



# MITIGATION PLAN

Final

January 2023

## Running Dog

Union County, NC  
NCDEQ Contract No. 210202-01  
DMS ID No. 100210  
RFP# 16-20200302 (Issued 12/1/2020)  
DWR No. 2022-0550v1

Yadkin River Basin  
Goose Creek Watershed  
HUC 03040105

RFP #: 20210202

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PREPARED FOR:



**NC Department of Environmental Quality**  
**Division of Mitigation Services**

1652 Mail Service Center  
Raleigh, NC 27699-1652



January 16, 2023

Katie Merritt  
Nutrient Offset & Buffer Banking Coordinator  
North Carolina Department of Environmental Quality  
512 N. Salisbury Street, Raleigh, NC 27620

RE: **Draft Mitigation Plan Comments**  
**Running Dog Mitigation Site (DWR #2022-0550v1)**  
Union County, NC

Dear Ms. Merritt:

Wildlands Engineering, Inc. (Wildlands) has reviewed the Division of Water Resources (DWR) comments dated January 12, 2023, for the Draft Mitigation Plan for the Running Dog Mitigation Site. The DWR comments are listed below in bold, while Wildlands' responses are noted in italics lettering.

1. **Page 2 – Use DWR Project ID# 2022-0550v1.**  
*The correction has been made throughout the report.*
2. **Page 10**
  - a. **Clarify that the credit Service Area is the Goose Creek Watershed.**  
*The correction has been made.*
  - b. **This planting date will likely not happen**  
*The planting date has been updated to March 2023.*
3. **Page 15 - This table does not appear to be the most up-to-date Table. Use the correct table.**  
*The credit table has been updated to the November 2022 version.*
4. **Page 16**
  - a. **The viability letter also cites active stream bank instability along with active erosional features. How is the provider addressing this issue beyond just the seeding of rills?**  
*In addition to the erosional features that will be filled in, seeded, and planted, a combination of coir matting, live stakes, and native seed will be applied in areas along UT1 that require minor bank stabilization. Language has been added to Section 6.1 to address this.*
  - b. **It is assumed that the provider is planting a minimum of 9 species based on the table. Please indicate what the minimum will be in this paragraph.**  
*The paragraph has been updated to make it clear that a minimum of 8 species will be planted.*



**5. Page 18**

- a. **The planting plan includes both Trees and Shrubs. The performance standards, as written, do not specify that trees and shrubs can count towards that performance. .0295(n)(2)(b) allows 2 different performance standards. Please adjust the performance standards and monitoring protocol appropriately to ensure that both Trees and Shrubs are wanting to be used towards measuring performance. Otherwise, remove shrubs from the planting plan and keep language elsewhere as is.**

*The report has been updated to allow for both Trees and Shrubs to be counted in the performance standards. Monitoring protocol has also been updated accordingly.*

- 6. Page 22 – From this page forward, with exception of the Figures, it is a duplicate Mitigation Plan. Please remove duplicate pages.**

*Wildlands apologizes for the error in the PDF submittal. The extra pages have been removed.*

- 7. Page 40 – Clearly mark the service area as being the Goose Creek Watershed.**

*The figure has been updated accordingly.*

Please contact me at 704-560-2997 if you have any additional questions or concerns.

Sincerely,

A handwritten signature in cursive script that reads "Andrea S. Eckardt".

Andrea S. Eckardt  
Ecological Assessment Team Leader  
[aeckardt@wildlandseng.com](mailto:aeckardt@wildlandseng.com)

# MITIGATION PLAN

## Running Dog

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NCDEQ Contract No. 210202-01  
DMS ID No. 100210  
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HUC 03040105

PREPARED FOR:

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

PREPARED BY:

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**Wildlands Engineering, Inc.**  
1430 South Mint Street, Suite 104  
Charlotte, NC 28203  
Phone: (704) 332-7754

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

- 15A NCAC 02B .0295 Mitigation Program Requirements for Protection and Maintenance of Riparian Buffers.

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

### **Contributing Staff:**

Andrea Eckardt, *Project Manager*  
Shawn Wilkerson, *Principal in Charge*  
Stephanie Erickson, *Mitigation Plan Development and Monitoring Lead*  
Sam Kirk, *Construction Administrator*

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NC Division of Water Resources Site Viability for Buffer Mitigation Letter – April 29, 2022

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## 1.0 Introduction

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The Running Dog mitigation site (Site) is located in Union County approximately ten miles east of Charlotte (Figure 1). The Site involves buffer restoration on three unnamed tributaries and three ephemeral channels that flow to Goose Creek. The Site is being submitted for buffer mitigation credit in the Goose Creek Watershed – Cataloging Unit 03040105 of the Yadkin River Basin in accordance with the Consolidated Buffer Mitigation Rules (15A NCAC 02B .0295).

The project is located within the Yadkin River Hydrologic Unit Code (HUC) 03040105030020 and NCDWR Subbasin 03-07-12 and is also within a Targeted Resource Area (TRA) for hydrology, water quality, and habitat. Project streams flow approximately 1,000 feet to their confluence with Goose Creek, which flows to the Rocky River. According to the 2012 Goose Creek and Crooked Creek Local Watershed Plan – Phase III (LWP), the Goose Creek watershed is “one of only three watersheds in North Carolina to still support the Carolina heelsplitter (*Lasmigona decorata*), a federally and state endangered freshwater mussel.” According to the report, improving and protecting the health of the streams in the Goose Creek watershed was identified as critical in the continued existence of the Carolina heelsplitter. The proposed riparian buffer restoration project supports that goal of improved stream health by addressing the primary watershed stressors outlined in the Goose Creek LWP: sediment and bacteria from agricultural sources and increased peak flows and runoff volumes. The project also addresses nutrient inputs, thermal pollution, and lack of riparian canopy. More information on the ecological and water quality goals for the project is included in Table 1.

The area surrounding the project streams and ephemeral channels proposed for buffer restoration is currently agricultural fields, used to grow corn, wheat or soybeans. Fertilizer, in the form of chicken litter, is regularly applied to the fields. Restoring the vegetation on the areas up to 70 feet from the streams and ephemeral channels will remove the crops and fertilizer inputs within the project area. The restored floodplain areas will filter sediment during high rainfall events. The establishment of riparian buffers will create shading to minimize thermal heating. Finally, newly planted native vegetation will provide cover and food for wildlife.



To reach the Site from the City of Charlotte, travel east on US-74 for approximately 4 miles. Take exit 246 for NC-27 E/ Albemarle Rd and continue for 2.5 miles, then turn right onto Lawyers Rd. In approximately 4 miles, turn left onto Nelson Rd. After 1 mile turn right onto Wilson Mint Hill Rd and

continue onto NC-218 E/Fairview Rd for 4 miles. At the traffic circle, continue straight onto NC-218 for 2.5 miles. Turn right onto Indian Trail Fairview Rd. The parcel will be located on the left.

**Table 1: Water Quality, Hydrology, and Habitat Goals**

<b>Site Functional Stressors</b>	<b>Functional Uplift Potential</b>	<b>Site Goal</b>	<b>Site Objective</b>
Water Quality: <b>Sediment</b>	Significant sources of sediment include eroding channels, streams, and adjacent agricultural fields. Sediment will be captured by deposition on restored floodplain areas where native vegetation will slow overland flow velocities. Planted vegetation will help stabilize streams and ephemeral channels.	Reduce sediment input from adjacent agricultural fields.	Reduce sediment inputs to waters of Goose Creek.
Water Quality: <b>Nutrients</b>	Nutrient input will be decreased by filtering runoff from the agricultural fields through restored native vegetation. The off-site nutrient input will also be absorbed on-site by filtering flood flows through restored floodplain areas, where flood flows can disperse through native vegetation.	Reduce nutrient input from adjacent agricultural fields.	Reduce nutrient inputs to waters of Goose Creek.
Water Quality: <b>Fecal Coliform</b>	These pollutants will be reduced by converting cropland fertilized with chicken litter to forest and filtering runoff from the adjacent fields and poultry farm through the planted vegetated buffers.	Restrict the application of animal waste in the conservation easement and reduce fecal coliform input from adjacent agricultural fields.	Reduce fecal coliform inputs to waters of Goose Creek.
Water Quality: <b>Other (Temperature)</b>	Planted riparian trees will shade the project features as they mature, reducing thermal pollution.	Decrease water temperature and increase dissolved oxygen concentrations in the Site streams.	Improve water quality of Goose Creek through a reduction of thermal pollution.
Hydrology: <b>Non-Diffuse Flow</b>	Diffuse flow will be maintained throughout the conservation easement area where possible, thereby reducing erosion and filtering of nutrients into the project features.	Create diffuse-flow discharge through the reforested riparian area.	Reduce erosion and filter nutrients into waters of Goose Creek through diffuse flow.
Habitat: <b>Lack of Riparian Canopy</b>	The existing land use of the riparian buffer of the project features is agriculture. The project will include replanting of riparian zones with native vegetation.	Riparian areas will be restored by planting native vegetation.	Convert agricultural fields to forested riparian buffers along all Site streams and ephemeral channels.



## 2.0 Mitigation Project Summary

The following section describes the existing riparian conditions at the Site in terms of vegetative condition, watershed, soils, geology, cultural resources, species of concern, regulated floodplain zones, and site constraints. The major attributes and timeline of the project are outlined in Table 2.

**Table 2: Project Attributes**

<b>Project Name</b>	Running Dog
<b>Hydrologic Unit Code</b>	03040105030020
<b>River Basin</b>	Goose Creek Watershed – Yadkin River Basin
<b>Geographic Location (Lat, Long)</b>	35.130655, -80.549511
<b>Site Protection Instrument (DB, PG)</b>	To be recorded
<b>Total Credits</b>	632,250 ft <sup>2</sup> (Service Area – Goose Creek Watershed)
<b>Types of Credits</b>	Riparian Buffer
<b>Mitigation Plan Date</b>	July 2022
<b>Initial Planting Date</b>	March 2023
<b>Baseline Report Date</b>	April 2023
<b>MY1 Report Date</b>	December 2023
<b>MY2 Report Date</b>	December 2024
<b>MY3 Report Date</b>	December 2025
<b>MY4 Report Date</b>	December 2026
<b>MY5 Report Date*</b>	December 2027

\*Meets success criteria (schedule progression has been developed assuming that the site meets success criteria each monitoring year)

### 2.1 Existing and Historic Site Conditions

The proposed buffer restoration site is approximately 15.7 acres of agricultural fields located on one parcel. The project includes the restoration of riparian buffers along three unnamed tributaries and three ephemeral channels: UT1, UT1A, UT2, and EC1-EC3 (Figure 3).

The Site is characterized by a gently sloped valley dominated by agricultural fields and an adjacent poultry farm. There are few existing trees on Site with all six project features flowing through active agricultural fields. Based on aerial photos, project streams have been in the same location since 1948. Historical aerials from 1948 through 2016 are included in the proposal appendix and further document the Site’s long history of agricultural use prior to 2009, the effective date of the Goose Creek Buffer Rules.

UT1 originates on the Site approximately 200 feet from the southern wood line and flows southwest through agricultural fields towards Indian Trail-Fairview Road. UT1A flows into UT1 approximately 150 feet east of the property line and is located completely within the conservation easement area. There is a section of ephemeral channel upstream of UT1A (EC1) also within the conservation easement area. There is a second ephemeral channel (EC2) approximately 1,200 linear feet upstream on UT1. The third ephemeral channel (EC3) begins just north of the gas utility line shown on Figure 3 and flows approximately 450 feet until it transitions to UT2. UT2 continues to flow north through the agricultural fields to Brent Haigler Road. Other than some very small sections on the right bank of UT1 that have a thin row of mature trees, the entire project area is cleared and used for agriculture. A photolog from May 20, 2022 is included in the Appendix.

## 2.2 Watershed Characterization

The Site is located within the NCDWR Subbasin 03-07-12. The project streams flow directly to Goose Creek which flows to the Rocky River. Goose Creek is protected for Class C uses (recreational use, agriculture, fishing and fish consumption, and the maintenance of biological integrity for wildlife) and is home to a known population of the federally listed Carolina heelsplitter.

The Site topography, as indicated on the Midland, NC USGS 7.5-minute topographic quadrangle, shows gently sloped areas throughout the Site (Figure 3). UT1 and a portion of UT2 are depicted as streams on the USGS topographic map. Drainage areas for the project reaches (Figure 4) were delineated using 2-foot contour intervals derived from the USGS Stream Stats website and the North Carolina Floodplain Mapping Program’s 2014 Light Detection and Ranging (LiDAR) data (Figure 5). Land uses draining to the project reaches are a mixture of agricultural and forest with some residential use. The watershed areas and current land use are summarized in Table 3, below.

**Table 3 Drainage Areas and Associated Land Use**

Reach Name	Stream Type	Watershed Area (acres)	Land Use
UT1	Intermittent	82	88% agriculture, 10% forested, 2% residential development
UT1A	Intermittent	11	100% agriculture
UT2	Intermittent	41	95% agriculture, 5% forested
EC1	Ephemeral	11	95% agriculture, 5% residential development
EC2	Ephemeral	13	75% agriculture, 25% residential development
EC3	Ephemeral	15	88% agriculture, 12% forested

## 2.3 Soils

The project site is mapped by the Union County Soil Survey. Project area soils are mapped primarily as Cid channery silt, Goldston very channery silt loam, and Goldston-Badin complex. These soils are described below in Table F.3. An image of the paper copy of the 1996 Soil Survey of Union County is provided in Figure 6. Both UT1 and UT2 are depicted as streams on the 1996 Soil Survey.

**Table 4 Project Soil Types and Descriptions**

Soil Name	Description
CmB – Cid channery silt loam, 1-5% slopes	Cid channery silt loam consists of a moderately deep upland area soils that are moderately well drained or somewhat poorly drained. Permeability is slow and surface runoff is slow to moderate.
GoC – Goldston very channery silt loam, 4- 15% slopes	Goldston very channery silt loam soils are shallow soils found in the Carolina Slate Belt. The soils are well drained to excessively drained. Permeability is moderately rapid and run off is rapid.
GsB – Goldston-Badin complex, 2-8% slopes	The Goldston-Basin soils are moderately deep soils that are well drained and found in the Carolina Slate Belt. Permeability is moderate and surface runoff is medium to very rapid.

Source: *Union County Soil Survey, 1996, USDA-NRCS and <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>*

## 2.4 Vegetation

Vegetation communities within the project area are comprised mostly of open agricultural fields (wheat, rye, soy, and corn). The Site has been maintained as row crops up to the project features. While there

are small patches of early successional trees and shrubs, most of the Site lacks canopy, understory, and shrub vegetative layers.

The small wooded areas along UT1 contain a mix of native and exotic species. The canopy layer is dominated by sugarberry (*Celtis laevigata*), green ash (*Fraxinus pennsylvanica*), persimmon (*Diospyros virginiana*), and boxelder (*Acer negundo*), but also includes a few American elm (*Ulmus americana*), black cherry (*Prunus serotina*) and a pecan (*Carya illinoensis*). The vine layer consists of poison ivy (*Toxicodendron radicans*), Virginia creeper (*Parthenocissus quinquefolia*), trumpet creeper (*Campsis radicans*), and muscadine grape (*Vitis rotundifolia*). The shrub layer minimal, being composed of either young trees or Chinese privet (*Ligustrum sinense*). The herbaceous layer includes a mix of johnsongrass (*Sorghum halepense*), fescue (*Festuca spp.*), Japanese honeysuckle (*Lonicera japonica*), goldenrod (*Solidago canadensis*, *S. gigantea*), wild garlic (*Allium vineale*), and spiny sowthistle (*Sonchus asper*).

## 2.5 Site Constraints and Access

The Site is accessible for construction, monitoring, and long-term stewardship from Brent Haigler Road and Indian Trail-Fairview Road (Figure 7). Easement break locations and widths were minimized during the planning of the site. There are now three easement breaks proposed to allow for property owner access. Two easement breaks on UT1, included one with an existing gas utility line that runs through the break. One additional easement break is located on UT2. No culverts or crossings will be installed as part of the project. There is a power utility line that runs parallel to Indian Trail-Fairview Road, but the line and associated right of way are outside of the proposed conservation easement boundary.

## 2.6 Current Site Resources

On February 16, 2022, NCDWR assessed the stream origin and issued the official stream origin determination Letter. NCDWR also performed an onsite visit of the project area to determine viability for buffer mitigation on March 22, 2022 and issued a site viability letter on April 29, 2022. Seven features assessed were deemed suitable for riparian buffer credit pursuant to 15A NCAC 02B .0295 by NCDWR. There have been no changes to land use in the project area since NCDWR's 2022 site visit. A copy of both the "Determination for Applicability to the Catawba Riparian Buffer Rule" and the "Site Viability for Buffer Mitigation" letter from NCDWR are included in the Appendix.

## 2.7 Alternative Mitigation for Buffer Mitigation

In addition to buffer restoration on subject streams, per the Consolidated Buffer Mitigation Rules (15A NCAC 02B 0.0295 (o)), alternative mitigation is proposed on the Parcel in the form of buffer preservation on subject streams and buffer restoration on ephemeral channels. The proposed project is in compliance in the following ways:

Preservation on Subject Streams (15A NCAC 02B .0295 (o)(5):

- The buffer width is at least 30 feet from the stream (See Figure 8 for buffer zones).
- The area meets the requirements of 15A NCAC 02R 0.0403(c)(7), (8), and (11) with no known structures, infrastructure, hazardous substances, solid waste, or encumbrances within the mitigation boundary (Appendix D for EDR Radius Report summary).
- Mitigation credits for preservation are being requested on no more than 25% of the total area of buffer mitigation (See Tables 7 and 8 for credit calculations).

Restoration on Ephemeral Channels - 15A NCAC 02B .0295 (o)(7):

- The topographic crenulation on the ephemeral channel is depicted on Figures 3 and 4.
- The area of mitigation on the Parcel's ephemeral channel is located completely within its drainage areas (Figure 5).

- The ephemeral channel is directly connected to intermittent or perennial stream channels and will be protected under the same contiguous easement boundary (Figure 3).
- Mitigation credits on the ephemeral channels are being requested on no more than 25% of the total area of buffer mitigation on the Parcel (See Tables 7 and 8).

### 3.0 Site Protection Instrument

#### 3.1 Site Protection Instruments and Long-Term Protection

The land required for planting, management, and stewardship of the mitigation project includes portions of the parcel listed in Table 5. The conservation easement on this property has not yet been recorded. A copy of the draft Site Protection Instrument is included in the Appendix. An option agreement for the project area shown on the Figures have been signed by the property owners and a Memorandum of Option has been recorded at the Union County Register of Deeds. The option agreement allows restriction of the land use in perpetuity through a conservation easement. Wildlands will convey the conservation easement to the State to provide long-term protection of the Site. The conservation easement agreement will ensure the right of entry abilities of Wildlands, its contractors, and the future easement holder in any future land transactions. Once the conservation easement has been recorded, easement boundaries will be identified in the field to ensure clear distinction between the Site and adjacent areas. Boundary markers that have been disturbed, damaged, or destroyed will be repaired and/or replaced on an as needed basis.

**Table 5: Site Protection Instrument**

Landowner	PIN	County	Site Protection Instrument	Deed Book and Page Number	Acreage to be Protected
CF Master Limited Partnership	08225015	Union	Conservation Easement	To Be Recorded	15.7

### 4.0 Regulatory Considerations

Table 6, below, is a summary of regulatory considerations for the Site. These considerations are expanded upon in Sections 4.1-4.4. A copy of the signed Categorical Exclusion Form for the project is included in the Appendix.

**Table 6: Regulatory Considerations**

Regulatory Considerations			
Parameters	Applicable?	Resolved?	Supporting Docs?
Water of the United States - Section 404	No	N/A	N/A
Water of the United States - Section 401	No	N/A	N/A
Endangered Species Act	Yes	Yes	Appendix (Categorical Exclusion)
Historic Preservation Act	Yes	Yes	Appendix (Categorical Exclusion)
Coastal Zone Management Act	No	N/A	N/A
FEMA Floodplain Compliance	No	N/A	N/A
Essential Fisheries Habitat	No	N/A	N/A

#### 4.1 Threatened and Endangered Species

The National Heritage Program (NHP) Data Explorer database and the US Fish and Wildlife Service (USFWS) Information for Planning and Consulting (iPaC) database were searched for sensitive species and critical habitats within and near the project location in Union County, NC. Three federally listed endangered species were found to be possible in the area: Carolina heelsplitter, Michaux's sumac (*Rhus michauxii*) and Schweinitz's sunflower (*Helianthus schweinitzii*). No critical habitat or other species of interest were listed.

Results from pedestrian surveys conducted on September 9, 2021 indicated that the project area provides no suitable habitat for the federally listed species and no individuals of these species were located. There are no known critical habitats within the project site or in the area around it. Wildlands determinations are noted below.

To meet regulatory requirements, a letter with project maps was submitted to the USFWS Asheville field office requesting comment on January 25, 2022. The USFWS responded in a letter dated February 8, 2022 stating they concur with the determination of No Effect for all federally listed species. North Carolina Wildlife Resource Commission (NCWRC) was also contacted for comment in a letter dated January 25, 2022. NCWRC responded on February 24, 2022 stating there are known occurrences of the Carolina heelsplitter as well as other state species of concern in the Goose Creek and Crooked Creek watersheds. NCWRC advised that if any in-stream work were to occur, surveys for aquatic species may be requested. No in-stream work is planned for Running Dog, thereby, no surveys are required at this time. All correspondence is included in the Appendix as part of the Categorical Exclusion for the project.

#### 4.2 Cultural Resources and Significant Natural Heritage Areas

A scoping letter was submitted to the State Historic Preservation Office (SHPO) requesting comment on Running Dog on January 25, 2022. SHPO responded on February 23, 2022 and is unaware of any historical resources within the project boundary that would be affected by the project.

Therefore, SHPO does not have any concerns with the project as proposed. All correspondence related to Section 106 is included in the Appendix as part of the Categorical Exclusion for the project.

#### 4.3 FEMA Floodplain Compliance

The Site is not located in a FEMA floodplain. No grading activities are planned for the floodplain, so a floodplain development permit will not be required. No hydraulic modeling is planned for this project.

#### 4.4 Other Environmental Issues

An EDR Radius Map Report with GeoCheck was ordered for the Site through Environmental Data Resources, Inc. on February 5, 2021. The target property and the adjacent properties are not listed in any of the Federal, State, or Tribal environmental databases searched by EDR. There were no known or potential hazardous waste sites identified within one mile of the Site. The executive summary of the EDR report is included in the Appendix as part of the Categorical Exclusion for the project.

## 5.0 Determination of Credits

The Site is being restored as a riparian restoration site for 632,250 square feet of riparian buffer credits (Tables 7 and 8 and Figure 7). The mitigation credit calculations were derived from NCDWR based on the 15A NCAC 02B .0295 rule for Buffer Mitigation Credit, as well as *NCDWR's Methodology and Calculations for Nutrient Reductions* on the Site. The buffer zones and subject and non-subject stream designations are shown on Figure 8. The management objectives, mitigation type, and amount of buffer mitigation are presented below.

Table 7: Project Mitigation Credits

Project Area		Yadkin - Goose Creek		N Credit Conversion Ratio (ft <sup>2</sup> /pound)		P Credit Conversion Ratio (ft <sup>2</sup> /pound)		Riparian Buffer Credits		Delivered Nutrient Offset: N (lbs)		Delivered Nutrient Offset: P (lbs)		
Credit Type	Location	Subject? (enter NO if ephemeral or ditch )	Feature Type	Mitigation Activity	Min-Max Buffer Width (ft)	Feature Name	Total Area (ft <sup>2</sup> )	Total (Creditable) Area of Buffer Mitigation (ft <sup>2</sup> )	Initial Credit Ratio (x:1)	% Full Credit	Final Credit Ratio (x:1)	Convertible to Riparian Buffer?	Convertible to Nutrient Offset?	
Buffer	Rural	Yes	I / P	Restoration	0-100	UT1	420,770	420,770	1	100%	1.00000	Yes	No	
Buffer	Rural	Yes	I / P	Enhancement	0-100	UT1	9,126	9,126	2	100%	2.00000	Yes	No	
Buffer	Rural	Yes	I / P	Restoration	0-100	UT2	134,226	134,226	1	100%	1.00000	Yes	No	
Buffer	Rural	No	Ephemeral	Restoration	0-100	EC3	71,710	71,710	1	100%	1.00000	Yes	No	
<b>Totals (ft2):</b>							<b>635,832</b>	<b>635,832</b>						
<b>Total Buffer (ft2):</b>							<b>635,832</b>	<b>635,832</b>						
<b>Total Nutrient Offset (ft2):</b>							<b>0</b>	<b>N/A</b>						

Table 8: Total Area of Mitigation

Enter Preservation Credits Below		Total Ephemeral Area (ft <sup>2</sup> ) for Credit:		Total Eligible Ephemeral Area (ft <sup>2</sup> ):		Total Eligible for Preservation (ft <sup>2</sup> ):		Ephemeral Reaches as % TABM		Preservation as % TABM			
Credit Type	Location	Subject?	Feature Type	Mitigation Activity	Min-Max Buffer Width (ft)	Feature Name	Total Area (sf)	Total (Creditable) Area for Buffer Mitigation (ft <sup>2</sup> )	Initial Credit Ratio (x:1)	% Full Credit	Final Credit Ratio (x:1)	Riparian Buffer Credits	
	Rural	Yes	I / P		0-100	UT1	9,810	9,810	10	100%	10.00000	981.000	
<b>Preservation Area Subtotals (ft<sup>2</sup>):</b>							<b>9,810</b>	<b>9,810</b>					

Table 8: Total Area of Mitigation

TOTAL AREA OF BUFFER MITIGATION (TABM)		
Mitigation Totals	Square Feet	Credits
Restoration:	626,706	626,706.000
Enhancement:	9,126	4,563.000
Preservation:	9,810	981.000
<b>Total Riparian Buffer:</b>	<b>645,642</b>	<b>632,250.000</b>
TOTAL NUTRIENT OFFSET MITIGATION		
Mitigation Totals	Square Feet	Credits
Nitrogen:	0	0.000
Phosphorus:	0	0.000

## 6.0 Mitigation Work Plan

---

Wildlands proposes to restore a high quality of ecological function to riparian areas of the project intermittent streams and ephemeral channels. The ecological uplift can be summarized as transforming an agriculturally impacted area to a protected riparian corridor. The project design will ensure that no adverse impacts to wetlands or existing riparian buffers occur. Figure 7 illustrates the conceptual design for the Site. Across most of the Site, riparian restoration will occur at 70 feet. Areas of restoration, enhancement, and preservation along UT1, UT2, and UT2A will extend to a maximum of 100 feet from the top of banks on project features. The minimum width of the conservation easement is 50 feet throughout the project. Figure 8 depicts the riparian buffer zones (30 feet, 50 feet, 100 feet, and 200 feet). Figure 8 also identifies whether the project streams are subject to the buffer rules, based on the DWR Determination for Applicability to the Catawba Riparian Buffer Rule.

### 6.1 Parcel Preparation

The land use within 100 feet from top of bank of the project features has been maintained and cleared for row crop cultivation. Areas slated for buffer restoration will not require disking or ripping because the land has been maintained in agriculture; therefore, soil disturbance will be minimal across the Site. A couple of isolated erosional features along UT1 will be filled in, seeded, and planted. Also, along UT1, a combination of coir matting, live stakes, and native seed will be applied in select areas that require minor bank stabilization. Within the riparian enhancement areas, Site preparation will include select herbicide treatments and/or limited mechanical clearing to remove undesirable underbrush or invasive species within the including Chinese privet. Soil samples will also be collected and analyzed across the Site prior to planting to determine baseline soil health and used for future reference in the case of poor tree growth/health later in the project. Agricultural crops or cover crops will be grown on the Site until the winter of 2022 at which point the crop will be sprayed with an herbicide and the riparian seed mix will be spread. The cover crop will stabilize the soil while seed mix establishes.

### 6.2 Riparian Area Restoration Activities

Riparian area restoration will involve planting appropriate native tree species along the riparian corridor. These revegetation efforts will be coupled with controlling invasive species population. The species composition to be planted was selected based on the community type, observation of occurrence of species in riparian areas adjacent to the Site, best professional judgement on species establishment, and anticipated site conditions in the early years following project implementation. Based on initial observations of the Site, the Piedmont Levee Forest (Typic subtype) defined by Schafale (2012) is the appropriate target community. Tree and shrub species planted across the riparian areas of the Site will include a mixture of the species listed in Table 9 below, based on availability. A minimum of 8 species will be planted.

Trees and shrubs will be spaced at 7'x12' upon planting, which is equivalent to a stem density of 521 stems per acre and is sufficient to meet the performance standards outlined in the Rule 15A NCAC 02B .0295 of 260 planted trees and shrubs per acre at the end of five years. Stems will be well mixed prior to planting to ensure diversity of bare root species across the Site. Due to the nature of random mixing, some stems of the same species might be planted together in some areas.

**Table 9: Proposed Tree Species**

Tree & Shrub Species	Common Name	Density	Forest Strata
<i>Betula nigra</i>	River Birch	15%	Canopy
<i>Quercus michauxii</i>	Swamp Chestnut Oak	15%	Canopy
<i>Quercus phellos</i>	Willow oak	15%	Canopy
<i>Platanus occidentalis</i>	Sycamore	13%	Canopy
<i>Liriodendron tulipifera</i>	Tulip Poplar	12%	Canopy
<i>Acer negundo</i>	Boxelder	10%	Sub-Canopy
<i>Diospyros virginiana</i>	Persimmon	10%	Canopy
<i>Celtis laevigata</i>	Sugarberry	5%	Canopy
<i>Viburnum prunifolium</i>	Smooth Blackhaw	5%	Shrub
Alternate Species	Common Name	Density	Strata
<i>Carya ovata</i>	Shagbark Hickory	0%	Canopy
<i>Prunus serotina</i>	Black Cherry	0%	Canopy
<i>Quercus alba</i>	White Oak	0%	Canopy
<i>Sambucus nigra</i>	Elderberry	0%	Shrub
<i>Ulmus americana</i>	American Elm	0%	Canopy

A regionally appropriate seed mix of warm season grasses and wildflowers will also be applied to provide permanent ground cover for soil stabilization and reduction of sediment loss during rain events. The riparian seed mix will be selected from the species listed in Table 10. Planting is scheduled for early 2023.

**Table 10: Proposed Permanent Riparian Seeding Species**

Pure Live Seed (15 lbs/acre)			
Riparian Seeding	Common Name	Density (lbs/acre)	Strata
<i>Schizachyrium scoparium</i>	Little Bluestem	4.0	Herbaceous
<i>Elymus virginicus</i>	Virginia Wild Rye	3.0	Herbaceous
<i>Panicum virgatum</i>	Switchgrass	3.0	Herbaceous
<i>Chamaecrista fasciculata</i>	Partridge Pea	2.0	Herbaceous
<i>Carex vulpinoidea</i>	Fox Sedge	1.0	Herbaceous
<i>Coreopsis lanceolata</i>	Lanceleaf Coreopsis	1.0	Herbaceous
<i>Rudbeckia hirta</i>	Black-eyed Susan	1.0	Herbaceous
Riparian Alternates	Common Name	Density (lbs/acre)	Strata
<i>Baptisia australis</i>	Blue False Indigo	0.0	Herbaceous
<i>Chasmanthium latifolium</i>	River Oats	0.0	Herbaceous
<i>Panicum rigidulum</i>	Redtop Panicgrass	0.0	Herbaceous

Post construction, the presence and extents of invasive species will be monitored. Treatment of invasive species will continue as necessary throughout the life of the project to ensure project stability and success of the riparian and streambank vegetation.

### 6.3 Riparian Area Enhancement Activities

The revegetation plan for the buffer enhancement areas under 15A NCAC 02B .0295(n) will include planting supplemental bare root trees and shrubs listed in Table 9 and controlling invasive species growth, specifically Chinese privet. Prior to planting, Wildlands will implement a cut stump treatment of Chinese privet in the enhancement area with an appropriate herbicide. In the spring of 2023, a foliar



application of herbicide will be applied to honeysuckle and the remaining privet within the project area. The proposed supplemental planting area includes the area identified as Buffer Enhancement on Figure 7.

#### **6.4 Riparian Area Preservation Activities**

No work is proposed in the buffer preservation areas, as allowed under 15A NCAC 02B .0295(o). The preservation area will be protected in perpetuity under a conservation easement.

### **7.0 Performance Standards**

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The performance criteria for the Site will follow approved performance criteria presented in the guidance documents outlined in RFP 16-20210202 and the Consolidated Buffer Rule (15A NCAC 02B .0295). Annual monitoring and semi-annual site visits will be conducted to assess the condition of the finished project. The buffer mitigation project will be assigned specific performance criteria components for vegetation. Performance criteria will be evaluated throughout the five-year post-construction monitoring. An outline of the performance criteria components follows.

#### **7.1 Vegetation**

The final vegetative success criteria will be the survival of at least 260 stems per acre at the end of the fifth year of monitoring, with a minimum of four native hardwood tree and native shrub species where no one species comprising more than 50 percent of stems for the Site. Vigor, height, species composition, and density data will all be collected and provided in the annual reports. The extent of invasive species coverage will also be monitored and controlled as necessary throughout the required monitoring period.

Permanent vegetation monitoring plots will be installed and evaluated within the riparian restoration areas to measure the survival of the planted trees and shrubs. The plots will be randomly placed throughout the planted riparian areas. A total of 12 plots will be established within the riparian buffer restoration areas which will make up at least 2% of the planted area (Figure 9). The size of individual quadrants will be 100 square meters.

Vegetation assessments will be conducted and follow the DMS approved protocol outlined in the DMS Monitoring Report Template (October 2020). A reference photo will be taken from the southwestern corner of each of the 12 plots. Photos will be taken from all photo points each monitoring year and provided in the annual reports. All planted stems will be marked with flagging tape and recorded.

#### **7.2 Reference Photographs**

Overview photographs will be taken within the project area once a year to visually document stability for five years following construction.

#### **7.3 Visual Assessments**

Visual assessments will be performed within the Site on a semi-annual basis during the five-year monitoring period. Problem areas with vegetative health will be noted (e.g. low stem density, vegetation mortality, invasive species or encroachment). Areas of concern will be mapped and photographed accompanied by a written description in the annual report. Problem areas will be re-evaluated during each subsequent visual assessment. Should remedial actions be required, recommendations will be provided in the annual monitoring report.

#### **7.4 Reporting Performance Criteria**

Using the DMS Riparian Buffer and Annual Monitoring Report Template version 2.0 (May 2017), a baseline monitoring document and as-built record drawings of the project will be developed for the

constructed Site. Complete monitoring reports will be prepared in the fall of each monitoring year and submitted to DMS. Annual monitoring reports will be based on the above referenced DMS Template (May 2017). The monitoring period will extend five years beyond completion of construction or until performance criteria have been met.

### 7.5 Maintenance and Contingency Plans

Wildlands will develop necessary adaptive measures or implement appropriate remedial actions in the event that the Site or a specific component of the Site fails to achieve the success criteria outlined above. The project-specific monitoring plan developed during the design phase will identify an appropriate threshold for maintenance intervention based on the monitored items. Any actions implemented will be designed to achieve the success criteria specified previously and will include a work schedule and updated monitoring criteria (if applicable).

## 8.0 Monitoring Plan

The Site monitoring plan has been developed to ensure that the required performance standards are met, and project goals and objectives are achieved. The monitoring report shall provide project data chronology that will facilitate an understanding of project status and trends, ease population of DMS databases for analysis and research purposes and assist in close-out decision making.

### 8.1 Monitoring Components

Project monitoring components are listed in more detail in Table 11 and Figure 9.

**Table 11: Monitoring Components**

Parameter	Monitoring Feature	Quantity	Frequency
Vegetation	Carolina Vegetation Survey (CVS) Level 2	12	Annual
Visual Assessment		Yes	Semi-Annual
Exotic and nuisance vegetation		Yes	Semi-Annual
Project Boundary		Yes	Semi-Annual
Reference Photos	Overview Photographs	Yes	Annual

## 9.0 Long-Term Management Plan

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

The Stewardship Program will periodically install additional signage as needed to identify boundary markings. Internal easement crossings planned for the project area will be the responsibility of the landowner to maintain. The Site Protection Instrument can be found in the Appendix.

## 10.0 Adaptive Management Plan

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Upon completion of Site construction, Wildlands will implement the post-construction monitoring defined in Section 8. Project maintenance will be performed during the monitoring years to address minor issues as necessary. If, during annual monitoring it is determined the Site's ability to achieve Site performance standards are jeopardized, Wildlands will notify the members of DMS/NCDWR and work with the DMS/NCDWR to develop contingency plans and remedial actions. Any actions implemented will be designed to achieve the success criteria specified previously and will include a work schedule and updated monitoring criteria (if applicable).



## 11.0 References

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Natural Resources Conservation Service (NRCS), 2019. Web Soil Survey of Union County.  
<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>.

North Carolina Division of Water Quality (NCDWQ), 2011. Surface Water Classifications.  
<http://deq.nc.gov/about/divisions/water-resources/planning/classification-standards/classifications>.

NCGS, 2013. Mineral Resources. <http://deq.nc.gov/about/divisions/energy-mineral-land-resources/north-carolina-geological-survey/mineral-resources>.

North Carolina Natural Heritage Program (NHP), 2018. Natural Heritage Element Occurrence Database, Union County, NC.

Rule 15A NCAC 02B .0295

Schafale, M.P. 2012. Classification of the Natural Communities of North Carolina, Fourth Approximation. North Carolina Natural Heritage Program, Raleigh, North Carolina.

United States Fish and Wildlife Service (USFWS), 2018. Endangered Species, Threatened Species, Federal Species of Concern and Candidate Species, Union County, NC.  
<https://www.fws.gov/raleigh/species/cntylist/wayne.html>.



# Figures

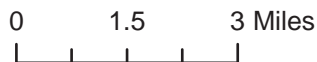
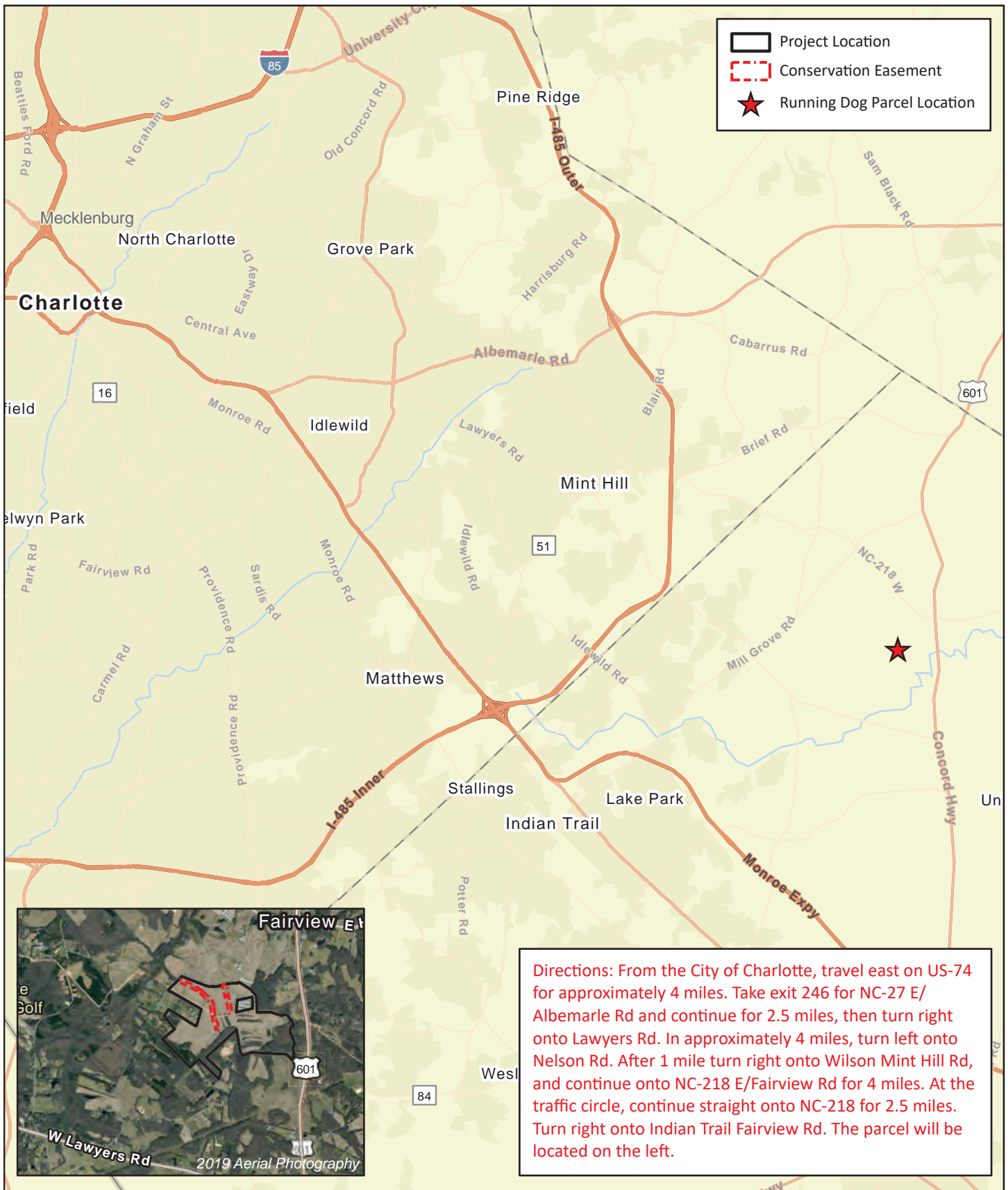


Figure 1. Vicinity Map  
Running Dog Mitigation Site  
Mitigation Plan  
Yadkin River Basin (03040105)

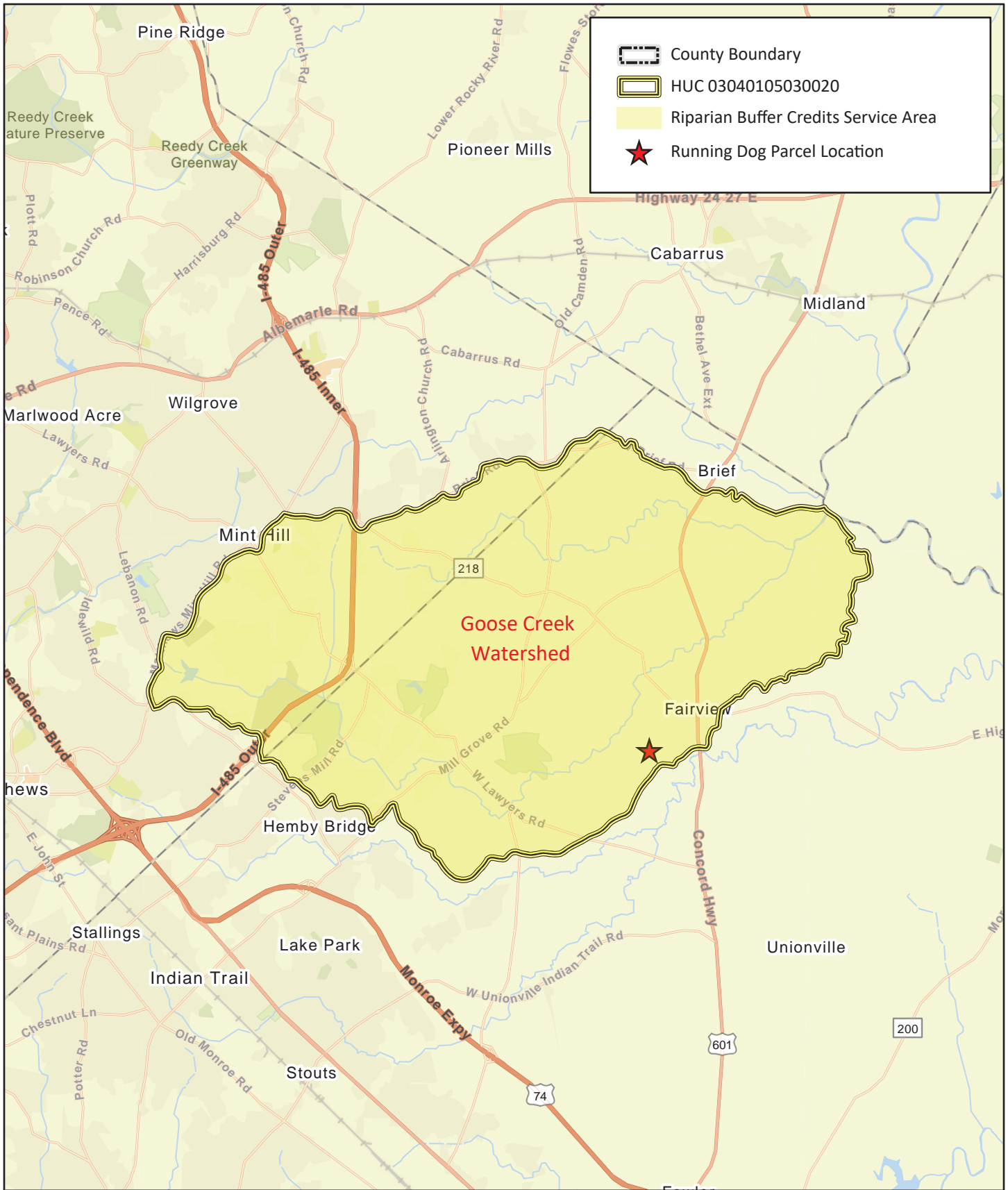
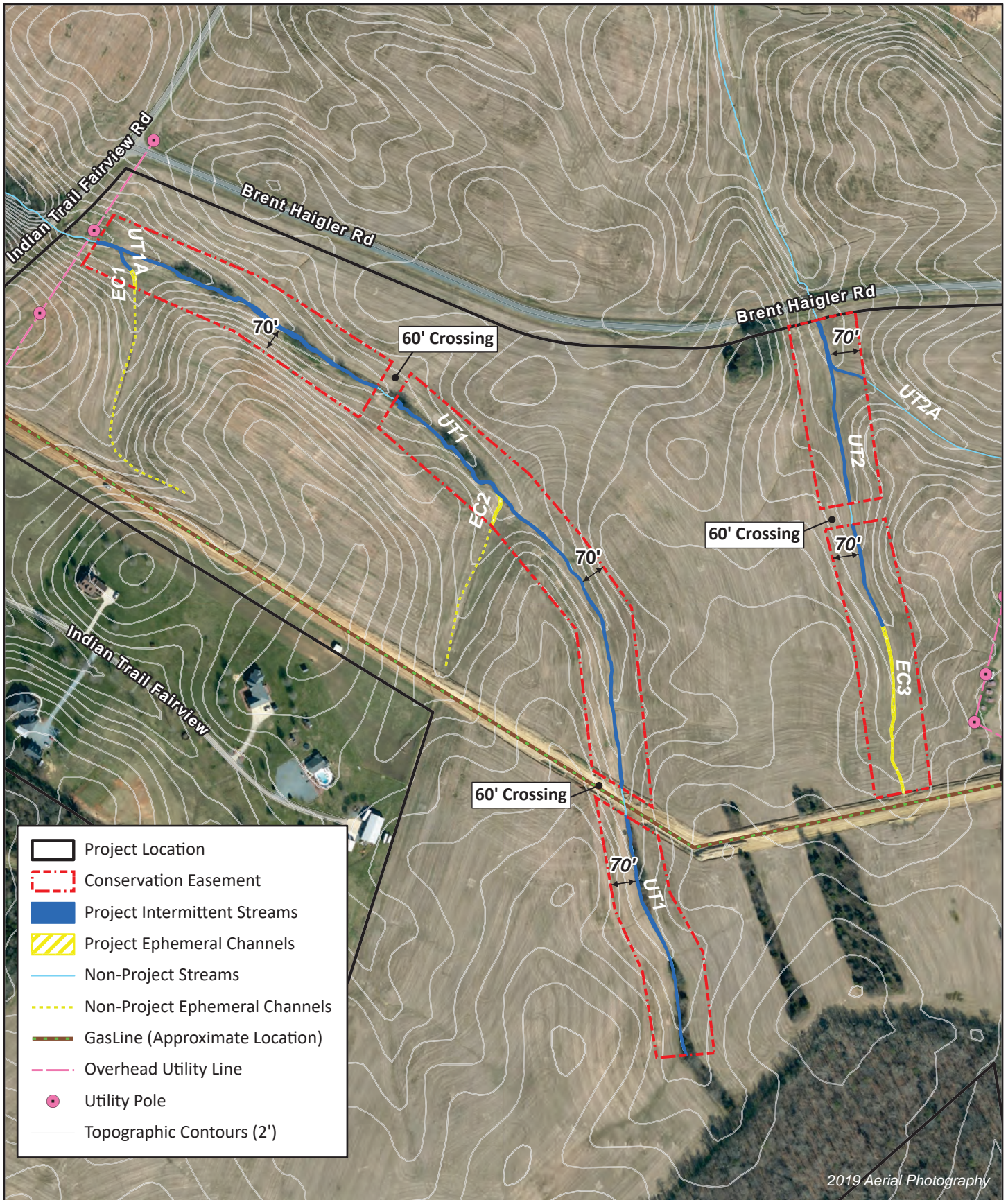


Figure 2. Service Area Map  
Running Dog Mitigation Site  
Mitigation Plan  
Yadkin River Basin (03040105)

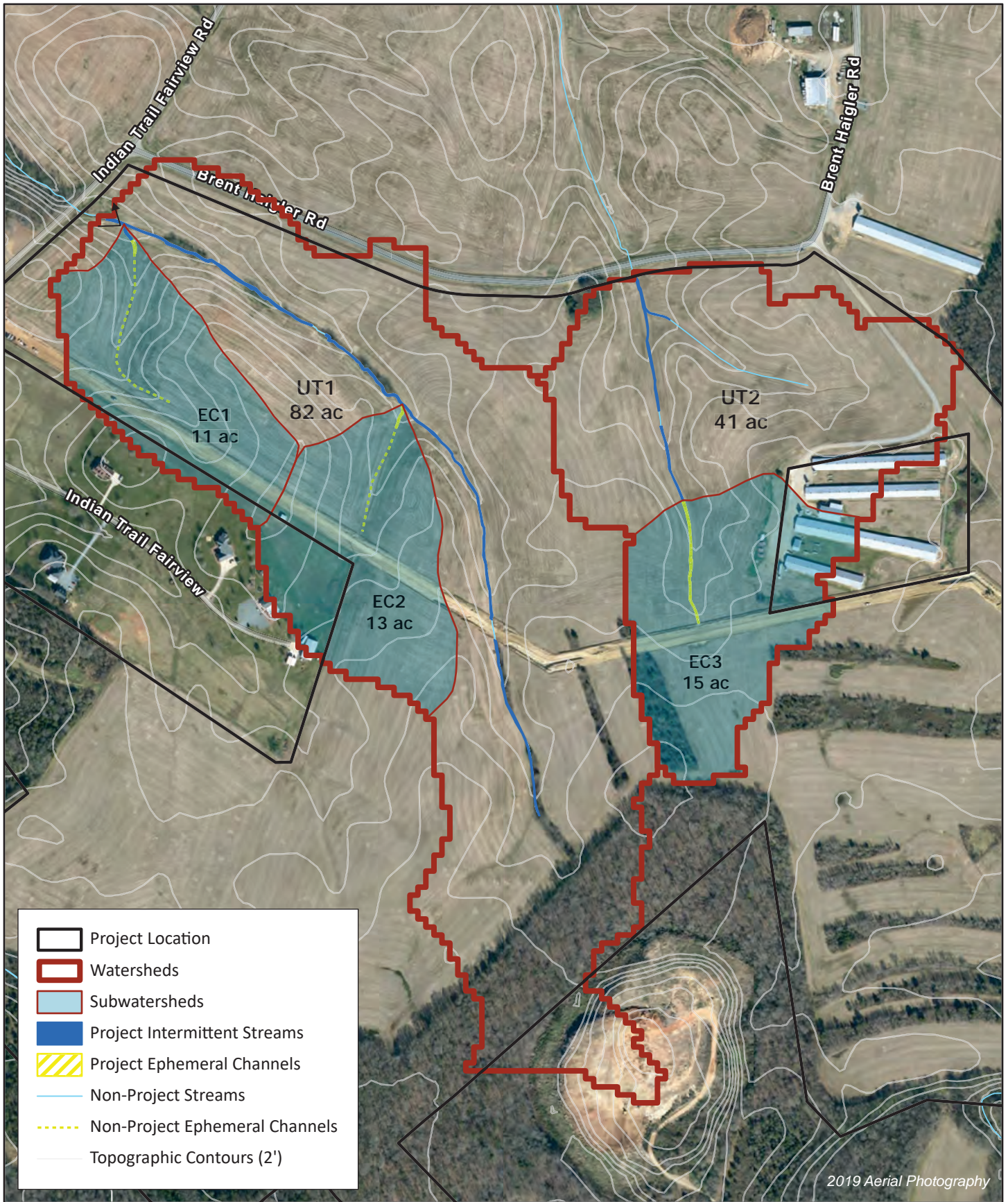


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Figure 3. Site Map  
 Running Dog Mitigation Site  
 Mitigation Plan  
 Yadkin River Basin (03040105)





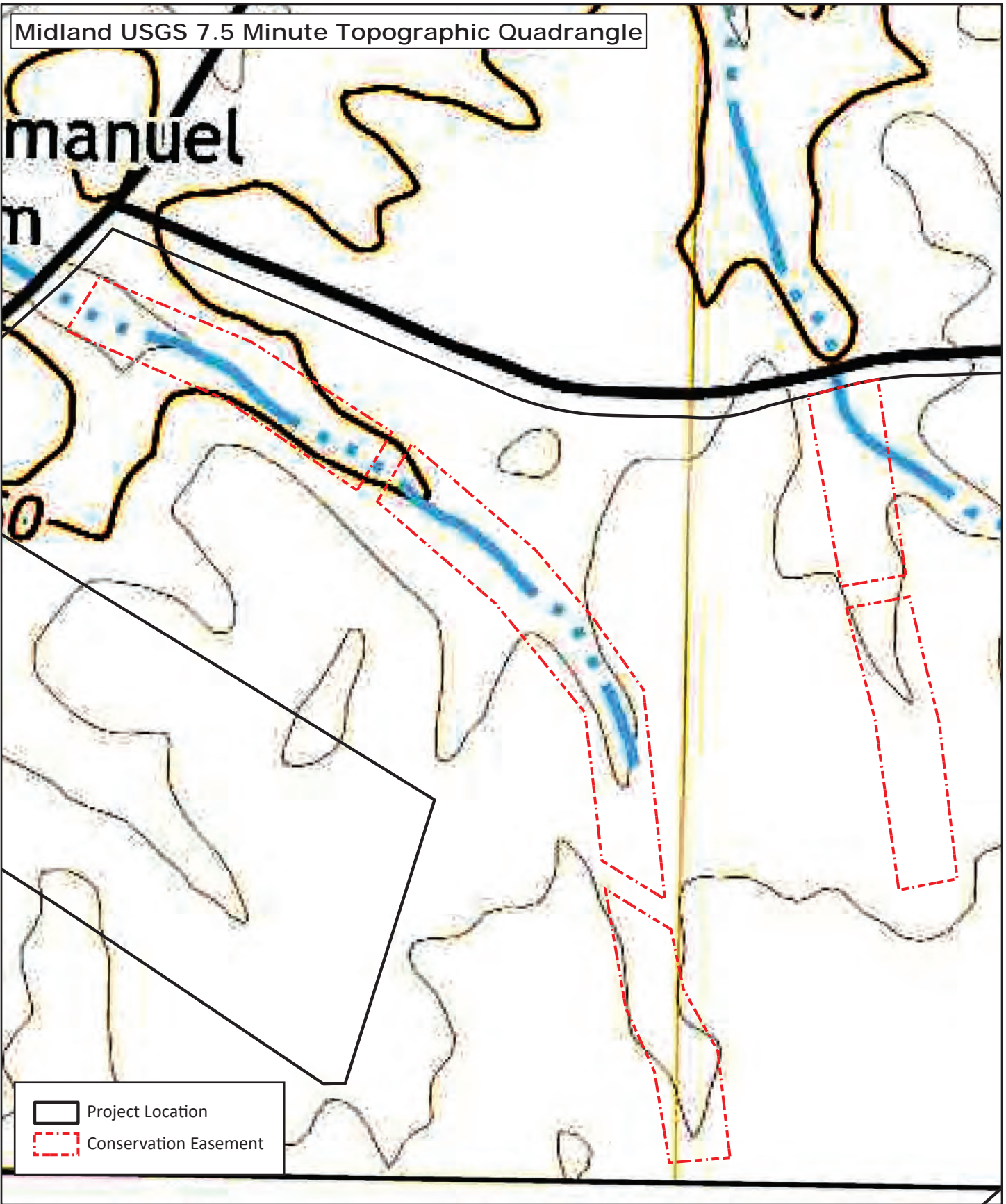
0 250 500 Feet



Figure 5. Watershed Map  
Running Dog Mitigation Site  
Mitigation Plan  
Yadkin River Basin (03040105)

Midland USGS 7.5 Minute Topographic Quadrangle

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Project Location  
Conservation Easement



0 200 400 Feet



Figure 6. USGS Topographic Map  
Running Dog Mitigation Site  
Mitigation Plan  
Yadkin River Basin (03040105)

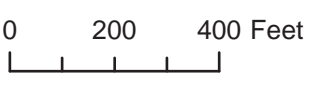
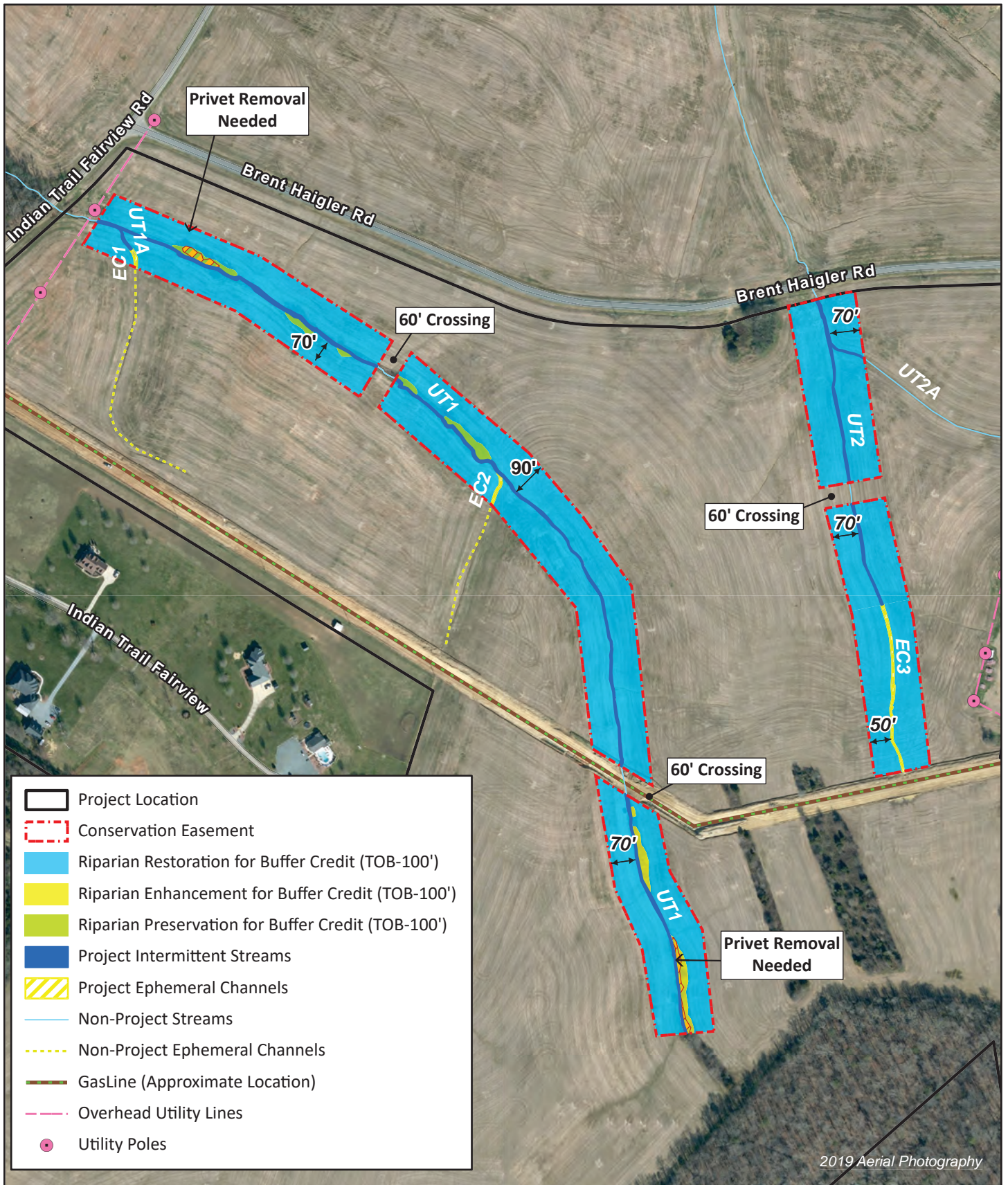
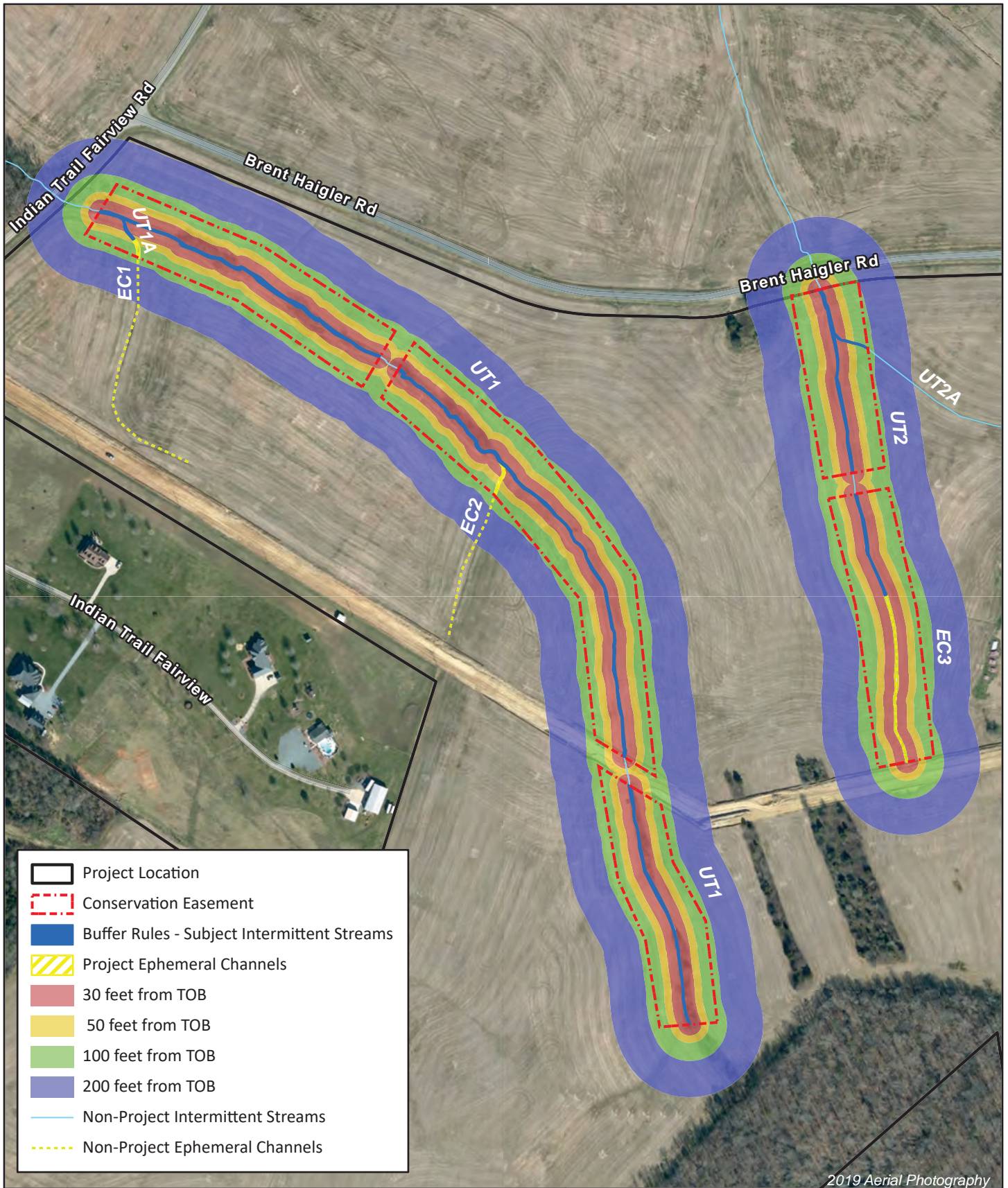


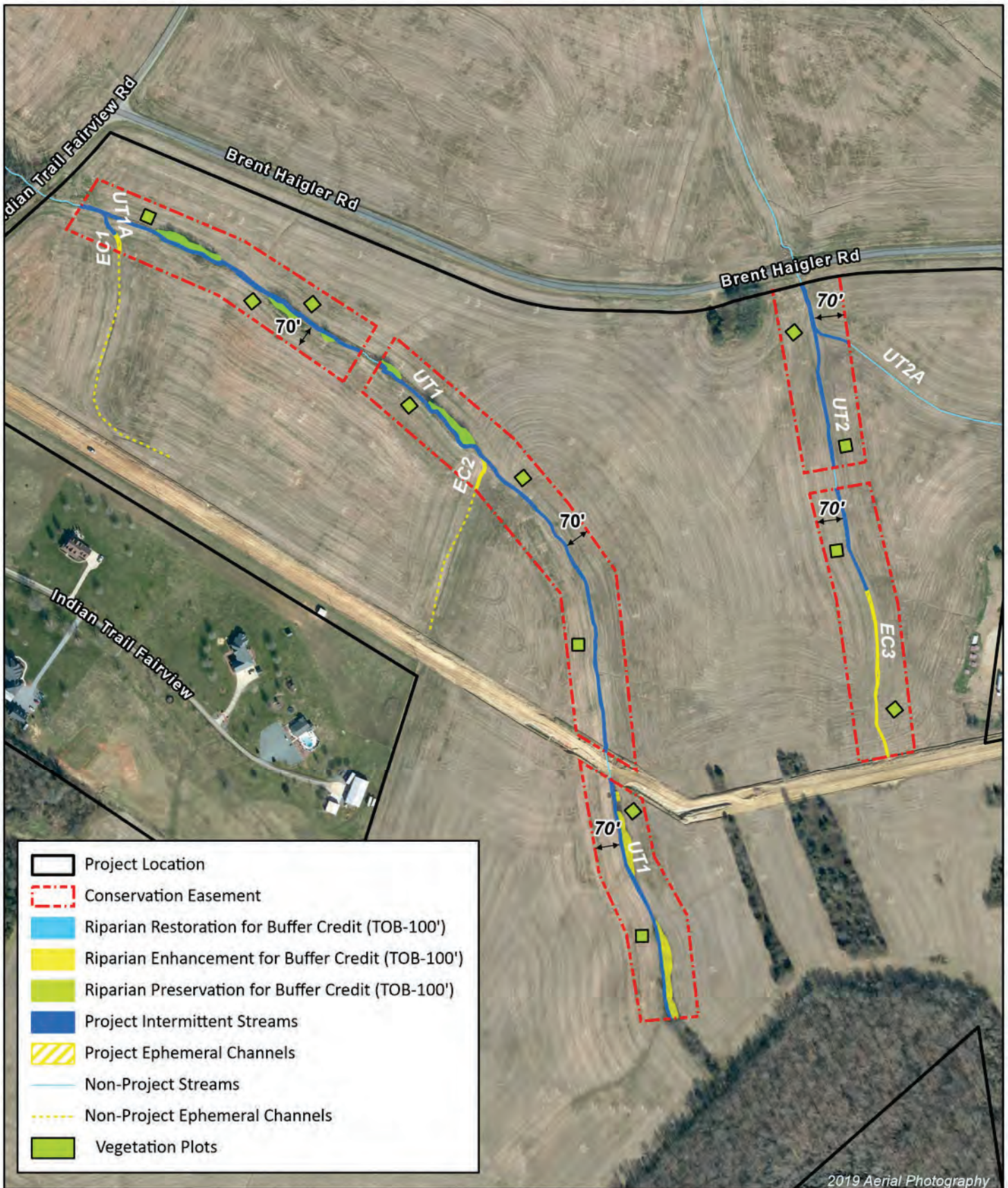
Figure 7. Buffer Mitigation Concept Map  
 Running Dog Mitigation Site  
 Mitigation Plan  
 Yadkin River Basin (03040105)



0 200 400 Feet



Figure 8. Riparian Buffer Zones Map  
 Running Dog Mitigation Site  
 Mitigation Plan  
 Yadkin River Basin (03040105)



2019 Aerial Photography



0 200 400 Feet



Figure 9. Site Overview Map  
Running Dog Mitigation Site  
Mitigation Plan  
Yadkin River Basin (03040105)

Appendix A  
Historical Aerial Photographs

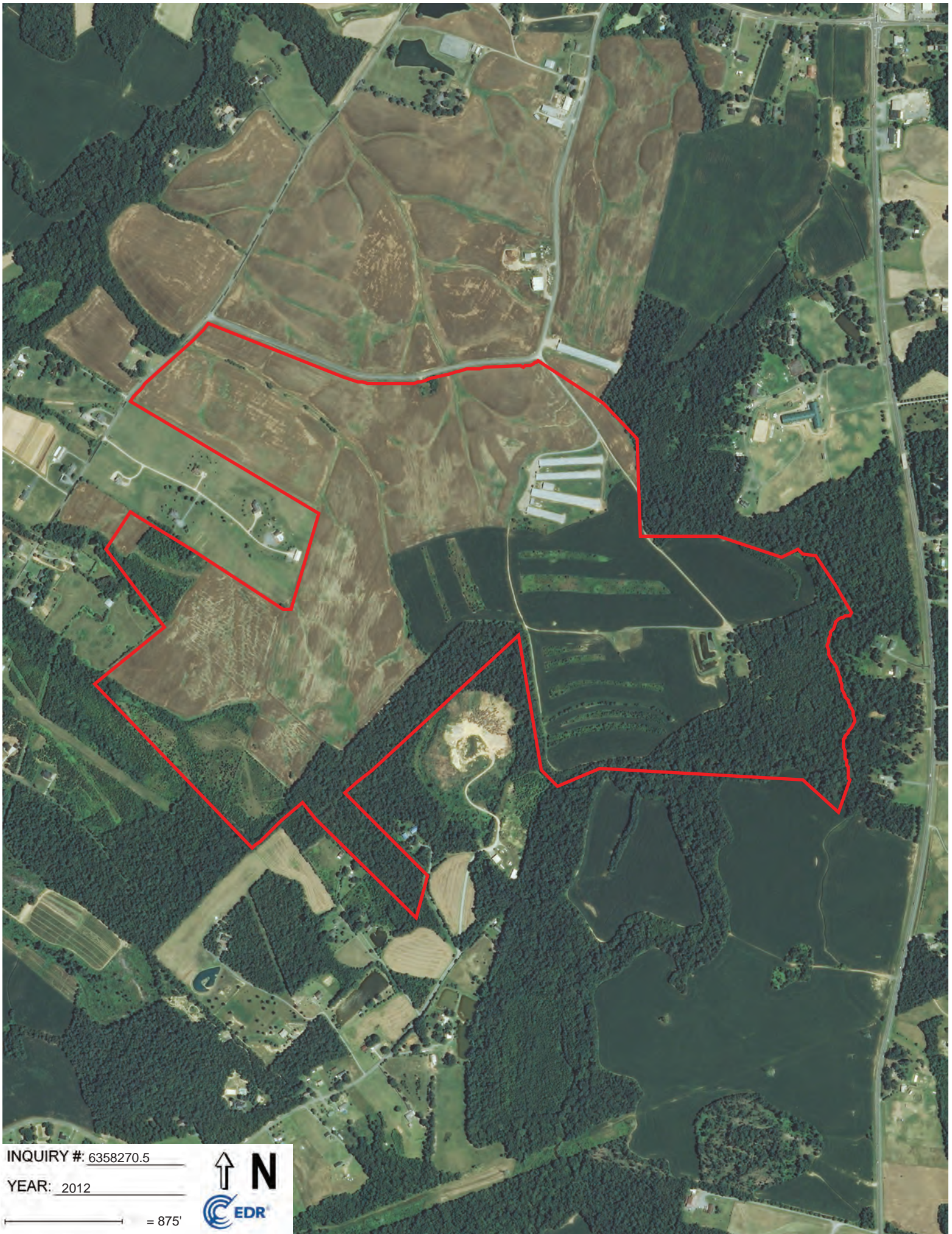


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YEAR: 2016

— = 875'





INQUIRY #: 6358270.5

YEAR: 2012

— = 875'





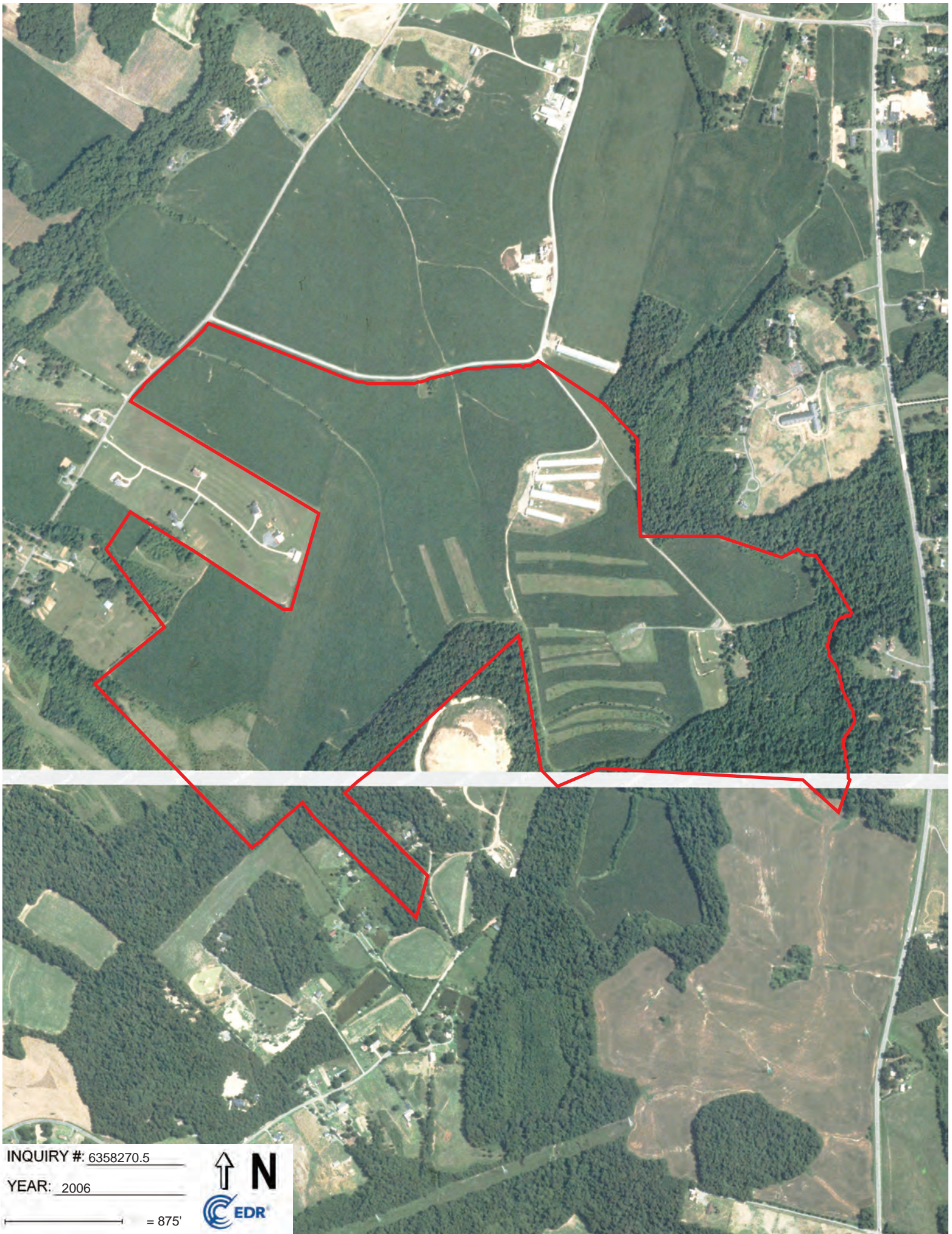


INQUIRY #: 6358270.5

YEAR: 2009

— = 875'





INQUIRY #: 6358270.5

YEAR: 2006

— = 875'





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INQUIRY #: 6358270.5

YEAR: 1999

— = 875'



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INQUIRY #: 6358270.5

YEAR: 1993

 = 875'



Subject boundary not shown because it exceeds image extent or image is not georeferenced.



INQUIRY #: 6358270.5

YEAR: 1983

— = 875'





INQUIRY #: 6358270.5

YEAR: 1976

 = 875'





INQUIRY #: 6358270.5

YEAR: 1964

 = 875'





INQUIRY #: 6358270.5

YEAR: 1951

— = 875'







INQUIRY #: 6358270.5

YEAR: 1948

— = 875'



## Appendix B

### Existing Conditions Photographs



Photo 1 – UT1



Photo 2 – UT1A



Photo 3 – UT2



Photo 4 – UT2A



Photo 5 – EC1



Photo 6 – EC2



Photo 7 – EC3



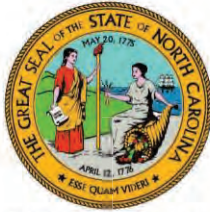
## Appendix C

### NCDWR Determination and Site Viability Letters

ROY COOPER  
Governor

ELIZABETH S. BISER  
Secretary

S. DANIEL SMITH  
Director



NORTH CAROLINA  
Environmental Quality

February 18, 2022

Union County

Andrea Eckardt  
Wildlands Engineering Inc.  
[aekardt@wildlandseng.com](mailto:aekardt@wildlandseng.com)

**Subject:** Determination for Applicability to the Catawba Riparian Buffer Rule 15A NCAC 02B .0614  
**Project Name:** Running Dog Mitigation Site  
**Address:** Brent Haigler Rd., Fairview, Union County  
**Location:** Lat., Long: 35.130655, -80.549511

Dear Ms. Eckardt:

On February 16, 2022, staff of the Division of Water Resources (DWR) conducted an on-site review of features located on the Running Dog Bank Parcel at the request of Wildlands Engineering Inc. to determine the applicability of features on the site to the Goose Creek Riparian Buffer Rule.

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

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

The following table addresses the features observed and rated during the DWR site visit.



Feature ID	Feature Stream type, ditch, swale, wetland, other	Subject to Buffer Rules	Start @	Stop @	Depicted on Soil Survey	Depicted on USGS Topo
UT1	Stream	Yes	35.125/-80.549	Beyond site boundary	Yes	Yes
UT1A	Stream	No	35.131/-80.555	UT1	No	No
UT2	Stream	Yes	35.128/-80.548	Beyond site boundary	No	Yes
UT2A	Stream	Yes	35.129/-80.546	UT2	Yes	Yes
EC2	Ephemeral	na	35.128/-80.552	UT1	Yes	No
EC3	Ephemeral	na	35.127/-80.547	UT2	Yes	Yes

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

<p><i>If sending via U.S. Postal Service:</i></p> <p>Paul Wojoski - DWR 401 &amp; Buffer Permitting Branch Supervisor 1617 Mail Service Center Raleigh, NC 27699-1617</p>	<p><i>If sending via delivery service (UPS, FedEx, etc.)</i></p> <p>Paul Wojoski - DWR 401 &amp; Buffer Permitting Branch Supervisor 512 N Salisbury St. Raleigh, NC 27604</p>
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This determination is final and binding as detailed above unless an appeal is requested **within sixty (60) calendar days of the date of this letter.**

If you have any additional questions or require additional information, please contact Doug Perez at [doug.perez@ncdenr.gov](mailto:doug.perez@ncdenr.gov) or 704-743-6872. This determination is subject to review as provided in G.S. 150B.

Sincerely,

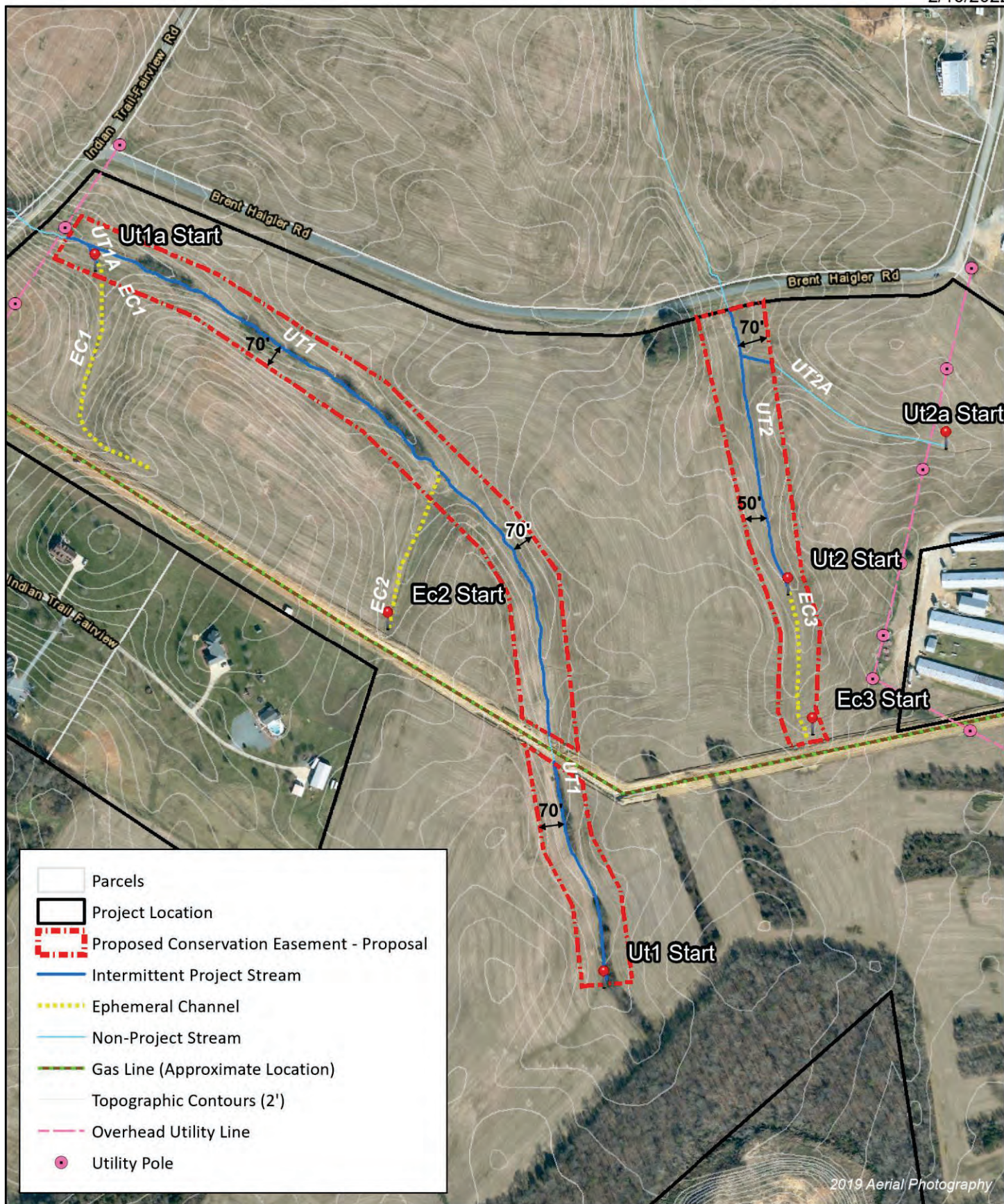
DocuSigned by:  
 for  
 F161FB69A2D84A3...

W. Corey Basinger, Regional Supervisor  
Water Quality Regional Operations Section  
Mooresville Regional Office, DEQ

Attachments: Site Map with labels

cc: Katie Merritt, 401/Buffer Permitting Branch, email





0 200 400 Feet



Figure 1 Site Map  
Running Dog Mitigation Site  
Yadkin River Basin (03040105)  
Goose Creek Watershed



NORTH CAROLINA  
Environmental Quality

April 29, 2022

ROY COOPER  
Governor

ELIZABETH S. BISER  
Secretary

RICHARD E. ROGERS, JR.  
Director

Andrea Eckardt  
Wildlands Engineering, Inc  
(via electronic mail: [aekardt@wildlandseng.com](mailto:aekardt@wildlandseng.com) )

Re: Site Viability for Buffer Mitigation – Running Dog Site  
Near 35.130655, -80.549511 off Brent Haigler Rd in Indian River, NC  
Goose Creek Watershed  
Union County

Dear Ms. Eckardt,

On February 18, 2022, Katie Merritt, with the Division of Water Resources (DWR), received a request from you on behalf of Wildlands Engineering, Inc (Wildlands) for a site visit near the above-referenced site in the Goose Creek Watershed. The site visit was to determine the potential for riparian buffer mitigation within a proposed conservation easement boundary, which is more accurately depicted in the attached map labeled “Figure 1-Site Map” (Figure 1”) prepared by Wildlands. The proposed easement boundary in Figure 1, includes all riparian areas intended to be proposed as part of the mitigation site. On March 22, 2022, 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).

<u>Feature</u>	<u>Classification onsite</u>	<u><sup>1</sup>Subject to Buffer Rule</u>	<u>Riparian Land uses adjacent to Feature (0-200’)</u>	<u>Buffer Credit Viable</u>	<u><sup>3</sup>Nutrient Offset Viable at 2,273.02 lbs-N/acre</u>	<u><sup>4,5</sup>Mitigation Type Determination w/in riparian areas</u>
UT1	Stream	Yes	Primarily non-forested agricultural fields with scattered areas of privet and partially forested areas along the channel. See Figure 1 for differentiation between forested and partially forested and where privet removal is required.  Erosional rills and gullies observed in the riparian areas	<sup>2</sup> Yes	N/A	Non-forested fields - <b>Restoration Site</b> per 15A NCAC 02B .0295 (n)  Partially forested fields - <b>Enhancement Site</b> per 15A NCAC 02B .0295 (n)  Forested areas - <b>Preservation Site</b> per 15A NCAC 02B .0295 (o)(5)  <i>Minor bank stabilization efforts and grading needed where bank stability is compromised and where erosional rills, sink holes and gullies are observed.</i>





<u>Feature</u>	<u>Classification onsite</u>	<u><sup>1</sup>Subject to Buffer Rule</u>	<u>Riparian Land uses adjacent to Feature (0-200')</u>	<u>Buffer Credit Viable</u>	<u><sup>3</sup>Nutrient Offset Viable at 2,273.02 lbs-N/acre</u>	<u><sup>4,5</sup>Mitigation Type Determination w/in riparian areas</u>
UT1A	Stream	No	Non-forested agricultural fields	Yes	N/A	<b>Restoration Site</b> per 15A NCAC 02B .0295 (o)(3)
EC1	Ephemeral	No	Non-forested agricultural fields  This feature is not within the proposed project boundary, but was assessed per the request of Wildlands	<sup>6</sup> Yes	N/A	<b>Restoration Site</b> per 15A NCAC 02B .0295 (o)(7)
EC2	Ephemeral	No	Non-forested agricultural fields	<sup>6</sup> Yes	N/A	<b>Restoration Site</b> per 15A NCAC 02B .0295 (o)(7)
UT2	Stream	Yes	Non-forested agricultural fields	Yes	N/A	<b>Restoration Site</b> per 15A NCAC 02B .0295 (n)
UT2A	Stream	Yes	Non-forested agricultural fields	Yes	N/A	<b>Restoration Site</b> per 15A NCAC 02B .0295 (n)
EC3	Ephemeral	No	Non-forested agricultural fields	<sup>6</sup> Yes	N/A	<b>Restoration Site</b> per 15A NCAC 02B .0295 (o)(7)

<sup>1</sup>Subjectivity calls for the features were determined by DWR in correspondence dated February 18, 2022 (DWR# not assigned) 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 .

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

<sup>3</sup>NC Division of Water Resources - Methodology and Calculations for determining Nutrient Reductions associated with Riparian Buffer Establishment. Credits are calculated differently in the Jordan Lake Watershed. Phosphorus may be calculated separately.

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

<sup>5</sup>All features proposed for buffer mitigation or nutrient offset, must have a planted conservation easement established that includes the tops of channel banks when being measured perpendicular and landward from the banks, even if no credit is viable within that riparian area. Easement breaks that disconnect the continuity of riparian restoration/enhancement/preservation result in no credit viable beyond the break.

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

<sup>7</sup>The area described as an Enhancement Site was assessed and determined to comply with all of 15A NCAC 02B .0295(o)(6). Cattle exclusion fencing is required to be installed around the mitigation area to get buffer credit under this part of the rule.

Determinations provided in the table above were made using a proposed easement boundary showing proposed mitigation areas and features shown in Figure 1. The map representing the proposal for the site is attached to this letter and initialed by Ms. Merritt on April 29, 2022. 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 for 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 April 29, 2024 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:  
*Chonticha McDaniel*  
88BFFC85168F4E4...

for Paul Wojoski, Supervisor  
401 and Buffer Permitting Branch

*PW/kym*

Attachments: Figure 1: Site Map

cc: File Copy (Katie Merritt)

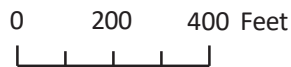
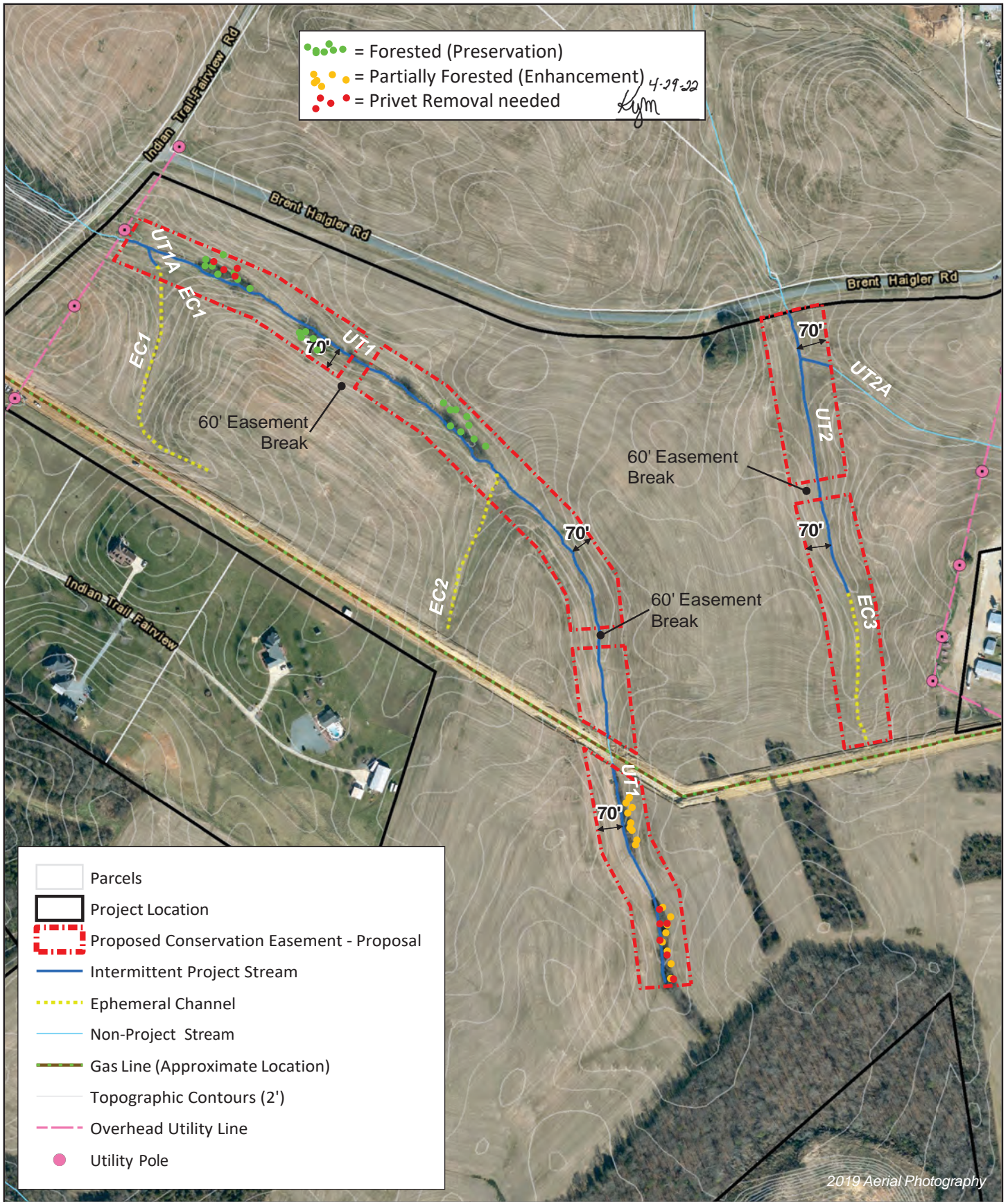


Figure 1 Site Map  
 Running Dog Mitigation Site  
 Yadkin River Basin (03040105)  
 Goose Creek Watershed

Appendix D  
Site Protection Instrument

**STATE OF NORTH CAROLINA**

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

**UNION COUNTY**

**SPO File Numbers: XX-XX  
DMS Project Number: 100210**

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 \_\_\_\_\_, 2022, by **CF Master Limited Partnership, LLC** (collectively "**Grantor**"), whose mailing address is \_\_\_\_\_ 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 Environmental Quality (formerly Department of Environment and Natural Resources), for the purposes of acquiring, maintaining, restoring, enhancing, creating and preserving wetland and riparian resources that contribute to the protection and improvement of water quality, flood prevention, fisheries, aquatic habitat, wildlife habitat, and recreational opportunities; and

**WHEREAS**, this Conservation Easement from Grantor to Grantee has been negotiated, arranged and provided for as a condition of a full delivery contract between **Wildlands Engineering, Inc.** and the North Carolina Department of Environmental Quality, to provide stream, wetland and/or buffer mitigation pursuant to the North Carolina Department of Environment and Natural Resources Purchase and Services Contract Number **210202-01**.

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

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

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

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

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

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

**WHEREAS**, Grantor owns in fee simple certain real properties situated, lying, and being in Union County, North Carolina (the "**Property**"), and being more particularly described as

one parcels of land containing a total of approximately \_\_\_\_ acres and being conveyed to the Grantor by deed as recorded in \_\_\_\_\_ of the Union 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 unnamed tributaries to Goose Creek.

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

The Conservation Easement Area consists of the following:

Total conservation Easement Area containing a total of \_\_\_\_ acres as shown on the plat of survey entitled “A Conservation Easement Survey for the State of North Carolina Division of Mitigation Services, Running Dog Site, SPO File No. \_\_\_\_\_, DMS Project No. 100210”, Property of **CF Master Limited Partnership, LLC**, dated \_\_\_\_\_ prepared by Turner Land Surveying (License \_\_\_\_\_), and recorded in the Union 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

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 except within a Crossing Area as shown on the recorded survey plat. 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.

Appendix E  
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:	Running Dog Mitigation Site
County Name:	Union
DMS Number:	100210
Project Sponsor:	Wildlands Engineering, Inc.
Project Contact Name:	Kirsten Gimbert
Project Contact Address:	1430 S. Mint St, Suite 104, Charlotte, NC 28203
Project Contact E-mail:	kgimbert@wildlandseng.com
DMS Project Manager:	Kelly Phillips
Project Description	
<p>The Running Dog Mitigation Site is being developed to provide riparian buffer mitigation within the Goose Creek Watershed in the Yadkin River Basin. The streams onsite have little to no existing riparian buffers and are surrounded by open agricultural fields primarily used to grow wheat, soybeans, and corn. Site stressors include sedimentation, nutrient, and fecal coliform input from adjacent agricultural fields, limited floodplain storage, and lack of riparian canopy. Major goals are to provide ecological and water quality enhancements by creating a functional riparian corridor and restoring the riparian buffer. This buffer mitigation project will reduce sediment and nutrient loading, provide and improve terrestrial and in stream habitats, and improve stream and bank stability by restoring and or preserving the vegetative buffer on the areas along with establishing a conservation easement.</p>	
For Official Use Only	
Reviewed By:	
<u>3/18/2022</u>	<u>Kelly Phillips</u>
Date	DMS Project Manager
Conditional Approved By:	
<u>        </u>	<u>        </u>
Date	For Division Administrator FHWA
<input type="checkbox"/> Check this box if there are outstanding issues	
Final Approval By:	
<u>3-22-22</u>	<u>Donald W Brew</u>
Date	For Division Administrator FHWA

<b>Part 2: All Projects</b>	
<b>Regulation/Question</b>	<b>Response</b>
<b>Coastal Zone Management Act (CZMA)</b>	
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 NCDCEM 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
<b>Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)</b>	
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
<b>National Historic Preservation Act (Section 106)</b>	
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
<b>Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act)</b>	
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
<b>American Indian Religious Freedom Act (AIRFA)</b>		
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	
<b>Antiquities Act (AA)</b>		
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	
<b>Archaeological Resources Protection Act (ARPA)</b>		
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	
<b>Endangered Species Act (ESA)</b>		
1. Are federal Threatened and Endangered species and/or Designated Critical Habitat listed for the county?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
2. Is Designated Critical Habitat or suitable habitat present for listed species?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
3. Are T&E species present or is the project being conducted in Designated Critical Habitat?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
4. Is the project "likely to adversely affect" the species 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	

<b>Executive Order 13007 (Indian Sacred Sites)</b>	
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
<b>Farmland Protection Policy Act (FPPA)</b>	
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
<b>Fish and Wildlife Coordination Act (FWCA)</b>	
1. Will the project impound, divert, channel deepen, or otherwise control/modify any water body?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. Have the USFWS and the NCWRC been consulted?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
<b>Land and Water Conservation Fund Act (Section 6(f))</b>	
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
<b>Magnuson-Stevens Fishery Conservation and Management Act (Essential Fish Habitat)</b>	
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
<b>Migratory Bird Treaty Act (MBTA)</b>	
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
<b>Wilderness Act</b>	
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

Running Dog Mitigation Site  
Categorical Exclusion

**SUMMARY**

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

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) provides a Federal “Superfund” to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment.

As the Running Dog Mitigation Site is a full-delivery project; an EDR Radius Map Report with Geocheck was ordered for the site through Environmental Data Resources, Inc on February 5, 2021. Neither the target property nor the adjacent properties were listed in any of the Federal, State, or Tribal environmental databases searched by the EDR.

The Executive Summary of the EDR report is included in the Appendix. The full report is available if needed.

### **National Historic Preservation Act (Section 106)**

The National Historic Preservation Act declares a national policy of historic preservation to protect, rehabilitate, restore, and reuse districts, sites, buildings, structures, and objects significant in American architecture, history, archaeology, and culture, and Section 106 mandates that federal agencies consider the effect of an undertaking on a property that is included in, or is eligible for inclusion in, the National Register of Historic Places.

A scoping letter was submitted to the State Historic Preservation Office (SHPO) requesting comment on the Running Dog Mitigation Site on January 25, 2022. SHPO responded on February 23, 2022 and is unaware of any historical resources within the project boundary that would be affected by the project. Therefore, SHPO does not have any concerns with the project as proposed. All correspondence related to Section 106 is included in the Appendix.

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

These acts, collectively known as the Uniform Act, provide for uniform and equitable treatment of persons displaced from their homes, businesses, non-profit associations, or farms by federal and federally assisted programs, and establish uniform and equitable land acquisition policies.

The Running Dog Mitigation Site is a full-delivery project that includes land acquisition. Notification of the fair market value of the project property and the lack of condemnation authority by Wildlands was included in the signed Option Agreements for the project properties. A copy of the relevant section of each of the Option Agreements are included in the Appendix.

### **Endangered Species Act (ESA)**

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

The United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation database (IPaC) list of threatened and endangered species for the site includes the Atlantic pigtoe (*Fusconaia masoni*), Carolina heelsplitter (*Lasmigona decorata*), monarch butterfly (*Danaus plexippus*): (candidate species), Michaux’s sumac (*Rhus michauxii*), and Schweinitz’s sunflower (*Helianthus schweinitzii*). Results from pedestrian surveys conducted on September 9, 2021 indicated that the project area provides no suitable habitat for the federally listed species and no individuals of these



species were located. There are no known critical habitats within the project site or in the area around it. Wildlands determinations are noted below.

To meet regulatory requirements, a letter with project maps was submitted to the Asheville field office requesting comment from USFWS dated January 25, 2022. The USFWS responded in a letter dated February 8, 2022 stating they concur with the determination of No Effect for all federally listed species. North Carolina Wildlife Resource Commission (NCWRC) was also contacted for comment in a letter dated January 25, 2022. NCWRC responded on February 24, 2022 stating there are known occurrences of the Carolina heelsplitter as well as other state species of concern in the Goose Creek and Crooked Creek watersheds. NCWRC advised that if any in-stream work were to occur, surveys for aquatic species may be requested. No in-stream work is planned for the Running Dog Mitigation Site, thereby, no surveys are required at this time. All correspondence is included in the Appendix.

### **Farmland Protection Policy Act (FPPA)**

The FPPA requires that, before taking or approving any federal action that would result in conversion of farmland, the agency must examine the effects of the action using the criteria set forth in the FPPA, and, if there are adverse effects, must consider alternatives to lessen them.

The Running Dog Mitigation Site includes the conversion of prime farmland. As such, Form AD-1006 has been completed and was submitted to the Natural Resources Conservation Service (NRCS) on March 17, 2022. The completed form and correspondence documenting its submittal is included in the Appendix.

### **Migratory Bird Treaty Act (MBTA)**

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

Wildlands requested comment on the Running Dog Mitigation Site from the USFWS in regard to migratory birds on January 25, 2022. The USFWS responded in a letter dated February 8, 2022 stating they concur with the determination of No Effect. All correspondence with USWFS is included in the Appendix.



Running Dog Mitigation Site  
Categorical Exclusion

**APPENDIX**

**Running Dog**

9430 INDIAN TRAIL FAIRVIEW RD  
INDIAN TRAIL, NC 28079

Inquiry Number: 6358270.2s  
February 05, 2021

**The EDR Radius Map™ Report with GeoCheck®**



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://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.

### Disclaimer - Copyright and Trademark Notice

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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

9430 INDIAN TRAIL FAIRVIEW RD  
INDIAN TRAIL, NC 28079

#### COORDINATES

Latitude (North): 35.1258910 - 35° 7' 33.20"  
Longitude (West): 80.5485820 - 80° 32' 54.89"  
Universal Transverse Mercator: Zone 17  
UTM X (Meters): 541130.6  
UTM Y (Meters): 3886899.2  
Elevation: 579 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5947242 MIDLAND, NC  
Version Date: 2013  
  
South Map: 5947220 BAKERS, NC  
Version Date: 2013

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140524, 20140517  
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:  
9430 INDIAN TRAIL FAIRVIEW RD  
INDIAN TRAIL, NC 28079

Click on Map ID to see full detail.

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

NO MAPPED SITES FOUND

# EXECUTIVE SUMMARY

## TARGET PROPERTY SEARCH RESULTS

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

## DATABASES WITH NO MAPPED SITES

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

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal NPL site list***

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

### ***Federal Delisted NPL site list***

Delisted NPL..... National Priority List Deletions

### ***Federal CERCLIS list***

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

### ***Federal CERCLIS NFRAP site list***

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

### ***Federal RCRA CORRACTS facilities list***

CORRACTS..... Corrective Action Report

### ***Federal RCRA non-CORRACTS TSD facilities list***

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

### ***Federal RCRA generators list***

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

### ***Federal institutional controls / engineering controls registries***

LUCIS..... Land Use Control Information System

## EXECUTIVE SUMMARY

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

### ***Federal ERNS list***

ERNS..... Emergency Response Notification System

### ***State- and tribal - equivalent NPL***

NC HSDS..... Hazardous Substance Disposal Site

### ***State- and tribal - equivalent CERCLIS***

SHWS..... Inactive Hazardous Sites Inventory

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

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

## EXECUTIVE SUMMARY

### **Local Lists of Landfill / Solid Waste Disposal Sites**

SWRCY.....	Recycling Center Listing
HIST LF.....	Solid Waste Facility Listing
INDIAN ODI.....	Report on the Status of Open Dumps on Indian Lands
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

## EXECUTIVE SUMMARY

INDIAN RESERV.	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
FINDS	Facility Index System/Facility Registry System
ECHO	Enforcement & Compliance History Information
UXO	Unexploded Ordnance Sites
DOCKET HWC	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM	EPA Fuels Program Registered Listing
AIRS	Air Quality Permit Listing
ASBESTOS	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
SEPT HAULERS	Permitted Septage Haulers Listing
MINES MRDS	Mineral Resources Data System
CCB	Coal Ash Structural Fills (CCB) 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 not identified.

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

## EXECUTIVE SUMMARY

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

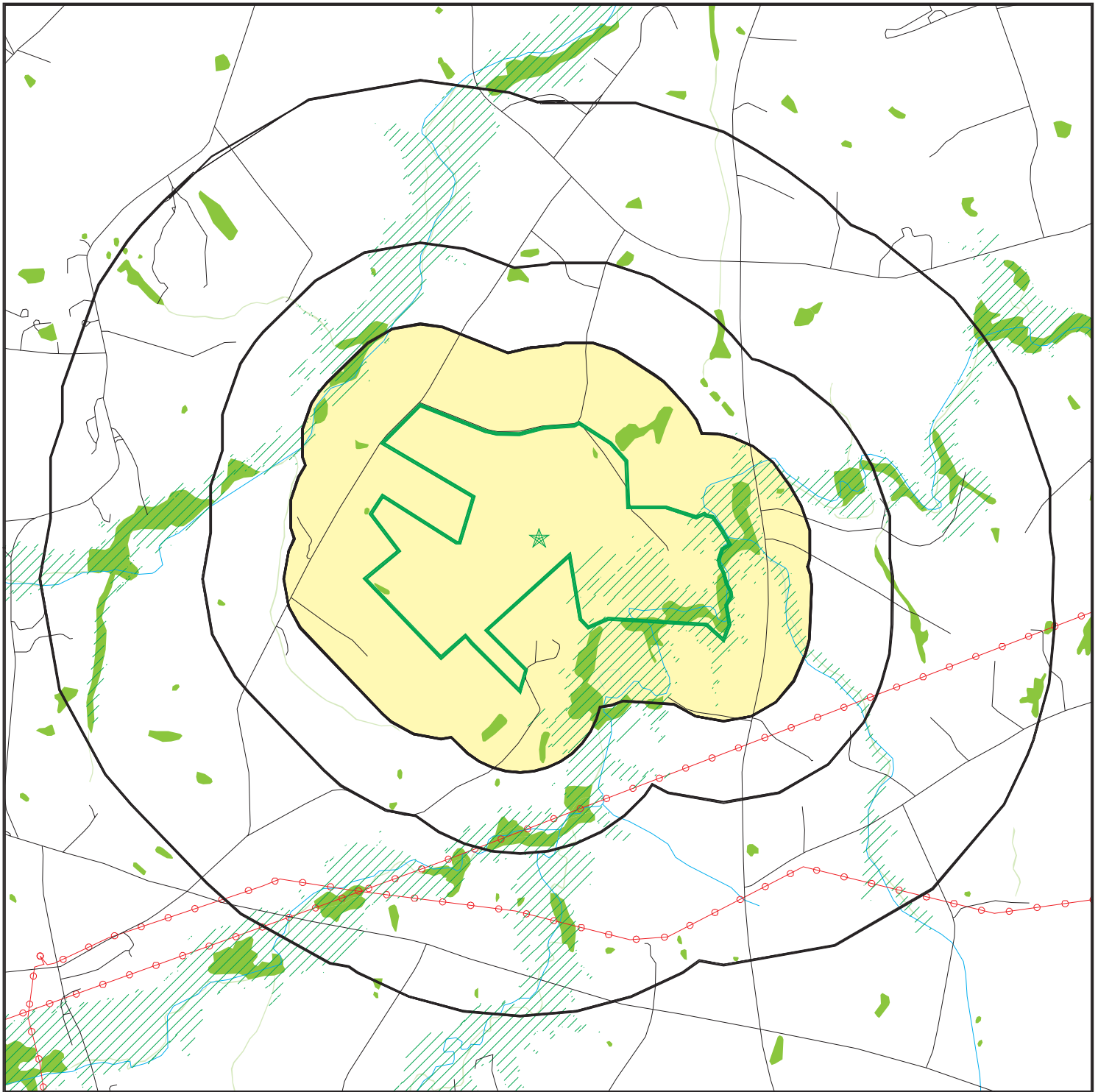
Site Name

PREFERRED CLEANERS

Database(s)

DRYCLEANERS

# OVERVIEW MAP - 6358270.2S



Target Property

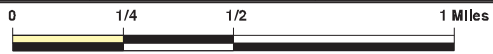
Sites at elevations higher than or equal to the target property

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



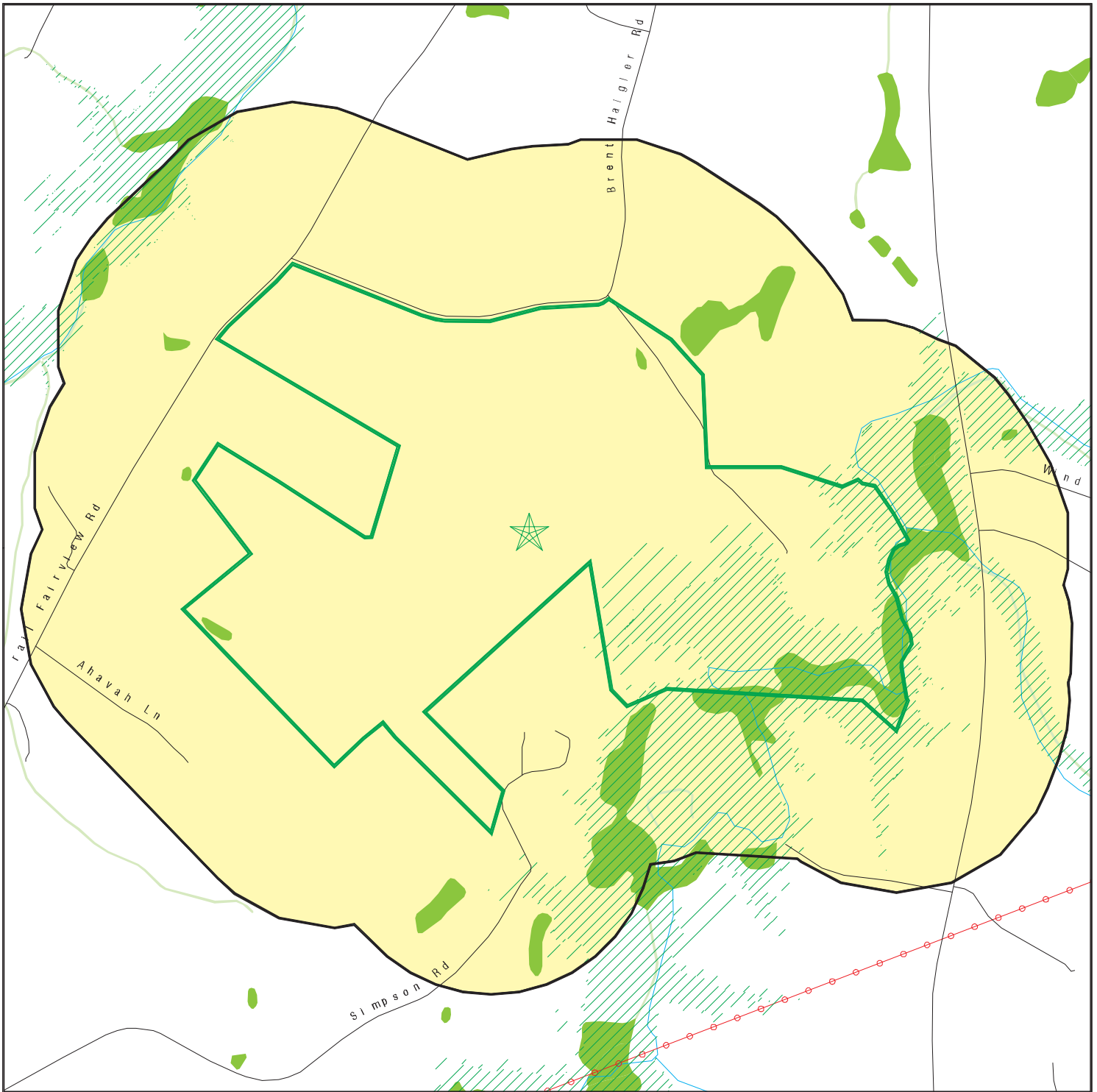
This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Running Dog  
 ADDRESS: 9430 INDIAN TRAIL FAIRVIEW RD  
 INDIAN TRAIL NC 28079  
 LAT/LONG: 35.125891 / 80.548582

CLIENT: Wildlands Eng, Inc.  
 CONTACT: Andrea Eckardt  
 INQUIRY #: 6358270.2s  
 DATE: February 05, 2021 2:42 pm



# DETAIL MAP - 6358270.2S



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

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: Running Dog  
 ADDRESS: 9430 INDIAN TRAIL FAIRVIEW RD  
 INDIAN TRAIL NC 28079  
 LAT/LONG: 35.125891 / 80.548582

CLIENT: Wildlands Eng, Inc.  
 CONTACT: Andrea Eckardt  
 INQUIRY #: 6358270.2s  
 DATE: February 05, 2021 2:43 pm



January 25, 2022

**Renee Gledhill-Earley**

State Historic Preservation Office

4617 Mail Service Center

Raleigh, NC 27699-4617

*Submitted via email: [environmental.review@ncdcr.gov](mailto:environmental.review@ncdcr.gov)*

**Subject:** Running Dog Mitigation Site  
Union County, North Carolina

Dear Ms. Gledhill-Earley,

Wildlands Engineering, Inc. requests review and comment on any possible issues that might emerge with respect to archaeological or cultural resources associated with a potential riparian buffer restoration project on the Running Dog Mitigation Site located in Union County, NC. A Site Map and a USGS Topographic Map showing the approximate project area are enclosed. The topographic figure was prepared from the Midland 7.5-Minute USGS Topographic Quadrangle, and the site is located at latitude 35.130142, longitude -80.552587.

The Running Dog Mitigation Site is being developed to provide riparian buffer mitigation in the Yadkin River basin. The project will include buffer restoration of three unnamed tributaries and three ephemeral channels that flow to Goose Creek. The streams onsite have little to no existing riparian buffers and are surrounded by open agricultural fields primarily used to grow wheat, soybeans, and corn. Site stressors include sedimentation, nutrient, and fecal coliform input from adjacent agricultural fields, limited floodplain storage, lack of riparian canopy, as well as non-diffuse and peak flows.

The major goals of the proposed buffer restoration project are to provide ecological and water quality enhancements to the Yadkin River Basin by creating a functional riparian corridor and restoring the riparian buffer. This buffer mitigation project will reduce sediment and nutrient loading, provide and improve terrestrial and in stream habitats, and improve stream and bank stability. This will be accomplished by restoring and or preserving the vegetative buffer on the areas up to 70 feet from streams and ephemeral channels, along with permanently preserving and protecting the site through establishing a conservation easement.

No surveyed sites listed on the North Carolina State Historic Preservation Office (SHPO) or are on the National Register are located within a mile of the project. No other architectural structures or archaeological artifacts have been observed or noted during preliminary surveys of the site. We ask that you review the site based on the attached information to determine the presence of any historic properties within the conservation easement area as shown on Figures 1 and 2.

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

Sincerely,

A handwritten signature in cursive script that reads "Kirsten Y. Gimbert".

**Kirsten Gimbert**, Senior Environmental Scientist

[kgimbert@wildlandseng.com](mailto:kgimbert@wildlandseng.com)

704.941.9093

Attachments: Figure 1 Site Overview Map and Figure 2 USGS Topographic Map



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

Ramona M. Bartos, Administrator

Governor Roy Cooper  
Secretary D. Reid Wilson

Office of Archives and History  
Deputy Secretary, Darin J. Waters, Ph.D.

February 23, 2022

Kirsten Gimbert  
Wildlands Engineering, Inc.  
1430 South Mint Street, Suite 104  
Charlotte, NC 28203

[kgimbert@wildlandseng.com](mailto:kgimbert@wildlandseng.com)

Re: Running Dog Mitigation Site, 35.130142, -80.552587, Union County, ER 22-0384

Dear Ms. Gimbert:

Thank you for your letter of January 25, 2022, 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](mailto: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

action under any indemnification or defense provision in this agreement, nor for the award of attorney's fees and costs in conjunction with any action relating to this agreement.

3.2 **Notices.** All notices required by this agreement shall be in writing, shall be given only in accordance with the provisions of this Section, shall be addressed to the Parties in the manner stated below, and shall be conclusively deemed properly delivered: (a) upon receipt when hand delivered during normal business hours; (b) upon the day of delivery if the notice has been deposited in an authorized receptacle of the United States Postal Service as first-class, registered or certified mail, postage prepaid, with a return receipt requested; (c) one business day after the notice has been deposited with either FedEx or United Parcel Service to be delivered by overnight delivery; or (d) if sent by email, upon receipt of an acknowledgement email sent to the sender's email address in which the party receiving the email notice acknowledges having received that email. An automatic "read receipt" is not acknowledgement for purposes of this section 3.2. The addresses of the parties to receive notices are as follows:

TO BUYER: Wildlands Engineering, Inc.  
1430 S. Mint Street, Suite 104  
Charlotte, North Carolina 28203  
Attention: Matt Covington  
e-mail: [mcovington@wildlandseng.com](mailto:mcovington@wildlandseng.com)

TO SELLER: 601 Investments, LLC  
13860 Ballantyne Corporate Park, Suite 120  
Charlotte, NC 28277  
Attention: Glenn Chambers  
e-mail: [gchambers@usgventures.com](mailto:gchambers@usgventures.com)



Notice of change of address shall be given by written notice in the manner described in this paragraph.

3.3 **Assignment.** Buyer has the right to assign this agreement without the consent of Seller. No assignment shall be effective unless the assignee has delivered to Seller a written assumption of Buyer's obligations under this agreement. Seller hereby releases Buyer from any obligations under this agreement arising after the effective date of any assignment of this agreement by Buyer.

3.4 **Value of Conservation Easement; No Power of Eminent Domain.** In accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Buyer hereby notifies Seller that: (i) Buyer believes that the fair market value of the Conservation Easement is an amount equal to the Purchase Price; and (ii) Buyer does not have the power of eminent domain.

3.5 **Modification; Waiver.** No amendment of this agreement will be effective unless it is in writing and signed by the parties. No waiver of satisfaction of a condition or failure to comply with an obligation under this agreement will be effective unless it is in writing and signed by the party granting the waiver, and no such waiver will constitute a waiver of satisfaction of any other condition or failure to comply with any other obligation.

3.6 **Attorneys' Fees.** If either party commences an action against the other to interpret or enforce any of the terms of this agreement or because of the breach by the other party of any of the terms of this agreement, the losing party shall pay to the prevailing party reasonable attorneys' fees, expenses, court costs, litigation costs and any other expenses incurred in connection with the prosecution or defense of such action, whether or not the action is prosecuted to a final judgment.

  
Buyer  
  
Seller

Each party is signing this agreement on the date stated below that party's signature.

**BUYER:**

**WILDLANDS ENGINEERING, INC.,**  
a North Carolina corporation

By:   
Shawn D. Wilkerson, President

Date: 1/31/2021

**SELLER:**

**601 INVESTMENTS, LLC,**  
a North Carolina limited liability company

By:   
Glenn Chambers, Manager

Date: 1/29/21



January 25, 2022

**Holland Youngman**

US Fish and Wildlife Service

Asheville Field Office

160 Zillicoa Street

Asheville, NC 28801

Submitted via email: [holland\\_youngman@fws.gov](mailto:holland_youngman@fws.gov)

**Subject:** Running Dog Mitigation Site  
Union County, North Carolina

Dear Ms. Youngman,

Wildlands Engineering, Inc. requests review and comment on any possible issues that might emerge with respect to endangered species, migratory birds, or other trust resources associated with a potential riparian buffer restoration project on the Running Dog Mitigation Site located in Union County, NC. This is a North Carolina Division of Mitigation Services (NCDMS) full-delivery project. A Site Map and a USGS Topographic Map showing the approximate project area are enclosed. The topographic figure was prepared from the Midland 7.5-Minute USGS Topographic Quadrangle, and the site is located at latitude 35.130142, longitude -80.552587.

The Running Dog Mitigation Site is being developed to provide riparian buffer mitigation within the Yadkin River Basin. The streams onsite have little to no existing riparian buffers and are surrounded by open agricultural fields primarily used to grow wheat, soybeans, and corn. Land disturbance during planting will be limited. The buffer project will include the restoration of ecological function to riparian areas on the site. Existing site stressors include sedimentation, nutrient, and fecal coliform input from adjacent agricultural fields, limited floodplain storage, lack of riparian canopy, as well as non-diffuse and peak flows. Streams and ephemeral channels on the Site have little to no existing riparian buffer and flow directly into Goose Creek. The absence of well-established riparian buffers contributes to nutrient loading, habitat fragmentation, and bank instability within the project area.

The major goals of the stream mitigation project are to provide ecological and water quality enhancements in the Goose Creek Watershed, while protecting the site in perpetuity through establishing a conservation easement. This will be accomplished by creating a functional riparian corridor through the restoration of riparian buffers. The project design will be developed to avoid adverse impacts to existing streams, wetland resources, or mature wooded vegetation. Waters of the United States 404/401 permitting is not required for this buffer mitigation site as construction activities will only involve planting riparian vegetation and will not impact project streams or downstream resources.

According to the USFWS Information for Planning and Consultation database (IPaC), the threatened or endangered species listed within the project area located in Union County, NC consists of five species: the Atlantic pigtoe (*Fusconaia masoni*), the Carolina heelsplitter (*Lasmigona decorata*), the monarch butterfly (*Danaus plexippus*), Michaux's sumac (*Rhus michauxii*), and Schweinitz's sunflower (*Helianthus schweinitzii*) for similarity of appearance. A pedestrian survey was conducted on September 9, 2021. No suitable habitat was found for the federally listed species and no individuals of any species were located. If we have not heard from you in 30 days, we will assume that you do not have any comments regarding associated laws and that you do not have any information relevant to this project at the current time.

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

Sincerely,

A handwritten signature in cursive script that reads "Kirsten J. Gimbert".

**Kirsten Gimbert**, Senior Environmental Scientist

[kgimbert@wildlandseng.com](mailto:kgimbert@wildlandseng.com)

704.941.9093

Attachment: Figure 1 Site Overview Map and Figure 2 USGS Topographic Map



# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

Asheville Field Office  
160 Zillicoa Street Suite B  
Asheville, North Carolina 28801

February 08, 2022

Kirsten Gimbert  
Wildlands Engineering, Inc.  
1430 South Mint Street, Ste. 104  
Charlotte, North Carolina 28203  
[kgimbert@wildlandseng.com](mailto:kgimbert@wildlandseng.com)

Subject: Scoping Request for Running Dog Riparian Restoration Site, North Carolina Division of Mitigation Services (NCDMS) Full-Delivery Project in Yadkin River Basin, Union County, North Carolina

Dear Ms. Gimbert:

On January 25, 2022, we received your letter (via email) requesting our comments on the subject project. We have reviewed the information that you presented, and the following comments are provided in accordance with the provisions of the National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA); the Bald and Golden Eagle Protection Act (BGEPA, 16 U.S.C. 668-668d); the Fish and Wildlife Coordination Act, as amended (16 U.S.C. 661 - 667e); and section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 - 1543) (Act).

### **Project Description**

According to the information provided, Wildlands Engineering (Wildlands), proposes to conduct a stream enhancement project in Union County, North Carolina consisting of riparian buffer restoration along two tributaries to Goose Creek, within the Yadkin River Basin. The onsite streams have little to no existing riparian buffers and are surrounded by open agricultural fields. Existing site stressors include sedimentation, nutrient, and fecal coliform input from adjacent agricultural fields, limited floodplain storage, and lack of riparian canopy as well as non-diffuse and peak flows. Land disturbance during riparian planting will be limited and in-stream work will not occur. The purpose of the project is to provide ecological and water quality enhancements in the Goose Creek Watershed, while protecting the site in perpetuity through establishing a conservation easement. You provided this description, a list of federally designated species and associated considerations, and project site topographic and aerial maps.

### **Federally Listed Species**

In accordance with section 7 (a)(2) of the Act and 50 CFR Part 402.01, before any federal authorization/permits or funding can be issued for this project, it is the responsibility of the appropriate federal regulatory/permitting and/or funding agency(ies) to determine whether the project *may affect* any federally endangered or threatened species (listed species) or designated critical habitat. If it is determined that this project *may affect* any listed species or designated critical habitat, you and the federal action agency must initiate section 7 consultation with this office.

To determine whether your project *may affect* a listed species, we recommend surveying the project areas for suitable habitat for the below listed species prior to any on-the-ground activities. Your letter indicates that a survey on September 9, 2021 revealed no suitable habitat within the project area for federally listed

species. Given the lack of suitable habitat on site, the avoidance of in-stream work, and the minimization of soil disturbance during riparian plantings, impacts to aquatic organisms would not be expected to occur. Based on the information provided, we would agree with No Effect determinations from the lead federal action agency for the federally designated species listed in the table below:

Common Name	Scientific Name	Federal Status <sup>1</sup>
Atlantic pigtoe	<i>Fusconaia masoni</i>	T
Bald eagle	<i>Haliaeetus leucocephalus</i>	BGEPA
Carolina heelsplitter	<i>Lasmigona decorata</i>	E
Monarch butterfly	<i>Danaus plexippus</i>	CAN
Schweinitz's sunflower	<i>Helianthus schweinitzii</i>	E

<sup>1</sup>E = endangered, T = threatened, CAN = candidate species, BGEPA = Bald and Golden Eagle Protection Act

In the interest of a thorough review, the following is provided:

Monarch butterfly is a candidate species (CAN). CAN are not legally protected under the Act and are not subject to any of its provisions, including section 7, unless they are formally proposed or listed as endangered or threatened. While lead federal agencies are not prohibited from jeopardizing the continued existence of a CAN or proposed species until the species becomes listed, the prohibition against jeopardy and taking a listed species under section 9 of the Act applies as soon as the listing becomes effective, regardless of the stage of completion of the proposed action. We are including this species in our response to give you advance notification and request your assistance in protecting it. Although not required, we recommend that the presence/absence of this species be addressed in any BE/BA prepared for this or future projects, depending on your expected completion timeline.

### **Fish and Wildlife Resource Recommendations**

We offer the following general recommendations for the benefit of fish and wildlife resources:

- **Erosion and Sedimentation Control.** Construction activities near streams, rivers, and lakes have the potential to cause water pollution and stream degradation if measures to control site runoff are not properly installed and maintained. In order to effectively reduce erosion and sedimentation impacts, best management practices specific to the extent and type of construction should be designed and installed during land disturbing activities and should be maintained until the project is complete and appropriate stormwater conveyances and vegetation are reestablished on the site. A complete design manual, which provides extensive details and procedures for developing site specific plans to control erosion and sediment and is consistent with the requirements of the North Carolina Sedimentation and Pollution Control Act and Administrative Rules, is available at: <http://portal.ncdenr.org/web/lr/publications>.

For maximum benefits to water quality and bank stabilization, riparian areas should be forested; however, if the areas are maintained in grass, they should not be mowed. We recommend planting disturbed areas with native riparian species. We can provide information on potential sources of plant material upon request.

- **Pollinators.** Throughout the site, avoid non-native seed mixes and plants. Instead, sow native seed mixes and plant species that are beneficial to pollinators.
  - Avoid seed mixes and plants that have been pre-treated with insecticides, such as neonicotinoids.



- Taller-growing pollinator plant species should be planted around the periphery of the site and anywhere on the site where mowing can be restricted during the summer months. Taller plants, not mowed during the summer, would provide benefits to pollinators, habitat for ground-nesting/feeding birds, and cover for small mammals.
- Native low-growing/groundcover species should be planted in areas that need to be maintained. This would provide benefits to pollinators while also minimizing the amount of maintenance, such as mowing and herbicide treatment.
- Using a seed mix that includes milkweed species (*Asclepias* spp.) is especially beneficial for monarch butterflies. The following website provides additional information and a comprehensive list of native plant species that benefit pollinators: <http://www.xerces.org/pollinator-resource-center/mid-atlantic>. We also offer our assistance with developing seed mixes that can be used in conjunction with fast growing erosion control seed mixes for overall soil stability and pollinator benefits.
- Additional information regarding plant species, seed mixes, and pollinator habitat requirements can be provided upon request.

We appreciate the opportunity to provide these comments. Please contact Ms. Holland Youngman of our staff at [holland\\_youngman@fws.gov](mailto:holland_youngman@fws.gov) if you have any questions. In any future correspondence concerning this project, please reference our Log Number 22-126.

Sincerely,

- - *original signed* - -

Janet Mizzi  
Field Supervisor



February 25, 2022

**Laurie F. Muzzy**

NRCS-Natural Resource Conservation Service  
Resource Soil Scientist  
4407 Bland Road Suite #117  
Raleigh, NC 27609  
*Submitted via email: Laura.Muzzy@usda.gov*

**Subject:** Running Dog Mitigation Site  
Union County, North Carolina

Dear Ms. Muzzy,

Wildlands Engineering, Inc. requests review and completion of Parts II and IV of the USDA AD-1006 form as required under the Farmland Protection Policy Act (FPPA) of North Carolina regarding a potential riparian buffer restoration project on the Running Dog Mitigation Site located in Union County, NC. The project is funded by North Carolina Division of Mitigation Services (NCDMS) and the lead federal agency is Donnie Brew with Federal Highway Administration (FHWA). A Site Map and a USGS Topographic Map showing the approximate project area are enclosed. The topographic figure was prepared from the Midland 7.5-Minute USGS Topographic Quadrangle, and the site is located at latitude 35.130142, longitude -80.552587.

The Running Dog Mitigation Site is being developed to provide riparian buffer mitigation in the Yadkin River basin. The project will include buffer restoration of three unnamed tributaries and three ephemeral channels that flow to Goose Creek. The streams onsite have little to no existing riparian buffers and are surrounded by open agricultural fields primarily used to grow wheat, soybeans, and corn. Site stressors include sedimentation, nutrient, and fecal coliform input from adjacent agricultural fields, limited floodplain storage, lack of riparian canopy, as well as non-diffuse and peak flows.

The major goals of the proposed buffer restoration project are to provide ecological and water quality enhancements to the Yadkin River Basin by creating a functional riparian corridor and restoring the riparian buffer. This will be accomplished by restoring and or preserving the vegetative buffer on the areas up to 70 feet from streams and ephemeral channels, along with permanently preserving and protecting the site through establishing a conservation easement. Three areas within the proposed conservation easement are proposed to be converted, totaling 14.75 acres. Waters of the United States 404/401 permitting is not required for this buffer mitigation site as construction activities will only involve planting riparian vegetation and will not impact project streams or downstream resources.

We thank you in advance for your timely response and cooperation. Please feel free to contact us 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 "Kirsten Y. Gimbert".

**Kirsten Gimbert**, Senior Environmental Scientist

[kgimbert@wildlandseng.com](mailto:kgimbert@wildlandseng.com)

704.941.9093

Attachments: Figure 1 Site Overview Map, Figure 2 USGS Topographic Map, AD-1006 Form



Natural Resources  
Conservation Service

North Carolina  
State Office

4407 Bland Rd.  
Suite 117  
Raleigh, NC 27609  
Voice (919) 873-2158  
Fax (844) 325-6833

February 28, 2022

Kirsten Gimbert, Senior Environmental Scientist  
Wildlands Engineering, Inc.  
1430 S. Mint St, Suite 104  
Charlotte, NC 28203  
(704) 941-9093

Dear Kirsten Gimbert,

The following information is in response to your request soliciting comments regarding the Running Dog Mitigation Site project in Union 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 **does include** land classified as Prime or Important Farmland. In accordance with the Code of Federal Regulations 7CFR 658, Farmland Protection Policy Act, the AD-1006 was initiated. NRCS has completed Parts II, IV, V of the form, and returned for completion by the requesting agency. The requesting federal agency will determine next steps when funding is initiated.

If you have any questions, please feel free to call me at (919) 873-2158.

Sincerely,

Laurie F. Muzzy  
Resource Soil Scientist

cc:  
Shauntae Britt, District Conservationist, NRCS, Monroe, NC  
Mike Jones, State Soil Scientist, Raleigh, NC

## Kirsten Gimbert

---

**From:** Kirsten Gimbert  
**Sent:** Friday, March 18, 2022 9:48 AM  
**To:** Muzzy, Laura - FPAC-NRCS, RALEIGH, NC  
**Subject:** Running Dog AD-1006 Form  
**Attachments:** Union - Running Dog Mit\_AD-1006\_USDA\_FINAL.pdf

Hi Laurie,

Attached, please find the completed AD-1006 form for the Running Dog Mitigation Site.

Sincerely,

**Kirsten Gimbert** | *Senior Environmental Scientist*

M: 704.941.9093

**[Wildlands Engineering, Inc.](#)**

1430 S. Mint St, Suite 104

Charlotte, NC 28203

**FARMLAND CONVERSION IMPACT RATING**

<b>PART I</b> (To be completed by Federal Agency)		Date Of Land Evaluation Request <b>2/24/2022</b>			
Name of Project <b>Running Dog Mitigation Site</b>		Federal Agency Involved <b>FHWA</b>			
Proposed Land Use <b>Buffer Restoration</b>		County and State <b>Union County, NC</b>			
<b>PART II</b> (To be completed by NRCS)		Date Request Received By NRCS <b>2/25/2022</b>		Person Completing Form: <b>Laurie F. Muzzv</b>	
Does the site contain Prime, Unique, Statewide or Local Important Farmland? <i>(If no, the FPPA does not apply - do not complete additional parts of this form)</i>		YES <input type="checkbox"/>	NO <input type="checkbox"/>	Acres Irrigated <b>0</b>	Average Farm Size <b>195</b>
Major Crop(s) <b>corn</b>	Farmable Land In Govt. Jurisdiction Acres: <b>96.4</b> % <b>394,214</b>		Amount of Farmland As Defined in FPPA Acres: <b>96.4</b> % <b>394,214</b>		
Name of Land Evaluation System Used <b>Union County LESA</b>	Name of State or Local Site Assessment System <b>NA</b>		Date Land Evaluation Returned by NRCS <b>2/28/2022</b>		
<b>PART III</b> (To be completed by Federal Agency)		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly		<b>14.8</b>			
B. Total Acres To Be Converted Indirectly		<b>0</b>			
C. Total Acres In Site		<b>14.8</b>			
<b>PART IV</b> (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland		<b>0</b>			
B. Total Acres Statewide Important or Local Important Farmland		<b>10.8</b>			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted		<b>0.0037%</b>			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		<b>38.03%</b>			
<b>PART V</b> (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)		<b>74.4</b>			
<b>PART VI</b> (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>		<b>Maximum Points</b>	Site A	Site B	Site C
1. Area In Non-urban Use		(15)	<b>0</b>		
2. Perimeter In Non-urban Use		(10)	<b>0</b>		
3. Percent Of Site Being Farmed		(20)	<b>20</b>		
4. Protection Provided By State and Local Government		(20)	<b>20</b>		
5. Distance From Urban Built-up Area		(15)	<b>5</b>		
6. Distance To Urban Support Services		(15)	<b>0</b>		
7. Size Of Present Farm Unit Compared To Average		(10)	<b>1</b>		
8. Creation Of Non-farmable Farmland		(10)	<b>0</b>		
9. Availability Of Farm Support Services		(5)	<b>5</b>		
10. On-Farm Investments		(20)	<b>20</b>		
11. Effects Of Conversion On Farm Support Services		(10)	<b>0</b>		
12. Compatibility With Existing Agricultural Use		(10)	<b>0</b>		
TOTAL SITE ASSESSMENT POINTS		<b>160</b>	<b>71</b>	<b>0</b>	<b>0</b>
<b>PART VII</b> (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100	<b>74.4</b>	<b>0</b>	<b>0</b>
Total Site Assessment (From Part VI above or local site assessment)		160	<b>71</b>	<b>0</b>	<b>0</b>
<b>TOTAL POINTS (Total of above 2 lines)</b>		<b>260</b>	<b>145.4</b>	<b>0</b>	<b>0</b>
Site Selected:		Date Of Selection	Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>		
Reason For Selection:					
Name of Federal agency representative completing this form:					Date:

(See Instructions on reverse side)



January 25, 2022

**Olivia Munzer**

North Carolina Wildlife Resource Commission  
Western Piedmont Coordinator  
Rogers Lake Depot  
1718 NC Hwy 56 W  
Creedmoor, NC 27522  
*Submitted via email: [Olivia.munzer@ncwildlife.org](mailto:Olivia.munzer@ncwildlife.org)*

**Subject:** Running Dog Mitigation Site  
Union County, North Carolina

Dear Ms. Munzer,

Wildlands Engineering, Inc. requests review and comment on any possible issues that might emerge with respect to fish and wildlife issues associated with a potential riparian buffer restoration project on the Running Dog Mitigation Site located in Union County, NC. A Site Map and a USGS Topographic Map showing the approximate project area are enclosed. The topographic figure was prepared from the Midland 7.5-Minute USGS Topographic Quadrangle, and the site is located at latitude 35.130142, longitude -80.552587.

The Running Dog Mitigation Site is being developed to provide riparian buffer mitigation in the Yadkin River basin. The project will include buffer restoration of three unnamed tributaries and three ephemeral channels that flow to Goose Creek. The streams onsite have little to no existing riparian buffers and are surrounded by open agricultural fields primarily used to grow wheat, soybeans, and corn. Site stressors include sedimentation, nutrient, and fecal coliform input from adjacent agricultural fields, limited floodplain storage, lack of riparian canopy, as well as non-diffuse and peak flows.

The major goals of the proposed buffer restoration project are to provide ecological and water quality enhancements to the Yadkin River Basin by creating a functional riparian corridor and restoring the riparian buffer. This will be accomplished by restoring and or preserving the vegetative buffer on the areas up to 70 feet from streams and ephemeral channels, along with permanently preserving and protecting the site through establishing a conservation easement. Waters of the United States 404/401 permitting is not required for this buffer mitigation site as construction activities will only involve planting riparian vegetation and will not impact project streams or downstream resources.

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

Sincerely,

A handwritten signature in cursive script that reads "Kirsten Y. Gimbert".

**Kirsten Gimbert**, Senior Environmental Scientist

[kgimbert@wildlandseng.com](mailto:kgimbert@wildlandseng.com)

704.941.9093

Attachments: Figure 1 Site Overview Map and Figure 2 USGS Topographic Map



## ⊠ North Carolina Wildlife Resources Commission ⊠

---

Cameron Ingram, Executive Director

24 February 2022

Kirsten Gimbert  
Wildlands Engineering  
1430 South Mint Street, Suite 104  
Charlotte, NC 28203

**SUBJECT:** Environmental Review of the Running Dog Mitigation Site in Union County, North Carolina.

Dear Ms. Gimbert,

Biologists with the North Carolina Wildlife Resource Commission (NCWRC) received your request for review and comments on any possible concerns regarding the Running Dog Mitigation Site. Comments are provided in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667e) and North Carolina General Statutes (G.S. 113-131 et seq.).

The Running Dog Mitigation Site is located south-southeast of the intersection of Indian Trail-Fairview Road and Brent Haigler Road in Union County, North Carolina. The proposed project would restore and/or enhance the riparian buffer of three unnamed tributaries and three ephemeral channels that flow into Goose Creek. Goose Creek is in the Yadkin-Pee Dee River basin. The riparian buffer will extend up to 70 feet from the streams and ephemeral channels. The existing land use adjacent to the streams is agricultural.

We have records for the federal and state endangered Carolina heelsplitter (*Lasmigona decorata*), state endangered Carolina creekshell (*Villosa vaughaniana*), state threatened notched rainbow (*Villosa constricta*), state special concern Carolina darter (*Etheostoma collis*), and state significantly rare eastern creekshell (*Villosa delumbis*) in Goose Creek and Crooked Creek. If any instream work may occur, NCWRC may request surveys for aquatic species.

Buffer restoration projects often improve water quality and aquatic habitat. Establishing native, forested buffers in riparian areas will help protect water quality, improve aquatic and terrestrial habitats, and provide a travel corridor for wildlife species. We offer the following general recommendations to minimize impacts to aquatic and terrestrial wildlife resources:

1. We recommend riparian buffers are as wide as possible, given site constraints and landowner needs. NCWRC generally recommends a woody buffer of 100 feet on perennial streams to maximize the benefits of buffers, including bank stability, stream shading, treatment of overland runoff, and wildlife habitat.

24 February 2022  
Running Dog Mitigation Site  
Union County

2. We recommend a plant list that consists of species typically found in reference streams and the appropriate natural vegetation community, as described by M.P. Schafale in *The Guide To The Natural Communities of North Carolina, Fourth Approximation* (<https://www.ncnhp.org/references/nhp-publications/fourth-approximation-descriptions>). Also, ensure the species planted occur naturally within Union County.
3. Avoid using orchard grass, fescue, or cereal rye, which exhibits allelopathic characteristics, or any other non-native species for soil stabilization. Alternatively, use a grain, such as oats, wheat, or rye for temporary cover and native seed mixes for permeant seeding. We recommend planting native, wildflower seed mixes that will create pollinator habitat within the project boundary.
4. The use of biodegradable and wildlife-friendly sediment and erosion control devices is strongly recommended. 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 that has been reinforced with plastic or metal mesh should be avoided as it impedes 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.

Thank you for the opportunity to provide comments. If I can be of additional assistance, please call (336) 269-0074 or email [olivia.munzer@ncwildlife.org](mailto:olivia.munzer@ncwildlife.org).

Sincerely,



Olivia Munzer  
Western Piedmont Habitat Conservation Coordinator  
Habitat Conservation Program



Running Dog Mitigation Site  
Categorical Exclusion

**FIGURES**

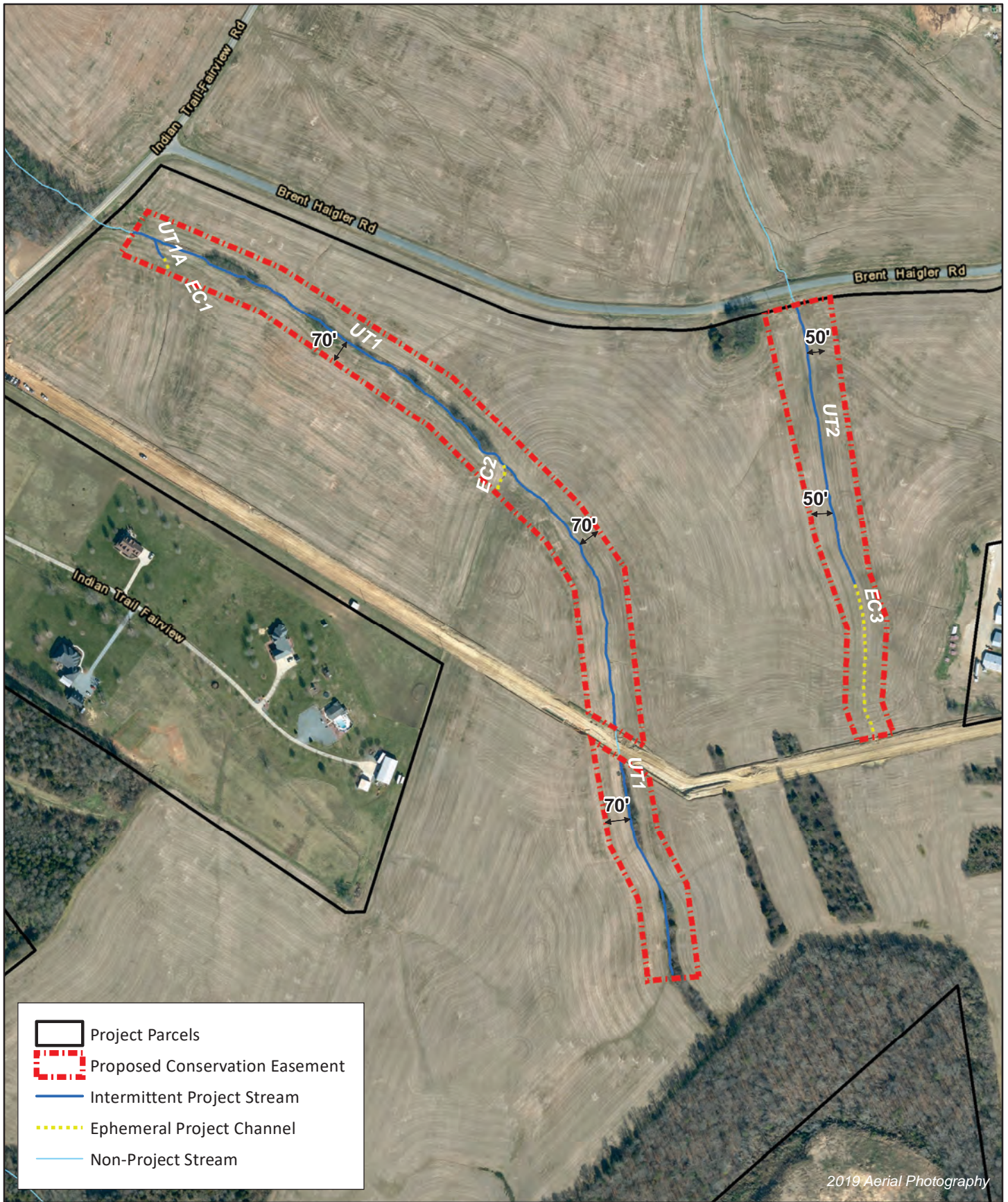
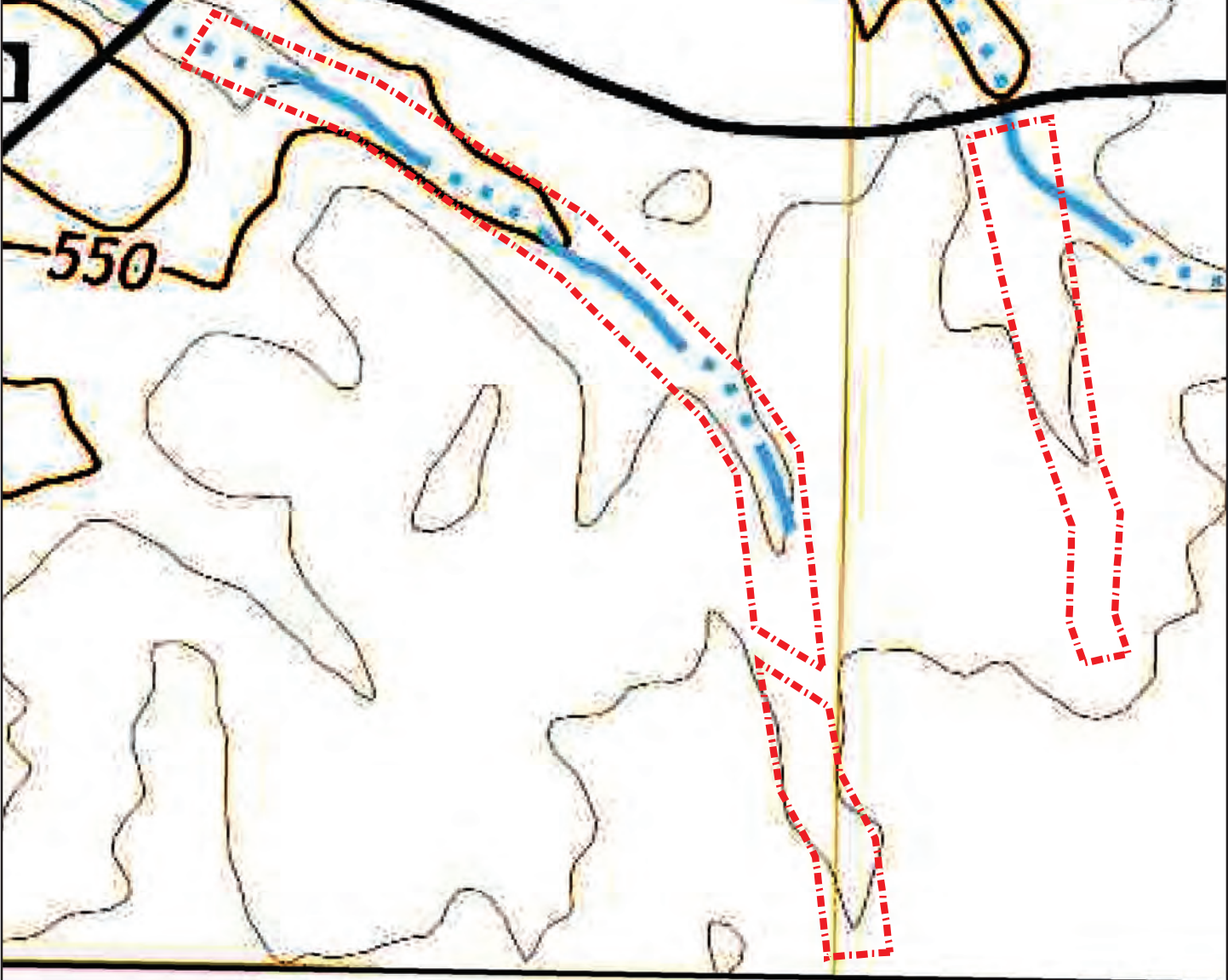


Figure 1 Site Overview Map  
Running Dog Mitigation Site  
Yadkin River Basin (03040105)

Midland USGS 7.5 Minute Topographic Quadrangle

Emmanuel  
Cem



 Proposed Conservation Easement




0 200 400 Feet  




Figure 2 USGS Topographic Map  
Running Dog Mitigation Site  
Yadkin River Basin (03040105)