | Yes | FAC | That Are OBL, FACW, or FAC: 7 (A) |
| 3. | | | | Total Number of Dominant |
| 4. | | | | Species Across All Strata: 7 (B) |
| 5. | | | | |
| · | | | | Percent of Dominant Species |
| 6. | | | | That Are OBL, FACW, or FAC: 100.0% (A/B) |
| 7. | | | | Prevalence Index worksheet: |
| | | =Total Cover | | Total % Cover of: Multiply by: |
| 50% of total cover | r: <u>4</u> 20% | of total cover: | 2 | OBL species 7 x 1 = 7 |
| Sapling/Shrub Stratum (Plot size: 30' |) | | | FACW species 2 x 2 = 4 |
| Carpinus caroliniana | 2 | Yes | FAC | FAC species11 x 3 =33 |
| 2. Liquidambar styraciflua | 2 | Yes | FAC | FACU species 0 x 4 = 0 |
| 3. Acer rubrum | | Yes | FAC | UPL species 0 x 5 = 0 |
| 4. | | | | Column Totals: 20 (A) 44 (B) |
| 5. | | | | Prevalence Index = B/A = 2.20 |
| 6. | | | | Hydrophytic Vegetation Indicators: |
| - | | | | |
| 7 | | | | 1 - Rapid Test for Hydrophytic Vegetation |
| 8 | | | | X 2 - Dominance Test is >50% |
| 9 | | | | X 3 - Prevalence Index is ≤3.0 ¹ |
| | 6 | =Total Cover | | 4 - Morphological Adaptations ¹ (Provide supporting |
| 50% of total cover | : 3 20% | of total cover: | 2 | data in Remarks or on a separate sheet) |
| Herb Stratum (Plot size: 30') | | | <u> </u> | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 1. Scirpus cyperinus | 2 | Yes | FACW | |
| Polygonum punctatum | | Yes | OBL | ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 3. | <u> </u> | 100 | ODL | Definitions of Four Vegetation Strata: |
| | | | | |
| 4. | | | | Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or |
| 5 | | | | more in diameter at breast height (DBH), regardless of height. |
| 6 | | | | neight. |
| 7 | | | | Sapling/Shrub – Woody plants, excluding vines, less |
| 8 | | | | than 3 in. DBH and greater than or equal to 3.28 ft |
| 9. | | | | (1 m) tall. |
| 10. | | | | Herb – All herbaceous (non-woody) plants, regardless |
| 11. | | | | of size, and woody plants less than 3.28 ft tall. |
| ···- | 7 | =Total Cover | | Woody Vine – All woody vines greater than 3.28 ft in |
| FOO/ of total cover | | of total cover: | 2 | height. |
| 50% of total cover | r: <u>4</u> 20% | or total cover: | 2 | |
| Woody Vine Stratum (Plot size: 30' |) | | | |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4. | | | | |
| 5. | | | | |
| | | =Total Cover | | Hydrophytic |
| EOO/ of total cover | | | | 1 ~ |
| 50% of total cover | 20% | or total cover. | | Fresent? Tes A NO |
| 50% of total cover Remarks: (Include photo numbers here or on | 20% | of total cover: | | Vegetation Present? Yes X No |

Sampling Point: WSC8 Wet

SOIL Sampling Point: WSC8 Wet

| Depth | cription: (Describe Matrix | io ine ae | - | ı ment t x Featu | | ator or co | ommin the abs | ence of Indi | ivalui 5. <i>)</i> | |
|-------------|-------------------------------|---------------|------------------------------|----------------------------|-------------------|------------------|---------------|-------------------------|--|---------------------|
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | Texture | | Remar | ks |
| 0-18 | 2.5Y 3/2 | 85 | 5YR 4/6 | 15 | C | M | Loamy/Clay | 'AV | | |
| 0-10 | 2.01 3/2 | | 311(4/0 | | | | Loamy/Olay | <u></u> | | |
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| | | | | | | | | | | |
| | | . | | | | | 2. | | | |
| | oncentration, D=Dep | letion, RM | 1=Reduced Matrix, N | 1S=Mas | ked San | d Grains. | -Lo | | Pore Lining, M=I | |
| • | Indicators: | | Dobavoluo Pr | Now Su | rfaac (50 | \ /MI D A | 147 140\ | | | - |
| Histosol | pipedon (A2) | | Polyvalue Be Thin Dark St | | | | - | | luck (A10) (MLR Prairie Redox (A | • |
| | istic (A3) | | Loamy Muck | , | , . | | • | | RA 147, 148) | 16) |
| | en Sulfide (A4) | | Loamy Gley | | | ILNA 13 | ., | - | ont Floodplain S | oile (F10) |
| | d Layers (A5) | | X Depleted Ma | | | | | | RA 136, 147) | Jii3 (1 1 <i>3)</i> |
| | uck (A10) (LRR N) | | Redox Dark | , , | | | | • | arent Material (F | 21) |
| | d Below Dark Surface | e (A11) | Depleted Da | | | | | | side MLRA 127, | |
| | ark Surface (A12) | (,,,, | Redox Depre | | | | | - | hallow Dark Surf | - |
| | /lucky Mineral (S1) | | Iron-Mangar | | | 2) (LRR I | ٧. | | Explain in Rema | |
| | Gleyed Matrix (S4) | | MLRA 136 | | (| , (| • | | | -, |
| | Redox (S5) | | Umbric Surfa | ace (F1 | 3) (MLRA | 122, 130 | 6) | ³ Indicators | of hydrophytic ve | egetation and |
| Stripped | Matrix (S6) | | Piedmont Fl | oodplair | n Soils (F | 19) (MLR | A 148) | wetland | d hydrology mus | t be present, |
| Dark Su | rface (S7) | | Red Parent I | Material | (F21) (M | ILRA 127 | , 147, 148) | unless | disturbed or pro | blematic. |
| Restrictive | Layer (if observed): | | | | | | | | | |
| Type: | | | | | | | | | | |
| Depth (i | nches): | | | | | | Hydric Soil | Present? | Yes X | No |
| Remarks: | | | | | | | - | | | |
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APPENDIX C UPLAND DATA FORMS



WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9: the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Proposed Luck Cherokee City/County: Cherokee County Sampling Date: 11/13/2024 State: SC Sampling Point: WCG11 Up Applicant/Owner: **Luck Companies** Investigator(s): M. McKnight, T. Williams, S. Long, C. Quade Section, Township, Range: Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Convex Slope (%): 4% Subregion (LRR or MLRA): LRR P, MLRA 136 Lat: 35.0837393 Long: -81.7512881 Datum: NAD83 Soil Map Unit Name: PaE3 - Pacolet clay loam NWI classification: N/A Are climatic / hydrologic conditions on the site typical for this time of year?

Yes X No (If no, explain in Remarks.) Are Vegetation _____, Soil _____, or Hydrology _____significantly disturbed? Are "Normal Circumstances" present? Yes X 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. Is the Sampled Area Hydrophytic Vegetation Present? Hydric Soil Present? Yes No_ within a Wetland? Yes No X Wetland Hydrology Present? No Remarks: According to the Antecedent Precipitation Calculator, conditions were normal during the time of the delineation. **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) True Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) Oxidized Rhizospheres on Living Roots (C3) Saturation (A3) Moss Trim Lines (B16) Presence of Reduced Iron (C4) Water Marks (B1) Dry-Season Water Table (C2) Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8) Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9) Other (Explain in Remarks) Algal Mat or Crust (B4) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Shallow Aguitard (D3) Water-Stained Leaves (B9) Microtopographic Relief (D4) FAC-Neutral Test (D5) Aquatic Fauna (B13) **Field Observations:** No X Depth (inches): Surface Water Present? Water Table Present? No X Depth (inches): No X Depth (inches): Wetland Hydrology Present? Saturation Present? Yes No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

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

| Section Sect | Troc Stratum (Blot size: 201 | Absolute | Dominant | Indicator | Deminance Test weeksheets |
|--|---|--------------|-----------------|-----------|---|
| | Tree Stratum (Plot size: 30') | % Cover | Species? | Status | Dominance Test worksheet: |
| 3. Pinus ellicitii | | | | | |
| 4. Carya glabra 2 Yes FACU 5. Querus falcata 2 Yes FACU 7. | | | | | |
| 5. Quercus falcata 6. Juniperus virginiana 7. | | | | | |
| 1 No FACU That Are OBL, FACW or FAC: 60.0% (A/B) | | | | | `` |
| Total Scover of Multiply by: Total Scover of Scover of Scover of Scover of Multiply by: Total Scover of Scover of Scover of Multiply by: Total Scover of Scover of Scover of Multiply by: Total Scover of Scover of Scover of Scover of Multiply by: Scover of | | | | | |
| Total Score of: Multiply by: | <u> </u> | | 110 | 1700 | |
| Saping/Shrub Stratum Policy size: 30' | ··· | 12 | -Total Cover | | |
| Sapling/Shrub Stratum (Plot size: 30') 1. | 50% of total cover: 6 | | | 3 | |
| 1. Acer rubrum 2. No FAC 2. Separate FAC species 7 x 3 = 21 FACU species 5 x 4 = 20 UPL species 0 x 5 = 0 Column Totals: 14 (A) 45 (B) Prevalence Index = B/A = 3.21 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 3. 3 | | | or total oover. | | |
| 2. | | 2 | No | FAC | |
| 3. | | | | | |
| Column Totals: 14 | | | | | |
| Prevalence Index = B/A = 3.21 | | | | | |
| 6. | 5. | | | | |
| 1 - Rapid Test for Hydrophytic Vegetation 2 = Total Cover 50% of total cover: 1 20% of total cover: 1 Herb Stratum (Plot size: 30') 1. 2 = Total Cover: 1 20% of total cover: 1 Herb Stratum (Plot size: 30') 1. 2 = Total Cover: 1 20% of total cover: 1 Herb Stratum (Plot size: 30') 1. 2 = Total Cover: 1 20% of total cover: 20% of total | - | | | | |
| 8. | | | | | |
| 9. | | | | | |
| 2 =Total Cover 1 20% of total cover: 1 20% of total cover: 1 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 3. | · · | | | | |
| Adata in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 1. | | 2 : | =Total Cover | | |
| Problematic Hydrophytic Vegetation (Explain) | 50% of total cover: 1 | | | 1 | |
| 1 | | | | | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 2. | 1 | | | | |
| Definitions of Four Vegetation Strata: Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. | · · · · · · · · · · · · · · · · · · · | | | | |
| 4. | 3. | | | | · |
| 5. | 4. | | | | |
| 6. | 5. | | | | |
| 8. | · · · · · · · · · · · · · · · · · · · | | | | height. |
| 8. | 7. | | | | Sanling/Shrub – Woody plants, excluding vines, less |
| 10. | 8. | | | | |
| 11 | 9. | | | | (1 m) tall. |
| 11 | 10. | | | | Herb – All herbaceous (non-woody) plants, regardless |
| | 11. | | | | |
| Solid total cover: 20% of total cover: height. | | | =Total Cover | | Woody Vine – All woody vines greater than 3.28 ft in |
| 1 | 50% of total cover: | | | | , , |
| 1 | Woody Vine Stratum (Plot size: 30') | | | | |
| 2. | 4 | | | | |
| 4 | | | | | |
| 5 | 3. | | | | |
| 5 | 4. | | | | |
| =Total Cover Vegetation 50% of total cover: 20% of total cover: Present? Yes X No | 5. | | | | Hadanahada |
| 50% of total cover: 20% of total cover: Present? Yes X No | | | =Total Cover | | |
| Remarks: (Include photo numbers here or on a separate sheet.) | 50% of total cover: | 20% | of total cover: | | = |
| remarke. (modes priote name of on a separate cross.) | Remarks: (Include photo numbers here or on a sepa | rate sheet) | | | |
| | Tremand. (molado proto namboro nero or on a separ | rate sheet.) | | | |
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Sampling Point: WCG11 Up

SOIL Sampling Point: WCG11 Up

| Profile Desci | ription: (Describe | to the dep | th needed to doc | ument t | he indica | ator or co | onfirm the ab | sence of indic | cators.) | |
|--------------------|-------------------------|------------|---------------------------|-----------|-------------------|------------------|------------------|------------------|-------------------------------------|----------------------------------|
| Depth | Matrix | | | x Featu | | | | | | |
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | Texture | | Ren | narks |
| 0-2 | 7.5YR 3/3 | 100 | | | | | Loamy/Cla | yey | | |
| 2-24 | 7.5YR 4/6 | 100 | | | | | Loamy/Cla | vev | | |
| | | | | | | | , | , , , | | |
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| | ncentration, D=Dep | letion, RM | Reduced Matrix, N | /IS=Mas | ked Sand | d Grains. | ² L | ocation: PL=F | | |
| Hydric Soil II | | | Dahasaksa D | - I C | -f (CO | \ | 4.47 .4.40\ | | | atic Hydric Soils ³ : |
| Histosol (| | | Polyvalue Bo | | , | | | | uck (A10) (M rairie Redox | - |
| Black His | pedon (A2) | | Thin Dark S Loamy Muck | | | | - | | rairie Redox A 147, 148) | (A16) |
| | n Sulfide (A4) | | Loamy Gley | - | | | ~, | - | nt Floodplain | Soils (F19) |
| | Layers (A5) | | Depleted Ma | | | | | | A 136, 147) | . 25110 (1.10) |
| | ck (A10) (LRR N) | | Redox Dark | | | | | - | rent Material | (F21) |
| | Below Dark Surface | e (A11) | Depleted Da | | | | | | | 27, 147, 148) |
| Thick Da | rk Surface (A12) | | Redox Depr | essions | (F8) | | | Very Sh | allow Dark S | Surface (F22) |
| | ucky Mineral (S1) | | Iron-Mangar | | sses (F1 | 2) (LRR N | ٧, | Other (E | Explain in Re | marks) |
| | eyed Matrix (S4) | | MLRA 13 | | | | | 0 | | |
| Sandy Re | | | Umbric Surf | | | | - | | | c vegetation and |
| | Matrix (S6) | | Piedmont FI | | | | - | | | iust be present, |
| Dark Surf | | | Red Parent | viateriai | (F21) (IVI | LRA 127 | , 147, 148) I | uniess | disturbed or p | problematic. |
| | ayer (if observed): | | | | | | | | | |
| Type: Depth (in | choc). | | | | | | Hydric Soi | I Present? | Yes | No X |
| | | | | | | | Hydric 30 | ii Fresent: | 169 | |
| Remarks: | | | | | | | | | | |
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WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region See ERDC/EL TR-12-9; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

| Project/Site: Proposed Luck Cherokee | oject/Site: Proposed Luck Cherokee City/County: Cherokee County Sampling Date: 11/13/2024 | | | | | | |
|--|---|-------------------------------|--------------------------|--------------------------------|------------|--|--|
| Applicant/Owner: Luck Companies | | | State: S | C Sampling Point: WSB14 | Up | | |
| Investigator(s): M. McKnight, T. Williams, | S. Long. C. Quade | Section, Township, Range: | | | | | |
| Landform (hillside, terrace, etc.): Hillside | | ocal relief (concave, convex, | | Slope (%): 5% | | | |
| , , , | | | - | | _ | | |
| Subregion (LRR or MLRA): LRR P, MLRA | | Long: <u>-</u> | 81.7471468 | Datum: NAD83 | _ | | |
| Soil Map Unit Name: Mv - Riverview loam | | | NVVI class | sification: N/A | | | |
| Are climatic / hydrologic conditions on the s | site typical for this time of ye | ear? Yes X | No (If | no, explain in Remarks.) | | | |
| Are Vegetation, Soil, or Hyd | rology significantly di | isturbed? Are "Normal C | ircumstances" pres | sent? Yes X No | | | |
| Are Vegetation, Soil, or Hyd | rology naturally probl | lematic? (If needed, exp | olain any answers i | n Remarks.) | | | |
| SUMMARY OF FINDINGS – Attac | h site map showing | sampling point location | ons, transects, | , important features, etc |) . | | |
| Hydrophytic Vegetation Present? | Yes X No | Is the Sampled Area | | | | | |
| Hydric Soil Present? | Yes No X | within a Wetland? | Yes | No X | | | |
| Wetland Hydrology Present? | Yes No X | | | <u> </u> | | | |
| Remarks: | | | | | _ | | |
| HYDROLOGY | | | | | | | |
| Wetland Hydrology Indicators: | | | Secondary Indicat | tors (minimum of two required) | _ | | |
| Primary Indicators (minimum of one is reg | uired; check all that apply) | | Surface Soil (| | | | |
| Surface Water (A1) | True Aquatic Plants | (B14) | | etated Concave Surface (B8) | | | |
| High Water Table (A2) | Hydrogen Sulfide Od | | Drainage Patt | | | | |
| Saturation (A3) | | res on Living Roots (C3) | Moss Trim Lines (B16) | | | | |
| Water Marks (B1) | Presence of Reduce | ed Iron (C4) | Dry-Season V | Water Table (C2) | | | |
| Sediment Deposits (B2) | Recent Iron Reducti | on in Tilled Soils (C6) | Crayfish Burro | ows (C8) | | | |
| Drift Deposits (B3) | Thin Muck Surface (| (C7) | Saturation Vis | sible on Aerial Imagery (C9) | | | |
| Algal Mat or Crust (B4) | Other (Explain in Re | emarks) | | ressed Plants (D1) | | | |
| Iron Deposits (B5) | | | Geomorphic Position (D2) | | | | |
| Inundation Visible on Aerial Imagery (| B7) | | Shallow Aquit | | | | |
| Water-Stained Leaves (B9) | | | | phic Relief (D4) | | | |
| Aquatic Fauna (B13) | | | FAC-Neutral | Test (D5) | | | |
| Field Observations: | | , | | | | | |
| Surface Water Present? Yes | No X Depth (inch | | | | | | |
| Water Table Present? Yes Yes | No X Depth (inch | · | Hydrology Present | t? Yes No X | | | |
| Saturation Present? Yes(includes capillary fringe) | No X Deptil (ilici) | vveiland | nyurology Freseni | t? Yes No X | _ | | |
| Describe Recorded Data (stream gauge, r | nonitoring well, aerial photo: | s previous inspections) if a | vailable: | | _ | | |
| z coonist i totoliaca zata (ci. ca.ii gaage, i | normorning from acriai priotos | o, p. o . o ao op o o o . , a | | | | | |
| | | | | | | | |
| Remarks: | | | | | _ | | |
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VEGETATION (Four Strata) – Use scientific names of plants.

| | Absolute | Dominant | Indicator | |
|---|---------------|-----------------|-----------|--|
| Tree Stratum (Plot size:) | % Cover | Species? | Status | Dominance Test worksheet: |
| 1. Carpinus caroliniana | 20 | Yes | FAC | Number of Dominant Species |
| 2. Acer saccharum | 10 | Yes | FACU | That Are OBL, FACW, or FAC: 2 (A) |
| 3. Liquidambar styraciflua | 5 | No | FAC | Total Number of Dominant |
| 4. Betula nigra | 10 | Yes | FACW | Species Across All Strata: 3 (B) |
| 5. | | | | · · · · · · · · · · · · · · · · · · · |
| 6. | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B) |
| 7. | | | | Prevalence Index worksheet: |
| 1. | 45 | Total Cause | | |
| | | =Total Cover | | Total % Cover of: Multiply by: |
| 50% of total cover: 2 | 3 20% | of total cover: | 9 | OBL species 0 x 1 = 0 |
| Sapling/Shrub Stratum (Plot size: 30') | | | | FACW species 10 x 2 = 20 |
| 1. | | | | FAC species 25 x 3 = 75 |
| 2. | | | | FACU species10 x 4 =40 |
| 3. | | | | UPL species 0 x 5 = 0 |
| 4 | | | | Column Totals: 45 (A) 135 (B) |
| 5. | | | | Prevalence Index = B/A = 3.00 |
| 6. | | | | Hydrophytic Vegetation Indicators: |
| 7. | | | | 1 - Rapid Test for Hydrophytic Vegetation |
| 8. | | | | X 2 - Dominance Test is >50% |
| 9. | | | | 3 - Prevalence Index is ≤3.0 ¹ |
| | | Total Cover | | 4 - Morphological Adaptations ¹ (Provide supporting |
| 50% of total cover: | | of total cover: | | data in Remarks or on a separate sheet) |
| Herb Stratum (Plot size: 30') | | | | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 1. | | | | ¹ Indicators of hydric soil and wetland hydrology must be |
| 2 | | | | present, unless disturbed or problematic. |
| 3. | | | | Definitions of Four Vegetation Strata: |
| 4 | | | | Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or |
| 5 | | | | more in diameter at breast height (DBH), regardless of |
| 6. | | | | height. |
| 7. | | | | Sapling/Shrub – Woody plants, excluding vines, less |
| 8. | | | | than 3 in. DBH and greater than or equal to 3.28 ft |
| 9. | | | | (1 m) tall. |
| 10. | | | | Herb - All herbaceous (non-woody) plants, regardless |
| 11. | | | | of size, and woody plants less than 3.28 ft tall. |
| | | =Total Cover | | Woody Vine – All woody vines greater than 3.28 ft in |
| 50% of total cover: | 20% | of total cover: | | height. |
| Woody Vine Stratum (Plot size: 30') | | | | |
| 1. | | | | |
| 2 | | | | |
| 3. | | | | |
| 4. | | | | |
| 5. | | | | |
| J | | Total Cayor | | Hydrophytic |
| 500/ () | | =Total Cover | | Vegetation |
| 50% of total cover: | 20% | of total cover: | | Present? Yes X No |
| Remarks: (Include photo numbers here or on a sepa | arate sheet.) | | | |
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Sampling Point: WSB14 Up

SOIL Sampling Point: WSB14 Up

| Profile Descr | iption: (Describe | to the dep | oth needed to doc | ument t | he indica | ator or c | onfirm the abs | ence of indi | cators.) | | |
|----------------|--------------------------|-------------|--|---|-------------------|------------------|---------------------|----------------------------|--------------------------------------|----------------------------------|--|
| Depth Matrix | | | Redox Features | | | | | | | | |
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | Texture | | Remarks | | |
| 0-16 | 7.5YR 4/4 | 100 | | | | | Loamy/Clay | rey | | | |
| 16-24 | 10YR 5/2 | 85 | 5YR 4/4 | 15 | С | М | Loamy/Clay | rev | | | |
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| | ncentration, D=Depl | etion, RM | =Reduced Matrix, N | /IS=Mas | ked Sand | d Grains. | ² Lc | | Pore Lining, N | | |
| Hydric Soil In | | | Dobaselue B | alou Cu | rface (CO | \ | 447 440) | | | atic Hydric Soils ³ : | |
| Histosol (| pedon (A2) | | | Polyvalue Below Surface (S8) (MLRA Thin Dark Surface (S0) (MLRA 147, 14 | | | | | uck (A10) (M Prairie Redox | - | |
| Black His | | | Thin Dark Surface (S9) (MLRA 147, 14 Loamy Mucky Mineral (F1) (MLRA 136 | | | | | raine Redox A 147, 148) | (~10) | | |
| | Sulfide (A4) | | Loamy Gley | - | | | -, | - | ont Floodplair | Soils (F19) | |
| | Layers (A5) | | Depleted Ma | | , , | | | | A 136, 147) | (· · - / | |
| | ck (A10) (LRR N) | Redox Dark | | | | | - | rent Material | (F21) | | |
| Depleted | Below Dark Surface | (A11) | Depleted Da | rk Surfa | ce (F7) | | | (outs | ide MLRA 12 | 27, 147, 148) | |
| | k Surface (A12) | Redox Depre | | | | | | Surface (F22) | | | |
| | ucky Mineral (S1) | | Iron-Manganese Masses (F12) (LRR N, Other (Explain in Remarks) | | | | | | | | |
| | eyed Matrix (S4) | | MLRA 136) | | | | | | | | |
| Sandy Re | edox (S5) Matrix (S6) | | Umbric Surface (F13) (MLRA 122, 136 | | | | | | | | |
| Dark Surf | | | Piedmont Floodplain Soils (F19) (MLR Red Parent Material (F21) (MLRA 127 | | | | | | | | |
| | ayer (if observed): | | RCGT archi | viatoriai | (1 2 1) (14 | LIVA 121 | , 147, 140 <i>)</i> | unicss | aistarbea or p | orobicinatic. | |
| Type: | ayer (ii observed). | | | | | | | | | | |
| Depth (in | ches): | | | | | | Hydric Soil | Present? | Yes | No X | |
| Remarks: | | | | | | | 1 - | | | | |
| rtomano. | | | | | | | | | | | |
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WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region

See ERDC/EL TR-12-9; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

| Project/Site: Proposed Luck Cherokee | | City/County: Cherokee County Sampling Date: 11/13/2024 | | | | | | | | | | |
|---|--|---|--|----------------------|---------|--|--|--|--|--|--|--|
| Applicant/Owner: Luck Companies | | | State: SC | Sampling Point: | WSC8 Up | | | | | | | |
| Investigator(s): M. McKnight, T. Williams, S | S. Long, C. Quade | Section, Township, Range: | | | | | | | | | | |
| Landform (hillside, terrace, etc.): Hillside | | ocal relief (concave, convex, | | Slope (%): | 5% | | | | | | | |
| · · · · · · · · · · · · · · · · · · · | | | | | NAD83 | | | | | | | |
| Subregion (LRR or MLRA): LRR P, MLRA | 130 Lat. 33.0633633 | Long. <u>- c</u> | 81.750137 | fication: N/A | INADOS | | | | | | | |
| Soil Map Unit Name: Mv - Riverview loam | | | | | | | | | | | | |
| Are climatic / hydrologic conditions on the s | | | | o, explain in Remark | s.) | | | | | | | |
| Are Vegetation, Soil, or Hydrologysignificantly disturbed? Are "Normal Circumstances" present? YesX _ No | | | | | | | | | | | | |
| Are Vegetation, Soil, or Hyd | rologynaturally probl | lematic? (If needed, exp | olain any answers in | Remarks.) | | | | | | | | |
| SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. | | | | | | | | | | | | |
| Hydrophytic Vegetation Present? | Yes No X | Is the Sampled Area | | | | | | | | | | |
| Hydric Soil Present? | Yes No X | within a Wetland? | | | | | | | | | | |
| Wetland Hydrology Present? | Yes No X | | | | | | | | | | | |
| Remarks: | | | | | | | | | | | | |
| According to the Antecedent Precipitation | Calculator, conditions were | normal during the time of the | e delineation. | | | | | | | | | |
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| HYDROLOGY | | | | | | | | | | | | |
| Wetland Hydrology Indicators: | | | Secondary Indicators (minimum of two required) | | | | | | | | | |
| Primary Indicators (minimum of one is req | uired; check all that apply) | | Surface Soil Cracks (B6) | | | | | | | | | |
| Surface Water (A1) | True Aquatic Plants | | Sparsely Vegetated Concave Surface (B8) | | | | | | | | | |
| High Water Table (A2) | Hydrogen Sulfide Od | | Drainage Patterns (B10) | | | | | | | | | |
| Saturation (A3) | | dized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16) | | | | | | | | | | |
| Water Marks (B1) | Presence of Reduce | | Dry-Season Water Table (C2) | | | | | | | | | |
| Sediment Deposits (B2) | | on in Tilled Soils (C6) | Crayfish Burrows (C8) | | | | | | | | | |
| Drift Deposits (B3) Algal Mat or Crust (B4) | Thin Muck Surface (Other (Explain in Re | | Saturation Visible on Aerial Imagery (C9) | | | | | | | | | |
| Iron Deposits (B5) | Other (Explain in Ne | iliaiks) | Stunted or Stressed Plants (D1) Geomorphic Position (D2) | | | | | | | | | |
| Inundation Visible on Aerial Imagery (I | | Shallow Aquitard (D3) | | | | | | | | | | |
| Water-Stained Leaves (B9) | , | | Microtopograp | | | | | | | | | |
| Aquatic Fauna (B13) | | | FAC-Neutral T | | | | | | | | | |
| Field Observations: | | | | | | | | | | | | |
| Surface Water Present? Yes | No X Depth (inch | nes): | | | | | | | | | | |
| Water Table Present? Yes | No X Depth (inch | | | | | | | | | | | |
| Saturation Present? Yes | No X Depth (inch | nes): Wetland I | nd Hydrology Present? Yes No X | | | | | | | | | |
| (includes capillary fringe) | | | | | | | | | | | | |
| Describe Recorded Data (stream gauge, n | nonitoring well, aerial photos | s, previous inspections), if av | ailable: | | | | | | | | | |
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| Remarks: | | | | | | | | | | | | |
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VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: WSC8 Up Absolute Dominant Indicator Tree Stratum (Plot size: 30' % Cover Species? Status **Dominance Test worksheet:** 1. Carya glabra No FACU **Number of Dominant Species** Acer rubrum 5 Yes FAC That Are OBL, FACW, or FAC: 2. (A) 3. Fagus grandifolia 10 Yes **FACU** Total Number of Dominant 4. Species Across All Strata: (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 50.0% (A/B) Prevalence Index worksheet: 17 =Total Cover Total % Cover of: Multiply by: 50% of total cover: 20% of total cover: **OBL** species x 1 = Sapling/Shrub Stratum (Plot size: 30' **FACW** species x 2 = 10 Acer rubrum FAC FAC species x 3 = 17 2. **FACU** species x 4 = 68 0 3. UPL species x 5 = 0 4. Column Totals: 27 (A) 98 (B) Prevalence Index = B/A =3.63 5. 6. **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 8. 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 9. 4 - Morphological Adaptations¹ (Provide supporting =Total Cover data in Remarks or on a separate sheet) 50% of total cover: 3 20% of total cover: 1 Herb Stratum (Plot size: 30') Problematic Hydrophytic Vegetation¹ (Explain) Ligustrum sinense FACU ¹Indicators of hydric soil and wetland hydrology must be 2. present, unless disturbed or problematic. 3. **Definitions of Four Vegetation Strata:** 4. Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 5. height. 6. 7. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft 8. (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless 10. of size, and woody plants less than 3.28 ft tall. =Total Cover Woody Vine - All woody vines greater than 3.28 ft in 50% of total cover: 3 20% of total cover: Woody Vine Stratum (Plot size: 30') 2. 3. **Hydrophytic** =Total Cover Vegetation 50% of total cover: 20% of total cover: Present? Yes No X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: WSC8 Up

| Depth | cription: (Describe Matrix | to the dep | | ument ti x Featur | | ator or c | onfirm the ab | sence of ind | icators.) | |
|-------------|-------------------------------|-------------|-------------------------|----------------------|-------------------|------------------|----------------|-------------------------|--|----------------------------------|
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | Texture | <u> </u> | Ren | narks |
| 0-10 | 7.5YR 5/6 | 100 | | | | | Loamy/Cla | ayey | | |
| 10-24 | 7.5YR 4/4 | 100 | | | | | Loamy/Cla | ayey | | |
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| | oncentration, D=Dep | letion, RM: | =Reduced Matrix, N | MS=Mas | ked San | d Grains. | ² L | ocation: PL= | | |
| Hydric Soil | | | Dobarduo P | olow Cur | face (S0 | \ | 147 140\ | | | atic Hydric Soils ³ : |
| Histosol | pipedon (A2) | | Polyvalue B Thin Dark S | | | | - | | /luck (A10) (M Prairie Redox | - |
| | istic (A3) | | Loamy Mucl | | | | - | | RA 147, 148) | . (A10) |
| | en Sulfide (A4) | | Loamy Gley | - | | ILIXA 13 | 0 , | - | ont Floodplair | Soils (F19) |
| | d Layers (A5) | | Depleted Ma | | , , | | | | RA 136, 147) | 1 00110 (1 10) |
| | uck (A10) (LRR N) | | Redox Dark | | | | | - | arent Material | (F21) |
| | d Below Dark Surface | e (A11) | Depleted Da | | | | | | | 27, 147, 148) |
| | ark Surface (A12) | - (| Redox Depr | | . , | | | - | hallow Dark S | |
| | Mucky Mineral (S1) | | Iron-Mangar | | | 2) (LRR I | N, | | Explain in Re | , , |
| | Gleyed Matrix (S4) | | MLRA 13 | | • | | | | | , |
| Sandy F | Redox (S5) | | Umbric Surf | ace (F13 | B) (MLRA | 122, 13 | 6) | ³ Indicators | of hydrophytic | c vegetation and |
| Stripped | Matrix (S6) | | Piedmont FI | oodplain | Soils (F | 19) (ML R | RA 148) | wetlan | d hydrology m | nust be present, |
| Dark Su | rface (S7) | | Red Parent | Material | (F21) (M | ILRA 127 | ', 147, 148) | unless | disturbed or p | problematic. |
| Restrictive | Layer (if observed): | | | | | | | | | |
| Type: | | | | | | | | | | |
| Depth (i | nches): | | | | | | Hydric So | il Present? | Yes | NoX |
| Remarks: | | | | | | | | | | |
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APPENDIX D STREAM FORMS



| Date: 11/11/2024 | Project/Site: Pro | posed Luck Cherokee | Latitude: 35.0904 | | | |
|---|--------------------------|---------------------------------|--------------------------|---------------------------------|--|--|
| Evaluator: Casey Quade | County: Cherok | Stream Determination (pick one) | | .7457 | | |
| Total Points: Stream is at least intermittent 10 if ≥ 19 or perennial if $\geq 30^*$ | | | | Cowpens, SC / Gaffney, SC (2024 | | |
| A. Geomorphology (Subtotal = 7) | Absent | Weak | Moderate | Strong | | |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | 3 | | |
| 2. Sinuosity of channel along thalweg | 0 | 1 | 2 | 3 | | |
| In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | Ø | 1 | 2 | 3 | | |
| Particle size of stream substrate | 0 | 1 | 2 | 3 | | |
| 5. Active/relict floodplain | Ø | 1 | 2 | 3 | | |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 | | |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 | | |
| 8. Headcuts | 0 | 1 | 2 | 3 | | |
| 9. Grade control | 0 | 0.5 | 1 | 1.5 | | |
| 10. Natural valley | 0 | 0.5 | 1 | 1.5 | | |
| 11. Second or greater order channel | No = ∅ Yes = 3 | | | | | |
| ^a artificial ditches are not rated; see discussions in manual | | | | | | |
| B. Hydrology (Subtotal = 0 | | | | | | |
| 12. Presence of Baseflow | Ø | 1 | 2 | 3 | | |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 | | |
| 14. Leaf litter | 1.5 | 1 | 0.5 | Ø | | |
| 15. Sediment on plants or debris | Ø | 0.5 | 1 | 1.5 | | |
| 16. Organic debris lines or piles | Ø | 0.5 | 1 | 1.5 | | |
| 17. Soil-based evidence of high water table? | No |) = Ø | Yes = 3 | | | |
| C. Biology (Subtotal = $\frac{3}{2}$) | | | | | | |
| 18. Fibrous roots in streambed | 3 | 2 | 1 | 0 | | |
| 19. Rooted upland plants in streambed | 3 | 2 | 1 | 0 | | |
| 20. Macrobenthos (note diversity and abundance) | Ø | 1 | 2 | 3 | | |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 | | |
| 22. Fish | Ø | 0.5 | 1 | 1.5 | | |
| 23. Crayfish | Ø | 0.5 | 1 | 1.5 | | |
| 24. Amphibians | Ø | 0.5 | 1 | 1.5 | | |
| 25. Algae | Ø | 0.5 | 1 | 1.5 | | |
| 26. Wetland plants in streambed | | FACW = 0.75; OBL | = 1.5 Other = 🥻 | V | | |
| *perennial streams may also be identified using other meth | nods. See p. 35 of manua | l. | | | | |
| Notes: Average width of channel is ~2 ft. | | | | | | |
| Sketch: | | | | | | |
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| Date: 11/12/2024 | Project/Site: Pro | posed Luck Cherokee | Latitude: 35.0897 | |
|--|------------------------|---------------------|--|----------|
| Evaluator: Brandon Smith | County: Cherok | ee County | Longitude: -81 | .7339 |
| Total Points: Stream is at least intermittent 8 if ≥ 19 or perennial if $\geq 30^*$ | (1000) | | Other e.g. Quad Name: Cowpens, SC / Gaffney, SC (2 | |
| A. Geomorphology (Subtotal = 4.5 | Absent | Weak | Moderate | Strong |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | 3 |
| 2. Sinuosity of channel along thalweg | 0 | 1 | 2 | 3 |
| In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | Ø | 1 | 2 | 3 |
| Particle size of stream substrate | Ø | 1 | 2 | 3 |
| 5. Active/relict floodplain | Ø | 1 | 2 | 3 |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 |
| 8. Headcuts | 0 | 1 | 2 | 3 |
| 9. Grade control | 0 | 0.5 | 1 | 1.5 |
| 10. Natural valley | 0 | 0,/5 | 1 | 1.5 |
| 11. Second or greater order channel | No |) = Ø | Yes = | = 3 |
| ^a artificial ditches are not rated; see discussions in manual | | | | |
| B. Hydrology (Subtotal = $\frac{0.5}{1}$ | | | | |
| 12. Presence of Baseflow | Ø | 1 | 2 | 3 |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 |
| 14. Leaf litter | 1.5 | 1 | 0/5 | 0 |
| 15. Sediment on plants or debris | Ø | 0.5 | 1 | 1.5 |
| 16. Organic debris lines or piles | Ø | 0.5 | 1 | 1.5 |
| 17. Soil-based evidence of high water table? | No |) = Ø | Yes = | = 3 |
| C. Biology (Subtotal = 3 | | | | |
| 18. Fibrous roots in streambed | 3 | 2 | 1 | 0 |
| 19. Rooted upland plants in streambed | 3 | 2 | 1 | 0 |
| 20. Macrobenthos (note diversity and abundance) | Ø | 1 | 2 | 3 |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 |
| 22. Fish | Ø | 0.5 | 1 | 1.5 |
| 23. Crayfish | Ø | 0.5 | 1 | 1.5 |
| 24. Amphibians | Ø | 0.5 | 1 | 1.5 |
| 25. Algae | Ø | 0.5 | 1 | 1.5 |
| 26. Wetland plants in streambed | | FACW = 0.75; OBL | = 1.5 Other = 0 | <u> </u> |
| *perennial streams may also be identified using other metho | ds. See p. 35 of manua | l | | |
| Notes: Average width of channel is ~2 ft. | | | | |
| Sketch: | | | | |
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| Date: 11/12/2024 | Project/Site: Pro | posed Luck Cherokee | Latitude: 35.0904 | |
|--|-------------------------|-----------------------------|--|--------|
| Evaluator: Brandon Smith | County: Cherok | ee County | Longitude: -81.7337 | |
| Total Points: Stream is at least intermittent 10 if ≥ 19 or perennial if $\geq 30^*$ | | nation (pick one) emeral | Other e.g. Quad Name: Cowpens, SC / Gaffney, SC (20) | |
| A. Geomorphology (Subtotal = 6) | Absent | Weak | Moderate | Strong |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 4 | 3 |
| 2. Sinuosity of channel along thalweg | 0 | 1 | 2 | 3 |
| In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | Ø | 1 | 2 | 3 |
| 4. Particle size of stream substrate | Ø | 1 | 2 | 3 |
| 5. Active/relict floodplain | Ø | 1 | 2 | 3 |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 |
| 8. Headcuts | 0 | 1 | 2 | 3 |
| 9. Grade control | 0 | 0/5 | 1 | 1.5 |
| 10. Natural valley | 0 | 0,/5 | 1 | 1.5 |
| 11. Second or greater order channel a artificial ditches are not rated; see discussions in manual | No | o = Ø | Yes | = 3 |
| • | | | | |
| B. Hydrology (Subtotal = 1) | ~ | | | |
| 12. Presence of Baseflow | Ø | 1 | 2 | 3 |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 |
| 14. Leaf litter | 1.5 | 1 | 0.5 | 0 |
| 15. Sediment on plants or debris | Ø | 0.5 | 1 | 1.5 |
| 16. Organic debris lines or piles 17. Soil-based evidence of high water table? | Ø | 0.5 | 1 Yes | 1.5 |
| C. Biology (Subtotal = 3) | 110 |) - | 163 | - 3 |
| 18. Fibrous roots in streambed | 3 | 2 | √ | 0 |
| 19. Rooted upland plants in streambed | 3 | 2 | V' 1 | 0 |
| 20. Macrobenthos (note diversity and abundance) | Ø | 1 | 2 | 3 |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 |
| 22. Fish | Ø | 0.5 | 1 | 1.5 |
| 23. Crayfish | Ø | 0.5 | 1 | 1.5 |
| 24. Amphibians | Ø | 0.5 | 1 | 1.5 |
| 25. Algae | Ø | 0.5 | 1 | 1.5 |
| 26. Wetland plants in streambed | | FACW = 0.75; OBL | = 1.5 Other = (| ĭ |
| *perennial streams may also be identified using other meth- | ods. See p. 35 of manua | al. | | |
| Notes: Average width of channel is ~2.14 ft. | | | | |
| Sketch: | | | | |
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| | | | | |

| Date: 11/12/2024 | Project/Site: Pro | pposed Luck Cherokee | Latitude: 35.0846 | | | |
|--|-----------------------|---|--------------------------|----------------------------------|--|--|
| Evaluator: Brandon Smith | County: Cherok | kee County | Longitude: -81.7431 | | | |
| Total Points: Stream is at least intermittent 10.5 if ≥ 19 or perennial if $\geq 30^*$ | | Stream Determination (pick one) Ephemeral | | Cowpens, SC / Gaffney, SC (2024) | | |
| A. Geomorphology (Subtotal = 8) | Absent | Weak | Moderate | Strong | | |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | 3 | | |
| 2. Sinuosity of channel along thalweg | 0 | 1 | 2 | 3 | | |
| In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | 0 | 4 | 2 | 3 | | |
| Particle size of stream substrate | 0 | 1 | 2 | 3 | | |
| 5. Active/relict floodplain | Ø | 1 | 2 | 3 | | |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 | | |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 | | |
| 8. Headcuts | 0 | 1 | 2 | 3 | | |
| 9. Grade control | 0 | 0.5 0.5 | 4 | 1.5 | | |
| 10. Natural valley | 0 | 1.5 | | | | |
| 11. Second or greater order channel | No = ∅ Yes = 3 | | | | | |
| ^a artificial ditches are not rated; see discussions in manual B. Hydrology (Subtotal = 0.5) | | | | | | |
| 12. Presence of Baseflow | Ø | 1 | 2 | 3 | | |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 | | |
| 14. Leaf litter | 1.5 | 1 | 0 <u>/</u> 5 | 0 | | |
| 15. Sediment on plants or debris | Ø | 0.5 | 1 | 1.5 | | |
| 16. Organic debris lines or piles | Ø | 0.5 | 1 | 1.5 | | |
| 17. Soil-based evidence of high water table? | No | o = ∅ | Yes | = 3 | | |
| C. Biology (Subtotal = 2 | | 1 | | | | |
| 18. Fibrous roots in streambed | 3 | 2 | 1 | 0 | | |
| 19. Rooted upland plants in streambed | 3 | 2 | 1 | 0 | | |
| 20. Macrobenthos (note diversity and abundance) | Ø | 1 | 2 | 3 | | |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 | | |
| 22. Fish | Ø | 0.5 | 1 | 1.5 | | |
| 23. Crayfish | Ø | 0.5 | 1 | 1.5 | | |
| 24. Amphibians | Ø | 0.5 | 1 | 1.5 | | |
| 25. Algae | Ø | 0.5 | 11 | 1.5 | | |
| 26. Wetland plants in streambed | | FACW = 0.75; OBL | . = 1.5 Other = 🥻 | <u> </u> | | |
| *perennial streams may also be identified using other method Notes: Average width of channel is ~2 ft. | s. See p. 35 of manua | al. | | | | |
| Sketch: | | | | | | |

| Date: 11/11/2024 | Project/Site: Pro | posed Luck Cherokee | Latitude: 35.0926 | | |
|--|---|----------------------|--|---------------|--|
| Evaluator: Myles McKnight | County: Cherokee County | | Longitude: -81.7411 | | |
| Total Points: Stream is at least intermittent 11.5 if ≥ 19 or perennial if $\geq 30^*$ | Stream Determination (pick one Ephemeral | | Other e.g. Quad Name: Cowpens, SC / Gaffney, S | | |
| A. Geomorphology (Subtotal = 8.5) | Absent | Weak | Moderate | Strong | |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | 3 | |
| 2. Sinuosity of channel along thalweg | 0 | 1 | 2 | 3 | |
| In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | Ø | 1 | 2 | 3 | |
| Particle size of stream substrate | 0 | 4 | 2 | 3 | |
| 5. Active/relict floodplain | Ø | 1 | 2 | 3 | |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 | |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 | |
| 8. Headcuts | 0 | 1 | 2 | 3 | |
| 9. Grade control | 0 | 0.5 | 1 | 1.5 | |
| 10. Natural valley | 0 | 0.5 | 1 | 1 <u>/</u> .5 | |
| 11. Second or greater order channel | No | o = ∅ Yes = 3 | | | |
| ^a artificial ditches are not rated; see discussions in manual | | | | | |
| B. Hydrology (Subtotal = 1 | | | | | |
| 12. Presence of Baseflow | Ø | 1 | 2 | 3 | |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 | |
| 14. Leaf litter | 1.5 | 1 | 0/5 | 0 | |
| 15. Sediment on plants or debris | Ø | 0.5 | 1 | 1.5 | |
| 16. Organic debris lines or piles | 0 | 0,/5 | 1 | 1.5 | |
| 17. Soil-based evidence of high water table? | No |) = Ø | Yes | = 3 | |
| C. Biology (Subtotal = 2) | | | | | |
| 18. Fibrous roots in streambed | 3 | 2 | 1 | 0 | |
| 19. Rooted upland plants in streambed | 3 | 2 | 1 | 0 | |
| 20. Macrobenthos (note diversity and abundance) | Ø | 1 | 2 | 3 | |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 | |
| 22. Fish | Ø | 0.5 | 1 | 1.5 | |
| 23. Crayfish | Ø | 0.5 | 1 | 1.5 | |
| 24. Amphibians | Ø | 0.5 | 1 | 1.5 | |
| 25. Algae | Ø | 0.5 | 1 | 1.5 | |
| 26. Wetland plants in streambed | | FACW = 0.75; OBL | = 1.5 Other = (|) | |
| *perennial streams may also be identified using other methods. | . See p. 35 of manua | ıl. | | | |
| Notes: Average width of channel is ~1.98 ft. | | | | | |
| Sketch: | | | | | |

| Date: 11/12/2024 | Project/Site: Pro | posed Luck Cherokee | Latitude: 35.0931 | | | |
|---|-----------------------|---|--------------------------|---------------------------------|--|--|
| Evaluator: Myles McKnight | County: Cherok | ee County | Longitude: -81.7327 | | | |
| Total Points: Stream is at least intermittent 8 if ≥ 19 or perennial if $\geq 30^*$ | | Stream Determination (pick one) Ephemeral | | Cowpens, SC / Gaffney, SC (2024 | | |
| A. Geomorphology (Subtotal = 5.5 | Absent | Weak | Moderate | Strong | | |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | 3 | | |
| Sinuosity of channel along thalweg | 0 | 1/ | 2 | 3 | | |
| In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | Ø | 1 | 2 | 3 | | |
| Particle size of stream substrate | Ø | 1 | 2 | 3 | | |
| Active/relict floodplain | Ø | 1 | 2 | 3 | | |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 | | |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 | | |
| 8. Headcuts | 0 | 1 | 2 | 3 | | |
| 9. Grade control | 0 | 0,⁄5 | 1 | 1.5 | | |
| 10. Natural valley | 0 | 0.5 | 1 | 1.5 | | |
| 11. Second or greater order channel | No = ∅ Yes = 3 | | | | | |
| ^a artificial ditches are not rated; see discussions in manual | | | | | | |
| B. Hydrology (Subtotal = 0.5 | | | | | | |
| 12. Presence of Baseflow | Ø | 1 | 2 | 3 | | |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 | | |
| 14. Leaf litter | 1.5 | 1 | Q <u>/</u> 5 | 0 | | |
| 15. Sediment on plants or debris | Ø | 0.5 | 1 | 1.5 | | |
| 16. Organic debris lines or piles | Ø | 0.5 | 1 | 1.5 | | |
| 17. Soil-based evidence of high water table? | No |) = Ø | Yes: | = 3 | | |
| C. Biology (Subtotal = $\frac{2}{2}$) | | | | | | |
| 18. Fibrous roots in streambed | 3 | 2 | 1 | 0 | | |
| 19. Rooted upland plants in streambed | 3 | 2 | 1 | 0 | | |
| 20. Macrobenthos (note diversity and abundance) | Ø | 1 | 2 | 3 | | |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 | | |
| 22. Fish | Ø | 0.5 | 1 | 1.5 | | |
| 23. Crayfish | Ø | 0.5 | 1 | 1.5 | | |
| 24. Amphibians | Ø | 0.5 | 1 | 1.5 | | |
| 25. Algae | Ø | 0.5 | 1 | 1.5 | | |
| 26. Wetland plants in streambed | 0 05 6 | FACW = 0.75; OBL | = 1.5 Other = (| | | |
| *perennial streams may also be identified using other methods Notes: Average width of channel is ~1 ft. | s. See p. 35 of manua | l | | | | |
| Sketch: | | | | | | |

| Date: 11/12/2024 | Project/Site: Pro | posed Luck Cherokee | Latitude: 35.0887 | | |
|---|-------------------------|-----------------------------|--|----------|--|
| Evaluator: Myles McKnight | County: Cherokee County | | Longitude: -8 | 1.7414 | |
| Fotal Points: Stream is at least intermittent 12 f ≥ 19 or perennial if ≥ 30* | | nation (pick one) emeral | Other e.g. Quad Name: Cowpens, SC / Gaffney, SC (20) | | |
| A. Geomorphology (Subtotal = 6.5) | Absent | Weak | Moderate | Strong | |
| ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | 3 | |
| 2. Sinuosity of channel along thalweg | 0 | 1 | 2 | 3 | |
| 3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | Ø | 1 | 2 | 3 | |
| l. Particle size of stream substrate | Ø | 1 | 2 | 3 | |
| 5. Active/relict floodplain | 0 | √ | 2 | 3 | |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 | |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 | |
| B. Headcuts | 0 | 1 | 2 | 3 | |
| 9. Grade control | 0 | 0,/5 | 1 | 1.5 | |
| 0. Natural valley | 0 | 0.5 | 1 | 1.5 | |
| Second or greater order channel | No = ∅ Yes = 3 | | | | |
| artificial ditches are not rated; see discussions in manual | | | | | |
| 3. Hydrology (Subtotal = 1 | | | | | |
| 2. Presence of Baseflow | Ø | 1 | 2 | 3 | |
| 3. Iron oxidizing bacteria | Ø | 1 | 2 | 3 | |
| 4. Leaf litter | 1.5 | ∜ | 0.5 | 0 | |
| 5. Sediment on plants or debris | Ø | 0.5 | 1 | 1.5 | |
| 6. Organic debris lines or piles | Ø | 0.5 | 1 | 1.5 | |
| 7. Soil-based evidence of high water table? | No | o = Ø | Yes | = 3 | |
| C. Biology (Subtotal = 4.5 | | _ | | | |
| 8. Fibrous roots in streambed | 3 | 2 | 1 | 0 | |
| Rooted upland plants in streambed | 3 | 2 | 1 | 0 | |
| 20. Macrobenthos (note diversity and abundance) | Ø | 1 | 2 | 3 | |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 | |
| 22. Fish | Ø | 0.5 | 1 | 1.5 | |
| 23. Crayfish | 0 | 0/5 | 11 | 1.5 | |
| 24. Amphibians | Ø | 0.5 | 1 | 1.5 | |
| 25. Algae | Ø | 0.5 | 1 | 1.5 | |
| 26. Wetland plants in streambed | | FACW = 0.75; OBL | = 1.5 Other = (| 8 | |
| *perennial streams may also be identified using other methods | . See p. 35 of manua | àl. | | | |
| Notes: Average width of channel is ~1.12 ft. | | | | | |
| Sketch: | | | | | |

| Date: 11/12/2024 | Project/Site: Pro | posed Luck Cherokee | Latitude: 35.08 | 332 | |
|--|---|---------------------|---|--------|--|
| Evaluator: Myles McKnight | County: Cherokee County | | Longitude: -81.7472 | | |
| Total Points: Stream is at least intermittent 12.5 if \geq 19 or perennial if \geq 30* | Stream Determination (pick one) Ephemeral | | Other e.g. Quad Name: Cowpens, SC / Gaffney, SC (20) | | |
| A. Geomorphology (Subtotal = 7.5) | Absent | Weak | Moderate | Strong | |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | 3 | |
| Sinuosity of channel along thalweg | 0 | 1 | 2 | 3 | |
| In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | Ø | 1 | 2 | 3 | |
| Particle size of stream substrate | 0 | 1 | 2 | 3 | |
| 5. Active/relict floodplain | Ø | 1 | 2 | 3 | |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 | |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 | |
| 8. Headcuts | 0 | 1 | 2 | 3 | |
| 9. Grade control | 0 | 0,/5 | 1 | 1.5 | |
| 10. Natural valley | 0 | 0.5 | 1 | 1.5 | |
| 11. Second or greater order channel | No |) = Ø | Yes = 3 | | |
| ^a artificial ditches are not rated; see discussions in manual | l . | · | | | |
| B. Hydrology (Subtotal = 1.5) | | | | | |
| 12. Presence of Baseflow | 0 | 1 | 2 | 3 | |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 | |
| 14. Leaf litter | 1.5 | 1 | Q <u>/</u> 5 | 0 | |
| 15. Sediment on plants or debris | Ø | 0.5 | 1 | 1.5 | |
| 16. Organic debris lines or piles | Ø | 0.5 | 1 | 1.5 | |
| 17. Soil-based evidence of high water table? | |) = Ø | Yes : | | |
| C. Biology (Subtotal = 3.5 | | | | | |
| 18. Fibrous roots in streambed | 3 | 2 | 1 | 0 | |
| 19. Rooted upland plants in streambed | 3 | 2 | 1 | 0 | |
| 20. Macrobenthos (note diversity and abundance) | Ø | 1 | 2 | 3 | |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 | |
| 22. Fish | Ø | 0.5 | 1 | 1.5 | |
| 23. Crayfish | 0 | 0,/5 | 1 | 1.5 | |
| 24. Amphibians | Ø | 0.5 | 1 | 1.5 | |
| 25. Algae | Ø | 0.5 | 1 | 1.5 | |
| 26. Wetland plants in streambed | - | FACW = 0.75; OBL | = 1.5 Other = Q | | |
| *perennial streams may also be identified using other methods | s. See p. 35 of manua | | . | | |
| Notes: Average width of channel is ~1.5 ft. | | | | | |
| Sketch: | | | | | |

| Date: 11/12/2024 | Project/Site: Pro | posed Luck Cherokee | Latitude: 35.0828 | |
|---|---------------------------|-----------------------------|--------------------------|---------------------------------|
| Evaluator: Myles McKnight | County: Cheroke | County: Cherokee County | | .7473 |
| Total Points: Stream is at least intermittent 9 if ≥ 19 or perennial if $\geq 30^*$ | | nation (pick one) emeral | Other e.g. Quad Name: | Cowpens, SC / Gaffney, SC (202- |
| A. Geomorphology (Subtotal = 4) | Absent | Weak | Moderate | Strong |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | 3 |
| Sinuosity of channel along thalweg | Ø | 1 | 2 | 3 |
| In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | Ø | 1 | 2 | 3 |
| Particle size of stream substrate | Ø | 1 | 2 | 3 |
| 5. Active/relict floodplain | Ø | 1 | 2 | 3 |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 |
| 8. Headcuts | 0 | 1 | 2 | 3 |
| 9. Grade control | 0 | 0,/5 | 1 | 1.5 |
| 10. Natural valley | 0 | 0/5 | 1 | 1.5 |
| 11. Second or greater order channel | No | = 0 | Yes = 3 | |
| ^a artificial ditches are not rated; see discussions in manual | ' | ' | | |
| B. Hydrology (Subtotal = 0.5) | | | | |
| 12. Presence of Baseflow | Ø | 1 | 2 | 3 |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 |
| 14. Leaf litter | 1.5 | 1 | 0.⁄5 | 0 |
| 15. Sediment on plants or debris | Ø | 0.5 | 1 | 1.5 |
| 16. Organic debris lines or piles | Ø | 0.5 | 1 | 1.5 |
| 17. Soil-based evidence of high water table? | No | = Ø | Yes - | = 3 |
| C. Biology (Subtotal = 4.5) | <u> </u> | ' | | |
| 18. Fibrous roots in streambed | 3 | 2 | 1 | 0 |
| 19. Rooted upland plants in streambed | 3 | 2 | 1 | 0 |
| 20. Macrobenthos (note diversity and abundance) | Ø | 1 | 2 | 3 |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 |
| 22. Fish | Ø | 0.5 | 1 | 1.5 |
| 23. Crayfish | 0 | 0,/5 | 1 | 1.5 |
| 24. Amphibians | Ø | 0.5 | 1 | 1.5 |
| 25. Algae | Ø | 0.5 | 1 | 1.5 |
| 26. Wetland plants in streambed | | FACW = 0.75; OBL | = 1.5 Other = 0 | 1 |
| *perennial streams may also be identified using other meth | nods. See p. 35 of manual | l. | | |
| Notes: Average width of channel is ~1.75 ft. | | | | |
| Sketch: | | | | |

| Date: 11/12/2024 | Project/Site: Pro | posed Luck Cherokee | Latitude: 35.0828 | | |
|--|--------------------------|------------------------------|--------------------------|---------------------------------|--|
| Evaluator: Myles McKnight | County: Cherok | kee County | Longitude: -81.7471 | | |
| Total Points: Stream is at least intermittent 10 if ≥ 19 or perennial if $\geq 30^*$ | | ination (pick one) emeral | Other e.g. Quad Name | Cowpens, SC / Gaffney, SC (2024 | |
| A. Geomorphology (Subtotal = 4) | Absent | Weak | Moderate | Strong | |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | 3 | |
| 2. Sinuosity of channel along thalweg | Ø | 1 | 2 | 3 | |
| In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | Ø | 1 | 2 | 3 | |
| 4. Particle size of stream substrate | Ø | 1 | 2 | 3 | |
| 5. Active/relict floodplain | © | 1 | 2 | 3 | |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 | |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 | |
| 8. Headcuts | 0 | 1 | 2 | 3 | |
| 9. Grade control | 0 | 0/5 | 1 | 1.5 | |
| 10. Natural valley | 0 | 0,/5 | 1 | 1.5 | |
| 11. Second or greater order channel | No = ∅ Yes = 3 | | | | |
| ^a artificial ditches are not rated; see discussions in manual | | | | | |
| B. Hydrology (Subtotal = 1.5) | | | | T | |
| 12. Presence of Baseflow | 0 | ∜ | 2 | 3 | |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 | |
| 14. Leaf litter | 1.5 | 1 | 0.⁄5 | 0 | |
| 15. Sediment on plants or debris | Ø | 0.5 | 1 | 1.5 | |
| 16. Organic debris lines or piles | Ø | 0.5 | 1 | 1.5 | |
| 17. Soil-based evidence of high water table? | No | o = Ø | Yes | = 3 | |
| C. Biology (Subtotal = 4.5) | | | | _ | |
| 18. Fibrous roots in streambed | 3 | 2 | 1 | 0 | |
| 19. Rooted upland plants in streambed | 3 | 2 | 1 | 0 | |
| 20. Macrobenthos (note diversity and abundance) | Ø | 1 | 2 | 3 | |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 | |
| 22. Fish | Ø | 0.5 | 1 | 1.5 | |
| 23. Crayfish | 0 | 0/5 | 1 | 1.5 | |
| 24. Amphibians | Ø | 0.5 | 1 | 1.5 | |
| 25. Algae | Ø | 0.5 | 1 | 1.5 | |
| 26. Wetland plants in streambed | | FACW = 0.75; OBL | _ = 1.5 Other = | <u>V</u> | |
| *perennial streams may also be identified using other methodology. Notes: Average width of channel is ~1 ft. | nods. See p. 35 of manua | al. | | | |
| Sketch: | | | | | |

| Total Dainte. | | ination (pick one) emeral | Other e.g. Quad Name: | .7475 Cowpens, SC / Gaffney, SC (202 | | |
|---|--------------------|------------------------------|------------------------|---|--|--|
| Stream is at least intermittent 13.5 if ≥ 19 or perennial if ≥ 30* A. Geomorphology (Subtotal = 12) 1a. Continuity of channel bed and bank 2. Sinuosity of channel along thalweg 3. In-channel structure: ex. riffle-pool, step-pool, | Absent 0 | emeral | e.g. Quad Name: | Cowpens, SC / Gaffney, SC (20) | | |
| 1 ^{a.} Continuity of channel bed and bank 2. Sinuosity of channel along thalweg 3. In-channel structure: ex. riffle-pool, step-pool, | 0 | Weak | Moderate | | | |
| 1 ^{a.} Continuity of channel bed and bank 2. Sinuosity of channel along thalweg 3. In-channel structure: ex. riffle-pool, step-pool, | 0 | | וווטעטומנד | Strong | | |
| Sinuosity of channel along thalweg In-channel structure: ex. riffle-pool, step-pool, | | 1 1 | 2 | ♂ | | |
| 3. In-channel structure: ex. riffle-pool, step-pool, | ı | 1 | 4 | 3 | | |
| | 0 | 1 | 2 | 3 | | |
| 4. Particle size of stream substrate | 0 | 1 | 2 | 3 | | |
| 5. Active/relict floodplain | Ø | 1 | 2 | 3 | | |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 | | |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 | | |
| 8. Headcuts | 0 | 1 | 2 | 3 | | |
| 9. Grade control | 0 | 0.5 | 1 | 1.5 | | |
| 10. Natural valley | 0 | 0.5 | 1 | 1.5 | | |
| 11. Second or greater order channel | N | o = Ø | Yes = 3 | | | |
| B. Hydrology (Subtotal = 0.5 | | , 1 | | | | |
| 12. Presence of Baseflow | Ø | 1 | 2 | 3 | | |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 | | |
| 14. Leaf litter | 1.5 | 1 | 0/5 | 0 | | |
| 15. Sediment on plants or debris | Ø | 0.5 | 1 | 1.5 | | |
| 16. Organic debris lines or piles | Ø | 0.5 | 1 | 1.5 | | |
| 17. Soil-based evidence of high water table? | N | o = Ø | Yes = | ÷ 3 | | |
| C. Biology (Subtotal = 1 | | | | | | |
| 18. Fibrous roots in streambed | 3 | 2 | 1 | 0 | | |
| 19. Rooted upland plants in streambed | 3 | 2 | 1 | Ø | | |
| 20. Macrobenthos (note diversity and abundance) | Ø | 1 | 2 | 3 | | |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 | | |
| 22. Fish | Ø | 0.5 | 1 | 1.5 | | |
| 23. Crayfish | Ø | 0.5 | 1 | 1.5 | | |
| 24. Amphibians | Ø | 0.5 | 1 | 1.5 | | |
| 25. Algae | Ø | 0.5 | 1 1 | 1.5 | | |
| 26. Wetland plants in streambed | 2 25 1 | FACW = 0.75; OBL | = 1.5 Other = (| | | |
| *perennial streams may also be identified using other methods. S Notes: Average width of channel is ~2.27 ft. | See p. 35 of manua | āl. | | | | |

| Date: 11/11/2024 | Project/Site: Pro | posed Luck Cherokee | Latitude: 35.09 | 002 |
|---|---------------------------------|---------------------|---|--------|
| Evaluator: Casey Quade | Stream Determination (pick one) | | Compens, SC / Gaffney, SC (20 e.g. Quad Name: | |
| Total Points: Stream is at least intermittent 22 if ≥ 19 or perennial if $\geq 30^*$ | | | | |
| A. Geomorphology (Subtotal = 11.5 | Absent | Weak | Moderate | Strong |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | 3 |
| Sinuosity of channel along thalweg | 0 | 1 | 2 | 3 |
| In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | 0 | 1 | 2 | 3 |
| Particle size of stream substrate | 0 | 1 | 2 | 3 |
| 5. Active/relict floodplain | 0 | 1 | 2 | 3 |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 |
| 8. Headcuts | 0 | 1 | 2 | 3 |
| 9. Grade control | 0 | 0.5 | 1 | 1/.5 |
| 10. Natural valley | 0 | 0.5 | 1 | 1.5 |
| 11. Second or greater order channel | No |) = Ø | Yes: | = 3 |
| ^a artificial ditches are not rated; see discussions in manual | | | | |
| B. Hydrology (Subtotal = 5) | | | | |
| 12. Presence of Baseflow | 0 | 1 | 2 | 3 |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 |
| 14. Leaf litter | 1.5 | 1 | 0.5 | 0 |
| 15. Sediment on plants or debris | Ø | 0.5 | 1 | 1.5 |
| 16. Organic debris lines or piles | Ø | 0.5 | 1 | 1.5 |
| 17. Soil-based evidence of high water table? | |) = 0 | Yes: | |
| C. Biology (Subtotal = 5.5 | | I | | |
| 18. Fibrous roots in streambed | 3 | 2 | 1 | 0 |
| 19. Rooted upland plants in streambed | 3 | 2 | 1 | 0 |
| 20. Macrobenthos (note diversity and abundance) | Ø | 1 | 2 | 3 |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 |
| 22. Fish | Ø | 0.5 | 1 | 1.5 |
| 23. Crayfish | 0 | 0,/5 | 1 | 1.5 |
| 24. Amphibians | Ø | 0.5 | 1 | 1.5 |
| 25. Algae | Ø | 0.5 | 1 | 1.5 |
| 26. Wetland plants in streambed | | FACW = 0.75; OBL | = 1.5 Other = 0 | l . |
| *perennial streams may also be identified using other method: | s. See p. 35 of manua | | | |
| Notes: Average width of channel is ~2 ft. | <u>'</u> | | | |
| Sketch: | | | | |

| Date: 11/12/2024 | Project/Site: Pro | oposed Luck Cherokee | Latitude: 35.07 | 788 | |
|---|-----------------------|----------------------|---|----------|--|
| Evaluator: Casey Quade | County: Cherok | ree County | Longitude: -81.7501 | | |
| Total Points: Stream is at least intermittent 25.5 if ≥ 19 or perennial if $\geq 30^*$ | | | Other e.g. Quad Name: Cowpens, SC / Gaffney, SC (20 | | |
| A. Geomorphology (Subtotal = 12) | Absent | Weak | Moderate | Strong | |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 4 | 3 | |
| 2. Sinuosity of channel along thalweg | 0 | 1 | 7 | 3 | |
| In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | 0 | 1 | 2 | 3 | |
| 4. Particle size of stream substrate | 0 | 1 | 2 | 3 | |
| 5. Active/relict floodplain | Ø | 1 | 2 | 3 | |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 | |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 | |
| 8. Headcuts | 0 | 1 | 2 | ॐ | |
| 9. Grade control | 0 | 0.5 | 1 | 1.5 | |
| 10. Natural valley | 0 | 0.5 | √ | 1.5 | |
| 11. Second or greater order channel a artificial ditches are not rated; see discussions in manual | No. | o = Ø | Yes | = 3 | |
| B. Hydrology (Subtotal = 6.5) | | | | | |
| 12. Presence of Baseflow | 0 | 1 | 2 | 3 | |
| | Ø | | 2 | 3 | |
| 13. Iron oxidizing bacteria 14. Leaf litter | 1.5 | 1 1 | 0.5 | 0 | |
| 15. Sediment on plants or debris | Ø | 0.5 | 1 | 1.5 | |
| 16. Organic debris lines or piles | 0 | 0.5 | 1 | 1.5 | |
| 17. Soil-based evidence of high water table? | - | 0 = 0 | Yes | | |
| C. Biology (Subtotal = 7) | l | l | | | |
| 18. Fibrous roots in streambed | ॐ | 2 | 1 | 0 | |
| 19. Rooted upland plants in streambed | 3 | 2 | 1 | 0 | |
| 20. Macrobenthos (note diversity and abundance) | Ø | 1 | 2 | 3 | |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 | |
| 22. Fish | Ø | 0.5 | 1 | 1.5 | |
| 23. Crayfish | 0 | 0,/5 | 1 | 1.5 | |
| 24. Amphibians | 0 | 0,/5 | 1 | 1.5 | |
| 25. Algae | Ø | 0.5 | 11 | 1.5 | |
| 26. Wetland plants in streambed | | FACW = 0.75; OBL | = 1.5 Other = (| <u> </u> | |
| *perennial streams may also be identified using other method: Notes: Average width of channel is ~3 ft. | s. See p. 35 of manua | al. | | | |
| Sketch: | | | | | |

| Date: 11/12/2024 | Project/Site: Pro | posed Luck Cherokee | Latitude: 35.08 | 98 |
|---|-------------------------|---------------------------------|-----------------|---|
| Evaluator: Brandon Smith | County: Cherok | Stream Determination (pick one) | | .7348 |
| Total Points: Stream is at least intermittent 37 if ≥ 19 or perennial if $\geq 30^*$ | | | | Other e.g. Quad Name: Cowpens, SC / Gaffney, SC (20 |
| A. Geomorphology (Subtotal = 18.5 | Absent | Weak | Moderate | Strong |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | ∡ |
| 2. Sinuosity of channel along thalweg | 0 | 1 | 4 | 3 |
| 3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | 0 | * | 2 | 3 |
| 4. Particle size of stream substrate | 0 | 1 | 2 | 3 |
| 5. Active/relict floodplain | 0 | 1 | 2 | ॐ |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 |
| 8. Headcuts | 0 | 1 | 2 | ₹ |
| 9. Grade control | 0 | 0.5 | 1 | 1.5 |
| 10. Natural valley | 0 | 0,/5 | 1 | 1.5 |
| 11. Second or greater order channel | No | 0 = 0 | Yes = | = 🎸 |
| ^a artificial ditches are not rated; see discussions in manual | | | | |
| B. Hydrology (Subtotal = $\frac{9}{2}$) | _ | | | |
| 12. Presence of Baseflow | 0 | 1 | 2 | ₹ |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 |
| 14. Leaf litter | 1,/5 | 1 | 0.5 | 0 |
| 15. Sediment on plants or debris | 0 | 0,/5 | 1 | 1.5 |
| 16. Organic debris lines or piles | 0 | 0.5 | 1 | 1.5 |
| 17. Soil-based evidence of high water table? | No |) = 0 | Yes = | = 3 |
| C. Biology (Subtotal = 9.5) | | • | | |
| 18. Fibrous roots in streambed | ॐ | 2 | 1 | 0 |
| 19. Rooted upland plants in streambed | ॐ | 2 | 1 | 0 |
| 20. Macrobenthos (note diversity and abundance) | 0 | 1 | 2 | 3 |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 |
| 22. Fish | 0 | 0/5 | 1 | 1.5 |
| 23. Crayfish | 0 | 0/5 | 1 | 1.5 |
| 24. Amphibians | 0 | 0,⁄5 | 1 | 1.5 |
| 25. Algae | Ø | 0.5 | 1 | 1.5 |
| 26. Wetland plants in streambed | | FACW = 0.75; OBL | = 1.5 Other = 0 | (|
| *perennial streams may also be identified using other method | ods. See p. 35 of manua | l. | | |
| Notes: Average width of channel is ~12.85 ft. | | | | |
| Sketch: | | | | |

| Date: 11/12/2024 | Project/Site: Pro | posed Luck Cherokee | Latitude: 35.08 | 96 |
|--|---------------------------------|---------------------|--|--------|
| Evaluator: Brandon Smith | Stream Determination (pick one) | | Compens, SC / Gaffney, SC (20 Compens, SC / Gaffney, SC / Gaffney, SC / Gaffney, SC (20 Compens, SC / Gaffney, SC / Gaff | |
| Total Points: Stream is at least intermittent 24.5 if ≥ 19 or perennial if $\geq 30^*$ | | | | |
| A. Geomorphology (Subtotal = 11.5 | Absent | Weak | Moderate | Strong |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | 3 |
| 2. Sinuosity of channel along thalweg | 0 | 1 | 2 | 3 |
| In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | 0 | 1 | ? | 3 |
| Particle size of stream substrate | 0 | 1 | 2 | 3 |
| 5. Active/relict floodplain | 0 | 1 | 2 | 3 |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 |
| 8. Headcuts | 0 | 1 | 2 | 3 |
| 9. Grade control | 0 | 0.5 | √ | 1.5 |
| 10. Natural valley | 0 | 0,⁄5 | 1 | 1.5 |
| 11. Second or greater order channel | No |) = Ø | Yes = 3 | |
| ^a artificial ditches are not rated; see discussions in manual | | | | |
| B. Hydrology (Subtotal = 6) | | | | |
| 12. Presence of Baseflow | 0 | 1 | 2 | 3 |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 |
| 14. Leaf litter | 1.5 | 1 | 0.5 | 0 |
| 15. Sediment on plants or debris | Ø | 0.5 | 1 | 1.5 |
| 16. Organic debris lines or piles | Ø | 0.5 | 1 | 1.5 |
| 17. Soil-based evidence of high water table? | No |) = 0 | Yes = | = 3 |
| C. Biology (Subtotal = 7 | | · | | |
| 18. Fibrous roots in streambed | ॐ | 2 | 1 | 0 |
| 19. Rooted upland plants in streambed | ॐ | 2 | 1 | 0 |
| 20. Macrobenthos (note diversity and abundance) | Ø | 1 | 2 | 3 |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 |
| 22. Fish | Ø | 0.5 | 1 | 1.5 |
| 23. Crayfish | 0 | 0,/5 | 1 | 1.5 |
| 24. Amphibians | 0 | 0,⁄5 | 1 | 1.5 |
| 25. Algae | Ø | 0.5 | 1 | 1.5 |
| 26. Wetland plants in streambed | | FACW = 0.75; OBL | = 1.5 Other = 0 | (|
| *perennial streams may also be identified using other method: Notes: Average width of channel is ~2.5 ft. Sketch: | s. See p. 35 of manua | l. | | |

| Date: 11/12/2024 | Project/Site: Pro | Project/Site: Proposed Luck Cherokee Latitude: 3 | | | |
|--|---------------------------------------|--|-----------------|---|--|
| Evaluator: Brandon Smith | County: Cherok | County: Cherokee County | | Compens, SC / Gaffney, SC (2024) Other e.g. Quad Name: | |
| Total Points: Stream is at least intermittent 26 if \geq 19 or perennial if \geq 30* | , , , , , , , , , , , , , , , , , , , | | | | |
| A. Geomorphology (Subtotal = 12.5 | Absent | Weak | Moderate | Strong | |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | 3 | |
| Sinuosity of channel along thalweg | 0 | 1 | 4 | 3 | |
| In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | 0 | 1 | 2 | 3 | |
| Particle size of stream substrate | 0 | 1 | 2 | 3 | |
| 5. Active/relict floodplain | 0 | 1 | 2 | 3 | |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 | |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 | |
| 8. Headcuts | 0 | 1 | 2 | 3 | |
| 9. Grade control | 0 | 0.5 | 1 | 1.5 | |
| 10. Natural valley | 0 | 0.5 | 1 | 1/5 | |
| 11. Second or greater order channel | No | o = Ø | Yes : | = 3 | |
| ^a artificial ditches are not rated; see discussions in manual B. Hydrology (Subtotal = 6.5 12. Presence of Baseflow | 0 | 4 | ď | 2 | |
| | 0 | 1 | 2 | 3 | |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 | |
| 14. Leaf litter | 1.5 | 4 | 0.5 | 0 | |
| 15. Sediment on plants or debris | Ø | 0.5 | 1 | 1.5 | |
| 16. Organic debris lines or piles | 0 | 0 <u>/</u> 5 o = 0 | 1 | 1.5 | |
| 17. Soil-based evidence of high water table? C. Biology (Subtotal = 7) | INC | 5 = 0 | Yes : | = ⋠ | |
| 18. Fibrous roots in streambed | ₹ | 2 | 1 | 0 | |
| 19. Rooted upland plants in streambed | 3 | 2 | 1 | 0 | |
| 20. Macrobenthos (note diversity and abundance) | Ø | 1 | 2 | 3 | |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 | |
| 22. Fish | Ø | 0.5 | 1 | 1.5 | |
| 23. Crayfish | 0 | 0,/5 | 1 | 1.5 | |
| 24. Amphibians | 0 | 0,/5 | 1 | 1.5 | |
| 25. Algae | Ø | 0.5 | 1 | 1.5 | |
| 26. Wetland plants in streambed | | FACW = 0.75; OBL | = 1.5 Other = @ | y | |
| *perennial streams may also be identified using other met | hods. See p. 35 of manua | al. | | | |
| Notes: Average width of channel is ~3.5 ft. | · | | | | |
| | | | | | |

| Date: 11/12/2024 | Project/Site: Pro | posed Luck Cherokee | Latitude: 35.0842 | |
|---|------------------------|---------------------------------|--------------------------|---|
| Evaluator: Myles McKnight | County: Cheroke | Stream Determination (pick one) | | .7474 |
| Total Points: Stream is at least intermittent 25.5 if ≥ 19 or perennial if $\geq 30^*$ | | | | Other e.g. Quad Name: Cowpens, SC / Gaffney, SC (20) |
| A. Geomorphology (Subtotal = 12.5) | Absent | Weak | Moderate | Strong |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | 3 |
| 2. Sinuosity of channel along thalweg | 0 | 1 | 4 | 3 |
| In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | 0 | 1 | ? | 3 |
| Particle size of stream substrate | 0 | 1 | 2 | 3 |
| 5. Active/relict floodplain | 0 | 1 | 2 | 3 |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 |
| 8. Headcuts | 0 | 1 | 2 | 3 |
| 9. Grade control | 0 | 0.5 | 1 | 1.5 |
| 10. Natural valley | 0 | 0.5 | 1 | 1/5 |
| 11. Second or greater order channel | No |) = Ø | Yes | = 3 |
| ^a artificial ditches are not rated; see discussions in manual | · | · | | |
| B. Hydrology (Subtotal = $\frac{6.5}{}$ | | | | |
| 12. Presence of Baseflow | 0 | 1 | 2 | 3 |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 |
| 14. Leaf litter | 1,/5 | 1 | 0.5 | 0 |
| 15. Sediment on plants or debris | Ø | 0.5 | 1 | 1.5 |
| 16. Organic debris lines or piles | Ø | 0.5 | 1 | 1.5 |
| 17. Soil-based evidence of high water table? | No | 0 = 0 | Yes | = 3 |
| C. Biology (Subtotal = $\underline{6.5}$ | | | | |
| 18. Fibrous roots in streambed | 3 | 2 | 1 | 0 |
| 19. Rooted upland plants in streambed | 3 | 2 | 1 | 0 |
| 20. Macrobenthos (note diversity and abundance) | Ø | 1 | 2 | 3 |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 |
| 22. Fish | Ø | 0.5 | 1 | 1.5 |
| 23. Crayfish | 0 | 0/5 | 1 | 1.5 |
| 24. Amphibians | Ø | 0.5 | 1 | 1.5 |
| 25. Algae | Ø | 0.5 | 1 | 1.5 |
| 26. Wetland plants in streambed | | FACW = 0.75; OBL | . = 1.5 Other = (| 8 |
| *perennial streams may also be identified using other metho | ds. See p. 35 of manua | l. | | |
| Notes: Average width of channel is ~1.71 ft. | | | | |
| Sketch: | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| Date: 11/12/2024 | Project/Site: Pro | posed Luck Cherokee | Latitude: 35.08 | 18 |
|--|---------------------------------|---------------------------|--|-------------------|
| Evaluator: Sam Long | Stream Determination (pick one) | | Complete Complete State Complete Sta | |
| Total Points: Stream is at least intermittent 30.5 if \geq 19 or perennial if \geq 30* | | | | |
| A. Geomorphology (Subtotal = 14.5) | Absent | Weak | Moderate | Strong |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | ₹ |
| Sinuosity of channel along thalweg | 0 | 1 | 4 | 3 |
| In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | 0 | 4 | 2 | 3 |
| 4. Particle size of stream substrate | 0 | 1 | 2 | 3 |
| 5. Active/relict floodplain | 0 | 1 | 2 | 3 |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 |
| 8. Headcuts | 0 | 1 | 2 | 3 |
| 9. Grade control | 0 | 0.5 | 1 | 1.5 |
| 10. Natural valley | 0 | 0.5 | 1 | 1,/5 |
| 11. Second or greater order channel | No |) = Ø | Yes = | = 3 |
| ^a artificial ditches are not rated; see discussions in manual B. Hydrology (Subtotal = 8 12. Presence of Baseflow | 0 | 1 | 2 | 3 |
| | Ø | 1 | 2 | 3 |
| 13. Iron oxidizing bacteria 14. Leaf litter | 1,/5 | 1 | 0.5 | 0 |
| 15. Sediment on plants or debris | Ø | 0.5 | 1 | 1.5 |
| 16. Organic debris lines or piles | 0 | 0.5 | 1 | 1.5 |
| 17. Soil-based evidence of high water table? | | 0 = 0 | Yes = | |
| C. Biology (Subtotal = 8) | 140 | <i>y</i> = 0 | 103 | - V |
| 18. Fibrous roots in streambed | ॐ | 2 | 1 | 0 |
| 19. Rooted upland plants in streambed | 3 | 2 | 1 | 0 |
| 20. Macrobenthos (note diversity and abundance) | 0 | 1 | 2 | 3 |
| | Ø | 1 | 2 | 3 |
| 21. Aquatic Mollusks | | | | |
| 21. Aquatic Mollusks 22. Fish | Ø | 0.5 | 1 | 1.5 |
| • | Ø 0 | 0.5 0 <mark>/</mark> 5 | 1 | 1.5 1.5 |
| 22. Fish 23. Crayfish | | | | |
| 22. Fish | 0 | 0,/5 | 1 | 1.5 |
| 22. Fish 23. Crayfish 24. Amphibians | 0 0 | 0/5 0/5 | 1 1 1 | 1.5 1.5 1.5 |

| Date: 11/12/2024 | Project/Site: Pro | posed Luck Cherokee | Latitude: 35.0814 Longitude: -81.7507 | | | |
|---|---|---------------------|--|--|--|--|
| Evaluator: Sam Long | County: Cheroke | ee County | | | | |
| Total Points: Stream is at least intermittent 33 if ≥ 19 or perennial if $\geq 30^*$ | | , | | Other e.g. Quad Name: Cowpens, SC / Gaffney, SC (2024) | | |
| A. Geomorphology (Subtotal = 16.5 | Absent | Weak | Moderate | Strong | | |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | 3 | | |
| 2. Sinuosity of channel along thalweg | 0 | 1 | 2 | ॐ | | |
| In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | 0 | 1 | 4 | 3 | | |
| Particle size of stream substrate | 0 | 1 | 2 | 3 | | |
| 5. Active/relict floodplain | 0 | 1 | 2 | 3 | | |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 | | |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 | | |
| 8. Headcuts | 0 | 1 | 2 | ₹ | | |
| 9. Grade control | 0 | 0.5 | 1 | 1.5 | | |
| 10. Natural valley | 0 | 0.5 | 1 | 1/5 | | |
| 11. Second or greater order channel | No | = 0 | Yes: | = 3 | | |
| ^a artificial ditches are not rated; see discussions in manual | | <u>'</u> | | | | |
| B. Hydrology (Subtotal = $\frac{8}{2}$) | | | | | | |
| 12. Presence of Baseflow | 0 | 1 | 2 | 3 | | |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 | | |
| 14. Leaf litter | 1,/5 | 1 | 0.5 | 0 | | |
| 15. Sediment on plants or debris | Ø | 0.5 | 1 | 1.5 | | |
| 16. Organic debris lines or piles | 0 | 0/5 | 1 | 1.5 | | |
| 17. Soil-based evidence of high water table? | No | = 0 | Yes : | = 🕉 | | |
| C. Biology (Subtotal = 8.5) | | | | | | |
| 18. Fibrous roots in streambed | 3 | 2 | 1 | 0 | | |
| 19. Rooted upland plants in streambed | ॐ | 2 | 1 | 0 | | |
| 20. Macrobenthos (note diversity and abundance) | 0 | ⋠ | 2 | 3 | | |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 | | |
| 22. Fish | 0 | 0/5 | 1 | 1.5 | | |
| 23. Crayfish | 0 | 0/5 | 1 | 1.5 | | |
| 24. Amphibians | 0 | 0,/5 | 1 | 1.5 | | |
| 25. Algae | Ø | 0.5 | 1 | 1.5 | | |
| 26. Wetland plants in streambed | FACW = 0.75; OBL = 1.5 Other = ◊ | | | | | |
| *perennial streams may also be identified using other meth | nods. See p. 35 of manual | | | | | |
| Notes: Average width of channel is ~4.45 ft. | | | | | | |
| Sketch: | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| Date: 11/12/2024 | Project/Site: Proj | posed Luck Cherokee | Latitude: 35.0837 | |
|--|--------------------------|---|--------------------------|--------------------------------|
| Evaluator: Sam Long | County: Cherokee County | | Longitude: -81.7568 | |
| Total Points: Stream is at least intermittent 22.5 if ≥ 19 or perennial if $\geq 30^*$ | | Stream Determination (pick one) Intermittent e. | | Cowpens, SC / Gaffney, SC (202 |
| A. Geomorphology (Subtotal = 11.5 | Absent | Weak | Moderate | Strong |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | 3 |
| 2. Sinuosity of channel along thalweg | 0 | 1 | 4 | 3 |
| In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | 0 | 1 | 2 | 3 |
| Particle size of stream substrate | 0 | 1 | 2 | 3 |
| 5. Active/relict floodplain | Ø | 1 | 2 | 3 |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 |
| 8. Headcuts | 0 | 1 | 2 | 3 |
| 9. Grade control | 0 | 0.5 | 1 | 1⁄.5 |
| 10. Natural valley | 0 | 0.5 | 1 | 1.5 |
| 11. Second or greater order channel | No | = 0 | Yes : | = 3 |
| ^a artificial ditches are not rated; see discussions in manual | | | | |
| B. Hydrology (Subtotal = 4.5) | | | | |
| 12. Presence of Baseflow | 0 | 4 | 2 | 3 |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 |
| 14. Leaf litter | 1.5 | 1 | 0/ 5 | 0 |
| 15. Sediment on plants or debris | Ø | 0.5 | 1 | 1.5 |
| 16. Organic debris lines or piles | Ø | 0.5 | 1 | 1.5 |
| 17. Soil-based evidence of high water table? | No | = 0 | Yes : | = 3 |
| C. Biology (Subtotal = 6.5 | | | | |
| 18. Fibrous roots in streambed | ₹ | 2 | 1 | 0 |
| 19. Rooted upland plants in streambed | ₹ | 2 | 1 | 0 |
| 20. Macrobenthos (note diversity and abundance) | Ø | 1 | 2 | 3 |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 |
| 22. Fish | Ø | 0.5 | 1 | 1.5 |
| 23. Crayfish | 0 | 0,/5 | 1 | 1.5 |
| 24. Amphibians | Ø | 0.5 | 1 | 1.5 |
| 25. Algae | Ø | 0.5 | 1 | 1.5 |
| 26. Wetland plants in streambed | | FACW = 0.75; OBL | = 1.5 Other = 0 | 1 |
| *perennial streams may also be identified using other meth | ods. See p. 35 of manual | | | |
| Notes: Average width of channel is ~3.79 ft. | | | | |
| Sketch: | | | | |

| A. Geomorphology (Subtotal = 18.5) Absent Weak Moderate Strong 1° Continuity of channel bed and bank 0 1 2 3/2 3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence 0 1 2 3/2 4. Particle size of stream substrate 0 1 2 3/2 5. Active/relict floodplain 0 1 2 3/2 6. Depositional bars or benches 0 1 2 3/2 7. Recent alluvial deposits 0 1 2 3/2 8. Headcuts 0 1 2 3/2 9. Grade control 0 0.5 4/7 10. Natural valley 0 0.5 4/7 11. Second or greater order channel No = ∅ Yes = 3/2 *artificial ditches are not rated; see discussions in manual B. Hydrology (Subtotal = 8.5) 12. Presence of Baseflow 0 1 2 3/2 13. Iron oxidizing bacteria 0 0 0.5 0 14. Leaf litter 1 0 0 0.5 15. Sediment on plants or debris 0 0 0 0 16. Organic debris lines or piles 0 0 0 0 17. Soil-based evidence of high water table? No = 0 Yes = 3/2 C. Biology (Subtotal = 8.5) 18. Fibrous roots in streambed 3/2 1 0 19. Rooted upland plants in streambed 3/2 1 0 20. Macrobenthos (note diversity and abundance) 0 0.5 1 1.5 21. Aquatic Mollusks 0 0.5 1 1.5 22. Grayfish 0 0.5 1 1.5 23. Crayfish 0 0.5 1 1.5 24. Amphibians 0 0.5 1 1.5 25. Adjae 0 0.5 1 1.5 26. Wetland plants in streambed FACW = 0.75; OBL = 1.5 Other = 0/2 **perennial streams may also be identified using other methods. See p. 35 of manual. **Notes** | Date: 11/11/2024 | Project/Site: Pro | oposed Luck Cherokee | Latitude: 35.09 | 906 | |
|---|--|-------------------------|-------------------------|---------------------------|---------------------|--|
| A. Geomorphology (Subtotal = 18.5 Absent Weak Moderate Strong | Evaluator: Tabitha Williams | County: Cherol | County: Cherokee County | | Longitude: -81,7469 | |
| 1° Continuity of channel bed and bank 0 1 2 3 3 3 1. Incomplete the street of the str | Stream is at least intermittent 35.5 | | | Cowners SC / Gaffney SC / | | |
| 1° Continuity of channel bed and bank 0 1 2 3 3 3 1 1 2 3 3 1 1 3 1 3 1 1 3 1 1 3 1 | A Geomorphology (Subtotal = 185 | Ahsent | Weak | Moderate | Strong | |
| 2. Sinuosity of channel along thalweg 3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence 4. Particle size of stream substrate 5. Active/relict floodplain 6. Depositional bars or benches 7. Recent alluvial deposits 8. Headcuts 9. Grade control 1. 2 3 8. Headcuts 9. Grade control 1. 2 3 9. Grade control 2. 3 1 9. Grade control 3. 4 2 3 9. Grade control 4. 5 4 5 5 1 9. 5 6 5 1 9. 5 6 1 9. 5 7 6 8 1 9. 5 7 8 9 1 9. 5 8 9 1 9. 5 8 9 1 9. 5 8 9 1 9. 5 8 9 1 9. 5 8 9 1 9. 5 9 1 9. 5 9 1 9. 5 9 1 9. 6 9 1 9. 6 9 1 9. 6 9 1 9. 6 9 1 9. 7 8 9 1 | | | 1 | | | |
| 3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence 4. Particle size of stream substrate 5. Active/relict floodplain 6. Depositional bars or benches 7. Recent alluvial deposits 7. Recent alluvial deposits 8. Headcuts 9. Grade control 1. 2 3 8. Headcuts 9. Grade control 1. 2 3 9. Grade control 1. 2 3 9. Grade control 1. 2 3 9. Fresence of Baseflow 1. Second or greater order channel 8. Hydrology (Subtotal = 8.5 12. Presence of Baseflow 13. Iron oxidizing bacteria 14. Leaf litter 14.5 1 0.5 0 15. Sediment on plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table? 18. Fibrous roots in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. 1 0 23. 32. Crayfish 24. Amphibians 25. Algae 26. Wetland plants in streambed 26. Wetland plants in streambed 27. FACW = 0.75; OBL = 1.5 Other = 67 28. FACW = 0.75; OBL = 1.5 Other = 67 29. FacW = 0.75; OBL = 1.5 Other = 67 20. Weters in streambed 20. Weters in streambed 21. Aguatic Mollusks 22. In 1.5 23. Crayfish 24. Amphibians 25. Algae 26. Wetland plants in streambed 26. Wetland plants in streambed 27. FACW = 0.75; OBL = 1.5 Other = 67 28. FacW = 0.75; OBL = 1.5 Other = 67 29. FacW = 0.75; OBL = 1.5 Other = 67 20. Macrobactures and also be identified using other methods. See p. 35 of manual. | · | | 1 | | | |
| 4. Particle size of stream substrate 5. Active/relict floodplain 6. Depositional bars or benches 7. Recent alluvial deposits 8. Headcuts 9. Grade control 10. 0. 1 2 3 8. Headcuts 9. Grade control 10. 0. 0.5 4 1.5 10. Natural valley 11. Second or greater order channel 8. Hydrology (Subtotal = 8.5 12. Presence of Baseflow 13. Iron oxidizing bacteria 14. Leaf litter 15. Sediment on plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table? 18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Tish 23. Crayfish 24. Amphibians 25. Algae 26. Wetland plants in streambed 26. Wetland plants in streambed 27. FACW = 0.75; OBL = 1.5 Other = € **perennial streams may also be identified using other methods. See p. 35 of manual. | 3. In-channel structure: ex. riffle-pool, step-pool, | - | | | | |
| 5. Active/relict floodplain 6. Depositional bars or benches 7. Recent alluvial deposits 8 1 2 3 8. Headcuts 9. Grade control 0 0.5 | | 0 | 1 | 2 | 3 | |
| 6. Depositional bars or benches 7. Recent alluvial deposits 8. Headcuts 9. 1 2 3 8. Headcuts 10. 1 2 3 8. Headcuts 10. Natural valley 10. No. 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | 0 | 1 | | | |
| 7. Recent alluvial deposits 8. Headcuts 9. Grade control 10. Natural valley 11. Second or greater order channel 8. Hydrology (Subtotal = 8.5 12. Presence of Baseflow 13. Iron oxidizing bacteria 14. Leaf litter 14.5 15. Oys defined to plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table? 18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 23. Crayfish 24. Amphibians 26. Wetland plants in streambed 27. Factor of manual. 28. Several of the subtofiled using other methods. See p. 35 of manual. 29. Motor of the plants of the pl | • | 0 | 1 | | | |
| 8. Headcuts 9. Grade control 0 0.5 1.5 10. Natural valley 0 0.5 11. Second or greater order channel 11. Second or greater order channel 12. W5 11. Second or greater order channel 12. Presence of Baseflow 12. Presence of Baseflow 13. Iron oxidizing bacteria 14. Leaf litter 14. Leaf litter 14. Leaf litter 14. Leaf litter 15. Sediment on plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table? 18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. 1 23. Crayfish 24. Amphibians 25. Algae 26. Wetland plants in streambed 26. Wetland plants in streambed 27. FACW = 0.75; OBL = 1.5 Other = 15. Other = 15. Other = 16. Organic debris in streambed 16. Organic debris in streambed 17. Soil-based evidence of high water table? 18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. 1 23. Crayfish 24. Amphibians 25. Algae 26. Wetland plants in streambed 26. Wetland plants in streambed 27. FACW = 0.75; OBL = 1.5 Other = 18. FACW = 0.75; OBL = 1.5 Other = 19. Motes: | · | Ø | | | | |
| 9. Grade control 10. Natural valley 11. Second or greater order channel 12. Presence of Baseflow 13. Iron oxidizing bacteria 14. Leaf litter 15. Sediment on plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table? 18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Fish 22. 33 22. Fish 23. Crayfish 24. Amphibians 25. Algae 26. Wetland plants in streambed 27. Factor and a streambed 28. Fibrous roots in streambed 29. Qv5 10. Sediment on plants or debris 20. Qv5 21. Qv6 22. 1 23. Qv6 23. 2 34. Qv7 35. Sv6 36. Crayfish 37. Qv7 38. Sv7 39. Sv6 30. Qv6 30. Qv7 40. Sv7 | · | | 1 | | | |
| 10. Natural valley 11. Second or greater order channel 12. Second or greater order channel 13. Hydrology (Subtotal = 8.5) 14. Leaf litter 15. Sediment on plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table? 18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 23. Crayfish 24. Amphibians 26. Wetland plants in streambed 7 | 9. Grade control | 0 | 0.5 | 1 | | |
| 11. Second or greater order channel 8. Hydrology (Subtotal = 8.5 12. Presence of Baseflow 13. Iron oxidizing bacteria 14. Leaf litter 15. Sediment on plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table? 18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 23. Crayfish 24. Amphibians 26. Wetland plants in streambed 36. Type = 36. South of the streambed 37. Soil-based evidence of high water table? 38. Type = 38. South of the streambed 39. Type = 39. South of the streambed 30. Macrobenthos (note diversity and abundance) 31. Macrobenthos (note diversity and abun | 10. Natural valley | 0 | | | | |
| B. Hydrology (Subtotal = 8.5) 12. Presence of Baseflow 0 1 2 3 13. Iron oxidizing bacteria Ø 1 2 3 14. Leaf litter 1√5 1 0.5 0 15. Sediment on plants or debris 0 0√5 1 1.5 16. Organic debris lines or piles 0 0√5 1 1.5 17. Soil-based evidence of high water table? No = 0 Yes = 3 18. Fibrous roots in streambed Ø 2 1 0 19. Rooted upland plants in streambed Ø 2 1 0 20. Macrobenthos (note diversity and abundance) 0 0√5 1 0 21. Aquatic Mollusks Ø 1 2 3 22. Fish 0 0 0√5 1 1.5 23. Crayfish 0 0 0√5 1 1.5 24. Amphibians 0 0 0√5 1 1.5 25. Algae Ø 0.5 1 1.5 Notes: | • | N | o = Ø | Yes | = 3 | |
| 12. Presence of Baseflow 13. Iron oxidizing bacteria 14. Leaf litter 14. Leaf litter 15. Sediment on plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table? 18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 23. Crayfish 24. Amphibians 25. Algae 26. Wetland plants in streambed 26. Wetland plants in streambed 27. FACW = 0.75; OBL = 1.5 Other = 6/ **perennial streams may also be identified using other methods. See p. 35 of manual. | | 1 | 1 | | | |
| 13. Iron oxidizing bacteria 14. Leaf litter 15. Sediment on plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table? 18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 23. Crayfish 24. Amphibians 25. Algae 26. Wetland plants in streambed 27. FACW = 0.75; OBL = 1.5 Other = € *perennial streams may also be identified using other methods. See p. 35 of manual. Notes: | B. Hydrology (Subtotal = 8.5 | | | | | |
| 14. Leaf litter 14. Leaf litter 15. Sediment on plants or debris 16. Organic debris lines or piles 17. Soil-based evidence of high water table? 18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 23. Crayfish 24. Amphibians 25. Algae 26. Wetland plants in streambed 27. FACW = 0.75; OBL = 1.5 Other = € Notes: | 12. Presence of Baseflow | 0 | 1 | 2 | ₹ | |
| 14. Leaf litter 1√5 1 0.5 0 15. Sediment on plants or debris 0 0√5 1 1.5 16. Organic debris lines or piles 0 0√5 1 1.5 17. Soil-based evidence of high water table? No = 0 Yes = 3 C. Biology (Subtotal = 8.5 / Substitution of the diversity and abundance) 3 2 1 0 19. Rooted upland plants in streambed 3 2 1 0 20. Macrobenthos (note diversity and abundance) 0 √ 2 3 21. Aquatic Mollusks √ 1 2 3 22. Fish 0 0√5 1 1.5 23. Crayfish 0 0√5 1 1.5 24. Amphibians 0 0√5 1 1.5 25. Algae √ 0.5 1 1.5 26. Wetland plants in streambed FACW = 0.75; OBL = 1.5 Other = √ *perennial streams may also be identified using other methods. See p. 35 of manual. Notes: | 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 | |
| 16. Organic debris lines or piles 17. Soil-based evidence of high water table? C. Biology (Subtotal = 8.5) 18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 33. Crayfish 44. Amphibians 55. Algae 66. Wetland plants in streambed 76. Draw 1.5 77. Soil-based evidence of high water table? 78. No = 0 79. Yes = 37 79. The streambed of the | - | 1,/5 | 1 | 0.5 | 0 | |
| 17. Soil-based evidence of high water table? C. Biology (Subtotal = 8.5) 18. Fibrous roots in streambed 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 33. Crayfish 44. Amphibians 55. Algae 66. Wetland plants in streambed 76. Biology (Subtotal = 8.5) 77. Soil-based evidence of high water table? 87. Pes 3 88. Fibrous roots in streambed 20. Macrobenthos (note diversity and abundance) 90. J. C. S. | 15. Sediment on plants or debris | 0 | 0,/5 | 1 | 1.5 | |
| C. Biology (Subtotal = 8.5 | 16. Organic debris lines or piles | 0 | 0,/5 | 1 | 1.5 | |
| 18. Fibrous roots in streambed 3 | | N | o = 0 | Yes | = 3 | |
| 19. Rooted upland plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 23. Crayfish 24. Amphibians 25. Algae 26. Wetland plants in streambed 27. Factor of the plants in streambed 28. Factor of the plants in streambed 29. Factor of the plants in streambed 20. Macrobenthos (note diversity and abundance) 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 23. Crayfish 24. Amphibians 25. Algae 26. Wetland plants in streambed 27. Factor of the plants in streambed 28. Factor of the plants in streambed 29. Factor of the plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 23. Crayfish 24. Amphibians 25. Algae 26. Wetland plants in streambed 27. Factor of the plants in streambed 28. Factor of the plants in streambed 29. Factor of the plants in streambed 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 23. Crayfish 24. Amphibians 25. Algae 26. Wetland plants in streambed 27. Factor of the plants in streambed 28. Factor of the plants in streambed 29. Factor of the plants in streambed 20. Macrobenthos (note diversity and abundance) 29. Macrobenthos (note diversity and abundance) 20. Macrobenthos (note diversity and abundance) 20. Macrobenthos (note diversity and abundance) 20. Ma | C. Biology (Subtotal = 8.5 | | , | | | |
| 20. Macrobenthos (note diversity and abundance) 21. Aquatic Mollusks 22. Fish 23. Crayfish 24. Amphibians 25. Algae 26. Wetland plants in streambed 27. The stream of the stream | 18. Fibrous roots in streambed | ₹ | 2 | 1 | 0 | |
| 21. Aquatic Mollusks 22. Fish 23. Crayfish 24. Amphibians 25. Algae 26. Wetland plants in streambed 27. Factor of the stream may also be identified using other methods. See p. 35 of manual. | 19. Rooted upland plants in streambed | ॐ | 2 | 1 | 0 | |
| 22. Fish 0 0√5 1 1.5 23. Crayfish 0 0√5 1 1.5 24. Amphibians 0 0√5 1 1.5 25. Algae ∅ 0.5 1 1.5 26. Wetland plants in streambed FACW = 0.75; OBL = 1.5 Other = ∅ *perennial streams may also be identified using other methods. See p. 35 of manual. Notes: | 20. Macrobenthos (note diversity and abundance) | 0 | ∜ | 2 | 3 | |
| 23. Crayfish 0 0/5 1 1.5 24. Amphibians 0 0/5 1 1.5 25. Algae Ø 0.5 1 1.5 26. Wetland plants in streambed FACW = 0.75; OBL = 1.5 Other = Ø *perennial streams may also be identified using other methods. See p. 35 of manual. Notes: | 21. Aquatic Mollusks | Ø | 1 | 2 | 3 | |
| 24. Amphibians 0 0 0.5 1 1.5 25. Algae 0 0.5 1 1.5 26. Wetland plants in streambed FACW = 0.75; OBL = 1.5 Other = *perennial streams may also be identified using other methods. See p. 35 of manual. Notes: | 22. Fish | 0 | 0/5 | 1 | 1.5 | |
| 25. Algae Ø 0.5 1 1.5 26. Wetland plants in streambed FACW = 0.75; OBL = 1.5 Other = Ø *perennial streams may also be identified using other methods. See p. 35 of manual. Notes: | 23. Crayfish | 0 | 0,/5 | 1 | 1.5 | |
| 26. Wetland plants in streambed FACW = 0.75; OBL = 1.5 Other = *perennial streams may also be identified using other methods. See p. 35 of manual. Notes: | 24. Amphibians | 0 | 0,/5 | 1 | 1.5 | |
| *perennial streams may also be identified using other methods. See p. 35 of manual. | 25. Algae | Ø | 0.5 | 1 | 1.5 | |
| Notes: | 26. Wetland plants in streambed | | FACW = 0.75; OBL | . = 1.5 Other = (| y | |
| Notes: | *perennial streams may also be identified using other meth | ods. See p. 35 of manua | al. | | | |
| Average width of channel is ~3.41 ft. | | | | | | |

| Date: 11/11/2024 | Project/Site: Pro | posed Luck Cherokee | Latitude: 35.08 | 372 |
|---|--------------------------|--|-------------------|---------------------------------|
| Evaluator: Tabitha Williams | County: Cherok | County: Cherokee County Stream Determination (pick one) Intermittent County: Cherokee County Cherokee Cherokee County Cherokee Cherokee Cherok | | .7521 |
| Total Points: Stream is at least intermittent 26 if ≥ 19 or perennial if $\geq 30^*$ | | | | Cowpens, SC / Gaffney, SC (2024 |
| A. Geomorphology (Subtotal = 13) | Absent | Weak | Moderate | Strong |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | 3 |
| 2. Sinuosity of channel along thalweg | 0 | 1 | 4 | 3 |
| 3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | 0 | 1 | ? | 3 |
| 4. Particle size of stream substrate | 0 | 1 | 2 | 3 |
| 5. Active/relict floodplain | 0 | ∜ | 2 | 3 |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 |
| 8. Headcuts | 0 | 1 | 4 | 3 |
| 9. Grade control | 0 | 0.5 | 1 | 1.5 |
| 10. Natural valley | 0 | 0.5 | 1 | 1.5 |
| 11. Second or greater order channel | No | o = ∅ | Yes | = 3 |
| ^a artificial ditches are not rated; see discussions in manual | | | | |
| B. Hydrology (Subtotal = $\frac{5.5}{}$) | | | | |
| 12. Presence of Baseflow | 0 | 1 | 2 | 3 |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 |
| 14. Leaf litter | 1.5 | 1 | 0.5 | 0 |
| 15. Sediment on plants or debris | Ø | 0.5 | 1 | 1.5 |
| 16. Organic debris lines or piles | 0 | 0/5 | 1 | 1.5 |
| 17. Soil-based evidence of high water table? | No | o = 0 | Yes | |
| C. Biology (Subtotal = 7.5) | I . | 1 | | |
| 18. Fibrous roots in streambed | ∛ | 2 | 1 | 0 |
| 19. Rooted upland plants in streambed | ॐ | 2 | 1 | 0 |
| 20. Macrobenthos (note diversity and abundance) | Ø | 1 | 2 | 3 |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 |
| 22. Fish | 0 | 0,/5 | 1 | 1.5 |
| 23. Crayfish | 0 | 0,/5 | 1 | 1.5 |
| 24. Amphibians | 0 | 0,/5 | 1 | 1.5 |
| 25. Algae | Ø | 0.5 | 1 | 1.5 |
| 26. Wetland plants in streambed | | FACW = 0.75; OBL | . = 1.5 Other = (| <u> </u> |
| *perennial streams may also be identified using other metl | nods. See p. 35 of manua | | <u>`</u> | |
| Notes: Average width of channel is ~3.82 ft. | , | | | |
| Sketch: | | | | |

| Date: 11/11/2024 | Project/Site: Pro | posed Luck Cherokee | Latitude: 35.08 | 887 | |
|---|-------------------------|---------------------------------|-----------------|--------------------------------|--|
| Evaluator: Tabitha Williams | County: Cherok | Stream Determination (pick one) | | Cowpens, SC / Gaffney, SC (20. | |
| Total Points: Stream is at least intermittent 22 if ≥ 19 or perennial if $\geq 30^*$ | | | | | |
| A. Geomorphology (Subtotal = 10) | Absent | Weak | Moderate | Strong | |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | 3 | |
| Sinuosity of channel along thalweg | 0 | 1 | 4 | 3 | |
| In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | 0 | 1 | 2 | 3 | |
| Particle size of stream substrate | 0 | 1 | 2 | 3 | |
| 5. Active/relict floodplain | Ø | 1 | 2 | 3 | |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 | |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 | |
| 8. Headcuts | 0 | 1 | 2 | 3 | |
| 9. Grade control | 0 | 0.5 | 1 | 1.5 | |
| 10. Natural valley | 0 | 0.5 | 1 | 1.5 | |
| 11. Second or greater order channel | No | o = Ø | Yes: | = 3 | |
| ^a artificial ditches are not rated; see discussions in manual | <u>-</u> | ' | | | |
| B. Hydrology (Subtotal = 5.5 | | | | | |
| 12. Presence of Baseflow | 0 | 1 | 2 | 3 | |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 | |
| 14. Leaf litter | 1.5 | 1 | 0.5 | 0 | |
| 15. Sediment on plants or debris | Ø | 0.5 | 1 | 1.5 | |
| 16. Organic debris lines or piles | 0 | 0,/5 | 1 | 1.5 | |
| 17. Soil-based evidence of high water table? | No | o = 0 | Yes : | = 3 | |
| C. Biology (Subtotal = 6.5 | <u>-</u> | ' | | | |
| 18. Fibrous roots in streambed | ॐ | 2 | 1 | 0 | |
| 19. Rooted upland plants in streambed | 3 | 2 | 1 | 0 | |
| 20. Macrobenthos (note diversity and abundance) | Ø | 1 | 2 | 3 | |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 | |
| 22. Fish | Ø | 0.5 | 1 | 1.5 | |
| 23. Crayfish | Ø | 0.5 | 1 | 1.5 | |
| 24. Amphibians | 0 | 0,/5 | 1 | 1.5 | |
| 25. Algae | Ø | 0.5 | 1 | 1.5 | |
| 26. Wetland plants in streambed | | FACW = 0.75; OBL | = 1.5 Other = @ | 1 | |
| *perennial streams may also be identified using other meth | ods. See p. 35 of manua | al. | | | |
| Notes: Average width of channel is ~0.75 ft. | | | | | |
| Sketch: | | | | | |
| | | | | | |

| Date: 11/12/2024 | Project/Site: Pro | Project/Site: Proposed Luck Cherokee | | Latitude: 35.0856 | |
|--|--|--------------------------------------|---|--------------------------|--|
| Evaluator: Tabitha Williams | County: Cherokee County Stream Determination (pick one) Perennial | | Longitude: -81.7522 Other e.g. Quad Name: Cowpens, SC / Gaffney, SC (2024) | | |
| Total Points: Stream is at least intermittent 44 if ≥ 19 or perennial if $\geq 30^*$ | | | | | |
| A. Geomorphology (Subtotal = 25.5) | Absent | Weak | Moderate | Strong | |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | ₹ | |
| 2. Sinuosity of channel along thalweg | 0 | 1 | 2 | ∡ | |
| 3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | 0 | 1 | 2 | 3 | |
| Particle size of stream substrate | 0 | 1 | 2 | ₹ | |
| Active/relict floodplain | 0 | 1 | 2 | 3 | |
| Depositional bars or benches | 0 | 1 | <u>Z</u> | 3 | |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 | |
| Headcuts | 0 | 1 | 2 | 3 | |
| 9. Grade control | 0 | 0.5 | <u>−</u> ∜ | 1.5 | |
| 10. Natural valley | 0 | 0.5 | 1 | 1/5 | |
| 11. Second or greater order channel | | 0 = 0 | Yes : | | |
| ^a artificial ditches are not rated; see discussions in manual | 110 | , , | | | |
| B. Hydrology (Subtotal = 8.5) | | | | | |
| 12. Presence of Baseflow | 0 | 1 | 2 | ₹ | |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 | |
| 14. Leaf litter | 1,/5 | 1 | 0.5 | 0 | |
| 15. Sediment on plants or debris | 0 | 0,/5 | 1 | 1.5 | |
| 16. Organic debris lines or piles | 0 | 0/5 | 1 | 1.5 | |
| 17. Soil-based evidence of high water table? | No = 0 Yes = 3 | | | | |
| C. Biology (Subtotal = 10) | | l . | | | |
| 18. Fibrous roots in streambed | ॐ | 2 | 1 | 0 | |
| 19. Rooted upland plants in streambed | 3 | 2 | 1 | 0 | |
| 20. Macrobenthos (note diversity and abundance) | 0 | 1 | 2 | 3 | |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 | |
| 22. Fish | 0 | 0.5 | 1 | 1.5 | |
| 23. Crayfish | 0 | 0,/5 | 1 | 1.5 | |
| 24. Amphibians | 0 | 0,⁄5 | 1 | 1.5 | |
| 25. Algae | Ø | 0.5 | 1 | 1.5 | |
| 26. Wetland plants in streambed | | FACW = 0.75; OBL | . = 1.5 Other = 0 | | |
| *perennial streams may also be identified using other meth | nods. See p. 35 of manua | l. | | | |
| Notes: Average width of channel is ~17.27 ft. | | | | | |
| Sketch: | | | | | |

| Date: 11/12/2024 | Project/Site: Pro | posed Luck Cherokee | Latitude: 35.0839 Longitude: -81.7509 | | |
|---|-------------------------|---|---|---|--|
| Evaluator: Tabitha Williams | County: Cherok | ee County | | | |
| Total Points: Stream is at least intermittent 23.5 if ≥ 19 or perennial if $\geq 30^*$ | | Stream Determination (pick one) Intermittent | | Other e.g. Quad Name: Cowpens, SC / Gaffney, SC (2024 | |
| A. Geomorphology (Subtotal = 6.5) | Absent | Weak | Moderate | Strong | |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | 3 | |
| 2. Sinuosity of channel along thalweg | 0 | 1 | 4 | 3 | |
| In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | Ø | 1 | 2 | 3 | |
| 4. Particle size of stream substrate | Ø | 1 | 2 | 3 | |
| 5. Active/relict floodplain | 0 | 1 | 2 | ♂ | |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 | |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 | |
| 8. Headcuts | Ø | 1 | 2 | 3 | |
| 9. Grade control | Ø | 0.5 | 1 | 1.5 | |
| 10. Natural valley | 0 | 0,/5 | 1 | 1.5 | |
| 11. Second or greater order channel | No = ∅ Yes = 3 | | = 3 | | |
| ^a artificial ditches are not rated; see discussions in manual | | | | | |
| B. Hydrology (Subtotal = $\frac{7.5}{}$) | | | | | |
| 12. Presence of Baseflow | 0 | 1 | 2 | 3 | |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 | |
| 14. Leaf litter | 1.5 | 1 | 0/5 | 0 | |
| 15. Sediment on plants or debris | 0 | 0.5 | ⋠ | 1.5 | |
| 16. Organic debris lines or piles | 0 | 0.5 | ∜ | 1.5 | |
| 17. Soil-based evidence of high water table? | No | No = 0 | | Yes = ✓ | |
| C. Biology (Subtotal = 9.5 | | | | | |
| 18. Fibrous roots in streambed | ॐ | 2 | 1 | 0 | |
| 19. Rooted upland plants in streambed | ॐ | 2 | 1 | 0 | |
| 20. Macrobenthos (note diversity and abundance) | 0 | 1 | 2 | 3 | |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 | |
| 22. Fish | 0 | 0,/5 | 1 | 1.5 | |
| 23. Crayfish | 0 | 0,/5 | 1 | 1.5 | |
| 24. Amphibians | 0 | 0,/5 | 1 | 1.5 | |
| 25. Algae | Ø | 0.5 | 1 | 1.5 | |
| 26. Wetland plants in streambed | | FACW = 0.75; OBL | = 1.5 Other = | Ø | |
| *perennial streams may also be identified using other methods | ods. See p. 35 of manua | al. | | | |
| Notes: Average width of channel is ~2.45 ft. | | | | | |
| Sketch: | | | | | |

| Date: 11/12/2024 | Project/Site: Proposed Luck Cherokee | | Latitude: 35.0842 | | |
|--|---|------------------|--|----------|--|
| Evaluator: Tabitha Williams | County: Cherokee County | | Longitude: -81.7507 | | |
| Total Points: Stream is at least intermittent $\frac{24}{\text{if } \geq 19 \text{ or perennial if } \geq 30^*}$ | Stream Determination (pick one) Intermittent | | Other e.g. Quad Name: Cowpens, SC / Gaffney, SC (2024) | | |
| A. Geomorphology (Subtotal = 5.5) | Absent | Weak | Moderate | Strong | |
| 1 ^{a.} Continuity of channel bed and bank | 0 | 1 | 2 | 3 | |
| 2. Sinuosity of channel along thalweg | 0 | 1 | 2 | 3 | |
| In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence | Ø | 1 | 2 | 3 | |
| Particle size of stream substrate | Ø | 1 | 2 | 3 | |
| Active/relict floodplain | 0 | 1 | 2 | ₹ | |
| 6. Depositional bars or benches | Ø | 1 | 2 | 3 | |
| 7. Recent alluvial deposits | Ø | 1 | 2 | 3 | |
| 8. Headcuts | Ø | 1 | 2 | 3 | |
| 9. Grade control | Ø | 0.5 | 1 | 1.5 | |
| 10. Natural valley | 0 | 0,/5 | 1 | 1.5 | |
| 11. Second or greater order channel | No | o = Ø | Yes = 3 | | |
| ^a artificial ditches are not rated; see discussions in manual | I | l | | | |
| B. Hydrology (Subtotal = 8) | | | | | |
| 12. Presence of Baseflow | 0 | 1 | 4 | 3 | |
| 13. Iron oxidizing bacteria | Ø | 1 | 2 | 3 | |
| 14. Leaf litter | 1.5 | 1 | 0.5 | 0 | |
| 15. Sediment on plants or debris | 0 | 0.5 | 1 | 1.5 | |
| 16. Organic debris lines or piles | 0 | 0.5 | <u>,</u> √1 | 1.5 | |
| 17. Soil-based evidence of high water table? | No = 0 Yes = 3 | | | | |
| C. Biology (Subtotal = 10.5) | 1 | 1 | | | |
| 18. Fibrous roots in streambed | ॐ | 2 | 1 | 0 | |
| 19. Rooted upland plants in streambed | ॐ | 2 | 1 | 0 | |
| 20. Macrobenthos (note diversity and abundance) | 0 | 1 | 2 | 3 | |
| 21. Aquatic Mollusks | Ø | 1 | 2 | 3 | |
| 22. Fish | 0 | 0,/5 | 1 | 1.5 | |
| 23. Crayfish | 0 | 0,/5 | 1 | 1.5 | |
| 24. Amphibians | 0 | 0,/5 | 1 | 1.5 | |
| 25. Algae | Ø | 0.5 | 1 | 1.5 | |
| 26. Wetland plants in streambed | | FACW = 0.75; OBL | . = 1.5 Other = 🥻 | 8 | |
| *perennial streams may also be identified using other method | ds. See p. 35 of manua | ıl. | | | |
| Notes: Average width of channel is ~1 ft. | | | | | |
| Sketch: | | | | | |

APPENDIX E SITE PHOTOGRAPHS





PHOTO 1: Culvert Associated With Perennial Stream STA



PHOTO 2: Perennial Stream STA

Date: November 2024

Page 1 of 32





PHOTO 3: Typical Project Dry Land



PHOTO 4: Intermittent Stream STE

Date: November 2024

Page 2 of 32





PHOTO 5: Intermittent Stream STE



PHOTO 6: Intermittent Stream STF

Date: November 2024

Page 3 of 32





PHOTO 7: Intermittent Stream STE



PHOTO 8: Perennial Stream STH

Date: November 2024

Page 4 of 32





PHOTO 9: Perennial Stream STH



PHOTO 10: Typical Project Dry Land

Date: November 2024

Page 5 of 32





PHOTO 11: Typical Project Dry Land



PHOTO 12: Typical Project Dry Land

Date: November 2024

Page 6 of 32





PHOTO 13: Bridge Associated With Perennial Stream STH



PHOTO 14: Wetland WCG / Intermittent Stream STJ

Date: November 2024

Page 7 of 32





PHOTO 15: Wetland WCG



PHOTO 16: Intermittent Stream STJ

Date: November 2024

Page 8 of 32





PHOTO 17: Typical Project Dry Land



PHOTO 18: Wetland WCA

Date: November 2024

Page 9 of 32





PHOTO 19: Wetland WSA



PHOTO 20: Intermittent Stream SCA

Date: November 2024

Page 10 of 32





PHOTO 21: Typical Project Dry Land



PHOTO 22: Typical Project Dry Land

Date: November 2024

Page 11 of 32





PHOTO 23: Typical Project Dry Land



PHOTO 24: Ephemeral Channel ETB

Date: November 2024

Page 12 of 32





PHOTO 25: Typical Project Dry Land



PHOTO 26: Wetland WSC

Date: November 2024

Page 13 of 32





PHOTO 27: Wetland WSC



PHOTO 28: Intermittent Stream STE

Date: November 2024

Page 14 of 32





PHOTO 29: Wetland WCE



PHOTO 30: Intermittent Stream SCB

Date: November 2024

Page 15 of 32





PHOTO 31: Perennial Stream SSD



PHOTO 32: Perennial Stream SSD

Date: November 2024

Page 16 of 32





PHOTO 33: Intermittent Stream SSE



PHOTO 34: Wetland WCF

Date: November 2024

Page 17 of 32





PHOTO 35: Typical Project Dry Land



PHOTO 36: Surface Water WMF (Thicketty Creek Watershed #20 Reservoir)

Date: November 2024

Page 18 of 32





PHOTO 37: Wetland MB



PHOTO 38: Typical Project Dry Land

Date: November 2024

Page 19 of 32



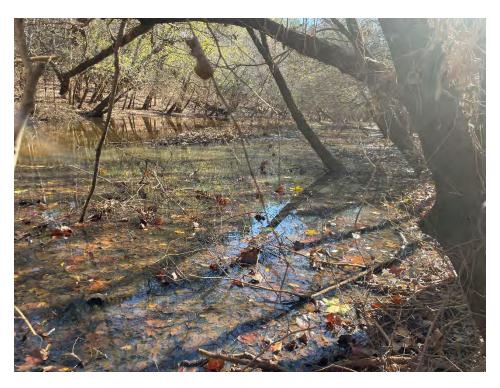


PHOTO 39: Wetland MB



PHOTO 40: Wetland MB

Date: November 2024

Page 20 of 32





PHOTO 41: Perennial Stream STH



PHOTO 42: Perennial Stream SSC

Date: November 2024

Page 21 of 32





PHOTO 43: Intermittent Stream SSE



PHOTO 44: Intermittent Stream SSE

Date: November 2024

Page 22 of 32





PHOTO 45: Typical Project Dry Land



PHOTO 46: Typical Project Dry Land

Date: November 2024

Page 23 of 32





PHOTO 47: Perennial Stream SFA



PHOTO 48: Perennial Stream SFA

Date: November 2024

Page 24 of 32





PHOTO 49: Intermittent Stream SFB



PHOTO 50: Intermittent Stream SFD

Date: November 2024

Page 25 of 32





PHOTO 51: Ephemeral Channel EMA



PHOTO 52: Ephemeral Channel EMA

Date: November 2024

Page 26 of 32





PHOTO 53: Ephemeral Channel EMA



PHOTO 54: Typical Project Dry Land

Date: November 2024

Page 27 of 32





PHOTO 55: Ephemeral Channel EMB



PHOTO 56: Typical Project Dry Land

Date: November 2024

Page 28 of 32





PHOTO 57: Ephemeral Channel EMB



PHOTO 58: Ephemeral Channel EMC

Date: November 2024

Page 29 of 32





PHOTO 59: Typical Project Dry Land



PHOTO 60: Typical Project Dry Land

Date: November 2024

Page 30 of 32





PHOTO 61: Ephemeral Channel EMF



PHOTO 62: Break Between Ephemeral Channel EMD and Intermittent Stream SMA

Date: November 2024

Page 31 of 32





PHOTO 63: Wetland FC



PHOTO 64: Typical Project Dry Land

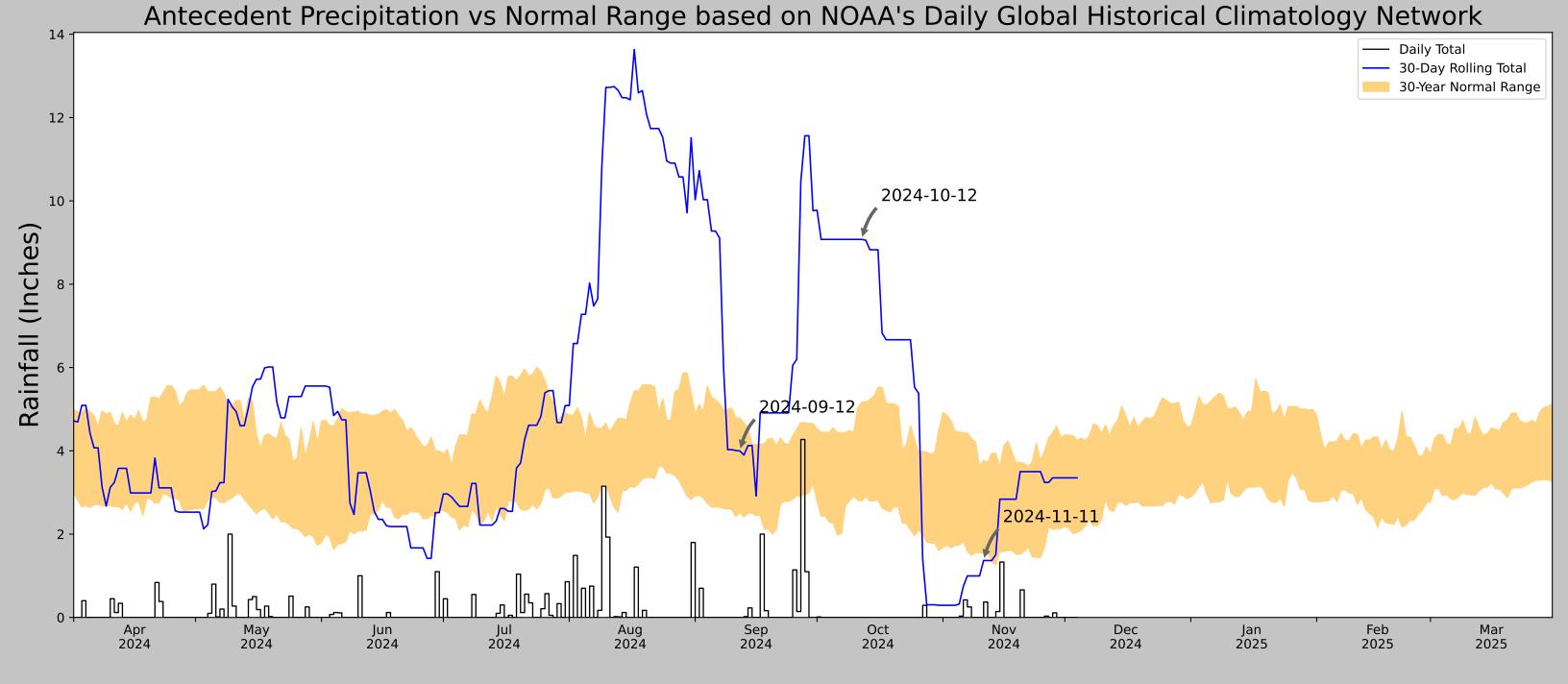
Date: November 2024

Page 32 of 32



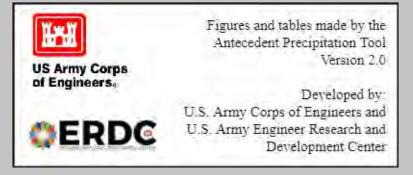
APPENDIX F PRECIPITATION AND DROUGHT DATA



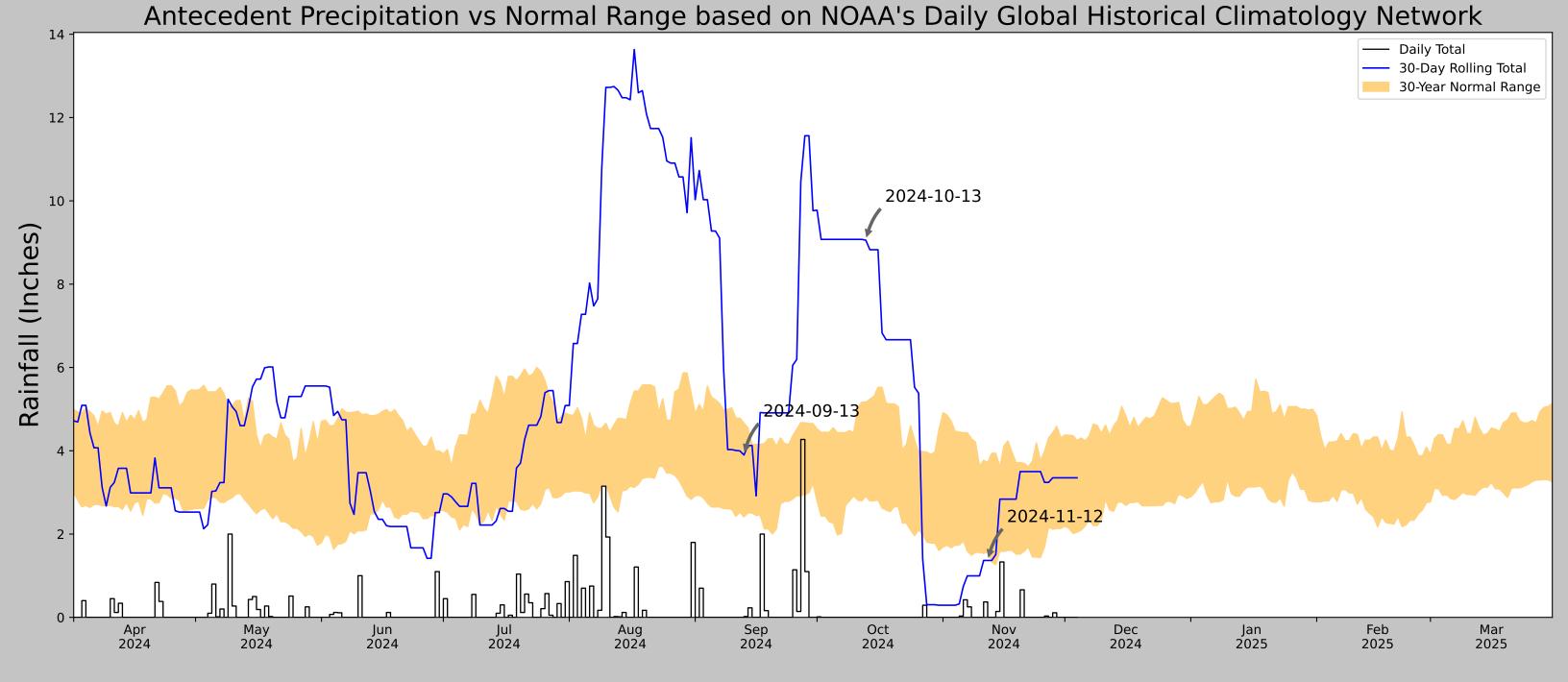


| Coordinates | 35.0857, -81.746 |
|----------------------------------|-----------------------------|
| Observation Date | 2024-11-11 |
| Elevation (ft) | 726.776 |
| Drought Index (PDSI) | Incipient wetness (2024-10) |
| WebWIMP H ₂ O Balance | Wet Season |
| | |

| 30 Days Ending | 30 th %ile (in) | 70 th %ile (in) | Observed (in) | Wetness Condition | Condition Value | Month Weight | Product |
|----------------|----------------------------|----------------------------|---------------|-------------------|-----------------|--------------|------------------------|
| 2024-11-11 | 1.535433 | 3.774016 | 1.366142 | Dry | 1 | 3 | 3 |
| 2024-10-12 | 2.792126 | 5.16811 | 9.074803 | Wet | 3 | 2 | 6 |
| 2024-09-12 | 2.520079 | 4.786221 | 3.996063 | Normal | 2 | 1 | 2 |
| Result | | | | | | | Normal Conditions - 11 |

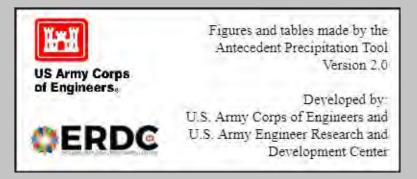


| Weather Station Name | Coordinates | | Distance (mi) | Elevation 🛆 | Weighted ∆ | Days Normal | Days Antecedent |
|----------------------|-------------------|---------|---------------|-------------|------------|-------------|-----------------|
| GASTON SHOALS | 35.1383, -81.5969 | 580.053 | 9.177 | 146.723 | 5.476 | 11031 | 68 |
| BLACKSBURG 3.2 NW | 35.151, -81.561 | 770.013 | 2.21 | 189.96 | 1.414 | 6 | 0 |
| SHELBY 5.8 SW | 35.2233, -81.6056 | 661.089 | 5.893 | 81.036 | 3.129 | 78 | 0 |
| GAFFNEY 3.3 NNW | 35.1163, -81.6803 | 804.134 | 4.952 | 224.081 | 3.338 | 142 | 0 |
| BLACKSBURG 2.6 ENE | 35.1336, -81.4745 | 700.131 | 6.924 | 120.078 | 3.947 | 2 | 22 |
| BLACKSBURG 2.5 ENE | 35.1347, -81.4783 | 719.16 | 6.706 | 139.107 | 3.951 | 1 | 0 |
| GAFFNEY 1.0 SE | 35.0619, -81.6427 | 846.129 | 5.879 | 266.076 | 4.21 | 68 | 0 |
| MOORESBORO 6.0 S | 35.2134, -81.7083 | 709.974 | 8.155 | 129.921 | 4.729 | 18 | 0 |
| NINETY NINE IS | 35.0317, -81.4928 | 500.0 | 9.428 | 80.053 | 4.997 | 1 | 0 |
| GAFFNEY 3.5 SW | 35.0366, -81.7009 | 693.898 | 9.162 | 113.845 | 5.166 | 2 | 0 |
| SHELBY 3.9 WSW | 35.2703, -81.6081 | 833.005 | 9.142 | 252.952 | 6.426 | 1 | 0 |
| SHELBY 0.9 WSW | 35.2849, -81.5566 | 840.879 | 10.381 | 260.826 | 7.379 | 1 | 0 |
| SHELBY 2 NW | 35.3111, -81.5708 | 819.882 | 12.03 | 239.829 | 8.299 | 2 | 0 |

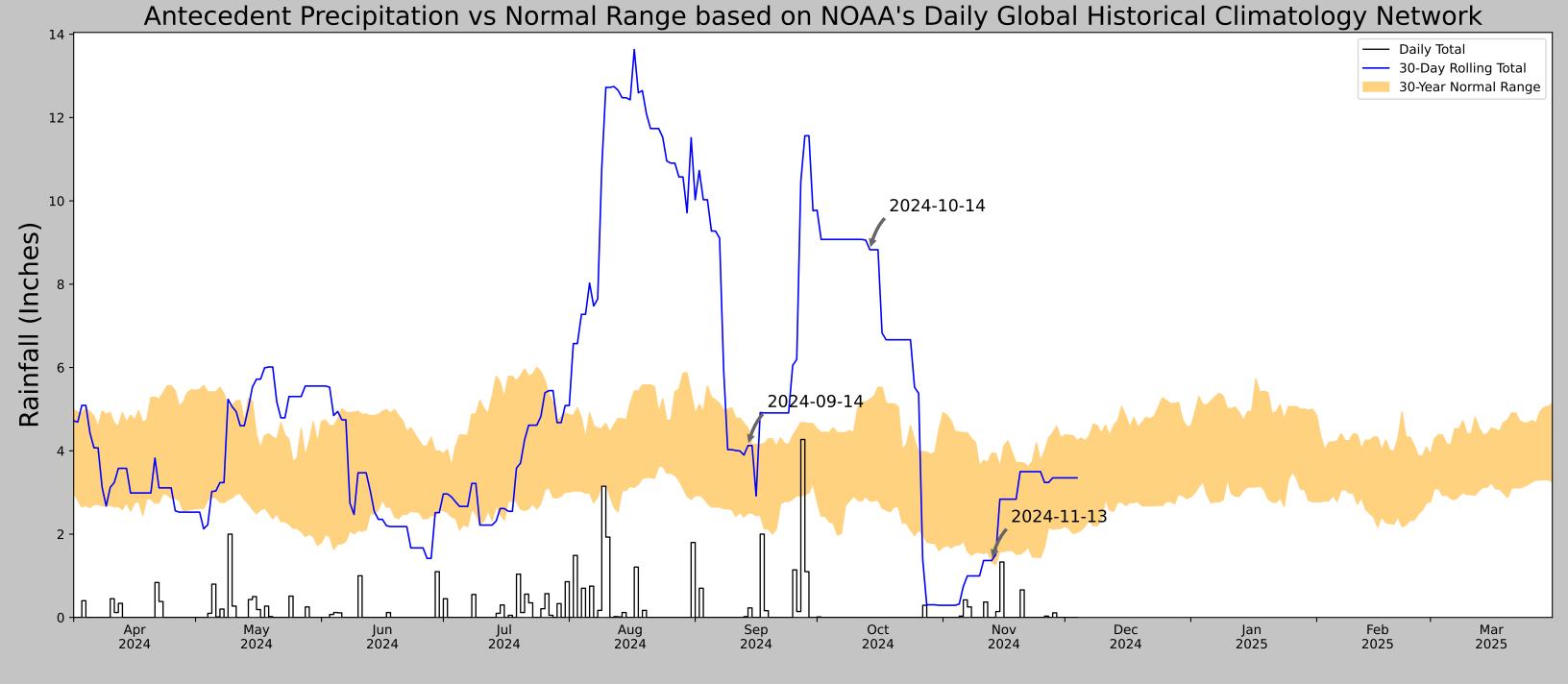


| Coordinates | 35.0857, -81.746 |
|----------------------|-----------------------------|
| | • |
| Observation Date | 2024-11-12 |
| Elevation (ft) | 726.776 |
| Drought Index (PDSI) | Incipient wetness (2024-10) |
| WebWIMP H₂O Balance | Wet Season |

| 30 Days Ending | 30 th %ile (in) | 70 th %ile (in) | Observed (in) | Wetness Condition | Condition Value | Month Weight | Product |
|----------------|----------------------------|----------------------------|---------------|-------------------|-----------------|--------------|------------------------|
| 2024-11-12 | 1.572835 | 3.717717 | 1.366142 | Dry | 1 | 3 | 3 |
| 2024-10-13 | 2.909843 | 5.16811 | 9.055118 | Wet | 3 | 2 | 6 |
| 2024-09-13 | 2.410236 | 4.664961 | 3.897638 | Normal | 2 | 1 | 2 |
| Result | | | | | | | Normal Conditions - 11 |

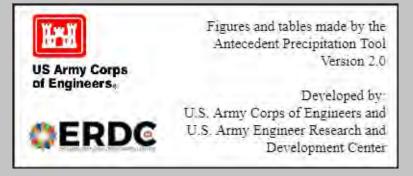


| Weather Station Name | Coordinates | Elevation (ft) | Distance (mi) | Elevation ∆ | Weighted ∆ | Days Normal | Days Antecedent |
|----------------------|---------------------------|----------------|---------------|-------------|------------|-------------|-----------------|
| GASTON SHOALS | 35.1383, -81.5969 | 580.053 | 9.177 | 146.723 | 5.476 | 11031 | 68 |
| BLACKSBURG 3.2 NW | 35.151, -81.561 | 770.013 | 2.21 | 189.96 | 1.414 | 6 | 0 |
| SHELBY 5.8 SW | 35.2233, -81.6056 | 661.089 | 5.893 | 81.036 | 3.129 | 78 | 0 |
| GAFFNEY 3.3 NNW | 35.1163, -81.6803 | 804.134 | 4.952 | 224.081 | 3.338 | 142 | 0 |
| BLACKSBURG 2.6 ENE | 35.1336, -81.4745 | 700.131 | 6.924 | 120.078 | 3.947 | 2 | 22 |
| BLACKSBURG 2.5 ENE | 35.1347 <i>,</i> -81.4783 | 719.16 | 6.706 | 139.107 | 3.951 | 1 | 0 |
| GAFFNEY 1.0 SE | 35.0619, -81.6427 | 846.129 | 5.879 | 266.076 | 4.21 | 68 | 0 |
| MOORESBORO 6.0 S | 35.2134 <i>,</i> -81.7083 | 709.974 | 8.155 | 129.921 | 4.729 | 18 | 0 |
| NINETY NINE IS | 35.0317, -81.4928 | 500.0 | 9.428 | 80.053 | 4.997 | 1 | 0 |
| GAFFNEY 3.5 SW | 35.0366, -81.7009 | 693.898 | 9.162 | 113.845 | 5.166 | 2 | 0 |
| SHELBY 3.9 WSW | 35.2703, -81.6081 | 833.005 | 9.142 | 252.952 | 6.426 | 1 | 0 |
| SHELBY 0.9 WSW | 35.2849, -81.5566 | 840.879 | 10.381 | 260.826 | 7.379 | 1 | 0 |
| SHELBY 2 NW | 35.3111, -81.5708 | 819.882 | 12.03 | 239.829 | 8.299 | 2 | 0 |



| Coordinates | 35.0857, -81.746 |
|----------------------------------|-----------------------------|
| Observation Date | 2024-11-13 |
| Elevation (ft) | 726.776 |
| Drought Index (PDSI) | Incipient wetness (2024-10) |
| WebWIMP H ₂ O Balance | Wet Season |
| | |

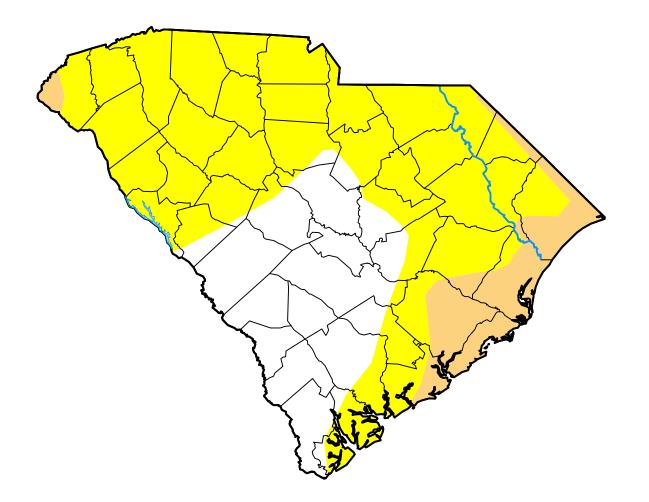
| 30 Days Ending | 30 th %ile (in) | 70 th %ile (in) | Observed (in) | Wetness Condition | Condition Value | Month Weight | Product |
|----------------|----------------------------|----------------------------|---------------|-------------------|-----------------|--------------|------------------------|
| 2024-11-13 | 1.329134 | 3.940551 | 1.366142 | Normal | 2 | 3 | 6 |
| 2024-10-14 | 2.795276 | 5.239764 | 8.826772 | Wet | 3 | 2 | 6 |
| 2024-09-14 | 2.507087 | 4.548032 | 4.125984 | Normal | 2 | 1 | 2 |
| Result | | | | | | | Normal Conditions - 14 |



| Weather Station Name | Coordinates | Elevation (ft) | Distance (mi) | Elevation Δ | Weighted ∆ | Days Normal | Days Antecedent |
|----------------------|-------------------|----------------|---------------|-------------|------------|-------------|-----------------|
| GASTON SHOALS | 35.1383, -81.5969 | 580.053 | 9.177 | 146.723 | 5.476 | 11031 | 68 |
| BLACKSBURG 3.2 NW | 35.151, -81.561 | 770.013 | 2.21 | 189.96 | 1.414 | 6 | 0 |
| SHELBY 5.8 SW | 35.2233, -81.6056 | 661.089 | 5.893 | 81.036 | 3.129 | 78 | 0 |
| GAFFNEY 3.3 NNW | 35.1163, -81.6803 | 804.134 | 4.952 | 224.081 | 3.338 | 142 | 0 |
| BLACKSBURG 2.6 ENE | 35.1336, -81.4745 | 700.131 | 6.924 | 120.078 | 3.947 | 2 | 22 |
| BLACKSBURG 2.5 ENE | 35.1347, -81.4783 | 719.16 | 6.706 | 139.107 | 3.951 | 1 | 0 |
| GAFFNEY 1.0 SE | 35.0619, -81.6427 | 846.129 | 5.879 | 266.076 | 4.21 | 68 | 0 |
| MOORESBORO 6.0 S | 35.2134, -81.7083 | 709.974 | 8.155 | 129.921 | 4.729 | 18 | 0 |
| NINETY NINE IS | 35.0317, -81.4928 | 500.0 | 9.428 | 80.053 | 4.997 | 1 | 0 |
| GAFFNEY 3.5 SW | 35.0366, -81.7009 | 693.898 | 9.162 | 113.845 | 5.166 | 2 | 0 |
| SHELBY 3.9 WSW | 35.2703, -81.6081 | 833.005 | 9.142 | 252.952 | 6.426 | 1 | 0 |
| SHELBY 0.9 WSW | 35.2849, -81.5566 | 840.879 | 10.381 | 260.826 | 7.379 | 1 | 0 |
| SHELBY 2 NW | 35.3111, -81.5708 | 819.882 | 12.03 | 239.829 | 8.299 | 2 | 0 |

U.S. Drought Monitor

South Carolina



November 12, 2024

(Released Thursday, Nov. 14, 2024)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|--------|--------|-------|-------|-------|------|
| Current | 27.84 | 72.16 | 10.70 | 0.00 | 0.00 | 0.00 |
| Last Week 11-05-2024 | 0.00 | 100.00 | 35.68 | 0.00 | 0.00 | 0.00 |
| 3 Months Ago 08-13-2024 | 80.73 | 19.27 | 0.00 | 0.00 | 0.00 | 0.00 |
| Start of Calendar Year 01-02-2024 | 60.82 | 39.18 | 16.08 | 1.61 | 0.00 | 0.00 |
| Start of Water Year 10-01-2024 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| One Year Ago 11-14-2023 | 24.88 | 75.12 | 48.54 | 30.68 | 6.66 | 0.00 |

Intensity:

None D2 Severe Drought
D0 Abnormally Dry D3 Extreme Drought
D1 Moderate Drought
D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions.

Local conditions may vary. For more information on the

Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

Richard Tinker CPC/NOAA/NWS/NCEP









droughtmonitor.unl.edu