

Final Mitigation Plan Rhapsody Mitigation Project

DMS Project #: 100110 | Contract #: 7864 | DWR #: 2019-1405 | RFP: 16-007703 January 2020

Randleman Lake Watershed | HUC 0303003 | Randolph County, North Carolina

Prepared By:

Resource Environmental Solutions, LLC For Environmental Banc & Exchange, LLC 302 Jefferson Street, Suite 110 Raleigh, NC 27605

Prepared For:

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

This mitigation plan has been written in conformance with the requirements of the following:

• The Consolidated Buffer Mitigation Rule, 15A NCAC 02B .0295, effective November 1, 2015 These documents govern NCDMS operations and procedures for the delivery of compensatory mitigation.

M E M O R A N D U M



302 Jefferson Street, Suite 110

Raleigh, North Carolina 27605 919.829.9913 fax

919.209.1062 tel.

TO: NCDMS and NCDWR

FROM: MATT BUTLER - RES

DATE: JANUARY 17, 2020

RE: Response to Rhapsody Final Draft Mitigation Plan Comments DMS Project ID No.

100110, Contract #7864, DWR #2019-1405

Report:

1. Cover page –

a. There is a reference to an In-Lieu Fee Instrument. This instrument is for stream & wetland compensatory mitigation. DWR & DMS have not entered into an Instrument governing the operations and procedures for the delivery of Buffer Mitigation or Nutrient Offset. Please remove reference.

The reference to an In-Lieu Fee Instrument has been removed from the cover page.

2. Section 1.0

- a. Page 1, 3rd paragraph: There is reference to a "farm access". This "farm access" is described differently than the "existing culvert", and therefore is assumed that direct cattle access will occur within the stream immediately upstream of the downstream portion of RQ1 and likely affect the waters within the project area. Explain the condition of this farm access. This "farm access" will provide a break in the easement to be used for future, unplanned access by the landowner and will be accompanied by gates/fencing on either side to ensure cattle exclusion from the project. A sentence has been added to paragraph three explaining this easement break.
- b. If installing a crossing for farm access, then confirmation of no permit being required by the USACE will need to be provided to comply with the statement made in Section 2.2.5. Because the farm access is for future use and no in-stream work will be conducted during construction, no permits will be needed. A sentence confirming this has been added to paragraph three.
- c. If there will be direct access of cattle in the stream within this break, then the risk of sedimentation/turbidity to riparian areas or waters immediately downstream & within the project area needs to be evaluated and addressed in the mitigation plan. This is a factor considered when reviewing the ability of the buffer mitigation project to minimize nutrient removal & protect other water quality functions [as cited in 0295 (1)(2)(A) and referenced under 0295 (n)(2)]. Therefore, explain how this will have an impact on the project's ability to comply with 0295 (n)(2) and 0295 (1)(2)(A) or how the provider will resolve the risk. As stated above, it has been confirmed with the landowner that gates/fencing will be installed on either side of the easement break to ensure the exclusion of cattle to the stream.

Because cattle will be excluded from this break, there is no risk of sedimentation/turbidity to riparian areas or waters immediately downstream as a result of cattle. A sentence regarding this confirmation of cattle exclusion has been included in paragraph three.

- d. Continuity of conservation easements is a factor considered when reviewing the ability of the buffer mitigation project to minimize nutrient removal & protect other water quality functions [as cited in 0295 (1)(2)(A) and reference under 0295 (n)(2)]. Therefore, explain why this farm access is necessary, considering there is already an existing culvert upstream for farm access. DWR would appreciate the providers limiting their easement breaks when at all possible, especially where easement breaks may include cattle crossing the stream. The purpose of this easement break is to provide flexibility for future access at the request of the landowner. While maintaining a continuous conservation easement is our priority, in order to minimize nutrient removal and protect water quality, we also strive to acknowledge and balance the requests of the landowner. Because this farm access will be gated/fenced, it allows us to comply with the landowner's request of providing future access, while also ensuring that the work we will be doing to the stream and within the Project easement will be protected from the impacts of cattle.
- e. Page 2, 1st paragraph:
 - Replace "zero" with "top of bank" within the paragraph

The word "zero" has been replaced with the phrase "top of bank" throughout this section.

3. Section 3.1 -

- a. Only temporary seeding is proposed for application. However, DWR requests that permanent riparian seeding also be applied and established where bare areas are present from impacts of cattle hoof shear. It is important to maintain a healthy and diverse herbaceous layer within the riparian areas to reduce the potential of runoff, nutrients and sediments into the streams.
 - A sentence has been added to section 3.1 to clarify "A mixture of temporary and permanent riparian seeding will be applied and established where bare areas are present from impacts of cattle hoof shear." However, as this project will not have much in the way of land disturbing stabilization activities it is not likely that other areas within the project easement will need seeding.
- b. Planting with a seed mix that is abundant in annual and perennial pollinator species is strictly voluntary but is being encouraged by DWR in other mitigation plans to promote diversity and enhance the health of the herbaceous layer, which can also greatly benefit planted stems.

RES appreciates DWR requests and will do our best to include pollinator-rich seedlings in our seed mixture. At this time, we have included common milkweed and blackeyed susan seed to be included with our typical riparian seed mix order. As we do not buy the seed mix until closer to the actual date of construction the actual seeds that are bought will be dependent on the alignment of the germination and time period of seeding along with the availability and cost at the time. RES will continue to consider this request in all future projects.

4. Figure 1 -

a. Remove the 14-digit HUC from the service area map. It is misleading as presented. Figure 1 has been updated with the removal of the 14-digit HUC.

5. Figure 3 -

a. The label chosen to show the widths from 101-200' is difficult to discern on the figure. It is recommended to just use a different color to show these areas rather than hatching. Figure 3 has been updated with changes to the symbology for the 101-200' buffer widths using different solid colors (with no hatching) to clearly discern the separate buffer zones.

Restoration, 101-200' zones are symbolized as light green and Enhancement, 101-200' areas are symbolized as fuchsia.

6. Overall, if the riparian restoration, enhancement and preservation is done according to the plan and addresses all comments and corrections provided by DWR, the site should provide a good buffer mitigation project.

Additional Edits

• There is a slight change to the riparian buffer enhancement mitigation credits in response to the final conservation easement and plat recorded on December 9th, 2019 (Appendix C). The enhancement area decreased by eight square feet and therefore decreased the credits 4.335. The Buffer Mitigation Plan and associated digital files have been updated to reflect these changes; changes within the document can be found in Section 1.1, Table 1, Section 2.1, Table 4, Table 5, and Figure 3. Below is the original Table 4 displayed in both the Draft and Draft Final versions of this BPDP showing the square footage and credit calculations for the Project; the table below that is an updated Table 4. displaying the new values, highlighting the changes.

Original Table 4. Rhapsody Mitigation Project (100110) Project Mitigation Summary

Total Riparian Buffer Mitigation Credits				
Mitigation Totals	Square Feet	Credits		
Restoration	68,800	66,907.251		
Enhancement via Cattle Exclusion	248,182	123,232.640		
Total Riparian Buffer	316,982	190,139.891		

Updated Table 4. Rhapsody Mitigation Project (100110) Project Mitigation Summary

	Total Riparian Buffer Mitigation Credits				
Mitigation Totals	Square Feet	Credits			
Restoration	68,800	66,907.251			
Enhancement via Cattle Exclusion	248,174	123,228.305			
Total Riparian Buffer	<mark>316,974</mark>	190,135.556			

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Figure 4 – Project Vicinity

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Figure 8 - Monitoring Plan

APPENDICES

Appendix A – NCDWQ Stream Determination Letter

Appendix B – NCDWQ Mitigation Viability Letter

Appendix C – Site Protection Instrument (s)

Appendix D – Categorical Exclusions

Appendix E – Correspondence on Environmental and Cultural Resources

1 MITIGATION PROJECT SUMMARY

Environmental Banc & Exchange, LLC (EBX), a wholly-owned subsidiary of Resource Environmental Solutions (RES), is pleased to provide this Mitigation Plan for the Rhapsody Riparian Buffer Mitigation Project (Project) as a full-delivery buffer mitigation project for the Division of Mitigation Services (DMS) (DMS #100110). This Project is designed to provide riparian buffer mitigation credits for unavoidable impacts due to development within the Randleman Lake Watershed of the Cape Fear River Basin, United States Geological Survey (USGS) 8-digit Hydrologic Unit Code (HUC – 03030003) (**Figure 1**). This Mitigation Plan is in accordance with the Consolidated Buffer Mitigation Rule 15A NCAC 02B .0295 and the Randleman Lake Water Supply Watershed Buffer Rule 15A NCAC 02B .0250.

1.1 Project Overview

The conservation easement of the Rhapsody Project will total approximately 7.75 acres and includes two perennial unnamed tributaries (RQ1 and RQ2) that drain south through the easement into Muddy Creek approximately one mile downstream of the Project (**Figure 2**). Reach RQ1, a 1,890 linear feet reach, is the primary feature onsite and has a drainage area of 213 acres. RQ2 flows southeast into the easement for 189 linear feet and then drains directly into RQ1 just below a large bedrock outcrop. Stream determinations were verified by the DWR on June 12, 2018. Correspondence regarding this determination is in a letter dated July 24th 2018 **Appendix A**.

There are two easement breaks in the Project: one existing culvert along RQ1 that will be maintained and another break that will allow for farm access (**Figure 2**). This farm access will provide a break for future, unplanned access by the landowner and will include gates on either side of the easement break in order to exclude cattle from accessing the stream. Because this access will be used for future use and no in-stream work will be conducted during construction, no permits will be needed. Land use within the Project is primarily actively grazed, disturbed riparian forest, non-forested pasture and a recently timbered area with the presence of invasive species. Grazing livestock have historically had access to all stream reaches within the Project. The lack of riparian buffer trees and the long-term presence of cattle has contributed to bank instability and erosional rills within some riparian zones.

The goal of the Project is to restore and enhance ecological function to the existing stream and riparian buffer by establishing appropriate plant communities while minimizing temporal and land disturbing impacts and will assist DMS with achieving its mitigation goals in the Randleman Lake Watershed. Restoration and enhancement of the Randleman Lake riparian buffer (as defined in 15A NCAC 02B .0250) is anticipated to result in a reduction of the water quality stressors currently affecting the Project: livestock access and areas of minimal riparian buffer. Immediate water quality benefits and pollutant removal within the vicinity of the Project will include the exclusion of livestock access to streams and reduction in nutrient loads from agricultural land-uses. This Project is consistent with the management strategy for maintaining and protecting riparian areas in the Randleman Lake watershed. Project attributes are summarized in **Table 1.**

Table 1. Project Attributes

Project Name	Rhapsody
Hydrologic Unit Code	03030003010060
River Basin	Cape Fear
Geographic Location (Lat, Long)	35.897336, -79.889849
	002093, 00024 Randolph
	001359, 01013 Randolph
	002207, 01333 Randolph
Site Protection Instrument (DB, PG)	002207, 00639 Randolph
Total Credits (BMU)	190,135.556
Types of Credits	Riparian Buffer
Mitigation Plan Date	October 2020
Initial Planting Date	April 2020
Baseline Report Date	June 2020
MY1 Report Date	December 2020
MY2 Report Date	December 2021
MY3 Report Date	December 2022
MY4 Report Date	December 2023
MY5 Report Date	December 2024

DWR staff performed an onsite viability assessment for buffer mitigation on June 12, 2018. Correspondence regarding this assessment is provided in **Appendix B** and dated August 2, 2018. The Rhapsody Project presents the opportunity to provide up to 190,135.556 riparian buffer credits by establishing a native hardwood forested and herbaceous riparian buffer plant community with a minimum width of 50 feet and a maximum of 200 feet from the channel top of bank. A small area in the northwest corner in which the buffer is less than 20 feet will not be used to generate credit. There are 65,975 square feet from the top of bank to 100 feet of Restoration, 2,825 square feet of 101 to 200 feet of Restoration, 258 square feet of 20 to 30 feet of Enhancement, 245,449 square feet of from the top of bank to 100 feet of Enhancement via Cattle Exclusion, and 2,467 square feet of 101 to 200 feet of Enhancement via Cattle Exclusion. This new community will be established in conjunction with the treatment of any existing exotic

or undesirable plant species. **Figure 3** shows the **Conceptual Design Plan Riparian Buffer** and **Section 2.1** provides details of the mitigation determination on the Rhapsody Project.

1.1.1 Parcel Ownership

The land required for the construction, management, and stewardship of this Project includes portions of the parcels listed in **Table 2**. EBX obtained conservation easements from the current landowners. The easement deeds and survey plats will be submitted to DMS and the State Property Office (SPO) for approval and will be held by the State of North Carolina. The easement deeds followed the DMS Full Delivery Conservation Easement Template dated May 5, 2017 and is included in **Appendix C**. The recorded easements allows EBX to proceed with the Project development and protect the mitigation assets in perpetuity. A finalized copy of the land protection instrument(s) is included in **Appendix C**.

Table 2. Parcel and Landowner Information

Landowners	Pin or Tax Parcel ID	Agreement Type	County
	7738539058		_
Daniel D. Orrani II and Camthia D. Orrani	7738623720	E	D d - 1 - h
Roger D. Queen, II and Cynthia D. Queen	7738528452	Easement	Randolph
	7738623180		

1.2 Project Location

The Rhapsody Project is within the Randleman Lake Watershed of the Cape Fear River Basin within the 8-digit Hydrologic Unit Code (HUC) 03030003, 14-digit HUC 03030003010060 and DWR Subbasin Number 03-06-08.

The Rhapsody Project is located in Randolph County approximately five miles east of Archdale, North Carolina (**Figure 4**). To access the Project head East on Cedar Square Road from I-74 and turn left on Muddy Creek Road, after about a one and half miles the Project will be on the right. The coordinates are 35.897336° and -79.889849°.

1.3 Existing Conditions

1.3.1 Surface Water Classification

The tributaries within the Rhapsody Site drain to Muddy Creek. The Muddy Creek current State classification is Class WS-IV. The WS-IV classification is intended to protect waters used as sources of water supply for drinking, culinary, or food processing purposes where a WS-I, II or III classification is not feasible. These waters are also protected for Class C uses. WS-IV waters are generally in moderately to highly developed watersheds or Protected Areas. Muddy Creek flows into the Randleman Reservoir, a drinking water supply with stream buffer protections. This supply has been designated a Nutrient Sensitive Water and DWR has developed a set of rules in order to protect, preserve, and reforest existing riparian buffers in the watersheds that feed into the supply (WS-IV; NCDWQ 2013).

1.3.2 Physiography and Soils

The Project is located within the Piedmont Physiographic region, specifically within the Southern Outer Piedmont level IV ecoregion within the Piedmont level III ecoregion. The physiography of the ecoregion is mostly characterized by hills, ridges and irregular plains. Streams generally have a low to moderate

gradient with cobble, gravel, and sandy substrates. Elevations range from 724 to 760 feet above mean sea level (NAD 27) based upon United States Geological Survey (USGS) topographic mapping (**Figure 5**).

The National Resources Conservation Service (NRCS) Web Soil Survey, accessed November 30, 2018, depicts three map units across the project (**Figure 6**). The map units are Helena sandy loam, 6 to 10 percent slopes; Wilkes-Poindexter-Wynott complex, 15 to 25 percent slopes; and Wynott-Enon complex, 8 to 15 percent slopes. The soil characteristics of these map units are summarized in **Table 3**.

Table 3. Site Mapped Soil Series

Map Unit Symbol	Map Unit Name	Percent Hydric	Drainage Class	Hydrologic Soil Group	Landscape Setting
HeC	Helena sandy loam, 6-10 percent slopes	0%	Moderately Well Drained	D	Shoulders, backslopes on ridges
WpE	Wilkes-Poindexter-Wynott complex, 15-25 percent slopes	0%	Well Drained	C/D	Backslopes on ridges
WtC	Wynott-Enon complex, 8- 15 percent slopes	0%	Well Drained	C/D	Backslopes on ridges

1.3.3 Wetlands

The United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) depicts no wetland areas within the site (**Figure 7**).

1.3.4 Landscape Communities

A. Existing Vegetation Communities

The project area is currently utilized by cattle for grazing and is a combination of non-forested and a closed canopy of native hardwoods with the presence of invasive species. Cattle have access to all streams within the easement. Prior to 1993 this area was not in significant agricultural production but had minor land clearing between 1993 and 2005. And then further clearing took place between 2008 and 2014. The buffer viability letter from DWR in **Appendix B** provides details on land-uses within the riparian areas on the Project. Existing tree species within the forested areas include: American Beech (*Fagus grandifolia*), tulip poplar (*Liriodendron tulipifera*), American sycamore (*Platanus occidentalis*), and ironwood (*Carpinus caroliniana*). The non-forested areas consist primarily of pasture grasses and weedy herbaceous vegetation. Invasive species are present throughout the forested understory, most notably princess tree (*Paulownia tomentosa*), *multiflora rose* (*Rosa multiflora*), tree of heaven (*Ailanthus altissima*), and Chinese privet (*Ligustrum sinense*).

B. Riparian Vegetation

The riparian buffer, especially in the northern two segments of the easement is in poor condition. Most of the riparian buffer is devoid of trees or shrubs. Current buffer conditions demonstrate significant degradation with a loss of stabilizing vegetation because of continued cattle access and past land management actions. Throughout the Project area there are scattered invasives that will be treated to the extent practicable. Habitat along the northern two segments of the easement are poor with little woody debris or overhanging vegetation for fish cover or habitat for other aquatic species. The southern easement is within canopy cover but is constantly being impacted by cattle access.

1.3.5 Existing Conditions Photos

Since the existing conditions photographs and the viability letter found in **Appendix B**, the land use conditions have not changed and remain actively grazed pasture and disturbed riparian forest with an invasive presence.



Buffer Condition Along RQ1 on the Eastern side of the Eastern



Buffer Condition Along RQ1 on the Western side of the Easement



Looking Upstream at the Confluence of RQ1 and RQ2 December 4, 2018



Buffer Condition along RQ2 December 4, 2018



Buffer Condition Along RQ1 upstream of the confluence of RQ1 and RQ2



Natural Grade Control in RQ1 December 4, 2018

December 4, 2018



Buffer Condition Along RQ1 on the Northwestern side of the Easement December 4, 2018



Buffer Condition Along RQ1 on the Northeastern side of the Easement December 4, 2018

2 REGULATORY CONSIDERATIONS

2.1 Determination of credits

This Project has the potential to generate approximately 66,907.251 ft² (1.536 acres) of riparian buffer restoration credits on existing non-forested pasture and 123,228.305 ft² (2.829 acres) of buffer enhancement for cattle exclusion credits. The riparian buffer mitigation credits generated will service Randleman Lake buffer impacts within the USGS 8-digit HUC 03030003 of the Cape Fear River Basin. The total potential mitigation credits that the Rhapsody Mitigation Project will generate are summarized in **Table 4** and **Table 5**; **Figure 3**.

Table 4. Rhapsody Mitigation Project (100110) Project Mitigation Summary

Total Riparian Buffer Mitigation Credits				
Mitigation Totals	Square Feet	Credits		
Restoration	68,800	66,907.251		
Enhancement via Cattle Exclusion	248,174	123,228.305		
Total Riparian Buffer	316,974	190,135.556		

Table 5. Rhapsody Project (100110) - Mitigation Site Credit Summary

Credit Type	Location	Subject? (enter NO if ephemeral or ditch ¹)	Feature Type	Mitigation Activity	Min-Max Buffer Width (ft)	Feature Name	Total Area (sf)	Creditable Area (sf)	Initial Credit Ratio (x:1)	% Full Credit	Final Credit Ratio (x:1)	Riparian Buffer Credits
Buffer	Rural	Yes	I/P	Enhancement via Cattle Exclusion	20-30	RQ1	258	258	2	75%	2.66667	96.750
Buffer	Rural	Yes	I/P	Restoration	0-100	RQ1	65,975	65,975	1	100%	1.00000	65,975.000
Buffer	Rural	Yes	I/P	Enhancement via Cattle Exclusion	0-100	RQ1, RQ2	245,449	245,449	2	100%	2.00000	122,724.500
Buffer	Rural	Yes	I/P	Restoration	101-200	RQ1	2,825	2,825	1	33%	3.03030	932.251
Buffer	Rural	Yes	I/P	Enhancement via Cattle Exclusion	101-200	RQ1	2,467	2,467	2	33%	6.06061	407.055
							TOTAL	316,974				190,135.556

2.2 Other regulatory considerations

2.2.1 Environmental Screening and Documentation

Because DMS mitigation sites are considered to be a category of activities that do not individually or cumulatively have an impact on the human environment, they do not require preparation of an environmental assessment or environmental impact statement. To ensure that a site meets the "Categorical Exclusion" criteria, the Federal Highways Administration and DMS have developed a Categorical Exclusion (Cat-Ex) checklist. The Cat-Ex for Rhapsody was sent to DMS on August, 6th 2019 and a copy is included in **Appendix D**.

The regulatory evaluation for the Cat-Ex focused primarily on the presence of hazardous materials, utilities and restrictive easements, rare/threatened/endangered species or critical habitats, cultural resources, and the potential for hydrologic trespass. The Cat-Ex summarized impacts to natural, cultural, and historical resources and documented coordination with stakeholders and federal and state agencies.

2.2.2 Threatened and Endangered Species

Plants and animals with a federal classification of endangered or threatened are protected under provisions of Sections 7 and 9 of the Endangered Species Act of 1973, as amended. The gold and bald eagles are protected under the Bald and Golden Eagle Protection Act (BGPA) and prohibits take of bald and golden eagles. A desktop analysis was performed to identify rare species or unique habitats on-site, including using the USFWS Information for Planning and Conservation (IPAC) online tool and performing a query of the October 2018 North Carolina Natural Heritage Program database of natural heritage element occurrences (USFWS, 2018; NCNHP, 2018). Additionally, a field investigation was conducted to evaluate federally protected species potentially occurring on the Project.

RES conducted the nine-step project review process for self-certification and provided the results to USFWS to determine if they had any concerns with the determinations. No correspondence has been received at the time of submittal. Documentation of all correspondence is included in **Appendix E**.

The Fish and Wildlife Coordination Act requires consultation with state fish and wildlife agencies when "waters of any stream or other body of water are proposed or authorized, permitted or licensed to be impounded, diverted...or otherwise controlled or modified." A letter was sent to the NCWRC on June 13, 2019 requesting review and comment of possible issues with respect to fish and wildlife resources on the Project. NCWRC responded on June 14, 2019 that stated that the Schweinitz's sunflower (*Helianthus schweinitzii*), the Greenboro crayfish (*Cambarus catagius*) and the Purple coneflower (*Echinacea purpurea*) have known records within the vicinity of the project. Therefore, RES will notify NCWRC if any of these species are identified within the project area. Documentation is included **Appendix E**.

According to the USFWS IPAC database review tool (USFWS 2017), Randolph County's list of threatened and endangered species includes one Federally listed species; Schweinitz's sunflower (*Helianthus schweinitzii*). A survey was conducted on August 20th, 2019 and determined that there were small areas of suitable habitat for the Schweinitz's sunflower within the project area but no species were present onsite. Therefore, a "No effect" determination was made. Documentation is included in **Appendix E**.

2.2.3 Cultural Resources

Environmental and cultural resources include historic and archeological resources located in or near the Site. RES has evaluated the Project's existing and future conditions to determine any potential mitigation impacts to cultural resources.

A review of properties listed on the North Carolina National Register of Historic Places maintained by the North Carolina State Historic Preservation Office (NCSHPO 2017) was conducted for the Project Sites and surrounding areas. No historic properties listed on the National Register exist within the Project. No architectural structures or archeological artifacts have been observed or noted during surveys of the Project area for restoration purposes. RES requested review and comment from the State Historic Preservation Office (SHPO) with respect to any archaeological and architectural resources related to the Project Sites. The summary of the review pursuant to Section 106 of the National Historic Preservation Act (NHPA) and correspondence with the SHPO can be found in **Appendix E**.

2.2.4 Federal Emergency Management Agency (FEMA)/ Hydrologic Trespass

The Project is not within a mapped FEMA Regulatory Floodway or 100-year floodplain (**Figure 7**). No hydrologic trespass will be permitted to adjacent properties upstream or downstream of the Project.

2.2.5 Clean Water Act - Section 401/404

Due to the nature of this project there will be no 401/404 permit required.

3 RIPARIAN RESTORATION AND ENHANCEMENT IMPLEMENTATION PLAN

Riparian restoration and enhancement areas adjacent to streams are shown in **Figure 3**, and were approved by the DWR in the letter dated August 2, 2018 (**Appendix B**)

3.1 Site Preparation

Preparation at the Project will involve spraying undesired fescue grass and exotic invasive species, contoured ripping, seeding, and planting. Livestock will be excluded from the entire easement area by installing permanent fence. Stabilization and implementation of dispersal techniques will be utilized where surface flows have become concentrated. Immediately following completion of stabilization activities, disturbed areas will be stabilized to prevent erosion. If possible, topsoil will be stockpiled and re-applied to provide a favorable seed bed. To provide a rapid herbaceous cover, planting of a temporary seed mix will be required. A mixture of temporary and permanent riparian seeding will be applied and established where bare areas are present from impacts of cattle hoof shear. Areas of compacted soil will be ripped and disked prior to seed mix application and tree planting.

3.2 Materials

A combination of silt fencing, erosion control wattles, temporary seeding, and erosion control matting will be used to reduce erosion and stabilize soil in riparian areas during any land disturbance activities. These erosion control measures shall be inspected and properly maintained at the end of each working day to ensure measures are functioning properly until permanent vegetation is established. Disturbed areas shall be temporarily seeded within ten working days and upon completion of final grading, permanent vegetation shall be established for all disturbed areas. After construction activities, the subsoil will be scarified and any compaction will be deep tilled before the topsoil is placed back over the site. Any topsoil that is removed during construction will be stockpiled and placed over the site during final soil preparation. This process should provide favorable soil conditions for plant growth. Bare root plantings and live stakes shall be planted according to detail shown in the planting plan.

3.3 Methods

All restoration and enhancement activities will begin from the tops of the stream banks and extend a minimum of 50 feet from the stream outward to a maximum of 200 feet perpendicular to the stream channel. Vegetation within riparian buffers can vary depending on disturbance regime and adjacent community types, so the protected buffer easement will be planted with appropriate native species observed in the surrounding forest and species known to occur in similar environments (Section 3.4). In forested areas, the buffer restoration areas are determined based on whether there are less than 25 percent of the tree canopy cover and a lack of dense growth of smaller woody stems (i.e. shrubs or saplings) and enhancement areas are determined as being higher than 25 percent but lower than what is deemed appropriate for the location in accordance with the Consolidated Buffer Mitigation Rule 15A NCAC 02B .0295 (b)(12), 15A NCAC 02B .0295 (b)(4). Restoration and enhancement areas were also determined by the mitigation determination performed during the viability assessment by DWR (Appendix D).

3.3.1 Riparian Restoration Activities

Buffer restoration activities will include planting a composition of native bare-root tree species based on reference reach data and excluding livestock from the stream and buffer area. The restoration of plant

communities within the Project will not only provide stabilization and improve water quality within the easement limits, but will also provide ecological benefits to the entire watershed

3.3.2 Riparian Enhancement Activities

Enhancement will occur in the very northern segment of the easement, along the stream in the middle segment and the complete southern segment of the easement in accordance with the Consolidated Buffer Mitigation Rule 15A NCAC 02B .0295 (o)(6) (**Figure 3**). All livestock will be removed from the easement and the fence will be installed to exclude access to riparian areas and their associated streams.

In the northern segment of the easement, the same activities as described in the Riparian Restoration Activities will be conducted (planting a composition of native bare-root tree species). However, since this area was a riparian buffer with mature forest before and after the effective date of Rule 15A NCAC 02B .0250 and remained forested up to approximately 2007, when it was cleared, but had the presence of cattle throughout this time period, it is only viable for enhancement credit but will receive similar activities as a restoration area.

The area along the stream in the middle segment as well as the southern segment have continued to remain a fully forested area that has been grazed by cattle, therefore this area will not be planted but livestock exclusion fencing will be installed around these segments.

3.4 Planting Plan

All riparian restoration areas will be planted from top of bank back at least 50 feet from the stream with bare root tree seedlings on a six by nine-foot spacing to achieve an initial density of 680 trees per acre. Planting where riparian buffer restoration and selected areas of enhancement are being performed will meet the performance standards outlined in the Rule 15A NCAC 02B .0295. The vegetation data will be collected no earlier than late August of each year. This includes treating invasive species and planting at least four species of native hardwood bare root trees. Piedmont Alluvial Forest (Schafale 2012) will be the target community type and will be used for all areas within the Project. This forest system is common throughout Piedmont drainages and will provide water quality and ecological benefits. The initial planting of bare root trees will occur before spring 2020. Wherever possible, mature vegetation will be preserved and incorporated into the buffer. Some areas adjacent to the forested areas may require maintenance due to the rapid regeneration of some species, such as red maple (*Acer rubrum*) and sweetgum (*Liquidambar styraciflua*). Tree species specified for planting at the Rhapsody Project are shown in **Table 6**.

Table 6. Tree Planting List

Bare Root Planting Tree Species					
Species	Common Name	Spacing (ft)	Unit Type	% of Total Species Composition	
Platanus occidentalis	American sycamore	9X6	Bare Root	20	
Liriodendron tulipifera	Tulip poplar	9X6	Bare Root	15	
Betula nigra	River birch	9X6	Bare Root	15	
Cercis canadensis	Eastern redbud	9X6	Bare Root	10	
Quercus phellos	Willow oak	9X6	Bare Root	10	
Quercus alba	White oak	9X6	Bare Root	10	
Quercus nigra	Water oak	9X6	Bare Root	10	
Quercus rubra	Northern red oak	9X6	Bare Root	10	

3.5 Easement Boundaries

Easement boundaries will be identified in the field to ensure clear distinction between the Project and adjacent properties. Boundaries may be identified by marker, bollard, post, tree-blazing, or other means as allowed by site conditions and/or conservation easement. Boundaries will be marked with signs identifying the property as a mitigation site and will include the name of the long-term steward and a contact number. Boundary markers disturbed, damaged, or destroyed will be repaired and/or replaced on an as needed basis. The easement boundary will be fenced to ensure cattle are excluded as required by 15A NCAC 02B .0295 (o)(6) (**Figure 3**). The easement boundary will be checked annually as part of monitoring activities and the conditions as well as any maintenance performed will be reported in the annual monitoring reports to DWR.

4 MONITORING PLAN

4.1 Monitoring Protocol and Success Criteria

Annual vegetation monitoring and visual assessments will be conducted. Riparian buffer vegetation monitoring will be based on the "Carolina Vegetation Survey-Ecosystem Enhancement Program Protocol for Recording Vegetation: Level 1-2 Plot Sampling Only Version 4.2". Monitoring plots will be installed a minimum of 100 meters squared in size and will cover at least two percent of the planted mitigation area. The total planted mitigation area is 4.66 acres. These plots will be randomly placed throughout the planted riparian buffer mitigation area and will be representative of the riparian buffer restoration and enhancement areas where applicable. As the upper section of Rhapsody was cleared after 2007, this area will be planted and monitored although credit is only being generated under Enhancement for cattle exclusion. The following data will be recorded for all trees in the plots: species, height, planting date (or volunteer), and grid location. All stems in plots will be flagged with flagging tape. There will be four (4) monitoring plots (2 designated to restoration, 2 designated to enhancement via cattle exclusion with planting) (**Figure 8**).

Photos will be taken from all photo points each monitoring year and provided in the annual reports. Visual inspections and photos will be taken to ensure that enhancement areas are being maintained and compliant. The measures of vegetative success for the Project will be the survival of at least four native hardwood tree species, where no one species is greater than 50 percent of stems, at a density of at least 260 stems per acre at the end of Year 5. Native volunteer species may be included to meet the performance standards as determined by NC Division of Water Resources (DWR).

A visual assessment of the conservation easement will also be performed each year to confirm:

- Fencing is in good condition throughout the site (if applicable);
- no cattle access within the conservation easement area;
- no encroachment has occurred:
- no invasive species in areas were invasive species were treated;
- diffuse flow is being maintained in the conservation easement areas; and
- there has not been any cutting, clearing, filling, grading, or similar activities that would negatively affect the functioning of the buffer.

Table 7. Summary of Project Monitoring and Maintenance Activities

Component/	Monitoring	Maintenance through project close-out
Feature	, and the second	
Vegetation	Annual vegetation monitoring	Vegetation shall be maintained to ensure the health and vigor of the targeted plant community. Routine vegetation maintenance and repair activities may include supplemental planting, pruning, mulching, and fertilizing. Exotic invasive plant species shall be treated by mechanical and/or chemical methods. Any vegetation requiring herbicide application will be performed in accordance with NC Department of Agriculture (NCDA) rules and regulations. Vegetation maintenance activities will be documented and reported in annual monitoring reports. Vegetation maintenance will continue through the monitoring period.
Invasive and Nuisance	Visual	Invasive and noxious species will be monitored and treated so that none become
Vegetation	Assessment	dominant or alter the desired community structure of the site. Locations of invasive and nuisance vegetation will be mapped.
Site Boundary	Visual Assessment	Site boundaries shall be identified in the field to ensure clear distinction between the mitigation site and adjacent properties. Boundaries will be marked with signs identifying the property as a mitigation site and will include the name of the long-term steward and a contact number. Boundaries may be identified by fence, marker, bollard, post, tree-blazing, or other means as allowed by site conditions and/or conservation easement. Boundary markers disturbed, damaged, or destroyed will be repaired and/or replaced on an as-needed basis. Easement monitoring and staking/ signage maintenance will continue in perpetuity as a stewardship activity.
Road Crossing	Visual Assessment	Road crossings within the site may be maintained only as allowed by conservation easement or existing easement, deed restrictions, rights of way, or corridor agreements. Crossings in easement breaks are the responsibility of the landowner to maintain.
Livestock Fencing	Visual Assessment	Livestock fencing is to be placed outside the easement limits. Maintenance of fencing is the responsibility of the landowner.

4.2 Adaptive Management Plan and Site Maintenance

Adaptive measures will be developed or appropriate remedial actions taken if in the event that the project, or a specific component of the project, fails to achieve the defined success criteria. DMS must approve all adaptive management plans prior to submittal to DWR.

Remedial actions will be designed to achieve the success criteria specified in this Mitigation Plan, and will include identification of the causes of failure, remedial design approach, work schedule, and monitoring criteria that will consider physical and climatic conditions.

Initial plant maintenance may include a one-time mowing, prior to initial planting to remove undesirable species. If mowing is deemed necessary by RES during the monitoring period, RES must first receive approval by DMS and then by DWR prior to any mowing activities to ensure that no buffer violations have been performed. Failure to receive approval to mow within the Randleman Lake buffer, as defined in 15A NCAC 02B .0250, by DWR could result in Randleman Lake buffer violations and violations of the conservation easement. If necessary, RES will develop a species-specific control plan.

5 STEWARDSHIP

The Project will be transferred to the NCDEQ Stewardship Program. NCDEQ Stewardship Program shall serve as the conservation easement holder and entity responsible for long term stewardship of the Project Sites. This party shall serve as conservation easement holder and long-term steward for the property and will conduct periodic inspection of the site to ensure that restrictions required in the conservation easement are upheld. The NCDEQ Stewardship Program is developing an endowment system within the non-reverting, interest-bearing Conservation Lands Conservation Fund Account. The use of funds from the Endowment Account will be governed by North Carolina General Statute GS 113A-232(d)(3). Interest gained by the endowment fund may be used for the purpose of stewardship, monitoring, stewardship administration, and land transaction costs, if applicable.

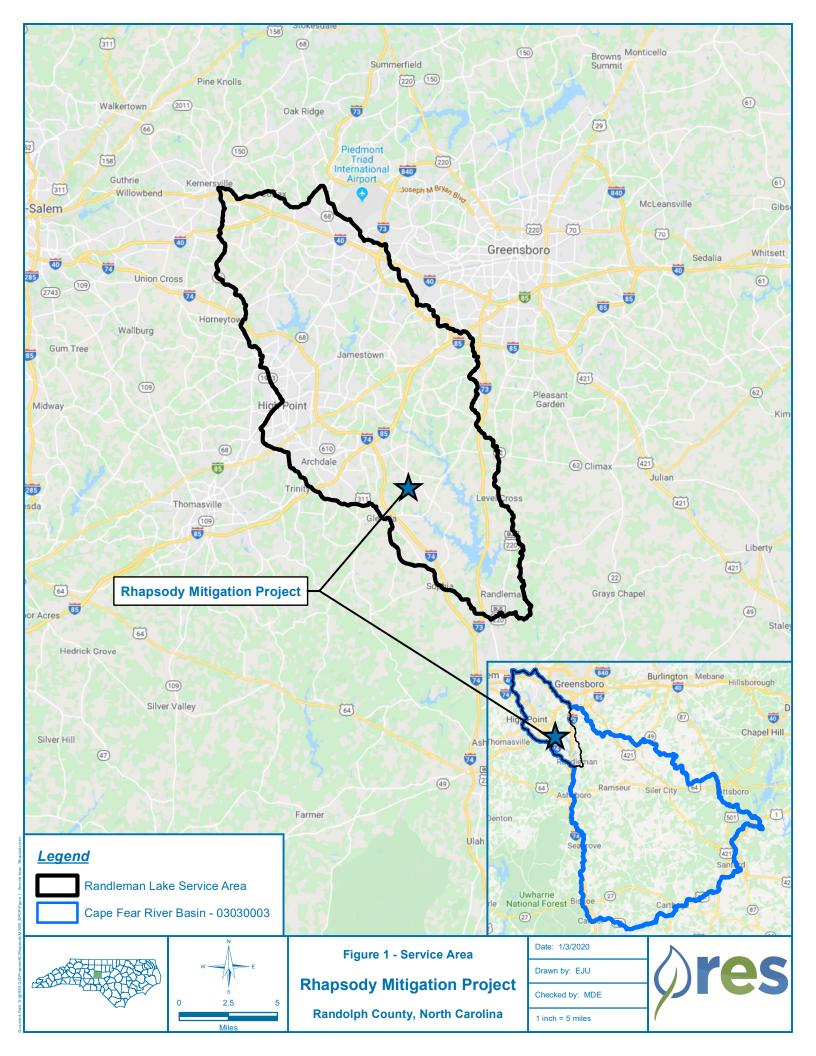
The Stewardship Program will periodically install signage as needed to identify boundary markings as needed. Any livestock or associated fencing or permanent crossings will be the responsibility of the owner of the underlying fee to maintain.

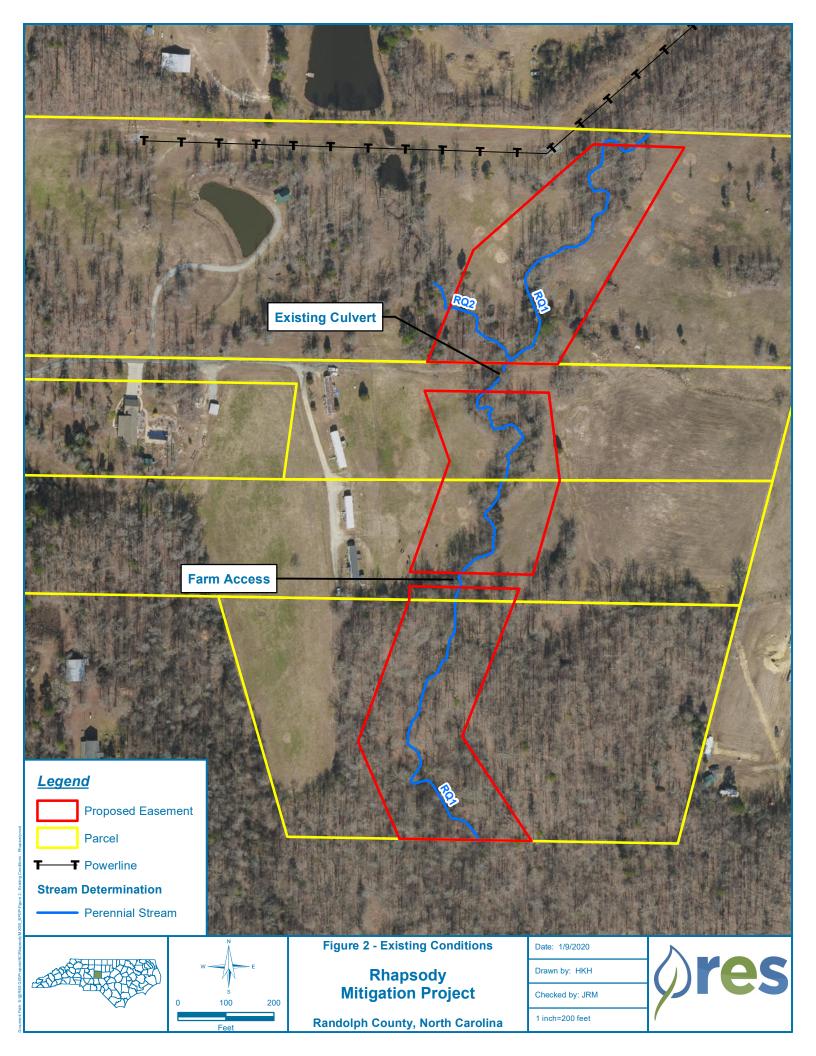
6 REFERENCES

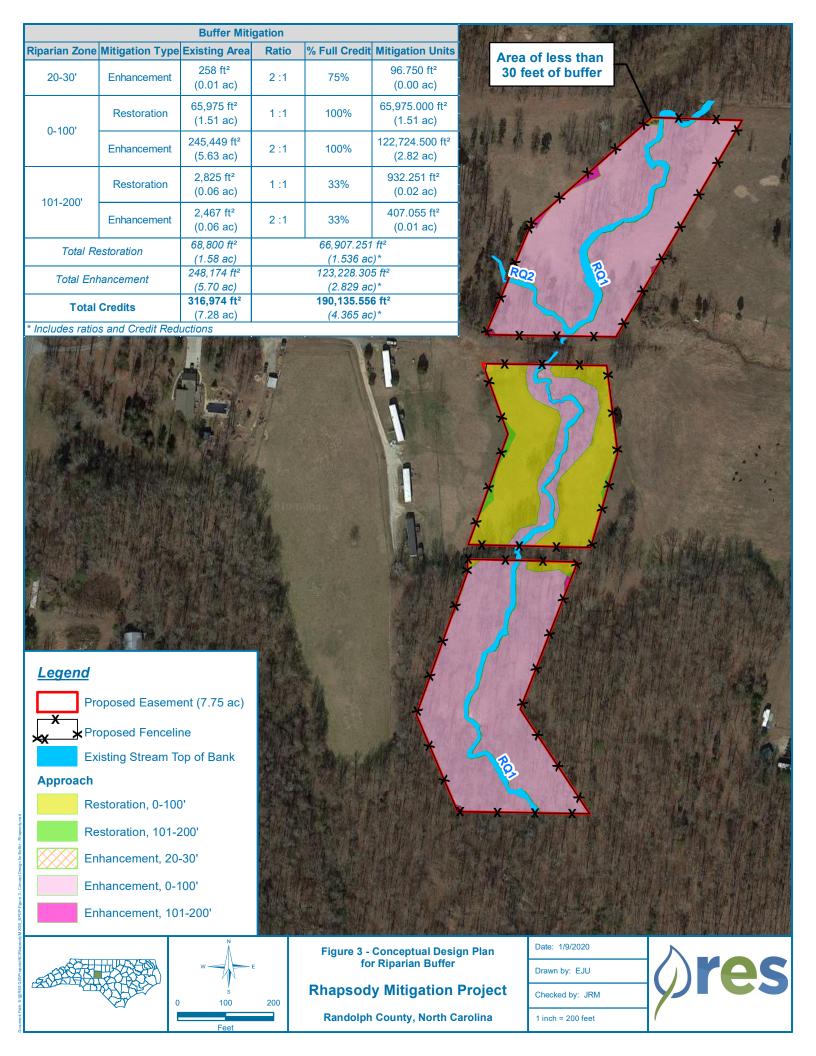
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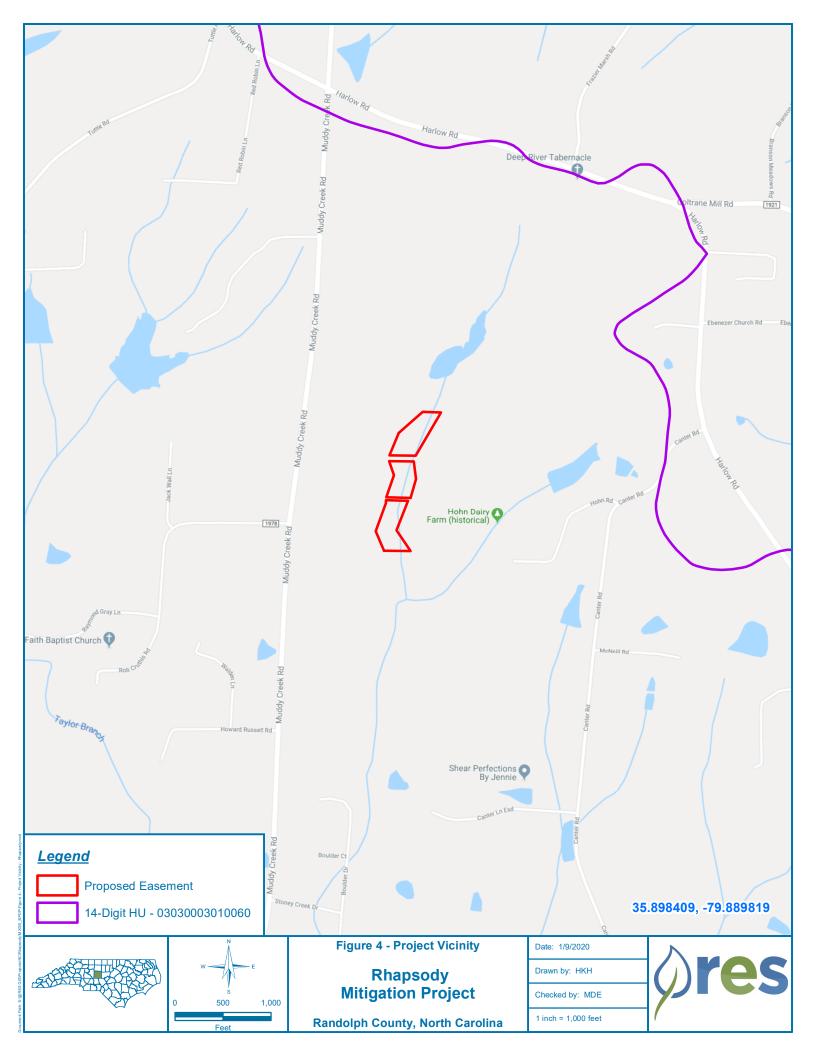
FIGURES

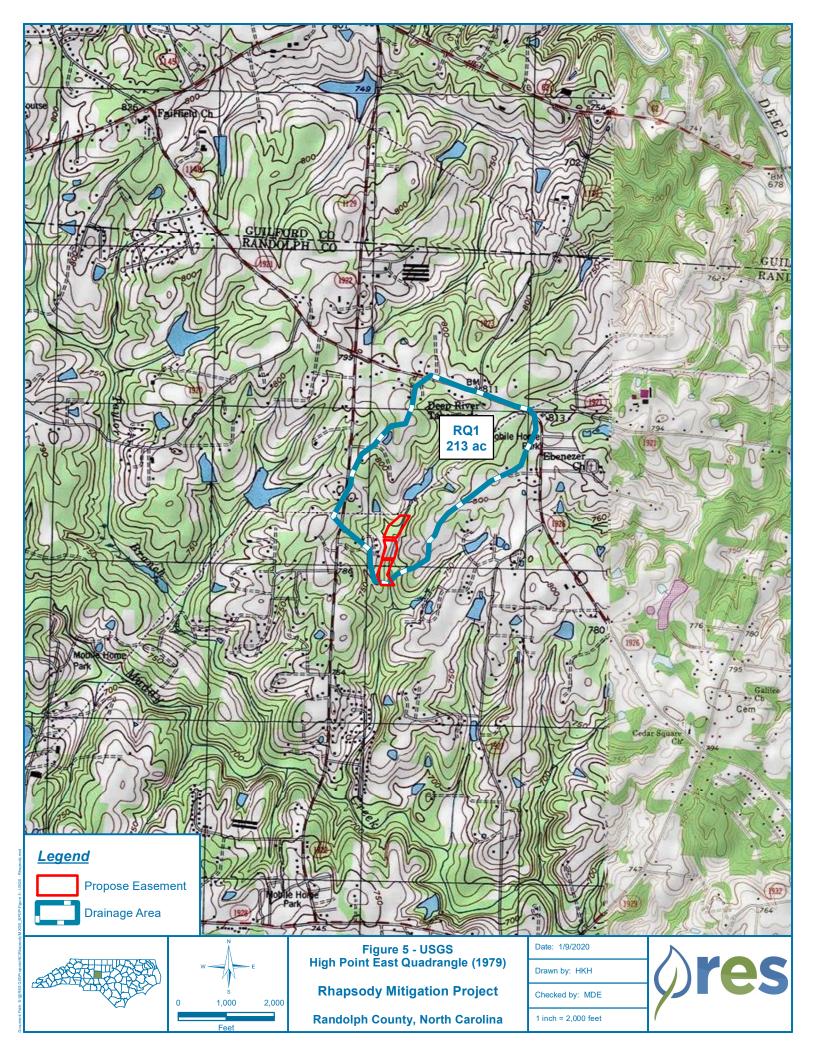
- Figure 1 Service Area
- **Figure 2 Existing Conditions**
- Figure 3 Concept Design for Riparian Buffer Mitigation
- **Figure 4 Project Vicinity**
- Figure 5 USGS Quadrangle
- Figure 6 Mapped Soils
- **Figure 7 Project Constraints**
- Figure 8 Monitoring Plan

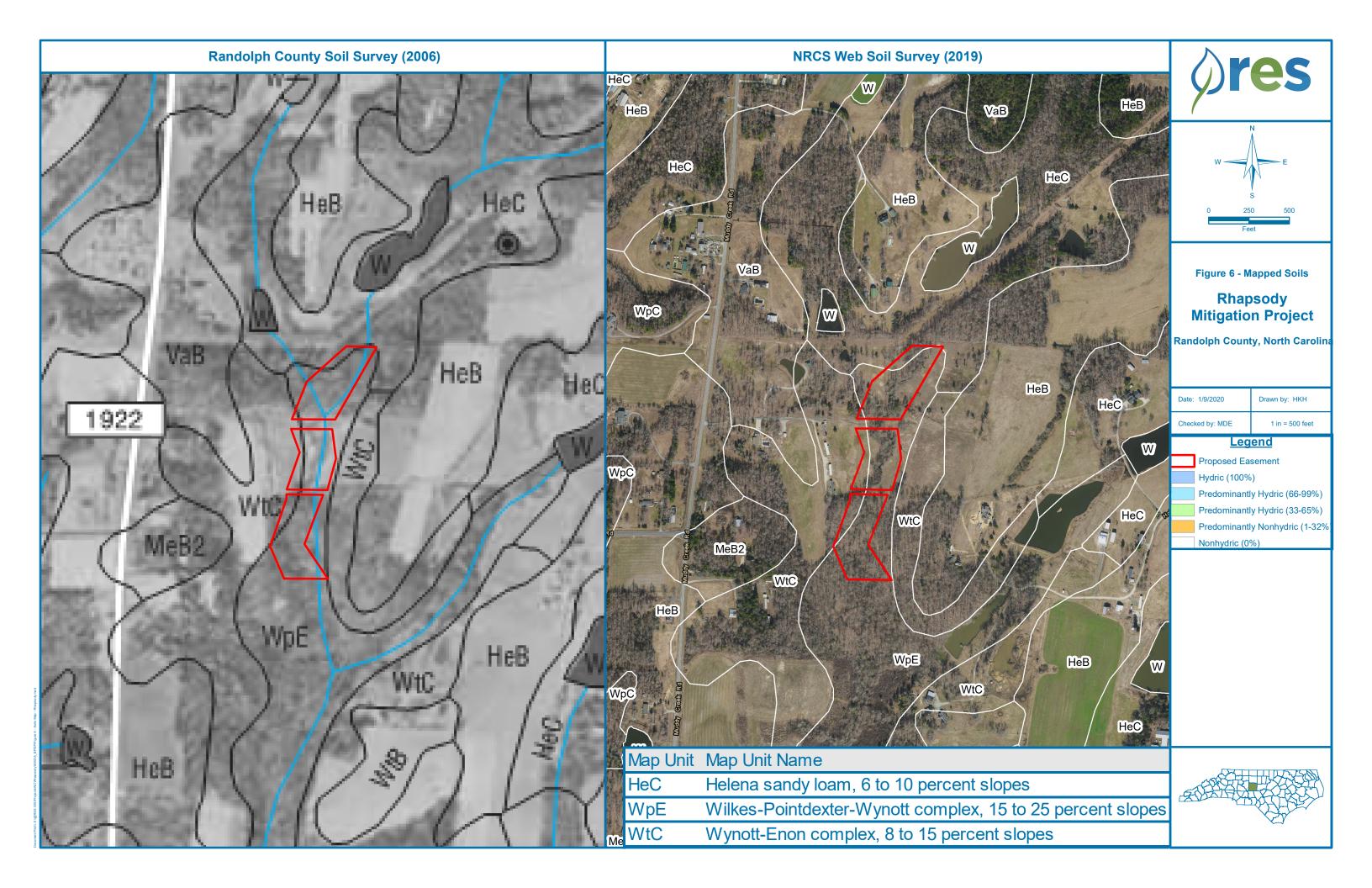


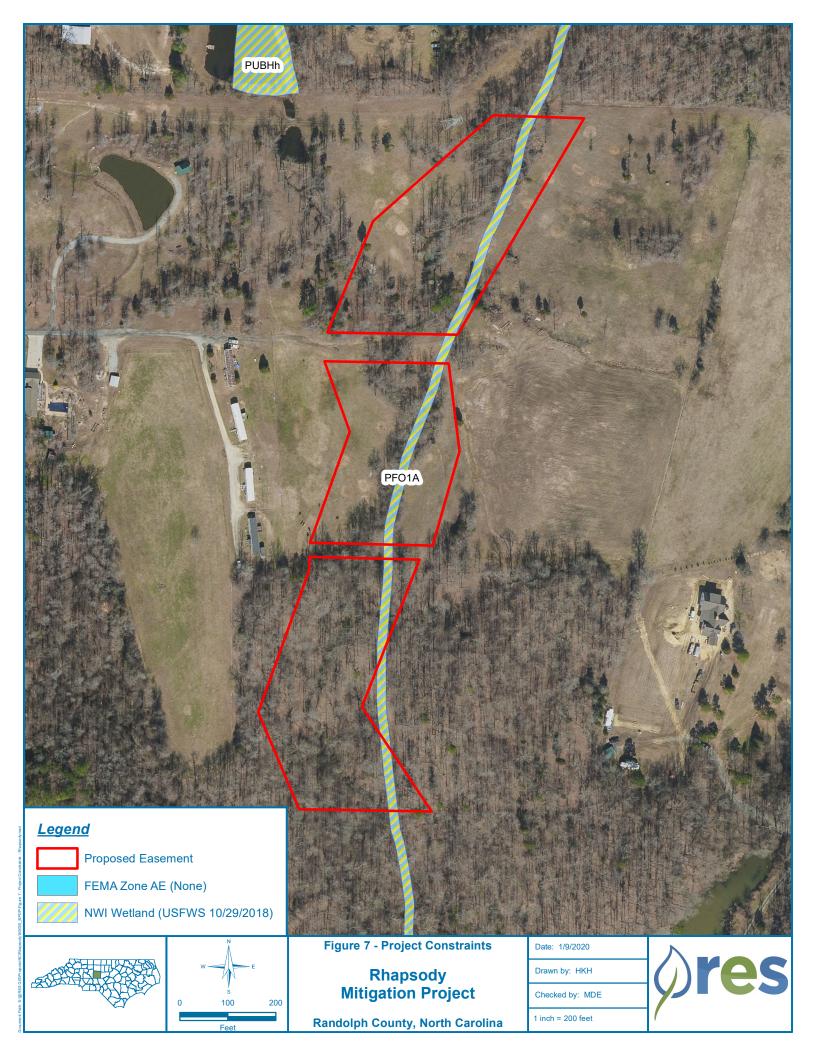


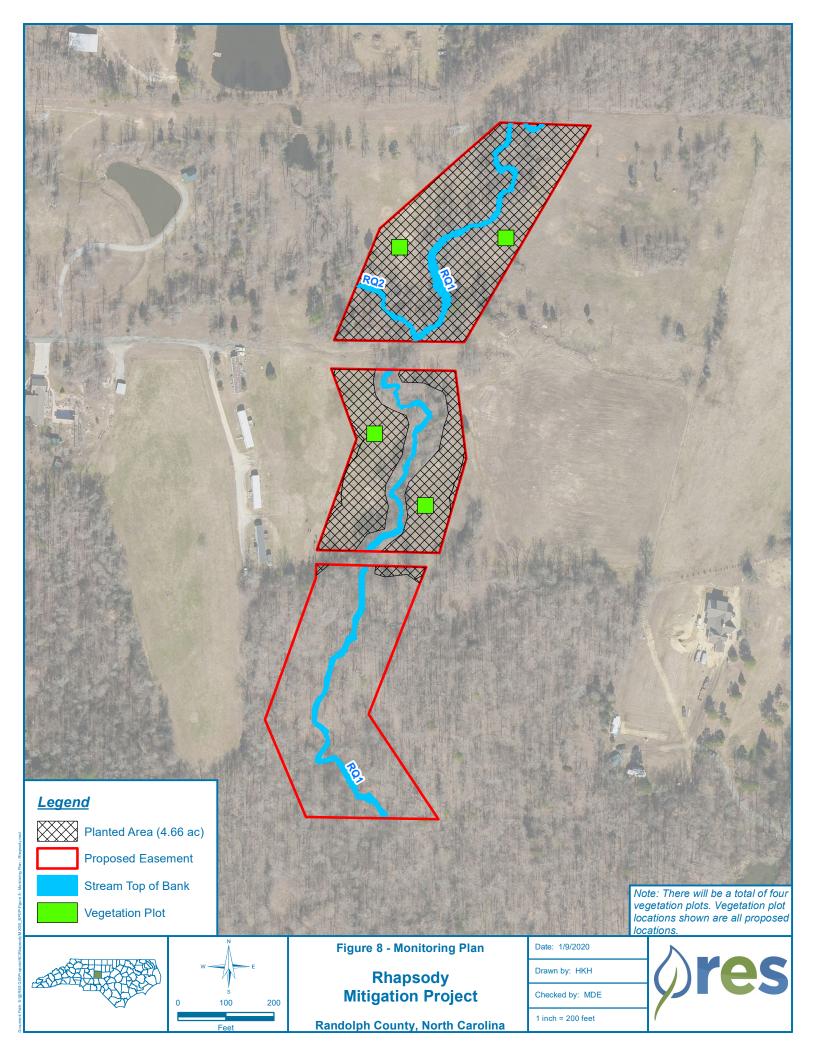












APPENDICES

$\frac{\textbf{Appendix A}}{\textbf{NCDWR Stream Determination Letter}}$



ROY COOPER Governor MICHAEL S. REGAN Secretary LINDA CULPEPPER Interim Director

July 24, 2018

Brad Breslow Resource Environmental Solutions 302 Jefferson St 110 Raleigh, NC 27605

Subject: On-Site Determination for Applicability to the Randleman Lake Buffer Rules (15A NCAC 2B .0250)

Subject Property: Rhapsody Mitigation Site, 6466 Muddy Creek Rd, Archdale NC, Randolph County

Dear Mr. Breslow:

On June 12, 2018, at your request, Sue Homewood conducted an on-site determination to review features located on the subject project for stream determinations with regards to the above noted state regulations. Katie Merritt with the Division of Water Resources (Division) – 401 & Buffer Permitting Branch was also present during the site visit.

The attached sketch depicts the channels that were reviewed during the site visit. Both channels, RQ1 and RQ2, shown on the attached sketch were determined to be perennial channels. These channels are subject to the Randleman Buffer Rules cited above. These regulations are subject to change in the future.

The owner (or future owners) should notify the Division (and other relevant agencies) of this decision in any future correspondences concerning this property. 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 Division or Delegated Local Authority that a surface water exists and that it is subject to the buffer rule may request a determination by the Director. A request for a determination by the Director shall be referred to the Director in writing c/o 401 & Buffer Permitting Branch, 1650 Mail Service Center, Raleigh, NC 27699-1650. Individuals that dispute a determination by the Division or Delegated Local Authority that "exempts" surface water from the buffer rule may ask for an adjudicatory hearing. You must act within 60 days of the date that you receive this letter. Applicants are hereby notified that the 60-day statutory appeal time does not start until the affected party (including downstream and adjacent landowners) is notified of this decision. The Division recommends that the applicant conduct this notification in order to be certain that third party appeals are made in a timely manner. To ask for a hearing, send a written petition, which conforms to Chapter 150B of the North Carolina General Statutes to the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. This determination is final and binding unless you ask for a hearing within 60 days.

This letter only addresses the applicability to the buffer rules and does not approve any activity within Waters of the United States or Waters of the State or their associated buffers. If you have any additional questions or require additional information, please contact me at 336-776-9693 or sue.homewood@ncdenr.gov.

Sincerely,

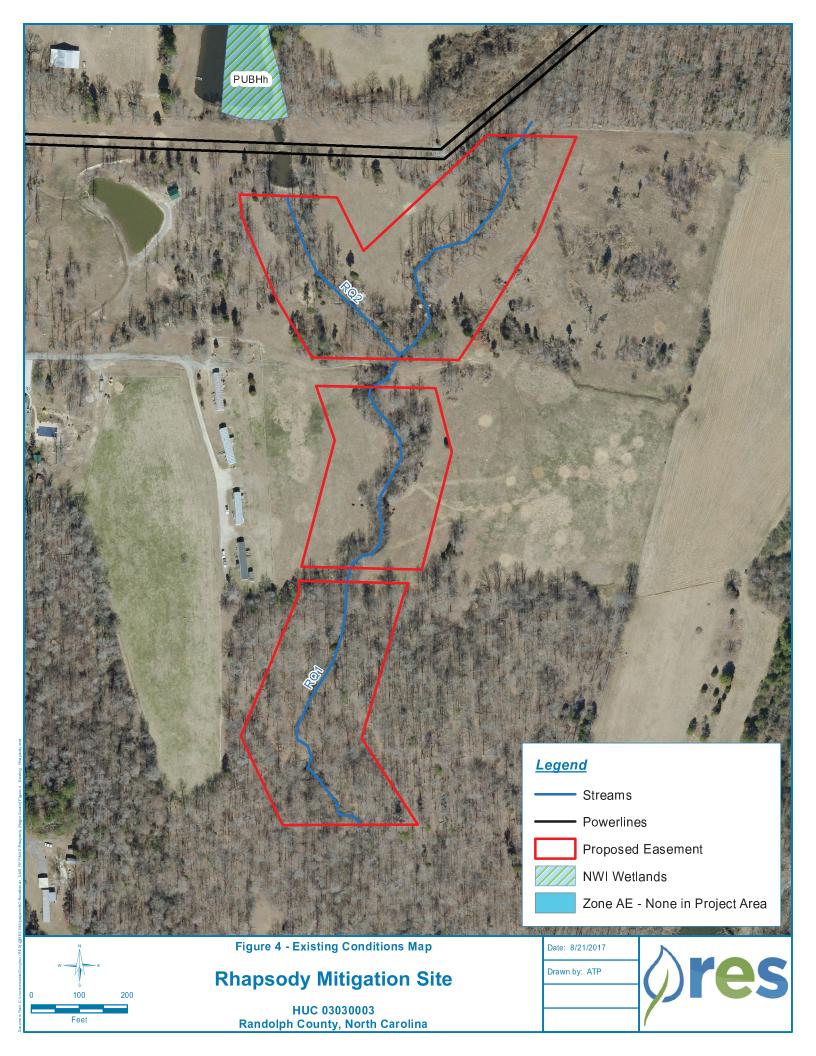
Sue Homewood

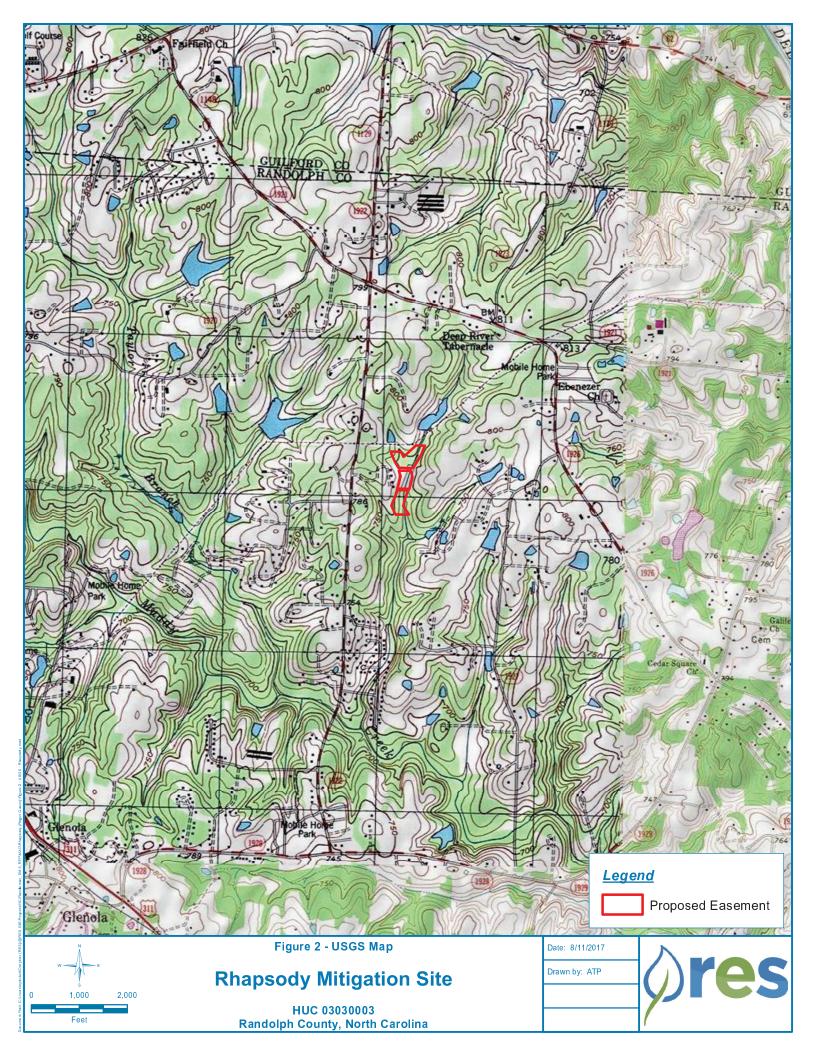
Winston-Salem Regional Office

Enclosures: USGS Topo Map

RES Existing Conditions Map

Cc: Roger Dale Queen, 6466 Muddy Creek Rd, Archdale NC 27263Katie Merritt, DWR (via email)DWR, Winston-Salem Regional Office





Appendix B NCDWR Mitigation Viability Letter



ROY COOPER Governor MICHAEL S. REGAN Secretary LINDA CULPEPPER Interim Director

August 2, 2018

Jeremy Schmid Resource Environmental Solutions 302 Jefferson Street, Suite 110 Raleigh, NC 27605 (via electronic mail: jschmid@res.us)

Re: Site Viability for Buffer Mitigation & Nutrient Offset - Rhapsody Site

Located near 6470 Muddy Creek Rd, Archdale, NC Randleman Lake Watershed/HUC 03030003

Randolph County

Dear Mr. Schmid,

On April 16, 2018, Katie Merritt, with the Division of Water Resources (DWR), received a request from you on behalf of Resource Environmental Solutions, LLC (RES) for a site visit near the above-referenced site in the Randleman Lake Watershed of the Cape Fear River Basin. The site visit was to determine the potential for riparian buffer mitigation within a proposed Easement Boundary, which is more accurately shown in the attached map labeled "Figure 4 Existing Conditions" and initialed by Ms. Merritt on August 2, 2018. On June 12, 2018, Ms. Merritt performed a site assessment of the subject site.

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).

<u>Feature</u>	Classification onsite	¹ Subject to Buffer Rule	Riparian Land uses adjacent to Feature (0-200')	Buffer Credit Viable	2Nutrient Offset Viable at 2,273 lbs/acre	Mitigation Type Determination w/in riparian areas
RQ1 Upper	Stream	Yes	Combination of forested & non-forested pasture grazed by cattle during site visit; However, riparian areas were mature forest before and after the effective date of Rule 15A NCAC 02B .0250 and remained in forest up to approximately 2007 with presence of cattle observed	Yes ^{3,4}	N/A	Enhancement Site per 15A NCAC 02B .0295 (o)(6) if fence is installed <u>or</u> Preservation Site per 15A NCAC 02B .0295 (o)(5) if fence isn't installed.



<u>Feature</u>	Classification onsite	1Subject to Buffer Rule	Riparian Land uses adjacent to Feature (0-200')	Buffer Credit Viable	2Nutrient Offset Viable at 2,273 lbs/acre	Mitigation Type Determination w/in riparian areas
RQ1 Middle	Stream	Yes	Combination of forested & non-forested pasture grazed by cattle	Yes ^{3,4}	N/A	Non-forested areas - Restoration Site per 15A NCAC 02B .0295 (n) Forested fringes - Enhancement Site per 15A NCAC 02B .0295 (o)(6) if fence is installed or Preservation Site per 15A NCAC 02B .0295 (o)(5) if fence isn't installed.
RQ1 Lower	Stream	Yes	Fully forested and grazed by cattle	Yes ^{3,4}	N/A	Enhancement Site per 15A NCAC 02B .0295 (0)(6) if fence is installed or Preservation Site per 15A NCAC 02B .0295 (0)(5) if fence isn't installed.
RQ2	Stream	Yes	Combination of forested & non-forested pasture grazed by cattle during site visit; However, riparian areas were mature forest before and after the effective date of Rule 15A NCAC 02B .0250 and remained in forest up to approximately 2007 with presence of cattle observed	Yes ^{3,4}	N/A	Enhancement Site per 15A NCAC 02B .0295 (o)(6) if fence is installed or Preservation Site per 15A NCAC 02B .0295 (o)(5) if fence isn't installed.

¹Subjectivity calls for the features were determined by DWR in correspondence dated July 24, 2018 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

This letter does not constitute an approval of this site to generate mitigation credits. Pursuant to 15A NCAC 02B .0295, 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.

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 riparian buffer mitigation credits.

² NC Division of Water Resources - Methodology and Calculations for determining Nutrient Reductions associated with Riparian Buffer Establishment

³The 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 (0)(5) and 15A NCAC 0295 (0)(4). Site cannot be a Preservation Only site to comply with this rule.

⁴The area described as an Enhancement Site was assessed and determined to comply with all of 15A NCAC 02B .0295(o)(6). Cattle exclusion fencing is required to be installed around the mitigation area to get buffer credit under this part of the rule.

⁵The area of the mitigation site on ephemeral channel shall comprise no more than 25 percent (25%) of the total area of buffer mitigation per 15A NCAC 02B .0295 (o)(7).

Rhapsody Site Resource Environmental Solutions, LLC August 2, 2018

This viability assessment will expire on August 2, 2020 or upon the submittal of an As-Built Report to the DWR, whichever comes first. This letter should be provided in all stream, wetland or buffer mitigation plans for this Site.

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

Sincerely,

Karen Higgins, Supervisor 401 and Buffer Permitting Branch

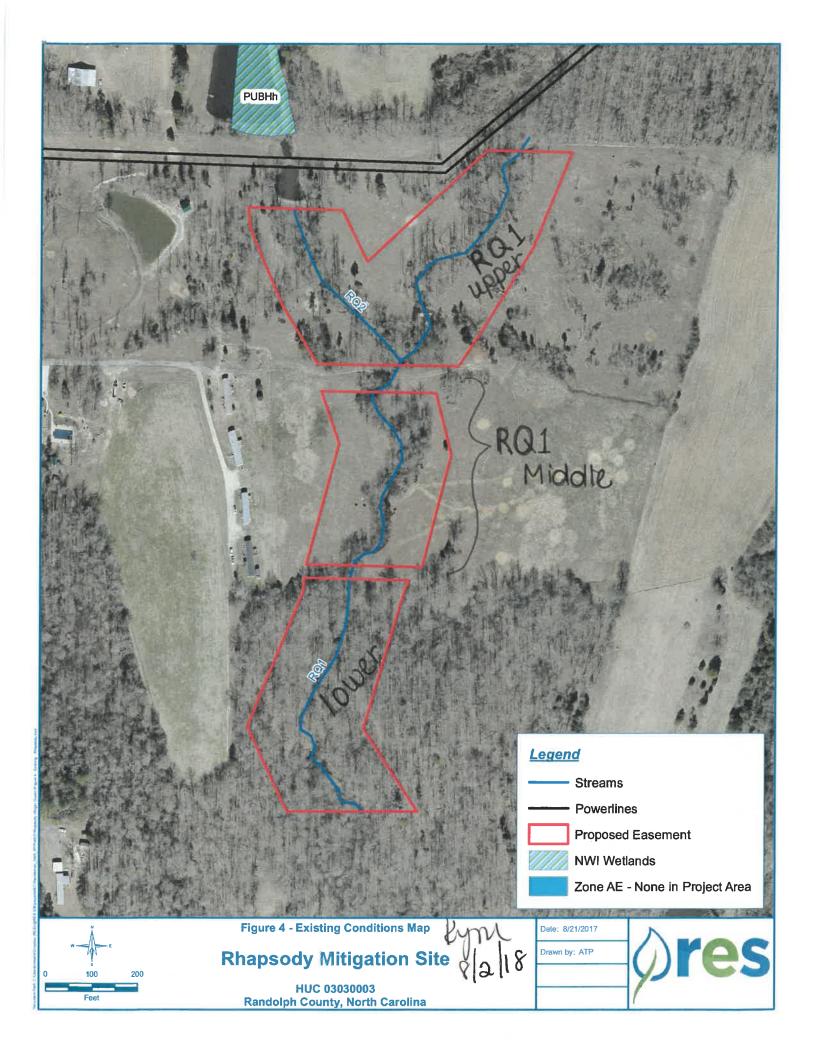
Willi Maher

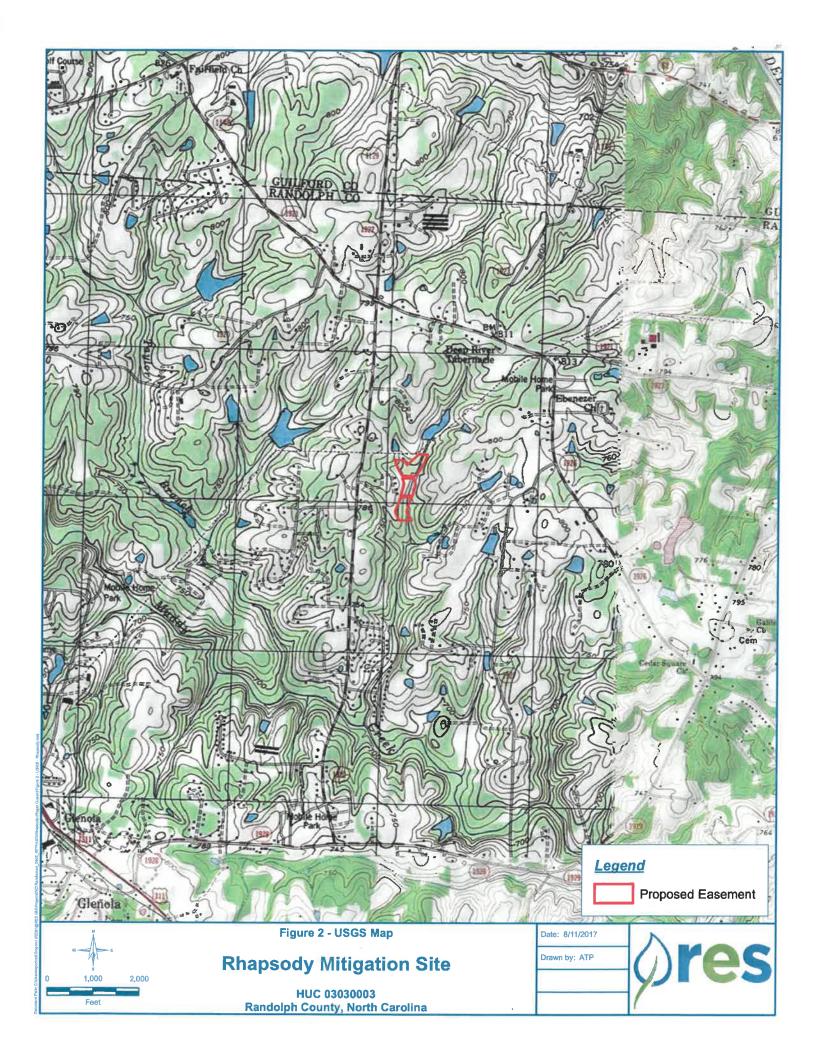
KAH/km

Attachments: Figure 4 Existing Conditions Map

cc: File Copy (Katie Merritt)

			ae d d





<u>Appendix C</u> Site Protection Instrument (s)

RES, 302 Jefferson St., Ste 110, Raleigh No 27605 CERTIFICATE OF SURVEY AND ACCURACY THE LOCALIZED COORDINATE SYSTEM USED FOR THE PROJECT IS BASED THIS SURVEY DOES NOT CREATE A ON STATE PLANE COORDINATES AND WERE ESTABLISHED BY A #4 REBAR SUBDIVISION IN RANDOLPH COUNTY (N: 782,859.58' E: 1,735,913.72') "I, CHRIS COLE, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN AND IS INTENDED TO IDENTIFY THE ACTUAL SURVEY MADE UNDER MY SUPERVISION BY DEEDS REFERENCED ON THE FACE OF BOUNDARIES OF A CONSERVATION CLASS OF SURVEY: A THIS PLAT; THAT DASHED LINES INDICATE LINES NOT SURVEYED; THAT THE RATIO OF EASEMENT AND DOES NOT ALTER OR POSITIONAL ACCURACY: DOES NOT EXCEED 0.10' PRECISION OR POSITIONAL ACCURACY AS CALCULATED IS + 1:10,000; AND THAT THIS CHANGE ANY BOUNDARY LINES. TYPE OF GPS FIELD PROCEDURE: VRS-RTK PLAT WAS PREPARED IN ACCORDANCE WITH G.S. 47-30 AS AMENDED DATE OF SURVEY: 06/10/2019 DATUM/EPOCH: NAD83(2011) I ALSO HEREBY CERTIFY THAT THIS PLAT IS OF ONE OF THE FOLLOWING: GS 47-30 F(11) D; THAT THE SURVEY IS OF ANOTHER CATEGORY, SUCH AS THE RECOMBINATION OF EXISTING GEOID MODEL: GEOID | 2A PARCELS, A COURT-ORDERED SURVEY, OR OTHER EXCEPTION TO THE DEFINITION OF COMBINED GRID FACTOR: 0.9998986300352841 (GROUND TO GRID) SUBDIVISION. UNITS: US SURVEY FEET LATTICE WITNESS MY ORIGINAL SIGNATURE, REGISTRATION NUMBER, AND SEAL THIS STATE OF NORTH CAROLINA, RANDOLPH COUNTY TOWER 4 TH DAY OF DECEMBER, AD 2019. THE FOREGOING CERTIFICATE OF, NOTARY PUBLIC, IS CERTIFIED TO BE CORRECT. VICINITY MAP THIS INSTRUMENT WAS PRESENTED FOR REGISTRATION AND RECORDED IN MAP __DAY OF _____, 20 ____AT A.M./P.M COUNTY. LINE TABLE CHRISTOPHER L. COLE REGISTRATION/LICENSE NO. NCPLS L-5008 BEARING LENGTH NC FIRM LICENSE NO. C-4288 REGISTER OF DEEDS N48°53'11"E 107.34" REVIEW OFFICER CERTIFICATION L2 N01°24'43"E Cric J. Murtin REVIEW OFFICER OF RANDOLPH COUNTY, CERTIFY THAT THE MAP OR PLAT 62.61' TO WHICH THIS CERTIFICATION IS AFFIXED MEETS ALL STATUARY REQUIREMENTS FOR RECORDING FOR 40.28' L4 S43°14'41"W WHICH THE REVIEW OFFICER HAS RESPONSIBILITY AS PROVIDED BY LAW. 29.88' COUNTY OF RANDOLPH CERTIFICATE OF EXEMPTION APPROVED Jay Pele! RANDOLPH COUNTY MAPPING DEPARTMENT PLANNING DIRECTOR DATE 12/6/19 AXLE STONE N88°01'00"W 967.88' (FOUND) N83°41'05"W 410.41' N87°11'25"E 371.01' POINT OF DUKE POWER BEGINNING METAL 100' RIGHT OF WAY NOTES: DB 1278 PG 905 1) BASIS OF BEARINGS: NCGS GRID COORDINATES, NAD 83/2011 DATUM. 2) ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED. PG 99 (2) NOW OR FORMERLY 3) THE AREAS SHOWN HEREON WERE COMPUTED USING THE COORDINATE ROGER AND CYNTHIA QUEEN This document presented and filed: CONSERVATION EASEMENT COMPUTATION METHOD. PIN: 7738-53-9058 12/06/2019 03:23:06 PM DB 2093 PG 24 124,427 S.F. 4)LINES NOT SURVEYED ARE SHOWN AS BROKEN LINES FROM INFORMATION PLAT RECORDING REFERENCED ON THE FACE OF THIS PLAT. +/- 2.856 AC. PASTURE Fee \$42.00 PASTURE 5)PROPERTY SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD. 6) NO GEODETIC MONUMENT WITHIN 2000' OF THIS SITE. 7) TRAVERSE ADJUSTMENT: COMPASS RULE Randolph County North Carolina COW Krista M. Lowe, Register of Deeds 8) THIS SURVEY CREATES THE BOUNDARIES OF A CONSERVATION EASEMENT ONLY. PASTURE THE LAND PARCELS AND THEIR RESPECTIVE BOUNDARIES AFFECTED BY THIS CONSERVATION EASEMENT ARE NOT CHANGED BY THIS PLAT. NOW OR FORMERLY ROGER AND CYNTHIA QUEEN 9) THE CONTRACTOR SHALL SET 5/8" REBAR 30" IN LENGTH WITH 3-1/4" ALUMINUM PIN: 7738-53-9058 CAPS ON ALL EASEMENT CORNERS. CAPS SHALL MEET DMS SPECIFICATIONS DB 2093 PG 24 (BERNTSEN RBD5325, IMPRINTED WITH NC STATE LOGO # B9087 OR EQUIVALENT). (ALONG GRAVEL AFTER INSTALLATION, CAPS SHALL BE STAMPED WITH THE CORRESPONDING NUMBER ROAD LEADING TO FROM THE TABLE OF COORDINATES ON THE SURVEY. MUDDY CREEK ROAD) TO BE REMOVED DURING SMOOTH 10) THE PURPOSE OF THIS PLAT IS TO IDENTIFY THE LOCATION OF THE (CONSTRUCTION) ROD CONSERVATION EASEMENTS DEPICTED HEREIN, TO PROVIDE A BASIS FOR THE CONVEYANCE AND DEDICATION OF SAID CONSERVATION EASEMENTS AND TO (FOUND) PROVIDE ACCESS EASEMENTS OVER THE ASSOCIATED LANDS. THIS PLAT DOES NOT N89°04'09"W 1698.47' CREATE NEW PROPERTY LINES OR AFFECT ANY EXISTING PROPERTY LINES. CONSERVATION EASEMENT 11) THE RIGHT(S) OF NON-EXCLUSIVE INGRESS, EGRESS, AND REGRESS OVER THE SUBJECT PROPERTY AND OVER ALL EXISTING PATHS/ROADS TRANSECTING THE 44,083 S.F. PROPERTY ARE RESERVED BY THE GRANTOR(S) AND THE GRANTEE(S) OF THE CONSERVATION EASEMENT(S) AS SET FORTH HEREIN AND IN THE CONSERVATION +/- 1.012 AC. #4 REBAR EASEMENT DEEDS RECORDED IN CONNECTION WITH THIS CONSERVATION EASEMENT N: 782,859.58 E: 1,735,913.72' NOW OR FORMERLY **LEGEND** NOW OR FORMERLY ROGER AND CYNTHIA QUEEN ROGER AND CYNTHIA QUEEN CP O CALCULATED POINT (NOT SET) PIN: 7738-62-3720 PIN: 7738-62-3720 DB 1359 PG 1013 PROPERTY CORNER (FOUND) DB 1359 PG 1013 #4 REBAR SET COW PROPERTY LINE (SURVEYED) PASTURE PROPERTY LINE (NOT SURVEYED) RIGHT OF WAY BEGINNING CONSERVATION EASEMENT 332.05 S89°48'09"E 242.85'-1018.34' (TOTAL) 443.43 EXISTING TOP OF BANK 30' ACCESS CONSERVATION EASEMENT CONSERVATION EASEMENT A NOW OR FORMERLY 48,584 S.F. ROGER AND CYNTHIA QUEEN / PIN: 7738-53-9058 NOW OR FORMERLY +/- 1.115 AC. PIN: 7738-52-8452 ROGER AND CYNTHIA QUEEN / DB 2207 PG 1333 PIN: 7738-52-8452 DB 2207 PG 1333 CONSERVATION EASEMENT B PIN: 7738-62-3720 BEGINNING CONSERVATION EASEMENT COW CONSERVATION EASEMENT C PASTURE IRON 6,166 S.F. PIN: 7738-52-8452 +/- 0.142 AC. (FOUND)

OWNER	CERTIFICATION

PIN: 7738-53-9058, 7738-62-3720, 7738-52-8452, 7738-62-3180

WE, ROGER DALE QUEEN II AND WIFE, CYNTHIA DYAN QUEEN, HEREBY CERTIFY THAT WE ARE THE OWNERS OF THE LIFE ESTATES OF THE PROPERTIES IDENTIFIED BY THE RANDOLPH COUNTY NORTH CAROLINA PARCEL IDENTIFICATION NUMBERS SET FORTH ABOVE; THAT WE HEREBY ADOPT THIS CONSERVATION EASEMENT PLAN AND THE TERMS AND CONDITIONS CONTAINED HEREON AND GRANT AND CONVEY THE EASEMENTS HEREIN WITH FREE CONSENT. FURTHER, WE CERTIFY THAT THE LANDS AS SHOWN HEREON ARE WITHIN THE SUBDIVISION REGULATION JURISDICTION OF RANDOLPH COUNTY, NORTH CAROLINA.

ROGER DALE QUEEN, I DATE

CYNTHIA DYAN QUEEN

EASEMENTS A-E (337,764 S.F. +/- 7.754 AC.)

CYNTHIA DYAN QUEEN

EASEMENTS A-E (337,764 S.F. +/- 7.754 AC.)

STATE OF NORTH CAROLINA COUNTY OF Day

I, Derice B FIGH THE UNDERSIGNED NOTARY PUBLIC CERTIFY THAT BOTH ROGER DALE QUEEN II AND CYNTHIA DYAN QUEEN, PERSONALLY APPEARED BEFORE ME THIS DAY AND

ACKNOWLEDGED THE DUE EXECUTION OF THE FOREGOING DOCUMENT.
WITNESS MY HAND AND NOTARIAL STAMP OR SEAL THIS THE 5th DAY OF 12019.

(NOTARY SIGNATURE)

(NOTARY SIGNATURE)

(TYPED NOTARY NAME)

NAMED

NAMED

NAMED

NO MERCH JOJ 3

NEXPIRES

COUNTY OF RANDOLPH CERTIFICATE OF EXEMPTION

APPROVED

Tog Pele (L)

PLANNING DIRECTOR

DATE 12/6/19

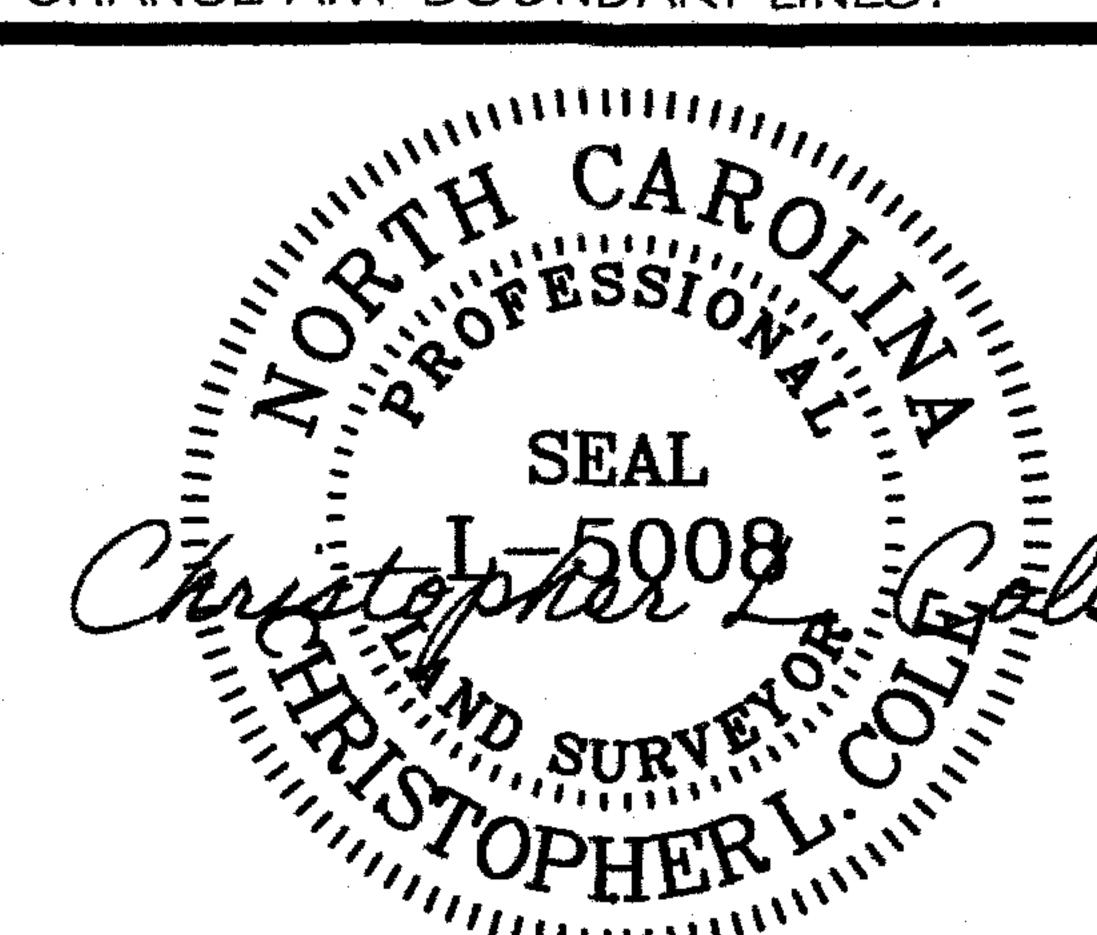
State of North Carolina County Of Randolph

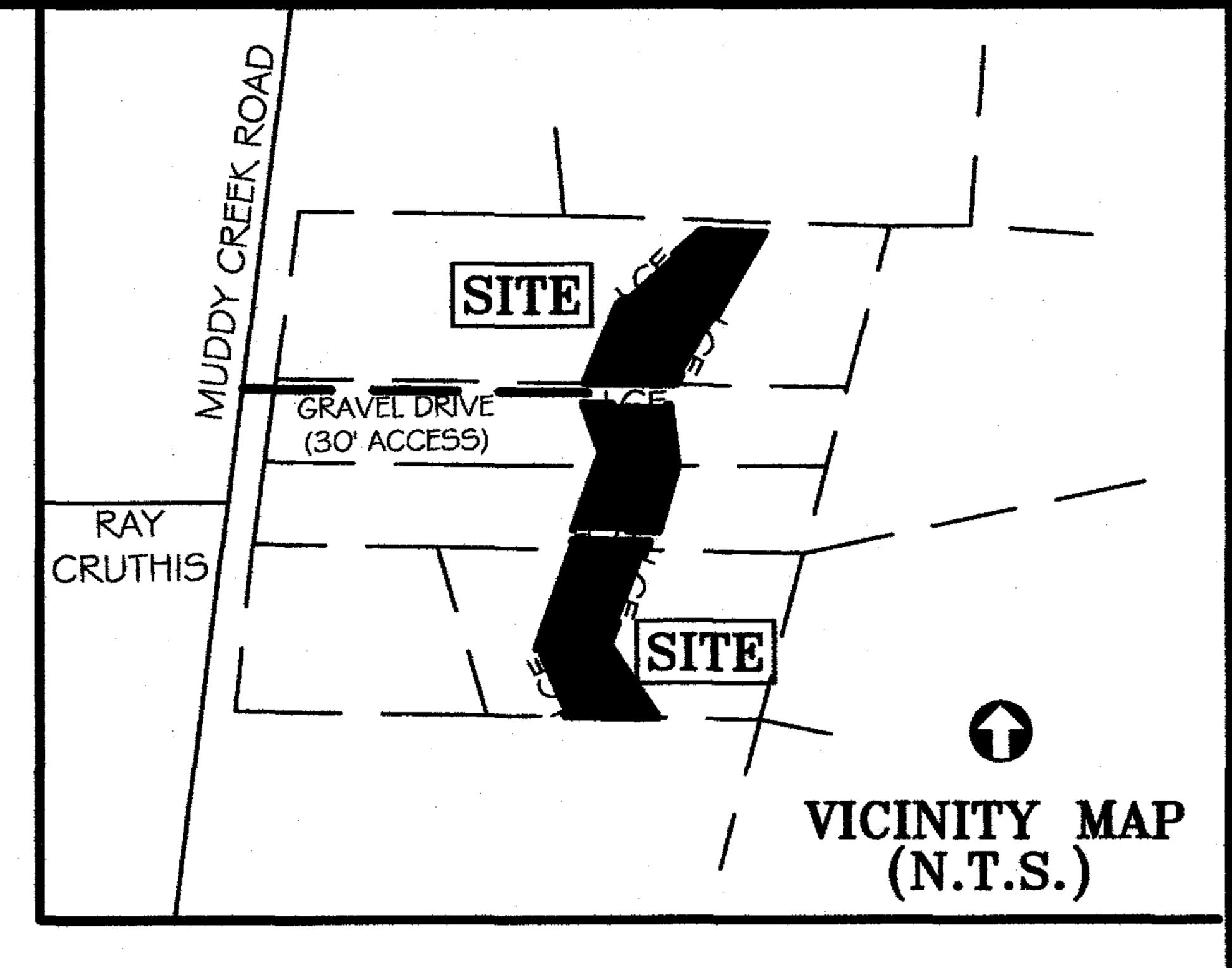
I. Review Officer of Randolph County, certify that the map or plat to which this certification is affixed meets all statutory requirements for recording.

En mente 12/6/17
Review Officer Date

Point Table Northing Easting 783326.39 1736735.47 1736472.38 782875.41 1736453.51 1736476.08 782633.04 1736420.19 782436.37 782407.03 | 1736392.59 1736273.08 1736417.92 1736142.38 1736056.53 782384.27 1736162.74 782412.57 | 1736163.44 | 782442.43 1736164.54 782673.28 1736247.37 782819.92 1736194.82 782879.83 | 1736200.60 | 783112.42 1736296.24 1736465.78 783332.93 1736546.66 782380.59 1736382.31

THIS SURVEY DOES NOT CREATE A SUBDIVISION IN RANDOLPH COUNTY AND IS INTENDED TO IDENTIFY THE BOUNDARIES OF A CONSERVATION EASEMENT AND DOES NOT ALTER OR CHANGE ANY BOUNDARY LINES.





CONSERVATION EASEMENT AREA

ROGER AND CYNTHIA QUEEN

EASEMENT A: 124,427 5.F. +/- 2.856 AC. (PIN: 7738-53-9058)
EASEMENT B: 44,083 5.F. +/- 1.012 AC. (PIN: 7738-62-3720)
EASEMENT C: 48,584 5.F. +/- 1.115 AC. (PIN: 7738-52-8452)
EASEMENT D: 6,166 5.F. +/- 0.142 AC. (PIN: 7738-52-8452)
EASEMENT E: 114,504 5.F. +/- 2.629 AC. (PIN: 7738-62-3180)
TOTAL AREA SURVEYED: 337,764 S.F. +/- 7.754 AC

NOTES

I) BASIS OF BEARINGS: NCGS GRID COORDINATES,

NAD 83/2011 DATUM.

2) ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.

3) THE AREAS SHOWN HEREON WERE COMPUTED USING THE COORDINATE COMPUTATION METHOD.

4)LINES NOT SURVEYED ARE SHOWN AS BROKEN LINES FROM INFORMATION REFERENCED ON THE FACE OF THIS PLAT.

5)PROPERTY SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.

6) NO GEODETIC MONUMENT WITHIN 2000' OF THIS SITE.

7) TRAVERSE ADJUSTMENT: COMPASS RULE

8) THIS SURVEY CREATES THE BOUNDARIES OF A CONSERVATION EASEMENT ONLY. THE LAND PARCELS AND THEIR RESPECTIVE BOUNDARIES AFFECTED BY THIS CONSERVATION EASEMENT ARE NOT CHANGED BY THIS PLAT.

9) THE CONTRACTOR SHALL SET 5/8" REBAR 30" IN LENGTH WITH 3-1/4" ALUMINUM CAPS ON ALL EASEMENT CORNERS. CAPS SHALL MEET DMS SPECIFICATIONS (BERNTSEN RBD5325, IMPRINTED WITH NC STATE LOGO # B9087 OR EQUIVALENT). AFTER INSTALLATION, CAPS SHALL BE STAMPED WITH THE CORRESPONDING NUMBER FROM THE TABLE OF COORDINATES ON THE SURVEY.

10) THE PURPOSE OF THIS PLAT IS TO IDENTIFY THE LOCATION OF THE CONSERVATION EASEMENTS DEPICTED HEREIN, TO PROVIDE A BASIS FOR THE CONVEYANCE AND DEDICATION OF SAID CONSERVATION EASEMENTS AND TO PROVIDE ACCESS EASEMENTS OVER THE ASSOCIATED LANDS. THIS PLAT DOES NOT CREATE NEW PROPERTY LINES OR AFFECT ANY EXISTING PROPERTY LINES.

I I) THE RIGHT(S) OF NON-EXCLUSIVE INGRESS, EGRESS, AND REGRESS OVER THE SUBJECT PROPERTY AND OVER ALL EXISTING PATHS/ROADS TRANSECTING THE PROPERTY ARE RESERVED BY THE GRANTOR(S) AND THE GRANTEE(S) OF THE CONSERVATION EASEMENT(S) AS SET FORTH HEREIN AND IN THE CONSERVATION EASEMENT DEEDS RECORDED IN CONNECTION WITH THIS CONSERVATION EASEMENT PLAT.

LEGI

CALCULATED POINT (NOT SET)
PROPERTY CORNER (FOUND)
#4 REBAR SET
PROPERTY LINE (SURVEYED)

PROPERTY LINE (NOT SURVEYED)

RIGHT OF WAY
CONSERVATION EASEMENT
EXISTING TOP OF BANK

CONSERVATION EASEMENT A
PIN: 7738-53-9058

30' ACCESS

CONSERVATION EASEMENT B
PIN: 7738-62-3720

CONSERVATION EASEMENT C
PIN: 7738-52-8452

CONSERVATION EASEMENT D

BK 2679 PG 237 - 248 (12)

This Document eRecorded:

Fee: \$26.00 DocType: DEED Randolph County, North Carolina Krista M. Lowe, Register of Deeds

DOC# 20089821 12/09/2019 02:

02:39:08 PM

Tax: \$280.00

STATE OF NORTH CAROLINA

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

RANDOLPH COUNTY

Parcel Identifier No · I	P/O PIN 7738-53-9058; PIN 7738-62-3720; PIN 7738-52-8452; PIN 7738-62-3180
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SPO File Number: 76-CO DMS Project Number: 100110

Prepared by: Office of the Attorney General

Property Control Section

Return to: NC Department of Administration

State Property Office 1321 Mail Service Center Raleigh, NC 27699-1321

THIS DEED OF CONSERVATION EASEMENT AND RIGHT OF ACCESS, made this _________, day of __________, 2019, by Roger Dale Queen, II and spouse, Cynthia Dyan Queen, ("Grantor"), whose mailing address is 6466 Muddy Creek Road, Archdale, NC 27263, to the State of North Carolina, ("Grantee"), whose mailing address is State of North Carolina, Department of Administration, State Property Office, 1321 Mail Service Center, Raleigh, NC 27699-1321. The designations of Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, and shall include singular, plural, masculine, feminine, or neuter as required by context.

NCDMS Full Delivery Conservation Easement Template adopted 5 May 2017 Page 1 of 12

4833-7454-4550, v. 2

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 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 Environmental Banc & Exchange, LLC, 6575 West Loop South, Suite 300, Bellaire, Texas 77401 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 7864; and

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

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

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

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

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

WHEREAS, the Division of Mitigation Services in the Department of Environmental Quality, 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 New Market Township, Randolph County, North Carolina (the "Property"), and being more particularly described as that certain parcel of land containing approximately 46.41 acres and being conveyed to the Grantor by deed as recorded in Deed Book 2207 at Page 639, Deed Book 2207 at Page 1333, Deed Book 1359 at Page 1013, and Deed Book 2093 at Page 24 of the Randolph 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 Randleman Lake Watershed, Cape Fear River Basin (HUC 03030003).

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 along with a general Right of Access.

The Conservation Easement Area consists of the following:

THE AREAS CONTAINING A COMBINED TOTAL OF 7.754 ACRES, AS SHOWN ON A PLAT OF SURVEY ENTITLED "CONSERVATION EASEMENT SURVEY FOR THE STATE OF NORTH CAROLINA, DIVISION OF MITIGATION SERVICES, RHAPSODY, DMS ID #100110, SPO #76-CO, ON THE PROPERTIES OF ROGER DALE QUEEN, II AND CYNTHIA DYAN QUEEN," DATED JUNE 1, 2019 BY CHRISTOPHER L. COLE, NCPLS L-5008 AND RECORDED IN THE OFFICE OF THE RANDOLPH COUNTY, NORTH CAROLINA REGISTER OF DEEDS AT **PLAT BOOK** 160 **PAGES** 96 - 100 (THE "SURVEY"), AND BEING FURTHER DESCRIBED AS FOLLOWS:

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. 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.

III. GRANTEE RESERVED USES

- A. Right of Access, Construction, and Inspection. The Grantee, its employees and agents, successors and assigns, receive a perpetual Right of Access to the Conservation Easement Area over the Property at reasonable times to undertake any activities on the property to restore, construct, manage, maintain, enhance, protect, and monitor the stream, wetland and any other riparian resources in the Conservation Easement Area, in accordance with restoration activities or a long-term management plan. Unless otherwise specifically set forth in this Conservation Easement, the rights granted herein do not include or establish for the public any access rights.
- **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.

IV. ENFORCEMENT AND REMEDIES

- 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.

V. 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.

VI. 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 said premises 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.

[THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN TESTIMONY WHEREOF, the Grantor has hereunto set his hand and seal, the day
and year first above written.
Logn Dale Queen I (SEAL)
Roger Wale Queen, II
Cynthia Dyan Queen (SEAL)
NORTH CAROLINA COUNTY OF
I,, a Notary Public in and for the County and State aforesaid, do hereby certify that Roger Dale Queen, II, Grantor, personally appeared before me this day and acknowledged the execution of the foregoing instrument.
IN WITNESS WHEREOF, I have hereunto set my hand and Notary Seal this the $\frac{5\pi}{2}$ day of
Dec 2019.
Signature of Notary Public
Printed Name of Notary Public My commission expires: 35th March, 3003
NORTH CAROLINA COUNTY OF Decided to the country of
I,, a Notary Public in and for the County and State aforesaid, do hereby certify that Cynthia Dyan Queen, Grantor, personally appeared before me this day and acknowledged the execution of the foregoing instrument.
IN WITNESS WHEREOF, I have hereunto set my hand and Notary Seal this the day of , 2019.
<u>Georgia</u> , 2019.
WILLIAS BUILD CALLANDER CALLANDER CONTRACTOR OF THE CONTRACTOR OF
Signature of Notary Public
[SEAB] NOTARY OF Drinted Name of Notary Dublie
Printed Name of Notary Public My commission expires: 25th Much, 3033
THE COUNTY HITTER

EXHIBIT A

(Conservation Easement Area)

THE AREAS CONTAINING A COMBINED TOTAL OF 7.754 ACRES, AS SHOWN ON A PLAT OF SURVEY ENTITLED "CONSERVATION EASEMENT SURVEY FOR THE STATE OF NORTH CAROLINA, DIVISION OF MITIGATION SERVICES, RHAPSODY, DMS ID #100110, SPO #76-CO, ON THE PROPERTIES OF ROGER DALE QUEEN, II AND CYNTHIA DYAN QUEEN," DATED JUNE 1, 2019 BY CHRISTOPHER L. COLE, NCPLS L-5008 AND RECORDED IN THE OFFICE OF THE RANDOLPH COUNTY, NORTH CAROLINA REGISTER OF DEEDS AT PLAT BOOK 10 PAGES 99 100 (THE "SURVEY"), AND BEING FURTHER DESCRIBED AS FOLLOWS:

CONSERVATION EASEMENT "A" 124,427 S.F. +/- 2.856 ACRES

BEGINNING AT A SET #4 REBAR BEING THE MOST NORTHEASTERN CORNER OF THE EASEMENT DESCRIBED HEREIN; THENCE S 30°15'33" W 522.11' TO A SET #4 REBAR BEING THE MOST SOUTHEASTERN CORNER OF THE EASEMENT DESCRIBED HEREIN; THENCE N 89°04'09" W 271.81' TO A SET #4 REBAR BEING THE MOST SOUTHWESTERN CORNER OF THE EASEMENT DESCRIBED HEREIN; THENCE N 22°21'06" E 251.49' TO A SET #4 REBAR; THENCE N 48°30'57" E 226.32' TO A SET #4 4REBAR; THENCE N 48°53'11" E 107.34' TO A SET #4 REBAR; THENCE S 88°01'00 E 188.93' TO THE POINT AND PLACE OF BEGINNING. CONTAINING 124,427 SQUARE FEET, MORE OR LESS.

CONSERVATION EASEMENT "B" 44,083 S.F. +/- 1.012 ACRES

BEGINNING AT A SET #4 REBAR BEING THE MOST NORTHEASTERN CORNER OF THE CONSERVATION EASEMENT DESCRIBED HEREIN; THENCE S 07°02'33" E 184.06' TO A SET #4 REBAR BEING THE MOST SOUTHEASTERN CORNER OF THE CONSERVATION EASEMENT DESCRIBED HEREIN; THENCE N 89°48'09" W 242.85' ALONG THE SOUTHERN LINE OF "CONSERVATION EASEMENT B" AND THE NORTHERN LINE OF "CONSERVATION EASEMENT C" TO A CALCULATED POINT; THENCE N 19°44'19" E 41.87' TO A SET #4 REBAR; THENCE N 19°43'05" W 155.77' TO A SET #4 REBAR BEING THE MOST NORTHWESTERN CORNER OF THE CONSERVATION EASEMENT DESCRIBED HEREIN; THENCE S89°04'09" E 258.73' THE POINT AND PLACE OF BEGINNING. CONTAINING 44,083 SQUARE FEET, MORE OR LESS.

CONSERVATION EASEMENT "C" 48,584 S.F. +/- 1.115 ACRES

BEGINNING AT A SET #4 REBAR BEING THE MOST NORTHEASTERN CORNER OF THE EASEMENT DESCRIBED HEREIN; THENCE S 15°51'51" W 204.46' TO A SET #4

REBAR BEING THE MOST SOUTHEASTERN CORNER OF THE EASEMENT DESCRIBED HEREIN; THENCE N 88°38'29" W 255.72' TO A SET #4 REBAR BEING THE MOST SOUTHWESTERN CORNER OF THE EASEMENT DESCRIBED HEREIN; THENCE N 19°44'19" E 245.26' TO A CALCULATED POINT; THENCE ALONG THE SOUTHERN LINE OF "EASEMENT B" S 89°48'09" E 242.85' TO THE POINT AND PLACE OF BEGINNING. CONTAINING 48,584 SQUARE FEET, MORE OR LESS.

CONSERVATION EASEMENT "D" 6,166 S.F. +/- 0.142 ACRES

BEGINNING AT A SET #4 REBAR BEING THE MOST NORTHEASTERN CORNER OF THE EASEMENT DESCRIBED HEREIN; THENCE S 21°15′52" W 28.36′ TO A CALCULATED POINT; THENCE WITH THE NORTHERN LINE OF "EASEMENT E" N 89°02′28" W 219.60′ TO A SET #4 REBAR; THENCE N 01°24′43" 28.31′ TO A SET #4 REBAR BEING THE MOST NORTHWESTERN CORNER OF THE EASEMENT DESCRIBED HEREIN; THENCE S 88°36′48" E 229.22′ TO THE POINT AND PLACE OF BEGINNING. CONTAINING 6,166 SQUARE FEET, MORE OR LESS.

CONSERVATION EASEMENT "E" 114,504 S.F. +/- 2.629 ACRES

BEGINNING AT A CALCULATED POINT BEING THE MOST NORTHEASTERN CORNER OF THE EASEMENT DESCRIBED HEREIN; THENCE S 21°15′52" W 301.16' TO A SET #4 REBAR; THENCE S 33°35′37" E 261.78' TO A SET #4 REBAR BEING THE MOST SOUTHEASTERN CORNER OF THE EASEMENT DESCRIBED HEREIN THENCE N 89°02′00" W 275.58' TO A SET #4 REBAR BEING THE MOST SOUTHWESTERN CORNER OF THE EASEMENT DESCRIBED HEREIN; THENCE N 23°01′00" W 219.56' TO A SET #4 REBAR; THENCE N 19°45′35" E 314.16' TO A SET #4 REBAR BEING THE MOST NORTHWESTERN CORNER OF THE EASEMENT DESCRIBED HEREIN; THENCE WITH THE SOUTHERN LINE OF "EASEMENT D" S 89°02′28" E 219.60' TO THE POINT AND PLACE OF BEGINNING. CONTAINING 114,504 SQUARE FEET, MORE OR LESS.

ALONG WITH NON-EXCLUSIVE RIGHTS TO THE RIGHT OF WAY AS CONVEYED ON MAY 24, 2002 FROM SHANNON T. QUEEN, UNMARRIED, TO ROGER DALE QUEEN, II AND SHANNON T. QUEEN, AS RECORDED IN DEED BOOK 1766, PAGE 31 OF THE RANDOLPH COUNTY REGISTRY.

Appendix D Categorical Exclusion

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.

Part	1: General Project Information			
Project Name:	Rhapsody			
County Name:	Randolph			
DMS Number:	100110			
Project Sponsor:	Environmental Banc & Exchange, LLC, a RES Company			
Project Contact Name:	Matt Butler			
Project Contact Address:	302 Jefferson Street, Suite 110, Raleight, NC 27605			
Project Contact E-mail:	mbutler@res.us			
DMS Project Manager:	Jeremiah Dow			
	Project Description			
The Rhapsody Project is located in Randolph County, approximately 5 miles east of Archdale, within the Cape Fear River Basin within Cataloging Unit 03030003. The Project includes two unnamed tributaries that drain into Muddy Creek approximately 1 mile downstream of the Project. Water quality stressors currently affecting the Project include livestock production and lack of forested riparian buffer. A combination of buffer restoration and enhancement is proposed to increase water quality and ecological function and protect these features in perpetuity. A combination of planting, establishment, and protection of hardwood forest community will result in a riparian habitat that will produce 7.28 acres of buffer mitigation for nutrient and sediment in puts from the surrounding uplands.				
建设基础设置的	For Official Use Only			
Reviewed By:				
9/9/19	Perennel Ow			
Date '	DMS Project Manager			
Conditional Approved By:				
Date	For Division Administrator FHWA			
☐ Check this box if there are	outstanding issues			
Final Approval By:				
Donald W.Brew	9-9-19			
Date	For Division Administrator FHWA			

Part 2: All Projects	
Regulation/Question	Response
Coastal Zone Management Act (CZMA)	
1. Is the project located in a CAMA county?	☐ Yes
	■ No
2. Does the project involve ground-disturbing activities within a CAMA Area of	Yes
Environmental Concern (AEC)?	∐ No
	■ N/A
3. Has a CAMA permit been secured?	Yes
	□ No
A LL- NODOM - man al the state - mails at its associate at with the NO Occasion Many - man and	■ N/A
4. Has NCDCM agreed that the project is consistent with the NC Coastal Management	│
Program?	I NO ■ N/A
Comprehensive Environmental Response, Compensation and Liability Act (C	
	Yes
1. Is this a "full-delivery" project?	□ Yes □ No
Has the zoning/land use of the subject property and adjacent properties ever been	☐ Yes
designated as commercial or industrial?	■ No
designated as commercial or industrial?	□ N/A
As a result of a limited Phase I Site Assessment, are there known or potential	Yes
hazardous waste sites within or adjacent to the project area?	□ les □ No
Tiazardous waste sites within or adjacent to the project area!	□ N/A
4. As a result of a Phase I Site Assessment, are there known or potential hazardous	Yes
waste sites within or adjacent to the project area?	□ No
waste sites within or adjacent to the project area:	■ N/A
5. As a result of a Phase II Site Assessment, are there known or potential hazardous	Yes
waste sites within the project area?	□ 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	☐ Yes
Historic Places in the project area?	■ No
2. 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
	│
	■ N/A
Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uni	
1. Is this a "full-delivery" project?	Yes
	☐ No
2. Does the project require the acquisition of real estate?	Yes
	☐ No
	□ N/A
3. Was the property acquisition completed prior to the intent to use federal funds?	Yes
	No No
	□ N/A
4. Has the owner of the property been informed:	Yes
* prior to making an offer that the agency does not have condemnation authority; and	□ No
* what the fair market value is believed to be?	□ 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	Yes
Cherokee Indians?	■ 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	☐ Yes
Places?	∏ No
Tidoo.	I 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	Yes
of antiquity?	□ No ■ N/A
3. Will a permit from the appropriate Federal agency be required?	Yes
o. Will a permit from the appropriate reductal agency be required:	☐ 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
2. Will there be a loss of destruction of distruction grounds seemed.	☐ 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)	I IN/A
1. Are federal Threatened and Endangered species and/or Designated Critical Habitat	■ Yes
listed for the county?	No No
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	☐ Yes
Habitat?	■ No
	∐ N/A
4. Is the project "likely to adversely affect" the specie and/or "likely to adversely modify"	Yes
Designated Critical Habitat?	□ No ■ N/A
5. Does the USFWS/NOAA-Fisheries concur in the effects determination?	Yes
2. 2000 and GOT TTO/TTO/ VTT ISHORIOG GOTION III the checks determination:	□ 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" by the EBCI?	Yes No
2. Has the EBCI indicated that Indian sacred sites may be impacted by the proposed project?	Yes No N/A
Have accommodations been made for access to and ceremonial use of Indian sacred sites?	Yes No
Farmland Protection Policy Act (FPPA)	— 14/74
1. Will real estate be acquired?	Yes No
Has NRCS determined that the project contains prime, unique, statewide or locally important farmland?	Yes No No N/A
3. Has the completed Form AD-1006 been submitted to NRCS?	Yes No N/A
Fish and Wildlife Coordination Act (FWCA)	14// (
Will the project impound, divert, channel deepen, or otherwise control/modify any water body?	Yes No
Have the USFWS and the NCWRC been consulted?	Yes No N/A
Land and Water Conservation Fund Act (Section 6(f))	I IN//A
Will the project require the conversion of such property to a use other than public, outdoor recreation?	☐ Yes ■ No
Has the NPS approved of the conversion?	Yes No
Magnuson-Stevens Fishery Conservation and Management Act (Essential Fish	N/A
1. Is the project located in an estuarine system?	Yes
	■ No
2. Is suitable habitat present for EFH-protected species?	│ │ Yes │ │ No ■ N/A
3. Is sufficient design information available to make a determination of the effect of the project on EFH?	Yes No
4. Will the project adversely affect EFH?	Yes No
5. Has consultation with NOAA-Fisheries occurred?	Yes No N/A
Migratory Bird Treaty Act (MBTA)	
1. Does the USFWS have any recommendations with the project relative to the MBTA?	☐ Yes ■ No
2. Have the USFWS recommendations been incorporated?	Yes No
	■ N/A
Wilderness Act	
1. Is the project in a Wilderness area?	☐ Yes ■ No
2. Has a special use permit and/or easement been obtained from the maintaining federal agency?	☐ Yes ☐ No ■ N/A

Categorical Exclusion Summary

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

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, created a tax on the chemical and petroleum industries to clean up abandoned or uncontrolled hazardous waste sites.

As a part of the CERCLA compliance, an EDR Radius Map Report with Geocheck was ordered for the Rhapsody Mitigation Project through Environmental Data Resources, Inc (EDR) on June 12th, 2019. According to the EDR report, there was one listed site located within 1 mile of the project site. This was a septic tank on the property. It was determined that the septic tank is non-hazardous and was far enough from the project that it will not be at risk of disturbance from the project. In addition to the EDR search, a visual inspection of the Rhapsody Project was conducted to assess the potential for the occurrence of recognized environmental conditions on the property that might not have been revealed in the EDR report. The inspection was conducted to locate and identify any obvious use, storage, or generation of hazardous materials. No hazardous storage containers or substances were observed.

Overall, the EDR assessment revealed no evidence of "recognized environmental conditions" in connection with the target property. The summary of the EDR report is enclosed.

National Historical Preservation Act (Section 106)

The National Historical Preservation Act (NHPA) is legislation intended to preserve historical and archaeological sites in the United States of America. RES requested review and comment from the State Historic Preservation Office (SHPO) with respect to any archaeological and architectural resources related to the Rhapsody Mitigation Project on June 26th, 2019. SHPO responded on July 19th, 2019 and had no objections to the Rhapsody Project. The correspondence with SHPO can be found in the enclosed documents.

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

The Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act) provides important protections and assistance for those people affected by federally funded projects. The Uniform Act applies to the acquisition, rehabilitation, or demolition of real property for federally funded projects. The Rhapsody Mitigation Site is a full-delivery project that includes land acquisition. Notification of fair market value of the property and the lack of condemnation authority was completed by RES. The landowner was notified of fair market value and condemnation authority was listed in the option agreement.

Endangered Species Act (ESA)

Section 7 of the ESA requires federal agencies, in consultation with and with the assistance of the Secretary of the Interior or of Commerce, as appropriate, to ensure that actions they authorize, fund or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species.

Randolph County's list of threatened and endangered species includes Schweinitz's sunflower (*Helianthus schweinitzii*). On August 20, 2019 a survey was conducted for Schweinitz's sunflower. The conclusion of the survey was that there was suitable habitat present but no species were present and therefore the project will have no effect on the Schweinitz's sunflower. An updated letter with the results of the survey was provided to the USFWS on August 28, 2019. A copy of this letter is enclosed. No response was provided by USFWS which is typical as the certification letter (provided) is their official response unless they do not concur with the determination.

The Bald and Golden Eagle Protection Act (BGPA)

The Bald and Golden Eagle Protection Act (BGPA) is a federal status that protects two species of Eagle. The BGPA provides protection for the bald eagle and golden eagle by prohibiting the take, possession, sale, purchase, barter, offer to sell, purchase or barter, transport, export or import, of any bald or golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit (16 U.S.C. 668(a) (BGPA, 1940). The Bald Eagle (*Haliaeetus leucocephalus*), has been identified in Randolph county; buffer mitigation practices will have a "No Effect" result on the Bald Eagle.

Farmland Protection Policy Act (FPPA)

The Farmland Protection Policy Act (FPPA) is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. The Rhapsody Mitigation Project includes the conversion of prime farmland. As such, Form AD-1006 has been completed and submitted to the Natural Resource Conservation Service (NRCS). The completed form and correspondence documenting the submittal is enclosed.

Fish and Wildlife Coordination Act (FWCA)

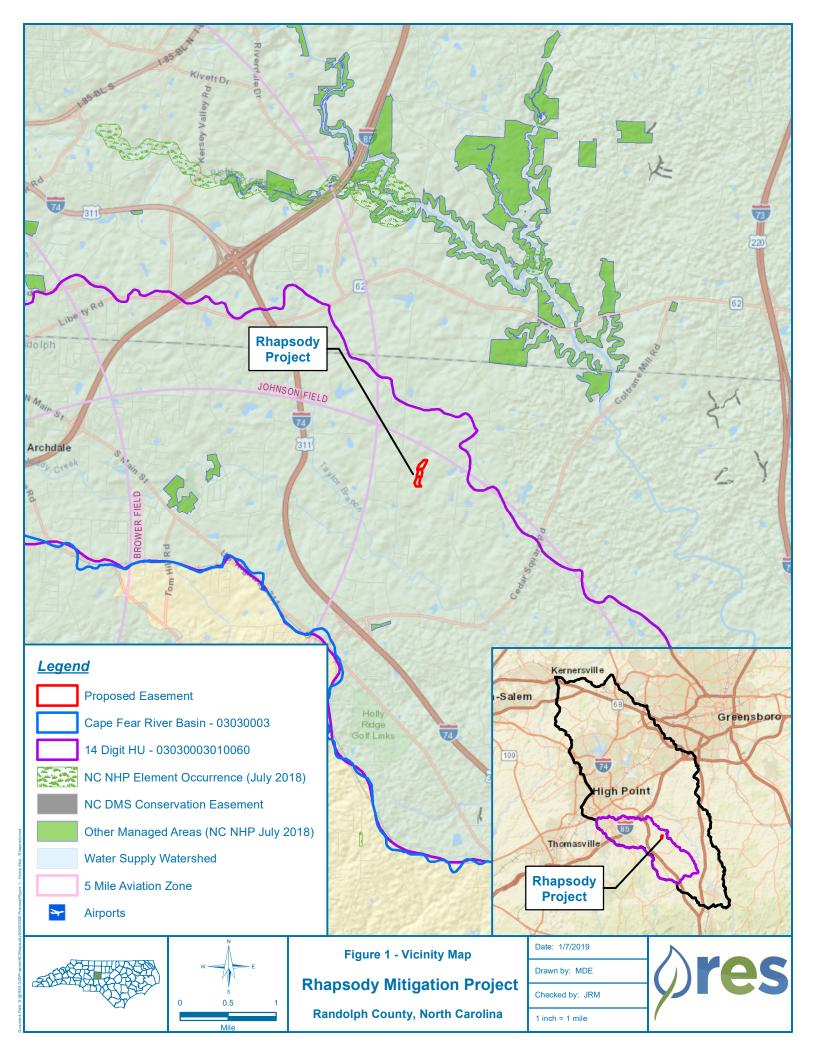
The Fish and Wildlife Coordination Act (FWCA) of the United States was enacted to protect fish and wildlife when federal actions result in the control or modification of a natural stream or body of water. Though the Rhapsody Mitigation Project does not include removal and/or replacement of existing culverts or stream bank stabilization, RES still requested comment from the North Carolina Fish and Wildlife Resource Commission (NCWRC) on June 13th, 2019. RES received a response from the NCWRC on June 14th, 2019 that stated that Schweinitz's sunflower (*Helianthus schweinitzii*), the Greenboro crayfish (*Cambarus catagius*) and the Purple coneflower (*Echinacea purpurea*) have known records within the vicinity of the project. Therefore, RES will notify NCWRC if any of these species are identified within the project area. All correspondence is enclosed.

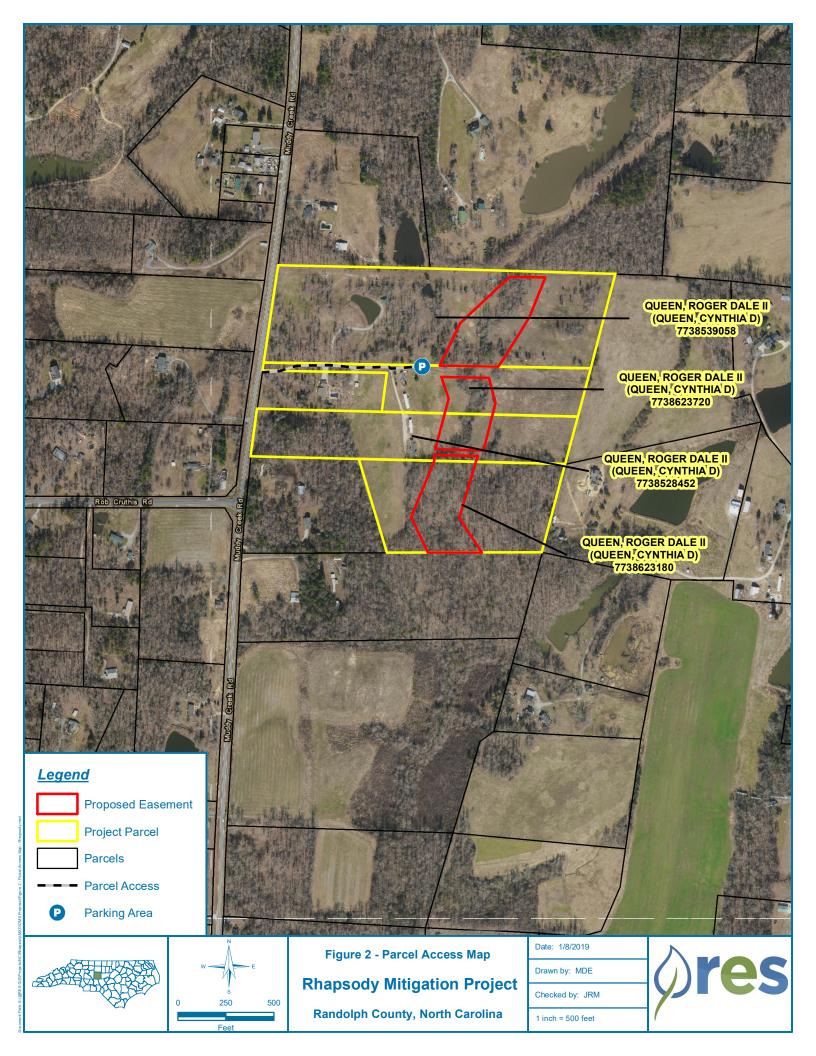
Migratory Bird Treaty Act (MBTA)

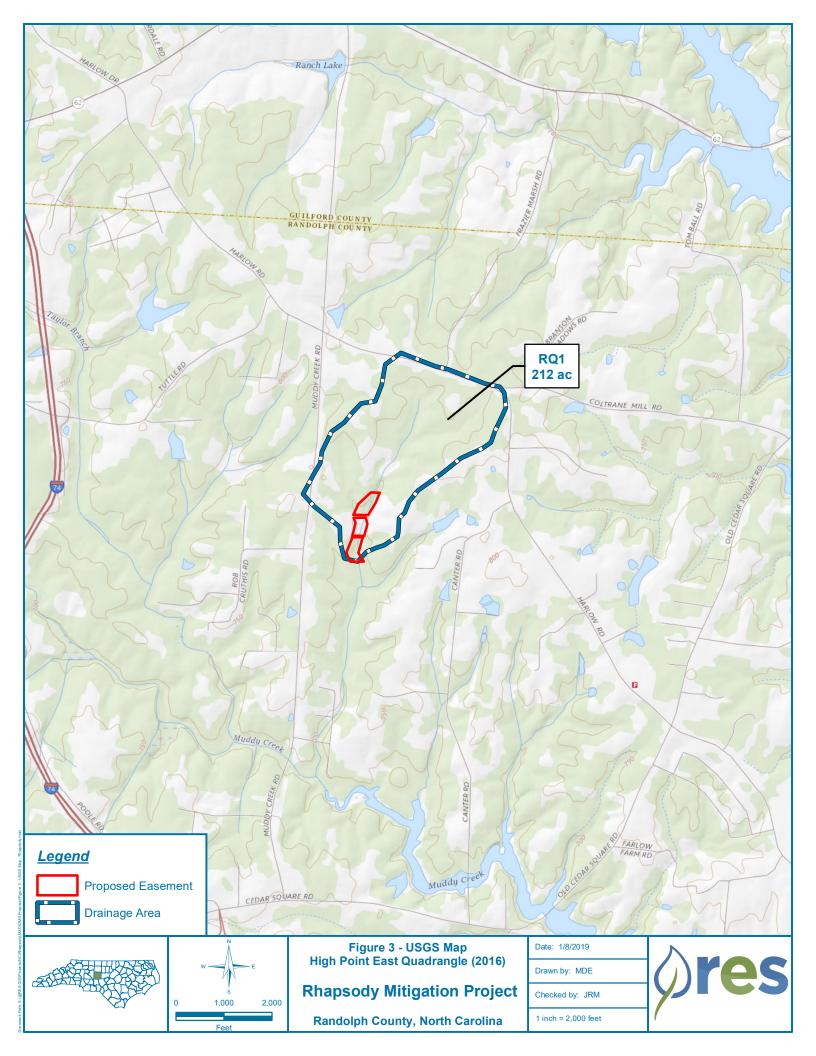
The MBTA makes it unlawful for anyone to kill, capture, collect, possess, buy, sell, trade, ship import, or extort and migratory bird. The indirect killing of birds by destroying their nests and eggs is covered by the MBTA, so construction in nesting areas during nesting seasons can constitute a taking.

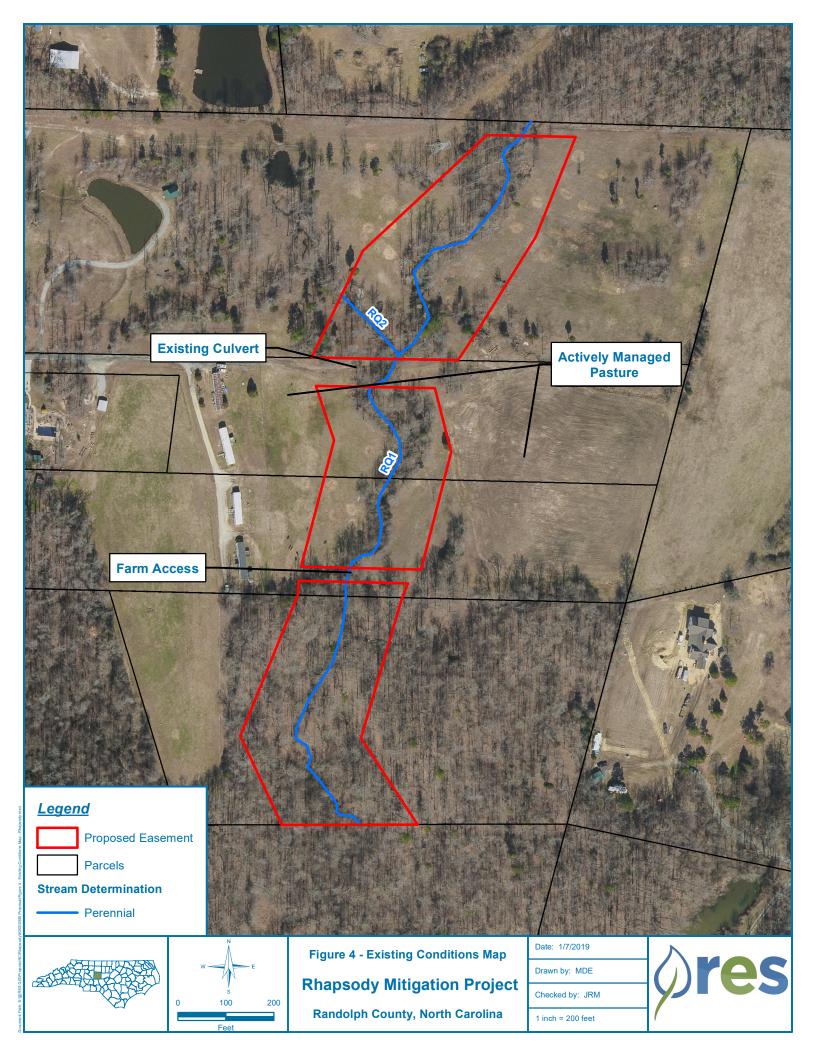
RES consulted the USFWS's Information for Planning and Consultation (IPAC) tool on August 1st, 2019 to generate a list of migratory birds that are expected to occur at the Rhapsody Project. The results concluded that six migratory birds of conservation concern occur at the Site. This includes the Bald Eagle (Haliaeetus leucocephalus). Prairie Warbler (Dendroice discolor), Prothonotary Warbler (Protonotaria citrea). Red-headed Woodpecker (Melanerpes erythrocephalus), Rustv (Euphagus carolinus), and Wood Thrush (Hylocichla mustelina). This project will Blackbird include the fencing out of cows and planting of trees that will improve the habitat for these migratory birds. Additionally, all work will be done outside of the window when the probability of these species presence is estimated. It was determined that there will be no negative effect or take on these migratory bird species.

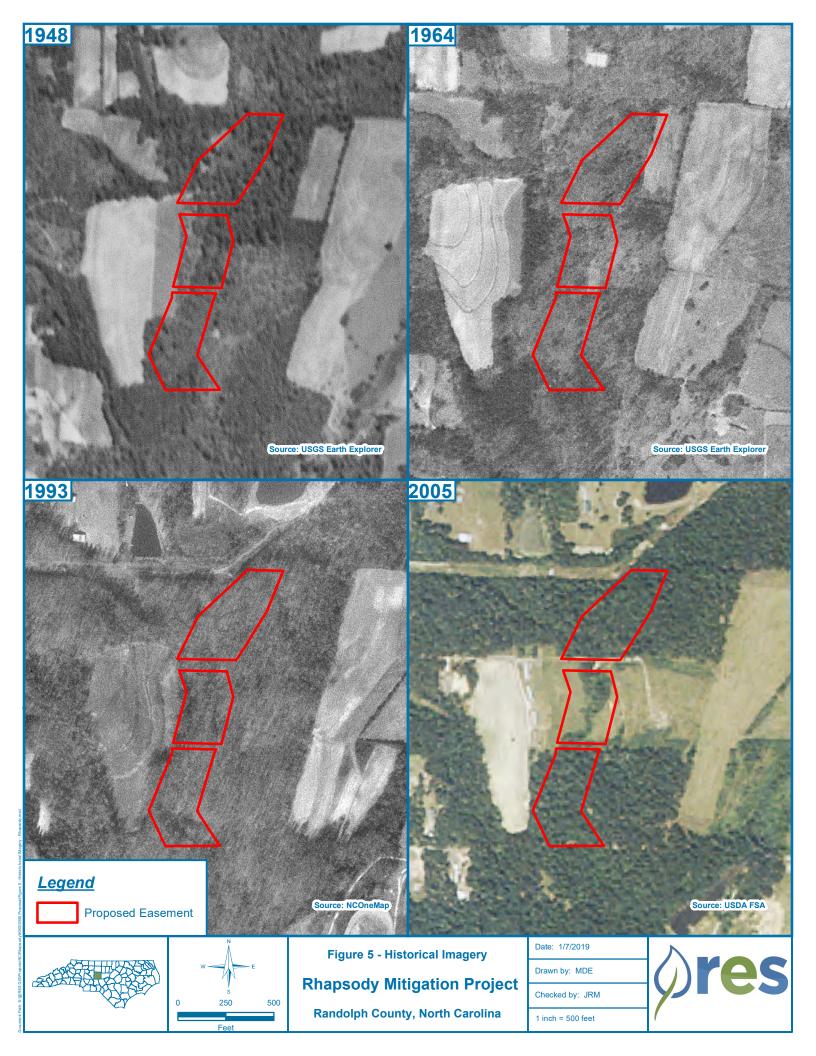






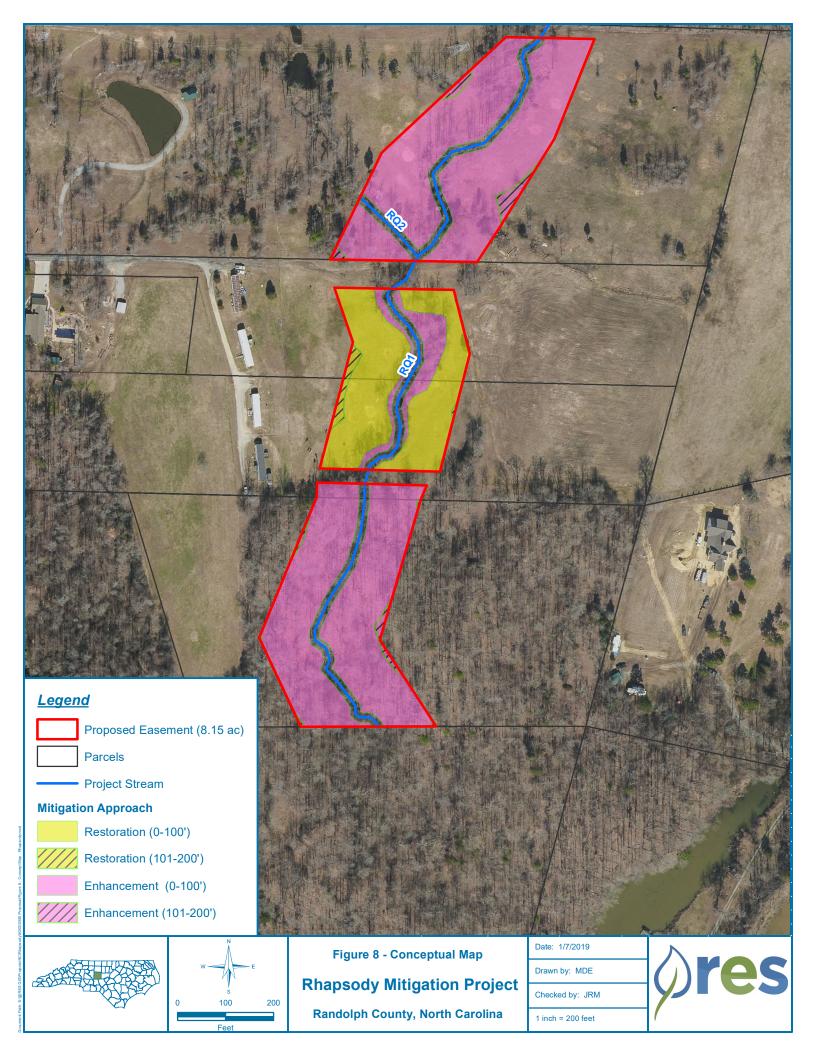


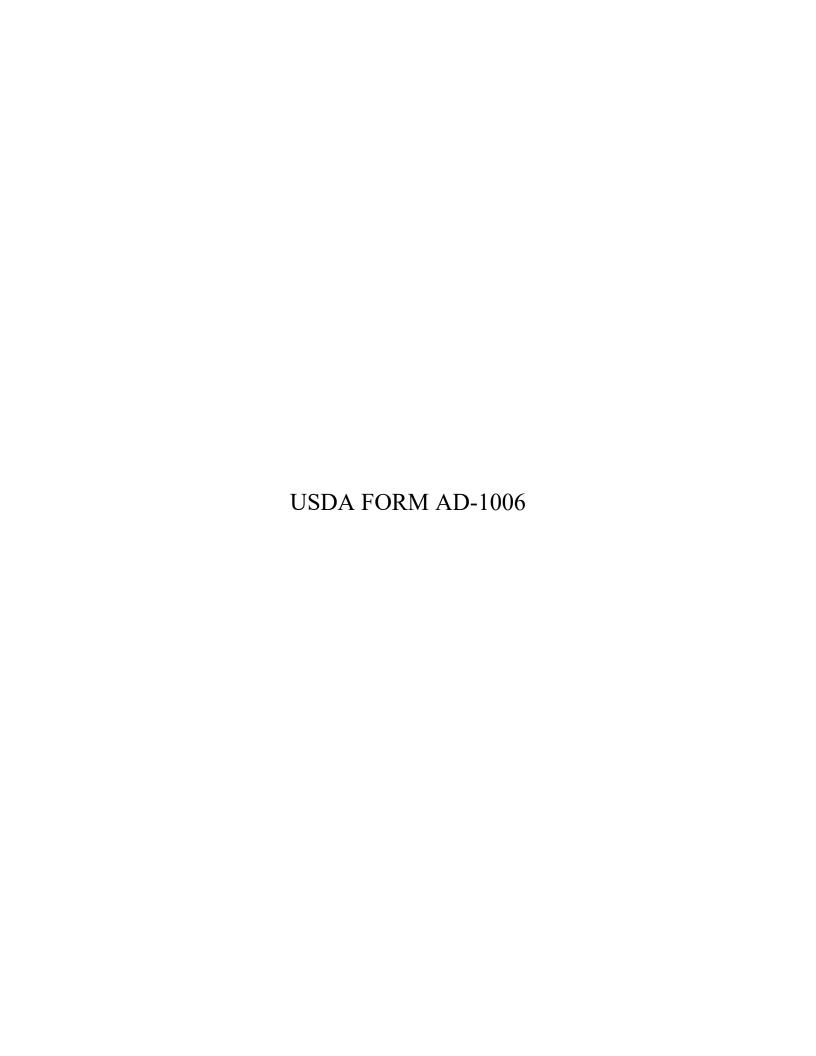












F	U.S. Departmen			ATING					
PART I (To be completed by Federal Agency)			Date Of Land Evaluation Request						
Name of Project			Agency Involved	<u>·</u>					
Proposed Land Use		County a							
PART II (To be completed by NRCS)		Date Red	quest Received	Ву	Person C	ompleting For	rm:		
Does the site contain Prime, Unique, Statew	vide or Local Important Farmland		YES NO	Acres Ir	rigated	Average	Farm Size		
(If no, the FPPA does not apply - do not con	nplete additional parts of this forn	n)							
Major Crop(s)	Farmable Land In Govt.	Jurisdiction]	Amount of F	armland As	Defined in FF	PPA		
	Acres: %			Acres:	%				
Name of Land Evaluation System Used	Name of State or Local S	ite Assess	ment System	Date Land E	valuation R	eturned by Ni	RCS		
PART III (To be completed by Federal Ager					Alternative	e 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) Land	d Evaluation Information								
, , , , , , , , , , , , , , , , , , , ,									
A. Total Acres Prime And Unique Farmland	Increase to the Comment of								
B. Total Acres Statewide Important or Local C. Percentage Of Farmland in County Or Local	·								
D. Percentage Of Farmland in Govt. Jurisdic		vo Valuo							
		ve value							
PART V (To be completed by NRCS) Land Relative Value of Farmland To Be Co		s)							
PART VI (To be completed by Federal Age			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)						
Area in Non-urban Use Perimeter In Non-urban Use			(10)						
Percent Of Site Being Farmed			(20)						
Protection Provided By State and Local (Sovernment		(20)						
Florection Florided By State and Local Co. Distance From Urban Built-up Area	Jovenninent		(15)						
Distance To Urban Support Services			(15)						
Size Of Present Farm Unit Compared To	Ανατασα		(10)						
Creation Of Non-farmable Farmland	Average		(10)						
Availability Of Farm Support Services			(5)						
10. On-Farm Investments			(20)						
11. Effects Of Conversion On Farm Support	Services		(10)						
12. Compatibility With Existing Agricultural U			(10)						
TOTAL SITE ASSESSMENT POINTS			160						
PART VII (To be completed by Federal A	gency)								
Relative Value Of Farmland (From Part V)	g,,		100						
Total Site Assessment (From Part VI above	or local site assessment)		160						
TOTAL POINTS (Total of above 2 lines)	·		260						
,				Was A Loca	Site Asses	sment Used?	1		
Site Selected:	Date Of Selection			YES	s 🗌	NO 🗌			
Reason For Selection: Name of Federal agency representative comp	oleting this form:				ח	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 http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)
- Step 3 NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.
- Step 4 For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.
- Step 5 NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.
- Step 6 The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.
- Step 7 The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

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

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

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

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

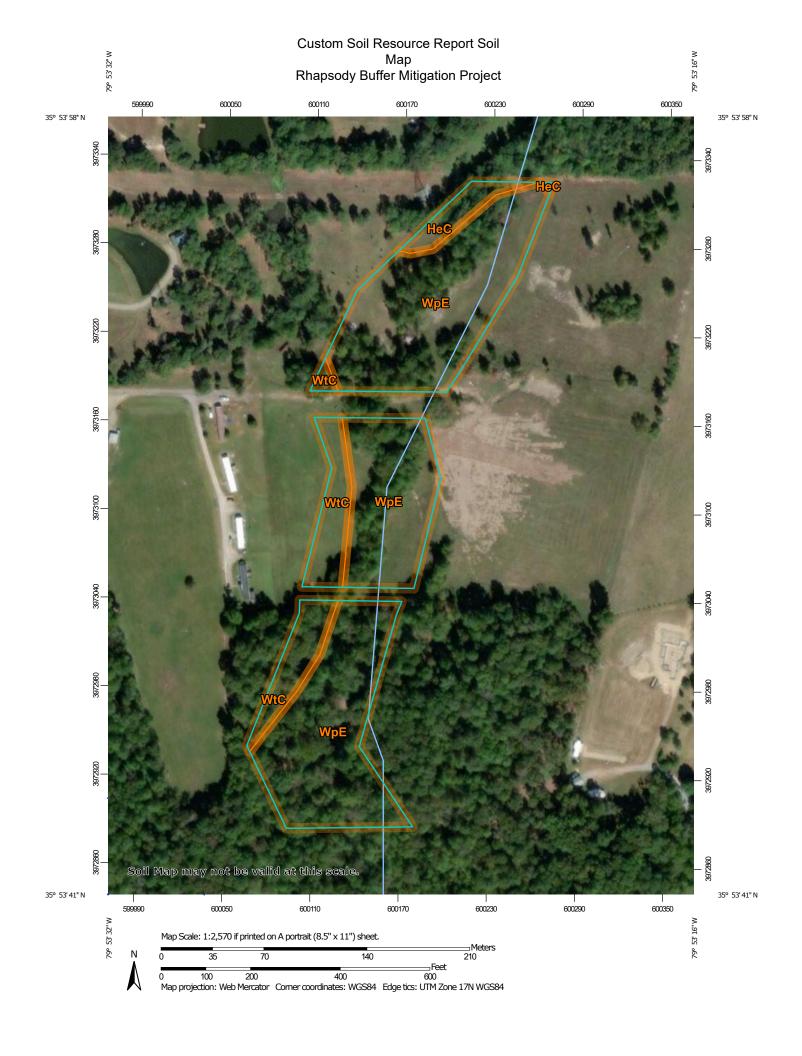
- 1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighted a maximum of 25 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.



MAP LEGEND

Area of Interest (AOI)

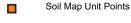
Area of Interest (AOI)

Soils

Soil Map Unit Polygons



Soil Map Unit Lines



Special Point Features

Blowout

Borrow Pit

Bonow 1

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot
Landfill

Lava Flow

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

+ Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

⊗ Sodic Spot

.02.10

Spoil Area

Stony Spot

Yery Stony Spot

∆ Other

Special Line Features

Water Features

Streams and Canals

Transportation

+++ Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24.000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Randolph County, North Carolina Survey Area Data: Version 23, Sep 10, 2018

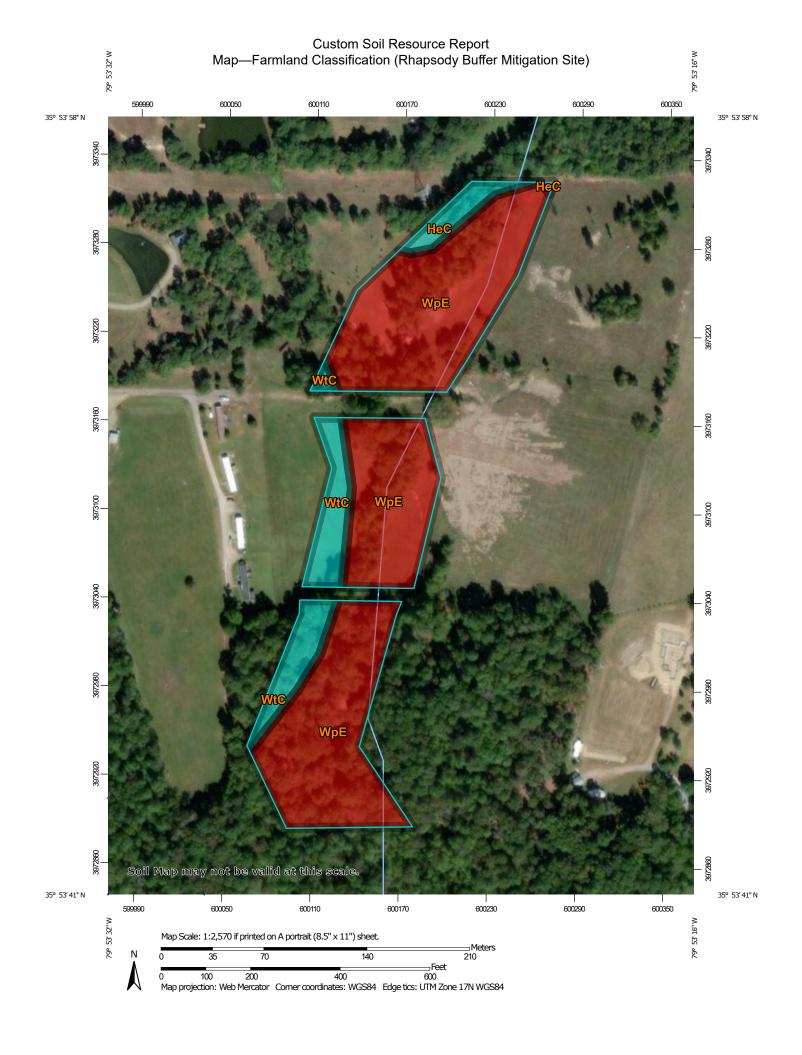
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 19, 2015—Oct 16, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
HeC	Helena sandy loam, 6 to 10 percent slopes	0.3	3.9%
WpE	Wilkes-Poindexter-Wynott complex, 15 to 25 percent slopes	6.8	82.9%
WtC	Wynott-Enon complex, 8 to 15 percent slopes	1.1	13.2%
Totals for Area of Interest		8.2	100.0%



MAP LEGEND									
Area of Interest (AOI) Area of Interest (AOI) Soils Soil Rating Polygons Not prime farmland All areas are prime farmland Prime farmland if drained Prime farmland if protected from flooding or not frequently flooded during the growing season Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season Prime farmland if irrigated and drained Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season	Prime farmland if subsoiled, completely removing the root inhibiting soil layer Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60 Prime farmland if irrigated and reclaimed of excess salts and sodium Farmland of statewide importance Farmland of statewide importance, if drained Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if irrigated	Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if irrigated and drained Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60	importance, if irrigated and reclaimed of excess salts and sodium	farmland Prime farmland if drained Prime farmland if protected from flooding or not frequently flooded during the growing season Prime farmland if irrigated Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season Prime farmland if irrigated and drained and either protected from flooding or not frequently flooded during the growing season					

~*	Prime farmland if subsoiled, completely removing the root inhibiting soil layer	~	Farmland of statewide importance, if drained and either protected from flooding or not frequently	***	Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium	~	Farmland of unique importance Not rated or not available	Prime farmland if subsoiled, completely removing the root inhibiting soil layer
2 2 2 2 2	removing the root	~ : ?	either protected from	~ ~ ~ ~	and reclaimed of excess	Soil Rat	importance Not rated or not available ing Points Not prime farmland All areas are prime farmland Prime farmland if drained Prime farmland if protected from flooding or not frequently flooded during the growing season Prime farmland if irrigated Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season Prime farmland if irrigated and drained	removing the root
				~	Farmland of local importance, if irrigated		Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season	

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
 - Farmland of statewide importance, if irrigated and drained
 - Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
 - Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated

- Farmland of unique importance
- Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

~

Interstate Highways

~

US Routes
Major Roads

-

Local Roads

Background

The same

Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:24,000.

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Coordinate System: Web Mercator (EPSG:3857)

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Soil Survey Area: Randolph County, North Carolina Survey Area Data: Version 23, Sep 10, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 19, 2015—Oct 16, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Farmland Classification (Rhapsody Buffer Mitigation Site)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
HeC	Helena sandy loam, 6 to 10 percent slopes	Farmland of statewide importance	0.3	3.9%
WpE	Wilkes-Poindexter- Wynott complex, 15 to 25 percent slopes	Not prime farmland	6.8	82.9%
WtC	Wynott-Enon complex, 8 to 15 percent slopes	Farmland of statewide importance	1.1	13.2%
Totals for Area of Intere	est	8.2	100.0%	



Rhapsody 6466 Muddy Creek Road High Point, NC 27263

Inquiry Number: 5681529.16s

June 12, 2019

The EDR Radius Map™ Report with GeoCheck®



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

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

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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

6466 MUDDY CREEK ROAD HIGH POINT, NC 27263

COORDINATES

Latitude (North): 35.8984750 - 35° 53' 54.51" Longitude (West): 79.8908150 - 79° 53' 26.93"

Universal Tranverse Mercator: Zone 17 UTM X (Meters): 600100.5 UTM Y (Meters): 3973056.0

Elevation: 770 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5945535 HIGH POINT EAST, NC

Version Date: 2013

Northeast Map: 5945571 PLEASANT GARDEN, NC

Version Date: 2013

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140827, 20140705

Source: USDA

MAPPED SITES SUMMARY

Target Property Address: 6466 MUDDY CREEK ROAD HIGH POINT, NC 27263

Click on Map ID to see full detail.

MAP				RELATIVE	DIST (ft. & mi.)
ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	ELEVATION	DIRECTION
1	QUEENS SEPTIC TANK	6466 MUDDY CREEK ROA	RGA LF		TP

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site Database(s) EPA ID

QUEENS SEPTIC TANK 6466 MUDDY CREEK ROA ARCHDALE, NC **RGALF**

N/A

DATABASES WITH NO MAPPED SITES

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

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL...... National Priority List

Proposed NPL..... Proposed National Priority List Sites

NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

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

Federal CERCLIS NFRAP site list

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

Federal RCRA CORRACTS facilities list

CORRACTS...... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

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

Federal RCRA generators list

RCRA-LQG...... RCRA - Large Quantity Generators

RCRA-SQG..... RCRA - Small Quantity Generators

RCRA-CESQG...... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

NC HSDS..... Hazardous Substance Disposal Site

State- and tribal - equivalent CERCLIS

SHWS..... Inactive Hazardous Sites Inventory

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

SWF/LF..... List of Solid Waste Facilities

OLI...... Old Landfill Inventory

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

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

State and tribal leaking storage tank lists

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

INDIAN VCP...... Voluntary Cleanup Priority Listing

VCP.....Responsible Party Voluntary Action Sites

State and tribal Brownfields sites

BROWNFIELDS..... Brownfields Projects Inventory

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

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

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY...... Recycling Center Listing HIST LF..... Solid Waste Facility Listing

INDIAN ODI______ Report on the Status of Open Dumps on Indian Lands DEBRIS REGION 9_____ Torres Martinez Reservation Illegal Dump Site Locations

ODI...... Open Dump Inventory IHS OPEN DUMPS...... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

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

Local Land Records

LIENS 2..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System

SPILLS......Spills Incident Listing

IMD_______ Incident Management Database
SPILLS 90______ SPILLS 90 data from FirstSearch
SPILLS 80______ SPILLS 80 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR...... RCRA - Non Generators / No Longer Regulated

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

RAATS......RCRA Administrative Action Tracking System

ICIS...... Integrated Compliance Information System

FTTS......FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide

Act)/TSCA (Toxic Substances Control Act)

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 ECHO..... Enforcement & Compliance History Information

UXO...... Unexploded Ordnance Sites

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

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

SEPT HAULERS..... Permitted Septage Haulers Listing CCB...... Coal Ash Structural Fills (CCB) Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

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

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

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

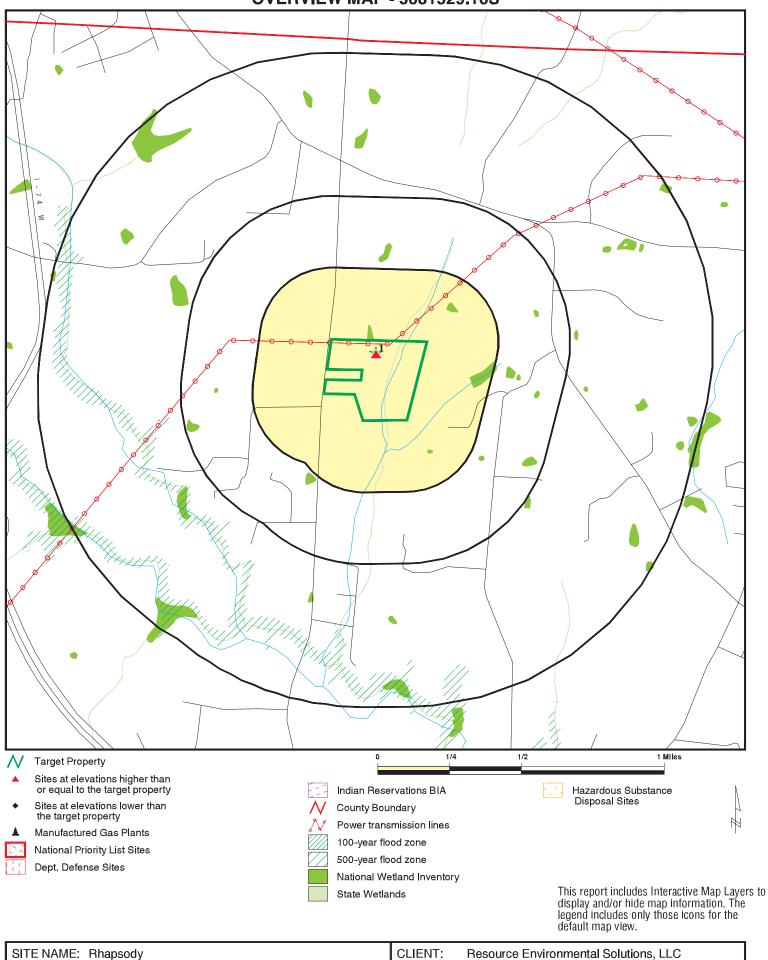
SURROUNDING SITES: SEARCH RESULTS

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 - 5681529.16S



LAT/LONG:

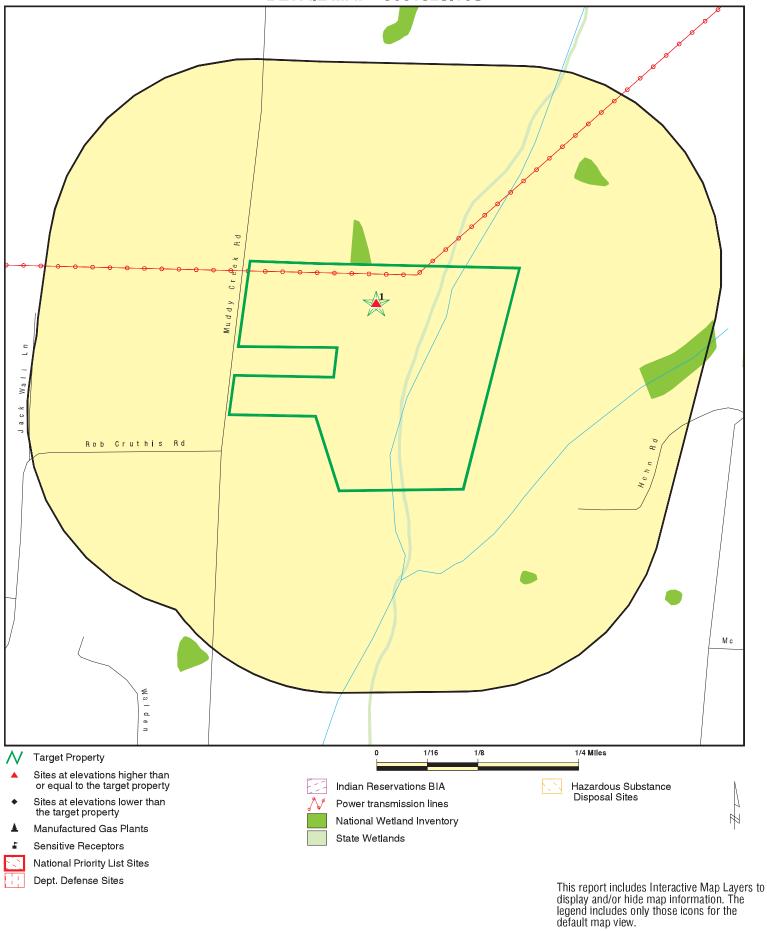
SITE NAME: Rhapsody ADDRESS: 6466 Muddy Creek Road

High Point NC 27263 35.898475 / 79.890815

CLIENT: CONTACT: Grayson Sanner INQUIRY #: 5681529.16s

DATE: June 12, 2019 1:09 pm

DETAIL MAP - 5681529.16S



SITE NAME: Rhapsody CLIENT: CONTACT: Resource Environmental Solutions, LLC 6466 Muddy Creek Road Grayson Sanner High Point NC 27263 INQUIRY #: 5681529.16s 35.898475 / 79.890815 DATE: June 12, 2019 1:12 pm

ADDRESS:

LAT/LONG:

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Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENT	TAL RECORDS							
Federal NPL site list								
NPL Proposed NPL NPL LIENS	1.000 1.000 0.001		0 0 0	0 0 NR	0 0 NR	0 0 NR	NR NR NR	0 0 0
Federal Delisted NPL site	e list							
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY SEMS	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
Federal CERCLIS NFRAI	P site list							
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRAC	TS facilities li	st						
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-COR	RACTS TSD fa	acilities list						
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generator	s list							
RCRA-LQG RCRA-SQG RCRA-CESQG	0.250 0.250 0.250		0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 0 0
Federal institutional con engineering controls reg								
LUCIS US ENG CONTROLS US INST CONTROL	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equiva	lent NPL							
NC HSDS	1.000		0	0	0	0	NR	0
State- and tribal - equiva	lent CERCLIS	3						
SHWS	1.000		0	0	0	0	NR	0
State and tribal landfill a solid waste disposal site								
SWF/LF OLI DEBRIS LCID	0.500 0.500 0.500 0.500		0 0 0	0 0 0 0	0 0 0 0	NR NR NR NR	NR NR NR NR	0 0 0 0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
State and tribal leaking storage tank lists								
LUST LAST INDIAN LUST LUST TRUST	0.500 0.500 0.500 0.500		0 0 0 0	0 0 0 0	0 0 0 0	NR NR NR NR	NR NR NR NR	0 0 0 0
State and tribal registere	d storage tar	nk lists						
FEMA UST UST AST INDIAN UST	0.250 0.250 0.250 0.250		0 0 0 0	0 0 0 0	NR NR NR NR	NR NR NR NR	NR NR NR NR	0 0 0 0
State and tribal institution control / engineering con		s						
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary	=	es						
INDIAN VCP VCP	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
State and tribal Brownfie	lds sites							
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMEN	TAL RECORDS	<u>s</u>						
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / S Waste Disposal Sites	olid							
SWRCY HIST LF INDIAN ODI DEBRIS REGION 9 ODI IHS OPEN DUMPS	0.500 0.500 0.500 0.500 0.500 0.500		0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	NR NR NR NR NR	NR NR NR NR NR	0 0 0 0 0
Local Lists of Hazardous Contaminated Sites	waste/							
US HIST CDL US CDL	0.001 0.001		0 0	NR NR	NR NR	NR NR	NR NR	0 0
Local Land Records								
LIENS 2	0.001		0	NR	NR	NR	NR	0
Records of Emergency R	-	rts						
HMIRS SPILLS IMD	0.001 0.001 0.500		0 0 0	NR NR 0	NR NR 0	NR NR NR	NR NR NR	0 0 0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SPILLS 90 SPILLS 80	0.001 0.001		0	NR NR	NR NR	NR NR	NR NR	0 0
Other Ascertainable Rec	ords							
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS US FIN ASSUR	0.500		0	0	0	NR	NR	0
EPA WATCH LIST	0.001 0.001		0 0	NR NR	NR NR	NR NR	NR NR	0 0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		Ő	NR	NR	NR	NR	0
TRIS	0.001		Ō	NR	NR	NR	NR	Ö
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS ICIS	0.001 0.001		0 0	NR NR	NR NR	NR NR	NR NR	0 0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		Ö	NR	NR	NR	NR	Ö
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS CONSENT	0.001 1.000		0 0	NR 0	NR 0	NR 0	NR NR	0 0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		Ö	Ö	Ö	NR	NR	Ö
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS ECHO	0.001 0.001		0 0	NR NR	NR NR	NR NR	NR NR	0 0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		Ő	0	NR	NR	NR	Ö
AIRS	0.001		0	NR	NR	NR	NR	0
ASBESTOS	0.001		0	NR	NR	NR	NR	0
COAL ASH	0.500		0	0	0	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
Financial Assurance	0.001		0	NR NB	NR NB	NR	NR NB	0
NPDES UIC	0.001 0.001		0 0	NR NR	NR NR	NR NR	NR NR	0 0
AOP	0.001		0	NR	NR NR	NR	NR	0
PCSRP	0.500		0	0	0	NR	NR	0
SEPT HAULERS	0.001		Ö	NR	NR	NR	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CCB	0.500		0	0	0	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP EDR Hist Auto EDR Hist Cleaner	1.000 0.125 0.125		0 0 0	0 NR NR	0 NR NR	0 NR NR	NR NR NR	0 0 0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA HWS RGA LF RGA LUST	0.001 0.001 0.001	1	0 0 0	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 1 0
- Totals		1	0	0	0	0	0	1

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID MAP FINDINGS Direction

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

QUEENS SEPTIC TANK RGA LF S115654324 Target 6466 MUDDY CREEK ROAD N/A

Property ARCHDALE, NC

RGA LF:

2012 QUEENS SEPTIC TANK 6466 MUDDY CREEK ROAD Actual: 2011 QUEENS SEPTIC TANK 6466 MUDDY CREEK ROAD 770 ft. 6466 MUDDY CREEK ROAD 2010 QUEENS SEPTIC TANK QUEENS SEPTIC TANK 6466 MUDDY CREEK ROAD 2009 2008 QUEENS SEPTIC TANK 6466 MUDDY CREEK ROAD Count: 0 records. ORPHAN SUMMARY

City EDR ID Site Name Site Address Zip Database(s)

NO SITES FOUND

GEOCHECK®-PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

RHAPSODY 6466 MUDDY CREEK ROAD HIGH POINT, NC 27263

TARGET PROPERTY COORDINATES

Latitude (North): 35.898475 - 35° 53' 54.51" Longitude (West): 79.890815 - 79° 53' 26.93"

Universal Tranverse Mercator: Zone 17 UTM X (Meters): 600100.5 UTM Y (Meters): 3973056.0

Elevation: 770 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map: 5945535 HIGH POINT EAST, NC

Version Date: 2013

Northeast Map: 5945571 PLEASANT GARDEN, NC

Version Date: 2013

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

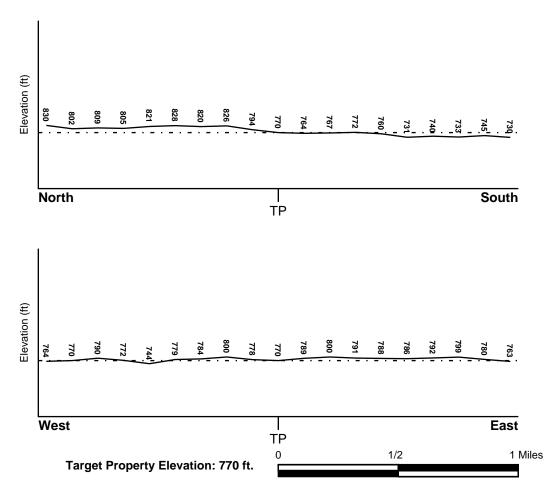
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property FEMA Source Type

3710773800J FEMA FIRM Flood data

Additional Panels in search area: FEMA Source Type

3710774800K FEMA FIRM Flood data 3710774600J FEMA FIRM Flood data 3710773700J FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Electronic
NWI Quad at Target Property

Data Coverage

HIGH POINT EAST YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

LOCATION GENERAL DIRECTION

MAP ID FROM TP GROUNDWATER FLOW

Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

GEOLOGIC AGE IDENTIFICATION

Era: Paleozoic Category: Plutonic and Intrusive Rocks

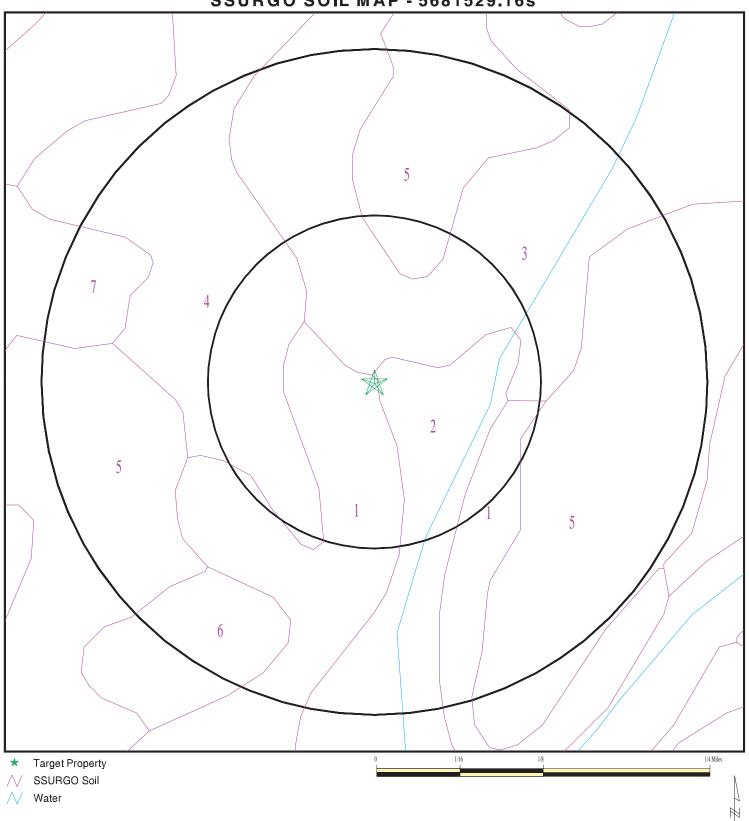
System: Ordovian

Series: Lower Paleozoic granitic rocks

Code: Pzg1 (decoded above as Era, System & Series)

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 5681529.16s



SITE NAME: Rhapsody
ADDRESS: 6466 Muddy Creek Road
High Point NC 27263
LAT/LONG: 35.898475 / 79.890815

CLIENT: Resource Environmental Solutions, LLC CONTACT: Grayson Sanner INQUIRY#: 5681529.16s

DATE: June 12, 2019 1:12 pm

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DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Wynott

Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward

movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

			Soil Layer	r Information			
	Bou	ındary		Classi	fication	Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)
1	0 inches	3 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 14 Min: 0	Max: Min:
2	3 inches	14 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 14 Min: 0	Max: Min:
3	14 inches	24 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 14 Min: 0	Max: Min:
4	24 inches	27 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 14 Min: 0	Max: Min:

	Soil Layer Information							
	Bou	ndary		Classification		Saturated hydraulic		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity	conductivity micro m/sec (pH)	
5	27 inches	78 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 14 Min: 0	Max: Min:	

Soil Map ID: 2

Soil Surface Texture:

Soil Component Name: Wilkes

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward

loam

movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Воц	ındary		Classi	fication	Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	
1	0 inches	5 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:
2	5 inches	11 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:

	Soil Layer Information								
	Вои	ındary		Classi	fication	Saturated hydraulic			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)		
3	11 inches	16 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:		
4	16 inches	44 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:		
5	44 inches	59 inches	unweathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:		

Soil Map ID: 3

Soil Component Name: Helena

Soil Surface Texture: sandy loam

Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures. Hydrologic Group:

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 61 inches

Soil Layer Information								
	Bou	ındary		Classification		Saturated hydraulic		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)	
1	0 inches	12 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 14 Min: 4	Max: 5.5 Min: 3.5	
2	12 inches	29 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 14 Min: 4	Max: 5.5 Min: 3.5	
3	29 inches	44 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 14 Min: 4	Max: 5.5 Min: 3.5	
4	44 inches	78 inches	gravelly sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 14 Min: 4	Max: 5.5 Min: 3.5	

Soil Map ID: 4

Soil Component Name: Vance
Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward

movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information								
	Bou	ındary		Classification		Saturated hydraulic		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)	
1	50 inches	59 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 5.5 Min: 4.5	
2	38 inches	50 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 5.5 Min: 4.5	
3	0 inches	9 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 5.5 Min: 4.5	
4	9 inches	38 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 5.5 Min: 4.5	

Soil Map ID: 5

Soil Component Name: Helena

Soil Surface Texture: gravelly sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward

movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 61 inches

Soil Layer Information								
	Bou	ındary		Classification		Saturated hydraulic		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)	
1	44 inches	78 inches	gravelly sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 5.5 Min: 3.5	
2	29 inches	44 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 5.5 Min: 3.5	
3	0 inches	12 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 5.5 Min: 3.5	
4	12 inches	29 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 5.5 Min: 3.5	

Soil Map ID: 6

Soil Surface Texture:

Soil Component Name: Mecklenburg

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward

clay loam

movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information								
	Bou	ındary		Classification		Saturated hydraulic		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)	
1	0 inches	7 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 1.4	Max: 7.3 Min: 5.6	
2	7 inches	29 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 1.4	Max: 7.3 Min: 5.6	
3	29 inches	38 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 1.4	Max: 7.3 Min: 5.6	
4	38 inches	59 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 1.4	Max: 7.3 Min: 5.6	

Soil Map ID: 7

Soil Component Name: Wilkes
Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward

movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

	_				<u> </u>	Saturated	
	Bou	ındary		Classi	fication	hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	
1	0 inches	5 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:
2	5 inches	11 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:
3	16 inches	44 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:
4	11 inches	16 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:
5	44 inches	59 inches	unweathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.07 Min: 0	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE SEARCH DISTANCE (miles)

Federal USGS 1.000

Federal FRDS PWS Nearest PWS within 0.001 miles

State Database 1.000

FEDERAL USGS WELL INFORMATION

LOCATION MAP ID WELL ID FROM TP 1/2 - 1 Mile NNE 1

USGS40000891615

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

LOCATION MAP ID WELL ID FROM TP

No PWS System Found

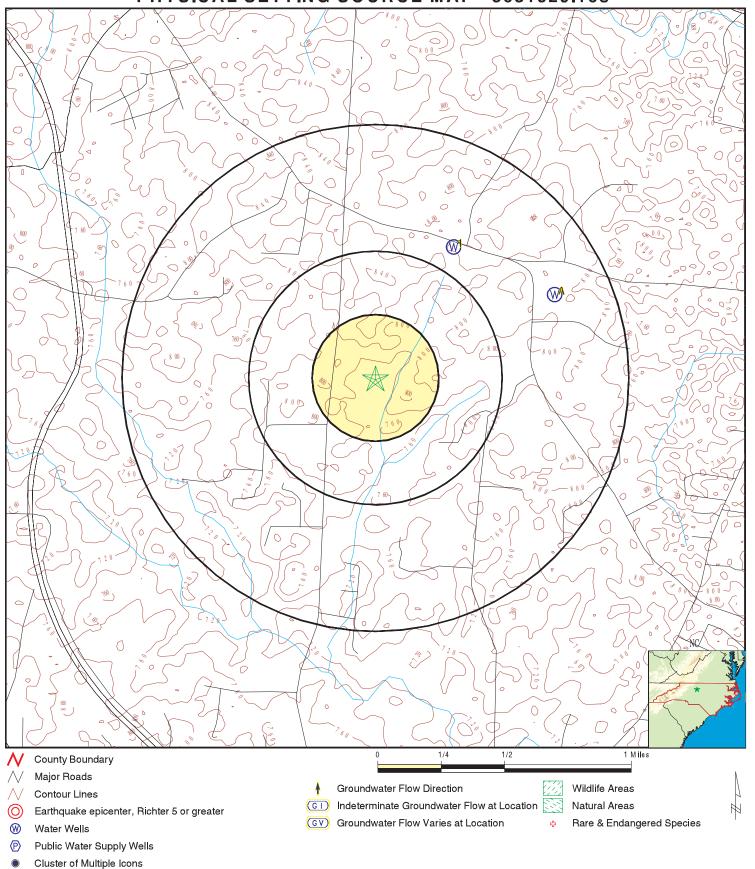
Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

LOCATION MAP ID WELL ID FROM TP

A2 NC3000000004195 1/2 - 1 Mile ENE NC3000000004200 АЗ 1/2 - 1 Mile ENE

PHYSICAL SETTING SOURCE MAP - 5681529.16s



SITE NAME: Rhapsody
ADDRESS: 6466 Muddy Creek Road

CLIENT: Resource Environmental Solutions, LLC
CONTACT: Grayson Sanner

6466 Muddy Creek Road
High Point NC 27263
35.898475 / 79.890815

CONTACT: Grayson Sanner
INQUIRY #: 5681529.16s
DATE: June 12, 2019 1:12 pm

LAT/LONG:

GEOCHECK®-PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance

Elevation Database EDR ID Number

NNE 1/2 - 1 Mile **FED USGS** USGS40000891615

Higher

Organization ID: **USGS-NC**

USGS North Carolina Water Science Center Organization Name: Monitor Location: Well RA-004 Type:

Not Reported HUC: Not Reported Description: Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported

Piedmont and Blue Ridge crystalline-rock aquifers Aquifer:

Formation Type: Felsic Metaigneous Rock Aquifer Type: Not Reported Construction Date: Well Depth: 150

Not Reported Well Hole Depth: Well Depth Units: ft Not Reported

Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: Level reading date: 1966 1

Feet below surface: Feet to sea level: Not Reported

Note: Not Reported

A2 ENE **NC WELLS** NC300000004195

1/2 - 1 Mile Higher

> PWD ID: NC0276146 System Name: CHIL-OAK-TON MHP PWS Type: Community Primary Source: **Ground Water** Facility Name: WELL #1 **Ground Water** Water Type: Well Depth: Well 90

Facility Type: Owner: CHILTON, CHARLES G

ENE **NC WELLS** NC300000004200

1/2 - 1 Mile Higher

Owner:

PWD ID: NC0276157 System Name: CHILTON'S MHP PWS Type: Community Primary Source: **Ground Water** Water Type: **Ground Water** Facility Name: WELL #1 Well Depth: 50

Facility Type: Well

DEBARI, RYAN

GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: NC Radon

Radon Test Results

Num Results	Avg pCi/L	Min pCi/L	Max pCi/L
3	1.23	0.9	1.7
1	0.30	0.3	0.3

Federal EPA Radon Zone for RANDOLPH County: 3

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for RANDOLPH COUNTY, NC

Number of sites tested: 7

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L	
Living Area - 1st Floor	0.443 pCi/L	100%	0%	0%	
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported	
Basement	0.400 pCi/L	100%	0%	0%	

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory Source: US Fish & Wildlife Service

Telephone: 703-358-2171

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

North Carolina Public Water Supply Wells Source: Department of Environmental Health

Telephone: 919-715-3243

OTHER STATE DATABASE INFORMATION

North Carolina Wildlife Resources/Game Lands

Source: Center for Geographic Information and Analysis

Telephone: 919-733-2090

All publicly owned game lands managed by the North Carolina Wildlife Resources Commission and as listed in Hunting and Fishing Maps.

NC Natural Heritage Sites: Natural Heritage Element Occurrence Sites

Source: Natural Heritage Occurrence Sites Center for Geographic Information and Analysis

Telephone: 919-733-2090

A point coverage identifying locations of rare and endangered species, occurrences of exemplary or unique natural ecosystems (terrestrial or aquatic), and special animal habitats (e.g., colonial waterbird nesting sites).

NC Natural Areas: Significant Natural Heritage Areas

Source: Center for Geographic Information and Analysis

Telephone: 919-733-2090

A polygon converage identifying sites (terrestrial or aquatic) that have particular biodiversity significance.

A site's significance may be due to the presenceof rare species, rare or high quality natural communities, or other important ecological features.

RADON

State Database: NC Radon

Source: Department of Environment & Natural Resources

Telephone: 919-733-4984

Radon Statistical and Non Statiscal Data

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency

(USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at

private sources such as universities and research institutions.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

EPA Radon Zones Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor

radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

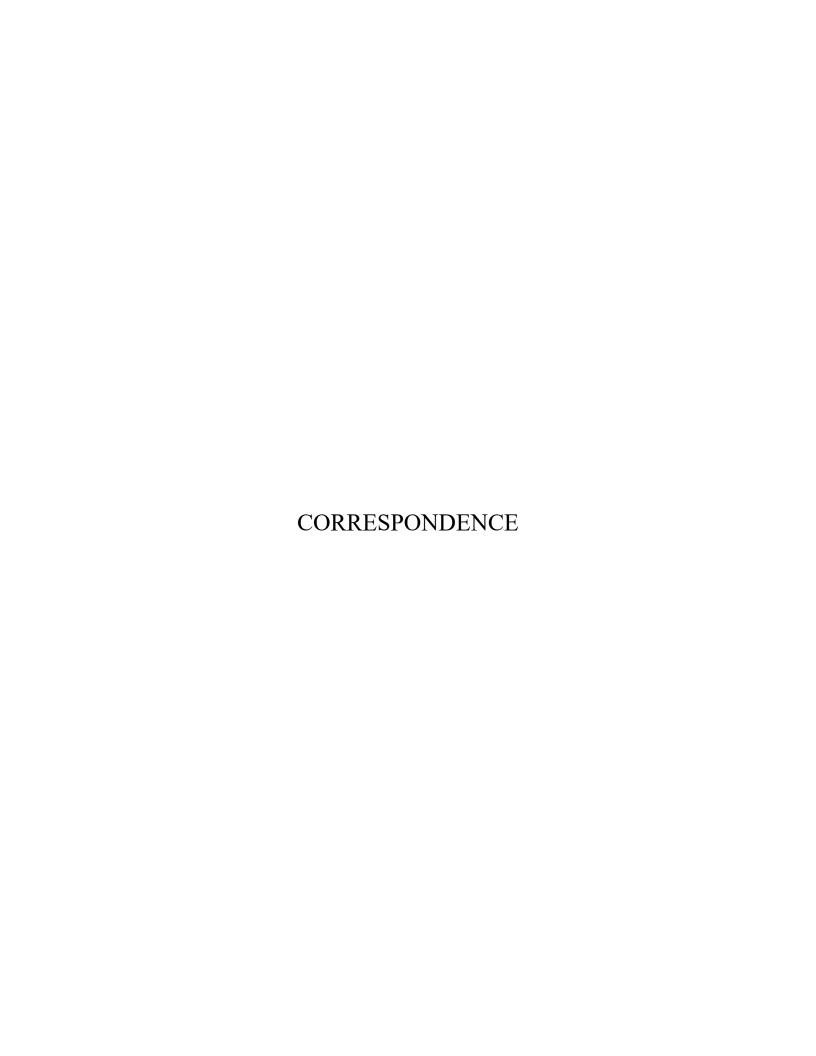
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared

in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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June 20, 2019

Roger and Cynthia Queen 6466 Muddy Creek Road High Point, NC 27263

Re: Rhapsody Mitigation Project

Dear Mr. and Mrs. Queen,

As part of the environmental documentation process in preparation for the stream mitigation project on your property, this letter is to inform you of provisions in the Federal Highway Administration Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, referred to as the Uniform Act.

The Uniform Act requires that we inform you in writing that this conservation easement transaction is voluntary and that the project is being developed by Environmental Banc & Exchange, LLC for the North Carolina Division of Mitigation Services (NCDMS). Neither EBX nor NCDMS have the authority to acquire the property by eminent domain. In addition, EBX believes that the agreed purchase price for the conservation easement area represents the fair market value.

This letter is for your information, and you do not need to respond. As always, please feel free to call me at 919-302-2324 with any questions.

Sincerely,

Kenton Beal Land Representative

701 E. Bay St. #306

Charleston, SC 29403

Houston, TX 77006





Corporate Headquarters 6575 West Loop South, Suite 300 Bellaire, TX 77401 Main: 713.520.5400

June 13, 2019

Milton Cortes Natural Resources Conservation Service 4407 Bland Rd, Suite 117 Raleigh, NC 27609

Subject: AD-1006 Request for the Rhapsody Mitigation Site in Randolph County

Dear Mr. Cortes,

Resource Enviornmental Solutions (RES) requests review and comment from the Natural Resources Conservation Service on any possible concerns that may emerge with respect to farmland resources including prime, unique, statewide or local important farmland associated with the Rhapsody Buffer Mitigation Project. This project is being developed for the North Carolina Division of Mitigation Services. Please note that this request is in support of the development of the Categorical Exclusion (CE).

The Rhapsody Site has been identified for the purposes of providing mitigation for unavoidable buffer impacts in the Cape Fear River Basin. RES has been awarded the contract to design and implement the Rhapsody project. A requirement of the project is to prepare a CE that describes resources present on the project site.

The Project is located in the Randleman watershed (Cataloging Unit 03030003, 14-digit HUC 03030003010060), a Targeted Local Watershed (TLW). The Project supports many of the Cape Fear River Basin Restoration Priorities (RBRP) goals and presents an opportunity to restore 8.15 acres of riparian buffers. The Project will provide numerous ecological and water quality benefits within the Cape Fear River Basin. These benefits are not limited to the project area, but have more far-reaching effects throughout the Cape Fear River Basin. The Project will provide improvements to water quality, hydrologic function, and habitat. Coordinates for the site are as follows: 35.8985028N, -79.8883361W

An inventory of soils data was completed by RES utilizing Web Soil Survey to determine prime farmland classifications for the 8.15 acre project area. Two soil map units in the project area are classified as farmland of statewide importance, making up 17.1% of the site (Helena sandy loam, 6-10% slopes, 3.9%; Wynott-Enon complex 8-15% slopes, 13.2%). One soil map unit in the project area is classified as Not prime farmland, making up 82.9% of the site (Wilkes-Poindexter-Wynott complex, 15-25% slopes).

Encolosed is Form AD-1006 with Parts I and III Completed and maps of the Rhapsody Site. We ask that you review the site information and complete Parts II, IV, and V as required by NRCS. Please email (mbutler@res.us), or mail your reply to the office at 302 Jeffferson Street, Suite 100, Raleigh, NC 27605.



We thank you in advance for your timely response and cooperation. Please feel free to contact me with any questions that you may have concerning the extent of site disturbance associated with this project.

Sincerely,

Matt Butler | Project Manager

Attachements: Vicinity Map (Figure 1), USGS Topographic Map (Figure 2), Aerial Map (Figure 3) Conceptual Plan Map (Figure 4), Web Soil Survey Report, & AD-1006



United States Department of the Interior

FISH AND WILDLIFE SERVICE

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

010010010

Date: 08/28/2019
Self-Certification Letter
Project Name Rhapsody
Dear Applicant:
Thank you for using the U.S. Fish and Wildlife Service (Service) Raleigh Ecological Services online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the project named above in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA), and the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c, 54 Stat. 250), as amended (Eagle Act). This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.
The species conclusions table in the enclosed project review package summarizes your ESA and Eagle Act conclusions. Based on your analysis, mark all the determinations that apply:
"no effect" determinations for proposed/listed species and/or proposed/designated critical habitat; and/or
"may affect, not likely to adversely affect" determinations for proposed/listed species and/or proposed/designated critical habitat; and/or
"may affect, likely to adversely affect" determination for the Northern long- eared bat (Myotis septentrionalis) and relying on the findings of the January 5, 2016, Programmatic Biological Opinion for the Final 4(d) Rule on the Northern long-eared bat;
"no Eagle Act permit required" determinations for eagles.

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

Species	Conc	lusions	Table
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Project Name:	Rhapsody Buffer Mitigation Site
00/20/	

Date:	08/28/2019			
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Species / Resource Name	Conclusion	ESA Section 7 / Eagle Act Determination	Notes / Documentation
Schweinitz's Sunflower (Helianthus schweinitzii)	Suitable habitat present, species not present	No effect	Habitat and species survey conducted on August 20, 2019. Determined suitable habitat present, but no species present. Conclusion and determination revised to reflect this. See pg. 10.
Critical Habitat	No Critical Habitat Present	No Effect	
Bald Eagle (Haliaeetus leucocephalus)	Unlikely to disturb nesting bald eagles	No Eagle Act permit required	

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.

MUL SAD	Project Manager	08/28/2019	
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: May 29, 2019

Consultation Code: 04EN2000-2019-SLI-0952

Event Code: 04EN2000-2019-E-02173

Project Name: Rhapsody

Subject: List of threatened and endangered species that may occur in your proposed project

location, and/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 http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

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

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

Attachment(s):

Official Species List

Official Species List

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

This species list is provided by:

Raleigh Ecological Services Field Office Post Office Box 33726 Raleigh, NC 27636-3726 (919) 856-4520

Project Summary

Consultation Code: 04EN2000-2019-SLI-0952

Event Code: 04EN2000-2019-E-02173

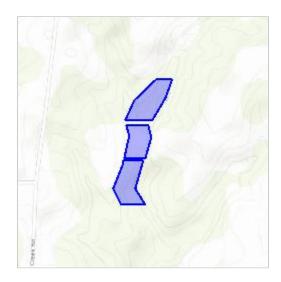
Project Name: Rhapsody

Project Type: LAND - RESTORATION / ENHANCEMENT

Project Description: Buffer Mitigation Project

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/35.89843386859168N79.88977846950324W



Counties: Randolph, NC

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

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

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

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

1. <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.

Flowering Plants

NAME STATUS

Schweinitz's Sunflower Helianthus schweinitzii

Endangered

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3849

Critical habitats

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

A plant survey for the federally listed Schweinitz's sunflower, Helianthus schweinitzii (Fed E, State E | S2 G3), was conducted on August 20, 2019 at our Rhapsody Riparian Buffer Mitigation Project, a full-delivery mitigation project for the Division of Mitigation Services (DMS), located near Archdale, NC in Randolph County. H. schweinitzii is endemic to the Piedmont regions of North and South Carolina, historically being centered around Charlotte, NC and Rock Hill, SC. Suitable habitat for *H. schweinitzii* includes disturbed areas with full-partial sun exposure such as roadsides and powerline cuts; historically it has occurred in dry, open woodlands and Piedmont prairies. In North Carolina, the known distributions of H. schweinitzii occur in Surry, Stokes, Catawba, Gaston, Rowan, Davidson, Randolph, Mecklenburg, Cabarrus, Stanly, Montgomery, Union, Anson, and Richmond counties. This species faces threats including alteration of native habitat, fire suppression, roadside/utility right-of-way maintenance, and invasive species encroachment. The Rhapsody Project consists of three easement sections; one located in densely forested area, another in open and active pasture surrounding a forested stream, and the last in a forested area leading up to a powerline cut; much of the conservation easement is impacted by actively grazing cattle. The forested areas consist of American beech (Fagus grandifolia), tulip poplar (Liriodendron tulipifera), American sycamore (Platanus occidentalis), and ironwood (Carpinus caroliniana). The non-forested areas consist primarily of pasture grasses, Juncus sp., Carex sp., and a Schweinitz's sunflower look-alike, Jerusalem artichoke (Helianthus tuberosus).

The survey team including Jeremy Schmid and Emily Ulman, visited a reference population for *H. schweinitzii* on August 20, 2019 at the North Carolina Botanical Gardens in Chapel Hill, NC. The surveying team had a dichotomous key for the genus *Helianthus*, adapted from Schilling (2006) and Weakley (2008), and had researched the information and pictures provided by the U.S. Fish and Wildlife Service for *H. schweinitzii*. Jeremy and Emily have both performed rare plant surveys in the past for threatened and endangered plant species throughout North Carolina.

At the Rhapsody site, the surveying team walked along the boundary and within the easement recording species present and any occurrences of potential suitable habitat. Though the majority of the site was densely shaded forest with actively grazing cattle (unsuitable for *H. schweinitzii*), there was one area of suitable habitat near the powerline cut at the northern most portion of the easement. This area did not have Schweinitz's sunflower, but rather Jerusalem artichoke, differentiated by the leaf position on the stem and length of petiole. After a thorough examination of the entire project site and an assessment of the habitat present, no populations were located at this site.

In conclusion, after conducting a more thorough evaluation of the habitat present at the Rhapsody Mitigation Site and surveying for *H. schweinitzii* specifically, we have determined that there is **suitable habitat present**, but **no species present** therefore, the conclusion for the *H. schweinitzii* species is **no effect**.





Corporate Headquarters 6575 West Loop South, Suite 300

Bellaire, TX 77401 Main: 713.520.5400

June 13, 2019

Ms. Olivia Munzer Western Piedmont Coordinator North Carolina Wildlife Resources Commission Rogers Lake Depot 1718 NC Hwy 56 W Creedmoor, NC 27522

Subject: Project Scoping for Rhapsody Buffer Mitigation Site in Randolph County

Dear Ms. Munzer,

The purpose of this letter is to request review and comment on any possible issues that might emerge with respect to fish and wildlife associated with a potential buffer restoration project on the attached site (Site maps with approximate property lines and areas of potential buffer restoration activities are enclosed). The Rhapsody Site (35.8985028N, -79.8883361W) has been identified by Resource Environmental Solutions, LLC (RES) to provide compensatory mitigation for unavoidable buffer impacts. The proposed project involves the restoration and enhancement of approximately 8.15 acres of riparian buffers. Current buffer conditions along the streams associated with this project demonstrate significant habitat degradation as a result of impacts from agricultural land use, water diversion, and cattle intrusion.

We thank you in advance for your timely response and cooperation. You may return the comment to my attention at the address below. Please feel free to contact me at mbutler@res.us with any questions that you may have concerning the extent of site disturbance associated with this project.

Sincerely,

Matt Butler | Project Manager

Attachments: Vicinity Map (Figure 1), USGS Topographic Map (Figure 2), Aerial Map (Figure 3) Conceptual Plan Map (Figure 4)



☐ North Carolina Wildlife Resources Commission **☐**

Gordon Myers, Executive Director

14 June 2019

Mr. Matt Butler RES 302 Jefferson Street, Suite 110 Raleigh, North Carolina 27605

Subject: Request for Project Scoping

Rhapsody Buffer Mitigation Site Randolph County, North Carolina

Dear Mr. Butler,

Biologists with the North Carolina Wildlife Resource Commission (NCWRC) received your letter on 13 June 2019 requesting review and comment on any possible concerns regarding the Rhapsody Buffer Mitigation Site. Biologists with NCWRC have reviewed the provided documents. Comments are provided in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667e) and North Carolina General Statutes (G.S. 113-131 et seq.).

The Rhapsody Buffer Mitigation Site is located east of Muddy Creek Road near its intersection with Rob Curtis Road in Randolph County, North Carolina. The project involves the restoration and enhancement of approximately 8.15 acres of riparian buffer. Current conditions of the site show significant degradation of the habitat from agricultural land use, water diversion, and cattle intrusions. The project will restore the riparian buffer along unnamed tributaries to the Deep River (Randleman Reservoir) in the Cape Fear River basin. The Deep River is classified as a Water Supply IV and Critical Water Supply Area by the N.C. Division of Water Resources (NCDWR).

We have known records of the federal and state endangered Schweinitz's sunflower (*Helianthus schweinitzii*); and state special concern Greensboro burrowing crayfish (*Cambarus catagius*) and purple coneflower (*Echinacea purpurea*) within the vicinity of the site. The Greensboro burrowing crayfish has been found in all types of soils from sandy loams to hard clay and burrows are not usually directly associated with any drainage or stream flow (McGrath 1994). The full extent of its distribution in this watershed is unknown due to lack of targeted surveys. Please notify Brena Jones, Central Aquatic Wildlife Diversity Coordinator (brena.jones@ncwildlife.org, 919-707-0369), if any potential Greensboro burrowing crayfish or burrows are located. Therefore, the lack of records from the site does not imply or confirm the absence of federal or state-listed species. An on-site survey is the only means to determine if the proposed project may impact federal or state rare, threatened, or endangered species.

Telephone: (919) 707-0220 • **Fax:** (919) 707-0028

Page 2

14 June 2019 Rhapsody Buffer Mitigation Site Randolph County

Based upon the information provided to NCWRC, it is unlikely that buffer mitigation will adversely affect any federal or state-listed species. Establishing native, forested buffers in riparian areas will help protect water quality, improve aquatic and terrestrial habitats, and provide a travel corridor for wildlife species. If present, we recommend leaving snags and mature trees or if necessary, remove tees outside the maternity roosting season for bats (May 15 – August 15).

Provided measures are taken to minimize erosion and sedimentation from construction/restoration activities, we do not anticipate the project to result in significant adverse impacts to aquatic and terrestrial wildlife resources.

Thank you for the opportunity to provide comments. If I can be of additional assistance, please call (919) 707-0364 or email olivia.munzer@ncwildlife.org.

Sincerely,

Olivia Munzer

Western Piedmont Habitat Conservation Coordinator

Habitat Conservation Program

Literature Cited

McGrath, C. 1994. Status survey for the Greensboro burrowing crayfish. Proceedings of the annual conference, Southeastern Association of Game and Fish Commissioners, 48: 343–349.





Corporate Headquarters 6575 West Loop South, Suite 300 Bellaire, TX 77401

Main: 713.520.5400

June 13, 2019

Ms. Gledhill-Early North Carolina State Historic Preservation Office 4617 Mail Service Center Raleigh NC 27699-4617

Subject: Project Scoping for Rhapsody Buffer Mitigation Site in Randolph County

Dear Ms. Gledhill-Early,

The Rhapsody Buffer Mitigation Site has been identified by Resource Environmental Solutions, LLC (RES) to provide compensatory mitigation for unavoidable buffer. The proposed project involves the restoration and enhancement of approximately 8.15 acres of riparian buffers.

RES requests review and comment on any possible issues that might emerge with respect to archaeological or cultural resources associated with a potential stream mitigation project on the Rhapsody Site (35.8985028N, -79.8883361W) (a USGS site map with approximate limits of conservation easement is attached).

A review of the N.C. State Historic Preservation Office (SHPO) HPOWEB GIS Service database (http://gis.ncdcr.gov/hpoweb/; accessed June 3rd, 2019) was performed as part of the site due diligence evaluation. The database did not reveal any listed or potentially eligible historic or archaeological resources on the proposed properties. In addition, most of the site has historically been disturbed due to cattle grazing.

We ask that you review this site based on the attached information to determine the presence of any historic properties. We thank you in advance for your timely response and cooperation. You may return the comment to my attention at the address below, or via email. Please feel free to contact me at mbutler@res.us with any questions that you may have concerning the extent of site disturbance associated with this project.

Sincerely,

Matt Butler | Project Manager

Attachments: Vicinity Map (Figure 1), USGS Topographic Map (Figure 2), Aerial Map (Figure 3) Conceptual Plan Map (Figure 4)



North Carolina Department of Natural and Cultural Resources

State Historic Preservation Office

Ramona M. Bartos, Administrator

Governor Roy Cooper Secretary Susi H. Hamilton Office of Archives and History Deputy Secretary Kevin Cherry

July 19, 2019

Matt Butler Resource Environmental Solutions, LLC 302 Jefferson Street, Suite 110 Raleigh, NC 27605

Re: Rhapsody Buffer Mitigation Site, Randolph County, ER 19-2095

Dear Mr. Butler:

Thank you for your email of June 26, 2019, concerning the above project.

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 919-807-6579 or environmental.review@ncdcr.gov. In all future communication concerning this project, please cite the above referenced tracking number.

Sincerely,

Ramona Bartos, Deputy

State Historic Preservation Officer

Zence Gledhill-Earley

Appendix E

Correspondence on Environmental and Cultural Resources



■ North Carolina Wildlife Resources Commission

Gordon Myers, Executive Director

14 June 2019

Mr. Matt Butler RES 302 Jefferson Street, Suite 110 Raleigh, North Carolina 27605

Subject: Request for Project Scoping

Rhapsody Buffer Mitigation Site Randolph County, North Carolina

Dear Mr. Butler,

Biologists with the North Carolina Wildlife Resource Commission (NCWRC) received your letter on 13 June 2019 requesting review and comment on any possible concerns regarding the Rhapsody Buffer Mitigation Site. Biologists with NCWRC have reviewed the provided documents. Comments are provided in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667e) and North Carolina General Statutes (G.S. 113-131 et seq.).

The Rhapsody Buffer Mitigation Site is located east of Muddy Creek Road near its intersection with Rob Curtis Road in Randolph County, North Carolina. The project involves the restoration and enhancement of approximately 8.15 acres of riparian buffer. Current conditions of the site show significant degradation of the habitat from agricultural land use, water diversion, and cattle intrusions. The project will restore the riparian buffer along unnamed tributaries to the Deep River (Randleman Reservoir) in the Cape Fear River basin. The Deep River is classified as a Water Supply IV and Critical Water Supply Area by the N.C. Division of Water Resources (NCDWR).

We have known records of the federal and state endangered Schweinitz's sunflower (*Helianthus schweinitzii*); and state special concern Greensboro burrowing crayfish (*Cambarus catagius*) and purple coneflower (*Echinacea purpurea*) within the vicinity of the site. The Greensboro burrowing crayfish has been found in all types of soils from sandy loams to hard clay and burrows are not usually directly associated with any drainage or stream flow (McGrath 1994). The full extent of its distribution in this watershed is unknown due to lack of targeted surveys. Please notify Brena Jones, Central Aquatic Wildlife Diversity Coordinator (brena.jones@ncwildlife.org, 919-707-0369), if any potential Greensboro burrowing crayfish or burrows are located. Therefore, the lack of records from the site does not imply or confirm the absence of federal or state-listed species. An on-site survey is the only means to determine if the proposed project may impact federal or state rare, threatened, or endangered species.

Telephone: (919) 707-0220 • **Fax:** (919) 707-0028

Page 2

14 June 2019 Rhapsody Buffer Mitigation Site Randolph County

Based upon the information provided to NCWRC, it is unlikely that buffer mitigation will adversely affect any federal or state-listed species. Establishing native, forested buffers in riparian areas will help protect water quality, improve aquatic and terrestrial habitats, and provide a travel corridor for wildlife species. If present, we recommend leaving snags and mature trees or if necessary, remove tees outside the maternity roosting season for bats (May 15 – August 15).

Provided measures are taken to minimize erosion and sedimentation from construction/restoration activities, we do not anticipate the project to result in significant adverse impacts to aquatic and terrestrial wildlife resources.

Thank you for the opportunity to provide comments. If I can be of additional assistance, please call (919) 707-0364 or email olivia.munzer@ncwildlife.org.

Sincerely,

Olivia Munzer

Western Piedmont Habitat Conservation Coordinator

Habitat Conservation Program

Literature Cited

McGrath, C. 1994. Status survey for the Greensboro burrowing crayfish. Proceedings of the annual conference, Southeastern Association of Game and Fish Commissioners, 48: 343–349.



North Carolina Department of Natural and Cultural Resources

State Historic Preservation Office

Ramona M. Bartos, Administrator

Governor Roy Cooper Secretary Susi H. Hamilton Office of Archives and History Deputy Secretary Kevin Cherry

July 19, 2019

Matt Butler Resource Environmental Solutions, LLC 302 Jefferson Street, Suite 110 Raleigh, NC 27605

Re: Rhapsody Buffer Mitigation Site, Randolph County, ER 19-2095

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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 919-807-6579 or environmental.review@ncdcr.gov. In all future communication concerning this project, please cite the above referenced tracking number.

Sincerely,

▼Ramona Bartos, Deputy

State Historic Preservation Officer

Zence Gledhill-Earley



United States Department of the Interior

FISH AND WILDLIFE SERVICE

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

Date: 08/28/2019

Self-Certification Letter

Project Name Rhapsody
Dear Applicant:
Thank you for using the U.S. Fish and Wildlife Service (Service) Raleigh Ecological Services online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the project named above in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA), and the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c, 54 Stat. 250), as amended (Eagle Act). This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.
The species conclusions table in the enclosed project review package summarizes your ESA and Eagle Act conclusions. Based on your analysis, mark all the determinations that apply:
"no effect" determinations for proposed/listed species and/or proposed/designated critical habitat; and/or
"may affect, not likely to adversely affect" determinations for proposed/listed species and/or proposed/designated critical habitat; and/or
"may affect, likely to adversely affect" determination for the Northern long- eared bat (Myotis septentrionalis) and relying on the findings of the January 5, 2016, Programmatic Biological Opinion for the Final 4(d) Rule on the Northern long-eared bat;
"no Eagle Act permit required" determinations for eagles.

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

Pro	ect Name:	Rhapsody Buffer Mitigation Site

Date: 08/28/2019

Species / Resource Name	Conclusion	ESA Section 7 / Eagle Act Determination	Notes / Documentation
Schweinitz's Sunflower (Helianthus schweinitzii)	Suitable habitat present, species not present	Not likely to adversely affect	Habitat and species survey conducted on August 20, 2019. Determined suitable habitat present, but no species present. Conclusion and determination revised to reflect this. See pg. 10.
Critical Habitat	No Critical Habitat Present	No Effect	
Bald Eagle (Haliaeetus leucocephalus)	Unlikely to disturb nesting bald eagles	No Eagle Act permit required	

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.

MUL BAD	Project Manager	08/02/2019	
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: May 29, 2019

Consultation Code: 04EN2000-2019-SLI-0952

Event Code: 04EN2000-2019-E-02173

Project Name: Rhapsody

Subject: List of threatened and endangered species that may occur in your proposed project

location, and/or may be affected by your proposed project

To Whom It May Concern:

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

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

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

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

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

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

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

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

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

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

Event Code: 04EN2000-2019-E-02173

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: 04EN2000-2019-SLI-0952

Event Code: 04EN2000-2019-E-02173

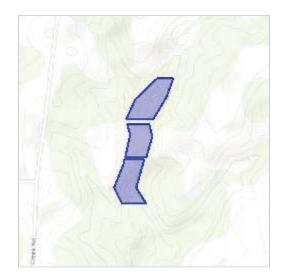
Project Name: Rhapsody

Project Type: LAND - RESTORATION / ENHANCEMENT

Project Description: Buffer Mitigation Project

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/35.89843386859168N79.88977846950324W



Counties: Randolph, NC

Event Code: 04EN2000-2019-E-02173

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

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

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

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

1. <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.

Flowering Plants

NAME STATUS

Schweinitz's Sunflower Helianthus schweinitzii

Endangered

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3849

Critical habitats

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

A plant survey for the federally listed Schweinitz's sunflower, Helianthus schweinitzii (Fed E, State E | S2 G3), was conducted on August 20, 2019 at our Rhapsody Riparian Buffer Mitigation Project, a full-delivery mitigation project for the Division of Mitigation Services (DMS), located near Archdale, NC in Randolph County. H. schweinitzii is endemic to the Piedmont regions of North and South Carolina, historically being centered around Charlotte, NC and Rock Hill, SC. Suitable habitat for *H. schweinitzii* includes disturbed areas with full-partial sun exposure such as roadsides and powerline cuts; historically it has occurred in dry, open woodlands and Piedmont prairies. In North Carolina, the known distributions of H. schweinitzii occur in Surry, Stokes, Catawba, Gaston, Rowan, Davidson, Randolph, Mecklenburg, Cabarrus, Stanly, Montgomery, Union, Anson, and Richmond counties. This species faces threats including alteration of native habitat, fire suppression, roadside/utility right-of-way maintenance, and invasive species encroachment. The Rhapsody Project consists of three easement sections; one located in densely forested area, another in open and active pasture surrounding a forested stream, and the last in a forested area leading up to a powerline cut; much of the conservation easement is impacted by actively grazing cattle. The forested areas consist of American beech (Fagus grandifolia), tulip poplar (Liriodendron tulipifera), American sycamore (Platanus occidentalis), and ironwood (Carpinus caroliniana). The non-forested areas consist primarily of pasture grasses, Juncus sp., Carex sp., and a Schweinitz's sunflower look-alike, Jerusalem artichoke (Helianthus tuberosus).

The survey team including Jeremy Schmid and Emily Ulman, visited a reference population for *H. schweinitzii* on August 20, 2019 at the North Carolina Botanical Gardens in Chapel Hill, NC. The surveying team had a dichotomous key for the genus *Helianthus*, adapted from Schilling (2006) and Weakley (2008), and had researched the information and pictures provided by the U.S. Fish and Wildlife Service for *H. schweinitzii*. Jeremy and Emily have both performed rare plant surveys in the past for threatened and endangered plant species throughout North Carolina.

At the Rhapsody site, the surveying team walked along the boundary and within the easement recording species present and any occurrences of potential suitable habitat. Though the majority of the site was densely shaded forest with actively grazing cattle (unsuitable for *H. schweinitzii*), there was one area of suitable habitat near the powerline cut at the northern most portion of the easement. This area did not have Schweinitz's sunflower, but rather Jerusalem artichoke, differentiated by the leaf position on the stem and length of petiole. After a thorough examination of the entire project site and an assessment of the habitat present, no populations were located at this site.

In conclusion, after conducting a more thorough evaluation of the habitat present at the Rhapsody Mitigation Site and surveying for *H. schweinitzii* specifically, we have determined that there is **suitable habitat present**, but **no species present** therefore, we are changing the conclusion on the species conclusion table on the self-certification letter from **may affect** to **not likely to adversely affect** on any *H. schweinitzii* populations.