Year 4 Monitoring Report

Bohemian Mitigation Project

FINAL

DMS Project #: 100108 | Contract #: 7863 | DWR # 2019-1403 | RFP: 16-007703

Randolph & Guilford Counties, North Carolina
Cape Fear River Basin
Randleman Lake Watershed
HUC 03030003

Prepared By:

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For Environmental Banc and Exchange, LLC

Prepared For:

NC Department of Environmental Quality
Division of Mitigation Services

January 2024

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January 4, 2024

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RE: Bohemian Mitigation Project: Year 4 Monitoring Report (NCDMS ID 100108)

Listed below are comments provided by DMS on November 21, 2023 regarding the Bohemian Mitigation Project Draft Year 4 Monitoring Report and RES' responses.

1. **Figure 2 – Please show the area of 2023 easement encroachments as polygons on the map. Additional encroachments along MA5 were observed during the site visit.**
   Encroachment polygons have now been added based on the site walk conducted on 11/16/2023.
2. **Several corners did not have witness posts. Please verify corner monuments/survey caps and ensure a witness post is located at each corner throughout the easement. All witness posts should have a Conservation Easement sign attached unless located in a fenced area. Signage can be located on the corner fence post in lieu of the witness post when fenced, but a metal witness post must still be located inside the fence line and approximately 6" to 1' inside of the corner monument (rebar).**
   RES will work to remedy any easement corners that did not have adequate signage in 2024. Based on prior communication regarding witness posts around fence corners, "*Anytime a treated wooden round post is located within 3 ft of the corner we appreciate the clean marking by using that same post. No need to add the extra marking. The requirement is to have a physical marking devise that can be used to help locate the in the ground monumentation. If the fence were located 10 ft away then we would absolutely require the corner to receive the extra above ground witness*." The fence posts at Bohemian should currently be sufficient.

3. **Based on observations during the site visit, some of the replanted encroachment areas from last year were either missed during replanting, or had high mortality. DMS recommends adding more containerized trees to these areas.**
   RES has now replanted these areas with supplemental container plantings to offset encroachments and provide species diversity and vigor.
4. **Table 6 – some columns have superscripts. Should there be footnotes below the table?**
   No this is a mistake on our end left over from data processing. Column superscripts have been removed.
5. **Please add details of completed supplemental planting to Appendix B, i.e, species, size (1 gallon, 3 gallon, etc.) and number planted.**
   A supplemental planting table has been added in appendix B that details the supplemental planting work done in MY3 and most recently of December 2023.

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1 Project Summary

1.1 Project Location and Description

The Bohemian Project is within the Randleman Lake Watershed of the Cape Fear River Basin within the 8-digit Hydrologic Unit Code (HUC) 03030003, 14-digit HUC 03030003010050 and DWR Sub Basin Number 03-06-08.

The Project is located in both Guilford and Randolph County, approximately 5 miles east of Archdale, North Carolina (**Figure 1**). To access the western portion of the Project, head east from I-74 on NC Highway 62 W, turn right onto Groonetown Rd, after approximately 1.5 miles the site will be on the left. To access the eastern portion of the Project, head east from I-74 on NC Highway 62 W, turn right onto Frazier Farm Rd, after approximately a half mile, the site will be on the left. The coordinates for the western portion of the project are 35.914 °N and -79.884 °W. The coordinates for the eastern portion of the project are 35.912 °N and -79.873 °W.

Environmental Banc & Exchange, LLC (EBX), a wholly owned subsidiary of Resource Environmental Solutions (RES), is pleased to provide this Monitoring Report for the Bohemian Riparian Buffer Mitigation Project (Project) as a full-delivery buffer mitigation project for the Division of Mitigation Services (DMS) (DMS #100108). This Project provides riparian buffer mitigation credits for unavoidable impacts due to development within the Randleman Lake Watershed of the Cape Fear River Basin, United States Geological Survey (USGS) 8-digit Hydrologic Unit Code (HUC – 03030003) (**Figure 1**). The Project is in accordance with the Consolidated Buffer Mitigation Rule 15A NCAC 02B .0295 and the Randleman Lake Water Supply Watershed Buffer Rule 15A NCAC 02B .0250.

The conservation easement of the Bohemian Project totals approximately 22.78 acres and is divided into two distinct sections (east and west) and includes seven unnamed tributaries that ultimately drain into Randleman Lake approximately 3,000 feet downstream of the Project. Land use within the western portion of the Project was primarily cropland and disturbed riparian forest with the presence of invasive species. Land use within the eastern portion of the Project was primarily actively grazed non-forested pasture and disturbed riparian forest with the presence of invasive species. Furthermore, livestock have historically had access to all stream reaches within the eastern portion of the Project. The lack of riparian trees and the long-term presence of livestock in those areas contributed to bank instability and erosional rills within some riparian zones.

The goal of the Project is to restore, enhance and preserve ecological function to the existing stream and riparian buffer by establishing appropriate plant communities while minimizing temporal and land disturbing impacts. Restoration of a native hardwood forest to the riparian buffer and surrounding areas and the removal of livestock aid in filtering runoff from agricultural fields, thereby reducing nutrient and sediment loads to Project channels and the overall watershed. Restoration, enhancement and preservation of the Randleman Lake riparian buffer (as defined in 15A NCAC 02B .0250) results in a reduction of the water quality stressors that affected

the Project: livestock access and a lack of a vegetated and/or protected riparian buffer. Immediate water quality benefits and pollutant removal within the vicinity of the Project include the exclusion of livestock access to streams and reduction in nutrient loads from agricultural land-uses. This Project is consistent with the management strategy for maintaining and protecting riparian areas in the Randleman Lake watershed. Project attributes are summarized in **Table 1**.

1.2 Monitoring Protocol and Project Success Criteria

Annual vegetation monitoring and visual assessments will be conducted. Riparian vegetation monitoring is based on the "Carolina Vegetation Survey-Ecosystem Enhancement Program Protocol for Recording Vegetation: Level 2 Plot Sampling Only Version 4.2". 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 (11.81 acres) and are representative of the riparian restoration and enhancement areas where applicable (i.e., when enhancement credit is being generated from supplemental planting under 15A NCAC 02B .0295 (n)). 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 CVS data entry tool. In the field, the four corners of each plot were permanently marked with PVC at the origin and metal conduit at the other corners. Photos of each plot are to be taken from the origin each monitoring year. There are 10 fixed vegetation monitoring plots (**Figure 2**).

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 enhancement 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:

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

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 a clear distinction between the mitigation project and adjacent properties. Boundaries are marked with signs identifying the property as a mitigation project and will include the name of the long-term steward and a contact number. Boundaries may be identified by fence, marker, bollard, post, tree-blazing, or other means as allowed by Project conditions and/or conservation easement. Boundary markers disturbed, damaged, or destroyed will be repaired and/or replaced on an as-needed basis. Easement monitoring and staking/ signage maintenance will continue in perpetuity as a stewardship activity.
Road Crossing	Visual Assessment	Road crossings within the Project may be maintained only as allowed by conservation easement or existing easement, deed restrictions, rights of way, or corridor agreements. Crossings in easement breaks are the responsibility of the landowner to maintain.
Livestock Fencing (if applicable)	Visual Assessment	Livestock fencing is to be placed outside the easement limits. Maintenance of fencing is the responsibility of the landowner.

1.3 Project Components

This Project generates 484,526.585 riparian buffer restoration credits on existing non-forested pasture, 72,168.500 buffer enhancement credits through livestock exclusion, and 21,958.800 buffer preservation credits. The restoration and preservation adjacent to the ephemeral Reaches Sa and Ma4 comprises 39,071 ft^2 (0.9 acres) of the Project, which is in compliance with 15A NCAC 02B .0295 (o)(7) in that it is only 4.3 percent of the total area of buffer mitigation, which is less than 25 percent of the total area of buffer mitigation (22.10 total acres). In accordance with 15A NCAC 02B .0295 (o)(4) and (5), "the area of preservation credit within a buffer mitigation site shall comprise of no more than 25% of the total area of buffer mitigation", only 5.04 acres out of the 6.97 total acres available for preservation credit are allowable to be used to generate mitigation credits. The total mitigation credits that the Bohemian Mitigation Project generate are summarized below and a more detailed table is in **Appendix A**.

Mitigation Totals	Used Area Square Feet	Credits
Restoration	514,428	484,526.585
Enhancement	144,337	72,168.500
Preservation	219,588	21,958.800
Total Riparian Buffer	**878,353**	**578,653.885**

1.4 Riparian Mitigation Approach

Restoration activities included planting a composition of native bareroot tree species based on reference reach data and excluding livestock from the stream and surrounding riparian area. The restoration of plant communities within the Project not only provides stabilization and improves water quality within the easement limits but also provides ecological benefits to the entire watershed.

Enhancement occurred in forested areas within the Project, found in small patches along SQ1, SQ2, and a small portion of Sa, where grazing occurs adjacent to the stream in accordance with the Consolidated Buffer Mitigation Rule 15A NCAC 02B .0295 (o)(6). All livestock was removed from the easement and the fence was installed to exclude access to riparian areas and their associated streams.

Preservation was used along Reach MA1, MA3, MA4, and MA5 in accordance with the Consolidated Buffer Mitigation Rule 15A NCAC 02B .0295 (o)(5). Mature hardwood forest is present on the right bank of MA1, on the left and right bank of MA3, on the left and right bank of the most downstream portion of MA4, and on the left and right bank of the most downstream portion of MA5.

1.5 Construction and As-Built Conditions

Revegetation of the Site included treating invasive species and planting native hardwood bareroot trees. Prior to planting, RES prepped the site by spraying and ripping the easement. Piedmont Alluvial Forest is the target community type for the riparian restoration areas. The community is defined by Schafale (2012). The planting of bareroot trees occurred in May 2020. Deviations from the initial planting plan were due to bareroot availability. A list of the planted species can be found in **Table 5**. Additionally, a temporary and permanent seed mixture was applied in areas where row crops were present. Among a variety of seed, the mixture also included black-eyed susan (*Rudbeckia hirta*) which is a perennial, pollinator species.

1.6 Year 4 Monitoring Performance

Monitoring of the 10 fixed vegetation plots was completed on September 21st, 2023. Vegetation tables are in **Appendix B** and associated photos are in **Appendix C**. Year 4 monitoring data indicates that all plots are exceeding the success criteria of 260 planted stems per acre. Planted stem densities ranged from 364 to 1012 planted stems per acre with a mean of 668 planted stems per acre across all plots. A total of 17 native species were documented within the plots. Volunteer species were found in eight plots, averaging 356 volunteer stems per acre. The average tree height observed was 4.5 feet. Field data collected in MY4 including tree height, vigor, and DBH can be found in **Appendix B.**

Visual assessment of vegetation outside of the monitoring plots indicates that the herbaceous vegetation is well established throughout the project. Invasive species including Chinese privet, and multiflora rose were noted along the wood lines of the downstream crossing of MA1. This area was treated in December 2022, however, will need to be treated again to reduce resprouts. Fencing is in good condition and maintains cattle exclusion. All MY3 areas of encroachment have been addressed through a combination of using additional posts, horse tape, witness posts and easement signage. There has been two new encroachments (~450ft^2) near MA5 where mowing has encroached into the easement. The easement line will be filled with additional posts and placards at this during the winter of 2023/2024. Horse tape will be strung between posts in the mowed area of encroachment and RES will be in contact with the landowner to reduce further impacts on the easement. Supplemental planting for MY3 encroachment areas occurred on March 8th, 2023, at areas of previous encroachment, these areas have not been encroached into further. Additional supplemental planting occurred on December 14th, 2023 to address these new encroachment areas and to provide additional species vigor and diversity. Easement Encroachment and supplemental planting locations can be found in **Figure 2** while photographs of work completed and a summary of supplemental planting table can be found in **Appendix B.**

2 Reference

Lee Michael T., Peet Robert K., Roberts Steven D., and Wentworth Thomas R., 2008. *CVS-EEP Protocol for Recording Vegetation Level*. Version 4.2

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. 2010. Rule 15A NCAC 02B.0250 – Randleman Lake Water Supply Watershed: Protection and Maintenance of Existing Riparian Buffers.

Resource Environmental Solutions, LLC (2020). Bohemian 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

Project Background Tables and Site Maps

Table 1. Buffer Project Areas and Assets

Credit Type	Location	Subject?	Feature Type	Mitigation Activity	Min-Max Buffer Width (ft)	Feature Name	Total Area (sf)	Creditable Area (sf)	Initial Credit Ratio (x:1)	% Full Credit	Final Credit Ratio (x:1)	Riparian Buffer Credits
Buffer	Rural	Yes	I / P	Restoration	0-100	MA1, MA3, MA4, MA5, SQ1, SQ2	433,768	433,768	1	100%	1	433,768.000
Buffer	Rural	Yes	I / P	Enhancement via Livestock Exclusion	0-100	SQ1, SQ2, Sb	144,337	144,337	2	100%	2	72,168.500
Buffer	Rural	Yes	I / P	Restoration	101-200	MA1, MA3, MA4, MA5, SQ1, SQ2, Sb	43,951	43,951	1	33%	3.0303	14,503.845
Buffer	Rural	No	Ephemeral	Restoration	0-100	Sa, MA4	36,031	36,031	1	100%	1	36,031.000
Buffer	Rural	No	Ephemeral	Restoration	101-200	Sa, MA4	678	678	1	33%	3.0303	223.740
						Totals	**658,765**	**658,765**			**556,695.085**	

Eligible for Preservation (sf) 219,588

Credit Type	Location	Subject?	Feature Type	Mitigation Activity	Min-Max Buffer Width (ft)	Feature Name	Total Area (sf)	Creditable Area (sf)	Initial Credit Ratio (x:1)	% Full Credit	Final Credit Ratio (x:1)	Riparian Buffer Credits
Buffer	Rural	Yes	I / P	Preservation	0-100	MA1, MA3, MA4, MA5	291,884	219,588	10	100%	10	21,958.800
	Rural	Yes	I / P		101-200	MA1, MA3, MA4, MA5,	9,494	0	10	33%	30.30303	—
	Buffer	No	Ephemeral		0-100	MA4	2,363	0		100%		—
						Preservation Area Subtotal (sf)	**219,588**					
						Preservation as % Total Area of Buffer Mitigation	**25.00%**					
						Ephemeral Reaches as % Total Area of Buffer Mitigation	**4.20%**					

Table 2. Project Activity and Reporting History
Bohemian Site

Elapsed Time Since planting complete: 3 yr, 6 mo
Number of reporting Years[1]: 4

Activity or Deliverable	Data Collection Complete	Completion or Delivery
Restoration Plan	NA	Jan-20
Final Design – Construction Plans	NA	NA
Stream Construction	NA	NA
Site Planting	NA	May-20
As-built (Year 0 Monitoring – baseline)	May-20	Jun-20
Year 1 Monitoring	Nov-20	Dec-20
Year 2 Monitoring	Nov-21	Nov-21
Invasive Vegetation Treatment	NA	Dec-22
Easement Repairs	NA	Nov-22
Year 3 Monitoring	Oct-22	Nov-22
Easement Repairs	NA	Feb-23
Supplemental Planting	NA	Mar-23
Year 4 Monitoring	Sep-23	Oct-23
Supplemental Planting	NA	Dec-23
Year 5 Monitoring		

1 = The number of reports or data points produced excluding the baseline

Table 3. Project Contacts Table Bohemian Site	
Planting Contractor	H&J Forestry
Planting contractor POC	Matt Hitch
Nursery Stock Suppliers	Arborgen
Monitoring Performers	RES / 3300 Glenwood Ave, Suite 100, Raleigh, NC 27612
Monitoring POC	Daniel Dixon (864) 567-7761

Table 4. Project Background Information			
Project Name	Bohemian		
County	Randolph & Guildford		
Project Area (acres)	22.78		
Project Coordinates (latitude and longitude)	Latitude: 35.914 N Longitude: -79.884 W		
Planted Acreage (Acres of Woody Stems Planted)	11.81		
Project Watershed Summary Information			
Physiographic Province	Southern Outer Piedmont		
River Basin	Cape Fear		
USGS Hydrologic Unit 8-digit	03030003	USGS Hydrologic Unit 14-digit	03030003010050
DWR Sub-basin	03-06-08		

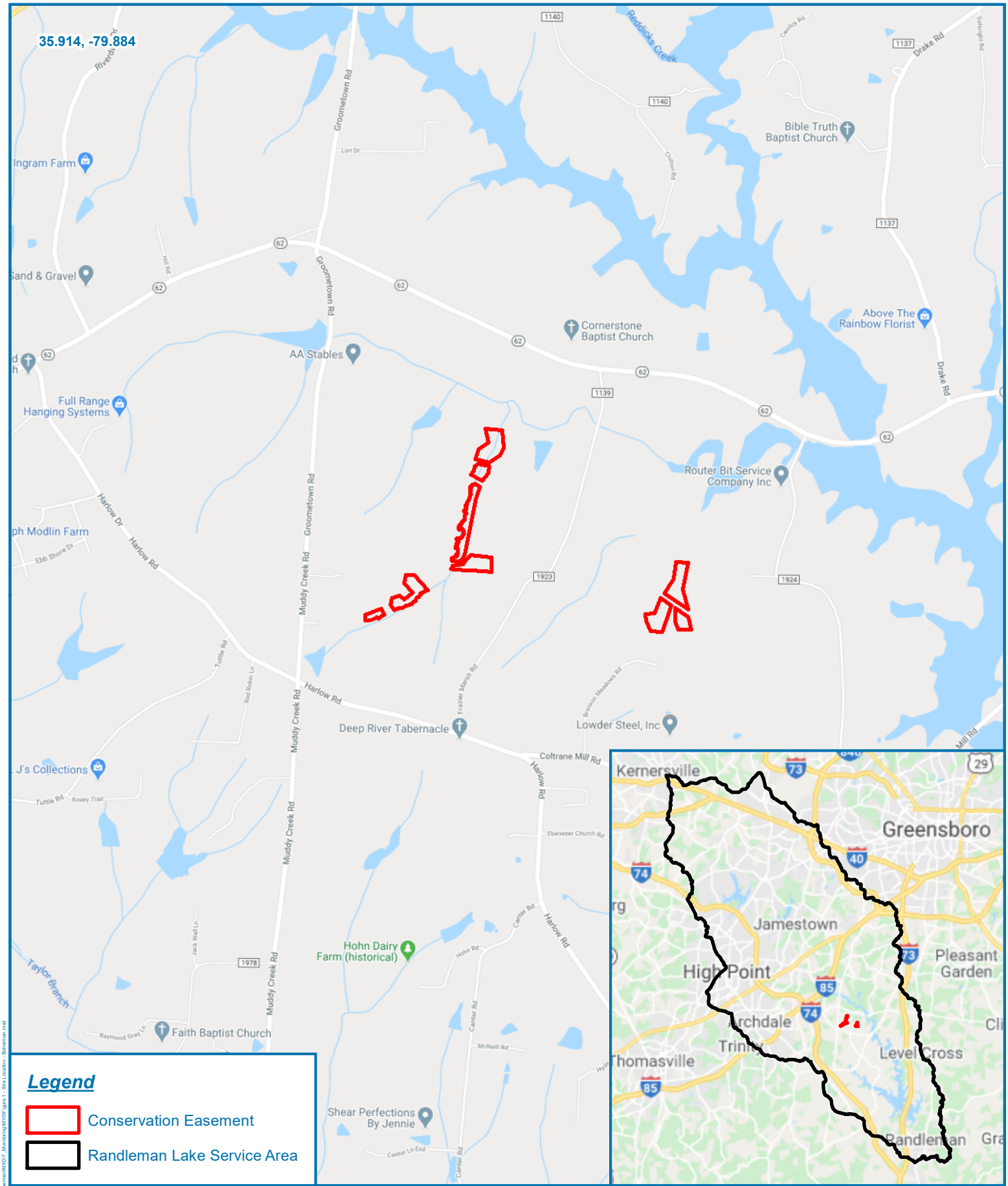


Figure 1 - Site Location Map

Bohemian Mitigation Project

Guilford and Randolph Counties, North Carolina

Date: 5/19/2020

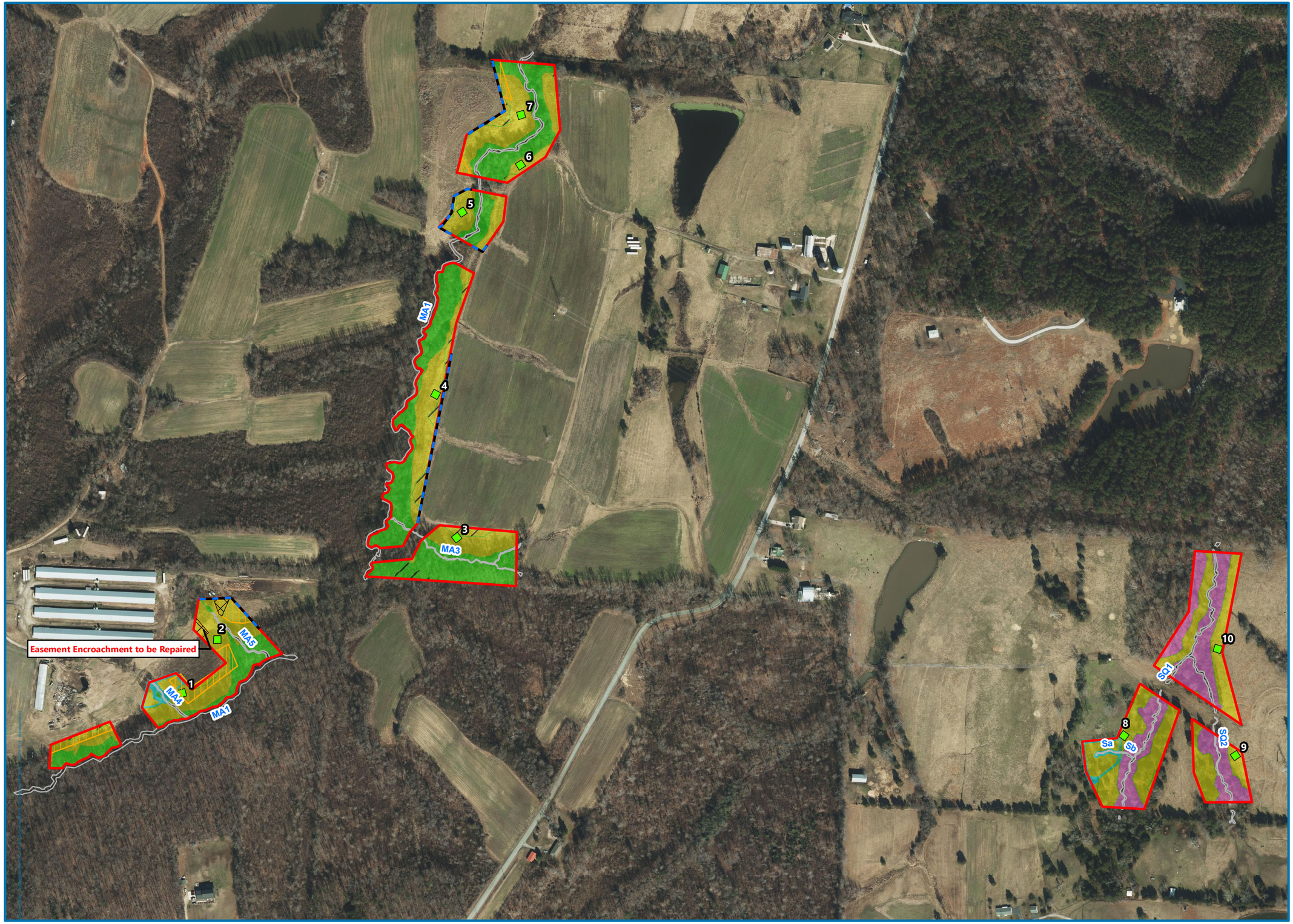
Drawn by: RTM

Checked by: JRM

1 inch = 2,000 feet

res

Document Path: R:\eagls\drs\docs\gis\projects\NCB\Bohemian\MX007_Monitoring\MXYR\Figure 1 - Site Location - Bohemian.mxd



res

N
W E
S

0 200 400
Feet

Figure 2

Current Conditions Plan View

MY4 2023

Bohemian Mitigation Project

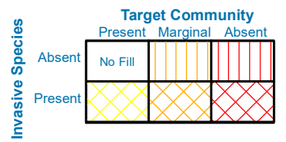
Guilford and Randolph Counties, North Carolina

Date: 1/8/2024	Drawn by: DGD
Checked by: RTM	1 in = 400 feet

Legend

- Conservation
- Easement Encroachments
- Easement Fixed
- Supplemental Planting Zones 2023
- Stream Top of Vegetation
- >260 Buffer Mitigation
- Restoration, 0-
- Restoration, 0-100' (Ephemeral)
- Restoration, 101-
- Restoration, 101-200' (Ephemeral)
- Enhancement, 0-
- Preservation, 0-
- Preservation, 0-100' (Ephemeral)
- Preservation, 101-

Vegetation Condition Assessment



Appendix B

Vegetation Assessment Data

Table 5. Bohemian Planted Species Summary

Common Name	Scientific Name	Total Stems Planted
Willow Oak	*Quercus phellos*	2,200
Chestnut Oak	*Quercus montana*	1,900
Swamp White Oak	*Quercus bicolor*	1,500
Blackgum	*Nyssa sylvatica*	1,500
Swamp Chestnut Oak	*Quercus michauxii*	1,000
Southern Red Oak	*Quercus falcata*	1,000
Black Walnut	*Juglans nigra*	600
Red Mulberry	*Morus rubra*	500
Black Cherry	*Prunus serotina*	450
White Oak	*Quercus alba*	400
Eastern Redbud	*Cercis canadensis*	350
	Total	11,400

Table 6. Bohemian Vegetation Plot Mitigation Success Summary

Plot #	Stream/ Wetland Stems	Volunteers	Total	Success Criteria Met?	Average Stem Height (ft)
1	445	0	445	Yes	1.71
2	526	324	850	Yes	2.40
3	728	1416	2145	Yes	5.86
4	526	40	567	Yes	12.48
5	567	202	769	Yes	4.22
6	850	0	850	Yes	4.00
7	364	324	688	Yes	3.33
8	890	769	1659	Yes	3.51
9	1012	121	1133	Yes	4.33
10	769	364	1133	Yes	2.78
Project Avg	**668**	**356**	**1024**	**Yes**	**4.46**

Supplemental Planting Table

Species	Species	Size	Quantity Planted MY3	Quantity Planted MY4
White oak	Quercus alba	3 gallon	65	94
		1 gallon		
Red mulberry	Morus rubra	3 gallon	35	36
		1 gallon	30	
Swamp chestnut oak	Quercus michauxii	3 gallon	18	3
		1 gallon	47	
Southern red oak	Quercus falcata	3 gallon	65	94
		1 gallon		
Sycamore	Quercus falcata	3 gallon		7
		1 gallon		
River Birch	Betula nigra	3 gallon		6
		1 gallon		
Willow Oak	Quercus phellos	3 gallon		102
		1 gallon		
		Total	**260**	**342**

Table 7. Bohemian Stem Count Total and Planted by Plot Species

			Current Plot Data (MY4 2023)																														Annual Means														
			100108-01-0001			100108-01-0002			100108-01-0003			100108-01-0004			100108-01-0005			100108-01-0006			100108-01-0007			100108-01-0008			100108-01-0009			100108-01-0010			MY4 (2023)			MY3 (2022)			MY2 (2021)			MY1 (2020)			MY0 (2020)		
Scientific Name	**Common Name**	**Species Type**	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T	PnoLS	P-all	T
Acer rubrum	red maple	Tree									10						5						8													23												
Cercis canadensis	eastern redbud	Tree							1	1	1				2	2	2				3	3	3	3	3	3							9	9	9	6	6	6	8	8	8	9	9	9	23	23	23
Cornus amomum	silky dogwood	Shrub													9	9	9	11	11	11										7	7	7	27	27	27	26	26	26	29	29	29	31	31	31	31	31	31
Diospyros virginiana	common persimmon	Tree							2	2	2	2	2	2							1	1	1										5	5	5	5	5	6	4	4	4	3	3	3			
Juglans nigra	black walnut	Tree																			1	1	1	3	3	7							4	4	8	3	3	3	4	4	4	5	5	5	6	6	6
Liquidambar styraciflua	sweetgum	Tree						7			5															13						6			31						2						
Liriodendron tulipifera	tuliptree	Tree																			1	1	1										1	1	1	1	1	2	1	1	1						
Morus rubra	red mulberry	Tree							5	5	5				1	1	1	3	3	3	2	2	2				1	1	1				12	12	12	13	13	13	13	13	13	9	9	9	29	29	29
Nyssa sylvatica	blackgum	Tree													1	1	1				1	1	1										2	2	2	2	2	2	4	4	4	4	4	4	31	31	31
Platanus occidentalis	American sycamore	Tree							1	1	21	9	9	9													1	1	4			2	11	11	36	11	11	30	8	8	59	8	8	22			
Prunus serotina	black cherry	Tree																									7	7	7	3	3	3	10	10	10	10	10	10	10	10	10	10	10	10	11	11	11
Quercus	oak	Tree																																					1	1	1	1	1	1			
Quercus alba	white oak	Tree	1	1	1	3	3	3	2	2	2				1	1	1	1	1	1				1	1	1	2	2	2	2	2	2	13	13	13	11	11	11	11	11	11	13	13	13	18	18	18
Quercus bicolor	swamp white oak	Tree	1	1	1	1	1	1	1	1	1							1	1	1				1	1	1							5	5	5	4	4	4	4	4	4	5	5	5	10	10	10
Quercus falcata	southern red oak	Tree	2	2	2	4	4	4	3	3	3													2	2	2	1	1	1				12	12	12	10	10	10	13	13	13	14	14	14	31	31	31
Quercus lyrata	overcup oak	Tree							2	2	2																2	2	2				4	4	4	4	4	4	4	4	4	4	4	4			
Quercus michauxii	swamp chestnut oak	Tree				2	2	2										2	2	2				4	4	4	5	5	5	1	1	1	14	14	14	14	14	14	16	16	16	17	17	17	10	10	10
Quercus montana		Tree	1	1	1																									1	1	1	2	2	2	1	1	1	4	4	4	6	6	6	10	10	10
Quercus phellos	willow oak	Tree	1	1	1	1	1	1	1	1	1	2	2	2										8	8	8	4	4	4	2	2	2	19	19	19	16	16	16	22	22	22	27	27	27	54	54	54
Quercus rubra	northern red oak	Tree	5	5	5	2	2	2										3	3	3							2	2	2	3	3	3	15	15	15	9	9	9	18	18	18	19	19	19			
Ulmus americana	American elm	Tree						1						1												2						1			5												
		Stem count	11	11	11	13	13	21	18	18	53	13	13	14	14	14	19	21	21	21	9	9	17	22	22	41	25	25	28	19	19	28	165	165	253	146	146	167	174	174	227	185	185	199	264	264	264
		size (ares)	1			1			1			1			1			1			1			1			1			1			10			9			10			10			10		
		size (ACRES)	0.02			0.02			0.02			0.02			0.02			0.02			0.02			0.02			0.02			0.02			0.25			0.22			0.25			0.25			0.25		
		Species count	6	6	6	6	6	8	9	9	11	3	3	4	5	5	6	6	6	6	6	6	7	7	7	9	9	9	9	7	7	10	17	17	20	17	17	17	18	18	19	17	17	17	12	12	12
		Stems per ACRE	445	445	445	526	526	850	728	728	2145	526	526	567	567	567	769	850	850	850	364	364	688	890	890	1659	1012	1012	1133	769	769	1133	668	668	1024	656	656	751	704	704	919	749	749	805	1068	1068	1068

Bohemian Easement Repair and Supplement Planting Photos

Easement Repair (02/09/2023)

Easement Repair (02/09/2023)


Easement Repair (02/09/2023)


Easement Repair (02/09/2023)

Easement Repair (02/09/2023)

Supplemental Planting (03/09/2023)

Supplemental Planting (03/09/2023)

Supplemental Planting (03/09/2023)

Supplemental Planting (03/09/2023)

Supplemental Planting (03/09/2023)

Baho

Plot (continued): 100108-01-0001

ID	Species	map char	source	X (m)	Y (m)	Last Year's Data: ddh (mm)	Height (cm)	DBH (cm)	Notes*	THIS YEAR'S DATA: ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Vegetation Monitoring Data (VMD) Datasheet — **Please fill in any missing data and correct any errors.**

Plot 100108-01-0001

VMD Year (1-5): 4 Date: / / - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec deg. or m) Datum: NAD83/W GS84

Longitude or UTM-E: UTM Zone:

Coordinate Accuracy (m): X-Axis bearing (deg): 270

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party: AG + DN Role:

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Last Year's Data: Height 1cm*	DBH 1 cm	Notes*	THIS YEAR'S DATA: Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
2	Quercus phellos	e	R	3.5	0.3	70.0		☐	80		☐	3		
4	Quercus falcata	b	R	1.8	2.7	50.0		☐	52		☐	3		
6	Quercus rubra	a	R	0.3	5.2	25.0		☐	15		☒	1		
10	Quercus montana	c	R	2.6	6.7	40.0		☐	51		☐	3		
11	Quercus rubra	d	R	3.3	5.5	47.0		☐	55		☐	3		
12	Quercus bicolor	f	R	4.1	4.3	30.0		☐	50		☐	3		
13	Quercus falcata	h	R	4.9	3.2	30.0		☐	missing		☐	3		
14	Quercus alba	i	R	5.5	2.1	30.0		☐	missing		☐	3		
17	Quercus rubra	n	R	9.4	1.1	51.0		☐	55		☐	3		
18	Quercus rubra	m	R	8.4	2.5	45.0		☐	55		☐	3		
19	Quercus rubra	l	R	7.7	3.7	60.0		☐	63		☐	3		
20	Quercus rubra	k	R	7.0	5.1	*Missing*		☐	dead		☐	0		
21	Quercus rubra	j	R	5.8	7.0	*Missing*		☐	50		☐	1		
22	Quercus rubra	g	R	4.7	8.5	*Missing*		☐	48		☒	1		

 # stems: 14

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS-EEP Entry Tool ver. 2.3.1

Plot (continued): 100108-01-0001

ID	Species	map char	source	X (m)	Y (m)	Last Year's Data: ddh (mm)	Height (cm)	DBH (cm)	Notes*	THIS YEAR'S DATA: ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					
		___				___					

**Required if cut-off >10cm or subsample ? 100%.

●1 ●2 ●3 ●●4 ●●5 ●●6 ●●7 ●●8 ●●9 ●●10

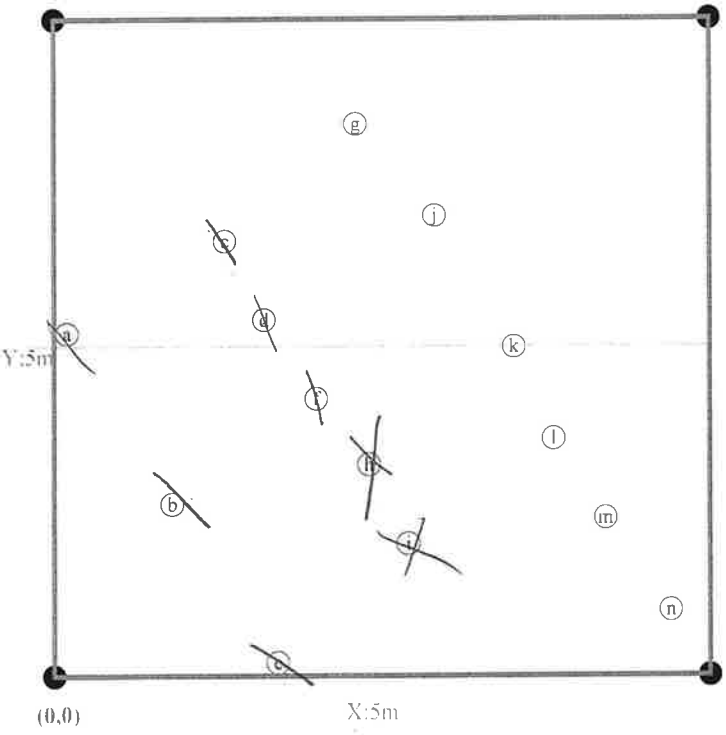
Form WS2, ver 9.1

Map of stems on plot 100108-01-0001

X-axis: 270°

 # stems: 14
map size: small

N



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS-EEP Entry Tool ver. 2.3.1

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100108-01-0002

VMD Year (1-5): 4 Date: / / - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec deg or m) Datum: NAD83/W

Longitude or UTM-E: UTM Zone:

Coordinate Accuracy (m): X-Axis bearing (deg): 83

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party: Role:

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Last Year's Data Height 1cm*	Last Year's Data DBH 1 cm	Notes*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
27	Quercus falcata	b	R	0.4	0.3	60.0		☐	60		☐	3		
28	Quercus michauxii	i	R	3.8	0.4	*Missing*		☐	Dead		☐	1		
29	Quercus rubra	f	R	2.6	1.5	115.0	*DBH?*	☐	148.2		☐	3		
30	Quercus falcata	d	R	1.4	2.8	55.0		☐	40		☒	3		
31	Quercus michauxii	a	R	0.3	4.0	62.0		☐	63		☐	3		
33	~~Quercus alba~~ Quercus michauxii	c	R	1.1	6.5	40.0		☐	45		☐	3		
34	Quercus bicolor	e	R	2.0	5.5	40.0		☐	52		☐	3		
35	Quercus falcata	h	R	3.0	4.5	90.0		☐	115		☐	3		
36	Quercus rubra	j	R	4.2	3.4	80.0		☐	90		☐	3		
37	Quercus falcata	k	R	5.3	2.4	62.0		☐	75		☐	3		
38	Quercus alba	m	R	6.5	1.4	70.0		☐	85		☐	3		
40	Quercus michauxii	p	R	9.8	2.0	40.0		☐	45		☐	3		
41	Quercus phellos	n	R	8.3	3.2	*Missing*		☐	Dead		☐	-		
43	Quercus alba	l	R	5.7	6.0	45.0		☐	60		☐	3		
45	Quercus montana	g	R	2.8	8.3	*Missing*		☐	Dead		☐	-		
49	Quercus phellos	o	R	8.5	6.6	95.0		☐	100		☐	3		

 # stems: 16

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100108-01-0002

ID	Species	map char	source	X (m)	Y (m)	Last Year's Data: ddh (mm)	Height (cm)	DBH (cm)	Notes*	THIS YEAR'S DATA: ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
ULAM											
LIST											

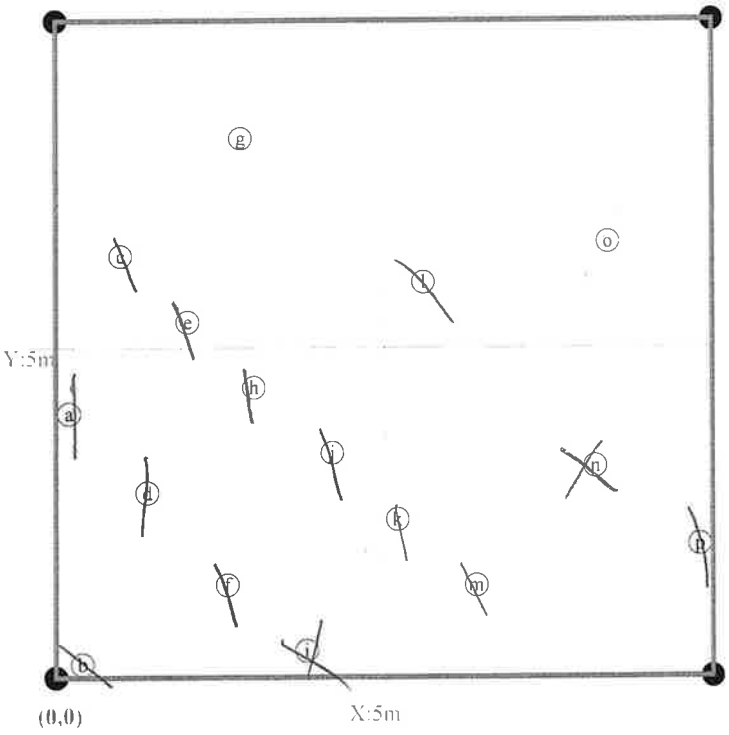
**Required if cut-off >10cm or subsample ? 100%.

Form WS2, ver 9.1

Map of stems on plot 100108-01-0002

X-axis: 83° N

 # stems: 16
map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

BOhO

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100108-01-0003

VMD Year (1-5): 4 Date: / / - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec deg. or m) Datum: NAD83/W

Longitude or UTM-E: UTM Zone:

Coordinate Accuracy (m): X-Axis bearing (deg): 155

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party: Role:

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Last Year's Data Height 1cm*	Last Year's Data DBH 1 cm	Notes*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
53	Quercus falcata	r	R	9.8	1.5	45.0		☐	50		X	3		
54	Quercus falcata	o	R	8.8	0.8	*Missing*		☐	70		☐	3		
56	Quercus phellos	h	R	5.9	1.1	*Missing*		☐	Dead		☐	1		
59	Diospyros virginiana	n	R	8.7	3.6	145.0	0.2	☐	200	.5	☐	3		
60	Diospyros virginiana	p	R	9.3	4.4	175.0	0.2	☐	320	.4	☐	3		
61	Platanus occidentalis	s	R	9.8	4.9	370.0	1.2	☐	500	2	☐	3		
62	Quercus alba	q	R	9.7	8.9	140.0	*DBH!!*	☐	220	.6	☐	3		
63	Quercus alba	m	R	8.4	7.5	140.0	*DBH!!*	☐	190	.3	☐	3		
64	Morus rubra	k	R	7.2	6.4	70.0		☐	85		☐	3		
65	Morus rubra	i	R	6.1	5.5	78.0		☐	140	.2	☐	3		
66	Cercis canadensis	g	R	4.6	4.2	120.0	*DBH?*	☐	170	.2	☐	3		
67	Morus rubra	e	R	3.2	2.8	80.0		☐	90		☐	3		
68	Morus rubra	c	R	1.9	1.7	115.0	*DBH?*	☐	115		☐	3		
69	Morus rubra	a	R	0.5	0.6	90.0		☐	130	.1	☐	3		
70	Quercus falcata	b	R	1.2	4.4	45.0		☐	90		☐	3		
73	Quercus lyrata	f	R	4.3	7.0	120.0	*DBH?*	☐	190	1	☐	3		
75	Quercus phellos	j	R	6.4	8.9	135.0	*DBH?*	☐	300	.6	☐	3		
76	Quercus lyrata	l	R	7.3	9.6	160.0	0.3	☐	300	.9	☐	3		
77	Quercus bicolor	d	R	2.5	8.9	55.0		☐	56		☐	3		

 # stems: 19

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100108-01-0003

ID	Species	map char	source	X (m)	Y (m)	Last Year's Data: ddh (mm)	Height (cm)	DBH (cm)	Notes*	THIS YEAR'S DATA: ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling:**

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
ACRU					10						
PIOC				5	5		10				
ILVE					5						

**Required if cut-off >10cm or subsample ? 100%.

●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10

Form WS2, ver 9.1

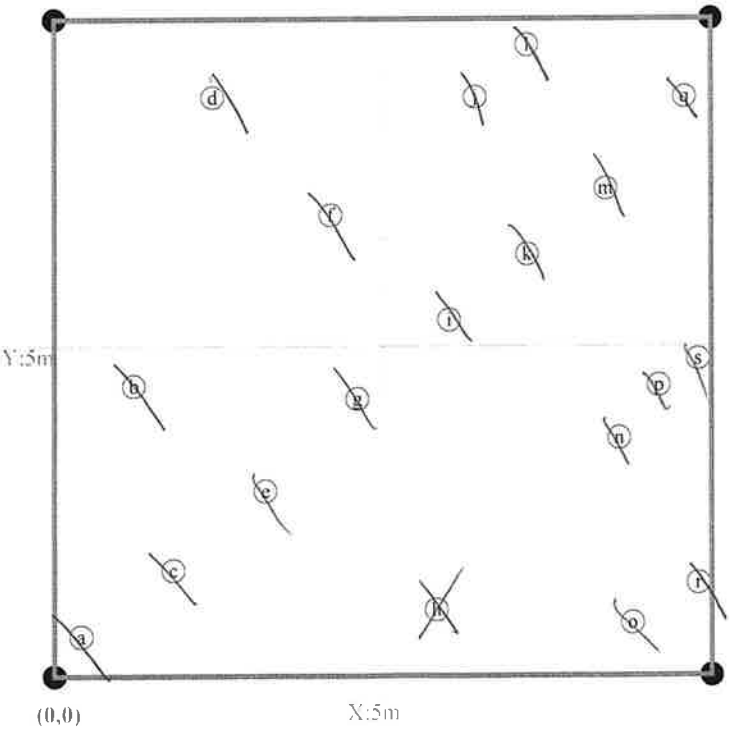
Map of stems on plot 100108-01-0003

X-axis: 155°

N

 # stems: 19

map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Boho

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100108-01-0004

VMD Year (1-5): 4 Date: 09/21/22 - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) Datum: NAD83/W

Longitude or UTM-E: UTM Zone:

Coordinate Accuracy (m): X-Axis bearing (deg): 30

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party: HGI PM Role:

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Last Year's Data Height 1cm*	Last Year's Data DBH 1 cm	Notes*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
80	Quercus phellos	(j)	R	7.8	0.8	*Missing*		☐	Dead		☐	—		
81	Nyssa sylvatica	(m)	R	9.1	1.5	*Missing*		☐	Dead		☐	—		
83	Platanus occidentalis	(i)	R	7.6	3.5	350.0	1.4	☐	500	3	☐	3		
87	Diospyros virginiana	(c)	R	3.1	1.3	190.0	0.4	☐	200	.7	☐	3		
89	Quercus phellos	(a)	R	0.5	0.4	160.0	0.4	☐	200	.9	☐	3		
92	Platanus occidentalis	(b)	R	2.9	4.0	165.0	0.9	☐	400	3	☐	3		
95	Platanus occidentalis	(g)	R	6.2	5.4	350.0	1.2	☐	450	3	☐	3		
97	Diospyros virginiana	(l)	R	8.8	6.8	165.0	0.5	☐	400	1	☐	3		
98	Platanus occidentalis	(n)	R	9.3	9.5	420.0	1.0	☐	500	3	☐	3		
99	Platanus occidentalis	(k)	R	8.1	9.1	400.0	1.1	☐	550	4	☐	3		
100	Quercus phellos	(h)	R	6.7	8.7	55.0		☐	20		☒	2		
101	Quercus phellos	(f)	R	4.9	8.2	70.0		☐	25		☒	3		
102	Platanus occidentalis	(e)	R	4.0	7.7	500.0	1.6	☐	600	4	☐	3		
103	Platanus occidentalis	(d)	R	3.1	7.2	500.0	1.7	☐	600	4	☐	3		
1010	Platanus occidentalis	(o)	R	9.9	0.1	400.0	1.7	☐	500	3	☐	3		

 # stems: 15

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100108-01-0004

ID	Species	map char	source	X (m)	Y (m)	Last Year's Data ddh (mm)	Height (cm)	DBH (cm)	Notes*	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
Viam					1						

**Required if cut-off >10cm or subsample ? 100%.

Form WS2, ver 9.1

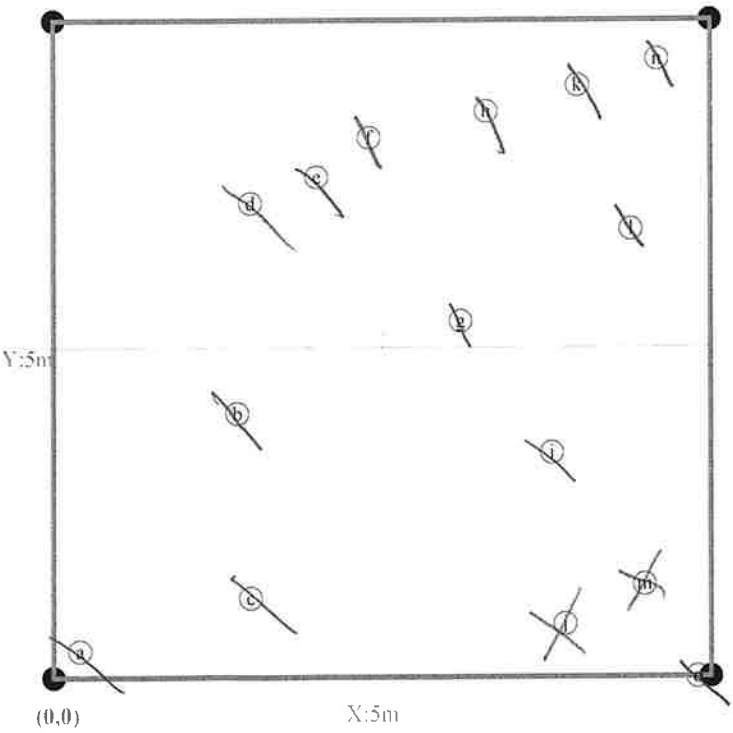
Map of stems on plot 100108-01-0004

X-axis: 30°

N

 # stems: 15

map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS-EEP Entry Tool ver. 2.3.1

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100108-01-0005

VMD Year (1-5): 4 Date: / / - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec deg or m) Datum: NAD83/W

Longitude or UTM-E: UTM Zone:

Coordinate Accuracy (m): X-Axis bearing (deg): 240

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party: Role:

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Last Year's Data Height 1cm*	Last Year's Data DBH 1 cm	Notes*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
109	Cornus amomum	n	R	9.7	4.7	90.0		☐	95		☐	3		
110	Cornus amomum	l	R	9.0	4.0	110.0	DBH?	☐	110		☐	3		
111	Cornus amomum	j	R	8.2	3.2	145.0	0.4	☐	146	.5	☐	3		
112	Cornus amomum	i	R	7.4	2.1	160.0	0.2	☐	170	.3	☐	3		
113	Cornus amomum	g	R	6.8	1.4	155.0	0.2	☐	180	.4	☐	3		
114	Quercus alba	e	R	6.1	1.6	160.0	0.3	☐	165	.4	☐	3		
116	Cornus amomum	b	R	4.2	2.2	190.0	0.2	☐	250	1	☐	3		
117	Cornus amomum	c	R	5.0	3.4	145.0	0.2	☐	145	.2	☐	3		
118	Cornus amomum	d	R	5.8	4.7	140.0	0.2	☐	140	.2	☐	3		
119	Cornus amomum	h	R	7.3	6.8	105.0	DBH?	☐	106		☐	3		
120	Nyssa sylvatica	k	R	8.2	7.7	70.0		☐	73		☐	3		
121	Morus rubra	m	R	9.2	9.0	25.0		☐	40		☐	3		
122	Cercis canadensis	f	R	6.3	9.0	142.0	0.2	☐	142	.3	☐	3		
127	Cercis canadensis	a	R	1.2	2.0	*Missing*		☐	40		☐	2		

 # stems: 14

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100108-01-0005

ID	Species	map char	source	X (m)	Y (m)	Last Year's Data: ddh (mm)	Height (cm)	DBH (cm)	Notes*	THIS YEAR'S DATA: ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
ACRU											

**Required if cut-off >10cm or subsample ? 100%.

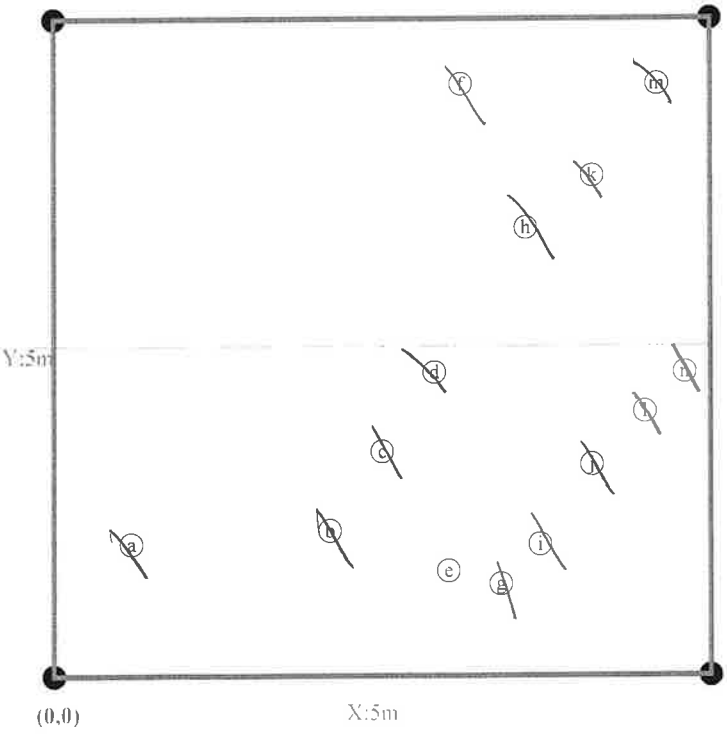
Form WS2, ver 9.1

Map of stems on plot 100108-01-0005

X-axis: 240°

stems: 14
map size: small

N



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

p. 10

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Bond

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100108-01-0006

VMD Year (1-5): 4 Date: 09/21/23 / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) Datum: NAD83/W

Longitude or UTM-E: UTM Zone:

Coordinate Accuracy (m): X-Axis bearing (deg): 237

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party: HG + DD Role:

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Last Year's Data Height 1cm*	Last Year's Data DBH 1 cm	Notes*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
132	Cornus amomum	b	R	1.2	0.4	95.0		☐	100		☐	3		
133	Cornus amomum	f	R	2.5	0.5	90.0		☐	91		☐	3		
134	Quercus alba	j	R	3.6	0.5	45.0		☐	53		☐	3		
135	Cornus amomum	m	R	4.8	0.4	140.0	0.2	☐	165	.4	☐	3		
136	Cornus amomum	o	R	5.9	0.4	105.0	DBH?	☐	110		☐	3		
138	Quercus michauxii	t	R	8.3	0.4	110.0	DBH?	☐	150	.2	☐	3		
139	Cornus amomum	v	R	9.4	0.4	90.0		☐	95		☐	3		
142	Quercus michauxii	q	R	6.0	3.0	Missing		☐	Dead		☐	—	D	
144	Cornus amomum	k	R	3.8	3.0	110.0	DBH?	☐	95		☐	3	Deer	
145	Cornus amomum	g	R	2.5	3.0	Missing		☐	Dead		☐	—		
146	Cornus amomum	c	R	1.2	3.0	80.0		☐	90		☐	3	Deer	
147	Cornus amomum	a	R	0.9	4.9	80.0		☐	82		☐	3		
148	Morus rubra	e	R	2.3	4.7	100.0		☐	102		☐	3		
149	Morus rubra	i	R	3.5	4.7	110.0	DBH?	☐	120		☐	3		
150	Quercus rubra	n	R	4.8	4.9	110.0	DBH?	☐	130	.2	☐	3		
151	Quercus rubra	p	R	5.9	5.0	Missing		☐	50		☐	3		
152	Quercus rubra	s	R	7.1	5.2	235.0	0.9	☐	300	1.5	☐	3		
153	Cornus amomum	u	R	8.4	5.3	70.0		☐	72		☐	3		
154	Quercus michauxii	w	R	9.4	5.3	185.0	0.3	☐	270	.9	☐	3		
155	Morus rubra	x	R	9.7	7.7	75.0		☐	100		☐	3		
157	Cornus amomum	r	R	6.0	7.7	110.0	DBH?	☐	140	.2	☐	3		
158	Cornus amomum	l	R	4.6	7.7	Missing		☐	Dead		☐	—		
159	Cornus amomum	h	R	3.0	7.7	95.0		☐	95		☐	3		
160	Quercus bicolor	d	R	1.7	7.7	150.0	0.6	☐	175	.8	☐	3		

 # stems: 24

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS-EEP Entry Tool ver. 2.3.1

Plot (continued): 100108-01-0006

ID	Species	map char	source	X (m)	Y (m)	Last Year's Data ddh (mm)	Height (cm)	DBH (cm)	Notes*	THIS YEAR'S DATA ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)

**Required if cut-off >10cm or subsample ? 100%.

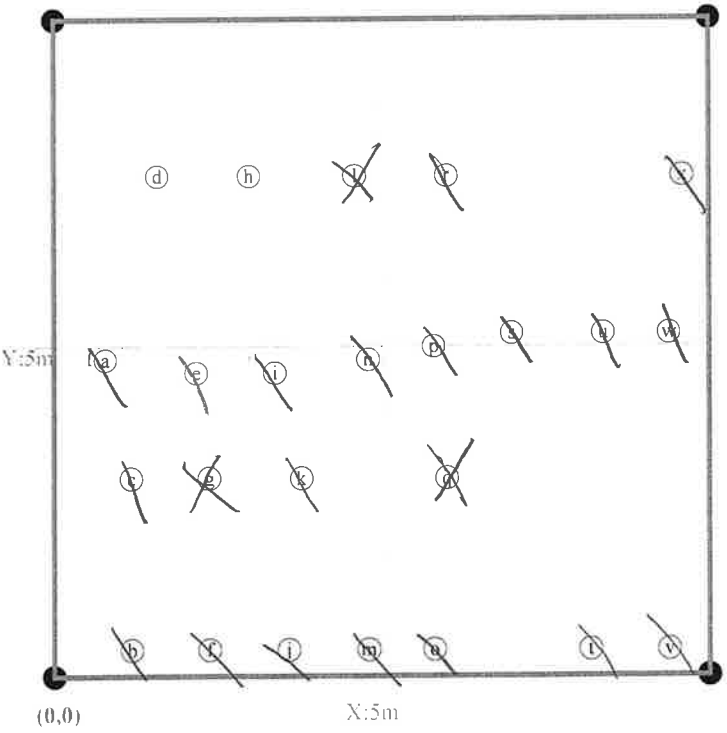
●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10 Form WS2, ver 9.1

Map of stems on plot 100108-01-0006

——— X-axis: 237°

 # stems: 24
map size: small

N



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS-EEP Entry Tool ver. 2.3.1

Boho

Vegetation Monitoring Data (VMD) Datasheet

Please fill in any missing data and correct any errors.

Plot 100108-01-0007

VMD Year (1-5): 4 Date: 09/21/24 / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) Datum: NAD83/WGS84

Longitude or UTM-E: UTM Zone:

Coordinate Accuracy (m): X-Axis bearing (deg): 80

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party:	Role:
HG + DM	

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Last Year's Data: Height 1cm*	Last Year's Data: DBH 1 cm	Notes*	This Year's Data: Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
166	Liriodendron tulipifera	i	R	9.1	4.7	85.0		☐	160	.2	☐	3		
167	Diospyros virginiana	i	R	8.8	9.0	100.0		☐	170	.2	☐	3		
168	Juglans nigra	h	R	8.0	7.9	125.0	DBH?	☐	160	.3	☐	3		
170	Cercis canadensis	g	R	5.7	5.5	90.0		☐	74		☐	2	deer	
172	Cercis canadensis	f	R	3.6	3.0	*Missing*		☐	missing		☐	–		
173	Cercis canadensis	d	R	2.5	2.6	58.0		☐	58	/	☐	3		
175	Nyssa sylvatica	a	R	0.3	0.8	54.0		☐	60		☐	3		
176	Morus rubra	b	R	0.8	4.2	60.0		☐	60		☐	3		
177	Morus rubra	c	R	0.9	5.2	45.0		☐	missing		☐	–		
178	Morus rubra	e	R	2.8	6.2	50.0		☐	70		☐	3		

 # stems: 10

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)		Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes
ceca				1	120		3		

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling:**

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	Seedlings — Height Classes: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	Saplings — DBH: Sub-Sapl	0-1 cm	1-2.5	Trees — DBH: 2.5-	5-	=10 (write DBH)
acru		—		3	5	—					
		—				—					
		—				—					
		—				—					
		—				—					
		—				—					
		—				—					

****Required** if cut-off >10cm or subsample ? 100%.

1 2 3 4 5 6 7 8 9 10

Form WS2, ver 9.1

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

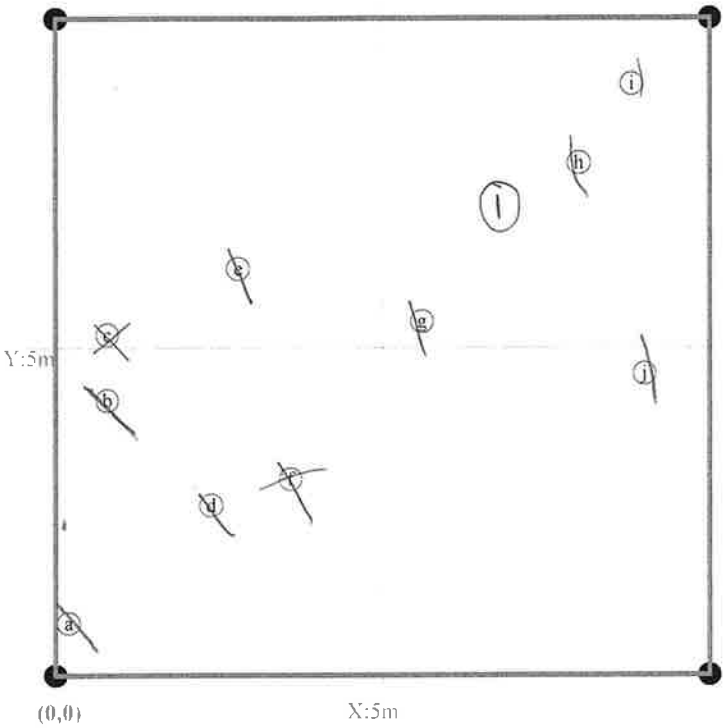
*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS-EEP Entry Tool ver. 2.3.1

Map of stems on plot 100108-01-0007

X-axis: 80° N

 # stems: 10
map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS-EEP Entry Tool ver. 2.3.1

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100108-01-0008

VMD Year (1-5): 4 Date: / / - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec deg. or m)

Longitude or UTM-E:

Coordinate Accuracy (m):

Datum: NAD83/W

UTM Zone:

X-Axis bearing (deg): 154

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party: Role:

Date last planted:

New planting date m/yy?

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Last Year's Data Height 1cm*	Last Year's Data DBH 1 cm	Notes*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
185	Quercus phellos	a	R	0.5	0.2	80.0		☐	100		☐	3		
186	Quercus michauxii	h	R	2.4	0.8	135.0	DBH?	☐	180	.3	☐			
187	~~Quercus michauxii~~ Jumi	e	R	1.4	2.2	60.0		☐	65		☐			
188	Quercus falcata	b	R	0.4	3.5	130.0	DBH?	☐	170	.2	☐			
189	Quercus alba	c	R	0.4	9.5	35.0		☐	60		☐			
190	Quercus falcata	d	R	0.9	8.7	130.0	DBH?	☐	170	.4	☐			
192	Quercus phellos	f	R	1.6	6.7	72.0		☐	95		☐			
193	Quercus michauxii	g	R	2.0	5.7	60.0		☐	120		☐			
194	Quercus bicolor	i	R	2.6	4.8	100.0		☐	155	.3	☐			
195	Quercus michauxii	j	R	3.1	4.0	55.0		☐	70		☐			
196	Quercus phellos	k	R	3.5	2.3	155.0	0.3	☐	180	.4	☐		3	
197	~~Cercis canadensis~~ QUmi	l	R	3.8	1.4	60.0		☐	75		☐			
200	Juglans nigra	n	R	4.2	9.6	150.0	0.3	☐	180	.5	☐	all		
201	Juglans nigra	m	R	4.3	8.1	135.0	DBH?	☐	170	.4	☐			
202	Quercus ~~sp.~~ ph	o	R	4.7	7.0	*Missing*		☐	60		☐			
203	Quercus phellos	p	R	5.0	5.6	42.0		☐	80		☐			
204	~~Quercus phellos~~ CCCa	q	R	5.4	4.4	60.0		☐	60		☐			
206	Cercis canadensis	r	R	6.2	2.1	*Missing*		☐	60		☐			
207	Cercis canadensis	s	R	6.5	1.0	60.0		☐	60		☐			
209	Quercus phellos	v	R	8.7	2.8	60.0		☐	85		☐			
210	Quercus ~~falcata~~ ph	u	R	8.2	4.4	75.0		☐	85		☐	3		
211	Quercus ~~montana~~ ph	t	R	7.7	5.9	*Missing*		☐	30		☐	3		

 # stems: 22

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS-EEP Entry Tool ver. 2.3.1

Plot (continued): 100108-01-0008

ID	Species	map char	source	X (m)	Y (m)	Last Year's Data: ddh (mm)	Height (cm)	DBH (cm)	Notes*	THIS YEAR'S DATA: ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
list											
juni											
jicam											

**Required if cut-off >10cm or subsample ? 100%.

1 2 3 4 5 6 7 8 9 10

Form WS2, ver 9.1

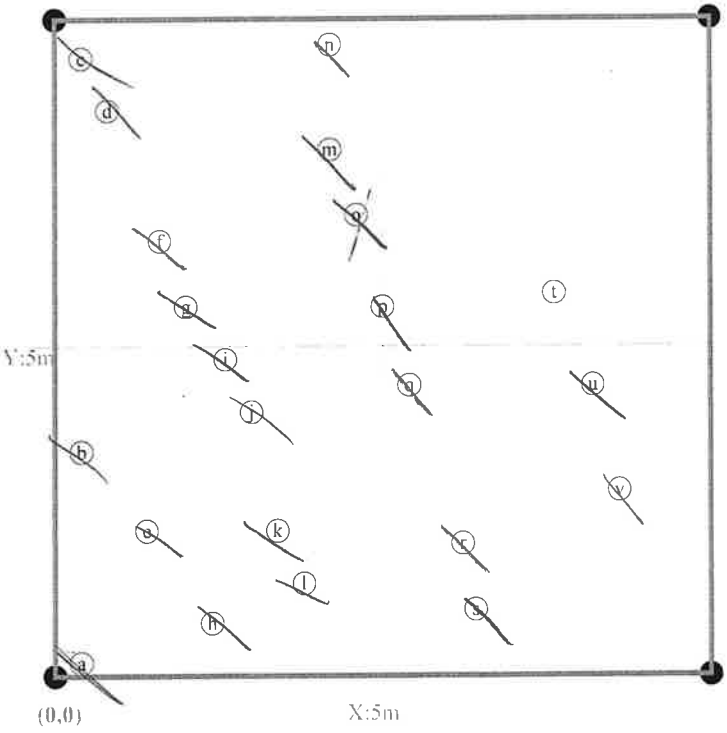
Map of stems on plot 100108-01-0008

X-axis: 154°

N

 # stems: 22

map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

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B010

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100108-01-0009

VMD Year (1-5): 3 Date: / / – / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) Datum: NAD83/W

Longitude or UTM-E: UTM Zone:

Coordinate Accuracy (m): X-Axis bearing (deg): 290

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party: Role:

Date last planted:

New planting date m/yy?

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Nov 2021 Data Height 1cm*	Nov 2021 Data DBH 1 cm	Notes*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
214	Prunus serotina	a	R	0.3	0.5	90.0		☐	240	.3	☐	3		
215	Quercus michauxii	b	R	0.6	3.3	85.0		☐	180	.2	☐	3		
216	Quercus michauxii	d	R	1.5	1.9	65.0		☐	165	.4	☐	3		
217	Quercus michauxii	f	R	2.5	0.6	58.0		☐	141	.2	☐	3		
218	Morus rubra	i	R	4.1	1.5	40.0		☐	140	.2	☐	3		
219	Prunus serotina	e	R	1.5	6.3	59.0		☐	110		☐	3		
220	Prunus serotina	c	R	0.9	8.0	56.0		☐	160	.2	☐	3		
221	Prunus serotina	g	R	2.8	8.7	80.0		☐	190	.3	☐	3		
222	Prunus serotina	h	R	3.6	7.3	35.0		☐	120		☐	3		
223	Prunus serotina	j	R	4.3	5.9	52.0		☐	160	.2	☐	3		
224	Quercus rubra	k	R	4.7	4.6	65.0		☐	110		☐	3		
225	Morus rubra	l	R	5.3	3.5	40.0		☐	65		☐	3		
226	Prunus serotina	o	R	6.2	1.8	40.0		☐	80		☐	3		
227	Quercus michauxii	q	R	6.8	0.9	79.0		☐	160	.2	☐	3		
229	Quercus lyrata	z	R	9.5	1.1	85.0		☐	165	.1	☐	3		
231	Quercus phellos	w	R	8.4	3.6	40.0		☐	30		☒	3		
233	Quercus phellos	s	R	7.2	6.0	101.0	DBH?	☐	205	.3	☐	3		
234	Quercus lyrata	p	R	6.7	6.8	60.0		☐	190	.2	☐	3		
235	Quercus michauxii	n	R	6.0	8.1	88.0		☐	120		☐	3		
236	~~Quercus falcata~~ M1	m	R	5.3	9.1	60.0		☐	110		☐	3		
237	Quercus phellos	u	R	7.8	6.4	59.0		☐	80		☐	3		
238	Quercus rubra	x	R	8.5	5.0	78.0		☐	145	.2	☐	3		
239	Cornus amomum	y	R	9.2	6.7	62.0		☐	missing		☐	1		
240	Quercus alba	v	R	8.3	8.0	49.0		☐	80		☐	3		
241	Quercus phellos	t	R	7.7	8.9	60.0		☐	75		☐	3		
242	Quercus phellos	r	R	6.9	9.5	65.0		☐	80		☐	3		

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Plot (continued): 100108-01-0009					Nov 2021 Data			Notes*	THIS YEAR'S DATA						
ID	Species	map char	source	X (m)	Y (m)	ddh (mm)	Height (cm)	DBH (cm)		ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage* Notes

 # stems: 26 New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling:**

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
PIOC				1	1		4				

**Required if cut-off >10cm or subsample ? 100%.

●1 ●2 ●3 ●4 ●5 ●6 ●7 ●8 ●9 ●10

Form WS2, ver 9.1

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

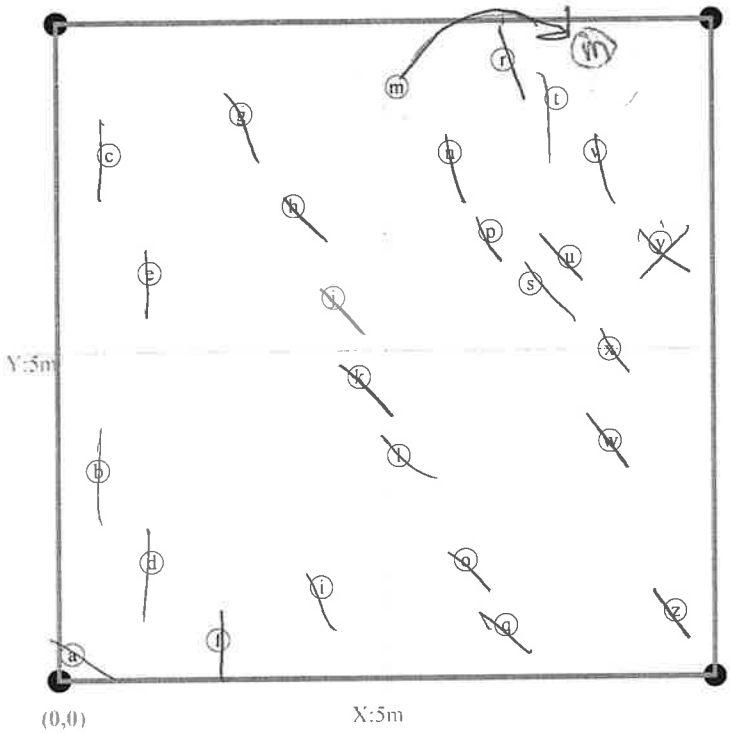
*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Map of stems on plot 100108-01-0009

X-axis: 290°

N

 # stems: 26
map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Printed in the CVS-EEP Entry Tool ver. 2.3.1

Vegetation Monitoring Data (VMD) Datasheet **Please fill in any missing data and correct any errors.**

Plot 100108-01-0010

VMD Year (1-5): 3 Date: / / - / /

Taxonomic Standard:

Taxonomic Standard DATE:

Latitude or UTM-N: (dec.deg. or m) Datum: NAD83/W

Longitude or UTM-E: UTM Zone:

Coordinate Accuracy (m): X-Axis bearing (deg): 15

Plot Dimensions: X: 10 Y: 10 ☐ Plot has reverse orientation for X and Y axis (Y is 90 degrees to the right of X

Party: Role:

Date last planted:

New planting date m/yy? /

☐ Check box if plot was not sampled, specify reason below

Notes:

ID	Species Name	Map char	Source*	X 0.1m	Y 0.1m	Nov 2021 Data Height 1cm*	Nov 2021 Data DBH 1 cm	Notes*	THIS YEAR'S DATA Height 1cm*	DBH 1 cm	Re-sprout	Vigor*	Damage*	Notes
244	Quercus rubra	a	R	0.3	0.4	60.0		☐	130	.2	☐	3		
245	Quercus alba	e	R	1.6	0.6	44.0		☐	90		☐	3		
246	Quercus montana	h	R	2.9	0.7	70.0		☐	140	.2	☐	3		
247	Quercus rubra	k	R	4.2	0.6	60.0		☐	110		☐	3		
248	Prunus serotina	o	R	5.5	0.5	55.0		☐	75		☐	3		
249	Prunus serotina	q	R	6.9	0.4	60.0		☐	65		☐	3		
250	Quercus alba	u	R	8.3	0.4	45.0		☐	70		☐	3		
251	Prunus serotina	v	R	8.5	2.4	50.0		☐	70		☐	3		
252	Quercus falcata	s	R	7.2	2.4	*Missing*		☐	dead		☐	/		
254	Quercus phellos	m	R	4.6	2.5	50.0		☐	75		☐	3		
255	Cornus amomum	i	R	3.1	2.5	64.0		☐	70		☐	3		
256	Cornus amomum	f	R	1.7	2.5	*Missing*		☐	80		☐	3		
257	Quercus phellos	c	R	0.5	2.5	41.0		☐	60		☐	3		
261	Quercus phellos	n	R	5.1	4.8	68.0		☐	70		☐	3		
266	Cornus amomum	t	R	8.0	8.6	50.0		☐	80		☐	3		
267	Quercus rubra	r	R	7.0	8.6	40.0		☐	85		☐	3		
268	Cornus amomum	p	R	5.5	8.6	56.0		☐	90		☐	3		
269	Cornus amomum	l	R	4.4	8.5	*Missing*		☐	dead		☐	/		
270	Cornus amomum	j	R	3.3	8.3	60.0		☐	75		☐	3		
271	Cornus amomum	g	R	2.2	8.2	50.0		☐	80		☐	3		
272	Cornus amomum	d	R	0.8	7.9	69.0		☐	95		☐	3		
273	Quercus michauxii	b	R	0.2	7.6	60.0		☐	80		☐	2		

 # stems: 22

New Stems, not included last year, but are obviously planted. If more space needed, use blank PWS (Planted Woody Stems) Form:

Species Name	Source*	X (m)	Y (m)	Height 1 cm*	DBH 1 cm	Vigor*	Damage*	Notes

*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

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Plot (continued): 100108-01-0010

ID	Species	map char	source	X (m)	Y (m)	Nov 2021 Data: ddh (mm)	Height (cm)	DBH (cm)	Notes*	THIS YEAR'S DATA: ddh (mm)	Height (cm)	DBH (cm)	Re-sprout	Vigor*	Damage*	Notes

Natural Woody Stems - tallied by species

Explanation of cut-off & subsampling**:

Height Cut-Off (All stems shorter than this are ignored. If >10cm, explain why to the right.): ☐ 10cm ☐ 50cm ☐ 100cm ☐ 137cm

Species Name	☑ c	SEEDLINGS — HEIGHT CLASSES: Sub-Seed	10 cm-50 cm	50 cm-100 cm	100 cm-137 cm	SAPLINGS — DBH: Sub-Sapl	0-1 cm	1-2.5	TREES — DBH: 2.5-	5-	=10 (write DBH)
list											
viam											
plot											

**Required if cut-off >10cm or subsample ? 100%.

Form WS2, ver 9.1

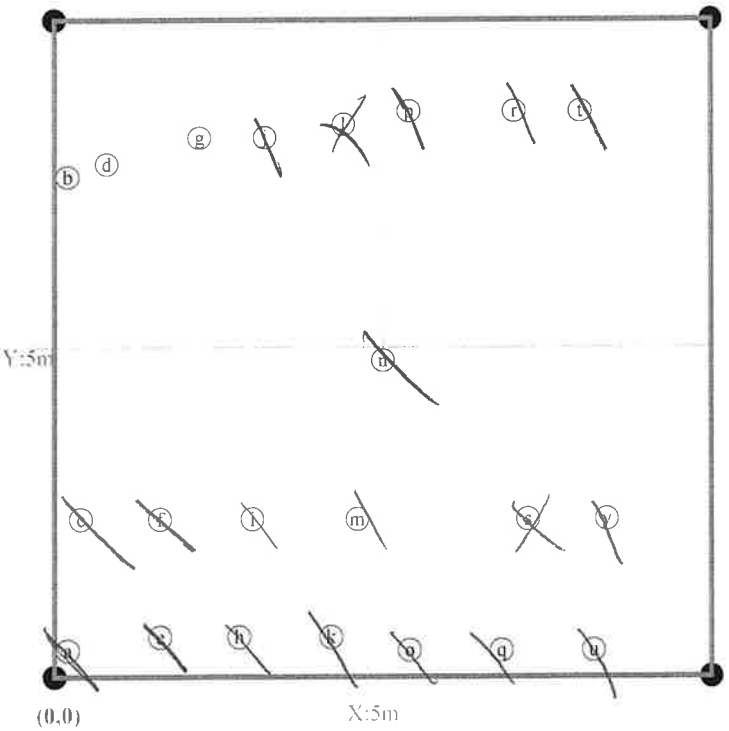
Map of stems on plot 100108-01-0010

X-axis: 15°

N

 # stems: 22

map size: small



*SOURCE: Tr=Transplant, L=Live stake, B=Ball and burlap, P=Potted, Tu=Tubling, R=bare Root, M=Mechanically, U=Unknown

*VIGOR: 4=excellent, 3=good, 2=fair, 1=unlikely to survive year, 0=dead, M=missing.

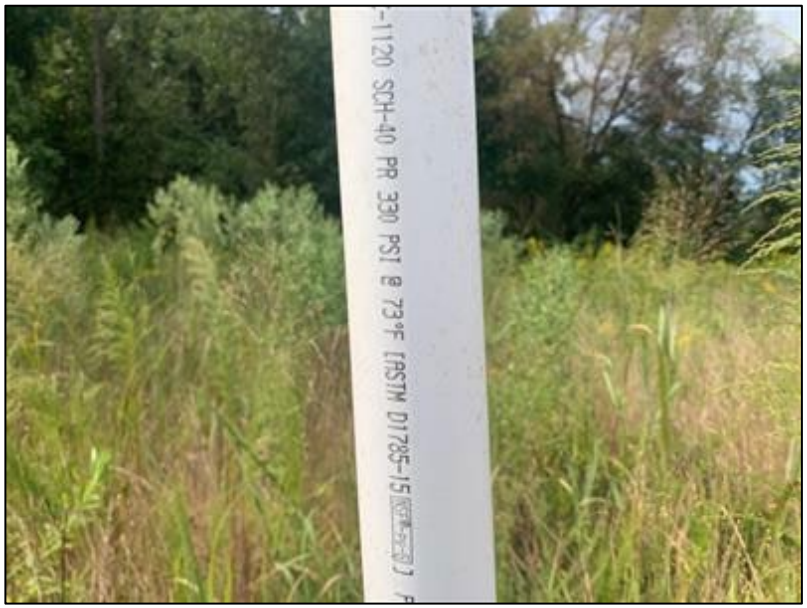
*DAMAGE: REMoval, CUT, MOWing, BEAVer, DEER, RODents, INSects, GAME, LIVESTock, Other/Unknown ANIMal, Human TRAMpled, Site Too WET, Site Too DRY, FLOOD, DROUght, STORM, HURRicane, DISeased, VINE Strangulation, UNKNown, specify other.

*HEIGHT PRECISION drops to 10cm if >2.5m and 50cm if >4m.

Appendix C

Vegetation Monitoring Plot Photos

Bohemian Vegetation Monitoring Plot Photos



Vegetation Plot 1 (09/21/2023)


Vegetation Plot 2 (09/21/2023)


Vegetation Plot 3 (09/21/2023)


Vegetation Plot 4 (09/21/2023)

Vegetation Plot 5 (09/21/2023)

Vegetation Plot 6 (09/21/2023)

Vegetation Plot 7 (09/21/2023)

Vegetation Plot 8 (09/21/2023)

Vegetation Plot 9 (09/21/2023)

Vegetation Plot 10 (09/21/2023)