

## CLEVELAND METROPARKS Plant Community Assessment Program: Quality Control Form



Project Label: PCAP

Plot No: 3402 Date Sampled: 9-7-11 Lead:

Comment required if item answer is NO

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

Obtain permission to park at the end of Eastwood Road  
and cross private property



# CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet

Page 1 of 2

<b>GENERAL INFORMATION</b>			
<b>Project Label:</b>	PCAP		
<b>Project Name:</b>	<b>Salt I 2011</b>		
<b>Plot Name:</b>	NW Rising Valley		
<b>Plot No.:</b>	3402		
<input type="checkbox"/> Level 4 (no nested corners sampled) <input checked="" type="checkbox"/> Level 5 (nested corners sampled)			
Date (mm/dd/yyyy): 09/07/2011			
End date (if > 1 day): / /			
<b>Party</b>	<b>Role**</b>		
J. Mack	Plot leader		
G. Haussman			
S. E. Van Lach			
<small>** Roles: Co-leader, Asst. Guide, Owner, Taxonomist, etc.</small>			
<b>PLOT NOT SAMPLED:</b>			
<input type="checkbox"/> Perm. water <input type="checkbox"/> Paved <input type="checkbox"/> Slope <input type="checkbox"/> Safety			
<b>SAMPLING QUALITY*</b>			
<b>Effort Level:</b> <input checked="" type="checkbox"/> Very thorough <input type="checkbox"/> Accurate <input type="checkbox"/> Hurried			
<small>subjective evaluation of how much effort put into sampling. Hurred plots may still provide good data</small>			
<b>TAXONOMIC ACCURACY</b>			
high	modera.	low	not samp!
vascular	X		n/a
bryo		X	
lichen		X	
<b>TAXONOMIC STANDARD</b>			
<b>Authority:</b>	G&C		
<b>Pub Date:</b>	1998		
Minimum required fields in Bold and Underlined			

Hand-drawn map of the plot area showing a rectangular plot divided into a 4x4 grid. The plot is located in a valley with trees and shrubs. A compass rose indicates North.

**OVER**

\*Definitions and values in CMPCAP FOM v. 1.0 and CVS Field Guide

CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet

Project Label: PCAP Project Name: OL\_HZ201

Plot No.: H04 Page 2 of 2

CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet					
Project Label:		Project Name:		Plot No.: 3402	
PCAP		OI HZ2011		Page 2 of 2	
<b>CLASSIFICATION</b>					
(FIT = excellent, good, fair, poor; CONF = high, med, low)		Fit and Confidence			
<b>Hydrogeomorphic class (WETLANDS ONLY):</b>					
□ DEPRESSION		Fit= <u>  </u> Conf= <u>  </u>	Fit= <u>  </u> Conf= <u>  </u>	> 1,000 x plot size	
□ IMPOUNDMENT		Fit= <u>  </u> Conf= <u>  </u>	Fit= <u>  </u> Conf= <u>  </u>	10-100 x plot size	
□ RIVERINE		Fit= <u>  </u> Conf= <u>  </u>	Fit= <u>E</u> Conf= <u>A</u>	3-10 x plot size	
□ SLOPE (ground water hydrology or on a physical slope)		Fit= <u>  </u> Conf= <u>  </u>	Fit= <u>  </u> Conf= <u>  </u>	1-3 x plot size	
□ FRINGING		Fit= <u>  </u> Conf= <u>  </u>	Fit= <u>  </u> Conf= <u>  </u>	< plot size	
□ COASTAL (specify subclass)		Fit= <u>  </u> Conf= <u>  </u>	Fit= <u>  </u> Conf= <u>  </u>		
□ BOG (strongly, moderately, weakly ombrotrophic)		Fit= <u>  </u> Conf= <u>  </u>	Fit= <u>  </u> Conf= <u>  </u>		
<b>Ohio EPA VIBI Plant Community Class (WETLANDS ONLY):</b>					
□ FOREST □ swamp forest □ bog forest □ forest steep		Fit= <u>  </u> Conf= <u>  </u>	Fit= <u>  </u> Conf= <u>  </u>	**L=low, M=med low, M=med, H=med high, H=high, VH=very high	
□ EMERGENT □ marsh □ wet meadow □ open bog		Fit= <u>E</u> Conf= <u>H</u>	Fit= <u>  </u> Conf= <u>  </u>	Current Land Use: wetland, conservation land	
□ SHRUB □ shrub swamp □ tall sh. bog □ tall sh. fen		Fit= <u>  </u> Conf= <u>  </u>	Fit= <u>  </u> Conf= <u>  </u>	Former Land Use: farm, "bank" farm	
<b>MODIFIED NATURE RESERVE CLASS*</b>					
CODE (on separate form):  R 03 c		Fit= <u>E</u> Conf= <u>H</u>	Fit= <u>  </u> Conf= <u>  </u>	<b>HYDROLOGIC REGIME*</b>	
COMMUNITY NAME:  Lake Sedge Meadow				<b>SALINITY*</b>	
<p>Additional notes &amp; diagrams: (Representativeness of plot to the stand, successional status, maturity, etc.)</p> <p>Lake Sedge Meadow. Point in shrubby inclusion in dominant community of C. lacustris, E. maculatum, plus other forbs and shrubs.</p>					
<b>HOMOGENEITY</b>					
<ul style="list-style-type: none"> <li><input type="checkbox"/> Homogeneous</li> <li><input type="checkbox"/> Compositional trend across the plot</li> <li><input checked="" type="checkbox"/> Conspicuous inclusions - shrubs</li> <li><input type="checkbox"/> Irregular/pattern mosaic</li> </ul>					

CLEVELAND METROPARKS Plant Community Assessment Program Species Cover Data Sheet

Project Label: \_\_\_\_\_ PCAP

Project name: Oliver

Plot no.: 3402

11

Total modules: 4  
Visual est. % open water entire site: 0 Visual est.

extensive modules: Plot  
inveg.o. w. entire site: O

configuration: 2 x 2 Pilot  
Visual est. %invasives entire site: 18

Net area (ha): 0.04

July 16 1916

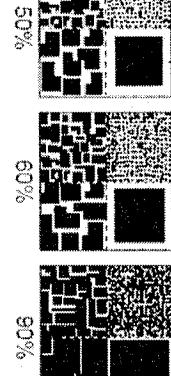
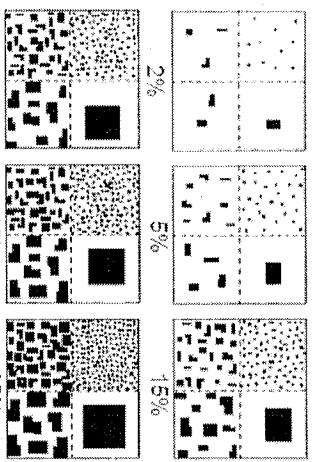
**Br** = Browse Level. Use cover classes to describe amount of browse per species over entire plot

INTERCROPPING		IRRIGATION		FERTILIZATION		POLLUTANT		SOIL		WATER		YIELD	
	%	COR	DESPIN	COR	DESPIN	COR	DESPIN	COR	DESPIN	COR	DESPIN	COR	DESPIN
%open water	1	0		1	0		1	0		1	0		
%unvegetated open water	1	0		1	0		1	0		1	0		

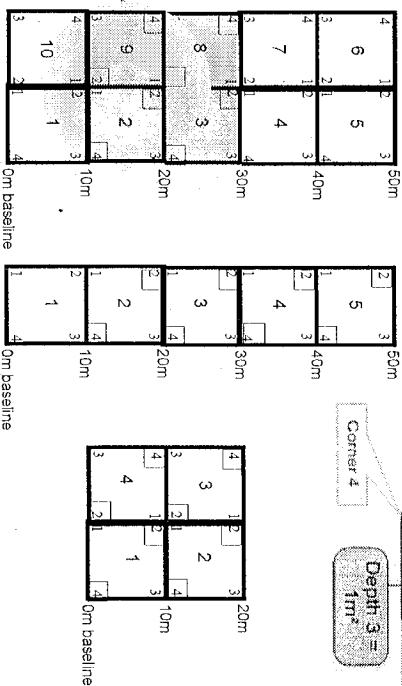
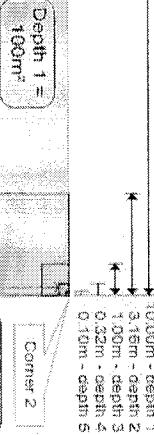
### Strata - Cov. entire plot

#### 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 row, each quadrat contains the same total area covered just different sized squares.



#### Nested Corners



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

#### 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.

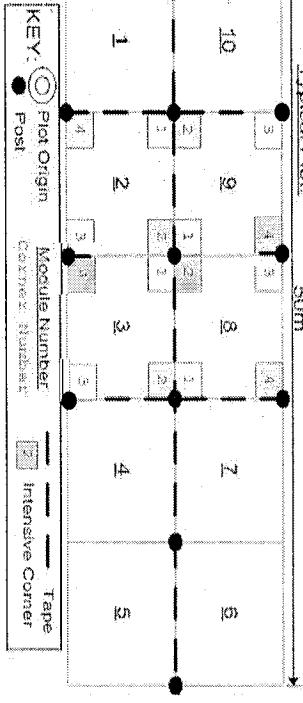
**MEDIUM LOW** values include evidence of browse at about 10 percent of the stems with no significant impact to plant reproduction evident. In this rating, plants are browsed but preferential species are observed to be reproducing in numbers that appear normal or near-normal in comparison to low browse 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 m<sup>2</sup> 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 m<sup>2</sup> nested quadrat and intensive module AND a browse line is evident.

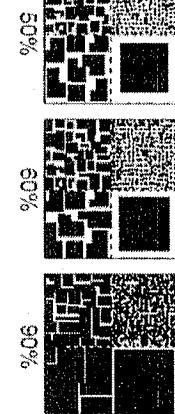
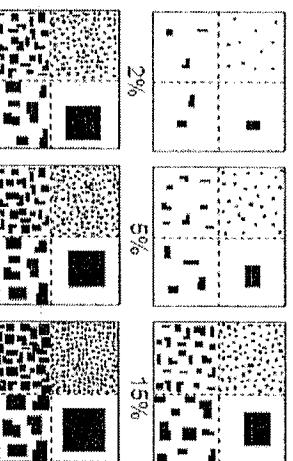
**VERY HIGH** values include extensive browse conditions, where the browse line is very evident AND almost all seedlings and herbs are severely browsed or missing. Browse line may be 5 to 6 feet in height with no or little green growth beneath.





#### 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.



20%

5%

15%

25%

Nested  
Corners

50%

80%

90%

35%

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	75-99%	0.850
10	95-100%	0.975

**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.

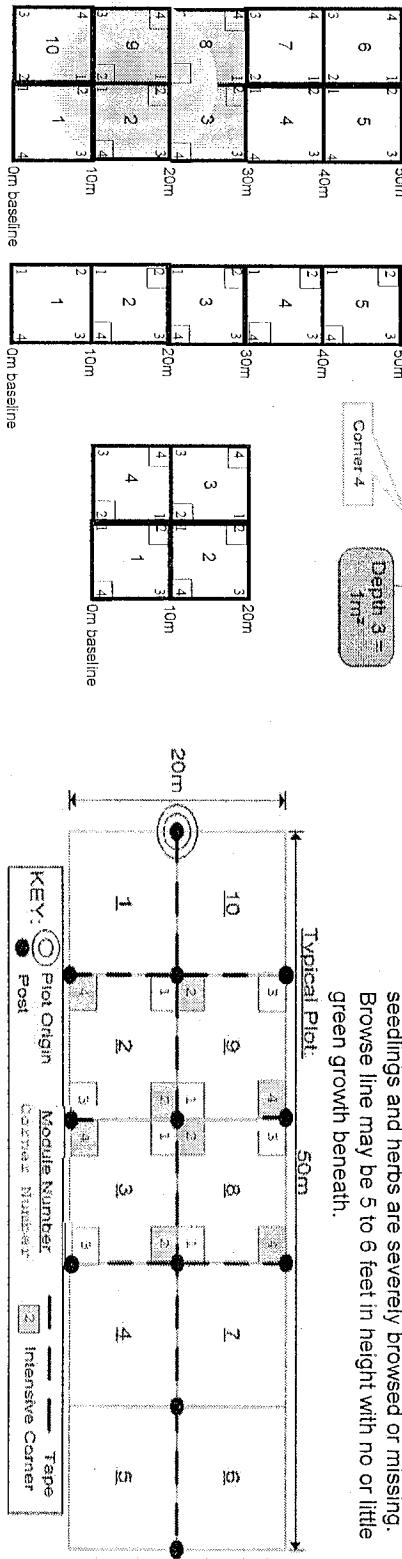
**MEDIUM LOW** values include evidence of browse at about 10 percent of the stems with no significant impact to plant reproduction evident. In this rating, plants are browsed but preferential species are observed to be reproducing in numbers that appear normal or near-normal in comparison to low browse 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 m<sup>2</sup> 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 m<sup>2</sup> 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.



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

Project Label: PCAP

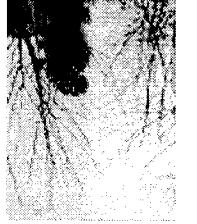
Project Name: OHIO  
Plot No.: 3402

Page: 1 of 2

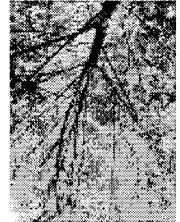
Explain subsample (additional room on back):

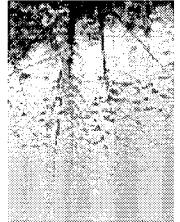
mod #	species	c voucher#	# stems 0.5-1m browsed	% sub sample	# shrub clumps	size class (cm) 0-<1	woody stems >1m									11 >40 (record each tree)
							1	2	3	4	5	6	7	8	9	
1	Standing dead				0	0	0	0	0	0	0	0	0	0	0	
1	Salix	JM57														
1	Frangula alnus															
1	Cornus <sup>Serricea</sup> <del>Fetterosa</del>															
1	Rosa	JM56														
1	Ribes americanum															
1	Viburnum recognitum															
2	Frangula alnus															
2	Cornus <sup>Serricea</sup> <del>Fetterosa</del>															
2	Styrax ciliolata															
2	Ulmus rubra															
3	Frangula alnus															
3	Salix	JM57														
3	Standing dead															
3	Rosa <sup>Multiflora</sup> <del>Serricea</del>															
3	Cornus <sup>Serricea</sup> <del>Fetterosa</del>															
3	Viburnum recognitum															
3	Ulmus rubra															
4	Salix	JM57														
4	Frangula alnus															
4	Viburnum prunifolium															
4	Viburnum recognitum															
4	Cornus <sup>Serricea</sup> <del>Fetterosa</del>															
4	Viburnum recognitum															

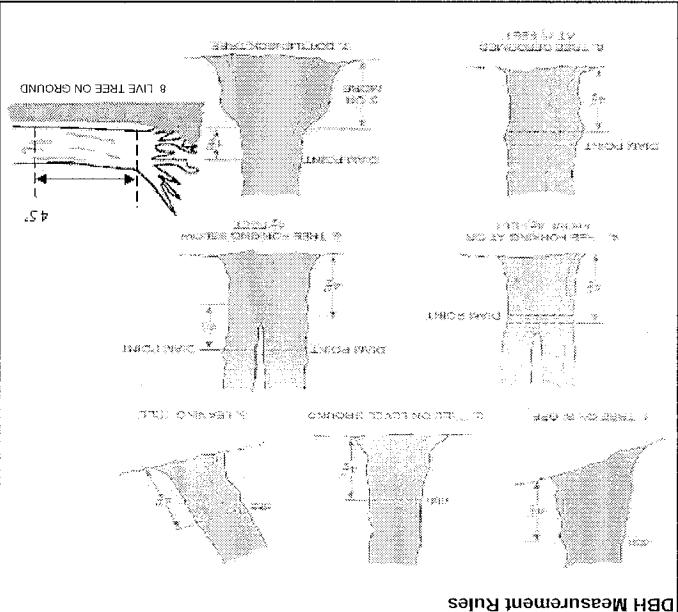
ASH CANOPY BREAKUP CONDITION (for dead trees)				
E	D	C	B	A
E: Central stem still standing	D: Stem still standing and tertiary main branches present	C: Less than 50% of main branches have fine twigs	B: Over 50% of main branches have fine twigs.	A: All main branches contain fine twigs (newly dead)
rank as described below:				
if an ash receives a score of 5 (dead) under canopy condition it must also receive a breakup condition rank as described below:				



ASH CANOPY CONDITION				
5	4	3	2	1
5. Dead canopy: No leaves remain in the canopy portion of the tree. If still counts as a 5 even if there are epicormic sprouts below the canopy (lowest branch) on the trunk.	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.	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.	2. Thinning canopy: There aren't as many leaves as there ought to be, but all top branches exposed to sunlight have leaves.	1. Healthy, full canopy: A healthy ash canopy is normally thinner than many other trees such as maple.




DBH Measurement Rules	
<p><b>Woodsy Stem Browse</b></p> <p>Record the number of stems/plants between 0.5-1.0 meters tall that exhibit evidence of this year's deer browse.</p> <p>Record using the tally system from 1 to 10</p> <p>•</p> 	

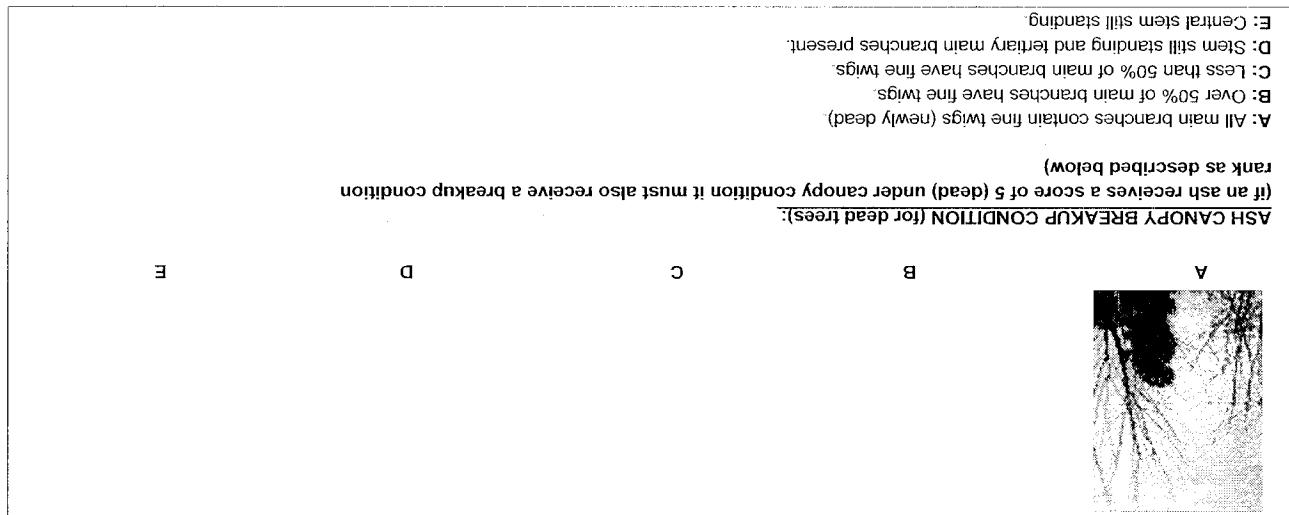
CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

Project Label: PCAP

**Project Name:** O141201      **Plot No.:** 3

Page: 2 of 2

Explain subsample (additional room on back):

ASH CANOPY BREAKUP CONDITION (for dead trees)				
	A	B	C	D
rank as described below				
E: Central stem still standing				

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

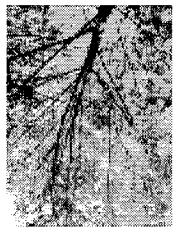
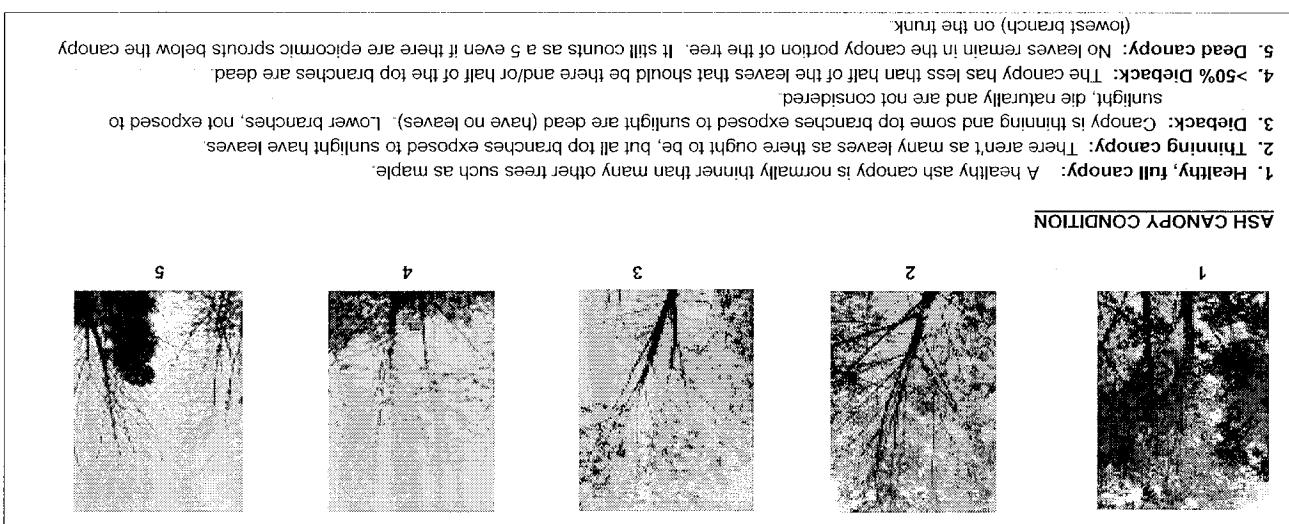
A: All main branches contain fine twigs (newly dead)

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

ASH CANOPY CONDITION				
	1	2	3	4
lowest branch on the trunk				
5. Dead canopy: No leaves remain in the canopy portion of the tree. It still counts as 5 even if there are epicormic sprouts below the canopy				

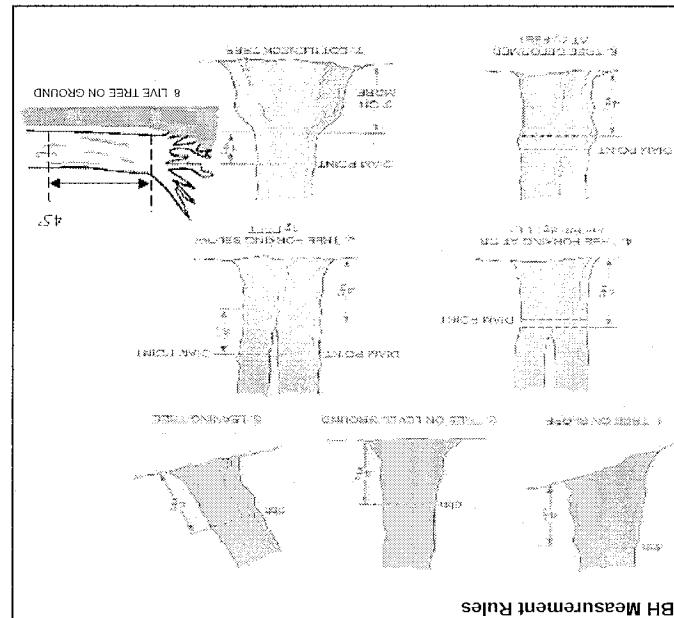
1. Healthy, full canopy: A healthy ash canopy is normally thinner than many other trees such as maple.

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 have 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 (have no leaves).

5. Dead canopy: No leaves remain in the canopy portion of the tree. It still counts as 5 even if there are epicormic sprouts below the canopy (lowest branch on the trunk).

DBH Measurement Rules	
<p>Record the number of stems/plants between 0.5-1.0 meters tall that exhibit evidence of stems/plants deeper browse.</p> <p>Wood Stem Deer Browse</p> <p>Record using the tally system from 1 to 10</p> 	 <p>The diagram illustrates various tree stumps and their associated DBH measurements. Labels include:</p> <ul style="list-style-type: none"> <li>1. TALL ON GROUND</li> <li>2. SLANTING GROUND</li> <li>3. TALL ON GROUND</li> <li>4. TALL HOLLOW AT TIP</li> <li>5. TALL POINT</li> <li>6. TALL POINT</li> <li>7. CROOKED POINT</li> <li>8. LIVE TREE ON GROUND</li> <li>9. MATURE</li> <li>10. YOUNG</li> <li>11. CROOKED POINT</li> <li>12. CROOKED POINT</li> <li>13. CROOKED POINT</li> <li>14. CROOKED POINT</li> <li>15. CROOKED POINT</li> <li>16. CROOKED POINT</li> <li>17. CROOKED POINT</li> <li>18. CROOKED POINT</li> <li>19. CROOKED POINT</li> <li>20. CROOKED POINT</li> <li>21. CROOKED POINT</li> <li>22. CROOKED POINT</li> <li>23. CROOKED POINT</li> <li>24. CROOKED POINT</li> <li>25. CROOKED POINT</li> <li>26. CROOKED POINT</li> <li>27. CROOKED POINT</li> <li>28. CROOKED POINT</li> <li>29. CROOKED POINT</li> <li>30. CROOKED POINT</li> <li>31. CROOKED POINT</li> <li>32. CROOKED POINT</li> <li>33. CROOKED POINT</li> <li>34. CROOKED POINT</li> <li>35. CROOKED POINT</li> <li>36. CROOKED POINT</li> <li>37. CROOKED POINT</li> <li>38. CROOKED POINT</li> <li>39. CROOKED POINT</li> <li>40. CROOKED POINT</li> <li>41. CROOKED POINT</li> <li>42. CROOKED POINT</li> <li>43. CROOKED POINT</li> <li>44. CROOKED POINT</li> <li>45. CROOKED POINT</li> </ul>

CLEVELAND METROPARKS Emerald Ash Borer - *Fraxinus* Sheet

Project Label: PCAP

Project Name: OHTZ01

INTENSIVE MODULES ONLY TREES  $\geq 10\text{CM}$  ONLY  
Plot No.: 3402 Date: 9-7-11

Page: 1 of 2

Module	Tree ID.	Species	Dead c	Voucher #	DBH (cm)	Ht @ DBH	Ash condition	*Dead condition	# Dead holes	ASH Only	Epicormic present	Woodpecker holes
								Ash	condition			
1	N/0											
2	Ash											
3	Trees											
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

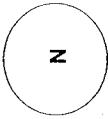
Baseline

9

8

2

3



\*\*\* Change intensive module numbers when necessary

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

- \* If Ash Condition scores 5 (dead) provide breakup score (A-E)
- Count EAB exit holes  $1.25\text{mm} \times 1.5\text{m}$
- Woodpecker and epicormic marked present (1) or absent (0)



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

 Cleveland Metroparks

Project label: PCAP Project Name: DIHEDROL

Plot No.: 3402

Page: 1 of 1

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

Soil pit module # 1 (one per entire plot)

5 cm	matrix color	<u>10YR 4/1</u>
	mottle color	<u>N/A</u>
%omotile		<u>N/A</u>
oxid roots		<u>Y</u>
texture*		<u>1</u>
redox features**		<u>X</u>
hydr. cond.***	<u>1</u> S	M D
20 cm	matrix color	<u>10YR 5/1</u>
	mottle color	<u>10YR 5/1</u>
%omotile		<u>Y</u>
oxid roots		<u>Y</u>
texture*		<u>2</u>
redox features**		<u>Y</u>
hydro. cond. ***	<u>1</u> S	M D
* refer to texture classes on reverse side		
** e.g. hydrogen sulfide odor, gleying, etc.		
*** Circle one:		
I=indundated S=saturated M=moist D=dry		

**SOIL SAMPLES** Standard procedure: collect a soil sample of the top 0.1 m of soil from center of each intensive module and composite the sample

Soil Collection Module      Horizon (A, B, C)

Soil Collection Module	Horizon (A, B, C)
1, 2, 3, 4, 5, 6, 7, 8, 9 composted	A
2	✓ 1 3
3	✓ 1 3
4	✓ 1 3

Soil Description/notes:

**STANDING BIOMASS** (required for emergent wetlands): collected in 0.1m clip plots (33x32 cm) from corners 1 and 3 in each intensive module. Required for VIBI-E score calculation. C? = check when collected

Module #	C?	Corner	Corner
1	✓	1	3
2	✓	1	3
3	✓	1	3
4	✓	1	3

Depth to  
restrictive  
layer

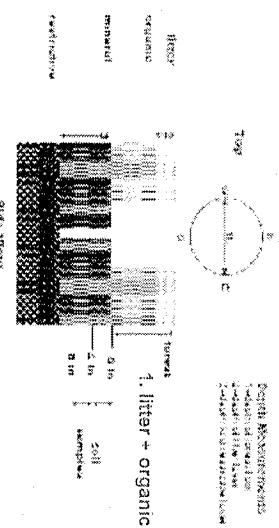
**SOIL DEPTH MEASUREMENT INSTRUCTIONS:** Measure to the nearest 0.1 cm in center of intensive modules. If >30.5 cm, record as >30

mod#	1 litter + organic depth (cm)	2 litter depth (cm)	3 restrict. depth(cm)	water depth (cm)		sat soil depth (cm)
				*VSSI	(cm)	
1	1	1	1	>30	0	0
2	3	3	3	>30	0	0
3	3	3	3	>30	2	0
4	0	0	0	>30	1	0

Length of soil probe = 125 cm

\* Use Web Soil Survey for #3 Restrictive layer dept.

NSS - SRE  
9-8-11



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

No evidence of earthworms  
No earthworms or castings

- Well drained
- Moderately well dr.
- Somewhat poorly dr.
- Poorly dr.
- Very poorly dr.
- Impermeable surface

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

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

is normally saturated when water level drops below soil surface. Includes Cowardin's Intermittently Exposed and Semipermanently Flooded

**SEMI-PERMANENTLY FLOODED (exposed <1/year):** Surface water persists throughout the growing season in most years. Land surface

is intermittently flooded when water level drops below soil surface. Includes Cowardin's Intermittently Exposed and Semipermanently Flooded

the U.S., where appropriate. This modifier can be applied to both wetland and non-wetland situations. Equivalent to Cowardin's

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

seasonal periodicity. Inundation is not predictable to a given season and is dependent upon highly localized storms. This modifier was

characterized by brief periods during growing season, but water table usually lies well below soil

**TEMPORARILY FLOODED:** Surface water present for brief periods during growing season, but water table usually lies well below soil

characterized by brief periods during growing season, but water table usually lies well below soil

**OCASIONALLY FLOODED:** Surface water can be present for brief periods during growing season, but not in most years. Often

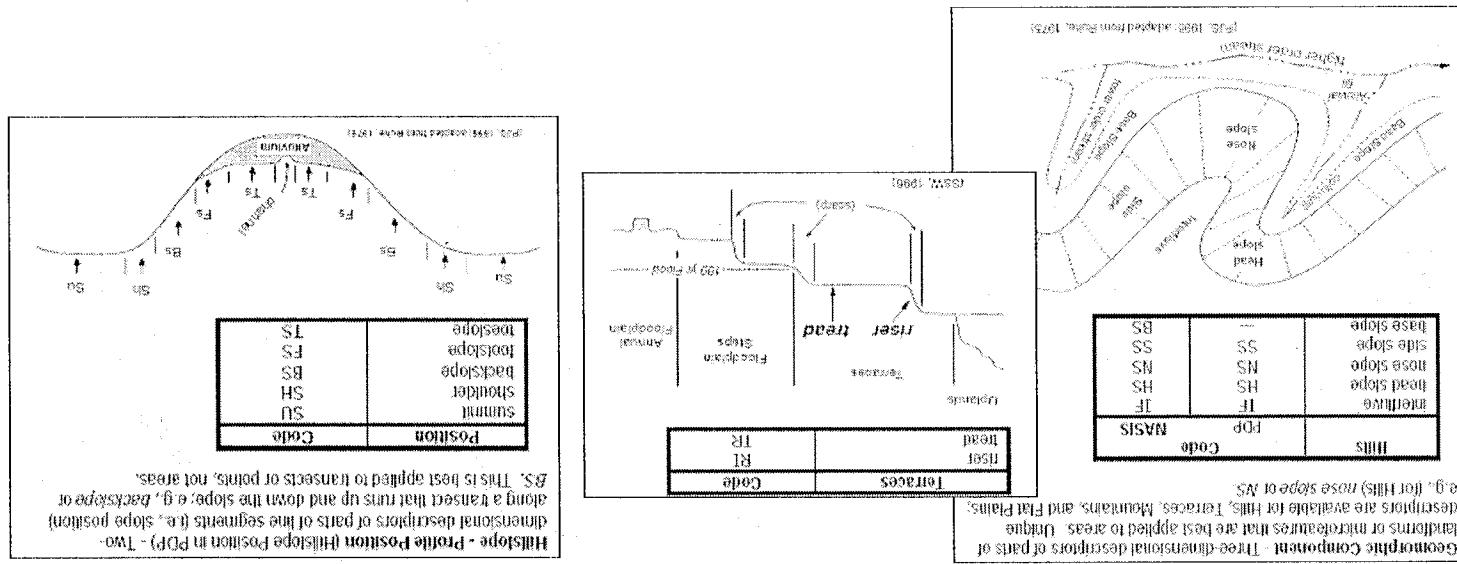
saturated to surface for extended periods during the growing season. Equivalent to Cowardin's Saturated modifier.

**PERMANENTLY/SEMI-PERMANENTLY SATURATED:** Dry less than once per year. Surface water is seldom present, but substrate is

to surface for extended periods during the growing season.

**UPLAND:** Not a wetland. Very rarely flooded.

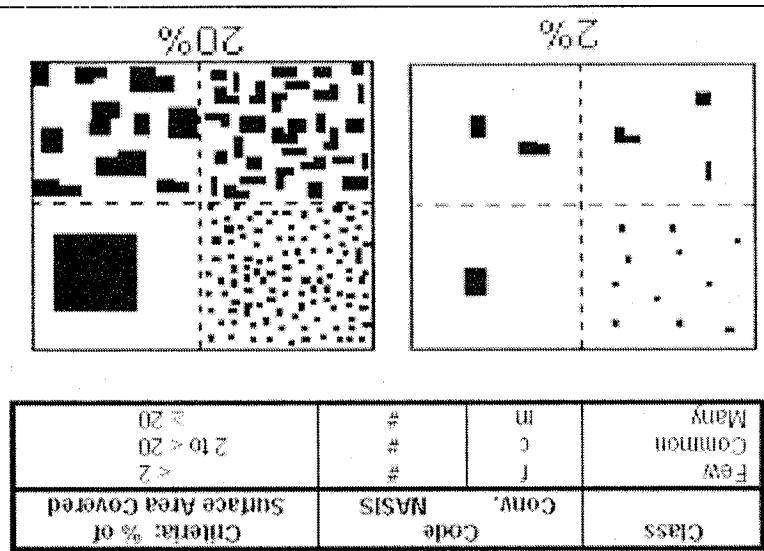
**HYDROLOGIC REGIME** Modified from Grossman et al 1998. (Frequency and duration of flooding.)



Geomorphic components - Three-dimensional descriptions of parts of the landscape that are best applied to areas. These dimensions of morphology are available for hills, terraces, mountainous, and flat plains, e.g., for hills nose slope or MAs. Dimensional descriptions of parts of the segments (i.e., slope position) along a transect that runs up and down the slope; e.g., back slope of deserts loess is best applied to transects of points, not areas.

- 0=Organic
- 1=Lamay
- 2=Clayey
- 3=Sandy
- 4=Sandy
- 5=Coarse Sand
- 6=Not measured - make plot note

which forms a ball but not a ribbon should be coded as loamy  
both a ball and a ribbon should be coded as clayey, samples  
and attempt to form a self-supporting ribbon. Samples which form  
soil does form a ball, squeeze the sample between your fingers  
grainy texture, the texture is either sandy or coarse sandy. If the  
roll the sample into a ball, if the soil will not stay in a ball and has  
enough that all of the particles are saturated but excess water  
of modeling clay/wet newspaper, the sample should be wet



**PERCENT MOTLES (USE CLASS CODES):**

**SOIL TEXTURE:** Record the code for the soil texture of the 5 cm

and 20 cm layers. To estimate texture, collect a soil sample from

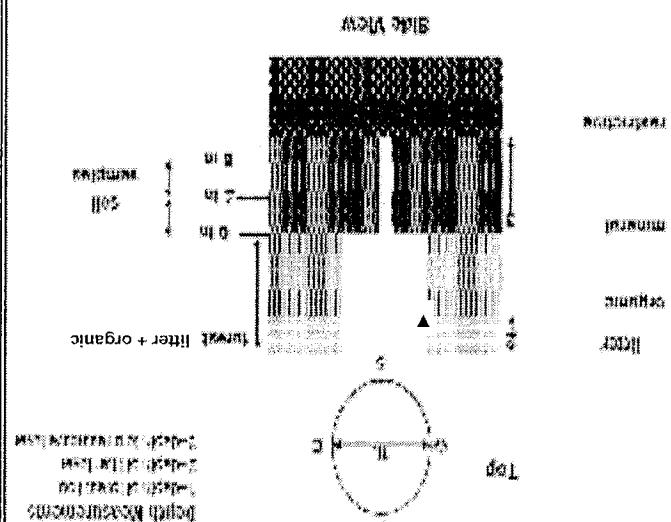
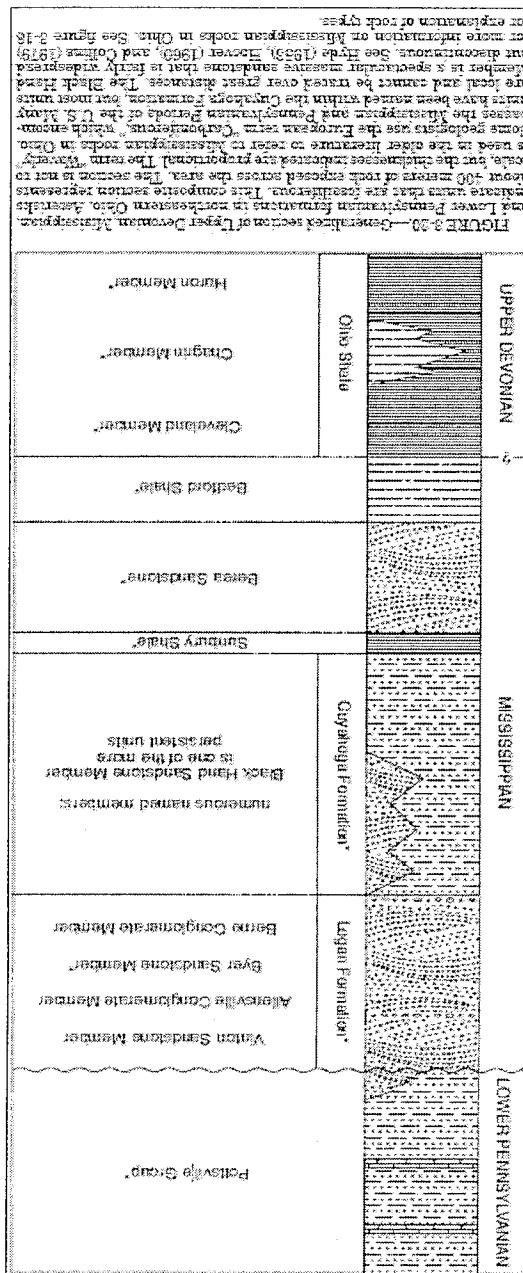
the upper 20 cm layer. To estimate texture, collect a soil sample from

the upper 5 cm layer. To estimate texture, collect a soil sample from

the upper 5 cm layer. To estimate texture, collect a soil sample from

the upper 5 cm layer. To estimate texture, collect a soil sample from





## FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial):

Site ID: PCAP HI 3402

DATE: 09/07/2011

Location:

AA Center O N O S O E O W

Fill in bubble(s) if plot(s) could not be sampled and flag →

 Plot 1  Plot 2  Plot 3

## Buffer Natural Cover Strata

Fill in bubbles for all that apply: Canopy Type: D = Deciduous; E = Evergreen Leaf Type: B = Broadleaf, N = Needle Leaf, Absent: No tree canopy

Strata Section: Fill in appropriate cover class bubble for each strata type for each plot 0 = Absent; 1 = Sparse(&lt;10%); 2=Moderate(10-40%); 3 = Heavy (40-75%); 4 = Very Heavy (&gt;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 type="radio"/> B <input checked="" type="radio"/> N		Flag		Leaf Type: <input type="radio"/> B <input checked="" type="radio"/> N		Flag		Leaf Type: <input type="radio"/> B <input checked="" type="radio"/> N		Flag
Big Trees (>0.3m DBH)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 1	Big Trees (>0.3m DBH)	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag	Big Trees (>0.3m DBH)	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag
Small Trees (<0.3m DBH)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 3 <input type="radio"/> 4	Small Trees (<0.3m DBH)	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag	Small Trees (<0.3m DBH)	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag
Woody Shrubs, Saplings (0.5m-5m HIGH)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 1	Woody Shrubs, Saplings (0.5m-5m HIGH)	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag	Woody Shrubs, Saplings (0.5m-5m HIGH)	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag
Woody Shrubs, Saplings (<0.5m HIGH)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 1	Woody Shrubs, Saplings (<0.5m HIGH)	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag	Woody Shrubs, Saplings (<0.5m HIGH)	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag
Herbs, Forbs and Grasses	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/>	Flag	Herbs, Forbs and Grasses	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag	Herbs, Forbs and Grasses	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag
Bare ground	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag	Bare ground	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag	Bare ground	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag
Litter, duff	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag	Litter, duff	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag	Litter, duff	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag
Rock	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag	Rock	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag	Rock	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag
Water	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag	Water	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag	Water	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag
Submerged Vegetation	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag	Submerged Vegetation	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag	Submerged Vegetation	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	Flag

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

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

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

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

2428168304

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

Reviewed by (initial):

**Site ID:** PCAP HI 3402

**DATE:** 09/07/2011

② 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 type="radio"/>	<input type="radio"/>	
Giant Salvinia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Perehrial Pepperweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Common Buckthorn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Garlic Mustard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Giant Reed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Himalayan Blackberry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Poison Hemlock	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Cheatgrass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tamarisk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mile-A-Minute Weed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Reed Canary Grass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Birdsfoot Trefoil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Common Reed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Canada Thistle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Leafy Spurge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
										Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

## PLOT COORDINATES

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

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

**Location of coordinates (choose one):**

### Flag

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

Latitude North 41° 25' 8.07"

Longitude West 081.69234

**Use Decimal Degrees: NAD83**

## FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (initial): \_\_\_\_\_

Site ID: RAP HI 3402

DATE: 09/07/2011

Location:

 AA Center     N     S     E     W

Fill in bubble(s) if plot(s) could not be sampled and flag →

 Plot 1     Plot 2     Plot 3

## Buffer Natural Cover Strata

Fill in bubbles for all that apply: Canopy Type: D = Deciduous; E = Evergreen Leaf Type: B = Broadleaf, N = Needle Leaf Absent: No tree canopy

Strata Section: Fill in appropriate cover class bubble for each strata type for each plot. 0 = Absent; 1 = Sparse (&lt;10%); 2 = Moderate (10-40%); 3 = Heavy (40-75%); 4 = Very Heavy (&gt;75%)

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

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

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

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

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

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

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

Reviewed by (initial):

Site ID: PCAP HI 3402

DATE: 09/07/2011

• 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"/>	
Poison Hemlock	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Cheatgrass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tamarisk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mile-A-Minute Weed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Reed Canary Grass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Birdsfoot Trefoil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Common Reed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other:	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Canada Thistle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Leafy Spurge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
										Other:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

## PLOT COORDINATES

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

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

**Location of coordinates (choose one):**

Flag

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

Latitude North 41° 25' 40"      Longitude West 081° 69' 35"

Use Decimal Degrees: NAD83

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

7966623548

We did the center + North line

### FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (initial): \_\_\_\_\_

Site ID:

3402

DATE: 09/07/2011

Location:

AA Center     N     S     E     W

Fill in bubble(s) if plot(s) could not be sampled and flag →

Plot 1     Plot 2     Plot 3

#### Buffer Natural Cover Strata

Fill in bubbles for all that apply: Canopy Type: D = Deciduous, E = Evergreen Leaf Type: B = Broadleaf, N = Needle Leaf Absent: No tree canopy

Strata Section: Fill in appropriate cover class bubble for each strata type for each plot. 0 = Absent; 1 = Sparse(<10%); 2=Moderate(10-40%); 3 = Heavy (40-75%); 4 = Very Heavy (>75%)

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

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

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

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

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

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

2428168304

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

Reviewed by (initial): \_\_\_\_\_

**Site ID:**

3402

DATE: 09/07/2011

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 type="radio"/>	<input type="radio"/>	
Giant Salvinia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Perennial Pepperweed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Common Buckthorn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Garlic Mustard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Giant Reed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Himalayan Blackberry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Poison Hemlock	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Cheatgrass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tamarisk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mile-A-Minute Weed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Reed Canary Grass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Birdsfoot Trefoil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Common Reed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Canada Thistle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Leafy Spurge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
										Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

## PLOT COORDINATES

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

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

**Location of coordinates (choose one):**

Flag

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

Latitude North 41° 25' 28.6"      Longitude West 150° 28.5"

**Use Decimal Degrees: NAD83**

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

7966623548

## FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (initial):

Site ID: 3402

DATE: 09/07/2011

Location:

 AA Center     N     S     O E     W

Fill in bubble(s) if plot(s) could not be sampled and flag →

 Plot 1     Plot 2     Plot 3

## Buffer Natural Cover Strata

Fill in bubbles for all that apply. Canopy Type: D = Deciduous; E = Evergreen. Leaf Type: B = Broadleaf; N = Needle Leaf. Absent: No tree canopy.

Strata Section: Fill in appropriate cover class bubble for each strata type for each plot. 0 = Absent; 1 = Sparse(&lt;10%), 2=Moderate(10-40%), 3 = Heavy (40-75%), 4 = Very Heavy (&gt;75%)

Buffer Plot 1	Canopy Type: <input type="radio"/> D <input checked="" type="radio"/> E		Absent: <input checked="" type="radio"/> A	Buffer Plot 2	Canopy Type: <input type="radio"/> D <input checked="" type="radio"/> E		Absent: <input type="radio"/> A	Buffer Plot 3	Canopy Type: <input type="radio"/> D <input checked="" type="radio"/> E		Absent: <input type="radio"/>
	Leaf Type: <input type="radio"/> B <input checked="" type="radio"/> N	Flag			Leaf Type: <input type="radio"/> B <input checked="" type="radio"/> N	Flag			Leaf Type: <input type="radio"/> B <input checked="" type="radio"/> N	Flag	
Big Trees (>0 3m DBH)	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input checked="" type="radio"/>	Big Trees (>0 3m DBH)	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input checked="" type="radio"/>	Big Trees (>0 3m DBH)	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>
Small Trees (<0 3m DBH)	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input checked="" type="radio"/>	Small Trees (<0 3m DBH)	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input checked="" type="radio"/>	Small Trees (<0 3m DBH)	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>
Woody Shrubs, Saplings (0.5m-5m HIGH)	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input checked="" type="radio"/>	Woody Shrubs, Saplings (0.5m-5m HIGH)	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input checked="" type="radio"/>	Woody Shrubs, Saplings (0.5m-5m HIGH)	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>
Woody Shrubs, Saplings (<0.5m HIGH)	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input checked="" type="radio"/>	Woody Shrubs, Saplings (<0.5m HIGH)	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input checked="" type="radio"/>	Woody Shrubs, Saplings (<0.5m HIGH)	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>
Herbs, Forbs and Grasses	<input type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/>	<input checked="" type="radio"/>	Herbs, Forbs and Grasses	<input type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/>	<input checked="" type="radio"/>	Herbs, Forbs and Grasses	<input type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/>	<input type="radio"/>
Bare ground	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input checked="" type="radio"/>	Bare ground	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input checked="" type="radio"/>	Bare ground	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>
Litter, duff	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input checked="" type="radio"/>	Litter, duff	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input checked="" type="radio"/>	Litter, duff	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>
Rock	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input checked="" type="radio"/>	Rock	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input checked="" type="radio"/>	Rock	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>
Water	<input type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/>	<input checked="" type="radio"/>	Water	<input type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/>	<input checked="" type="radio"/>	Water	<input type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/>	<input type="radio"/>
Submerged Vegetation	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input checked="" type="radio"/>	Submerged Vegetation	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input checked="" type="radio"/>	Submerged Vegetation	<input checked="" type="radio"/>	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<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 checked="" type="radio"/>	Ditches, Channelization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Pasture/Hay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Road - two lane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Dike/Dam/Road/RR Bed (IMPEDE FLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Range	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Road - four lane	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Water Level Control Structure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Row Crops	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Parking Lot/Pavement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Excavation, Dredging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Fallow Field (RECENT RESTING ROW CROP FIELD)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Golf Course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Fill/Spoil Banks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Fallow Field (OLD - GRASS, SHRUBS, TREES)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Lawn/Park	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Freshly Deposited Sediment (UNVEGETATED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Nursery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Suburban Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Soil Loss/Root Exposure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Dairy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Urban/Multifamily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Wall/Riprap	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Orchard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Landfill	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Inlets, Outlets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Confined Animal Feeding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Dumping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Point Source/Pipe (EFFLUENT OR STORMWATER)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Rural Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Trash	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Impervious surface input (SHEETFLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Gravel Pit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Irrigation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" 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 checked="" type="radio"/>	Forest Clear Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Herbicide Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Gas Wells	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Forest Selective Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Mowing/Shrub Cutting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Mine (surface)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Tree Plantation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Trails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Mine (underground)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Tree Canopy Herbivory (INSECT)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Soil Compaction (ANIMAL OR HUMAN)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Military	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Shrub Layer Browsed (WILD OR DOMESTIC)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Offroad vehicle damage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Highly Grazed Grasses (OVERALL <3' HIGH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Soil erosion (FROM WIND, WATER OR OVERUSE)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Recently Burned Forest Canopy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Recently Burned Grassland (BLACKENED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" 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 - TARGETED ALIEN SPECIES (Back)**

Reviewed by (initial):

Site ID:

3402

DATE: 09/07/2011

• 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 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 checked="" type="radio"/>	
Garlic Mustard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Giant Reed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Himalayan Blackberry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Poison Hemlock	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Cheatgrass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tamansk	<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):**

### Flag

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

Latitude North 4 1 7 5 7 0 3      Longitude West 8 1 6 9 7 9 3

**Use Decimal Degrees: NAD83**

7966623548

## FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial): \_\_\_\_\_

Site ID: 3402

DATE: 09/07/2011

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(&lt;10%); 2=Moderate(10-40%); 3 = Heavy (40-75%), 4 = Very Heavy (&gt;75%)

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

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

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

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

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

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

2428168304

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

Reviewed by (initial): \_\_\_\_\_

Site ID:

3402

DATE: 09/07/2011

② 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 type="radio"/>	<input checked="" 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 checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	
Garlic Mustard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Giant Reed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Himalayan Blackberry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Poison Hemlock	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Cheatgrass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tamarisk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mile-A-Minute Weed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Reed Canary Grass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Birdsfoot Trefoil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Common Reed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Canada Thistle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Leafy Spurge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
										Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

## PLOT COORDINATES

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

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

Location of coordinates (choose one):

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

Flag

--

Latitude North 41 25813Longitude West 81 69088

Use Decimal Degrees; NAD83

Flag	Comments
F1	EBRR channel in plot + 4.0 m

7966623548