

CLEVELAND METROPARKS Plant Community Assessment Program: Quality Control Form



Project Label: _____

PCAP

Plot No: 3420Date Sampled: 07/31/15Lead: LANCE

Comment required if item answer is NO

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

GRTS point verification: Is plot sampleable?

<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:

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CLEVELAND METROPARKS Plant Community Assessment Program - Background Data Sheet

Project Name: 510202015

PCAP

Project Label:

Plot No.: 3420

MODIFIED NATURAL RESERVE CLASS*

CODE (on separate form):

Fit= Conf=

W-01(a)

COMMUNITY NAME:

Atypical Succession →
Cottonwood Forest

HOMOGENEITY

☒ Homogeneous ☐ Compositional trend across the plot

☐ Conspicuous inclusions ☐ Irregular/pattern mosaic

DISTURBANCES

type*	severity**	yrs ago	% of plot	description
Human	VH	25-50	100%	dumping
Natural	L	0	100%	EAB impact
Fire				
Cut				
Animal	H	0	100%	browse
Other				

**L=low, ML=med low, M=med, MH=med high, H=high, VH=very high

Current Land Use: PARK

Former Land Use: UNKNOWN (Dump?)

HYDROLOGIC REGIME*

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

(by default unless plot is a wetland)

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

Limited diversity amongst the shrubs and herbs. Whitegrass, jack-in-the-pulpit, and Hackelia are the most abundant members of herb community. Substantial browse pressures and a number of invasive species present.

Project Label:

PCAP

Project name: 02WKA015

Plot no.: 3420

Total modules:

4

Intensive modules:

4

Plot configuration:

1x4

Plot area (ha):

0.04

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

Strata - Cov. entire plot

S H (F)(A) Br

C

Voucher #

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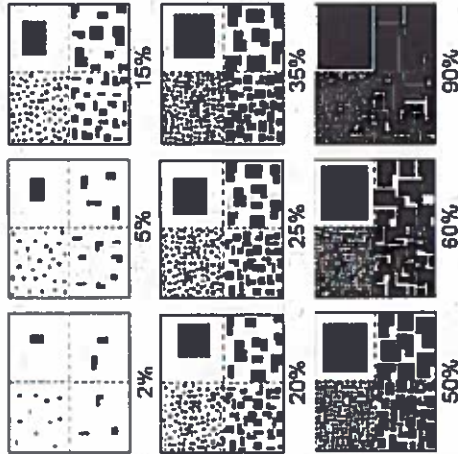
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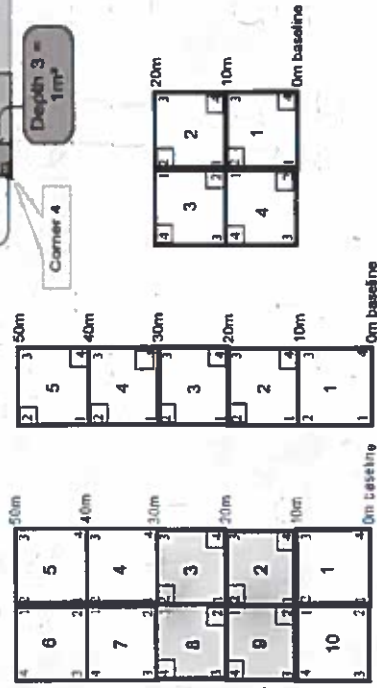
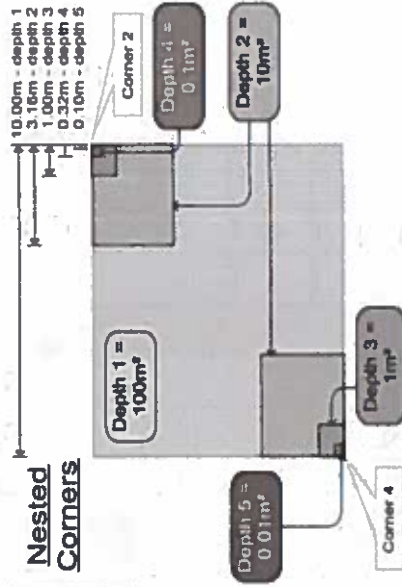
EXAMPLES OF PERCENT OF AREA COVERED

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



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	75-85%	0.850
10	85-100%	0.975

Nested Corners



BROWSE RATING NARRATIVE DESCRIPTION

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

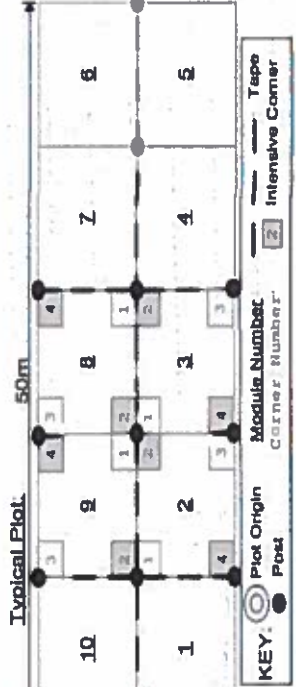
MEDIUM LOW values include evidence of browse at about 10 percent of the stems with no significant impact to plant reproduction evident. In this rating, plants are browsed but preferential species are observed to be reproducing in numbers that appear normal or near-normal in comparison to low browse areas.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



CLEVELAND METROPARKS Plant Community Assessment Program Species Cover Data Sheet

Page 2 of 2

Project Label: PCAP
Total modules: 4

Project name: 2010-2015
Intensive modules: 4 Plot configuration: 1x4

Plot area (ha): 0.04



Cleveland Metroparks

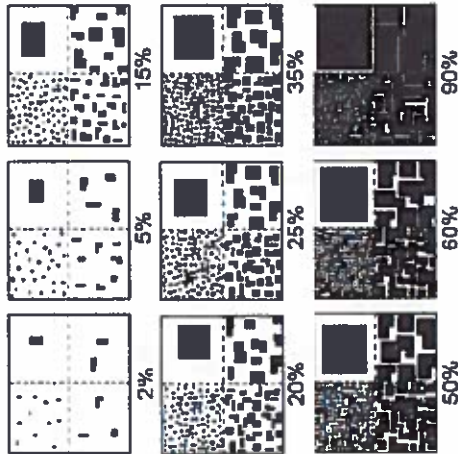
Br = Browse Level. Use cover classes to describe amount of browse per species over entire plot

Strata - Cov. entire plot

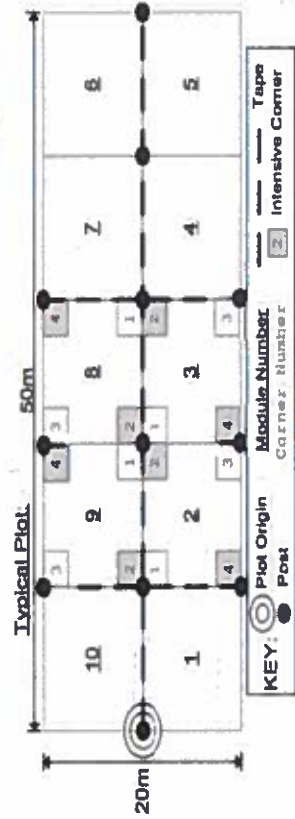
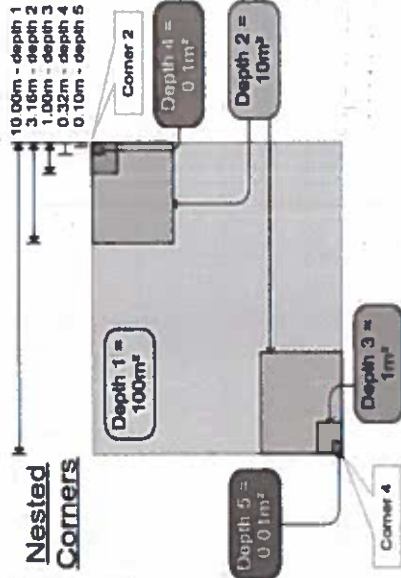
S	H	(F)(A) Br	Species	C	Voucher #	Estimate for each intensive module:				mod				mod				mod				mod				R
						%open water	%unvegetated open water	%unveg. ground (bare soil)	%unveg. litter (bare litter)	depth	cover	depth	cover	depth	cover	depth	cover	depth	cover	depth	cover	depth	cover	depth	cover	
2			Bidens sp.			1	1	1	1	1		1		1		1		1		1		1		1		
1			Cornus sp.																							
1			Berberis thunbergii																							
2			Circaea lutetiana																							
2			Solanum dulcamara																							
1			Ulmus sp.																							
1			Epipactis helleborine																							
1			Lamium officinale																							
1			Aster sp. 1																							
4			Acer rubrum																							
1			Urtica dioica																							
2			Poa annua sp. 3																							
2			Phalaris arundinacea																							
2			Trifolium sp.																							

EXAMPLES OF PERCENT OF AREA COVERED

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



BROWSE RATING NARRATIVE DESCRIPTION

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Page 1 of 1

Project name: 03w52015 Plot no.: 3420

[illegible]

Page of

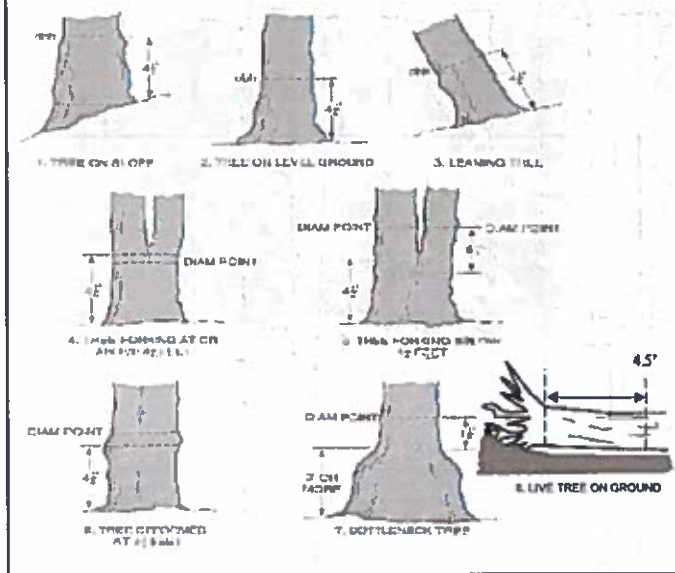
Plot no.:

Page: 1 of 1

Cleveland Metroparks

[illegible]

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



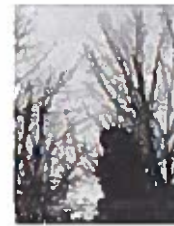
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3



4



5

ASH CANOPY CONDITION

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



A

B

C

D

E

ASH CANOPY BREAKUP CONDITION (for dead trees):

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

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

CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet



Project Label: PCAP

Project Name: CONC705

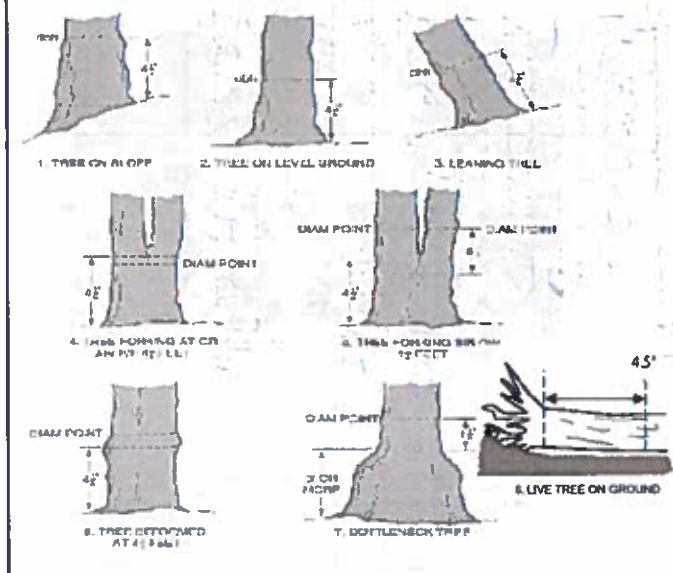
Plot No.: 3420

Page: 2 of 2

Explain subsample (additional room on back):

plot #	species	c	voucher#	# stems 0-1.4m browsed	% sub or super sample	# shrub clumps	size class (cm) woody stems > 1.4m										
							1	2	3	4	5	6	7	8	9	10	11
							0-1	1-2.5	2.5-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	>40 (record each tree)
3	<i>Berberis thunbergii</i>			•													
3	<i>Populus deltoides</i>																76.6,
3	<i>Rosa blanda</i>			•													
3	<i>Lonicera xylosteum</i> "rusty"			••													
4	<i>Fraxinus pennsylvanica</i>								•								
4	<i>Populus deltoides</i>																69.4, 46.0
4	<i>Nyctaginia</i>			••					••	••							
4	STANDING DEAD									•							
4	<i>Citrus</i> sp.																
4	<i>Opuntia</i>			•													
4	<i>Lonicera</i>			•						•							
4	<i>Berberis thunbergii</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.

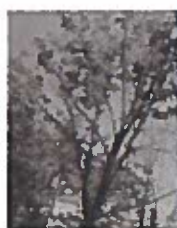
Record using the tally system from 1 to 10



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

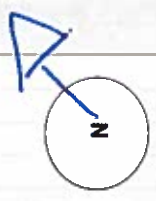
ASH CANOPY BREAKUP CONDITION (for dead trees):

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

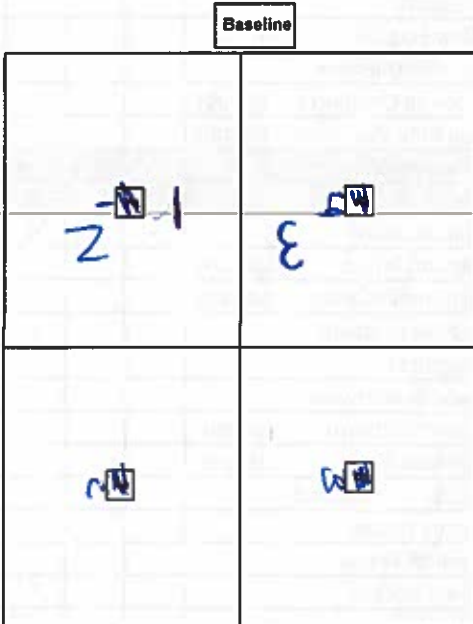
- A:** All main branches contain fine twigs (newly dead).
- B:** Over 50% of main branches have fine twigs.
- C:** Less than 50% of main branches have fine twigs.
- D:** Stem still standing and tertiary main branches present.
- E:** Central stem still standing.

Tree ID.	Species	Dead	c	Voucher #	DBH (cm)	Ht (m)	Ash condition	Dead condition	# Exit holes	Epicormic present	Woodpecker holes
1	Fraxinus pennsylvanica				10.8	4			1	1	1
2	Fraxinus pennsylvanica				25.4	7			0	0	1
3	Fraxinus pennsylvanica				11.0	1			0	0	1
4											
5											
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7											
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25											

* If Ash Condition scores 5 (dead) provide breakup score (A-E)
 Count EAB exit holes 1.25m2 x 21.5m
 Woodpecker and epicormic marked present (1) or absent (0)



*** Change intensive module numbers when necessary



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

1 | 2 | 3 | 4

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				1	
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)	1	1			
Alnus glutinosa	European Alder					
Dipsacus laciniatus	Cut-leaf Teasel					
Elaeagnus umbellata	Autumn Olive (shrub)					
Lonicera maackii	Amur Honeysuckle (shrub)	1	1	1	1	
Euonymus fortunei	Wintercreeper					
Tier 3: Presence is of Interest		# of Plants				comments
		NE	SE	SW	NW	
Convallaria majalls (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	3	3	3	3	
Ligustrum vulgare	Common Privet (shrub)					
L. morrowii, L. tatarica	Bush Honeysuckles (shrub)					
Phalaris arundinacea	Reed Canarygrass		1	1		
Phragmites australis (wetland)	Phragmites					
Polygonum cuspidatum	Japanese Knotweed					
Frangula alnus	Glossy Buckthorn (shrub)					
Rosa multiflora	Multiflora Rose (shrub)			1	1	
Typha angustifolia, T. x. glauca	Cattails (wetland)				1	
Cirsium arvense	Canada thistle					
Dipsacus fullonum	Common Teasel					
Hesperis matronalis	Dame's Rocket			1	1	
Vinca minor (G-cover)	Periwinkle			3	3	m sized patch

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: OSW0015

Plot No. 3420

Page 1 of 1

mod #	species	voucher#	# shrub clumps	size class (cm) woody stems > 1m										
				1 0-1	2 1-2.5	3 2.5-5	4 5-10	5 10-15	6 15-20	7 20-25	8 25-30	9 30-35	10 35-40	11 >40 (record each tree)
1	<u>Not a tree</u>													
2														
3														
4														
5														
6														
7														
8														
9														
10														

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

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

* Write None Present if no evidence:

Beech (Fungus)	Asian Longhorned Beetle
Hemlock (HWA)	<u>None</u> Other Pest or Pathogen
<u>None</u> 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

Plot No.: 3420

CLASSIFICATION

FTI = excellent, & Fit and Confidence

Hydrogeomorphic class (WETLANDS ONLY)

☐ DEPRESSION Fit = __ Conf = __

☐ IMPONDMENT ☐ Beaver ☐ Human Fit = __ Conf = __

☐ RIVERINE ☐ Headwater ☐ Meandering ☐ Channel Fit = __ Conf = __

☐ SLOPE (ground water hydrology or as a physical slope) Fit = __ Conf = __

(FTT = excellent & fit and Confidence

Hydroresomorphs class (WETLAND)

o DEPRESSION

- | | | |
|---|------|-------|
| ◻ IMPONDIMENT ◻ Beaver ◻ Human | Fit= | Conf= |
| ◻ RIVERINE ◻ Headwater ◻ Mainstem ◻ Channel | Fit= | Conf= |
| ◻ SLOPE (ground water hydrology or on a dry road slope) | Fit= | Conf= |
| ◻ FLOODING ◻ Reservoir ◻ Natural Lake | Fit= | Conf= |
| ◻ COASTAL (specific subclases) | Fit= | Conf= |
| ◻ BOG (strongly, moderately, weakly anthropogenic) | Fit= | Conf= |
| Other EPA VIBI Plant Communities ONLY: | | |
| ◻ FOREST ◻ swamp forest ◻ bog forest ◻ forest seep | Fit= | Conf= |
| ◻ EMERGENT ◻ marsh ◻ wet meadow ◻ open bog | Fit= | Conf= |
| ◻ SHRUB ◻ shrub swamp ◻ tall shr. bog ◻ tall sh. fen | Fit= | Conf= |

Rankings for microhabitat features. Select one or select two and average the score. NOTE: If mod falls on a slope automatically gets ranked based on steepness (1-3) to begin + any features present

Slope 1 = slight elevational grade scores modulo (100)

Slope 2 = falls on slope -20°

Slope 3 = maximum steepness that can be safely sampled -45°

- 9 feature is absent or functionally absent from the wetland
- 10 feature is present in the wetland in very small amounts or if more common, of low quality
- 7 feature is present in moderate amounts, but not of highest quality, or in small amounts of highest quality
- 8 feature is present in moderate amounts, but not of highest quality, or in small amounts of highest quality
- 9 feature is absent or functionally absent from the wetland
- 10 feature is present in the wetland in very small amounts or if more common, of low quality
- 7 feature is present in moderate amounts, but not of highest quality, or in small amounts of highest quality
- 8 feature is present in moderate amounts, but not of highest quality, or in small amounts of highest quality

C.W.D. - Count for pieces with minimum 1m length

[illegible]

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

FILLED OUT USING GNS PROGRAM. DO NOT FILL OUT IN FIELD

		LPI°	TSI°
At aspect	N		
+35 degrees	NE		
+90 degrees	E		
+135 degrees	SE		
+180 degrees	S		
-225 degrees	SW		
-270 degrees	W		
-315 degrees	NW		

LPI is angle of plot to the horizon. TSI is angles formed by local slopes. For TSI measure angle from recorder eye to e.g. of person standing ~10 m away.

- Landform Index (position within landscape)

²² Terrain Shape Index (site microtopographic shape)

CROWN COVER (DENSIMETER) Make 1
readings per module facing N, S, E, W Place dot count in

corresponding space. (4 dots per grid square)

Measure	N	S	E	W
1	2	0	0	1
2	3	1	1	1
3	6	1	1	0
4				

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.

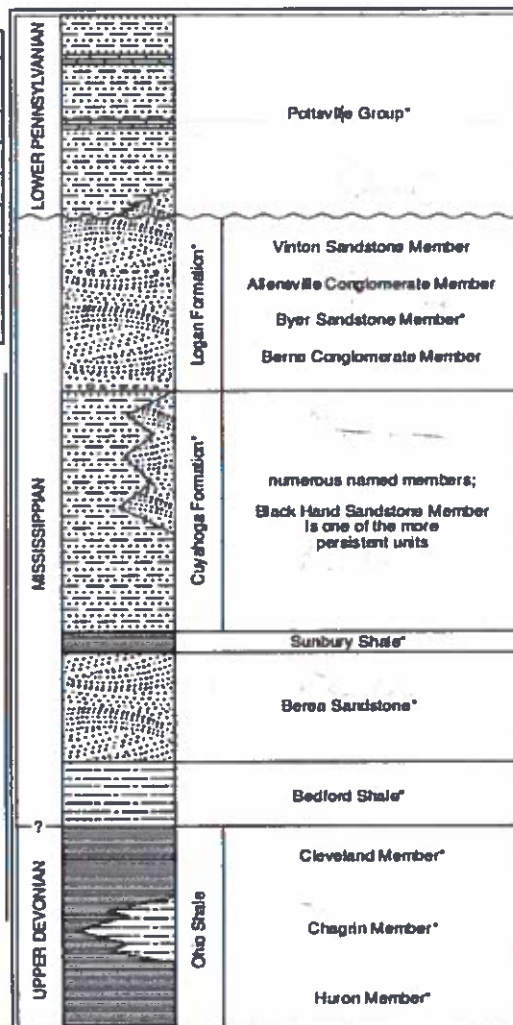
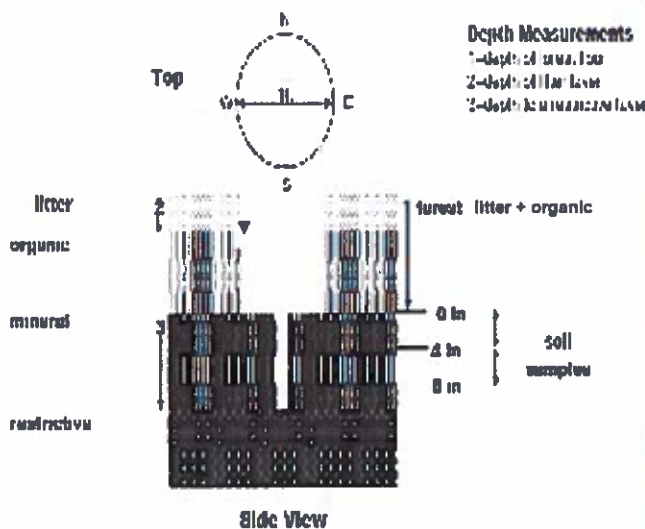


FIGURE 3-20.—Generalized section of Upper Devonian, Mississippian, and Lower Pennsylvanian formations in northeastern Ohio. Asterisks indicate units that are fossiliferous. This composite section represents about 400 meters of rock exposed across the area. The section is not to scale, but the thicknesses 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
	texture*
	redox features**
	hydr. cond.***
20 cm	matrix color
	mottle color
	%mottle
	oxid roots
	texture*
	redox features**
	hydr. cond.***

Soil Collection Method (Hertzen (A, B, C)	A
2.3, 2.9 cm positioned	
Field Soil Survey Information:	
Soil Series/Type	
Soil Series Source: Ohio Soil Survey	
Landform type	
Depth to root layer	
Parent Material	
DETAILED*	

- ☐ Excessively dr. ☐ Somewhat excessively
☐ Well drained ☐ Moderately well dr.
☐ Somewhat poorly dr. ☐ Very poorly dr.
☐ Impermeable surface

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

model	1 litter+ organic depth (cm)	2 litter depth (cm)	water depth (cm)	depth sat soil (cm)
1	7.1	7.1	-	-
2	3.4	3.4	-	-
3	3.8	3.8	-	-
4	3.0	3.0	-	-

1- worms middens and castings present
 2- middens 3 castings present
 3- middens 3 castings present
 4- castings present 3 worms

EARTH SURFACE & GROUND COVER

Underlying Earth Surface*	Ground Cover	percent
Glom - 100%	percent	percent
Histocel	Coarse Woody Debris***	15%
Mineral Soil	Fine Woody Debris***	10%
Gravel-Cobble*	Litter	70%
Boulder**	Duff (Ferm + Humus)	-
Bedrock	Bryophyte-Lichen	3%
Gravel-Cobble = 1/16-10"	Water	-
**Boulder = > 10 in	Bare Soil	10%
*** > 5 cm in diameter	Rock/Trail	-
**** < 5 cm in diameter	Other	-

TRAFFIC INFORMATION:

record type and cover for each

Type	%Cover
All Purpose	
Bridle	
Hiking sanctioned	
Boat/ing unsanctioned	
Gravel	
Deer	

COVER BY STRATA
 estimate using midpoints of 5, 9, 13 %

Strata	Height Range (cm)	Total Cover (%)
Tree	5	88%
Shrub	5-5	18%
Herb	0-2.5	28%
(Floating)*	-	-
(Aquatic)*	-	-

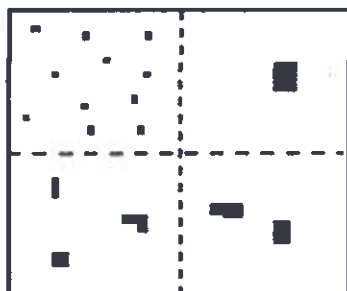
* rooted and sealing or slightly emerged
 ** submerged, most plant mass below surface
 SEE BACK OF PAGE FOR TYPICAL STRATA DESCRIPTIONS. STRATA CAN VARY BY COVER TYPE

STAND SIZE

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

PERCENT MOTTLES (USE CLASS CODES):

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



2%



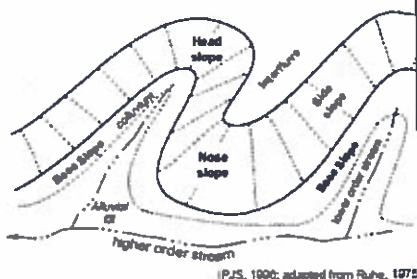
20%

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.

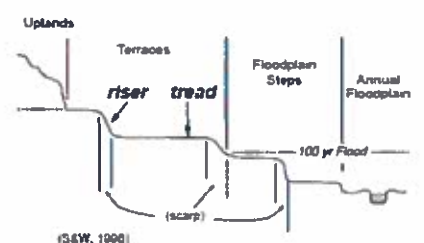
- 0= Organic
- 1= Loamy
- 2= Clayey
- 3= Sandy
- 4= Coarse Sand
- 9= Not measured - make plot note

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

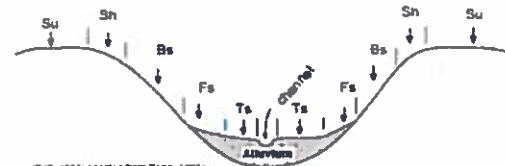


Terraces	Code
riser	RI
tread	TR



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

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



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

- UPLAND:** Not a wetland. Very rarely flooded.
- INTERMITTENTLY/SEASONALLY SATURATED:** Dry at least once per year. Surface water is seldom present, but substrate is saturated to surface for extended periods during the growing season.
- PERMANENTLY/SEMIPERMANENTLY SATURATED:** Dry less than once per year. Surface water is seldom present, but substrate is saturated to surface for extended periods during the growing season. Equivalent to 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: 3420WCBPAACDATE: 07/31/2015

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

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

Residential and Urban Stressors					Hydrology Stressors					Agricultural & Rural Stressors				
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Road - gravel	<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 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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		Offroad vehicle damage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Highly Grazed Grasses (OVERALL <3' HIGH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Soil erosion (FROM WIND, WATER, OR OVERUSE)	<input 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

2428168304

Buffer Sample Plots 05/27/2011

Reviewed by (initials): _____

DATE: 07 / 31 / 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

100

Use Decimal Degrees; NAD83

[illegible]

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

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial):

Site ID: 3420(B) WCN

DATE: 07/31/2015

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 type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Big Trees (>0.3m DBH)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Big Trees (>0.3m DBH)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>		
Small Trees (<0.3m DBH)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Small Trees (<0.3m DBH)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			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	<input type="radio"/>		
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	<input type="radio"/>			Woody Shrubs, Saplings (0.5m-5m HIGH)	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>		
Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/> 0 <input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			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	<input type="radio"/>			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	<input type="radio"/>		
Herbs, Forbs and Grasses	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Herbs, Forbs and Grasses	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Herbs, Forbs and Grasses	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>		
Bare ground	<input type="radio"/> 0 <input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Bare ground	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Bare ground	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>		
Litter, duff	<input type="radio"/> 0 <input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Litter, duff	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Litter, duff	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>		
Rock	<input type="radio"/> 0 <input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Rock	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Rock	<input type="radio"/> 0 <input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>		
Water	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Water	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Water	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>		
Submerged Vegetation	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Submerged Vegetation	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Submerged Vegetation	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>		

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

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

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				Forest Clear Cut	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2				Herbicide Use	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2			
Gas Wells	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2				Forest Selective Cut	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2				Mowing/Shrub Cutting	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2			
Mine (surface)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2				Tree Plantation	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2				Trails	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2			
Mine (underground)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2				Tree Canopy Herbivory (INSECT)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2				Soil Compaction (ANIMAL OR HUMAN)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2			
Military	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2				Shrub Layer Browsed (WILD OR DOMESTIC)	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2				Offroad vehicle damage	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2			
Other: _____	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2				Highly Grazed Grasses (OVERALL < 5' HIGH)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2				Soil erosion (FROM WIND, WATER, OR OVERUSE)	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2			
Other: _____	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2				Recently Burned Forest Canopy	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2				Other: <u>Forc</u>	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2			
Other: _____	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2				Recently Burned Grassland (BLACKENED)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2				Other: _____	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2			

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

Reviewed by (Initial): _____

Site ID:

DATE:

DATE: 07/31/2015



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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Garlic Mustard	<input checked="" 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: <u>Berberis thunbergii</u>	<input checked="" 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: <u>honeysuckle</u>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Canada Thistle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Leafy Spurge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
										Other: _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

PLOT COORDINATES

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

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

Location of coordinates (choose one):

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

Flag

Latitude North

Longitude West

Use Decimal Degrees; NAD83

[illegible]

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial):

Site ID:

3420(BP)/NK

DATE:

07 / 31 / 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 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 type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			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	<input type="radio"/>			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	<input type="radio"/>		
Small Trees (<0.3m DBH)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			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	<input type="radio"/>			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	<input type="radio"/>		
Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/> 0 <input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			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	<input type="radio"/>			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	<input type="radio"/>		
Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Woody Shrubs, Saplings (<0.5m HIGH)	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>		
Herbs, Forbs and Grasses	<input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Herbs, Forbs and Grasses	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Herbs, Forbs and Grasses	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>		
Bare ground	<input type="radio"/> 0 <input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Bare ground	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Bare ground	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>		
Litter, duff	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Litter, duff	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Litter, duff	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>		
Rock	<input type="radio"/> 0 <input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Rock	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Rock	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>		
Water	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Water	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Water	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>		
Submerged Vegetation	<input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Submerged Vegetation	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>			Submerged Vegetation	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4	<input type="radio"/>		

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

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

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

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): _____

Site ID:

DATE:

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 checked="" 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: <u>Honoxuckle</u>	<input checked="" 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.

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

Flag

2

Latitude North

Longitude West

[illegible]

Reviewed by (Initial):

Site ID:

DATE: 07/31/2015

Location:

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











































































































☐ AA Center ☐ N ☒ S ☐ E ☐ W

○ 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:  					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																				

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"/>		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"/>		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"/>		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 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): _____

Site ID:

DATE:

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 checked="" 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: <u>Berberis thunbergii</u>	<input checked="" 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"/>	

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

Longitude West

Use Decimal Degrees; NAD83

[illegible]

FORM B-1: BUFFER SAMPLE PLOTS (Front)

Reviewed by (Initial):

Site ID:

3420 WE BP W

DATE:

07/31/2015

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 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"/>	<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 checked="" type="radio"/>		Small Trees (<0.3m DBH)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>		Small Trees (<0.3m DBH)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Woody Shrubs, Saplings (0.5m-5m HIGH)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>		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 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 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"/>	
Herbs, Forbs and Grasses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Herbs, Forbs and Grasses	<input type="radio"/>	<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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Bare ground	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Bare ground	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	
Litter, duff	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Litter, duff	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Litter, duff	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Rock	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Rock	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Rock	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Water	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Water	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Water	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Submerged Vegetation	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Submerged Vegetation	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Submerged Vegetation	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	

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

Residential and Urban Stressors					Hydrology Stressors					Agricultural & Rural Stressors				
Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag	Fill bubble if present - Plot	1	2	3	Flag
Road - gravel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Ditches, Channelization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Pasture/Hay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Road - two lane	<input type="radio"/>	<input type="radio"/>	<input checked="" 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 checked="" 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 checked="" type="radio"/>	<input checked="" 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 checked="" type="radio"/>	<input checked="" 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 checked="" type="radio"/>	<input checked="" 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

damet ^{near} NN SW ^{near} me
vinca, garlic
thrustle

Los
Phula

DATE: 07 / 31 / 2015

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

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

PLOT COORDINATES

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

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

Location of coordinates (choose one):

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

Longitude West 081.69671

Use Decimal Degrees; NAD83

[illegible]

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

7966623548