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

Project Label: PCAP **Plot No:** 1222 **Date Sampled:** 6/12/12 **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	
Ash trees mapped		(Y) N	
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	KEL 6-29-12
Web Soil Survey		(Y) N	SAC 6/15/12
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:

After yellow curve arrow sign

Park on the west of Valley Pkwy after Spafford Rd and crossing the river bridge. Cross river near larger concrete wall, there is a shallow riffle - depending on rain may only need rubber boots

CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet

GENERAL INFORMATION

Project Label: PCAP

Project Name: 01RR2012

Plot Name: Plot of Death

Plot No.: 1222

☐ Level 4 (no nested corners sampled)

■ Level 5 (nested corners sampled)

Date (mm/dd/yyyy): 6 / 12 / 2012

End date (if > 1 day): / /

Party	Role**
Z. Barton	Plot leader
A. Young	Bot. Asst.
S. Cotella	Woody/Soil
L. Huffman	Woody/Soil
T. Kistler	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

TAXONOMIC STANDARD

Authority: G&C Pub Date: 1998

LOCATION

State: OH County: Cuy

Quadrangle: North Olmsted

Local Place Names: Valley Parkway ~~Near between~~ Spafford & ~~Willow bend~~ SAE 8-3-12

Landowner: CM

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): SAE 8-3-12

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

Latitude: 41.39321

Longitude: -81.88471

Coord. Accuracy: ✓ m ☐ ft +- 2.1

GPS File Name: 1222A

Plot size for cover data: 0.05 (hectares)

X-axis Bearing of plot: 360 °

Depth: (1-5): 4

Intensive modules: ~~2, 3, 8, 9~~ 1,2,3,4 (EDIT IF MODIFIED)

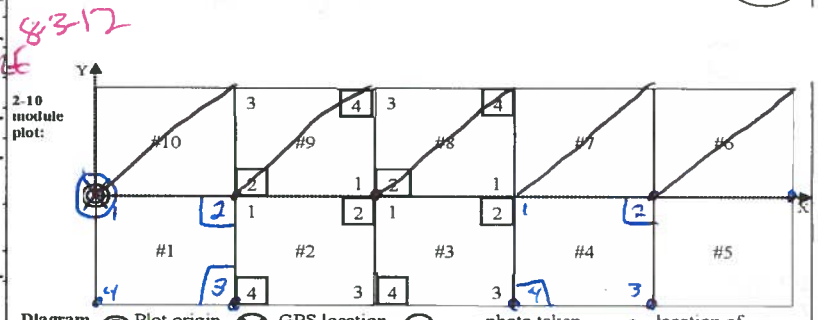
Camera No.: 4

Photo Nos.: 0071

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: 1x5

Location: Plot lands on small island between Rocky River and an old oxbow

Minimum required fields in Bold and Underlined

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

OVER

CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet

GENERAL INFORMATION

Project Label: PCAP

Project Name: OIRR 2012

Plot Name: Plot of Death

Plot No.: 1222

☐ Level 4 (no nested corners sampled)

■ Level 5 (nested corners sampled)

Date (mm/dd/yyyy): 06/12/2012

End date (if > 1 day): / /

Party	Role**
Z. Barton	Plot leader
A. Young	Bot. Asst.
S. Catella	Woody Soil
A L. Huffman	Woody/Soil
T. Kistler	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

TAXONOMIC STANDARD

Authority: G&C Pub Date: 1998

LOCATION

State: OH County: Cuy

Quadrangle: North Olmsted

Local Place Names: Valley Parkway between Stafford & willow bend

Landowner: CM

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):

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

Latitude: 41.39321

Longitude: -81.88471

Coord. Accuracy: ✓ m ☐ ft +- 21

GPS File Name: 1222A

Plot size for cover data: 0.1 (hectares)

X-axis Bearing of plot: [350] °

Depth: (1-5): 4

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

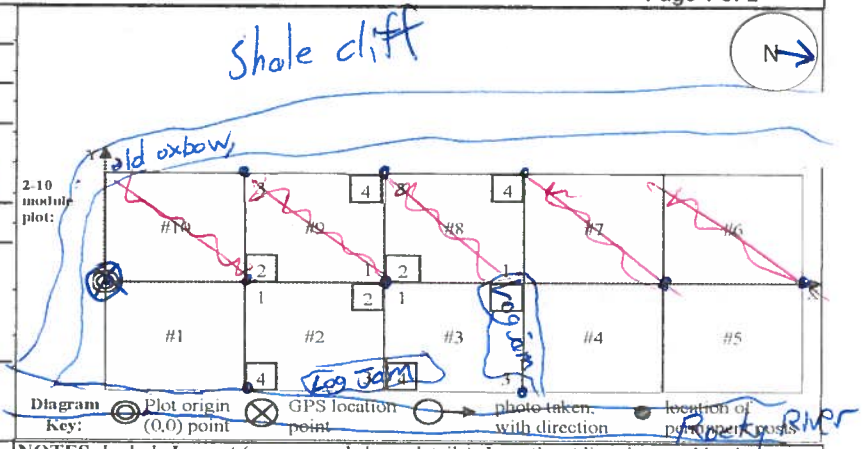
Camera No.: 4

Photo Nos.: 0071

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 context), **Rationale** (why here), and **Veg Characterization** (description of community, dominants, strata, BROWSE). Additional notes in space on back.

Layout: 2x5, There are no pins at (3,0) and (3,1) because of large debris piles

Location: See 2nd coversheet

Original layout

Minimum required fields in Bold and Underlined

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

OVER

CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet

Shale Cliff

GENERAL INFORMATION

Project Label: PCAP

Project Name: DIRR2012

Plot Name:

Plot No.: 1222

☐ Level 4 (no nested corners sampled)

■ Level 5 (nested corners sampled)

Date (mm/dd/yyyy): / /

End date (if > 1 day): / /

Party	Role**
	Plot leader

** 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.				n/a
bryo				
lichen				

TAXONOMIC STANDARD

Authority: G&C Pub Date: 1998

LOCATION

State: OH County: Cuy

Quadrangle:

Local Place Names:

Landowner: CM

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

Coord. Units

; min

Original layout

Coord. Accuracy: ☑ m ☐ ft +- 2.1

GPS File Name: 1222A

Plot size for cover data: 0.1 (hectares)

X-axis Bearing of plot: ~~245~~ 350°

Depth: (1-5): 4

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

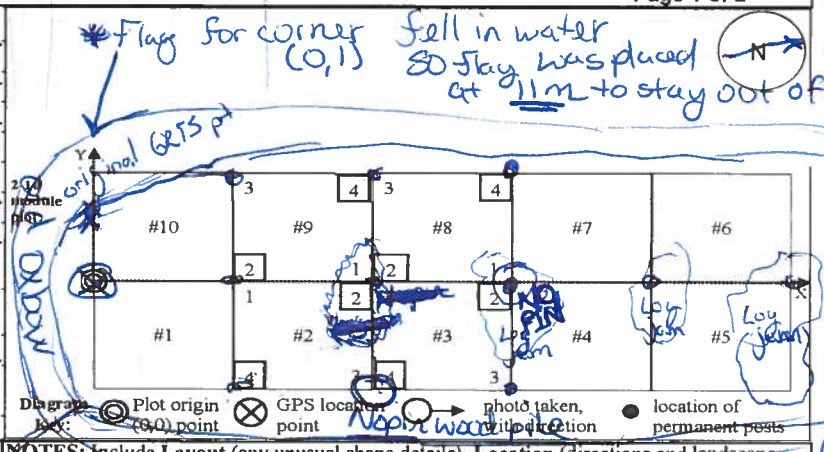
Camera No.:

Photo Nos.:

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: 2 x 5 *No pin at 30m and flag is off because giant log jam

*No pin at (2,-1)

Location: Park on gravel pulloff after Spafford Rd and river crossing on Valley Parkway. Head west and cross river near large concreet wall (shallow riffle). Plot is located near small oxbow (no water) that creates a semi-island next to the river and shale cliff

Rationale: Original grts pt fell approx 5m west on the origin line. Shifted plot to be able to fit 2 x 5. GPS was acting goofy so used map to determine point

Veg Char: Sycamore, Maples
Spice Bush, Hawthorn
Herb: Dense herbaceous layer w/ Elymus, Equisetum, Solidagos, Eupatoriums, Rosa multiflora, Plularis
Dense Floodplain herbs

OVER

*Please use caution, lots of giant log jams and you can fall through

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 Page 1 of 5

Project Label: PCAP Project name: OURR2012 Plot no.: 1222

Total modules: 5 Intensive modules: 4 Plot configuration: 1x5 Plot area (ha): 0.05

Visual est. % open water entire site: — Visual est. %unveg.o.w. entire site: — Visual est. %invasives entire site: —

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	4	4	4	2	1	3	1	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	5			1	6			1	1			1	2				
%unveg. litter (bare litter)	1	3			1	5			1	7			1	3				

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
9	5					Acer saccharum			4	8			4	9	4		4	9			4	6	2							
		2				Impatiens sp			3	2			4	2	2		2	2	3				2	2						
		2				Toxicodendron radicans			4	3	4		3	2	3		4	2	3		3	3								
		1				Poa sp			4	1																				
		2				Carex ~~blanda~~ digitalis ZSB 9-5-12	X	ZSB021	4	2	2		1	1			1	2+			1	1								
		2			5*	Fraxinus seedling			4	2	2		3	2			2	2			3	2	2							
		2				Polygonum cespitosum	✓	ZSB023	4	3			3	2	2		4	2				4	2	2	SRS	9-3-12				
6						Platanus occidentalis			2	5									4	5	3	7	4							
		2			5	Eupatorium rugosum			3	3	3		3	2			3	2	2		3	2	4							
		2				Lysimachia nummularia			3	2	4		3	2			3	2			3	1								
		1				Prenanthes sp			3	1			2	1	2															
		2			9*	Aster lateriflorus			3	2	4		1	2			4	2	2		3	2	2							
		2				Elymus ~~sp~~ villosus ZSB 9-25-12	X	ZSB005	3	3	3		1	1							3	3	2							
		3				Phalaris arundinacea			3	3	3						3	3			2	2								
		2				Sanicula gregaria	✓		3	2	3		3	2							1	1								
		2				Pilea pumila			3	2			3	2																
		2				Alliaria petiolata			3	2	2		3	2	2				4	2			4	2						
		1				Taraxacum officinale			3	1							3	1			~~3~~	~~2~~	~~4~~							
		5				Equisetum arvense			3	5	4				2	3	4	2	2		~~3~~	~~6~~	4							
		2				Polygonum virginianum			2	2	4				2	2			2	2	1	2	~~3~~	~~4~~						
		2				Oxalis stricta			3	2	3		3	2	2		1	1+					3	1						
		2				Leersia virginica ~~ca~~			2	2	2		2	2	2		4	2	4				3	1						
		2				Viola sp.			2	2	4		3	2			1	1+			3	2	2							
5	3					Aesculus glabra			2	4	2		1	3			2	4			3	7	4							
		2				Bidens sp.			2	2			2	2									2	1						

CLEVELAND METROPARKS Plant Community Assessment Program Species Cover Data Sheet Page 2 of 5

Project Label: PCAP Project name: (2)RR2012 Plot no.: 1222

Total modules: 5 Intensive modules: 4 Plot configuration: 1x5 Plot area (ha): 0.05

Visual est. % open water entire site: — Visual est. %unveg.o.w. entire site: — Visual est. %invasives entire site: —

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 the each intensive module:	2	4	2	2	3	4	3	2	4	4	4	2	1	3	1	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	depth	cov
		5				Poa trivialis ZSB 9-25-12	X	ZSB 016	2	6			3	6			4	3	2		3	2	2					
		1				Hesperis matronalis			2	1			1	1							1	1						
		2				Maxotis lanceolata ZSB 9-25-12 Scirpus atrovirens	X	ZSB 017	2	2	2		2	2			3	2			3	1						
		2				Acer seedling			2	2	2		3	2	2		2	2					3	1				
	3					Lindera benzoin			2	3	2		2	3	2		3	5	2		2	2						
		2				Ulmus seedling			2	2	3						1	1	+		3	1						
		2				Ranunculus repens sp.	X	ZSB 019	2	2	4		2	2			1	2	+									
		2				Plantago sp.			2	2	3		3	1														
		2				Rubus seedling			2	2	4		2	2	2		2	2	2		3	1	4					
		2				Cryptotaenia canadensis			2	2			2	2	2		2	2	2				2	1				
		2				Ranunculus arbortivus ZSB 9-25-12	X	ZSB 027	2	2																		
		1				unkn. dicot		C2-1638, 39	2	1																		
		1				unkn. dicot 2 (ZSB 026) Euphorbia nutans ZSB 8-23-12		C2-1641, 42	2	1																		
	2	2				Ligustrum vulgare			2	2			1	2			1	1			3	3						
		2				Allium canadense					2	2					1	1	+									
		2				Rumex obtusifolia					3	1	2	2														
		1				Unkn. dicot 3		C4-0002 73	1	1			1	1							1	1						
		2				Lysimachia ciliata			1	2			3	1							1	2						
		2				Acer negundo			2	1					2	2							2	1				
		2				Verbesina alternifolia					2	2	3	2	2						2	2						
	2	1				Crataegus sp.			1	1											1	4						
		2				Carex granularis ZSB 9-25-12	X	ZSB 029	1	2							2	1										
	2	2				Rosa multiflora ZSB 9-25-12					2	2			2	2	2	3			1	3						
		2				Stellaria Unk. dicot ZSB 9-25-12	X	ZSB 006			2	2	1	2														
		2				Festuca subverticillata ZSB 9-25-12	X	ZSB 026			3	2			2	2					4	1						

CLEVELAND METROPARKS Plant Community Assessment Program Species Cover Data Sheet Page 3 of 5

Project Label: PCAP Project name: 01082012 Plot no.: 1222

Total modules: 5 Intensive modules: 4 Plot configuration: 1x5 Plot area (ha): 0.05

Visual est. % open water entire site: — Visual est. %unveg.o.w. entire site: — Visual est. %invasives entire site: —

Cleveland Metroparks

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

Strata - Cov. entire plot

Estimate for the each intensive module:

%open water
%unvegetated open water
%unveg. ground (bare soil)
%unveg. litter (bare litter)

T	S	H	(F)	(A)	Br	Species	C	Voucher #	mod 2 depth	mod 2 cov	corner 2 depth	corner 2 cov	mod 3 depth	mod 3 cov	corner 3 depth	corner 3 cov	mod 4 depth	mod 4 cov	corner 4 depth	corner 4 cov	mod 1 depth	mod 1 cov	corner 1 depth	corner 1 cov	mod R depth	mod R cov	corner R depth	corner R cov
		2				Geum canadense ZSB 9-25-12	X	ZSB020	1	2			1	2					3	2	2	1						
		2				Ranunculus recurvatus ZSB 9-25-12	X	ZSB031	1	2													2	1			
		2				Ranunculus hispidis ZSB 9-25-12	X	ZSB030	1	2											1	1					
		2				Artemisia vulgaris			1	2																	
6						Acer nigrum					4	7	1	2													
3						Fraxinus sp.					4	4															
5						Tilia americana					4	2			3	6											
		2				Geranium maculatum					3	2	1	2													
		2				Elymus villose	✓				3	2	1	1													
		1				Panicum clandestinum ZSB 9-25-12	X	ZSB011			2	1											1	1				
		1				Asarum canadense					2	1															
		1				Anemonella thalictroides					2	1	1	1									1	1				
		1				Moss sp.					2	1	1	1					3	1			1	1				
		2				Maianthemum canadense					2	1	1	1			1	1	+								
		2				Galium triflorum ZSB 9-25-12	X	ZSB024			2	1	3	2									3	2				
		2				Circaea lutetiana					2	1			2	2	2	1					1	1				
		1				Daucus carota			1	1															3	3		
		1				Lonicera morrowii			1	1													2	2				
		1				Lycopus sp.			1	1			1	1									1	1				
		1				Arisaema triphyllum			1	1			2	1					2	1								
		1				Dactylis glomerata ZSB 9-25-12	X	ZSB018	1	1							2	2										
		1				Elytrigia repens			1	1																		
		1				Asteraceae sp.			1	1			3	2	2								1	1				
		1				Cardamine pensylvanica			1	1					2	1												
6					10	Quercus rubra							2	1	2		4	6					1	3				

Duplicate Species SEE 10-10-12

CLEVELAND METROPARKS Plant Community Assessment Program Species Cover Data Sheet Page 4 of 5

Project Label: PCAP Project name: CIRR2012 Plot no.: 1222

Total modules: 5 Intensive modules: 4 Plot configuration: 1x5 Plot area (ha): 0.05

Visual est. % open water entire site. — Visual est. %unveg.o.w. entire site — Visual est. %invasives entire site. —

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	4	4	4	2	1	3	1	2	R	R
	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov	depth	cov
%open water	1	~~2~~ 4			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	corner depth	corner cov	mod depth	mod cov	corner depth	corner cov
		1				~~Unkn dicot 3~~ Lapsana communis		C2-1013 C2-K643 44 SRE 6-27-12					2	1											1	1	SRE	10-10-12							
		1				Liriodendron tulipifera							3	1	2														3	1					
		1				Epipactis helleborine							2	1																					
		2				Carex grayii							1	2			1	2+																	
		1			1?	Solidago sp.							2	1															3	1					
		1				Tussilago farfara							1	1											1	1									
		1				Thalictrum pubescens							1	1																					
		2				Carex ~~rosea~~ radiata ZSB 9-25-12	X	ZSB 022					1	2							2	2													
		1				Unkn dicot 4 ZSB 9-25-12	X	ZSB 007					1	2																					
		2				Parthenocissus quinquefolia									2	2	1	1+			3	3													
		1				Arisaema dracontium									2	1																			
		1				Melilotus sp.									2	1					1	2													
		1				Carex sp							2	1	2						3	2	3												
		1				Glyceria striata							1	1																					
		1				Agrimonia pubescens							1	1																					
		1				Vitis riparia							1	1							1	1													
3						Carya cordiformis							1	4							4	2													
		1			9'	Cornus sp.							1	1			2	1																	
		1				Unkn dicot 5		C4-0094, 75					1	1																					
		1				Aster cordifolius							1	1																					
		2				Viburnum opulus var. opulus SRE 10-10-12											2	2	3		1	1													
		2				~~Ranunculus sp.~~ beum sp.		C4-0088									2	2	2		1	1													
6						Populus deltoides											2	8	4		3	1													
		1				Prunus seedlings													4	1	3	1													
		1				Unknown dicot 6		C4-0089											3	1	3	2	3													

paddle shaped

short wide broad

CLEVELAND METROPARKS Plant Community Assessment Program Species Cover Data Sheet 2a *Page* 5 *of* 5

Project Label: PCAP Project name: _____ Plot no.: _____

Total modules: _____ Intensive modules: _____ Plot configuration: _____ Plot area (ha): _____

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
									4	4	4	2	1	3	1	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	corner depth	corner cov	mod depth	mod cov	corner depth	corner cov
						~~Unknown brassicaceae~~		~~C4-0090,92~~																										
		1				Amelanchier sp.															1	1												
		1				Podophyllum peltatum																									R	1		
		1				Lonicera maackii																									R	1		
		2				Hemerocallis fulva																									R	4		
		1				Sisyrinchium ZSB 9-28-12 angustifolium	X	ZSB 014													1	1												
		1				Asteraceae sp.															4	1												
		1				Euonymous obovatus															3	1												
		1				Zizia sp.		C2-1653													3	1												
		1				Unknown dicot #9		C4-80-81													3	2	3											
		1				Unknown dicot #10		C2-1654,1655													2	1												
		1				~~Solidago~~ Salidago sp. Unk Dicot		C2-1656,1657													2	1												
		1				~~Unknown dicot #11~~ Eupatorium perfoliatum		C2-1658,1659 SRE 9-28-12													2	1												
		1				Unknown dicot #12		C2-1660															4	1										
		1				~~Unknown dicot #13~~ Lobelia sp.		C2-1662													1	1												
		1				~~Aster sp.~~ Lapsana communis SRE 10-10-12		C2-1663													1	1												
		1				Amphilocarpa bracteata															1	2												
		1				Carpinus caroliniana															1	2												
		1				Festuca arundinacea SRE 10-16-12	\	ZSB 028													1	2												
		1				Unknown dicot #14		C2-1664,1665													1	1												
		1				Erigeron annuus															1	1												
		1				Solidago ~~macrophylla~~ flexicaulis															1	2												
		1				Barbarea sp.															1	1												
		1				Solanum dulcamara															1	1												

carbomine

yasping, rommenent midvein

opposite bristly tall thin leaved

main vein whorled glaucus hairy alter nate

Poaceae

ovate leaves basal

Duplicate Species 10-10-12 SRE

SRE 10-

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

Project Label: PCAP Project Name: 01 RR 2012 Plot No.: 1222

Cleveland Metroparks

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)
1	-	0	0	3	12	12	1	3	0
2	-	0	0	2	14	6	0	~~2~~ 3	0
3	-	0	0	3	14	6	0	2	0
4	-	6	0	1	30	35	3	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 corresponding space. (4 dots per grid square)

Module	N	S	E	W
2	4	3	7	4
3	6	2	6	4
~~1~~	13	24	17	17
~~4~~	2	3	1	3
	14	24	26	16
	12	25	18	17
	4	3	6	2
	2	2	1	3
	1	4	2	2

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

Project label: PCAP Project Name: 01 RR 2012 Plot No.: 1222

Cleveland Metroparks

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

Soil pit module # 3 (one per entire plot)

5 cm	matrix color	10yr 2/2	
	mottle color	N/A	
	%mottle	N/A	
	oxid roots	Y	(N)
	texture*	l	
	redox features**	Y	(N)
	hydr. cond.***	I S (M) D	
20 cm	matrix color	2.5y 3/2	
	mottle color	N/A	
	%mottle	N/A	
	oxid roots	Y	(N)
	texture*	2	
	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)

None

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: Ch, Chagrin silt loam

Soil Series Source: Ohio Soil Survey

Landform type: Flood Plains

Depth to rest. Layer: >80"

Parent Material: Alluvium

DRAINAGE

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

WSS: JTP 6/8/12
SAC 6/15/12

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)
1	.5	.5	0	>30
2	.1	.1	0	>30
3	.1	.1	0	>30
4	0.4	0.4	0	>30

EARTH SURFACE & GROUND COVER

Underlying Earth Surface* (Sum = 100%)	percent	Ground Cover (Each ≤ 100%)	percent
Histosol	0	Coarse Woody Debris***	25
Mineral Soil	100	Fine Woody Debris****	8
Gravel-Cobble*	0	Litter	5
Boulder**	0	Duff (Ferm.+ Humus)	0
Bedrock	0	Bryophyte- Lichen	1
* Gravel-Cobble = 1/16-10"		Water	0
**Boulder = > 10 in		Bare Soil	1
*** >5 cm in diameter		Road/Trail	0
**** <5 cm in diameter		Other	

COVER BY STRATA %
estimate using midpoints of 5,ex:3, 8, 13

Strata	Height Range (m)	Total Cover (%)
Tree	>5	88
Shrub	.5 - 5	8
Herb	0 - .5	73
(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.

TRAIL INFORMATION:

record type and cover for each

Type	%Cover
□ All Purpose	
□ Bridle	
□ Hiking sanctioned	
□ Bootleg unsanctioned	
□ Gravel	
□ Deer	

No trails

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

CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet — Cleveland Metroparks

Project Label: PCAP   Project Name: 01RR 2012   Plot No.: 1222   Page: 1 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)
1	Platanus occidentalis																62.5, 83.0
1	Aesculus glabra									1	1		2				
1	Acer saccharum			2				3									
1	Lindera benzoin			3		4											
1	Crataegus sp.									1							
1	Acer negundo							1									
2	Standing dead									1							
2	Acer saccharum													1			
2	Fraxinus ~~pennsylvanica~~ sp								1								
2	Acer nigrum														1		
* 1	Fraxinus ~~pennsylvanica~~ sp			1													
2	Lindera benzoin			1		3											
3	Acer saccharum									2	2	1			1		
3	Aesculus glabra							2									
3	Standing dead																50.4
~~3~~	~~Fraxinus pennsyl~~																
3	Carya cordiformis								1								
3	Quercus rubra																85.0
3	Lindera benzoin			3		4											
3	Fraxinus sp.			3													
4	Acer saccharum									1	1	2		1			44.3
4	Aesculus glabra						1	1									
4	Fraxinus sp.			1													
4	Lindera benzoin			2		4											

SKE 8-3-1? Botany called sp.

CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

Project Label: PCAP Project Name: OIRR2012 Plot No.: 1222 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)
5	Acer saccharum									•	•	••	••			•	66.4, 72*
5	~~Sta~~ ~~Acer~~ Aesculus glabra										•						
5	Lindera benzoin					~~6~~ 7											
6	Standing dead							• • •	•	• • •							46.4
6	Acer saccharum											•	•				
6	Platanus occidentalis																43.0, 50.3, 42.1
X 6	Toxicodendron radicans						•										
6	Toxicodendron radicans						•										
6	Ulmus americana							•									
6	Carya cordiformis											•					
6	Lindera benzoin					7											
7	Quercus rubra									• •		•	•				
7	Acer nigrum									•							
7	Carya cordiformis			•					• •	•							
7	Toxicodendron radicans						•										
7	Prunis serotina								•								
7	Platanus occidentalis																63.8, 73.0, 54.5
7	~~Populus deltoides~~ ~~Carya cordiformis~~																86.0
7	Aesculus glabra							•									
7	Lindera benzoin					11											
8	Acer negundo										•						
8	Fraxinus pennsylvanica								•								
8	Aesculus glabra												•				
8	Tilia ~~A~~americana											•			•		

covered in poison ivy * took 1/2 DBH and doubled

* Reduced plot to only 5 mods SRE 8-3-12

CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

Cleveland Metroparks

Project Label: PCAP Project Name: OIPR2012 Plot No.: 1222 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)
8	Lindera benzoin				'	7&											
√ 9	Fraxinus sp.			•							•	•					
√ 9	Acer negundo			•				•				•					
√ 9	Vitis sp.									•							
√ 9	Acer saccharinum											• • •				•	
√ 9	Fraxinus pennsylvanica						•										
√ 9	Standing dead							•									
√ 9	Aesculus glabra						• •										
√ 9	Lindera benzoin			X		• • •											
√ 10	Aesculus glabra										•						
√ 10	Acer negundo							•									
√ 10	standing dead											•					
√ 10	Fraxinus pennsylvanica						•										
√ 10	Fraxinus sp.			• •													
√ 10	Lindera benzoin			⁝		□											
√ 10	multiflora rose			•													
√* 8	Quercus rubra			•			•										

CLEVELAND METROPARKS Plant Community Assessment Program: Invasive Species Survey

Cleveland Metroparks

Tier 1: Early detection/ Rapid response		Presence				GPS
		NE	SE	SW	NW	
Microstegium vimineum	Japanese stiltgrass					
Ranunculus ficaria	Lesser Celandine					
Cynanchum louiseae (vine)	Black Swallow-wort					
Butomus umbellatus (wetland)	Flowering Rush					
Heracleum mantegazzianum	Giant Hogweed					

Presence
X: yes

Tier 2: Assess as Needed		# of Plants				comments
		NE	SE	SW	NW	
Acer platanoides	Norway Maple					
Ailanthus altissima	Tree of Heaven					
Lonicera japonica (vine)	Japanese Honeysuckle					
Lythrum salicaria (wetland)	Purple Loosestrife					
Aegopodium podagraria (G-cover)	Bishop's Goutweed	X				
Celastrus orbiculatus (vine)	Asian Bittersweet			1	1	
Torilis sp.	Hedgeparsley	X				
Conium maculatum	Poison Hemlock					
Rhamnus cathartica	Common Buckthorn (shrub)					
Berberis thunbergii	Japanese Barberry (shrub)	1				
Alnus glutinosa	European Alder					
Dipsacus laciniatus	Cut-leaf Teasel					
Elaeagnus umbellata	Autumn Olive (shrub)					
Lonicera maackii	Amur Honeysuckle (shrub)	1		1		
Euonymus fortunei	Wintercreeper					

# of Plants
1: 1-10
2: 11-50.
3: 51-100
4: 101-1,000
5: >1,000

Tier 3: Presence is of Interest		# of Plants				comments
		NE	SE	SW	NW	
Convallaria majalis (G-cover)	Lily of the Valley					
Coronilla varia (G-cover)	Crown Vetch	1				
Eleutherococcus pentaphyllus	Five-leaf Aralia (shrub)					
Pachysandra terminalis (G-cover)	Japanese Pachysandra					
Philadelphus coronarius	Mock Orange (shrub)					
Pulmonaria officinalis (G-cover)	Lungwort					
Rubus phoenicolasius	Wineberry					
Iris pseudacorus (wetland)	Yellow Flag Iris					
Ornithogalum umbellatum	Star of Bethlehem					
Viburnum opulus var. opulus	European Cranberry (shrub)	1				SRE 10-17-12
Viburnum plicatum	Doublefile Viburnum (shrub)					

# of Plants
1: 1-10
2: 11-50.
3: 51-100
4: 101-1,000
5: >1,000

Tier 4: Widespread and abundant		Presence				comments
		NE	SE	SW	NW	
Alliaria petiolata	Garlic Mustard			2		
Ligustrum vulgare	Common Privet (shrub)	1				
L. morrowii, L. tatarica	Bush Honeysuckles (shrub)	1				
Phalaris arundinacea	Reed Canarygrass			3	4	
Phragmites australis (wetland)	Phragmites					
Polygonum cuspidatum	Japanese Knotweed	~~33~~	3	1	x	
Frangula alnus	Glossy Buckthorn (shrub)					
Rosa multiflora	Multiflora Rose (shrub)			3	4	
Typha angustifolia, T. x.glauca	Cattails (wetland)					
Cirsium arvense	Canada thistle					
Dipsacus fullonum	Common Teasel					
Hesperis matronalis	Dame's Rocket	1	1	1	1	
Vinca minor (G-cover)	Periwinkle	4	4			MNE, ~~SSE~~ LSE

Presence
X: yes

Note: For Ground-cover plants record "stem #" but in comment field describe # of colonies and patch size (S,M, L)

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (initial): _____

Site ID: PCAP ~~TMDL~~ 1222RR **DATE:** 06 / 12 / 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; 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)	2	Big Trees (>0.3m DBH)	0	Big Trees (>0.3m DBH)	0
Small Trees (<0.3m DBH)	2	Small Trees (<0.3m DBH)	0	Small Trees (<0.3m DBH)	0
Woody Shrubs, Saplings (0.5m-5m HIGH)	2	Woody Shrubs, Saplings (0.5m-5m HIGH)	0	Woody Shrubs, Saplings (0.5m-5m HIGH)	0
Woody Shrubs, Saplings (<0.5m HIGH)	1	Woody Shrubs, Saplings (<0.5m HIGH)	0	Woody Shrubs, Saplings (<0.5m HIGH)	0
Herbs, Forbs and Grasses	2	Herbs, Forbs and Grasses	0	Herbs, Forbs and Grasses	0
Bare ground	0	Bare ground	0	Bare ground	0
Litter, duff	2	Litter, duff	0	Litter, duff	0
Rock	4	Rock	0	Rock	0
Water	0	Water	0	Water	0
Submerged Vegetation	0	Submerged Vegetation	0	Submerged Vegetation	0

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: PCAP 1222RR **DATE:** 06 / 12 / 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: ● E	Leaf Type: ● N	Absent: ○	Flag
Big Trees (>0.3m DBH)	● 1 2 3 4			
Small Trees (<0.3m DBH)	0 1 ● 3 4			
Woody Shrubs, Saplings (0.5m-5m HIGH)	0 1 ● 3 4			
Woody Shrubs, Saplings (<0.5m HIGH)	0 ● 2 3 4			
Herbs, Forbs and Grasses	0 1 ● 3 4			
Bare ground	0 1 2 ● 4			
Litter, duff	0 ● 2 3 4			
Rock	0 1 2 ● 4			
Water	● 1 2 ⊗ 4			
Submerged Vegetation	● 1 2 3 4			

Buffer Plot 2	Canopy Type: ○ E	Leaf Type: ○ 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 (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)	○	○	○	

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: PCAP1222 RR **DATE:** 06 / 12 / 2013

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	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 ● 2 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 3 ●				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 ● 3 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 1 2 3 ●				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 ● 3 4				Litter, duff	0 1 2 3 4				Litter, duff	0 1 2 3 4			
Rock	0 ● 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	●	○	○	1
Soil Compaction (ANIMAL OR HUMAN)	●	○	○	2
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: PCAP 1222 RR **DATE:** 06 / 12 / 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	Leaf Type: B ○ N	Absent: ○	Flag
Big Trees (>0.3m DBH)	0 1 2 3 ●			
Small Trees (<0.3m DBH)	0 ● 2 3 4			
Woody Shrubs, Saplings (0.5m-5m HIGH)	0 ● 2 3 4			
Woody Shrubs, Saplings (<0.5m HIGH)	● 1 2 3 4			
Herbs, Forbs and Grasses	0 1 ● 3 4			
Bare ground	0 1 ● 3 4			
Litter, duff	0 ● 2 3 4			
Rock	0 1 2 ● 4			
Water	● 1 2 3 4			
Submerged Vegetation	● 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 ● 4			
Small Trees (<0.3m DBH)	0 1 ● 3 4			
Woody Shrubs, Saplings (0.5m-5m HIGH)	0 1 2 ● 4			
Woody Shrubs, Saplings (<0.5m HIGH)	0 ● 2 3 4			
Herbs, Forbs and Grasses	0 1 2 3 ●			
Bare ground	0 ● 2 3 4			
Litter, duff	0 1 2 ● 4			
Rock	● 1 2 3 4			
Water	● 1 2 3 4			
Submerged Vegetation	● 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 ● 4			
Small Trees (<0.3m DBH)	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			
Herbs, Forbs and Grasses	0 1 ● 3 4			
Bare ground	0 1 ● 3 4			
Litter, duff	0 1 2 ● 4			
Rock	● 1 2 3 4			
Water	● 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	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	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	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	1	2	3	Flag
Oil Drilling	○	○	○	
Gas Wells	○	○	○	
Mine (surface)	○	○	○	
Mine (underground)	○	○	○	
Military	○	○	○	
Other:	○	○	○	
Other:	○	○	○	
Other:	○	○	○	

Habitat/Vegetation Stressors	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	1	2	3	Flag
Herbicide Use	○	○	○	
Mowing/Shrub Cutting	○	○	○	
Trails	○	●	○	1
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: PCAP 1222 RR

DATE: 06 / 12 / 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
Big Trees (>0.3m DBH)	0	1	2	●	4	
Small Trees (<0.3m DBH)	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	
Herbs, Forbs and Grasses	0	1	2	3	●	
Bare ground	0	1	●	3	4	
Litter, duff	0	●	2	3	4	
Rock	●	1	2	3	4	
Water	●	1	2	3	4	
Submerged Vegetation	●	1	2	3	4	

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

Buffer Plot 3	Canopy Type: D ● E ○ Absent: ○ Leaf Type: B ● N ○					Flag
Big Trees (>0.3m DBH)	●	●	2	3	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 HIGH)	0	●	2	3	4	
Herbs, Forbs and Grasses	0	1	2	3	●	
Bare ground	0	●	2	3	4	
Litter, duff	0	1	2	3	●	
Rock	●	1	2	3	4	
Water	●	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	○	○	●	2
Soil Compaction (ANIMAL OR HUMAN)	○	○	○	
Offroad vehicle damage	○	○	○	
Soil erosion (FROM WIND, WATER, OR OVERUSE)	●	○	○	1
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

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