Year 1 Monitoring Report

FINAL

SASSAFRAS MITIGATION PROJECT

NCDMS Project #100178 (Contract #0402-05)
RFP #16-20200402
DWR Project #2021-0754v2

Wayne County, North Carolina
Neuse River Basin
HUC 03020201

Provided by:

Resource Environmental Solutions, LLC
for Environmental Banc & Exchange, LLC (EBX)

Provided for:
NC Department of Environmental Quality
Division of Mitigation Services

January 2024

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1 Mitigation Project Summary

1.1 Project Location and Description

Environmental Banc & Exchange, LLC (EBX), a wholly-owned subsidiary of Resource Environmental Solutions (RES), is pleased to provide the Sassafras Mitigation Project (Project), a full-delivery buffer mitigation project for the Division of Mitigation Services (DMS) (DMS Project #100178). The Sassafras Project is within the Neuse River Basin within the 8-digit HUC 03020201, 14-digit HUC 03020201200030 and DWR Sub-basin Number 03-04-12. The Project easement is located in Wayne County approximately five miles west of Goldsboro, NC and can be accessed from Rita Lane off NC Highway 581 (**Figure 1**). The coordinates are 35.396 N and -78.070 W.

This buffer project provides riparian buffer mitigation credits for unavoidable impacts due to development within the Neuse River Basin, United States Geological Survey (USGS) 8-digit Cataloguing Unit 03020201 (Neuse 01), excluding Falls Lake Watershed (**Figure 1**). This Buffer Mitigation Plan is in accordance with the Consolidated Buffer Mitigation Rule 15A NCAC 02B .0295 and Nutrient Offset Credit Trading Rule 15A NCAC 02B .0703. The Sassafras Project consists of a contiguous conservation easement that totals approximately 12.99 acres and includes three unnamed stream tributaries to Charles Branch. Charles Branch is a USGS-named stream that eventually drains to the Neuse River. Pre-existing land use within the Project was crop production. Water quality stressors previously affecting the Project included heavily manipulated/relocated and maintained stream channels, nutrient loadings from active crop production, and lack of forested riparian buffers.

The Sassafras Project is composed of one perennial stream, RS1, and two intermittent stream channels: RS2 and RS3. RS2 includes an ephemeral portion (RS2-A) and an in-line pond between RS2-B and RS2-C. All streams have been straightened and are incised. Furthermore, the fifty-foot riparian buffers of all stream channels were determined to be subject to the Neuse buffer protection rules, except for the ephemeral portion of RS2 (RS2-A). This Project was also codeveloped with a nutrient offset bank that extends riparian buffer areas associated with this Project's streams as well as incorporates an additional ditch feature on the property.

The goal of the Project is to restore ecological function to the existing streams and their associated riparian buffer areas by establishing appropriate plant communities while minimizing temporal and land disturbing impacts. This is being accomplished through the planting, establishment, and protection of a hardwood forest community. The result will be a riparian area that functions to mitigate nutrient and sediment inputs from the surrounding uplands. Buffer and surrounding riparian area improvements will filter runoff from agricultural fields, thereby reducing nutrient and sediment loads to Project channels and provide water quality benefit to the overall watershed. The Project will provide significant functional uplift to the watershed and will assist DMS with achieving its mitigation goals in the Neuse 01 watershed, excluding the Falls Lake Watershed.

2 Regulatory Considerations

2.1 Determination of Credits

This Project has the potential to generate up to 498,913.777 ft^2 (11.45 acres) riparian buffer mitigation credits within a 12.577-acre conservation easement. These will be derived from buffer restoration. The riparian buffer mitigation credits generated will service the Neuse 01 watershed, excluding the Falls Lake Watershed. Due to an adjustment to the conservation easement, the total riparian buffer mitigation credits at As-Built have been reduced by 1,665.289 ft^2. The total potential buffer mitigation credits that the Sassafras Mitigation Project will generate are detailed in **Table 1, Appendix A.** Where viable, buffer mitigation credits can be converted to nutrient offset credit in accordance with the Nutrient Offset Credit Trading Rule, 15A NCAC 02B .0703.

3 Baseline

3.1 Planting

The initial planting of bare root trees occurred on February 27, 2023. All riparian restoration areas were planted from top of bank back at least 50 feet from streams with bare root tree seedlings on a nine by six-foot spacing to achieve an initial density of approximately 878 trees per acre. In addition, these areas were seeded with an herbaceous seed mix to provide rapid herbaceous cover and promote immediate buffer effectiveness as well as habitat for pollinators and other wildlife. The seed blend contains both temporary and permanent seed and includes taproot species. The seed was sown utilizing broadcast seeding. Additionally, the site was ripped to encourage tree growth. Planting occurred in all areas proposed for riparian buffer restoration and meets the performance standards outlined in the Rule 15A NCAC 02B .0295. This includes planting of at least four species of native hardwood bare root trees. Mixed-Mesic Hardwood Forest (Coastal Plain subtype) (Schafale 2012) is the target community type and was used for all areas within the Project. This community composition is highly diverse and is suitable given the Project's soil and landscape characteristics and will provide water quality and ecological benefits. The list of planted bare root tree species and their percentage of total species composition can be found in **Appendix B**. Wherever possible, mature vegetation has been preserved and incorporated into the buffer.

3.2 Other Activities

In the approved mitigation plan, the culvert on RS2-B was to be replaced and upgraded to ensure hydrologic connectivity between features RS2-A and RS2-B. Upon reevaluation and agreement with the landowner, the existing culvert is functioning appropriately to ensure hydrologic connectivity between RS2-A and RS2-B. Therefore, the culvert was not replaced. The conservation easement includes a 20-foot-wide internal crossing on Ditch 1. This allows future access to land parcels for the landowner while ensuring that the hydrologic connection between Ditch 1 and RS3 is not interrupted. As mentioned earlier, this Project was codeveloped with Sassafras Phase II and extends the riparian areas associated with this Project's features. Therefore, riparian planting and site preparation activities extended beyond the limits of this Project's boundaries.

4 Annual Monitoring

4.1 Methods

Annual vegetation monitoring and visual assessments will be conducted. Monitoring plots were installed a minimum of 100 meters squared in size and cover at least two percent of the planted mitigation area. These plots were randomly placed throughout the planted riparian buffer mitigation area (11.7 acres) and are representative of the riparian restoration conditions. The following data is recorded for all trees in the plots: species, height, planting date (or volunteer), and grid location. All stems in plots are flagged with flagging tape. Data is processed using the "Vegetation Table Shiny Tool" made available by DMS in December 2021 and is reported in accordance with the most recent DMS requirements and templates. In the field, the four corners of each plot were permanently marked with PVC at the origin and metal conduit at the other corners. There are ten fixed vegetation monitoring plots (**Figure 2**). These plots were planted and monitored in conjunction with plots 11-21 of the Sassafras Phase II project site.

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

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

- Easement boundary markers/signage are in good condition throughout the site;
- No encroachment has occurred;
- No invasive species within the conservation easement;
- Diffuse flow is being maintained in the conservation easement areas; and
- There has not been any cutting, clearing, filling, grading, or similar activities that would negatively affect the functioning of the buffer.

Component/ Feature	Monitoring	Maintenance through project close-out
Vegetation	Annual vegetation monitoring	Vegetation shall be maintained to ensure the health and vigor of the targeted plant community. Routine vegetation maintenance and repair activities may include supplemental planting, pruning, mulching, and fertilizing. Exotic invasive plant species shall be treated by mechanical and/or chemical methods. Any vegetation requiring herbicide application will be performed in accordance with NC Department of Agriculture (NCDA) rules and regulations. Vegetation maintenance activities will be documented and reported in annual monitoring reports. Vegetation maintenance will continue through the monitoring period.
Invasive and Nuisance Vegetation	Visual Assessment	Invasive and noxious species will be monitored and treated so that none become dominant or alter the desired community structure of the Project. Locations of invasive and nuisance vegetation will be mapped.
Project Boundary	Visual Assessment	Project boundaries shall be identified in the field to ensure clear distinction between the mitigation project and adjacent properties. Boundaries are marked

Component/ Feature	Monitoring	Maintenance through project close-out
		with signs identifying the property as a mitigation project and will include the name of the long-term steward and a contact number. Boundaries may be identified by fence, marker, bollard, post, tree-blazing, or other means as allowed by Project conditions and/or conservation easement. Boundary markers disturbed, damaged, or destroyed will be repaired and/or replaced on an as-needed basis. Easement monitoring and staking/ signage maintenance will continue in perpetuity as a stewardship activity.

4.2 Tables

See **Appendix B**.

4.3 Results and Discussion

Monitoring of 10 fixed vegetation plots was completed on December 5th, 2023. Vegetation tables are in **Appendix B** and associated photos are in **Appendix C**. MY1 monitoring data indicates that all plots are exceeding the success criteria of 260 planted stems per acre. Planted stem densities ranged from 486 to 1,255 planted stems per acre with a mean of 858 planted stems per acre across all plots. A total of 11 species were documented within the plots. Volunteer species were not noted in MY1 but are expected to become established in upcoming years. The average tree height observed was 2.0 feet. Two vegetation plots, plot 2 and 3, resulted in a dominance of one species (northern red oak and river birch) when updated tree identification occurred this year. However, RES is not concerned about this because there are other species within the plot that are doing well and there is not a display of one species being over 50% dominant across the site. Additionally, RES will refrain from planting river birch and northern red oak in these areas in future years if supplemental planting is needed.

Visual assessment of vegetation outside of the monitoring plots indicates that the herbaceous vegetation is becoming well established throughout the project. Small areas of mimosa and Chinese privet were treated in May 2023 along RS2-C and RS3 (**Figure 2**). Easement boundary markers and signs are clearly visible and in good condition. Additionally, there were no signs of encroachment or undocumented concentrated flow in the easement area.

4.4 Maintenance and Management

Project boundary will continue to be monitored for encroachment and conservation easement markings will be replaced if damaged. Invasive and noxious species will be monitored and treated so that none become dominant or alter the desired community structure of the Project.

5 References

NC Environmental Management Commission. 2014. Rule 15A NCAC 02B.0295 - Mitigation Program Requirements for the Protection and Maintenance of Riparian Buffers.

NC Environmental Management Commission. 2020. Rule 15A NCAC 02B.0714 – Neuse River Basin: Nutrient Sensitive Waters Management Strategy: Protection and Maintenance of Existing Riparian Buffers.

NC Department of Environmental Quality, Division of Mitigation Services. 2021. Vegetation Table Shiny Tool. https://ncdms.shinyapps.io/Veg_Table_Tool/.

Resource Environmental Solutions, LLC (2022). Sassafras Mitigation Project. Final Mitigation Plan.

Schafale, M.P. 2012. Classification of the Natural Communities of North Carolina, Fourth Approximation. North Carolina Natural Heritage Program, Division of Parks and Recreation, NCDENR, Raleigh, NC.

Appendix A

Background Tables & Site Maps

Table 1. Sassafras, DMS# 100178 DWR# 2021-0754V2, Project Credits

Neuse 03020201 - Outside Falls Lake	**Project Area**
19.16394	**N Credit Conversion Ratio (ft²/pound)**
N/A	**P Credit Conversion Ratio (ft²/pound)**

Credit Type	Location	Subject? (enter NO if ephemeral or ditch [1])	Feature Type	Mitigation Activity	Min-Max Buffer Width (ft)	Feature Name	Total Area (ft²)	Total (Creditable) Area of Buffer Mitigation (ft²)	Initial Credit Ratio (x:1)	% Full Credit	Final Credit Ratio (x:1)	Convertible to Riparian Buffer?	Riparian Buffer Credits	Convertible to Nutrient Offset?	Delivered Nutrient Offset: N (lbs)	Delivered Nutrient Offset: P (lbs)
Buffer	Rural	Yes	I / P	Restoration	0-100	RS1, RS2-B, RS2-C, RS3 (0-100 ft)	469,755	469,755	1	100%	1.00000	Yes	469,755.000	Yes	24,512.444	—
Buffer	Rural	Yes	I / P	Restoration	0-100	RS1, RS3 (30-50 ft)	2,474	2,474	1	100%	1.00000	Yes	2,474.000	No	—	—
Buffer	Rural	Yes	I / P	Restoration	101-200	RS1, RS2-B, RS2-C, RS3	16,186	16,186	1	33%	3.03030	Yes	5,341.385	Yes	844.607	—
Buffer	Rural	No	Ephemeral	Restoration	0-100	RS2-A (0-100 ft)	20,746	20,746	1	100%	1.00000	Yes	20,746.000	Yes	1,082.554	—
Buffer	Rural	No	Ephemeral	Restoration	101-200	RS2-A (101-200 ft)	158	158	1	33%	3.03030	Yes	52.140	Yes	8.245	—
Buffer	Rural	Yes	I / P	Restoration	20-29	RS1, RS3 (20-29ft)	727	727	1	75%	1.33333	Yes	545.251	No	—	—
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						Totals (ft2):	**510,046**	**510,046**					**498,913.777**		**26,447.849**	**0.000**
						Total Buffer (ft2):	**510,046**	**510,046**								
						Total Nutrient Offset (ft2):	**0**	**N/A**								

Total Ephemeral Area (ft²) for Credit:	**20,904**	**20,904**	
Total Eligible Ephemeral Area (ft²):	**127,512**	**4.1%**	**Ephemeral Reaches as % TABM**
Total Eligible for Preservation (ft²):	**170,015**	**0.0%**	**Preservation as % TABM**

Enter Preservation Credits Below

Credit Type	Location	Subject?	Feature Type	Mitigation Activity	Min-Max Buffer Width (ft)	Feature Name	Total Area (sf)	Total (Creditable) Area for Buffer Mitigation (ft²)	Initial Credit Ratio (x:1)	% Full Credit	Final Credit Ratio (x:1)	Riparian Buffer Credits
												—
												—
												—
												—
												—
						Preservation Area Subtotals (ft²):	**0**	**0**				

TOTAL AREA OF BUFFER MITIGATION (TABM)			
Mitigation Totals		**Square Feet**	**Credits**
Restoration:		510,046	498,913.777
Enhancement:		0	0.000
Preservation:		0	0.000
Total Riparian Buffer:		510,046	498,913.777
TOTAL NUTRIENT OFFSET MITIGATION			
Mitigation Totals		**Square Feet**	**Credits**
Nutrient Offset:	**Nitrogen:**	0	0.000
	Phosphorus:		0.000

1. The Randleman Lake buffer rules allow some ditches to be classified as subject according to 15A NCAC 02B .0250 (5)(a).

last updated 08/03/2020

Table 2: Summary: Goals, Performance and Results

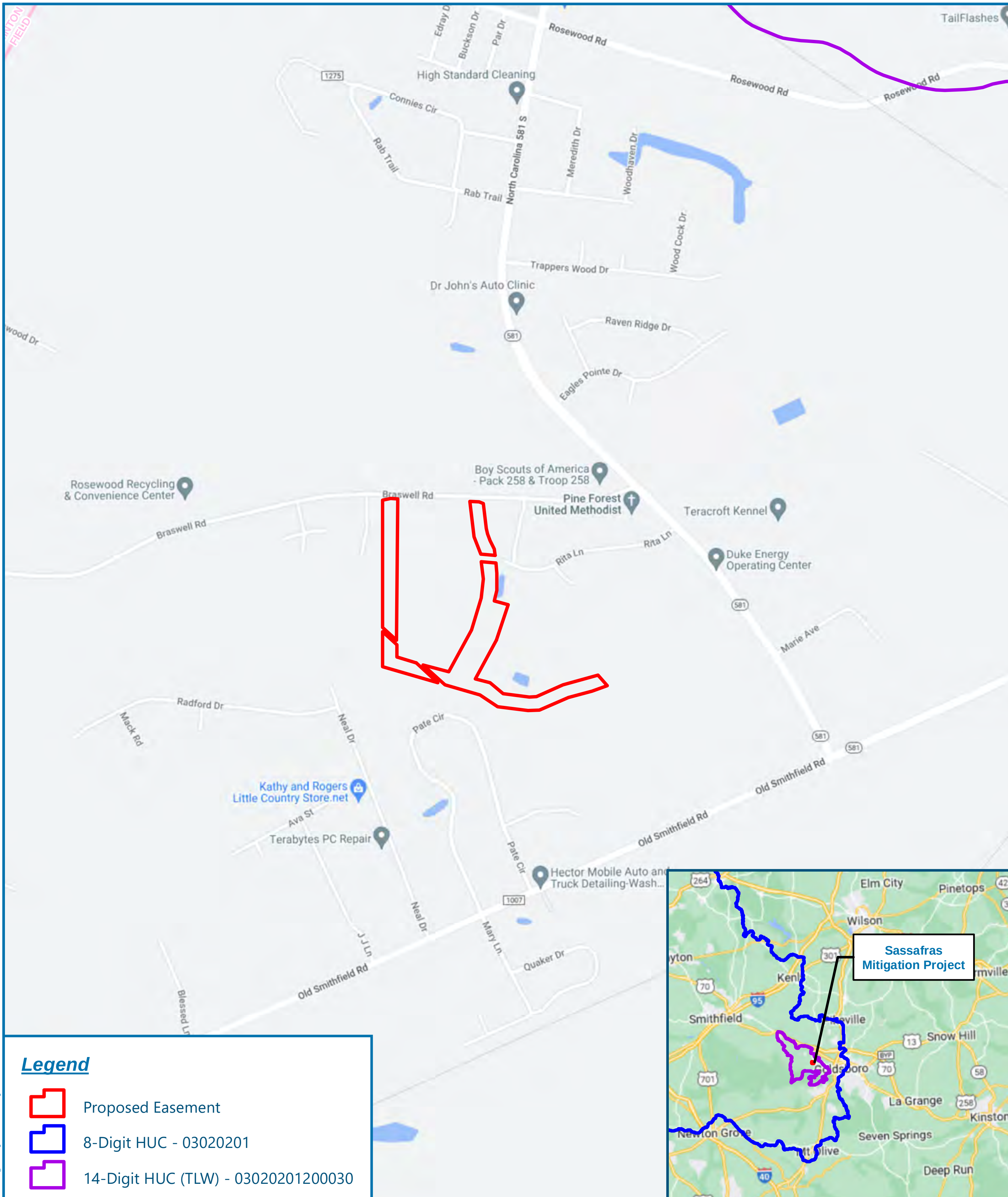
Goal	Objective/Treatment	Likely Functional Uplift	Performance Criteria	Measurement	Cumulative Monitoring Results
Restore and preserve native vegetation.	Established and increased forested riparian buffers to 50 feet and greater along both sides of the channel along the project reaches with a hardwood riparian plant community;	Reduction in floodplain sediment inputs from runoff, increased bank stability, increased LWD, and increased organic material in streams	Survival of at least four native hardwood tree species, where no one species is greater than 50 percent of stems, at a density of at least 260 stems per acre at the end of MY5	Ten fixed vegetation plots	All ten fixed vegetation plots met success criteria

Table 3. Project Attribute Table			
Project Name	Sassafras Mitigation Project		
County	Wayne		
Project Area (acres)	12.577		
Planted Area (acres)	11.7		
Project Coordinates (latitude and longitude decimal degrees)	35.396, -78.070		
Project Watershed Summary Information			
Physiographic Province	Rolling Coastal Plain		
River Basin	Neuse		
USGS Hydrologic Unit 8-digit	3020201		
DWR Sub-basin	03-04-12		
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
Buffer Authorization - Neuse Riparian Buffer Protection Rules	Yes	Yes	Appendix A
Endangered Species Act	Yes	Yes	Categorical Exclusion
Historic Preservation Act	Yes	Yes	Categorical Exclusion
Coastal Zone Management Act (CZMA or CAMA)	No	N/A	N/A
Essential Fisheries Habitat	No	N/A	N/A

Table 4. Project Timeline and Contacts

Activity or Deliverable	Data Collection Complete	Task Completion or Deliverable Submission
Project Instituted	NA	Dec-20
Mitigation Plan Approved	NA	Dec-22
Planting Completed	NA	27-Feb-23
As-built Survey Completed	NA	Mar-23
MY-0 Baseline Report	Mar-23	Apr-23
Invasive Treatment	NA	May-23
MY1 Monitoring Report	Dec-23	Jan-24

Sassafras	
Provider Mitigation Provider POC	RES / 3600 Glenwood Ave., Suite 100, Raleigh, NC 27612 Jamey Mceachran (919) 623-9889
Designer Primary project design POC	RES / 3600 Glenwood Ave., Suite 100, Raleigh, NC 27612 Benton Carroll
Construction Contractor Construction contractor POC	RES / 3600 Glenwood Ave., Suite 100, Raleigh, NC 27612 Paul Dunn



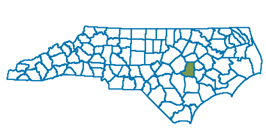


Figure 1 - Site Location

Sassafras Mitigation Project

Wayne County, North Carolina

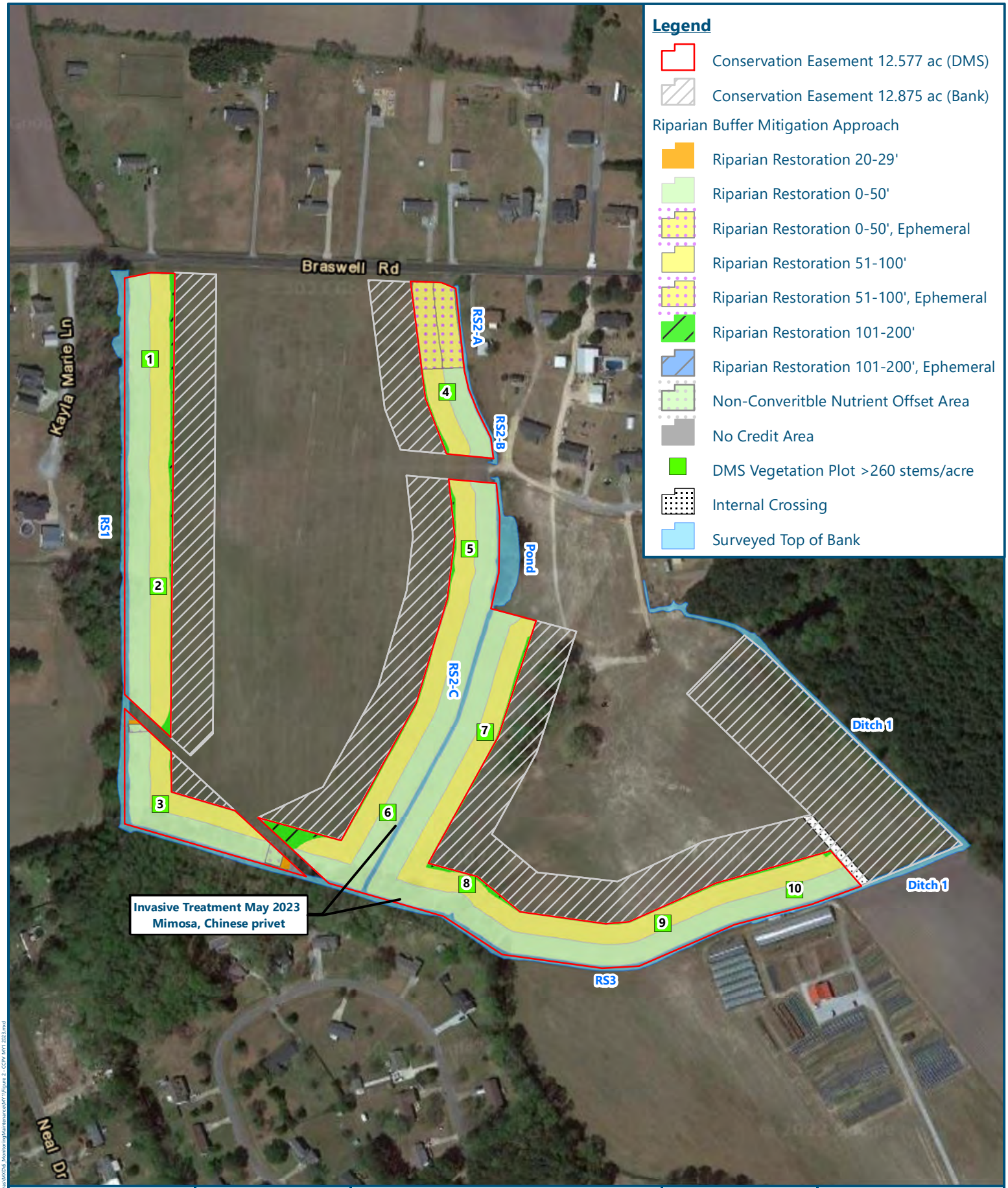
Date: 3/23/2023

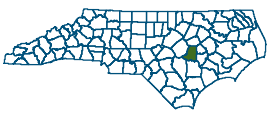
Drawn by: HKH

Checked by: BPB

1 inch = 1,000 feet

Document Path: R:\Resgis\ersgis\Projects\103272_Sassafras\MXDs\6_MonitoringMaintenance\MY0\Figure 1 - Site Location - Sassafras.mxd





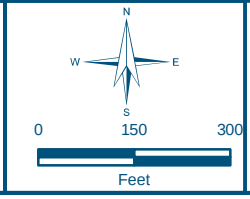


Figure 2 - CCPV MY1 2023

Sassafras
Mitigation Project

Wayne County, North Carolina

Date: 1/4/2024
Drawn by: HKH
Checked by: JRM
1 inch = 300 feet

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Appendix B

Vegetation Assessment Data

Planted Species Summary

Common Name	Scientific Name	Mit Plan %	As-Built %	Total Stems Planted
American sycamore	*Platanus occidentalis*	15	15	1,600
River birch	*Betula nigra*	15	15	1,600
Willow Oak	*Quercus phellos*	10	10	1,000
Swamp chestnut oak	*Quercus michauxii*	10	10	1,000
Water oak	*Quercus nigra*	10	10	1,000
Northern red oak	*Quercus rubra*	10	10	1,000
Overcup oak	*Quercus lyrata*	10	10	1,000
Persimmon	*Diospyros virginiana*	10	10	1,000
Green Ash	*Fraxinus pennsylvanica*	5	5	500
Buttonbush	*Cephalanthus occidentalis*	5	5	500
			Total	10,200
			Planted Area	11.7
			As-Built Stems/Acre	878

Planted Acreage	11.7
Date of Initial Plant	2023-02-07
Date(s) of Supplemental Plant(s)	NA
Date(s) Mowing	NA
Date of Current Survey	2023-12-05
Plot size (ACRES)	0.0247

	Scientific Name	Common Name	Tree/Shrub	Indicator Status	Veg Plot 1 F		Veg Plot 2 F		Veg Plot 3 F		Veg Plot 4 F		Veg Plot 5 F		Veg Plot 6 F		Veg Plot 7 F		Veg Plot 8 F		Veg Plot 9 F		Veg Plot 10 F	
					Planted	Total	Planted	Total	Planted	Total	Planted	Total	Planted	Total	Planted	Total	Planted	Total	Planted	Total	Planted	Total	Planted	Total
Species Included in Approved Mitigation Plan	Betula nigra	river birch	Tree	FACW	3	3	1	1	10	10	2	2	8	8	3	3	5	5	2	2	2	2	6	6
	Cephalanthus occidentalis	common buttonbush	Shrub	OBL							1	1	2	2					2	2	1	1		
	Diospyros virginiana	common persimmon	Tree	FAC			1	1					3	3			3	3	1	1			4	4
	Fraxinus pennsylvanica	green ash	Tree	FACW	2	2					1	1			2	2	2	2	2	2	2	2	1	1
	Platanus occidentalis	American sycamore	Tree	FACW	5	5	1	1	3	3	3	3			5	5	3	3	2	2	8	8	2	2
	Quercus lyrata	overcup oak	Tree	OBL					2	2	2	2	1	1	1	1	3	3	1	1	2	2	5	5
	Quercus michauxii	swamp chestnut oak	Tree	FACW	5	5			2	2	3	3			1	1			2	2	3	3		
	Quercus nigra	water oak	Tree	FAC	1	1					3	3			4	4	3	3	3	3			9	9
	Quercus phellos	willow oak	Tree	FACW			1	1	1	1	6	6	1	1	5	5	3	3	6	6	1	1	2	2
	Quercus rubra	northern red oak	Tree	FACU	1	1	8	8			1	1	2	2	2	2			3	3	7	7	2	2
Sum	Performance Standard				17	17	12	12	18	18	22	22	17	17	23	23	22	22	24	24	26	26	31	31
Mitigation Plan Performance Standard	Current Year Stem Count					17		12		18		22		17		23		22		24		26		31
	Stems/Acre					688		405		688		891		688		931		891		972		1052		1255
	Species Count					6		5		5		9		6		8		7		10		8		8
	Dominant Species Composition (%)					29		67		56		27		47		22		23		25		31		29
	Average Plot Height (ft.)					3		2		3		2		2		2		2		2		2		2
	% Invasives					0		0		0		0		0		0		0		0		0		0
Post Mitigation Plan Performance Standard	Current Year Stem Count					17		12		18		22		17		23		22		24		26		31
	Stems/Acre					688		405		688		891		688		931		891		972		1052		1255
	Species Count					6		5		5		9		6		8		7		10		8		8
	Dominant Species Composition (%)					29		67		56		27		47		22		23		25		31		29
	Average Plot Height (ft.)					3		2		3		2		2		2		2		2		2		2
	% Invasives					0		0		0		0		0		0		0		0		0		0

1). Bolded species are proposed for the current monitoring year, italicized species are not approved, and a regular font indicates that the species has been approved.
2). The "Species Included in Approved Mitigation Plan" section contains only those species that were included in the original approved mitigation plan. The "Post Mitigation Plan Species" section includes species that are being proposed through a mitigation plan addendum for the current monitoring year (bolded) , species that have been approved in prior monitoring years through a mitigation plan addendum (regular font), and species that are not approved (italicized).
3). The "Mitigation Plan Performance Standard" section is derived only from stems included in the original mitigation plan, whereas the "Post Mitigation Plan Performance Standard" includes data from mitigation plan approved, post mitigation plan approved, and proposed stems.

Vegetation Performance Standards Summary Table												
	Veg Plot 1 F				Veg Plot 2 F				Veg Plot 3 F			
	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives
Monitoring Year 7												
Monitoring Year 5												
Monitoring Year 3												
Monitoring Year 2												
Monitoring Year 1	688	3	6	0	405	2	5	0	688	3	5	0
Monitoring Year 0	688	1	6	0	445	1	6	0	688	1	5	0
	Veg Plot 4 F				Veg Plot 5 F				Veg Plot 6 F			
	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives
Monitoring Year 7												
Monitoring Year 5												
Monitoring Year 3												
Monitoring Year 2												
Monitoring Year 1	891	2	9	0	688	2	6	0	931	2	8	0
Monitoring Year 0	931	1	9	0	688	1	6	0	972	1	8	0
	Veg Plot 7 F				Veg Plot 8 F				Veg Plot 9 F			
	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives
Monitoring Year 7												
Monitoring Year 5												
Monitoring Year 3												
Monitoring Year 2												
Monitoring Year 1	891	2	7	0	972	2	10	0	1052	2	8	0
Monitoring Year 0	931	1	7	0	972	1	10	0	1052	1	8	0
	Veg Plot 10 F											
	Stems/Ac.	Av. Ht. (ft)	# Species	% Invasives								
Monitoring Year 7												
Monitoring Year 5												
Monitoring Year 3												
Monitoring Year 2												
Monitoring Year 1	1255	2	8	0								
Monitoring Year 0	1295	1	8	0								

*Each monitoring year represents a different plot for the random vegetation plot "groups". Random plots are denoted with an R, and fixed plots with an F.

Plot ID	Scientific Name	Performance Standard Approval	Planted or Volunteer?	X Coordinate (m)	Y Coordinate (m)	MY0 Height	MY1 Height	MY2 Height	MY3 Height	MY5 Height	MY7 Height	Map_ID
1	Quercus nigra	Approved Mit Plan	Planted	8.5	0.2	1.0	1.0					A
1	Betula nigra	Approved Mit Plan	Planted	9.3	4.8	1.5	2.6					B
1	Betula nigra	Approved Mit Plan	Planted	7.6	3.4	1.6	3.6					C
1	Quercus michauxii	Approved Mit Plan	Planted	6.2	1.7	1.6	1.6					D
1	Betula nigra	Approved Mit Plan	Planted	4.7	0.4	1.4	3.9					E
1	Quercus michauxii	Approved Mit Plan	Planted	0.4	0.3	2.0	2.3					F
1	Fraxinus pennsylvanica	Approved Mit Plan	Planted	2.3	1.9	1.5	1.5					G
1	Fraxinus pennsylvanica	Approved Mit Plan	Planted	3.8	3.5	1.1	3.3					H
1	Quercus michauxii	Approved Mit Plan	Planted	5.6	5.1	1.2	1.1					I
1	Quercus michauxii	Approved Mit Plan	Planted	7.4	6.5	1.9	2.5					J
1	Quercus michauxii	Approved Mit Plan	Planted	9	8	1.9	2.1					K
1	Platanus occidentalis	Approved Mit Plan	Planted	6.3	9.6	0.8	3.3					L
1	Platanus occidentalis	Approved Mit Plan	Planted	4.7	8.1	0.9	3.6					M
1	Platanus occidentalis	Approved Mit Plan	Planted	3	6.8	0.9	3.4					N
1	Platanus occidentalis	Approved Mit Plan	Planted	1.6	5.8	1.0	3.8					O
1	Platanus occidentalis	Approved Mit Plan	Planted	0.3	4.4	0.8	3.0					P
1	Quercus rubra	Approved Mit Plan	Planted	0.5	9.5	1.9	1.6					Q

Plot ID	Scientific Name	Performance Standard Approval	Planted or Volunteer?	X Coordinate (m)	Y Coordinate (m)	MY0 Height	MY1 Height	MY2 Height	MY3 Height	MY5 Height	MY7 Height	Map_ID
2	Betula nigra	Approved Mit Plan	Planted	0.3	0.2	1.6	3.0					A
2	Diospyros virginiana	Approved Mit Plan	Planted	4.3	0.1	0.8	0.7					B
2	Quercus phellos	Approved Mit Plan	Planted	2.8	1.9	0.7	0.8					C
2	Quercus rubra	Approved Mit Plan	Planted	1.1	3.7	2.0	1.3					D
2	Platanus occidentalis	Approved Mit Plan	Planted	1	8.1	0.8	1.8					E
2	Quercus rubra	Approved Mit Plan	Planted	2.9	6.2	0.9	1.1					F
2	Quercus rubra	Approved Mit Plan	Planted	4.7	4.2	1.9	2.0					G
2	Quercus rubra	Approved Mit Plan	Planted	6.7	1.8	2.0	2.3					H
2	Quercus rubra	Approved Mit Plan	Planted	9.3	3.6	1.6	1.6					I
2	Quercus nigra	Approved Mit Plan	Planted	7.8	5.2	0.6	0.0					J
2	Quercus rubra	Approved Mit Plan	Planted	6	7.3	1.6	1.6					K
2	Quercus rubra	Approved Mit Plan	Planted	4.2	9.3	2.0	1.6					L
2	Quercus rubra	Approved Mit Plan	Planted	8	9.7	1.7	2.0					M

Plot ID	Scientific Name	Performance Standard Approval	Planted or Volunteer?	X Coordinate (m)	Y Coordinate (m)	MY0 Height	MY1 Height	MY2 Height	MY3 Height	MY5 Height	MY7 Height	Map_ID
3	Quercus lyrata	Approved Mit Plan	Planted	0.3	0.4	1.3	3.4					A
3	Quercus lyrata	Approved Mit Plan	Planted	3.4	0.5	1.1	2.9					B
3	Betula nigra	Approved Mit Plan	Planted	6.5	0.6	1.3	4.1					C
3	Quercus phellos	Approved Mit Plan	Planted	9.8	0.7	1.0	1.4					D
3	Betula nigra	Approved Mit Plan	Planted	8.4	2.7	1.7	3.9					E
3	Betula nigra	Approved Mit Plan	Planted	5.2	2.7	1.5	4.7					F
3	Platanus occidentalis	Approved Mit Plan	Planted	2	2.7	1.0	1.0					G
3	Betula nigra	Approved Mit Plan	Planted	2.5	4.5	1.7	4.0					H
3	Betula nigra	Approved Mit Plan	Planted	5.4	4.6	0.9	2.7					I
3	Betula nigra	Approved Mit Plan	Planted	8.5	4.8	1.5	3.8					J
3	Quercus michauxii	Approved Mit Plan	Planted	9.3	6.9	1.9	2.3					K
3	Platanus occidentalis	Approved Mit Plan	Planted	6	6.8	0.7	4.9					L
3	Betula nigra	Approved Mit Plan	Planted	2.8	6.7	1.2	2.8					M
3	Betula nigra	Approved Mit Plan	Planted	0.2	6.6	1.2	4.0					N
3	Quercus michauxii	Approved Mit Plan	Planted	0.9	8.4	1.7	1.9					O
3	Platanus occidentalis	Approved Mit Plan	Planted	4	8.5	0.8	5.3					P
3	Betula nigra	Approved Mit Plan	Planted	7.2	8.7	1.6	5.2					Q
3	Betula nigra	Approved Mit Plan	Planted	9.7	8.9	1.3	3.2					R

Plot ID	Scientific Name	Performance Standard Approval	Planted or Volunteer?	X Coordinate (m)	Y Coordinate (m)	MY0 Height	MY1 Height	MY2 Height	MY3 Height	MY5 Height	MY7 Height	Map_ID
4	Quercus michauxii	Approved Mit Plan	Planted	0.1	0.5	1.7	3.3					A
4	Quercus michauxii	Approved Mit Plan	Planted	2.9	0.5	1.8	1.6					B
4	Quercus michauxii	Approved Mit Plan	Planted	5.6	0.5	1.6	0.0					C
4	Quercus phellos	Approved Mit Plan	Planted	8.3	0.5	0.8	1.1					D
4	Platanus occidentalis	Approved Mit Plan	Planted	8.9	2.4	1.2	1.6					E
4	Platanus occidentalis	Approved Mit Plan	Planted	5.9	2.4	1.2	1.6					F
4	Betula nigra	Approved Mit Plan	Planted	3.3	2.3	1.5	1.0					G
4	Betula nigra	Approved Mit Plan	Planted	0.8	2.2	1.3	1.0					H
4	Quercus phellos	Approved Mit Plan	Planted	2.8	4.4	1.0	1.8					I
4	Quercus nigra	Approved Mit Plan	Planted	5.7	4.4	0.7	0.8					J
4	Quercus nigra	Approved Mit Plan	Planted	8.3	4.4	0.9	0.3					K
4	Quercus michauxii	Approved Mit Plan	Planted	8.6	6.2	1.8	2.0					L
4	Cephalanthus occident	Approved Mit Plan	Planted	6.1	6.2	1.2	1.8					M
4	Quercus phellos	Approved Mit Plan	Planted	3.4	6.2	1.3	1.3					N
4	Platanus occidentalis	Approved Mit Plan	Planted	0.9	6.2	2.1	2.5					O
4	Fraxinus pennsylvanica	Approved Mit Plan	Planted	1	8.3	1.2	1.3					P
4	Quercus rubra	Approved Mit Plan	Planted	3.8	8.3	1.5	1.5					Q
4	Quercus lyrata	Approved Mit Plan	Planted	6.9	8.3	1.5	1.5					R
4	Quercus nigra	Approved Mit Plan	Planted	9.3	8.3	0.7	2.1					S
4	Quercus lyrata	Approved Mit Plan	Planted	8.8	9.8	1.3	1.8					T
4	Quercus phellos	Approved Mit Plan	Planted	6.1	9.8	1.7	1.6					U
4	Quercus phellos	Approved Mit Plan	Planted	3.1	9.8	1.6	1.8					V
4	Quercus phellos	Approved Mit Plan	Planted	0.2	9.8	1.7	1.6					Q

Plot ID	Scientific Name	Performance Standard Approval	Planted or Volunteer?	X Coordinate (m)	Y Coordinate (m)	MY0 Height	MY1 Height	MY2 Height	MY3 Height	MY5 Height	MY7 Height	Map_ID
5	Diospyros virginiana	Approved Mit Plan	Planted	1.3	1.7	0.6	1.4					A
5	Betula nigra	Approved Mit Plan	Planted	4.1	1.6	1.4	3.3					B
5	Betula nigra	Approved Mit Plan	Planted	6.9	1.4	1.1	1.1					C
5	Diospyros virginiana	Approved Mit Plan	Planted	9.8	1	1.0	1.3					D
5	Diospyros virginiana	Approved Mit Plan	Planted	7	3.8	1.0	1.2					E
5	Quercus lyrata	Approved Mit Plan	Planted	4.2	3.9	1.7	1.9					F
5	Quercus rubra	Approved Mit Plan	Planted	1.5	4	1.8	2.3					G
5	Betula nigra	Approved Mit Plan	Planted	1.6	5.9	1.0	2.6					H
5	Betula nigra	Approved Mit Plan	Planted	3.9	5.8	1.0	3.0					I
5	Quercus phellos	Approved Mit Plan	Planted	6.4	5.7	1.6	1.5					J
5	Betula nigra	Approved Mit Plan	Planted	8.9	5.6	0.9	3.0					K
5	Betula nigra	Approved Mit Plan	Planted	7.2	7.3	1.3	2.7					L
5	Betula nigra	Approved Mit Plan	Planted	4.5	7.6	1.8	2.9					M
5	Betula nigra	Approved Mit Plan	Planted	1.6	7.8	1.0	2.5					N
5	Quercus rubra	Approved Mit Plan	Planted	2.6	9.9	1.7	3.0					O
5	Cephalanthus occident	Approved Mit Plan	Planted	5.2	9.5	1.0	1.2					P
5	Cephalanthus occident	Approved Mit Plan	Planted	7.7	9.1	0.7	1.3					Q

Plot ID	Scientific Name	Performance Standard Approval	Planted or Volunteer?	X Coordinate (m)	Y Coordinate (m)	MY0 Height	MY1 Height	MY2 Height	MY3 Height	MY5 Height	MY7 Height	Map_ID
6	Quercus lyrata	Approved Mit Plan	Planted	0.2	0.4	1.0	1.2					A
6	Fraxinus pennsylvanica	Approved Mit Plan	Planted	0.2	5.7	0.9	1.6					B
6	Fraxinus pennsylvanica	Approved Mit Plan	Planted	0.2	8.1	0.6	1.9					C
6	Quercus rubra	Approved Mit Plan	Planted	2.2	8.8	1.7	1.1					D
6	Quercus rubra	Approved Mit Plan	Planted	2.1	7.3	1.2	1.3					E
6	Betula nigra	Approved Mit Plan	Planted	2.1	6	1.7	4.3					F
6	Betula nigra	Approved Mit Plan	Planted	2	3.1	1.1	3.0					G
6	Quercus phellos	Approved Mit Plan	Planted	3.1	1.6	1.3	1.5					H
6	Platanus occidentalis	Approved Mit Plan	Planted	3.3	4.1	0.3	0.9					I
6	Quercus michauxii	Approved Mit Plan	Planted	3.7	6.7	1.9	3.2					J
6	Platanus occidentalis	Approved Mit Plan	Planted	3.9	9.2	0.6	2.6					K
6	Quercus nigra	Approved Mit Plan	Planted	5.5	9.3	0.7	1.1					L
6	Quercus phellos	Approved Mit Plan	Planted	5.4	8.1	1.6	2.0					M
6	Quercus phellos	Approved Mit Plan	Planted	5.4	6.9	1.7	1.7					N
6	Platanus occidentalis	Approved Mit Plan	Planted	5.2	4.3	0.6	1.0					O
6	Quercus phellos	Approved Mit Plan	Planted	5	2	1.0	1.1					P
6	Quercus nigra	Approved Mit Plan	Planted	7	2.3	1.0	1.0					Q
6	Quercus phellos	Approved Mit Plan	Planted	7.1	5.7	2.3	3.6					R
6	Quercus nigra	Approved Mit Plan	Planted	7.5	7.6	0.9	0.0					S
6	Quercus nigra	Approved Mit Plan	Planted	8	9.5	0.9	1.3					T
6	Quercus nigra	Approved Mit Plan	Planted	9.7	9.2	1.0	1.3					U
6	Platanus occidentalis	Approved Mit Plan	Planted	9.4	6.4	1.2	2.0					V
6	Betula nigra	Approved Mit Plan	Planted	9.1	3.5	1.4	3.0					W
6	Platanus occidentalis	Approved Mit Plan	Planted	8.8	0.7	0.7	1.8					X

Plot ID	Scientific Name	Performance Standard Approval	Planted or Volunteer?	X Coordinate (m)	Y Coordinate (m)	MY0 Height	MY1 Height	MY2 Height	MY3 Height	MY5 Height	MY7 Height	Map_ID
7	Betula nigra	Approved Mit Plan	Planted	0.3	6.5	1.3	2.5					A
7	Betula nigra	Approved Mit Plan	Planted	1.4	9.4	1.4	2.4					B
7	Diospyros virginiana	Approved Mit Plan	Planted	2.6	9.3	1.0	1.0					C
7	Quercus lyrata	Approved Mit Plan	Planted	2.3	7.6	1.6	1.6					D
7	Quercus lyrata	Approved Mit Plan	Planted	2	6.2	0.9	0.0					E
7	Fraxinus pennsylvanica	Approved Mit Plan	Planted	1.3	3.1	0.8	1.0					F
7	Diospyros virginiana	Approved Mit Plan	Planted	1	2.8	1.3	1.4					G
7	Platanus occidentalis	Approved Mit Plan	Planted	0.5	0.3	1.5	3.5					H
7	Diospyros virginiana	Approved Mit Plan	Planted	2.9	1.6	0.7	1.0					I
7	Quercus nigra	Approved Mit Plan	Planted	3.3	2.9	0.4	1.0					J
7	Fraxinus pennsylvanica	Approved Mit Plan	Planted	3.6	4	0.5	0.7					K
7	Quercus lyrata	Approved Mit Plan	Planted	4.3	6.8	0.3	1.0					L
7	Betula nigra	Approved Mit Plan	Planted	4.9	9	1.3	2.0					M
7	Platanus occidentalis	Approved Mit Plan	Planted	7.3	9.5	1.0	1.5					N
7	Quercus nigra	Approved Mit Plan	Planted	6.4	7.2	0.2	1.6					O
7	Quercus phellos	Approved Mit Plan	Planted	5.7	4.7	0.7	1.0					P
7	Quercus nigra	Approved Mit Plan	Planted	5.2	1.9	0.7	1.7					Q
7	Betula nigra	Approved Mit Plan	Planted	7.2	1.2	1.4	2.4					R
7	Quercus phellos	Approved Mit Plan	Planted	8	3.8	1.6	2.3					S
7	Betula nigra	Approved Mit Plan	Planted	8.7	6.7	0.8	2.6					T
7	Platanus occidentalis	Approved Mit Plan	Planted	9.4	9.2	0.6	1.0					U
7	Quercus lyrata	Approved Mit Plan	Planted	9.9	3.8	1.7	1.6					V
7	Quercus phellos	Approved Mit Plan	Planted	9.2	0.9	1.0	1.5					W

Plot ID	Scientific Name	Performance Standard Approval	Planted or Volunteer?	X Coordinate (m)	Y Coordinate (m)	MY0 Height	MY1 Height	MY2 Height	MY3 Height	MY5 Height	MY7 Height	Map_ID
8	Quercus michauxii	Approved Mit Plan	Planted	0.4	0.5	1.6	2.0					A
8	Quercus michauxii	Approved Mit Plan	Planted	0.9	2.9	1.6	1.6					B
8	Quercus nigra	Approved Mit Plan	Planted	1.1	4.1	0.6	1.3					C
8	Fraxinus pennsylvanica	Approved Mit Plan	Planted	1.3	5.5	1.0	1.8					D
8	Fraxinus pennsylvanica	Approved Mit Plan	Planted	1.5	7.7	0.5	2.7					E
8	Quercus nigra	Approved Mit Plan	Planted	1.6	8.8	0.4	1.7					F
8	Quercus phellos	Approved Mit Plan	Planted	4	9.1	0.7	1.1					G
8	Quercus rubra	Approved Mit Plan	Planted	3.6	6.9	1.3	1.6					H
8	Platanus occidentalis	Approved Mit Plan	Planted	3.1	4.5	0.6	4.8					I
8	Quercus rubra	Approved Mit Plan	Planted	2.9	2.2	1.0	1.1					J
8	Quercus rubra	Approved Mit Plan	Planted	2.4	0.1	1.6	1.8					K
8	Cephalanthus occidentalis	Approved Mit Plan	Planted	5.1	1.9	0.7	1.0					L
8	Cephalanthus occidentalis	Approved Mit Plan	Planted	5.5	4.7	0.3	1.6					M
8	Diospyros virginiana	Approved Mit Plan	Planted	5.9	7.7	1.0	1.0					N
8	Quercus nigra	Approved Mit Plan	Planted	8.7	9.5	0.2	1.3					O
8	Quercus phellos	Approved Mit Plan	Planted	8.1	7.9	1.3	1.5					P
8	Quercus phellos	Approved Mit Plan	Planted	7.9	6.9	0.7	0.5					Q
8	Quercus phellos	Approved Mit Plan	Planted	7.6	5.1	0.9	1.4					R
8	Quercus phellos	Approved Mit Plan	Planted	7.2	2.3	0.8	1.1					S
8	Betula nigra	Approved Mit Plan	Planted	6.9	1.3	1.0	2.0					T
8	Platanus occidentalis	Approved Mit Plan	Planted	8.7	0.7	0.9	3.1					U
8	Betula nigra	Approved Mit Plan	Planted	9.2	2.4	1.1	3.3					V
8	Quercus phellos	Approved Mit Plan	Planted	9.4	3.5	1.1	1.6					W
8	Quercus lyrata	Approved Mit Plan	Planted	9.7	4.6	1.6	2.0					X

Plot ID	Scientific Name	Performance Standard Approval	Planted or Volunteer?	X Coordinate (m)	Y Coordinate (m)	MY0 Height	MY1 Height	MY2 Height	MY3 Height	MY5 Height	MY7 Height	Map_ID
9	Quercus michauxii	Approved Mit Plan	Planted	7.9	0.2	0.6	0.8					A
9	Platanus occidentalis	Approved Mit Plan	Planted	9	1.3	0.6	1.4					B
9	Quercus rubra	Approved Mit Plan	Planted	6.8	1.2	1.6	1.6					C
9	Platanus occidentalis	Approved Mit Plan	Planted	5.6	1.1	1.6	2.1					D
9	Quercus michauxii	Approved Mit Plan	Planted	4.1	0.9	1.5	1.6					E
9	Quercus rubra	Approved Mit Plan	Planted	2.8	0.7	2.0	2.0					F
9	Platanus occidentalis	Approved Mit Plan	Planted	1.5	0.4	0.7	1.7					G
9	Cephalanthus occidentalis	Approved Mit Plan	Planted	0.4	0.3	0.7	1.0					H
9	Quercus rubra	Approved Mit Plan	Planted	1.5	3.3	2.0	2.9					I
9	Quercus rubra	Approved Mit Plan	Planted	3.5	3.7	1.8	2.0					J
9	Fraxinus pennsylvanica	Approved Mit Plan	Planted	5.5	4	1.3	1.2					K
9	Quercus phellos	Approved Mit Plan	Planted	7.3	4.5	1.9	1.8					L
9	Quercus lyrata	Approved Mit Plan	Planted	9.3	5.1	1.7	1.7					M
9	Quercus michauxii	Approved Mit Plan	Planted	9.8	7.8	0.7	0.9					N
9	Quercus rubra	Approved Mit Plan	Planted	8.3	7.4	1.8	1.9					O
9	Platanus occidentalis	Approved Mit Plan	Planted	6.5	6.8	1.2	1.6					P
9	Quercus rubra	Approved Mit Plan	Planted	4.7	5.9	1.6	1.5					Q
9	Fraxinus pennsylvanica	Approved Mit Plan	Planted	2.8	5.3	0.8	1.0					R
9	Quercus rubra	Approved Mit Plan	Planted	0.9	4.8	1.7	1.6					S
9	Platanus occidentalis	Approved Mit Plan	Planted	1.9	7	0.5	3.2					T
9	Platanus occidentalis	Approved Mit Plan	Planted	3.7	7.5	0.5	2.0					U
9	Platanus occidentalis	Approved Mit Plan	Planted	6	8.3	0.3	1.5					V
9	Betula nigra	Approved Mit Plan	Planted	8	9.1	1.3	3.0					W
9	Betula nigra	Approved Mit Plan	Planted	9.7	9.5	1.3	2.7					X
9	Quercus lyrata	Approved Mit Plan	Planted	2.9	9.6	1.8	1.7					Y
9	Platanus occidentalis	Approved Mit Plan	Planted	1.2	9.2	0.7	1.4					Z

Plot ID	Scientific Name	Performance Standard Approval	Planted or Volunteer?	X Coordinate (m)	Y Coordinate (m)	MY0 Height	MY1 Height	MY2 Height	MY3 Height	MY5 Height	MY7 Height	Map_ID
10	Diospyros virginiana	Approved Mit Plan	Planted	0.3	0.5	1.8	1.7					A
10	Platanus occidentalis	Approved Mit Plan	Planted	0.3	2	0.7	1.1					B
10	Fraxinus pennsylvanica	Approved Mit Plan	Planted	0.3	3.5	1.1	1.1					C
10	Quercus phellos	Approved Mit Plan	Planted	0.4	5.1	0.7	0.9					D
10	Quercus nigra	Approved Mit Plan	Planted	0.4	6.2	0.4	1.1					E
10	Quercus nigra	Approved Mit Plan	Planted	0.4	8.9	0.6	0.3					F
10	Quercus lyrata	Approved Mit Plan	Planted	2.9	8.9	1.6	1.7					G
10	Quercus lyrata	Approved Mit Plan	Planted	2.9	6.6	1.8	2.1					H
10	Quercus lyrata	Approved Mit Plan	Planted	2.9	4.4	1.6	1.6					I
10	Betula nigra	Approved Mit Plan	Planted	2.9	2.9	1.3	3.6					J
10	Betula nigra	Approved Mit Plan	Planted	2.9	1.4	1.2	3.0					K
10	Betula nigra	Approved Mit Plan	Planted	5.2	0.7	1.5	2.7					L
10	Quercus rubra	Approved Mit Plan	Planted	5.2	2.2	0.7	0.7					M
10	Quercus nigra	Approved Mit Plan	Planted	5.2	3.8	0.9	2.0					N
10	Quercus nigra	Approved Mit Plan	Planted	5.2	5.4	0.5	2.5					O
10	Quercus nigra	Approved Mit Plan	Planted	5.2	6.8	0.9	1.5					P
10	Quercus nigra	Approved Mit Plan	Planted	5.2	8.3	0.9	1.6					Q
10	Quercus rubra	Approved Mit Plan	Planted	5.2	9.5	1.6	1.8					R
10	Betula nigra	Approved Mit Plan	Planted	7.1	8.9	0.8	2.4					S
10	Quercus lyrata	Approved Mit Plan	Planted	7.1	7.8	1.6	2.0					T
10	Diospyros virginiana	Approved Mit Plan	Planted	7.1	6.4	1.2	1.1					U
10	Betula nigra	Approved Mit Plan	Planted	7.1	5.3	1.3	3.0					V
10	Quercus phellos	Approved Mit Plan	Planted	7.1	3.9	1.4	1.6					W
10	Betula nigra	Approved Mit Plan	Planted	7.1	2.5	1.3	2.1					X
10	Quercus nigra	Approved Mit Plan	Planted	7.1	1.4	0.5	2.5					Y
10	Quercus nigra	Approved Mit Plan	Planted	9.3	0.7	1.0	1.6					Z
10	Diospyros virginiana	Approved Mit Plan	Planted	9.3	2	1.4	1.8					AA
10	Quercus lyrata	Approved Mit Plan	Planted	9.3	2.9	1.5	1.8					BB
10	Diospyros virginiana	Approved Mit Plan	Planted	9.3	4.2	0.8	1.8					CC
10	Quercus nigra	Approved Mit Plan	Planted	9.3	5.3	1.0	0.9					DD
10	Platanus occidentalis	Approved Mit Plan	Planted	9.3	6.7	0.6	1.3					EE
10	Quercus nigra	Approved Mit Plan	Planted	9.3	9.2	1.0	0.0					FF

Visual Vegetation Assessment

Planted acreage **11.7**

Vegetation Category	Definitions	Mapping Threshold	Combined Acreage	% of Planted Acreage
Bare Areas	Very limited cover of both woody and herbaceous material.	0.10 acres	0.00	0.0%
Low Stem Density Areas	Woody stem densities clearly below target levels based on current MY stem count criteria.	0.10acres	0.00	0.0%
		Total	0.00	0.0%
Areas of Poor Growth Rates	Planted areas where average height is not meeting current MY Performance Standard.	0.10 acres	0.00	0.0%
		Cumulative Total	0.00	0.0%

Easement Acreage **12.577**

Vegetation Category	Definitions	Mapping Threshold	Combined Acreage	% of Easement Acreage
Invasive Areas of Concern	Invasives may occur outside of planted areas and within the easement and will therefore be calculated against the total easement acreage. Include species with the potential to directly outcompete native, young, woody stems in the short-term or community structure for existing communities. Species included in summation above should be identified in report summary.	0.10 acres	0.00	0.0%
Easement Encroachment Areas	Encroachment may be point, line, or polygon. Encroachment to be mapped consists of any violation of restrictions specified in the conservation easement. Common encroachments are mowing, cattle access, vehicular access. Encroachment has no threshold value as will need to be addressed regardless of impact area.	none	# Encroachments noted	

Appendix C

Photos

Sassafras General Site Photos MY1 2024

Internal Crossing (12/5/2023)

Easement Signage (12/5/2023)

Sassafras MY1 Vegetation Monitoring Plot Photos

Vegetation Plot 1 (12/5/2023)

Vegetation Plot 2 (12/5/2023)

Vegetation Plot 3 (12/5/2023)

Vegetation Plot 4 (12/5/2023)

Vegetation Plot 5 (12/5/2023)

Vegetation Plot 6 (12/5/2023)

Vegetation Plot 7 (12/5/2023)

Vegetation Plot 8 (12/5/2023)

Vegetation Plot 9 (12/5/2023)

Vegetation Plot 10 (12/5/2023)