

MITIGATION PLAN
CHINQUAPIN VALLEY BUFFER MITIGATION SITE

Jones County, NC

NCDEQ Contract No. 0103-02

NCDMS ID No. 100197

NCDWR Project No. 2021-0993v2

RFP No. 16-20200103



Neuse River Basin

HUC 03020204

August 2021 (Revised December 2021)

Prepared For:

NC Department of Environmental Quality

Division of Mitigation Services

1652 Mail Service Center, Raleigh, NC 27699-1652



Mitigation Services
ENVIRONMENTAL QUALITY



December 22, 2021

Lin Xu
1652 Mail Service Center
Raleigh, NC 27699-1652

Subject: Task 3 Draft Mitigation Plan Comments (DWR) – Chinquapin Valley Buffer Mitigation Site (DMS #100197) Neuse 03020204; Jones County, NC, Contract No. 0103-02

Dear Lin,

SWE/Eco Terra has addressed comments received by Katie Merritt (DWR) on December 15, 2021 for the Draft Mitigation Plan, Kingfield Buffer Mitigation Site. Our responses are below in blue:

1. Page 2: change DWR ID# to 2021-0993v2
Revised.
2. Page 3: remove this reference to an Instrument. DMS does not have an Instrument with DWR for nutrient offset or buffer mitigation sites - add reference to the 15A NCAC 02B .0703 "Nutrient Offset Credit Trading"
Revised.
3. Page 4: break out your Figures by name. Usually the Tables are also broken out by name.
Revised.
4. Page 4: Add another Figure titled "Nutrient Offset Conceptual Map" and add clarification that this Figure only represents areas that are viable for nutrient offsets if ever DMS converted the RBCs. These areas shown in the Figure as being viable for NOC should match the asset table for what is deemed convertible to Nutrient Offset
A new figure (Figure 8b) is included in the Plan and aligns with Table 9.
5. Page 4: in order to use the diffused flow reduction policy for ditches, DMS has to request to use the DWR Diffused Flow Clarification Memo. There is a need to account for the lack of diffused flow of the ditch entering the main channel. By including the Clarification Memo as an appendix to this Plan, DWR can approve the use of this memo for meeting the diffused flow requirements. the memo is found at this link: <https://deq.nc.gov/media/4742/download>
The NCDWQ Buffer Interpretation/Clarification #2008-019 Memorandum (August 19, 2008) is now included in Appendix A.
6. Page 5: add the following statement to the first paragraph (sic): This Site Plan is being submitted for buffer mitigation credit and nutrient offset credit in the Neuse River Basin Hydrologic Unit Code 03020204, in accordance with the Consolidated Buffer Mitigation Rule (15A NCAC 02B .0295) and the Nutrient Offset Credit Trading Rule (15A NCAC 02B .0703) respectively.
Revised.

7. Page 6: this objective alone does not adequately address the sediment load occurring on this site. There are areas of unstable and eroding banks that all need to be remediated as part of the Plan to achieve this goal.
Noted. Additional attention to unstable banks along Chinquapin Branch and methods to stabilize are addressed in the revised plan. Areas of concern are noted within Figure 3.
8. Page 6: There should be current photos mentioned in this paragraph with a reference to where those photos are within the Plan. No photos showing existing conditions were included in the Plan. Add photos that represent the current status of the riparian areas since the date of the DWR's site visit and make sure the photos include the date they were taken.
Added photo documentation. No land use changes, or other site modifications have occurred since the DWR site visits and leading up to the date of submittal that may nullify or affect site viability and per Rule 15A NCAC 02B 0703 (e)(2)(C) Project Plan Requirements.
9. Page 6: this section does not mention the washed out banks or the active bank erosion. the site viability letter indicates this is an issue of concern and this section should include this information as "existing conditions" since it affects the riparian areas around the Top of Banks.
Revised accordingly to include areas of erosion along streambanks of Chinquapin Branch.
10. Page 7: There is a statement that indicates that unbuffered ditches entering the project site but it doesn't indicate that this means, "non-diffused flow" is an issue on the site. Please clarify. Also, there needs to be a statement in this paragraph regarding the need to account for "Diffused Flow" specifically. Add a reference to the Clarification Memo that is supposed to be in the Appendix so that DWR can approve the use of that Memo to address the non-diffused flow on the site.
Revised accordingly and noted by Figure 8a.
11. Page 7: Figure 8 does not depict credit reductions on UT1. Also, since UT1 is a stream, deductions are not required to be applied.
UT1 is a stream, and no deductions are indicated. Clarified in Plan.
12. Page 7: It says that the credit deductions are accounted for in the Credit Table but there are no rows dedicated to showing this. See further comments on Table 9.
Revised Table 9 rows to further clarify how the Buffer-Credit Calculation Tool column "I" "Total (Creditable) Area of Buffer Mitigation (ft²)" is derived from column "H" "Total Area (ft²)" that accounts for the unbuffered ditch total area (ft²) within the project.
13. Page 7: no language is provided in this table acknowledging that the service area for these credits is limited to the 03020102 HUC (sic). Add language that speaks to this and reference the Service area figure 1.
The HUC/Service Area is shown on Figure 2, cover page, and here on Table 2. Table 2 has been modified for clarity and to add redundancy.
14. Page 7: add, "with flexibility to convert to Nutrient Offset if needed"
Revised Table 2. Riparian Buffer credits may be converted to nutrient offset as indicated in Table 9 and illustrated with a new Figure 8b.
15. Page 12: The Site viability letter indicates that there is likely a drainage district that controls the drainage of the main channel. the letter states that correspondence from the drainage district needs to be included in this Plan for review. See viability letter for further instructions. If no letter is provided, DWR cannot guarantee the credits proposed on this site
A title search, discussions with the local soil and water district, and communication with the landowner revealed no drainage district in place within the Project easement.

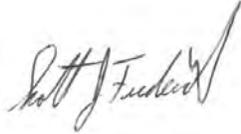
16. Page 12: DWR recommends the Provider commit to performing soil testing to determine how best to prepare the soil for planting and success. Will soil testing be performed? Why or Why not. Soil testing is recommended on a case by case basis depending on site conditions, soil type, historic land use, and existing conditions. Soil testing was not performed when all these factors were considered including the current vigor and success of the last nitrogen fixing row crop, soybeans.
17. Page 12: What exactly is meant by "sediment and erosion control measures"? Need to specify what measures the Provider intends to use if needed.
Revised. Sediment and erosion control measures may include seeding, mulching, haying, and temporary sediment containment around any land disturbance areas other than tree planting rows.
18. Page 12: This section needs more information. Define the minimum and maximum widths from TOB for the riparian restoration. Provider should also include information on how they will address the washed out bank areas and the unstable eroding banks (sic).
Widths of 30-115 ft across the entire project are proposed. Proposed restored riparian buffer area measured landward from TOB on viable streams is at least 30 ft in width for a 1:1 ratio, so 30-100 ft across most of the project and 100-115 ft in minor areas. Areas less than 50 ft are not viable for nutrient offset conversion and calculated by Table 9 and illustrated by Figure 8b. Eroding banks will be stabilized using mechanical equipment and planted with appropriate seed and tree species as described in Section 5.1.
19. Page 13: this is a nice robust list of planted stems. If 14 species of trees are shown in the table, DWR expects 14 species to be planted. If anticipating to plant less than 14 species, you need to at least indicate the minimum # of species the Provider will plant. The standard in rule is 4, but hopefully Provider is intending to plant more. Just commit to a minimum so I can hold that accountable in the As-Built Report.
The species listed in Table 8 are suitable species for the site, soil, and existing conditions. A minimum of four (4) species will be planted, however the intent is to plant a more diverse site. Actual species composition will be based on availability, cost, quantities, and site conditions at the time of construction.
20. Page 13: Bald Cypress is a softwood and only hardwoods are allowed to be planted and counted towards performance standards. Either remove Cypress from your planting plan or add a note that the species will not be able to counted towards the performance standards (sic). Or, provide a justification for DWR to review under Rule 0295 (n)(2)(B).
Per 15A NCAC 02B .0295 (n)(B), stems are considered native trees or shrubs and trees. The Rule further defines trees as "hardwood" trees, but also allows the Authority to review and approve alternative vegetation plans based on site conditions and other factors. Although defined as a softwood, bald cypress is a component of the proposed plant community, appropriate, and well suited for the site due to soil type and wetness. We request acceptance of this vegetation plan as proposed to include bald cypress as a "native tree stem" that counts toward the final performance standard.
21. Page 13: the rule also requires that a minimum of 4 different species be planted as well. Add language that speaks to this.
Revised. As noted in Comment #19.
22. Page 13: Commit to ensuring that stem species will be well mixed before planting to promote site wide diversity of planted species
Suitable species available at the time of planting will be mixed to ensure site wide diversity in accordance with the vegetation performance standards.

23. Page 14: there are areas <50 that will not be allowed to convert to nutrient offsets since the minimum width for nutrient offset viability is >50 feet. See viability letter where this is noted.
A new Figure 8b showing potential nutrient offset credits is now included in the Plan.
24. Page 14: the last sentence in Section 5.3 should speak to "diffused flow" and reference the Clarification Memo as well as include the total deduction of ft² from the "Total Area" from the Asset Table
Revised. The total deduction for the unbuffered ditches entering the project area is 0.2 ac. The total area in the asset table now reflects this deduction for credit calculation purposes and clarity for DWR.
25. Page 15: as stated in previous comments, provide a figure to support this table where it says "YES" for convertible to Nutrient Offset.
As noted previously, a new Figure 8b illustrating potential nutrient offset credits is now included in the Plan in accordance with Table 9.
26. Page 15: break out areas <50. change N/A to Yes
Revised in Table 9 and illustrated by Figure 8b. Proposed restored riparian buffer area measured landward from TOB on viable streams should be at least 30 ft in width.
27. Page 15: add a row to show the Diffused Flow deduction on the ditch feeding into UT1, otherwise, it is assumed that the Total Creditable Area of buffer mitigation column has not appropriately been deducted per the Clarification Memo. for Feature Name = Diffused Flow deductions (A1, A2) Total Area = enter the ft² deducted. Check "No" for both columns
Revised and as noted in Comment #12.
28. Page 15: if DMS is expecting to have the flexibility to convert to nutrient offset as indicated by this table, please add text below the table that speaks to that directly. Using a text box may be the easiest way to add that Text (sic).
Revised Table 9 accordingly.
29. Page 15: add the following statement to this table somewhere appropriate "Credit conversions must be calculated using the guidance provided in the Clarified Procedures for Calculating Buffer Mitigation Credits and Nutrient Offset Credits letter issued by the DWR in November 2020" and located at
<https://files.nc.gov/ncdeq/Water%20Quality/Surface%20Water%20Protection/401/Mitigation/Issues---Resolutions-Ver-1.0-buffer-mitigation-nutrient-offset.pdf>
If DMS prefers this letter be referenced by including the PDF in an Appendix to this Buffer Plan instead of included as a link on this table, that will be acceptable as well.
Updated Table 9 accordingly.
30. Page 15: riparian restoration adjacent to ditches or streams with less than a 50' riparian zone will not be viable to generate nutrient offset. The figure provided in the plan looks like there are areas along Chinquapin Branch that will not be a minimum of 50'. address those areas in this table in addition to any areas that are <30' and check "No" for nutrient offset.
Updated Table 9 accordingly and illustrated by Figure 8b.
31. Page 16: change title to "Performance Standards"
Revised.

32. Page 16: another performance standard in the rule requires at least 4 species of trees. Add language that speaks to this.
Revised. As noted in Comment #19.
33. Page 16: this indicates more of a Qualitative monitoring approach and lacks wording about Quantitative monitoring. Add language that addresses this.
Revised to include both quantitative and qualitative examples.
34. Page 16: chosen from the selection in Table 8
Revised
35. Page 19: this vicinity map is too blurry. Replace this Figure with one where the names of roads and highways can be deciphered.
Revised Figure 1.
36. Page 20: clarify that this is the service area for "Riparian Buffer Credits" and "Nutrient Offset Credits"
Revised Figure 2.
37. Page 21: may should document washed out areas and unstable banks that will need to be addressed.
Revised Figure 3.
38. Page 25: change text to
Non-project ditches
Revised Figure 7, however these ditch features are in fact components of the project, reviewed for viability, accounted for in credit calculations/deductions, contained within the CE, and will be protected with riparian vegetation, so the comment seems inappropriate to change "Ditches" to "Non-Project Ditches."
39. Page 26: Restoration for
Revised Figure 8 (now Figure 8a).
40. Page 26: Restoration for
Revised Figure 8 (now Figure 8a).
41. Page 26: label features
Revised Figure 8 (now Figure 8a).
42. Page 26: this figure shows what is viable for buffer credit but not nutrient offset.
Added Figure 8b to illustrate viable nutrient offset credit areas.
43. Page 27: the widths should only be measured off the features being proposed for credits in the Asset Table. the two yellow outlined ditches and UT1 are not shown in the Asset Table and therefore your measurements here should only be off Chinquapin Branch. Correct this map accordingly.
Revised Figure 9.
44. Page 27: label features
Revised Figure 9.

Included in this letter package (via email) is one (1) pdf copy of the revised mitigation plan and supporting data. Please let us know if additional information is needed.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott J. Frederick". The signature is written in a cursive style with a large, stylized initial "S".

Scott J. Frederick
SWE Group
sjfrederick@swegrp.com

cc: Norton Webster, Eco Terra

DRAFT MITIGATION PLAN
CHINQUAPIN VALLEY BUFFER MITIGATION SITE

Jones County, NC

NCDEQ Contract No. 0103-02 & NCDMS ID No. 100197

NCDWR Project No. 2021-0993v2

RFP No. 16-20200103

Neuse River Basin

HUC 03020204

Prepared For:



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This Mitigation Plan has been written in conformance with the requirements of the following:

- 15A NCAC 02B.0295 Mitigation Program Requirements for Protection and Maintenance of Riparian Buffers.
- 15A NCAC 02B.0703 Nutrient Offset Credit Trading

These documents govern DMS operations and procedures for the delivery and compensatory mitigation.

Contributing Staff

Michael Beinenson, Eco Terra Principal in Charge
Norton Webster, Eco Terra Construction Oversight

Scott Frederick, Eco Terra/SWE Project Manager
Heather Smith, VHB Quality Assurance

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APPENDICES

- Appendix A: NCDWR On-Site Stream Buffer Determination
NCDWR Site Viability for Buffer Mitigation Letter
NCDWQ Buffer Interpretation/Clarification #2008-019 Memorandum
(August 19, 2008)**
- Appendix B: Draft Conservation Easement**
- Appendix C: Signed Categorical Exclusion**

1.0 Introduction

The Chinquapin Valley Buffer Mitigation Site is a buffer restoration project located approximately 9.4 miles northwest of the Town of Trenton off Guinea Town Road in Jones County, NC (Figure 1). The Project Site is associated with one parcel owned by Hobert K. Sanderson (PIN 4449-37-84-1800). This Site Plan is being submitted for buffer mitigation credit and nutrient offset credit in the Neuse River Basin Hydrologic Unit Code 03020204, in accordance with the Consolidated Buffer Mitigation Rule (15A NCAC 02B .0295) and the Nutrient Offset Credit Trading Rule (15A NCAC 02B .0703) respectively. The proposed riparian corridor restoration will reduce the amount of sediment and nutrients that are entering the Project streams by restoring riparian buffers and other riparian areas along Chinquapin Branch, a direct tributary of the Trent River. A Project conservation easement, encompassing at most 9.11 acres, will be recorded to protect the Project Site in perpetuity.

The Project reach is located in HUC 03020204010060, along Chinquapin Branch proper and within the greater Trent River watershed that ultimately flows into the Neuse River (Figure 2). This watershed is designated as a Targeted Resources Area for both Hydrology and Water Quality according to NCDMS. The watershed consists of large managed timberland areas in loblolly pine rotations and agriculture, both row crops and permitted animal operations. The project will include the restoration of riparian buffers along Chinquapin Branch, within Hydrology and Water Quality Targeted Resource Areas (TRA). Chinquapin Branch is classified as Class C, Sw, and Nutrient Sensitive Waters (NSW) according to the NC Department



Right bank near Project origin (9/2/20)



Left bank near Project terminus (9/2/20)

of Environmental Quality (NCDEQ). Chinquapin Branch drains into the Crooked Creek targeted watershed (HUC 03020204010071) as identified in the NC Division of Mitigation Services (NCDMS) 2018 Neuse River Basin Restoration Priorities (RBRP) document. The restoration of riparian buffers to address agricultural nonpoint source inputs and preservation or restoration of contiguous forested wetland habitat to develop Strategic Habitat Areas (SHAs) and connect to Natural Heritage Areas and other conservation lands are identified as a *Priorities* for the 8-digit CU and overall, for the Neuse River Basin in the 2018 RBRP.

The Chinquapin Valley Buffer Mitigation Site will help to reduce future sediment and nutrient loading into Chinquapin Branch and downstream Crooked Creek and Trent River. It will also improve terrestrial habitats along these streams by establishing riparian corridors and allowing the land to undergo natural succession to forested community types. Adjacent land use is agriculturally related and little vegetated buffer exists along the length of Chinquapin Branch proper within the Project Site. The project will restore vegetative buffers and other riparian areas to the streams and will remove rotating crops and fertilizer inputs. The restored riparian buffer will filter runoff from the surrounding farm fields. Invasive vegetation will be treated as needed within the project area to promote native vegetation.

2.0 Mitigation Project Summary

The goal of the Chinquapin Valley Buffer Mitigation Project (hereinafter referred to as the Project, Site, or Project Site) is to provide ecological uplift to the existing and nearby stream channels via the restoration and establishment of a forested riparian buffer and riparian corridor. The goals and objectives defined below as part of Table 1 are consistent with those of the NCDMS, and the specific goals outlined in the 2018 Neuse RBRP. As proposed, the Chinquapin Valley Buffer Mitigation Project will further help NCDMS to meet these goals.

Table 1: Goals and Objectives

Goal	Objective	Supported CU-wide and HUC RBRP Goals
Reduce nutrient levels	Nutrient input will be decreased by filtering runoff from the agricultural land/pastures through restored forested riparian buffers and other riparian areas.	Promote nutrient and sediment reduction in agricultural areas by restoring riparian buffers. ^{**}
Reduce sediment levels	Sediment input will be decreased by filtering runoff from the agricultural land/pastures through restored forested riparian buffers and other riparian areas and stabilize any eroding banks.	Promote nutrient and sediment reduction in agricultural areas by restoring riparian buffers. ^{**}
Project protection in perpetuity	Implement a project in an NSW water and record a conservation easement.	Continue implementation of projects under the Buffer programs. ^{**}
Restore terrestrial habitat	Riparian buffer areas will be restored with native vegetation and invasive vegetation will be managed (as necessary).	NCDMS' programmatic goal, <i>North Carolina General Statute 143-214.10</i> ^{**}

* HUC: 03020204 RBRP goal, ^ CU: RBRP 030202 goal

2.1 Existing Site Conditions

The Project Site is located within one parcel (~41 acres) currently used for row crop agriculture rotations (Figure 3). Adjacent land use is agriculturally related and little vegetated buffer exists along the length of Chinquapin Branch proper within the Project Site. Periodic erosion and sediment-laden runoff is entering the channels from these areas during crop rotations and from some actively eroding streambanks (Figure 3).



Overall Project view south along Chinquapin Branch (12/10/21)

Historical aerials denote that land uses at the Project Site have been in agriculture since at least 1974 on the south side of the channel and the north side upstream near the origin of the Project, and more recently since 1993 on the north side of the channel where the buffer narrows downstream (Figure 6). Chinquapin Branch is mapped on the 2013 US Geological Survey's (USGS) Trenton Quadrangle (Figure 1) as a stream channel, but not on the Natural Resources Conservation Service's (NRCS) 1981 Jones County Soil Survey (Figure 5).



Right bank instability SE view (12/10/21)

Chinquapin Branch meets the definition of at least intermittent per the NCDWR

On-Site Determination for Applicability to the Neuse Buffer Rules Letter (Buffer Letter), and NCDWR Site Viability for Buffer Mitigation Letter (Appendix A). Two unbuffered ditches (Ditch 1 and Ditch 2) enter the Project on the right bank. Another unbuffered stream feature (UT1) that is intermittent, but determined not subject enters the project from the north on the left bank. Diffuse flow into the project is required and credit deductions from these unbuffered ditches are

accounted for in the credit calculations within Table 9 and illustrated by Figure 8a in accordance with the NCDWQ Buffer Interpretation/Clarification #2008-019 Memorandum (August 19, 2008) found in Appendix A. Project attributes associated with the proposed buffer site are provided in Table 2.

Table 2: Buffer Project Attributes

Project Name	Chinquapin Valley Buffer Mitigation Site
Hydrologic Unit Code (Service Area)	03020204*
River Basin	Neuse
Geographic Location (decimal degrees)	35.107758, -77.516267
Site Protection Instrument	Conservation Easement
Types of Credits	Riparian Buffer (328,931.863 BMU)**
Mitigation Plan Date	October 2021
Initial Planting Date	January 2022
Baseline Report Date	February 2022
MY1 Report Date	November 2022
MY2 Report Date	November 2023
MY3 Report Date	November 2024
MY 4 Report Date	November 2025
MY 5 Report Date	November 2026
Close out Report Date/Visit	May 2027

*Project Service Area (also illustrated in Figure 2)

**Riparian Buffer credits may be converted to nutrient offset credits as calculated by Table 9 and illustrated by Figure 8b.

2.2 Watershed Characterization

The proposed Project is located in Jones County, approximately 9.4 miles northwest of the Town of Trenton off Guinea Town Road (Figure 1).

The Project stream is located in HUC 03020204010060, along Chinquapin Branch proper and within the greater Trent River watershed that ultimately flows into the Neuse River. This watershed is designated as a Targeted Resources Area for both Hydrology and Water Quality according to NCDMS. The watershed consists primarily of large managed timberland areas in loblolly pine rotations and agriculture, both row crops and permitted animal operations. Jones County remains mostly undeveloped aside from the areas in and surrounding the Town of Trenton. The County's population decreased 7.4% since the 2010 census.

Drainage areas for the on-site streams and buffer areas were determined by delineating watersheds in USGS Stream Stats. Figure 4 shows the watershed boundaries for the project stream. Table 3 describes the current land use and drainage area for the project stream.

Table 3: Drainage Area and Land Use

Reach Name	NCDWR Stream Designation	Watershed Area Upstream/Downstream (mi ²)	Land Use
Chinquapin Branch	Intermittent (at least)	1.16 / 1.32	Agriculture/Forestry

2.3 Soils

Elevations at and surrounding the Project Site are nearly level to gently sloping. Soils underlying the area are mapped as fine sandy loams and loamy sands and consist of the Grifton, Stockade, and Goldsboro series extending along the stream corridors (Figure 5). Specific soil mapping units are listed in Table 4.

Table 4: Riparian Buffer Site Soil Series

Soil Name	Map Unit Symbol	Hydric Soil Rating (USDA-NRCS Web Soil Survey)
Stockade fine sandy loam, 0-2% slopes	Sx	B (drained)/D
Grifton fine sandy loam, 0-2% slopes	Gt	B (drained)/D
Goldsboro loamy sand, 0-2% slopes	Go	B

Source: <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>, accessed May, 2021

The Stockade (Sx) soils are very poorly drained soils found along streams and depressions. These soils formed in loamy sediments on marine terraces of streams in the Coastal Plain region. Stockade soils have moderate permeability and the water table is typically less than 12 in. Grifton (Gt) soils are very poorly drained soils found along stream terraces and floodplains as well. These soils have moderate permeability and the water table is less than 12 in. for six months out of the year. Goldsboro (Go) soils are found on flatwoods of the region that are

moderately well drained. These soils formed in Coastal Plain marine and fluviomarine sediments. The water table is 24-30 in. An image of the printed (NRCS) 1981 soil survey map of the Project is shown in Figure 5.

2.4 Geology

Geologically, the Project Site is located within the Coastal Plain physiographic province. Coastal Plain stream systems are characterized by broad, flat floodplains and interstream divides adjacent to low to medium-gradient stream channels. The valley is visually obvious within the Project area indicating at least intermittent flow throughout the year.

2.5 Vegetation

Vegetative communities within the project area consist of row crops and early successional, herbaceous vegetation in the near-bank stream/ditch region. Adjacent land use is agriculture and little vegetated buffer exists along the length of Chinquapin Branch proper within the Project Site. The near-bank stream/ditch area is maintained with herbicide and mechanical mowing equipment annually. The wetter ditch areas have wetland herbaceous vegetation present including *Salix nigra* (black willow), and *Typha latifolia* (cattail).

2.6 Site Constraints and Access

The Site can be accessed via a dirt farm road from Guinea Town Road (SR 1157). A permanent general access easement from Guinea Town Road will be recorded as part of the project. There are no public use airports within a five-mile radius of the Project. No other site constraints are known to exist. A title search conducted by an attorney, discussions with the local soil and water district, and communication with the landowner revealed no drainage district in place presently or historically within the Project easement.

Directions from Raleigh:

- Follow US70 to HWY 58 in Kinston
- Turn right onto HWY 58 and follow for 9 miles
- Turn right onto Guinea Town Road for 0.9 miles
- Turn left onto a dirt road after crossing Chinquapin Branch.

2.7 Site Resources

The Site has been in agricultural production since at least 1974 and no changes have been observed to the current stream configuration since that time (Figure 6). The property owner has verified that the property has been in some form of agricultural production and adjacent forestry for the past 50 years.

NCDWR staff visited the Site on to determine subjectivity of on-site resources to the Neuse buffer rules and their suitability for riparian buffer mitigation per the Consolidated Buffer Mitigation Rule (15A NCAC 02B 0.029). Chinquapin Branch was found to be suitable for riparian buffer mitigation in the Neuse River Basin. Other features entering and/or adjacent to the project were identified during the stream determination site visit by DWR staff. Additionally,

a Site Viability review was completed by NCDWR to determine site suitability for the establishment of riparian buffers for buffer mitigation credits. The resulting NCDWR letters are in Appendix A.

3.0 Site Protection Instrument

3.1 Site Protection Instrument Summary Information

The property selected for restoration of riparian buffers and other riparian areas includes portions of the parcel listed in Table 5. The proposed conservation easement on this property has not been recorded. A copy of the draft land protection instrument is included in Appendix B.

3.2 Current Ownership and Long-Term Protection

The Site is located on one parcel owned by Hobert K. Sanderson (Table 5). An option agreement for the project area was signed by the property owner and was recorded at the Jones County Register of Deeds. The option agreement allows restriction of the land use in perpetuity through a conservation easement. Eco Terra will convey the conservation easement to the State to provide long term protection of the Site.

Table 5: Current Ownership and Long-Term Protection

Parcel Identification Number	County	Owner	Conservation Easement (~ac)	Deed Book and Page Number	Site Protection Instrument	Identified Conservation Easement Holder
4449-37-84-1800	Jones	Hobert K. Sanderson	9.11 ac	To be recorded	Conservation Easement	State of North Carolina

4.0 Regulatory Considerations

Table 6 summarizes the regulatory considerations for the proposed project. These considerations are expanded upon in Sections 4.1-4.4. A copy of the signed Categorical Exclusion Form is provided in Appendix C.

Table 6: Regulatory Considerations

Parameter	Applicable	Resolved	Supporting Documentation
Waters of the U.S. -Section 404	No	N/A	N/A
Waters of the U.S.-Section 401	No	N/A	N/A
Endangered Species Act	Yes	Yes	Signed CE Appendix C
Historic Preservation Act	Yes	Yes	Signed CE Appendix C
Coastal Zone Management Act	No	N/A	N/A

FEMA Floodplain Compliance	No	N/A	N/A
Essential Fisheries Habitat	No	N/A	N/A

4.1 Threatened and Endangered Species

The US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) identifies three federally threatened or endangered species and two proposed threatened or endangered species under the Endangered Species Act. One species is protected under the Bald and Golden Eagle Protection Act (Table 7). A review of the NC Natural Heritage Program (NCNHP) data identified three known occurrences of federally listed species within one (1) mile of the Project Site and one known occurrence within a five (5) mile radius of the project.

Table 7: Federally Listed Species for Jones County

Scientific Name	Common Name	Federal Status*	Suitable Habitat
<i>Haliaeetus leucocephalus</i>	Bald Eagle	BGPA	No
<i>Picoides borealis</i>	Red-cockaded woodpecker	E	No
<i>Alligator mississippiensis</i>	American alligator	T	No
<i>Myotis septentrionalis</i>	Northern Long-eared Bat	T	No
<i>Necturus lewisi</i>	Neuse River waterdog	PT	No
<i>Noturus furiosus</i>	Carolina madtom	PE	No

* BGPA - Bald and Golden Eagle Protection Act, E - Endangered, PT - Proposed Threatened, PE - Proposed Endangered

4.2 Cultural Resources

The National Historic Preservation Act declares a national policy of historic preservation to protect, rehabilitate, restore, and reuse districts, sites, buildings, structures, and objects significant in American architecture, history, archaeology, and culture, and Section 106 mandates that federal agencies take into account the effect of an undertaking on a property that is included in, or is eligible for inclusion in, the National Register of Historic Places. The NC State Historic Preservation Office's (SHPO) online mapping resource was reviewed to determine the presence of known historic resources at or near the Project Site listed on the National Register. There are no existing structures in the project area.

According to the database, two historical resources; Laines Chapel Christian Church and Haskins Chapel occur within one mile of the Project. There are no known historical resources within the Project Site. SHPO was contacted for completion of the Categorical Exclusion and SHPO had no concerns or comments on the Site. The approved Categorical Exclusion is in Appendix C.

4.3 FEMA Floodplain Compliance

The Project is not located within a FEMA regulated floodplain and will not require FEMA coordination or a floodplain development permit.

4.4 Other Environmental Issues

An EDR Radius Map Report with Geotcheck was ordered for the Site through Environmental Data Resources, Inc. (EDR) as part of the Categorical Exclusion. The target property and the adjacent properties are not listed in any of the Federal, State, or Tribal environmental databases searched by EDR. There are no known or potential hazardous waste sites identified within one mile of the Site. The Executive Summary of the EDR report is included in Appendix C.

5.0 Implementation Plan

The project design will restore high quality riparian buffers to Chinquapin Branch and ultimately to the Neuse River. The project will not have any adverse impacts to on-site wetlands; no grading activities will occur within jurisdictional wetland boundaries. Figure 7 depicts the planting plan for the Site. More detailed descriptions of the proposed restoration activity are found in Sections 5.1 through 5.3.

5.1 Parcel Preparation

The land proposed for buffer restoration is currently in agricultural production and adjacent agriculture and forestry management north of Chinquapin Branch. Only the planting rows will be ripped to improve soil compaction prior to planting in the upland areas or during mechanical planting. Soil scarification for temporary and permanent seeding may be required depending on the site condition at the time of planting and equipment used for seed application. Some minor bank stabilization will be completed using machinery in select areas noted in the DWR viability letter along Chinquapin Branch. These areas will be stabilized with hay and planted with temporary/permanent seed and trees selected from Table 8. No other soil disturbance is anticipated and sediment and erosion control measures will be used to prevent sediment from entering the streams during a rain event, should any additional soil disturbing activities become necessary. Sediment and erosion control measures may include seeding, mulching, haying, and temporary sediment containment.

Pre-emergent herbicide will be used in the tree rows to control potential herbaceous weed competition. All herbicides will be applied by a licensed herbicide applicator. The near-bank region along the stream within the project area contains a limited number of invasive plants and if necessary, an aquatic safe herbicide will be used in appropriate areas where there is an existing population of non-native invasive plant species. In the event that drain tiles are found during construction, they will be noted and removed.

5.2 Riparian Buffer Restoration Activities

The revegetation plan for the buffer restoration area will include temporary and permanent seeding in the active farming areas. The Site will be planted to replicate a Coastal Plain Small Stream Swamp (blackwater subtype) community with one planting zone, floodplain. Riparian restoration will occur on viable streams from a minimum of 30 feet to a maximum of 115 feet for riparian buffer credit. Areas less than 50 feet are not viable for nutrient offset credit. Proposed tree species are shown in Table 8.

Table 8: Proposed Species List

Scientific Name	Common Name	Planting Zone	Strata	%
<i>Nyssa sylvatica biflora</i>	Swamp blackgum	Floodplain	Canopy	<5
<i>Platanus occidentalis</i>	Sycamore	Floodplain	Canopy	10
<i>Betula nigra</i>	River birch	Floodplain	Canopy/Understory	10
<i>Diospyros virginiana</i>	Persimmon	Floodplain	Canopy/Understory	10
<i>Quercus laurifolia</i>	Laurel oak	Floodplain	Canopy	10
<i>Fraxinus pennsylvanica</i>	Green ash*	Floodplain	Canopy	<5
<i>Liriodendron tulipifera</i>	Tulip poplar	Floodplain	Canopy	<5
<i>Quercus michauxii</i>	Swamp chestnut oak	Floodplain	Canopy	10
<i>Quercus nigra</i>	Water oak	Floodplain	Canopy	10
<i>Quercus phellos</i>	Willow oak	Floodplain	Canopy	10
<i>Quercus falcatta var. pagodaefolia</i>	Cherrybark oak	Floodplain	Canopy	10
<i>Quercus shumardii</i>	Shumard oak	Floodplain	Canopy	10
<i>Taxodium distichum</i>	Bald cypress	Floodplain	Canopy	<5
<i>Cornus amomum</i>	Silky dogwood	Floodplain	Understory	<5
<i>Sorghastrum nutans</i>	Indian grass	Permanent Seed Mixture	Herb	n/a
<i>Agrostis alba</i>	Redtop	Permanent Seed Mixture	Herb	n/a
<i>Andropogon gerardii</i>	Big bluestem	Permanent Seed Mixture	Herb	n/a
<i>Panicum virgatum</i>	Switchgrass	Permanent Seed Mixture	Herb	n/a
<i>Setaria italica</i>	Foxtail millet	Temporary Seed Mixture	Herb	n/a
<i>Pennisetum glaucum</i>	Pearl top millet	Temporary Seed Mixture	Herb	n/a

* Green ash will be ≤ 5% of total stems

** Bald cypress will be planted in appropriate wet areas as allowed by the Authority

Trees will be planted at a density sufficient to meet the performance standards outlined in the Rule 15A NCAC 02B .0295 of 260 trees per acre at the end of five years. A minimum of four species will be planted where no one tree/shrub species will be greater than 50% of the established stems. A mixed species density of approximately 600-800 trees per acre is proposed

for the initial planting. Actual species composition will be based on availability, cost, quantities, and site conditions at the time of construction. Planting will occur during the dormant season between January 15 and March 15 unless weather patterns or unforeseen circumstances allow or require a later planting date, respectively. An appropriate temporary seed mix will also be applied as necessary to provide temporary ground cover for soil stabilization and reduction of sediment loss during rain events, helping establish buffer functional uplift during early forest succession. Temporary seed mix species are found in Table 8. This will be followed by an appropriate permanent seed mixture.

Vegetation management and herbicide applications may be needed to prevent competition of invasive species with the planted species. Planting is scheduled to begin in February 2022.

5.3 Determination of Credits

Mitigation credits shown in Table 9 and Figure 8 are based on surveyed top of banks of the Chinquapin Branch and conservation easement. All areas within specific buffers zones will be planted and counted as a buffer mitigation unit (Figures 8 and 9). Credit calculations were done according to the most recent version of the DWR Credit Calculation Tool V3 (October 2020) and the guidance, Clarified Procedures for Calculating Buffer Mitigation Credits & Nutrient Offset Credits (November 2019). Unbuffered ditches entering the buffer were appropriately deducted from the overall credits generated within the conservation easement to account for diffuse flow requirements. The total deduction for the unbuffered ditches entering the project area is 0.2 ac. The total area in the asset table (Table 9) reflects this deduction for credit calculation purposes.

6.0 Monitoring Plan

The Site monitoring plan was developed to demonstrate that the required performance standards are met and project goals and objectives are achieved. The monitoring report shall provide project data and chronicle issues that arise during the five-year monitoring period.

These reports will assist in population of DMS databases and assist in the close-out process. Table 10 summarizes the proposed monitoring plan components associated with this project.

Table 10: Monitoring Plan Components

Success Criteria	Monitoring Protocol	Reaches	Quantity	Frequency
Vegetation	CVS Level I/Photos	All	6	Annual
Reference Stations	Photos	All	6	Annual
Visual Assessments	Visual Assessment/Photos	All	As needed	Semi-annual
Easement Boundary	Visual Assessment	All	As needed	Semi-annual
Exotic/Nuisance Vegetation	Visual Assessment	All	As needed	Semi-annual

7.0 Performance Standards

The performance standards for the Project follow approved criteria presented in the Consolidated Buffer Rule (15A NCAC 02B .0295). Annual monitoring and semi-annual site visits will be conducted to assess the condition of the finished project. Performance standards will be evaluated throughout the five-year post-construction monitoring period.

7.1 Vegetation

The Consolidated Buffer Rule (15A NCAC 02B .0295) requires survival of at least 260 stems per acre at the end of a five year monitoring period consisting of at least four species, with no one species representing greater than 50 percent of the stems. Six (6) permanent vegetation 100 m² monitoring plots, two percent (2%) of the planted area, will be placed throughout the Site to document tree survival. Vegetation monitoring will follow the CVS-EEP Level I Protocol for Recording Vegetation (2008). Quantitative measurements will be recorded annually including tree species and tree height. Qualitative measurements will also be recorded such as tree vigor, tree damage, and other observations. Approximate locations of permanent vegetation plots are shown on Figure 7.

7.2 Photo Reference Stations

Photographs of vegetation plots will be taken each year and there will be an additional six (6) photographs taken to document stream condition and easement integrity. These photos will be taken at the same location and direction each year.

7.3 Visual Assessments

Visual assessments will be performed twice a year during the five years of monitoring. Areas of concern, low stem density, invasive species or easement encroachment, will be mapped and photographed and described in the monitoring report. Problem areas will be re-evaluated during subsequent site visits.

7.4 Reporting Performance Criteria

A baseline monitoring document and as-built record drawing depicting deviations from the proposed planting to the actual planting will be provided. Annual monitoring reports will use the DMS Riparian Buffer and Nutrient Offset Baseline and Annual Monitoring Report Template version 2.0 (May 2017). The monitoring reports will be submitted to DMS in the fall of each year for a total of five years or until performance criteria have been met.

7.5 Maintenance and Contingency Plans

Actions will be taken to correct issues identified in the annual monitoring reports that jeopardize the success of the project. If required, additional hardwood trees will be planted, selected from the species listed in Table 8.0, invasive species will be controlled, and additional signage will be installed. Additional post planting herbicide and mechanical mowing will be used within the planting rows for at least the first three years as needed. These are examples of remedial actions and others may become necessary through the five-year monitoring period.

8.0 Stewardship

The Site will be marked with signage by the Provider prior to as-builts. The Provider will inspect the boundary marking on a yearly basis and repair as needed during the monitoring period.

The Site will be transferred to the NCDEQ Stewardship Program. The Stewardship Program shall serve as the conservation easement holder and long-term steward for the property and conduct inspections of the Site to determine whether the conservation easement is being upheld. The NCDEQ Stewardship Program is developing an endowment system within the non-reverting, interest-bearing Conservation Lands Conservation Fund Account. The use of funds from the Endowment Account will be governed by North Carolina General Statute GS 113A-232(d)(3). Interest gained by the endowment fund may be used for stewardship, monitoring, stewardship administration, and land transaction costs, if applicable.

No fencing is planned for this project. The draft Site Protection Instrument can be found in Appendix B.

9.0 References

- 15A NCAC 02B .0295 Mitigation Program Requirements for Protection and Maintenance of Riparian Buffers. 2015.
- N.C. Department of Environmental Quality. Division of Mitigation Services. 2018. Neuse River Basin Restoration Priorities.
- N.C. Department of Natural and Cultural Resources. N.C. State Historic Preservation Office. 2020. (<http://gis.ncdcr.gov/hpoweb/>) (Accessed May, 2021).
- N.C. Floodplain Mapping Program. 2020. N.C. Flood Risk Information System. (<https://fris.nc.gov/fris/Index.aspx?FIPS=145&ST=NC&user=General%20Public>) (Accessed May, 2021).
- NC Natural Heritage Program Data Explorer. 2021. <https://ncnhde.natureserve.org/> (Accessed May, 2021).
- Schafale, M.P. and A.S. Weakley. 1990. Classification of the Natural Communities of North Carolina: Third Approximation. North Carolina Natural Heritage Program, Division of Parks and Recreation, NCDEHNR. Raleigh, North Carolina. 325pp.
- U.S. Census Bureau. 2020. QuickFacts, Jones County, North Carolina. Updated September, 2020 <https://www.census.gov/quickfacts/fact/table/jonescountynorthcarolina,US/POP010210>
- U.S. Department of Agriculture. Natural Resources Conservation Service. 1981. Soil Survey of Jones County, North Carolina.
- U.S. Department of Agriculture. Natural Resources Conservation Service. 2021. Web Soil Survey. (<https://websoilsurvey.nrcs.usda.gov/app/>). (Accessed May, 2021).

- U.S. Fish and Wildlife Service, 2021. Endangered Species, Threatened Species, Federal Species of Concern, and Candidate Species, Jones County, North Carolina. Updated 17 July 2020. <https://www.fws.gov/raleigh/species/cntylist/jones.html>
- U.S. Geological Survey. 2013. Trenton. 1:24,000. North Carolina Topographic Quadrangle (7.5-minute series). Reston, VA: U.S. Department of the Interior, USGS, 2013.
- U.S. Geological Survey. 2021. StreamStats. (<https://streamstats.usgs.gov/ss/>) (Accessed May, 2021).

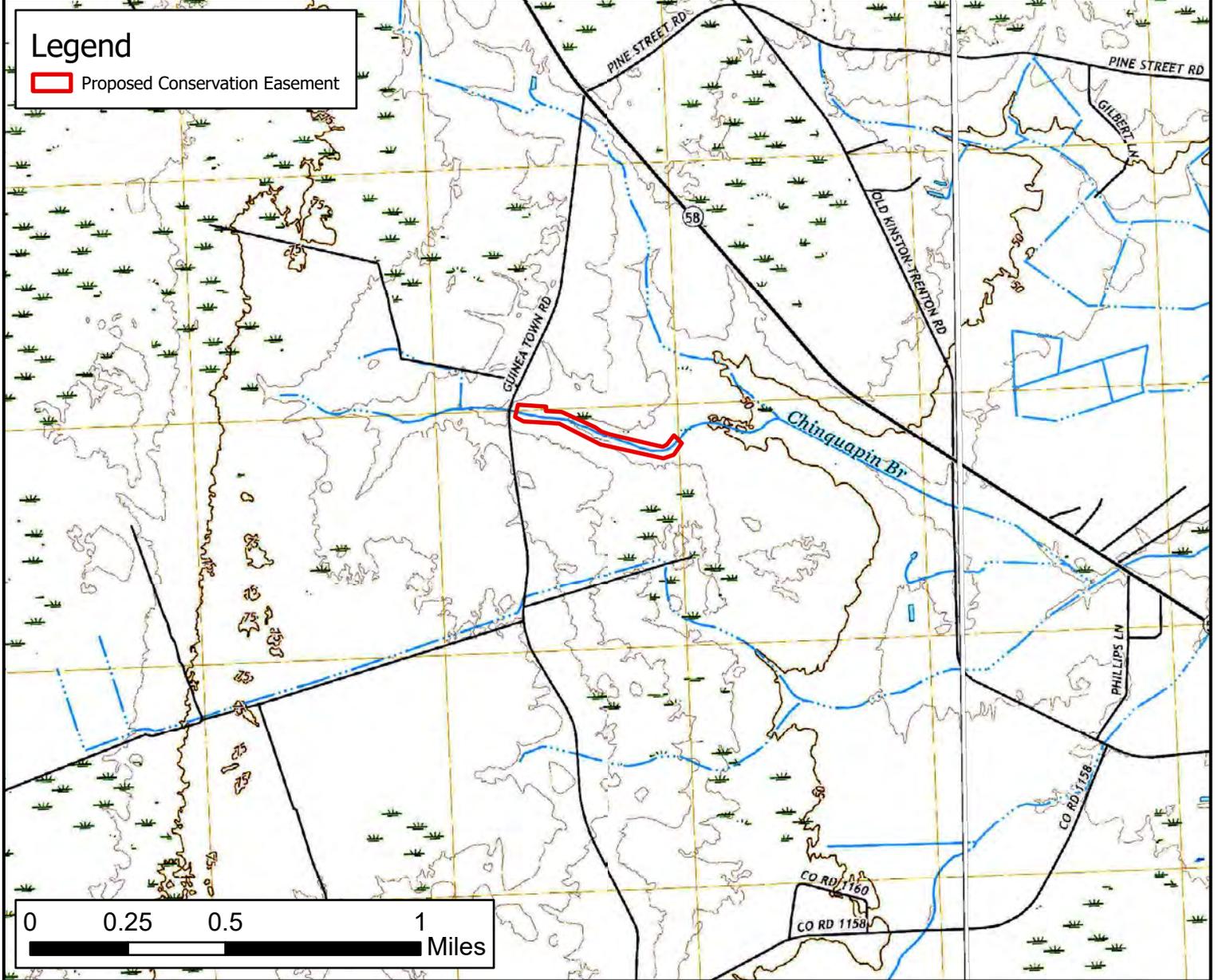
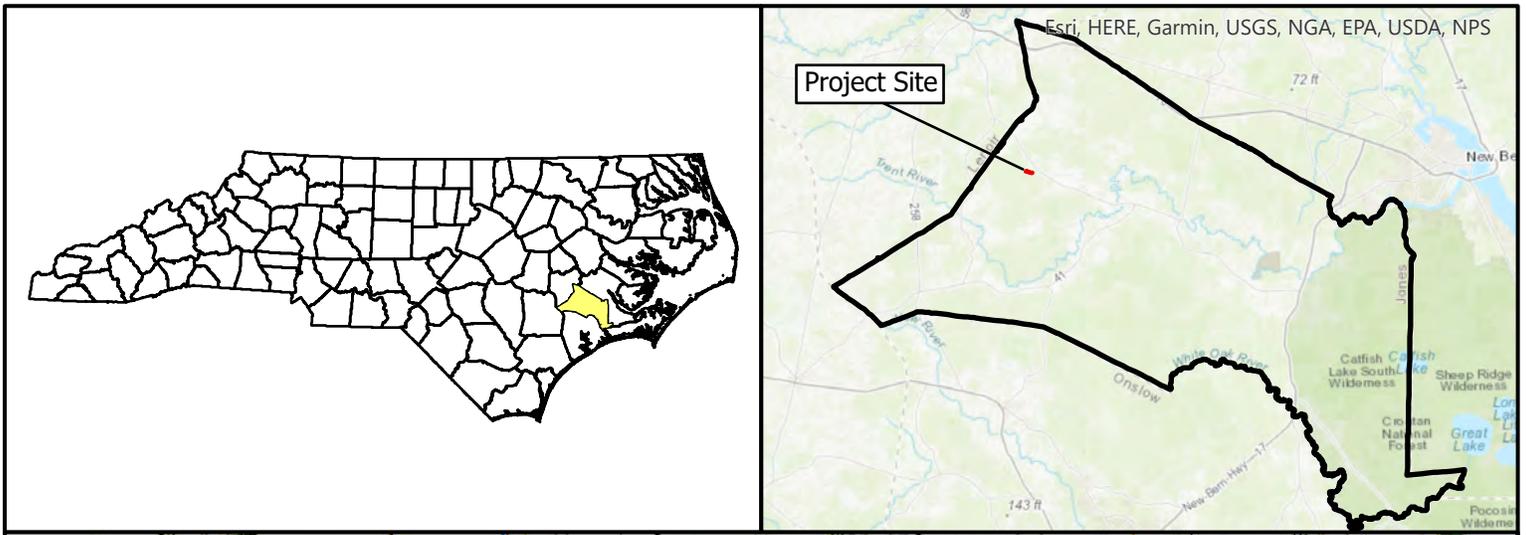
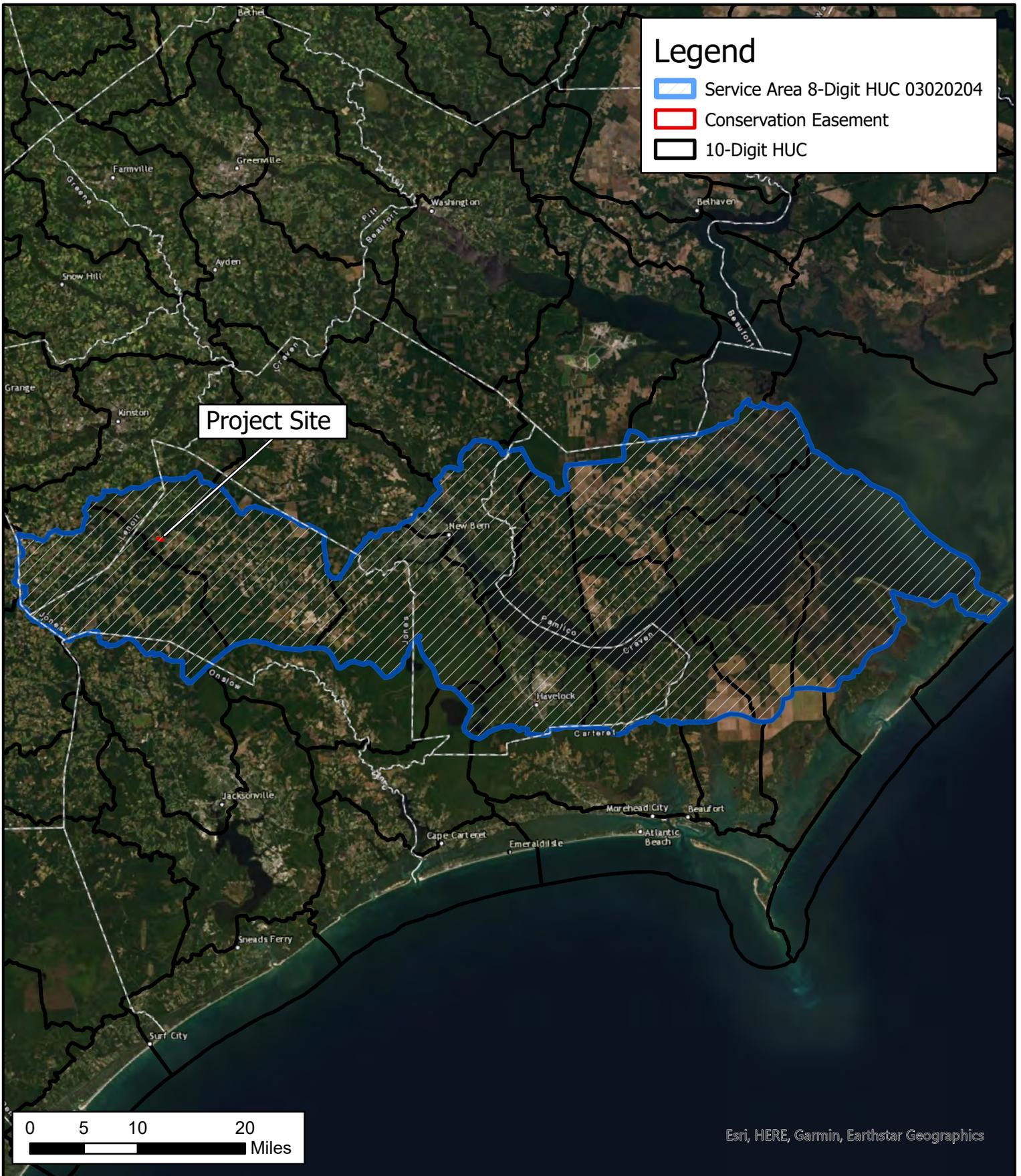


Figure 1: Vicinity Map
Chinquapin Valley Buffer Mitigation Site
Neuse 0302024
Jones County, North Carolina
December 2021



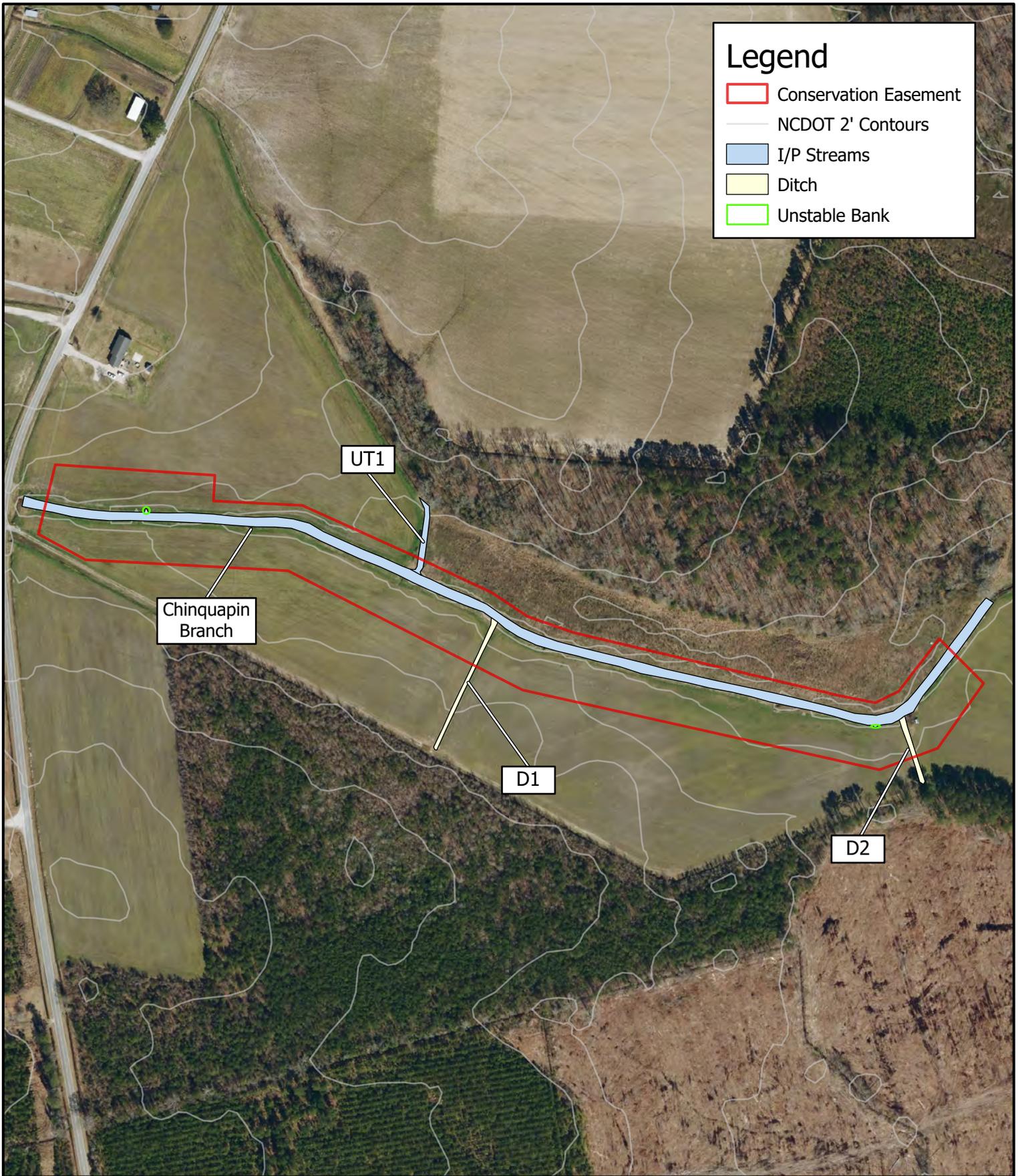
USGS 2013 Topographic Quadrangles: Phillips Crossroads & Comfort



**Figure 2: Riparian Buffer Credit/Nutrient Offset Credit Service Area
Chinquapin Valley Buffer Mitigation Site
Neuse 03020204
Jones County, North Carolina
December 2021**



ESRI Aerial Basemap



Legend

- Conservation Easement
- NCDOT 2' Contours
- I/P Streams
- Ditch
- Unstable Bank

UT1

Chinquapin Branch

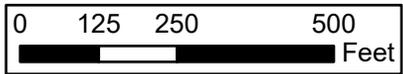
D1

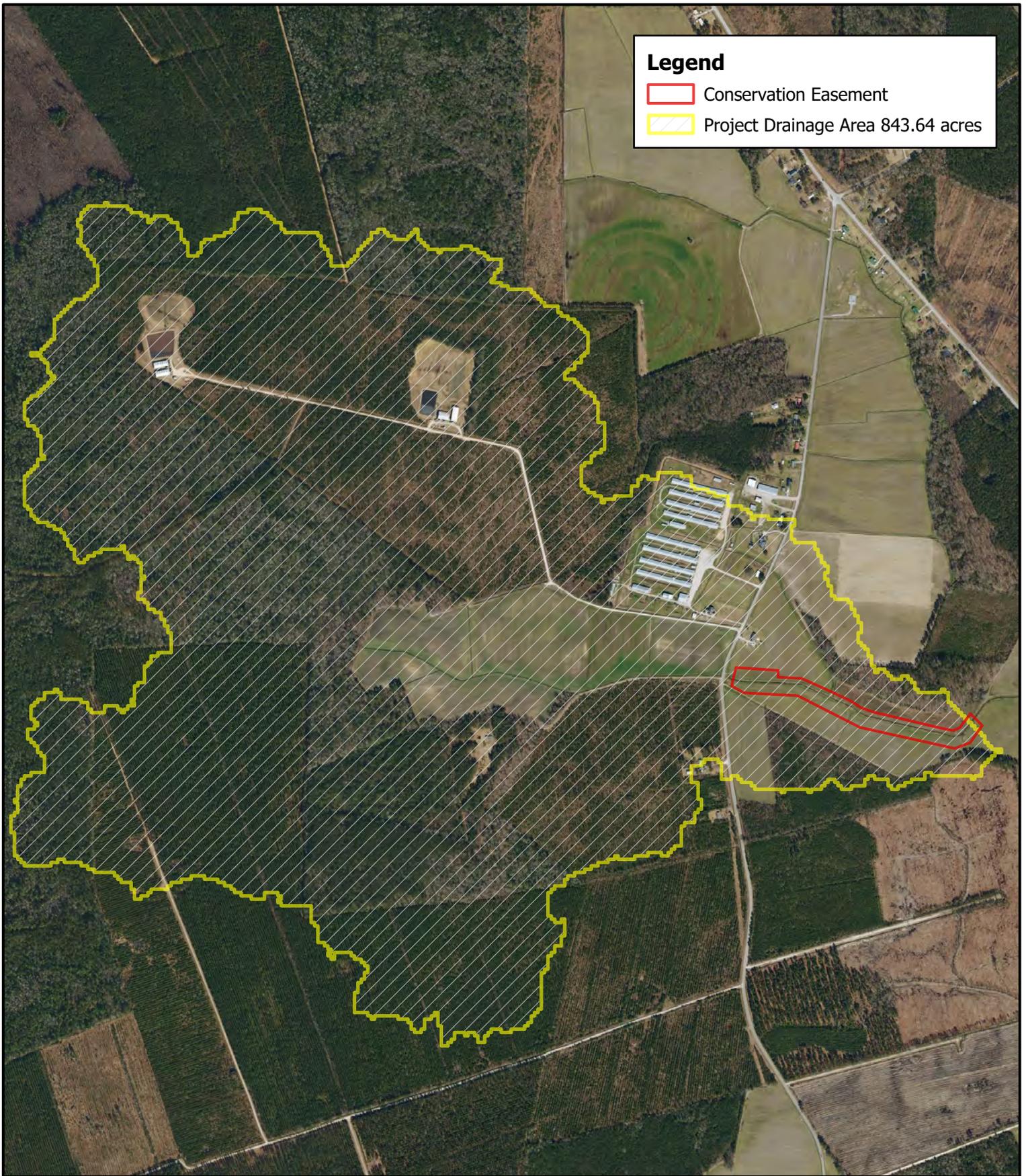
D2

Figure 3: Existing Conditions
Chinquapin Valley Buffer Mitigation Site
Neuse 03020204
Jones County, North Carolina
December 2021

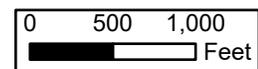


NC Onemap 2018 Aerial

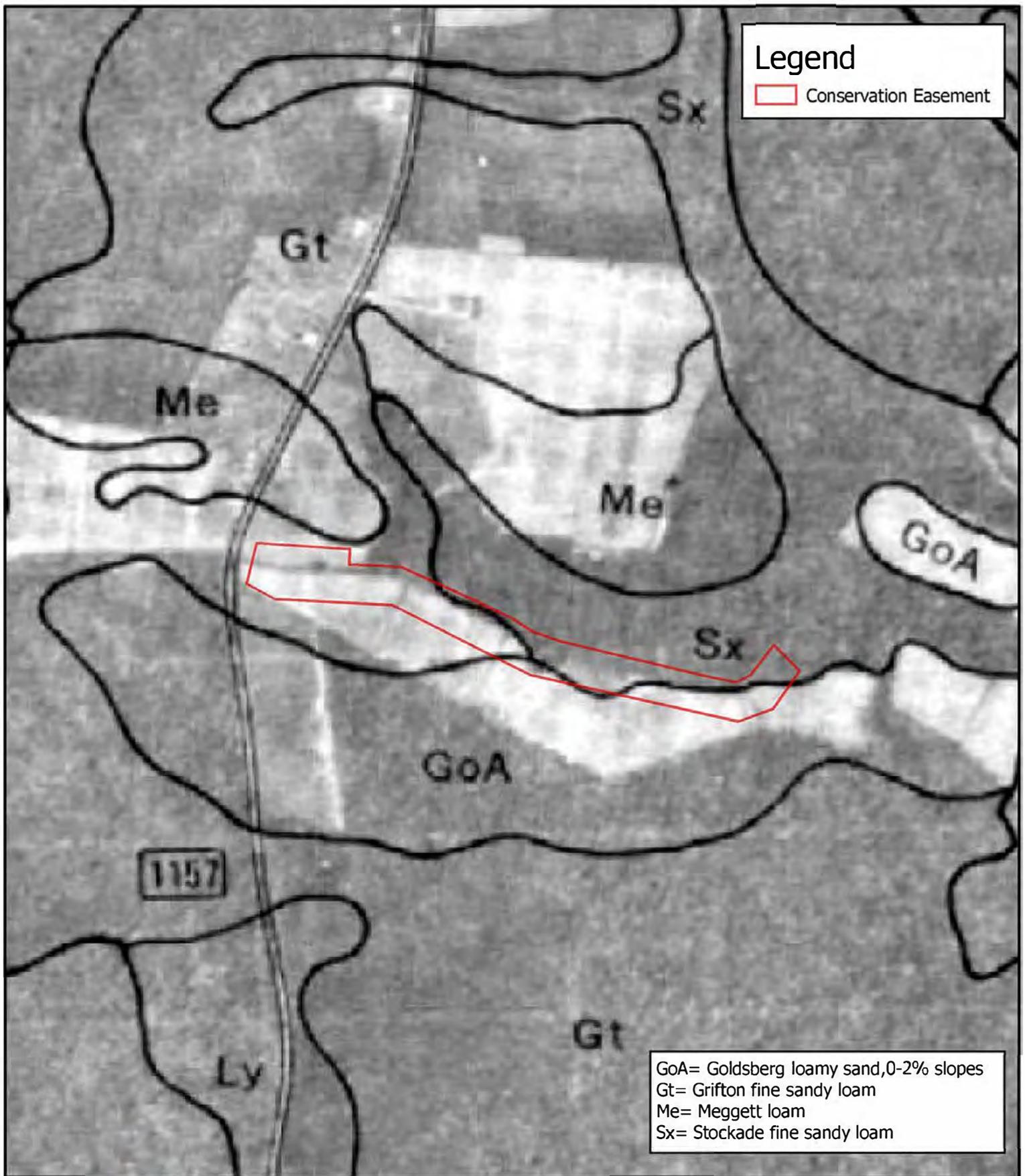




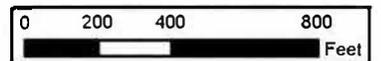
**Figure 4: Chinquapin Branch Drainage Area
Chinquapin Valley Buffer Mitigation Site
Neuse 03020204
Jones County, North Carolina
December 2021**

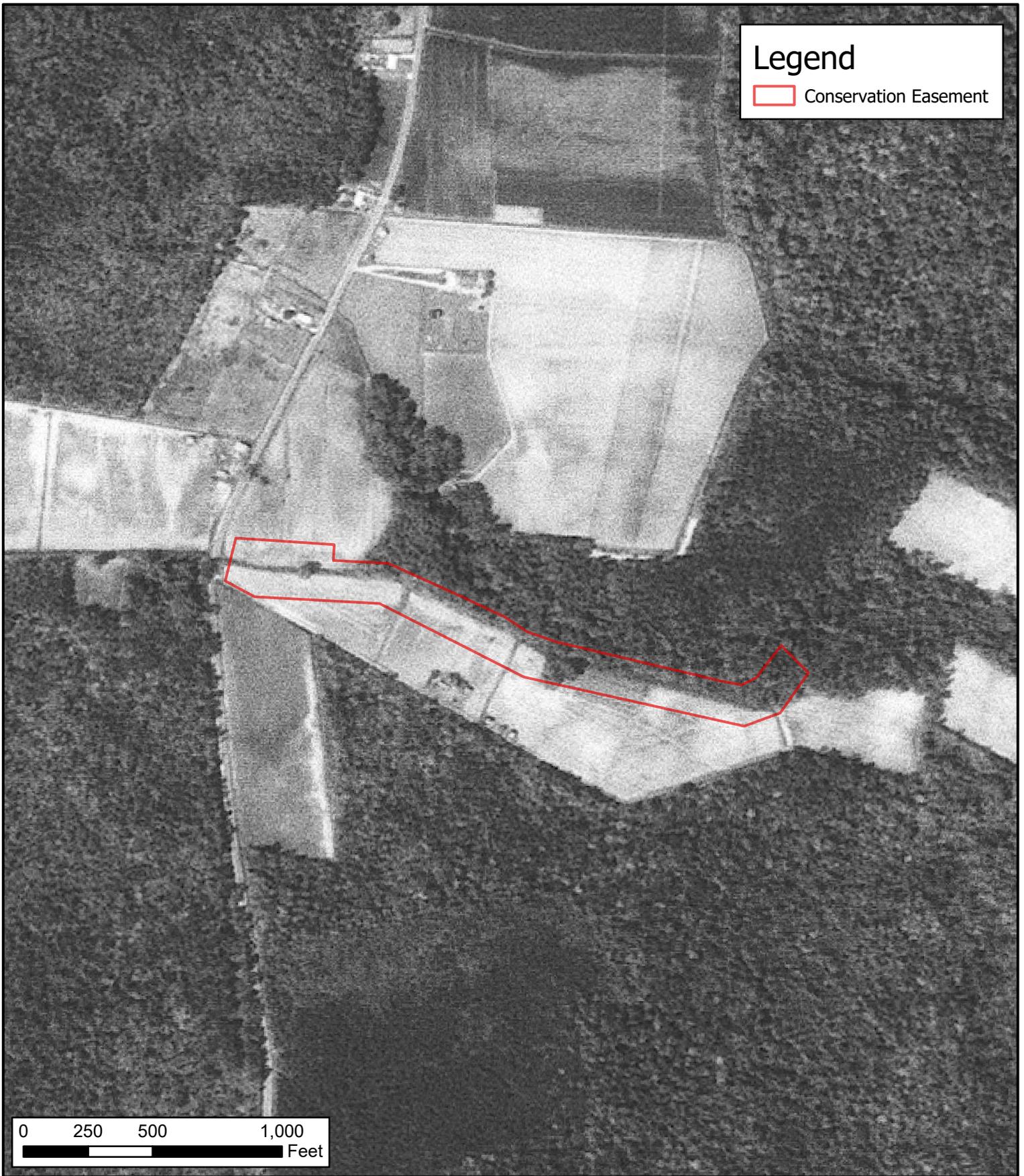


NC Onemap 2018 Aerial



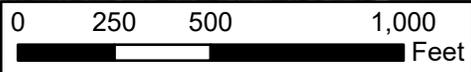
**Figure 5: NRCS Soil Survey
 Chinquapin Valley Buffer Mitigation Site
 Neuse 03020204
 Jones County, North Carolina
 December 2021**





Legend

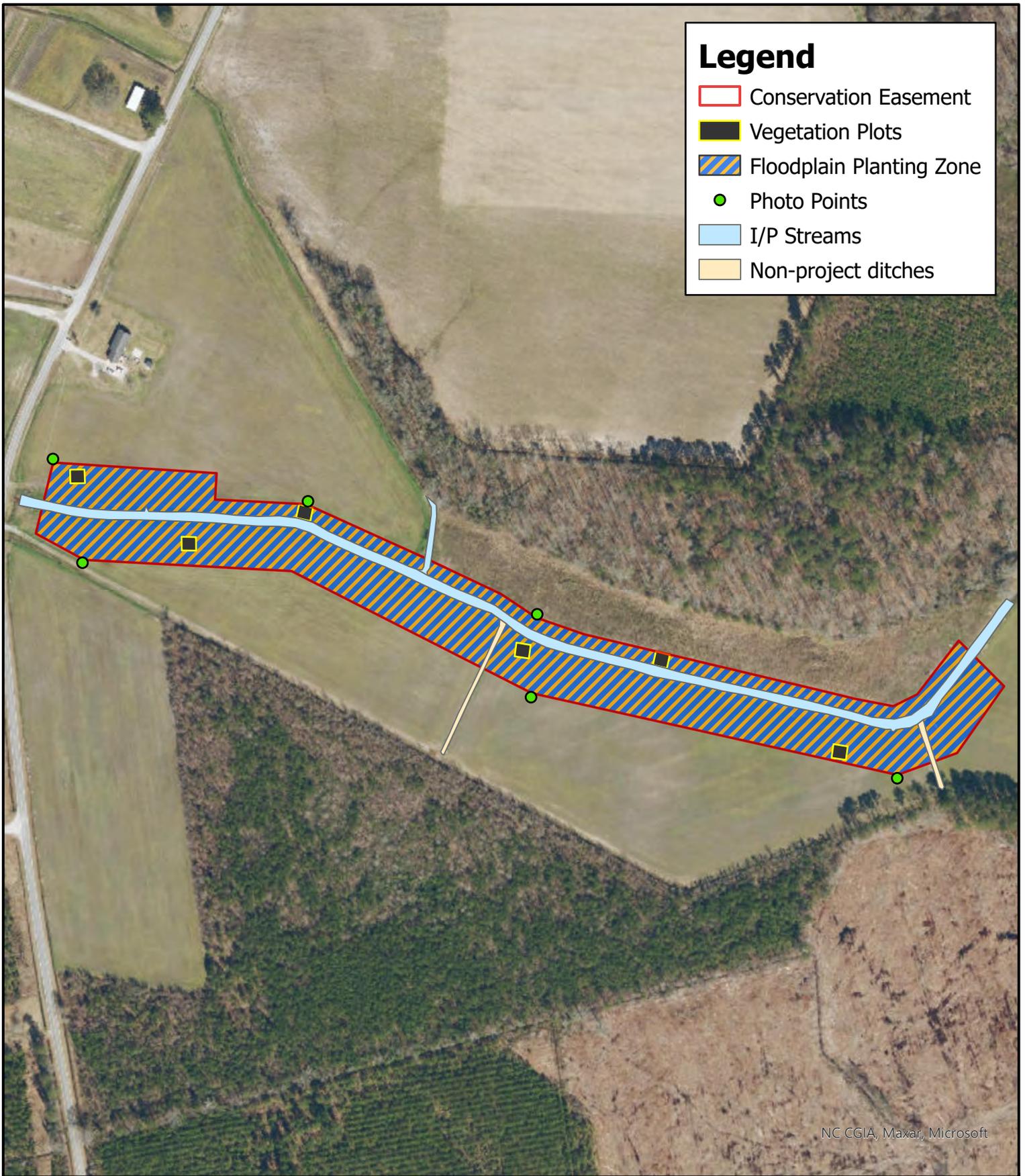
 Conservation Easement



**Figure 6: 1974 Historical Aerial
Chinquapin Valley Buffer Mitigation Site
Neuse 03020204
Jones County, North Carolina
December 2021**



USGS Earth Explorer: Aerial Photo Single Frame



Legend

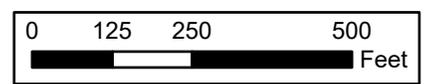
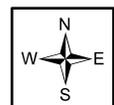
- Conservation Easement
- Vegetation Plots
- Floodplain Planting Zone
- Photo Points
- I/P Streams
- Non-project ditches

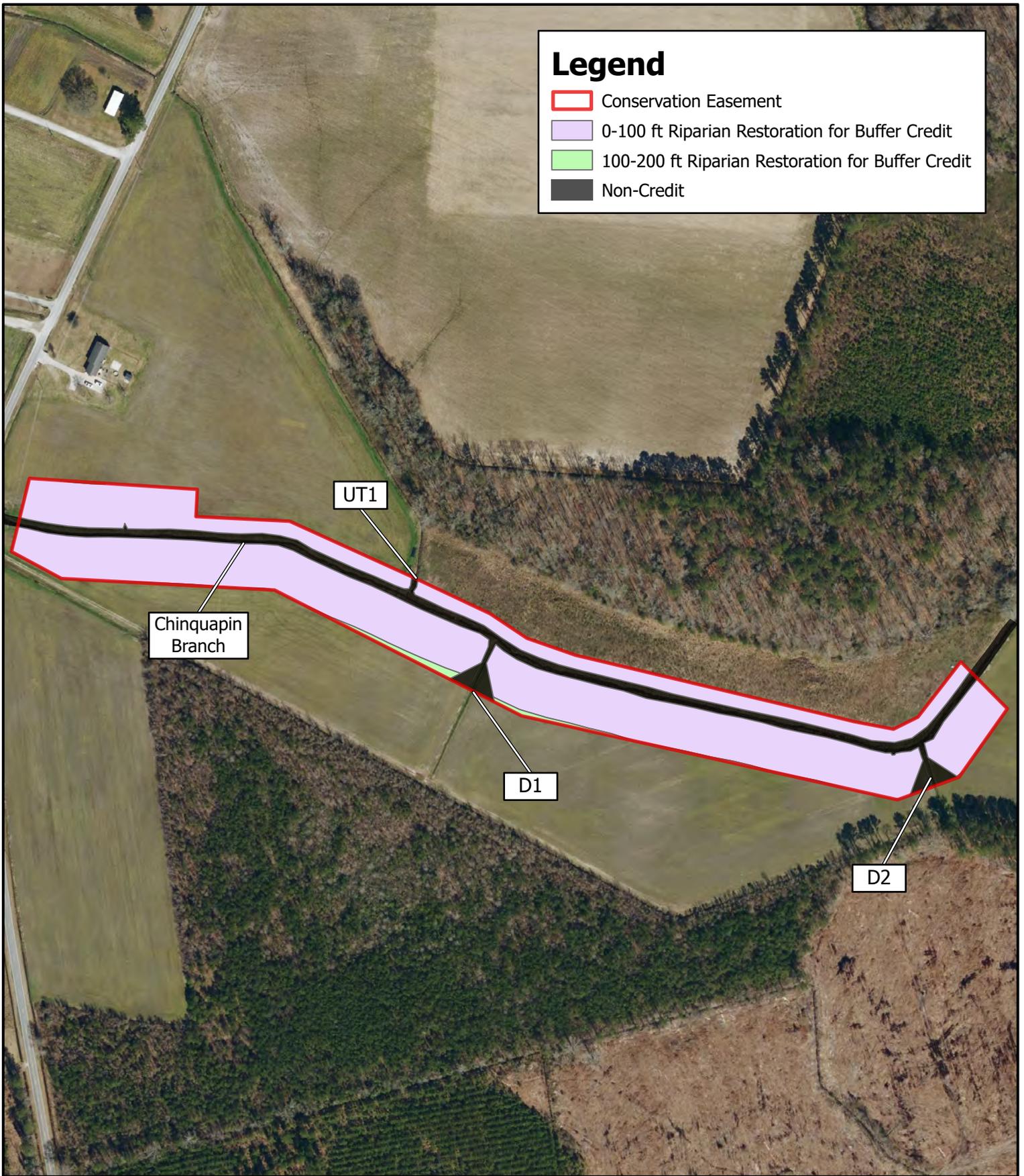
NC CGIA, Maxar, Microsoft



**Figure 7: Monitoring Components
Chinquapin Valley Buffer Mitigation Site
Neuse 03020204
Jones County, North Carolina
December 2021**

ESRI Aerial Imagery

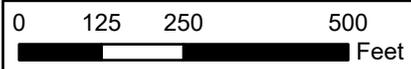


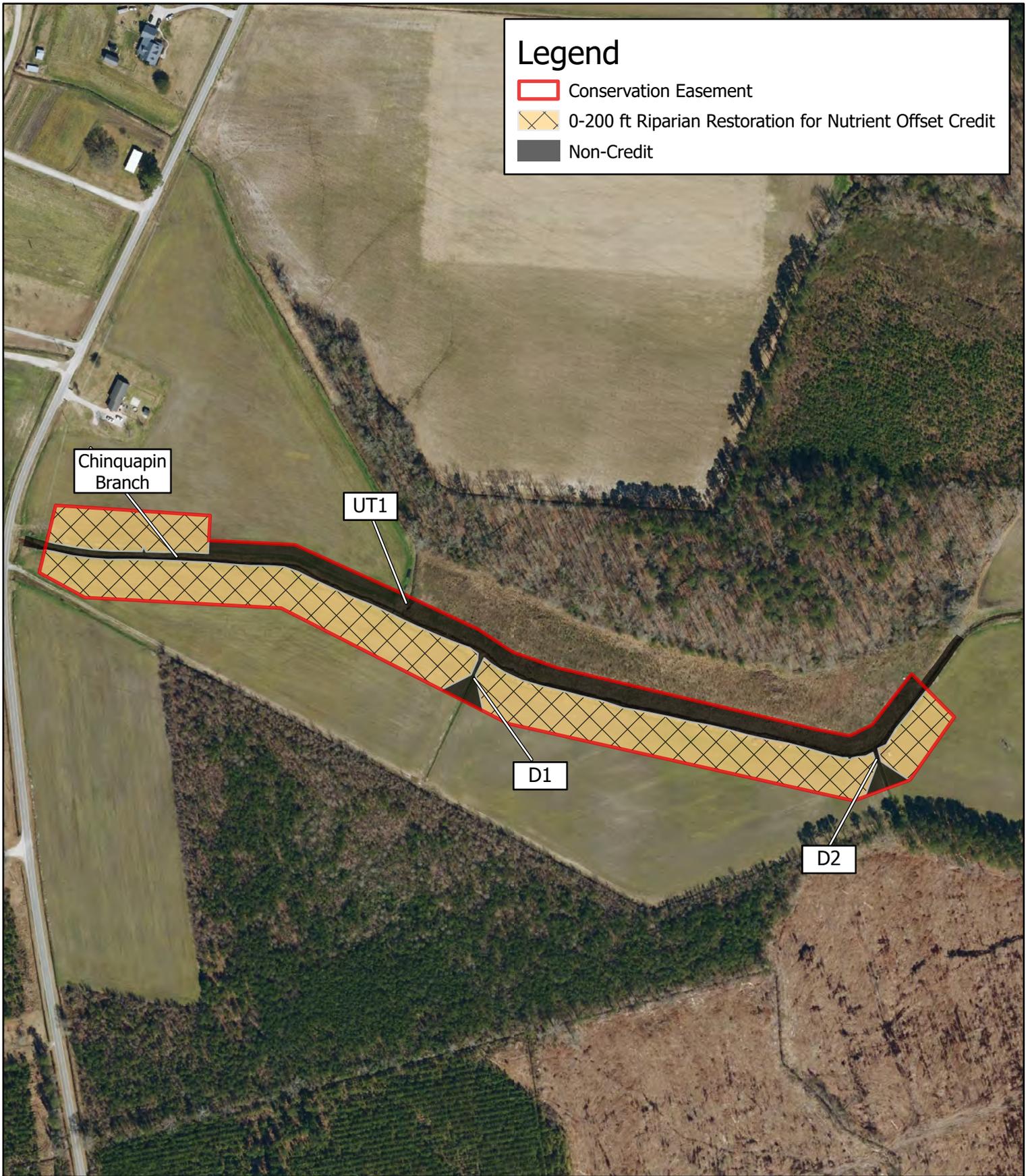


Legend

- Conservation Easement
- 0-100 ft Riparian Restoration for Buffer Credit
- 100-200 ft Riparian Restoration for Buffer Credit
- Non-Credit

Figure 8a: Proposed Riparian Buffer Credit
Chinquapin Valley Buffer Mitigation Site
Neuse 03020204
Jones County, North Carolina
December 2021
 NC Onemap 2018 Aerial

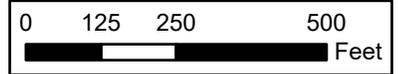




Legend

- Conservation Easement
- 0-200 ft Riparian Restoration for Nutrient Offset Credit
- Non-Credit

**Figure 8b: Potential Nutrient Offset Credit
Chinquapin Valley Buffer Mitigation Site
Neuse 03020204
Jones County, North Carolina
December 2021**



NC Onemap 2018 Aerial

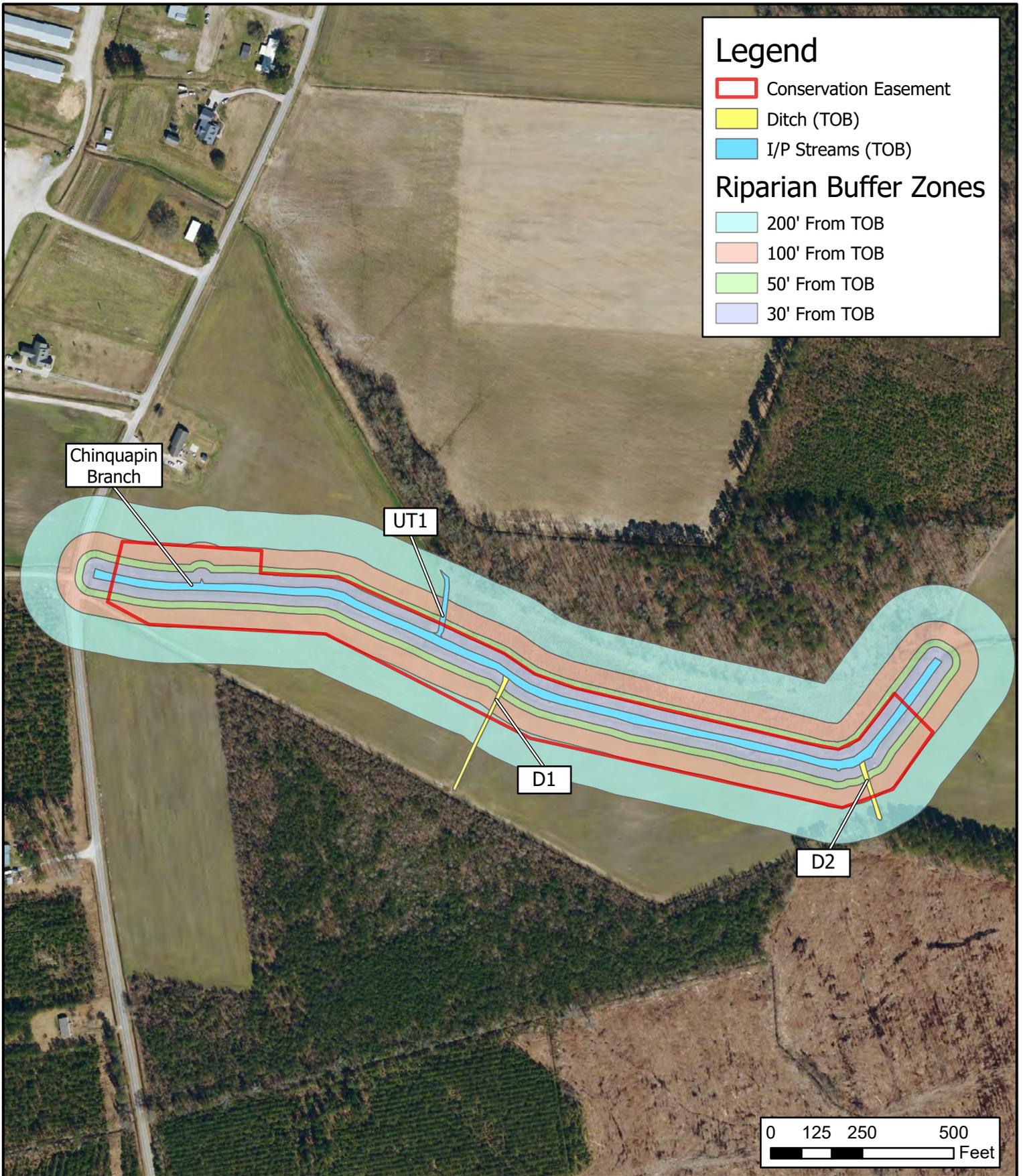


Figure 9: Riparian Buffer Zones
Chinquapin Valley Buffer Mitigation Site
Neuse 03020204
Jones County, North Carolina
December 2021



NC 2018 Onemap Aerial



APPENDIX A

NCDWR On-Site Stream Buffer Determination
NCDWR Site Viability for Buffer Mitigation Letter
NCDWQ Buffer Interpretation/Clarification #2008-019 Memorandum



NORTH CAROLINA Environmental Quality

June 10, 2021

20210993 ver1 Jones County

ROY COOPER Governor JOHN NICHOLSON Interim Secretary S. DANIEL SMITH Director

Hobert K. Sanderson 1929 Guinea Town Road Kinston, NC 28501 252-521-7815

Subject: On-Site Determination for Applicability to Neuse Riparian Buffer Rules (15A NCAC 02B .0714)

Subject Property/Project Name: Chinquapin Valley Buffer Mitigation Site Address/Location: 35.108624, -77.519940 Responsible Party: Eco Terra

Stream(s) Evaluated: (4) – Chinquapin Branch, UT1, Ditch 1,2

Determination Date: June 4th, 2021

Staff: Allen Stewart

Table with 2 columns: Buffer, Stream. Buffer includes Neuse, Tar-Pamlico, Catawba, Jordan, Randleman, and Goose Creek. Stream is Ephemeral/Intermittent/Perennial Determination.

Table with 8 columns: Stream, E/I/P/D*, Not Subject, Subject, Start@, Stop@, Soil Survey, USGS Topo. Rows include Chinquapin Branch, UT1, Ditch 1, and Ditch 2.

*Ephemeral / Intermittent / Perennial / Ditch

Dear Mr. Sanderson,

The Division of Water Resources has determined that the streams listed as "subject" above and included on the attached map have been located on the most recent published (1981) NRCS Soil Survey of Jones County, North Carolina, Map Sheet 3 and/or the web based Digital USGS National Topographic Map...



This on-site determination shall expire five (5) years from the date of this letter. Landowners or affected parties that dispute a determination made by the DWR may request a determination by the Director. An appeal request must be made within sixty (60) calendar days of date of this letter to the Director in writing.

If sending via US Postal Service:

*c/o Paul Wojoski
DWR – 401 & Buffer Permitting Unit
1617 Mail Service Center
Raleigh, NC 27699-1617*

If sending via delivery service (UPS, FedEx, etc.):

*c/o Paul Wojoski
DWR – 401 & Buffer Permitting Unit
512 N. Salisbury Street
Raleigh, NC 27604*

This determination is final and binding as detailed above unless an appeal is requested within sixty (60) days.

This determination only addresses the applicability to the buffer rules and does not approve any activity within the buffers or waters. The project may require a Section 404/401 Permit for the proposed activity. Any inquiries regarding applicability to the Clean Water Act should be directed to the US Army Corps of Engineers Raleigh Regulatory Field Office at (919)-554-4884 Ext. 22.

If you have questions regarding this determination, please feel free to contact Allen Stewart at (252) 946-6481.

Sincerely,

Robert Tankard

Robert Tankard, Assistant Regional Supervisor
Water Quality Regional Operations Section
Division of Water Resources, NCDEQ

cc: WaRO DWR File Copy/LASERFICHE
Jamey O'Shaughnessey, Eco Terra, jamey@ecoterra.com
Emily Thompson, US Army Corps of Engineers Washington Regulatory Field Office, emily.b.thompson@usace.army.mil
Katie Merritt, NCDWR 401 & Buffer Permitting Branch, katie.merritt@ncdenr.gov
Randall Jones, WaRO DEMLR (via e-mail) randall.jones@ncdenr.gov



North Carolina Department of Environmental Quality | Division of Water Resources
Washington Regional Office | 943 Washington Square Mall | Washington, North Carolina 27889
252.946.6481

Chinquapin Valley Buffer Mitigation Site Project number 20210993 version 1

Blue lines indicate mapped streams shown on the most recent published NCRS Soil Survey (1981) of Jones County, NC and/or the USGS Topographic National Map <https://apps.nationalmap.gov/viewer/>

Blue line mapped streams have been determined to be at least intermittent in nature and are subject to the Neuse River Basin Riparian Buffer Regulations (15NCAC 028.0714)

Red lines indicate unmapped streams and/or mapped streams that rate as ephemeral in nature and are therefore not subject to the Neuse River Basin Riparian Buffer Regulations. (15 NCAC 028.0714)

Chinquapin Branch 35.108624,-77.519940

UT1 35.108457,-77.516852

Ditch 1 35.107363,-77.516590

Chinquapin Branch 35.107642,-77.512589

Ditch 2 35.106805,-77.512965



ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

S. DANIEL SMITH
Director

July 19, 2021

Jamey O'Shaughnessey
Eco Terra Partners, LLC
(via electronic mail: jamey@ecoterra.com)

Re: Site Viability for Buffer Mitigation & Nutrient Offset – Chinquapin Valley Site
Near 1830 Guinea Town Rd, Kinston, NC
Neuse 03020204
Jones County

Dear Mr. O'Shaughnessey,

On June 14, 2021, Katie Merritt, with the Division of Water Resources (DWR), received a request from you on behalf of Eco Terra Partners, LLC (Eco Terra) for a site visit near the above-referenced site in the Neuse River Basin within the 8-digit Hydrologic Unit Code 03020204. The site visit was to determine the potential for riparian buffer mitigation and nutrient offset within a proposed conservation easement boundary, which is more accurately depicted in the attached map labeled "Figure 2" prepared by Eco Terra. The proposed easement boundary in Figure 1, includes all riparian areas intended to be proposed as part of the mitigation site. On July 9, 2020, Ms. Merritt performed a site assessment of the subject site. Staff with Eco Terra were also present. It was noted onsite, that the main stream channel may be associated with a local drainage district and may be actively managed by the local drainage district. **The mitigation determination provided in the table on page 2 of this letter is contingent on Eco Terra providing written confirmation from the local drainage district confirming that the stream is not part of, nor will be part of, active management.**

Ms. Merritt's evaluation of the features onsite and their associated mitigation determination for the riparian areas are provided in the table below. This evaluation was made from Top of Bank (TOB) and landward 200' from each feature for buffer mitigation pursuant to 15A NCAC 02B .0295 (effective November 1, 2015) and for nutrient offset credits pursuant to 15A NCAC 02B .0703.



<u>Feature</u>	<u>Classification onsite</u>	<u>¹Subject to Buffer Rule</u>	<u>Riparian Land uses adjacent to Feature (0-200')</u>	<u>Buffer Credit Viable</u>	<u>³Nutrient Offset Viable</u>	<u>^{4,5}Mitigation Type Determination w/in riparian areas</u>
Chinquapin Branch	Stream	Yes	Non-forested agricultural fields. Areas with washed out banks were observed.	Yes (where a minimum of 30' width is obtained)	Yes (where a minimum of 50' width is obtained)	Restoration Site per 15A NCAC 02B .0295 (n) <i>Minor bank stabilization efforts and grading needed where bank stability is compromised and where erosional rills, sink holes and gullies are observed.</i>
UT1	Stream	No	Non-forested agricultural fields. Areas with washed out banks were observed	Yes	Yes	Restoration Site per 15A NCAC 02B .0295 (n) <i>Minor bank stabilization efforts and grading needed where bank stability is compromised and where erosional rills, sink holes and gullies are observed.</i>
D1	Ditch >3' depth	No	Non-forested agricultural fields	No	Yes	Non-forested fields - Restoration Site per 15A NCAC 02B .0295 (n)
D2	>3' depth	No	Non-forested agricultural fields	No	Yes	Non-forested fields - Restoration Site per 15A NCAC 02B .0295 (n)

¹Subjectivity calls for the features were determined by DWR in correspondence dated June 10, 2021 (DWR# 2021-0993) using the 1:24,000 scale quadrangle topographic map prepared by USGS and the most recent printed version of the soil survey map prepared by the NRCS .

²The area of preservation credit within a buffer mitigation site shall comprise of no more than 25 percent (25%) of the total area of buffer mitigation per 15A NCAC 0295 (o)(5) and 15A NCAC 0295 (o)(4). Site cannot be a Preservation Only site to comply with this rule.

³NC Division of Water Resources - Methodology and Calculations for determining Nutrient Reductions associated with Riparian Buffer Establishment

⁴Determinations made for this Site are determined based on the proposal provided in maps and figures submitted with the request.

⁵All features proposed for buffer mitigation or nutrient offset, must have a planted conservation easement established that includes the tops of channel banks when being measured perpendicular and landward from the banks, even if no credit is viable within that riparian area.

⁶The area of the mitigation site on ephemeral channels shall comprise no more than 25 percent (25%) of the total area of buffer mitigation per 15A NCAC 02B .0295 (o)(7).

Determinations provided in the table above were made using a proposed easement boundary showing proposed mitigation areas shown in Figure 2. The map representing the proposal for the site is attached to this letter and initialed by Ms. Merritt on July 19, 2021. Substantial changes to the proposed easement boundary as well as any site constraints identified in the table above, could affect the Site's potential to generate buffer mitigation and nutrient offset credits.

This letter does not constitute an approval of this Site to generate buffer and nutrient offset credits. Pursuant to 15A NCAC 02B .0295, a mitigation proposal and a mitigation plan shall be submitted to DWR for written approval **prior** to conducting any mitigation activities in riparian areas and/or surface waters for buffer mitigation credit. Pursuant to 15A NCAC 02B .0703, a proposal regarding a proposed nutrient load-reducing measure for nutrient offset credit shall be submitted to DWR for approval prior to any mitigation activities in riparian areas and/or surface waters.

All vegetative plantings, performance criteria and other mitigation requirements for riparian restoration, enhancement and preservation must follow the requirements in 15A NCAC 02B .0295 to be eligible for buffer and/or nutrient offset mitigation credits. For any areas depicted as not being viable for nutrient offset credit above, one could propose a different measure, along with supporting calculations and sufficient detail to support estimates of load reduction, for review by the DWR to determine viability for nutrient offset in accordance with 15A NCAC 02B .0703.

This viability assessment will expire on July 19, 2023 or upon approval of a mitigation plan by the DWR, whichever comes first. This letter should be provided in any nutrient offset, buffer, stream or wetland mitigation plan for this Site.

Please contact Katie Merritt at (919) 707-3637 if you have any questions regarding this correspondence.

Sincerely,

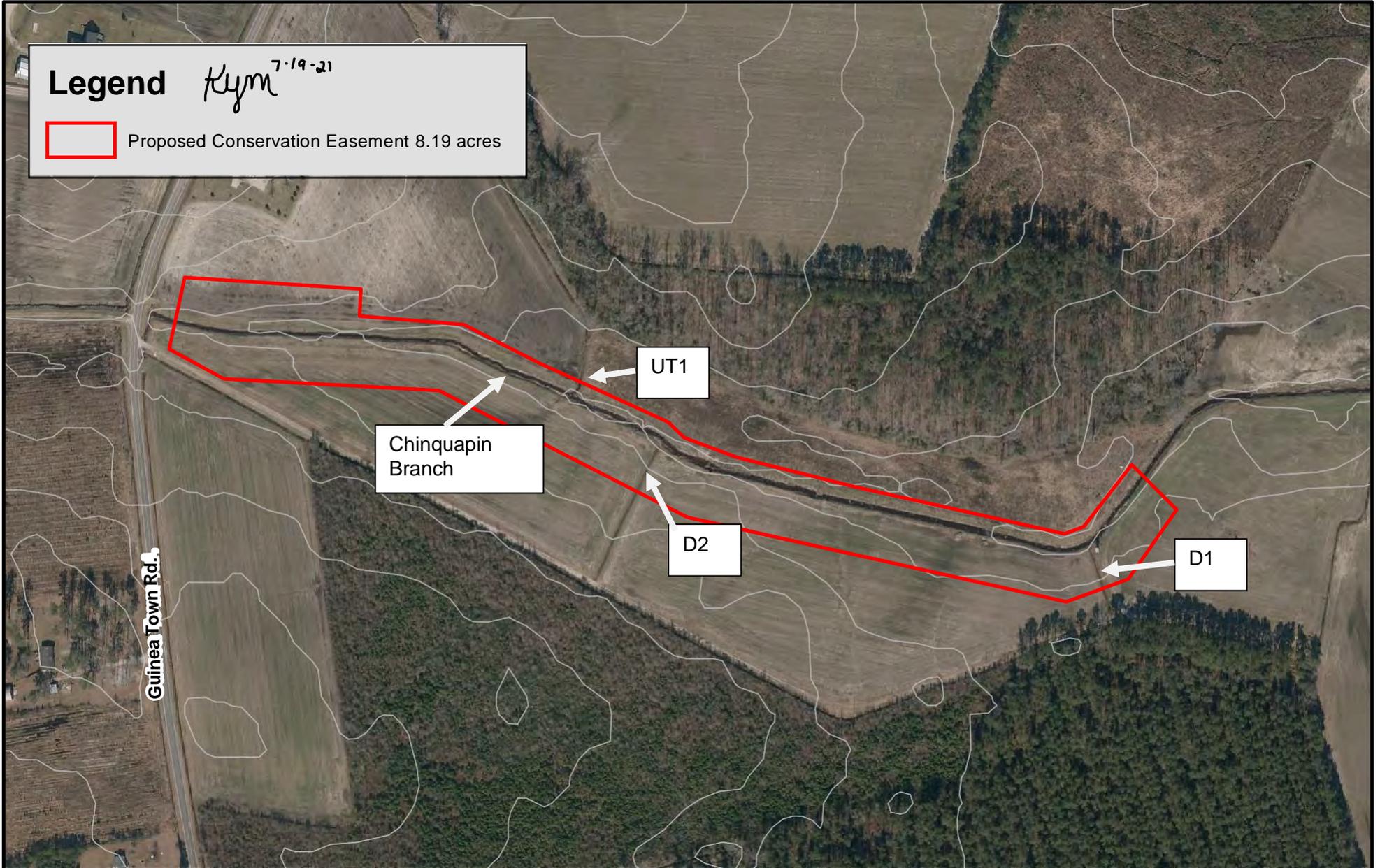
DocuSigned by:
Paul Wojoski
949D91BA53EF4E0...

Paul Wojoski, Supervisor
401 and Buffer Permitting Branch

PW/kym

Attachments: Figure 2: Existing Conditions

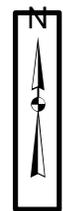
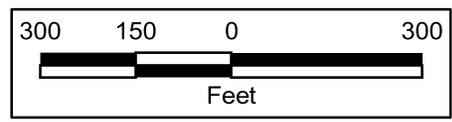
cc: File Copy (Katie Merritt)



Legend *Kym* 7-19-21

Proposed Conservation Easement 8.19 acres

Figure 2: Existing Conditions
Chinquapin Valley Buffer Mitigation Site
Neuse 03020204
Jones County, North Carolina
September 2020



2016 NC Onemap Aerial & NCDOT Contours



Michael F. Easley
Governor

William G. Ross, Jr., Secretary
Department of Environment and Natural Resources

Coleen, H. Sullins, Director
Division of Water Quality

August 19, 2008
Buffer Interpretation/Clarification #2008-019

MEMORANDUM

RE: The Division of Water Quality's (DWQ's) stance on whether diffuse flow of stormwater through the newly restored buffers on mitigation sites should be a requirement. Diffuse flow is a requirement for buffer restoration or enhancement in the Neuse River Basin Buffer Rule 15A NCAC 02B.0242(9)(d)(iii), the Tar-Pamlico River Basin Buffer Rule 15A NCAC 02B.0260(9)(d)(iii), and the Catawba River Basin Buffer Rule 15A NCAC 02B.0244 (9)(d)(iii).

Diffuse flow is a requirement for all sites in a buffered basin for buffer mitigation and for sites providing nutrient offset credit as well.

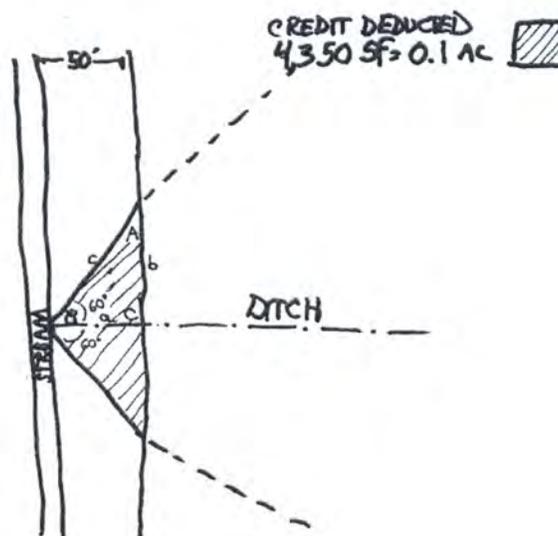
Current Policy: According to the Mitigation rules in the Neuse, Tar-Pamlico and Catawba buffer rules, a grading plan must be provided for buffer mitigation sites. In addition, those rules state that "The site shall be graded in a manner to ensure diffuse flow through the riparian buffer".

Problem: The question has been raised as to whether stormwater carried by lateral ditches that enter buffered streams should provide diffuse flow prior to that stormwater entering the restored buffers.

Solution: The Neuse, Tar-Pamlico and Catawba buffer rules with respect to buffer mitigation sites contain a very clear requirement that states that diffuse flow of stormwater must be maintained through the buffer. Unless otherwise approved by DWQ, all buffer mitigation sites must provide diffuse flow of stormwater from ditches and similar conveyances through the restored buffer.

Where such diffuse flow cannot be attained and where DWQ agrees that such treatment is not possible, deduction of buffer credit will be calculated as follows:

SCENARIO 1



One
North Carolina
Naturally

A, B and C are angles. a, b, and c are distances (lengths)

DWQ believes that using an immediate drainage area extending at a 60-degree angle from the point of discharge to the stream is a reasonable approach to the issue of determining the area which is not draining through the restored buffer. To calculate the area of buffer being "short-circuited" by the ditch, the area of the right triangles shown in the figure above must be determined.

$$a = 50'$$

$$A = 30^\circ$$

$$B = 60^\circ$$

$$b = a \cot A$$

$$b = 50 (1.732)$$

$$b = 86.6' (87')$$

The area to be excluded from credit would be the area of the two right triangles:

$$\text{Area} = (a \times b)/2$$

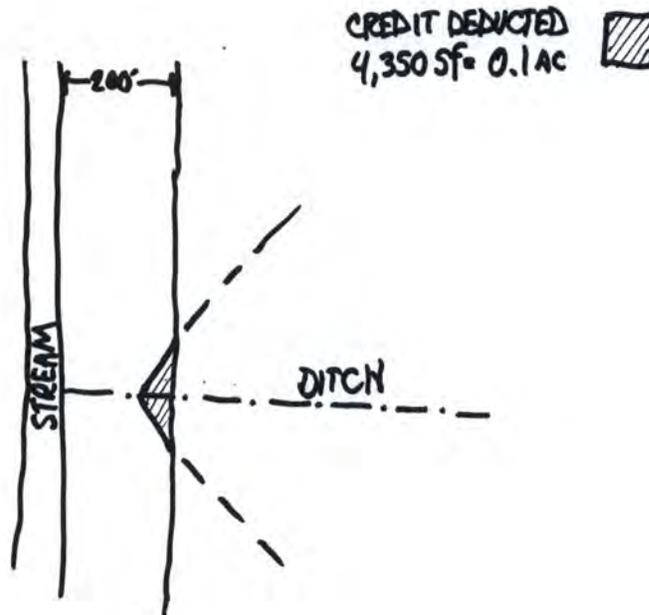
$$\text{Area} = (50 \text{ feet} \times 87 \text{ feet})/2$$

$$\text{Area} = 2,175 \text{ SF}$$

Total deducted area = $2,175 \times 2 = 4,350 \text{ SF}$ or 0.1 acres.

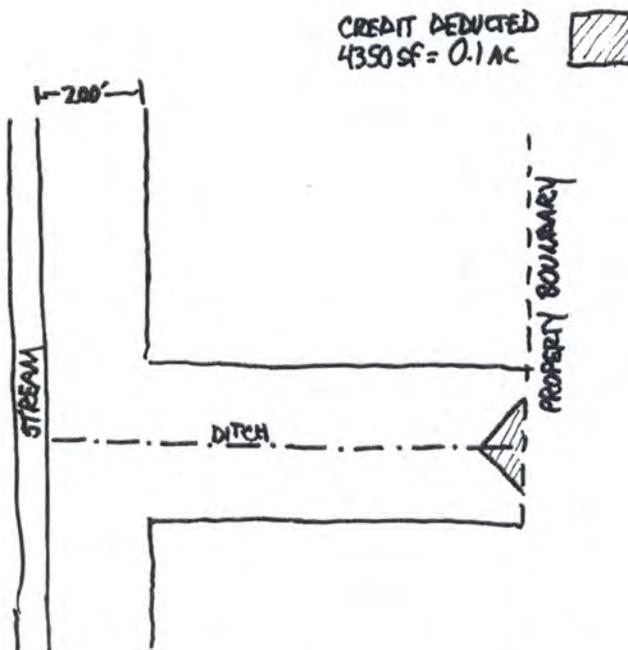
The example shown above assumes a buffer width of 50 feet from the top of bank (riparian buffer mitigation site). For nutrient offset sites, credit can be generated out to 200 feet from the top of bank. The policy applies to sites with larger buffers as follows:

SCENARIO 2



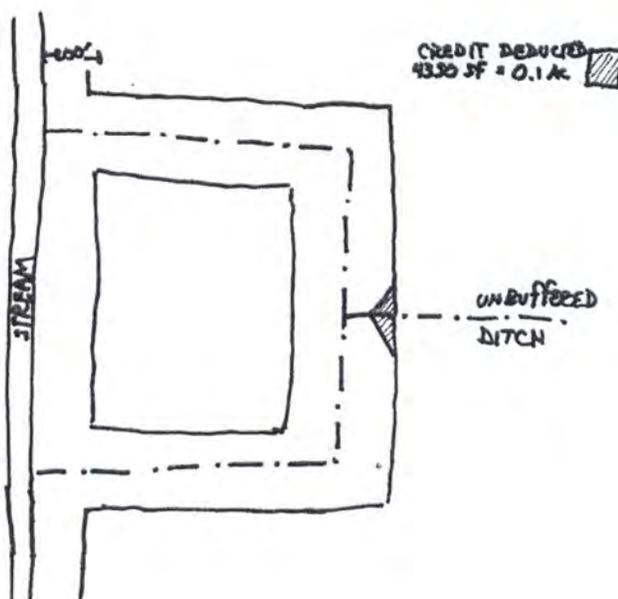
If a ditch leading to a buffered stream is buffered, then no credit is deducted from the stream buffer. If the upstream origin of the ditch is within the buffer, no credit is deducted. If the upstream origin of the ditch is not buffered (e.g. if the ditch begins upstream offsite), the credit deduction is applied to the most upstream portion of the ditch on the property.

SCENARIO 3



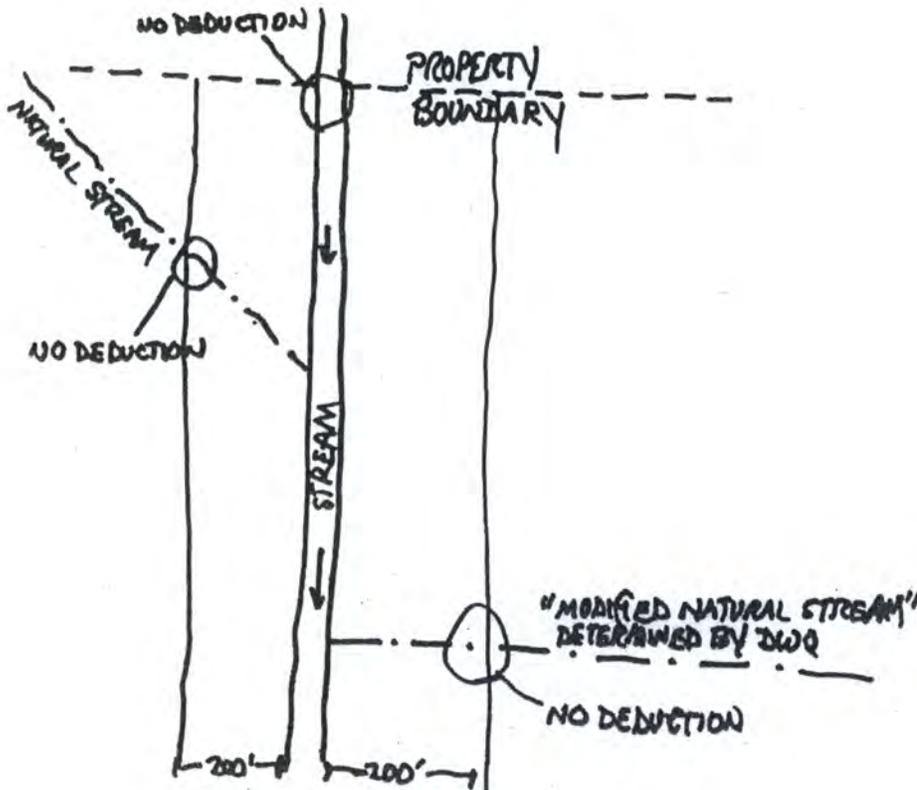
Where a network of interconnecting ditches occurs on a site, and all of the ditches are buffered, the only credit deduction would be at the point where an unbuffered ditch enters the project:

SCENARIO 4



Where a natural stream enters the project site, no deduction of credit will occur. Also, when a natural stream or a modified natural stream flow into a buffered stream, no deduction of credit will occur. The modified natural stream must be subject to the buffer rules, and must be verified to be a modified natural stream (as opposed to a ditch) through an on-site determination by DWQ personnel.

SCENARIO 5



For any additional questions or clarifications on this issue, please contact Eric Kulz or Amy Chapman at (919) 733-1786.

Signature: M. M. Matthews Date: 8/19/2008

Signature: F. R. [unclear] Date: 8/19/2008

APPENDIX B

Draft Conservation Easement

STATE OF NORTH CAROLINA

**DEED OF CONSERVATION EASEMENT
AND RIGHT OF ACCESS PROVIDED
PURSUANT TO
FULL DELIVERY
MITIGATION CONTRACT**

JONES COUNTY

SPO File Number:

DMS Project Number: 100197

Prepared by: Office of the Attorney General
Property Control Section
Return to: NC Department of Administration
State Property Office
1321 Mail Service Center
Raleigh, NC 27699-1321

THIS DEED OF CONSERVATION EASEMENT AND RIGHT OF ACCESS, made this _____ day of _____, 20___, by **Hobert K. Sanderson**, (“Grantor”), whose mailing address is **1929 Guinea Town Rd. Kinston, NC 28501**, to the State of North Carolina (“Grantee”), whose mailing address is State of North Carolina, Department of Administration, State Property Office, 1321 Mail Service Center, Raleigh, NC 27699-1321. The designations of Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, and shall include singular, plural, masculine, feminine, or neuter as required by context.

WITNESETH:

WHEREAS, pursuant to the provisions of N.C. Gen. Stat. § 143-214.8 et seq., the State of North Carolina has established the Division of Mitigation Services (formerly known as the Ecosystem Enhancement Program and Wetlands Restoration Program) within the Department of Environment and Natural Resources for the purpose of acquiring, maintaining, restoring, enhancing, creating, and preserving wetland and riparian resources that contribute to the protection and improvement of water quality, flood prevention, fisheries, aquatic habitat, wildlife habitat, and recreational opportunities; and

WHEREAS, this Conservation Easement from Grantor to Grantee has been negotiated, arranged and provided for as a condition of a full delivery contract between (*Eco Terra Partners, LLC, 1328 DeKalb Ave, Atlanta GA 30307*) and the North Carolina Department of Environment and Natural Resources, to provide wetland and/or buffer mitigation pursuant to the North Carolina Department of Environment and Natural Resources Purchase and Services Contract Number **0103-02**.

WHEREAS, the State of North Carolina is qualified to be the Grantee of a Conservation Easement pursuant to N.C. Gen. Stat. § 121-35; and

WHEREAS, the Department of Environment and Natural Resources and the United States Army Corps of Engineers, Wilmington District entered into a Memorandum of Understanding, (MOU) duly executed by all parties on November 4, 1998. This MOU recognized that the Wetlands Restoration Program was to provide effective compensatory mitigation for authorized impacts to wetlands, streams and other aquatic resources by restoring, enhancing, and preserving the wetland and riparian areas of the State; and

WHEREAS, the Department of Environment and Natural Resources, the North Carolina Department of Transportation, and the United States Army Corps of Engineers, Wilmington District entered into a Memorandum of Agreement, (MOA) duly executed by all parties in Greensboro, NC on July 22, 2003, which recognizes that the Division of Mitigation Services (formerly Ecosystem Enhancement Program) is to provide for compensatory mitigation by effective protection of the land, water, and natural resources of the State by restoring, enhancing, and preserving ecosystem functions; and

WHEREAS, the Department of Environment and Natural Resources, the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, the North Carolina Wildlife Resources Commission, the North Carolina Division of Water Quality, the North Carolina Division of Coastal Management, and the National Marine Fisheries Service entered into an agreement to continue the In-Lieu Fee operations of the North Carolina Department of Natural Resources' Division of Mitigation Services (formerly Ecosystem Enhancement Program) with an effective date of 28 July, 2010, which supersedes and replaces the previously effective MOA and MOU referenced above; and

WHEREAS, the acceptance of this instrument for and on behalf of the State of North Carolina was granted to the Department of Administration by resolution as approved by the Governor and Council of State adopted at a meeting held in the City of Raleigh, North Carolina, on the 8th day of February 2000; and

WHEREAS, the Division of Mitigation Services in the Department of Environment and Natural Resources, which has been delegated the authority authorized by the Governor and Council of State to the Department of Administration, has approved acceptance of this instrument; and

WHEREAS, Grantor owns in fee simple certain real property situated, lying, and being in *Chinquapin* Township, *Jones* County, North Carolina (the “**Property**”), and being more particularly described as that certain parcel of land containing approximately 41.6 acres and being conveyed to the Grantor by deed as recorded in **Deed Book 307** at **Page 558** of the *Jones* County Registry, North Carolina; and

WHEREAS, Grantor is willing to grant a Conservation Easement and Right of Access over the herein described areas of the Property, thereby restricting and limiting the use of the areas of the Property subject to the Conservation Easement to the terms and conditions and purposed hereinafter set forth and Grantee is willing to accept said Easement and Access Rights. The Conservation Easement shall be for the protection and benefit of the waters of *Chinquapin Branch*.

NOW, THEREFORE, in consideration of the mutual covenants, terms, conditions, and restrictions hereinafter set forth, Grantor unconditionally and irrevocably hereby grants and conveys unto Grantee, its successors and assigns, forever and in perpetuity, a Conservation Easement and Right of Access together with an access easement to and from the Conservation Easement Area described below.

The Conservation Easement Area consists of the following:

Tracts Number **444937841800** containing a total of **9.11 acres** as shown on the plats of survey entitled “Final Plat, Conservation Easement for North Carolina Division of Mitigation Services, Project Name: *Chinquapin Valley Buffer Mitigation Site*, SPO File No. _____, DMS Site No. **100197**, Property of *Hobert K. Sanderson*,” dated August 9th, 2021 by *Chris Paderick*, PLS Number **L-4189** and recorded in the *Jones* County, North Carolina Register of Deeds at **Plat Book _____ Pages _____**.

See attached “**Exhibit A**”, Legal Description of area of the Property hereinafter referred to as the “**Conservation Easement Area**”

The purposes of this Conservation Easement are to maintain, restore, enhance, construct, create, and preserve wetland, stream, and/or riparian resources in the Conservation Easement Area that contribute to the protection and improvement of water quality, flood prevention, fisheries, aquatic habitat, wildlife habitat, and recreational opportunities; to maintain permanently the Conservation Easement Area in its natural conditions, consistent with these purposes; and to prevent any use of the Easement Area that will significantly impair or interfere with these purposes. To achieve these purposes, the following conditions and restrictions are set forth:

I. DURATION OF EASEMENT

Pursuant to law, including the above referenced statutes, this Conservation Easement and Right of Access shall be perpetual and it shall run with, and be a continuing restriction upon the use of, the Property, and it shall be enforceable by the Grantee against Grantor and against Grantor’s heirs, successors and assigns, personal representatives, agents, lessees, and licensees.

II. ACCESS EASEMENT

choose one option based on survey and deed, delete other

[GENERAL LOCATION OPTION] Grantor hereby grants and conveys unto Grantee, its employees, agents, successors and assigns, a perpetual, non-exclusive easement for ingress and egress over and upon the Property at all reasonable times and at the location as practically necessary to access the Conservation Easement Area for the purposes set forth herein (“Access Easement”). This grant of easement shall not vest any rights in the public and shall not be construed as a public dedication of the Access Easement. Grantor covenants, represents and warrants that it is the sole owner of and is seized of the Property in fee simple and has the right to grant and convey this Access Easement.

III. GRANTOR RESERVED USES AND RESTRICTED ACTIVITIES

The Conservation Easement Area shall be restricted from any development or usage that would impair or interfere with the purposes of this Conservation Easement. Unless expressly reserved as a compatible use herein, any activity in, or use of, the Conservation Easement Area by Grantor is prohibited as inconsistent with the purposes of this Conservation Easement. Any rights not expressly reserved hereunder by Grantor have been acquired by the Grantee. Any rights not expressly reserved hereunder by Grantor, including the rights to all mitigation credits, including but not limited to, stream, wetland, and riparian buffer mitigation units, derived from each site within the area of the Conservation Easement, are conveyed to and belong to the Grantee. Without limiting the generality of the foregoing, the following specific uses are prohibited, restricted, or reserved as indicated:

- A. Recreation Uses.** Grantor expressly reserves the right to undeveloped recreational uses, including hiking, bird watching, hunting, and fishing, and access to the Conservation Easement Area for the purposes thereof.
- B. Motorized Vehicle Use.** Motorized vehicle use in the Conservation Easement Area is prohibited except within a Crossing Area(s) or Road or Trail as shown on the recorded survey plat.
- C. Educational Uses.** Grantor reserves the right to engage in a permit others to engage in educational uses in the Conservation Easement Area not inconsistent with this Conservation Easement, and the right of access to the Conservation Easement Area for such purposes including organized educational activities such as site visits and observation. Educational uses of the property shall not alter vegetation, hydrology or topography of the site.

D. Damage to Vegetation. Except within Crossing Area(s) as shown on the recorded survey plat and as related to the removal of non-native plants, diseased or damage trees, or vegetation that destabilizes or renders unsafe the Conservation Easement Area to persons or natural habitat, all cutting, removal, mowing, harming, or destruction of any trees and vegetation in the Conservation Easement Area is prohibited.

E. Industrial, Residential and Commercial Uses. All industrial, residential, and commercial uses are prohibited in the Conservation Easement Area.

F. Agricultural Uses. All agricultural uses are prohibited within the Conservation Easement Area including any use for cropland, waste lagoons, or pastureland.

G. New Construction. There shall be no building, facility, mobile home, antenna, utility pole, tower, or other structure constructed or placed in the Conservation Easement Area.

H. Roads and Trails. There shall be no construction or maintenance of new roads, trails, walkways, or paving in the Conservation Easement.

All existing roads, trails, and crossing within the Conservation Easement Area shall be shown on the recorded survey plat.

I. Signs. No signs shall be permitted in the Conservation Easement Area except interpretive signs describing restoration activities and the conservation values of the Conservation Easement Area, signs identifying the owner of the Property and the holder of the Conservation Easement, signs giving directions, or signs prescribing rules and regulations for the use of the Conservation Easement Area.

J. Dumping or Storing. Dumping or storage of soil, trash, ashes, garbage, waste, abandoned vehicles, appliances, machinery, or any other material in the Conservation Easement Area is prohibited.

K. Grading, Mineral Use, Excavation, Dredging. There shall be no grading, filling, excavation, dredging, mining, drilling, hydraulic fracturing; removal of topsoil, sand, gravel, rock, peat, minerals, or other materials.

L. Water Quality and Drainage Patterns. There shall be no diking, draining, dredging, channeling, filling, leveling, pumping, impounding, or diverting, causing, allowing, or permitting the diversion of surface or underground water in the Conservation Easement Area. No altering or tampering with water control structures or devices, or disruption or alteration of the restored, enhanced, or created drainage patterns is allowed. All removal of wetlands, polluting or discharging into waters, springs, seeps, or wetlands, or use of pesticide or biocides in the Conservation Easement Area is prohibited. In the event of an emergency interruption or shortage of all other water sources, water from within the Conservation Easement Area may temporarily be withdrawn for good cause shown as needed for the survival of livestock on the Property.

M. Subdivision and Conveyance. Grantor voluntarily agrees that no further subdivision, partitioning, or dividing of the Conservation Easement Area portion of the Property owned by Grantor in fee simple (“fee”) that is subject to this Conservation Easement is allowed. Any future transfer of the Property shall be subject to this Conservation Easement and Right of Access and to the Grantee’s right of unlimited and repeated ingress and egress over and across the Property to the Conservation Easement Area for the purposes set forth herein.

N. Development Rights. All development rights are permanently removed from the Conservation Easement Area and are non-transferrable.

O. Disturbance of Natural Features. Any change, disturbance, alteration, or impairment of the natural features of the Conservation Easement Area or any intentional introduction of non-native plants, trees and/or animal species by Grantor is prohibited.

Grantor may request permission to vary from the above restrictions for good cause shown, provided that any such request is not inconsistent with the purposes of this Conservation Easement, and Grantor obtains advance written approval from the Division of Mitigation Services, 1652 Mail Services Center, Raleigh, NC 27699-1652.

IV. GRANTEE RESERVED USES

A. Right of Access, Construction, and Inspection. The Grantee, its employees, agents, successors and assigns, shall have a perpetual Right of Access over and upon the Conservation Easement Area to undertake or engage in any activities necessary to construct, maintain, manage, enhance, repair, restore, protect, monitor and inspect the stream, wetland, and any other riparian resources in the Conservation Easement Area for the purposes set forth herein or any long-term management plan for the Conservation Easement Area developed pursuant to this Conservation Easement.

B. Restoration Activities. These activities include planting of trees, shrubs, and herbaceous vegetation, installation of monitoring wells, utilization of heavy equipment to grade, fill, and prepare the soil, modification of the hydrology of the site, and installation of natural and manmade materials as needed to direct in-stream, above ground, and subterranean water flow.

C. Signs. The Grantee, its employees and agents, successors or assigns, shall be permitted to place signs and witness posts on the Property to include any or all of the following: describe the project, prohibited activities within the Conservation Easement, or identify the project boundaries and the holder of the Conservation Easement.

D. Fences. Conservation Easements are purchased to protect the investments by the State (Grantee) in natural resources. Livestock within conservation easements damages the investment and can result in reductions in natural resource value and mitigation credits, which would cause financial harm to the State. Therefore, Landowners (Grantor) with livestock are required to restrict livestock access to the Conservation Easement Area. Repeated failure to do so may result in the State (Grantee) repairing or installing livestock exclusion devices (fences) within the conservation area for the purpose of restricting livestock access. In such cases, the landowner (Grantor) must provide access to the State (Grantee) to make repairs.

E. Crossing Area(s). The Grantee is not responsible for maintenance of crossing area(s), however, the Grantee, its employees and agents, successors or assigns, reserve the right to repair crossing area(s), at its sole discretion and to recover the cost of such repairs from Grantor if such repairs are needed as a result of activities of Grantor, his successors, or assigns.

V. ENFORCEMENT AND REMEDIES

A. Enforcement. To accomplish the purposes of this Conservation Easement, Grantee is allowed to prevent any activity within the Conservation Easement Area that is inconsistent with the purposed of this Conservation Easement and to require the restoration of such areas or features in the Conservation Easement Area that may have been damaged by such unauthorized activity or use. Upon any breach of the terms of this Conservation Easement by Grantor, the Grantee shall except as provided below, notify Grantor in writing of such breach and Grantor shall have ninety (90) days after receipt of such notice to correct the damage caused by such breach. If the breach and damage remain uncured after ninety (90) days, the Grantee may enforce this Conservation Easement by bringing appropriate legal proceedings including an action to recover damages, as well as injunctive and other relief. The Grantee shall also have the power and authority, consistent with its statutory authority: (1) to prevent any impairment of the Conservation Easement Area by acts which may be unlawful or in violation of this Conservation Easement; (b) to otherwise preserve or protect its interest in the Property; or (c) to seek damages from any appropriate person or entity. Notwithstanding the foregoing, the Grantee reserves the immediate right, without notice, to obtain a temporary restraining order injunctive or other appropriate relief, if the breach is or would irreversibly or otherwise materially impair the benefits to be derived from this Conservation Easement, and Grantor and Grantee acknowledge that the damage would be irreparable and remedies at law inadequate. The rights and remedies of the Grantee provided hereunder shall be in addition to, and not in lieu of, all other rights and remedies available to Grantee in connection with this Conservation Easement.

B. Inspection. The Grantee, its employees and agents, successors and assigns, have the right, with reasonable notice, to enter the Conservation Easement Area over the Property at reasonable times for the purpose of inspection to determine whether Grantor is complying with the terms, conditions, and restrictions of this Conservation Easement.

C. Acts Beyond Grantor's Control. Nothing contained in this Conservation Easement shall be construed to entitle Grantee to bring any action against Grantor for any injury or change in the Conservation Easement Area caused by third parties, resulting from causes beyond Grantor's control, including, without limitation, fire, flood, storm, and earth movement, or from any prudent action taken in good faith by Grantor under emergency conditions to prevent, abate, or mitigate significant injury to life or damage to the Property resulting from such causes.

D. Costs of Enforcement. Beyond regular and typical monitoring expenses, any costs incurred by Grantee in enforcing the terms of this Conservation Easement against Grantor, including without limitation, any costs of restoration necessitated by Grantor's acts or omissions in violation of the terms of this Conservation Easement, shall be borne by Grantor.

E. No Waiver. Enforcement of this Easement shall be at the discretion of the Grantee and any forbearance, delay or omission by Grantee to exercise its rights hereunder in the event of any breach of any term set forth herein shall not be construed to be a waiver by Grantee.

VI. MISCELLANEOUS

A. This instrument sets forth the entire agreement of the parties with respect to the Conservation Easement and supersedes all prior discussions, negotiations, understandings or agreements relating to the Conservation Easement. If any provision is found to be invalid, the remainder of the provisions of the Conservation Easement, and the application of such provision to persons or circumstances other than those as to which it is found to be invalid, shall not be affected thereby.

B. Grantor is responsible for any real estate taxes, assessments, fees, or charges levied upon the Property. Grantee shall not be responsible for any costs or liability of any kind related to the ownership, operation, insurance, upkeep, or maintenance of the Property, except as expressly provided herein. Upkeep of any constructed bridges, fences, or other amenities on the Property are the sole responsibility of Grantor. Nothing herein shall relieve Grantor of the obligation to comply with federal, state, or local laws, regulations and permits that may apply to the exercise of the Reserved Rights.

C. Any notices shall be sent by registered or certified mail, return receipt requested to the parties at their addresses shown herein or to other addresses as either party establishes in writing upon notification to the other.

D. Grantor shall notify Grantee in writing of the name and address and any party to whom the Property or any part thereof is to be transferred at or prior to the time said transfer is made. Grantor further agrees that any subsequent lease, deed, or other legal instrument by which any interest in the Property is conveyed is subject to the Conservation Easement herein created.

E. Grantor and Grantee agree that the terms of this Conservation Easement shall survive any merger of the fee and easement interests in the Property or any portion thereof.

F. This Conservation Easement and Right of Access may be amended, but only in writing signed by all parties hereto, or their successors or assigns, if such amendment does not affect the qualification of this Conservation Easement or the status of the Grantee under any applicable laws and is consistent with the purposes of the Conservation Easement. The owner of the Property shall notify the State Property Office and the U.S. Army Corps of Engineers in writing sixty (60) days prior to the initiation of any transfer of all or any part of the Property or of any request to void or modify this Conservation Easement. Such notifications and modification requests shall be addressed to:

Division of Mitigation Services Program Manager
NC State Property Office
1321 Mail Service Center
Raleigh, NC 27699-1321

and

General Counsel
U.S. Army Corps of Engineers
69 Darlington Avenue
Wilmington, NC 28403

G. The parties recognize and agree that the benefits of this Conservation Easement are in gross and assignable provided, however, that the Grantee hereby covenants and agrees, that in the event it transfers or assigns this Conservation Easement, the organization receiving the interest will be a qualified holder under N.C. Gen. Stat. § 121-34 et seq. and § 170(h) of the Internal Revenue Code, and the Grantee further covenants and agrees that the terms of the transfer or assignment will be such that the transferee or assignee will be required to continue in perpetuity the conservation purposes described in this document.

VII. QUIET ENJOYMENT

Grantor reserves all remaining rights accruing from ownership of the Property, including the right to engage in or permit or invite others to engage in only those uses of the Conservation Easement Area that are expressly reserved herein, not prohibited or restricted herein, and are not inconsistent with the purposes of this Conservation Easement. Without limiting the generality of the foregoing, Grantor expressly reserves to Grantor, and Grantor's invitees and licensees, the right of access to the Conservation Easement Area, and the right of quiet enjoyment of the Conservation Easement Area,

TO HAVE AND TO HOLD, the said rights and easements perpetually unto the State of North Carolina for the aforesaid purposes,

AND, Grantor covenants that Grantor is seized of the Property in fee simple and has the right to convey the permanent Conservation Easement herein granted; that the same is free from encumbrances and that Grantor will warrant and defend title to the same against the claims of all persons whomsoever.

IN TESTIMONY, WHEREOF, Grantor has hereunto set their hand and seal, the day and year first above written.

_____ (SEAL)

Name: Hobert K. Sanderson

**NORTH CAROLINA
COUNTY OF JONES**

I, _____, a Notary Public in and for the County and State aforesaid, do hereby certify that **Hobert K. Sanderson**, Grantor, personally appeared before me this day and acknowledged the execution of the foregoing instrument.

IN WITNESS, WHEREOF, I have hereunto set my hand and Notary Seal this the _____ day of _____, 20 ____.

Notary Public

My commission expires:

EXHIBIT A

LEGAL DESCRIPTION – CHINQUAPIN VALLEY BUFFER MITIGATION SITE

LYING IN CHINQUAPIN TOWNSHIP, JONES COUNTY, NORTH CAROLINA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A NEW IRON STAKE AND CAP; SAID NEW IRON STAKE AND CAP HAVING NAD 83/2011 GRID COORDINATES, N=497,850.0475 FEET, E=2,442,656.4217 FEET;

THENCE FROM THE POINT OF BEGINNING SO LOCATED; RUNNING S 86°14'09" E 381.58 FEET TO A NEW IRON STAKE AND CAP; THENCE S 03°16'13" W 61.47 FEET TO A NEW IRON STAKE AND CAP; THENCE S 87°05'54" E 212.46 FEET TO A NEW IRON STAKE AND CAP; THENCE S 65°36'35" E 298.48 FEET TO A NEW IRON STAKE AND CAP; THENCE S 64°41'34" E 201.70 FEET TO A NEW IRON STAKE AND CAP; THENCE S 56°18'05" E 100.30 FEET TO A NEW IRON STAKE AND CAP; THENCE S 70°43'34" E 116.33 FEET TO A NEW IRON STAKE AND CAP; THENCE S 76°37'46" E 581.37 FEET TO A NEW IRON STAKE AND CAP; THENCE S 76°21'38" E 66.37 FEET TO A NEW IRON STAKE AND CAP; THENCE S 79°04'22" E 91.94 FEET TO A NEW IRON STAKE AND CAP; THENCE N 63°45'52" E 61.97 FEET TO A NEW IRON STAKE AND CAP; THENCE N 37°42'20" E 158.38 FEET TO A NEW IRON STAKE AND CAP; THENCE S 44°46'57" E 149.75 FEET TO A NEW IRON STAKE AND CAP; THENCE S 35°08'07" W 189.99 FEET TO A NEW IRON STAKE AND CAP; THENCE S 69°52'20" W 148.20 FEET TO A NEW IRON STAKE AND CAP; THENCE N 77°24'56" W 872.52 FEET TO A NEW IRON STAKE AND CAP; THENCE N 63°01'30" W 627.95 FEET TO A NEW IRON STAKE AND CAP; THENCE N 86°53'35" W 483.70 FEET TO A NEW IRON STAKE AND CAP; THENCE N 61°33'11" W 128.47 FEET TO A NEW IRON STAKE AND CAP; THENCE N 13°42'30" E 170.68 FEET TO THE POINT AND PLACE OF BEGINNING;

CONTAINING 9.111 ACRES MORE OR LESS AND BEING A PORTION OF THE PROPERTY DESCRIBED IN DEED BOOK 219, PAGE 833, AS RECORDED IN THE JONES COUNTY REGISTER OF DEEDS OFFICE.

I, _____, REVIEW OFFICER OF JONES COUNTY, CERTIFY THAT THE MAP OR PLAT TO WHICH THIS CERTIFICATION IS AFFIXED MEETS ALL STATUTORY REQUIREMENTS FOR RECORDING.

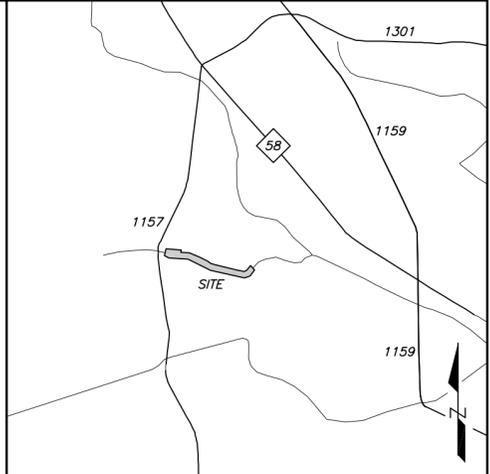
FILED FOR REGISTRATION _____, 2021. _____ M PLAT CABINET _____, PAGE _____.

LEGEND
 R/W = RIGHT OF WAY
 C/L = CENTERLINE
 PP = POWER POLE
 GW = GUY WIRE
 ● = NEW IRON STAKE
 E = ELECTRICAL LINE
 --- = ADJOINING PROPERTY LINE

SOURCE OF TITLE
 DB 219, PG 833

CONSERVATION EASEMENT ACREAGE DATA (BY COMPUTER)
 9.111 AC±

OWNER INFORMATION
 HOBART K. SANDERSON, JR.
 DENISE C. SANDERSON

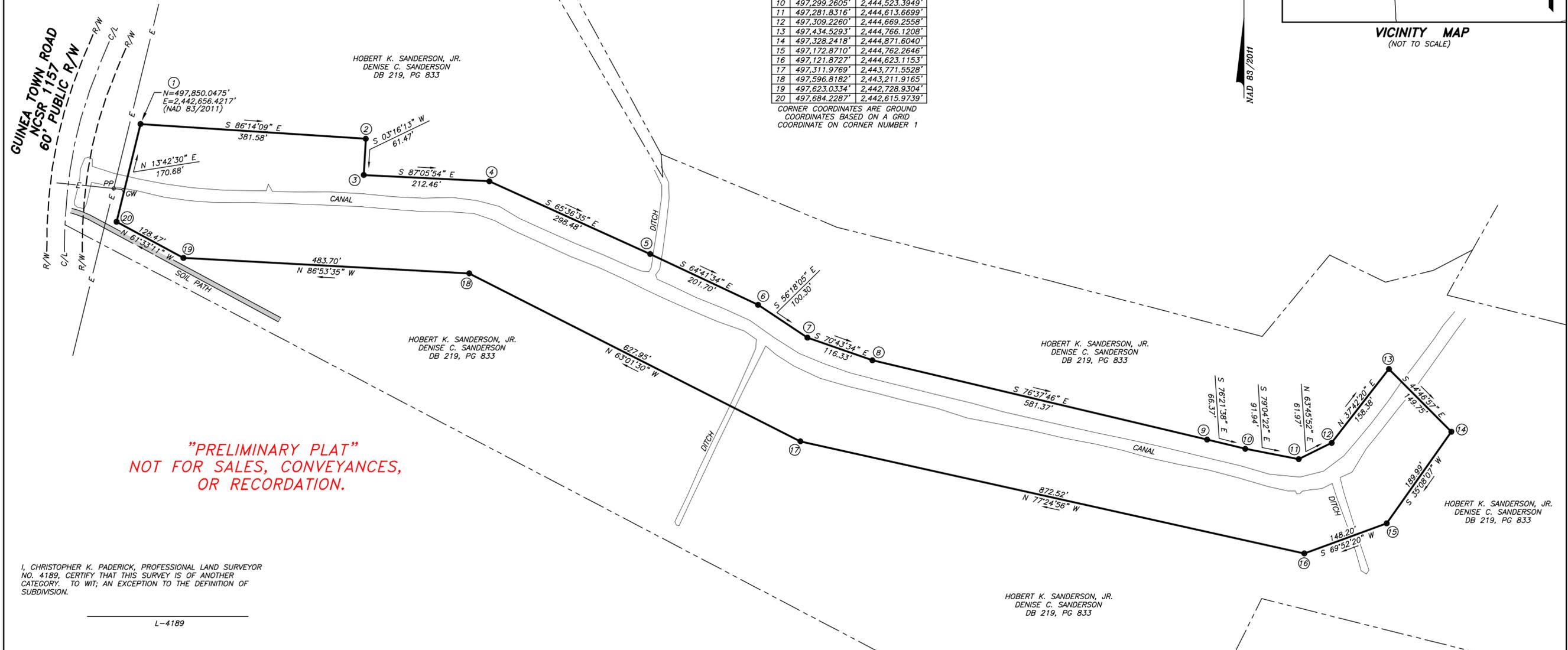


- NOTES:**
1. COMBINED FACTOR IS 0.9998840.
 2. ALL DISTANCES ARE HORIZONTAL GROUND MEASUREMENTS IN FEET & DECIMALS THEREOF, UNLESS OTHERWISE NOTED.
 3. THIS EASEMENT IS LOCATED ENTIRELY ON PIN 444937841800.
 4. ACCESS TO EASEMENT SHALL BE THROUGH NEIGHBORING TRACTS.

EASEMENT CORNER COORDINATE TABLE

#	NORTHING	EASTING
1	497,850.0475'	2,442,656.4217'
2	497,824.9977'	2,443,037.1778'
3	497,763.6271'	2,443,033.6712'
4	497,752.8720'	2,443,245.8602'
5	497,629.6140'	2,443,517.7020'
6	497,543.3954'	2,443,700.0403'
7	497,487.7491'	2,443,783.4832'
8	497,449.3512'	2,443,893.2910'
9	497,314.9104'	2,444,458.8997'
10	497,299.2605'	2,444,523.3949'
11	497,281.8316'	2,444,613.6699'
12	497,309.2260'	2,444,669.2558'
13	497,434.5293'	2,444,766.1208'
14	497,328.2418'	2,444,871.6040'
15	497,172.8710'	2,444,762.2646'
16	497,121.8727'	2,444,623.1153'
17	497,311.9769'	2,443,771.5528'
18	497,596.8182'	2,443,211.9165'
19	497,623.0334'	2,442,728.9304'
20	497,684.2287'	2,442,615.9739'

CORNER COORDINATES ARE GROUND COORDINATES BASED ON A GRID COORDINATE ON CORNER NUMBER 1



**"PRELIMINARY PLAT"
 NOT FOR SALES, CONVEYANCES,
 OR RECORDATION.**

I, CHRISTOPHER K. PADERICK, PROFESSIONAL LAND SURVEYOR NO. 4189, CERTIFY THAT THIS SURVEY IS OF ANOTHER CATEGORY. TO WIT; AN EXCEPTION TO THE DEFINITION OF SUBDIVISION.

L-4189
 STATE OF NORTH CAROLINA JONES COUNTY

I, CHRISTOPHER K. PADERICK, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION; (DEED DESCRIPTION RECORDED IN MAP & DEED BOOKS NOTED); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION REFERENCED HEREON; THAT THE RATIO OF PRECISION AS CALCULATED IS 1: 10,000±; THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH G.S. 47-30 AS AMENDED; THAT THE FOLLOWING INFORMATION WAS USED TO PERFORM THIS GNSS SURVEY:

CLASS OF SURVEY: A
 POSITIONAL ACCURACY: 0.10'
 TYPE OF GPS FIELD PROCEDURE: RTK
 DATES OF SURVEY: 7/15/2021
 DATUM / EPOCH: NAD 83(2011)
 PUBLISHED / FIXED CONTROL USED: REAL TIME NETWORK
 GEOID MODEL: GEOID12
 COMBINED GRID FACTOR: 0.9998840
 UNITS: U.S. SURVEY FEET

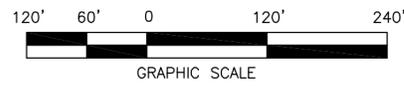
WITNESS MY ORIGINAL SIGNATURE, REGISTRATION NUMBER AND SEAL THIS 9TH DAY OF AUGUST, A.D., 2021.



CONSERVATION EASEMENT SURVEY FOR

**THE STATE OF NORTH CAROLINA
 DIVISION OF MITIGATION SERVICES
 PROJECT: CHINQUAPIN VALLEY BUFFER MITIGATION SITE
 (SPO FILE #___-___; DMS PROJECT #100197)
 OWNER: HOBART K. SANDERSON**

CHINQUAPIN TOWNSHIP AUGUST 9, 2021
 JONES COUNTY, NC 1" = 120'



MATRIX EAST, PLLC
 PROFESSIONAL LAND SURVEYORS
 906 N. QUEEN ST., SUITE A KINSTON, NC 28501
 TEL: 252-522-2500 FAX: 252-522-4747

FIRM LIC. # P-0221	EMAIL: surveyor@matrixeast.net
DRAWN BY: CKP	PROJECT NO.: 20210191
SURVEYED BY: CKP/CCK	DATE: 8/9/2021
SCALE: 1" = 120'	DRAWING NAME: 20210191

APPENDIX C

Signed Categorical Exclusion



July 23, 2021

Lin Xu
North Carolina Department of Mitigation Services
217 W Jones St.
Raleigh, NC 27603

Re: Chinquapin Valley Buffer Mitigation Site: NCDMS Contract #100197
- Task 1 Deliverables

Mr. Xu,

Eco Terra is pleased to present you with the Environmental and Project Screening deliverables associated with Task 1 of our contract. Our package includes a Site Viability Letter from DWR as well as categorical exclusion documentation. Our team has carried out proper coordination with the agencies associated with the following Acts.

- Categorical Exclusion Coordination Efforts
 - National Historic Preservation Act
 - Endangered Species Act
 - Uniform Act
 - CERCLA
 - Farmland Protection Policy Act
 - Fish and Wildlife Coordination Act

Sincerely,

Ted Griffith

Project Manager
Ted@ecoterra.com
404-840-2697

Appendix A

Categorical Exclusion Form for Division of Mitigation Services Projects
Version 2

Note: Only Appendix A should be submitted (along with any supporting documentation) as the environmental document.

Part 1: General Project Information	
Project Name:	Chinquapin Valley Buffer Mitigation Site
County Name:	Jones
DMS Number:	100197
Project Sponsor:	Eco Terra Partners, LLC
Project Contact Name:	Ted Griffith
Project Contact Address:	1328 Dekalb Ave. NE Atlanta, GA 30307
Project Contact E-mail:	Ted@ecoterra.com
DMS Project Manager:	Lin XU
Project Description	
Full Delivery Project to provide Riparian Buffer Mitigation Credits within Cataloging Unit (CU) 03020204 of the Neuse River Basin.	
For Official Use Only	
Reviewed By: 7/28/2021	 <i>Lin Xu</i>
Date	DMS Project Manager
Conditional Approved By: 	
Date	For Division Administrator FHWA
<input type="checkbox"/> Check this box if there are outstanding issues	
Final Approval By: 7-30-21	 <i>Donald W Brew</i>
Date	For Division Administrator FHWA

Part 2: All Projects Regulation/Question		Response
Coastal Zone Management Act (CZMA)		
1. Is the project located in a CAMA county?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. Does the project involve ground-disturbing activities within a CAMA Area of Environmental Concern (AEC)?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
3. Has a CAMA permit been secured?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
4. Has NCDCCM agreed that the project is consistent with the NC Coastal Management Program?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)		
1. Is this a "full-delivery" project?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2. Has the zoning/land use of the subject property and adjacent properties ever been designated as commercial or industrial?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
3. As a result of a limited Phase I Site Assessment, are there known or potential hazardous waste sites within or adjacent to the project area?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
4. As a result of a Phase I Site Assessment, are there known or potential hazardous waste sites within or adjacent to the project area?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
5. As a result of a Phase II Site Assessment, are there known or potential hazardous waste sites within the project area?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
6. Is there an approved hazardous mitigation plan?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
National Historic Preservation Act (Section 106)		
1. Are there properties listed on, or eligible for listing on, the National Register of Historic Places in the project area?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. Does the project affect such properties and does the SHPO/THPO concur?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
3. If the effects are adverse, have they been resolved?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act)		
1. Is this a "full-delivery" project?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2. Does the project require the acquisition of real estate?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
3. Was the property acquisition completed prior to the intent to use federal funds?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
4. Has the owner of the property been informed: * prior to making an offer that the agency does not have condemnation authority; and * what the fair market value is believed to be?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A

Part 3: Ground-Disturbing Activities	
Regulation/Question	Response
American Indian Religious Freedom Act (AIRFA)	
1. Is the project located in a county claimed as "territory" by the Eastern Band of Cherokee Indians?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. Is the site of religious importance to American Indians?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
3. Is the project listed on, or eligible for listing on, the National Register of Historic Places?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
4. Have the effects of the project on this site been considered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Antiquities Act (AA)	
1. Is the project located on Federal lands?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. Will there be loss or destruction of historic or prehistoric ruins, monuments or objects of antiquity?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
3. Will a permit from the appropriate Federal agency be required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
4. Has a permit been obtained?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Archaeological Resources Protection Act (ARPA)	
1. Is the project located on federal or Indian lands (reservation)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. Will there be a loss or destruction of archaeological resources?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
3. Will a permit from the appropriate Federal agency be required?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
4. Has a permit been obtained?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Endangered Species Act (ESA)	
1. Are federal Threatened and Endangered species and/or Designated Critical Habitat listed for the county?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2. Is Designated Critical Habitat or suitable habitat present for listed species?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
3. Are T&E species present or is the project being conducted in Designated Critical Habitat?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
4. Is the project "likely to adversely affect" the specie and/or "likely to adversely modify" Designated Critical Habitat?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
5. Does the USFWS/NOAA-Fisheries concur in the effects determination?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
6. Has the USFWS/NOAA-Fisheries rendered a "jeopardy" determination?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A

Executive Order 13007 (Indian Sacred Sites)	
1. Is the project located on Federal lands that are within a county claimed as "territory" by the EBCI?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. Has the EBCI indicated that Indian sacred sites may be impacted by the proposed project?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
3. Have accommodations been made for access to and ceremonial use of Indian sacred sites?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Farmland Protection Policy Act (FPPA)	
1. Will real estate be acquired?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2. Has NRCS determined that the project contains prime, unique, statewide or locally important farmland?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
3. Has the completed Form AD-1006 been submitted to NRCS?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Fish and Wildlife Coordination Act (FWCA)	
1. Will the project impound, divert, channel deepen, or otherwise control/modify any water body?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. Have the USFWS and the NCWRC been consulted?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Land and Water Conservation Fund Act (Section 6(f))	
1. Will the project require the conversion of such property to a use other than public, outdoor recreation?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. Has the NPS approved of the conversion?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Magnuson-Stevens Fishery Conservation and Management Act (Essential Fish Habitat)	
1. Is the project located in an estuarine system?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. Is suitable habitat present for EFH-protected species?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
3. Is sufficient design information available to make a determination of the effect of the project on EFH?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
4. Will the project adversely affect EFH?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
5. Has consultation with NOAA-Fisheries occurred?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Migratory Bird Treaty Act (MBTA)	
1. Does the USFWS have any recommendations with the project relative to the MBTA?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. Have the USFWS recommendations been incorporated?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Wilderness Act	
1. Is the project in a Wilderness area?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. Has a special use permit and/or easement been obtained from the maintaining federal agency?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A

Appendix D (Supporting Documents for Categorical Exclusion At-A-Glance)

Coastal Zone Management Act

- ✓ Provide scoping letter and document concurrence from NCDCM **IF** project in CAMA county (*Beaufort, Bertie, Brunswick, Camden, Carteret, Chowan, Craven, Currituck, Dare, Gates, Hertford, Hyde, New Hanover, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Tyrrell & Washington*).

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- ✓ Document that there are no known or potential hazardous waste sites through a Limited Phase I Site Assessment report, such as an EDM report. **IF** sites are present, provide additional screening documentation or work with DMS/FHWA.

National Historic Preservation Act (Section 106)

- ✓ Provide scoping letter and document concurrence from SHPO.
- ✓ Provide scoping letter and document concurrence from ECBI **IF** located in ECBI County (*Alleghany, Ashe, Avery, Buncombe, Burke, Caldwell, Catawba, Cherokee, Clay, Cleveland, Gaston, Graham, Haywood, Henderson, Jackson, Lincoln, Macon, Madison, McDowell, Mitchell, Polk, Rutherford, Swain, Transylvania, Watauga, Wilkes & Yancey*)

Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act)

- ✓ Document through signed Option Agreement or landowner letter as evidence that all project landowners were informed of fair market value of their property and notified that the land could not be acquired through eminent domain.

American Indian Religious Freedom Act (AIRFA)

- ✓ Provide scoping letter and document concurrence from three federally recognized Cherokee tribes **IF** located in ECBI County.

Antiquities Act (AA)

- ✓ Provide scoping letter and document concurrence from SHPO **IF** project located on federal lands. May require permit based on consultation.

Archaeological Resources Protection Act (ARPA)

- ✓ Provide scoping letter and document concurrence from SHPO **IF** project located on federal lands or Indian lands. May require permit based on consultation.

Endangered Species Act (ESA)

- ✓ Provide a species list and effect determinations, evaluate for critical habitat
- ✓ Provide scoping letter and document concurrence from USF&W and NOAA (if applicable)
- ✓ For sites under the Raleigh USF&W field office jurisdiction, follow the 9-step on-line process and provide Self Certification letter, species conclusion table, and email receipt.

Executive Order 13007 (Indian Sacred Sites)

- ✓ Provide scoping letter and document concurrence from three federally recognized Cherokee tribes **IF** located in ECBI County.

Farmland Protection Policy Act (FPPA)

- ✓ Provide documentation of completed NRCS form AD-1006, with assistance from NRCS.

Fish and Wildlife Coordination Act (FWCA)

- ✓ Provide scoping letter and document concurrence from USF&W and NCWRC, if project will affect any water body.

Land and Water Conservation Fund Act (Section 6(f))

- ✓ Provide scoping letter and document concurrence from NPS **IF** project will convert recreation lands

Magnuson-Stevens Fishery Conservation and Management Act (Essential Fish Habitat)

- ✓ Provide scoping letter and document concurrence from NCDMF **IF** project is in estuarine system.

Migratory Bird Treaty Act (MBTA)

- ✓ Provide scoping letter to USF&W to identify any recommendations relative to MBTA

Wilderness Act

- ✓ Provide permit or easement **IF** project is in a Wilderness area

National Historic Preservation Act (Section 106) NC SHPO Coordination



North Carolina Department of Natural and Cultural Resources
State Historic Preservation Office

Ramona M. Bartos, Administrator

Governor Roy Cooper

Secretary D. Reid Wilson

April 30, 2021

Jamey O'Shaughnessey
Eco Terra
1328 Dekalb Ave NE
Atlanta, GA 30307

jamey@ecoterra.com

Re: Chinquapin Valley Buffer mitigation site, PIN 444937841800, Guinea Town Road, Kinston, Jones County, ER 21-0828

Dear Mr. O'Shaughnessey:

Thank you for your letter of March 24, 2021, regarding the above-referenced undertaking. We have reviewed the submittal and offer the following comments.

We have conducted a review of the project and are aware of no historic resources which would be affected by the project. Therefore, we have no comment on the project as proposed.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-814-6579 or environmental.review@ncdcr.gov. In all future communication concerning this project, please cite the above referenced tracking number.

Sincerely,

A handwritten signature in blue ink that reads "Renee Gledhill-Earley".

for Ramona Bartos, Deputy
State Historic Preservation Officer

cc: Heath Hidlay, RES

hhidlay@res.us

Endangered Species Act (ESA)



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Raleigh Field Office
P.O. Box 33726
Raleigh, NC 27636-3726

Date: _____

Self-Certification Letter

Project Name _____

Dear Applicant:

Thank you for using the U.S. Fish and Wildlife Service (Service) Raleigh Ecological Services online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the project named above in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA), and the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c, 54 Stat. 250), as amended (Eagle Act). This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.

The species conclusions table in the enclosed project review package summarizes your ESA and Eagle Act conclusions. Based on your analysis, mark all the determinations that apply:

“no effect” determinations for proposed/listed species and/or proposed/designated critical habitat; and/or

“may affect, not likely to adversely affect” determinations for proposed/listed species and/or proposed/designated critical habitat; and/or

“may affect, likely to adversely affect” determination for the Northern long-eared bat (*Myotis septentrionalis*) and relying on the findings of the January 5, 2016, Programmatic Biological Opinion for the Final 4(d) Rule on the Northern long-eared bat;

“no Eagle Act permit required” determinations for eagles.

We certify that use of the online project review process in strict accordance with the instructions provided as documented in the enclosed project review package results in reaching the appropriate determinations. Therefore, we concur with the “no effect” or “not likely to adversely affect” determinations for proposed and listed species and proposed and designated critical habitat; the “may affect” determination for Northern long-eared bat; and/or the “no Eagle Act permit required” determinations for eagles. Additional coordination with this office is not needed. Candidate species are not legally protected pursuant to the ESA. However, the Service encourages consideration of these species by avoiding adverse impacts to them. Please contact this office for additional coordination if your project action area contains candidate species. Should project plans change or if additional information on the distribution of proposed or listed species, proposed or designated critical habitat, or bald eagles becomes available, this determination may be reconsidered. This certification letter is valid for 1 year. Information about the online project review process including instructions, species information, and other information regarding project reviews within North Carolina is available at our website <http://www.fws.gov/raleigh/pp.html>. If you have any questions, you can write to us at Raleigh@fws.gov or please contact Leigh Mann of this office at 919-856-4520, ext. 10.

Sincerely,

/s/Pete Benjamin

Pete Benjamin
Field Supervisor
Raleigh Ecological Services

Enclosures - project review package



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Raleigh Ecological Services Field Office
Post Office Box 33726
Raleigh, NC 27636-3726
Phone: (919) 856-4520 Fax: (919) 856-4556

In Reply Refer To:
Consultation Code: 04EN2000-2021-SLI-0922
Event Code: 04EN2000-2021-E-02023
Project Name: Chinquapin Valley Buffer Mitigation

March 29, 2021

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The species list generated pursuant to the information you provided identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

Section 7 of the Act requires that all federal agencies (or their designated non-federal representative), in consultation with the Service, insure that any action federally authorized, funded, or carried out by such agencies is not likely to jeopardize the continued existence of any federally-listed endangered or threatened species. A biological assessment or evaluation may be prepared to fulfill that requirement and in determining whether additional consultation with the Service is necessary. In addition to the federally-protected species list, information on the species' life histories and habitats and information on completing a biological assessment or

evaluation and can be found on our web page at <http://www.fws.gov/raleigh>. Please check the web site often for updated information or changes

If your project contains suitable habitat for any of the federally-listed species known to be present within the county where your project occurs, the proposed action has the potential to adversely affect those species. As such, we recommend that surveys be conducted to determine the species' presence or absence within the project area. The use of North Carolina Natural Heritage program data should not be substituted for actual field surveys.

If you determine that the proposed action may affect (i.e., likely to adversely affect or not likely to adversely affect) a federally-protected species, you should notify this office with your determination, the results of your surveys, survey methodologies, and an analysis of the effects of the action on listed species, including consideration of direct, indirect, and cumulative effects, before conducting any activities that might affect the species. If you determine that the proposed action will have no effect (i.e., no beneficial or adverse, direct or indirect effect) on federally listed species, then you are not required to contact our office for concurrence (unless an Environmental Impact Statement is prepared). However, you should maintain a complete record of the assessment, including steps leading to your determination of effect, the qualified personnel conducting the assessment, habitat conditions, site photographs, and any other related articles.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

Not all Threatened and Endangered Species that occur in North Carolina are subject to section 7 consultation with the U.S Fish and Wildlife Service. Atlantic and shortnose sturgeon, sea turtles, when in the water, and certain marine mammals are under purview of the National Marine Fisheries Service. If your project occurs in marine, estuarine, or coastal river systems you should also contact the National Marine Fisheries Service, <http://www.nmfs.noaa.gov/>

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office. If you have any questions or comments, please contact John Ellis of this office at john_ellis@fws.gov.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Raleigh Ecological Services Field Office

Post Office Box 33726

Raleigh, NC 27636-3726

(919) 856-4520

Project Summary

Consultation Code: 04EN2000-2021-SLI-0922

Event Code: 04EN2000-2021-E-02023

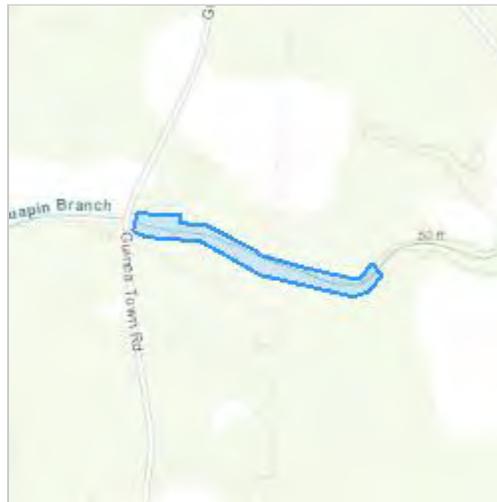
Project Name: Chinquapin Valley Buffer Mitigation

Project Type: LAND - RESTORATION / ENHANCEMENT

Project Description: Chinquapin Valley Buffer Mitigation is a riparian buffer restoration project in Jones county. The project seeks to increase riparian buffer habitat by planting native hardwood trees along the stream present. The chief goals are to reduce nutrient inputs, reduce water temperature, aid in flood events, provide wildlife habitat, and improve overall water quality.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@35.10782845,-77.5166775671762,14z>



Counties: Jones County, North Carolina

Endangered Species Act Species

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Birds

NAME	STATUS
Red-cockaded Woodpecker <i>Picoides borealis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7614	Endangered

Reptiles

NAME	STATUS
American Alligator <i>Alligator mississippiensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/776	Similarity of Appearance (Threatened)

Amphibians

NAME	STATUS
<p>Neuse River Waterdog <i>Necturus lewisi</i></p> <p>There is proposed critical habitat for this species. The location of the critical habitat is not available.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/6772</p>	<p>Proposed Threatened</p>

Fishes

NAME	STATUS
<p>Carolina Madtom <i>Noturus furiosus</i></p> <p>There is proposed critical habitat for this species. The location of the critical habitat is not available.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/528</p>	<p>Proposed Endangered</p>

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Species Conclusions Table

Project Name: Chinquapin Buffer Mitigation Site

Date: 3/29/2021

Species / Resource Name	Conclusion	ESA Section 7 / Eagle Act Determination	Notes / Documentation
Northern Long-eared Bat <i>Myotis septentrionalis</i>	No suitable habitat	No effect	There are no trees, caves, or any other crevices that would provide roosting habitat.
Red-cockaded Woodpecker <i>Picoides borealis</i>	No suitable habitat	No effect	The Action Area does not consist of any fire-dependent open, mature, longleaf or southern pine forests or foraging grounds needed to support this species.
American Alligator <i>Alligator mississippiensis</i>	No suitable habitat	No effect	The Action Area has insufficient habitat, lack of open water, and lack of nesting / foraging areas.
Neuse River Waterdog <i>Necturus lewisi</i>	No suitable habitat	No effect	No gravel, bedrock, cover, and stream flow does not support suitable habitat for the Neuse-River Waterdog
Carolina Madtom <i>Noturus furiosus</i>	No suitable habitat	No effect	Suitable substrate not present, stream flow not suitable, water quality not supportive.
Critical Habitat	No critical habitat present	No effect	n/a
Bald Eagle	Unlikely to disturb nesting bald eagles	No Eagle Act Permit Required	Project is more the 660 feet from any potential or known bald eagle nest or any roosting/nesting trees.
Northern Long-eared Bat	No suitable habitat	No effect	No tree cutting or tree removal will occur.

Acknowledgement: I agree that the above information about my proposed project is true. I used all of the provided resources to make an informed decision about impacts in the immediate and surrounding areas.

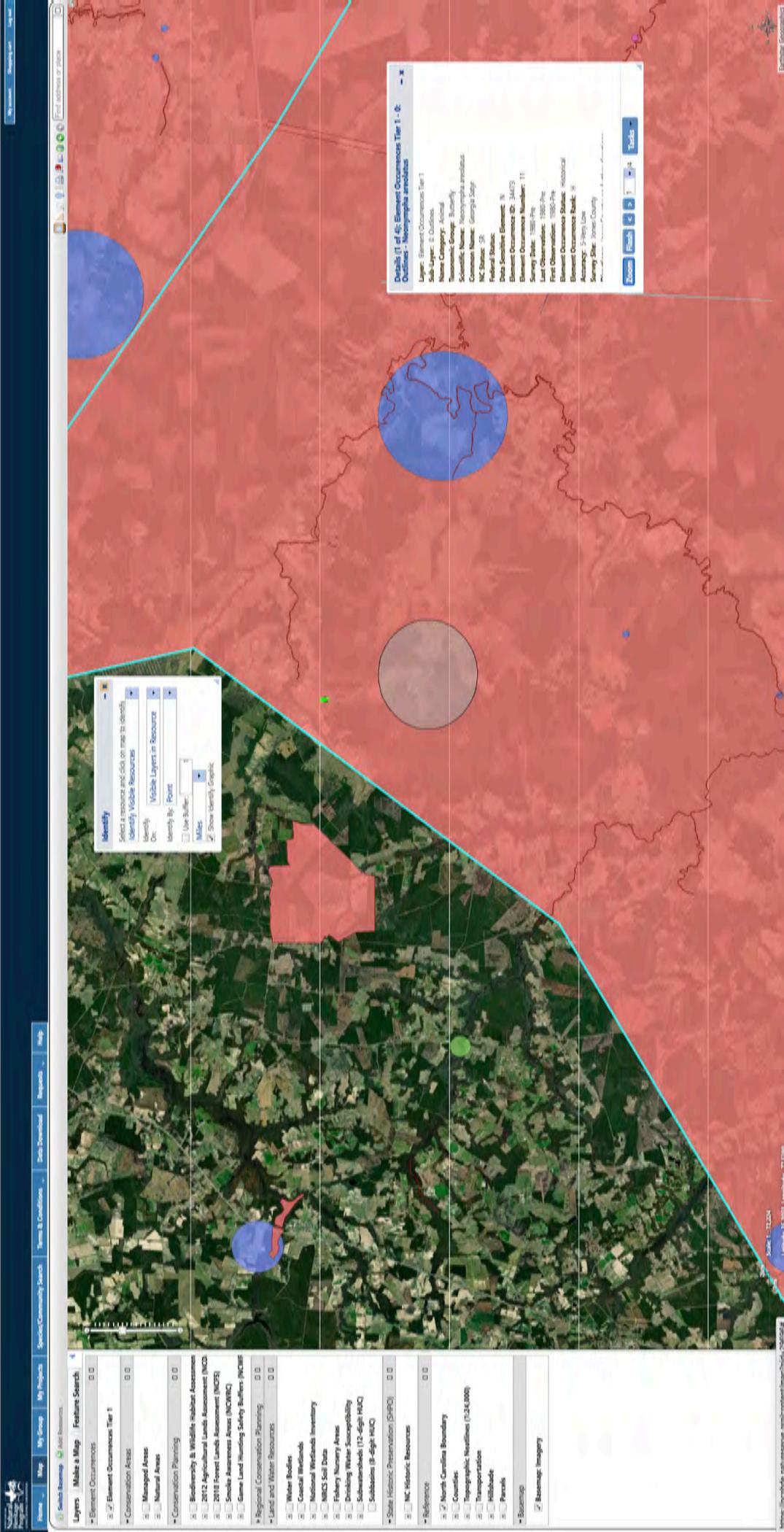
Scott J Frederick / Environmental Scientist



3/30/2021

Signature /Title

Date



Details (1 of 4): Element Occurrence Tier 1 - Q

Layer: Element Occurrence Tier 1
 Sub-Layer: Q Occurrences
 Name Category: Actual
 Scientific Name: *Myrica asplachnoides*
 Common Name: Georgia Sedge
 NC Status: SR
 Federal Status:
 Data Source: Element Occurrence
 Element Occurrence ID: 34473
 Element Occurrence Number: 11
 Last Observation: 1982-7he
 First Observation: 1982-7he
 Element Occurrence Status: Historical
 Element Occurrence Rank: R
 Accuracy: 2-Meter Line
 Accuracy Date: 2005-04-01

Tools

Identify

Select a resource and click on map to identify.

Identify Visible Resources

Identify On: Visible Layers in Resource

Identify By: Point

Use Buffer: Miles

Show Identify Graphic

- Switch Basemap
- Layers
- Make a Map
- Features Search
- Element Occurrences
- Conservation Areas
- Management Areas
- Natural Areas
- Conservation Planning
- Biodiversity & Wildlife Habitat Assessment
- 2012 Agricultural Lands Assessment (NCO)
- 2010 Forest Lands Assessment (NCO)
- Soils Assessment Areas (NCO/WC)
- Game Land Hunting Safety Buffers (NCO/WC)
- Regional Conservation Planning
- Land and Water Resources
- Water Bodies
- Coastal Wetlands
- NCO Wetlands Inventory
- NCO Soil Data
- Fishing Nursery Areas
- Drinking Water Acceptability
- Subwatersheds (10-digit NCO)
- Subwatersheds (8-digit NCO)
- State Historic Preservation (SHPO)
- NC Historic Resources
- Reference
- North Carolina Boundary
- Counties
- Topographic NodeLine (1:24,000)
- Transportation
- Wetlands
- Parcels
- Basemap
- Basemap: Imagery

Scale: 1:12,204
 UTM Zone 18N
 UTM Zone 18N
 UTM Zone 18N

Uniform Relocation Assistance and Real
Property Acquisition Polices Act (Uniform
Act)



March 10, 2021

Hobert K Sanderson
1929 Guinea Town Rd.
Kinston, NC 28501

Re: Chinquapin Buffer Mitigation Site: Division of Mitigation Services Project
in Jones County

Dear Hobert,

In accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Buyer hereby notifies Seller that: (i) Buyer believes that the fair market value of the Mitigation Values of the Mitigation Property is an amount equal to the Purchase Price; and (ii) Buyer does not have the power of eminent domain.

The purpose of this letter is to notify you that Eco Terra Partners, LLC and The State of North Carolina, in offering to purchase your property in Jones county, North Carolina, does not have the power to acquire it by eminent domain. Also, Eco Terra Partners, LLC's offer to purchase your property is based on what we believe to be its fair market value.

No response is needed.

Sincerely,

Jamey O'Shaughnessey

Assistant Project Manager
Jamey@ecoterra.com
W: 984-222-5116

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

Chinquapin Valley Buffer Mitigation Site

-

Trenton, NC 28585

Inquiry Number: 6427622.2s

March 30, 2021

The EDR Radius Map™ Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Executive Summary	ES1
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Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

-
TRENTON, NC 28585

COORDINATES

Latitude (North):	35.1077580 - 35° 6' 27.92"
Longitude (West):	77.5162670 - 77° 30' 58.56"
Universal Transverse Mercator:	Zone 18
UTM X (Meters):	270657.4
UTM Y (Meters):	3887692.8
Elevation:	55 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5944930 COMFORT, NC
Version Date:	2013
Southeast Map:	5945481 PHILLIPS CROSSROADS, NC
Version Date:	2013

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140524, 20140706
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:

TRENTON, NC 28585

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
--------	-----------	---------	-------------------	--------------------	----------------------------

NO MAPPED SITES FOUND

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing
SEMS..... Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators
RCRA-VSQG..... RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System

EXECUTIVE SUMMARY

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROLS..... Institutional Controls Sites List

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

NC HSDS..... Hazardous Substance Disposal Site

State- and tribal - equivalent CERCLIS

SHWS..... Inactive Hazardous Sites Inventory

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... List of Solid Waste Facilities
OLI..... Old Landfill Inventory
DEBRIS..... Solid Waste Active Disaster Debris Sites Listing
LCID..... Land-Clearing and Inert Debris (LCID) Landfill Notifications

State and tribal leaking storage tank lists

LAST..... Leaking Aboveground Storage Tanks
LUST..... Regional UST Database
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land
LUST TRUST..... State Trust Fund Database

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
UST..... Petroleum Underground Storage Tank Database
AST..... AST Database
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

INST CONTROL..... No Further Action Sites With Land Use Restrictions Monitoring

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing
VCP..... Responsible Party Voluntary Action Sites

State and tribal Brownfields sites

BROWNFIELDS..... Brownfields Projects Inventory

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

EXECUTIVE SUMMARY

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY.....	Recycling Center Listing
HIST LF.....	Solid Waste Facility Listing
INDIAN ODI.....	Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9.....	Torres Martinez Reservation Illegal Dump Site Locations
ODI.....	Open Dump Inventory
IHS OPEN DUMPS.....	Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL.....	Delisted National Clandestine Laboratory Register
US CDL.....	National Clandestine Laboratory Register

Local Land Records

LIENS 2.....	CERCLA Lien Information
--------------	-------------------------

Records of Emergency Release Reports

HMIRS.....	Hazardous Materials Information Reporting System
SPILLS.....	Spills Incident Listing
IMD.....	Incident Management Database
SPILLS 90.....	SPILLS 90 data from FirstSearch
SPILLS 80.....	SPILLS 80 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR.....	RCRA - Non Generators / No Longer Regulated
FUDS.....	Formerly Used Defense Sites
DOD.....	Department of Defense Sites
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR.....	Financial Assurance Information
EPA WATCH LIST.....	EPA WATCH LIST
2020 COR ACTION.....	2020 Corrective Action Program List
TSCA.....	Toxic Substances Control Act
TRIS.....	Toxic Chemical Release Inventory System
SSTS.....	Section 7 Tracking Systems
ROD.....	Records Of Decision
RMP.....	Risk Management Plans
RAATS.....	RCRA Administrative Action Tracking System
PRP.....	Potentially Responsible Parties
PADS.....	PCB Activity Database System
ICIS.....	Integrated Compliance Information System
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS.....	Material Licensing Tracking System
COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees

EXECUTIVE SUMMARY

INDIAN RESERV.	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
FINDS	Facility Index System/Facility Registry System
UXO	Unexploded Ordnance Sites
DOCKET HWC	Hazardous Waste Compliance Docket Listing
ECHO	Enforcement & Compliance History Information
FUELS PROGRAM	EPA Fuels Program Registered Listing
AIRS	Air Quality Permit Listing
ASBESTOS	ASBESTOS
COAL ASH	Coal Ash Disposal Sites
DRYCLEANERS	Drycleaning Sites
Financial Assurance	Financial Assurance Information Listing
NPDES	NPDES Facility Location Listing
UIC	Underground Injection Wells Listing
AOP	Animal Operation Permits Listing
MINES MRDS	Mineral Resources Data System
SEPT HAULERS	Permitted Septage Haulers Listing
PCSRP	Petroleum-Contaminated Soil Remediation Permits
CCB	Coal Ash Structural Fills (CCB) Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto	EDR Exclusive Historical Auto Stations
EDR Hist Cleaner	EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS	Recovered Government Archive State Hazardous Waste Facilities List
RGA LF	Recovered Government Archive Solid Waste Facilities List
RGA LUST	Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

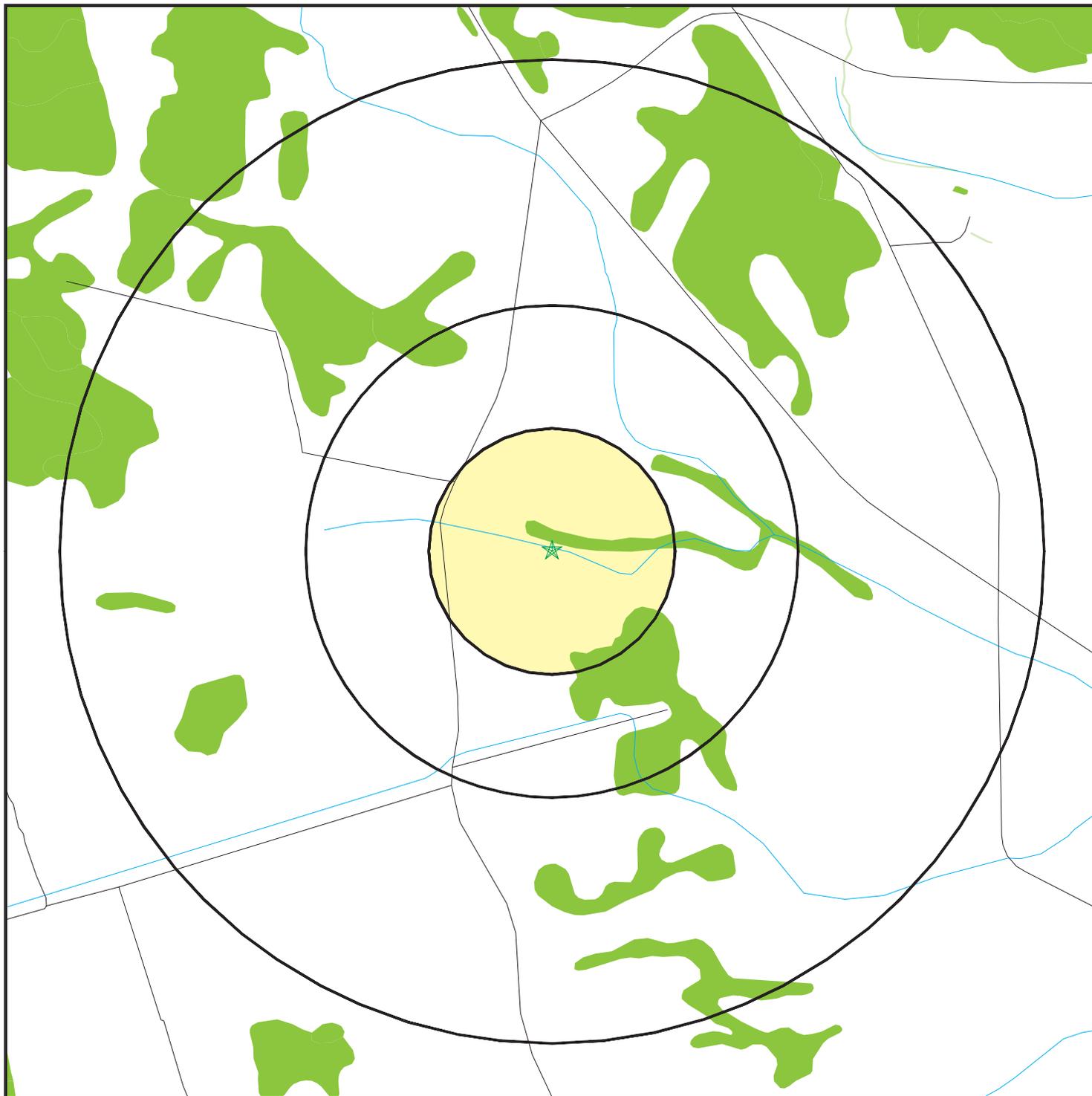
Surrounding sites were not identified.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

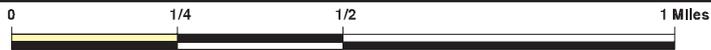
There were no unmapped sites in this report.

OVERVIEW MAP - 6427622.2S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- ☒ National Priority List Sites
- ☒ Dept. Defense Sites

- ☒ Indian Reservations BIA
- National Wetland Inventory
- State Wetlands
- ☒ Hazardous Substance Disposal Sites

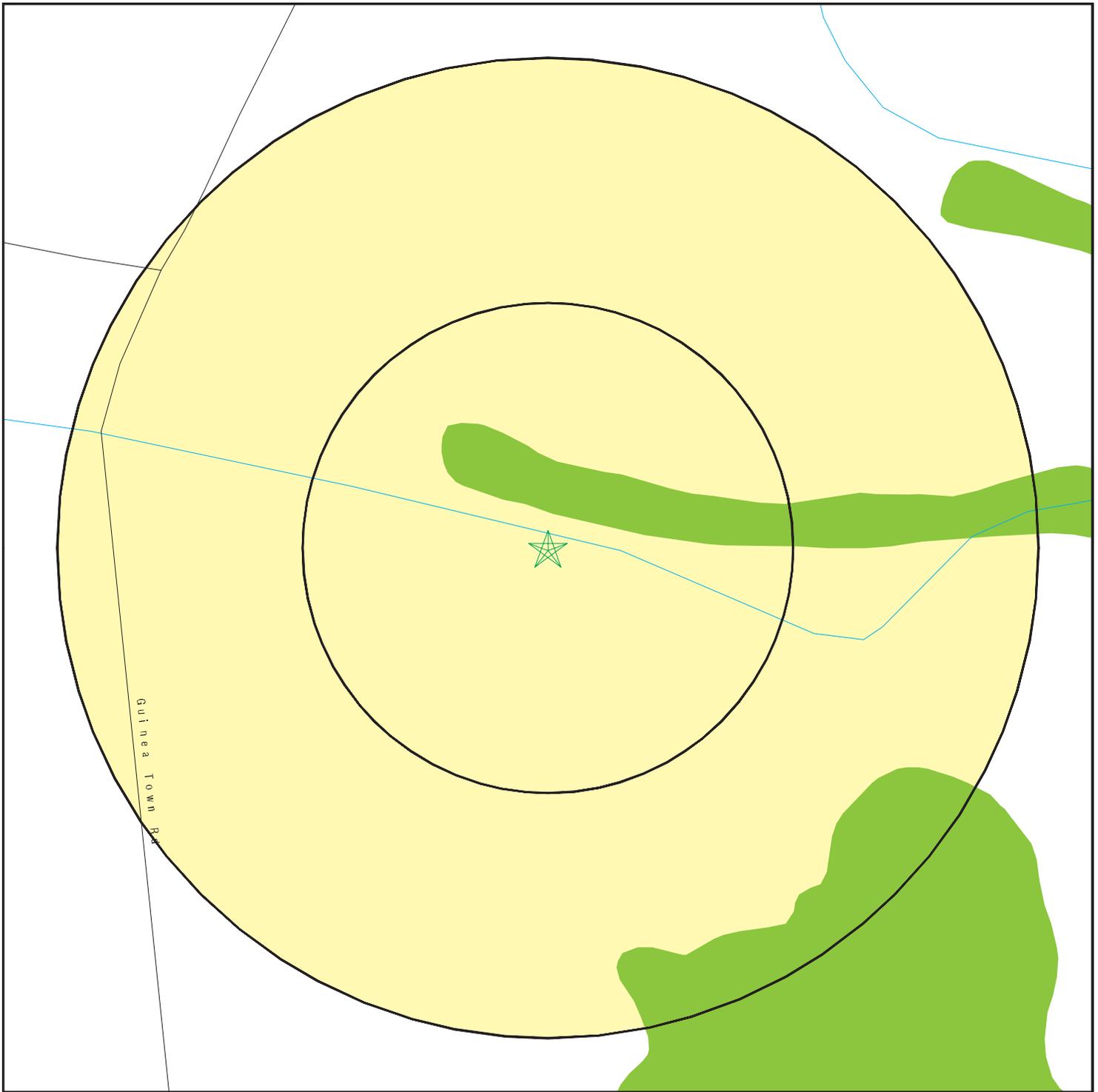


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Chinquapin Valley Buffer Mitigation Site
 ADDRESS: -
 Trenton NC 28585
 LAT/LONG: 35.107758 / 77.516267

CLIENT: Eco Terra Management, LLC
 CONTACT: Jamey Oshaughnessey
 INQUIRY #: 6427622.2s
 DATE: March 30, 2021 1:04 pm

DETAIL MAP - 6427622.2S



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- Sensitive Receptors
- ▨ National Priority List Sites
- ▨ Dept. Defense Sites

- ▨ Indian Reservations BIA
- National Wetland Inventory
- State Wetlands
- ▨ Hazardous Substance Disposal Sites



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Chinquapin Valley Buffer Mitigation Site
 ADDRESS: -
 Trenton NC 28585
 LAT/LONG: 35.107758 / 77.516267

CLIENT: Eco Terra Management, LLC
 CONTACT: Jamey Oshaughnessey
 INQUIRY #: 6427622.2s
 DATE: March 30, 2021 1:06 pm

Farmland Protection Policy Act (FPPA)



Natural Resources
Conservation Service

April 26, 2021

North Carolina
State Office

Jamey O'Shaughnessey
Environmental Associate
Eco Terra Management LLC
1117 Peachtree Walk NE; Suite 126
Atlanta, GA 30309

4407 Bland Rd.
Suite 117
Raleigh
North Carolina 27609
Voice (704) 680-3541
Fax (844) 325-2156

Dear Jamey O'Shaughnessey;

The following information is in response to your request soliciting comments regarding the Proposed Chinquapin Valley Buffer Mitigation Site in Jones County, NC.

Projects are subject to Farmland Protection Policy Act (FPPA) requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a Federal agency or with assistance from a Federal agency.

For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forest land, pastureland, cropland, or other land, but not water or urban built-up land. Farmland means prime or unique farmlands as defined in section 1540(c)(1) of the Act or farmland that is determined by the appropriate state or unit of local government agency or agencies with concurrence of the Secretary to be farmland of statewide or local importance.

"Farmland" does not include land already in or committed to urban development or water storage. Farmland "already in" urban development or water storage includes all such land with a density of 30 structures per 40-acre area. Farmland already in urban development also includes lands identified as "urbanized area" (UA) on the Census Bureau Map, or as urban area mapped with a "tint overprint" on the USGS topographical maps, or as "urban-built-up" on the USDA Important Farmland Maps. See over for more information.

The area in question includes land classified as Prime Farmland. In accordance with the Code of Federal Regulations 7CFR 658, Farmland Protection Policy Act, the AD-1006 was initiated. NRCS Completed Parts II, IV, V of the form and returned for completion by the requesting agency.

If you have any questions, please feel free to call me at (704) 680-3541 office or (704) 754-6734 cell.

Sincerely,

Kristin L May
Acting State Soil Scientist

cc:

Petra Volinski, supervisory soil conservationist, NRCS, New Bern, NC

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request			
Name of Project		Federal Agency Involved			
Proposed Land Use		County and State			
PART II (To be completed by NRCS)		Date Request Received By NRCS		Person Completing Form:	
Does the site contain Prime, Unique, Statewide or Local Important Farmland? <i>(If no, the FPPA does not apply - do not complete additional parts of this form)</i>		YES <input type="checkbox"/>	NO <input type="checkbox"/>	Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %	Amount of Farmland As Defined in FPPA Acres: %			
Name of Land Evaluation System Used	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS			
PART III (To be completed by Federal Agency)		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly					
B. Total Acres To Be Converted Indirectly					
C. Total Acres In Site					
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland					
B. Total Acres Statewide Important or Local Important Farmland					
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted					
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value					
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)					
PART VI (To be completed by Federal Agency) Site Assessment Criteria <i>(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)</i>		Maximum Points	Site A	Site B	Site C
1. Area In Non-urban Use		(15)			
2. Perimeter In Non-urban Use		(10)			
3. Percent Of Site Being Farmed		(20)			
4. Protection Provided By State and Local Government		(20)			
5. Distance From Urban Built-up Area		(15)			
6. Distance To Urban Support Services		(15)			
7. Size Of Present Farm Unit Compared To Average		(10)			
8. Creation Of Non-farmable Farmland		(10)			
9. Availability Of Farm Support Services		(5)			
10. On-Farm Investments		(20)			
11. Effects Of Conversion On Farm Support Services		(10)			
12. Compatibility With Existing Agricultural Use		(10)			
TOTAL SITE ASSESSMENT POINTS		160			
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100			
Total Site Assessment (From Part VI above or local site assessment)		160			
TOTAL POINTS (Total of above 2 lines)		260			
Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>			
Reason For Selection:					
Name of Federal agency representative completing this form:					Date:

(See Instructions on reverse side)

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

- Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, <http://fppa.nrcs.usda.gov/lesa/>.
- Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s) of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)
- Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.
- Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.
- Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.
- Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.
- Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.
2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.

Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site A}$$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.