



**Final Buffer Mitigation Plan
Carraway Bluff Mitigation Project**

September 2022

DMS Project #: 100186 | Contract #: 0402-07 | RFP: 16-20200402 | DWR #: 2014-0820 V5

Neuse River Basin | HUC 03020201 | Wayne County, North Carolina

Prepared For:

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

Prepared By:

Resource Environmental Solutions, LLC
For Environmental Banc & Exchange, LLC (EBX)
3600 Glenwood Avenue, Suite 100
Raleigh, NC 27612
919-209-1052

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*
- *Nutrient Offset Credit Trading Rule, 15A NCAC 02B .0703, effective April 1, 2020*

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

Summary of Comments on CarawayBluff MP_DWRreview.pdf

Page: 1


 Number: 1 Author: kymerritt Subject: Sticky Note Date: 8/3/2022 3:32:04 PM
DWR ID# is 2014-0820 v5

Number: 1 Author: kymerritt Subject: Sticky Note Date: 8/3/2022 3:33:28 PM


EBX is referenced a couple of times as EBX, LLC in the document. Inconsistent naming can lead to confusion so it's recommended this be edited in the document where applicable.


Number: 1 Author: kymerritt Subject: Sticky Note Date: 8/3/2022 3:36:27 PM

as described here, the sewer easement is within the Zone 1 of the Neuse River, not within Zone 1 of Caraway Creek as it appears to be shown in Figure 9 and represented in the Table 4. Correct the Table 4 and corresponding figures to show the TOB off Neuse River contributing to crediting rather than it being Caraway Creek.

 Number: 1 Author: kymerritt Subject: Sticky Note Date: 8/3/2022 3:39:57 PM
it is best to describe the adjacent closed out bank project as the "Caraway Creek Bank Parcel"

It is recommended that when describing the buffer and nutrient offset project that EBX plans to develop in conjunction with this DMS site, that it be referenced as "Caraway Bluff Phase II Bank Parcel".

 Number: 1 Author: kymerritt Subject: Sticky Note Date: 8/3/2022 3:41:08 PM
it should be noted that the right bank of D4 also is within an existing CE

 Number: 1 Author: kymerritt Subject: Inserted Text Date: 8/3/2022 3:52:39 PM
which are regulated under

 Number: 2 Author: kymerritt Subject: Sticky Note Date: 8/3/2022 3:52:18 PM
comments on Table 4 may affect crediting amounts that will need to be updated in this paragraph.

Number: 1 Author: kymerritt Subject: Sticky Note Date: 8/3/2022 3:56:28 PM

there should be a row depicting total area and total buffer credits measured off TOB of the Neuse River, but it appears those credits and areas are tabulated within the Carraway Creek amount. edit the table accordingly.

Number: 2 Author: kymerritt Subject: Sticky Note Date: 8/3/2022 3:58:42 PM

BH3 has an area correctly shown on Figure 8 that is not viable for nutrient offset. therefore, there will need to be two rows for BH3. One for the restoration areas that are convertible to NOC and another where it reads BH3 (1998 cleared) and NO for convertible to NOC

Number: 1 Author: kymerritt Subject: Sticky Note Date: 8/3/2022 4:02:39 PM

At a point that will mark the end of Caraway creek as it enters the Neuse River so that it isnt confusing as to which feature these measurements will be derived.

Number: 1 Author: kymerritt Subject: Sticky Note Date: 8/3/2022 4:09:10 PM
change "NCDWR Bank" to "Private Bank"
Make this change on all other figures.

Number: 2 Author: kymerritt Subject: Sticky Note Date: 8/3/2022 4:17:03 PM
the yellow and orange CE boundaries are difficult to decipher when looking at the hard copy vs the electronic copy. It is recommended that the map depicts the bank site CE differently (not orange) so that when or if the plan is printed as a hard copy, it will be easy to decipher.

Number: 3 Author: kymerritt Subject: Sticky Note Date: 8/3/2022 4:10:56 PM
change "Existing Buffer and Nutrietrn Offset Bank" to "Caraway Creek Bank Conservation Easement" and make the same change to other figures.

Number: 4 Author: kymerritt Subject: Sticky Note Date: 8/3/2022 4:11:47 PM
add "riparian" to all credit types below


Example: "riparian" restoration 0-50; riparian preservation 0-100'....

Number: 5 Author: kymerritt Subject: Sticky Note Date: 8/3/2022 4:07:36 PM
it is not clear what this area is supposed to depict or whether this area is measured off Caraway Creek or BH2. Should this be yellow or should it be "ineligible buffer credit area"? add clarity to the figure

Based on the site viability letter, it appears that more areas along BH2 should be called out for being cleared in 1998 and ineligible for buffer credit. Explain

Number: 6 Author: kymerritt Subject: Sticky Note Date: 8/3/2022 4:06:08 PM
Same as comment above off BH2;
it is not clear what this area is supposed to depict or whether this area is measured off Caraway Creek or BH1. Should this be yellow or should it be "ineligible buffer credit area"? add clarity to the figure

 Number: 1 Author: kymerritt Subject: Sticky Note Date: 8/3/2022 4:15:20 PM
need to clarify that all these areas are "Riparian Restoration" areas.


 Number: 2 Author: kymerritt Subject: Sticky Note Date: 8/3/2022 4:14:22 PM
this ineligible NOC area is not depicted in Table 4. see comments on Table 4

Number: 1 Author: kymerritt Subject: Sticky Note Date: 8/3/2022 4:18:22 PM

are these measurements taken from TOB of the Neuse River? If so, great and Table 4 needs to depict the same. If no, correct to be measured off TOB of NEuse and update Table 4 to reflect the change.

Number: 2 Author: kymerritt Subject: Sticky Note Date: 8/3/2022 4:19:35 PM

When looking at this map off BH2 and BH1, Figure 5 may not be accurate. please cross check the two.

 Number: 1 Author: kymerritt Subject: Sticky Note Date: 8/3/2022 4:20:34 PM
as mentioned on previous figures make sure to add "riparian" to the different approaches.



To: NCDWR - Katie Merritt
From: Megan Engel, RES
Jamey Mceachran, RES
Subject: Carraway Bluff Comment Response Memo
Date: 9/12/2022
CC: Lin Xu

COVER

1. DWR ID# is 2014-0820 v5
[This ID number was added to the cover page.](#)

SECTION 1: MITIGATION PROJECT SUMMARY

2. EBX is referenced a couple of times as EBX, LLC in the document. Inconsistent naming can lead to confusion, so it's recommended this be edited in the document where applicable.
[This has been addressed.](#)
3. As described here, the sewer easement is within the Zone 1 of the Neuse River, not within Zone 1 of Caraway Creek as it appears to be shown in Figure 9 and represented in the Table 4. Correct the Table 4 and corresponding figures to show the TOB off Neuse River contributing to crediting rather than it being Caraway Creek.
[Figure 9 was updated accordingly, and Table 4 credits did not need to be adjusted.](#)
4. It is best to describe the adjacent closed out bank project as the "Caraway Creek Bank Parcel". It is recommended that when describing the buffer and nutrient offset project that EBX plans to develop in conjunction with this DMS site, that it be referenced as "Caraway Bluff Phase II Bank Parcel".
[These changes were corrected though out the document. Specifically in Section 1.1 Section 1.3.4 B, and Section 3.2.1.](#)
5. It should be noted that the right bank of D4 also is within an existing CE.
[This had been added to Section 1.3.4 B when describing D4.](#)

SECTION 2: REGULATORY CONSIDERATIONS

6. Requested that "in accordance to" is changed to "which are regulated under".
[This edit to the sentence was made in the document to reflect the requested change.](#)
7. Comments on Table 4 may affect crediting amounts that will need to be updated in this paragraph.
[Credit amounts have been updated accordingly.](#)

TABLE 4: CARRAWAY BLUFF PROJECT (OMS#: 100186) RIPARIAN BUFFER MITIGATION SUMMARY

8. There should be a row depicting total area and total buffer credits measured off TOB of the Neuse River, but it appears those credits and areas are tabulated within the Carraway Creek amount. edit the table accordingly.
[This was a typo. The Neuse River was tabulated on credit lines one and two; Table 4 has been updated accordingly.](#)



9. BH3 has an area correctly shown on Figure 8 that is not viable for nutrient offset. therefore, there will need to be two rows for BH3. One for the restoration areas that are convertible to NOC and another where it reads BH3 (1998 cleared) and NO for convertible to NOC

BH3 and BH3 (1998 Cleared) were shown in Table 4 as described in this comment. However, BH3 (1998 Cleared) was incorrectly listed as a ditch not as I/P. This has been revised.

FIGURE 2: EXISTING CONDITIONS

10. At a point that will mark the end of Caraway creek as it enters the Neuse River so that it isn't confusing as to which feature these measurements will be derived

Terminal points have been added to each feature to ensure more clarity in the map

FIGURE 5: BUFFER CONCEPTUAL DESIGN

11. Change "NCDWR Bank" to "Private Bank" Make this change on all other figures.

This edit was made in the Figure 5, Figure 2, Figure 8 and Figure 11 to reflect the requested change.

12. The yellow and orange CE boundaries are difficult to decipher when looking at the hard copy vs the electronic copy. It is recommended that the map depicts the bank site CE differently (not orange) so that when or if the plan is printed as a hard copy, it will be easy to decipher.

The conservation easement boundary color for the bank site has been revised.

13. Change "Existing Buffer and Nutrient Offset Bank" to "Caraway Creek Bank Conservation Easement" and make the same change to other figures.

This edit was made in the figures to reflect the requested change.

14. Add "riparian" to all credit types below Example: "riparian" restoration 0-50; riparian preservation 0-100'....

This edit was made in the figures to reflect the requested change.

15. It is not clear what this area is supposed to depict or whether this area is measured off Caraway Creek or BH2. Should this be yellow, or should it be "ineligible buffer credit area"? add clarity to the figure. Based on the site viability letter, it appears that more areas along BH2 should be called out for being cleared in 1998 and ineligible for buffer credit. Explain.

Callouts have been added to this map to clarify which zones correspond to each feature. The ineligible area shown in this location is associated with BH2. The yellow zone, called out on Figure 5, corresponds to the 101–200-foot zone as measured off of Caraway Creek, which is also presented in Figure 9.

16. Same as comment above off BH2; it is not clear what this area is supposed to depict or whether this area is measured off Caraway Creek or BH1. Should this be yellow, or should it be "ineligible buffer credit area"? add clarity to the figure.

Callouts have been added to this map to clarify which zones correspond to each feature. The ineligible area shown in this location is associated with BH1. The yellow zone, called out on Figure 5, corresponds to the 101–200-foot zone as measured off of Caraway Creek, which is also presented in Figure 9.

FIGURE 8: NUTRIENT OFFSET CONCEPTUAL DESIGN

17. Need to clarify that all these areas are "Riparian Restoration" areas.

This has been revised.

18. This ineligible NOC area is not depicted in Table 4. see comments on Table 4.

BH3 and BH3 (1998 Cleared) were shown in Table 4 as described in a previous comment. However, BH3 (1998 Cleared) was incorrectly listed as a ditch not as I/P. This has been revised, no credits or NOC needed to be adjusted.



FIGURE 9: RIPARIAN ZONES

19. Are these measurements taken from TOB of the Neuse River? If so, great and Table 4 needs to depict the same. If no, correct to be measured off TOB of Neuse and update Table 4 to reflect the change.

Measurements were taken from the TOB of the Neuse River. Table 4 has been revised to reflect this.

20. When looking at this map off BH2 and BH1, Figure 5 may not be accurate. please cross check the two.

These areas were measured accurately. To make these zones clearer, each feature is now depicted with its own Riparian Zones.

FIGURE 11: MONITORING PLAN

21. As mentioned on previous figures make sure to add "riparian" to the different approaches.

This addition has been added to the different approaches.

Please find enclosed the final Buffer Mitigation Plan submission with changes as noted above. Do not hesitate to reach out with any question or comments. Jamey can be reached by email at jmceachran@res.us or by phone at 919-623-9889.

Thank you,

Megan Engel
Geospatial Analyst

Hannah Gadai
Ecologist

Jamey Mceachran
Project Manager

ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

MARC RECKTENWALD
Director



NORTH CAROLINA
Environmental Quality

April 26, 2022

Jamey McEachran
Resource Environmental Solutions, LLC
3600 Glenwood Ave., Suite 100
Raleigh, NC 27612

Subject: Task 3 Draft Mitigation Plan Comments – Carraway Bluff Mitigation Project (DMS #100186)
Neuse River 03020201; Wayne County, NC
Contract No. 0402-07

Dear Ms. McEachran:

On April 12, 2022, DMS received the Draft Mitigation Plan for the Carraway Bluff Buffer Mitigation Project from Resource Environmental Solutions, LLC (RES). DMS has completed our review of the Draft Mitigation Plan and has the following comments:

1. On page 4 of Table 1 – The table 1 and the text above the table indicated that the project would provide up to 639,413.692 buffer mitigation credit. Please be mindful that the project is contracted to provide 629,627.497 buffer mitigation credit.
2. On page 4 of Section 1.1 – The bottom of the page, the draft stated, “The buffer will have a minimum of 50 feet and maximum of 50 feet from the edge of the channel”. Please make necessary change.
3. On page 15 of Section 2.2.3 – Please make sure that the Wayne County local floodplain administrator is contacted, and all necessary FEMA regulations are met. Please include the copy of a floodplain development permit (if required) from Wayne County in the final mitigation plan.
4. On Page 18 of Table 5 – The percentage of sycamore should be 15 instead of 150 listed in the table. Please change.
5. As required by contract and in Section 4.7 of RFP 16-007703, RES must submit the required Performance Bond as part of the final mitigation plan. This must be approved prior to invoice submittal.
6. This is a reminder that Task 2 has not been completed and will not be complete until the Conservation Easement is recorded for this project and all required deliverables have been submitted to the DMS Project Manager and State Property Office.

Please make the requested revisions and provide one (1) pdf copy of the revised mitigation plan, the required digital data and a response to comments letter for DMS review. Once DMS verifies all revisions have been made and the required digital files have been submitted, RES will be instructed when to submit



North Carolina Department of Environmental Quality | Division of Mitigation Services
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the final copies of the Task 3 deliverable. If you have any questions, please contact me at any time. I can be reached at (919) 219-8476 or email me at lin.xu@ncdenr.gov.

Sincerely,

Lin Xu

Lin Xu
Project Manager
NCDEQ Division of Mitigation Services

Attachment

cc: file



North Carolina Department of Environmental Quality | Division of Mitigation Services
217 West Jones Street | 1652 Mail Service Center | Raleigh, North Carolina 27699-1652
919.707.8976

MEMORANDUM



3600 Glenwood Avenue, Suite 100 Raleigh, North Carolina 27612 919.770.5573 tel. 919.829.9913 fax

TO: NCDEQ Division of Mitigation Services

FROM: Jamey McEachran – RES

DATE: September 29, 2022

RE: Response to Draft Mitigation Plan Comments – Carraway Bluff Mitigation Project (DMS #100186) Neuse River 03020201; Wayne County, NC; Contract No. 0402-07

Lin Xu - NCDMS:

1. On page 4 of Table 1 – The table 1 and the text above the table indicated that the project would provide up to 639,413.692 buffer mitigation credit. Please be mindful that the project is contracted to provide 629,627.497 buffer mitigation credit.
RES appreciates the reminder. RES is aware of the contracted buffer mitigation credits. As proposed, the project will generate surplus credits.
2. On page 4 of Section 1.1 – The bottom of the page, the draft stated, “The buffer will have a minimum of 50 feet and maximum of 50 feet from the edge of the channel”. Please make necessary change.
This sentence was revised to say “For ditch channels, the mitigation area will be a width of 50 feet from the edge of the channel.”
3. On page 15 of Section 2.2.3 – Please make sure that the Wayne County local floodplain administrator is contacted, and all necessary FEMA regulations are met. Please include the copy of a floodplain development permit (if required) from Wayne County in the final mitigation plan.
As mentioned in the plan, we will make sure that the Wayne County Local floodplain administrator is contacted and all necessary FEMA regulations are met and provided in the final mitigation plan.
4. On Page 18 of Table 5 – The percentage of sycamore should be 15 instead of 150 listed in the table. Please change.
We appreciate DMS notating this error. The percentage of sycamore is updated in the plan.
5. As required by contract and in Section 4.7 of RFP 16-007703, RES must submit the required Performance Bond as part of the final mitigation plan. This must be approved prior to invoice submittal.
RES will submit the Performance Bond as part of the final mitigation plan.

6. On page 11 of Section 2.2.4 – Please make sure to include the copy of a floodplain development permit from Wayne County in the final mitigation plan.
RES will provide a copy of the floodplain development permit from Wayne County in the final mitigation plan.
7. This is a reminder that Task 2 has not been completed and will not be complete until the Conservation Easement is recorded for this project and all required deliverables have been submitted to the DMS Project Manager and State Property Office.
Thank you. RES will complete the required steps to finish Task 2.

Lin Xu – Digital Comments:

1. The easement could not be verified, it was submitted by provider but is not in the Production instance of the DMS Property Geodatabase. Timmons Basecamp indicated it was still in review as of Friday 5/08/22; no problems identified, two instances of infrastructure in the easement that may need to be added. The digital submission boundary acreage equals the acreage stated in the report (25.34 ac). There is a Utility ROW indicated in the report that does not appear on the easement survey. A sewer line easement located along the Neuse River reach (northern boundary) of the project. Jeff Horton, DMS property specialist, was also notified to ensure it is captured on the easement plat.

RES has submitted the geospatial materials to SPO. RES received approval to close by SPO. If there are any issues or additional materials, please reach out to myself, Jamey McEachran at 919-623-9889.
2. The asset table and digital submission numbers for total area are all equivalent; the feature names are not the same in the digital submission as in the Mitigation Summary Table. There was one discrepancy between the digital submission and report; feature D4 in the report is listed as non-subject in the report and subject in the digital submission. Please verify if this feature is subject or non-subject and if necessary, update credit table.
There was a typo in the previous digital submission. This has been revised in the final digital submission.
3. Please submit TOB.
This has been included in the digital submission package.
4. Please submit digital version of Riparian Buffer Mitigation Summary.
This has been included in the digital submission package.



**Final Buffer Mitigation Plan
Carraway Bluff Mitigation Project**

September 2022

DMS Project #: 100186 | Contract #: 0402-07 | RFP: 16-20200402 | DWR #: 2014-0820 V5

Neuse River Basin | HUC 03020201 | Wayne County, North Carolina

Prepared For:

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

Prepared By:

Resource Environmental Solutions, LLC
For Environmental Banc & Exchange, LLC (EBX)
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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*
- *Nutrient Offset Credit Trading Rule, 15A NCAC 02B .0703, effective April 1, 2020*

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

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FIGURES

Figure 1 – Nutrient Offset and Buffer Mitigation Service Area

Figure 2 – Existing Conditions

Figure 3a – Historic Imagery

Figure 3b – Historic Imagery

Figure 4 – Vicinity

Figure 5 – Buffer Conceptual Design

Figure 6a – USGS Quadrangle

Figure 6b – USGS – The National Map

Figure 7 – NRCS Soil Survey

Figure 8 – Nutrient Offset Conceptual Design

Figure 9 – Riparian Zones

Figure 10 – Project Constraints

Figure 11 – Monitoring Plan

APPENDIX

A – Buffer Viability & Stream Determination

B – Site Protection Easement

C – Approved FHWA Categorical Exclusion

D – Invasive Species

1 MITIGATION PROJECT SUMMARY

Environmental Banc & Exchange, LLC (EBX), a wholly-owned subsidiary of Resource Environmental Solutions (RES), is pleased to provide the Carraway Bluff Mitigation Project (Project), a full-delivery buffer mitigation project for the Division of Mitigation Services (DMS) (DMS #100186). This buffer project is designed to provide riparian buffer mitigation credits for unavoidable impacts due to development within the Neuse River Basin, United States Geological Survey (USGS) 8-digit Cataloguing Unit 03020201 (Neuse 01), excluding Falls Lake Watershed (**Figure 1**). This Buffer Mitigation Plan is in accordance with the Consolidated Buffer Mitigation Rule 15A NCAC 02B .0295 and Nutrient Offset Credit Trading Rule 15A NCAC 02B .0703.

1.1 Project Overview

The Carraway Bluff Project consists of a 25.39-acre conservation easement and the following features: the Neuse River, five stream features (Carraway Creek, BH1, BH2, BH3, and BH4) and one ditch feature (D4). Carraway Creek is a USGS-named stream that drains to the Neuse River within the Project Area. This Project will be co-developed with a buffer mitigation and nutrient offset project, Caraway Bluff Phase II Bank Parcel that will extend riparian buffer and riparian areas associated with this Project's streams as well as incorporate three additional ditch features on the property, ditch D6, D3 and D5. D3 drains into both BH1 and BH2 whereas D5 drains into BH3. Therefore, the realized riparian buffer mitigation areas for some stream features will be larger and additional features will be included. Current land use within the Project is primarily row crop production and riparian forest (**Figure 2**). Much of the Project area has been used extensively for agricultural purposes for at least 70 years with areas of timbering in the 50s and then again in early 1998 (**Figure 3a** and **3b**). Currently, the Project streams and ditch, and adjacent areas are in either crop production or forest. Water quality stressors currently affecting the Project include heavily manipulated/relocated and maintained stream channels, nutrient loading from active crop production, and a lack of forested riparian buffers. Current buffer conditions demonstrate significant degradation with the loss of stabilizing vegetation because of continued crop production.

The goal of the Project is to restore and preserve riparian buffers and riparian areas by establishing appropriate plant communities while minimizing temporal and land disturbing impacts. Buffer and surrounding riparian area improvements will filter runoff from agricultural fields, thereby reducing nutrient and sediment loads to Project channels and provide water quality benefit to the overall watershed.

The Project easement can be accessed by Genoa Road (**Figure 4**). The Carraway Bluff Project consists of both perennial and intermittent features, including the Neuse River, Carraway Creek, five unnamed stream features (BH1, BH2, BH3, and BH4) and one ditch feature (D4) (**Figure 2**). Carraway Creek is a named tributary of the Neuse River with a partially intact riparian buffer, while its tributaries, BH1, BH2, BH3 and BH4 are modified natural stream channels that lack any riparian buffer. Furthermore, the fifty-foot riparian buffers of BH1 and BH2 were determined to be subject to the Neuse buffer protection rules (Subject); the fifty-foot riparian buffers of BH3 and BH4 were determined to be not subject to the Neuse buffer protection rules (Non-subject); stream determinations were verified by the DWR site visit on March 24, 2021. Correspondence regarding this determination is in **Appendix A**.

Buffer and riparian area mitigation efforts along the Project streams and ditches will be accomplished through the planting, establishment, and protection of a hardwood forest community. The result will be a riparian area that functions to mitigate nutrient and sediment inputs from the surrounding uplands. The buffer mitigation plan proposed is being submitted for review under the Consolidated Buffer Mitigation Rule 15A NCAC 02B .0295 and Nutrient Offset Credit Trading Rule 15A NCAC 02B .0703. In addition to traditional riparian restoration, the Project will also incorporate the alternative buffer mitigation option: Preservation of Buffers on Subject Streams, as outlined in 15A NCAC 02B .0295 (o) (5) and buffer restoration on ditches as outlined in 15A NCAC 02B .0295 (o) (8). DWR staff performed an onsite stream determination on March 24, 2021, and a buffer viability assessment for buffer mitigation and nutrient offset on July 29th, 2021. These correspondences are provided in **Appendix A**. The Project will provide significant functional uplift to the watershed and will assist DMS with achieving its mitigation goals in the Neuse 01 watershed, excluding the Falls Lake Watershed. The Project presents the opportunity to provide up to 640,370.462 (14.70 acres) of riparian buffer mitigation credits. These will be derived from restoration and preservation of the riparian buffer and surrounding riparian areas. Project attributes are summarized in **Table 1**.

Table 1. Project Attributes

Parameter	Attribute
Project Name	Carraway Bluff
Hydrologic Unit Code	03020201 (Excluding Falls Lake Watershed)
River Basin	Neuse River (excluding the Falls Lake Watershed)
Geographic Location (Lat, Long)	35.330, -78.010
Site Protection Instrument (DB/PG)	3076/616
Total Credits (BMU)	640,370.462
Types of Credits	Riparian Buffer (with flexibility to convert to Nutrient Offset if needed)
Mitigation Plan Date	April 2022
Initial Planting Date	March 2023
Baseline Report Date	April 2023
MY1 Report Date	December 2023
MY2 Report Date	December 2024
MY3 Report Date	December 2025
MY4 Report Date	December 2026
MY5 Report Date	December 2027

The riparian buffer mitigation credits will be produced by establishing a native forested and herbaceous riparian plant community and protecting buffers in perpetuity with a conservation easement. For stream channels, the buffer mitigation area will have a minimum width of 50 feet and a maximum of 200 feet from the edge of the channels. These will be derived from 659,298 ft² (14.44 acres) feet of buffer Restoration; and 60,467 (1.38 acres) of buffer Preservation. For ditch channels, the mitigation area will be a width of 50 feet from the edge of the channel. These will be derived from 29,340 ft² (0.67 acres) from the top of bank

to 50 feet of Restoration. The new plant community will be established in conjunction with the treatment of any existing exotic or undesirable plant species. **Figure 5** depicts the Conceptual Design Plan for Buffer and Credit Determination, and **Section 2.1** provides details of the mitigation determination on the Carraway Bluff Project.

1.1.1 Parcel Ownership

The land required for the construction, management, and stewardship of this Project includes the parcel listed in **Table 2**. EBX, (an entity of RES) will record a conservation easement from the current landowner. The easement deed and survey plat will be submitted to DMS and the State Property Office (SPO) for approval and are held by the State of North Carolina. The easement deed will follow the DMS Full Delivery Conservation Easement Template dated May 5, 2017, and are included in **Appendix B**. The recorded easement will allow EBX, to proceed with the Project development and protect the mitigation assets in perpetuity. A finalized copy of the land protection instrument will be included in **Appendix B**.

Table 2. Parcel and Landowner Information

Landowner	Pin or Tax Parcel ID	Agreement Type	County
Norwood Bruce Howell and wife, Vickie Lee Howell	2597458424	Easement	Wayne

1.2 Project Location

The Carraway Bluff Project is within the Neuse River Basin within the 8-digit HUC 03020201, 14-digit HUC 03020201170060 and DWR Sub-basin Number 03-04-12.

The Project is located in Wayne County, approximately five miles south of downtown Goldsboro, off of Highway 117 (**Figure 1**). To access the Project from Goldsboro, head South on US 70 Business and merge onto US-177 South for approximately 4.5 miles. Then turn left onto Old Mt Olive Highway and drive approximately 1.2 miles. Then turn left onto Genoa Road, for about a half a mile, then turn left onto Robert Avenue. The coordinates are 35.3280007, -78.010718.

1.3 Existing Conditions

1.3.1 Surface Water Classification

Carraway Creek and the Neuse River have both been assigned class C and Nutrient Sensitive Waters (NSW). Class C waters are protected for uses such as secondary recreation, fishing, wildlife, fish consumption, aquatic life including propagation, survival and maintenance of biological integrity, and agriculture. Secondary recreation includes wading, boating, and other uses involving human body contact with water where such activities take place in an infrequent, unorganized, or incidental manner. NSW designation is intended for waters needing additional nutrient management due to being subject to excessive growth of microscopic or macroscopic vegetation (NCDWQ 2011).

1.3.2 Physiography and Soils

The Project is located within the Rolling Coastal Plain Level IV ecoregion within the Southeastern Plains Level III ecoregion and is characterized by greater relief, elevation, and stream gradients compared to the

Mid-Atlantic Coastal Plain to the east. This ecoregion contains both dissected irregular and smooth plains, and low to moderate gradient sandy-bottomed streams that branch from broad interstream divides with steep to moderately gentle side slopes. The Project area is generally a very flat floodplain of the Neuse River with mostly gentle side slopes that are dissected by drainages with elevations ranging from 50-feet to 80-feet (**Figure 6a** and **6b**). The ecoregion also contains better drained soils and a slightly cooler and shorter growing season than the Mid-Atlantic Coastal Plain; however, it is still a productive agricultural region with typical crops of corn, soybeans, tobacco, cotton, sweet potatoes, peanuts, and wheat.

The Natural Resources Conservation Service (NRCS, 2021) depicts eight soil series across the Project (**Figure 7**). The Project has Chewacla loam, Johns sandy loam, Kalmia loamy sand, 0 to 2 percent slopes, Kinston loam, Lumbee sandy loam, Torhunta loam, Wagram loamy sand, 0 to 6 percent slopes, and Wickham sandy loam, 2 to 6 percent slopes, eroded. The soil characteristics of all soils within the Project are summarized in **Table 3**.

Table 3. Project Mapped Soil Series

Map Unit Symbol	Map Unit Name	Percent Hydric	Drainage Class	Hydrologic Soil Group	Landscape Setting
Ch	Chewacla loam	5%	Somewhat poorly drained	B/D	Floodplains
Jo	Johns sandy loam	5%	Moderately well drained	C	Stream terraces
KaA	Kalmia loamy sand, 0 to 2 percent slopes	0%	Well drained	B	Stream terraces
Kn	Kinston loam	90%	Poorly drained	B/D	Floodplains
Lv	Lumbee sandy loam	100%	Poorly drained	B/D	Backswamps on stream terraces
To	Torhunta loam	90%	Very poorly drained	A/D	Flats on marine terraces, Carolina bays on marine terraces, depressions on stream terraces
WaB	Wagram loamy sand, 0 to 6 percent slopes	5%	Well drained	A	Broad interstream divides on marine terraces, ridges on marine terraces
WkB2	Wickham sandy loam, 2 to 6 percent slopes, eroded	5%	Well drained	B	Stream terraces

1.3.3 Wetlands

National Wetland Inventory (NWI) mapping depicts two wetlands throughout the Project area (**Figure 10**) however, the jurisdictional boundaries are not confirmed since this Project will not require a Jurisdictional Determination. A palustrine forested broad-leaved deciduous, temporarily flooded (PFO1A) wetland encompasses most of the northern and southern portions of the Project, with a small section of wetland

in the middle. A palustrine forested broad-leaved deciduous, seasonally flooded (PFO1C) wetland occurs along the north and middle eastern boundaries of the Project.

1.3.4 Landscape Communities

A. Existing Vegetation Communities

Currently, within the project area there is both cropland and forest. The cropland areas consist of a vegetative cover is primarily comprised of fields of soybean crops. The less disturbed forested floodplain along the right bank and some of the left bank of Carraway Creek (and the thin row along the Neuse River) resembles a riverine swamp forest; however, due to croplands and ditching along the left bank of Carraway Creek within the Project boundary, the natural hydrology and vegetation has been disturbed and displays species more consistent with a mixed-mesic hardwood forest (Coastal Plain subtype). This area includes trees and saplings such as red maple, Overcup oak, river birch, sweet bay, white oak (*Quercus alba*), bald cypress (*Taxodium distichum*), pond cypress (*Taxodium ascendens*), persimmon (*Diospyros virginiana*), and American elm (*Ulmus americana*). The herbaceous layer includes muscadine (*Vitis rotundifolia*), Virginia creeper (*Parthenocissus quinquefolia*), poison ivy (*Toxicodendron radicans*), and false nettle (*Boehmeria cylindrica*). Invasive species were noted in these areas and include mostly Japanese stilt-grass (*Microstegium vimineum*) and Chinaberry (*Melia azedarach*).

B. Riparian Vegetation

Carraway Bluff Project Area is comprised of the Neuse River, Carraway Creek, three unnamed stream features (BH1, BH2, BH3 and BH4) and one ditch feature (D4). In general, the Project reaches do not function to their full potential. Current conditions demonstrate significant habitat and water quality degradation with a loss of stabilizing vegetation as a result of impacts from ongoing crop production and forestry. Specifically, there were two main tracts of forest on the parcel that were cleared sometime in the 50s and were kept in agriculture through the 60's and then again in January or February of 1998 and (**Figures 3a** and **3b** and **Figure 2b**). The timbering in 1998 would have been in violation of the Neuse Buffer rules on subject streams.

Riparian vegetation conditions onsite currently consist of mature riparian forest and active row crops.

On the Neuse River, serving as the northernmost portion of the project, the riparian vegetation consists of a narrow band of mature riparian vegetation, and active row crops. Additionally, there is a 20-foot-wide sewer easement located within the riparian buffer that was delineated by a Subsurface Utility Engineering (SUE) Manager using a Ground Penetrating Radar to delineate the easement (**Figure 2A**). The sewer easement is within Zone 1 of the Riparian Buffer (**Figure 9**).

Carraway Creek, serving as the easternmost portion of the Project, consists of mature riparian area that extends beyond the limits of the easement on its right bank. Mature riparian areas along the left bank are narrow and abut active crop fields. Some areas along the left bank contain weedy, herbaceous vegetation and little to no woody vegetation. There are localized areas along the left bank where eroded meander bends have migrated into the adjacent agricultural fields. There were some areas along Carraway Creek that were timbered in 1998 but they were not within the 50-foot Neuse Riparian Buffer at the time the Buffer rules went into effect. From historical imagery (**Figures 3a** and **3b**), it appears that the downstream portion of Carraway Creek has widened and braided since the buffer rules went into effect from backwater

effects of the Neuse River, especially within the past 20 years with increased inundation from the Neuse River during flooding events.

BH1, the stream on the western side of the project, consists of a modified natural stream and is channelized and maintained to promote drainage for crop production. An unbuffered agricultural ditch, Ditch D3, drains into the stream from the north; however, the ditch is too deep to be viable for buffer mitigation according to 15A NCAC 02B .0295 (o) (8) and is therefore excluded from our Project but will be contained within the Bank Project. This area contains some mature trees along the top of bank but mainly consists of small, planted woody vegetation along the left bank. Invasive species include Chinese privet and Chinaberry. The upper most section of BH1 that flows North to South abuts a Conservation Easement of recently closed out Caraway Creek Bank Parcel. The right bank however has no riparian buffer. The Neuse Buffers on the right bank of BH1 at the top of the reach were impacted from timbering in 1998 and would have been in violation of the Neuse Buffer Rules (**Appendix A**). Once the stream makes an abrupt turn to the east through the crop fields, the reach has no riparian buffer on either bank. After about 200 feet, the riparian buffers were not intact at the time the Neuse Buffer Rules went into effect as there was a cleared road along the right bank of the stream from the top of bank out 40 – 50 feet that was mostly likely used to maintain the stream. Generally, the stream banks of BH1 contain tall, herbaceous vegetation and little to no woody vegetation. The current crop in production is soybean. Where BH1 enters the Caraway Creek floodplain, the riparian area becomes sufficiently buffered through mature forest. However, portions of buffer along this downstream portion of BH1 are not viable for buffer credit, due to timbering in 1998 that would have been in violation of the Neuse Buffer Rules (**Appendix A** and **Figure 5**). In the forested area at the most downstream limit of BH1, there are invasive species (Chinese privet) present along the.

BH2, the tributary stream on the western side of the project, like BH1, the reach is a modified natural stream that has been channelized and maintained to promote drainage for crop production and flows eastward through cropland until meeting the Caraway Creek floodplain. At the origin point until BH2 turns abruptly right to cross the field, the left bank of BH2 abuts a Conservation Easement of recently closed out Caraway Creek Bank Parcel. Both banks within the project area abut active crop fields, and the riparian buffer condition is absent and devoid of trees or woody vegetation. Generally, stream banks contain weedy, herbaceous vegetation and little to no woody vegetation. The current crop within the fields is soybean. As the reach enters the Caraway Creek floodplain, the riparian area becomes sufficiently buffered through mature forest, although the invasive species, Chinese privet, is present along the forest edge. Similar to BH1, prior to the 1998 timbering the forested buffer of the Caraway Creek floodplain extended further west, or upstream along BH2.

BH3, on the southern portion of the project, consists of a modified natural stream. BH3 has been channelized and maintained to promote drainage for crop production and flows north through cropland until the confluence with BH1. Both banks are surrounded by active crop fields and the riparian buffer condition is absent. Stream banks contain some maintained, herbaceous vegetation and little to no woody vegetation. BH3 flows east to west in the upstream section and then makes an abrupt turn north through a collapsed culvert and continues flowing towards the confluence with BH1. Similar to BH1, the left bank of BH3 was forested prior to the timbering in 1998, however this stream was considered not subject to the buffer rules and therefore the timber activities were not a violation of the Neuse Buffer Rules.

BH4, on the most southern border of the project has an origin point outside of the project area where it transitions from ditch to an intermittent stream and drains to Carraway Creek. Both sides of BH4 were forested at baseline and then the left bank was timbered in 1998. The left bank is non forested agricultural fields whereas the right bank remains forested. And similar to BH3, this stream was considered not subject to the buffer rules and therefore was not a violation of the Neuse Buffer Rules.

D4, is a ditch feature on the western side of the project consists of weedy, herbaceous vegetation and completely lacks a forested riparian area on the left bank. The right bank which is inside the existing Caraway Creek Bank Parcel contains some larger trees but consists mostly of small, planted stems from the adjacent closed out Caraway Creek Bank Parcel. The crop fields extend to the top of the left bank of the feature.

The current land use and riparian vegetation conditions at the time of writing this final buffer mitigation have remained unchanged since the site viability assessment conducted by DWR on July 29th, 2021.

1.3.5 Existing Conditions Photos



*Looking Upstream along Carraway Creek
March 23, 2022*



*Looking Downstream along Carraway Creek
March 23, 2022*



*Looking Upstream along BH1
March 23, 2022*



*Looking Downstream along BH1
March 23, 2022*



*Looking Downstream along BH2
March 23, 2022*



*Looking Downstream along BH2
March 23, 2022*



*Looking Upstream along BH3
March 23, 2022*



*Riparian Buffer and Surrounding Areas
Along the Neuse River
March 23, 2022*



*Looking Upstream along D4 (Ditch)
March 23, 2022*



*Looking Downstream along D4 (Ditch)
March 23, 2022*



*Looking Downstream along BH4
March 23, 2022*

2 REGULATORY CONSIDERATIONS

2.1 Determination of Credits

This Project has the potential to generate up to 640,370.462 (14.70 acres) riparian buffer mitigation credits within a 25.39-acre conservation easement as depicted in **Figure 5**. These will be derived from buffer restoration and buffer preservation. The riparian buffer mitigation credits generated will service the Neuse 01 watershed, excluding the Falls Lake Watershed. Additionally, some of these buffer mitigation credits, where viable, can be converted to nutrient offset credit which are regulated under the Nutrient Offset Credit Trading Rule, 15A NCAC 02B .0703 (see **Figure 8** and **Table 4**). The total potential buffer mitigation credits that the Carraway Bluff Mitigation Project will generate and the detailed Project credit breakdown, including buffer credits that are convertible to nutrient offset credit, utilizing the DWR "Project Credit Table Template (Updated February 2022)," is presented in **Table 4**. In addition, **Figure 8** depicts buffer restoration areas that are convertible to nutrient offset credit. This total area that is convertible to nutrient offset amounts to 271,534 ft² (6.23 acres) which would deliver 14,227.45 lbs. of Nitrogen offset. Furthermore, **Figure 9** depicts riparian zones of 50, 100, and 200 feet from stream top of banks to demonstrate width requirements for crediting. There are small areas along Carraway Creek that will be included as Preservation Credits. The area of preservation credit within this buffer mitigation site shall comprise of no more than 25 percent (25%) of the total area of buffer mitigation per 15A NCAC 0295 (o)(5) as shown in **Table 4**.

Due to clearing within zone 1 and 2 of the Neuse Riparian Buffer of subject streams in areas along Carraway Creek, BH1 and BH2 in early 1998, after the adoption of the Neuse River Basin Buffer Rule (15 NCAC 02B .0714), restoration is not viable within a few small areas along these streams. To determine where these areas are located, the historic top of bank, from 1997, of Carraway Creek, BH2 and BH1 was utilized to determine the 50-ft Neuse Riparian Buffer and where clearing had occurred. These areas were also marked and clearly defined in the site viability letter dated October 22nd and found in **Appendix A**. These areas have been excluded from riparian buffer restoration crediting and can be seen in **Figure 5**. However, these areas will be treated as riparian restoration areas and will be planted as such. An additional area has been cut out of crediting along the Neuse River due to the location of a 20-foot-wide sewer easement that runs parallel to the Neuse River. In accordance with 15A NCAC 02B .0295 (l)(4), since the sewer easement is

located within Zone 1, the area within the sewer easement will not be suitable for buffer mitigation credit. The sewer easement will be maintained in the condition that meets the vegetative requirement of the collection system permit.

There is one ditch within the Project easement area, D4 (**Figure 5**). This ditch is proposed for riparian buffer restoration in accordance with the alternative mitigation option of Consolidated Buffer Mitigation Rule 15A NCAC 02B .0295 (o)(8) and the DWR site viability assessment (**Appendix A**). The ditch feature meets criteria for riparian buffer restoration according to Rule 15A NCAC 02B .0295 (o) (8) in the following ways:

- (A) D4 drains directly to reach BH2, an intermittent stream.
- (B) The stream (BH2) and D4, including their confluence, will be protected by a contiguous, perpetual conservation easement that will prevent any future maintenance or manipulation of the ditches.
- (C) Stormwater runoff and overland flow drain toward the ditches.
- (D) D4 is a maximum of 2.9 feet deep which is between one and three feet in depth (as measured before and during the DWR buffer viability site visit).
- (E) The entire length of each ditch has been in place prior to the effective date of the Neuse Buffer Rule (see **Figure 3b**).

Additionally, the watershed (DA) draining to the ditch was delineated (**Figure 6a**) and determined to be at least four times (multiplier of 4) larger than the restored area along their corresponding ditches, as expressed in the following calculations:

- D4: (10.09 ac. DA) / (0.69 ac. restored area) = 14.62 multiplier

Although, another ditch feature (D3) enters the DMS project easement, it will be wholly encompassed in the adjacent buffer mitigation and nutrient offset bank and therefore no non-diffused flow will enter the project (**Figure 5**).

2.2 Other regulatory considerations

2.2.1 Environmental Screening and Documentation

Because DMS mitigation projects are 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 project meets the “Categorical Exclusion” criteria, the Federal Highways Administration (FHWA) and NCDMS have developed a categorical exclusion (CE) checklist that is included as part of each mitigation project’s Environmental Screening process. The CE Approval Form for the Carraway Bluff Project is included in **Appendix C** and was approved by DMS and FHWA in May 2021.

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. According to the United States Fish and Wildlife Service’s (USFWS) Information for Planning and Consultation (IPAC) database review tool (accessed February 18th, 2021) and the self-certification process conducted by EBX and submitted to the USFWS on March 25th, 2021, the list of threatened or endangered species includes the Red-cockaded woodpecker (*Picoides borealis*). Two additional species on the list submitted to USFWS are newly listed, the Neuse River Waterdog (*Necturus lewisi*) and the Carolina Madtom (*Noturus furiosus*). The Carraway Bluff Project does not contain any suitable habitat for the Red-cockaded woodpecker nor the Carolina

Madtom. The Project does contain suitable habitat for the Neuse River Waterdog. Overall, the project will provide long term benefits to the species by providing additional forested and protected buffers. EBX intendeds to avoid instream work where suitable habitat is located. Most of the work conducted on site will involve tree planting, culvert removal, and minor bank stabilization.

A self-certification letter was sent to USFWS (on March 25th, 2021). The USFWS responded on April 5th, 2021 and stated “We don’t intended to officially respond back”. Thus, the certification letter (provided) is their official response unless they do not concur with the determination. This consultation was conducted as part of the CE process and supporting documentation and correspondence can be found in **Appendix C**.

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.” The North Carolina Wildlife Resources Commission (NCWRC) was consulted during the CE process and the NCWRC did not comment on any state or federally listed species; however, they did recommend the use of biodegradable and wildlife-friendly sediment and erosion control devices and to treat invasive species as part of the Project. Documentation is included in **Appendix C**.

2.2.3 Cultural Resources

A review of North Carolina State Historic Preservation Office (SHPO) GIS Web Service (September 3, 2020) database did not reveal any registered occurrences within the Project area; however, there was one occurrence within a half-mile radius, Montague-Orton Farm. RES consulted with the SHPO during the CE process and the SHPO had “conducted a review of the project and are aware of no historic resources which would be affected by the project.” Cultural Resources screening met the Categorical Exclusion Criteria for FHWA and DMS projects and documentation is included in **Appendix C**.

2.2.4 Federal Emergency Management Agency (FEMA)/ Hydrologic Trespass

The entire Project, except for a small portion along the southern boundary, is in FEMA Zone AE and also contains a FEMA regulatory floodway starting halfway up the proposed easement and continuing north (3720259700K, 2018; **Figure 10**). FEMA mapping also shows a small .2% Chance Annual Flood zone at the southern boundary of the Project. As the Project progresses, the implications of updating Culverts outside of the Project Area will be considered and determined whether a No-Rise FEMA permit is needed. A Floodplain Development Permit will be obtained from the Wayne County Floodplain Administrator prior to construction to ensure the proposed project meets the requirements of the National Flood Insurance Program (NFIP) and the community's floodplain management regulations.

3 RIPARIAN RESTORATION AND PRESERVATION IMPLEMENTATION PLAN

Riparian restoration and preservation areas adjacent to streams are shown in **Figure 5** and were determined viable for credits by the DWR in the letter dated October 22, 2021(**Appendix A**).

3.1 Site Preparation

Preparation at the Project will involve spraying crops and exotic invasive species, soil amendments, seeding, and planting. A seed mix will be chosen to maximize successful herbaceous growth in all riparian areas while also incorporating valuable pollinator species. All riparian planting areas will be seeded using a no-till drill prior to tree planting or broadcast seeding depending on season and conditions at the time of seeding. Soil amendments will be provided across the entire planted area based on the results of soil fertility tests. Temporary and permanent riparian seeding, bare root plantings, and live stakes shall be planted according to the planting plan (**Section 3.3**).

The riparian restoration areas will be surveyed, and information will be provided in the As-Built report.

3.2 Methods

Riparian buffer mitigation activities will include restoration and preservation along streams and the viable ditch feature. All restoration and preservation areas were determined by the mitigation determination performed during the viability assessment by DWR (**Appendix A**).

3.2.1 Riparian Restoration Activities – stream channels and viable ditches

For stream channels, the Project will provide riparian buffer and surrounding area restoration in accordance with the Consolidated Buffer Mitigation Rule 15A NCAC 02B .0295 (n). Restoration activities along stream channels will begin from the tops of the proposed stream banks and extend a minimum of 50 feet from the stream outward to a maximum of 200 feet perpendicular to the stream channel. Restoration will occur where cropland is currently present. Specifically, reaches BH1, BH2, BH3, and BH4 a will include riparian buffer restoration (**Figure 5**).

For the ditch feature, D4, the project will provide riparian buffer restoration in accordance with the alternative mitigation option of Consolidated Buffer Mitigation Rule 15A NCAC 02B .0295 (o)(8). These restoration activities will begin from the tops of the ditch bank and extend 50 feet perpendicular to the ditch channel. All these riparian areas are currently cropland (**Figure 2A**).

As no work is proposed on neither the stream channels nor the ditch feature, the only restoration activities will include the planting of bare root trees as described in **Section 3.3** and the other activities mentioned in **Section 3**. Additionally, this Project will be co-developed with a bank Caraway Bluff Phase II Bank Parcel that will extend riparian buffer and riparian areas associated with this Project's streams as well as incorporate an additional ditch feature on the property. Therefore, riparian planting and site preparation activities will extend beyond the limits of this Project's boundaries.

3.2.2 Riparian Preservation Activities

Preservation will take place in limited forested areas within the Project where existing tree growth was determined adequate, and in accordance with the alternative mitigation option of Consolidated Buffer Mitigation Rules 15A NCAC 02B .0295 (o) (4) and (5) and the DWR buffer viability assessment (**Appendix A**). Specifically, along Carraway Creek contains forested areas that will be preserved (**Figure 5**). In addition, preservation activities will include treating invasive species (**Appendix D**), specifically Chinese privet, and the permanent protection of the riparian area from cutting, clearing, filling, grading, and similar activities that would affect the functioning of the buffer through a conservation easement that will have clearly visible easement markers and signs (see **Section 3.4** for further description of the easement boundaries).

3.2.3 Other Activities

Other activities involved with the buffer mitigation component of the Project will include localized live staking along the top of banks on stream features that are showing signs of instability. As part of the Restoration activities, one culvert will be removed from the Project Area, and one will be updated outside of the Project Area to ensure they are properly sized and functioning. Seeding and livestaking will occur in the locations where the existing culverts are removed (**Figure 5**). On BH2, outside of the easement there will be a timber mat bridge installed.

3.3 Planting Plan

All riparian restoration areas will be planted from top of bank back at least 50 feet from streams with bare root tree seedlings on a nine by six-foot spacing to achieve an initial density of approximately 800 trees per acre. The suite of bare root stems will be thoroughly mixed prior to planting to ensure maximum diversity throughout the planted areas. These areas will also be seeded with an herbaceous seed mix to provide rapid herbaceous cover and promote immediate buffer effectiveness as well as habitat for pollinators and other wildlife. The seed blend will contain both temporary and permanent seed and will include taproot species. The list of seed species to be sown and a proposed composition percentage of the mix can be found in **Table 6**. The seed will be sown utilizing a no-till drill or broadcast depending on season and conditions at the time of planting as well as easement closing. Planting will occur in all areas proposed for riparian buffer restoration and will meet the performance standards outlined in the Rule 15A NCAC 02B .0295. This includes treating invasive species and planting at least four species of native hardwood bare root trees. Mixed-Mesic Hardwood Forest (Coastal Plain subtype) (Schafale 2012) will be the target community type and will be used for all areas within the Project. This community composition is highly diverse and is suitable given the Project's soil and landscape characteristics and will provide water quality and ecological benefits. The initial planting of bare root trees will occur before Spring 2023. The list of bare root tree species to be planted and their percentage of total species composition can be found in **Table 5**. A total of 10 species are proposed below, and a minimum of 7 species will be planted. 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*). Additionally, the livestake plantings mentioned above in **Section 3.2.4** will consist of black willow (*Salix nigra*) and silky dogwood (*Cornus amomum*).

Table 5. Tree Planting List

Bare Root Planting Tree Species					
Species	Common Name	Spacing (ft)	Unit Type	Canopy or Sub-canopy	% of Total Species Composition
<i>Platanus occidentalis</i>	American sycamore	9X6	Bare Root	Canopy	15
<i>Betula nigra</i>	River birch	9X6	Bare Root	Canopy	15
<i>Quercus phellos</i>	Willow oak	9X6	Bare Root	Canopy	10
<i>Quercus michauxii</i>	Swamp chestnut oak	9X6	Bare Root	Canopy	10
<i>Quercus nigra</i>	Water oak	9X6	Bare Root	Canopy	10
<i>Quercus rubra</i>	Northern red oak	9X6	Bare Root	Canopy	10
<i>Quercus shumardii</i>	Shumard's oak	9X6	Bare Root	Canopy	10
<i>Quercus lyrata</i>	Overcup oak	9X6	Bare Root	Canopy	10
<i>Diospyros virginiana</i>	Persimmon	9X6	Bare Root	Sub-canopy	5
<i>Cephalanthus occidentalis</i>	Buttonbush	9X6	Bare Root	Sub-canopy	5

Table 6. Proposed Seed Mix List

Scientific Name	Common Name	Percent Composition
<i>Elymus virginicus</i>	Virginia Wild Rye	20%
<i>Panicum virgatum</i>	Switchgrass	20%
<i>Andropogon gerardii</i>	Big Bluestem	10%
<i>Bidens aristosa</i>	Bearded Beggarticks	10%
<i>Coreopsis lanceolata</i>	Lanceleaf Coreopsis	10%
<i>Schizachyrium scoparium</i>	Little Bluestem	10%
<i>Echinacea purpurea</i>	Purple Coneflower	7%
<i>Heliopsis helianthoides</i>	Oxeye Sunflower	7%
<i>Asclepias tuberosa</i>	Butterfly Milkweed	3%
<i>Helianthus angustifolius</i>	Narrowleaf Sunflower	3%

3.4 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 Project conditions and/or conservation easement. Boundaries will be marked with signs identifying the property as a mitigation project 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 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.

Again, this Project will be codeveloped with a buffer mitigation and nutrient offset bank that will extend riparian buffer areas associated with this Project's streams as well as incorporate additional stream features on the property. Therefore, there will be bank conservation easement boundaries extending beyond the boundaries of this Project and will also be marked appropriately.

4 MONITORING PLAN

4.1 Monitoring Protocol and Success Criteria

Annual vegetation monitoring and visual assessments will be conducted. Riparian vegetation monitoring where riparian buffer mitigation credits are being generated will be based on the "Carolina Vegetation Survey-Ecosystem Enhancement Program Protocol for Recording Vegetation: Level 1-2 Plot Sampling Only Version 4.2". Annual vegetation monitoring will occur each year for a minimum of five years and will be conducted during the fall season with the first year occurring at least 6 months from initial planting. 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 planted area is 17.61 acres, and there will be 14 vegetation plots measuring riparian buffer mitigation success. These plots will be randomly placed throughout the planted riparian restoration area and will be representative of the riparian community (**Figure 11**). 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.

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 upon approval by DWR. Invasive and noxious species will be monitored and treated so that none become dominant or alter the desired community structure of the site.

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 applicable areas are being maintained and compliant.

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

- Easement markers are in good condition throughout the site;
- no encroachment has occurred;
- no invasive species occur in areas where 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.

A summary of project monitoring and maintenance activities can be found in **Table 7**.

Table 7. Summary of Project Monitoring and Maintenance Activities

Component/ Feature	Monitoring	Maintenance through project close-out
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 Vegetation	Visual Assessment	Invasive and noxious species will be monitored and treated so that none become dominant or alter the desired community structure of the Project. Locations of invasive and nuisance vegetation will be mapped. Also, see Appendix D for more details.
Project Boundary	Visual Assessment	Project boundaries shall be identified in the field to ensure clear distinction between the mitigation project and adjacent properties. Boundaries will be marked with signs identifying the property as a mitigation project 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 Project 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.

4.2 Adaptive Management Plan and Project 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 EBX during the monitoring period, EBX must first receive approval by DMS and then by DWR prior to any mowing activities to ensure that no buffer violations will be committed. Failure to receive approval to mow within the Neuse River buffer, as defined in 15A NCAC 02B .0714 by DWR, could result in Neuse River buffer violations and violations of the conservation easement. If necessary, EBX 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. This party shall serve as conservation easement holder and long-term steward for the property and will conduct periodic inspection of the Project 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 to identify boundary markings as needed. Any associated fencing or permanent crossings will be the responsibility of the owner of the underlying fee to maintain.

6 REFERENCES

- Endangered Species Act of 1973. Public Law 93-205, 87 Stat. 884. 16 USC 1531-1543,
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- Schafale, M.P. 2012. Classification of the Natural Communities of North Carolina, Fourth Approximation. North Carolina Natural Heritage Program, Division of Parks, and Recreation, NCDENR, Raleigh, NC.
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- USFWS (United States Fish and Wildlife Service). 2015. Information, Planning, and Conservation (IPAC) Online Screening Tool. <https://ecos.fws.gov/ipac/>; accessed February 2021.

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
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Figure 9 – Riparian Zones

Figure 10 – Monitoring Plan

Legend

-  Proposed Easement
-  Neuse River Basin - 03020201 (Excluding Falls Lake Watershed)

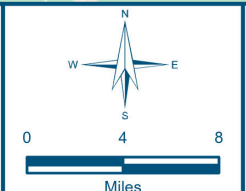
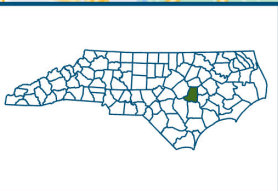
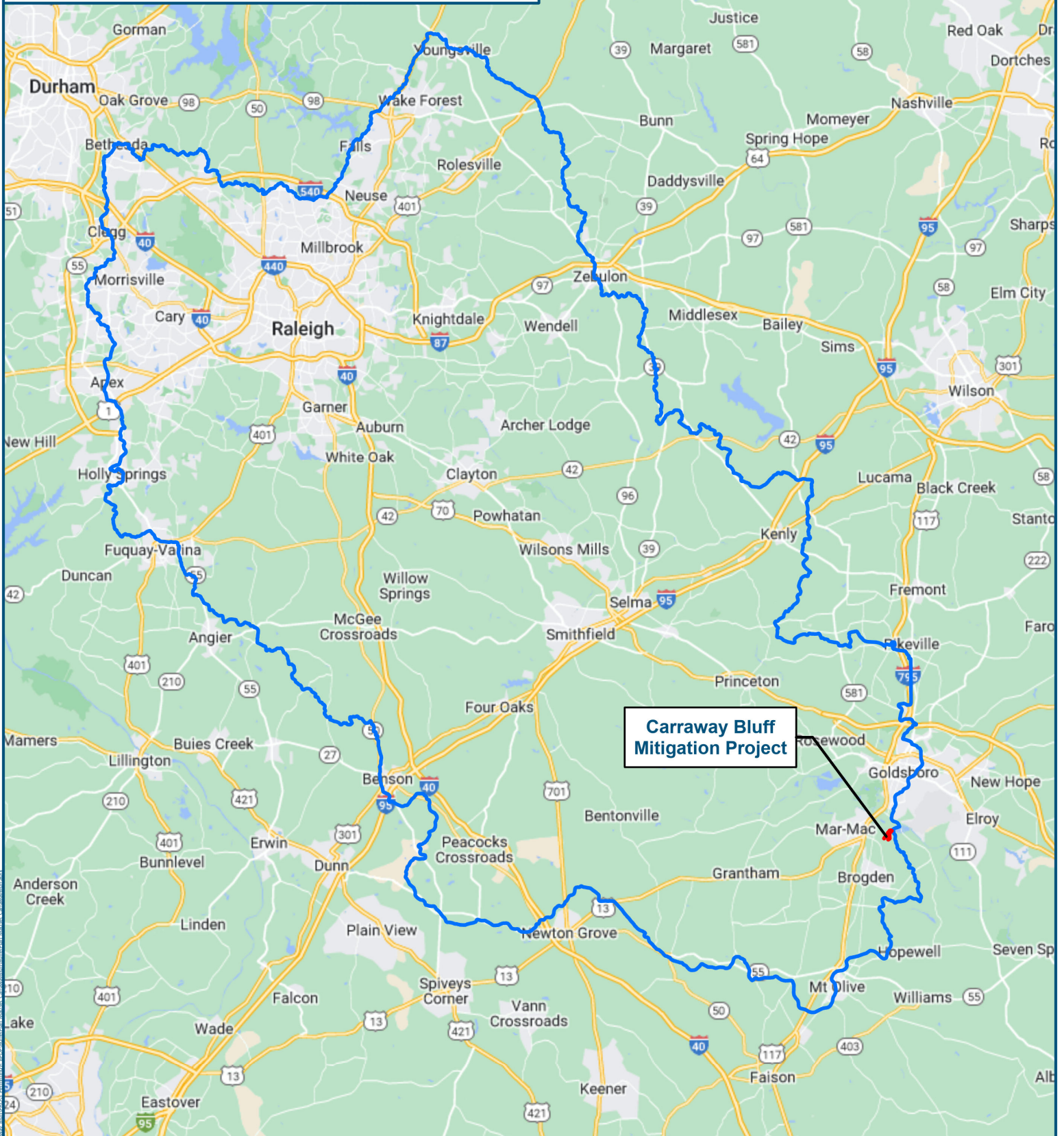















Figure 1 - Nutrient Offset and Buffer Mitigation Service Area

Carraway Bluff Mitigation Project

Wayne County, North Carolina

Date: 8/11/2022
Drawn by: MDE
Checked by: JRM
1 in = 8 mi



-  Proposed Easement
 -  Proposed Private Bank
 -  Private Bank Conservation Easement
 -  Surveyed Sewer Easement
 -  Estimated Sewer Easement
 -  Existing Culvert
 -  Flow Direction Change
 -  NCDWR Stream Call (03-24-2021)
 -  NCDWR Stream Call (08-11-2021)
- Stream Determination
-  Perennial
 -  Intermittent (Non-Subject)
 -  Intermittent (Subject)
 -  Ditch

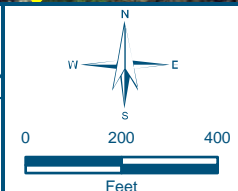
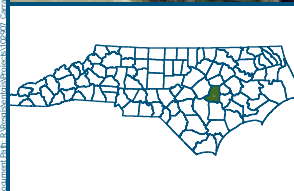
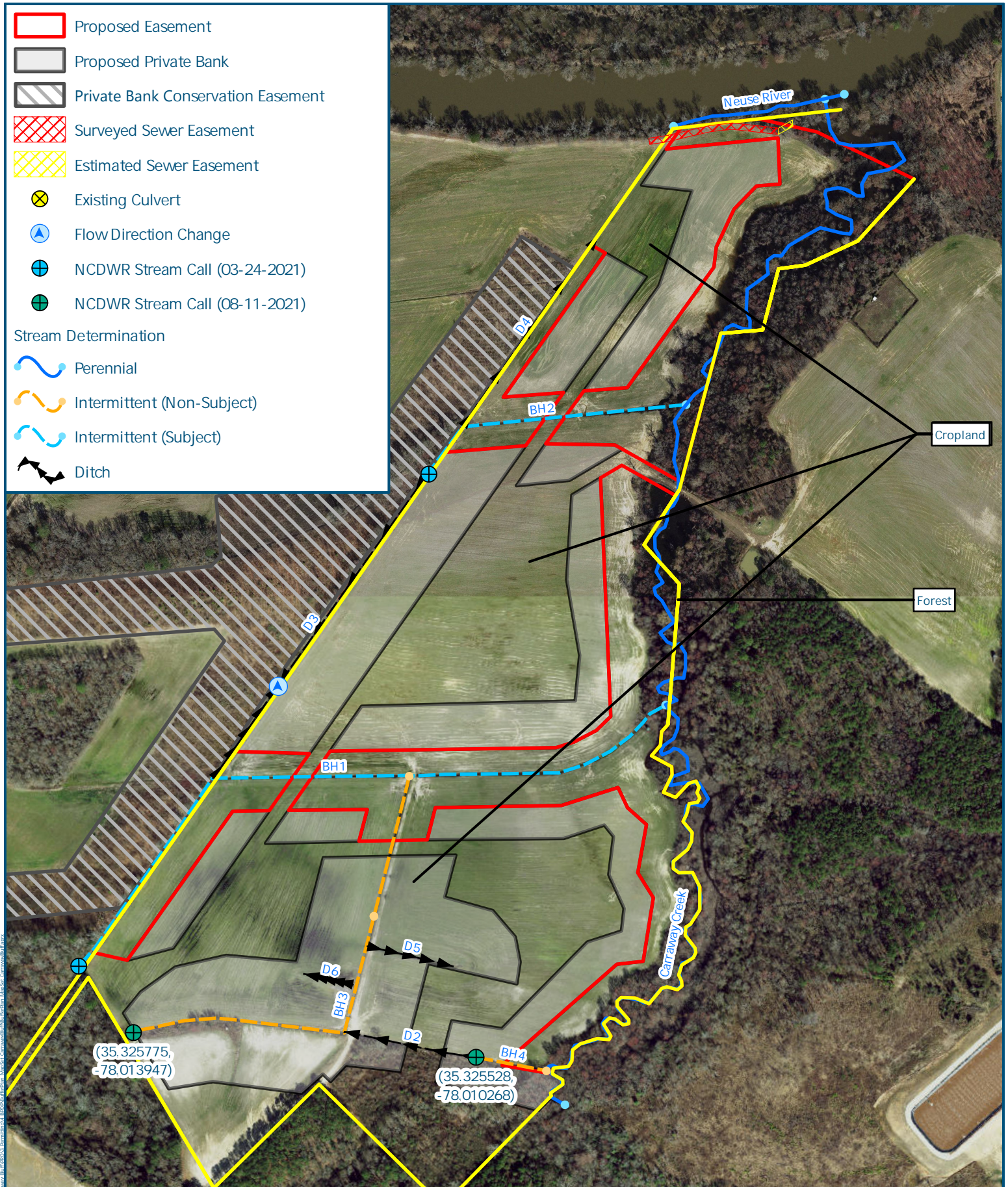
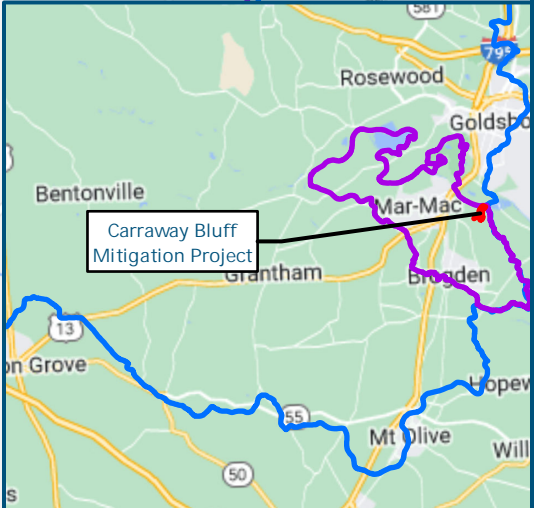
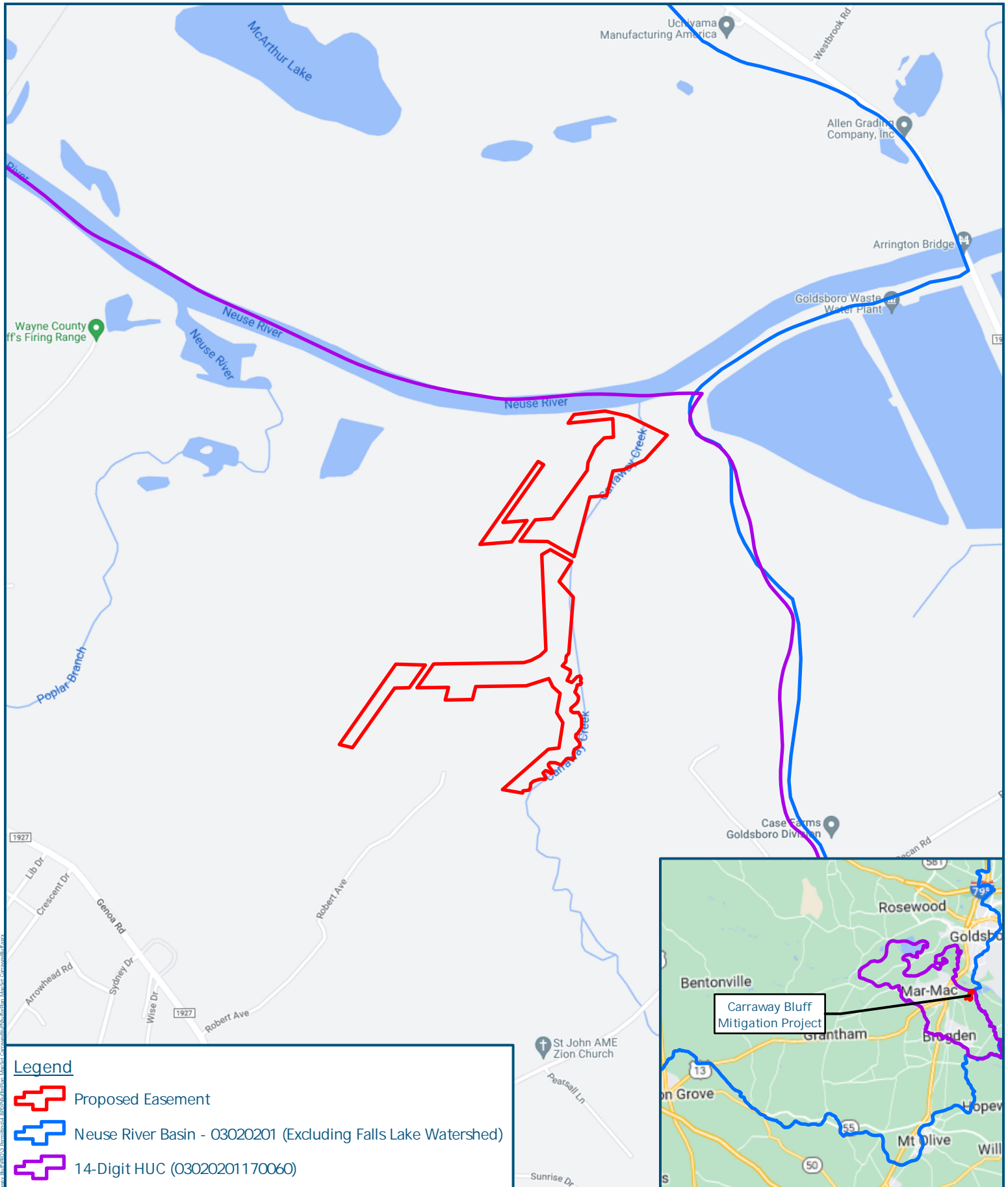


Figure 2 - Existing Conditions
 Carraway Bluff Mitigation Project
 Wayne County, North Carolina

Date: 9/29/2022
Drawn by: MDE
Checked by: JRM
1 in = 400 ft





- Legend**
-  Proposed Easement
 -  Neuse River Basin - 03020201 (Excluding Falls Lake Watershed)
 -  14-Digit HUC (03020201170060)

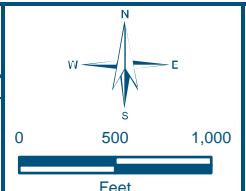
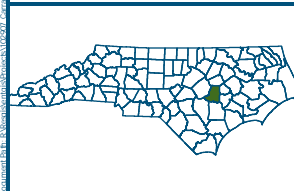
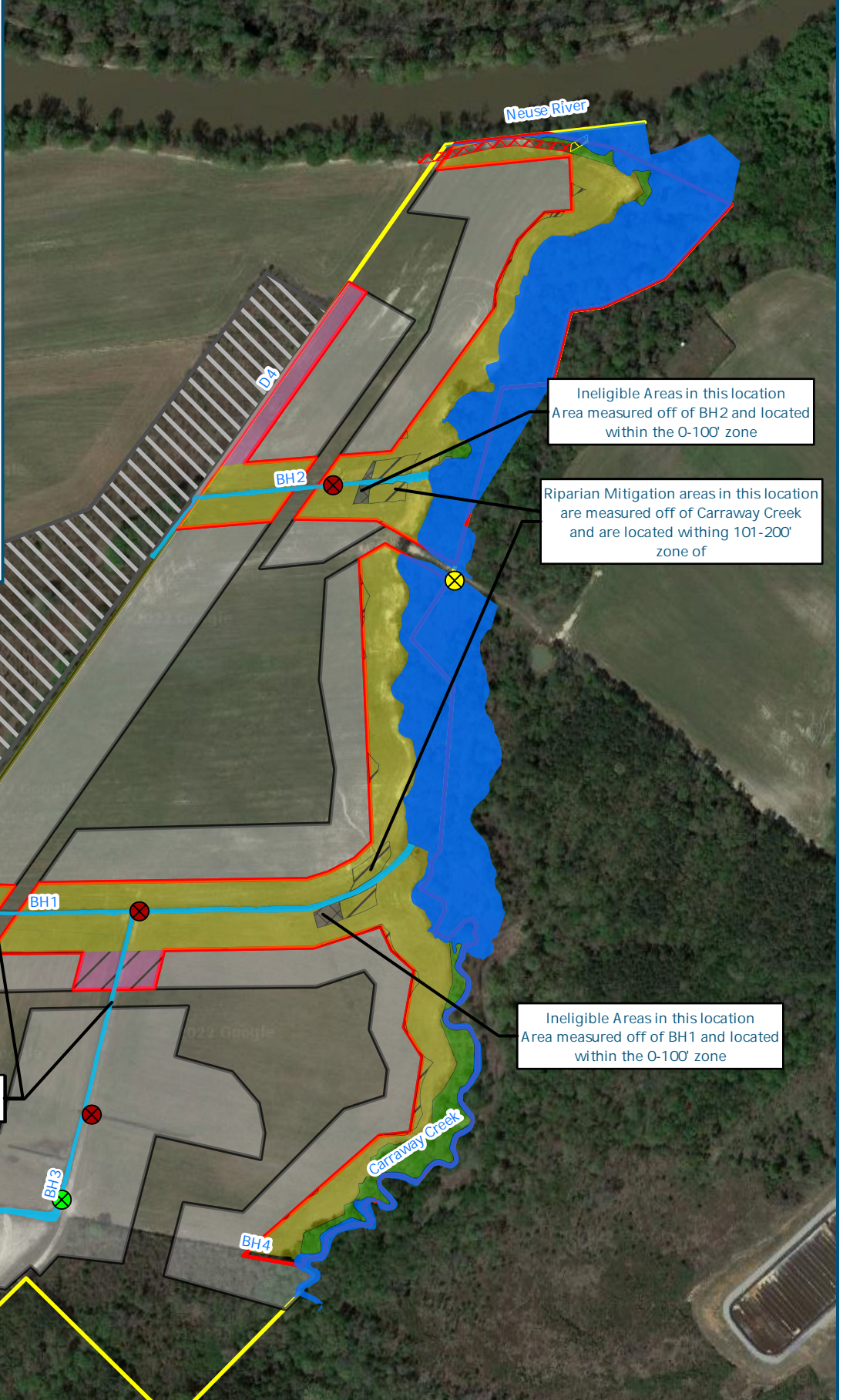


Figure 4 - Project Vicinity
 Carraway Bluff Mitigation Project
 Wayne County, North Carolina

Date: 9/21/2022
 Drawn by: MDE
 Checked by: JRM
 1:12,000



- Proposed Easement (25.39 ac)
- Proposed Private Bank (34.52 ac)
- Parcel Boundary (Surveyed)
- Private Bank Conservation Easement
- Surveyed Sewer Easement Estimated
- Sewer Easement
- Stream Type
- Intermittent
- Perennial
- Ditch
- Approach
- Riparian Restoration 0-50 ft (Non-subject, ditch)
- Riparian Restoration 0-100 ft (Subject)
- Riparian Restoration 101-200 ft (Subject)
- Riparian Restoration 0-100 ft (Non-subject)
- Riparian Preservation 0-100 ft (Subject)
- Ineligible Buffer Credit Area
- ⊗ Culvert (Removal)
- ⊗ Culvert (Relocation)
- ⊗ Culvert (No Treatment)



Ineligible Areas in this location Area measured off of BH2 and located within the 0-100' zone

Riparian Mitigation areas in this location are measured off of Carraway Creek and are located within 101-200' zone of

Ineligible Areas in this location Area measured off of BH1 and located within the 0-100' zone

Culvert Relocation to Easement Break

Figure 5 - Buffer Conceptual Design

Carraway Bluff Mitigation Project

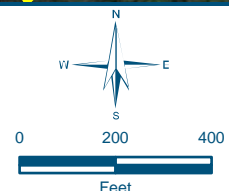
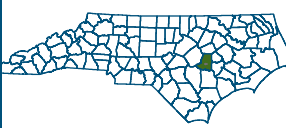
Wayne County, North Carolina

Date: 9/27/2022

Drawn by: MDE

Checked by: JRM

1 in = 400 ft



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Legend

 Proposed Easement

Drainage Area

 Carraway Creek (4,223 ac)

 D4 (10.09 ac)

 BH1 (263.48 ac)

 BH2 (52.44 ac)

 BH3 (21.89 ac)

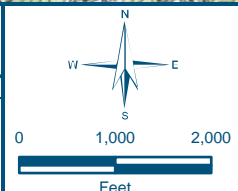
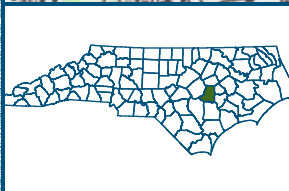
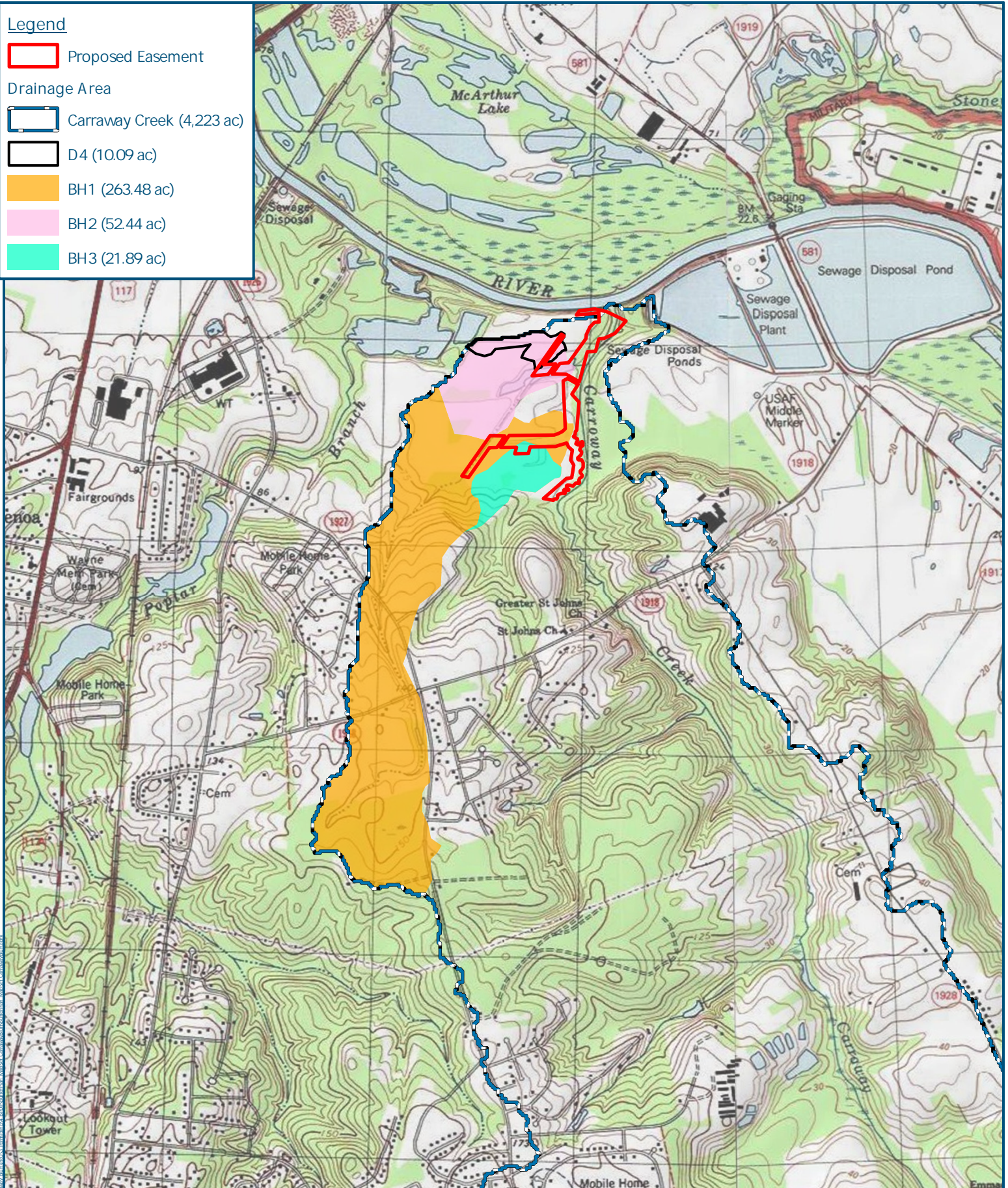


Figure 6a - USGS Quadrangle
Southwest Goldsboro (1976)
**Carraway Bluff
Mitigation Project**
Wayne County, North Carolina

Date: 9/21/2022
Drawn by: MDE
Checked by: JRM
1 in = 2,000 ft



Legend
 Proposed Easement

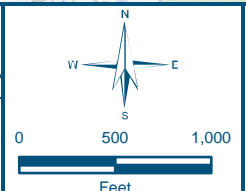
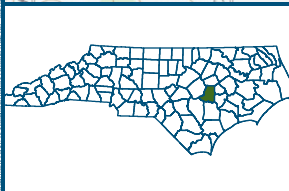
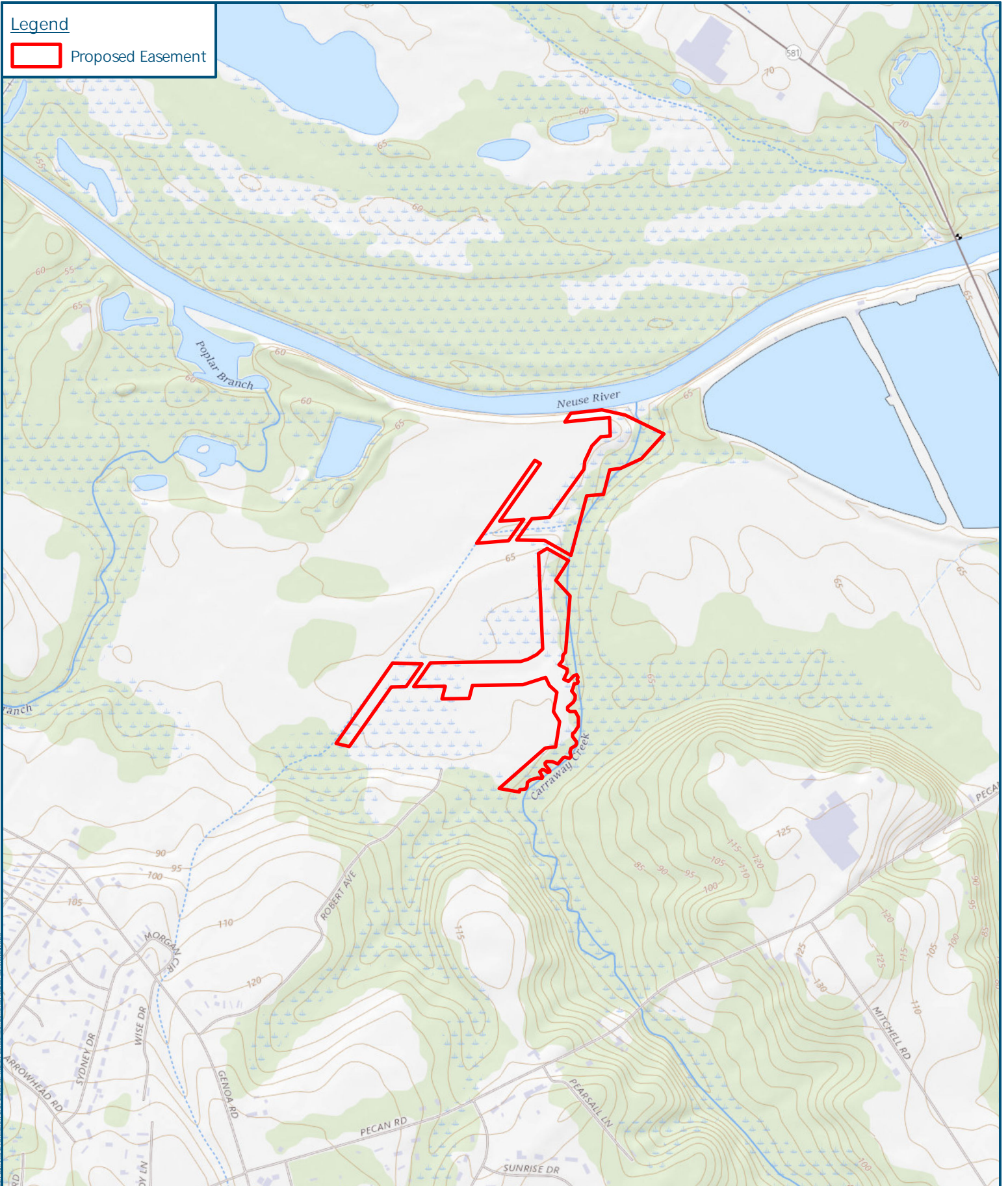


Figure 6b - USGS - The National Map
 Carraway Bluff
 Mitigation Project
 Wayne County, North Carolina

Date: 9/21/2022
 Drawn by: MDE
 Checked by: JRM
 1 in = 1,000 ft



Legend

Proposed Easement

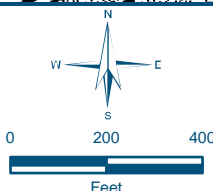
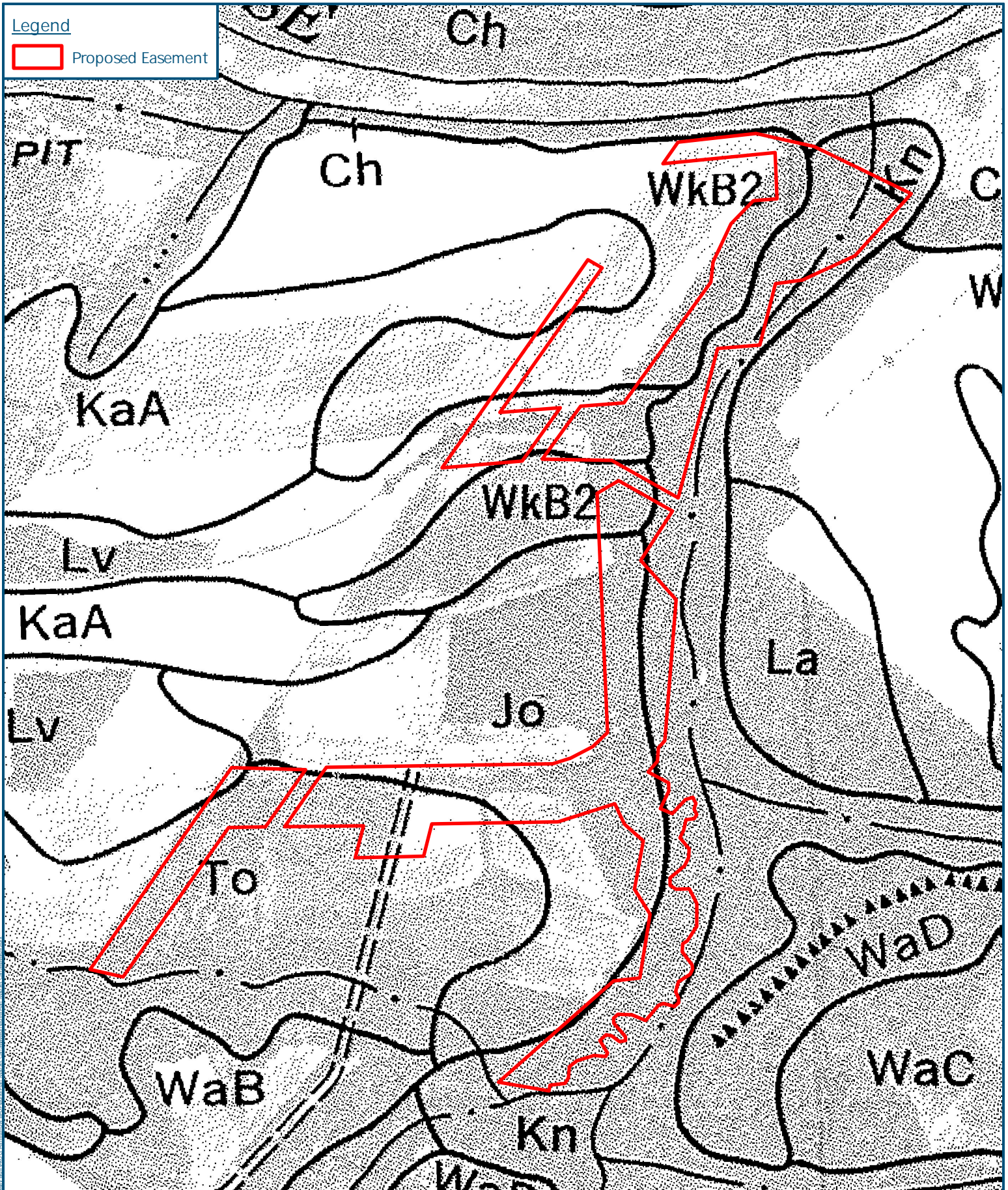


Figure 7 - NRCS Soil Survey (1974)

Carraway Bluff Mitigation Project

Wayne County, North Carolina

Date: 9/21/2022

Drawn by: MDE




Checked by: JRM

1 in = 400 ft




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Legend

-  Proposed Easement
-  Proposed Private Bank
-  Parcel Boundary (Surveyed)
-  Private Bank Conservation Easement
-  Surveyed Sewer Easement
-  Estimated Sewer Easement

Stream Type

-  Perennial
-  Intermittent
-  Ditch

Approach - Riparian Restoration

-  Riparian Nutrient Offset (0-50 ft), D4 Only
-  Riparian Nutrient Offset (101-200 ft)
-  Riparian Nutrient Offset (0-100 ft)
-  Ineligible Riparian Nutrient Offset Area

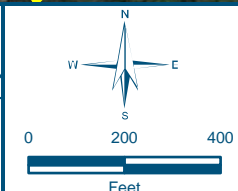
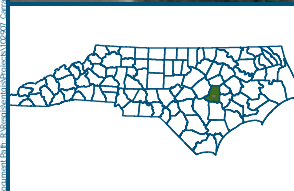
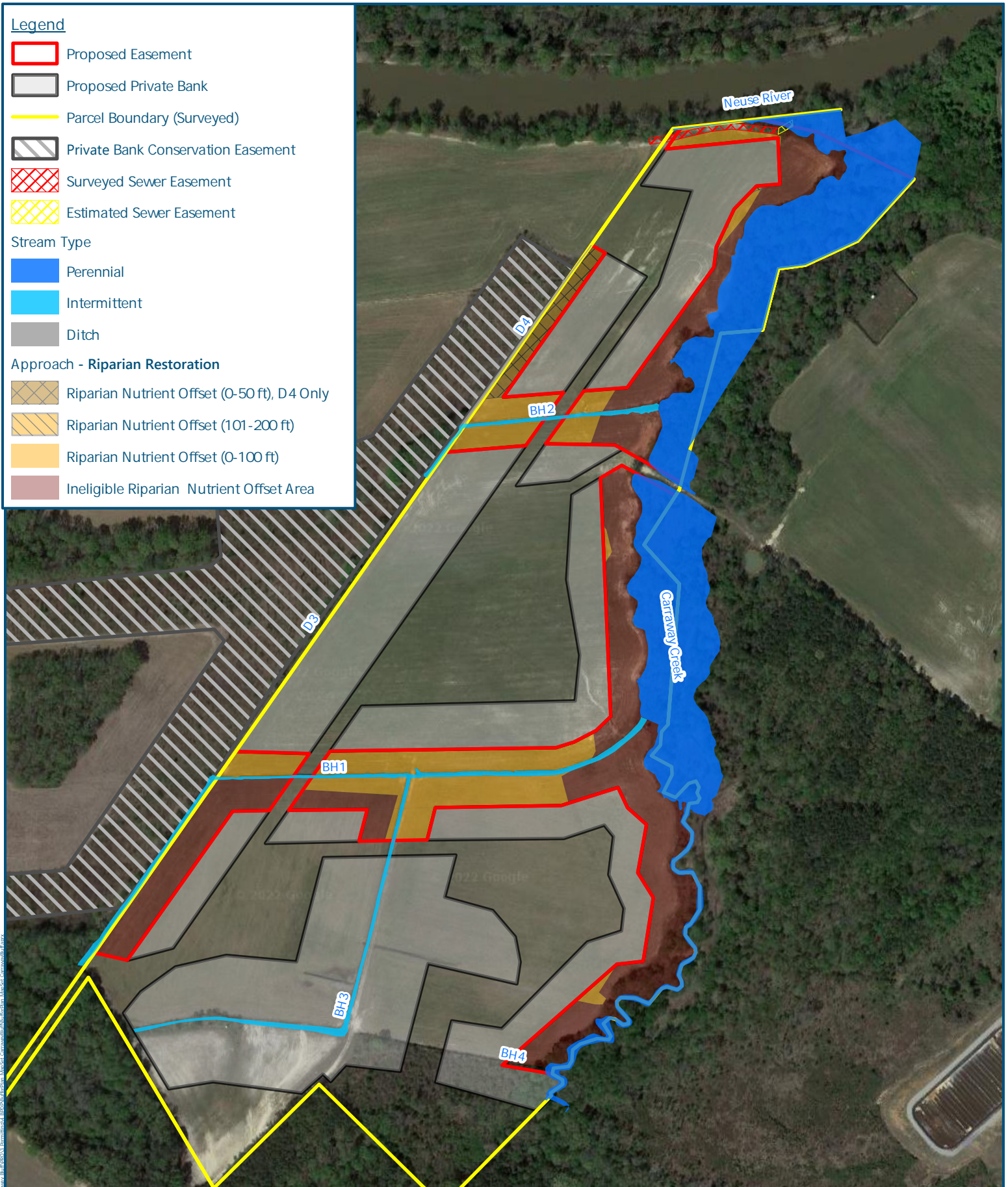


Figure 8 - Nutrient Offset Conceptual Design

Carraway Bluff
Mitigation Project




Wayne County, North Carolina

Date: 9/29/2022
Drawn by: MDE
Checked by: JRM
1 in = 400 ft







Restoring a resilient earth for a modern world




Legend

-  Proposed Easement
-  Surveyed Sewer Easement
-  Estimated Sewer Easement

Riparian Zone

-  0-30'
-  0-50'
-  0-100'
-  0-200'

Stream Type

-  Ditch
-  Intermittent
-  Perennial

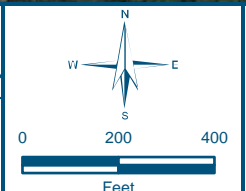
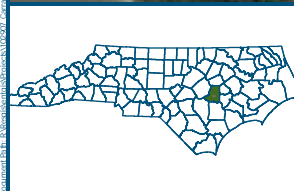
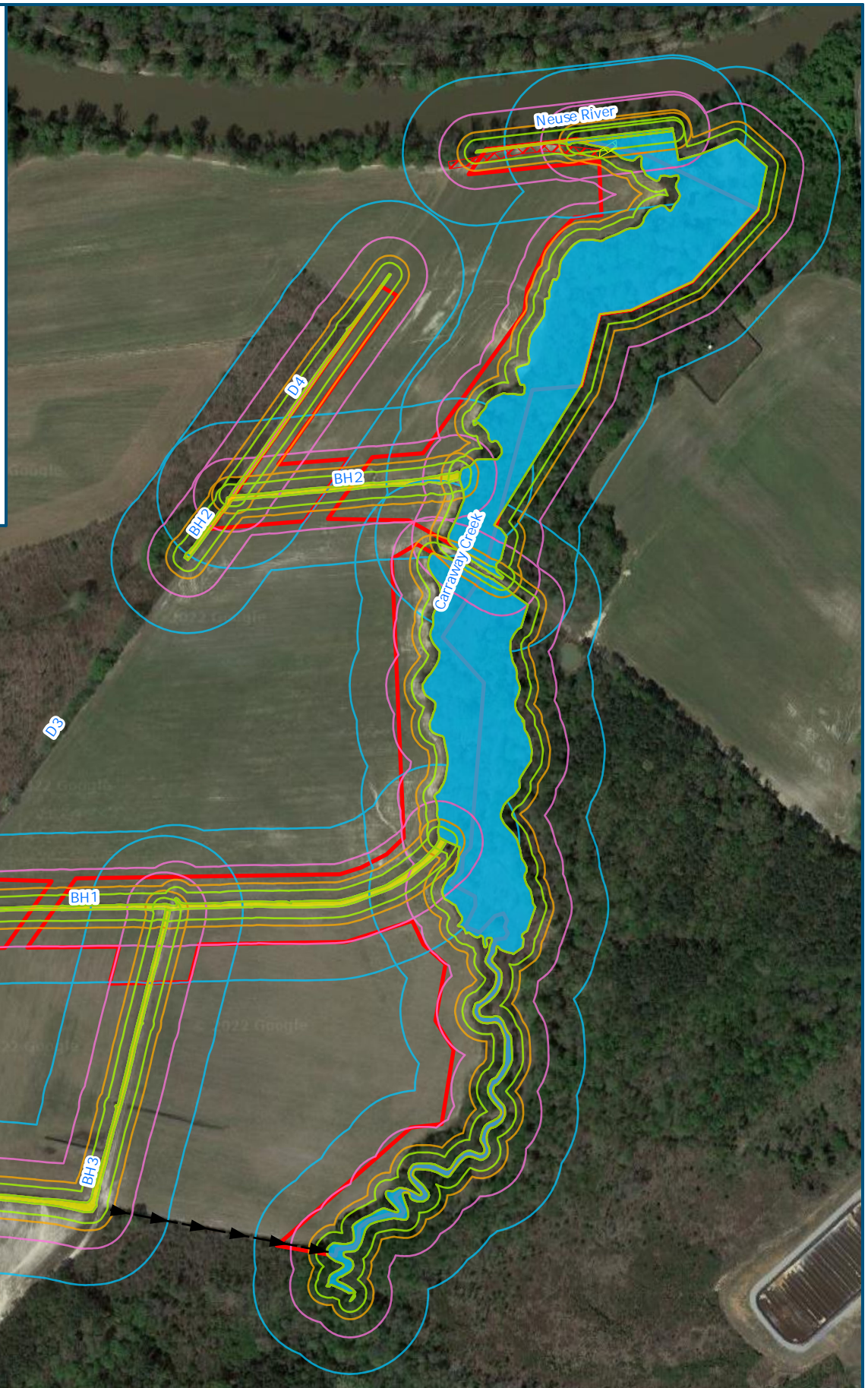



Figure 9 - Riparian Zones
 Carraway Creek Mitigation Project
 Wayne County, North Carolina

Date: 9/27/2022
 Drawn by: MDE
 Checked by: JRM
 1 in = 400 ft



Legend

-  Proposed Easement
-  NWI Wetlands (USFWS May 2020)
-  FEMA Zone AE
-  FEMA Regulatory Floodway

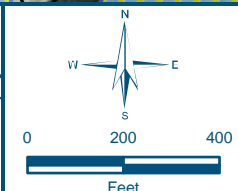
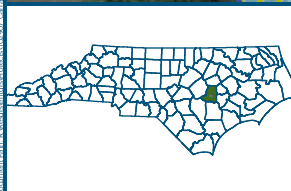
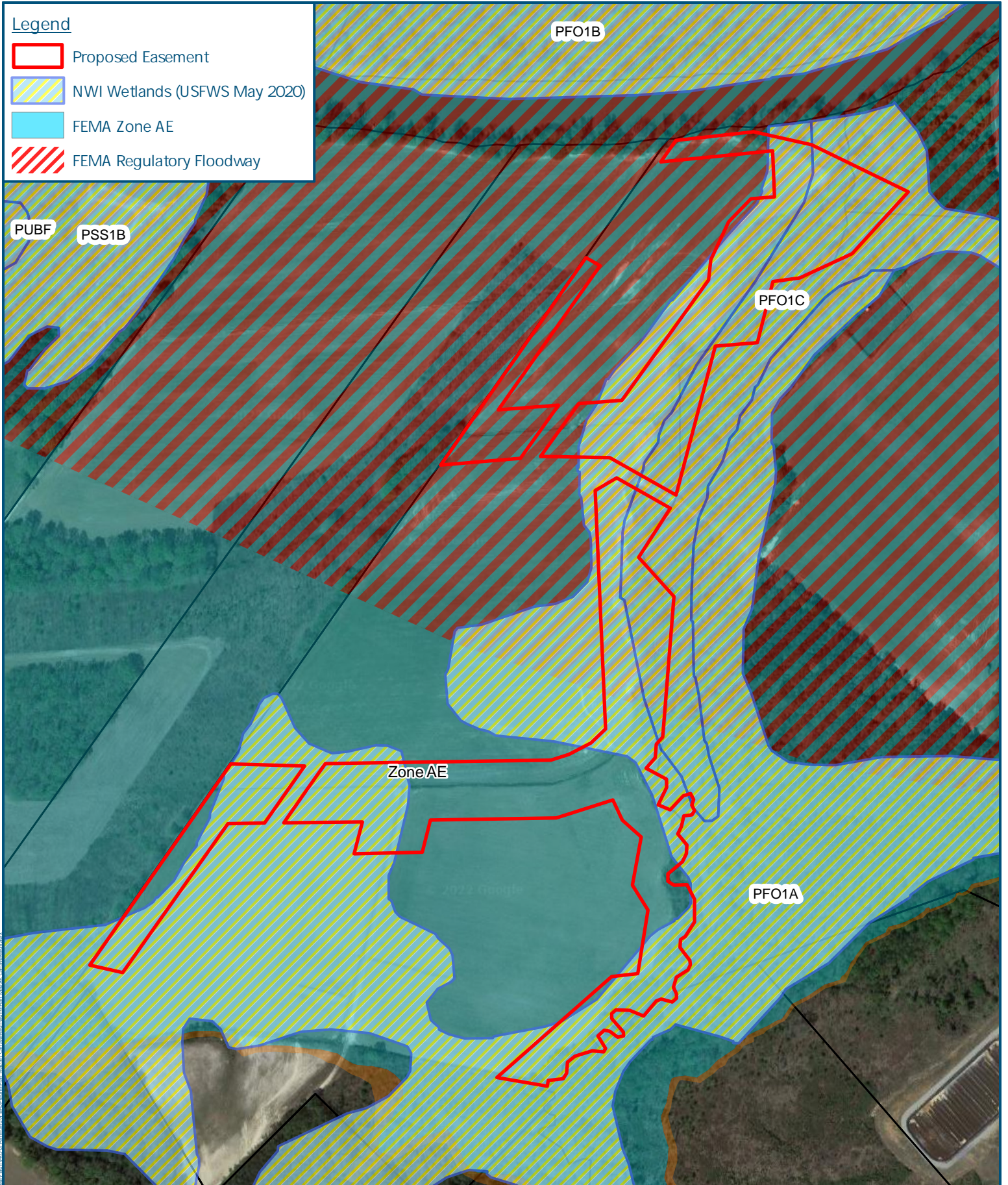


Figure 10 - Project Constraints
Carraway Bluff
Mitigation Project
Wayne County, North Carolina

Date: 9/27/2022
Drawn by: MDE
Checked by: JRM
1 in = 400 ft



- Legend**
- Parcel Boundary
 - Proposed Easement
 - Proposed Private Bank
 - Private Bank Conservation Easement
 - Surveyed Sewer Easement
 - Estimated Sewer Easement
 - Proposed Vegetation Plot
 - Planting Area (17.61 ac)
- Stream Type**
- Perennial
 - Intermittent
 - Ditch
- Approach**
- Riparian Restoration 0-50 ft (Non-subject, ditch)
 - Riparian Restoration 0-100 ft (Subject)
 - Riparian Restoration 101-200 ft (Subject)
 - Riparian Restoration 0-100 ft (Non-subject)
 - Riparian Preservation 0-100 ft (Subject)
 - Ineligible Riparian Buffer Credit Area

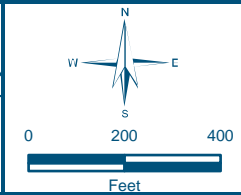
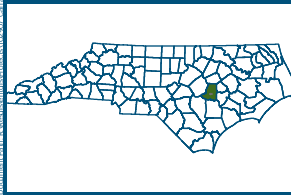
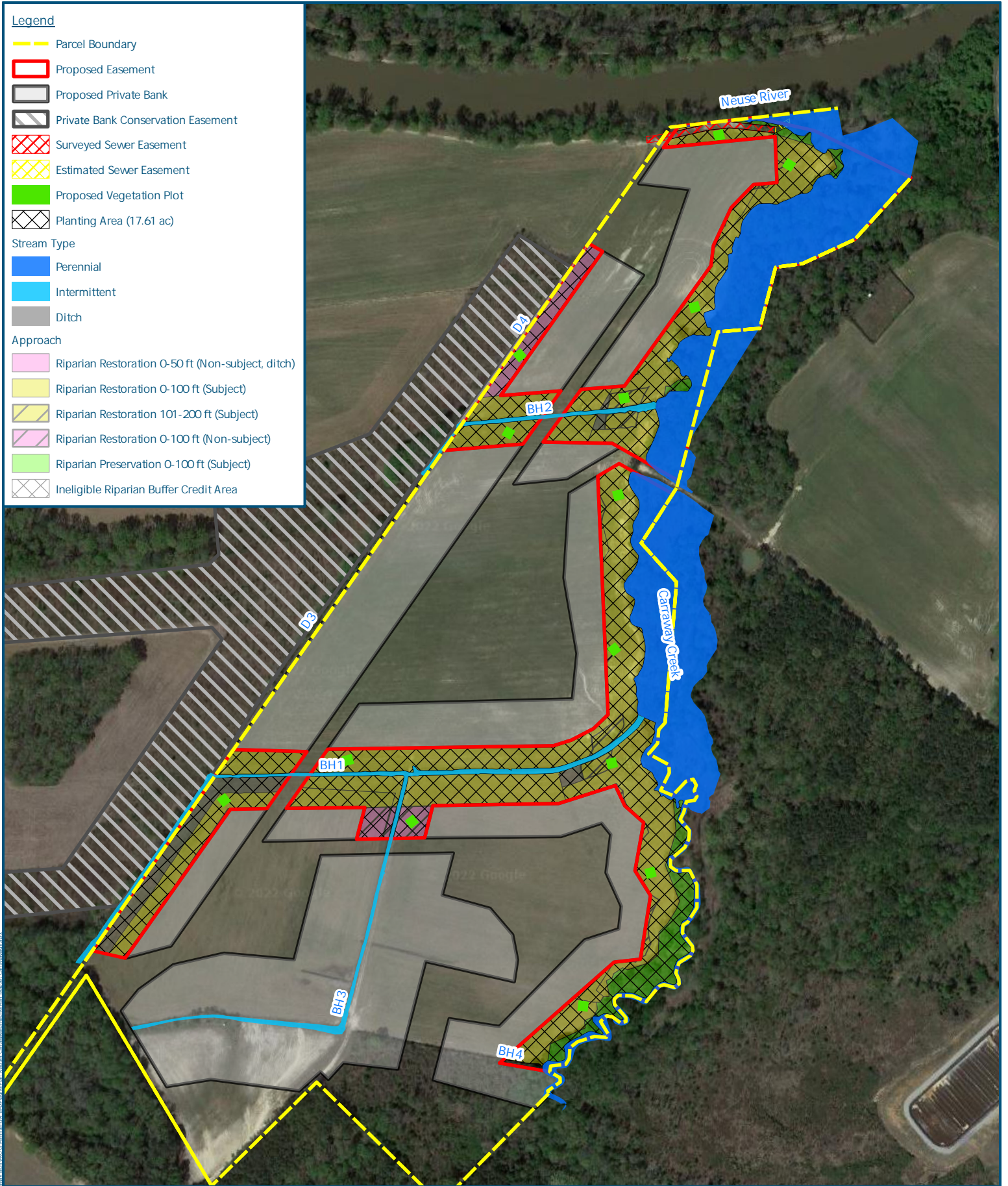
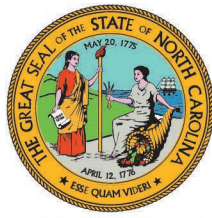


Figure 11 - Monitoring Plan
 Carraway Bluff
 Mitigation Project
 Wayne County, North Carolina

Date: 9/29/2022
 Drawn by: MDE
 Checked by: JRM
 1 in = 400 ft



Appendix A
Buffer Viability & Stream Determination



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

S. DANIEL SMITH
Director

October 22, 2021

Jamey McEachran
Environmental Banc & Exchange, LLC
(via electronic mail: jmceachran@res.us)

Re: Site Viability for Buffer Mitigation & Nutrient Offset – Carraway Bluff Site
Near 35.330, -78.010 in Dudley, NC
Neuse 03020201
Wayne County

Dear Ms. McEachran,

On June 17, 2021, Katie Merritt, with the Division of Water Resources (DWR), received a request from you on behalf of Environmental Banc & Exchange, LLC (EBX), a RES company, for a site visit near the above-referenced site in the Neuse River Basin within the 8-digit Hydrologic Unit Code 03020201. The site visit was to determine the potential for riparian buffer mitigation and nutrient offset within a proposed conservation easement boundary, which is more accurately depicted in the attached map labeled “Figure 1-Existing Conditions” (Figure 1) prepared by EBX. The proposed easement boundary in Figure 1, includes all riparian areas intended to be proposed as part of a mitigation site. On July 29, 2021, Ms. Merritt performed a site assessment of the subject site. Staff with Wildlands were also present.

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

<u>Feature</u>	<u>Classification onsite</u>	<u>¹Subject to Buffer Rule</u>	<u>Riparian Land uses adjacent to Feature (0-200')</u>	<u>Buffer Credit Viable</u>	<u>³Nutrient Offset Viable</u>	<u>^{4,5}Mitigation Type Determination w/in riparian areas</u>
D5	Ditch >3' depth	No	Right side of ditch was forested at baseline (1991-1995) Current conditions: non-forested agricultural fields	No	Yes (right side only)	Restoration site per 15A NCAC 02B .0295 (n)
D6	Ditch >3' depth	No	Not present during baseline (1991-1995)	No	No	N/A



<u>Feature</u>	<u>Classification onsite</u>	<u>¹Subject to Buffer Rule</u>	<u>Riparian Land uses adjacent to Feature (0-200')</u>	<u>Buffer Credit Viable</u>	<u>³Nutrient Offset Viable</u>	<u>^{4,5}Mitigation Type Determination w/in riparian areas</u>
BH1	Stream	Yes	Partially non-forested agricultural fields and partially forested at baseline (1991-1995); Neuse riparian buffers shown in Figure 1 were impacted from timbering in 1998 and would have been in violation of the Neuse Buffer rules. Therefore, no buffer credit can be generated within Zone 1 or Zone 2 of the Neuse riparian buffer that was timbered. Current conditions: non-forested agricultural fields	Yes (see Figure 1)	Yes (only in non-forested areas shown in Figure 1)	Non-forested Areas (see Figure 1) - Restoration Site per 15A NCAC 02B .0295 (n) 1998 Timbered 50' Neuse Buffer Areas (Zone 1 & Zone 2)- no credit 1998 Timbered areas beyond the 50' Neuse Buffer – Restoration Site per 15A NCAC 02B .0295 (n) for buffer credit only
BH2	Stream	Yes	Mostly non-forested agricultural fields and partially forested at baseline (1991-1995) near confluence with Caraway Creek; Neuse riparian buffers shown in Figure 1 were impacted from timbering in 1998 and would have been in violation of the Neuse Buffer rules. Therefore, no buffer credit can be generated within Zone 1 or Zone 2 of the Neuse riparian buffer that was timbered. Current conditions: non-forested agricultural fields	Yes (see Figure 1)	Yes (only in non-forested areas shown in Figure 1)	Non-forested Areas (see Figure 1) - Restoration Site per 15A NCAC 02B .0295 (n) 1998 Timbered 50' Neuse Buffer Areas (Zone 1 & Zone 2)- no credit 1998 Timbered areas beyond the 50' Neuse Buffer – Restoration Site per 15A NCAC 02B .0295 (n) for buffer credit only
Caraway Creek	Stream	Yes	Partially non-forested agricultural fields and partially forested at baseline (1991-1995); riparian areas were timbered in 1998 but not within the 50' Neuse riparian buffers. Current conditions: non-forested agricultural fields	Yes	Yes (only in non-forested areas shown in Figure 1)	Non-Forested Areas - Restoration site per 15A NCAC 02B .0295 (n) Forested Areas - Preservation Site per 15A NCAC 02B .0295 (o)(5)

<u>Feature</u>	<u>Classification onsite</u>	<u>¹Subject to Buffer Rule</u>	<u>Riparian Land uses adjacent to Feature (0-200')</u>	<u>Buffer Credit Viable</u>	<u>³Nutrient Offset Viable</u>	<u>^{4,5}Mitigation Type Determination w/in riparian areas</u>
BH3 starts @ 35.325775, - 78.013947	Stream	No	Partially non-forested agricultural fields and partially forested at baseline (1991-1995, see maps) Current conditions: non-forested agricultural fields;	Yes	Yes (only in non-forested areas shown in Figure 1)	Non-Forested Areas - Restoration site per 15A NCAC 02B .0295 (o)(3)
D2	Ditch >3' depth	No	Both sides of ditch were forested at baseline (1991-1995) Current conditions: non-forested agricultural fields	No	No	N/A
BH4 starts @ 35.325528	Stream	No	Both sides of stream were forested at baseline (1991-1995) Current conditions: Left Bank is non-forested agricultural fields; Right Bank is forested	Yes	No	Non-Forested Areas - Restoration site per 15A NCAC 02B .0295 (o)(3) Forested Areas - Preservation Site per 15A NCAC 02B .0295 (o)(4)
D3	Ditch >3' depth	No	Non-forested agricultural fields (opposite side is within an existing conservation easement)	No	Yes	Restoration site per 15A NCAC 02B .0295 (n)
D4	Ditch <3' depth	No	Non-forested agricultural fields (opposite side is within an existing conservation easement)	*see note	Yes	Restoration site per 15A NCAC 02B .0295 (o)(8) *Buffer Mitigation Note – Assessment concludes the ditch meets 15A NCAC 02B .0295 (o)(8) (A, B, C, D & E). More information on the watershed is required to be provided in a mitigation plan for complete assessment. See rule.
Neuse River	Stream	Yes	combination of non-forested agricultural fields and forested areas	*see note	*see note	there is a sewer easement located within the riparian areas. No information was provided by EBX to assist DWR's determination under 15A NCAC 02B .0295 (l)(4). All information shall be included in a restoration plan for DWR review.

¹Subjectivity calls for the features were determined by DWR in correspondence dated October 7, 2021 (DWR# 2014-0820v4) using the 1:24,000 scale quadrangle topographic map prepared by USGS and the most recent printed version of the soil survey map prepared by the NRCS .

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

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

⁴Determinations made for this Site are determined based on the proposal provided in maps and figures submitted with the request and assessed according to the definitions in 15A NCAC 02B .0295 (b).

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

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

Determinations provided in the table above were made using a proposed easement boundary showing proposed mitigation areas shown in Figure 1. The maps representing the proposal for the site are attached to this letter and initialed by Ms. Merritt on October 22, 2021. Substantial changes to the proposed easement boundary as well as any site constraints identified in this letter, could affect the Site's potential to generate buffer mitigation and nutrient offset credits.

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

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

This viability assessment will expire on October 22, 2023 or upon approval of a mitigation plan by the DWR, whichever comes first. This letter should be provided in any nutrient offset, buffer, stream or wetland mitigation plan for this Site.

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

Sincerely,

DocuSigned by:
Shelton Sullivan signed for
570614EF960B4BF...

Paul Wojoski, Supervisor
401 and Buffer Permitting Branch

PW/kym

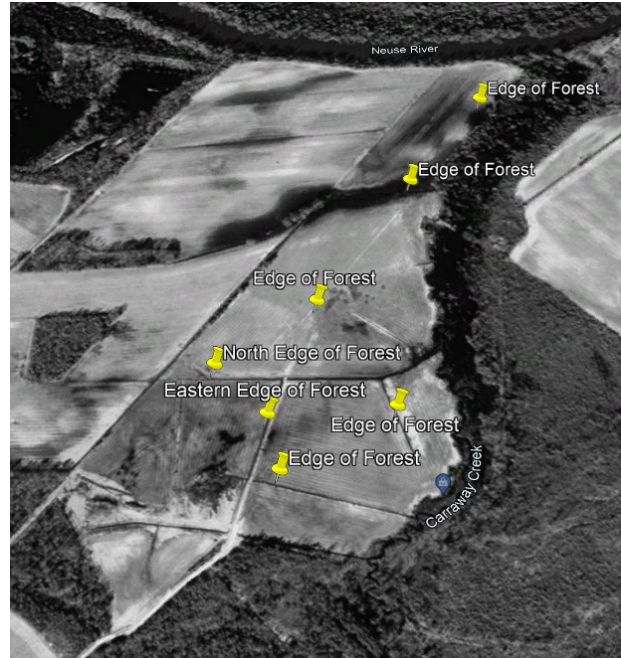
Attachments: Site photos, Figure 1-Existing Conditions

cc: File Copy (Katie Merritt)

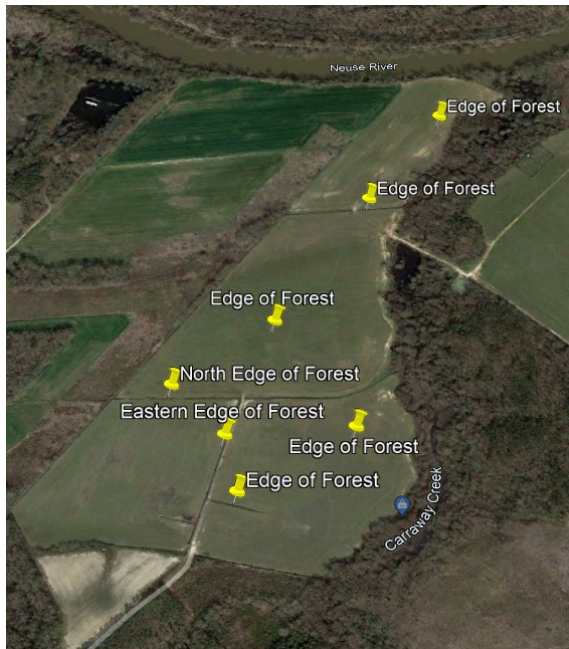
Historical Land use imagery showing forested areas between baseline & 2021



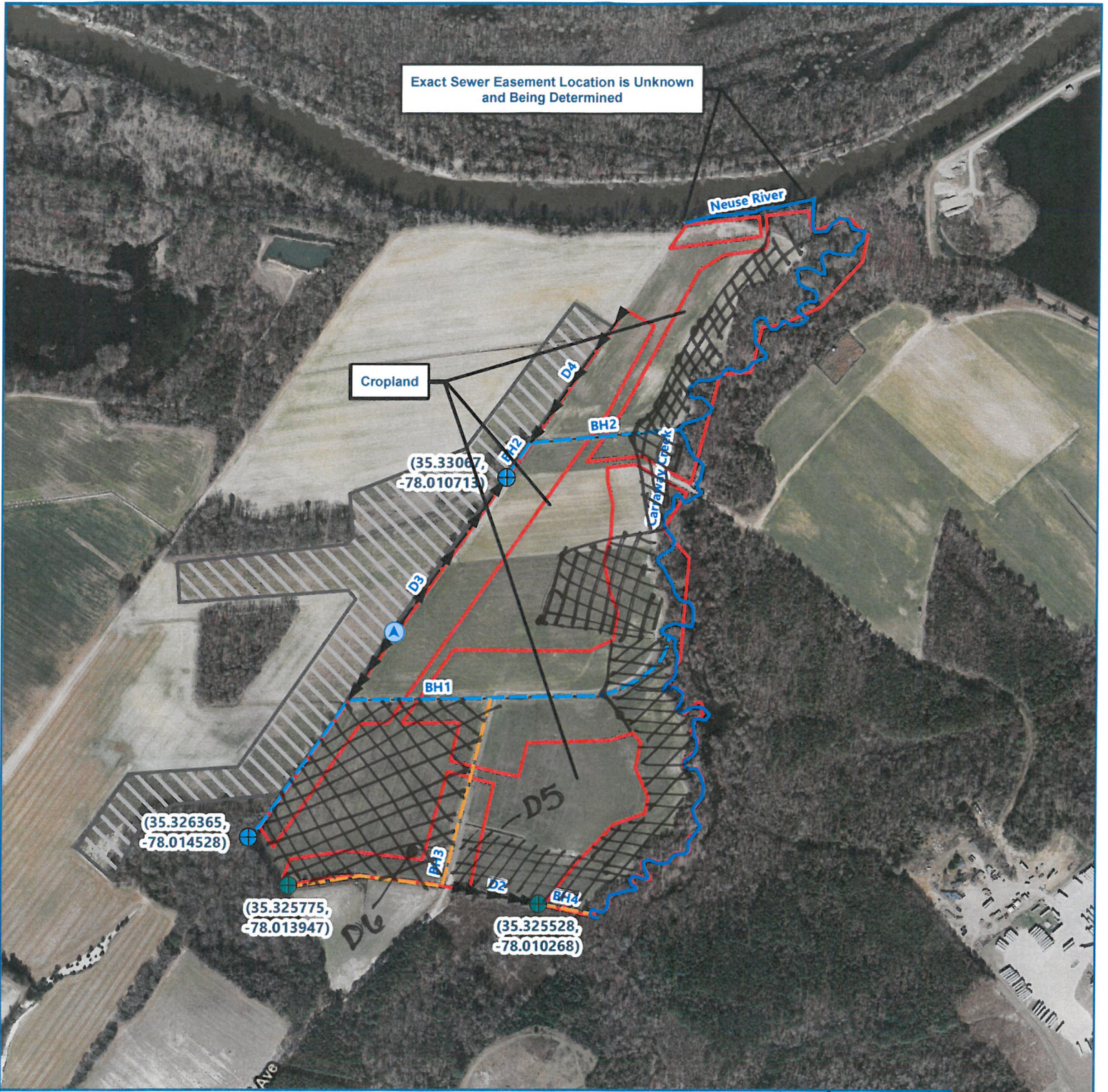
Landuse in 1993-Jan 1998



Landuse in February 1998



Landuse in 2021



Legend

- Proposed Easement (48.77 ac)
- Existing Conservation Easement
- Forested (1991-1997) & Forested at Buffer Rule Effective Date (1997)
- Perennial
- Intermittent (Non-Subject)
- Intermittent (Subject)
- Ditch

- NCDWR Stream Call (08-11-2021)
- NCDWR Stream Call (03-24-2021)
- Flow Direction Change

Kym 10/22/2021

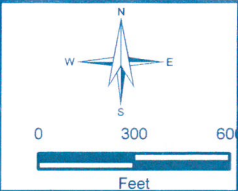
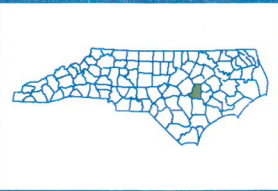


Figure 1 - Existing Conditions

Carraway Bluff Mitigation Project

Wayne County, North Carolina

Date: 10/22/2021
Drawn by: MDE
Checked by: JRM
1 inch = 600 feet



ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

S. DANIEL SMITH
Director



NORTH CAROLINA
Environmental Quality

October 7, 2021

20140820 v. 4
Wayne County

Norwood Bruce Howell and Vickie Lee Howell
118 Oak Heights
Goldsboro, NC 27530
919-922-9777

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

Subject Property/Project Name: **Carraway Bluff Mitigation Project**

Address/Location: 35.330, -78.010

Responsible Party: Environmental Bank & Exchange, LLC, a RES Company

Stream(s) Evaluated: (5) – BH1 – BH4, D2

Determination Date: March 24th 2021 and August 11th, 2021

Staff: Allen Stewart

Determination Type: Applicability to Neuse Riparian Buffer Rules (15A NCAC 02B .0714)	
Buffer:	Stream:
X - Neuse (15A NCAC 02B .0714) - Tar-Pamlico (15A NCAC 02B .0734) - Catawba (15A NCAC 02B .0614) - Jordan (15A NCAC 02B .0267) (governmental and/or interjurisdictional projects) - Randleman (15A NCAC 02B .0724) - Goose Creek (15A NCAC 02B .0605-.0608)	X – Ephemeral/ Intermittent/Perennial Determination

Stream	E/I/P/D*	Not Subject	Subject	Start@	Stop@	Soil Survey	USGS Topo
BH1	I		X	35.326362, -78.014528	Carraway Creek	X	
BH2	I		X	35.330667, -78.010718	Carraway Creek		X
BH3	I	X		35.325775, -78.013947	BH1		
BH4	I	X		35.325528, -78.010268	Carraway Creek		
D2	D	X		35.325713, -78.011507	35.325528, -78.010268		

*Ephemeral / Intermittent / Perennial / Ditch

Dear Mr. & Mrs. Howell,

The Division of Water Resources has determined that the streams listed as “subject” above and included on the attached map have been located on the most recent published (1974) NRCS Soil Survey of Wayne County, North Carolina and/or the web based Digital USGS National Topographic Map <https://apps.nationalmap.gov/viewer/> and evaluated for applicability to the Neuse Riparian Buffer Rules. For each stream that is checked “Not Subject” it has been determined to not be at least intermittent, not present on the property or not represented on the most recent published (1974) NRCS Soil Survey of Wayne County, North Carolina and/or the web based Digital USGS National Topographic Map. There may be other streams or features located on the property that were not assessed and/or that do not appear on the maps referenced above but may be considered jurisdictional according to the US Army Corps of Engineers and subject to the Clean Water Act. BH1 and BH2 determinations were made on 3/24/21. BH3, BH4 and D2 determinations made on 8/11/21.



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

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

If sending via US Postal Service:
c/o Paul Wojoski
DWR – 401 & Buffer Permitting Unit
1617 Mail Service Center
Raleigh, NC 27699-1617

If sending via delivery service (UPS, FedEx, etc.):
c/o Paul Wojoski
DWR – 401 & Buffer Permitting Unit
512 N. Salisbury Street
Raleigh, NC 27604

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

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

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

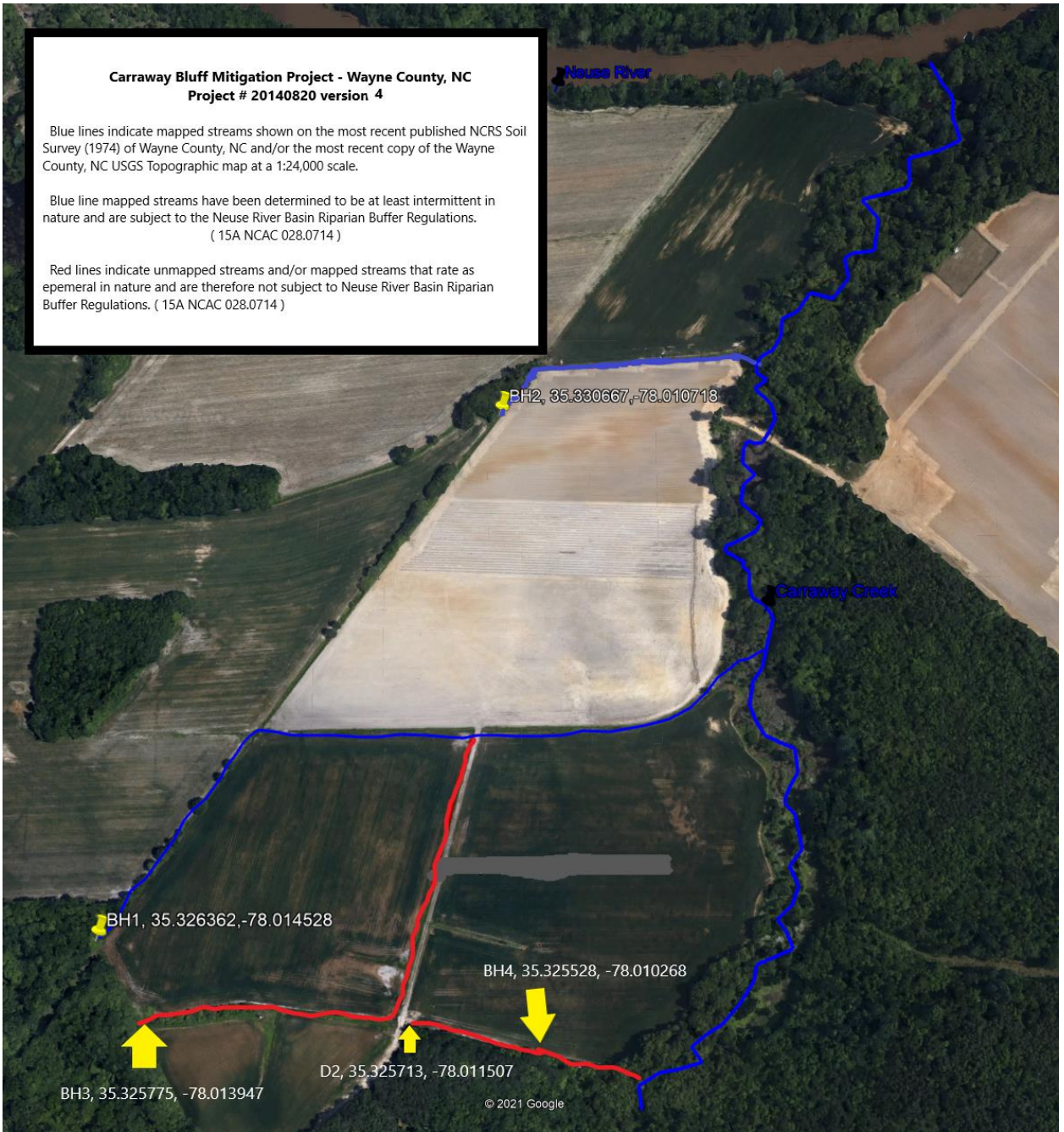
Sincerely,

Robert Tankard

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

cc: WaRO DWR File Copy/LASERFICHE
Jamey Mceachran, Environmental Banc & Exchange, LLC, a RES Company, jmceachran@res.us
Emily Thompson, US Army Corps of Engineers Washington Regulatory Field Office, emily.b.thompson@usace.army.mil
Katie Merritt, NCDWR 401 & Buffer Permitting Branch, katie.merritt@ncdenr.gov
Randall Jones, WaRO DEMLR (via e-mail) randall.jones@ncdenr.gov





Appendix B
Site Protection Easement

STATE OF NORTH CAROLINA

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

_____ COUNTY

SPO File Number:

DMS Project Number:

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

THIS DEED OF CONSERVATION EASEMENT AND RIGHT OF ACCESS, made this _____ day of _____, 20__, by _____ *Landowner name goes here*, (“**Grantor**”), whose mailing address is _____ *Landowner address goes here* _____, 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.

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 (insert name and address of full delivery contract provider) and the North Carolina Department of Environment and Natural Resources, to provide stream, wetland and/or buffer mitigation pursuant to the North Carolina Department of Environment and Natural Resources Purchase and Services Contract Number _____.

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

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

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

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

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

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

WHEREAS, Grantor owns in fee simple certain real property situated, lying, and being in _____ Township, _____ County, North Carolina (the "**Property**"), and being more particularly described as that certain parcel of land containing approximately _____ acres and being conveyed to the Grantor by deed as recorded in **Deed Book** _____ **at Page** _____ of the _____ 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 **if known, insert name of stream, branch, river or waterway here.**

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

The Conservation Easement Area consists of the following:

Tracts Number _____ containing a total of _____ **acres** as shown on the plats of survey entitled "Final Plat, Conservation Easement for North Carolina Division of Mitigation Services, Project Name: _____, SPO File No. _____, DMS Site No. _____, Property of _____," dated _____, 20__ by *name of surveyor*, PLS Number _____ and recorded in the _____ County, North Carolina Register of Deeds at **Plat Book** _____ **Pages** _____.

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

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

I. DURATION OF EASEMENT

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

II. ACCESS EASEMENT

choose one option based on survey and deed, delete other

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

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

III. GRANTOR RESERVED USES AND RESTRICTED ACTIVITIES

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

A. Recreational Uses. Grantor expressly reserves the right to undeveloped recreational uses, including hiking, bird watching, hunting and fishing, and access to the Conservation Easement Area for the purposes thereof.

B. Motorized Vehicle Use. Motorized vehicle use in the Conservation Easement Area is prohibited except within a Crossing Area(s) or Road or Trail as shown on the recorded survey plat.

C. Educational Uses. The Grantor reserves the right to engage in and permit others to engage in educational uses in the Conservation Easement Area not inconsistent with this Conservation Easement, and the right of access to the Conservation Easement Area for such purposes including organized educational activities such as site visits and observations. Educational uses of the property shall not alter vegetation, hydrology or topography of the site.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

IV. GRANTEE RESERVED USES

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

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

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

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

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

V. ENFORCEMENT AND REMEDIES

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

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

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

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

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

VI. MISCELLANEOUS

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

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

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

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

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

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

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

and

General Counsel
US Army Corps of Engineers
69 Darlington Avenue
Wilmington, NC 28403

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

VII. QUIET ENJOYMENT

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

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

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

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

_____ (SEAL)

NORTH CAROLINA
COUNTY OF _____

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

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

Notary Public

My commission expires:

Exhibit A

[INSERT LEGAL DESCRIPTION]

Appendix C
Approved FHWA Categorical Exclusion

Appendix A

Categorical Exclusion Form for Division of Mitigation Services Projects Version 2

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

Part 1: General Project Information	
Project Name:	Carroway Bluff Riparian Buffer Mitigation Project
County Name:	Wayne County
DMS Number:	100186
Project Sponsor:	Environmental Banc & Exchange, LLC
Project Contact Name:	Jamey McEachran
Project Contact Address:	3600 Glenwood Ave. Suite 100, Raleigh, NC 27612
Project Contact E-mail:	jmceachran@res.us
DMS Project Manager:	Lin Xu
Project Description	
<p>The Carraway Bluff Project is comprised of a proposed 54.20 acre conservation easement on one parcel in Wayne County, North Carolina. The project will involve the restoration and preservation of riparian buffers in the Neuse 01 watershed. Riparian buffer restoration and preservation will be completed on several features within the project easement. Buffer mitigation efforts on the project will be accomplished through the planting, establishment, and protection of a hardwood forest community.</p>	
For Official Use Only	
Reviewed By:	
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p style="margin: 0;">5/21/2021</p> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <p style="margin: 0;">Date</p> </div> <div style="width: 45%; text-align: right;"> <p style="margin: 0;"><i>Lin Xu</i></p> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <p style="margin: 0;">DMS Project Manager</p> </div> </div>	
Conditional Approved By:	
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p style="margin: 0;"> </p> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <p style="margin: 0;">Date</p> </div> <div style="width: 45%; text-align: right;"> <p style="margin: 0;">For Division Administrator FHWA</p> </div> </div>	
<input type="checkbox"/> Check this box if there are outstanding issues	
Final Approval By:	
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p style="margin: 0;">5-25-21</p> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <p style="margin: 0;">Date</p> </div> <div style="width: 45%; text-align: right;"> <p style="margin: 0;"><i>Donald W Brew</i></p> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <p style="margin: 0;">For Division Administrator FHWA</p> </div> </div>	

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

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

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

Categorical Exclusion Summary

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

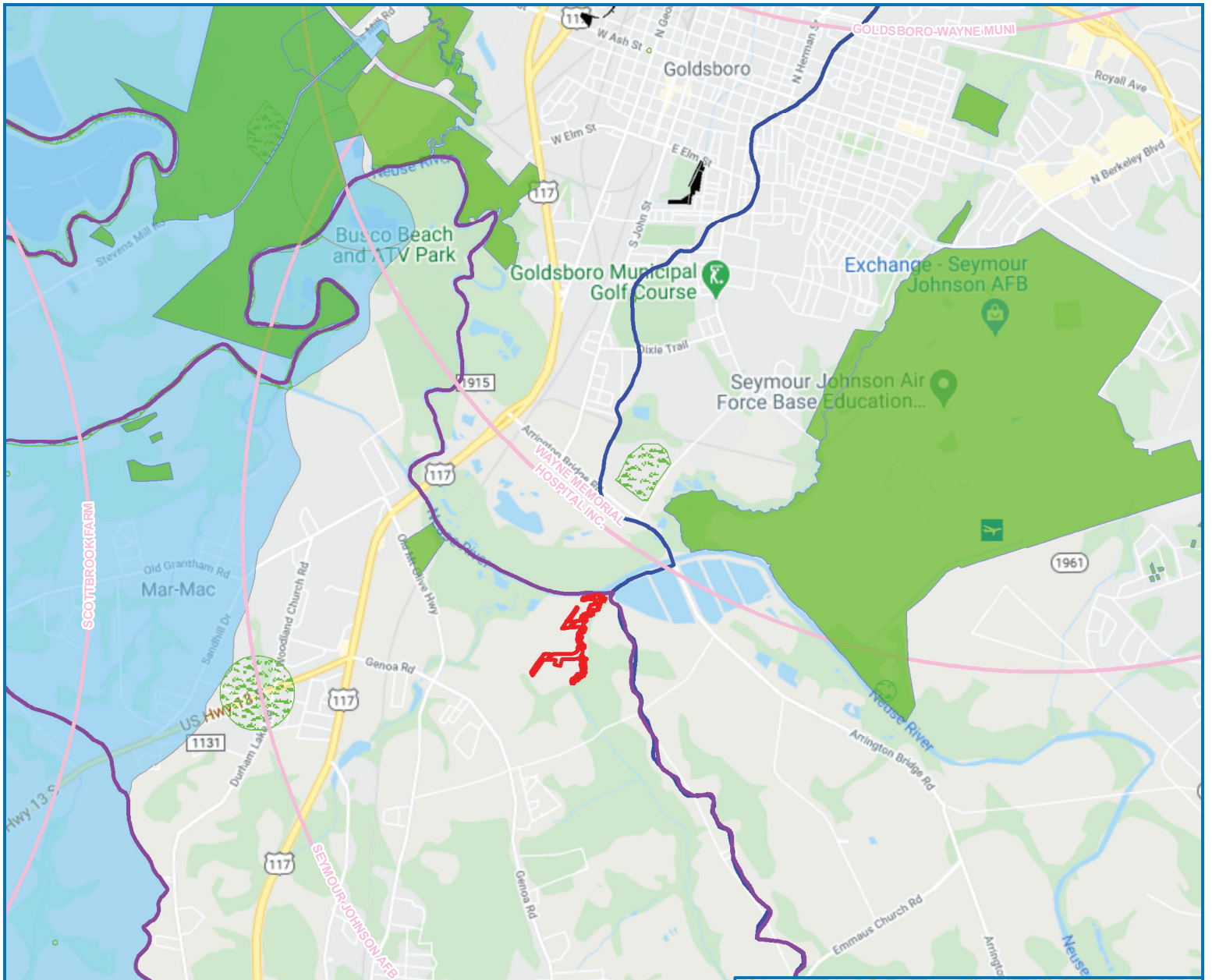
The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, created a tax on the chemical and petroleum industries to clean up abandoned or uncontrolled hazardous waste sites.

As a part of the environmental screening and CERCLA compliance, an EDR Radius Map Report with Geocheck was ordered for the Carraway Bluff Mitigation Project through Environmental Data Resources, Inc (EDR) on February 16, 2021. According to the EDR report, the project property was identified to be within one mile of an underground storage tank incident. This facility was established in 1967 by Hevi-Duty Electric and the polychlorinated biphenyl (PCB) disposal site was approved by NCDEQ in 1976. The disposal area was used to contain PCB-contaminated soil and debris in drums on site, just north of the manufacturing area. After the disposal site was established, transformer oil spills occurred in July of 1981, January 1986, and March 1986. Undocumented, pre-1976 releases are also known to have occurred on site. Site investigations since 1981 have detected PCB-contamination in surface water and soils from on-site culverts and ditches. PCBs have also been identified in on-site groundwater and air. This incident is still undergoing annual inspections, to ensure site compliance.

This incident, although higher in the Neuse watershed, is not within or adjacent to the project area and is not within the drainage area of the Carraway Bluff Mitigation Project. This incident is located just under 1-mile northwest of the Project. Any ground disturbance within the Project has little to no potential for contaminants to enter the site. The summary of the EDR report is enclosed.

In addition to the EDR search, a visual inspection of the Carraway Bluff project area 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 during the visual inspection.

EXHIBITS



Legend

-  Proposed Easement
-  14-Digit HUC - 03020201170060
-  8-Digit HUC - 03020201
-  NC NHP Element Occurrence (NC NHP July 2018)
-  NC DMS Conservation Easement (NCDMS June 2019)
-  Water Supply Watershed
-  Other Managed Area (NC NHP July 2019)
-  5 Mile Aviation Zone
-  Airport

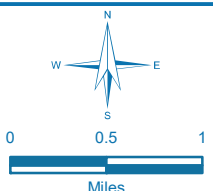
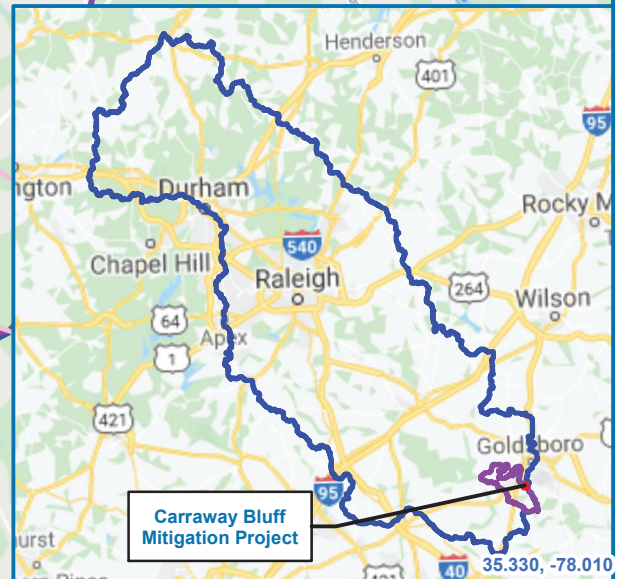
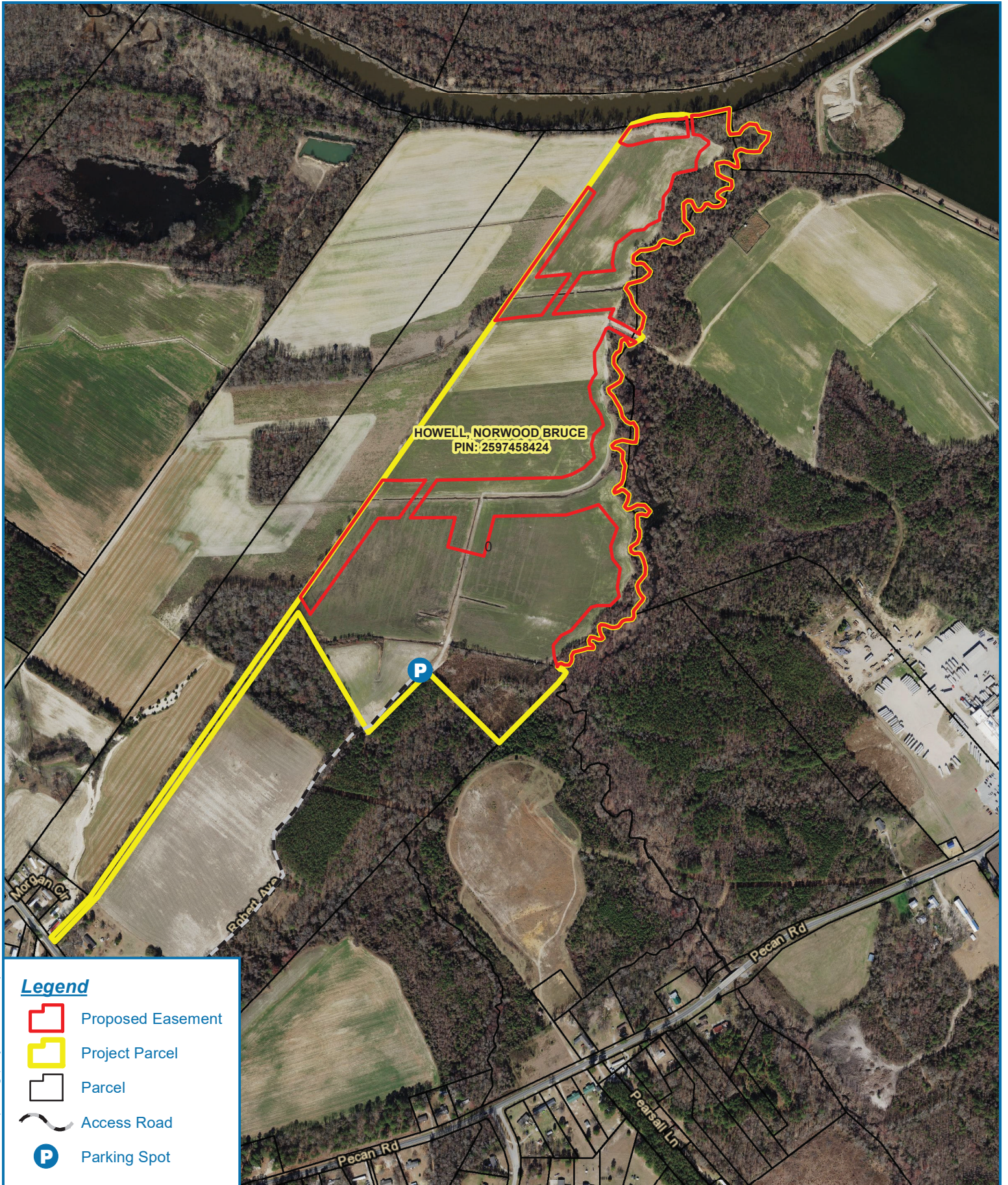


Figure 1 - Project Vicinity
Carraway Bluff Mitigation Project
 Wayne County, North Carolina






Date: 9/11/2020
 Drawn by: EJU
 Checked by: JRM/BPB
 1 inch = 1 miles



Document Path: R:\Registration\Projects\NC\RFPS\2020-09_DMS\RFPS\Carraway Bluff\MXD1 - Proposed\Figure 1 - Project Vicinity - Carraway Bluff.mxd



Legend

-  Proposed Easement
-  Project Parcel
-  Parcel
-  Access Road
-  Parking Spot

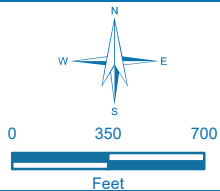


Figure 2 - Parcel Access

Carraway Bluff Mitigation Project

Wayne County, North Carolina

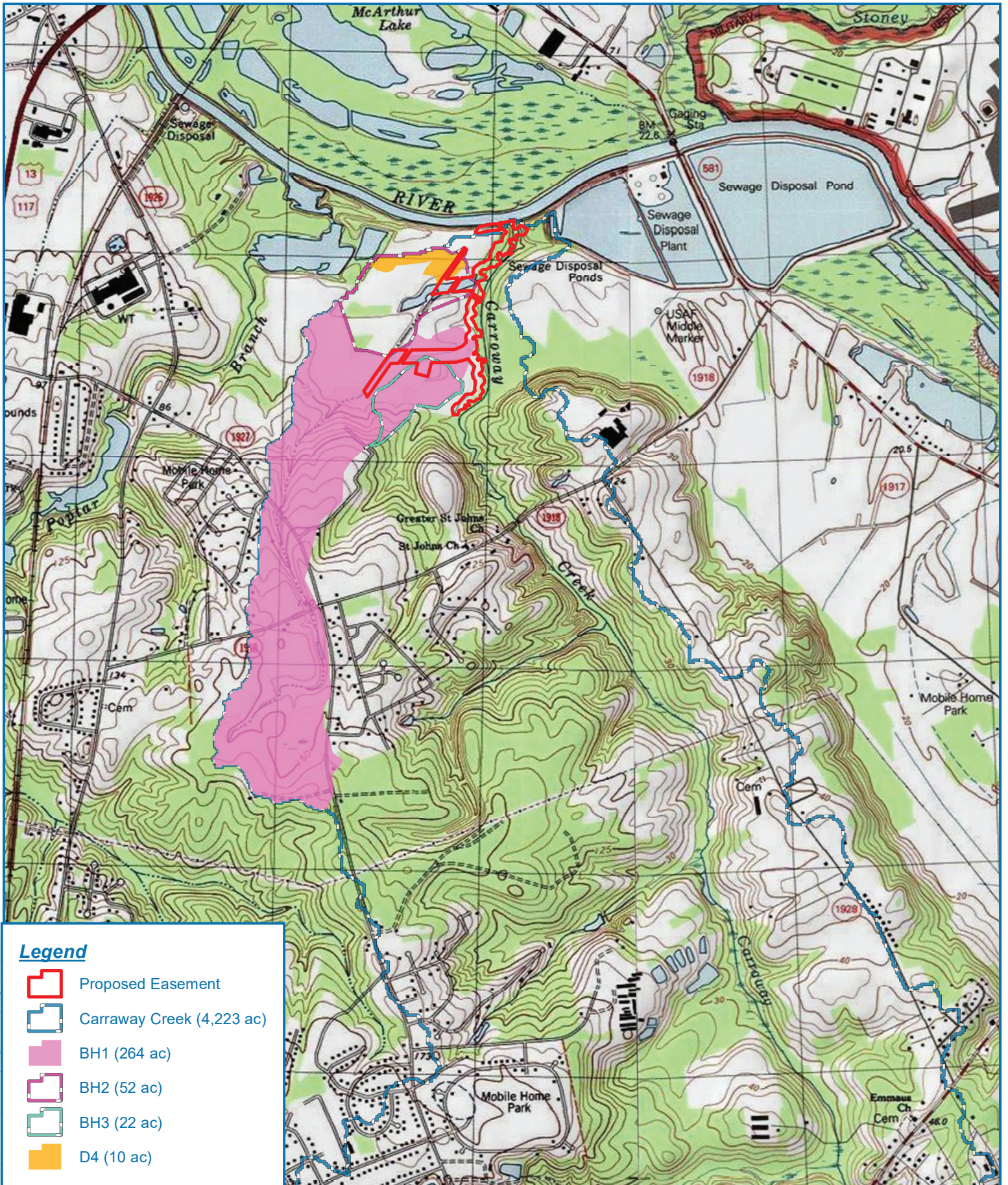
Date: 9/11/2020

Drawn by: EJU







Checked by: JRM/BPB

1 inch = 700 feet





Legend

-  Proposed Easement
-  Carraway Creek (4,223 ac)
-  BH1 (264 ac)
-  BH2 (52 ac)
-  BH3 (22 ac)
-  D4 (10 ac)

**Figure 3a - USGS Quadrangle
Southwest Goldsboro (1976)**

**Carraway Bluff
Mitigation Project**

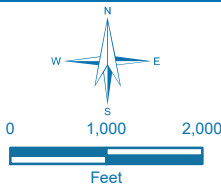
Wayne County, North Carolina

Date: 9/11/2020

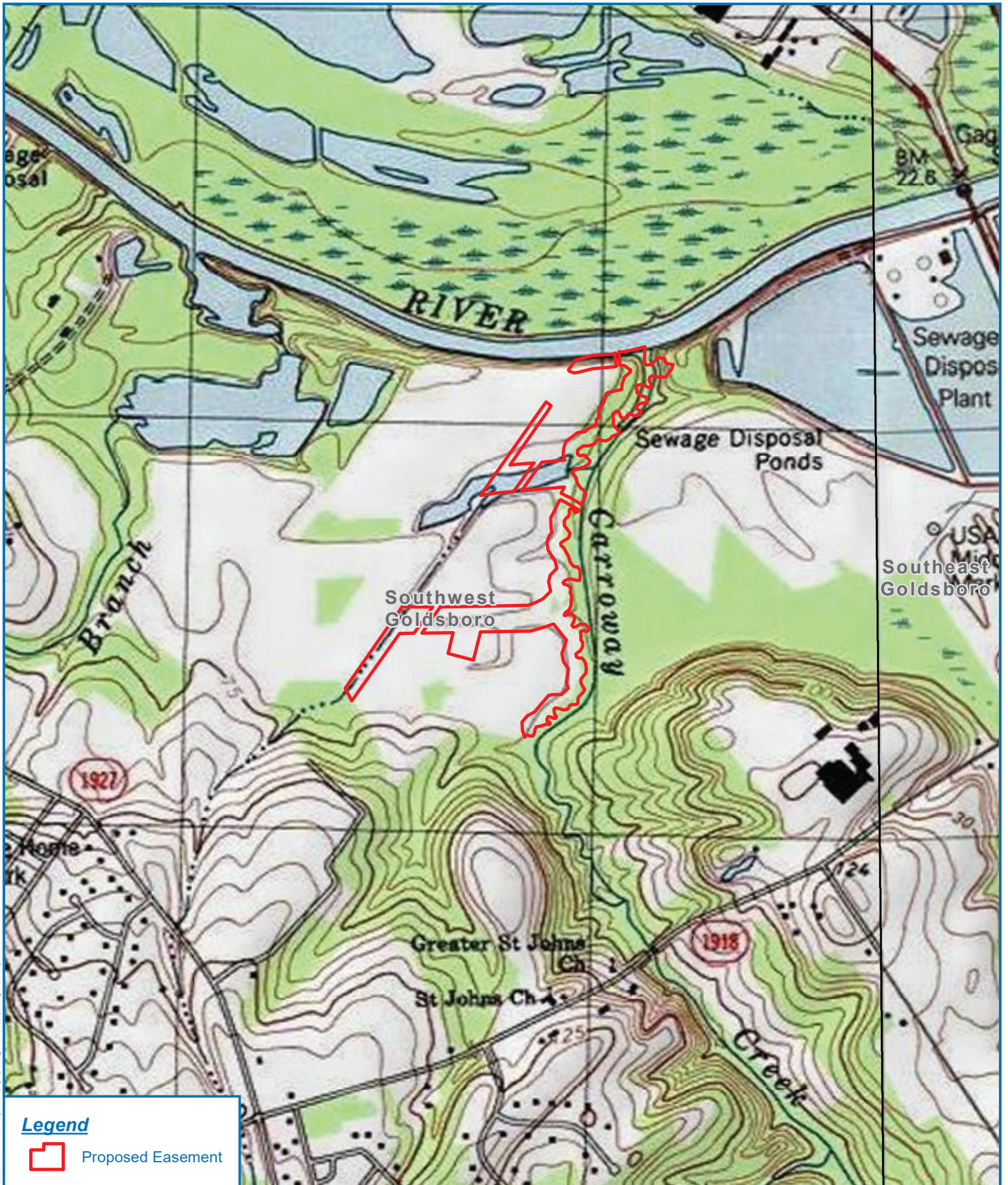
Drawn by: MDE

Checked by: JRM/BPB

1 inch = 2,000 feet



Document Path: R:\RegionalProjects\Projects\NCP\20200919_20201013_SAS\BP\Carraway_BLM\10111_Proposed\Figure 3a_USGS_Quadrangle_SouthwestGoldSboro



Legend

 Proposed Easement

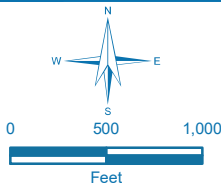


Figure 3b - USGS Quadrangle
Southwest Goldsboro (1976)

Carraway Bluff
Mitigation Project

Wayne County, North Carolina

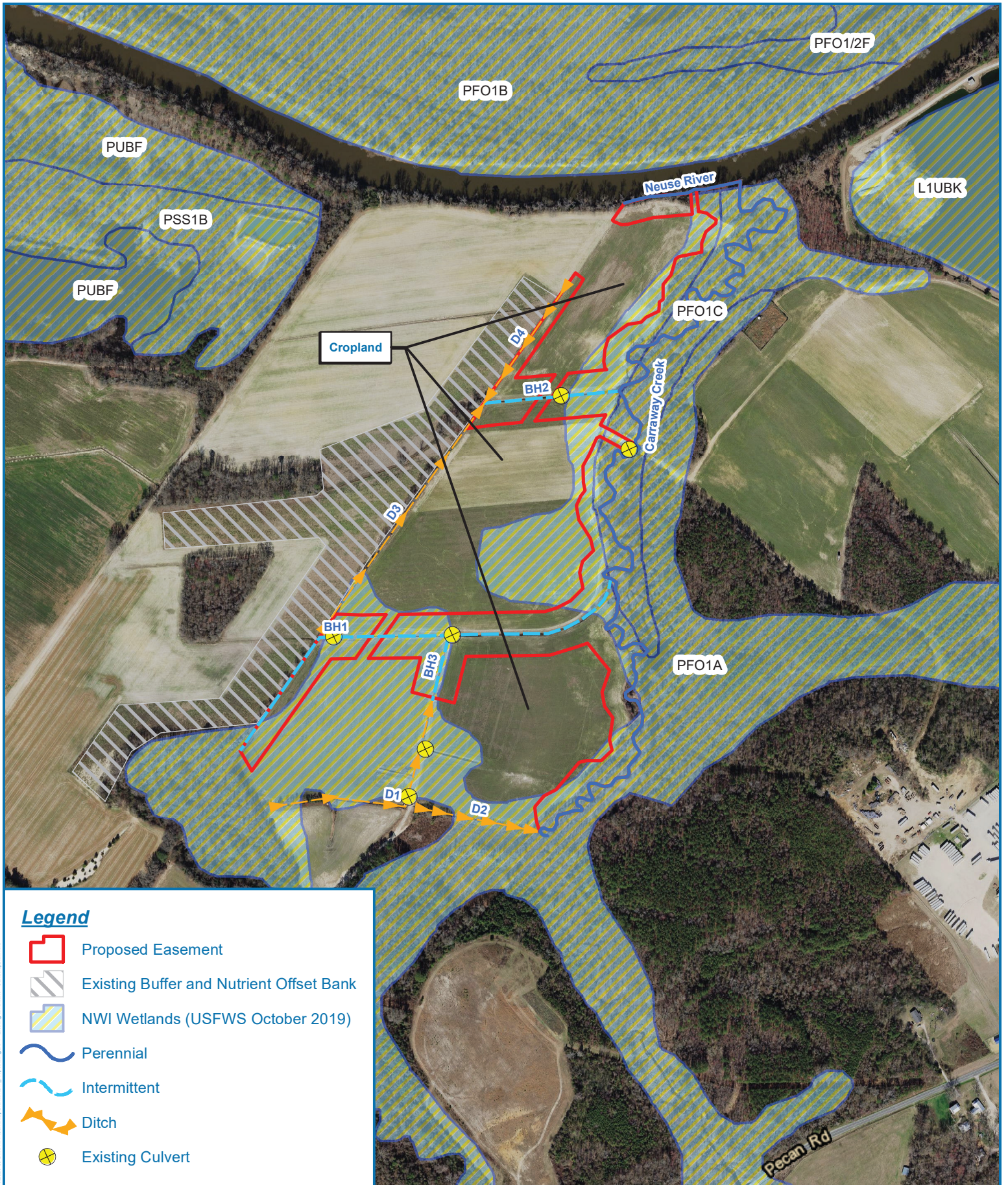
Date: 9/12/2020

Drawn by: EJU

Checked by: JRM/BPB

1 inch = 1,000 feet





Legend

-  Proposed Easement
-  Existing Buffer and Nutrient Offset Bank
-  NWI Wetlands (USFWS October 2019)
-  Perennial
-  Intermittent
-  Ditch
-  Existing Culvert

Figure 4 - Existing Conditions

Carraway Bluff Mitigation Project

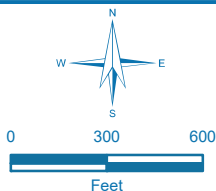
Wayne County, North Carolina

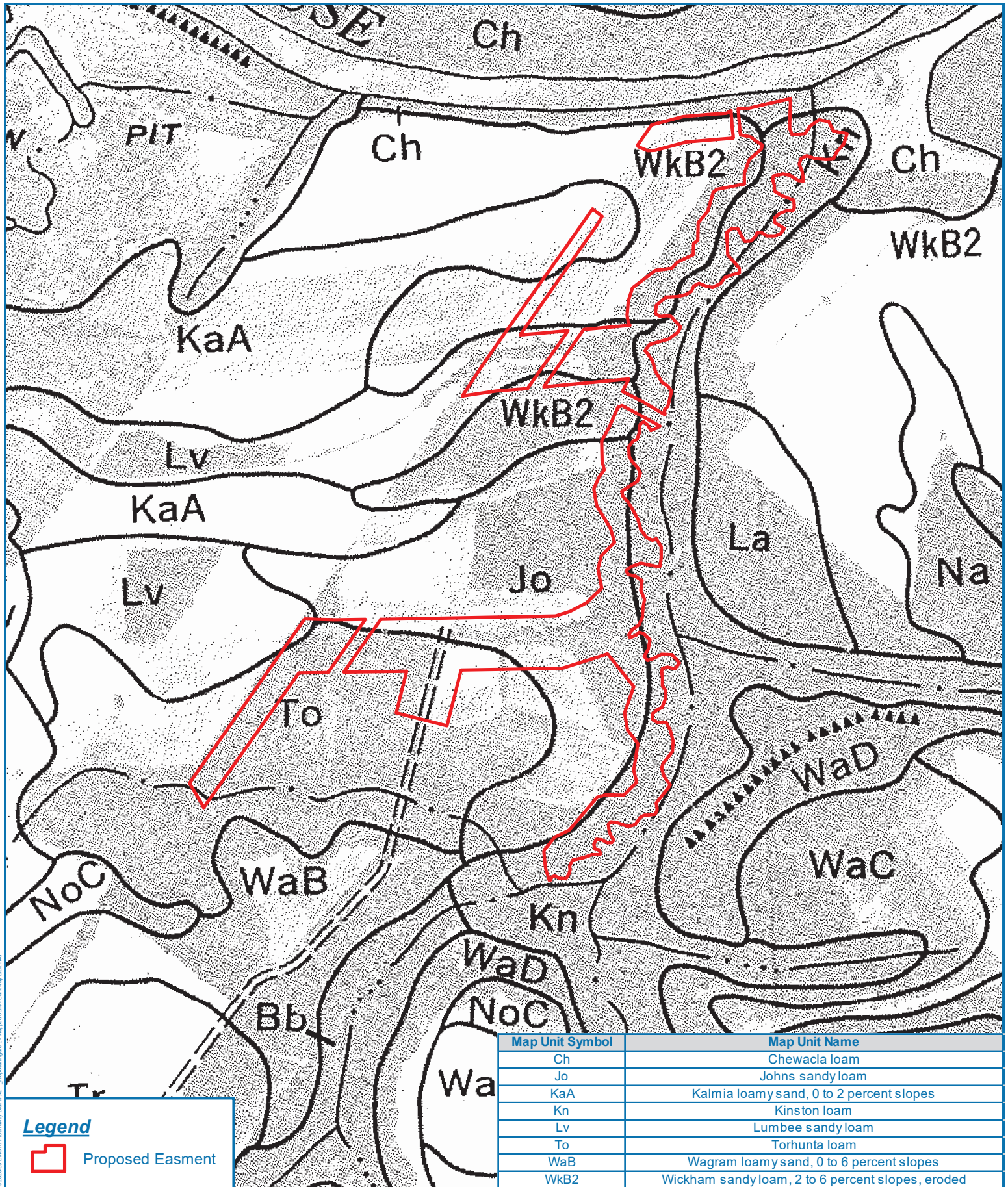
Date: 9/12/2020

Drawn by: EJU

Checked by: JRM/BPB

1 inch = 600 feet





Map Unit Symbol	Map Unit Name
Ch	Chewacla loam
Jo	Johns sandy loam
KaA	Kalmia loamy sand, 0 to 2 percent slopes
Kn	Kinston loam
Lv	Lumbee sandy loam
To	Torhunta loam
WaB	Wagram loamy sand, 0 to 6 percent slopes
WkB2	Wickham sandy loam, 2 to 6 percent slopes, eroded

Legend

 Proposed Easment

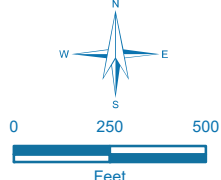


Figure 5 - NRCS Soil Survey (1974)

Carraway Bluff Mitigation Project

Wayne County, North Carolina

Date: 9/11/2020

Drawn by: MDE

Checked by: JRM/BPB

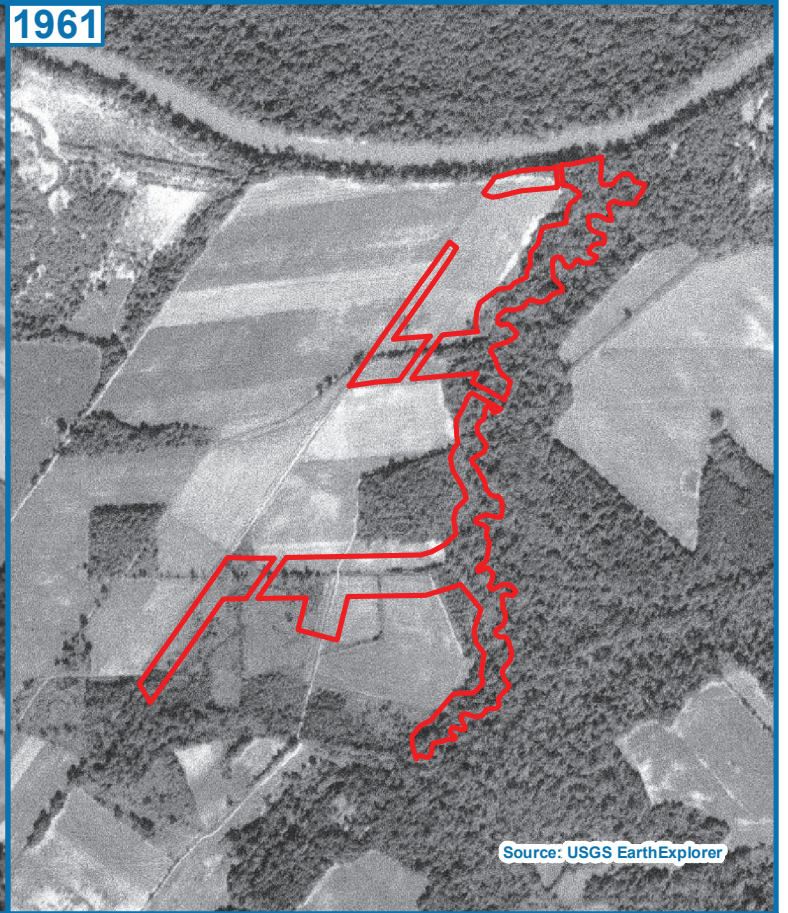
1 inch = 500 feet



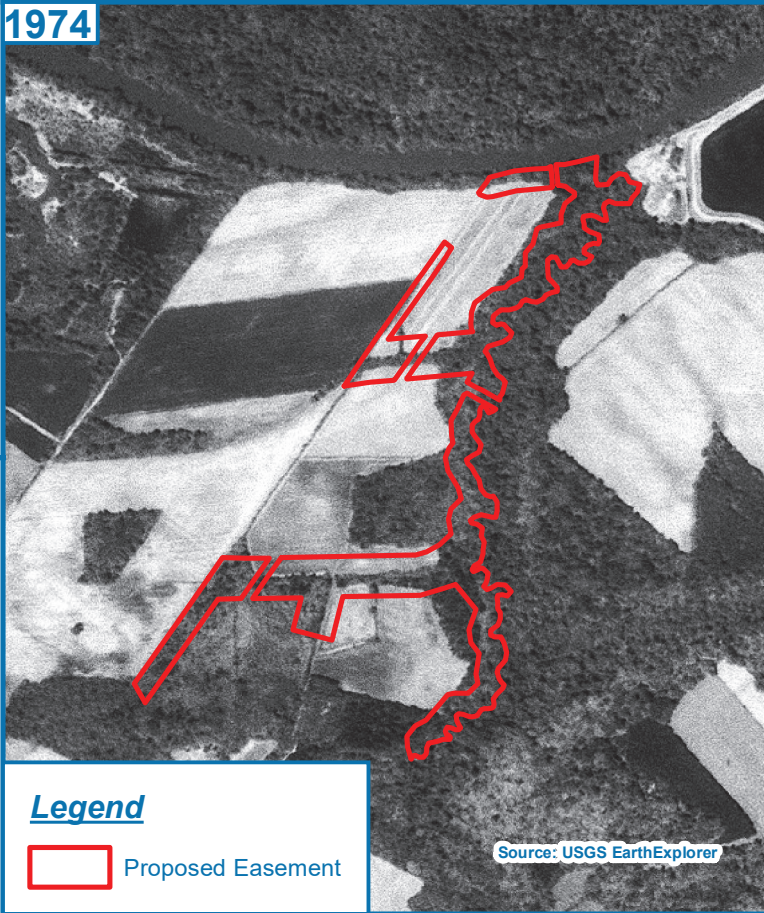
1950



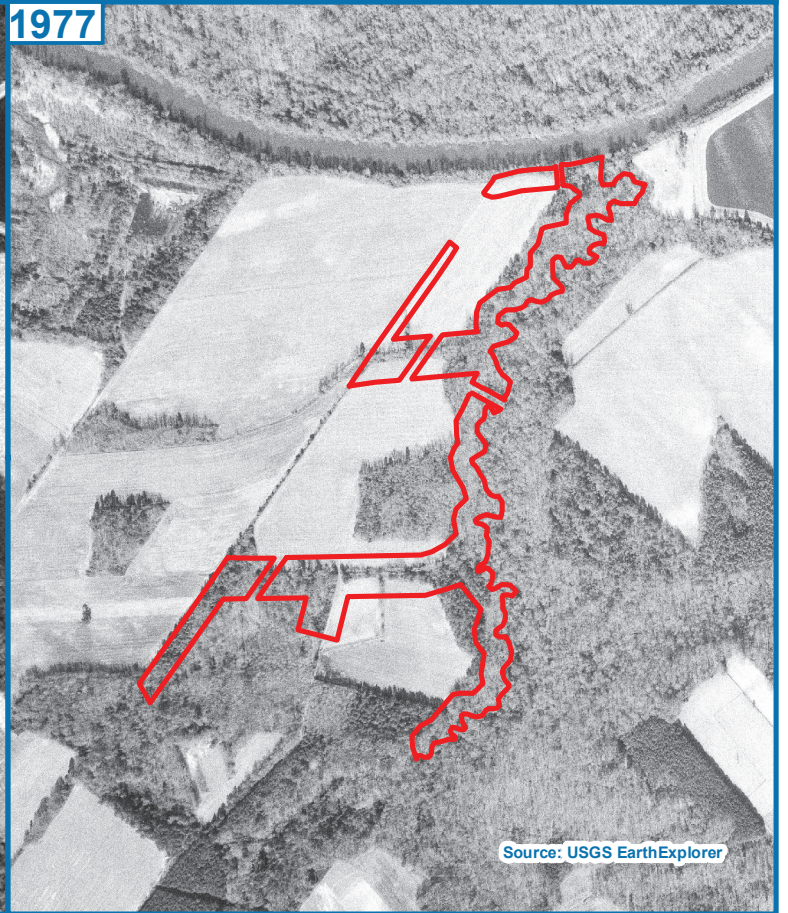
1961



1974



1977



Legend

 Proposed Easement

Source: USGS EarthExplorer

Source: USGS EarthExplorer

Figure 6a - Historical Imagery

Carraway Bluff Mitigation Project

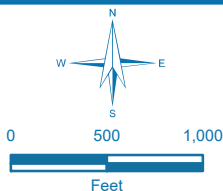
Wayne County, North Carolina

Date: 9/11/2020

Drawn by: GDS

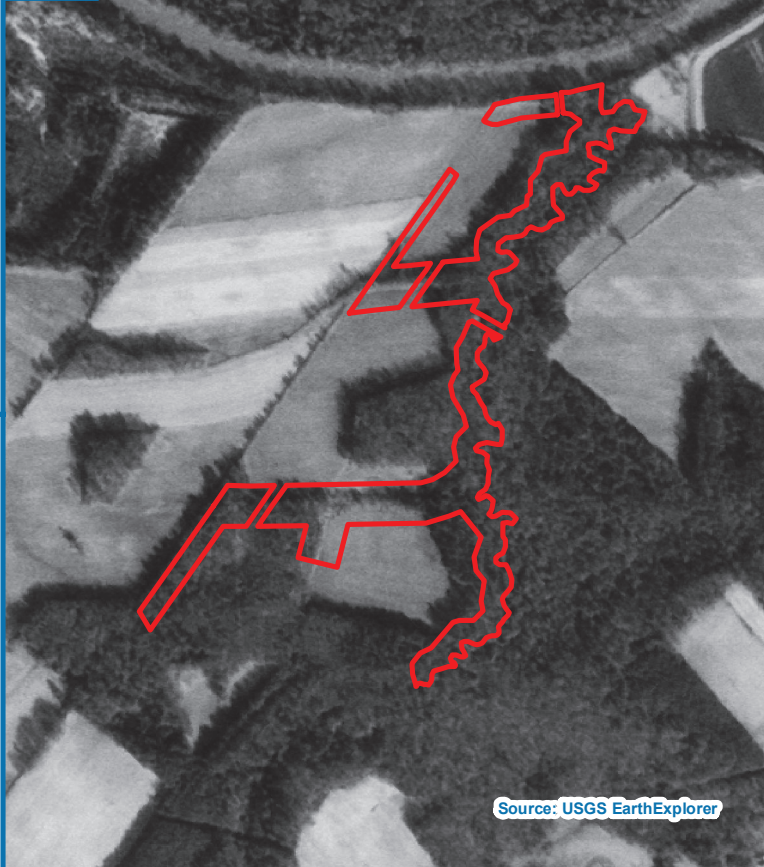
Checked by: MDE

1 inch = 1,000 feet



Document Path: R:\Regulatory\Projects\NCEP\2020\09_DMS_RFP\Carraway Bluff\M011_Proposal\Figure 6a - Historical Imagery_CarrawayBluff.mxd

1980



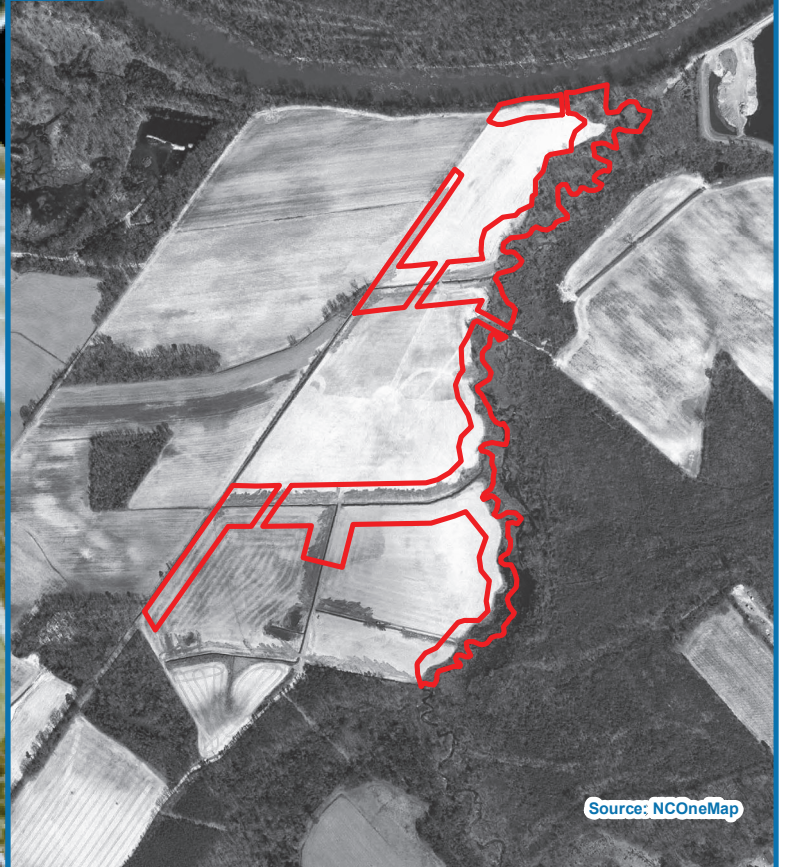
1993



1998



2000



Legend

 Proposed Easement

Source: USGS EarthExplorer

Source: NCOneMap

Figure 6b - Historical Imagery

Carraway Bluff Mitigation Project

Wayne County, North Carolina

Date: 9/11/2020

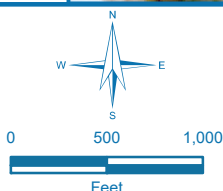
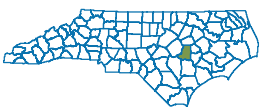
Drawn by: GDS

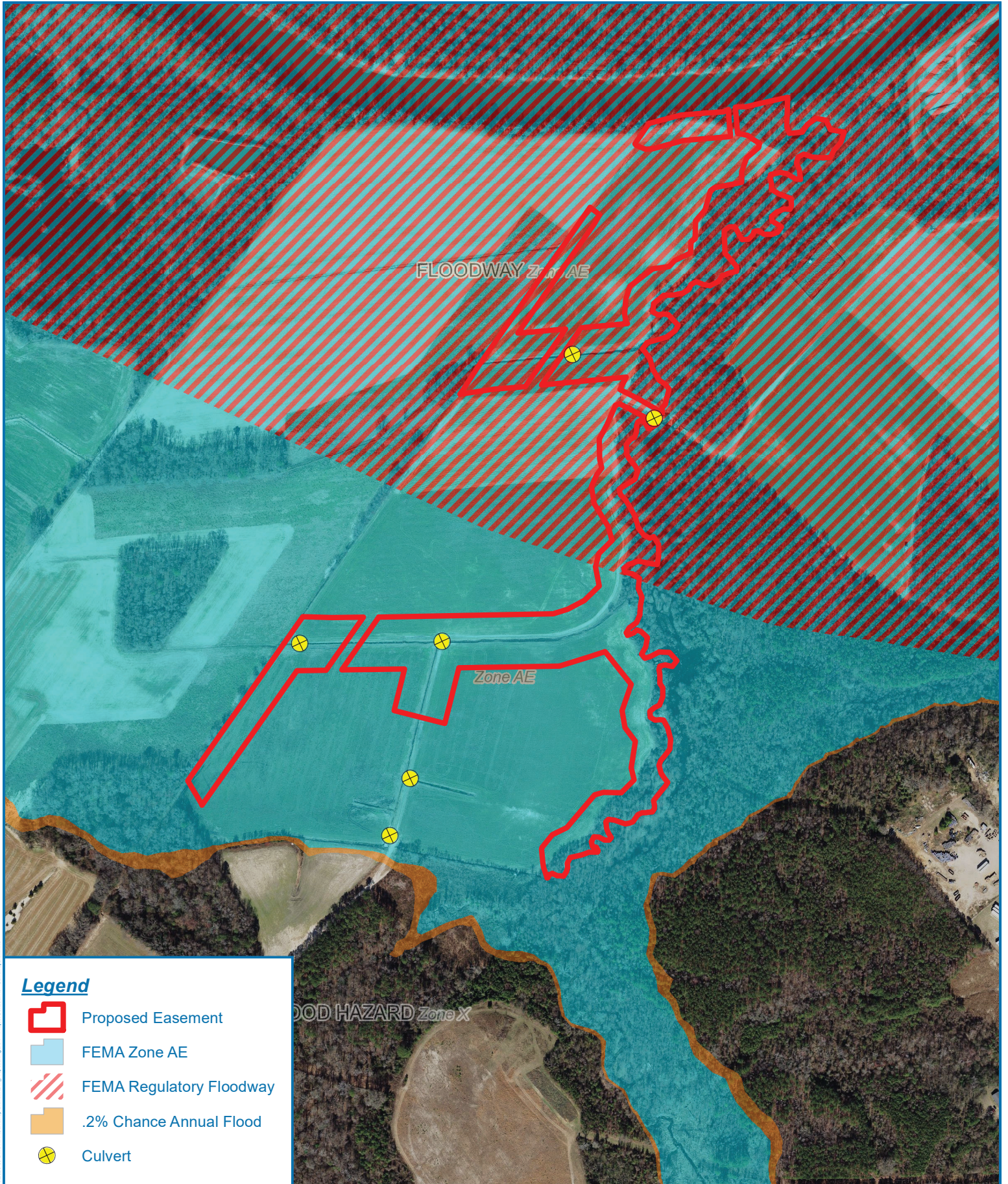
Checked by: MDE

1 inch = 1,000 feet



Document Path: R:\Regulatory\Projects\NCEP\FP3200-00-DMS\RPFCarraway Bluff\M011-Proposed\Figure 06 - Historical Imagery_Carraway.tif.mxd





Legend

-  Proposed Easement
-  FEMA Zone AE
-  FEMA Regulatory Floodway
-  .2% Chance Annual Flood
-  Culvert

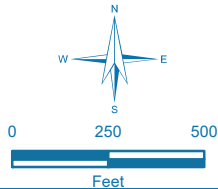


Figure 7 - Project Constraints

Carraway Bluff Mitigation Project

Wayne County, North Carolina

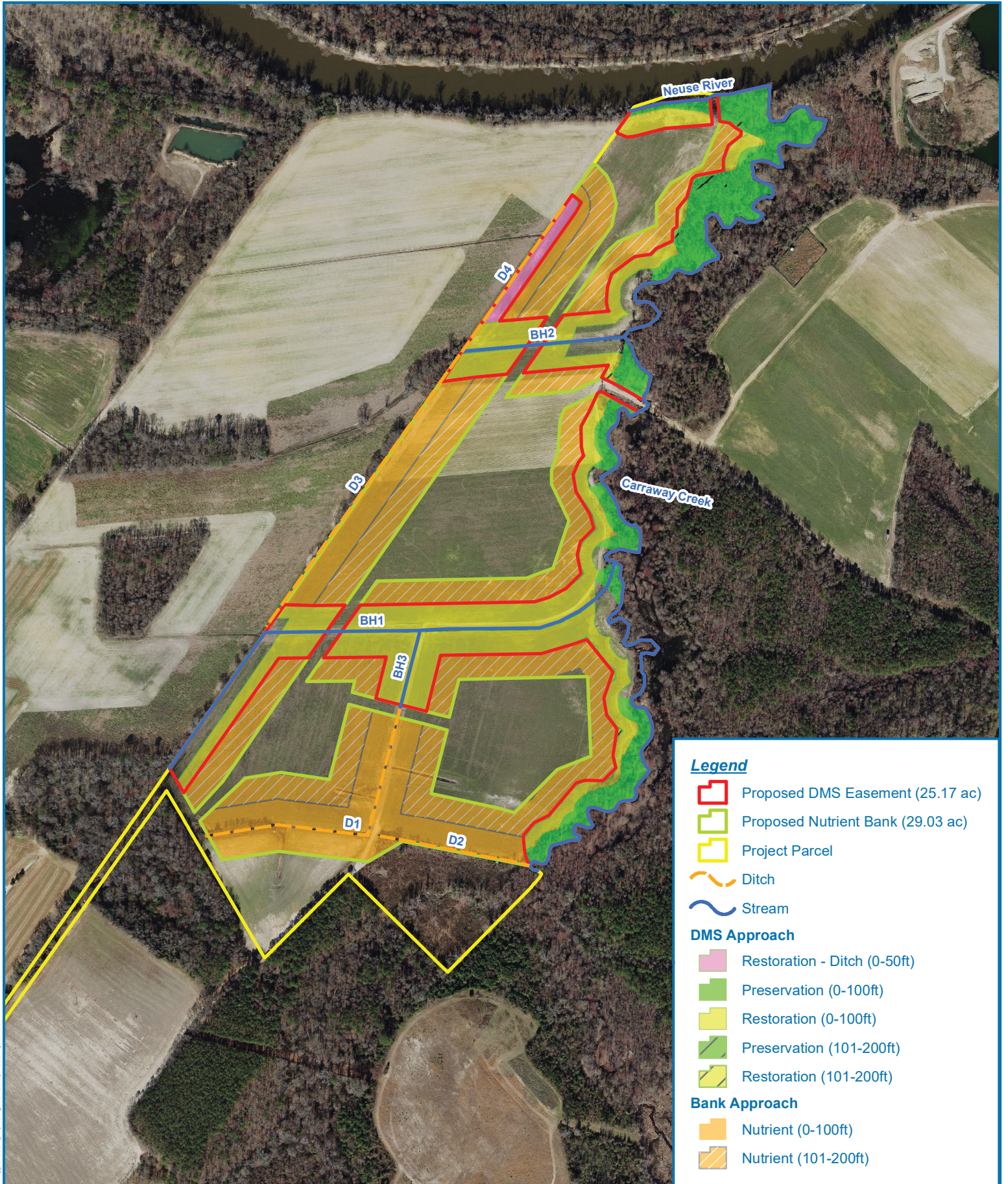
Date: 9/11/2020

Drawn by: EJU

Checked by: JRM/BPB

1 inch = 500 feet





Document Path: R:\RegulatoryProjects\10207_Carraway_Bluff\10207_Carraway_Bluff\10207_Carraway_Bluff\Figure 8 - Concept - CarrawayBluff.mxd

Figure 8 - Conceptual Design

Carraway Bluff Mitigation Project

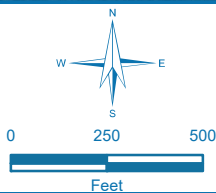
Wayne County, North Carolina

Date: 2/17/2021

Drawn by: MDE

Checked by: BPB

1 inch = 500 feet



USDA FORM AD-1006

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request 2/25/2020			
Name of Project Carraway Bluff Riparian Buffer Project		Federal Agency Involved Federal Highway Admin (FHWA)			
Proposed Land Use Conservation Easement		County and State Wayne County, NC			
PART II (To be completed by NRCS)		Date Request Received By NRCS 3/3/2021		Person Completing Form: Kristin Mav	
Does the site contain Prime, Unique, Statewide or Local Important Farmland? <i>(If no, the FPPA does not apply - do not complete additional parts of this form)</i>		YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	Acres Irrigated None	Average Farm Size 300
Major Crop(s) Corn	Farmable Land In Govt. Jurisdiction Acres: 86.96 % 310,477 ac.		Amount of Farmland As Defined in FPPA Acres: 86.96 % 310,477 ac.		
Name of Land Evaluation System Used Wayne Co. LESA	Name of State or Local Site Assessment System NA		Date Land Evaluation Returned by NRCS 3/15/2021		
PART III (To be completed by Federal Agency)		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly		25.10			
B. Total Acres To Be Converted Indirectly					
C. Total Acres In Site		25.10			
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland		4.3			
B. Total Acres Statewide Important or Local Important Farmland		0			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted		0.0004			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		49.20			
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)		62			
PART VI (To be completed by Federal Agency) Site Assessment Criteria <i>(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)</i>		Maximum Points	Site A	Site B	Site C
1. Area In Non-urban Use		(15)	15		
2. Perimeter In Non-urban Use		(10)	10		
3. Percent Of Site Being Farmed		(20)	12		
4. Protection Provided By State and Local Government		(20)	0		
5. Distance From Urban Built-up Area		(15)	10		
6. Distance To Urban Support Services		(15)	10		
7. Size Of Present Farm Unit Compared To Average		(10)	0		
8. Creation Of Non-farmable Farmland		(10)	10		
9. Availability Of Farm Support Services		(5)	3		
10. On-Farm Investments		(20)	10		
11. Effects Of Conversion On Farm Support Services		(10)	0		
12. Compatibility With Existing Agricultural Use		(10)	0		
TOTAL SITE ASSESSMENT POINTS		160	80	0	0
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100	62	0	0
Total Site Assessment (From Part VI above or local site assessment)		160	80	0	0
TOTAL POINTS (Total of above 2 lines)		260	142	0	0
Site Selected:		Date Of Selection		Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>	
Reason For Selection:					
Name of Federal agency representative completing this form:					Date:

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

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

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

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

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

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

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

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

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

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

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

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

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

EDR REPORT

Carraway Bluff
105 Morgan Circle
Dudley, NC 28333

Inquiry Number: 6368027.2s
February 16, 2021

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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EXECUTIVE SUMMARY

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

TARGET PROPERTY INFORMATION

ADDRESS

105 MORGAN CIRCLE
DUDLEY, NC 28333

COORDINATES

Latitude (North): 35.3283930 - 35° 19' 42.21"
Longitude (West): 78.0103160 - 78° 0' 37.13"
Universal Transverse Mercator: Zone 17
UTM X (Meters): 771766.7
UTM Y (Meters): 3913365.2
Elevation: 65 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5948626 SOUTHWEST GOLDSBORO, NC
Version Date: 2013

East Map: 5945485 SOUTHEAST GOLDSBORO, NC
Version Date: 2013

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140524, 20140525
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:
105 MORGAN CIRCLE
DUDLEY, NC 28333

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
Reg	HEVI DUTY ELECTRIC		NC HSDS	Same	4285, 0.812, WNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

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

DATABASES WITH NO MAPPED SITES

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

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

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

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

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

Federal CERCLIS NFRAP site list

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

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

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

Federal RCRA generators list

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

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System

EXECUTIVE SUMMARY

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

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent CERCLIS

SHWS..... Inactive Hazardous Sites Inventory

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

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

State and tribal leaking storage tank lists

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

State and tribal registered storage tank lists

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

State and tribal institutional control / engineering control registries

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

State and tribal voluntary cleanup sites

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

State and tribal Brownfields sites

BROWNFIELDS..... Brownfields Projects Inventory

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

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

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY..... Recycling Center Listing

EXECUTIVE SUMMARY

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

Local Lists of Hazardous waste / Contaminated Sites

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

Local Land Records

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

Records of Emergency Release Reports

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

Other Ascertainable Records

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

EXECUTIVE SUMMARY

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
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
UXO.....	Unexploded Ordnance Sites
ECHO.....	Enforcement & Compliance History Information
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
AIRS.....	Air Quality Permit Listing
ASBESTOS.....	ASBESTOS
COAL ASH.....	Coal Ash Disposal Sites
DRYCLEANERS.....	Drycleaning Sites
Financial Assurance.....	Financial Assurance Information Listing
NPDES.....	NPDES Facility Location Listing
UIC.....	Underground Injection Wells Listing
AOP.....	Animal Operation Permits Listing
MINES MRDS.....	Mineral Resources Data System
CCB.....	Coal Ash Structural Fills (CCB) Listing
SEPT HAULERS.....	Permitted Septage Haulers Listing
PCSRP.....	Petroleum-Contaminated Soil Remediation Permits

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

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

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

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

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS 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. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

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

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent NPL

NC HSDS: The Hazardous Substance Disposal Sites list contains locations of uncontrolled and unregulated hazardous waste sites. The file contains sites on the national priority list as well as the state priority list. The data source is the North Carolina Center for Geographic Information and Analysis.

A review of the NC HSDS list, as provided by EDR, and dated 08/09/2011 has revealed that there is 1 NC HSDS site within approximately 1 mile of the target property.

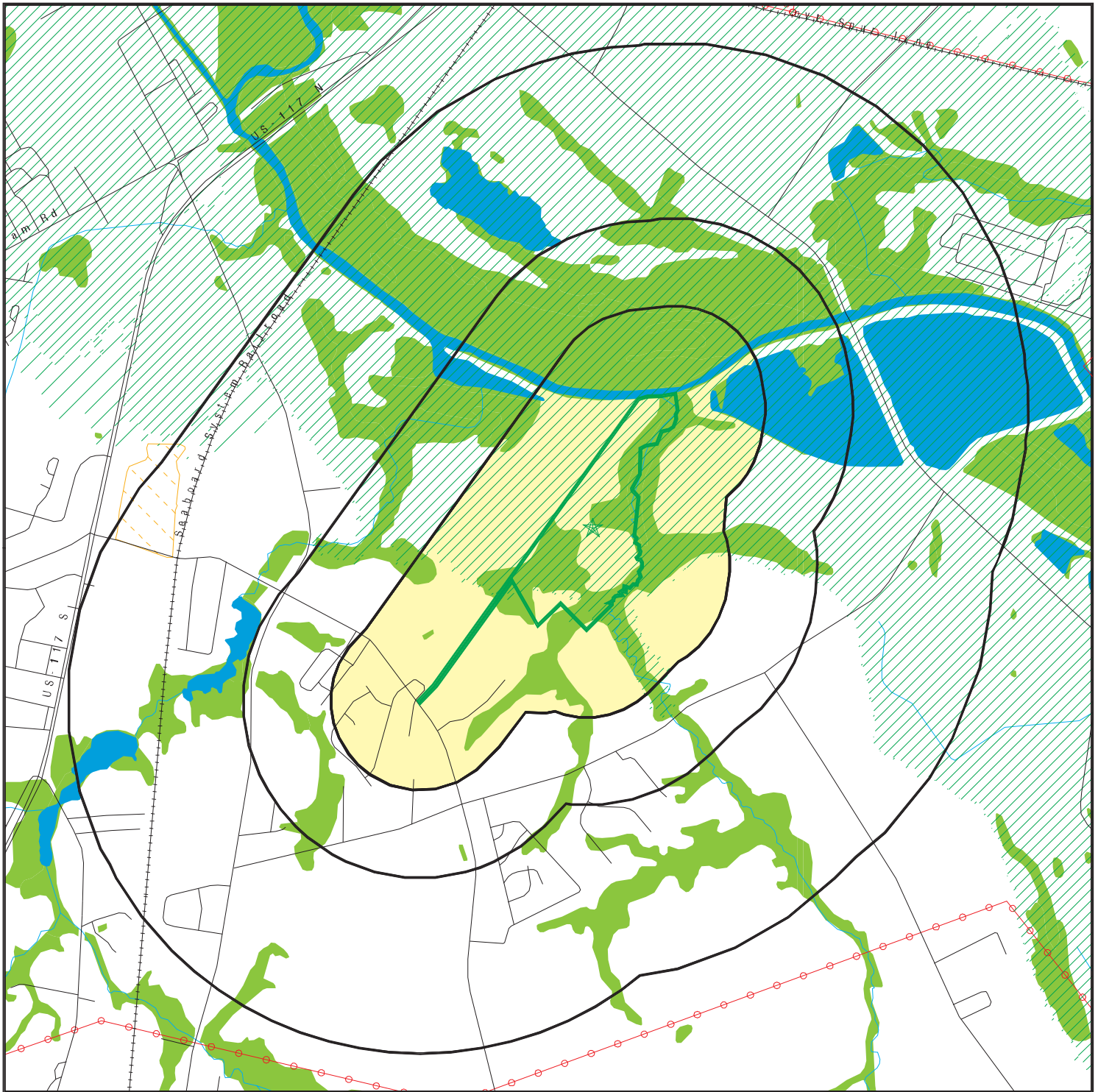
<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
HEVI DUTY ELECTRIC		WNW 1/2 - 1 (0.812 mi.)	0	8

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

<u>Site Name</u>	<u>Database(s)</u>
GA-PACIFIC CORP CHIP-N-SAW	SHWS

OVERVIEW MAP - 6368027.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites



Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Hazardous Substance Disposal Sites










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







SITE NAME: Carraway Bluff
 ADDRESS: 105 Morgan Circle
 Dudley NC 28333
 LAT/LONG: 35.328393 / 78.010316

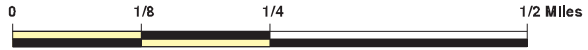
CLIENT: Resource Environmental Solutions, LLC
 CONTACT: Grayson Sanner
 INQUIRY #: 6368027.2s
 DATE: February 16, 2021 8:54 am

DETAIL MAP - 6368027.2S



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

-  Indian Reservations BIA
-  Special Flood Hazard Area (1%)
-  0.2% Annual Chance Flood Hazard
-  National Wetland Inventory
-  State Wetlands
-  Hazardous Substance Disposal Sites



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

SITE NAME: Carraway Bluff
 ADDRESS: 105 Morgan Circle
 Dudley NC 28333
 LAT/LONG: 35.328393 / 78.010316

CLIENT: Resource Environmental Solutions, LLC
 CONTACT: Grayson Sanner
 INQUIRY #: 6368027.2s
 DATE: February 16, 2021 8:55 am

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site list</i>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	0.001		0	NR	NR	NR	NR	0
<i>State- and tribal - equivalent NPL</i>								
NC HSDS	1.000		0	0	0	1	NR	1
<i>State- and tribal - equivalent CERCLIS</i>								
SHWS	1.000		0	0	0	0	NR	0
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500		0	0	0	NR	NR	0
DEBRIS	0.500		0	0	0	NR	NR	0
OLI	0.500		0	0	0	NR	NR	0
LCID	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<i>State and tribal leaking storage tank lists</i>								
LAST	0.500		0	0	0	NR	NR	0
LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
LUST TRUST	0.500		0	0	0	NR	NR	0
<i>State and tribal registered storage tank lists</i>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
<i>State and tribal institutional control / engineering control registries</i>								
INST CONTROL	0.500		0	0	0	NR	NR	0
<i>State and tribal voluntary cleanup sites</i>								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
<i>State and tribal Brownfields sites</i>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<u>ADDITIONAL ENVIRONMENTAL RECORDS</u>								
<i>Local Brownfield lists</i>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Landfill / Solid Waste Disposal Sites</i>								
SWRCY	0.500		0	0	0	NR	NR	0
HIST LF	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Hazardous waste / Contaminated Sites</i>								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
<i>Local Land Records</i>								
LIENS 2	0.001		0	NR	NR	NR	NR	0
<i>Records of Emergency Release Reports</i>								
HMIRS	0.001		0	NR	NR	NR	NR	0
SPILLS	0.001		0	NR	NR	NR	NR	0
IMD	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SPILLS 90	0.001		0	NR	NR	NR	NR	0
SPILLS 80	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
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	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
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	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
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	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
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	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
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	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
AOP	0.001		0	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
CCB	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

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

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HSDS
Region
WNW
1/2-1
4285 ft.

HEVI DUTY ELECTRIC
, NC

NC HSDS **S102442669**
N/A

HSDS:

Name:	HEVI DUTY ELECTRIC
Address:	Not reported
City:	Not reported
Site Type:	1
Superfun Number:	Not reported
Total area in coverage units:	112860.117188
Total perimeter in coverage units:	1474.92492675
X-value coordinate in feet:	2288486.75
Y-value coordinate in feet:	576196.625
Sites designated as superfund cleanup sites:	577
Length of feature in internal units:	1474.92494458
Area of feature in internal units squared:	112860.124859

Count: 1 records.

ORPHAN SUMMARY

<u>City</u>	<u>EDR ID</u>	<u>Site Name</u>	<u>Site Address</u>	<u>Zip</u>	<u>Database(s)</u>
DUDLEY	S105309893	GA-PACIFIC CORP CHIP-N-SAW	OLD MOUNT OLIVE HIGHWAY		SHWS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/30/2020	Source: EPA
Date Data Arrived at EDR: 01/14/2021	Telephone: N/A
Date Made Active in Reports: 02/09/2021	Last EDR Contact: 01/14/2021
Number of Days to Update: 26	Next Scheduled EDR Contact: 04/12/2021
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/30/2020	Source: EPA
Date Data Arrived at EDR: 01/14/2021	Telephone: N/A
Date Made Active in Reports: 02/09/2021	Last EDR Contact: 01/14/2021
Number of Days to Update: 26	Next Scheduled EDR Contact: 04/12/2021
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/30/2020
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 02/09/2021
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 01/14/2021
Next Scheduled EDR Contact: 04/12/2021
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 12/23/2020
Next Scheduled EDR Contact: 04/12/2021
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/28/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 20

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 01/14/2021
Next Scheduled EDR Contact: 04/26/2021
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 10/28/2020	Source: EPA
Date Data Arrived at EDR: 11/05/2020	Telephone: 800-424-9346
Date Made Active in Reports: 11/25/2020	Last EDR Contact: 01/14/2021
Number of Days to Update: 20	Next Scheduled EDR Contact: 04/26/2021
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/14/2020	Source: EPA
Date Data Arrived at EDR: 12/17/2020	Telephone: 800-424-9346
Date Made Active in Reports: 12/22/2020	Last EDR Contact: 12/17/2020
Number of Days to Update: 5	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/14/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/17/2020	Telephone: (404) 562-8651
Date Made Active in Reports: 12/22/2020	Last EDR Contact: 12/17/2020
Number of Days to Update: 5	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/14/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/17/2020	Telephone: (404) 562-8651
Date Made Active in Reports: 12/22/2020	Last EDR Contact: 12/17/2020
Number of Days to Update: 5	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/14/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/17/2020	Telephone: (404) 562-8651
Date Made Active in Reports: 12/22/2020	Last EDR Contact: 12/17/2020
Number of Days to Update: 5	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/14/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/17/2020	Telephone: (404) 562-8651
Date Made Active in Reports: 12/22/2020	Last EDR Contact: 12/17/2020
Number of Days to Update: 5	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 11/11/2020	Source: Department of the Navy
Date Data Arrived at EDR: 11/17/2020	Telephone: 843-820-7326
Date Made Active in Reports: 02/09/2021	Last EDR Contact: 02/08/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/24/2021
	Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 10/28/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/05/2020	Telephone: 703-603-0695
Date Made Active in Reports: 11/18/2020	Last EDR Contact: 11/05/2020
Number of Days to Update: 13	Next Scheduled EDR Contact: 03/08/2021
	Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 10/28/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/05/2020	Telephone: 703-603-0695
Date Made Active in Reports: 11/18/2020	Last EDR Contact: 11/05/2020
Number of Days to Update: 13	Next Scheduled EDR Contact: 03/08/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/14/2020
Date Data Arrived at EDR: 12/15/2020
Date Made Active in Reports: 12/22/2020
Number of Days to Update: 7

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 12/15/2020
Next Scheduled EDR Contact: 04/05/2021
Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

HSDS: Hazardous Substance Disposal Site

Locations of uncontrolled and unregulated hazardous waste sites. The file includes sites on the National Priority List as well as those on the state priority list.

Date of Government Version: 08/09/2011
Date Data Arrived at EDR: 11/08/2011
Date Made Active in Reports: 12/05/2011
Number of Days to Update: 27

Source: North Carolina Center for Geographic Information and Analysis
Telephone: 919-754-6580
Last EDR Contact: 01/19/2021
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: No Update Planned

State- and tribal - equivalent CERCLIS

SHWS: Inactive Hazardous Sites Inventory

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 09/04/2020
Date Data Arrived at EDR: 09/09/2020
Date Made Active in Reports: 12/03/2020
Number of Days to Update: 85

Source: Department of Environment, Health and Natural Resources
Telephone: 919-508-8400
Last EDR Contact: 12/08/2020
Next Scheduled EDR Contact: 03/22/2021
Data Release Frequency: Quarterly

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

SWF/LF: List of Solid Waste Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/10/2020
Date Data Arrived at EDR: 09/23/2020
Date Made Active in Reports: 12/14/2020
Number of Days to Update: 82

Source: Department of Environment and Natural Resources
Telephone: 919-733-0692
Last EDR Contact: 12/23/2020
Next Scheduled EDR Contact: 04/05/2021
Data Release Frequency: Varies

OLI: Old Landfill Inventory

Old landfill inventory location information. (Does not include no further action sites and other agency lead sites).

Date of Government Version: 09/11/2020
Date Data Arrived at EDR: 10/09/2020
Date Made Active in Reports: 12/30/2020
Number of Days to Update: 82

Source: Department of Environment & Natural Resources
Telephone: 919-733-4996
Last EDR Contact: 01/08/2021
Next Scheduled EDR Contact: 04/19/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DEBRIS: Solid Waste Active Disaster Debris Sites Listing

NCDEQ Division of Waste Management Solid Waste Section Temporary Disaster Debris Staging Site (TDDSS) Locations which are available to be activated in a disaster or emergency.. Disaster Debris Sites can only be used for temporary disaster debris storage if the site's responsible party activates the site for use by notifying the NCDEQ DWM Solid Waste Section staff during an emergency

Date of Government Version: 09/02/2020	Source: Department of Environmental Quality
Date Data Arrived at EDR: 09/16/2020	Telephone: 919-707-8247
Date Made Active in Reports: 12/08/2020	Last EDR Contact: 12/14/2020
Number of Days to Update: 83	Next Scheduled EDR Contact: 03/29/2021
	Data Release Frequency: Varies

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

A list all of the Land-Clearing and Inert Debris (LCID) Landfill Notification facilities (under 2 acres in size) in North Carolina.

Date of Government Version: 04/30/2020	Source: Department of Environmental Quality
Date Data Arrived at EDR: 07/09/2020	Telephone: 919-707-8248
Date Made Active in Reports: 09/23/2020	Last EDR Contact: 01/08/2021
Number of Days to Update: 76	Next Scheduled EDR Contact: 04/19/2021
	Data Release Frequency: Varies

State and tribal leaking storage tank lists

LAST: Leaking Aboveground Storage Tanks

A listing of leaking aboveground storage tank site locations.

Date of Government Version: 10/30/2020	Source: Department of Environment & Natural Resources
Date Data Arrived at EDR: 11/03/2020	Telephone: 877-623-6748
Date Made Active in Reports: 01/22/2021	Last EDR Contact: 02/03/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/17/2021
	Data Release Frequency: Quarterly

LUST: Regional UST Database

This database contains information obtained from the Regional Offices. It provides a more detailed explanation of current and historic activity for individual sites, as well as what was previously found in the Incident Management Database. Sites in this database with Incident Numbers are considered LUSTs.

Date of Government Version: 10/30/2020	Source: Department of Environment and Natural Resources
Date Data Arrived at EDR: 11/03/2020	Telephone: 919-707-8200
Date Made Active in Reports: 11/18/2020	Last EDR Contact: 02/03/2021
Number of Days to Update: 15	Next Scheduled EDR Contact: 05/17/2021
	Data Release Frequency: Quarterly

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/14/2020	Source: EPA, Region 5
Date Data Arrived at EDR: 05/20/2020	Telephone: 312-886-7439
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/29/2020	Source: EPA Region 1
Date Data Arrived at EDR: 05/20/2020	Telephone: 617-918-1313
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/14/2020	Source: EPA Region 10
Date Data Arrived at EDR: 05/20/2020	Telephone: 206-553-2857
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/15/2020	Source: EPA Region 7
Date Data Arrived at EDR: 05/20/2020	Telephone: 913-551-7003
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/08/2020	Source: EPA Region 6
Date Data Arrived at EDR: 05/20/2020	Telephone: 214-665-6597
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/14/2020	Source: EPA Region 8
Date Data Arrived at EDR: 05/20/2020	Telephone: 303-312-6271
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 04/14/2020	Source: EPA Region 4
Date Data Arrived at EDR: 05/26/2020	Telephone: 404-562-8677
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 78	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/08/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/20/2020	Telephone: 415-972-3372
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

LUST TRUST: State Trust Fund Database

This database contains information about claims against the State Trust Funds for reimbursements for expenses incurred while remediating Leaking USTs.

Date of Government Version: 10/02/2020	Source: Department of Environment and Natural Resources
Date Data Arrived at EDR: 10/07/2020	Telephone: 919-733-1315
Date Made Active in Reports: 12/31/2020	Last EDR Contact: 01/06/2021
Number of Days to Update: 85	Next Scheduled EDR Contact: 04/19/2021
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 07/21/2020	Source: FEMA
Date Data Arrived at EDR: 09/03/2020	Telephone: 202-646-5797
Date Made Active in Reports: 11/25/2020	Last EDR Contact: 01/04/2021
Number of Days to Update: 83	Next Scheduled EDR Contact: 04/19/2021
	Data Release Frequency: Varies

UST: Petroleum Underground Storage Tank Database

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 10/30/2020	Source: Department of Environment and Natural Resources
Date Data Arrived at EDR: 11/04/2020	Telephone: 919-733-1308
Date Made Active in Reports: 12/31/2020	Last EDR Contact: 02/03/2021
Number of Days to Update: 57	Next Scheduled EDR Contact: 05/17/2021
	Data Release Frequency: Quarterly

AST: AST Database

Facilities with aboveground storage tanks that have a capacity greater than 21,000 gallons.

Date of Government Version: 08/12/2020	Source: Department of Environment and Natural Resources
Date Data Arrived at EDR: 09/15/2020	Telephone: 919-715-6183
Date Made Active in Reports: 12/07/2020	Last EDR Contact: 12/09/2020
Number of Days to Update: 83	Next Scheduled EDR Contact: 03/29/2021
	Data Release Frequency: Semi-Annually

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 04/14/2020	Source: EPA Region 4
Date Data Arrived at EDR: 05/26/2020	Telephone: 404-562-9424
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 78	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/14/2020	Source: EPA Region 10
Date Data Arrived at EDR: 05/20/2020	Telephone: 206-553-2857
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/15/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/08/2020	Source: EPA Region 6
Date Data Arrived at EDR: 05/20/2020	Telephone: 214-665-7591
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/03/2020	Source: EPA Region 7
Date Data Arrived at EDR: 05/20/2020	Telephone: 913-551-7003
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/29/2020	Source: EPA, Region 1
Date Data Arrived at EDR: 05/20/2020	Telephone: 617-918-1313
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/14/2020	Source: EPA Region 8
Date Data Arrived at EDR: 05/20/2020	Telephone: 303-312-6137
Date Made Active in Reports: 08/13/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 85	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/08/2020	Source: EPA Region 9
Date Data Arrived at EDR: 05/20/2020	Telephone: 415-972-3368
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/14/2020	Source: EPA Region 5
Date Data Arrived at EDR: 05/20/2020	Telephone: 312-886-6136
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 12/16/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

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

A land use restricted site is a property where there are limits or requirements on future use of the property due to varying levels of cleanup possible, practical, or necessary at the site.

Date of Government Version: 09/04/2020	Source: Department of Environmental Quality
Date Data Arrived at EDR: 09/09/2020	Telephone: 919-508-8400
Date Made Active in Reports: 12/03/2020	Last EDR Contact: 12/11/2020
Number of Days to Update: 85	Next Scheduled EDR Contact: 03/22/2021
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 12/15/2020
Number of Days to Update: 142	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

VCP: Responsible Party Voluntary Action Sites

Responsible Party Voluntary Action site locations.

Date of Government Version: 09/04/2020	Source: Department of Environment and Natural Resources
Date Data Arrived at EDR: 09/09/2020	Telephone: 919-508-8400
Date Made Active in Reports: 12/03/2020	Last EDR Contact: 12/08/2020
Number of Days to Update: 85	Next Scheduled EDR Contact: 03/22/2021
	Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Projects Inventory

A brownfield site is an abandoned, idled, or underused property where the threat of environmental contamination has hindered its redevelopment. All of the sites in the inventory are working toward a brownfield agreement for cleanup and liability control.

Date of Government Version: 12/01/2020	Source: Department of Environment and Natural Resources
Date Data Arrived at EDR: 12/08/2020	Telephone: 919-733-4996
Date Made Active in Reports: 12/09/2020	Last EDR Contact: 12/08/2020
Number of Days to Update: 1	Next Scheduled EDR Contact: 04/12/2021
	Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 09/14/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/15/2020	Telephone: 202-566-2777
Date Made Active in Reports: 12/10/2020	Last EDR Contact: 12/11/2020
Number of Days to Update: 86	Next Scheduled EDR Contact: 03/29/2021
	Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Lists of Landfill / Solid Waste Disposal Sites

HIST LF: Solid Waste Facility Listing

A listing of solid waste facilities.

Date of Government Version: 11/06/2006
Date Data Arrived at EDR: 02/13/2007
Date Made Active in Reports: 03/02/2007
Number of Days to Update: 17

Source: Department of Environment & Natural Resources
Telephone: 919-733-0692
Last EDR Contact: 01/19/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWRCY: Recycling Center Listing

A listing of recycling center locations.

Date of Government Version: 09/16/2020
Date Data Arrived at EDR: 09/17/2020
Date Made Active in Reports: 12/09/2020
Number of Days to Update: 83

Source: Department of Environment & Natural Resources
Telephone: 919-707-8137
Last EDR Contact: 01/25/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 01/25/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/19/2021
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 01/29/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 03/18/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/16/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 03/18/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/16/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Quarterly

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 10/28/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 20

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 01/14/2021
Next Scheduled EDR Contact: 04/12/2021
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/20/2020
Date Data Arrived at EDR: 09/22/2020
Date Made Active in Reports: 12/14/2020
Number of Days to Update: 83

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 12/17/2020
Next Scheduled EDR Contact: 04/05/2021
Data Release Frequency: Quarterly

SPILLS: Spills Incident Listing

A listing spills, hazardous material releases, sanitary sewer overflows, wastewater treatment plant bypasses and upsets, citizen complaints, and any other environmental emergency calls reported to the agency.

Date of Government Version: 10/09/2020
Date Data Arrived at EDR: 10/22/2020
Date Made Active in Reports: 01/14/2021
Number of Days to Update: 84

Source: Department of Environment & Natural Resources
Telephone: 919-807-6308
Last EDR Contact: 01/11/2021
Next Scheduled EDR Contact: 03/22/2021
Data Release Frequency: Quarterly

IMD: Incident Management Database

Groundwater and/or soil contamination incidents

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/30/2020
Date Data Arrived at EDR: 11/03/2020
Date Made Active in Reports: 01/21/2021
Number of Days to Update: 79

Source: Department of Environment and Natural Resources
Telephone: 877-623-6748
Last EDR Contact: 02/03/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: No Update Planned

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 09/27/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/06/2013
Number of Days to Update: 62

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SPILLS 80: SPILLS80 data from FirstSearch

Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 06/14/2001
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/06/2013
Number of Days to Update: 62

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

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

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/14/2020
Date Data Arrived at EDR: 12/17/2020
Date Made Active in Reports: 12/22/2020
Number of Days to Update: 5

Source: Environmental Protection Agency
Telephone: (404) 562-8651
Last EDR Contact: 12/17/2020
Next Scheduled EDR Contact: 04/05/2021
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 09/29/2020
Date Data Arrived at EDR: 11/17/2020
Date Made Active in Reports: 01/25/2021
Number of Days to Update: 69

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 11/17/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 01/15/2021
Next Scheduled EDR Contact: 04/26/2021
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018	Source: U.S. Geological Survey
Date Data Arrived at EDR: 04/11/2018	Telephone: 888-275-8747
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 01/07/2021
Number of Days to Update: 574	Next Scheduled EDR Contact: 04/19/2021
	Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/03/2017	Telephone: 615-532-8599
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 02/09/2021
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/24/2021
	Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/21/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/22/2020	Telephone: 202-566-1917
Date Made Active in Reports: 12/14/2020	Last EDR Contact: 12/17/2020
Number of Days to Update: 83	Next Scheduled EDR Contact: 04/05/2021
	Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2014	Telephone: 617-520-3000
Date Made Active in Reports: 06/17/2014	Last EDR Contact: 02/02/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 05/17/2021
	Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/08/2018	Telephone: 703-308-4044
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 02/05/2021
Number of Days to Update: 73	Next Scheduled EDR Contact: 05/17/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016	Source: EPA
Date Data Arrived at EDR: 06/17/2020	Telephone: 202-260-5521
Date Made Active in Reports: 09/10/2020	Last EDR Contact: 12/18/2020
Number of Days to Update: 85	Next Scheduled EDR Contact: 03/29/2021
	Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018	Source: EPA
Date Data Arrived at EDR: 08/14/2020	Telephone: 202-566-0250
Date Made Active in Reports: 11/04/2020	Last EDR Contact: 02/02/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 03/01/2021
	Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 10/19/2020	Source: EPA
Date Data Arrived at EDR: 10/19/2020	Telephone: 202-564-4203
Date Made Active in Reports: 01/04/2021	Last EDR Contact: 01/21/2021
Number of Days to Update: 77	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 10/28/2020	Source: EPA
Date Data Arrived at EDR: 11/05/2020	Telephone: 703-416-0223
Date Made Active in Reports: 11/25/2020	Last EDR Contact: 01/14/2021
Number of Days to Update: 20	Next Scheduled EDR Contact: 03/15/2021
	Data Release Frequency: Annually

RMP: Risk Management Plans

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/02/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/12/2020	Telephone: 202-564-8600
Date Made Active in Reports: 01/25/2021	Last EDR Contact: 01/19/2021
Number of Days to Update: 74	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/27/2020	Source: EPA
Date Data Arrived at EDR: 05/06/2020	Telephone: 202-564-6023
Date Made Active in Reports: 06/09/2020	Last EDR Contact: 01/14/2021
Number of Days to Update: 34	Next Scheduled EDR Contact: 05/17/2021
	Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 10/09/2019	Source: EPA
Date Data Arrived at EDR: 10/11/2019	Telephone: 202-566-0500
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 01/08/2021
Number of Days to Update: 70	Next Scheduled EDR Contact: 04/19/2021
	Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 12/30/2020
Number of Days to Update: 79	Next Scheduled EDR Contact: 04/19/2021
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/05/2020	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 08/10/2020	Telephone: 301-415-7169
Date Made Active in Reports: 10/08/2020	Last EDR Contact: 01/19/2021
Number of Days to Update: 59	Next Scheduled EDR Contact: 05/03/2021
	Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2019	Source: Department of Energy
Date Data Arrived at EDR: 12/01/2020	Telephone: 202-586-8719
Date Made Active in Reports: 02/09/2021	Last EDR Contact: 12/01/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 03/15/2021
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/05/2019	Telephone: N/A
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 11/30/2020
Number of Days to Update: 251	Next Scheduled EDR Contact: 03/15/2021
	Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/06/2019	Telephone: 202-566-0517
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 02/05/2021
Number of Days to Update: 96	Next Scheduled EDR Contact: 05/17/2021
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 01/08/2021
Next Scheduled EDR Contact: 04/12/2021
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transportation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 01/27/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2020
Date Data Arrived at EDR: 10/08/2020
Date Made Active in Reports: 01/04/2021
Number of Days to Update: 88

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 01/04/2021
Next Scheduled EDR Contact: 04/19/2021
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 11/20/2020
Number of Days to Update: 151

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 12/23/2020
Next Scheduled EDR Contact: 04/05/2021
Data Release Frequency: Biennially

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014	Source: USGS
Date Data Arrived at EDR: 07/14/2015	Telephone: 202-208-3710
Date Made Active in Reports: 01/10/2017	Last EDR Contact: 01/08/2021
Number of Days to Update: 546	Next Scheduled EDR Contact: 04/19/2021
	Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017	Source: Department of Energy
Date Data Arrived at EDR: 09/11/2018	Telephone: 202-586-3559
Date Made Active in Reports: 09/14/2018	Last EDR Contact: 02/02/2021
Number of Days to Update: 3	Next Scheduled EDR Contact: 05/17/2021
	Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019	Source: Department of Energy
Date Data Arrived at EDR: 11/15/2019	Telephone: 505-845-0011
Date Made Active in Reports: 01/28/2020	Last EDR Contact: 11/20/2020
Number of Days to Update: 74	Next Scheduled EDR Contact: 03/01/2021
	Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 12/30/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/14/2021	Telephone: 703-603-8787
Date Made Active in Reports: 02/09/2021	Last EDR Contact: 01/14/2021
Number of Days to Update: 26	Next Scheduled EDR Contact: 04/12/2021
	Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust.

Date of Government Version: 04/05/2001	Source: American Journal of Public Health
Date Data Arrived at EDR: 10/27/2010	Telephone: 703-305-6451
Date Made Active in Reports: 12/02/2010	Last EDR Contact: 12/02/2009
Number of Days to Update: 36	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 11/24/2020
Date Data Arrived at EDR: 11/30/2020
Date Made Active in Reports: 01/25/2021
Number of Days to Update: 56

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 11/24/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 01/25/2021
Number of Days to Update: 63

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 11/23/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 11/25/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 11/25/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/16/2020
Date Data Arrived at EDR: 09/17/2020
Date Made Active in Reports: 12/10/2020
Number of Days to Update: 84

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 12/10/2020
Next Scheduled EDR Contact: 03/22/2021
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/04/2020
Date Data Arrived at EDR: 12/01/2020
Date Made Active in Reports: 01/25/2021
Number of Days to Update: 55

Source: EPA
Telephone: (404) 562-9900
Last EDR Contact: 12/01/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 77

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 01/15/2021
Next Scheduled EDR Contact: 04/26/2021
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/17/2020
Date Made Active in Reports: 02/09/2021
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 11/17/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 10/03/2020
Date Data Arrived at EDR: 10/06/2020
Date Made Active in Reports: 01/04/2021
Number of Days to Update: 90

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 01/08/2021
Next Scheduled EDR Contact: 04/19/2021
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/13/2020
Date Data Arrived at EDR: 11/13/2020
Date Made Active in Reports: 01/25/2021
Number of Days to Update: 73

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 11/13/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Quarterly

AIRS: Air Quality Permit Listing

A listing of facilities with air quality permits.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/09/2020
Date Made Active in Reports: 12/03/2020
Number of Days to Update: 85

Source: Department of Environmental Quality
Telephone: 919-707-8726
Last EDR Contact: 12/08/2020
Next Scheduled EDR Contact: 03/22/2021
Data Release Frequency: Varies

ASBESTOS: ASBESTOS

Asbestos notification sites

Date of Government Version: 10/30/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Department of Health & Human Services
Telephone: 919-707-5973
Last EDR Contact: 01/19/2021
Next Scheduled EDR Contact: 05/03/2021
Data Release Frequency: Varies

COAL ASH: Coal Ash Disposal Sites

A listing of coal combustion products distribution permits issued by the Division for the treatment, storage, transportation, use and disposal of coal combustion products.

Date of Government Version: 09/10/2020
Date Data Arrived at EDR: 09/23/2020
Date Made Active in Reports: 12/14/2020
Number of Days to Update: 82

Source: Department of Environment & Natural Resources
Telephone: 919-807-6359
Last EDR Contact: 12/23/2020
Next Scheduled EDR Contact: 04/05/2021
Data Release Frequency: Varies

DRYCLEANERS: Drycleaning Sites

Potential and known drycleaning sites, active and abandoned, that the Drycleaning Solvent Cleanup Program has knowledge of and entered into this database.

Date of Government Version: 09/08/2020
Date Data Arrived at EDR: 09/16/2020
Date Made Active in Reports: 12/08/2020
Number of Days to Update: 83

Source: Department of Environment & Natural Resources
Telephone: 919-508-8400
Last EDR Contact: 12/18/2020
Next Scheduled EDR Contact: 03/29/2021
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

A listing of financial assurance information for underground storage tank facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 10/30/2020
Date Data Arrived at EDR: 11/04/2020
Date Made Active in Reports: 12/31/2020
Number of Days to Update: 57

Source: Department of Environment & Natural Resources
Telephone: 919-733-1322
Last EDR Contact: 02/03/2021
Next Scheduled EDR Contact: 05/17/2021
Data Release Frequency: Quarterly

Financial Assurance 2: Financial Assurance Information Listing

Information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 10/02/2012
Date Data Arrived at EDR: 10/03/2012
Date Made Active in Reports: 10/26/2012
Number of Days to Update: 23

Source: Department of Environment & Natural Resources
Telephone: 919-508-8496
Last EDR Contact: 12/16/2020
Next Scheduled EDR Contact: 04/05/2021
Data Release Frequency: Varies

Financial Assurance 3: Financial Assurance Information

Hazardous waste financial assurance information.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/04/2020
Date Data Arrived at EDR: 09/04/2020
Date Made Active in Reports: 11/30/2020
Number of Days to Update: 87

Source: Department of Environment & Natural Resources
Telephone: 919-707-8222
Last EDR Contact: 12/02/2020
Next Scheduled EDR Contact: 03/22/2021
Data Release Frequency: Varies

NPDES: NPDES Facility Location Listing

General information regarding NPDES(National Pollutant Discharge Elimination System) permits.

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 10/27/2020
Date Made Active in Reports: 01/15/2021
Number of Days to Update: 80

Source: Department of Environment & Natural Resources
Telephone: 919-733-7015
Last EDR Contact: 01/27/2021
Next Scheduled EDR Contact: 05/10/2021
Data Release Frequency: Varies

UIC: Underground Injection Wells Listing

A listing of uncerground injection wells locations.

Date of Government Version: 10/26/2020
Date Data Arrived at EDR: 11/30/2020
Date Made Active in Reports: 12/07/2020
Number of Days to Update: 7

Source: Department of Environment & Natural Resources
Telephone: 919-807-6412
Last EDR Contact: 11/25/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Quarterly

AOP: Animal Operation Permits Listing

This listing includes animal operations that are required to be permitted by the state.

Date of Government Version: 04/01/2020
Date Data Arrived at EDR: 05/26/2020
Date Made Active in Reports: 05/27/2020
Number of Days to Update: 1

Source: Department of Environmental Quality
Telephone: 919-707-9129
Last EDR Contact: 12/11/2020
Next Scheduled EDR Contact: 03/22/2021
Data Release Frequency: Varies

SEPT HAULERS: Permitted Septage Haulers Listing

This list of all active and permitted Septage Land Application Site (SLAS) and Septage Detention and Treatment Facility (SDTF) sites in North Carolina. The purpose of this map is to provide the public and government entities a visual overview of the businesses that manage septage and septage facilities throughout the state.

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 07/07/2020
Date Made Active in Reports: 09/23/2020
Number of Days to Update: 78

Source: Department of Environmental Quality
Telephone: 919-707-8248
Last EDR Contact: 01/08/2021
Next Scheduled EDR Contact: 04/19/2021
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 01/04/2021
Next Scheduled EDR Contact: 04/19/2021
Data Release Frequency: Semi-Annually

PCS INACTIVE: Listing of Inactive PCS Permits

An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 01/04/2021
Next Scheduled EDR Contact: 04/19/2021
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 12/30/2020
Next Scheduled EDR Contact: 04/19/2021
Data Release Frequency: Varies

CCB: Coal Ash Structural Fills (CCB) Listing

These are not permitted Coal Ash landfills A list all of the now closed Coal Ash Structural Fills (CCB) in North Carolina, in point data form. The purpose is to provide the public and other government entities a visual overview of coal ash structural fills throughout the state and increase public awareness of their current locations.

Date of Government Version: 02/27/2020
Date Data Arrived at EDR: 07/07/2020
Date Made Active in Reports: 09/23/2020
Number of Days to Update: 78

Source: Department of Environmental Quality
Telephone: 919-707-8248
Last EDR Contact: 01/08/2021
Next Scheduled EDR Contact: 04/19/2021
Data Release Frequency: Varies

PCSRP: Petroleum-Contaminated Soil Remediation Permits

To treat petroleum-contaminated soil in order to protect North Carolina's environment and the health of the citizens of North Carolina.

Date of Government Version: 07/06/2020
Date Data Arrived at EDR: 07/07/2020
Date Made Active in Reports: 09/23/2020
Number of Days to Update: 78

Source: Department of Environmental Quality
Telephone: 919-707-8248
Last EDR Contact: 12/30/2020
Next Scheduled EDR Contact: 04/18/2021
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 11/25/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environment, Health and Natural Resources in North Carolina.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/24/2013
Number of Days to Update: 176

Source: Department of Environment, Health and Natural Resources
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environment, Health and Natural Resources in North Carolina.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Environment, Health and Natural Resources
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environment, Health and Natural Resources in North Carolina.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/20/2013
Number of Days to Update: 172

Source: Department of Environment, Health and Natural Resources
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 08/10/2020	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 10/20/2020	Telephone: 860-424-3375
Date Made Active in Reports: 11/02/2020	Last EDR Contact: 02/12/2021
Number of Days to Update: 13	Next Scheduled EDR Contact: 05/24/2021
	Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018	Source: Department of Environmental Protection
Date Data Arrived at EDR: 04/10/2019	Telephone: N/A
Date Made Active in Reports: 05/16/2019	Last EDR Contact: 01/08/2021
Number of Days to Update: 36	Next Scheduled EDR Contact: 04/19/2021
	Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 04/29/2020	Telephone: 518-402-8651
Date Made Active in Reports: 07/10/2020	Last EDR Contact: 01/29/2021
Number of Days to Update: 72	Next Scheduled EDR Contact: 05/10/2021
	Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/19/2019	Telephone: 717-783-8990
Date Made Active in Reports: 09/10/2019	Last EDR Contact: 01/11/2021
Number of Days to Update: 53	Next Scheduled EDR Contact: 04/26/2021
	Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2018	Source: Department of Environmental Management
Date Data Arrived at EDR: 10/02/2019	Telephone: 401-222-2797
Date Made Active in Reports: 12/10/2019	Last EDR Contact: 02/09/2021
Number of Days to Update: 69	Next Scheduled EDR Contact: 05/31/2021
	Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018	Source: Department of Natural Resources
Date Data Arrived at EDR: 06/19/2019	Telephone: N/A
Date Made Active in Reports: 09/03/2019	Last EDR Contact: 12/03/2020
Number of Days to Update: 76	Next Scheduled EDR Contact: 03/22/2021
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Child Care Facility List

Source: Department of Health & Human Services

Telephone: 919-662-4499

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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

STREET AND ADDRESS INFORMATION

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GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

CARRAWAY BLUFF
105 MORGAN CIRCLE
DUDLEY, NC 28333

TARGET PROPERTY COORDINATES

Latitude (North):	35.328393 - 35° 19' 42.21"
Longitude (West):	78.010316 - 78° 0' 37.14"
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	771766.7
UTM Y (Meters):	3913365.2
Elevation:	65 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5948626 SOUTHWEST GOLDSBORO, NC
Version Date:	2013
East Map:	5945485 SOUTHEAST GOLDSBORO, 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).

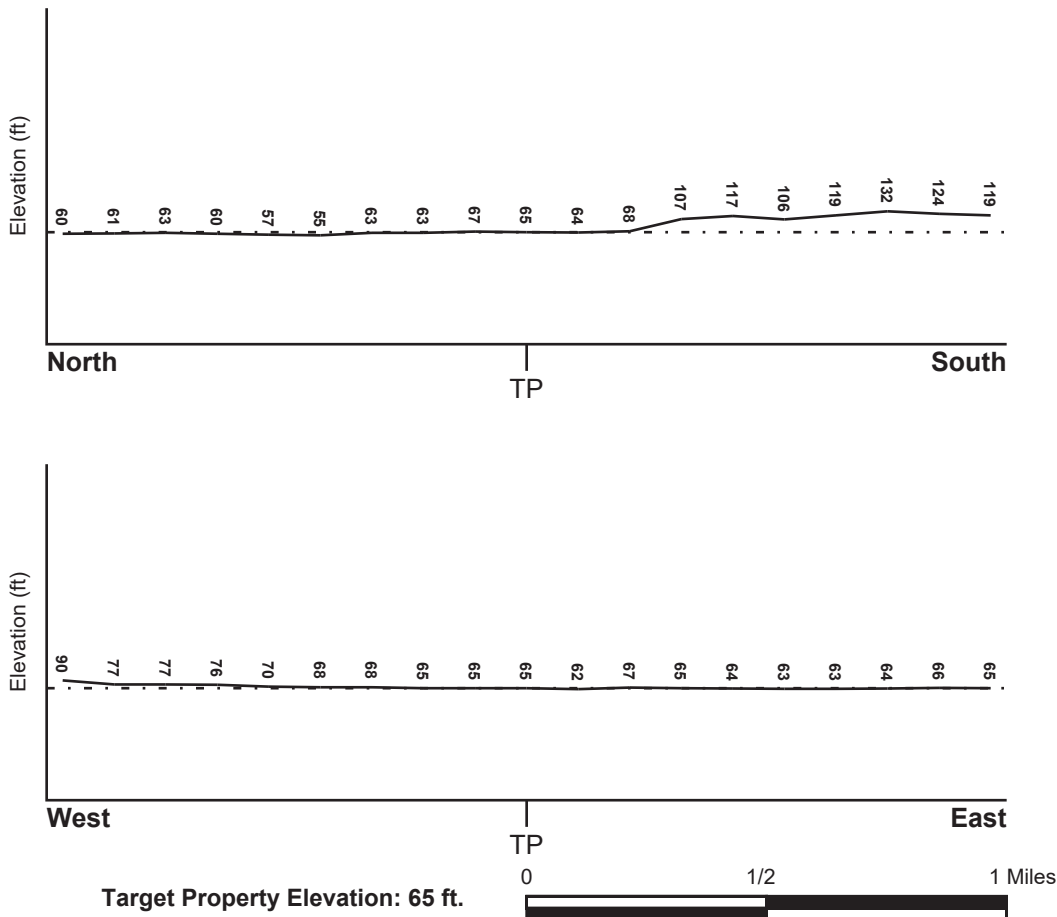
TOPOGRAPHIC INFORMATION

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 NE

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

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
3720259700J	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
3720258800J	FEMA FIRM Flood data
3720258700J	FEMA FIRM Flood data
3720350600J	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
SOUTHWEST GOLDSBORO	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.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
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

Era: Mesozoic
System: Cretaceous
Series: Washita Group
Code: IK3 *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

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).

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. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: ROANOKE

Soil Surface Texture: loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly. Soils may have a saturated zone, a layer of low hydraulic conductivity, or seepage. Depth to water table is less than 1 foot.

Hydric Status: Soil meets the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 2.00 Min: 0.60	Max: 5.50 Min: 3.60
2	7 inches	12 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%), Lean Clay	Max: 20.00 Min: 0.00	Max: 5.50 Min: 3.60
3	12 inches	50 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 0.20 Min: 0.00	Max: 5.50 Min: 3.60
4	50 inches	72 inches	stratified	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 20.00 Min: 0.06	Max: 6.50 Min: 3.60

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: muck
loamy sand
fine sandy loam
silt loam
loamy fine sand
sandy loam

Surficial Soil Types: muck
loamy sand
fine sandy loam
silt loam
loamy fine sand
sandy loam

Shallow Soil Types: silt loam
sandy clay loam

Deeper Soil Types: sand

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

loamy sand

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

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	USGS40000886372	1/2 - 1 Mile SE
A2	USGS40000886365	1/2 - 1 Mile SE
A3	USGS40000886356	1/2 - 1 Mile SE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

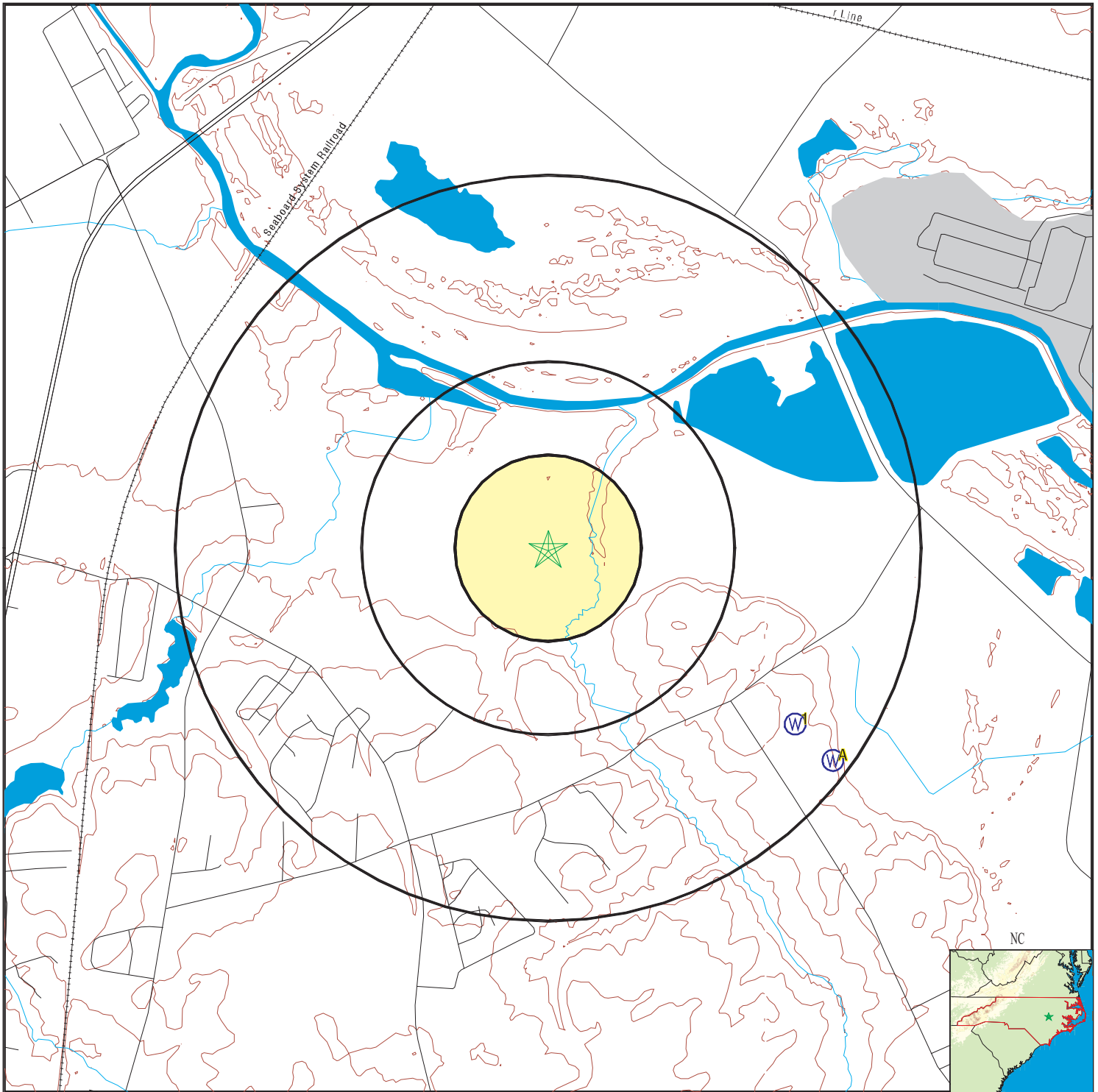
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

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

STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 6368027.2s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons



- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Wildlife Areas
- Natural Areas
- Rare & Endangered Species



SITE NAME: Carraway Bluff
 ADDRESS: 105 Morgan Circle
 Dudley NC 28333
 LAT/LONG: 35.328393 / 78.010316

CLIENT: Resource Environmental Solutions, LLC
 CONTACT: Grayson Sanner
 INQUIRY #: 6368027.2s
 DATE: February 16, 2021 8:55 am

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

1
SE
1/2 - 1 Mile
Higher **FED USGS** **USGS40000886372**

Organization ID:	USGS-NC		
Organization Name:	USGS North Carolina Water Science Center		
Monitor Location:	WA-080	Type:	Well
Description:	Not Reported	HUC:	03020202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Black Creek Aquifer	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	103
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

A2
SE
1/2 - 1 Mile
Higher **FED USGS** **USGS40000886365**

Organization ID:	USGS-NC		
Organization Name:	USGS North Carolina Water Science Center		
Monitor Location:	WA-081	Type:	Well
Description:	Not Reported	HUC:	03020202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	70	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

A3
SE
1/2 - 1 Mile
Higher **FED USGS** **USGS40000886356**

Organization ID:	USGS-NC		
Organization Name:	USGS North Carolina Water Science Center		
Monitor Location:	WA-082	Type:	Well
Description:	Not Reported	HUC:	03020202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	70	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for WAYNE 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 WAYNE COUNTY, NC

Number of sites tested: 2

<u>Area</u>	<u>Average Activity</u>	<u>% <4 pCi/L</u>	<u>% 4-20 pCi/L</u>	<u>% >20 pCi/L</u>
Living Area - 1st Floor	0.300 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

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 coverage identifying sites (terrestrial or aquatic) that have particular biodiversity significance.

A site's significance may be due to the presence of 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 Statistical 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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CORRESPONDENCE



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Bellaire, TX 77401
Main: 713.520.5400

March 3, 2021

Kristin May
Natural Resources Conservation Service
4407 Bland Rd., Suite 117
Raleigh, NC 27609

Subject: AD-1006 Request for the Carraway Bluff Mitigation Projects in Wayne County

Dear Kristin May,

Resource Environmental 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 Carraway Bluff riparian buffer mitigation projects. The Carraway Bluff Project is a NC Division of Mitigation Services (NCDMS) full-delivery project as depicted in the attached figures. Please note that this request is in support of the development of the Categorical Exclusion (CE) and an Environmental Screening document for the NCDMS portion of the Carraway Bluff Mitigation Project (Project).

The Project is in the Neuse River Basin within 14-digit Hydrologic Unit (HU) 03020201170060 and NC Division of Water Resources (DWR) Sub-Basin 03-04-12. The proposed projects present the opportunity to restore, preserve, and protect in perpetuity, up to 25.10 acres of riparian buffer in the Neuse River Basin. Coordinates for the site are as follows: 35.330, -78.010.

An inventory of soils data was completed by RES utilizing Web Soil Survey to determine prime farmland classifications for the proposed 25.09 acre conservation easement. Two soil map units in the project area are classified as prime farmland, making up 17.2% of the site (Kalmia loamy sand, 0 to 2 percent slopes and Wickham sandy loam, 2 to 6 percent slopes). Four soil map units are classified as prime farmland if drained, making up 60.3% of the site (Chewcla loam, Johns fine sandy loam, Lumbee sandy loam, Torhunta loam). One soil map unit in the project area is classified as not prime farmland, making up 22.5% of the site (Kinston loam).

Enclosed is Form AD-1006 with Parts I and III Completed and maps of the Carraway Bluff Site. We ask that you review the site information and complete Parts II, IV, and V as required by NRCS. Please email (via mengel@res.us), or mail your reply to the our office on 3600 Glenwood Avenue, Suite 100, Raleigh, NC 27612.

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,

A handwritten signature in black ink that reads "Megan D Engel".

Megan D Engel | Ecologist II

Attachments: US Department of Agriculture Farmland Conversion Impact Rating Form (AD-1006), Web Soil Survey Report, Vicinity Map (Figure 1), USGS Topographic Map (Figure 2a & 2b), Aerial Map (Figure 3), Conceptual Plan Map (Figure 4)



Natural Resources
Conservation Service

March 15, 2021

North Carolina
State Office

Megan Engel
Ecologist II
Resource Environmental Solutions
3600 Glenwood Avenue, Suite 100
Raleigh, NC 27612

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

Dear Megan Engel;

The following information is in response to your request soliciting comments regarding the Carraway Bluff Mitigation Project Site in Wayne County, NC.

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

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

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

The area in question includes land classified as Prime Farmland. In accordance with the Code of Federal Regulations 7CFR 658, Farmland Protection Policy Act, the CPA-106 was initiated. NRCS Completed Parts II, IV, V of the form and returned for completion by the requesting agency.

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

Sincerely,

Kristin L May
Acting State Soil Scientist

cc:

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



3600 Glenwood Avenue, Suite 100
Raleigh, NC 27612

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

March 3, 2021

To Whom it May Concern
North Carolina State Historic Preservation Office
4617 Mail Service Center
Raleigh NC 27699-4617

Subject: Project Scoping for Carraway Bluff Mitigation Projects in Wayne County

To Whom it May Concern,

Resource Environmental Solutions, LLC (RES) requests review and comment on any possible issues that might emerge with respect to archaeological or cultural resources associated with a potential riparian buffer mitigation project called Carraway Bluff Mitigation Projects. The Carraway Bluff Project is comprised of a NC Division of Mitigation Services full-delivery project, and a full-delivery retail bank, as depicted in the attached figures. The projects have been identified by RES to provide compensatory mitigation for unavoidable riparian buffer impacts. The proposed projects present the opportunity to restore, preserve, and protect in perpetuity, up to 54.20 acres of riparian buffer in the Neuse River Basin. Coordinates for the site are as follows: 35.330, -78.010.

A review of the N.C. State Historic Preservation Office (SHPO) HPOWEB GIS Service database (<http://gis.ncdcr.gov/hpweb/>; accessed September 3, 2020) was performed as part of the site due diligence evaluation to reveal any listed or potential eligible historic or archeological resources. The database revealed one listing within a 0.5-mile radius of the project area but should not be affected by construction activities. Land use around the project is row crop fields, residential land, and bottomland hardwood forest.

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

Sincerely,

A handwritten signature in black ink that reads "Megan D Engel".

Megan D Engel | Ecologist II

Attachments: Project Description, Vicinity Map (Figure 1), USGS Topographic Map (Figure 2a & 2b), Aerial Map (Figure 3), Conceptual Plan Map (Figure 4), and a .KMZ file of project boundaries.



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

Ramona M. Bartos, Administrator

Governor Roy Cooper

Secretary D. Reid Wilson

April 5, 2021

Megan D. Engel
Resource Environmental Solutions
3600 Glenwood Avenue, Suite 100
Raleigh, NC 27612

mengel@res.us

Re: Carraway Creek Mitigation Bank Site, Wayne County, ER 14-2046

Dear Ms. Engel:

Thank you for your letter of March 3, 2021, regarding the above-referenced undertaking. We have reviewed the submittal and offer the following comments.

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

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

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

Sincerely,

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

for Ramona Bartos, Deputy
State Historic Preservation Officer



3600 Glenwood Avenue, Suite 100
Raleigh, NC 27612

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

March 3, 2021

Gabriela Garrison
Eastern Piedmont Coordinator
North Carolina Wildlife Resources Commission
Sandhills Depot
PO Box 149
Hoffman, NC 28347

Subject: Project Scoping for Carraway Bluff Mitigation Projects in Wayne County

Dear Gabriela Garrison,

The purpose of this letter is to request your review and comment on any possible issues that might emerge with respect to your office's purview for fish and wildlife associated with a potential buffer restoration projects on the attached site (USGS site map with approximate property lines and areas of potential ground disturbance are enclosed). The Carraway Bluff Project is comprised of a NC Division of Mitigation Services full-delivery project, and a retail bank, as depicted in the attached figures. The projects have been identified by Resource Environmental Solutions, LLC (RES) to provide compensatory mitigation for unavoidable riparian buffer impacts. The proposed projects present the opportunity to restore, preserve, and protect in perpetuity, up to 54.20 acres of riparian buffer in the Neuse River Basin. Coordinates for the site are as follows: 35.330, -78.010. The Project watershed is primarily a mix of row crops and disturbed forest and has historically been so since 1950.

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

Sincerely,

A handwritten signature in black ink that reads "Megan D Engel".

Megan D Engel | Ecologist II

Attachments: Project Description, Vicinity Map (Figure 1), USGS Topographic Map (Figure 2a & 2b), Aerial Map (Figure 3), Conceptual Plan Map (Figure 4)



◇ NORTH CAROLINA WILDLIFE RESOURCES COMMISSION ◇

Cameron Ingram, Executive Director

March 24, 2021

Ms. Megan Engel
Resource Environmental Solutions, LLC
3600 Glenwood Avenue, Suite 100
Raleigh, NC 27612

Subject: Request for Environmental Information for the Caraway Bluff Buffer Mitigation Project,
Wayne County, North Carolina.

Ms. Engel,

Biologists with the North Carolina Wildlife Resources Commission (NCWRC) have reviewed the proposed project description. Comments are provided in accordance with certain provisions of the Clean Water Act of 1977 (as amended), 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.).

In conjunction with the NC Division of Mitigation Services, Resource Environmental Solutions, LLC has identified and developed the Caraway Bluff Buffer Mitigation Project. The 54.20-acre site will restore and preserve riparian buffer in perpetuity. The project area consists of agriculture and forested lands and is surrounded by agricultural and disturbed forested areas. This site is located northeast of the intersection of Pecan and Genoa Roads, south of Goldsboro.

The project area drains to Caraway Creek in the Neuse River basin. Stream restoration projects often improve water quality and aquatic habitat. Establishing native, forested buffers in riparian areas will improve both aquatic and terrestrial habitats and provide a travel corridor for wildlife species.

In addition to stringent best management practices for erosion and sediment control during construction, the NCWRC recommends the use of biodegradable and wildlife-friendly sediment and erosion control devices. Silt fencing, fiber rolls and/or other products should have loose-weave netting that is made of natural fiber materials with movable joints between the vertical and horizontal twines. Silt fencing and similar products that have been reinforced with plastic or metal mesh should be avoided as they impede the movement of terrestrial wildlife species. Excessive silt and sediment loads can have detrimental effects on aquatic resources including destruction of spawning habitat, suffocation of eggs and clogging of gills. Only native vegetation should be installed onsite and any invasive plant species found in or near the project area should be removed and destroyed.

Page 2

March 24, 2021

Scoping – Caraway Bluff Buffer Mitigation Project

Thank you for the opportunity to review and comment on this project. If I can be of further assistance, please contact me at (910) 409-7350 or gabriela.garrison@ncwildlife.org.

Sincerely,

A handwritten signature in blue ink that reads "Gabriela Garrison".

Gabriela Garrison
Eastern Piedmont Habitat Conservation Coordinator
Habitat Conservation Program



United States Department of the Interior



FISH AND WILDLIFE SERVICE

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

Date: 3/25/2021

Self-Certification Letter

Project Name Carroway Bluff

Dear Applicant:

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

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

- “no effect” determinations for proposed/listed species and/or proposed/designated critical habitat; and/or
- “may affect, not likely to adversely affect” determinations for proposed/listed species and/or proposed/designated critical habitat; and/or
- “may affect, likely to adversely affect” determination for the Northern long-eared bat (*Myotis septentrionalis*) and relying on the findings of the January 5, 2016, Programmatic Biological Opinion for the Final 4(d) Rule on the Northern long-eared bat;
- “no Eagle Act permit required” determinations for eagles.

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

Sincerely,

/s/Pete Benjamin

Pete Benjamin
Field Supervisor
Raleigh Ecological Services

Enclosures - project review package


Species Conclusions Table

Project Name: Carraway Bluff

Date: 3/25/2021

Species / Resource Name	Conclusion	ESA Section 7 / Eagle Act Determination	Notes / Documentation
Red-cockaded Woodpecker	No Suitable habitat present	No Effect	Habitat assessment indicated no potential habitat present.
Neuse River Waterdog	Suitable habitat observed, no current survey conducted	May affect, Not Likely to Adversely Affect	Overall the project will provide longterm benefits to the Neuse River Water Dog, as it will provide approximately 25.17 acres of additional forested and protected buffer. RES intends to avoid any instream work where suitable habitat is located. Majority of the work conducted on site will involve tree planting removal of a culvert and potentially minor bank stabilization areas above the high water mark. Any work that will be done along the banks will ensure to follow stringent sediment and erosion control measures, working in the dry, and preserving existing buffers, etc
Atlantic Pigtoe	No Suitable habitat present	No Effect	Habitat assessment indicated no potential habitat present.
Tar River Spiny mussel	No Suitable habitat present	No Effect	Habitat assessment indicated no potential habitat present.
Carolina Madtom	No Suitable habitat present	No Effect	Habitat assessment indicated no potential habitat present.
Critical Habitat	Neuse River Waterdog	May Affect, Not Likely to Adversely Affect	RES does not intend to impact the critical habitat that lies just outside of the project area.

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.

 - Ecologist II

Signature /Title

3/25/2021

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:
Consultation Code: 04EN2000-2021-SLI-0714
Event Code: 04EN2000-2021-E-01540
Project Name: Carraway Bluff Buffer Mitigation Project

February 18, 2021

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

To Whom It May Concern:

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

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

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

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

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

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

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

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

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

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

Attachment(s):

- Official Species List

Official Species List

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

This species list is provided by:

Raleigh Ecological Services Field Office

Post Office Box 33726

Raleigh, NC 27636-3726

(919) 856-4520

Project Summary

Consultation Code: 04EN2000-2021-SLI-0714

Event Code: 04EN2000-2021-E-01540

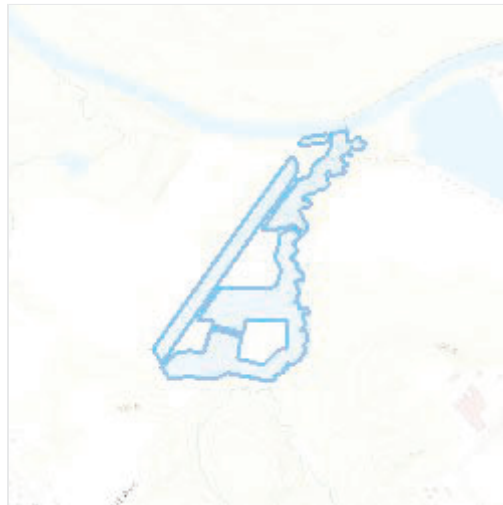
Project Name: Carraway Bluff Buffer Mitigation Project

Project Type: LAND - RESTORATION / ENHANCEMENT

Project Description: The Carraway Bluff Project is comprised of a NC Division of Mitigation Services (NCDMS) full-delivery project, and a full-delivery retail bank. The Project is in the Neuse River Basin within 14-digit Hydrologic Unit (HU) 03020201170060 and NC Division of Water Resources (DWR) Sub-Basin 03-04-12. The proposed projects present the opportunity to restore, preserve, and protect in perpetuity, up to 54.20 acres of riparian buffer in the Neuse River Basin. Coordinates for the site are as follows: 35.330, -78.010.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@35.32801430000006,-78.01007070425729,14z>



Counties: Wayne County, North Carolina

Endangered Species Act Species

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

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

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

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

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

Birds

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

Amphibians

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

Fishes

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

Clams

NAME	STATUS
<p>Atlantic Pigtoe <i>Fusconaia masoni</i> There is proposed critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5164</p>	<p>Proposed Threatened</p>
<p>Tar River Spinemussel <i>Elliptio steinstansana</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1392</p>	<p>Endangered</p>

Critical habitats

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

Megan Engel

From: Matthews, Kathryn H <kathryn_matthews@fws.gov>
Sent: Monday, April 5, 2021 4:01 PM
To: Megan Engel; Jamey Mceachran
Subject: Fw: DUE DATE: APRIL 15, 2021 Fw: [EXTERNAL] Biological Assessment: Carraway Bluff Buffer Mitigation Project, Wayne County, NC
Attachments: CarrawayBluff_USFWS_Letter_20210325.pdf

Thanks for the revised submittal. It looks good, and the extra info on the project is helpful. We don't intend to officially respond back unless you need us to.

Thanks,
Kathy

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

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

From: Mann, Leigh <leigh_mann@fws.gov> on behalf of Raleigh, FW4 <raleigh@fws.gov>
Sent: Monday, March 29, 2021 9:11 AM
To: Matthews, Kathryn H <kathryn_matthews@fws.gov>
Subject: DUE DATE: APRIL 15, 2021 Fw: [EXTERNAL] Biological Assessment: Carraway Bluff Buffer Mitigation Project, Wayne County, NC

From: Megan Engel <mengel@res.us>
Sent: Thursday, March 25, 2021 7:11 PM
To: Raleigh, FW4 <raleigh@fws.gov>
Cc: Jamey Mceachran <jmceachran@res.us>
Subject: RE: [EXTERNAL] Biological Assessment: Carraway Bluff Buffer Mitigation Project, Wayne County, NC

To whom it may concern,

Please see attached Project Review Package and self-certification letter for the Carraway Bluff Buffer Mitigation Project. This package followed 9-step review process as required by the NC Division of Mitigation Services for central and eastern NC mitigation projects.

Please let me know if you have any questions.

Best,

Megan D Engel

Ecologist II

RES | res.us

M: 909.844.7122

Restoring a resilient earth for a modern world

From: Raleigh, FW4 <raleigh@fws.gov>

Sent: Wednesday, March 3, 2021 1:52 PM

To: Megan Engel <mengel@res.us>

Subject: Automatic reply: [EXTERNAL] Biological Assessment: Carraway Bluff Buffer Mitigation Project, Wayne County, NC

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

From: [Jamey Mceachran](#)
To: [Matthews, Kathryn H](#); [Ellis, John](#)
Subject: RE: [EXTERNAL] FW: Biological Assessment: Carraway Bluff Buffer Mitigation Project, Wayne County, NC
Date: Monday, March 8, 2021 2:12:00 PM

Hi Kathy,
Thank you so much for the response. I may have some followups but this helps with the Carraway Project a lot.
Thanks!
Jamey

Jamey Redding McEachran

Ecology Team Lead

RES | res.us

Mobile: 919.623.9889

From: Matthews, Kathryn H <kathryn_matthews@fws.gov>
Sent: Friday, March 5, 2021 3:09 PM
To: Ellis, John <john_ellis@fws.gov>; Jamey Mceachran <jmceachran@res.us>
Subject: Re: [EXTERNAL] FW: Biological Assessment: Carraway Bluff Buffer Mitigation Project, Wayne County, NC

Hi Jamey,

John forwarded this email to me - I am the POC for most mitigation reviews in Eastern NC. I have the Carraway Project in my inbox for review.

I appreciate the inclusion of a BA and I hope the RRP BA template is helpful. Please note that the BA template is not required, but it's an option provided to streamline formal consultation (if the project is likely to adversely affect to a species). You are welcome to use it for any projects you like. I was wondering if FHWA has required that you use it? I'm attaching the guidance document and Q & A document associated with the BA template, if you haven't seen them.

I understand the difficulty in making determinations and figuring out stressors. We have been getting lots of questions lately. Our office is working on more specific guidance for determining suitable habitat, making determinations, and other aspects of T&E consultation for aquatic species. We are also working on determination keys for IPAC and the Corps, and that should help. But for now, we do not have an encyclopedia of stressors for each species. What we do have are Species Status Assessment (SSA) documents for several of our species, including the newly listed or proposed aquatic species (NRWD, Atlantic pigtoe, Yellow lance, and Carolina madtom). Those documents are available on our website or at <https://ecos.fws.gov/>, along with listing documents and recovery plans for many of our listed species. These documents contain species-specific information on biology, habitat

requirements, and stressors/threats. You can use some of that language for your consultation submittals. Unfortunately, I think that most consultants will have no choice but to learn more about each species, its life history and habitat requirements, and common stressors.

As for the Carraway project, my thoughts are this: The site is within the same 10-digit HUC as NRWD records (and historic Carolina madtom records), and NRWD proposed critical habitat is just downstream in the Neuse River. Your company determined that Carraway Creek has suitable habitat, but the biologist didn't see any NRWD in the stream in August. NRWD are best surveyed in the middle of winter (January and February), and they are a secretive species. They should be surveyed using non-lethal baited traps. So, unless the stream was thoroughly surveyed using appropriate methods during the appropriate survey season, the Service is unlikely to agree that the species is not present. We would recommend that the species be assumed present in this case. The BA that was submitted makes a determination of "May affect, not likely to adversely affect" (MANLAA) for NRWD (although I think in one spot it says No effect), which I think is appropriate, even if work is not being conducted in the stream.

As discussed in the SSA for NRWD, sedimentation and lowering of DO from development are the biggest stressors for this species. Sedimentation is one of the biggest stressors for all our listed and proposed aquatic species. Culvert replacement upstream may cause some sedimentation in the suitable habitat portions of the site, and we can't rule out NRWD from the field work. Also, there are concerns for sedimentation downstream in the Neuse in proposed critical habitat. So, MANLAA is a safe choice for a determination. MANLAA can also mean that there are benefits to the species, and I would think that the NRWD would benefit from this project. If you are truly only planting trees in the buffer, not doing earth-moving activities or other things that may cause sedimentation and erosion, then the effects to the species are probably all beneficial. If you are wondering how to list stressors for work upstream of a record or critical habitat, I think it is appropriate to say, for example, that sedimentation or erosion from the site is possible. Then in the conservation measure section you can talk about how you are going to avoid and/or minimize any sedimentation or erosion from activities on the site. Although it hopefully is a given that all site developers will use stringent sediment controls, it is helpful to us if you provide some information in the "conservation measures" section of the BA template (or in any other documentation you submit) to generally describe how in-stream or downstream impacts are going to be avoided (commitment to stringent sediment and erosion controls, working in the dry, preserving existing buffers, etc.). Any info you can provide on the activity and how impacts to suitable habitat will be avoided or minimized would be helpful for us to be able to agree with a MANLAA determination.

No effect literally means no effect at all. For the other species that may be ok if there are no

records within the 10-digit HUC. However, the other aquatic species have a similar sensitivity to sedimentation as NRWD, and would also benefit from the project, so MANLAA would be fine for all of them, too. Carolina madtom is a little more difficult, because you have suitable habitat downstream in the Neuse and historic records in the 10-digit HUC, but no current records near the project. I think it could go either way, but I think we would recommend MANLAA for the madtom too, to cover the FHWA in case there are sedimentation issues from the project. If you are only planting trees, and there is no suitable habitat on the site, then No Effect is appropriate.

There are probably lots of other scenarios that you can imagine for a mitigation site in or near a species record, so if you have other questions, please don't hesitate to reach out to me or John - we have been fielding a lot of these questions lately and will be happy to talk them out with you.

I hope this is helpful. Have a good weekend.

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

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

From: Ellis, John <john_ellis@fws.gov>
Sent: Thursday, March 4, 2021 4:31 PM
To: Matthews, Kathryn H <kathryn_matthews@fws.gov>
Subject: Fw: [EXTERNAL] FW: Biological Assessment: Carraway Bluff Buffer Mitigation Project, Wayne County, NC

Is this for you?

From: Jamey Mceachran <jmceachran@res.us>
Sent: Thursday, March 4, 2021 1:42 PM
To: Ellis, John <john_ellis@fws.gov>
Subject: [EXTERNAL] FW: Biological Assessment: Carraway Bluff Buffer Mitigation Project, Wayne County, NC

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hello Mr. Ellis,

We are working through the Cat Ex Checklist for a Riparian Buffer Restoration Project with the NC Division of Mitigation Services Full Delivery Projects under the Federal Highway Administration obligations. We will be doing this same process for 5 projects in the area so I wanted to make sure we were completing the new Biological Assessment correctly. The biggest area that I had questions on when our team was filling it out is the section that asks for identification of stressors for particular activities. We are mostly planting trees but on some sites will be removing or replacing culverts in ditches/streams.

Do you have a dictionary or help document on certain activities and what type of stressor you would envision? I could see it either being nothing or a long list of potentials. Especially when there is not suitable habitat on site for any of the listed species.

Any feedback would be appreciated.

Thanks,
Jamey

Jamey Redding McEachran

Ecology Team Lead

RES | res.us

Mobile: 919.623.9889

From: Megan Engel <mengel@res.us>

Sent: Wednesday, March 3, 2021 1:50 PM

To: Raleigh@fws.gov

Cc: Jamey Mceachran <jmceachran@res.us>

Subject: Biological Assessment: Carraway Bluff Buffer Mitigation Project, Wayne County, NC

To the Reviewer,

My name is Megan Engel from RES, and I am submitting the Biological Assessment completed for the Carraway Bluff Buffer Mitigation Project, located in Wayne County, NC. This BA was prepared using IPaC Version 5.55.7. RES has concluded a "No Effect" determination for three of the listed species associated with the project area, and a "not Likely to Adversely Affect" determination for the Neuse River Waterdog critical habitat.

Please feel free to contact me with any questions or comments.

Best,

Megan D Engel

Ecologist II

RES | res.us

M: 909.844.7122

Restoring a resilient earth for a modern world



Roy Cooper, Governor

D. Reid Wilson, Secretary

Walter Clark

Director, Division of Land and Water Stewardship

NCNHDE-13979

February 15, 2021

Matthew DeAngelo
Resource Environmental Solutions, LLC
302 Jefferson Street
Raleigh, NC 27607
RE: Carraway Bluff

Dear Matthew DeAngelo:

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

A query of the NCNHP database indicates that there are records for rare species, important natural communities, natural areas, and/or conservation/managed areas within the proposed project boundary. These results are presented in the attached 'Documented Occurrences' tables and map.

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

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

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

Also please note that the NC Natural Heritage Program may follow this letter with additional correspondence if a Dedicated Nature Preserve, Registered Heritage Area, Land and Water Fund easement, or an occurrence of a Federally-listed species is documented near the project area.

If you have questions regarding the information provided in this letter or need additional assistance, please contact Rodney A. Butler at rodney.butler@ncdcr.gov or 919-707-8603.

Sincerely,
NC Natural Heritage Program

Natural Heritage Element Occurrences, Natural Areas, and Managed Areas Intersecting the Project Area
Carraway Bluff
February 15, 2021
NCNHDE-13979

No Element Occurrences are Documented within the Project Area

There are no documented element occurrences (of medium to very high accuracy) that intersect with the project area. Please note, however, that although the NCNHP database does not show records for rare species within the project area, it does not necessarily mean that they are not present; it may simply mean that the area has not been surveyed. The use of Natural Heritage Program data should not be substituted for actual field surveys if needed, particularly if the project area contains suitable habitat for rare species. If rare species are found, the NCNHP would appreciate receiving this information so that we may update our database.

No Natural Areas are Documented within the Project Area

Managed Areas Documented Within Project Area*

Managed Area Name	Owner	Owner Type
NC Land and Water Fund Conservation Agreement	NC DNCR, NC Land and Water Fund	State

* NOTE: If the proposed project intersects with a conservation/managed area, please contact the landowner directly for additional information. If the project intersects with a Dedicated Nature Preserve (DNP), Registered Natural Heritage Area (RHA), or Federally-listed species, NCNHP staff may provide additional correspondence regarding the project.

Definitions and an explanation of status designations and codes can be found at <https://ncnhde.natureserve.org/help>. Data query generated on February 15, 2021; source: NCNHP, Q4 January 2021. Please resubmit your information request if more than one year elapses before project initiation as new information is continually added to the NCNHP database.

Natural Heritage Element Occurrences, Natural Areas, and Managed Areas Within a One-mile Radius of the Project Area
 Carraway Bluff
 February 15, 2021
 NCNHDE-13979

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

Taxonomic Group	EO ID	Scientific Name	Common Name	Last Observation Date	Element Occurrence Rank	Accuracy	Federal Status	State Status	Global Rank	State Rank
Bird	26223	<i>Ixobrychus exilis</i>	Least Bittern	2008-07-12	C?	3-Medium	---	Special Concern	G4G5	S2S3B
Freshwater Fish	38942	<i>Acipenser oxyrinchus oxyrinchus</i>	Atlantic Sturgeon	2018-04-17	E	4-Low	Endangered	Endangered	G3T3	S2

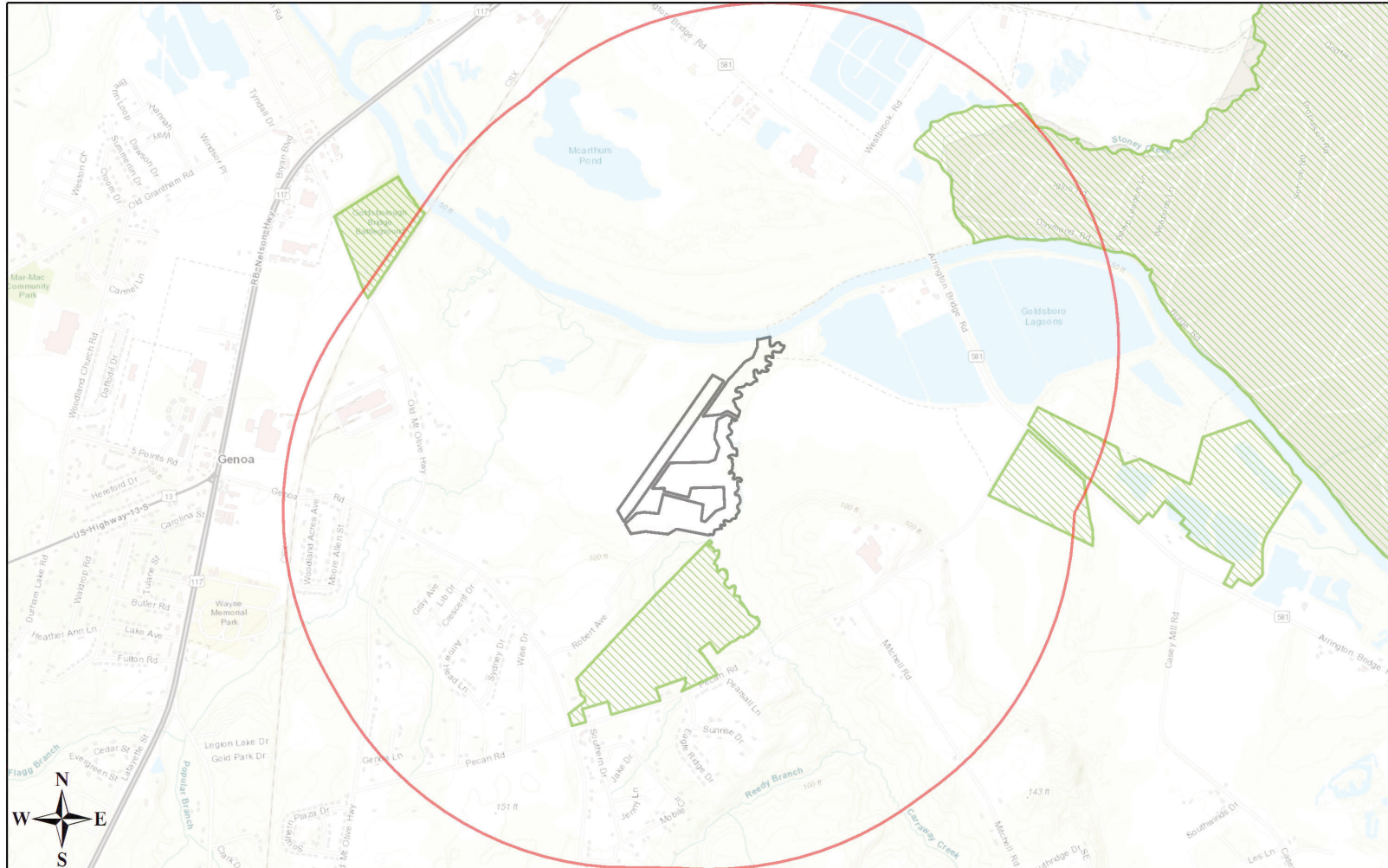
No Natural Areas are Documented Within a One-mile Radius of the Project Area

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

Managed Area Name	Owner	Owner Type
Seymour Johnson Air Force Base	US Department of Defense	Federal
NC Land and Water Fund Conservation Agreement	NC DNCR, NC Land and Water Fund	State
Wayne County Open Space	Wayne County	Local Government

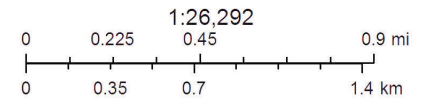
Definitions and an explanation of status designations and codes can be found at <https://ncnhde.natureserve.org/help>. Data query generated on February 15, 2021; source: NCNHP, Q4 January 2021. Please resubmit your information request if more than one year elapses before project initiation as new information is continually added to the NCNHP database.

NCNHDE-13979: Carraway Bluff



February 15, 2021

- Project Boundary
- Buffered Project Boundary
- Managed Area (MAREA)



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Uniform Act Compliance Letter



3600 Glenwood Avenue, Suite 100
Raleigh, NC 27612

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

April 28, 2021

Norwood Bruce Howell
Vickie Lee Howell
118 Oak Heights
Goldsboro, NC 27530

Re: Carraway Mitigation Project

Mr. and Mrs. Howell:

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,

A handwritten signature in blue ink, appearing to read 'Kenton Beal'.

Kenton Beal
Land Representative

Appendix D
Invasive Species

INVASIVE SPECIES PLAN

Annual monitoring and semi-annual site visits will be conducted to assess the condition of the finished project. These site inspections may identify the presence of invasive vegetation. RES will treat invasive species vegetation within the project area and provide remedial action on a case by- case basis. Common invasive species vegetation found onsite, such as Chinese privet (*Ligustrum sinense*), Chinaberry (*Melia azedarach*), and kudzu (*Pueraria montana*), will be treated to allow native plants to become established within the conservation easement. Invasive species vegetation will be treated by approved mechanical and/or chemical methods such that the percent composition of exotic/invasive species is less than 5% of the total riparian buffer area. Any control methods requiring herbicide application will be performed in accordance with NC Department of Agriculture (NCDA) rules and regulations. Additionally, some stream reaches contain dense thickets of greenbriers and grape vines along their banks that have the potential to become a nuisance; therefore, some of these areas may be thinned and/or removed mechanically if there is a threat to planted vegetation. If areas of invasive species exist within the easement, they will be monitored yearly as part of the monitoring protocol and treated if necessary. If required, problem areas will continue to be treated until the project easement shows overall trending towards meeting all monitoring requirements.