

CLEVELAND METROPARKS Plant Community Assessment Program: Quality Control Form



Project Label:

PCAP

Plot No:

3732

Date Sampled:

8/10

Lead:

Ex Sebach

Comment required if item answer is NO

Parking/Access outside of Park Boundaries:	Y	N	If yes, write details in Comments section below
Field journals completed	<input checked="" type="checkbox"/>	N	
Site sketch made on 1:3000 map?	<input checked="" type="checkbox"/>	N	
Check cover page	<input checked="" type="checkbox"/>	N	
X-axis Bearing of plot recorded	<input checked="" type="checkbox"/>	N	
GPS coords. Recorded	<input checked="" type="checkbox"/>	N	
North direction recorded	<input checked="" type="checkbox"/>	N	
Photographs taken?	<input checked="" type="checkbox"/>	N	
Relocated Pins Mapped	<input checked="" type="checkbox"/>	N	
Plot No., Date agreement on all pages?	<input checked="" type="checkbox"/>	N	
Header data completed all pages?	<input checked="" type="checkbox"/>	N	
Cover classes recorded in all Intensive modules	<input checked="" type="checkbox"/>	N	
Browse Level By Species	<input checked="" type="checkbox"/>	N	
Woody stem quality control check	<input checked="" type="checkbox"/>	N	Check every line and cross check with the Tree Cover Sheet
Invasive plant quality control check	<input checked="" type="checkbox"/>	N	
Ash trees mapped	<input checked="" type="checkbox"/>	N	
Completed Forest Pest/Pathogen Datasheet	<input checked="" type="checkbox"/>	N	
Cover by Strata? (confirm cover type)	<input checked="" type="checkbox"/>	N	
Soil samples collected with matching plot #.	<input checked="" type="checkbox"/>	N	
Cross check 2010 information	<input checked="" type="checkbox"/>	N	Highlight any changes from 2010 information
Vouchers labeled on datasheet with initials and number	<input checked="" type="checkbox"/>	N	
Vouchers labeled on collection bag	<input checked="" type="checkbox"/>	N	
Pink flags removed	<input checked="" type="checkbox"/>	N	
Data sheet QA before leaving site?	<input checked="" type="checkbox"/>	N	
Common equipment returned to tub.	<input checked="" type="checkbox"/>	N	
Data sheets scanned?			Enter date to left
Final data sheets scanned?			Enter date to left
Buffer Widths measured?	<input checked="" type="checkbox"/>	N	
Web Soil Survey	Y	N	
Voucher Location	Refrigerator	Y	N
(# vouchers collected)	Press (#)		Enter number to left
SRE 715-716	Drier	Y	N
	Identified	Y	N
	Mounted	Y	N
	Thrown away	Y	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:

--

D

D

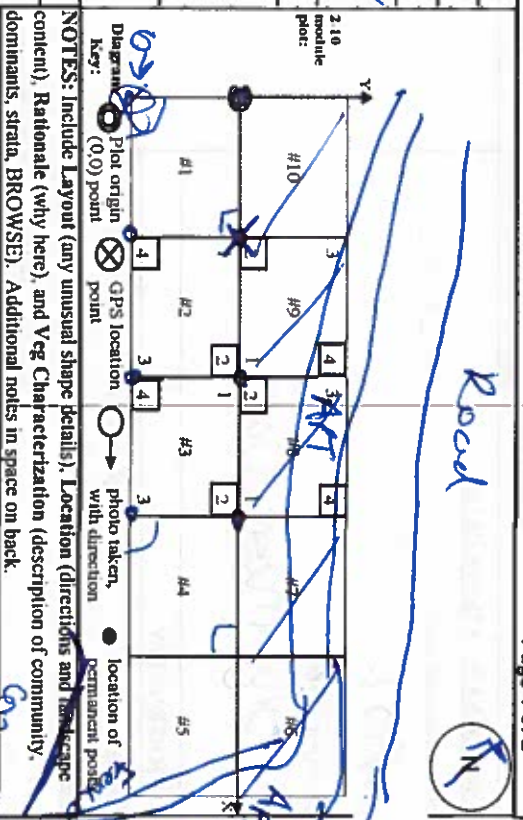
CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet

GENERAL INFORMATION	
Project Label:	PCAP
Project Name:	02WC2015
Plot Name:	North slope of the creek
Plot No.:	3732
<input type="checkbox"/> Level 4 (no nested corners sampled) <input checked="" type="checkbox"/> Level 5 (nested corners sampled)	
Date (mm/dd/yyyy):	08/10 / 2015
End date (if > 1 day):	/ /
Party:	Role**
S. Eysenbach	Plot leader
D. Sweet	Bot Asst
T. Cochran	Woody
E. Krauss	Woody
** Roles: Co-leader, Asst. Guide, Observer, Taxonomist, etc.	
PLOT NOT SAMPLED: <input type="checkbox"/> Other <input type="checkbox"/> Perm. water <input type="checkbox"/> Paved <input type="checkbox"/> Slope <input type="checkbox"/> Safety	
SAMPLING QUALITY*	
Effort Level:	subjective evaluation of how much effort put into sampling. Hurried plots may still provide good data
<input checked="" type="checkbox"/> Very thorough	
<input type="checkbox"/> Accurate	
<input type="checkbox"/> Hurried	
TAXONOMIC ACCURACY	
	high <input checked="" type="checkbox"/> modera. <input type="checkbox"/> low <input type="checkbox"/> not simpl <input type="checkbox"/>
vascul.	n/a
bryo	<input checked="" type="checkbox"/>
lichen	<input checked="" type="checkbox"/>
TAXONOMIC STANDARD	
Authority:	G&C Pub Date: 1998

Minimum required fields in Bold and Underlined

LOCATION	
State:	OH
County:	Cuyahoga
Quadrangle:	
Local Place Names:	East of the center
Landowner:	CM
Data Confidentiality:	
Check one:	<input checked="" type="checkbox"/> Public data <input type="checkbox"/> Private Data
<input type="checkbox"/> Fuzz 100m	<input type="checkbox"/> Fuzz 250m <input type="checkbox"/> Fuzz 500m
Reason:	
If data not public why?	
Source of coordinates:	<input type="checkbox"/> MAP <input checked="" type="checkbox"/> GPS
Coordinate system:	<input checked="" type="checkbox"/> Coord. Units
<input checked="" type="checkbox"/> Lat/Long	<input type="checkbox"/> UTM <input type="checkbox"/> StatePlane <input type="checkbox"/> deg <input type="checkbox"/> deg min
<input type="checkbox"/> Other (specify):	<input type="checkbox"/> m <input type="checkbox"/> ft <input type="checkbox"/>
Datum:	<input checked="" type="checkbox"/> NAD83/WGS84 <input type="checkbox"/> NAD27
GPS location in plot x=0 to 5, y=-1.0,+1): x = 0 y = -1 (base of plot x=0, y=0)	
Latitude:	41.38906
Longitude:	81.69424
Coord. Accuracy:	<input checked="" type="checkbox"/> m <input type="checkbox"/> ft +- 4
GPS File Name:	
Plot size for cover data:	0.05 (hectares)
X-axis Bearing of plot:	[112]°
Depth: (1-5):	4
Intensive modules:	2,3,6,9,1,2,3,4 (EDIT IF MODIFIED)
Camera No.:	C2
Photo Nos.:	C2-4592-93
Plot placement:	<input checked="" type="checkbox"/> WRTS <input type="checkbox"/> Representative
<input type="checkbox"/> Random	<input type="checkbox"/> Stratified Random <input type="checkbox"/> Transect component
<input type="checkbox"/> Systematic (grid)	<input type="checkbox"/> Capture specific feature <input type="checkbox"/> Other

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



Layout: 1x5

location: Plot is located near the SW corner of the entry drive and the drive to Bluebird point. Short walk east from the center

Rationale: brts point resample

Veg Char:

Canopy: Red, Black, White Oak w/ Red Maple and Beech

Shrub: Red Maple, Black cherry, Beech, Serviceberry

Herb: Very depauperate

the addition of the road and soil exposure, Natural Resources Management FORM NR2010-01a

OVER

CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet

Project Name: 07WC705

Plot No.: 3732

Project Label: PCAP

MODIFIED NATU/RESERVE CLASS*

CODE (on separate form): A02 Fit= Conf=

COMMUNITY NAME: Org-Mesic Oak

HOMOGENEITY

☐ Homogeneous ☐ Compositional trend across the plot

☒ Conspicuous inclusions ☐ Irregular/pattern mosaic

HYDROLOGIC REGIME*	
<input checked="" type="checkbox"/> Upland (seldom flooded)	<input type="checkbox"/> Intermittently flooded
<input type="checkbox"/> Intermittently/seasonally saturated (seldom flooded)	<input type="checkbox"/> Semipermanently flooded
<input type="checkbox"/> Permanently/Semipermanent. saturated (dry <1/yr, seldom flooded)	<input type="checkbox"/> Permanently flooded
<input type="checkbox"/> Occasionally flooded (<1/yr)	<input type="checkbox"/> Tidal/Seiche flooded daily
<input type="checkbox"/> Temporarily flooded	<input type="checkbox"/> Tidal/Seiche flooded monthly
	<input type="checkbox"/> Tidal/Seiche flooded irregular (e.g. wind, storms)
	<input type="checkbox"/> Unknown

Additional notes & diagrams: (Representativeness of plot to the stand, successional status, maturity, etc.)

Construction of the Road & Apt Severely changed mod 5. Many trees ~~were~~ ^{were} cut down and most of the mod is sunny w/ inclusion of Apt and Fence

The forest floor is very depauperate - Browse is very heavy.

Huge Red oak in mod I. Several trees id as Scarlett in 2010, I believe are Black or Red Oak

CLEVELAND METROPARKS Plant Community Assessment Program Species Cover Data Sheet

Page 1 of 2

Project Label: PCAP Project name: DRU2015 Plot no.: 3732
 Total modules: 5 Intensive modules: 4 Plot configuration: 1x5

Plot area (ha): 0.05



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

Cleveland
Metroparks

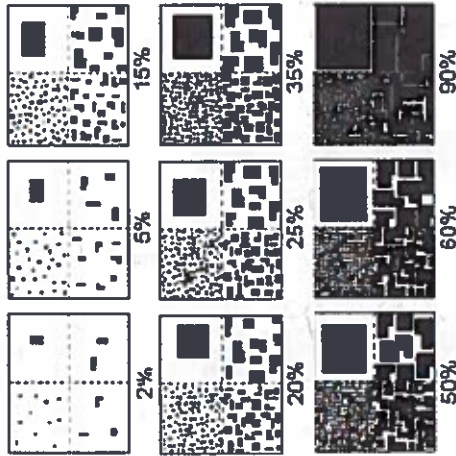
Br = Browse Level. Use cover classes to
describe amount of browse per species over
entire plot

Sirala - Coy. entire plot

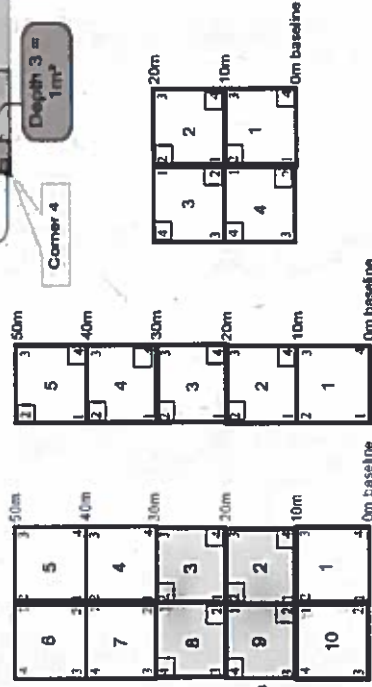
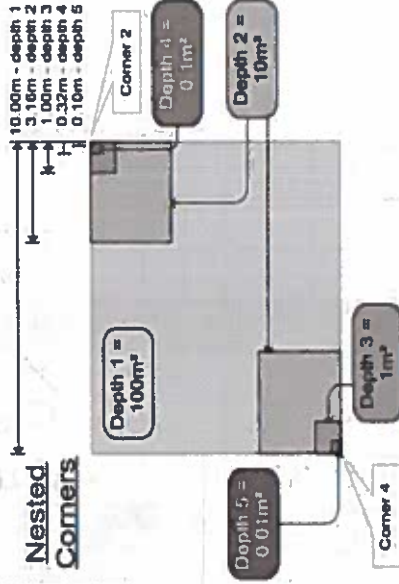
S	H	(F)	(A)	Br	Species	C	Voucher #	Estimate for each intensive module:				Estimate for each intensive module:				Estimate for each intensive module:				Estimate for each intensive module:				mod	R																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
								%unveg. water	%unveg. ground (bare soil)	%unveg. litter (bare litter)	depth	corner	mod	depth	corner	mod	depth	corner	mod	depth	corner	mod	depth			corner	mod	depth	corner	mod																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
2	2				<i>Smilax rotundifolia</i>			8	2	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				

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 bird area covered, but different visual subjects.



Nested Corners



BROWSE RATING NARRATIVE DESCRIPTION

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

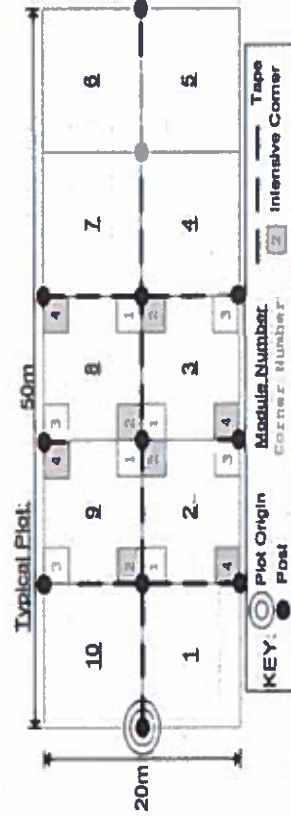
MEDIUM LOW values include evidence of browse at about 10 percent of the stems with no significant impact to plant reproduction evident. In this rating, plants are browsed but preferential species are observed to be reproducing in numbers that appear normal or near-normal in comparison to low browse areas.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

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

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

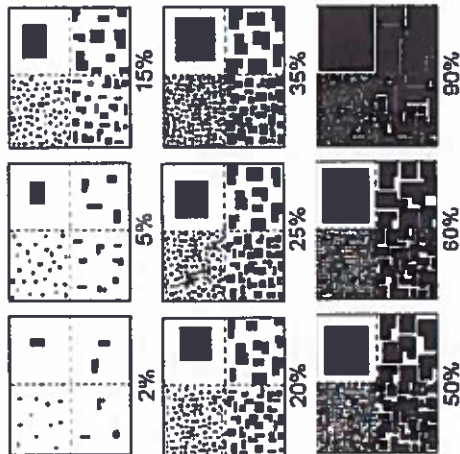
HIGH: greater than 25 percent of the stems of plants in the 1 m2 nested quadrat and intensive module AND a browse line is evident.

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



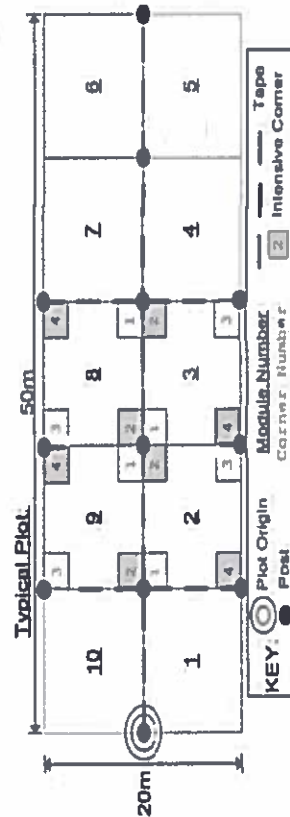
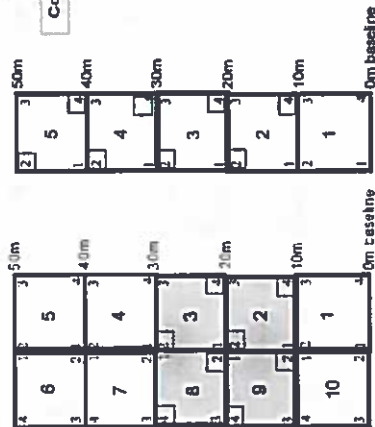
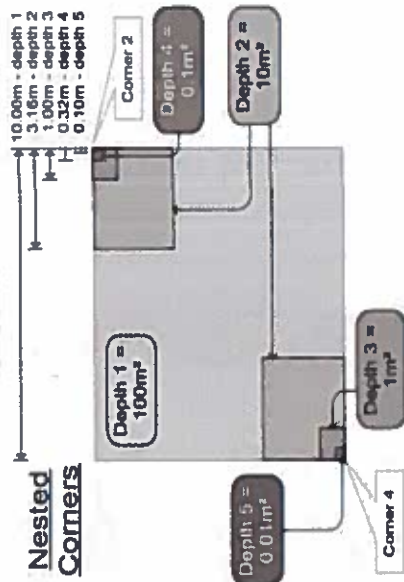
EXAMPLES OF PERCENT OF AREA COVERED

This following graphic can be used for various data elements to convey "Amount" or "Density". NOTE: Within any given box, each quadrant contains the same kind of the covered, just different sized objects.



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

Nested Corners



BROWSE RATING NARRATIVE DESCRIPTION

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

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

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

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

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

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

Page 1 of 1

Project name: 02WC2015 Plot no.: 3+32

Plot no.: 5+32

[illegible]

Page of

Plot no.:

SRE_CM PCAP TREE Species Cover Data.xls last revised 6/10/2015 jjm

CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet



Project Label: PCAP

Project Name: 02 WC2015

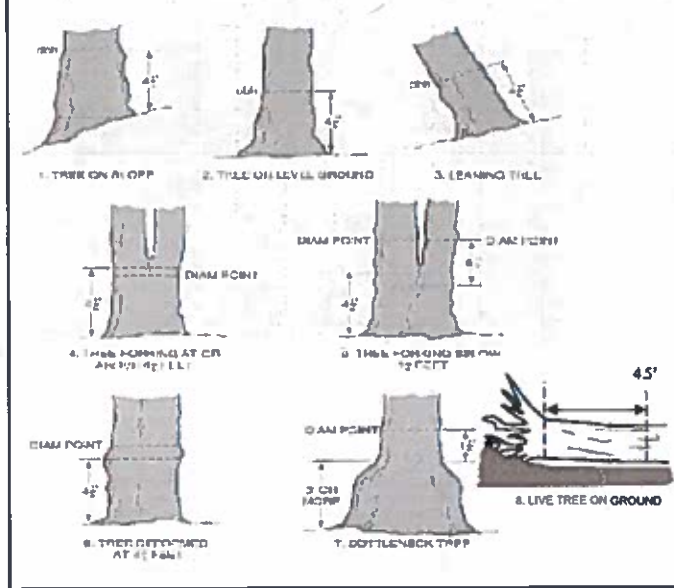
Plot No.: 3732

Page: 1 of 2

Explain subsample (additional room on back):

mod #	species	c	voucher#	# stems 0-1.4m	% sub or super sample	# shrub clumps	size class (cm) woody stems > 1.4m										>40 (record each tree)
							1 0-1	2 1-2.5	3 2.5-5	4 5-10	5 10-15	6 15-20	7 20-25	8 25-30	9 30-35	10 35-40	
1	<i>Quercus rubra</i>																
1	<i>Smilax rotundifolia</i>																
1	<i>Sassafras albidum</i>																
1	<i>Quercus rubra</i>																130.5
1	<i>Quercus velutina</i>																58.0 58.0
1	<i>Fagus grandifolia</i>																
2	<i>Quercus alba</i>																
2	<i>Hel rubrum</i>																
2	<i>Quercus velutina</i>																
2	<i>Fagus grandifolia</i>																47.0
2	<i>Quercus rubra</i>																
2	<i>Hamamelis virginiana</i>																
2	<i>Smilax rotundifolia</i>																42.3
3	<i>Quercus velutina</i>																
3	<i>Hel rubrum</i>																
3	<i>Quercus alba</i>																
3	<i>Shadblow</i>																
3	<i>Smilax rotundifolia</i>																
4	<i>Rhus glabra</i>																
4	<i>Quercus velutina</i>																76.5
4	<i>Fagus grandifolia</i>																
4	<i>Quercus rubra</i>																
4	<i>Hel rubrum</i>																
4	<i>Amelanchier sp.</i>																

DBH Measurement Rules



Woody Stem Deer Browse

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

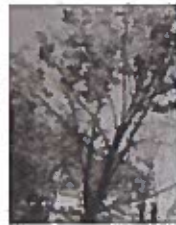
Record using the tally system from 1 to 10



1



2



3



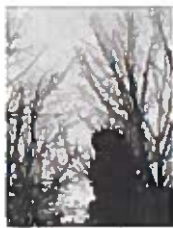
4



5

ASH CANOPY CONDITION

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



A

B

C

D

E

ASH CANOPY BREAKUP CONDITION (for dead trees):

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

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

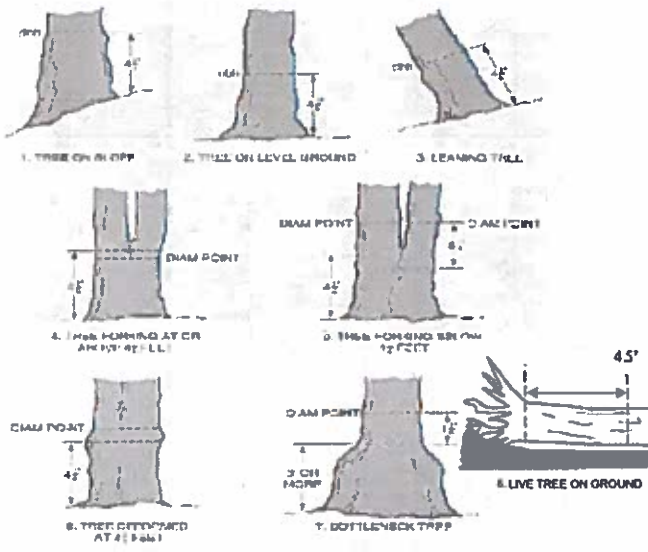
100

Page: 2 of

100

Natural Resources Management FORM NR/2010-03a

DBH Measurement Rules



Woody Stem Deer Browse

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

Record using the tally system from 1 to 10



1



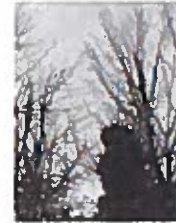
2



3



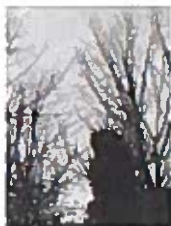
4



5

ASH CANOPY CONDITION

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



A

B

C

D

E

ASH CANOPY BREAKUP CONDITION (for dead trees):

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

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

Project Label: PCAP

Project Name:

02MC2015

Plot No.:

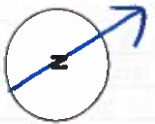
3737

Date:

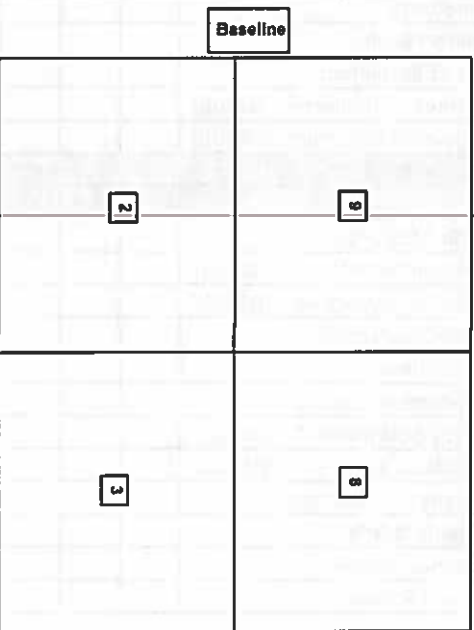
8-10-15

Tree ID	Species	Dead	C	Voucher #	DBH (cm)	Ht @ DBH	Ash condition	Dead condition	# Exit holes	Episcortic present	Woodpecker holes
1	None present										
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											

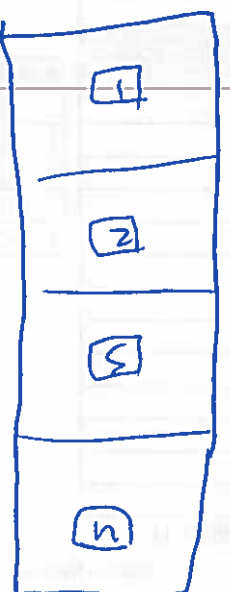
ASH Only



*** Change intensive module numbers when necessary



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



• If Ash Condition scores 5 (dead) provide breakup score (A-E)
Count EAB exit holes 1.25m x 21.5m
Woodpecker and epicormic marked present (1) or absent (0)

CLEVELAND METROPARKS Plant Community Assessment Program: Invasive Species Survey



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

Presence
X: yes

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

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

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

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

CLEVELAND METROPARKS Plant Community Assessment Program Forest Pest and Pathogens Data Sheet



Project Label: _____

PCAP _____

Project Name: 02WC2015

Plot No.: 3732

Page: 1 of 1

mod #	species	voucher#	# shrub clumps	size class (cm) woody stems >1m										
				1 0-1	2 1-2.5	3 2.5-4.5	4 4.5-10	5 10-15	6 15-20	7 20-25	8 25-30	9 30-35	10 35-40	11 >40 (record each tree)
1	<i>Fagus grandifolia</i>													
2	<i>Fagus grandifolia</i>													
3	<i>Fagus grandifolia</i>													
4	<i>Fagus grandifolia</i>													
5	<i>Fagus grandifolia</i>													
6														
7														
8														
9														
10														

* IF EVIDENCE OF PEST OR PATHOGEN RECORD TOTAL SPECIES POPULATION IN THE PLOT EVEN THE NOT INFECTED

Strata	# of stem infected	Severity (H, M, or L)
Tree (size class 3 or above)	..	L
Shrub (size class 2 or below including shrub clumps)		

* Write None Present if no evidence:

<u>Present</u> Beech (Fungus)	<u>None present</u> Asian Longhorned Beetle
_____ Hemlock (HWA)	_____ Other Pest or Pathogen
_____ Walnut (Thousand Canker)	

Severity

High = more than 50% of leaf/needle cover exhibiting symptoms

Medium = Less than 50% of leaf/needle cover exhibiting symptoms

Low = Only a few leaves or branches are exhibiting symptoms



STANDING BIOMASS (required for emergent wetlands) collected in 0.1m clip plots (3x32 cm) from corner 1 and 3 in each intensive module. Required for VIBI-E score calculation. C7=check when collected

Module #	C7	Corner	Corner

CLASSIFICATION

GFI = excellent, F = fair and Confidence

Hydrogeomorphic class (WETLANDS ONLY)

<input type="checkbox"/> DEPRESSION	Fit=	Conf=
<input type="checkbox"/> IMPOUNDMENT <input type="checkbox"/> Beaver <input type="checkbox"/> Human	Fit=	Conf=
<input type="checkbox"/> RIVERINE <input type="checkbox"/> Headwater <input type="checkbox"/> Mainstem <input type="checkbox"/> Channel	Fit=	Conf=
<input type="checkbox"/> SLOPE (ground water hydrology or on a physical slope)	Fit=	Conf=
<input type="checkbox"/> FRINGING <input type="checkbox"/> Reservoir <input type="checkbox"/> Natural Lake	Fit=	Conf=
<input type="checkbox"/> COASTAL (specify subclass)	Fit=	Conf=
<input type="checkbox"/> BOG (strongly, moderately, weakly ombrotrophic)	Fit=	Conf=

Other EPA VIBI Plant Community Class (WETLANDS ONLY)

<input type="checkbox"/> FOREST <input type="checkbox"/> swamp forest <input type="checkbox"/> bog forest <input type="checkbox"/> forest seep	Fit=	Conf=
<input type="checkbox"/> EMERGENT <input type="checkbox"/> marsh <input type="checkbox"/> wet meadow <input type="checkbox"/> open bog	Fit=	Conf=
<input type="checkbox"/> SHRUB <input type="checkbox"/> shrub swamp <input type="checkbox"/> tall sh. bog <input type="checkbox"/> tall sh. fen	Fit=	Conf=

MICROTOPOGRAPHIC FEATURE COUNTS - Intensive modules only

Remarks for microhabitat features. Select one or select two and average the score. NOTE: If mod fails on a slope automatically gets ranked based on steepness (1-3) to begin + any features present
 Slope 1 = slight elevational grade across module (N/S) Slope 2 = falls on slope -20° Slope 3 = maximum steepness that can be safely sampled -45°

- 0 feature is absent or functionally absent from the wetland
- 1 feature is present in the wetland in very small amounts, or if more common, of low quality
- 2 feature is present in moderate amounts, but not of highest quality, or in small amounts of highest quality
- 3 feature is present in moderate or greater amounts and of highest quality

C.W.D. - count for pieces with minimum 1m length									
module	corner	no. of tussocks	no. of hummocks	no. macro. depressions	C.W.D. (2-12 cm)	C.W.D. (12-40cm)	C.W.D. >40 cm	microhab. interspers.	microhab. SLOPE
		depth 3 1x1m	depth 2 3.16x3.16m	depth 1 10x10m	depth 1 10x10m	depth 1 10x10m	depth 1 10x10m	depth 1 10x10m	10x10m
1		0	0	0	17	1	0	2	2
2		0	0	0	14	2	0	2	2
3		0	0	0	17	2	0	2	2
4		0	0	0	20	1	0	2	2

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

MCNAB INDICES (degrees) + for up - for down

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

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

Landform Index (location within landscape)

Terrain Slope Index (note microtopographic shape)

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

Module	N	S	E	W
1	0	0	0	1
2	1	0	0	2
3	1	0	1	1
4	0	0	1	0

COVER BY STRATA

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

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

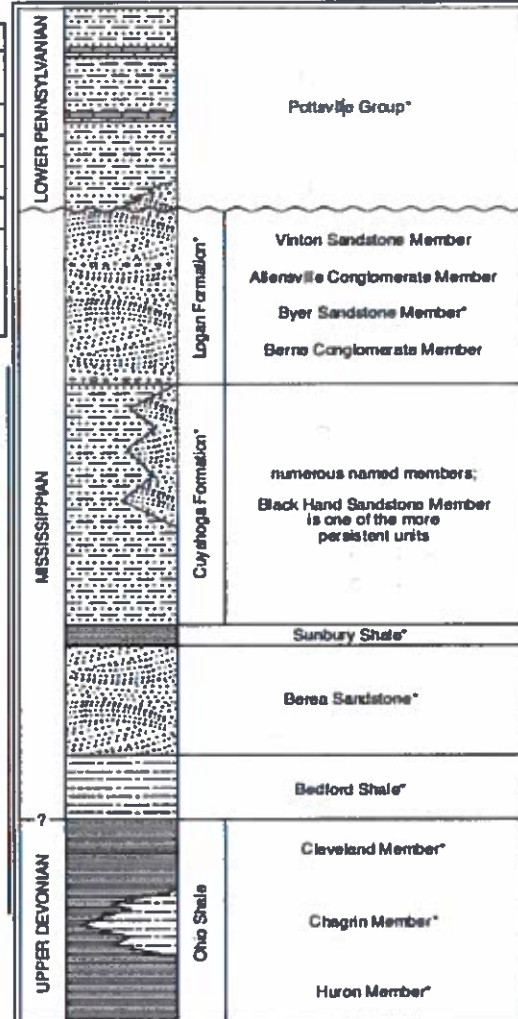
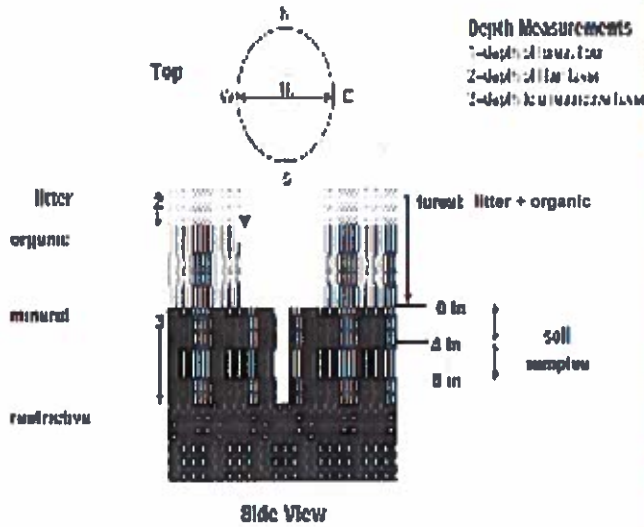


FIGURE 3-20.—Generalized section of Upper Devonian, Mississippian, and Lower Pennsylvanian formations in northeastern Ohio. Asterisks indicate units that are fossiliferous. This composite section represents about 400 meters of rock exposed across the area. The section is not to scale, but the thicknesses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

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

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

Soil pit module # (one per entire plot)

5 cm	matrix color	
	mottle color	
	%mottle	
	oxid roots	Y N
	texture*	
	redox features**	Y N
	hydr. cond.***	I S M D
20 cm	matrix color	
	mottle color	
	%mottle	
	oxid roots	Y N
	texture*	
	redox features**	Y N
	hydr. cond.***	I S M D

* refer to lecture classes on reverse side
 ** e.g. hydrogen sulfide odor, gleying, etc.
 *** Circle one:
 I=indurated S=saturated M=moist D=dry

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

1 - NO worms present
 2 - castings present
 3 - NO worms present
 4 - NO worms present

Soil Collection Module	Horizon (A, B, C)
2.3.8.9 composite	A
Web Soil Survey Information	
Soil Series Type	
Soil Series Source	Ohio Soil Survey
Landform type	
Depth to root layer	
Parent Material	
Drainage*	
<input type="checkbox"/> Excessively dr. <input type="checkbox"/> Well drained <input type="checkbox"/> Somewhat poorly dr. <input type="checkbox"/> Impermeable surface	<input type="checkbox"/> Somewhat excessively <input type="checkbox"/> Moderately well dr. <input type="checkbox"/> Very poorly dr.

SOIL DEPTH MEASUREMENT: Measure to the nearest 0.1 cm in center of intensive modules. If >30.5 cm, record as >30			
	1 liter+ organic depth (cm)	2 liter depth (cm)	water depth (cm)
1	5.4	3.4	0
2	3.5	3.5	0
3	2.4	2.4	0
4	2.0	2.0	0

EARTH SURFACE & GROUND COVER			
Underlying Earth Surface*	Ground Cover	percent	
Gravel - 100%+	percent (each < 100%)		
Hiacrol	Coarse Woody Debris***	8	
Mineral Soil	Fine Woody Debris***	5	
Gravel-Cobble*	Litter	80	
Boulder**	Duff (Ferm + Humus)	0	
Bedrock	Bryophyte-Lichen	2	
* Gravel-Cobble = 1/16-10"	Water	0	
** Boulder = > 10 in	Bare Soil	3	
*** > 5 cm in diameter	Dead Trail	2	
**** < 5 cm in diameter	Other		

COVER BY STRATA		
Strata	Height Range (m)	Total Cover (%)
Tree	5 - 7	78
Shrub	0.5 - 5	43
Herb	0 - 0.5	13
(Floating)*	-	0
(Aquatic)*	-	0
* rooted and floating or slightly emergent ** submerged, most plant mass below surface		
SEE BACK OF PAGE FOR TYPICAL STRATA DESCRIPTIONS. STRATA CAN VARY BY COVER TYPE		

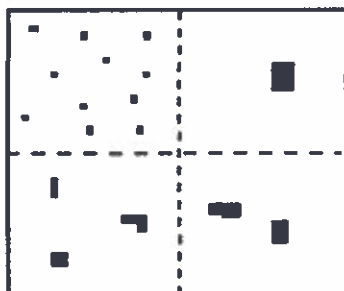
TRAIL INFORMATION:	
record type and cover for each	
Type	%Cover
All Purpose	2
Bridle	
Hiking sanctioned	
Boatleg unsanctioned	
Gravel	
Deer	

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

SEE 9-8-15

PERCENT MOTTLES (USE CLASS CODES):

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



2%



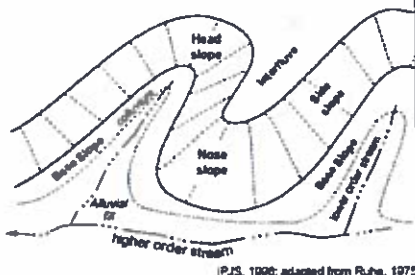
20%

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

- 0= Organic
- 1= Loamy
- 2= Clayey
- 3= Sandy
- 4= Coarse Sand
- 9= Not measured - make plot note

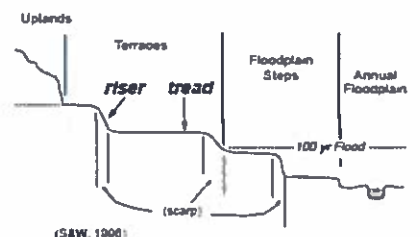
Geomorphic Component - Three-dimensional descriptors of parts of landforms or microfeatures that are best applied to areas. Unique descriptors are available for Hills, Terraces, Mountains, and Flat Plains; e.g., (for Hills) nose slope or NS.

Hills	Code	NASIS
interfluvial	IF	IF
head slope	HS	HS
nose slope	NS	NS
side slope	SS	SS
base slope	---	BS



(P.J.S. 1996; adapted from Ruhe, 1975)

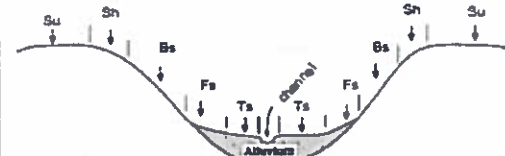
Terraces	Code
riser	RI
tread	TR



(S&W, 1996)

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

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



(P.J.S. 1996; adapted from Ruhe, 1975)

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

UPLAND: Not a wetland. Very rarely flooded.

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

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

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

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

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

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

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

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

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial):

Site ID:

3727 BPWCC

DATE:

08/10/2015

Location:

AA Center ON OS OE OW

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

Plot 1 Plot 2 Plot 3

Buffer Natural Cover Strata

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

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

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

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

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

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

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

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

Buffer Sample Plots 05/27/2011

2428168304

7966623548

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

Flag Comments

Use Decimal Degrees: NAD83

Latitude North 41.38901 Longitude West 081.69398

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

Location of coordinates (choose one):

Flag

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.

PLOT COORDINATES

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 Watermilloil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Purple Loosestrife	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Johnson Grass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Water hyacinth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Knotted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Kudzu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Yellow Floating Heart	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Japanese Knotweed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Mulberry Rose	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Giant Salvinia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Perennial Pepperweed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Common Buckhorn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Garlic Mustard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Giant Reed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Himalayan Blackberry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Poison Hemlock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Cheatgrass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Tamarisk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mill-A-Minute Weed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Reed Canary Grass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Birdfoot Trefoil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Common Reed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Canada Thistle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Leafy Spurge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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

Site ID:

3732BPWC

DATE:

08/10/2015

Reviewed by (initial):

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

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial):

Site ID: 37328PWCN

DATE: 08 / 10 / 2015

Location:

☐ AA Center
 ☒ N
 ☐ S
 ☐ E
 ☐ W

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

☐ Plot 1

 ☐ Plot 2

 ☒ Plot 3

1

Buffer Natural Cover Strata

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

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

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

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

Residential and Urban Stressors					Hydrology Stressors					Agricultural & Rural Stressors				
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Road - gravel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Ditches, Channelization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Pasture/Hay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Road - two lane	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	2	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 FIELDS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Golf Course	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Fill/Spoil Banks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Fallow Field (OLD - GRASS, SHRUBS, TREES)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Lawn/Park	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Freshly Deposited Sediment (UNVEGETATED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Nursery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Suburban Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil Loss/Root Exposure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Dairy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Urban/Multifamily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Wall/Riprap	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Orchard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Landfill	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Inlets, Outlets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Confined Animal Feeding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Dumping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Point Source/Pipe (EFFLUENT OR STORMWATER)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Rural Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Trash	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Impervious surface input (SHEETFLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Gravel Pit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Irrigation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Industrial Development Stressors					Habitat/Vegetation Stressors									
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Oil Drilling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Forest Clear Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Herbicide Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Gas Wells	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Forest Selective Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Mowing/Shrub Cutting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mine (surface)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tree Plantation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Trails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mine (underground)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tree Canopy Herbivory (INSECT)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil Compaction (ANIMAL OR HUMAN)	<input checked="" 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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Recently Burned Forest Canopy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Recently Burned Grassland (BLACKENED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

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

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

Buffer Sample Plots 05/27/2011

2428168304

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

Reviewed by (initials):

Site ID:

8732BPMN

DATE:

08/10/2015

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 Watermilloil					Purple Loosestrife					Johnson Grass				
Water hyacinth					Knotweed					Kudzu				
Yellow Floating Heart					Japanese Knotweed					Mulberry Rose				
Giant Salvinia					Perennial Pepperweed					Common Buckhorn				
Garlic Mustard					Giant Reed					Himalayan Blackberry				
Poison Hemlock					Cheatgrass					Tamarisk				
Mile-A-Minute Weed					Reed Canary Grass					Other:				
Birdfoot Trefoil					Common Reed					Other:				
Canada Thistle					Leafy Spurge					Other:				
										Other:				

PLOT COORDINATES

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

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

Location of coordinates (choose one):

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

Flag

Latitude North

41.38901

Longitude West

081.69378

Use Decimal Degrees; NAD83

Flag

Comments

1 Plot 3 could not be sampled since it fell on private property
 2 GPS pt taken at Plot 2
 3 crossed over API and Rd to the center

7966623548

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

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (initial):

Site ID: 3732BPWCE

DATE: 08/10/2015

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, N = Needle Leaf. Absent: No tree canopy.

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

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

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

Residential and Urban Stressors					Hydrology Stressors					Agricultural & Rural Stressors				
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Road - gravel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Ditches, Channelization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Pasture/Hay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Road - two lane	<input type="radio"/>	<input checked="" 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 checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	1	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 checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		Dairy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Urban/Multifamily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Wall/Riprap	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Orchard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Landfill	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Inlets, Outlets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Confined Animal Feeding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Dumping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Point Source/Pipe (EFFLUENT OR STORMWATER)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Rural Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Trash	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Impervious surface input (SHEETFLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Gravel Pit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Irrigation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Industrial Development Stressors					Habitat/Vegetation Stressors									
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Oil Drilling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Forest Clear Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Herbicide Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Gas Wells	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Forest Selective Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Mowing/Shrub Cutting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mine (surface)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tree Plantation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Trails	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	1
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 checked="" type="radio"/>	<input checked="" 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 checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Recently Burned Forest Canopy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Recently Burned Grassland (BLACKENED)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

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

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

Buffer Sample Plots 05/27/2011

2428168304

Reviewed by (initials):

DATE: 08 / 10 / 2015

PLOT COORDINATES

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.

Flag

100

Longitude West 081.69405

Use Decimal Degrees; NAD83

Flag

Comments

1	Apt Falls into plot
---	---------------------

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial):

Site ID: 3732BPWCS

DATE: 08/10/2015

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

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

Residential and Urban Stressors					Hydrology Stressors					Agricultural & Rural Stressors				
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Road - gravel	<input 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 checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>		Dairy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Urban/Multifamily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Wall/Riprap	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Orchard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Landfill	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Inlets, Outlets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Confined Animal Feeding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Dumping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Point Source/Pipe (EFFLUENT OR STORMWATER)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Rural Residential	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Trash	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Impervious surface input (SHEETFLOW)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Gravel Pit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Irrigation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Industrial Development Stressors					Habitat/Vegetation Stressors									
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Oil Drilling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Forest Clear Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Herbicide Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Gas Wells	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Forest Selective Cut	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Mowing/Shrub Cutting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Mine (surface)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Tree Plantation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Trails	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" 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 checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" 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 checked="" type="radio"/>		Offroad vehicle damage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Highly Grazed Grasses (OVERALL <3' HIGH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil erosion (FROM WIND, WATER, OR OVERUSE)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" 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

[illegible]
























































































































Reviewed by (Initial):

DATE: 08 / 10 / 2015

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

☐ Plot 1 ☐ Plot 2 ☐ Plot 3

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:  					Absent: 	Buffer Plot 2	Canopy Type:  					Absent: 	Buffer Plot 3	Canopy Type:  					Absent: 
	Leaf Type:  					Flag		Leaf Type:  					Flag		Leaf Type:  					Flag
Big Trees (>0.3m DBH)							Big Trees (>0.3m DBH)							Big Trees (>0.3m DBH)						
Small Trees (<0.3m DBH)							Small Trees (<0.3m DBH)							Small Trees (<0.3m DBH)						
Woody Shrubs, Saplings (0.5m-5m HIGH)							Woody Shrubs, Saplings (0.5m-5m HIGH)							Woody Shrubs, Saplings (0.5m-5m HIGH)						
Woody Shrubs, Saplings (<0.5m HIGH)							Woody Shrubs, Saplings (<0.5m HIGH)							Woody Shrubs, Saplings (<0.5m HIGH)						
Herbs, Forbs and Grasses							Herbs, Forbs and Grasses							Herbs, Forbs and Grasses						
Bare ground							Bare ground							Bare ground						
Litter, duff							Litter, duff							Litter, duff				 </		

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

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

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

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

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

Buffer Sample Plots 05/27/2011

2428168304

Reviewed by (Initial):

DATE: 08 / 10 / 2015

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"/>		

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.

Flag

Longitude West 081 69.363

Use Decimal Degrees; NAD83

[illegible]