

CLEVELAND METROPARKS Plant Community Assessment Program: Quality Control Form

Project Label:

PCAP

Plot No: 1317

Date Sampled: 7/1, 7/2

Cleveland Metroparks

Lead: J. Miller

		Comment required if item answer is NO	
		If yes, write details in Comments section below	
Parking/Access outside of Park Boundaries:		<input checked="" type="checkbox"/>	N
Field journals completed		<input checked="" type="checkbox"/>	N
Site sketch made on 1:3000 map?		<input checked="" type="checkbox"/>	N
Check cover page	X-axis Bearing of plot recorded	<input checked="" type="checkbox"/>	N
	GPS coords. Recorded	<input checked="" type="checkbox"/>	N
	North direction recorded	<input checked="" type="checkbox"/>	N
	Photographs taken?	<input checked="" type="checkbox"/>	N
Plot No., Date agreement on all pages?		<input checked="" type="checkbox"/>	N
Header data completed all pages?		<input checked="" type="checkbox"/>	N
Cover classes recorded in all Intensive modules		<input checked="" type="checkbox"/>	N
Browse Level By Species		<input checked="" type="checkbox"/>	N
Woody stem quality control check		<input checked="" type="checkbox"/>	N
Invasive plant quality control check		<input checked="" type="checkbox"/>	N
Ash trees mapped		<input checked="" type="checkbox"/>	N
Cover by Strata? (confirm cover type)		<input checked="" type="checkbox"/>	N
Soil samples collected with matching plot #.		<input checked="" type="checkbox"/>	N
Vouchers labeled on datasheet with initials and number		<input checked="" type="checkbox"/>	N
Vouchers labeled on collection bag		<input checked="" type="checkbox"/>	N
Pink flags removed		<input checked="" type="checkbox"/>	N
Data sheet QA before leaving site?		<input checked="" type="checkbox"/>	N
Common equipment returned to tub.		<input checked="" type="checkbox"/>	N
Data sheets scanned?		7/15/13 Enter date to left AB	
Final data sheets scanned?		Enter date to left	
Buffer Widths measured?		<input checked="" type="checkbox"/>	N AB 6-20-13
Web Soil Survey		<input checked="" type="checkbox"/>	N AB 7/15/13
Voucher Location	Refrigerator	<input checked="" type="checkbox"/>	N
(# vouchers collected)	Press (#)	Enter number to left	
	Drier	<input checked="" type="checkbox"/>	N
	Identified	<input checked="" type="checkbox"/>	N
	Mounted	<input checked="" type="checkbox"/>	N
	Thrown away	<input checked="" type="checkbox"/>	N

GRTS point verification: Is plot sampleable?

<input checked="" type="checkbox"/> Yes	Original GRTS point is sampleable
<input type="checkbox"/> No	Original GRTS point lands in a non-sampleable area (fill in category below)
<input type="checkbox"/> Point falls in a water (i.e. river, lake)	
<input type="checkbox"/> Managed mowed area (i.e. golf course, picnic area, right-of-way)	
<input type="checkbox"/> Paved area (i.e. parkinglot, road)	
<input type="checkbox"/> Unsafe to sample (i.e. steep slope)	
<input type="checkbox"/> Other	

Additional Comments:

* Park @ Kiwanis Cabin area.

* Combination R.I.R. and standard paper data sheets used due to humidity, rain, weather changes etc.

Community Assessment Program - Background Data Sheet

Plot No.: 1317

Page 2 of 2

CLEVELAND METROPARKS

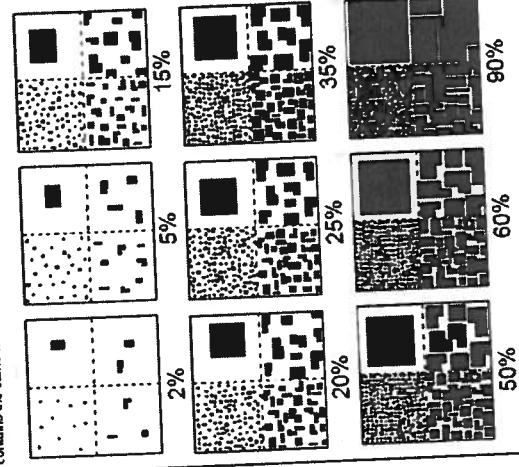
PCAP

Project Name: 01 H. Z & 13

MODIFIED NATURE RESERVE CLASS		DISTURBANCES	
CODE (on separate form): C03		<input checked="" type="checkbox"/> <i>check community designation</i>	
Habitat Conf.		type*	severity**
		Human	M
		Fire	O
		Cult. Natural	
		Other	
		* *L=low, M=med low, M=med, MH=med high, H=high, VH=very high	
COMMUNITY NAME: <i>Beech - Maple (not good recruitment)</i> <i>- Sugar maple forest of beech</i>		Current Land Use: CMR	
HOMOGENEITY		<input type="checkbox"/> Compositional trend across the plot <input type="checkbox"/> Homogeneous <input type="checkbox"/> Conspicuous inclusions	
HYDROLOGIC REGIME*		<input type="checkbox"/> Upland (seldom flooded) <input type="checkbox"/> Intermittently/seasonally saturated (seldom flooded) <input type="checkbox"/> Permanently/Semipermanent saturated (dry <1/yr, seldom flooded) <input type="checkbox"/> Occasionally flooded (<1/yr) <input type="checkbox"/> Temporarily flooded (e.g. wind, storms) <input type="checkbox"/> Unknown	
(by default unless plot is a wetland)			
Additional notes & diagrams: (Representativeness of plot to the stand, successional status, maturity, etc.) <p>At first, we set up this plot w/ the GPTS point @ the origin on the baseline (same bearing). We changed this, putting the bottom 4 mols (4-7) and adding 4 on the S.W. ("top"). This was done in an effort to represent more of the tulip/slip/cucumber magnolia blc the GPTS point fell in an area w/ these trees dominant, rather than sugar maple. In the end the larger community proved to be sugar maple (beech, maple) mostly.</p> <p>— = sampled plot — = original, rejected plot setup.</p>			

EXAMPLES OF PERCENT OF AREA COVERED

The following graphic can be used for various data elements to convey "Amount or Quantity". NOTE: Within any given 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.

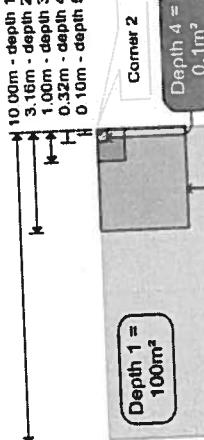
MEDIUM HIGH values include evidence of a browse line and 25 percent of stems browsed with very little vegetation regeneration evident. In this rating, for some species of plants, reproduction does not appear to occur or it is very severely limited.

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



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

Project Label: PCAP

Project name: Q H Z Q 3

Page 2 of 2

Total modules: 10

Intensive modules: 4

Plot configuration: 2x5

Plot area (ha): 0.1



**Cleveland
Metroparks**

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

Estimate for each
intensive module:

mod	corner														
2	4	12	2	3	4	13	2	8	4	8	2	9	4	9	2
depth	cov														

%open water	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
%unvegetated open water	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
%unveg. ground (bare soil)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
%unveg. litter (bare litter)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

T	S	H	(F)	(A)	Br	Species	C	Voucher #	depth	cov	depth	cov	depth	cov	depth	cov
1	2					<i>Acer spp. (seedling)</i>	1	2								
2	2					<i>Veronica officinalis</i>										
1	2					<i>Vaccinium spp.</i>	2	3	C3 - 1347, 49	2	2	2	2	2	2	
2	2					<i>Amanita</i> sp.										
2	2					<i>Gaultheria</i> sp.										
2	2					<i>Viburnum acerifolium</i>	1	2								
2	2					<i>Potentilla</i> spp.										
2	2					<i>Podophyllum peltatum</i>										
3	3					<i>Crataegus</i> spp.										
2	2					<i>Acer spicatum</i>	1	2								
1	1					<i>Viburnum dentatum</i>	1	3								
1	1					<i>Oxalis</i> spp.										
1	1					<i>Carex</i> sp. Carex gracillima X	1	2								
1	1					<i>Liquidambar</i> spp.	1	2								
5	5					<i>Acer rubrum</i>	1	4								
2	2					<i>Gaultheria</i> sp.	1	2								
1	1					<i>Crataegus</i> spp.	1	3								
1	1					<i>Hamamelis virginiana</i>	1	2								
1	1					<i>Amelanchier</i> sp.	1	2								
1	1					<i>Prunus pensylvanica</i>	1	2								
2	2					<i>Malus</i> spp.	1	2								
2	2					<i>Maianthemum canadense</i>	1	2								
1	1					<i>Ulmus americana</i>	1	2								
1	1					<i>Ulmus americana</i>	1	2								
2	2					<i>Prunus pensylvanica</i>	1	2								
2	2					<i>Crataegus</i> spp.	1	2								
2	2					<i>Cornus</i> spp.	1	2								
2	2					<i>Populus tremuloides</i>	1	2								
2	2					<i>Populus tremuloides</i>	1	2								
2	2					<i>Pyrus</i> spp.	1	2								

CLEVELAND METROPARKS Plant Committee

Explaining subgame perfect equilibria

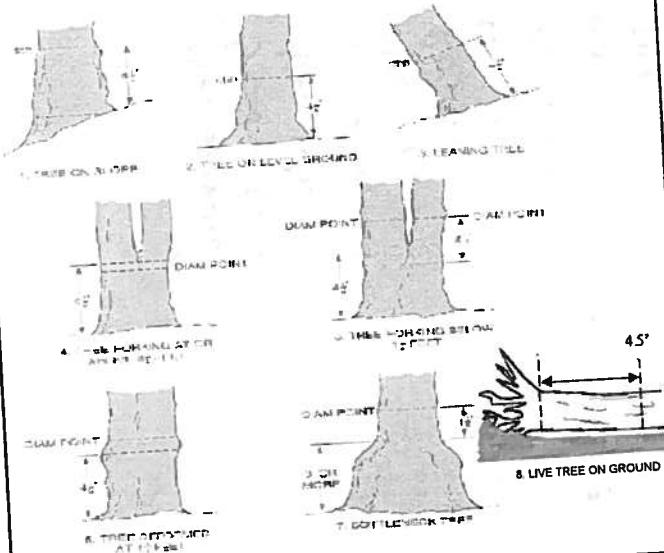
Project Name: Q1 H: 2013

Plot No.: 1317

Page: 1 of 5 Clever

Cleveland Metroparks

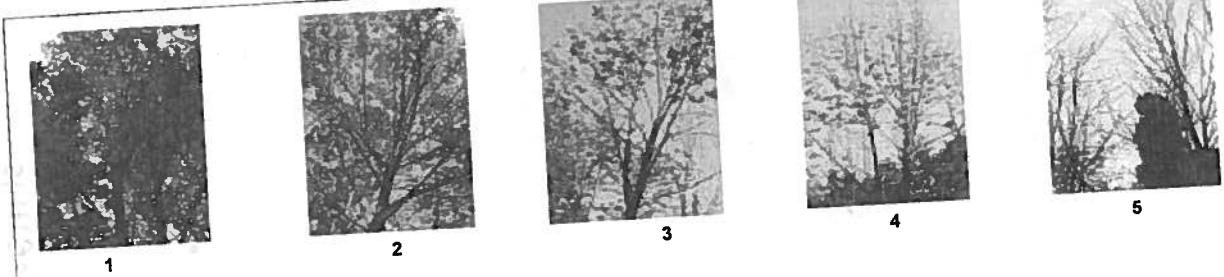
DBH Measurement Rules



Woody Stem Deer Browse

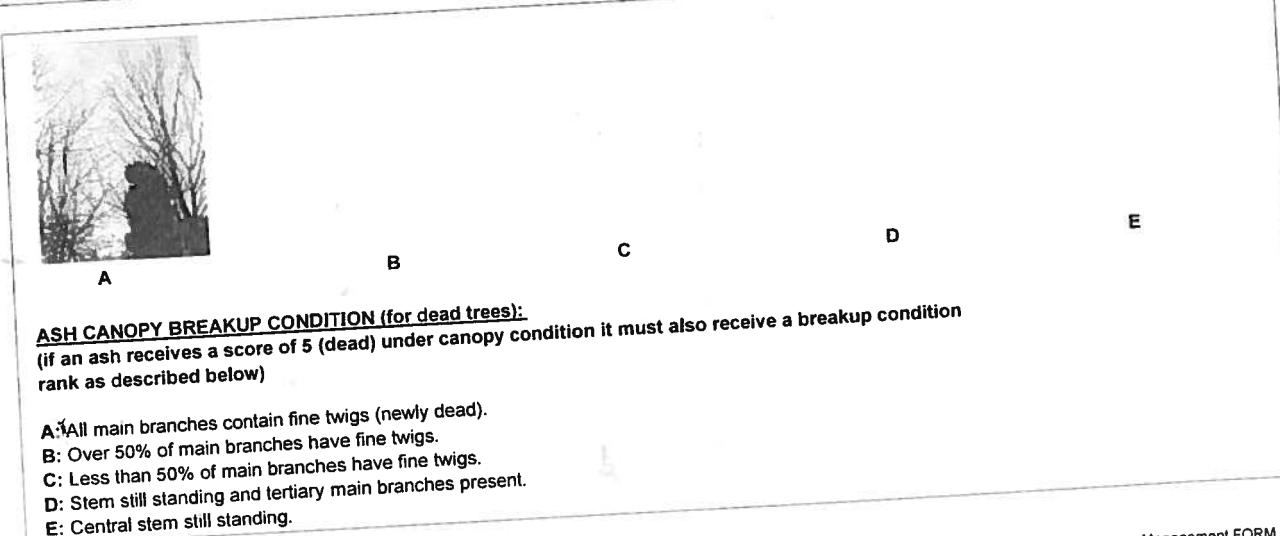
Record the number of stems/plants between 0.5-1.0 meters tall that exhibit evidence of this years deer browse.

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.



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: OH:2013

Plot No: 1317

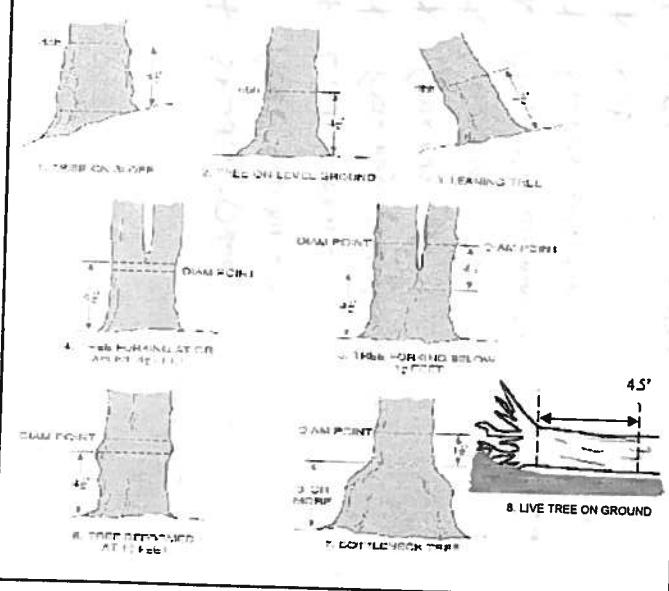
Page: 2 of 5

Cleveland Metroparks

Explain subsample (additional room on back):

mod #	species	c	voucher#	# stems browsed	% sub sample	# clumps	size class (cm) woody stems >1.4m											11 >40 (record each tree)
							1	2	3	4	5	6	7	8	9	10		
3	Standing Dead			•		11	□	•	•	•	•	•	•	•	•	•	92.4	
3	Acer saccharum																	
3	Lindera benzoin																	
3	Fraxinus pennsylvanica																	
3	Fraxinus texensis pennsylvanica																	
3	Liquidambar tulipifera																	
3	Magnolia acuminata																	
3	Pinus strobus			••														
3	Rubus sp. pensylvanicus			••														
3	Parthenocissus quinquefolia																	
4	Acer saccharum			11	••	••	••	••	••	••	••	••	••	••	••	••	••	
4	Standing Dead																	
4	Fraxinus pennsylvanica																	
4	Parthenocissus quinquefolia																	
4	Lindera benzoin																	
4	Pinus strobus																	
4	Crateagus sp.																	
5	Standing Dead																	
5	Acer saccharum																	
5	Magnolia acuminata																	
5	Fraxinus pennsylvanica																	
5	Pinus strobus																	
5	Conus ^{sp.} attenuata			••														
6	Acer saccharum																	

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.
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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

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CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

Project Label: PCAP

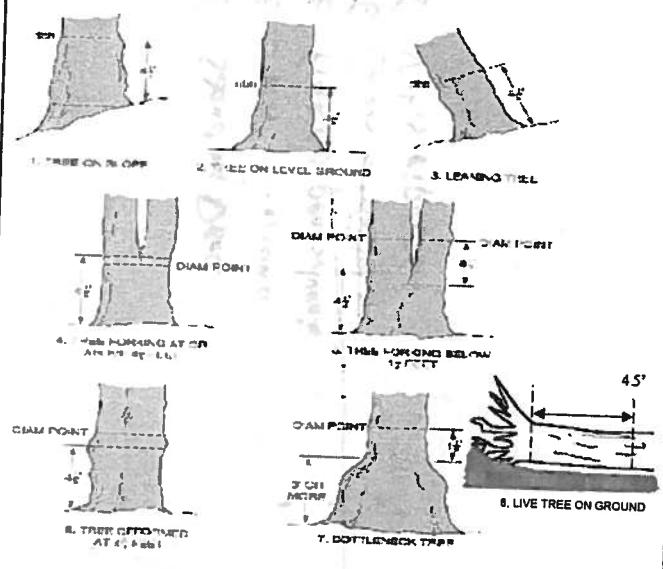
Project Name: Ohio 2013

Plot No.: 1317

Page: 3 of 5

Explain subsample (additional room on back).

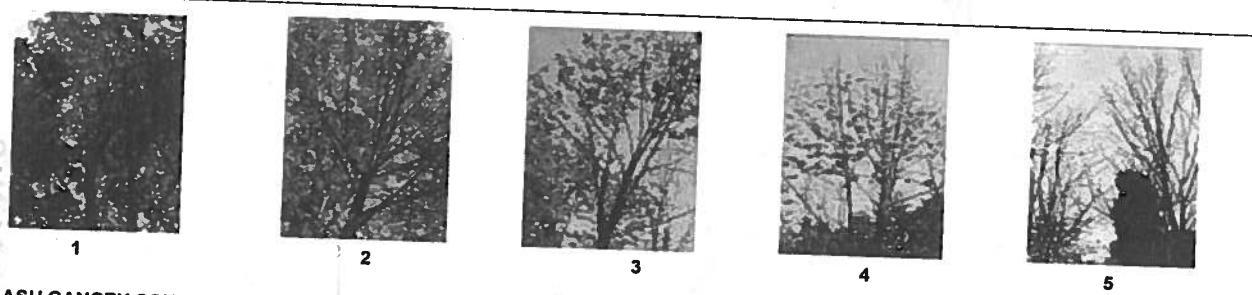
DBH Measurement Rules



Woody Stem Deer Browse

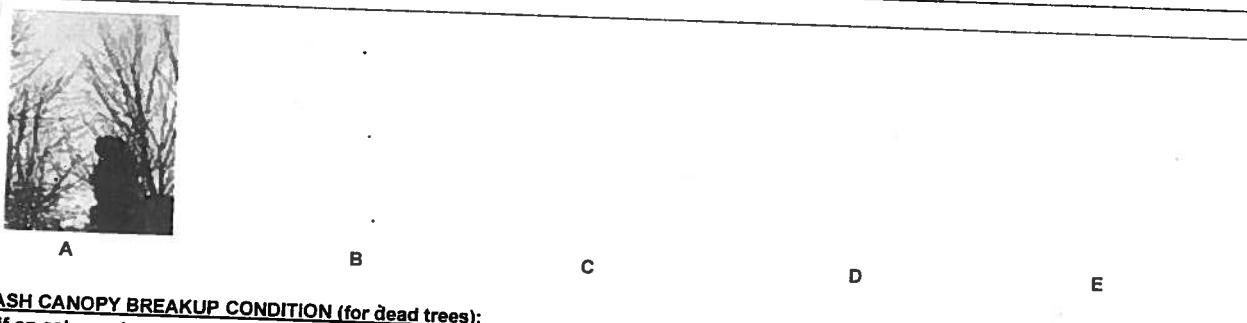
Record the number of stems/plants between 0.5-1.0 meters tall that exhibit evidence of this years deer browse.

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.
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CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

Project Label: PCAP

Project Name: 014132013

Plot No.: 1317 Page: 4 of 5

Explain subsample (additional room on back):

mod #	species	c	voucher#	# browsed	% sub sample	# shrub clumps	size class (cm) woody stems >1.4m										# stems 0-1.4m or super sample	size class (cm) woody stems >1.4m	# stems >40 (record each tree)	
							1	2	3	4	5	6	7	8	9	10	11			
7	<i>Aesculus sylvatica</i>			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41.0	7623
7	<i>Fagus grandifolia</i>			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	<i>Syringa</i> Dead			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	<i>Liriodendron tulipifera</i>			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	<i>Acer saccharum</i>			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Standing Dead			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	<i>Rubus sp. pensylvanicus</i>			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	<i>Ulmus americana</i>			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	<i>Fraxinus sp.</i>			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	<i>Liriodendron tulipifera</i>			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	<i>Craibergia</i> sp.			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	<i>Polystachys glutinosa</i>			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	<i>Fraxinus pennsylvanica</i>			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	<i>Amelanchier canadensis</i>			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	<i>Liquidambar styraciflua</i>			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Standing Dead			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	<i>Toxicodendron radicans</i>			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	<i>Rubus sp. pensylvanicus</i>			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	<i>Ulmus americana</i>			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	<i>Fraxinus pennsylvanica</i>			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	<i>Vitis riparia</i>			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	<i>Acer rubrum</i>			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	<i>Acer saccharum</i>			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	<i>ROSA MULIFLORA</i>			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(One)



CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

Project Label: PCAP

Project Name: 0111: 2013

Plot No.: 1317

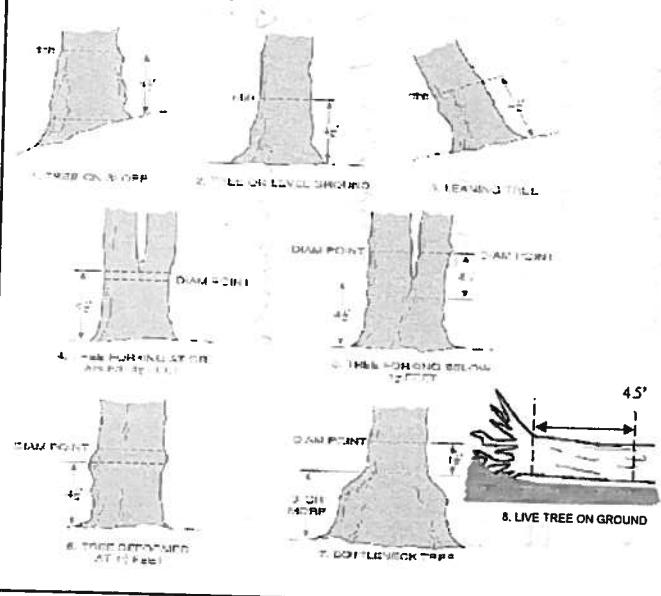
Page: 5 of 5

 Cleveland Metroparks

Explain subsample (additional room on back):

mod #	species	c	voucher#	# stems 0-1.4m or super browsed	% sub sample	# shrub clumps	size class (cm) woody stems >1.4m											# stems >40 (record each tree)
							1	2	3	4	5	6	7	8	9	10	11	
9	<i>Parthenocissus quinquefolia</i>		..															
10	<i>Parthenocissus quinquefolia</i>		..															
10	<i>Acer rubrum</i>		..															
10	<i>Vitis riparia</i>		..															
10	<i>Fraxinus pennsylvanica</i>		..															
10	<i>Styrax obassia</i>		..															
10	<i>Cirsiodendron tikoufana</i>		..															
10	<i>Toxicodendron radicans</i>		□															
10	<i>Ulmus americana</i>		..															
10	<i>Rosa multiflora</i>		..															
10	<i>Lindernia vulgaris</i>		..															

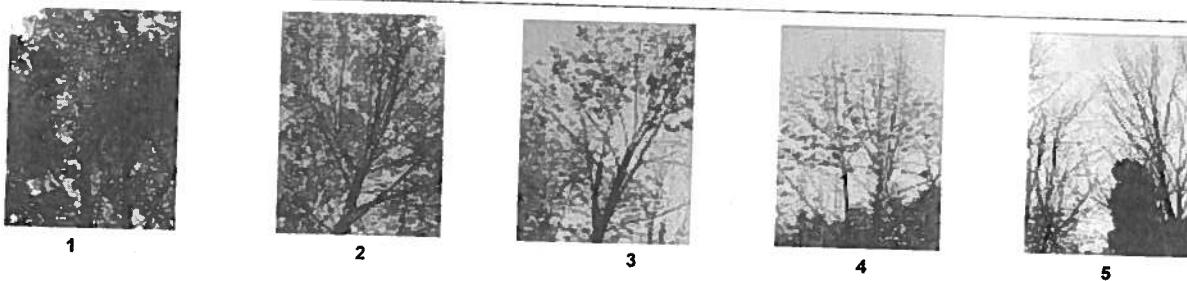
DBH Measurement Rules



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

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CLEVELAND METROPARKS Emerald Ash Borer - *Fraxinus* Sheet

Project Label: PCAP

Project Name: 0145: 2013

INTENSIVE MODULES ONLY TREES $\geq 10\text{cm}$ ONLY Date: 7-1-2013

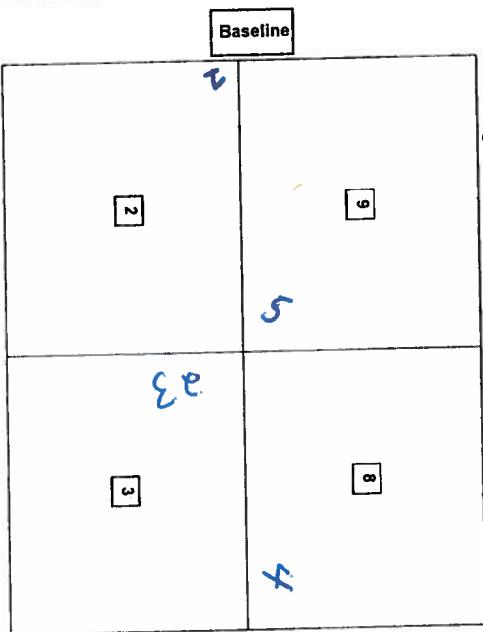
Page: 1 of 2

Module Tree Species Dead c Voucher # DBH (cm) Ht @ DBH condition *Dead condition # Exit holes present Epicormic Woodpecker holes

Module	Tree ID	Species	Dead c	Voucher #	DBH (cm)	Ht @ DBH condition	*Dead condition	# Exit holes	present	Epicormic	Woodpecker holes
2	1	<i>Fraxinus sp.</i>			12.5	/	5	D	0	1	0
3	2	<i>Fraxinus sp.</i>			11.9	/	5	C	0	1	0
3	3	<i>Fraxinus sp.</i>			12.6	/	2	/	0	0	0
3	4	<i>Fraxinus sp.</i>			38.1	/	2	/	0	1	1
4	5	<i>Fraxinus sp.</i>			16.0	/	5	C	0	0	0
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											

- If Ash Condition scores 5 (dead) provide breakup score (A-E)
- Count EAB exit holes $1.25\text{m}^2 \times 21.5\text{m}$
- Woodpecker and epicormic marked present (1) or absent (0)

Map all ash trees $\geq 10\text{cm}$ in each module using Tree ID number



*** Change intensive module numbers when necessary

CLEVELAND METROPARKS Plant Community Assessment Program: Invasive Species Survey



Tier 1: Early detection/ Rapid response

		Presence				GPS
		NE	SE	SW	NW	
<i>Microstegium vimineum</i>	Japanese stiltgrass					
<i>Ranunculus ficaria</i>	Lesser Celandine					
<i>Cynanchum louiseae</i> (vine)	Black Swallow-wort					
<i>Butomus umbellatus</i> (wetland)	Flowering Rush					
<i>Heracleum mantegazzianum</i>	Giant Hogweed					

Presence
X: yes

Tier 2: Assess as Needed

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

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

Tier 3: Presence is of Interest

		# of Plants				comments
		NE	SE	SW	NW	
<i>Convallaria majalis</i> (G-cover)	Lily of the Valley					
<i>Coronilla varia</i> (G-cover)	Crown Vetch					
<i>Eleutherococcus pentaphyllus</i>	Five-leaf Aralia (shrub)					
<i>Pachysandra terminalis</i> (G-cover)	Japanese Pachysandra					
<i>Philadelphus coronarius</i>	Mock Orange (shrub)					
<i>Pulmonaria officinalis</i> (G-cover)	Lungwort					
<i>Rubus phoenicolasius</i>	Wineberry					
<i>Iris pseudacorus</i> (wetland)	Yellow Flag Iris					
<i>Ornithogalum umbellatum</i>	Star of Bethlehem					
<i>Viburnum opulus</i> var. <i>opusulus</i>	European Cranberry (shrub)					
<i>Viburnum plicatum</i>	Doublefile Viburnum (shrub)					

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

Tier 4: Widespread and abundant

		Presence				comments
		NE	SE	SW	NW	
<i>Alliaria petiolata</i>	Garlic Mustard					
<i>Ligustrum vulgare</i>	Common Privet (shrub)					
<i>L. morrowii</i> , <i>L. tatarica</i>	Bush Honeysuckles (shrub)					
<i>Phalaris arundinacea</i>	Reed Canarygrass					
<i>Phragmites australis</i> (wetland)	Phragmites					
<i>Polygonum cuspidatum</i>	Japanese Knotweed					
<i>Frangula alnus</i>	Glossy Buckthorn (shrub)					
<i>Rosa multiflora</i>	Multiflora Rose (shrub)					
<i>Typha angustifolia</i> , <i>T. x. glauca</i>	Cattails (wetland)					
<i>Cirsium arvense</i>	Canada thistle					
<i>Dipsacus fullonum</i>	Common Teasel					
<i>Hesperis matronalis</i>	Dame's Rocket					
<i>Vinca minor</i> (G-cover)	Periwinkle					

Presence
X: Yes

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

CLEVELAND METROPARKS Plant Community Assessment Program: Invasive Species Survey



Tier 1: Early detection/ Rapid response		Presence				GPS	Presence
		NE	SE	SW	NW		
<i>Microstegium vimineum</i>	Japanese stiltgrass						
<i>Ranunculus ficaria</i>	Lesser Celandine						
<i>Cynanchum louiseae</i> (vine)	Black Swallow-wort						
<i>Butomus umbellatus</i> (wetland)	Flowering Rush						
<i>Heracleum mantegazzianum</i>	Giant Hogweed						
Tier 2: Assess as Needed		# of Plants				comments	# of Plants
		NE	SE	SW	NW		
<i>Acer platanoides</i>	Norway Maple						1: 1-10
<i>Ailanthus altissima</i>	Tree of Heaven						2: 11-50.
<i>Lonicera japonica</i> (vine)	Japanese Honeysuckle						3: 51-100
<i>Lythrum salicaria</i> (wetland)	Purple Loosestrife						4: 101-1,000
<i>Aegopodium podagraria</i> (G-cover)	Bishop's Goutweed						5: >1,000
<i>Celastrus orbiculatus</i> (vine)	Asian Bittersweet						
<i>Torilis</i> sp.	Hedgeparsley						
<i>Conium maculatum</i>	Poison Hemlock						
<i>Rhamnus cathartica</i>	Common Buckthorn (shrub)						
<i>Berberis thunbergii</i>	Japanese Barberry (shrub)						
<i>Alnus glutinosa</i>	European Alder						
<i>Dipsacus laciniatus</i>	Cut-leaf Teasel						
<i>Elaeagnus umbellata</i>	Autumn Olive (shrub)						
<i>Lonicera maackii</i>	Amur Honeysuckle (shrub)						
<i>Euonymus fortunei</i>	Wintercreeper						
Tier 3: Presence is of Interest		# of Plants				comments	# of Plants
		NE	SE	SW	NW		
<i>Convallaria majalis</i> (G-cover)	Lily of the Valley						1: 1-10
<i>Coronilla varia</i> (G-cover)	Crown Vetch						2: 11-50.
<i>Eleutherococcus pentaphyllus</i>	Five-leaf Aralia (shrub)						3: 51-100
<i>Pachysandra terminalis</i> (G-cover)	Japanese Pachysandra						4: 101-1,000
<i>Philadelphus coronarius</i>	Mock Orange (shrub)						5: >1,000
<i>Pulmonaria officinalis</i> (G-cover)	Lungwort						
<i>Rubus phoenicolasius</i>	Wineberry						
<i>Iris pseudacorus</i> (wetland)	Yellow Flag Iris						
<i>Ornithogalum umbellatum</i>	Star of Bethlehem						
<i>Viburnum opulus</i> var. <i>opulus</i>	European Cranberry (shrub)						
<i>Viburnum plicatum</i>	Doublefile Viburnum (shrub)						
Tier 4: Widespread and abundant		Presence				comments	# of Plants
		NE	SE	SW	NW		
<i>Alliaria petiolata</i>	Garlic Mustard						1: 1-10
<i>Ligustrum vulgare</i>	Common Privet (shrub)			1			2: 11-50.
<i>L. morrowii</i> , <i>L. tatarica</i>	Bush Honeysuckles (shrub)						3: 51-100
<i>Phalaris arundinacea</i>	Reed Canarygrass						4: 101-1,000
<i>Phragmites australis</i> (wetland)	Phragmites						5: >1,000
<i>Polygonum cuspidatum</i>	Japanese Knotweed						
<i>Frangula alnus</i>	Glossy Buckthorn (shrub)						
<i>Rosa multiflora</i>	Multiflora Rose (shrub)	3		1	4		
<i>Typha angustifolia</i> , <i>T. x glauca</i>	Cattails (wetland)						
<i>Cirsium arvense</i>	Canada thistle						
<i>Dipsacus fullonum</i>	Common Teasel						
<i>Hesperis matronalis</i>	Dame's Rocket						
<i>Vinca minor</i> (G-cover)	Periwinkle						

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



STANDING BIOMASS (required for emergent wetlands): collected in 1 m² subplot (32x32 cm) from corners 1 and 3 in each intensive module. Required for VIBI-E score calculation. C=check when collected

Module #	C?	Corner	Corner

CLASSIFICATION

(Fit = excellent, & Fit and Confidence

Hydrogeomorphic class (WETLANDS ONLY):

□ DEPRESSION

□ IMPOUNDMENT □ Beaver □ Human

□ RIVERINE □ Headwater □ Mainstem □ Channel

□ SLOPE (ground water hydrology or on physical slope)

□ FRINGING □ Reservoir □ Natural Lake

□ COASTAL (specify subclasse)

□ BOG (strongly, moderately, weakly ombrotrophic)

Ohio EPA VBLE Plant Community Class (WETLANDS ONLY):

□ FOREST □ swamp forest □ bog forest □ forest swamp

□ EMERGENT □ marsh □ wet meadow □ open bog

□ SHRUB □ shrub swamp □ tall shrub □ tall sedge fen

Ohio EPA VBLE Plant Community Class (WETLANDS ONLY):

□ FOREST □ swamp forest □ bog forest □ forest swamp

□ EMERGENT □ marsh □ wet meadow □ open bog

□ SHRUB □ shrub swamp □ tall shrub □ tall sedge fen

Fit=

Conf=

Fit=

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.

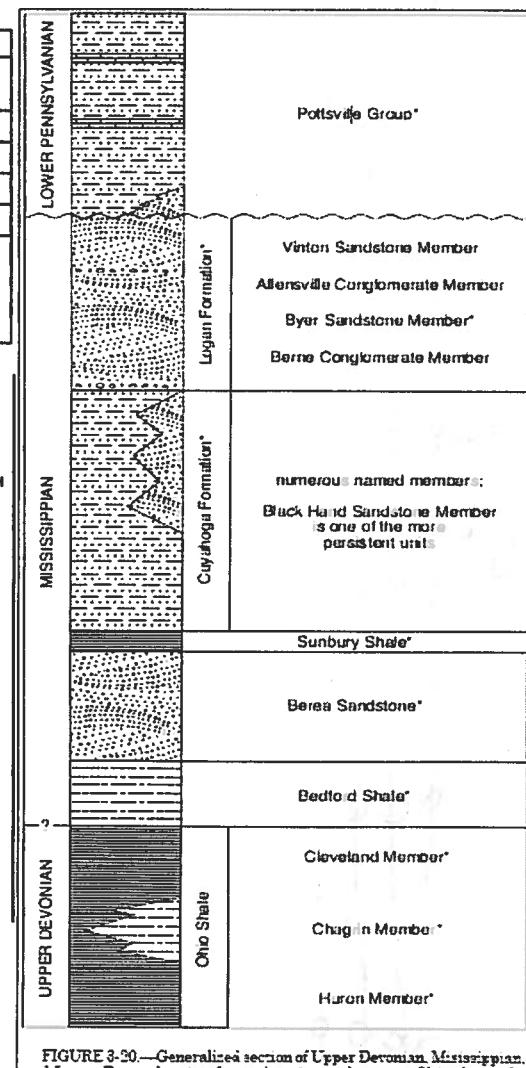
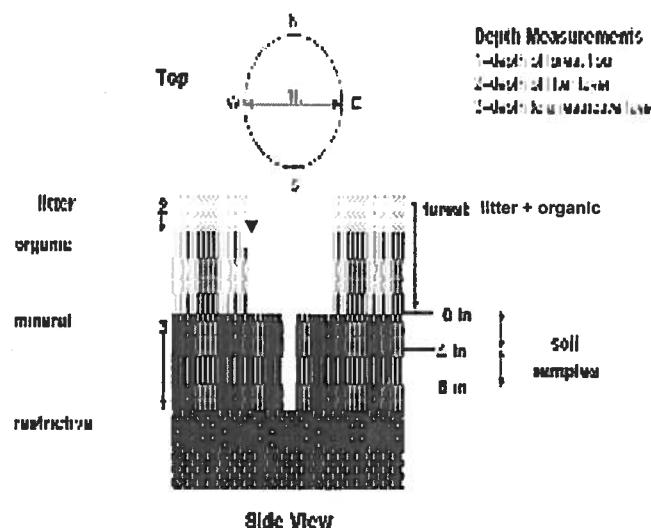


FIGURE 3-20.—Generalized section of Upper Devonian, Mississippian, and Lower Pennsylvanian formations in northeastern Ohio. Asterisks indicate units that are fossiliferous. This composite section represents about 400 meters of rock exposed across the area. The section is not to scale, but the thicknesses 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 Ryd (1953), Hoover (1960), and Collins (1979) for more information on Mississippian rocks in Ohio. See figure 3-16 for explanation of rock types.

* Soil originally taken in 2 (had to 30 in max because of a tree) but plot was shifted SW so that became mod A. Consulted soil map, soil still the same, so we kept the data.

No trunk

SOIL PIT DESCRIPTION: Excavate 20 cm plug with 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 
	moisture color 
	soil texture 
	oxid roots 
	texture* 
	redox features** 
20 cm	hydr. cond *** 
	matrix color 
	moisture color 
	oxid roots 
	texture* 
	redox features** 
	hydr. cond *** 

AB 7/15/13

Soil Collection Module (horizon A, B, C)	A
2,3,8,9 composted	
Soil Series/Type: E1B-Ellisworth Silt Loam	
Soil Series Source: Ohio Soil Survey	
Landform type: Till plains	
Depth to next layer: None known 80 in.	101 cm
Parent Material: Till	
• Excessively dr.	<input type="checkbox"/>
• Well drained	<input checked="" type="checkbox"/>
• Somewhat poorly dr.	<input type="checkbox"/>
• Very poorly dr.	<input type="checkbox"/>
• Impermeable surface	<input type="checkbox"/>

EARTH SURFACE & GROUND COVER		
Underlying Earth Surface*	Ground Cover	
(Sum = 100%)	percent	percent
Histsol	0	Coarse Woody Debris***
Mineral Soil	100	Fine Woody Debris***
Gravel-Cobble*	0	Litter
Boulder**	0	Duff (Fern + Humus)
Bedrock	0	Bryophyte-Lichen
Water	0	Gravel
Bare Soil	1	Deer
**>5 cm in diameter		Boatleg unsanctioned
***<5 cm in diameter		Bindle
Other	0	Hiking sanctioned

SL 8-7-13

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

STAND SIZE		
Strata	Height Range(m)	Total Cover(%)
Tree	1.5m	93
Shrub	.5-.5m	63
Herb	<.5	13
(Floating)*	-	N/A
(Aquatic)*	-	N/A

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

only worm sighted during sampling (4/25).

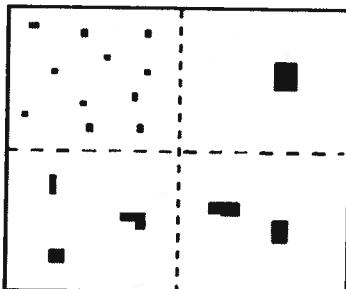
Some findings:

2	0.7	0.7	0	>30
3	2.0	2.0	0	>30
3	1.5	1.5	0	>30
9	1.7	1.7	0	>30

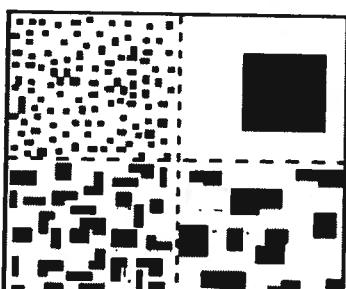
SEE BACK OF PAGE FOR 'TYPICAL' STRATA DESCRIPTIONS. STRATA CAN VARY BY COVER TYPE.

PERCENT MOTTLES (USE CLASS CODES).

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



2%



20%

Geomorphic Component - Three-dimensional descriptors of parts of landscapes 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	
	PDP	NASIS
interfluve	IF	IF
head slope	HS	HS
nose slope	NS	NS
side slope	SS	SS
base slope	—	BS

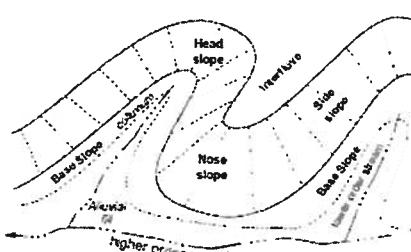
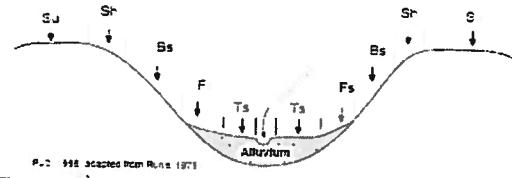


Fig. 19c: adapted from Fig. 19a

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



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/SEMIPERMANENTLY-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 Gossard's G4 and G5.

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. E.g. Alluvial Fan, Delta.

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 data.

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial): _____

Site ID: PCAP 1317 BP

DATE: 07/02/2013

Location:

● 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 type="radio"/> D <input checked="" type="radio"/> E		Absent: <input type="radio"/>	Buffer Plot 3	Canopy Type: <input type="radio"/> D <input checked="" type="radio"/> E		Absent: <input type="radio"/>
	Leaf Type: <input checked="" type="radio"/> B <input type="radio"/> N	Flag: <input type="radio"/>			Leaf Type: <input type="radio"/> B <input checked="" type="radio"/> N	Flag: <input type="radio"/>			Leaf Type: <input type="radio"/> B <input checked="" type="radio"/> N	Flag: <input type="radio"/>	
Big Trees (>0.3m DBH)	<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"/>	<input type="radio"/>
Small Trees (<0.3m DBH)	<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"/>
Woody Shrubs, Saplings (0.5m-5m HIGH)	<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"/>
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"/>
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"/>
Bare ground	<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"/>
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 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"/>
Water	<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"/>
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"/>

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"/>	<input type="radio"/>	Ditches, Channelization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pasture/Hay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Road - two lane	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Dike/Dam/Road/RR Bed (IMPEDE FLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Range	<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"/>	Water Level Control Structure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Row Crops	<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"/>	Excavation, Dredging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fallow Field (RECENT RESTING ROWCROP FIELD)	<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"/>	Fill/Soil Banks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fallow Field (OLD GRASS SHRUBS, TREES)	<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"/>	Freshly Deposited Sed (UNGRAVELLED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Nursery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Suburban Residential	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Soil Loss/Root Exposure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Airy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Urban/Multi-family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Wall/Riprap	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Orchard	<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"/>	Inlets, Outlets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Confined Animal Feedin	<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"/>	Point Source/Pipe (EFFLUENT OR STORMWATER)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Residential	<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"/>	Impervious Surface Input (SATELLITE)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Gravel Pit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other:	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Other:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Impati	<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"/>	Other:	<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"/>	

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"/>	Forest Clear Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Herbicide Use	<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"/>	Forest Selective Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Mowing/Shrub Cutting	<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"/>	Tree Plantation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Trails	<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"/>	Tree Canopy Herbivory (BROWNS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Soil Compaction (ANIMAL OR HUMAN)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Military	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Shrub Layer Browsed (WILD OR DOMESTIC)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Off-road vehicle damage	<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"/>	Highly Grazed Grasses (MEDIUM < HIGH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Soil erosion (FREEZING/WIND CROPLAND)	<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"/>	Recently Burned Forest Canopy	<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"/>	
Other:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Recently Burned Grass (BROWNS)	<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"/>	

Flag codes: X = No measurement made, U = Suspect measurement, P1/P2, etc. = misc. flags assigned by each field crew.

Enter all flags in comment section on the back of this form

2428168304

Latitude North 41° 10.84' Longitude West 081° 52.950' Use Decimal Degrees: NAD83

Location of coordinates (choose one): AA CENTER N3 63 E5 W3 Nearest practicable location (flag and comment below)

Position (x,y,z) coordinates at the center of the Butter Plot (G3) at the rear end of each Butter Plot and (x,y,z) of the number Plot of the AICU patient. Measure the location of the plot coordinates by fitting in the appropriate double Butter Plot 3 can now be assessed. Take the position coordinates at the nearest practicable location of the transsect. This is important because all Butter Plots are centered on the Butter Transsects and the coordinates will indicate the location of the nearest Plot in the nearest location. Fill in the high 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 Butter Plot.

PLOT COORDINATES

Continuing this trend, the Chinese market has become the largest in the world, surpassing the United States by 2015 in the future.

Sample: PCAP1317 BP Date: 07/02/2013

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial): _____

Site ID: PCAP 1317 BP

DATE: 07/02/2013

Location: OAA Center N 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: <input type="radio"/>			Leaf Type: <input checked="" type="radio"/> B <input type="radio"/> N	Flag: <input type="radio"/>			Leaf Type: <input checked="" type="radio"/> B <input type="radio"/> N	Flag: <input type="radio"/>	
Big Trees (>0.3m DBH)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Small Trees (<0.3m DBH)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Woody Shrubs, Saplings (0.5m-5m HIGH)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Woody Shrubs, Saplings (<0.5m HIGH)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Herbs, Forbs and Grasses	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Bare ground	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Litter, duff	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Rock	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Water	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Submerged Vegetation	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" 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 checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Ditches, Channelization	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Pasture/Hay	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Road - two lane	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Dike/Dam/Road/RR Bed (IMPEDES FLOW)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Range	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Road - four lane	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Water Level Control Structure	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Row Crops	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Parking Lot/Pavement	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Excavation, Dredging	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Fallow Field (RECENT RESTING ROW CROP FIELD)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Golf Course	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Fall/Spot Banks	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Fallow Field (OLD - GRASS, SHRUBS, TREES)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Lawn/Park	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Freshly Deposited Sediment (UNVEGETATED)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Nursery	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Suburban Residential	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Soil Loss/Root Exposure	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Dairy	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Urban/Multifamily	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Wall/Riprap	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Orchard	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Landfill	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Outlets	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Confined Animal Feeding	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Dumping	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Point Source/Pipe (SEWERAGE OR STORMWATER) Impervious surface input (SHEETFLOW)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Rural Residential	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Trash	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Other: _____	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Gravel Pit	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Other: _____	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Other: _____	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Irrigation	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Other: _____	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Other: _____	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Other: _____	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" 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 checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Forest Clear Cut	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Herbicide Use	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Gas Wells	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Forest Selective Cut	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Mowing/Shrub Cutting	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Mine (surface)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Tree Plantation	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Trails	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Mine (underground)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Tree Canopy Herbivory (INSECT)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Soil Compaction (ANIMAL OR HUMAN)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Military	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Shrub Layer Browsed (MILDOCK, BLOWERS, ETC)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Offroad vehicle damage	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Other: _____	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Highly Grazed Grasses (OVERALL GRASS)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Soil erosion (FROM WIND, WATER, OR OVERGRUSE)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Other: _____	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Recently Burned Forest	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Other: _____	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Other: _____	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Canopy Recently Burned Grassland (THICKENED)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Other: _____	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	

Flag codes: K = No measurement made, U = Suspect measurement, P1, P2, etc. = misc. flags assigned by each field crew.
Explain all flags in comment section on the back of this form

2428168304

1971 GOODWILL INDUSTRIES

• Continue a filled data bubble with a line to the previous one and an upward pointing arrow indicates the source of filling in the diagram.

PC# 1317-BP Date 07/02/2013 Site ID:

FORM B-1: BUDGET SAMPLE PLOTS - TRAVERSE ALLEN SPECIES (B-1a)

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial): _____

Site ID: PCAP 1317 BP

DATE: 07/02/2013

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

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: <input type="radio"/>	Buffer Plot 2	Canopy Type: D E		Absent: <input type="radio"/>	Buffer Plot 3	Canopy Type: D E		Absent: <input type="radio"/>
	Leaf Type: B N	Flag			Leaf Type: B N	Flag			Leaf Type: B N	Flag	
Big Trees (>0.3m DBH)	<input checked="" type="radio"/>	1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	4	<input type="radio"/>	Big Trees (>0.3m DBH)	<input type="radio"/>	1	<input type="radio"/>
Small Trees (<0.3m DBH)	<input checked="" type="radio"/>	1	<input type="radio"/>	<input type="radio"/>	2	4	<input type="radio"/>	Small Trees (<0.3m DBH)	<input type="radio"/>	1	<input type="radio"/>
Woody Shrubs, Saplings (0.5m-5m HIGH)	<input checked="" type="radio"/>	1	<input type="radio"/>	<input type="radio"/>	2	4	<input type="radio"/>	Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/>	1	<input type="radio"/>
Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/>	2	<input type="radio"/>	3	3	4	<input type="radio"/>	Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/>	2	<input type="radio"/>
Herbs, Forbs and Grasses	<input type="radio"/>	2	<input type="radio"/>	3	4	<input type="radio"/>	<input type="radio"/>	Herbs, Forbs and Grasses	<input type="radio"/>	2	<input type="radio"/>
Bare ground	<input type="radio"/>	1	<input type="radio"/>	2	3	4	<input type="radio"/>	Bare ground	<input type="radio"/>	1	<input type="radio"/>
Litter, duff	<input type="radio"/>	1	<input type="radio"/>	2	3	<input checked="" type="radio"/>	<input type="radio"/>	Litter, duff	<input type="radio"/>	1	<input type="radio"/>
Rock	<input type="radio"/>	1	<input type="radio"/>	2	3	4	<input type="radio"/>	Rock	<input type="radio"/>	1	<input type="radio"/>
Water	<input type="radio"/>	1	<input type="radio"/>	2	3	<input type="radio"/>	<input type="radio"/>	Water	<input type="radio"/>	1	<input type="radio"/>
Submerged Vegetation	<input type="radio"/>	1	<input type="radio"/>	2	3	4	<input type="radio"/>	Submerged Vegetation	<input type="radio"/>	1	<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"/>	<input type="radio"/>	Ditches, Channelization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pasture/Hay	<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"/>	Dike/Dam/Road/RR Bed (IMPEDE FLOW)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Range	<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"/>	Water Level Control Structure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Row Crops	<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"/>	Excavation, Dredging	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Fallow Field (RECENTLY RESTING ROW CROP FIELD)	<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"/>	Fill/Soil Banks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fallow Field (OLD - GRASS, SHRUBS, TREES)	<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"/>	Freshly Deposited Sediment (UNAGGRADED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Nursery	<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"/>	Soil Loss/Root Exposure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Dairy	<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"/>	Wall/Riprap	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Orchard	<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"/>	Inlets, Outlets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Confined Animal Feeding	<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"/>	Point Source/Pipe (SUSPENDED OR STORED WATER)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Rural Residential	<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"/>	Impervious Surface Input (SHEET FLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Gravel Pit	<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"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Irrigation	<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"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Other: _____	<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"/>	Forest Clear Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Herbicide Use	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Gas Wells	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Forest Selective Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Mowing/Shrub Cutting	<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"/>	Tree Plantation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Trails	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mine (underground)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tree Canopy Herbivory (ANIMAL)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Soil Compaction (ANIMAL OR HUMAN)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Military	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Shrub Layer Browsed (WILDLIFE, DOMESTIC)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Offroad vehicle damage	<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"/>	Highly Grazed Grasses (OVERALL <10% HIGH)	<input type="radio"/>	<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"/>	<input type="radio"/>	
Other: _____	<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"/>	Other: _____	<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"/>	Recently Burned Grassland (BURNED)	<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"/>	

Flag codes: K = No measurement made, U = Suspect measurement, F1, F2, etc. = misc. flags assigned by each field crew.

Explain all flags in comment section on the back of this form

2428168304

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial): _____

DATE: 07/02/2013

Site ID: PCAP1317 BP

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

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 type="radio"/> E		Absent: <input type="radio"/>	Buffer Plot 2	Canopy Type: <input 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 type="radio"/> B <input type="radio"/> N		Flag		Leaf Type: <input 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 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"/>
Small Trees (<0.3m DBH)	<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"/>
Woody Shrubs, Saplings (0.5m-5m HIGH)	<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"/>
Woody Shrubs, Saplings (<0.5m HIGH)	<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"/>
Herbs, Forbs and Grasses	<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"/>
Bare ground	<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 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 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 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 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"/>
Big Trees (>0.3m DBH)	<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"/>
Small Trees (<0.3m DBH)	<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"/>
Woody Shrubs, Saplings (0.5m-5m HIGH)	<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"/>
Woody Shrubs, Saplings (<0.5m HIGH)	<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"/>
Herbs, Forbs and Grasses	<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"/>
Bare ground	<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 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 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 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 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							
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"/>	<input type="radio"/>	Ditches, Channelization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pasture/Hay	<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"/>	Dike/Dam/Road/RR Bed (IMPEDE FLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Range	<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"/>	Water Level Control Structure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Row Crops	<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"/>	Excavation, Dredging	<input type="radio"/>	<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"/>	<input type="radio"/>	
Golf Course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fill/Spill Banks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fallow Field (OLD - GRASS, SHRUBS, TREES)	<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"/>	Freshly Deposited Sediment (UNVEGETATED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Nursery	<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"/>	Soil Loss/Root Exposure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Dairy	<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"/>	Wall/Riprap	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Orchard	<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"/>	Inlets, Outlets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Confined Animal Feeding	<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"/>	Point Source/Pipe (EFFLUENT OR STORMWATER)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Rural Residential	<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"/>	Impervious surface Input (SHEETFLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Gravel Pit	<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"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Irrigation	<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"/>	Other: _____	<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"/>	

Industrial Development Stressors				Habitat/Vegetation Stressors										
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"/>	Forest Clear Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Herbicide Use	<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"/>	Forest Selective Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Mowing/Shrub Cutting	<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"/>	Tree Plantation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Trails	<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"/>	Tree Canopy Herbivory (INSECT)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Soil Compaction (ANIMAL OR HUMAN)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Military	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Shrub Layer Browsed (WILD OR DOMESTIC)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Offroad vehicle damage	<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"/>	Highly Grazed Grasses (OVERALL <3' HIGH)	<input type="radio"/>	<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"/>	<input type="radio"/>
Other: _____	<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"/>	Other: _____	<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"/>	Recently Burned Grassland (BLACKENED)	<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"/>

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

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

Reviewed by (Initials):

Site ID: PCAP 1317 BP

DATE: 07/02/2013

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

PLOT COORDINATES AND ABSENCE/PRESENT STATUS																							
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 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"/>				

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

41.20992

Longitude West

081.72929

Use Decimal Degrees: NAD83

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial): _____

Site ID: PCAP 1317 BP

DATE: 07/02/2013

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

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

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

Residential and Urban Stressors				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 1 2 3 4				Ditches, Channelization	0 1 2 3 4				Pasture/Hay	0 1 2 3 4				
Road - two lane	0 1 2 3 4				Dike/Dam/Road/RR Bed (IMPEDE FLOW)	0 1 2 3 4				Range	0 1 2 3 4				
Road - four lane	0 1 2 3 4				Water Level Control Structure	0 1 2 3 4				Row Crops	0 1 2 3 4				
Parking Lot/Pavement	0 1 2 3 4				Excavation, Dredging	0 1 2 3 4				Fallow Field (RECENT RESTING ROW CROP FIELD)	0 1 2 3 4				
Golf Course	0 1 2 3 4				Fill/Soil Banks	0 1 2 3 4				Fallow Field (OLD GRASS, SHRUBS, TREES)	0 1 2 3 4				
Lawn/Park	0 1 2 3 4				Freshly Deposited Sediment (UNVEGETATED)	0 1 2 3 4				Nursery	0 1 2 3 4				
Suburban Residential	0 1 2 3 4				Soil Loss/Root Exposure	0 1 2 3 4				Dairy	0 1 2 3 4				
Urban/Multifamily	0 1 2 3 4				Wall/Riprap	0 1 2 3 4				Orchard	0 1 2 3 4				
Landfill	0 1 2 3 4				Inlets, Outlets	0 1 2 3 4				Confined Animal Feeding	0 1 2 3 4				
Dumping	0 1 2 3 4				Point Source/Pipe (EFFLUENT OR STORMWATER)	0 1 2 3 4				Rural Residential	0 1 2 3 4				
Trash	0 1 2 3 4				Impervious surface Input (SHEETFLOW)	0 1 2 3 4				Gravel Pit	0 1 2 3 4				
Other: _____	0 1 2 3 4				Other: _____	0 1 2 3 4				Irrigation	0 1 2 3 4				
Other: _____	0 1 2 3 4				Other: _____	0 1 2 3 4				Other: _____	0 1 2 3 4				

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 1 2 3 4				Forest Clear Cut	0 1 2 3 4				Herbicide Use	0 1 2 3 4				
Gas Wells	0 1 2 3 4				Forest Selective Cut	0 1 2 3 4				Mowing/Shrub Cutting	0 1 2 3 4				
Mine (surface)	0 1 2 3 4				Tree Plantation	0 1 2 3 4				Trails	0 1 2 3 4				
Mine (underground)	0 1 2 3 4				Tree Canopy Herbivory (INSECT)	0 1 2 3 4				Soil Compaction (ANIMAL OR HUMAN)	0 1 2 3 4				1
Military	0 1 2 3 4				Shrub Layer Browsed (WILD OR DOMESTIC)	0 1 2 3 4				Offroad vehicle damage	0 1 2 3 4				
Other: _____	0 1 2 3 4				Highly Grazed Grasses (OVERALL <3' HIGH)	0 1 2 3 4				Soil erosion (FROM WIND, WATER, OR OVERUSE)	0 1 2 3 4				1
Other: _____	0 1 2 3 4				Recently Burned Forest Canopy	0 1 2 3 4				Other: _____	0 1 2 3 4				
Other: _____	0 1 2 3 4				Recently Burned Grassland (BLACKENED)	0 1 2 3 4				Other: _____	0 1 2 3 4				

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

2428168304

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

Reviewed by (initials):

Site ID: PCAP 1317 Bp

DATE: 07/02/2013

④ 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 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"/>	
Polson 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"/>	

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 41.21095 Longitude West 081.73080
Use Decimal Degrees: NAD83

Flag	Comments
1	bootleg - well used, soil + roots exposed on portions