# DRAFT MITIGATION PLAN MAPLE SWAMP BUFFER MITIGATION SITE

Edgecombe County, NC
NCDEQ Contract No. 200208-01
NCDMS ID No. 100189
NCDWR Project No. 2021-0614v2
RFP No. 16-20200208



Tar-Pamlico River Basin HUC 03020102

August 2021 (Revised December 6, 2021)

**Prepared For:** 

NC Department of Environmental Quality
Division of Mitigation Services
1652 Mail Service Center, Raleigh, NC 27699-1652







December 6, 2021

Lindsay Crocker 1652 Mail Service Center Raleigh, NC 27699-1652

Subject: Task 3 Draft Mitigation Plan Comments (DWR) – Maple Swamp Buffer Mitigation Site (DMS #100189) Tar-Pamlico 03020102; Edgecombe County, NC, Contract No. 200208-01

Dear Lindsay,

SWE/Eco Terra has addressed comments received by Katie Merritt (DWR) on December 3, 2021 for the Draft Mitigation Plan, Maple Swamp Buffer Mitigation Site. Our responses are below in blue:

- 1. Page 5: Change DWR ID# to 2021-0614v2 Revised.
- 2. Page 5: change 0240 rule reference to the new rule which is 15A NCAC 02B .0703 Revised.
- 3. Page 6: in order to use the diffused (sic) flow reduction policy for ditches, DMS has to request to use the DWR Diffused Flow Clarification Memo (sic). By including the Clarification Memo as an appendix to this Plan, DWR can approve the use of this memo for meeting the diffused (sic) 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.

4. Page 7: Add the following statement to the first paragraph: This Site Plan is being submitted for buffer mitigation credit and nutrient offset credit in the Tar-Pamlico River Basin Hydrologic Unit Code 03020102, in accordance with the Consolidated Buffer Mitigation Rule (15A NCAC 02B .0295) and the Nutrient Offset Credit Trading Rule (15A NCAC 02B 0703) respectively. Completed and both referenced originally on the cover page to provide clarity for the remainder of the document.

5. Page 8: There is a statement that indicates that unbuffered ditches entering the project site are accounted for in the credit calculations. Explain what this means. Also, there needs to be a statement in this paragraph regarding the need to account for "Diffused Flow" (sic). Add a reference to the Clarification Memo that is supposed to be in the Appendix.

The NCDWQ Buffer Interpretation/Clarification #2008-019 Memorandum (August 19, 2008) illustrates how reductions in credits in the vicinity of unbuffered ditches entering a project are calculated. The unbuffered ditch reduction area is accounted for in the credit calculations provided by the most recent version of the Credit Calculation Tool provided by DWR/DMS by not including this area in the "Total Creditable Area Column." However, Comment 15 requests the "non-credit" area be included in Table 9 to illustrate the arithmetic completed for this column. The reference and use of this Memorandum are now included in the Plan/Appendix and Table 9 respectively.





- 6. Page 8: 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.
- 7. Page 9: no language is provided in this table acknowledging that the service area for these credits is limited to the 03020102 HUC. 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.
- 8. Page 14: 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.
- 9. Page 14: 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.
- 10. Page 14: This section needs more information. Define the minimum and maximum widths from TOB for the riparian restoration.
  Revised. Riparian restoration will occur on viable streams for riparian buffer credit and on ditches for nutrient offset credit from a minimum of 50 feet to a maximum of 100 feet and a minimum of 50 feet to a maximum of 60 feet measured landward from TOB, respectively (Figure 9). It was noted during this review that the proposed CE did not overlap the minimum buffer needed for nutrient offset along some vertices and was revised accordingly and all references to the CE.
- 11. Page 14: 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.
  - 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.
- 12. Page 15: 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.





13. Page 15: the rule also requires that a minimum of 4 different species be planted as well. Add language that speaks to this.

As noted in comment 11.

14. Page 15: It is also highly recommended that the Provider agree to include pollinator species in their seed. DWR understands this is not a requirement, and that the Provider does not have to do this.

Therefore, adding it into your plan is only a suggestion and completely voluntary. Noted. Several herbaceous permanent seed mixture species already proposed are considered pollinator species.

15. Page 15: the last sentence in Section 5.3 should speak to "diffused flow" (sic) 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 0.3 ac. The total area in the asset table now reflects this deduction for credit calculation purposes.

16. Page 16: 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" (sic) 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.

- 17. Page 16: the wrong HUC is entered in the table. Correct the HUC. Revised.
- 18. Page 16: add a row to show the Diffused Flow deductions, otherwise, it is assumed that the Total Area 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 Table 9 rows to further clarify how the Buffer-Credit Calculation Tool column "I" "Total (Creditable) Area of Buffer Mitigation (ft<sup>2</sup>)" is derived from column "H" "Total Area (ft<sup>2</sup>)" that accounts for the unbuffered ditch total area (ft<sup>2</sup>) within the project.

- 19. Page 17: change title to "Performance Standards". Revised.
- 20. Page 17: another performance standard in the rule requires at least 4 species of trees. Add language that speaks to this.

  Revised.





- 21. Page 17: 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.
- 22. Page 21: this vicinity map is too blurry. Replace this Figure with one where the names of roads and highways can be deciphered.
  Revised.
- Page 22: clarify that this is the service area for "Riparian Buffer Credits" and "Nutrient Offset Credits" Revised.
- 24. Page 23: label the features and show the DWR Stream Origin points on this map. Revised and included all features affecting site viability for clarity.
- 25. Page 28: label all features on this map that are represented in the Asset Table. I'm not 100% sure the Clarification Memo is being applied correctly to the two ditches outlined in yellow. Check the Clarification Memo and make sure.
  - The NCDWQ Buffer Interpretation/Clarification #2008-019 Memorandum (August 19, 2008) was interpreted to calculate deductions using the limited examples provided for unbuffered ditches entering a given project area. This project results in 0.1 ac deductions for each ditch feature.
- 26. Page 28: this should be called "Diffused Flow deduction" (sic) Revised along with legend edits accordingly.
- 27. Page 29: Label all features represented or reference in the Asset Table and Plan (sic). Revised.
- 28. Page 29: the widths should only be measured off the features being proposed for credits in the Asset Table. the two yellow outlined ditches are not shown in the Asset Table and therefore your measurements here should only be off A1 and A2. Correct this map accordingly. Revised.

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

Sincerely,

Scott J. Frederick SWE Group

sjfrederick@swegrp.com

cc: Norton Webster, Eco Terra

# DRAFT MITIGATION PLAN MAPLE SWAMP BUFFER MITIGATION SITE

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Tar-Pamlico River Basin

HUC 03020102 Prepared For:



# NC Department of Environmental Quality Division of Mitigation Services

1652 Mail Service Center, Raleigh, NC 27699-1652

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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

## **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 (April 1, 2021)

NCDWR Site Viability for Buffer Mitigation Letter (May 14, 2021) NCDWQ Buffer Interpretation/Clarification #2008-019 Memorandum

(August 19, 2008)

Appendix B: Draft Conservation Easement
Appendix C: Signed Categorical Exclusion

Maple Swamp Buffer Mitigation Site-Mitigation Plan DMS No: 100189

## 1.0 Introduction

The Maple Swamp Buffer Mitigation Site is a buffer restoration project located approximately 2.0 miles northeast of Leggett off NC HWY 97 E in Edgecombe County, NC (Figure 1). The Project Site is associated with one parcel owned by RKW Properties, LLC (PIN 4822-75-37-68). The restored riparian corridor will reduce the amount of sediment and nutrients that are entering the Project streams by restoring riparian buffers and other riparian areas and offsetting Nitrogen (N) and Phosphorus (P). This Site Plan is being submitted for buffer mitigation credit and nutrient offset credit in the Tar-Pamlico River Basin Hydrologic Unit Code 03020102, in accordance with the Consolidated Buffer Mitigation Rule (15A NCAC 02B .0295) and the Nutrient Offset Credit Trading Rule (15A NCAC 02B .0703) respectively. All work will be completed within a Project conservation easement comprising 8.13 acres and protected in perpetuity. Furthermore, the site lies adjacent to the 1,290 acre NC Wildlife Resource Commission Lower Fishing Creek Game Lands.

The Maple Swamp Site is located within Hydrologic Unit 03020102060010 in the Tar-Pamlico



NW view at Project origin (June 2020)

River Basin (Figure 2). The project will include the restoration of riparian buffers and other riparian areas along UT to Maple Swamp, within the Fishing Creek watershed and within North Carolina Division of Mitigation (NCDMS) identified Habitat, Hydrology, and Water Quality Targeted Resource Areas (TRA). Maple Swamp is defined as Water Supply (WS-IV) and Nutrient Sensitive Waters (NSW) according the NC Department Environmental Quality (NCDEQ). Maple Swamp drains into Fishing Creek, which is designated as a targeted local watershed in the upper reaches (HUC 03020102040010 and 03020102050010) as

identified in the NCDMS 2018 Tar-Pamlico River Basin Restoration Priorities (RBRP) document.



SE view near Project origin (June 2021)

The restoration of riparian buffer areas addresses the need to limit agricultural nonpoint source inputs as well as promotes restoration of contiguous forested stream and wetland habitat. Furthermore, the chief goal of Tar-Pamlico River Basin's 2018 RBRP for the 8-digit CU is to "Protect, augment, and connect Natural Heritage Areas and other conservation lands." The Maple Swamp Mitigation Project directly achieves this goal by abutting a Natural Heritage area to the South and lying adjacent to North Carolina Game Lands to the East.

The Maple Swamp Buffer Mitgation Site will help to reduce future sediment and nutrient loading into the unnamed tributary to Fishing Creek and downstream Tar 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. The area surrounding the streams is primarily agricultural fields. 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 areas 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 Maple Swamp 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 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 Tar-Pamlico RBRP. As proposed, the Maple Swamp 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.	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 adjacent to 1,290 ac NC Wildlife Resource Commission Game Lands.	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</i> <i>Statue 143-214.10</i> *^

<sup>\*</sup> HUC: 03020102 RBRP goal, ^ CU: RBRP 030201 goal

## 2.1 Existing Site Conditions

The Project Site is located within one parcel (~356 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 the UT to Maple Swamp stream within the Project Site. Periodic erosion and sediment-laden runoff is entering the channels from these areas during crop rotations. Historical aerials denote that land uses at the Project Site have been in agriculture since at least 1976 (Figure 6). The UT is mapped on the 2013 US Geological Survey's (USGS) Draughn and



Existing Condtion SE view (June 2021)

Tarboro Quadrangles (Figure 1) and on the Natural Resources Conservation Service's (NRCS) 1979 Edgecombe County Soil Survey (Figure 5) as a stream channel. The UT (A2) meets the definition of at least intermittent per the NCDWR On-Site Determination for Applicability to the Tar-Pamlico Buffer Rules Letter and deemed suitable for buffer and nutrient offset credits per the NCDWR Site Viability for Buffer Mitigation Letter. (Appendix A). The UT (A1) is classified as a ditch. Two unbuffered ditches enter the Project on the right bank. Diffuse flow into the project is required and credit deductions from these unbuffered ditches are accounted for in the credit calculations in accordance with the

NCDWQ Buffer Interpretation/Clarification #2008-019 Memorandum (August 19, 2008) found in Appendix A. Attributes associated with the proposed buffer site are provided in Table 2.

Table 2: Buffer Project Attributes

Project Name	Maple Swamp Buffer Mitigation Site				
Hydrologic Unit Code (Service Area)	03020102				
River Basin	Tar-Pamlico				
Geographic Location (decimal degrees)	36.008912, -77.556057				
Site Protection Instrument	Conservation Easement				
Types of Credits	Riparian Buffer (293,584.000), Nutrient Offset (985.601 lbs N, 63.480 lbs P)				
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				

## 2.2 Watershed Characterization

The proposed Project is located in Edgecombe County, approximately 2.0 miles northeast of the Town of Leggett off NC HWY 97E (Figure 1).

The Project UT is located in HUC 03020102060010, as a tributary to Maple Swamp and within the greater Fishing Creek watershed that ultimately flows into the Tar River. This watershed is designated as a TRA for Hydrology, Water Quality, and Habitat according to NCDMS. According to the 2018 RBRP, nearly half of the 55-square mile Tar River drainage area consists of agriculturally related landuses and 42% of the land is either wetland or forested. The watershed consists of a mixture of forest land (~50%) and agriculture (~30-40%), both row crops and permitted animal operations. Edgecombe County remains mostly undeveloped aside from the areas in and surrounding the Rocky Mount, Tarboro, and Princeville. The County's population has decreased 9.0% 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 each unnamed tributary. Table 3 describes the current land use and drainage area for each unnamed tributary.

Table 3: Drainage Area and Land Use

Reach Name	NCDWR Stream Designation	Watershed Area Upstream/Downstream (acres)	Land Use		
A2	Intermittent (at least)	112 / 143	91% Agriculture/ 9% Forested		

## 2.3 Soils

Elevations at and surrounding the Project Site are nearly level to gently sloping through the stream valley. Soils underlying the area are mapped as silt loam and fine sandy and consist of the Roanoke and Altavista soils respectively (Figure 5). Specific soil mapping units are listed in Table 4.

Table 4: Maple Swamp Buffer Site Soil Series

Soil Name	Map Unit Symbol	Hydric Soil Rating (USDA-NRCS Web Soil Survey)		
Roanoke silt loam 0-2% slopes	Ro	C (drained)/D (undrained)		
Altavista fine sandy loam, 0-3% slopes	AaA	С		

Source: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx, accessed April, 2021

The Altavista (AaA) soils are very poorly drained soils found along streams and depressions. These soils formed in old loamy alluvium loamy sediments on stream terraces and valleys in the Coastal Plain region. Altavista soils have moderate permeability and the water table is typically 18-30 inches during the dormant season December through April.

Roanoke (Ro) soils are very poorly drained soils found along a variety of landscape positions including stream terraces, depressions, valleys, and backswamps. These soils formed in old clayey alluvium and have slow to very slow permeability and the water table is less than 12 inches for six to seven months out of the year. An image of the printed (NRCS) 1979 soil survey map of the Project is shown in Figure 5. Geologically, the Project Site is located within the Coastal Plain physiographic province. Coastal Plain stream systems are typically 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.

## 2.4 Geology

The Project Site is located within the Rolling Coastal Plain of the Middle and Upper Coastal Plains physiographic province. Both the Middle and Upper Coastal Plains are characterized by broad, flat terraces adjacent to low-gradient stream channels with elevations ranging from 300-1,000 feet. Coastal Plain stream systems are typically 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. The Site is located in the Yorktown and Duplin Formation and is characterized by fossiliferous clay with varying amounts of fine grained sand.

## 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. 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 NC 97. A permanent general access easement from NC 97 will be recorded as part of the project. There are no public use airports within a five-mile radius of the Project.

Directions from Raleigh:

- Follow US-64 East Bypass to exit 470 for Atlantic Avenue
- Turn right onto NC-97 East/Atlantic Avenue and follow for 1.3 miles
- Turn right onto NC-97 East and follow for ~11.0 miles to the Town of Leggett

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• Continue on NC-97 and turn left onto a gated dirt road after passing the NCWRC Game Lands Entrance.

## 2.7 Site Resources

The Site has been in agricultural production since at least 1976 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 for the past 75 years. NCDWR staff visited the Site on to determine subjectivity of on-site water resources to the Tar-Pamlico buffer rules and their suitability for riparian buffer mitigation per the Consolidated Buffer Mitigation Rule (15A NCAC 02B .0295). The unnamed tributary was found to be suitable for riparian buffer mitigation in the Tar-Pamlico River Basin. Additionally, a Site Viability review was completed by NCDWR to determine site suitability for the establishment of riparian buffers for buffer mitigation credits and other riparian areas for nutrient offset credits. The resulting NCDWR response letters are in Appendix A.

## 3.0 Site Protection Instrument

## 3.1 Site Protection Instrument Summary Information

The property needed to restore the riparian buffer and other riparian areas, access the easement, and manage the Site 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 RKW Properties, LLC. (Table 5). An option agreement for the project area was signed by the property owners and was recorded at the Edgecombe 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	Acreage in Conservation Easement	Deed Book and Page Number	Site Protection Instrument	Identified Conservation Easement Holder
3880-38-6335	Edgecombe	RKW Properties, LLC	8.13 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	<b>Supporting Documentation</b>
Waters of the U.SSection 404	No	N/A	N/A
Waters of the U.SSection 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 two federally threatened and endangered species and three proposed 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 dated April, 2021, identified no known occurrences of federally listed species within one mile of the Project Site.

Table 7: Federally Listed Species for Edgecombe County

Scientific Name	Common Name	Federal Status*	Suitable Habitat
Haliaeetus leucocephalus	Bald Eagle	BGPA	No
Picoides borealis	Red-cockaded woodpecker	E	No
Necturus lewisi	Neuse River waterdog	PT	No
Noturus furiosus	Carolina madtom	PE	No
Fusconaia masoni	Atlantic pigtoe	PT	No
Parvaspina steinstansana	Tar River spinymussel	E	No

<sup>\*</sup> 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, one historical

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resource; Wilkinson-Hurdle House occurs within one mile of the Project, but is not listed on the National Register of Historic Places. 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.

#### **Other Environmental Issues** 4.4

An EDR Radius Map Report with Geocheck 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 buffer areas to an unnamed tributary to Fishing Creek and ultimately to the Tar 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. 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. 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 aquatic safe 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.

Maple Swamp Buffer Mitigation Site-Mitigation Plan DMS No: 100189

## 5.2 Riparian Buffer Area 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 50 feet to a maximum of 100 feet for riparian buffer credit and a minimum of 50 feet to a maximum of 60 feet for nutrient offset credit, measured from TOB (Figure 9). Proposed tree species are shown in Table 8.

Table 8: Suitable Species List

Scientific Name	Common Name	Planting Zone	Strata	%
Nyssa sylvatica biflora	Swamp blackgum	Floodplain	Canopy	<5
Platanus occidentalis	Sycamore	Floodplain	Canopy	10
Betula nigra	River birch	Floodplain	Canopy/Understory	10
Diospyros virginiana	Persimmon	Floodplain	Canopy/Understory	10
Quercus laurifolia	Laurel oak	Floodplain	Canopy	10
Fraxinus pennsylvanica	Green ash*	Floodplain	Canopy	<5
Liriodendron tulipifera	Tulip poplar	Floodplain	Canopy	<5
llex opaca	American holly	Floodplain	Understory	<5
Carpinus caroliniana	American hornbeam	Floodplain	Understory	<5
Quercus nigra	Water oak	Floodplain	Canopy	15
Quercus phellos	Willow oak	Floodplain	Canopy	15
Quercus falcatta var. pagodaefolia	Cherrybark oak	Floodplain	Canopy	15
Quercus shumardii	Shumard oak	Floodplain	Canopy	10
Cornus amomum	Silky dogwood	Floodplain	Understory	<5
Sorgastrum nutans	Indian grass	Permanent Seed Mixture	Herb	n/a
Agrostis alba	Redtop	Permanent Seed Mixture	Herb	n/a
Andropogon geradii	Big bluestem	Permanent Seed Mixture	Herb	n/a
Panicum virgatum	Switchgrass	Permanent Seed Mixture	Herb	n/a
Setaria italica	Foxtail millet	Temporary Seed Mixture	Herb	n/a
Pennisetum glaucum	Pearl top millet	Temporary Seed Mixture	Herb	n/a

<sup>\*</sup> Represents <5% of total stems

Trees will be planted at a density sufficient to meet the performance standards outlined in the Rule 15A NCAC 02B .0295 of 260 stems 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 and permanent seed mix species are found in Table 8. Vegetation management and herbicide applications will 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 are based on surveyed top of banks of the ditch (A1) and unnamed tributary (A2) and conservation easement. All areas within 100 linear feet of the top of bank will be planted and counted as a buffer mitigation unit (Figures 8 and 9). Areas designated for nutrient offset within 50 linear feet of the top of bank will be planted similarly. Credit calculations were done according to the most recent version of the DWR Credit Calculation Tool (V3, August 2020) and guideance documents; NCDWQ Methodology for Determining Nutrient Reductions Associated with Riparian Buffer Establishment (1998), NCDWQ Buffer Interpretation/Clarification #2008-019 Memorandum (August 19, 2008), and NCDEQ/DWR Clarified Procedures for Calculating Buffer Mitigation Credits & Nutrient Offset Credits (November 2019). These guidance help fulfill requirements for providing a nutrient load reduction estimate in accordance with 15A NCAC 02B .0703. 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 0.3 ac. The total area in the asset table (Table 9) reflects this deduction for credit calculation purposes.

## 6.0 Montoring 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 assists in population of DMS databases and assist in the close-out process. Table 10 summarizes the proposed monitoring plan components associated with this project.

Maple Swamp Buffer Mitigation Site-Mitigation Plan DMS No: 100189

r-LI- 0 84I- 6-	n. #			D	2 504 000 0441	054 000 II N 55 054 II										
able 9. Maple S	wamp Butter M	itigation Site, L	WIS NO: 100189	, Project Credits: 29	3,604.000 BMU,	854.880 lb N, 55.061 lb	· P									
	Tar-Pamlico	03020102		Project Area												
	19.16	394		N Credit Conversion	n Ratio (ft²/pound)											
	297.54	1099		P Credit Conversion	Ratio (ft²/pound)											
Credit Type	Location	Subject? (enter NO if ephemeral or ditch <sup>1</sup> )	Feature Type	Mitigation Activity	Min-Max Buffer Width (ft)	Feature Name	Total Area (ft²)	Total (Creditable) Area of Buffer Mitigation (ft <sup>2</sup> )	Initial Credit Ratio (x:1)	% Full Credit	Final Credit Ratio (x:1)	Convertible to Riparian Buffer?	Riparian Buffer Credits	Convertible to Nutrient Offset?	Delivered Nutrient Offset: N (lbs)	Delivered Nutrient Offse P (lbs)
Buffer	Rural	Yes	I/P	Restoration	0-100	A2	293,584	293,584	1	100%	1.00000	N/A	293,584.000	Yes	15,319.605	986.701
Nutrient Offset	Rural	No	Ditch	Restoration	0-100	A1	18,888	18,888	1	100%	1.00000	No	_	Yes	985.601	63.480
Buffer	Rural	Yes	Ditch	Restoration	0-100	Ditch 2 (diffused flow reduction)	4,356	0	1	100%		No	-	No	-	-
Buffer	Rural	No	Ditch	Restoration	0-100	Ditch 1 (diffused flow reduction)	4,356	0	1	100%		No	-	No	-	-
Nutrient Offset	Rural	No	Ditch	Restoration	0-50	A1 (diffused flow reduction)	4,356	0	1	100%		No	-	No	-	-
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						Totals (ft2):	325,540	312,472					293,584.000		16,305.207	1,050.181
						Total Buffer (ft2):	302,296	293,584								-,
					To	otal Nutrient Offset (ft2):	23,244	N/A								
						, ,										
					Total Ephem	eral Area (ft²) for Credit:	0	0								
						ble Ephemeral Area (ft²):	75,574	0.0%	Enhemeral Re	aches as % TABI	м					
nter Preservation	Credits Relow					ble for Preservation (ft <sup>2</sup> ):	100,765	0.0%	Preservation a							
Credit Type	Location	Subject?	Feature Type	Mitigation Activity	Min-Max Buffer Width (ft)	Feature Name	Total Area (sf)	Total (Creditable) Area for Buffer	Initial Credit Ratio (x:1)	% Full Credit	Final Credit Ratio (x:1)	Riparian Buffer Credits				
								Mitigation (ft <sup>2</sup> )			(A.1)	Cicuits				
	Rural	Yes	I/P		0-100				10	100%		-				
	Rural	Yes	Ephemeral		0-100				10	100%		-				
												-				
												_				
												_				
					Preserva	tion Area Subtotals (ft²):	0	0								
	AREA OF BUFFER			1												
Mitigatio		Square Feet	Credits													
Restora		293,584	293,584.000													
Enhance		0	0.000													
Preserv		0	0.000													
Total Ripari		293,584	293,584.000													
	TAL NUTRIENT OF				Credit conversion	ns must be calculated usin	ng the guidance or	ovided in the Clarif	ied Procedures	for Calculating	Buffer Mitigati	on Credits				
Mitigation	n Totals	Square Feet	Credits			et Credits letter issued by				8	- Integration					
IVIILIGALIO								ciliber 2013 and lo								
Nutrient Offset:	Nitrogen: Phosphorus:	23,244	985.601 63.480			ov/ncdeq/Water%20Qual				/Issues—Resolu	tions-Ver-1.0	buffer-				

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 survivial. 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 10.

## 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 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 Statue 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.
- 15A NCAC 02B .0703 Nutrient Offset Trading. 2020.
- N.C. Department of Water Quality Methodology for Determining Nutrient Reductions Associated with Riparian Buffer Establishment. 1998.
- N.C. Department of Water Quality Buffer Interpretation/Clarification #2008-019 Memorandum August 19, 2008.
- N.C. Department of Environmental Quality. Division of Water Resources. Clarified Procedures for Calculating Buffer Mitigation Credits & Nutrient Offset Credits for Riparian Projects Regulated under 15A NCAC 02B .0295 and 15A NCAC 02B .0240. November 21, 2019.

Maple Swamp Buffer Mitigation Site-Mitigation Plan DMS No: 100189

- N.C. Department of Environmental Quality. Division of Mitigation Services. 2018. Tar-Pamlico River Basin Restoration Priorities.
- N.C. Department of Natural and Cultural Resources. N.C. State Historic Preservation Office. 2021. (http://gis.ncdcr.gov/hpoweb/) (Accessed April, 2021).
- N.C. Floodplain Mapping Program. 2021. N.C. Flood Risk Information System. (https://fris.nc.gov/fris/Index.aspx?FIPS=145&ST=NC&user=General%20Public) (Accessed April, 2021).
- NC Natural Heritage Program Data Explorer. 2021. <a href="https://ncnhde.natureserve.org/">https://ncnhde.natureserve.org/</a> (Accessed May, 2021).
- Schafale, M.P. 2012. Classification of the Natural Communities of North Carolina: Fourth Approximation. North Carolina Natural Heritage Program, Division of Parks and Recreation, NCDEHNR. Raleigh, North Carolina. 208 pp.
- U.S. Census Bureau. 2020. QuickFacts, Edgecombe County, North Carolina. Updated 21 October, 2020 https://www.census.gov/quickfacts/fact/table/edgecombecountynorthcarolina,US/POP01 0210
- U.S. Department of Agriculture. Natural Resources Conservation Service. 1979. Soil Survey of Edgecombe County, North Carolina.
- U.S. Department of Agriculture. Natural Resources Conservation Service. 2021. Web Soil Survey. (https://websoilsurvey.nrcs.usda.gov/app/). (Accessed April, 2021).
- U.S. Fish and Wildlife Service, 2020. Endangered Species, Threatened Species, Federal Species of Concern, and Candidate Species, Edgecombe County, North Carolina. Updated May, 2021. <a href="https://www.fws.gov/raleigh/species/cntylist/edgecombe.html">https://www.fws.gov/raleigh/species/cntylist/edgecombe.html</a>
- U.S. Geological Survey. 2013. Draughn and Tarboro. 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. 2018. StreamStats. (https://streamstats.usgs.gov/ss/) (Accessed April, 2021).

DMS No: 100189 December 2021

## **FIGURES**

Maple Swamp Buffer Mitigation Site-Mitigation Plan DMS No: 100189

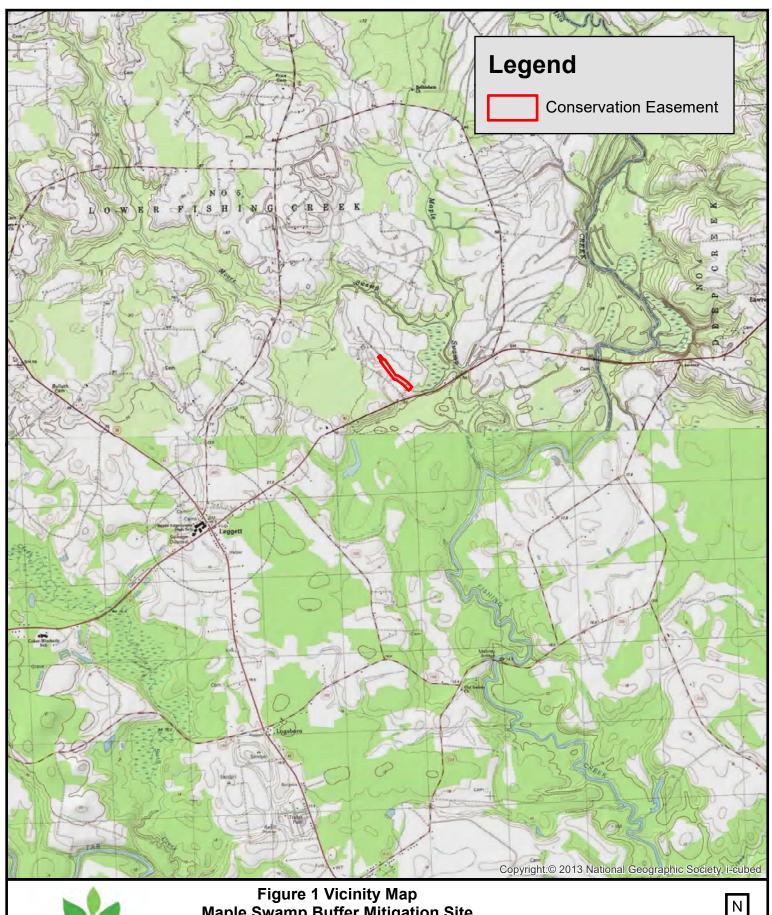




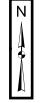
Figure 1 Vicinity Map
Maple Swamp Buffer Mitigation Site
Tar-Pam 03020102
Edgecombe County, North Carolina
December 2021

December 2021 Feet
USA Topo Maps

4,000

2,000

0



4,000

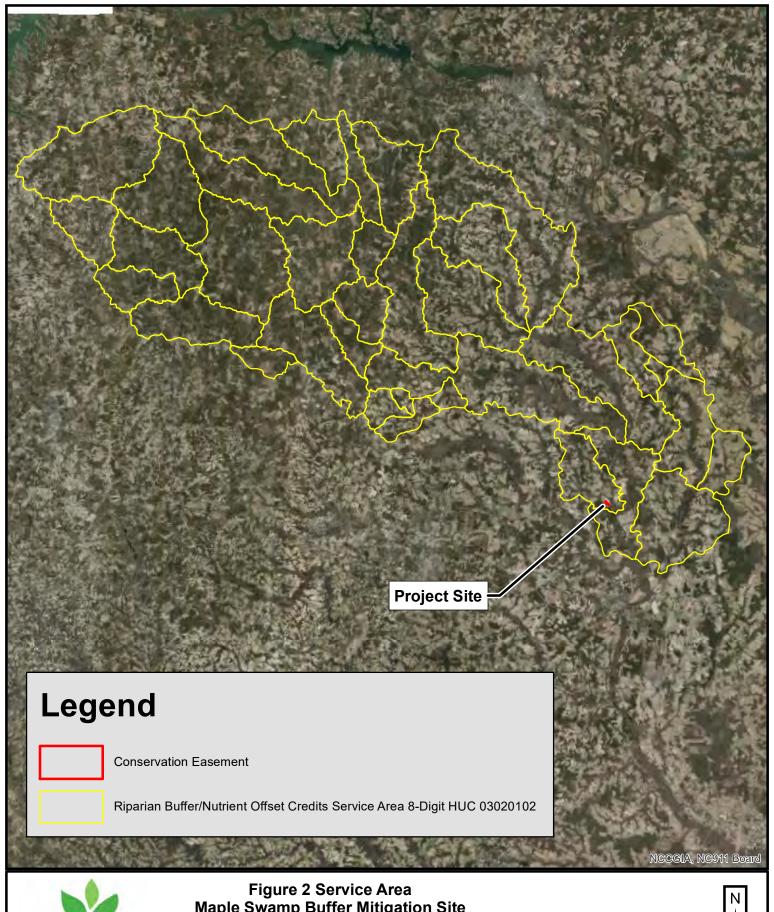
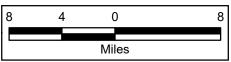
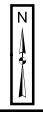




Figure 2 Service Area
Maple Swamp Buffer Mitigation Site
Tar-Pam 03020102
Edgecombe County, North Carolina
December 2021
NC Onemap Aerial





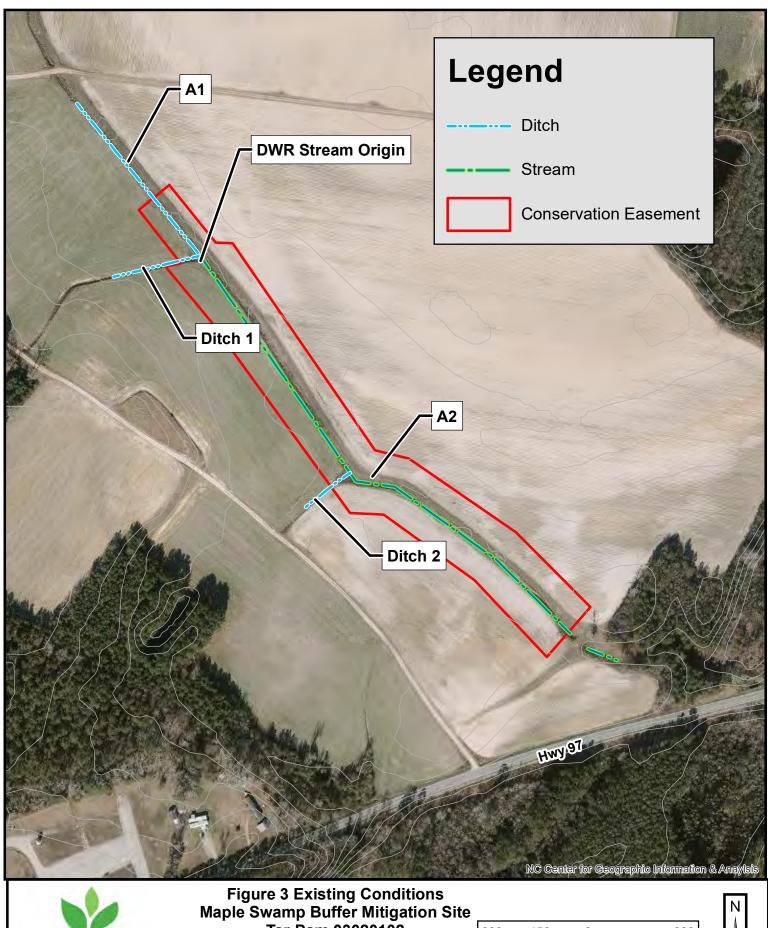
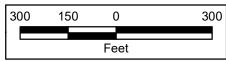
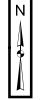




Figure 3 Existing Conditions
Maple Swamp Buffer Mitigation Site
Tar-Pam 03020102
Edgecombe County, North Carolina
December 2021





NC Onemap 2017 Aerial

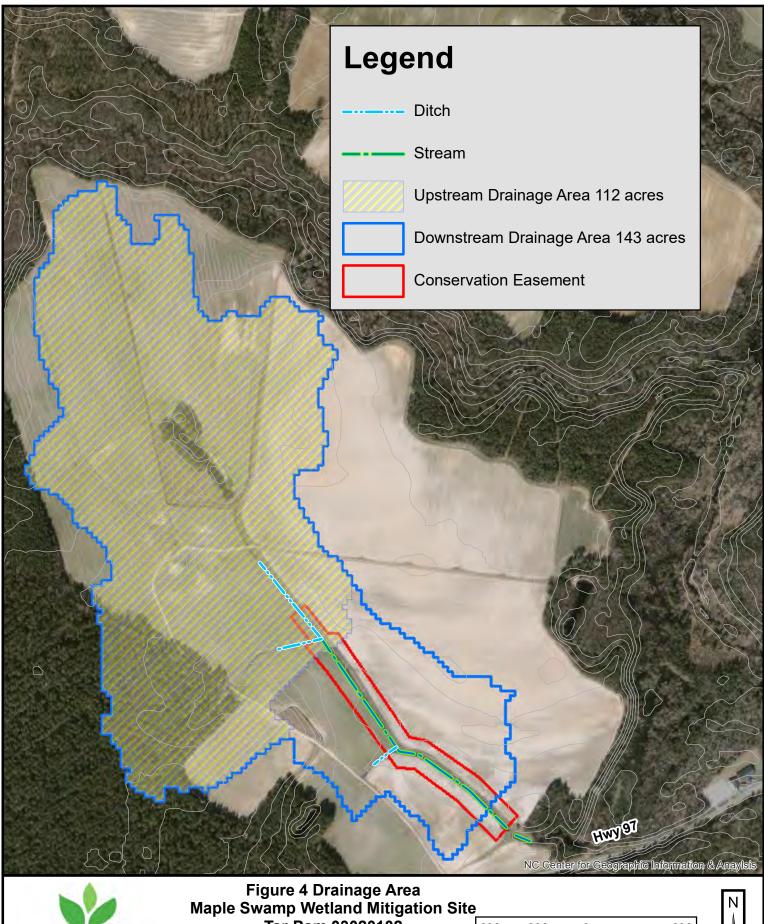
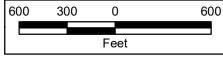


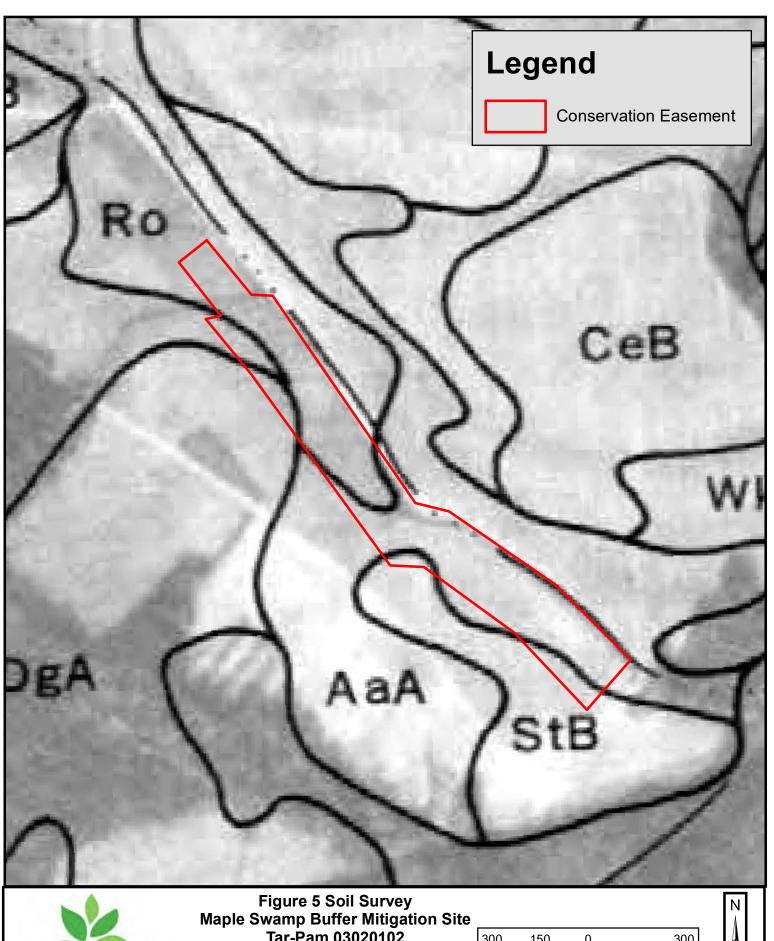


Figure 4 Drainage Area
Maple Swamp Wetland Mitigation Site
Tar-Pam 03020102
Edgecombe County, North Carolina
June 2021

NC Onemap 2017 Aerial









Tar-Pam 03020102 Edgecombe County, North Carolina
June 2021

300 150 300 Feet



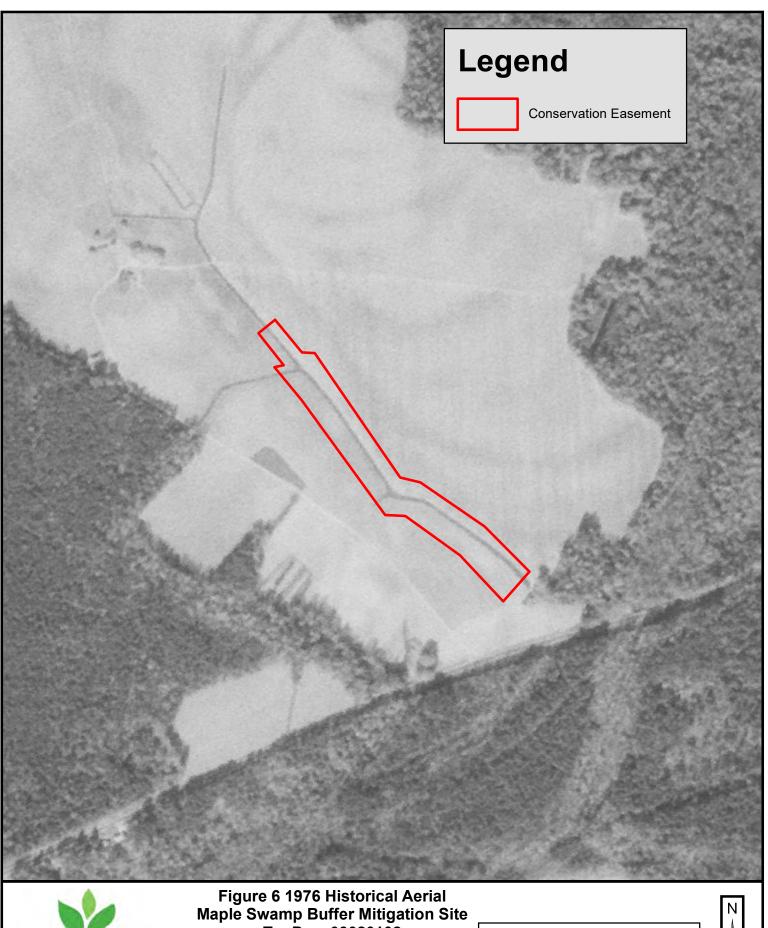
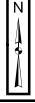




Figure 6 1976 Historical Aerial
Maple Swamp Buffer Mitigation Site
Tar-Pam 03020102
Edgecombe County, North Carolina
June 2021

500 250 0 500 Feet



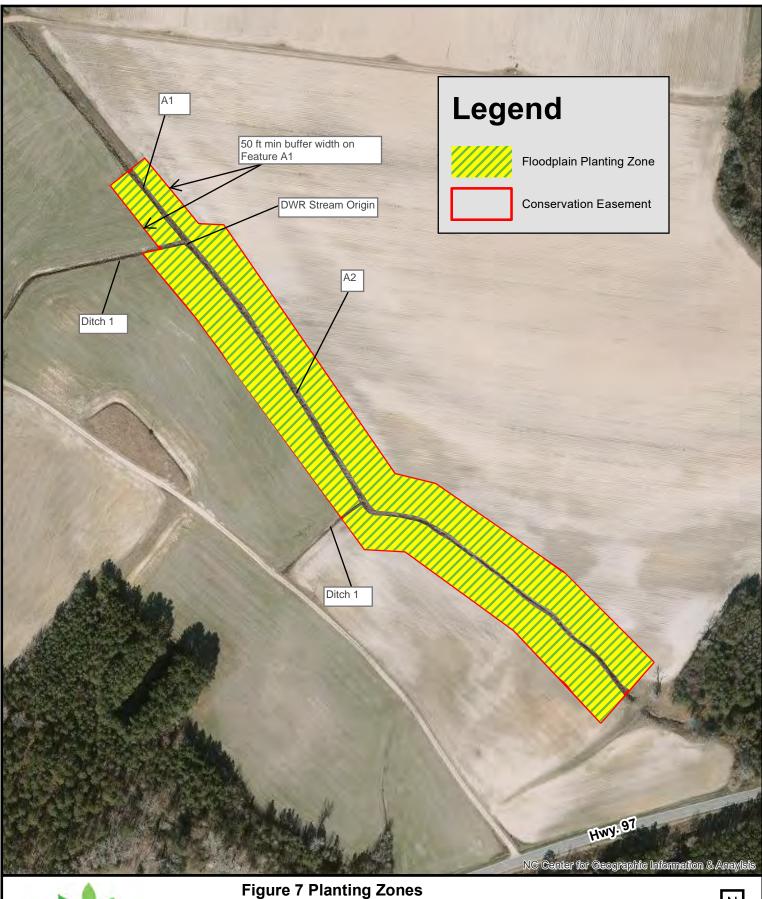
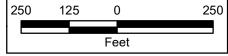
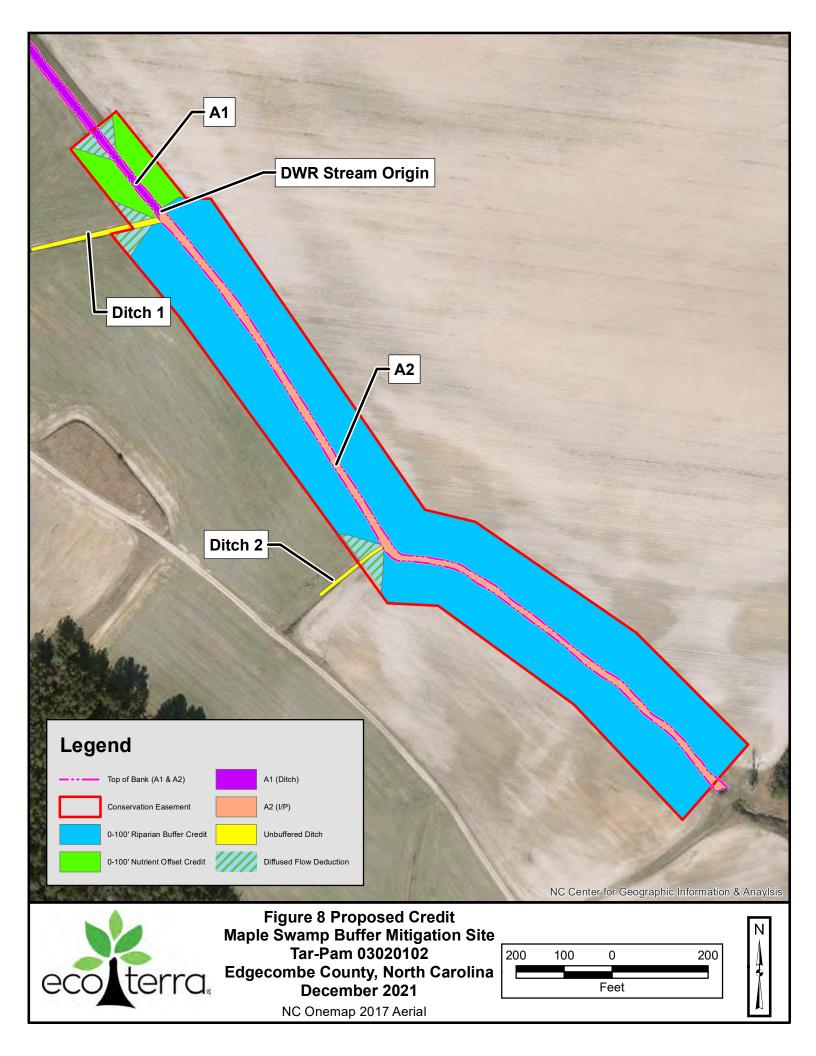


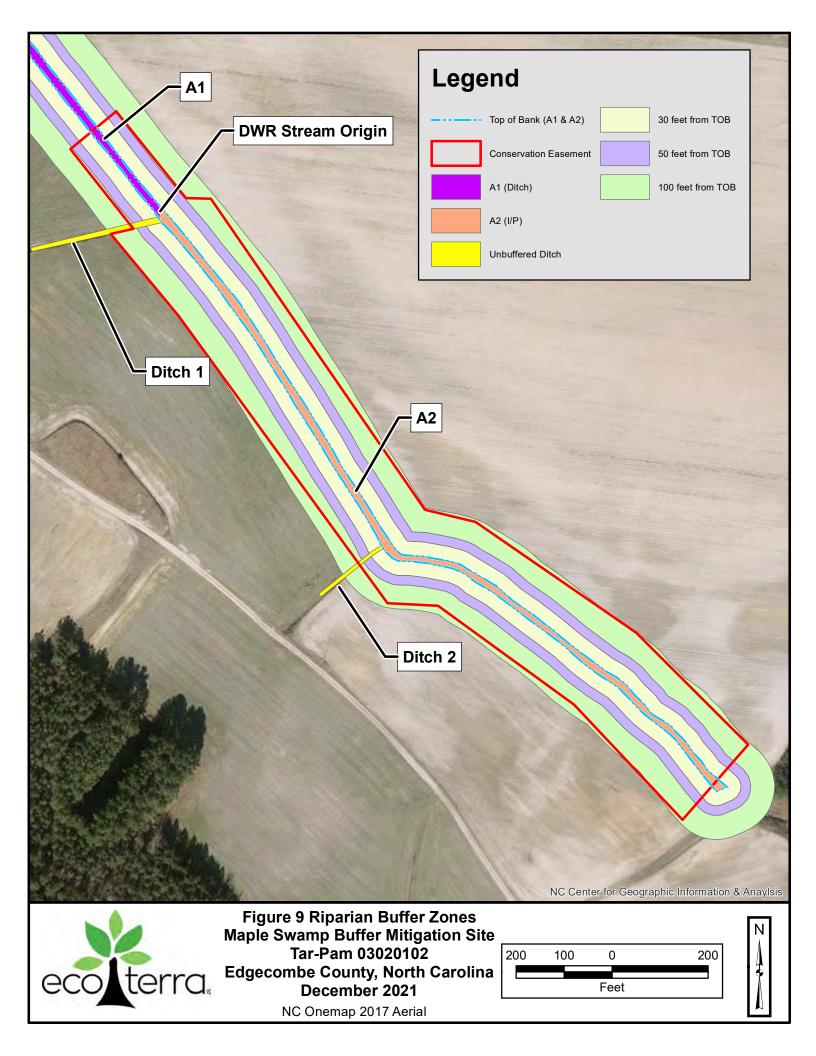


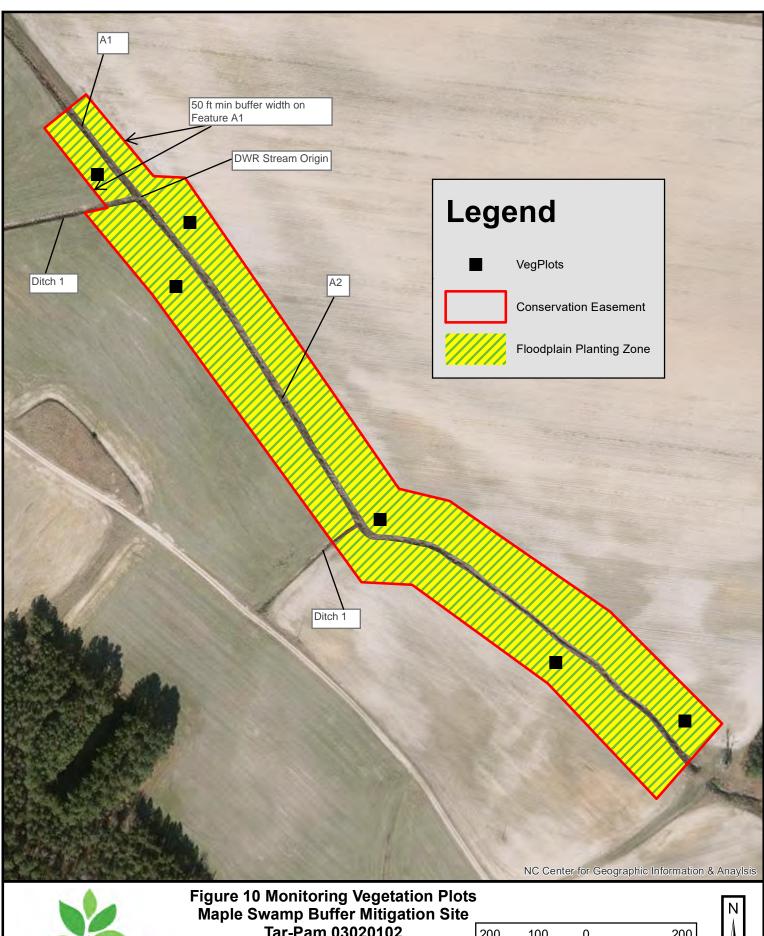
Figure 7 Planting Zones
Maple Swamp Buffer Mitigation Site
Tar-Pam 03020102
Edgecombe County, North Carolina
June 2021





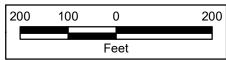








Tar-Pam 03020102 Edgecombe County, North Carolina June 2021





## **APPENDIX A**

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

ROY COOPER Governor DIONNE DELLI-GATTI Secretary S. DANIEL SMITH Director



April 1, 2021

DWR Project # 20210614 Edgecombe County

RKW Properties, LLC
J. Rodney Williford
PO BOX 429
Bethel, NC 27812
(via email to jamey@ecoterra.com)

## This letter replaces one dated March 30, 2021

Subject: On-Site Determination for Applicability to the Tar-Pam Buffer Rules (15A NCAC 02B .0734)

Project Name: Maple Swamp Buffer Mitigation Site

Address / Location: East of Leggett, NC at approximately 36.006997 -77.554086

**Determination Date:** March 30, 2021 **Staff:** Rick Trone

Mr. O'Shaughnessey,

On March 30, 2021, Rick Trone of the Division of Water Resources conducted an on-site review of features located on the subject property at the request of Eco Terra to determine the applicability to the Tar-Pamlico Riparian Area Protection Rules (15A NCAC 02B .0734).

The enclosed map(s) depict the feature(s) evaluated. This information is also summarized in the table below. Streams that are considered "Subject" have been located on the most recently published NRCS Soil Survey of Edgecombe County and/or the most recent copy of the USGS Topographic (at 1:24,000 scale) map(s), have been located on the ground at the site, and possess characteristics that qualify them to be at least intermittent streams. Features that are considered "Not Subject" have been determined to not be at least intermittent or not present on the property or not depicted on the required maps.

This determination only addresses the applicability to the buffer rules and does not approve any activity within buffers or within waters of the state. There may be other streams or features located on the property that do not appear on the maps referenced above. Any of the features on the site may be considered jurisdictional according to the US Army Corps of Engineers and subject to the Clean Water Act.

The following table addresses the features rated during the DWR site visit:



Feature ID	Type <sup>1</sup>	Subject	Start @ Stop @		Depicted on Soil Survey	Depicted on USGS Topo
A1	E/D		Approximately 36.010133 -77.556984/outside project boundary	A2/confluence with Ditch 1	х	
A2	I/P	х	Approximately 36.008485 -77.555506	Outside project boundary	х	
D1	D		Outside project boundary	Feature A2		
D2	D		Outside project boundary	Feature A2		

(1) E = Ephemeral, I = Intermittent, P = Perennial, NP = Not Present, NE=Not Evaluated, D = Ditch

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 the date of this letter to the Director in writing.

If sending via U.S. Postal Service:	If sending via delivery service (UPS, FedEx, etc.)
DWR 401 & Buffer Permitting Branch	DWR 401 & Buffer Permitting Branch
Supervisor	Supervisor
1617 Mail Service Center	512 N Salisbury St.
Raleigh, NC 27699-1617	Raleigh, NC 27604

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

This letter only addresses the features on the subject property and within the proposed project easement and does not approve any activity within buffers or within waters of the state. If you have any additional questions or require additional information, please contact Rick Trone at (919) 707-3631 or rick.trone@ncdenr.gov. This determination is subject to review as provided in Articles 3 & 4 of G.S. 150B.

Sincerely,

Pocusigned by:

Paul Wojoski

Paul Wojoski, Supervisor

401 & Buffer Permitting Branch

Enclosures: USGS Topographical Map, NRCS Soil Survey, Site Map

cc: Jamey O'Shaughnessey, EcoTerra (via email) 401 & Buffer Permitting Branch files

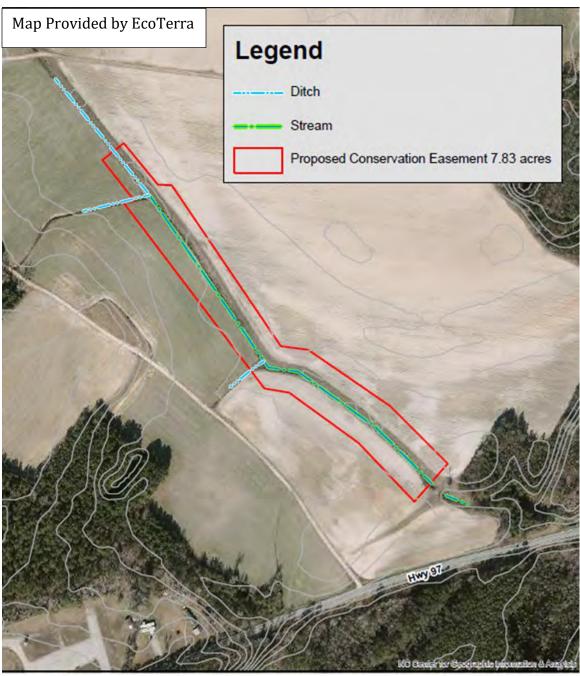


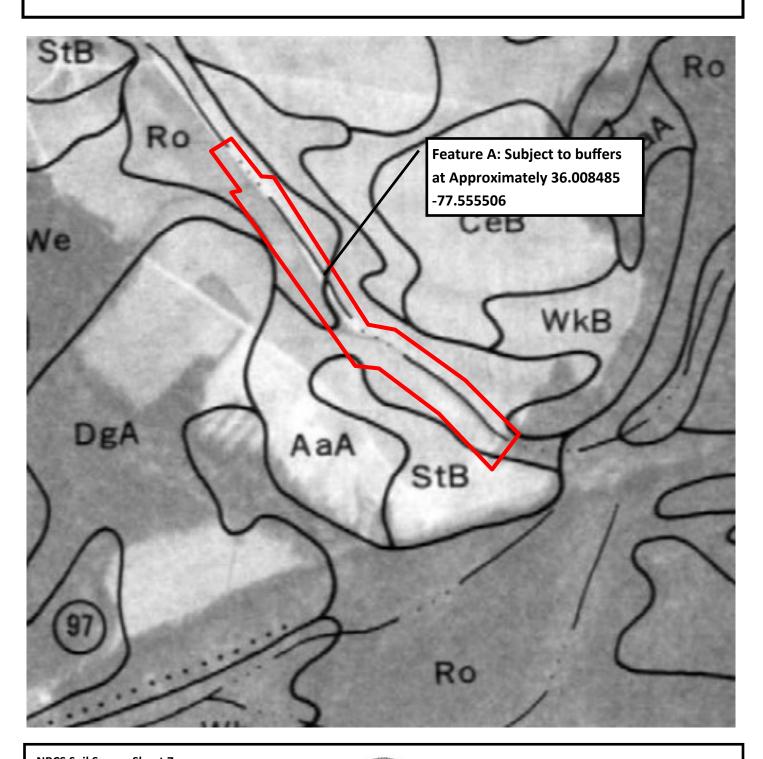


Figure 2 Existing Conditions
Maple Swamp Buffer Mitigation Site
Tar-Pam 03020102
Edgecombe County, North Carolina
October 2020

NC Onemap 2017 Aerial

300 150 0 300 Feet N

# Maple Swamp Buffer Mitigation Site Edgecombe County, NC-DWR Project # 20210614



NRCS Soil Survey Sheet 7

**Edgecombe Co NC 1974** 

Legend:

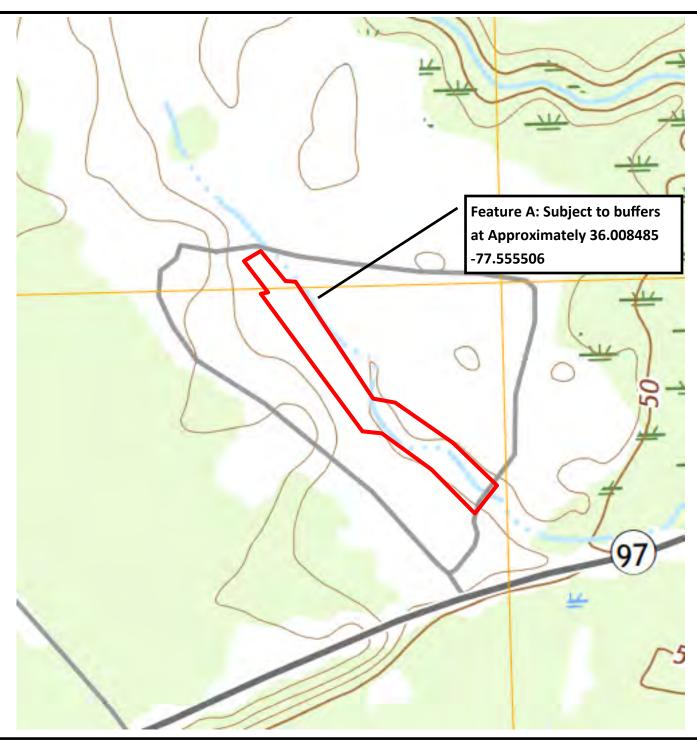
-project boundary



:: Locations are approximate and are provided for reference only ::



# Maple Swamp Buffer Mitigation Site Edgecombe County, NC-DWR Project # 20210617



USGS Topographical Map
Draughn Quadrangle 2019

Legend:

-project boundary



:: Locations are approximate and are provided for reference only ::



ROY COOPER Governor DIONNE DELLI-GATTI Secretary S. DANIEL SMITH Director



May 14, 2021

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

Re: Site Viability for Buffer Mitigation & Nutrient Offset –Maple Swamp Site

Near 36.006997 -77.554086 off NC Hwy 97, Leggett, NC

Tar-Pamlico 03020102 Edgecombe County

Dear Mr. O'Shaughnessey,

On March 31, 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 Tar-Pamlico River Basin within the 8-digit Hydrologic Unit Code 03020102. The site visit was to determine the potential for riparian buffer mitigation and nutrient offset within a proposed Easement Boundary, which is more accurately shown in the attached maps labeled "Figure 2 Existing Conditions Maple Swamp Mitigation Site" (Figure 2), prepared by Eco Terra. On May 7, 2021, Ms. Merritt performed a site assessment of the subject site. Staff with Eco Terra were also present.

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>	Classification onsite	1Subject to Buffer Rule	Riparian Land uses adjacent to Feature (0-200')	Buffer Credit Viable	<sup>3</sup> Nutrient <u>Offset</u> <u>Viable</u>	4.5 Mitigation Type Determination w/in riparian areas
A1	Ditch >3' depth	No	Non-forested agricultural fields	No	Yes	Restoration Site per 15A NCAC 02B .0295 (n)
A2	Stream	Yes	Non-forested agricultural fields	Yes	Yes	Restoration Site per 15A NCAC 02B .0295 (n)

<u>Feature</u>	Classification onsite	<sup>1</sup> Subject to Buffer Rule	Riparian Land uses adjacent to Feature (0-200')	Buffer Credit Viable	<sup>3</sup> Nutrient Offset Viable	4.5 Mitigation Type Determination w/in riparian areas
D1	Ditch >3' depth	No	Non-forested agricultural fields	No	Yes	Restoration Site per 15A NCAC 02B .0295 (n)
D2	Ditch >3' depth	No	Non-forested agricultural fields	No	Yes	Restoration Site per 15A NCAC 02B .0295 (n)

<sup>&</sup>lt;sup>1</sup>Subjectivity calls for the features were determined by DWR in correspondence dated May 6, 2021 (DWR# 2021-0614) 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.

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 are attached to this letter and are initialed by Ms. Merritt on May 14, 2021. Substantial changes to the proposed easement boundary could affect the Site's potential to generate buffer 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 <u>and</u> 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.

<sup>&</sup>lt;sup>2</sup>The 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.

<sup>&</sup>lt;sup>3</sup>NC Division of Water Resources - Methodology and Calculations for determining Nutrient Reductions associated with Riparian Buffer Establishment

<sup>&</sup>lt;sup>4</sup>Determinations made for this Site are determined based on the proposal provided in maps and figures submitted with the request.

<sup>&</sup>lt;sup>5</sup> All 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.

<sup>&</sup>lt;sup>6</sup>The 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).

Maple Swamp Site Eco Terra Partners, LLC May 14, 2021

This viability assessment will expire on May 14, 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,

Paul Wojoski
949D91BA53EF4E0...

Paul Wojoski, Supervisor 401 and Buffer Permitting Branch

PW/kym

Attachments: Figure 2 Existing Conditions Maple Swamp Mitigation Site

cc: File Copy (Katie Merritt)

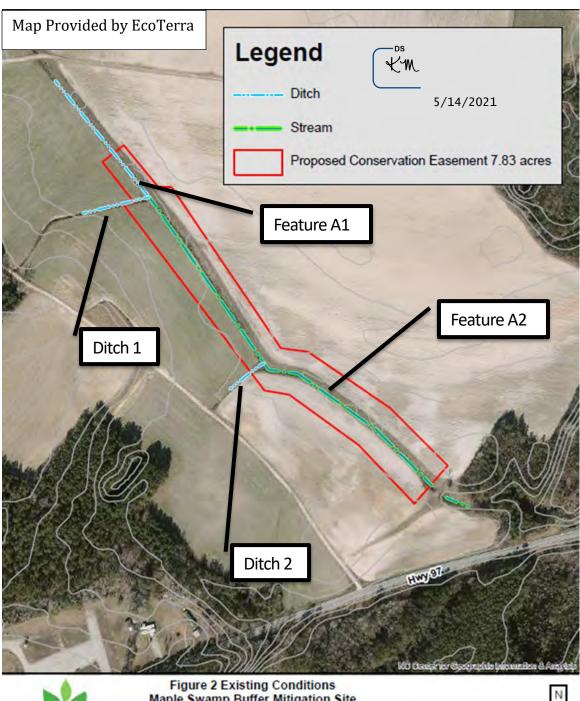




Figure 2 Existing Conditions
Maple Swamp Buffer Mitigation Site
Tar-Pam 03020102
Edgecombe County, North Carolina
October 2020

NC Onemap 2017 Aerial

300 150 0 300 Feet Z





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 for sites providing nutrient offset credit as well.

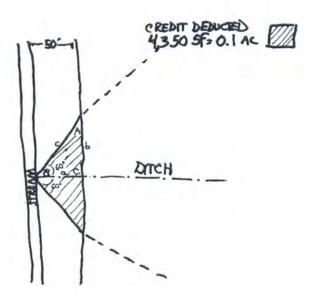
<u>Current Policy:</u> According to the Mitigation rules in the Neuse, Tar-Pamlico and Catawba buffer rules, a grading plan must be provided for buffer mitigation sites. In addition, those rules state that "The site shall be graded in a manner to ensure diffuse flow through the riparian buffer".

<u>Problem:</u> 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





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:

Area =  $(a \times b)/2$ 

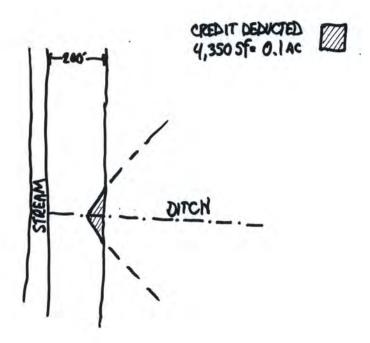
Area = (50 feet x 87 feet)/2

Area = 2,175 SF

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

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:

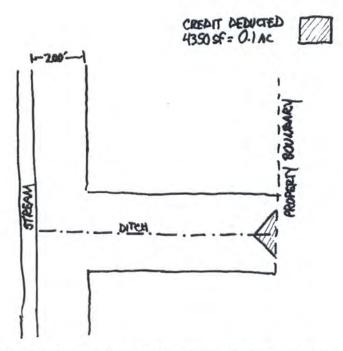
#### **SCENARIO 2**





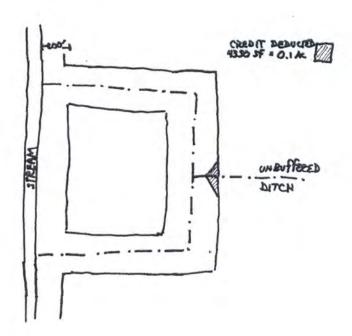
If a ditch leading to a buffered stream is buffered, then no credit is deducted from the stream buffer. If the upstream origin of the ditch is within the buffer, no credit is deducted. If the upstream origin of the ditch is not buffered (e.g. if the ditch begins upstream offsite), the credit deduction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

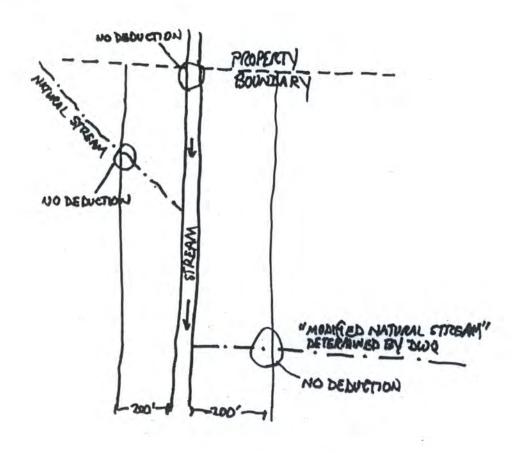




401 Wetlands Certification Unit 1650 Mail Service Center, Raleigh, North Carolina 27699-1650 2321 Crabtree Boulevard, Suite 250, Raleigh, North Carolina 27604 Phone: 919-733-1786 / FAX 919-733-6893 / Internet: http://h2o.enr.state.nc.us/newetlands

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.

401 Wetlands Certification Unit

1650 Mail Service Center, Raleigh, North Carolina 27699-1650

2321 Crabtree Boulevard, Suite 250, Raleigh, North Carolina 27604

Phone: 919-733-1786 / FAX 919-733-6893 / Internet: http://h2o.enr.state.nc.us/ncwetlands

## **APPENDIX B**

**Draft Conservation Easement** 

#### STATE OF NORTH CAROLINA

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

#### **EDGECOMBE COUNTY**

SPO File Number: 33-LA-002 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 O	F CONSERVATION EASEMENT AND RIGHT OF ACCESS, made
thisday of	, 20, by <i>RKW Properties, LLC</i> , ("Grantor"), whose
mailing address is PO	Box 429 Bethel, NC 27812 to the State of North Carolina, ("Grantee"),
whose mailing address	is State of North Carolina, Department of Administration, State Property
Office, 1321 Mail Serv	ice 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.

#### WITNESSETH:

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 Environmental Quality (formerly Department of Environment and Natural Resources), for the purposes 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 (<u>Eco Terra Partners, LLC</u>) and the North Carolina Department of Environmental Quality, to provide stream, wetland and/or buffer mitigation pursuant to the North Carolina Department of Environmental Quality Purchase and Services Contract Number 200206-01.

**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 8<sup>th</sup> day of February 2000; and

WHEREAS, the Division of Mitigation Services in the Department of Environmental Quality (formerly 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 *Tarboro* Township, *Edgecombe* County, North Carolina (the "Property"), and being more

particularly described as that certain parcel of land containing approximately 348.29 acres and being conveyed to the Grantor by deed as recorded in **Deed Book 1552 at Page 0337** of the **Edgecombe** 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 purposes 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 *an unnamed tributary to Fishing Creek*.

**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 482275376800 containing a total of 8.07 acres as shown on the	e plats of survey
entitled "Final Plat, Conservation Easement for North Carolina Division of Mi	tigation Services,
Project Name: Maple Swamp Buffer Mitigation Site, SPO File No	_, DMS Site No.
100189, Property of RKW Properties, LLC," dated August 26th, 2021 by God	rdon Strout, PLS
Number L-2984 and recorded in the Edgecombe County, North Carolina Registe	r of Deeds at <b>Plat</b>
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 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 condition, 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 the 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

NCDMS Full Delivery Conservation Easement Template

AG reviewed 11 May 2017

[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 such 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 the Grantor is prohibited as inconsistent with the purposes of this Conservation Easement. Any rights not expressly reserved hereunder by the Grantor have been acquired by the Grantee. Any rights not expressly reserved hereunder by the 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.** Recreational 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. The Grantor reserves the right to engage in and 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 observations. 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 damaged 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 Use.** 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 crossings 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 the 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.

The 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 the 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 subterraneous 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 conservations 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 the Grantor if such repairs are needed as a result of activities of the 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 purposes 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 the Grantor in writing of such breach and the Grantor shall have ninety (90) days after receipt of such notice to correct the damage caused by such breach. If the breach and damage remains 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: (a) 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 the 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 the 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 the Grantor's control, including, without limitation, fire, flood, storm, and earth movement, or from any prudent action taken in good faith by the 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 the Grantor. Nothing herein shall relieve the 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.** The 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
US 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, the Grantor expressly reserves to the Grantor, and the 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 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**, the Grantor has hereunto set his hand and seal, the day and year first above written.

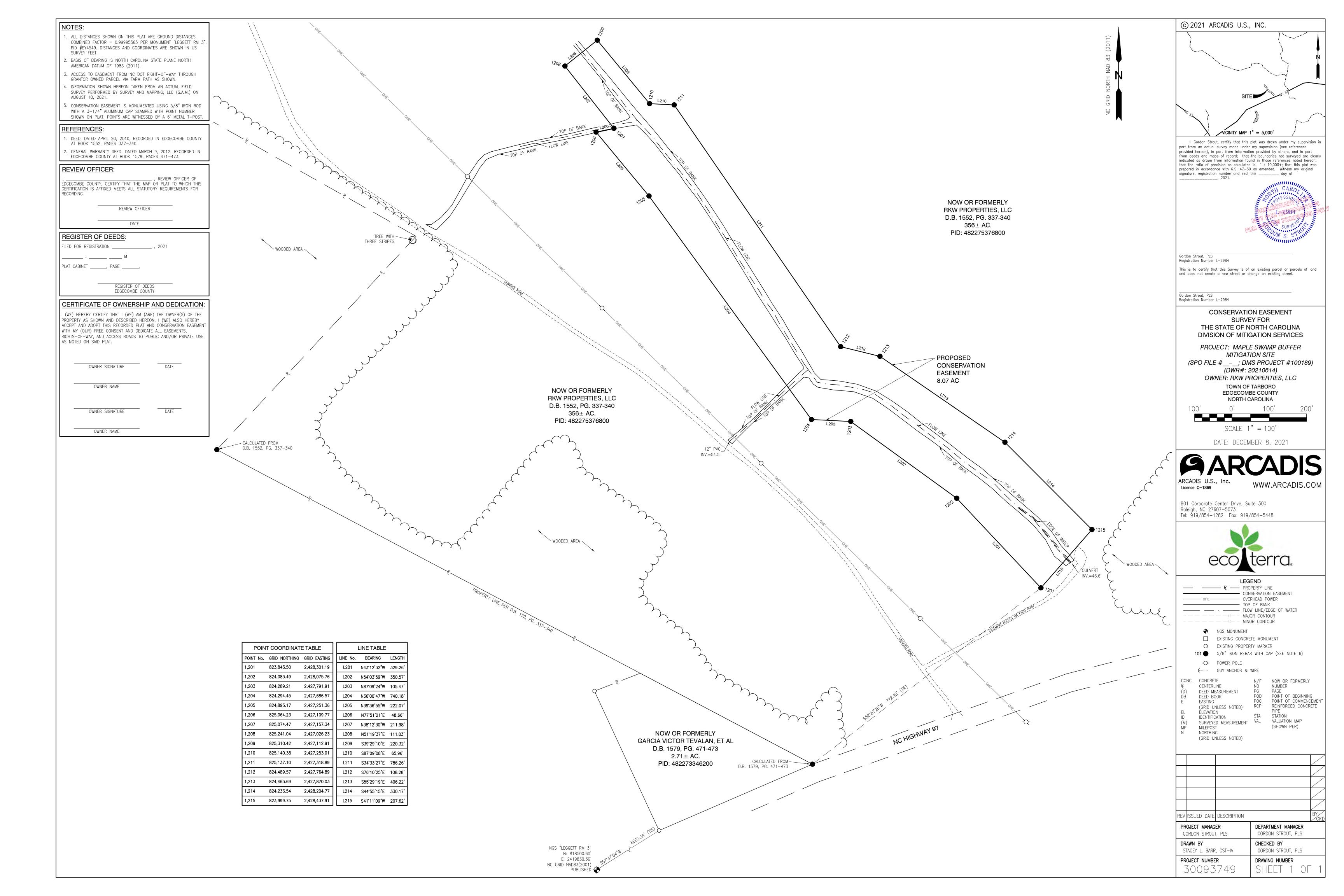
RKW PROPERTIES, LLC A North Carolina limited liability company	
Name: Jimmy Rodney Williford Title: President	AL)
NORTH CAROLINA COUNTY OF EDGECOMBE	
I,, a Notary do hereby certify that <b>Jimmy Rodney Williford</b> and acknowledged the execution of the foregoing	
IN WITNESS, WHEREOF, I have hereunto sed day of, 20	et my hand and Notary Seal this the
Notary Public	_
My commission expires:	

## Exhibit A

Proposed Conservation Easement 8.07 acres +/-Property of RKW Properties, LLC

Being all that 8.07 acres, more or less, as shown on plat entitled, "Conservation Easement Survey for The State of North Carolina Division of Mitigation Services, Project: Maple Swamp Buffer Mitigation Site, (SPO File #\_-\_; DMS Project #100189) (DWR #: 20210614), Owner: RKW Properties, LLC, Town of Tarboro, Edgecombe County, North Carolina," having Scale of 1" = 100' and dated August 26, 2021, the metes and bounds of said plat being as follows:

Beginning at a point in the northern right of way line of NC Highway 97, said point calculated from Deed Book 1579, Page 471-473, thence North 52 20' 28" East 772.98 feet to a point labeled 1201, the point of BEGINNING. From the BEGINNING point thus determined, thence along a new line, the boundary of a new Conservation Easement area as follows: North 43° 12' 32" West 329.26 feet to a point (1202); continuing thence, North 54° 03' 59" West 350.57 feet to a point (1203), cornering; thence, North 87° 09' 24" West 105.47 feet to a point (1204), cornering; thence, North 36° 00' 47" West 740.18 feet crossing a small watercourse to a point (1205); continuing thence, North 39° 36' 55" West 222.07 feet to a point (1206), cornering; thence, North 77° 51' 21" East 48.66 feet to a point (1207), cornering; thence, North 38° 12' 30" West 211.98 feet to a point (1208), cornering; thence, North 51 ° 19' 37" East 111.03 feet to a point (1209), cornering; thence, South 39° 29' 1 O" East 220.32 feet to a point (1210), cornering; thence, South 87° 09' 08" East 65.96 feet to a point (1211), cornering; thence, South 34° 33' 27" East 786.26 feet to a point (1212), cornering; thence, South 76° 10' 25" East 108.28 feet to a point (1213), cornering; thence, South 55° 29' 19" East 406.22 feet to a point (1214); continuing thence, South 44° 55' 15" East 330.17 feet to a point (1215), cornering; thence, South 41 ° 11' 09" West 207.62 feet to a point (1201), the point of BEGINNING. Attention is drawn to the Point Coordinate Table as shown on said plat of conservation easement, to which reference is made for further description.



## **APPENDIX C**

**Signed Categorical Exclusion** 



May 17, 2021

Lindsay Crocker North Carolina Department of Mitigation Services 217 W Jones St. Raleigh, NC 27603

Re: Maple Swamp Buffer Mitigation Site: NCDMS Contract #100189. Task 1 Deliverables

Ms. Crocker,

Eco Terra is pleased to present you with the Environmental and Project Screening deliverables associated with Task 1 of our contract. Our package includes categorical exclusion documentation and coordination efforts with the agencies associated with the following Acts.

- Categorical Exclusion Coordination Efforts
  - National Historic Preservation Act
  - o Endangered Species Act
  - Uniform Act
  - o CERCLA
  - o Farmland Protection Policy Act
  - o 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 to be submitted (along with any supporting documentation) as the environmental document.

	1: General Project Information			
Project Name:	Maple Swamp Buffer Mitigation Site - Option 1			
County Name:	Edgecombe			
DMS Number:	100189			
Project Sponsor:	Eco Terra Partners			
Project Contact Name:	Ted Griffith			
Project Contact Address:	1328 Dekalb Ave Atlanta GA 30307			
Project Contact E-mail:	Ted@ecoterra.com			
DMS Project Manager:	Lindsay Crocker			
	Project Description			
Maple Swamp Buffer Mitigation Site is a riparian buffer and nutrient offset project that works to offset unavoidable impacts to existing riparian buffers within the Tar River Watershed.				
	For Official Use Only			
Reviewed By:				
5/26/2021	JHCaocker.			
Date	DMS Project Manager			
Conditional Approved By:				
Date	For Division Administrator FHWA			
☐ Check this box if there are outstanding issues				
Final Approval By:				
5-26-21	Donald W Brew			
Date	For Division Administrator FHWA			

Part 2: All Projects	
Regulation/Question	Response
Coastal Zone Management Act (CZMA)	
Is the project located in a CAMA county?	☐ Yes ☒ No
2. Does the project involve ground-disturbing activities within a CAMA Area of Environmental Concern (AEC)?	Yes No No
3. Has a CAMA permit been secured?	Yes No N/A
4. Has NCDCM agreed that the project is consistent with the NC Coastal Management Program?	☐ Yes ☐ No ☑ N/A
Comprehensive Environmental Response, Compensation and Liability Act (C	ERCLA)
1. Is this a "full-delivery" project?	☐ Yes ☐ No
2. Has the zoning/land use of the subject property and adjacent properties ever been designated as commercial or industrial?	☐ Yes ☒ No ☐ 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?	☐ Yes ☒ No ☐ 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?	☐ Yes ☐ No ☑ N/A
5. As a result of a Phase II Site Assessment, are there known or potential hazardous waste sites within the project area?	☐ Yes ☐ No ☑ N/A
6. Is there an approved hazardous mitigation plan?	☐ Yes ☐ No ☑ 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?	☐ Yes ☒ No
Does the project affect such properties and does the SHPO/THPO concur?	Yes No N/A
3. If the effects are adverse, have they been resolved?	☐ Yes ☐ No ☑ N/A
Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uni	form Act)
1. Is this a "full-delivery" project?	X Yes ☐ No
2. Does the project require the acquisition of real estate?	
3. Was the property acquisition completed prior to the intent to use federal funds?	Yes No N/A
<ul> <li>4. Has the owner of the property been informed:</li> <li>* prior to making an offer that the agency does not have condemnation authority; and</li> <li>* what the fair market value is believed to be?</li> </ul>	∑ Yes   ☐ No   ☐ 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?	☐ Yes ☒ No
2. Is the site of religious importance to American Indians?	☐ Yes ☐ No ☒ N/A
3. Is the project listed on, or eligible for listing on, the National Register of Historic Places?	Yes No N/A
4. Have the effects of the project on this site been considered?	☐ Yes ☐ No ☒ N/A
Antiquities Act (AA)	
1. Is the project located on Federal lands?	☐ Yes ☒ No
2. Will there be loss or destruction of historic or prehistoric ruins, monuments or objects of antiquity?	☐ Yes ☐ No ☒ N/A
3. Will a permit from the appropriate Federal agency be required?	☐ Yes ☐ No ☒ N/A
4. Has a permit been obtained?	Yes No N/A
Archaeological Resources Protection Act (ARPA)	
1. Is the project located on federal or Indian lands (reservation)?	☐ Yes ☒ No
2. Will there be a loss or destruction of archaeological resources?	☐ Yes ☐ No ☑ N/A
3. Will a permit from the appropriate Federal agency be required?	☐ Yes ☐ No ☑ N/A
4. Has a permit been obtained?	☐ Yes ☐ No ☒ N/A
Endangered Species Act (ESA)	
Are federal Threatened and Endangered species and/or Designated Critical Habitat listed for the county?	X Yes ☐ No
2. Is Designated Critical Habitat or suitable habitat present for listed species?	☐ Yes ☒ No ☐ N/A
3. Are T&E species present or is the project being conducted in Designated Critical Habitat?	☐ Yes ☐ No ☒ N/A
4. Is the project "likely to adversely affect" the specie and/or "likely to adversely modify" Designated Critical Habitat?	☐ Yes ☐ No ☒ N/A
5. Does the USFWS/NOAA-Fisheries concur in the effects determination?	☐ Yes ☐ No ☒ N/A
6. Has the USFWS/NOAA-Fisheries rendered a "jeopardy" determination?	☐ Yes ☐ No ☒ N/A

Executive Order 13007 (Indian Sacred Sites)	
1. Is the project located on Federal lands that are within a county claimed as "territory"	Yes
by the EBCI?	No     No
2. Has the EBCI indicated that Indian sacred sites may be impacted by the proposed	Yes
project?	│
3. Have accommodations been made for access to and ceremonial use of Indian sacred	Yes
sites?	□ res □ No
Sites:	⊠ N/A
Farmland Protection Policy Act (FPPA)	23 1 117 1
1. Will real estate be acquired?	X Yes
'	☐ No
2. Has NRCS determined that the project contains prime, unique, statewide or locally	
important farmland?	☐ No
	☐ N/A
3. Has the completed Form AD-1006 been submitted to NRCS?	X Yes
	∐ No
Figh and Middlife Coordination Act (FMCA)	□ N/A
Fish and Wildlife Coordination Act (FWCA)  1. Will the project impound, divert, channel deepen, or otherwise control/modify any	☐Yes
water body?	X No
2. Have the USFWS and the NCWRC been consulted?	☐ Yes
2. Have the Got we and the Nowico been consulted:	☐ No
	⊠ 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,	☐ Yes
outdoor recreation?	X No
2. Has the NPS approved of the conversion?	☐ Yes
	☐ No
	X N/A
Magnuson-Stevens Fishery Conservation and Management Act (Essential Fish	
Is the project located in an estuarine system?	☐ Yes ☒ No
2. Is suitable habitat present for EFH-protected species?	Yes
	∐ No
	X N/A
3. Is sufficient design information available to make a determination of the effect of the project on EFH?	│
	I NO I N/A
4. Will the project adversely affect EFH?	Yes
The transition project autoroscip and occurrent	□ No
	⊠ N/A
5. Has consultation with NOAA-Fisheries occurred?	☐ Yes
	☐ No
	X N/A
Migratory Bird Treaty Act (MBTA)	
Does the USFWS have any recommendations with the project relative to the MBTA?	☐ Yes ☒ No
2. Have the USFWS recommendations been incorporated?	☐ Yes
	☐ No
	X N/A
Wilderness Act	
1. Is the project in a Wilderness area?	│
2. Has a special use permit and/or easement been obtained from the maintaining	Yes
federal agency?	☐ No
	X N/A

# 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

March 19, 2021

Jamey O'Shaughnessey Eco Terra Management, LLC 1117 Peachtree Walk Northeast, Suite 126 Atlanta, GA 30309 jamey@ecoterra.com

Re: Maple Swamp Buffer conservation easement, 36.007372 -77.554415, Highway 97, Tarboro,

Edgecombe County, ER 21-0574

Dear Mr. O'Shaughnessey:

Thank you for your letter of February 12, 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 <a href="mailto:environmental.review@ncdcr.gov">environmental.review@ncdcr.gov</a>. In all future communication concerning this project, please cite the above referenced tracking number.

Sincerely,

Ramona Bartos, Deputy

Rence Gledhill-Earley

State Historic Preservation Officer

# 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 longeared 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.

Applicant Page 2

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

Roy Cooper, Governor

D. Reid Wilson, Secretary

Walter Clark

Director, Division of Land and Water Stewardship

NCNHDE-14255

March 23, 2021

Jamey O'Shaughnessey SWE Group, PLLC 3216 Byers Dr Raleigh, NC 27607 RE: Proj 99

Dear Jamey O'Shaughnessey:

The North Carolina Natural Heritage Program (NCNHP) appreciates the opportunity to provide information about natural heritage resources for the project referenced above.

Based on the project area mapped with your request, a query of the NCNHP database indicates that there are no records for rare species, important natural communities, natural areas, and/or conservation/managed areas within the proposed project boundary. Please note that although there may be no documentation of natural heritage elements within the project boundary, it does not imply or confirm their absence; the area may not have been surveyed. The results of this query should not be substituted for field surveys where suitable habitat exists. In the event that rare species are found within the project area, please contact the NCNHP so that we may update our records.

The attached 'Potential Occurrences' table summarizes rare species and natural communities that have been documented within a one-mile radius of the property boundary. The proximity of these records suggests that these natural heritage elements may potentially be present in the project area if suitable habitat exists. Tables of natural areas and conservation/managed areas within a one-mile radius of the project area, if any, are also included in this report.

If a Federally-listed species is found within the project area or is indicated within a one-mile radius of the project area, the NCNHP recommends contacting the US Fish and Wildlife Service (USFWS) for guidance. Contact information for USFWS offices in North Carolina is found here: https://www.fws.gov/offices/Directory/ListOffices.cfm?statecode=37.

Please note that natural heritage element data are maintained for the purposes of conservation planning, project review, and scientific research, and are not intended for use as the primary criteria for regulatory decisions. Information provided by the NCNHP database may not be published without prior written notification to the NCNHP, and the NCNHP must be credited as an information source in these publications. Maps of NCNHP data may not be redistributed without permission.

The NC Natural Heritage Program may follow this letter with additional correspondence if a Dedicated Nature Preserve, Registered Heritage Area, Land and Water Fund easement, or Federally-listed species are documented near the project area.

If you have questions regarding the information provided in this letter or need additional assistance, please contact Rodney A. Butler at <a href="mailto:rodney.butler@ncdcr.gov">rodney.butler@ncdcr.gov</a> or 919-707-8603.

Sincerely, NC Natural Heritage Program

# Natural Heritage Element Occurrences, Natural Areas, and Managed Areas Within a One-mile Radius of the Project Area Proj 99 March 23, 2021 NCNHDE-14255

#### Element Occurrences Documented Within a One-mile Radius of the Project Area

Taxonomic	EO ID	Scientific Name	Common Name	Last	Element	Accuracy	Federal	State	Global	
Group				Observation Date	Occurrence Rank		Status	Status	Rank	Rank
Freshwater Bivalve	1206	Alasmidonta undulata	Triangle Floater	2017-11-07	Е	3-Medium		Threatened	G4	S3
Freshwater Fi	sh14421	Noturus furiosus	Carolina Madtom	2007-08-02	Е	3-Medium	Proposed Endangered	Threatened	G2	S2
Mammal	38980	Corynorhinus rafinesquii macrotis	Eastern Big-eared Bat	2017-05-31	Е	2-High		Special Concern	G3G4T 3	S3
Mammal	39825	Myotis austroriparius	Southeastern Bat	2018-06-13	Е	2-High		Special Concern	G4	S2
Natural Community	38746	Brownwater Bottomland Hardwoods (High Subtype)		2016	E	6-Unkno wn			G3G4	S2
Natural Community	8661	Brownwater Levee Forest (Medium Levee Subtype)		2010	C?	4-Low			G4?	S3S4
Natural Community	38744	Coastal Plain Semipermanent Impoundment (Open Water Subtype)		2016	E	2-High			G5	S4
Natural Community	38742	Mesic Mixed Hardwood Forest (Coastal Plain Subtype)	d	2016	C?	2-High			G3	S3

#### Natural Areas Documented Within a One-mile Radius of the Project Area

Site Name	Representational Rating	Collective Rating
Fishing Creek Floodplain Forest	R4 (Moderate)	C4 (Moderate)
TAR/Fishing Creek Aquatic Habitat	R1 (Exceptional)	C1 (Exceptional)

#### Managed Areas Documented Within a One-mile Radius of the Project Area

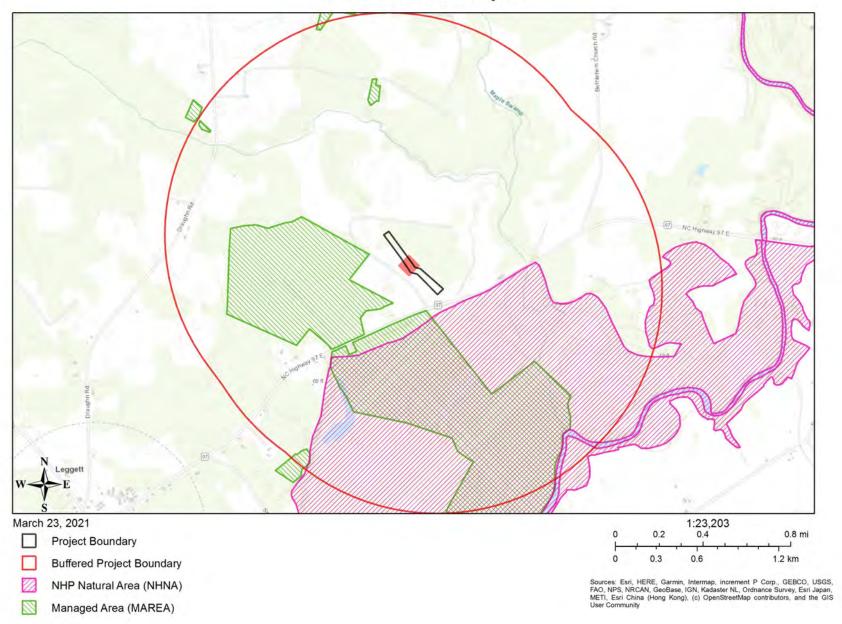
Managed Area Name	Owner	Owner Type
Lower Fishing Creek Game Land	NC Wildlife Resources Commission	State

Managed Areas Documented Within a One-mile Radius of the Project Area

Managed Area Name	Owner	Owner Type
Lower Fishing Creek Game Land Dedicated Nature	NC Wildlife Resources Commission	State
Preserve		
Conservation Reserve Enhancement Program	NC Department of Agriculture, Division of	State
Easement	Soil and Water Conservation	
Conservation Reserve Enhancement Program	NC Department of Agriculture, Division of	State
Easement	Soil and Water Conservation	

Definitions and an explanation of status designations and codes can be found at <a href="https://ncnhde.natureserve.org/help">https://ncnhde.natureserve.org/help</a>. Data query generated on March 23, 2021; source: NCNHP, Q4 January 2021. Please resubmit your information request if more than one year elapses before project initiation as new information is continually added to the NCNHP database.

#### NCNHDE-14255: Proj 99



#### **Species Conclusions Table**

Project Name: Maple Swamp Buffer Mitigation Site

Date: 3/16/2021

Species / Resource Name	Conclusion	ESA Section 7 / Eagle Act Determination	Notes / Documentation
	No suitable habitat	No effect	No gravel, bedrock, cover, and stream flow
Neuse River Waterdog			does not support suitable habitat for the
(Necturus lewisi)			Neuse-River Waterdog
	No suitable habitat	No effect	Suitable substrate not present, stream flow
Carolina Madtom			not suitable, water quality not supportive.
(Noturus furiosus)			
	No suitable habitat	No effect	Suitable substrate not present, stream flow
Atlantic Pigtoe			not suitable, and water quality not
(Fusconaia masoni)			supportive.
	No suitable habitat	No effect	Silt-free unconsolidated beds of coarse
Tar River Spinymussel			sand and gravel in relatively fast-flowing,
(Elliptio steinstansana)			well oxygenated stream reach not present
	No suitable habitat	No effect	Suitable substrate not present, stream flow
Yellow Lance ( <i>Elliptio</i>			not suitable, and water quality not
lanceolata)			supportive.
Critical Habitat	No critical habitat present	No effect	n/a
Bald Eagle	Unlikely to disturb nesting	No Eagle Act Permit Required	Project is more the 660 feet from any
	bald eagles		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	Scott J. Trederick	3/16/2021	
Signature /Title		Date	



### 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: March 05, 2021

Consultation Code: 04EN2000-2021-SLI-0789

Event Code: 04EN2000-2021-E-01729

Project Name: Maple Swamp Buffer Mitigation Site

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.htm; http://www.towerkill.com; and <a href="http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html">http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html</a>.

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-0789 Event Code: 04EN2000-2021-E-01729

Project Name: Maple Swamp Buffer Mitigation Site

Project Type: LAND - RESTORATION / ENHANCEMENT

Project Description: Edgecombe County, 8 acres, riparian buffer restoration

**Project Location:** 

Approximate location of the project can be viewed in Google Maps: <a href="https://www.google.com/maps/@36.00704155,-77.55428920476288,14z">https://www.google.com/maps/@36.00704155,-77.55428920476288,14z</a>



Counties: Edgecombe 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 Fisheries<sup>1</sup>, 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. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

#### **Amphibians**

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

#### **Fishes**

1 101100	
NAME	STATUS
Carolina Madtom Noturus furiosus	Proposed
There is <b>proposed</b> critical habitat for this species. The location of the critical habitat is not	Endangered
available.	O
Species profile: <a href="https://ecos.fws.gov/ecp/species/528">https://ecos.fws.gov/ecp/species/528</a>	

#### **Clams**

NAME	STATUS
Atlantic Pigtoe <i>Fusconaia masoni</i> There is <b>proposed</b> critical habitat for this species. The location of the critical habitat is not available.  Species profile: <a href="https://ecos.fws.gov/ecp/species/5164">https://ecos.fws.gov/ecp/species/5164</a>	Proposed Threatened
Tar River Spinymussel <i>Elliptio steinstansana</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1392">https://ecos.fws.gov/ecp/species/1392</a>	Endangered
Yellow Lance <i>Elliptio lanceolata</i> There is <b>proposed</b> critical habitat for this species. The location of the critical habitat is not available.  Species profile: <a href="https://ecos.fws.gov/ecp/species/4511">https://ecos.fws.gov/ecp/species/4511</a>	Threatened

#### **Critical habitats**

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

# Automatic reply: [EXTERNAL] Online Project Review Request Letter | Maple Swamp Buffer Mitigation Site





Raleigh, FW4

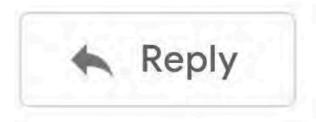
3:57 PM (4 minutes ago)

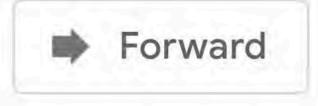




to me 🔻

Thank you for submitting your online project package. We will review your package within 30 days of receipt. If you have submitted an online **project review request letter**, expect our response within 30 days. If you have submitted an online **project review certification letter**, you will typically not receive a response from us since the certification letter is our official response. However, if we have additional questions or we do not concur with your determinations, we will contact you during the review period.









Matthews, Kathryn H <kathryn\_matthews@fws.gov>

@ 8:37 AM (3 hours ago)



to me -

Hi Jamey,

Mitigation Site

I normally wouldn't send a response to these if we agree with your determinations (though we do review all of them), but thought I would give you some feedback on this one. As you know, some of these species may be listed soon, and we are reaching out to consultants and others to assist them in making determinations.

One of the things we have started looking closely at is the presence of suitable habitat downstream of the project (since it could be affected by sediment and erosion from the project site). I think that "no effect" is ok for this project for the aquatic species, since there is no suitable habitat there, AND because you are not removing trees. I also assume that stringent sediment and erosion controls will be used to keep sediment from going downstream, but it would be great to see that in writing. Also, it appears that there are a few impounded areas downstream between the project and the known occurrence of Carolina madtom. So, perhaps there is no suitable habitat within a short distance downstream.

So, this one looks good, but if you have a project where there may be suitable habitat shortly downstream, it would be great if you could spell out how you are going to limit sediment and erosion going downstream from the project (no heavy equipment in the buffer, no tree removal, using stringent controls, etc). If you have any questions about a site, please don't hesitate to ask. Have a good week,

Kathy

Please note that I am teleworking almost exclusively. Email is the best way to reach me. Thanks,

Kathy Matthews Fish and Wildlife Biologist U.S. Fish and Wildlife Service 551-F Pylon Drive Raleigh, NC 27606 919-856-4520, x. 27

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



March 8, 2021

J. Rodney Williford RKW Properties, LLC PO Box 429 Bethel, NC 27812

Re: Maple Swamp Buffer Site: Division of Mitigation Services Riparian Buffer Project in Edgecombe County

Mr. Williford,

In accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Buyer herby 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 Edgecombe 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.

Sincerely,

Jarney O'Shaughnessey

Assistant Project Manager Jamey@ecoterra.com

W: 984-222-5116

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

#### **Maple Swamp Buffer Mitigation Site**

Maple Swamp Buffer Mitigation Site Tarboro, NC 27886

Inquiry Number: 6396141.2s

March 08, 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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GEOCHECK ADDENDUM	

**GeoCheck - Not Requested** 

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

#### **Disclaimer - Copyright and Trademark Notice**

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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**

MAPLE SWAMP BUFFER MITIGATION SITE TARBORO, NC 27886

#### **COORDINATES**

Latitude (North): 36.0071390 - 36° 0' 25.70" Longitude (West): 77.5543060 - 77° 33' 15.50"

Universal Tranverse Mercator: Zone 18 UTM X (Meters): 269778.0 UTM Y (Meters): 3987557.8

Elevation: 55 ft. above sea level

#### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5946137 DRAUGHN, NC

Version Date: 2013

South Map: 5945661 TARBORO, NC

Version Date: 2013

#### **AERIAL PHOTOGRAPHY IN THIS REPORT**

Portions of Photo from: 20140618, 20140521

Source: USDA

#### MAPPED SITES SUMMARY

Target Property Address:
MAPLE SWAMP BUFFER MITIGATION SITE TARBORO, NC 27886

Click on Map ID to see full detail.

MAP RELATIVE DIST (ft. & mi.)

ID SITE NAME ADDRESS DATABASE ACRONYMS ELEVATION DIRECTION

NO MAPPED SITES FOUND

#### 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 Proposed NPL NPL LIENS	. Proposed National Priority List Sites			
Federal Delisted NPL site lis	st			
Delisted NPL	National Priority List Deletions			
Federal CERCLIS list				
	Federal Facility Site Information listing Superfund Enterprise Management System			
Federal CERCLIS NFRAP si	ite list			
SEMS-ARCHIVE	Superfund Enterprise Management System Archive			
Federal RCRA CORRACTS facilities list				
CORRACTS	Corrective Action Report			

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	
	Generators)

#### Federal institutional controls / engineering controls registries

LUCIS.....Land Use Control Information System

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

DEBRIS..... Solid Waste Active Disaster Debris Sites Listing

OLI..... Old Landfill Inventory

LCID...... Land-Clearing and Inert Debris (LCID) Landfill Notifications

State and tribal leaking storage tank lists

LUST...... Regional UST Database

LAST...... Leaking Aboveground Storage Tanks
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

State and tribal voluntary cleanup sites

..... Responsible Party Voluntary Action Sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Brownfields Projects Inventory

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

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

#### 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

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)

...... 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

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

ECHO..... Enforcement & Compliance History Information DOCKET HWC..... Hazardous Waste Compliance Docket Listing FUELS PROGRAM..... EPA Fuels Program Registered Listing

AIRS..... Air Quality Permit Listing

ASBESTOS..... ASBESTÓS

COAL ASH Coal Ash Disposal Sites
DRYCLEANERS Drycleaning Sites
Financial Assurance Information Listing

NPDES Facility Location Listing UIC...... Underground Injection Wells Listing AOP..... Animal Operation Permits Listing SEPT HAULERS..... Permitted Septage Haulers Listing 

MINES MRDS..... Mineral Resources Data System

PCSRP...... Petroleum-Contaminated Soil Remediation Permits

#### **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
DCALE	Pageyard Covernment Archive Solid Wests Escilities List

..... Recovered Government Archive Solid Waste Facilities List

RGA LUST...... Recovered Government Archive Leaking Underground Storage Tank

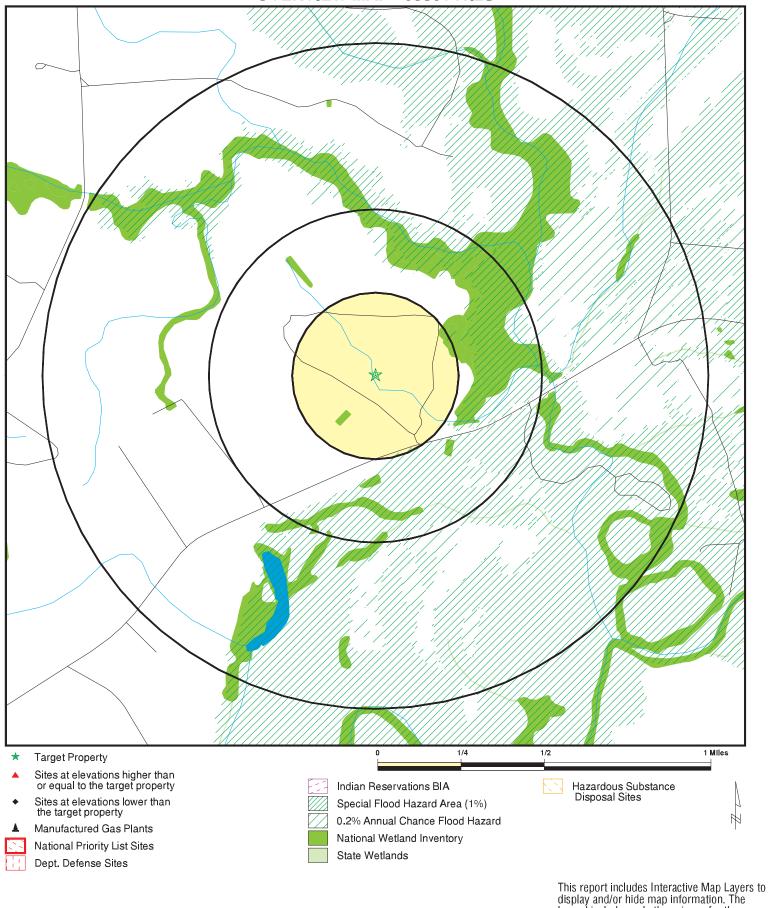
#### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were not identified.

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

There were no unmapped sites in this report.

#### **OVERVIEW MAP - 6396141.2S**



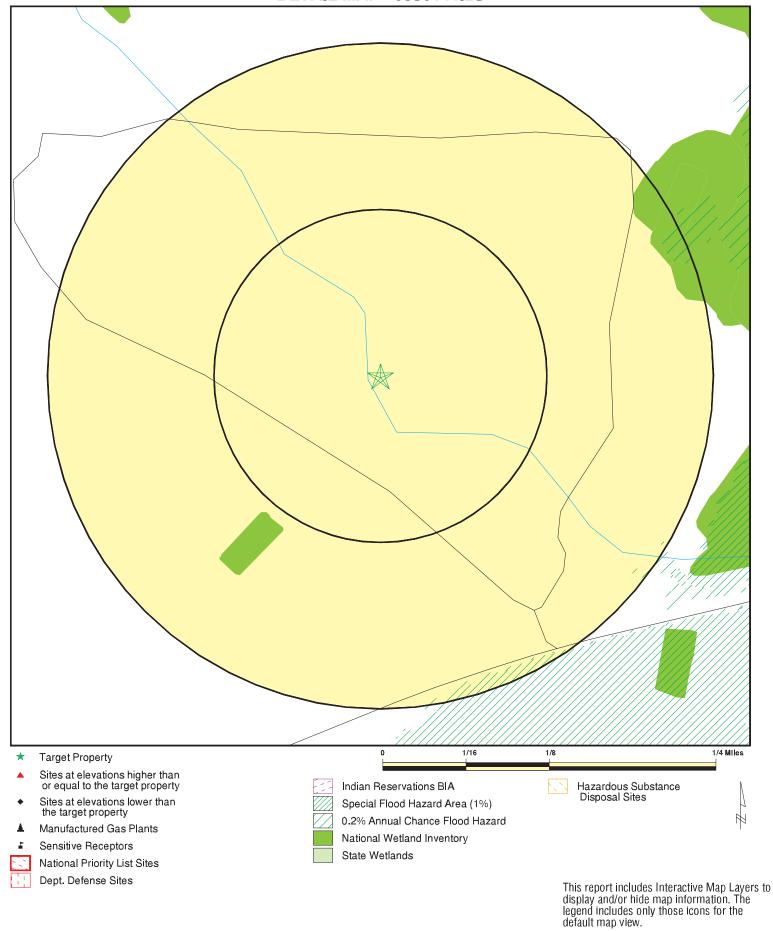
display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Maple Swamp Buffer Mitigation Site Maple Swamp Buffer Mitigation Site Tarboro NC 27886 ADDRESS:

LAT/LONG: 36.007139 / 77.554306 CLIENT: Eco Terra Management, CONTACT: Jamey Oshaughnessey INQUIRY #: 6396141.2s Eco Terra Management, LLC

DATE: March 08, 2021 4:26 pm

#### **DETAIL MAP - 6396141.2S**



SITE NAME: Maple Swamp Buffer Mitigation Site
ADDRESS: Maple Swamp Buffer Mitigation Site
Tarboro NC 27886
LAT/LONG: 36.007139 / 77.554306

CLIENT: Eco Terra Management, LLC
CONTACT: Jamey Oshaughnessey
INQUIRY #: 6396141.2s
DATE: March 08, 2021 4:28 pm

# Farmland Protection Policy Act (FPPA)



#### **United States Department of Agriculture**

Natural Resources
Conservation Service

March 3, 2021

North Carolina State Office

4407 Bland Rd. Suite 117 Raleigh North Carolina 27609 Voice (704) 680-3541 Fax (844) 325-2156 Jamey O'Shaughnessey Environmental Associate Eco Terra Management LLC 1117 Peachtree Walk NE; Suite 126 Atlanta, GA 30309

Dear Jamey O'Shaughnessey;

The following information is in response to your request soliciting comments regarding the Proposed Maple Swamp Buffer Site in Edgecombe 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 of 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 ``urbanbuilt-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

Kristin L May

CC:

Carl Kirby, acting supervisory soil conservationist, NRCS, Snow Hill, NC

The Natural Resources Conservation Service is an agency of the Department of Agriculture's Farm Production and Conservation (FPAC).

F.	U.S. Departmen			ATING					
PART I (To be completed by Federal Agency)			Date Of Land Evaluation Request						
Name of Project			Federal Agency Involved NC DOT / FHWA						
Proposed Land Use			County and State						
PART II (To be completed by NRCS)			Date Request Received By			Person Completing Form:			
Does the site contain Prime, Unique, States	vide or Local Important Farmland	NRCS	YES NO	Acres II	Acres Irrigated Average Farm Size				
(If no, the FPPA does not apply - do not complete additional parts of this form									
Major Crop(s)	Farmable Land In Govt.	Jurisdiction	Amount of I		armland As Defined in FPPA				
	Acres: %	Acres: %		Acres: %					
Name of Land Evaluation System Used	ne 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 Age	ncy)			Alternative Site Rating					
A. Total Acres To Be Converted Directly	•			Site A	Site B	Site C	Site D		
B. Total Acres To Be Converted Indirectly									
C. Total Acres In Site									
PART IV (To be completed by NRCS) Lan	d Evaluation Information								
A. Total Acres Prime And Unique Farmland									
B. Total Acres Statewide Important or Loca									
C. Percentage Of Farmland in County Or Lo	•								
D. Percentage Of Farmland in Govt. Jurisdi		ve Value							
PART V (To be completed by NRCS) Land		ve value							
Relative Value of Farmland To Be C		s)							
PART VI (To be completed by Federal Age		004 400	Maximum	Site A	Site B	Site C	Site D		
(Criteria are explained in 7 CFR 658.5 b. For 1. Area In Non-urban Use	Corridor project use form NRCS-	CPA-106)	Points (15)						
Perimeter In Non-urban Use			(10)						
Percent Of Site Being Farmed			(20)						
Protection Provided By State and Local	Government		(20)						
Distance From Urban Built-up Area	OOVERTIMENT		(15)						
Distance From Orban Built-up Area     Distance To Urban Support Services									
Size Of Present Farm Unit Compared To Average									
Size of Present Farm Unit Compared To Average     Reation Of Non-farmable Farmland									
Availability Of Farm Support Services			(5)						
10. On-Farm Investments									
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		160							
TOTAL POINTS (Total of above 2 lines)			260						
Site Selected: Date Of Selection			Was A Local Site Assessment Used?  YES NO						
Reason For Selection:					- 🗀				
	slating this form.					oto:			
Name of Federal agency representative comp	neung uns rorm:				ט ן	ate:			

#### 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 <a href="http://offices.usda.gov/scripts/ndISAPI.dll/oip\_public/USA\_map">http://offices.usda.gov/scripts/ndISAPI.dll/oip\_public/USA\_map</a>, 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 weighted 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:

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

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.