CLEVELAND METROPARKS Plant Community Assessment Program: Quality Control Form Cleveland Metroparks

Project Label: PCAP **Plot No:** 1218 **Date Sampled:** 6/11/12 **Lead:** Barton

				Comment required if item answer is NO
Parking/Access outside of Park Boundaries:		Y	(N)	If yes, write details in Comments section below
Field journals completed		(Y)	N	
Site sketch made on 1:3000 map?		(Y)	N	
Check cover page	X-axis Bearing of plot recorded	(Y)	N	
	GPS coords. Recorded	(Y)	N	
	North direction recorded	(Y)	N	
	Photographs taken?	(Y)	N	
Plot No., Date agreement on all pages?		(Y)	N	
Header data completed all pages?		(Y)	N	
Cover classes recorded in all Intensive modules		(Y)	N	
Browse Level By Species		(Y)	N	
Woody stem quality control check		(Y)	N	
Invasive plant quality control check		(Y)	N	quantity not always recorded
Ash trees mapped		Y	(N)	N/A
Cover by Strata? (confirm cover type)		(Y)	N	
Soil samples collected with matching plot #.		(Y)	N	
Vouchers labeled on datasheet with initials and number		(Y)	N	
Vouchers labeled on collection bag		(Y)	N	
Pink flags removed		(Y)	N	
Data sheet QA before leaving site?		(Y)	N	
Common equipment returned to tub.		(Y)	N	
Data sheets scanned?		6/18/12		Enter date to left NZ
Final data sheets scanned?				Enter date to left
Buffer Widths measured?		(Y)	N	JTP 6-22-2012
Web Soil Survey		(Y)	N	6-8-12 JTP
Voucher Location	Refrigerator	Y	N	
(# vouchers collected)	Press (#)			Enter number to left
	Drier	Y	N	
	Identified	Y	N	
	Mounted	Y	N	
	Thrown away	Y	N	

GRTS point verification: Is plot sampleable?	
☑ Yes	Original GRTS point is sampleable
☐ No	Original GRTS point lands in a non-sampleable area (fill in category below)
	☐ Point falls in a water (i.e. river, lake)
	☐ Managed mowed area (i.e. golf course, picnic area, right-of-way)
	☐ Paved area (i.e. parkinglot, road)
	☐ Unsafe to sample (i.e. steep slope)
	☐ Other

Additional Comments:

Not sure where lat/long were measured; new coords. 41.42496, -81.85329

Needs photo @ origin

CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet

GENERAL INFORMATION

Project Label: PCAP

Project Name: 01 RR 2012

Plot Name: Miller Lite

Plot No.: 1218

☐ Level 4 (no nested corners sampled)

■ Level 5 (nested corners sampled)

Date (mm/dd/yyyy): 06/11/12

End date (if > 1 day): / /

Party	Role**
Z. Barton	Plot leader
S. Calella	Woody/Soil
A. Young	Bot. Asst.
L. Huffman	Woody/soil
T. Sistler	Woody/soil

** Roles: Co-leader, Asst., Guide, Owner, Taxonomist, etc.

PLOT NOT SAMPLED: ☐ Other

☐ Perm. water ☐ Paved ☐ Slope ☐ Safety

SAMPLING QUALITY*

Effort Level:

- ~~Very thorough~~
- ☐ Accurate
- ☐ Hurried

subjective evaluation of how much effort put into sampling. Hurried plots may still provide good data

TAXONOMIC ACCURACY

	high	modera.	low	not smpl
vascul.	X			n/a
bryo			X	
lichen			X	X 23B 6-0-12

TAXONOMIC STANDARD

Authority: G&O Pub Date: 1998

LOCATION

State: OH County: Cuyahoga

Quadrangle: Lakewood

Local Place Names: SW of Cottonwood Picnic Area

Landowner: Cleveland Metroparks

Data Confidentiality:

Check one: ~~Public data~~ ☐ Private Data

☐ Fuzz 100m ☐ Fuzz 250m ☐ Fuzz 500m

Reason:

If data not public why?

Source of coordinates ☐ MAP ■ GPS

Coordinate system:	Coord. Units
■ Lat/Long ☐ UTM ☐ StatePlane	■ deg ☐ deg min
☐ Other (*specify*)	■ m ☐ ft ☐

Datum: ■ NAD83/WGS84 ☐ NAD27

GPS location in plot x=0 to 5, y=-1,0,+1): Plot Slipped

x = 0 y = 0 (base of plot x=0, y=0) coordinates from

Latitude: 41.42997° back of plot

Longitude: -81.85339° USE GPS coordinates or QA/QC

Coord. Accuracy: ~~4~~ m ☐ ft 0-1

GPS File Name: 1218A

Plot size for cover data: 0.1 (hectares)

X-axis Bearing of plot: 4° ~~180~~ °

Depth: (1-5): 4

Intensive modules: 2, 3, 8, 9 (EDIT IF MODIFIED) 3rd + 3rd 12

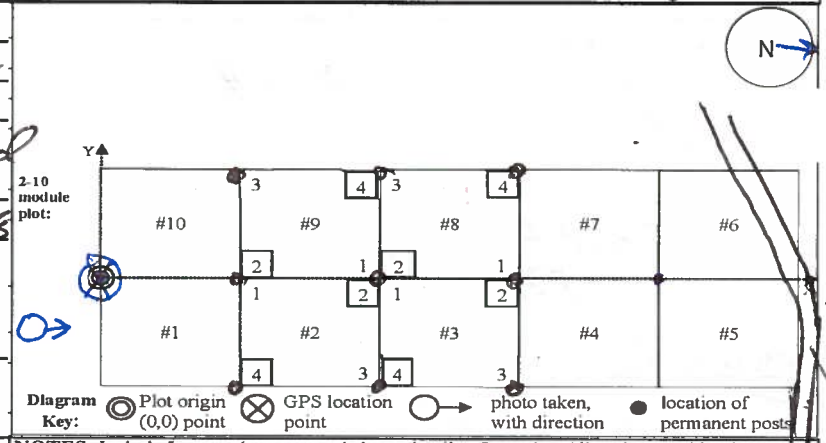
Camera No.: 4

Photo Nos.: 0064

Plot placement: ~~GRTS~~ ☐ Representative

☐ Random ☐ Stratified Random ☐ Transect component

☐ Systematic (grid) ☐ Capture specific feature ☐ Other



NOTES: Include **Layout** (any unusual shape details), **Location** (directions and landscape content), **Rationale** (why here), and **Veg Characterization** (description of community, dominants, strata, BROWSE). Additional notes in space on back.

Layout: 2x5 mods

Location: ~450 m SW of the south end of the Cottonwood Picnic Area

Rationale: GRTS pt. The GRTS pt is in the middle of the APT along Valley Parkway. We ran our center axis 180° off the APT and set our origin and baseline at the opposite end. Therefore, the GRTS pt is at pt (0,5) along the x-axis. Parts of mod 5 + 6 are in the APT and Valley Parkway

Veg Characteristics: see notes on back

Valley Parkway APT

OVER

Minimum required fields in Bold and Underlined

*Definitions and values in CM PCAP FOM v. 1.0 and CVS Field Guide

CLEVELAND METROPARKS Plant Community Assessment Program Species Cover Data Sheet 2a Page 1 of 3

Project Label: PCAP Project name: 01RR2012 Plot no.: 1218

Total modules: 10 Intensive modules: 4 Plot configuration: 2x5 Plot area (ha): 0.1

Cleveland Metroparks

Br = Browse Level. Use cover classes to describe amount of browse per species over entire plot

Strata - Cov. entire plot

Estimate for each intensive module:

	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner
	2	4	2	2	3	4	3	2	8	4	8	2	9	4	9	2	R	R
	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov
%open water	1	0			1	0			1	0			1	0				
%unvegetated open water	1	0			1	0			1	0			1	0				
%unveg. ground (bare soil)	1	2			1	2			1	1			1	2				
%unveg. litter (bare litter)	1	8			1	9			1	9			1	9				

T	S	H	(F)	(A)	Br	Species	c	Voucher #	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov
6						Populus deltoides			2	8	4		2	6	2					4	5				3	6		
8	5				9+	Acer saccharum			4	9	4		2	7	4		2	7	4		4	8	4					
	7	2			8.	Lindera benzoin			4	7	4		4	7	4		2	8	4		4	7	3					
6	3					Quercus rubra			4	5	3						4	7	4		4	6						
		2				Allium tricoccum			3	2			2	2	3		3	2			3	2						
2*		2				Prunus serotina			2	2	2				2	1	1	1										
		2				Alliaria petiolata			2	2	3		2	2	3		2	2	2		1	2						
		2			3.	Acer seedlings			2	2	2		3	2	3		3	2	4		2	2	3					
		2				Prenanthes sp.					2	2							2	1			2	1				
		2			2.	Arisaema triphyllum					2	2	2	2	3		1	2			1	2						
		1				Ligustrum vulgare			1	1																		
		2			3.	Caulophyllum thalictroides			1	2			2	2	3				2	2	2	2						
		2				Leersia virginica			1	1																		
	5	2				Aesculus glabra			1	1			1	6			4	5	2									
		2			3	Eupatorium rugosum			1	2							4	2	2				2	2				
		2			3.	Circaea lutetiana			1	2			2	2			2	2			2	2	4					
		1				Unknown monocot		C4-0065	1	1											2	1						
		1				~~Boeh~~ Boehmeria cylindrica			1	1																		
		2				Parthenocissus quinquefolia			1	1			1	1			2	1					2	1				
		1				Euyonymus obovatus			1	1	X																	
		2			3	Fraxinus seedlings					2	2	2	2	3		4/3	2	3		2	2	2					
		2				Toxicodendron radicans					2	2	1	1			2	2	3		2	2						
		1				Unknown dicot 1		C4-0066			2	1																
		2				Camassia scilloides					2	1	2	2	2		4	1			3	2	3					
		1			8.	Maianthemum racemosum			1	1	X																	

opposite, toothed hairy

CLEVELAND METROPARKS Plant Community Assessment Program Species Cover Data Sheet 2a Page 2 of 3

Project Label: PCAP Project name: 01RR2012 Plot no.: 1218

Total modules: 10 Intensive modules: 4 Plot configuration: 2X5 Plot area (ha): 0.1

Cleveland Metroparks

Br = Browse Level. Use cover classes to describe amount of browse per species over entire plot

Strata - Cov. entire plot

Estimate for each intensive module:

	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner
	2	4	2	2	3	4	3	2	8	4	8	2	9	4	9	2	R	R
	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov
%open water	1				1				1				1					
%unvegetated open water	1				1				1				1					
%unveg. ground (bare soil)	1				1				1				1					
%unveg. litter (bare litter)	1				1				1				1					

T	S	H	(F)	(A)	Br	Species	c	Voucher #	mod depth	mod cov	corner depth	corner cov	mod depth	mod cov	corner depth	corner cov	mod depth	mod cov	corner depth	corner cov	mod depth	mod cov	corner depth	corner cov	mod depth	mod cov	corner depth	corner cov	mod depth	mod cov
		2				Asarum canadense			1	2	X		1	1	+		2	2	2		2	2								
		2				Anemonella thalictroides			1	1	X		1	1			1	2												
		1				Duchesnra indica			1	1																				
6						Platanus occidentalis			1	6			4	8	4		4	8	4											
6	3					Ulmus rubra			1	6							4	7			4	6								
		2			4+	Trillium sessile			1	1			2	2	2				-2	2	1	1	+							
		1				Solanum dulcamara			1	1																				
5					10+	Tilia americana							4	7																
		2				Geranium maculatum			1	1			2	1																
		2			5+	Solidago flexicaulis							1	2	+						2	1								
	5	1				Carya cordiformis		~~ZSB002~~					1	1	+		4	5	~~7~~											
Broad leaved		2				~~Carex sp.~~ Laxiflora ZSB 9-25-12	X	ZSB002					1	1	+		1	2	+											
6						Acer nigrum									4	7														
6					10+	Acer saccharinum									3	5	4	7	2		1	4	4							
		1				Sambucus canadensis									2	1														
trigonous base		1			9+	Ranunculus sp.			1	1	+																			
		1				Carex Sp. 2			1	1																				
5						Acer platanoides											4	6												
		3			3+	Smilacina racemosa											2	2												
		1				Epipactis helleborine											1	1	+		3	1								
		2				Polygonatum biflorum											1	1	+											
		2				Hydrophyllum canadense											1	1	+											
		1				Symplocarpus foetidus															1	1	+							
		1				Moss sp.															1	1	+							
		1				Rosa multiflora																							R	+ 1

CLEVELAND METROPARKS Plant Community Assessment Program Species Cover Data Sheet 2a Page 3 of 3

Project Label: PCAP Project name: OIRI2012 Plot no.: 1218

Total modules: 10 Intensive modules: 4 Plot configuration: 2X5 Plot area (ha): 0.1

Cleveland Metroparks

Br = Browse Level. Use cover classes to describe amount of browse per species over entire plot

Strata - Cov. entire plot

	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner	mod	corner
Estimate for each intensive module:	2	4	2	2	3	4	3	2	8	4	8	2	9	4	9	2	R	R
	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov
%open water	1				1				1				1					
%unvegetated open water	1				1				1				1					
%unveg. ground (bare soil)	1				1				1				1					
%unveg. litter (bare litter)	1				1				1				1					

T	S	H	(F)	(A)	Br	Species	c	Voucher #	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov
		1				Unknown poaceae 1		C4-0068																	R	1
		2				Podophyllum peltatum																			R	2
		4				Ulmus americana																			R	5
		1				Allium canadense																			R	1
		2			Vu	Actinomeris alternifolia																			R	2
		2				Ulmus seedlings																			R	2
		2				Trillium ~~flexipes~~ cernuum																			R	2
		2				Sot Lonicera japonica																			R	2
		2				Impatiens sp.																			R	2
		2				Trillium sp.																			R	2
		1				Ranunculus repens																			R	1
		5				Acer negundo																			R	6
		2				Oxalis stricta																			R	2
		1				Unknown poaceae 2		C4-0069																	R	1
		3				Urtica dioica																			R	4
		1				Taraxacum officinale																			R	1
		2				Plantago major																			R	2
						~~Sanicula canadensis~~	X	ZSB003																		
		2				Achillea millefolium																			R	2
		2				Cryptotaenia canadensis	X	ZSB003																	R	2
		2				Prunella vulgaris																			R	2
		2				Lysimachia nummularia																			R	2
		1				Unknown dicot Dipsacus ZSB 10-9-12		C4-0070																	R	1
		1				Cirsium sp.																			R	1
		3				Poa sp.	X	ZSB004																	R	4

CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

Project Label: PCAP Project Name: OIRR2012 Plot No.: 1218 Page: 1 of 3

Cleveland Metroparks

Explain subsample (additional room on back):

mod #	species	c	voucher#	# stems 0-1.4m browsed	% sub or super sample	# shrub clumps	size class (cm) woody stems >1.4m 1 0-<1	2 1-<2.5	3 2.5-<5	4 5-<10	5 10 - <15	6 15 - <20	7 20 - <25	8 25 - <30	9 30 - <35	10 35 - <40	11 >40 (record each tree)
1	Ulmas americana														•		
1	Acersaccharum															•	
1	Ulmas rubra									•							
1	Acer nigrum													•			
1	Lindera benzoin			[illegible]	50%	23											
2	Standing dead							•	°								
2	Acer saccharum							•		•	•						58.8
2	Prunus serotina											•					
2	Ulmus rubra								•								
2	Populus deltoides																106.5
2	Lindera benzoin			[illegible]		28											
3	Aesculus glabra									•							
3	standing dead							[illegible]		•							
3	Quercus rubra									•							
3	Acer nigrum										•						
3	Acer saccharum								•	•							
~~3~~	~~standing dead~~							[illegible]									
3	Tilia americana														•		
3	Lindera benzoin			[illegible] 6 total		19											
3	Fraxinus sp.			•													
4	Tilia Americana								•								
4	Platinus occidentalis																6, 45.6
4	Acer saccharum								X					°		°	
4	Quercus rubra								•								

Duplicate species ID-3 in 5RE

CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

Project Label: PCAP Project Name: 01RR2012 Plot No.: 1218 Page: 2 of 3

Explain subsample (additional room on back):

mod #	species	c	voucher#	# stems 0-1.4m browsed	% sub or super sample	# shrub clumps	size class (cm) woody stems >1.4m 1 0-<1	2 1-<2.5	3 2.5-<5	4 5-<10	5 10 - <15	6 15 - <20	7 20 - <25	8 25 - <30	9 30 - <35	10 35 - <40	11 >40 (record each tree)
4	Aesculus glabra												•				
4	Lindera benzoin			☒		17											
5	Acer negundo									•		•	•		•		
5	Acer nigrum								•	•							
* 4	Acer nigrum								•								
5	Acer saccharum											•					
5	Prunus seedling											•					
5	Fraxinus ~~sp~~ SR4 10-4-12							• •									
5	Ulmus rubra			•				• •	•								
5	Aesculus glabra								• •								
5	Lindera benzoin					6											
6	Acer negundo							• •	• •		•						
6	Ulmus rubra								•								
6	Aesculus glabra							•									
6	Lindera benzoin					1											
7	Acer saccharum											•					
7	Ulmus rubra									•							
7	Carya cordiformis								•	•							
7	Aesculus glabra			•					•	• •							
7	Quercus rubra											•					
7	Standing dead												•				
7	Acer nigrum											•					
7	Platinus occidentalis																81.0
7	Acer saccharinum																80.3

CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

Project Label: PCAP Project Name: 01RR2012 Plot No.: 1218 Page: 3 of 3

Explain subsample (additional room on back):

mod #	species	c	voucher#	# stems 0-1.4m browsed	% sub or super sample	# shrub clumps	size class (cm) woody stems >1.4m 1 0-<1	2 1-<2.5	3 2.5-<5	4 5-<10	5 10 - <15	6 15 - <20	7 20 - <25	8 25 - <30	9 30 - <35	10 35 - <40	11 >40 (record each tree)
7	Lindera benzoin			::		6											
7	Acer Sp.			•													
8	Carya cordiformis								•								
8	Ulmus rubra									•				•			
8	Quercus rubra								•							•	
8	Acer platanoides											•					
8	Standing dead											•					
8	Acer Saccharum										•						
8	Lindera benzoin			:		16											
8	Fraxinus sp.			:													
9	Acer saccharum								:•								
9	Ulmus rubra										•						41.0
9	Lindera benzoin			11		27											
10	Acer saccharum									•							43.2, 50.9
10	Carya cordiformis							.	•								
10	Lindera benzoin			F.		15											

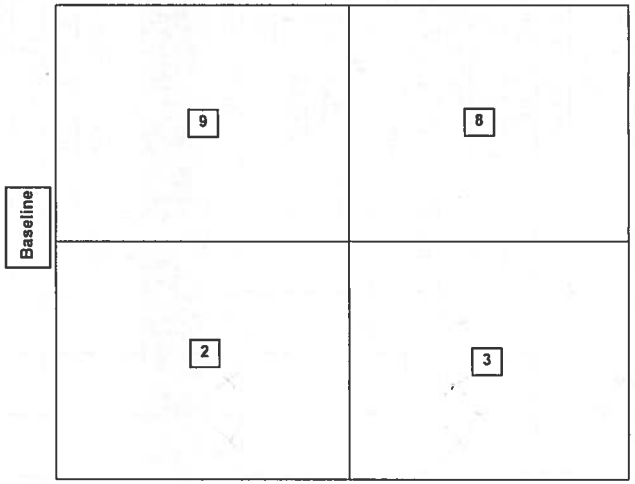
CLEVELAND METROPARKS Emerald Ash Borer - Fraxinus Sheet *INTENSIVE MODULES ONLY* *TREES ≥ 10CM ONLY*

Project Label: PCAP Project Name: OIRR 2012 Plot No.: 1218 Date: 6/11/12

								ASH Only				
Module	Tree ID.	Species	Dead	c	Voucher #	DBH (cm)	Ht @ DBH	Ash condition	*Dead condition	# Exit holes	Epicormic present	Woodpecker holes
	1	No ash										
	2											
	3											
	4											
	5											
	6											
	7											
	8											
	9											
	10											
	11											
	12											
	13											
	14											
	15											
	16											
	17											
	18											
	19											
	20											
	21											
	22											
	23											
	24											
	25											

N

*** Change Intensive module numbers when necessary



Map all ash trees ≥10cm in each module using Tree ID number

* If Ash Condition scores 5 (dead) provide breakup score (A-E)
Count EAB exit holes 1.25m≥ x ≥1.5m
Woodpecker and epicormic marked present (1) or absent (0)

CLEVELAND METROPARKS Plant Community Assessment Program - Plant Cover and Earth Surface

Project Label: PCAP Project Name: 01RR2012 Plot No.: 1218

STANDING BIOMASS (required for emergent wetlands): collected in 0.1m clip plots (32x32 cm) from corners 1 and 3 in each intensive module. Required for VIBI-E score calculation. C?=check when collected

Module #	C?	Corner	Corner

CLASSIFICATION

(FIT = excellent, g Fit and Confidence

Hydrogeomorphic class (WETLANDS ONLY):

- ☐ DEPRESSION Fit=___ Conf=___
- ☐ IMPOUNDMENT ☐ Beaver ☐ Human Fit=___ Conf=___
- ☐ RIVERINE ☐ Headwater ☐ Mainstem ☐ Channel Fit=___ Conf=___
- ☐ SLOPE (ground water hydrology or on a physical slope) Fit=___ Conf=___
- ☐ FRINGING ☐ Reservoir ☐ Natural Lake Fit=___ Conf=___
- ☐ COASTAL (specify subclass) Fit=___ Conf=___
- ☐ BOG (strongly, moderately, weekly ombrotrophic) Fit=___ Conf=___

Ohio EPA VIBI Plant Community Class (WETLANDS ONLY):

- ☐ FOREST ☐ swamp forest ☐ bog forest ☐ forest seep Fit=___ Conf=___
- ☐ EMERGENT ☐ marsh ☐ wet meadow ☐ open bog Fit=___ Conf=___
- ☐ SHRUB ☐ shrub swamp ☐ tall sh. bog ☐ tall sh. fen Fit=___ Conf=___

McNAB INDICES (degrees) + for up - for down

(FILLED OUT USING GIS PROGRAM - DO NOT FILL OUT IN FIELD)

		LFI*	TSI**
At aspect	N		
+45 degrees	NE		
+90 degrees	E		
+135 degrees	SE		
+180 degrees	S		
+225 degrees	SW		
+270 degrees	W		
+315 degrees	NW		

LFI is angle of plot to the horizon. TSI is angles formed by local slopes. For TSI measure angle from recorders eye to eye of person standing ~10 m away

* Landform Index (position within landscape)

** Terrain Shape Index (site microtopographic shape)

MICROTOPOGRAPHIC FEATURE COUNTS - Intensive modules only

Ranks for microhabitat features. Select one or select two and average the score. **NOTE:** If mod falls on a slope automatically gets ranked based on steepness (1-3) to begin + any features present

Slope 1 = slight elevational grade across module (hill) **Slope 2** = falls on slope ~20° **Slope 3** = maximum steepness that can be safely sampled ~45°

0 feature is absent or functionally absent from the wetland

3 feature is present in the wetland in very small amounts or if more common, of low quality

7 feature is present in moderate amounts, but not of highest quality, or in small amounts of highest quality

10 feature is present in moderate or greater amounts and of highest quality

c.w.d. - count for pieces with minimum 1m length

mod#	corner	no. of tussocks depth 3 1x1m (count)	no. of hummocks uplands (Tip-Ups) depth 2 3.16x3.16m (count)	no. macro. depressions depth 1 10x10m (count)	c.w.d (2-12 cm) depth 1 10x10m (count)	c.w.d (12-40cm) depth 1 10x10m (count)	c.w.d >40 cm depth 1 10x10m (count)	microhab. interspers. depth 1 10x10m (rank)	microhab. SLOPE 10x10m (rank)
2		0	0	2	9	6	0	3	0
3		0	0	3	12	7	0	2	0
8		0	0	2	11	4	1	~~2~~ 3	0
9		0	0	2	10	6	0	2	0

NOTE: tussock and hummocks are counted in BOTH nested quadrat corners but counts are aggregated.

CROWN COVER (DENSIOMETER): Make 4 readings per module facing N, S, E, W. Place dot count in coresponding space. (4 dots per grid square)

Module	N	S	E	W
2	5	3	5	4
3	4	5	3	4
8	4	7	6	6
9	10	7	9	6

CLEVELAND METROPARKS Plant Community Assessment Program - Soils, Crown Cover, Standing Biomass Data Sheet 6a

Project label: PCAP Project Name: 01RR2012 Plot No.: 1218

Cleveland Metroparks

SOIL PIT DESCRIPTION: Excavate 20 cm plug wih shovel. Describe using Munsell chart, visual exam, texture, and odor.

Soil pit module # 8 (one per entire plot)

5 cm	matrix color	10yr/2/2
	mottle color	N/A
	%mottle	0
	oxid roots	Y (N)
	texture*	1
	redox features**	Y (N)
	hydr. cond.***	I S (M) D
20 cm	matrix color	10yr/3/2
	mottle color	N/A
	%mottle	0
	oxid roots	Y (N)
	texture*	1
	redox features**	Y (N)
	hydro. cond.***	I S (M) D

* refer to texture classes on reverse side

** e.g. hydrogen sulfide odor, gleying, etc.

*** Circle one:
I=indundated S=saturated M=moist D=dry

Notes: include evidence of earthworms (worms, castings, middens)

Castings present throughout plot

SOIL SAMPLES Standard procedure: collect a soil sample of the top 10 cm of soil from center of each intensive module and composite the sample

Soil Collection Module	Horizon (A, B, C)
2,3,8,9 composited	A

Web Soil Survey Information

Soil Series/Type: BrF, Bracksville Silt Loam

Soil Series Source: Ohio Soil Survey

Landform type: Drainageways

Depth to rest. Layer: 20-40" 76.15cm

Parent Material: Residuum weathered from shale.

DRAINAGE

- ☐ Excessively dr.
- ☐ Somewhat excessively
- ☒ Well drained
- ☐ Moderately well dr.
- ☐ Somewhat poorly dr.
- ☐ Very poorly dr.
- ☐ Impermeable surface

WSS: JTP 6/8/12

SOIL DEPTH MEASUREMENT: Measure to the nearest 0.1 cm in center of intensive modules. If >30.5 cm, record as >30

mod#	1 litter+ organic depth (cm)	2 litter depth (cm)	water depth (cm)	depth sat soil (cm)
2	2.5	2.5	Ø	>30
3	4.2	4.0	Ø	>30
8	3.5	3.5	Ø	730
9	2.0	2.0	Ø	730

EARTH SURFACE & GROUND COVER

Underlying Earth Surface* (Sum = 100%)	percent	Ground Cover (Each ≤ 100%)	percent
Histosol	0	Coarse Woody Debris***	10
Mineral Soil	90	Fine Woody Debris****	5
Gravel-Cobble*	10	Litter	90
Boulder**	0	Duff (Ferm.+ Humus)	0
Bedrock	0	Bryophyte- Lichen	1
* Gravel-Cobble = 1/16-10"		Water	0
**Boulder = > 10 in		Bare Soil	2
*** >5 cm in diameter		Road/Trail	8
**** <5 cm in diameter		Other	

TRAIL INFORMATION:

record type and cover for each

Type	%Cover
☐ All Purpose	
☐ Bridle	
☑ Hiking sanctioned	5
☐ Bootleg unsanctioned	
☐ Gravel	
☐ Deer	
VRoad	3

Apt

Valley Parkway

COVER BY STRATA %

estimate using midpoints of 5,ex:3, 8, 13

Strata	Height Range (m)	Total Cover (%)
Tree	5 - x	88
Shrub	0.5-5	~~18~~ 43
Herb	x - 0.5	23
(Floating)*	-	—
(Aquatic)*	-	—

* rooted and floating or slightly emersed

** submersed, most plant mass below surface

SEE BACK OF PAGE FOR "TYPICAL"STRATA DESCRIPTIONS. STRATA CAN VARY BY COVER TYPE.

STAND SIZE

- ☐ >600 x plot size
- ☐ > 100 x plot size
- ☐ 10-100 x plot size
- ☑ 3-10 x plot size
- ☐ 1-3 x plot size
- ☐ < plot size

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (initial): _____

Site ID: OHPCAP1218 RR DATE: 6 / 11 / 2012

Location: ○ AA Center ○ N ○ S ○ E ● W

Fill in bubble(s) if plot(s) could not be sampled and flag → ○ Plot 1 ○ Plot 2 ● Plot 3 — 3

Buffer Natural Cover Strata

Fill in bubbles for all that apply: Canopy Type: D = Deciduous; E = Evergreen. Leaf Type: B = Broadleaf; N = Needle Leaf. Absent: No tree canopy.
Strata Section: Fill in appropriate cover class bubble for each strata type for each plot. 0 = Absent; 1 = Sparse(<10%); 2=Moderate(10-40%); 3 = Heavy (40-75%); 4 = Very Heavy (>75%)

	Buffer Plot 1 (Canopy Type: ● E, Leaf Type: ● N, Absent: ○, Flag)	Buffer Plot 2 (Canopy Type: ● E, Leaf Type: ● N, Absent: ○, Flag)	Buffer Plot 3 (Canopy Type: ○ D ○ E, Leaf Type: ○ B ○ N, Absent: ○, Flag)
Big Trees (>0.3m DBH)	0 1 ● 3 4	● 1 2 3 4	0 1 2 3 4
Small Trees (<0.3m DBH)	0 1 2 ● 4	0 1 2 ● 4	0 1 2 3 4
Woody Shrubs, Saplings (0.5m-5m HIGH)	0 ● 2 3 4	0 1 ● 3 4	0 1 2 3 4
Woody Shrubs, Saplings (<0.5m HIGH)	0 ● 2 3 4	● 1 2 3 4	0 1 2 3 4
Herbs, Forbs and Grasses	0 ● 2 3 4	0 1 2 ● 4	0 1 2 3 4
Bare ground	0 1 2 3 ●	● 1 2 3 4	0 1 2 3 4
Litter, duff	0 ● 2 3 4	0 ● 2 3 4	0 1 2 3 4
Rock	0 ● 2 3 4	● 1 2 3 4	0 1 2 3 4
Water	● 1 2 3 4	● 1 2 3 4	0 1 2 3 4
Submerged Vegetation	● 1 2 3 4	● 1 2 3 4	0 1 2 3 4

Stressor Presence/Absence - Confirm that a filled data bubble indicates presence and an unfilled bubble indicates absence by filling this bubble. ●

Residential and Urban Stressors — Fill bubble if present - Plot	1	2	3	Flag
Road - gravel	○	○	○	
Road - two lane	○	●	○	2
Road - four lane	○	○	○	
Parking Lot/Pavement	○	○	○	
Golf Course	○	○	○	
Lawn/Park	○	○	○	
Suburban Residential	○	○	○	
Urban/Multifamily	○	○	○	
Landfill	○	○	○	
Dumping	○	○	○	
Trash	○	○	○	
Other: _____	○	○	○	
Other: _____	○	○	○	

Hydrology Stressors — Fill bubble if present - Plot	1	2	3	Flag
Ditches, Channelization	●	○	○	
Dike/Dam/Road/RR Bed (IMPEDE FLOW)	○	○	○	
Water Level Control Structure	●	○	○	1
Excavation, Dredging	○	○	○	
Fill/Spoil Banks	○	○	○	
Freshly Deposited Sediment (UNVEGETATED)	○	○	○	
Soil Loss/Root Exposure	○	○	○	
Wall/Riprap	○	○	○	
Inlets, Outlets	○	○	○	
Point Source/Pipe (EFFLUENT OR STORMWATER)	○	○	○	
Impervious surface input (SHEETFLOW)	○	●	○	2
Other: _____	○	○	○	
Other: _____	○	○	○	

Agricultural & Rural Stressors — Fill bubble if present - Plot	1	2	3	Flag
Pasture/Hay	○	○	○	
Range	○	○	○	
Row Crops	○	○	○	
Fallow Field (RECENT-RESTING ROW CROP FIELD)	○	○	○	
Fallow Field (OLD - GRASS, SHRUBS, TREES)	○	○	○	
Nursery	○	○	○	
Dairy	○	○	○	
Orchard	○	○	○	
Confined Animal Feeding	○	○	○	
Rural Residential	○	○	○	
Gravel Pit	○	○	○	
Irrigation	○	○	○	
Other: _____	○	○	○	

Industrial Development Stressors — Fill bubble if present - Plot	1	2	3	Flag
Oil Drilling	○	○	○	
Gas Wells	○	○	○	
Mine (surface)	○	○	○	
Mine (underground)	○	○	○	
Military	○	○	○	
Other: _____	○	○	○	
Other: _____	○	○	○	
Other: _____	○	○	○	

Habitat/Vegetation Stressors — Fill bubble if present - Plot	1	2	3	Flag
Forest Clear Cut	○	○	○	
Forest Selective Cut	○	○	○	
Tree Plantation	○	○	○	
Tree Canopy Herbivory (INSECT)	○	○	○	
Shrub Layer Browsed (WILD OR DOMESTIC)	○	○	○	
Highly Grazed Grasses (OVERALL <3" HIGH)	○	○	○	
Recently Burned Forest Canopy	○	○	○	
Recently Burned Grassland (BLACKENED)	○	○	○	

Habitat/Vegetation Stressors — Fill bubble if present - Plot	1	2	3	Flag
Herbicide Use	○	○	○	
Mowing/Shrub Cutting	○	○	○	
Trails	○	○	○	
Soil Compaction (ANIMAL OR HUMAN)	○	○	○	
Offroad vehicle damage	○	○	○	
Soil erosion (FROM WIND, WATER, OR OVERUSE)	○	○	○	
Other: _____	○	○	○	
Other: _____	○	○	○	

Flag codes: K = No measurement made, U = Suspect measurement., F1,F2, etc. = misc. flags assigned by each field crew.
Explain all flags in comment section on the back of this form

2428168304

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (initial): _____

Site ID: 01PCAP1218 DATE: 06 / 11 / 2012

Location: ● AA Center ○ N ○ S ○ E ○ W

Fill in bubble(s) if plot(s) could not be sampled and flag → ○ Plot 1 ○ Plot 2 ○ Plot 3

Buffer Natural Cover Strata

Fill in bubbles for all that apply: Canopy Type: D = Deciduous; E = Evergreen. Leaf Type: B = Broadleaf; N = Needle Leaf. Absent: No tree canopy.
Strata Section: Fill in appropriate cover class bubble for each strata type for each plot. 0 = Absent; 1 = Sparse(<10%); 2=Moderate(10-40%); 3 = Heavy (40-75%); 4 = Very Heavy (>75%)

Buffer Plot 1	Canopy Type: D ● E	Absent: ○	Leaf Type: B ● N	Flag	Buffer Plot 2	Canopy Type: D ● E	Absent: ○	Leaf Type: B ● N	Flag	Buffer Plot 3	Canopy Type: D ○ E	Absent: ○	Leaf Type: B ○ N	Flag
Big Trees (>0.3m DBH)	0 1 ● 3 4				Big Trees (>0.3m DBH)	0 1 2 3 4				Big Trees (>0.3m DBH)	0 1 2 3 4			
Small Trees (<0.3m DBH)	0 1 2 ● 4				Small Trees (<0.3m DBH)	0 1 2 3 4				Small Trees (<0.3m DBH)	0 1 2 3 4			
Woody Shrubs, Saplings (0.5m-5m HIGH)	0 1 2 ● 4				Woody Shrubs, Saplings (0.5m-5m HIGH)	0 1 2 3 4				Woody Shrubs, Saplings (0.5m-5m HIGH)	0 1 2 3 4			
Woody Shrubs, Saplings (<0.5m HIGH)	0 ● 2 3 4				Woody Shrubs, Saplings (<0.5m HIGH)	0 1 2 3 4				Woody Shrubs, Saplings (<0.5m HIGH)	0 1 2 3 4			
Herbs, Forbs and Grasses	0 ● 2 3 4				Herbs, Forbs and Grasses	0 1 2 3 4				Herbs, Forbs and Grasses	0 1 2 3 4			
Bare ground	0 ● 2 3 4				Bare ground	0 1 2 3 4				Bare ground	0 1 2 3 4			
Litter, duff	0 1 2 3 ●				Litter, duff	0 1 2 3 4				Litter, duff	0 1 2 3 4			
Rock	● 1 2 3 4				Rock	0 1 2 3 4				Rock	0 1 2 3 4			
Water	● 1 2 3 4				Water	0 1 2 3 4				Water	0 1 2 3 4			
Submerged Vegetation	● 1 2 3 4				Submerged Vegetation	0 1 2 3 4				Submerged Vegetation	0 1 2 3 4			

Stressor Presence/Absence - Confirm that a filled data bubble indicates presence and an unfilled bubble indicates absence by filling this bubble. ●

Residential and Urban Stressors

Fill bubble if present - Plot	1	2	3	Flag
Road - gravel	○	○	○	
Road - two lane	○	○	○	
Road - four lane	○	○	○	
Parking Lot/Pavement	○	○	○	
Golf Course	○	○	○	
Lawn/Park	○	○	○	
Suburban Residential	○	○	○	
Urban/Multifamily	○	○	○	
Landfill	○	○	○	
Dumping	○	○	○	
Trash	○	○	○	
Other: _____	○	○	○	
Other: _____	○	○	○	

Hydrology Stressors

Fill bubble if present - Plot	1	2	3	Flag
Ditches, Channelization	○	○	○	
Dike/Dam/Road/RR Bed (IMPEDE FLOW)	○	○	○	
Water Level Control Structure	○	○	○	
Excavation, Dredging	○	○	○	
Fill/Spoil Banks	○	○	○	
Freshly Deposited Sediment (UNVEGETATED)	○	○	○	
Soil Loss/Root Exposure	○	○	○	
Wall/Riprap	○	○	○	
Inlets, Outlets	○	○	○	
Point Source/Pipe (EFFLUENT OR STORMWATER)	○	○	○	
Impervious surface input (SHEETFLOW)	○	○	○	
Other: _____	○	○	○	
Other: _____	○	○	○	

Agricultural & Rural Stressors

Fill bubble if present - Plot	1	2	3	Flag
Pasture/Hay	○	○	○	
Range	○	○	○	
Row Crops	○	○	○	
Fallow Field (RECENT-RESTING ROW CROP FIELD)	○	○	○	
Fallow Field (OLD - GRASS, SHRUBS, TREES)	○	○	○	
Nursery	○	○	○	
Dairy	○	○	○	
Orchard	○	○	○	
Confined Animal Feeding	○	○	○	
Rural Residential	○	○	○	
Gravel Pit	○	○	○	
Irrigation	○	○	○	
Other: _____	○	○	○	

Industrial Development Stressors

Fill bubble if present - Plot	1	2	3	Flag
Oil Drilling	○	○	○	
Gas Wells	○	○	○	
Mine (surface)	○	○	○	
Mine (underground)	○	○	○	
Military	○	○	○	
Other: _____	○	○	○	
Other: _____	○	○	○	
Other: _____	○	○	○	

Habitat/Vegetation Stressors

Fill bubble if present - Plot	1	2	3	Flag
Forest Clear Cut	○	○	○	
Forest Selective Cut	○	○	○	
Tree Plantation	○	○	○	
Tree Canopy Herbivory (INSECT)	○	○	○	
Shrub Layer Browsed (WILD OR DOMESTIC)	●	○	○	
Highly Grazed Grasses (OVERALL <3" HIGH)	○	○	○	
Recently Burned Forest Canopy	○	○	○	
Recently Burned Grassland (BLACKENED)	○	○	○	

Fill bubble if present - Plot	1	2	3	Flag
Herbicide Use	○	○	○	
Mowing/Shrub Cutting	○	○	○	
Trails	○	○	○	
Soil Compaction (ANIMAL OR HUMAN)	○	○	○	
Offroad vehicle damage	○	○	○	
Soil erosion (FROM WIND, WATER, OR OVERUSE)	○	○	○	
Other: _____	○	○	○	
Other: _____	○	○	○	

Flag codes: K = No measurement made, U = Suspect measurement., F1,F2, etc. = misc. flags assigned by each field crew.
Explain all flags in comment section on the back of this form

2428168304

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (initial): _____

Site ID: RCIPCAP121BRK

DATE: 06/11/2012

Location: ○ AA Center ● N ○ S ○ E ○ W

Fill in bubble(s) if plot(s) could not be sampled and flag → ○ Plot 1 ● Plot 2 ● Plot 3 | 1

Buffer Natural Cover Strata

Fill in bubbles for all that apply: Canopy Type: D = Deciduous; E = Evergreen. Leaf Type: B = Broadleaf; N = Needle Leaf. Absent: No tree canopy
Strata Section: Fill in appropriate cover class bubble for each strata type for each plot. 0 = Absent; 1 = Sparse(<10%); 2=Moderate(10-40%); 3 = Heavy (40-75%); 4 = Very Heavy (>75%)

Buffer Plot 1	Canopy Type: ● D ○ E; Leaf Type: ● B ○ N; Absent: ○; Flag					
Big Trees (>0.3m DBH)	● 0	○ 1	○ 2	○ 3	○ 4	
Small Trees (<0.3m DBH)	● 0	○ 1	○ 2	○ 3	○ 4	
Woody Shrubs, Saplings (0.5m-5m HIGH)	○ 0	○ 1	● 2	○ 3	○ 4	
Woody Shrubs, Saplings (<0.5m HIGH)	○ 0	○ 1	● 2	○ 3	○ 4	
Herbs, Forbs and Grasses	○ 0	○ 1	● 2	○ 3	○ 4	
Bare ground	○ 0	○ 1	● 2	● 3	○ 4	
Litter, duff	○ 0	● 1	○ 2	○ 3	○ 4	
Rock	○ 0	● 1	○ 2	○ 3	○ 4	
Water	● 0	○ 1	○ 2	○ 3	○ 4	
Submerged Vegetation	● 0	○ 1	○ 2	○ 3	○ 4	

Buffer Plot 2	Canopy Type: ● D ○ E; Leaf Type: ● B ○ N; Absent: ○; Flag					
Big Trees (>0.3m DBH)	○ 0	○ 1	○ 2	○ 3	○ 4	
Small Trees (<0.3m DBH)	○ 0	○ 1	○ 2	○ 3	○ 4	
Woody Shrubs, Saplings (0.5m-5m HIGH)	○ 0	○ 1	○ 2	○ 3	○ 4	
Woody Shrubs, Saplings (<0.5m HIGH)	○ 0	○ 1	○ 2	○ 3	○ 4	
Herbs, Forbs and Grasses	○ 0	○ 1	○ 2	○ 3	○ 4	
Bare ground	○ 0	○ 1	○ 2	○ 3	○ 4	
Litter, duff	○ 0	○ 1	○ 2	○ 3	○ 4	
Rock	○ 0	○ 1	○ 2	○ 3	○ 4	
Water	○ 0	○ 1	○ 2	○ 3	● 4	
Submerged Vegetation	○ 0	○ 1	○ 2	○ 3	○ 4	

Buffer Plot 3	Canopy Type: ● D ○ E; Leaf Type: ● B ○ N; Absent: ○; Flag					
Big Trees (>0.3m DBH)	○ 0	○ 1	○ 2	○ 3	○ 4	
Small Trees (<0.3m DBH)	○ 0	○ 1	○ 2	○ 3	○ 4	
Woody Shrubs, Saplings (0.5m-5m HIGH)	○ 0	○ 1	○ 2	○ 3	○ 4	
Woody Shrubs, Saplings (<0.5m HIGH)	○ 0	○ 1	○ 2	○ 3	○ 4	
Herbs, Forbs and Grasses	○ 0	○ 1	○ 2	○ 3	○ 4	
Bare ground	○ 0	○ 1	○ 2	○ 3	○ 4	
Litter, duff	○ 0	○ 1	○ 2	○ 3	○ 4	
Rock	○ 0	○ 1	○ 2	○ 3	○ 4	
Water	○ 0	○ 1	○ 2	○ 3	○ 4	
Submerged Vegetation	○ 0	○ 1	○ 2	○ 3	○ 4	

Stressor Presence/Absence - Confirm that a filled data bubble indicates presence and an unfilled bubble indicates absence by filling this bubble.

Residential and Urban Stressors

Fill bubble if present - Plot	1	2	3	Flag
Road - gravel	○	○	○	
Road - two lane	●	○	○	
Road - four lane	○	○	○	
Parking Lot/Pavement	○	○	○	
Golf Course	○	○	○	
Lawn/Park	○	○	○	
Suburban Residential	○	○	○	
Urban/Multifamily	○	○	○	
Landfill	○	○	○	
Dumping	○	○	○	
Trash	○	○	○	
Other:	○	○	○	
Other:	○	○	○	

Hydrology Stressors

Fill bubble if present - Plot	1	2	3	Flag
Ditches, Channelization	●	○	○	
Dike/Dam/Road/RR Bed (RESTRICTS FLOW)	○	○	○	
Water Level Control Structure	○	○	○	
Excavation, Dredging	○	○	○	
Fill/Spoil Banks	○	○	○	
Freshly Deposited Sediment (EVIDENCE OF)	●	○	○	
Soil Loss/Root Exposure	●	○	○	
Wall/Riprap	○	○	○	
Inlets, Outlets	○	○	○	
Point Source/Pipe (EFFLUENT OR STORMWATER)	○	○	○	
Impervious Surface Input (SHEETFLOW)	●	○	○	
Other:	○	○	○	
Other:	○	○	○	

Agricultural & Rural Stressors

Fill bubble if present - Plot	1	2	3	Flag
Pasture/Hay	○	○	○	
Range	○	○	○	
Row Crops	○	○	○	
Fallow Field (RECENT/RESTING ROW CROP FIELD)	○	○	○	
Fallow Field (OLD- GRASS, SHRUBS, TREES)	○	○	○	
Nursery	○	○	○	
Dairy	○	○	○	
Orchard	○	○	○	
Confined Animal Feeding	○	○	○	
Rural Residential	○	○	○	
Gravel Pit	○	○	○	
Irrigation	○	○	○	
Other:	○	○	○	

Industrial Development Stressors

Fill bubble if present - Plot	1	2	3	Flag
Oil Drilling	○	○	○	
Gas Wells	○	○	○	
Mine (surface)	○	○	○	
Mine (underground)	○	○	○	
Military	○	○	○	
Other:	○	○	○	
Other:	○	○	○	
Other:	○	○	○	

Habitat/Vegetation Stressors

Fill bubble if present - Plot	1	2	3	Flag
Forest Clear Cut	○	○	○	
Forest Selective Cut	○	○	○	
Tree Plantation	○	○	○	
Tree Canopy Herbivory (INSECT)	○	○	○	
Shrub Layer Browsed (WILD/DOMESTIC)	○	○	○	
Highly Grazed Grasses (DEFOLIATED)	○	○	○	
Recently Burned Forest Canopy	○	○	○	
Recently Burned Grassland (BLACKENED)	○	○	○	

Fill bubble if present - Plot	1	2	3	Flag
Herbicide Use	○	○	○	
Mowing/Shrub Cutting	○	○	○	
Trails	○	○	○	
Soil Compaction (ANIMAL OR HUMAN)	○	○	○	
Offroad vehicle damage	○	○	○	
Soil erosion (FROM WIND, WATER OR UNDERCUT)	●	○	○	
Other:	○	○	○	
Other:	○	○	○	

Flag codes: X = no measurement made, U = Suspect measurement, F1, F2, etc. = misc. flags assigned by each field crew. Explain all flags in comment section on the back of this form

2428168304

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (initial): _____

Site ID: ~~04~~ PLAP 1218 RR

DATE: 06/11/2012

Location: ○ AA Center ✓N ○ S ● E ○ W

Fill in bubble(s) if plot(s) could not be sampled and flag → ○ Plot 1 ○ Plot 2 ○ Plot 3

Buffer Natural Cover Strata

Fill in bubbles for all that apply: Canopy Type: D = Deciduous; E = Evergreen. Leaf Type: B = Broadleaf; N = Needle Leaf. Absent: No tree canopy.
Strata Section: Fill in appropriate cover class bubble for each strata type for each plot. 0 = Absent; 1 = Sparse(<10%); 2=Moderate(10-40%); 3 = Heavy (40-75%); 4 = Very Heavy (>75%)

Buffer Plot 1	Canopy Type: ● E	Absent: ○	Leaf Type: ● N	Flag	Buffer Plot 2	Canopy Type: ● E	Absent: ○	Leaf Type: ● N	Flag	Buffer Plot 3	Canopy Type: ● E	Absent: ○	Leaf Type: ● N	Flag
Big Trees (>0.3m DBH)	0 1 ● 3 4				Big Trees (>0.3m DBH)	0 1 2 ● 4				Big Trees (>0.3m DBH)	0 1 2 ● 4			
Small Trees (<0.3m DBH)	0 1 2 ● 4				Small Trees (<0.3m DBH)	0 1 ● 3 4				Small Trees (<0.3m DBH)	0 1 2 3 ●			
Woody Shrubs, Saplings (0.5m-5m HIGH)	0 1 2 3 ●				Woody Shrubs, Saplings (0.5m-5m HIGH)	0 1 2 ● 4				Woody Shrubs, Saplings (0.5m-5m HIGH)	0 1 2 ● 4			
Woody Shrubs, Saplings (<0.5m HIGH)	0 ● 2 3 4				Woody Shrubs, Saplings (<0.5m HIGH)	0 1 ● 3 4				Woody Shrubs, Saplings (<0.5m HIGH)	0 1 ● 3 4			
Herbs, Forbs and Grasses	0 1 ● 3 4				Herbs, Forbs and Grasses	0 1 ● 3 4				Herbs, Forbs and Grasses	0 1 ● 3 4			
Bare ground	0 ● 2 3 4				Bare ground	0 ● 2 3 4				Bare ground	0 ● 2 3 4			
Litter, duff	0 1 2 3 ●				Litter, duff	0 1 2 3 ●				Litter, duff	0 1 2 3 ●			
Rock	● 1 2 3 4				Rock	● 1 2 3 4				Rock	0 ● 2 3 4			
Water	● 1 2 3 4				Water	● 1 2 3 4				Water	● 1 2 3 4			
Submerged Vegetation	● 1 2 3 4				Submerged Vegetation	● 1 2 3 4				Submerged Vegetation	● 1 2 3 4			

Stressor Presence/Absence - Confirm that a filled data bubble indicates presence and an unfilled bubble indicates absence by filling this bubble. ●

Residential and Urban Stressors

Fill bubble if present - Plot	1	2	3	Flag
Road - gravel	○	○	●	
Road - two lane	○	○	○	
Road - four lane	○	○	○	
Parking Lot/Pavement	○	○	○	
Golf Course	○	○	○	
Lawn/Park	○	○	○	
Suburban Residential	○	○	○	
Urban/Multifamily	○	○	○	
Landfill	○	○	○	
Dumping	○	○	○	
Trash	●	○	○	
Other: _____	○	○	○	
Other: _____	○	○	○	

Hydrology Stressors

Fill bubble if present - Plot	1	2	3	Flag
Ditches, Channelization	○	○	○	
Dike/Dam/Road/RR Bed (IMPEDE FLOW)	○	○	○	
Water Level Control Structure	○	○	○	
Excavation, Dredging	○	○	○	
Fill/Spoil Banks	○	○	○	
Freshly Deposited Sediment (UNVEGETATED)	○	○	○	
Soil Loss/Root Exposure	○	○	○	
Wall/Riprap	○	○	○	
Inlets, Outlets	○	○	○	
Point Source/Pipe (EFFLUENT OR STORMWATER)	○	○	○	
Impervious surface input (SHEETFLOW)	○	○	○	
Other: _____	○	○	○	
Other: _____	○	○	○	

Agricultural & Rural Stressors

Fill bubble if present - Plot	1	2	3	Flag
Pasture/Hay	○	○	○	
Range	○	○	○	
Row Crops	○	○	○	
Fallow Field (RECENT-RESTING ROW CROP FIELD)	○	○	○	
Fallow Field (OLD - GRASS, SHRUBS, TREES)	○	○	○	
Nursery	○	○	○	
Dairy	○	○	○	
Orchard	○	○	○	
Confined Animal Feeding	○	○	○	
Rural Residential	○	○	○	
Gravel Pit	○	○	○	
Irrigation	○	○	○	
Other: _____	○	○	○	

Industrial Development Stressors

Fill bubble if present - Plot	1	2	3	Flag
Oil Drilling	○	○	○	
Gas Wells	○	○	○	
Mine (surface)	○	○	○	
Mine (underground)	○	○	○	
Military	○	○	○	
Other: _____	○	○	○	
Other: _____	○	○	○	
Other: _____	○	○	○	

Habitat/Vegetation Stressors

Fill bubble if present - Plot	1	2	3	Flag
Forest Clear Cut	○	○	○	
Forest Selective Cut	○	○	○	
Tree Plantation	○	○	○	
Tree Canopy Herbivory (INSECT)	○	○	○	
Shrub Layer Browsed (WILD OR DOMESTIC)	●	●	●	
Highly Grazed Grasses (OVERALL <3" HIGH)	○	○	○	
Recently Burned Forest Canopy	○	○	○	
Recently Burned Grassland (BLACKENED)	○	○	○	

Fill bubble if present - Plot	1	2	3	Flag
Herbicide Use	○	○	○	
Mowing/Shrub Cutting	○	○	○	
Trails	○	○	○	
Soil Compaction (ANIMAL OR HUMAN)	○	○	○	
Offroad vehicle damage	○	○	○	
Soil erosion (FROM WIND, WATER, OR OVERUSE)	○	○	○	
Other: _____	○	○	○	
Other: _____	○	○	○	

Flag codes: K = No measurement made, U = Suspect measurement., F1,F2, etc. = misc. flags assigned by each field crew.
Explain all flags in comment section on the back of this form

2428168304

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (initial): _____

Site ID: ~~X~~ PCAP 1218 RR

DATE: 06/11/2012

Location: ○ AA Center ○ N ● S ○ E ○ W

Fill in bubble(s) if plot(s) could not be sampled and flag → ○ Plot 1 ○ Plot 2 ○ Plot 3

Buffer Natural Cover Strata

Fill in bubbles for all that apply: Canopy Type: D = Deciduous; E = Evergreen. Leaf Type: B = Broadleaf; N = Needle Leaf. Absent: No tree canopy.
Strata Section: Fill in appropriate cover class bubble for each strata type for each plot. 0 = Absent; 1 = Sparse(<10%); 2=Moderate(10-40%); 3 = Heavy (40-75%); 4 = Very Heavy (>75%)

Buffer Plot 1	Canopy Type: D ● E ○ Absent: ○ Leaf Type: B ● N ○ Flag						Buffer Plot 2	Canopy Type: D ● E ○ Absent: ○ Leaf Type: B ● N ○ Flag						Buffer Plot 3	Canopy Type: D ● E ○ Absent: ○ Leaf Type: B ● N ○ Flag					
Big Trees (>0.3m DBH)	0	1	●	3	4		Big Trees (>0.3m DBH)	⊗	1	●	3	4		Big Trees (>0.3m DBH)	0	1	2	●	4	
Small Trees (<0.3m DBH)	0	1	2	●	4		Small Trees (<0.3m DBH)	0	1	●	⊗	4		Small Trees (<0.3m DBH)	0	1	●	3	4	
Woody Shrubs, Saplings (0.5m-5m HIGH)	0	1	2	3	●		Woody Shrubs, Saplings (0.5m-5m HIGH)	0	1	2	●	4		Woody Shrubs, Saplings (0.5m-5m HIGH)	0	1	●	3	4	
Woody Shrubs, Saplings (<0.5m HIGH)	0	●	2	3	4		Woody Shrubs, Saplings (<0.5m HIGH)	0	●	2	3	4		Woody Shrubs, Saplings (<0.5m HIGH)	0	●	2	3	4	
Herbs, Forbs and Grasses	0	●	2	3	4		Herbs, Forbs and Grasses	0	●	2	3	4		Herbs, Forbs and Grasses	0	●	2	3	4	
Bare ground	0	●	2	3	4		Bare ground	0	●	2	3	4		Bare ground	0	●	2	3	4	
Litter, duff	0	1	2	3	●		Litter, duff	0	1	2	3	●		Litter, duff	0	1	2	3	●	
Rock	0	●	2	3	4		Rock	●	1	2	3	4		Rock	0	●	2	3	4	
Water	●	1	2	3	4		Water	●	1	2	3	4		Water	●	1	2	3	4	
Submerged Vegetation	●	1	2	3	4		Submerged Vegetation	●	1	2	3	4		Submerged Vegetation	●	1	2	3	4	

Stressor Presence/Absence - Confirm that a filled data bubble indicates presence and an unfilled bubble indicates absence by filling this bubble. ●

Residential and Urban Stressors

Fill bubble if present - Plot	1	2	3	Flag
Road - gravel	○	○	●	
Road - two lane	○	○	○	
Road - four lane	○	○	○	
Parking Lot/Pavement	○	○	○	
Golf Course	○	○	○	
Lawn/Park	○	○	○	
Suburban Residential	○	○	○	
Urban/Multifamily	○	○	○	
Landfill	○	○	○	
Dumping	○	○	○	
Trash	○	●	○	
Other: _____	○	○	○	
Other: _____	○	○	○	

Hydrology Stressors

Fill bubble if present - Plot	1	2	3	Flag
Ditches, Channelization	○	○	○	
Dike/Dam/Road/RR Bed (IMPEDE FLOW)	○	○	○	
Water Level Control Structure	○	○	○	
Excavation, Dredging	○	○	○	
Fill/Spoil Banks	○	○	○	
Freshly Deposited Sediment (UNVEGETATED)	○	○	○	
Soil Loss/Root Exposure	○	○	○	
Wall/Riprap	○	○	○	
Inlets, Outlets	○	○	○	
Point Source/Pipe (EFFLUENT OR STORMWATER)	○	○	○	
Impervious surface input (SHEETFLOW)	○	○	○	
Other: _____	○	○	○	
Other: _____	○	○	○	

Agricultural & Rural Stressors

Fill bubble if present - Plot	1	2	3	Flag
Pasture/Hay	○	○	○	
Range	○	○	○	
Row Crops	○	○	○	
Fallow Field (RECENT-RESTING ROW CROP FIELD)	○	○	○	
Fallow Field (OLD - GRASS, SHRUBS, TREES)	○	○	○	
Nursery	○	○	○	
Dairy	○	○	○	
Orchard	○	○	○	
Confined Animal Feeding	○	○	○	
Rural Residential	○	○	○	
Gravel Pit	○	○	○	
Irrigation	○	○	○	
Other: _____	○	○	○	

Industrial Development Stressors

Fill bubble if present - Plot	1	2	3	Flag
Oil Drilling	○	○	○	
Gas Wells	○	○	○	
Mine (surface)	○	○	○	
Mine (underground)	○	○	○	
Military	○	○	○	
Other: _____	○	○	○	
Other: _____	○	○	○	
Other: _____	○	○	○	

Habitat/Vegetation Stressors

Fill bubble if present - Plot	1	2	3	Flag
Forest Clear Cut	○	○	○	
Forest Selective Cut	○	○	○	
Tree Plantation	○	○	○	
Tree Canopy Herbivory (INSECT)	○	○	○	
Shrub Layer Browsed (WILD OR DOMESTIC)	○	○	○	
Highly Grazed Grasses (OVERALL <3" HIGH)	○	○	○	
Recently Burned Forest Canopy	○	○	○	
Recently Burned Grassland (BLACKENED)	○	○	○	

Fill bubble if present - Plot	1	2	3	Flag
Herbicide Use	○	○	○	
Mowing/Shrub Cutting	○	○	○	
Trails	○	○	○	
Soil Compaction (ANIMAL OR HUMAN)	○	○	○	
Offroad vehicle damage	○	○	○	
Soil erosion (FROM WIND, WATER, OR OVERUSE)	○	○	○	
Other: _____	○	○	○	
Other: _____	○	○	○	

Flag codes: K = No measurement made, U = Suspect measurement., F1,F2, etc. = misc. flags assigned by each field crew.
Explain all flags in comment section on the back of this form

2428168304