

CLEVELAND METROPARKS Plant Community Assessment Program: Quality Control Form



Project Label:

PCAP

Plot No:

1373 Date Sampled: 09/04/2013 Lead: SJC

Comment required if item answer is NO

Parking/Access outside of Park Boundaries:	<input checked="" type="radio"/> Y <input type="radio"/> N	If yes, write details in Comments section below
Field journals completed	<input checked="" type="radio"/> Y <input type="radio"/> N	
Site sketch made on 1:3000 map?	<input checked="" type="radio"/> Y <input type="radio"/> N	
Check cover page	X-axis Bearing of plot recorded	<input checked="" type="radio"/> Y <input type="radio"/> N
	GPS coords. Recorded	<input checked="" type="radio"/> Y <input type="radio"/> N
	North direction recorded	<input checked="" type="radio"/> Y <input type="radio"/> N
	Photographs taken?	<input checked="" type="radio"/> Y <input type="radio"/> N
Plot No., Date agreement on all pages?	<input checked="" type="radio"/> Y <input type="radio"/> N	
Header data completed all pages?	<input checked="" type="radio"/> Y <input type="radio"/> N	
Cover classes recorded in all Intensive modules	<input checked="" type="radio"/> Y <input type="radio"/> N	
Browse Level By Species	<input checked="" type="radio"/> Y <input type="radio"/> N	
Woody stem quality control check	<input checked="" type="radio"/> Y <input type="radio"/> N	
Invasive plant quality control check	<input checked="" type="radio"/> Y <input type="radio"/> N	
Ash trees mapped	<input checked="" type="radio"/> Y <input type="radio"/> N	
Cover by Strata? (confirm cover type)	<input checked="" type="radio"/> Y <input type="radio"/> N	
Soil samples collected with matching plot #.	<input checked="" type="radio"/> Y <input type="radio"/> N	
Vouchers labeled on datasheet with initials and number	<input checked="" type="radio"/> Y <input type="radio"/> N	
Vouchers labeled on collection bag	<input checked="" type="radio"/> Y <input type="radio"/> N	
Pink flags removed	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	very hard to find, isolated
Data sheet QA before leaving site?	<input checked="" type="radio"/> Y <input type="radio"/> N	
Common equipment returned to tub.	<input checked="" type="radio"/> Y <input type="radio"/> N	
Data sheets scanned?		Enter date to left
Final data sheets scanned?		Enter date to left
Buffer Widths measured?	<input checked="" type="radio"/> Y <input type="radio"/> N	
Web Soil Survey	<input checked="" type="radio"/> Y <input type="radio"/> N	AB 9/5/13
Voucher Location	Refrigerator	<input checked="" type="radio"/> Y <input type="radio"/> N
(# vouchers collected)	Press (#)	Enter number to left
SJC JB326 333	Drier	<input checked="" type="radio"/> Y <input type="radio"/> N
	Identified	<input checked="" type="radio"/> Y <input type="radio"/> N
	Mounted	<input checked="" type="radio"/> Y <input type="radio"/> N
	Thrown away	<input checked="" type="radio"/> Y <input type="radio"/> 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:



Project Label: _____		MODIFIED NATUREERVE CLASS*: _____		Fit: _____ Conf: _____		DISTURBANCES	
CODE (on separate form): M03		COMMUNITY NAME: Maple-Ash-Elm Wet Flatwoods				type*	severity**
						yrs ago	% of plot
				Human			
				Natural			
				Fire			
				Cut			
				Animal	100	H	100
				Other			
				description			
				deer browse and trail			
				* **L=low, ML=med low, M=med, MH=med high, H=high, VH=very high			
				Current Land Use: CNP			
				Former Land Use: UNK			
				HYDROLOGIC REGIME*			
				<input checked="" type="checkbox"/> Upland (seldom flooded) <input checked="" type="checkbox"/> Intermittently/seasonally saturated (seldom flooded) <input type="checkbox"/> Permanently/Semipermanent saturated (dry <1yr, seldom flooded) <input type="checkbox"/> Occasionally flooded (<1/yr) <input type="checkbox"/> Temporarily flooded			
				<input type="checkbox"/> Intermittently flooded <input type="checkbox"/> Semipermanently flooded <input type="checkbox"/> Permanently flooded <input type="checkbox"/> Tidal/Seiche flooded daily <input type="checkbox"/> Tidal/Seiche flooded monthly <input type="checkbox"/> Tidal/Seiche flooded irregular (e.g. wind, storms) <input type="checkbox"/> Unknown			
				SALINITY*			
				<input type="checkbox"/> Saltwater <input type="checkbox"/> Brackish <input type="checkbox"/> Fresh <input type="checkbox"/> Upland (n/a)			

by default unless plot is a wetland) (Representativeness of plot to the stand, successional status, maturity, etc.)

57 soil Additional notes & diagrams: (Representativeness of plot to the stand, successional status, maturity, etc.)
Deer browse was heavy on *Impatiens*. Left flags & pins because it will be difficult to find and it is also very isolated. Buckthorn and multiflora were extremely abundant in plot as well as along all the buffers.

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

Project Label: PCAP

Project name: OH 2013

Page 1 of 3

Total modules: 4

Intensive modules: 4 Plot configuration: 2x2

Plot area (ha): .04



Cleveland Metroparks

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

Strata - Cov. entire plot

T

S

H

(F)

(A)

Br

Species

c

Voucher #

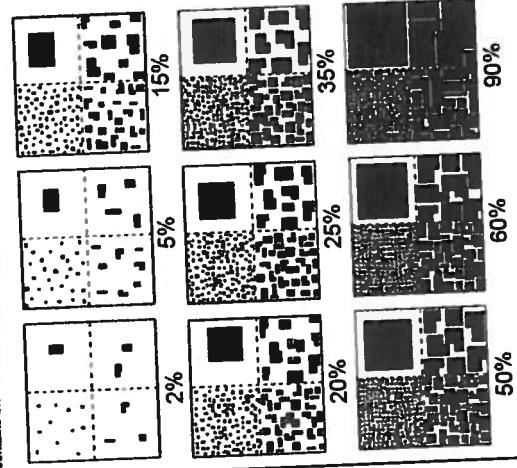
depth

cov

depth

EXAMPLES OF PERCENT OF AREA COVERED

The following graphic can be used for various data elements to convey 'Amount' or 'Quantity'. NOTE: Within any open box, each quadrant contains the same total area covered, just different sized objects.



BROWSE RATING NARRATIVE DESCRIPTION

LOW OR NONE: there is no measurable browse line **AND** there are very few or no plants 1-m nested quadrat and intensive module. In general, low values relate to less than 10 percent, by numbers of stems browsed.

MEDIUM LOW values include evidence of browse at about 10 percent of the stems with no significant impact to plant reproduction evident. In this rating, plants are browsed but preferential species are observed to be reproducing in numbers that appear normal or near-normal in comparison to low browse areas. For example, trilliums may flower and fruit, but jewelweed

and arrowwood viburnum exhibit browse.

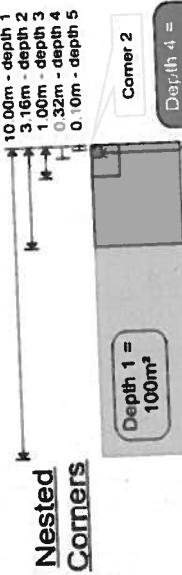
MEDIUM: browse affects greater than 10 percent and less than 25 percent of stems in the 1 m² nested quadrat and intensive module. A browse line is usually not evident or obvious for all classes and species of vegetation, but careful examination may show preferential browse and/or browse lines for some species of plants.

MEDIUM HIGH values include evidence of a browse line and 25 percent of stems browsed with very little vegetation regeneration evident. In this rating, for some species of plants, reproduction does not appear to occur or it is very severely limited.

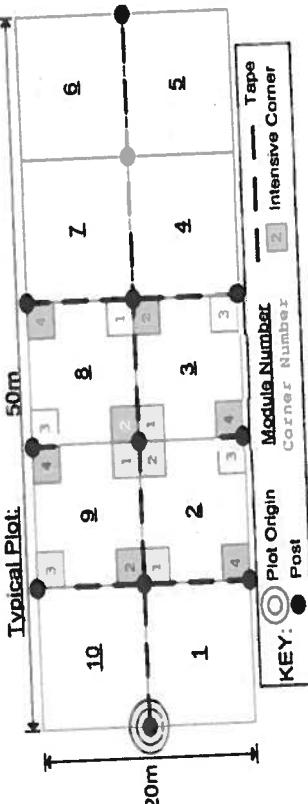
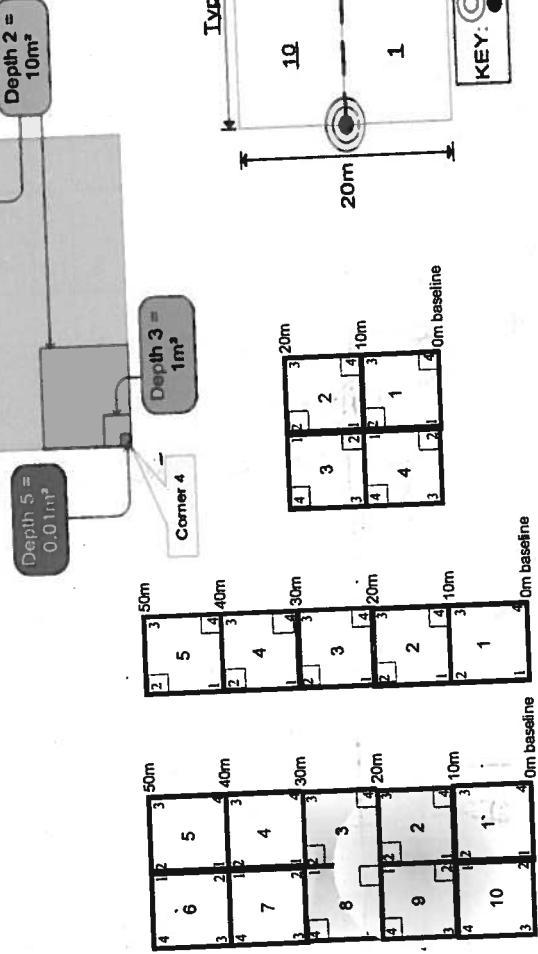
HIGH: greater than 25 percent of the stems of plants in the 1 m² nested quadrat and intensive module **AND** a browse line is evident.

VERY HIGH values include extensive browse conditions, where the browse line is very evident **AND** almost all seedlings and herbs are severely browsed or missing. Browse line may be 5 to 6 feet in height with no or little green growth beneath.

cover class	% cover	midpoint
1	solitary or few	0.0001
2	0-1%	0.005
3	1-2%	0.015
4	2-5%	0.035
5	5-10%	0.075
6	10-25%	0.175
7	25-50%	0.375
8	50-75%	0.625
9	75-95%	0.850
10	95-100%	0.975

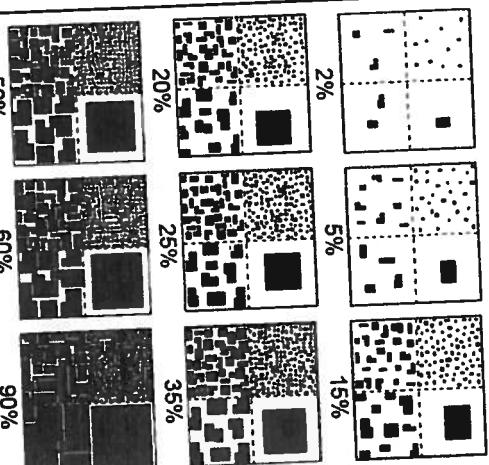


Nested
Corners



EXAMPLES OF PERCENT OF AREA COVERED

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cover class	% cover	midpoint
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2	0-1%	0.005
3	1-2%	0.015
4	2-5%	0.035
5	5-10%	0.075
6	10-25%	0.175
7	25-50%	0.375
8	50-75%	0.625
9	75-95%	0.850
10	95-100%	0.975

BROWSE RATING NARRATIVE DESCRIPTION

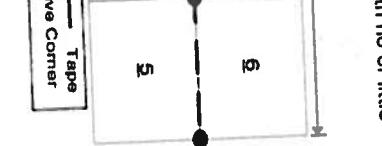
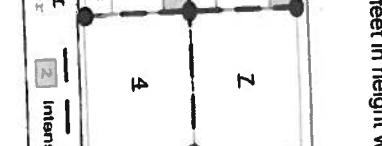
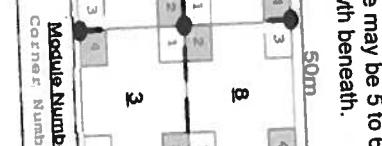
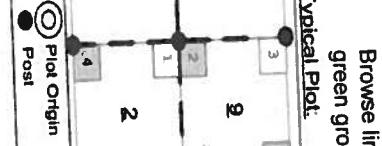
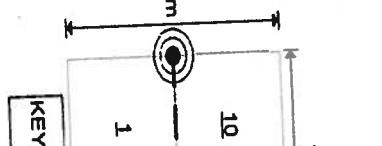
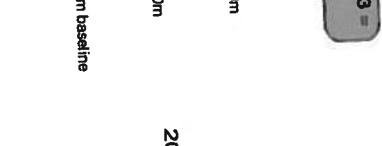
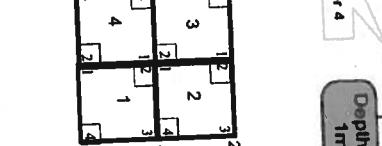
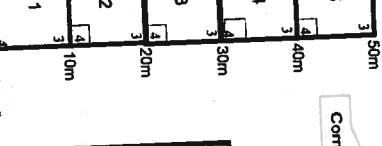
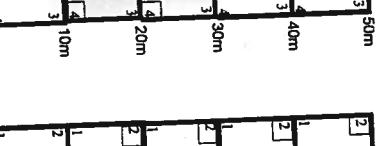
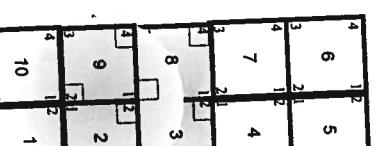
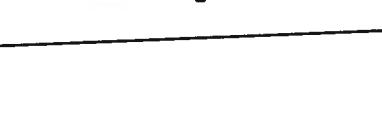
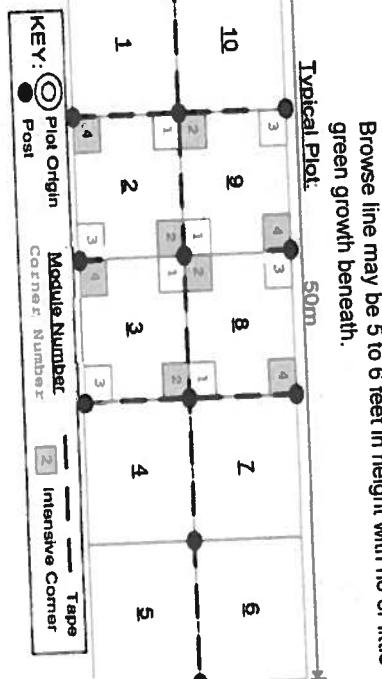
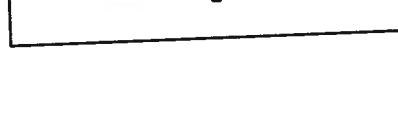
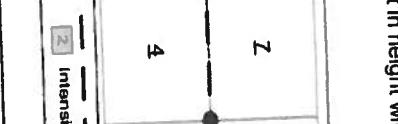
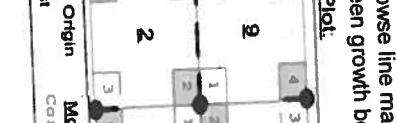
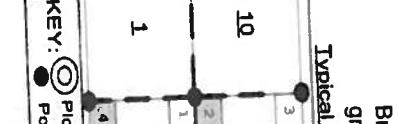
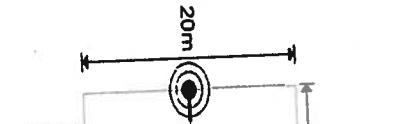
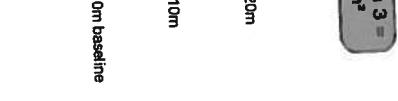
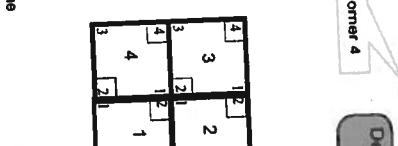
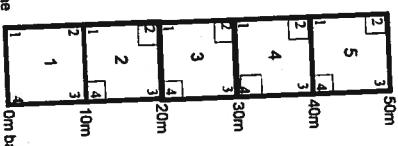
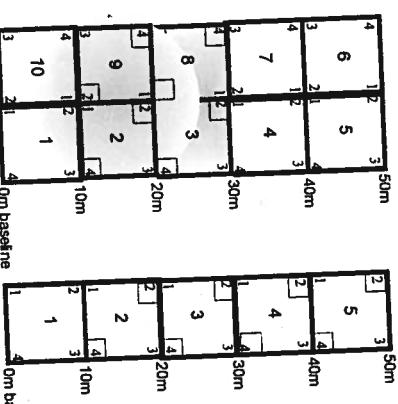
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CLEVELAND METROPARKS Plant Community Assessment Program *Shrubland Survey Report*

Project Label:

PCAP

Logjam Species Cover Data Sheet 2a

lot no.: 1372 Page 2 of 3

Total modules:

4

Intensive modules: 4 Plot configuration: 3 x 3

Plot area (ha): 0.04



Cleveland
Metroparks

describe amount of browse per species over entire plot

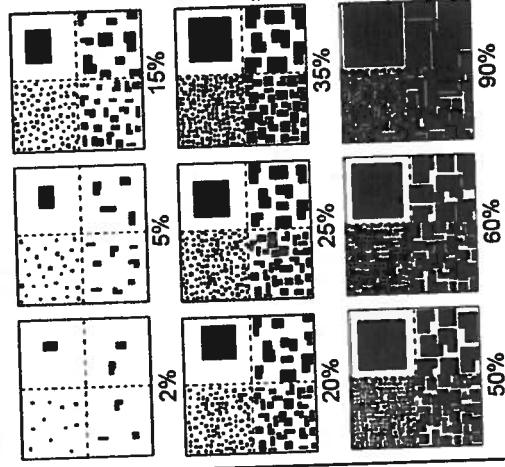
%unvegetated open water

T	S	H	(F)	(A)	Br	Species	c
			2			<i>Ligustrum vulgare</i>	
			1			<i>Althaea officinalis</i>	
2						<i>Scirpus cyperinus</i>	

Voucher #	% Sunveg. litter (bare litter)					
	1	1	1	1	1	1
1	1	1	1	1	1	1
1	1	1	1	1	1	1
1	1	1	1	1	1	1
2	2	2	2	2	2	2
2	2	2	2	2	2	2
2	2	2	2	2	2	2

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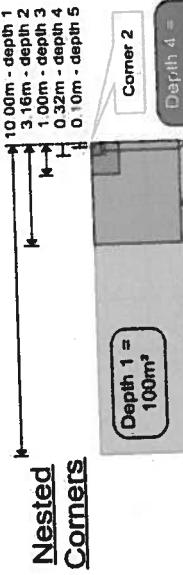
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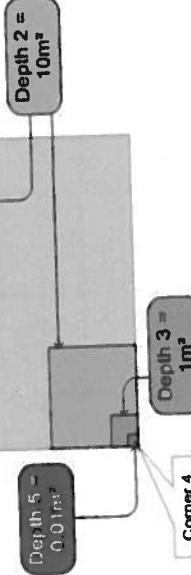
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5	5-10%	0.075
6	10-25%	0.175
7	25-50%	0.375
8	50-75%	0.625
9	75-95%	0.860
10	95-100%	0.975



90% 60% 50% 20% 25% 35% 15% 5% 2%

Nested

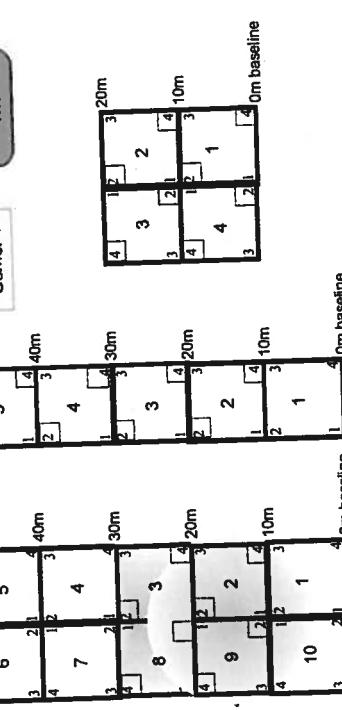
Corners



50m 40m 30m 20m 10m 10m 20m 30m 40m 50m

On baseline

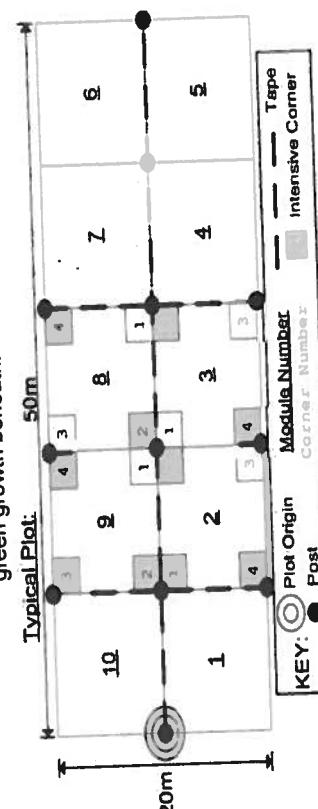
0m



50m 40m 30m 20m 10m 10m 20m 30m 40m 50m

On baseline

0m



50m 40m 30m 20m 10m 10m 20m 30m 40m 50m

On baseline

0m

CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

Project Label: PCAP

Project Name: OH Hi 2013

Plot No.: 1373

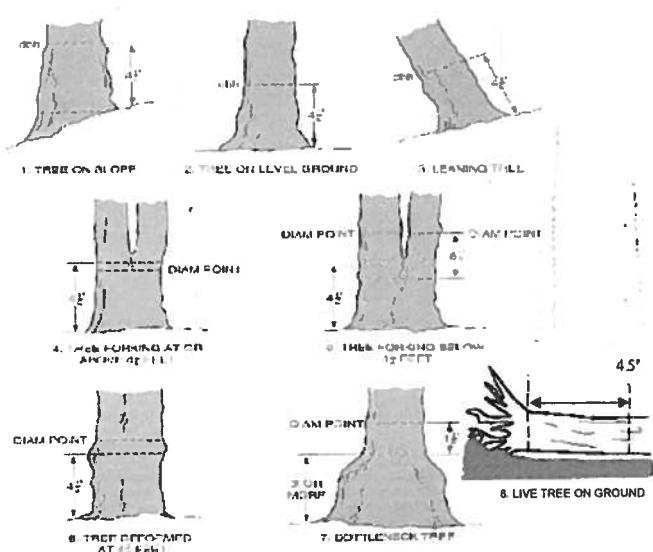
Page: 1 of 2

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											11 >40 (record each tree)
							1	2	3	4	5	6	7	8	9	10		
1	<i>Bornus</i> sp.	PCAP	12-4-13-2	329	SJC	BB	0	0	0	0	0	0	0	0	0	0	0	
1	<i>Crataegus</i> sp.						0	0	0	0	0	0	0	0	0	0	0	
1	<i>Frangula alnus</i>						00	00	00	00	00	00	00	00	00	00	00	
1	<i>Viburnum dentatum</i>						00	00	00	00	00	00	00	00	00	00	00	
1	<i>Rosa multiflora</i>						00	00	00	00	00	00	00	00	00	00	00	
1	<i>Fraxinus pennsylvanica</i>						00	00	00	00	00	00	00	00	00	00	00	
1	Standing Dead						00	00	00	00	00	00	00	00	00	00	00	
1	<i>Ribes</i> sp.	SKC	12-4-13-2	328	SJC	BB	00	00	00	00	00	00	00	00	00	00	00	
1	<i>Rubus</i> sp.	DENSE	SKC	12-4-13-2	328	SJC	BB	00	00	00	00	00	00	00	00	00	00	
1	<i>Fraxinus</i> sp.	SKC	12-4-13-2	328	SJC	BB	00	00	00	00	00	00	00	00	00	00	00	
2	Standing dead						00	00	00	00	00	00	00	00	00	00	00	
2	<i>Fraxinus pennsylvanica</i>						00	00	00	00	00	00	00	00	00	00	00	
2	<i>Cornus</i> sp.	SKC	12-4-13-2	328	SJC	BB	00	00	00	00	00	00	00	00	00	00	00	
2	<i>Crataegus</i> sp.						00	00	00	00	00	00	00	00	00	00	00	
2	<i>Lonicera morrowii</i>						00	00	00	00	00	00	00	00	00	00	00	
2	<i>Fragaria ananassa</i>						00	00	00	00	00	00	00	00	00	00	00	
2	<i>Rosa multiflora</i>						00	00	00	00	00	00	00	00	00	00	00	
2	<i>Rubus</i> sp.	PENNSYLVANICUS	SKC	12-4-13-2	328	SJC	BB	00	00	00	00	00	00	00	00	00	00	
2	<i>Rose m</i>	SKC	12-4-13-2	328	SJC	BB	00	00	00	00	00	00	00	00	00	00	00	
2	<i>Fraxinus</i> sp.						00	00	00	00	00	00	00	00	00	00	00	
2	<i>Ulmus americana</i>						00	00	00	00	00	00	00	00	00	00	00	
2	<i>Toxicodendron radicans</i>						00	00	00	00	00	00	00	00	00	00	00	
2	<i>Rubo</i> sp.	SKC	12-4-13-2	328	SJC	BB	00	00	00	00	00	00	00	00	00	00	00	
2	<i>Pyrus</i> sp.	2	SKC	333			00	00	00	00	00	00	00	00	00	00	00	

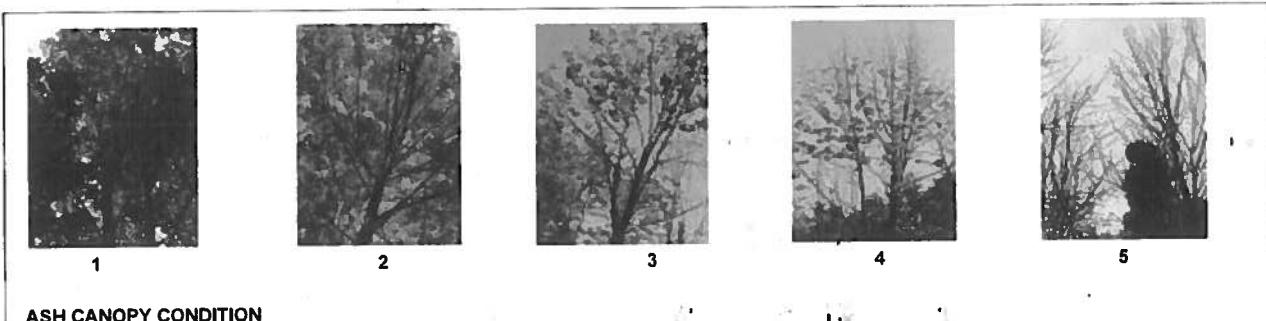
DBH Measurement Rules



Woody Stem Deer Browse

Record the number of stems/plants between 0.5-1.0 meters tall that exhibit evidence of this years deer browse.

Record using the tally system from 1 to 10



ASH CANOPY CONDITION

1. Healthy, full canopy: A healthy ash canopy is normally thinner than many other trees such as maple.
2. Thinning canopy: There aren't as many leaves as there ought to be, but all top branches exposed to sunlight have leaves.
3. Dieback: Canopy is thinning and some top branches exposed to sunlight are dead (have no leaves). Lower branches, not exposed to sunlight, die naturally and are not considered.
4. >50% Dieback: The canopy has less than half of the leaves that should be there and/or half of the top branches are dead.
5. Dead canopy: No leaves remain in the canopy portion of the tree. It still counts as a 5 even if there are epicormic sprouts below the canopy (lowest branch) on the trunk.



A



B



C



D



E

ASH CANOPY BREAKUP CONDITION (for dead trees):

(If an ash receives a score of 5 (dead) under canopy condition it must also receive a breakup condition rank as described below)

- A: All main branches contain fine twigs (newly dead).
- B: Over 50% of main branches have fine twigs.
- C: Less than 50% of main branches have fine twigs.
- D: Stem still standing and tertiary main branches present.
- E: Central stem still standing.

CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

Project label:
PCAP

Project Name: 01 월드비전

Blatt-Nr.: 1372

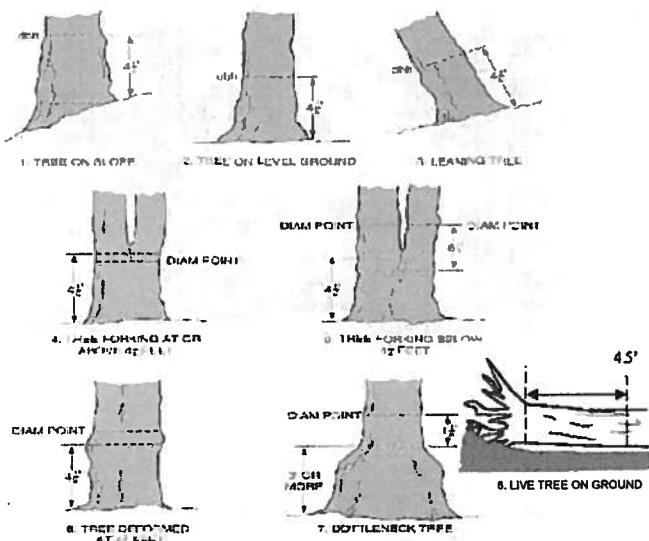
10

१८८

Explain subsample (additional room on back)

node #	species	c	voucher#	browsed	# stems 0-1.4m or super sample	% sub shrub clumps	# 1 2 3 4 5 6 7 8 9 10 11 size class (cm) woody stems >1.4m				
3	<i>Standing dead</i>										
3	<i>Viburnum dentatum</i>			??	00	00	4				
3	<i>Fraxinus pennsylvanica</i>			REB	00	00	2	00			
3	<i>Bornus sp. regalis</i>			REB	00	00	0	00			
3	<i>Frangula alnus</i>			REB	00	00	0	00			
3	<i>Fraxinus sp.</i>			REB	00	00	0	00			
3	<i>Pirus sp. 1</i>			REB	00	00	0	00			
3	<i>Ulmus americana</i>			REB	00	00	0	00			
3	<i>Acer rubrum</i>			REB	00	00	0	00			
3	<i>Taxodium radicans</i>			REB	00	00	0	00			
3	<i>Rosa multiflora</i>			REB	00	00	0	00			
3	<i>Lonicera morrowii</i>			REB	00	00	0	00			
4	<i>Standing dead</i>				00	00	0	00			
4	<i>Cornus sp. prunifolia</i>				00	00	0	00			
4	<i>Crateagia sp.</i>				00	00	0	00			
4	<i>Fraxinus pennsylvanica</i>			REB	00	00	0	00			
4	<i>Pyrus sp. 1</i>			REB	00	00	0	00			
4	<i>Frangula alnus</i>			REB	00	00	0	00			
4	<i>Rosa multiflora</i>			REB	00	00	0	00			
4	<i>Pyrus sp. 2</i>			REB	00	00	0	00			
4	<i>Lonicera Morrowii</i>			REB	00	00	0	00			
4	<i>Acer rubrum</i>			REB	00	00	0	00			

DBH Measurement Rules



Woody Stem Deer Browse

Record the number of stems/plants between 0.5-1.0 meters tall that exhibit evidence of this years deer browse.

Record using the tally system from 1 to 10



1



2



3



4



5

ASH CANOPY CONDITION

1. **Healthy, full canopy:** A healthy ash canopy is normally thinner than many other trees such as maple.
2. **Thinning canopy:** There aren't as many leaves as there ought to be, but all top branches exposed to sunlight have leaves.
3. **Dieback:** Canopy is thinning and some top branches exposed to sunlight are dead (have no leaves). Lower branches, not exposed to sunlight, die naturally and are not considered.
4. **>50% Dieback:** The canopy has less than half of the leaves that should be there and/or half of the top branches are dead.
5. **Dead canopy:** No leaves remain in the canopy portion of the tree. It still counts as a 5 even if there are epicormic sprouts below the canopy (lowest branch) on the trunk.



A

B

C

D

E

ASH CANOPY BREAKUP CONDITION (for dead trees):

(If an ash receives a score of 5 (dead) under canopy condition it must also receive a breakup condition rank as described below)

- A: All main branches contain fine twigs (newly dead).
- B: Over 50% of main branches have fine twigs.
- C: Less than 50% of main branches have fine twigs.
- D: Stem still standing and tertiary main branches present.
- E: Central stem still standing.

CLEVELAND METROPARKS Emerald Ash Borer - *Fraxinus* Sheet

Project Label: PCAP

Project Name: OIH 2013

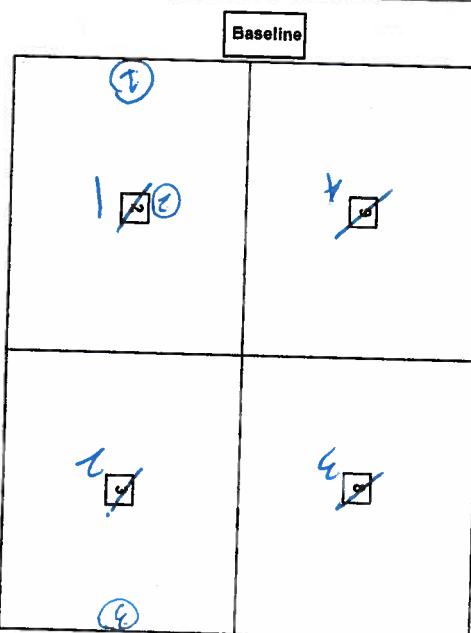
INTENSIVE MODULES ONLY

TREES \geq 10CM ONLY

Page: 1 of 2

Module	Tree ID	Species	Dead	Voucher #	DBH (cm)	HT @ DBH	Ash condition	Dead condition	# Exit holes	Epicormic present	Woodpecker holes
1	1	<i>Fraxinus pennsylvanica</i>		335	3.5	3	1	0	1	1	1
1	2	<i>Fraxinus sp.</i>		11.5	3	0	0	0	0	0	0
2	3	<i>Fraxinus sp.</i>		19.8	1	0	0	0	0	0	0
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											

*** Change intensive module numbers when necessary

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

* If Ash Condition scores 5 (dead) provide breakup score (A-E)

Count EAB exit holes 1.25m² x 21.5m

Woodpecker and epicormic marked present (1) or absent (0)

CLEVELAND METROPARKS Plant Community Assessment Program: Invasive Species Survey



Tier 1: Early detection/ Rapid response		Presence				GPS	Presence
		NE	SE	SW	NW		X: yes
Microstegium vimineum	Japanese stiltgrass						
Ranunculus ficaria	Lesser Celandine						
Cynanchum louiseae (vine)	Black Swallow-wort						
Butomus umbellatus (wetland)	Flowering Rush						
Heracleum mantegazzianum	Giant Hogweed						
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						
Celastrus orbiculatus (vine)	Asian Bittersweet						
Torilis sp.	Hedgeparsley						
Conium maculatum	Poison Hemlock						
Rhamnus cathartica	Common Buckthorn (shrub)						
Berberis thunbergii	Japanese Barberry (shrub)						
Alnus glutinosa	European Alder						
Dipsacus laciniatus	Cut-leaf Teasel						
Elaeagnus umbellata	Autumn Olive (shrub)						
Lonicera maackii	Amur Honeysuckle (shrub)						
Euonymus fortunei	Wintercreeper						
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						
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)						
Viburnum plicatum	Doublefile Viburnum (shrub)						
Tier 4: Widespread and abundant		Presence				comments	
		NE	SE	SW	NW		
Alliaria petiolata	Garlic Mustard						
Ligustrum vulgare	Common Privet (shrub)			1			
L. morrowii, L. tatarica	Bush Honeysuckles (shrub)	2	1	2			
Phalaris arundinacea	Reed Canarygrass						
Phragmites australis (wetland)	Phragmites						
Polygonum cuspidatum	Japanese Knotweed						
Frangula alnus	Glossy Buckthorn (shrub)	4	4	4	4		
Rosa multiflora	Multiflora Rose (shrub)	4	2	2	4		
Typha angustifolia, T. x. glauca	Cattails (wetland)						
Cirsium arvense	Canada thistle						
Dipsacus fullonum	Common Teasel						
Hesperis matronalis	Dame's Rocket						
Vinca minor (G-cover)	Periwinkle						

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

4bCM PCAP Invasive species datasheet.xls last revised 6/11/2012 ceh

Natural Resources

Presence
X: yes

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

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

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

STANDING BIOMASS (required for emergent wetland), collected in 0 m clip plots (32x32 cm) from corners 1 and 3 in each intensive module. Required for VBI-E score calculation. C⁺ check when collected

Module #	C?	Corner	Corner

CLASSIFICATION

LFI = elevation & Fit and Confidence

Hydrogeomorphic class (WETLANDS ONLY):

<input type="checkbox"/> DEPRESSION	<input type="checkbox"/> Headwater	<input checked="" type="checkbox"/> Mainstem	<input type="checkbox"/> Channel
<input type="checkbox"/> IMPOUNDMENT	<input type="checkbox"/> Beaver	<input type="checkbox"/> Human	
<input type="checkbox"/> RIVERINE			
<input type="checkbox"/> SLOPE (around water hydrology or on a physical slope)			
<input type="checkbox"/> FRINGING	<input type="checkbox"/> Reservoir	<input type="checkbox"/> Natural Lake	
<input type="checkbox"/> COASTAL (specify sub-class)			
<input type="checkbox"/> BOG (strongly, moderately, weakly, ombrotrophic)			
<input type="checkbox"/> FORREST	<input type="checkbox"/> swamp forest	<input type="checkbox"/> bog forest	<input type="checkbox"/> forest steep
<input type="checkbox"/> EMERGENT	<input type="checkbox"/> marsh	<input type="checkbox"/> wet meadow	<input type="checkbox"/> open bog
<input type="checkbox"/> SHRUB	<input type="checkbox"/> shrub swamp	<input type="checkbox"/> tall sh. bog	<input type="checkbox"/> tall sh. fen

Ohio EPA VBI Plant Community Class (WETLANDS ONLY):

<input type="checkbox"/> FORREST	<input type="checkbox"/> swamp forest	<input type="checkbox"/> bog forest	<input type="checkbox"/> forest steep
<input type="checkbox"/> EMERGENT	<input type="checkbox"/> marsh	<input type="checkbox"/> wet meadow	<input type="checkbox"/> open bog
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FORREST	swamp forest	bog forest	forest steep

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COVER BY STRATA

STRATUM	GENERAL FORM
Tree (generally >5 m)	Tree (overstory), very tall shrubs*, liana, epiphyte)
Shrub (generally 0.5 to 5 m)	Tree (sapling), shrub, liana, epiphyte)
Herb (Field)	Herb, dwarf-shrub**, tree (seedling***)
Floating	Floating
Aquatic (submerged)	Submerged

*Very tall shrubs are sometimes included in the tree stratum
**Can also include seedlings of shrubs, i.e. all shrubs <0.5m
***Tree seedlings are often defined as up to 1.4 m height or as <2.5 cm DBH in which case they would span the herb and shrub layers.

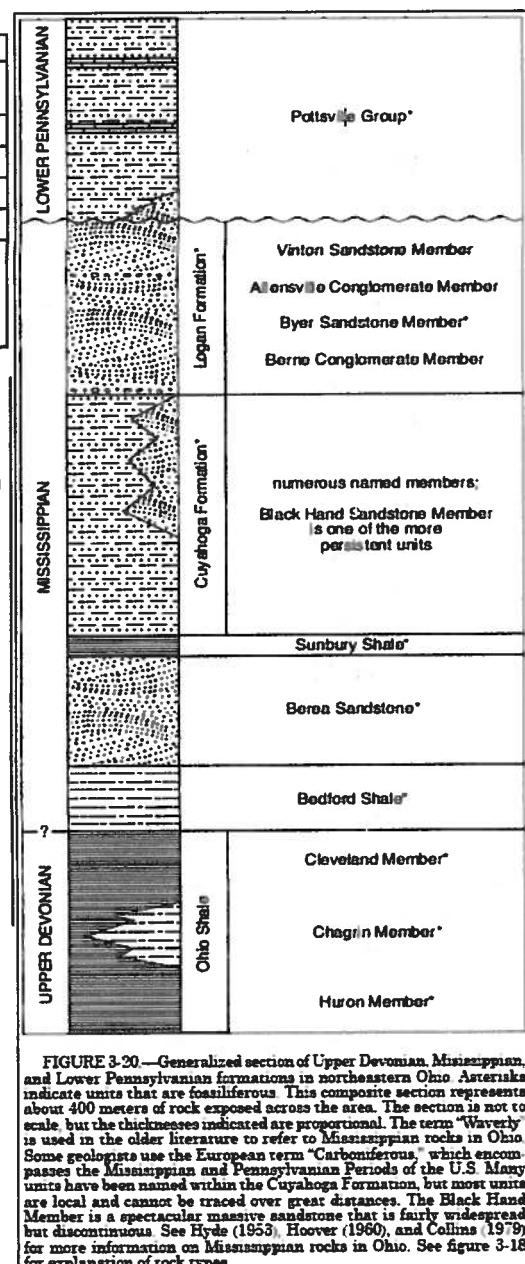
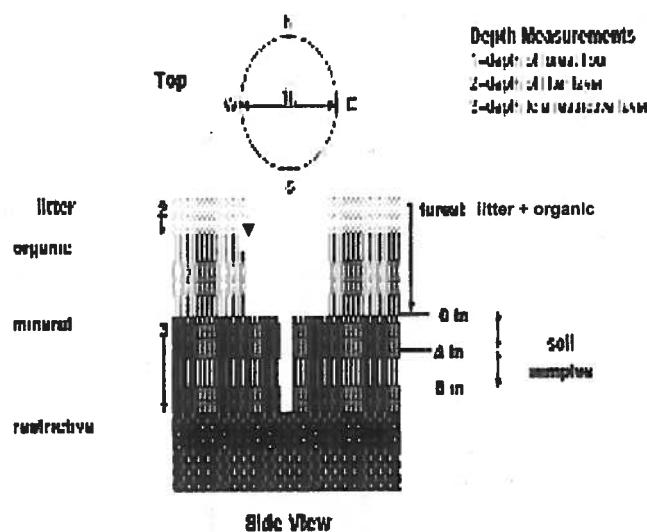


FIGURE 3-20.—Generalized section of Upper Devonian, Mississippian, and Lower Pennsylvanian formations in northeastern Ohio. Asterisks indicate units that are fossiliferous. This composite section represents about 400 meters of rock exposed across the area. The section is not to scale, but the thicknesses indicated are proportional. The term "Wavy" is used in the older literature to refer to Mississippian rocks in Ohio. Some geologists use the European term "Carboniferous," which encompasses the Mississippian and Pennsylvanian Periods of the U.S. Many units have been named within the Cuyahoga Formation, but most units are local and cannot be traced over great distances. The Black Hand Member is a spectacular massive sandstone that is fairly widespread but discontinuous. See Hyde (1953), Hoover (1960), and Collins (1979) for more information on Mississippian rocks in Ohio. See figure 3-18 for explanation of rock types.

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

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 pit module # (one per entire plot)	
5 cm	matrix color 10YR 3/4
matrix color	10YR 4/6
% organic	15
oxid. tools	Y
texture*	2
redox features**	Y N
hydr. cond.***	I S M D
20 cm	matrix color 10YR 7/8
matrix color	10YR 7/8
oxid. tools	Y N
texture*	1
redox features**	Y N
hydr. cond.***	I S M D

Soil Collection Module		Horizon (A, B, C)
1, 2, 3, 4		A
2, 3, 6, 9 composted		
Web Soil Survey Information:		
Soil Series/Type: Hy-Holly Silt loam		
Soil Series Source: Ohio Soil Survey		
Landform type: Flood Plains		
Depth to next Layer: More than 30 inches		
Parent Material: Aluminum		
DRAINAGE*		
Excessively dr.		
Well drained		
Somewhat poorly dr.		
Moderately well dr.		
Very poorly dr.		
Impenetrable surface		

AB 9/5/13

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

Strata	Height Range (m)	Total Cover (%)
Tree	2-5	43
Shrub	1.5 - 5	78
Herb (Floating)*	0 - 1.5	98
(Aquatic)*	-	na

STAND SIZE	
>600 x plot size	<input type="checkbox"/>
>100 x plot size	<input type="checkbox"/>
10-100 x plot size	<input checked="" type="checkbox"/>
3-10 x plot size	<input type="checkbox"/>
1-3 x plot size	<input type="checkbox"/>
< plot size	<input type="checkbox"/>

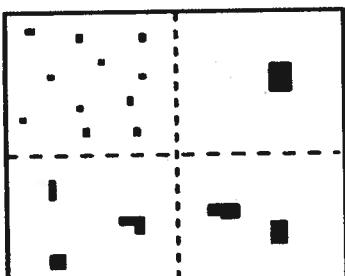
SOIL DEPTH MEASUREMENT: Measure to the nearest 0.1 cm in center of intensive modules. If >30.5 cm, record as >30			
mod#	1 litter+ organic depth (cm)	2 litter depth (cm)	water depth (cm)
1	0	0	730
2	0	0	>30
3	0	0	>30
4	0	0	>30

* rooted and floating or slightly emersed

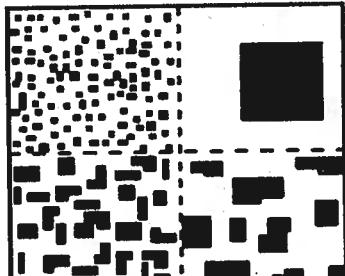
** submersed, most plant mass below surface
 SEE BACK OF PAGE FOR "TYPICAL" STRATA DESCRIPTIONS. STRATA CAN VARY BY COVER TYPE.

PERCENT MOTTLES (USE CLASS CODES):

Class	Code	NASIS	Criteria: % of Surface Area Covered
Conv.			
Few	f	#	< 2
Common	c	#	2 to < 20
Many	m	#	≥ 20



2%



20%

SOIL TEXTURE: Record the code for the soil texture of the 5 cm and 20 cm layers. To estimate texture, collect a soil sample from the appropriate layer and moisten it with water to the consistency of modeling clay/wet newspaper; the sample should be wet enough that all of the particles are saturated but excess water does not freely flow from the sample when squeezed. Attempt to roll the sample into a ball. If the soil will not stay in a ball and has a grainy texture, the texture is either sandy or coarse sandy. If the soil does form a ball, squeeze the sample between your fingers and attempt to form a self-supporting ribbon. Samples which form both a ball and a ribbon should be coded as clayey; samples which form a ball but not a ribbon should be coded as loamy.

0= Organic

1= Loamy

2= Clayey

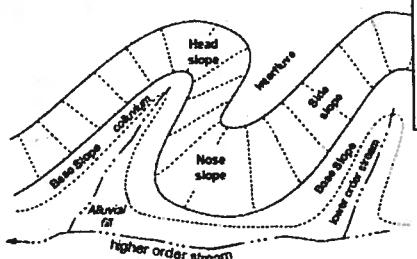
3= Sandy

4= Coarse Sand

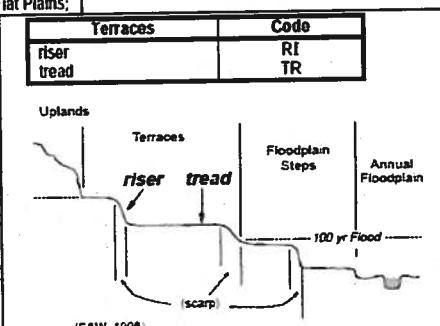
9= Not measured - make plot note

Geomorphic Component - Three-dimensional descriptors of parts of landforms or microfeatures that are best applied to areas. Unique descriptors are available for Hills, Terraces, Mountains, and Flat Plains; e.g. (for Hills) nose slope or NS.

Hills	Code	NASIS
PDP		
Interfluve	IF	IF
head slope	HS	HS
nose slope	NS	NS
side slope	SS	SS
base slope	—	BS

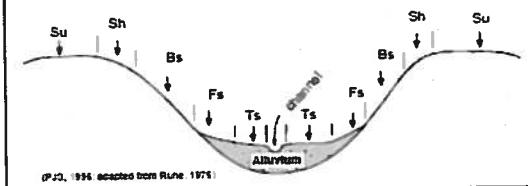


(PJS: 1998; adapted from Runde, 1975)



Hillslope - Profile Position (Hillslope Position in PDP) - Two-dimensional descriptors of parts of line segments (i.e., slope position) along a transect that runs up and down the slope: e.g., *backslope* or *BS*. This is best applied to transects or points, not areas.

Position	Code
summit	SU
shoulder	SH
backslope	BS
footslope	FS
toeslope	TS



(PJS, 1998; adapted from Runde, 1975)

HYDROLOGIC REGIME Modified from Grossman et al 1998. (Frequency and duration of flooding.)

UPLAND: Not a wetland. Very rarely flooded.

INTERMITTENTLY/SEASONALLY SATURATED: Dry at least once per year. Surface water is seldom present, but substrate is saturated to surface for extended periods during the growing season.

PERMANENTLY/SEMPERMANENTLY SATURATED: Dry less than once per year. Surface water is seldom present, but substrate is saturated to surface for extended periods during the growing season. Equivalent to Cowardin's Saturated modifier.

OCCASIONALLY FLOODED: Surface water can be present for brief periods during growing season, but not in most years. Often characterizes flood-plain upper terraces.

TEMPORARILY FLOODED: Surface water present for brief periods during growing season, but water table usually lies well below soil surface. Often characterizes flood-plain levees and lower terraces. Equivalent to Cowardin's Temporary modifier.

INTERMITTENTLY FLOODED: Substrate is usually exposed, but surface water can be present for variable periods without detectable seasonal periodicity. Inundation is not predictable to a given season and is dependent upon highly localized rain storms. This modifier was developed for use in the arid West for water regimes of Playa lakes, intermittent streams, and dry washes but can be used in other parts of the U.S. where appropriate. This modifier can be applied to both wetland and non-wetland situations. Equivalent to Cowardin's Intermittently Flooded modifier.

SEMIPERMANENTLY FLOODED (exposed <1/year): Surface water persists throughout the growing season in most years. Land surface is normally saturated when water level drops below soil surface. Includes Cowardin's Intermittently Exposed and Semipermanently Flooded modifiers.

PERMANENTLY FLOODED: Water covers the land surface at all times of the year in all years. Equivalent to Cowardin's "permanently flooded".

UNKNOWN: The hydrologic regime cannot be determined from the available information.

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial): _____

Site ID: PCAP Hi ~~1373~~ 1373

DATE: 09/04/2013

Location:

● AACenter ON OS OE OW

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

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				Hydrology Stressors				Agricultural & Rural Stressors				Flag
Fill bubble If present - Plot	1	2	3	Fill bubble If present - Plot	1	2	3	Fill bubble If present - Plot	1	2	3	Flag
Road - gravel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Road - two lane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Road - four lane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parking Lot/Pavement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Golf Course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lawn/Park	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Suburban Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Urban/Multifamily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Landfill	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dumping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trash	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Industrial Development Stressors

Habitat/Vegetation Stressors

Fill bubble If present - Plot	1	2	3	Flag	Fill bubble If present - Plot	1	2	3	Flag	Fill bubble If present - Plot	1	2	3	Flag
Oil Drilling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gas Wells	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mine (surface)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mine (underground)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Military	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recently Burned Forest Canopy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recently Burned Grassland (BLACKENED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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

Buffer Sample Plots 05/27/2011

2428168304

FORM B-1: BUFFER SAMPLE PLOTS - TARGETED ALIEN SPECIES (Back)

Reviewed by (Initial): _____

Site ID: PCAP HI 1373

DATE: 09 / 04 / 2013

● Confirm a filled data bubble indicates presence and an unfilled bubble indicates absence by filling in this bubble

Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Eurasian Watermilfoil	○	○	○		Purple Loosestrife	○	○	○		Johnson Grass	○	○	○	
Water hyacinth	○	○	○		Knotweed	○	○	○		Kudzu	○	○	○	
Yellow Floating Heart	○	○	○		Japanese Knotweed	○	○	○		Multiflora Rose	○	○	○	
Giant Salvinia	○	○	○		Perennial Pepperweed	○	○	○		Common Buckthorn	●	○	○	
Garlic Mustard	○	○	○		Giant Reed	○	○	○		Himalayan Blackberry	○	○	○	
Poison Hemlock	○	○	○		Cheatgrass	○	○	○		Tamarisk	○	○	○	
Mile-A-Minute Weed	○	○	○		Reed Canary Grass	○	○	○		Other: _____	○	○	○	
Birdsfoot Trefoil	○	○	○		Common Reed	○	○	○		Other: _____	○	○	○	
Canada Thistle	○	○	○		Leafy Spurge	○	○	○		Other: _____	○	○	○	
										Other: _____	○	○	○	

PLOT COORDINATES

Provide GPS coordinates at the center of the Buffer Plot (#3) at the far end of each Buffer Transect and for the Buffer Plot at the AA CENTER. Indicate the location of the plot coordinates by filling in the appropriate bubble.

If Buffer Plot 3 can not be accessed, take the coordinates at the nearest practicable location ALONG THE TRANSECT. This is important because all Buffer Plots are centered on the Buffer Transects and the coordinates will indicate the location of the transect. Fill in the "nearest practicable location" bubble, fill in the flag box, and describe where the coordinates were taken and why in the comment section below. The coordinates of the nearest practicable location can be either placed as close to the center of Plot 3 as possible or at the center of the last accessible Buffer Plot.

Location of coordinates (choose one):

SAVED AS 1373 A

AA CENTER N3 S3 E3 W3 Nearest practicable location (flag and comment below)

Flap

Latitude North

41.25356

Longitude West

Use Decimal Degrees: NAD83

7966623548

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial): _____

Site ID: PCAP HI 1373

DATE: 09 / 04 / 2013

Location:

O AA Center O N O S O E O W

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

2

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

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				Hydrology Stressors				Agricultural & Rural Stressors							
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	
Road - gravel	0	0	0		Ditches, Channelization	0	0	0		Pasture/Hay	0	0	0		
Road - two lane	0	0	0		Dike/Dam/Road/RR Bed (IMPEDE FLOW)	0	0	0		Range	0	0	0		
Road - four lane	0	0	0		Water Level Control Structure	0	0	0		Row Crops	0	0	0		
Parking Lot/Pavement	0	0	0		Excavation, Dredging	0	0	0		Fallow Field (RECENT-RESTING ROW CROP FIELD)	0	0	0		
Golf Course	0	0	0		Fill/Spoil Banks	0	0	0		Fallow Field (OLD - GRASS, SHRUBS, TREES)	0	0	0		
Lawn/Park	0	0	0		Freshly Deposited Sediment (UNVEGETATED)	0	0	0		Nursery	0	0	0		
Suburban Residential	0	0	0		Soil Loss/Root Exposure	0	0	0		Dairy	0	0	0		
Urban/Multifamily	0	0	0		Wall/Riprap	0	0	0		Orchard	0	0	0		
Landfill	0	0	0		Inlets, Outlets	0	0	0		Confined Animal Feeding	0	0	0		
Dumping	0	0	0		Point Source/Pipe (EFFLUENT OR STORMWATER)	0	0	0		Rural Residential	0	0	0		
Trash	0	0	0		Impervious surface input (SHEETFLOW)	0	0	0		Gravel Pit	0	0	0		
Other: _____	0	0	0		Other: _____	0	0	0		Irrigation	0	0	0		
Other: _____	0	0	0		Other: _____	0	0	0		Other: _____	0	0	0		

Industrial Development Stressors

Habitat/Vegetation Stressors

Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Oil Drilling	0	0	0		Forest Clear Cut	0	0	0		Herbicide Use	0	0	0	
Gas Wells	0	0	0		Forest Selective Cut	0	0	0		Mowing/Shrub Cutting	0	0	0	
Mine (surface)	0	0	0		Tree Plantation	0	0	0		Trails	0	0	0	1
Mine (underground)	0	0	0		Tree Canopy Herbivory (INSECT)	0	0	0		Soil Compaction (ANIMAL OR HUMAN)	0	0	0	
Military	0	0	0		Shrub Layer Browsed (WILD OR DOMESTIC)	1	0	0		Offroad vehicle damage	0	0	0	
Other: _____	0	0	0		Highly Grazed Grasses (OVERALL <3" HIGH)	0	0	0		Soil erosion (FROM WIND, WATER, OR OVERUSE)	0	0	0	
Other: _____	0	0	0		Recently Burned Forest Canopy	0	0	0		Other: _____	0	0	0	
Other: _____	0	0	0		Recently Burned Grassland (BLACKENED)	0	0	0		Other: _____	0	0	0	

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

Buffer Sample Plots 05/27/2011

070

FORM B-1: BUFFER SAMPLE PLOTS - TARGETED ALIEN SPECIES (Back)

Reviewed by (Initial): _____

Site ID: PCAPHI1373

DATE: 09 / 04 / 2013

• Confirm a filled data bubble indicates presence and an unfilled bubble indicates absence by filling in this bubble

Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Eurasian Watermilfoil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Purple Loosestrife	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Johnson Grass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Water hyacinth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Kudzu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Yellow Floating Heart	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Japanese Knotweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Multiflora Rose	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Giant Salvinia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Perennial Pepperweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Common Buckthorn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Garlic Mustard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Giant Reed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Himalayan Blackberry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Poison Hemlock	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Cheatgrass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tamarisk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mile-A-Minute Weed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Reed Canary Grass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Birdsfoot Trefoil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Common Reed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Canada Thistle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Leafy Spurge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
										Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

PLOT COORDINATES

Provide GPS coordinates at the center of the Buffer Plot (#3) at the far end of each Buffer Transect and for the Buffer Plot at the AA CENTER. Indicate the location of the plot coordinates by filling in the appropriate bubble.

If Buffer Plot 3 can not be accessed, take the coordinates at the nearest practicable location **ALONG THE TRANSECT**. This is important because all Buffer Plots are centered on the Buffer Transects and the coordinates will indicate the location of the transect. Fill in the "nearest practicable location" bubble, fill in the flag box, and describe where the coordinates were taken and why in the comment section below. The coordinates of the nearest practicable location can be either placed as close to the center of Plot 3 as possible or at the center of the last accessible Buffer Plot.

Location of coordinates (choose one):

AA CENTER N3 S3 E3 W3 Nearest practicable location (flag and comment below)

Flag

Latitude North 41.25823. Longitude West 081.69122.

Use Decimal Degrees; NAD83

7966623548

Buffer Sample Points - Targeted Alien Species 05/27/2011

buck
rose
morawski

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial): _____

Site ID: PCAP Hi 1373

DATE: 09 / 04 / 2013

Location:

AA Center ON OS E OW

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: <input checked="" type="radio"/> D <input type="radio"/> E		Absent: <input type="radio"/>	Buffer Plot 2	Canopy Type: <input type="radio"/> D <input checked="" type="radio"/> E		Absent: <input type="radio"/>	Buffer Plot 3	Canopy Type: <input checked="" type="radio"/> D <input type="radio"/> E		Absent: <input type="radio"/>	Flag
	Leaf Type: <input checked="" type="radio"/> B <input type="radio"/> N	Flag			Leaf Type: <input checked="" type="radio"/> B <input type="radio"/> N	Flag			Leaf Type: <input checked="" type="radio"/> B <input type="radio"/> N	Flag		
Big Trees (>0.3m DBH)	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Small Trees (<0.3m DBH)	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Herbs, Forbs and Grasses	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bare ground	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Litter, duff	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rock	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Submerged Vegetation	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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				Hydrology Stressors				Agricultural & Rural Stressors				
Fill bubble if present - Plot	1	2	3	Fill bubble if present - Plot	1	2	3	Fill bubble if present - Plot	1	2	3	Flag
Road - gravel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Ditches, Channelization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pasture/Hay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Road - two lane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Dike/Dam/Road/RR Bed (IMPEDE FLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Range	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Road - four lane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Water Level Control Structure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Row Crops	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Parking Lot/Pavement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Excavation, Dredging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fallow Field (RECENT-RESTING ROW CROP FIELD)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Golf Course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fill/Spoil Banks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fallow Field (OLD - GRASS, SHRUBS TREES)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Lawn/Park	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Freshly Deposited Sediment (UNVEGETATED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Nursery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Suburban Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Soil Loss/Root Exposure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Dairy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Urban/Multifamily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Wall/Riprap	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Orchard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Landfill	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Inlets, Outlets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Confined Animal Feeding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Dumping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Point Source/Pipe (EFFLUENT OR STORMWATER)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Rural Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Trash	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Impervious surface input (SHEETFLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Gravel Pit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Irrigation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Industrial Development Stressors				Habitat/Vegetation Stressors								
Fill bubble if present - Plot	1	2	3	Fill bubble if present - Plot	1	2	3	Fill bubble if present - Plot	1	2	3	Flag
Oil Drilling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Forest Clear Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Herbicide Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Gas Wells	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Forest Selective Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Mowing/Shrub Cutting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mine (surface)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tree Plantation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Trails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mine (underground)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tree Canopy Herbivory (INSECT)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Soil Compaction (ANIMAL OR HUMAN)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Military	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Shrub Layer Browsed (WILD OR DOMESTIC)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	Offroad vehicle damage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Highly Grazed Grasses (OVERALL <3" HIGH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Soil erosion (FROM WIND, WATER, OR OVERUSE)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Recently Burned Forest Canopy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Recently Burned Grassland (BLACKENED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

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

Buffer Sample Plots 05/27/2011

2428168304

FORM B-1: BUFFER SAMPLE PLOTS - TARGETED ALIEN SPECIES (Back)
Reviewers

Reviewed by (Initial): _____

Site ID: PCA-111-1373

DATE: 09 / 04 / 2013

Confirm a filled data bubble indicates presence and an unfilled bubble indicates absence by filling in this bubble

Confirm a filled data bubble indicates presence and an unfilled bubble indicates absence														
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Eurasian Watermilfoil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Purple Loosestrife	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Johnson Grass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Water hyacinth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Knotweed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Kudzu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Yellow Floating Heart	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Japanese Knotweed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Multiflora Rose	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Giant Salvinia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Perennial Pepperweed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Common Buckthorn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Garlic Mustard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Giant Reed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Himalayan Blackberry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Poison Hemlock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Cheatgrass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Tamarisk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mile-A-Minute Weed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Reed Canary Grass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Birdsfoot Trefoil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Common Reed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Canada Thistle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Leafy Spurge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

PLOT COORDINATES

Provide GPS coordinates at the center of the Buffer Plot (#3) at the far end of each Buffer Transect and for the Buffer Plot at the AA CENTER. Indicate the location of the plot coordinates by filling in the appropriate bubble.

If Buffer Plot 3 can not be accessed, take the coordinates at the nearest practicable location ALONG THE TRANSECT. This is important because all Buffer Plots are centered on the Buffer Transects and the coordinates will indicate the location of the transect. Fill in the "nearest practicable location" bubble, fill in the flag box, and describe where the coordinates were taken and why in the comment section below. The coordinates of the nearest practicable location can be either placed as close to the center of Plot 3 as possible or at the center of the last accessible Buffer Plot.

Location of coordinates (choose one):

AA CENTER N3 S3 E3 W3 Nearest practicable location (flag and comment below)

Flag

Latitude North 41.25745

Longitude West

D.B.S. 68953

Use Decimal Degrees; NAD83

7966623548

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial): _____

Site ID: PCAP HI 1373

DATE: 09/04/2013

Location:

AA Center ON S OE OW

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: <input checked="" type="radio"/> D <input type="radio"/> E		Absent: <input type="radio"/>	Buffer Plot 2	Canopy Type: <input checked="" type="radio"/> D <input type="radio"/> E		Absent: <input type="radio"/>	Buffer Plot 3	Canopy Type: <input type="radio"/> D <input type="radio"/> E		Absent: <input type="radio"/>													
	Leaf Type: <input checked="" type="radio"/> B <input type="radio"/> N	Flag			Leaf Type: <input checked="" type="radio"/> B <input type="radio"/> N	Flag			Leaf Type: <input type="radio"/> B <input type="radio"/> N	Flag														
Big Trees (>0.3m DBH)	<input checked="" type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4			Big Trees (>0.3m DBH)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4			Big Trees (>0.3m DBH)	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4		
Small Trees (<0.3m DBH)	<input checked="" type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4			Small Trees (<0.3m DBH)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4			Small Trees (<0.3m DBH)	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4		
Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input checked="" type="radio"/>			Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/>	<input type="radio"/> 4			Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	
Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/>	<input type="radio"/> 4			Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4				Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	
Herbs, Forbs and Grasses	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input checked="" type="radio"/>			Herbs, Forbs and Grasses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input checked="" type="radio"/>			Herbs, Forbs and Grasses	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4		
Bare ground	<input checked="" type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4			Bare ground	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4				Bare ground	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4		
Litter, duff	<input checked="" type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4			Litter, duff	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4			Litter, duff	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4		
Rock	<input checked="" type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4			Rock	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4			Rock	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4		
Water	<input checked="" type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4			Water	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4			Water	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4		
Submerged Vegetation	<input checked="" type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4			Submerged Vegetation	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4			Submerged Vegetation	<input type="radio"/>	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 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				Hydrology Stressors				Agricultural & Rural Stressors							
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	
Road - gravel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Ditches, Channelization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Pasture/Hay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Road - two lane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Dike/Dam/Road/RR Bed (IMPEDE FLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Range	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Road - four lane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Water Level Control Structure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Row Crops	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Parking Lot/Pavement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Excavation, Dredging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Fallow Field (RECENT-RESTING ROW CROP FIELD)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Golf Course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Fill/Spoil Banks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Fallow Field (OLD - GRASS, SHRUBS, TREES)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Lawn/Park	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Freshly Deposited Sediment (UNVEGETATED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Nursery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Suburban Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil Loss/Root Exposure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Dairy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Urban/Multifamily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Wall/Riprap	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Orchard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Landfill	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Inlets, Outlets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Confined Animal Feeding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Dumping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Point Source/Pipe (EFFLUENT OR STORMWATER)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Rural Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Trash	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Impervious surface input (SHEETFLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Gravel Pit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Irrigation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		

Industrial Development Stressors				Habitat/Vegetation Stressors											
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	
Oil Drilling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Forest Clear Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Herbicide Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Gas Wells	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Forest Selective Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Mowing/Shrub Cutting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Mine (surface)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tree Plantation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Trails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Mine (underground)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tree Canopy Herbivory (INSECT)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil Compaction (ANIMAL OR HUMAN)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Military	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Shrub Layer Browsed (WILD OR DOMESTIC)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Offroad vehicle damage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Highly Grazed Grasses (OVERALL <3 HIGH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil erosion (FROM WIND, WATER, OR OVERUSE)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Recently Burned Forest Canopy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Recently Burned Grassland (BLACKENED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		

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

Buffer Sample Plots 05/27/2011

FORM B-1: BUFFER SAMPLE PLOTS - TARGETED ALIEN SPECIES (Back) Reviewed _____

Reviewed by (Initials): _____

Site ID: PCAPHI 20131373

DATE: 09/04/2013

② Confirm a filled data bubble indicates presence and an unfilled bubble indicates absence by filling in this bubble

Confirm a filled data bubble indicates presence and an unfilled bubble indicates absence.														
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Eurasian Watermilfoil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Purple Loosestrife	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Johnson Grass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Water hyacinth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Knotweed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Kudzu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Yellow Floating Heart	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Japanese Knotweed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Multiflora Rose	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Giant Salvinia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Perennial Pepperweed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Common Buckthorn	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Garlic Mustard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Giant Reed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Himalayan Blackberry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Poison Hemlock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Cheatgrass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Tamarisk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mile-A-Minute Weed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Reed Canary Grass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Birdsfoot Trefoil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Common Reed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Canada Thistle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Leafy Spurge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
										Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

PLOT COORDINATES

Provide GPS coordinates at the center of the Buffer Plot (#3) at the far end of each Buffer Transect and for the Buffer Plot at the AA CENTER. Indicate the location of the plot coordinates by filling in the appropriate bubble.

If Buffer Plot 3 can not be accessed, take the coordinates at the nearest practicable location ALONG THE TRANSECT. This is important because all Buffer Plots are centered on the Buffer Transects and the coordinates will indicate the location of the transect. Fill in the "nearest practicable location" bubble, fill in the flag box, and describe where the coordinates were taken and why in the comment section below. The coordinates of the nearest practicable location can be either placed as close to the center of Plot 3 as possible or at the center of the last accessible Buffer Plot.

Location of coordinates (choose one):

M CENTER N3 S3 E3 W3

◆ Nearest practicable location (flag and comment below)

Flag

Latitude North 41° 25' 6" 8.7

Longitude West 0.87 69072

Use Decimal Degrees: NAD83

Buffer Sample Points - Targeted Alien Species 05/27/2011

Ligustrum
Rosa
L. mucronata
~~G~~ Buckthorn

7966623548

FORM B-1: BUFFER SAMPLE PLOTS - TARGETED ALIEN SPECIES (Back)

Reviewed by (Initials):

Site ID: PCAPHI1373

DATE: 09 / 04 / 2013

1 Confirm a filled data bubble indicates presence and an unfilled bubble indicates absence by filling in this bubble

Legend: Bubble indicates absence by filling in this bubble														
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Eurasian Watermilfoil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Purple Loosestrife	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Johnson Grass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Water hyacinth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Knotweed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Kudzu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Yellow Floating Heart	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Japanese Knotweed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Multiflora Rose	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Giant Salvinia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Perennial Pepperweed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Common Buckthorn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Garlic Mustard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Giant Reed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Himalayan Blackberry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Poison Hemlock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Cheatgrass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Tamarisk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mile-A-Minute Weed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Reed Canary Grass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Birdsfoot Trefoil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Common Reed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Canada Thistle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Leafy Spurge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
										Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

PLOT COORDINATES

Provide GPS coordinates at the center of the Buffer Plot (#3) at the far end of each Buffer Transect and for the Buffer Plot at the AA CENTER. Indicate the location of the plot coordinates by filling in the appropriate bubble.

If Buffer Plot 3 can not be accessed, take the coordinates at the nearest practicable location ALONG THE TRANSECT. This is important because all Buffer Plots are centered on the Buffer Transects and the coordinates will indicate the location of the transect. Fill in the "nearest practicable location" bubble, fill in the flag box, and describe where the coordinates were taken and why in the comment section below. The coordinates of the nearest practicable location can be either placed as close to the center of Plot 3 as possible or at the center of the last accessible Buffer Plot.

Location of coordinates (choose one):

AA CENTER N3 S3 E3 W3 Nearest practicable location (flag and comment below)

Latitude North 41.25731 Longitude West 081.69216
Use Decimal Degrees: NAD83

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial): _____

Site ID: PCAP HI 2013

DATE: 09 / 04 / 2013

Location: **ON** AA Center **ON** OS **OE** **OW**

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: <input checked="" type="radio"/> D <input type="radio"/> E		Absent: <input type="radio"/>	Buffer Plot 2	Canopy Type: <input checked="" type="radio"/> D <input type="radio"/> E		Absent: <input type="radio"/>	Buffer Plot 3	Canopy Type: <input checked="" type="radio"/> D <input type="radio"/> E		Absent: <input type="radio"/>
	Leaf Type: <input checked="" type="radio"/> B <input type="radio"/> N	Flag			Leaf Type: <input checked="" type="radio"/> B <input type="radio"/> N	Flag			Leaf Type: <input checked="" type="radio"/> B <input type="radio"/> N	Flag	
Big Trees (>0.3m DBH)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Small Trees (<0.3m DBH)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Herbs, Forbs and Grasses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bare ground	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Litter, duff	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rock	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Submerged Vegetation	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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				Hydrology Stressors				Agricultural & Rural Stressors							
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	
Road - gravel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Ditches, Channelization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Pasture/Hay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Road - two lane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Dike/Dam/Road/RR Bed (IMPEDE FLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Range	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Road - four lane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Water Level Control Structure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Row Crops	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Parking Lot/Pavement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Excavation, Dredging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Fallow Field (RECENT-RESTING ROW CROP FIELD)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Golf Course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Fill/Spoil Banks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Fallow Field (OLD - GRASS, SHRUBS, TREES)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Lawn/Park	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Freshly Deposited Sediment (UNVEGETATED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Nursery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Suburban Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil Loss/Root Exposure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Dairy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Urban/Multifamily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Wall/Riprap	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Orchard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Landfill	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Inlets, Outlets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Confined Animal Feeding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Dumping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Point Source/Pipe (EFFLUENT OR STORMWATER)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Rural Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Trash	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Impervious surface input (SHEETFLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Gravel Pit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Irrigation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		

Industrial Development Stressors				Habitat/Vegetation Stressors											
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	
Oil Drilling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Forest Clear Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Herbicide Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Gas Wells	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Forest Selective Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Mowing/Shrub Cutting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Mine (surface)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tree Plantation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Trails	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Mine (underground)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tree Canopy Herbivory (INSECT)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil Compaction (ANIMAL OR HUMAN)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Military	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Shrub Layer Browsed (WILD OR DOMESTIC)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>		Offroad vehicle damage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Highly Grazed Grasses (OVERALL <3" HIGH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil erosion (FROM WIND, WATER, OR OVERUSE)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Recently Burned Forest Canopy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Recently Burned Grassland (BLACKENED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		

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