

CLEVELAND METROPARKS Plant Community Assessment Program: Quality Control Form



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

PCAP

Plot No: 1284

Date Sampled: 8-16-12

Lead: Eysenbach

Comment required if item answer is NO

|  |  |  |
|--|--|--|
| Parking/Access outside of Park Boundaries:             | Y <input checked="" type="radio"/> N <input type="radio"/> | If yes, write details in Comments section below            |
| Field journals completed                               | <input checked="" type="radio"/> Y <input type="radio"/> N |  |
| Site sketch made on 1:3000 map?                        | <input checked="" type="radio"/> Y <input type="radio"/> N |  |
| Check cover page                                       | <input checked="" type="radio"/> Y <input type="radio"/> N |  |
| X-axis Bearing of plot recorded                        | <input checked="" type="radio"/> Y <input type="radio"/> N |  |
| GPS coords. Recorded                                   | <input checked="" type="radio"/> Y <input type="radio"/> N |  |
| North direction recorded                               | <input checked="" type="radio"/> Y <input type="radio"/> N |  |
| Photographs taken?                                     | <input checked="" type="radio"/> Y <input type="radio"/> N |  |
| Plot No., Date agreement on all pages?                 | <input checked="" type="radio"/> Y <input type="radio"/> N |  |
| Header data completed all pages?                       | <input checked="" type="radio"/> Y <input type="radio"/> N |  |
| Cover classes recorded in all Intensive modules        | <input checked="" type="radio"/> Y <input type="radio"/> N |  |
| Browse Level By Species                                | <input checked="" type="radio"/> Y <input type="radio"/> N |  |
| Woody stem quality control check                       | <input checked="" type="radio"/> Y <input type="radio"/> N |  |
| Invasive plant quality control check                   | <input checked="" type="radio"/> Y <input type="radio"/> N |  |
| Ash trees mapped                                       | Y <input type="radio"/> N <input type="radio"/>            | N/A  |
| Cover by Strata? (confirm cover type)                  | <input checked="" type="radio"/> Y <input type="radio"/> N |  |
| Soil samples collected with matching plot #.           | <input checked="" type="radio"/> Y <input type="radio"/> N |  |
| Vouchers labeled on datasheet with initials and number | <input checked="" type="radio"/> Y <input type="radio"/> N |  |
| Vouchers labeled on collection bag                     | <input checked="" type="radio"/> Y <input type="radio"/> N |  |
| Pink flags removed                                     | <input checked="" type="radio"/> Y <input type="radio"/> N |  |
| Data sheet QA before leaving site?                     | <input checked="" type="radio"/> Y <input type="radio"/> N |  |
| Common equipment returned to tub.                      | <input checked="" type="radio"/> Y <input type="radio"/> N |  |
| Data sheets scanned?                                   | 8-22-12  | Enter date to left JP                                      |
| Final data sheets scanned?                             |  | Enter date to left   |
| Buffer Widths measured?                                | <input checked="" type="radio"/> Y <input type="radio"/> N | N 7-6-12   |
| Web Soil Survey  | <input checked="" type="radio"/> Y <input type="radio"/> N | TK 8-17-12   |
| Voucher Location                                       | Refrigerator   | Y <input type="radio"/> N <input type="radio"/>            |
| (# vouchers collected)                                 | Press (#)  | Enter number to left                                       |
| SRL<br>625-627   | Drier  | Y <input type="radio"/> N <input type="radio"/>            |
|  | Identified   | <input checked="" type="radio"/> Y <input type="radio"/> N |
|  | Mounted  | Y <input type="radio"/> N <input type="radio"/>            |
|  | Thrown away  | Y <input type="radio"/> N <input type="radio"/>            |

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:

|  |
|--|
|  |
|--|



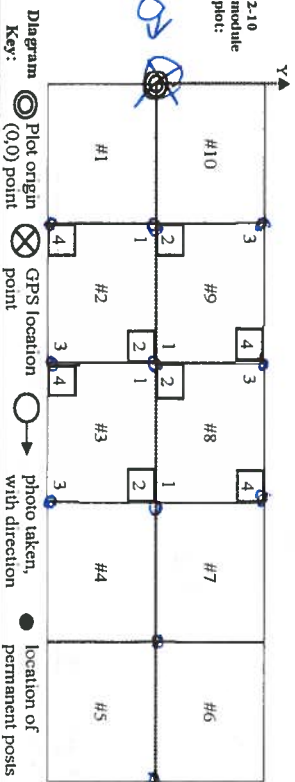
|  |   |
|--|---|
| <b>GENERAL INFORMATION</b>   |   |
| Project Label: <b>PCAP</b>   |   |
| Project Name: <b>01NLC2012</b>   |   |
| Plot Name: <b>AN+ Armageddon</b>   |   |
| Plot No.: <b>1284</b>  |   |
| <input type="checkbox"/> Level 4 (no nested corners sampled)   |   |
| <input checked="" type="checkbox"/> Level 5 (nested corners sampled)   |   |
| Date (mm/dd/yyyy): <b>8/15/2012</b>  |   |
| End date (if > 1 day): <b>8/16/2012</b>  |   |
| Party: <b>S. Gussak</b>  | Role: <b>Plot leader</b>  |
| <b>T. Kistler</b>  | <b>body</b>   |
| <b>A. Young</b>  | <b>woods</b>  |
| <b>L. Hoffman</b>  | <b>soils</b>  |
| ** Roles: Co-leader, Asst. Guide, Observer, Taxonomist, etc.   |   |
| <b>PLOT NOT SAMPLED:</b> <input type="checkbox"/> Other  |   |
| <input type="checkbox"/> Perm. water <input type="checkbox"/> Paved <input type="checkbox"/> Slope <input type="checkbox"/> Safety |   |
| <b>SAMPLING QUALITY*</b>   |   |
| Effort Level: <input checked="" type="checkbox"/> Very thorough  | subjective evaluation of how much effort put into sampling. Hurried plots may still provide good data |
| <input type="checkbox"/> Accurate  |   |
| <input type="checkbox"/> Hurried   |   |
| <b>TAXONOMIC ACCURACY</b>  |   |
| <input checked="" type="checkbox"/> high   | <input type="checkbox"/> modera. <input type="checkbox"/> low <input type="checkbox"/> not simpl      |
| vascul. <input checked="" type="checkbox"/>  | <input type="checkbox"/> n/a  |
| bryo <input type="checkbox"/>  | <input checked="" type="checkbox"/>   |
| lichen <input type="checkbox"/>  | <input checked="" type="checkbox"/>   |
| <b>TAXONOMIC STANDARD</b>  |   |
| Authority: <b>G&amp;C</b>  | Pub Date: <b>1998</b>   |

Minimum required fields in Bold and Underlined

|   |                         |
|---|-------------------------|
| <b>LOCATION</b>   |                         |
| State: <b>OH</b>  | County: <b>Cuyahoga</b> |
| Quadrangle: <b>Mayfield Hts</b>   |                         |
| Local Place Names: <b>A. B. Williams Memorial woods</b>   |                         |
| Landowner: <b>CM</b>  |                         |
| <b>Data Confidentiality:</b>  |                         |
| Check one: <input checked="" type="checkbox"/> Public data <input type="checkbox"/> Private Data  |                         |
| <input type="checkbox"/> Fuzz 100m <input type="checkbox"/> Fuzz 250m <input type="checkbox"/> Fuzz 500m  |                         |
| <b>Reason:</b>  |                         |
| If data not public why?   |                         |
| Source of coordinates: <input type="checkbox"/> MAP <input checked="" type="checkbox"/> GPS   |                         |
| <b>Coordinate system:</b>   |                         |
| <input checked="" type="checkbox"/> Lat/Long <input type="checkbox"/> UTM <input type="checkbox"/> StatePlane <input type="checkbox"/> deg <input type="checkbox"/> deg min |                         |
| <input type="checkbox"/> Other (specify): <input type="checkbox"/> m <input type="checkbox"/> ft  |                         |
| <b>Datum:</b> <input checked="" type="checkbox"/> NAD83/WGS84 <input type="checkbox"/> NAD27  |                         |
| GPS location in plot x=0 to 5, y=-1.0+1):<br>x = <b>0</b> y = <b>6</b> (base of plot x=0, y=0)  |                         |
| <b>Latitude:</b> <b>41.55812</b>  |                         |
| <b>Longitude:</b> <b>81.43165</b>   |                         |
| <b>Coord. Accuracy:</b> <input checked="" type="checkbox"/> m <input type="checkbox"/> ft <input type="checkbox"/> +/-  |                         |
| GPS File Name: <b>12894</b>   |                         |
| Plot size for cover data: <b>0.1</b> (hectares)   |                         |
| X-axis Bearing of plot: <b>315</b> °  |                         |
| <b>Depth:</b> <b>4</b>  |                         |
| Intensive modules: <b>2, 3, 8, 9</b> (EDIT IF MODIFIED)   |                         |
| Camera No.: <b>2</b>  |                         |
| Photo Nos.: <b>C2-2097</b>  |                         |
| <b>Plot placement:</b> <input checked="" type="checkbox"/> GRTS <input type="checkbox"/> Representative   |                         |
| <input type="checkbox"/> Random <input type="checkbox"/> Stratified Random <input type="checkbox"/> Transect component  |                         |
| <input type="checkbox"/> Systematic (grid) <input type="checkbox"/> Capture specific feature <input type="checkbox"/> Other   |                         |

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

**Private Residence**



**NOTES:** Include Layout (any unusual shape details), Location (directions and landscape content), Rationale (why here), and Veg Characterization (description of community, dominants, strata, BROWSE). Additional notes in space on back.

**Layout:** 2x5

**Location:** Park at Williams Woods and walk approx 300m SW. Plot falls about 40m from property line & runs East parallel to property line.

**Rationale:** GRTS pt

**Veg. Char.**

**Canopy:** Beech, Red Maple, Red Oak

**Shrub:** Beech, Cornus, Sugar maple

**Herb:** White grass, four manna grass, Jack in the pulpit, poisoning and some sedges

**OVER**

Project Label: PCAPProject Name: DMC2012Plot No.: 1284

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## MODIFIED NATURESERVE CLASS\*

CODE (on separate form):

Fit=<sup>of pool</sup> Conf=lowC02

COMMUNITY NAME:

Black-Maple

## HOMOGENEITY

☒ Homogeneous☐ Compositional trend across the plot☐ Conspicuous inclusions ☐ Irregular/pattern mosaic

## HYDROLOGIC REGIME\*

☐ Upland (seldom flooded)☒ Intermittently/seasonally saturated

(seldom flooded)

☐ Permanently/Semipermanent, saturated

(dry &lt; 1/yr, seldom flooded)

☐ Occasionally flooded (< 1/yr)☐ Temporarily flooded☐ Unknown

## DISTURBANCES

| Type*   | severity** | yrs ago  | % of plot  | description                  |
|---------|------------|----------|------------|------------------------------|
| Human   | <u>M</u>   | <u>5</u> | <u>100</u> | <u>old x-mas tree, 2x4's</u> |
| Natural |            |          |            |                              |
| Fire    |            |          |            |                              |
| Cut     |            |          |            |                              |
| Animal  | <u>H</u>   | <u>0</u> | <u>100</u> | <u>deer browse</u>           |
| Other   |            |          |            |                              |

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

Current Land Use: ParkFormer Land Use: UNK

## SALINITY\*

☐ Saltwater☐ Brackish☐ Fresh☒ Upland (n/a)

(by default unless plot is a wetland)

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

Plot was located in a Black maple forest. Parts of the plot had depressions that are seasonally saturated even w/ the drought. Several of these areas were squishy. Understory was depauperate w/ some grasses and seedlings. Browse was mostly on the woody sprouts. There was a lot of past years browse evident. There were also minimum amount of invasive species. We found an old x-mas tree and several plants of woods in the plot. Several tips were located outside of the plot.



Total modules: 10 Intensive modules: 4 Plot configuration: 2x5 Plot area (ha) 0.1



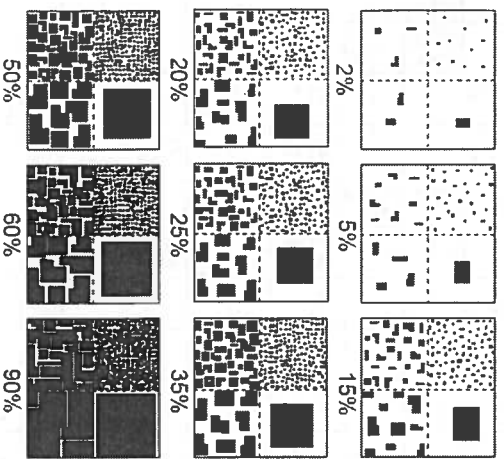
Br = Browse Level. Use cover classes to describe amount of browse per species over entire plot

Strata - Cov. entire plot

| T | S | H | (F) | (A) | Br | Species   | c | Voucher # | depth | cov | depth | cov | depth | cov | depth | cov | depth | cov | depth | cov | depth | cov |
|---|---|---|-----|-----|----|---|---|-----------|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|
| 8 | 3 |   |     |     | 8  | Fagus grandifolia                                   |   |           | 2     | 7   | 4     |     |       |     | 4     | 9   | 4     |     |       | 4   | 10    | 4   |
| 6 | 2 |   |     |     | 9  | Carpinus caroliniana                                |   |           | 4     | 6   | 2     |     |       |     | 3     | 4   |       |     |       | 1   | 4     |     |
| 3 | 3 | 2 |     |     |    | Pinus strobus                                       |   |           | 3     | 4   |       |     |       |     | 4     | 5   |       |     |       |     |       |     |
| 5 | 6 |   |     |     |    | Acer saccharum                                      |   |           | 2     | 6   | 2     |     |       |     | 4     | 6   | 2     |     |       | 1   | 5     |     |
| 7 |   |   |     |     | 4  | Acer rubrum   |   |           | 1     | 7   | 2     |     |       |     | 4     | 7   |       |     |       |     |       |     |
|   |   | 3 |     |     |    | Acer sp. (seedlings)                                |   |           | 2     | 2   | 2     |     |       |     | 1     | 1   |       |     |       |     |       |     |
|   |   | 2 |     |     |    | Carex sp. swanii                                    |   |           | 2     | 2   |       |     |       |     |       |     |       |     |       |     |       |     |
|   |   | 2 |     |     |    | Leersia virginica                                   |   |           |       |     | 2     | 3   | 2     |     |       |     |       |     | 1     | 1   |       |     |
|   |   | 2 |     |     |    | Eleocharis stricta                                  |   |           | 1     | 3   |       |     |       |     |       |     |       |     |       |     |       |     |
|   |   | 2 |     |     |    | Arisaema triphyllum var triphyllum                  |   |           |       |     | 2     | 2   | 3     | 2   |       |     |       |     |       |     |       |     |
|   |   | 2 |     |     |    | Moss sp.  |   |           | 1     | 2   |       |     |       |     |       |     |       |     |       |     |       |     |
|   |   | 1 |     |     |    | Carex sp. (seedlings)                               |   |           |       | 2   | 2     |     |       |     |       |     |       |     |       |     |       |     |
|   |   | 2 |     |     |    | Thelypteris novaborecensis                          |   |           | 1     | 2   |       |     |       |     |       |     |       |     |       |     |       |     |
|   |   | 2 |     |     |    | Crataegus sp.                                       |   |           | 1     | 1   |       |     |       |     |       |     |       |     |       |     |       |     |
|   |   | 3 |     |     |    | Toxicodendron radicans                              |   |           | 1     | 2   |       |     |       |     |       |     |       |     |       |     |       |     |
|   |   | 2 |     |     |    | Parthenocissus quinquefolia                         |   |           | 1     | 2   |       |     |       |     |       |     |       |     |       |     |       |     |
|   |   | 2 |     |     |    | Viburnum dentatum                                   |   |           | 1     | 2   |       |     |       |     | 1     | 1   |       |     |       |     |       |     |
|   |   | 2 |     |     |    | Ulmus sp. (seedlings)                               |   |           | 1     | 2   |       |     |       |     |       |     |       |     |       |     |       |     |
|   |   | 2 |     |     |    | Rosa multiflora                                     |   |           | 1     | 1   |       |     |       |     |       |     |       |     |       |     |       |     |
|   |   | 1 |     |     |    | <del>Viburnum</del> <u>Urtica dioica</u> <u>253</u> |   |           |       |     |       |     |       |     | 2     | 1   |       |     |       |     |       |     |
|   |   | 1 |     |     |    | Fraxinus sp. (seedlings)                            |   |           |       |     |       |     |       |     | 1     | 1   |       |     |       |     |       |     |
|   |   | 2 |     |     |    | Fraxinus sp. (seedlings)                            |   |           |       |     |       |     |       |     | 1     | 2   |       |     |       |     |       |     |
|   |   | 6 |     |     |    | Quercus rubra                                       |   |           |       |     |       |     |       |     |       |     |       |     |       |     |       |     |
|   |   | 5 | 3   |     |    | Carya ovata   |   |           |       |     |       |     |       |     |       |     |       |     |       |     |       |     |
|   |   | 1 |     |     |    | Carex sp.   |   |           |       |     |       |     |       |     | 1     | 1   |       |     |       |     |       |     |

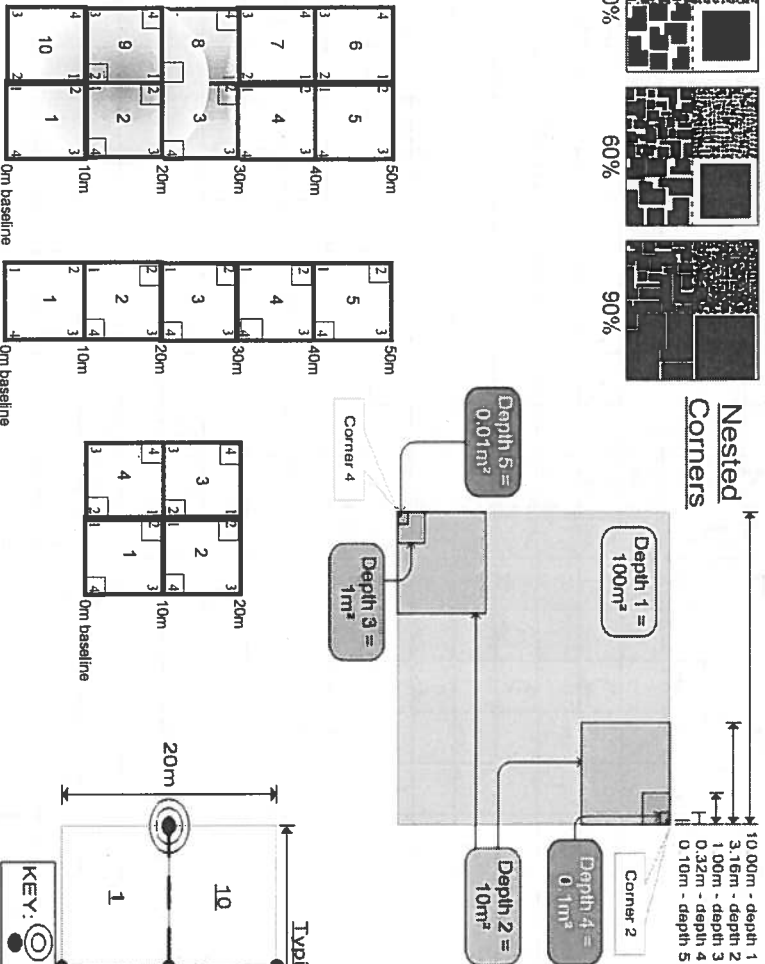
# EXAMPLES OF PERCENT OF AREA COVERED

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           | 75-95%          | 0.850    |
| 10          | 95-100%         | 0.975    |

## Nested Corners



## BROWSE RATING NARRATIVE DESCRIPTION

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

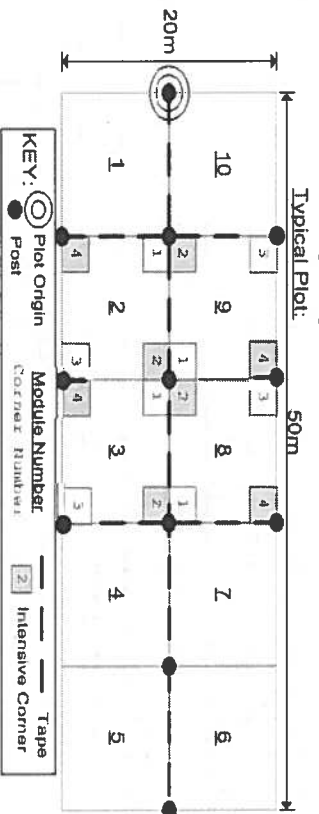
**MEDIUM LOW** values include evidence of browse at about 10 percent of the stems with no significant impact to plant reproduction evident. In this rating, plants are browsed but preferential species are observed to be reproducing in numbers that appear normal or near-normal in comparison to low browse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

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

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

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

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



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

Page 7 of 7

Project Label: PCAP

Project name: 01NC2012 Plot no.: 1284

Plot no: 1284

Total modules: 10

Intensive modules: 4

Plot configuration: 2x5

Plot configuration: 2x5

Plot area (ha): 0.1



## Cleveland Metroparks

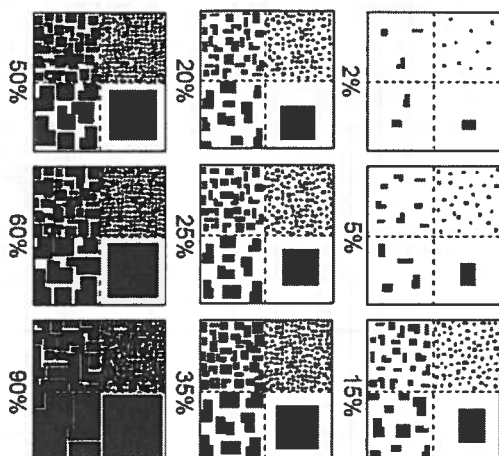
**Br** = Browse Level. Use cover classes to describe amount of browse per species over entire plot

Strata - Cov. entire plot

[illegible]

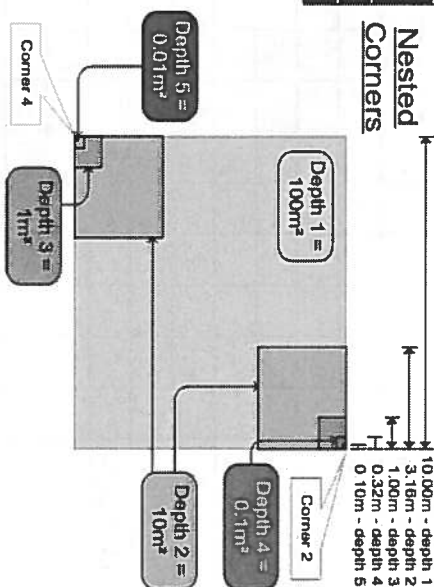
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| 2           | 0-1%            | 0.005    |
| 3           | 1-2%            | 0.015    |
| 4           | 2-5%            | 0.035    |
| 5           | 5-10%           | 0.075    |
| 6           | 10-25%          | 0.175    |
| 7           | 25-50%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

## Nested Corners



**BROWSE RATING NARRATIVE DESCRIPTION**

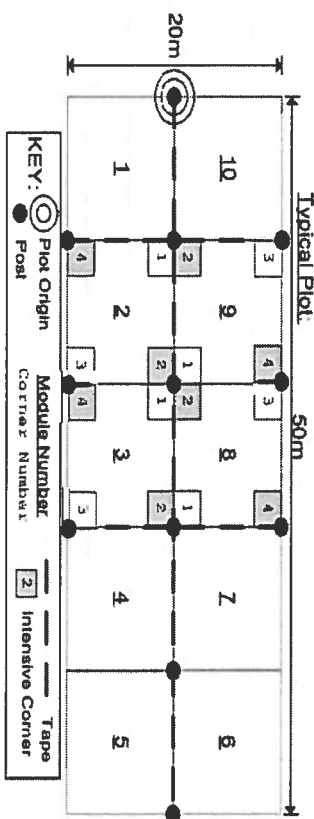
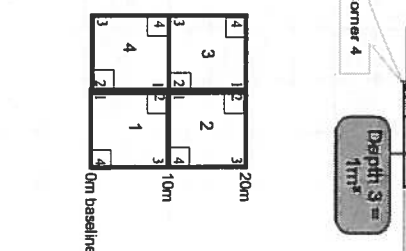
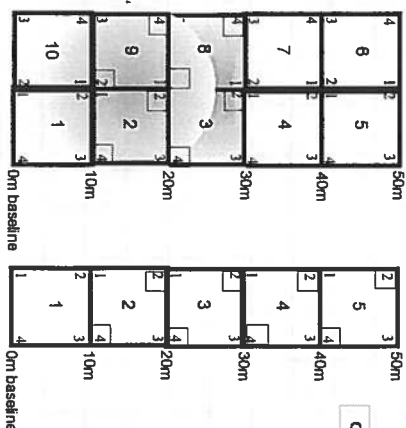
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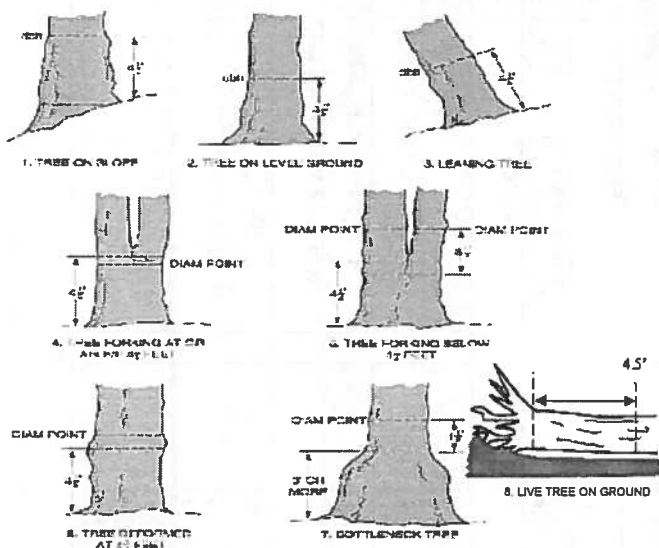
## CLEVELAND METROPARKS Plant Community Assessment Program Natural Woody Stem Data Sheet

Project Label: PCAPProject Name: 01 PCAP 2012Plot No.: 1884Page: 1 of 3

Explain subsample (additional room on back):

| mod # | species                | c | voucher# | # stems<br>0-1.4m<br>browsed | % sub<br>or super<br>sample | #<br>shrub<br>clumps | size class (cm) woody stems >1.4m | 1<br>0-1 | 2<br>1-2.5 | 3<br>2.5-4.5 | 4<br>4.5-10 | 5<br>10-15 | 6<br>15-20 | 7<br>20-25 | 8<br>25-30 | 9<br>30-35 | 10<br>35-40 | 11<br>>40 (record each tree) |
|-------|------------------------|---|----------|------------------------------|-----------------------------|----------------------|-----------------------------------|----------|------------|--------------|-------------|------------|------------|------------|------------|------------|-------------|------------------------------|
| 1     | Fagus grandifolia      |   |          | 0                            |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           |                              |
| 1     | Standing dead          |   |          |                              |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           |                              |
| 1     | Carpinus caroliniana   |   |          |                              |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           |                              |
| 1     | Acer rubrum            |   |          |                              |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           |                              |
| 2     | Rhus serotina          |   |          |                              |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           |                              |
| 2     | Acer saccharum         |   |          |                              |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           |                              |
| 2     | Standing dead          |   |          |                              |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           |                              |
| 2     | Fagus grandifolia      |   |          | 0                            |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           |                              |
| 2     | Carpinus caroliniana   |   |          | 0                            |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           |                              |
| 2     | Acer rubrum            |   |          |                              |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           |                              |
| 2     | Acer rubrum            |   |          |                              |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           | 73.9                         |
| 3     | Fagus grandifolia      |   |          |                              |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           |                              |
| 3     | Carpinus caroliniana   |   |          |                              |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           |                              |
| 3     | Standing dead          |   |          |                              |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           |                              |
| 3     | Acer saccharum         |   |          |                              |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           |                              |
| 3     | Rhus serotina          |   |          |                              |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           |                              |
| 4     | Fagus grandifolia      |   |          | 0                            |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           | 47.3                         |
| 4     | Carya ovata            |   |          |                              |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           | 43.5                         |
| 4     | Standing dead          |   |          |                              |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           | 61.6                         |
| 5     | Fagus grandifolia      |   |          |                              |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           |                              |
| 5     | Standing dead          |   |          |                              |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           |                              |
| 5     | Carpinus caroliniana   |   |          |                              |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           |                              |
| 5     | Acer saccharum         |   |          |                              |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           |                              |
| 5     | Toxicodendron radicans |   |          | 0                            |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           |                              |
| 5     | Acer moultonii         |   |          | 0                            |                             |                      | 0                                 | 0        | 0          | 0            | 0           | 0          | 0          | 0          | 0          | 0          | 0           |                              |

## DBH Measurement Rules



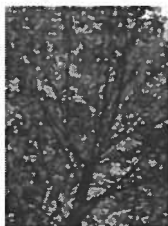
## Woody Stem Deer Browse

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

Record using the tally system from 1 to 10



1



2



3



4



5

## ASH CANOPY CONDITION

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



A

B

C

D

E

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

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

Project Label: PCAP

Project Name: 01 PCAP 2012

Plot No.: 1854

Page: 2

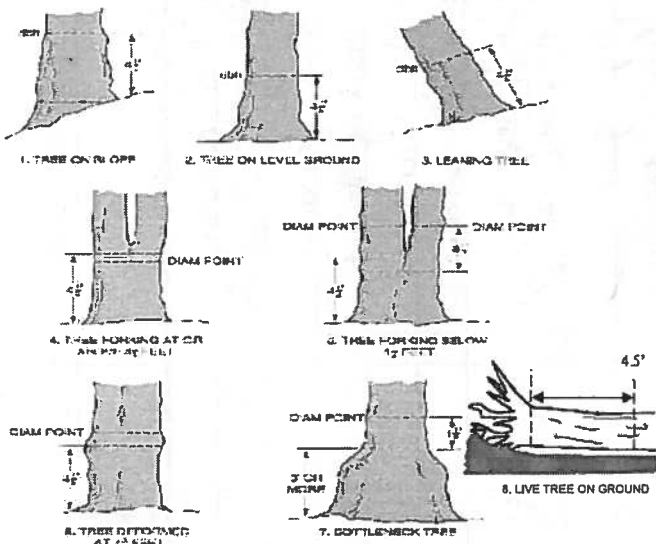
of



Explain subsample (additional room on back):

| mod # | species              | c | voucher# | # stems<br>0-1.4m<br>browsed | % sub<br>or super<br>sample | #<br>shrub<br>clumps | size class (cm) woody stems > 1.4m | 1<br>0-1 | 2<br>1-2.5 | 3<br>2.5-5 | 4<br>5-10 | 5<br>10-15 | 6<br>15-20 | 7<br>20-25 | 8<br>25-30 | 9<br>30-35 | 10<br>35-40 | 11<br>>40 (record each tree) |
|-------|----------------------|---|----------|------------------------------|-----------------------------|----------------------|------------------------------------|----------|------------|------------|-----------|------------|------------|------------|------------|------------|-------------|------------------------------|
| 16    | Acer rubrum          |   |          | •                            |                             |                      |                                    |          | •          | •          | •         | •          | •          | •          | •          |            |             | 76.2                         |
| 16    | Carpinus caroliniana |   |          |                              |                             |                      |                                    |          | •          | •          | •         |            |            |            |            |            |             |                              |
| 16    | Fagus grandifolia    |   |          | •                            |                             |                      |                                    | •        | •          | •          |           |            |            |            |            |            |             |                              |
| 16    | standing dead        |   |          |                              |                             |                      |                                    |          |            |            |           |            |            |            |            |            |             |                              |
| 16    | Acer saccharum       |   |          |                              |                             |                      |                                    | •        | •          | •          |           |            |            |            |            |            |             |                              |
| 16    | Lindera benzoin      |   |          |                              |                             |                      |                                    |          |            |            |           |            |            |            |            |            |             |                              |
| 16    | Rosa multiflora      |   |          | ••                           |                             |                      |                                    |          |            |            |           |            |            |            |            |            |             |                              |
| 17    | Rosa multiflora      |   |          |                              |                             |                      |                                    |          |            |            |           |            |            |            |            |            |             |                              |
| 17    | Fagus grandifolia    |   |          |                              |                             |                      |                                    | •        | •          | •          | •         |            |            |            |            |            |             |                              |
| 17    | Carpinus caroliniana |   |          |                              |                             |                      |                                    |          | •          | •          | •         |            |            |            |            |            |             |                              |
| 17    | standing dead        |   |          |                              |                             |                      |                                    |          | •          | •          | •         |            |            |            |            |            |             | 74.0                         |
| 17    | Prunus serotina      |   |          |                              |                             |                      |                                    |          |            |            |           |            |            |            |            |            |             |                              |
| 17    | Fraxinus sp.         |   |          |                              |                             |                      |                                    | •        |            |            |           |            |            |            |            |            |             |                              |
| 18    | Fagus grandifolia    |   |          |                              |                             |                      |                                    | •        | •          | •          | •         |            |            |            |            |            |             | 51.8                         |
| 18    | Acer saccharum       |   |          |                              |                             |                      |                                    |          |            |            |           |            |            |            |            |            |             |                              |
| 18    | Carpinus caroliniana |   |          |                              |                             |                      |                                    |          | •          | •          | •         |            |            |            |            |            |             |                              |
| 18    | standing dead        |   |          |                              |                             |                      |                                    |          |            |            |           |            |            |            |            |            |             |                              |
| 19    | Fagus grandifolia    |   |          |                              |                             |                      |                                    | •        | •          | •          | •         |            |            |            |            |            |             | 57.3                         |
| 19    | Acer saccharum       |   |          |                              |                             |                      |                                    | •        | •          | •          | •         |            |            |            |            |            |             |                              |
| 19    | standing dead        |   |          |                              |                             |                      |                                    |          | •          | •          | •         |            |            |            |            |            |             |                              |
| 10    | Fagus grandifolia    |   |          |                              |                             |                      |                                    | •        | •          | •          | •         |            |            |            |            |            |             |                              |
| 10    | Quercus rubra        |   |          |                              |                             |                      |                                    |          |            |            |           |            |            |            |            |            |             |                              |
| 10    | Acer saccharum       |   |          |                              |                             |                      |                                    | •        | •          | •          | •         |            |            |            |            |            |             |                              |
| 10    | standing dead        |   |          |                              |                             |                      |                                    | •        | •          | •          | •         |            |            |            |            |            |             |                              |

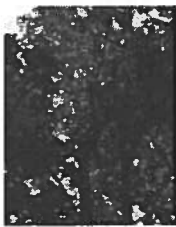
### DBH Measurement Rules



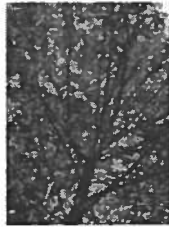
### Woody Stem Deer Browse

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Record using the tally system from 1 to 10



1



2



3



4



5

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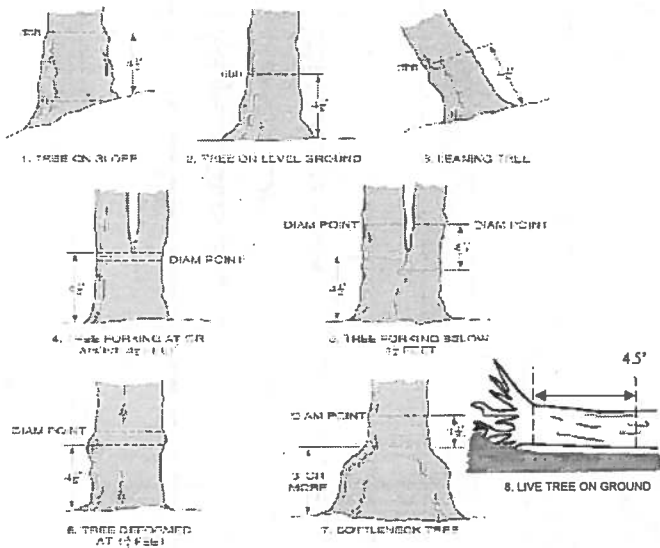

 Türkiye Cumhuriyeti  
 Millî Eğitim Bakanlığı

۱۰۰

④ Cleveland Metropolitan

[illegible]

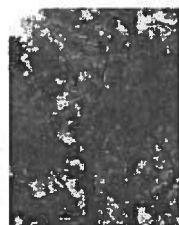
### DBH Measurement Rules



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**CLEVELAND METROPARKS Plant Community Assessment Program: Invasive Species Survey**


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

**Presence**  
X: yes

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

Project Label: PCAP

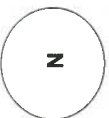
Project Name: OWC 2012

Pilot No.: 1804

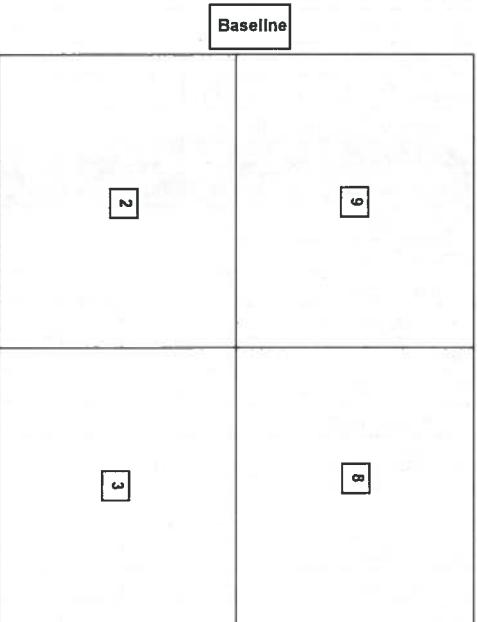
Date: 08-16-12

| Tree ID. | Species | Dead | c | Voucher # | DBH (cm) | Hit @ DBH | Ash condition | Dead condition | # Exit holes | Epicormic present | Woodpecker holes |
|----------|---------|------|---|-----------|----------|-----------|---------------|----------------|--------------|-------------------|------------------|
|          |         |      |   |           |          |           |               |                |              |                   |                  |
| 1        |         |      |   |           |          |           |               |                |              |                   |                  |
| 2        |         |      |   |           |          |           |               |                |              |                   |                  |
| 3        |         |      |   |           |          |           |               |                |              |                   |                  |
| 4        |         |      |   |           |          |           |               |                |              |                   |                  |
| 5        |         |      |   |           |          |           |               |                |              |                   |                  |
| 6        |         |      |   |           |          |           |               |                |              |                   |                  |
| 7        |         |      |   |           |          |           |               |                |              |                   |                  |
| 8        |         |      |   |           |          |           |               |                |              |                   |                  |
| 9        |         |      |   |           |          |           |               |                |              |                   |                  |
| 10       |         |      |   |           |          |           |               |                |              |                   |                  |
| 11       |         |      |   |           |          |           |               |                |              |                   |                  |
| 12       |         |      |   |           |          |           |               |                |              |                   |                  |
| 13       |         |      |   |           |          |           |               |                |              |                   |                  |
| 14       |         |      |   |           |          |           |               |                |              |                   |                  |
| 15       |         |      |   |           |          |           |               |                |              |                   |                  |
| 16       |         |      |   |           |          |           |               |                |              |                   |                  |
| 17       |         |      |   |           |          |           |               |                |              |                   |                  |
| 18       |         |      |   |           |          |           |               |                |              |                   |                  |
| 19       |         |      |   |           |          |           |               |                |              |                   |                  |
| 20       |         |      |   |           |          |           |               |                |              |                   |                  |
| 21       |         |      |   |           |          |           |               |                |              |                   |                  |
| 22       |         |      |   |           |          |           |               |                |              |                   |                  |
| 23       |         |      |   |           |          |           |               |                |              |                   |                  |
| 24       |         |      |   |           |          |           |               |                |              |                   |                  |
| 25       |         |      |   |           |          |           |               |                |              |                   |                  |

ASH ONLY



\*\*\* Change Intensive module numbers when necessary



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

\* If Ash Condition scores 5 (dead) provide breakup score (A-E)  
Count EAB exit holes 1.25m<sup>2</sup> x ±1.5m  
Woodpecker and epicormic marked present (1) or absent (0)



STANDING BIOMASS (required for emergent wetlands) collected in 0.1m clip plots (32x32 cm) from corners 1 and 3 in each intensive module. Required for VIBI-E score calculation. C7=check when collected

| Module # | C7 | Corner | Corner |
|----------|----|--------|--------|
|          |    |        |        |
|          |    |        |        |
|          |    |        |        |
|          |    |        |        |

### CLASSIFICATION

(Fit = excellent, F Fit and Confidence)

#### Hydrogeomorphic class (WETLANDS ONLY):

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

#### Ohio EPA VIBI Plant Community Class (WETLANDS ONLY):

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

### MICROTOPOGRAPHIC FEATURE COUNTS - Intensive modules only

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

- 0 feature is absent or functionally absent from the wetland  
3 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  
10 feature is present in moderate or greater amounts and of highest quality

| c.w.d. - count for pieces with minimum 1m length |        |                |                    |                    |                    |                      |                    |                                    |                              |
|--|--------|----------------|--------------------|--------------------|--------------------|----------------------|--------------------|------------------------------------|------------------------------|
| mod#   | corner | tussocks       |                    | hummocks           |                    | depressions          |                    | microhab.                          |                              |
|  |        | no. of<br>1x1m | depth 3<br>(count) | no. of<br>3.0x3.0m | depth 2<br>(count) | no. macro.<br>10x10m | depth 1<br>(count) | microhab.<br>interspers.<br>10x10m | microhab.<br>SLOPE<br>10x10m |
| 2  | -      | 0              | 0                  | 0                  | 1                  | 16                   | 2                  | 3                                  | 0                            |
| 3  | -      | 0              | 0                  | 0                  | 3                  | 12                   | 0                  | 3                                  | 0                            |
| 8  | -      | 0              | 0                  | 0                  | 2                  | 9                    | 2                  | 2                                  | 0                            |
| 9  | -      | 0              | 0                  | 0                  | 4                  | 10                   | 4                  | 3                                  | 0                            |

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

### MCNAB INDICES (degrees) + for up - for down

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

| AI aspect    | N | SE | E | SW | W | NW |
|--------------|---|----|---|----|---|----|
| +45 degrees  |   |    |   |    |   |    |
| +90 degrees  |   |    |   |    |   |    |
| +135 degrees |   |    |   |    |   |    |
| +180 degrees |   |    |   |    |   |    |
| +225 degrees |   |    |   |    |   |    |
| +270 degrees |   |    |   |    |   |    |
| +315 degrees |   |    |   |    |   |    |

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

\* Landform Index (position within landscape)  
\*\* Terrain Shape Index (site microtopographic shape)

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

| Module | N | S | E  | W |
|--------|---|---|----|---|
| 2      | 3 | 4 | 12 | 2 |
| 3      | 2 | 0 | 3  | 0 |
| 8      | 2 | 1 | 1  | 3 |
| 9      | 0 | 1 | 3  | 2 |

# 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.

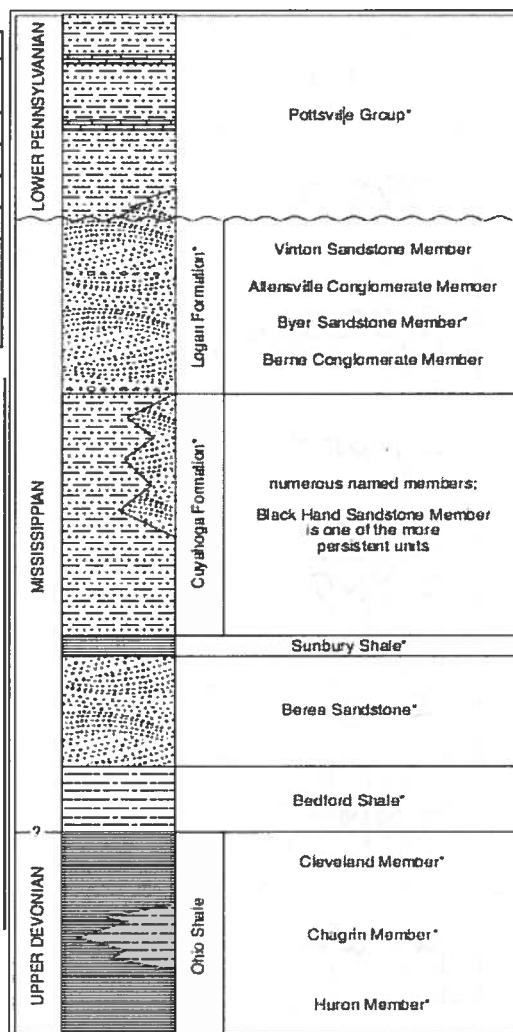
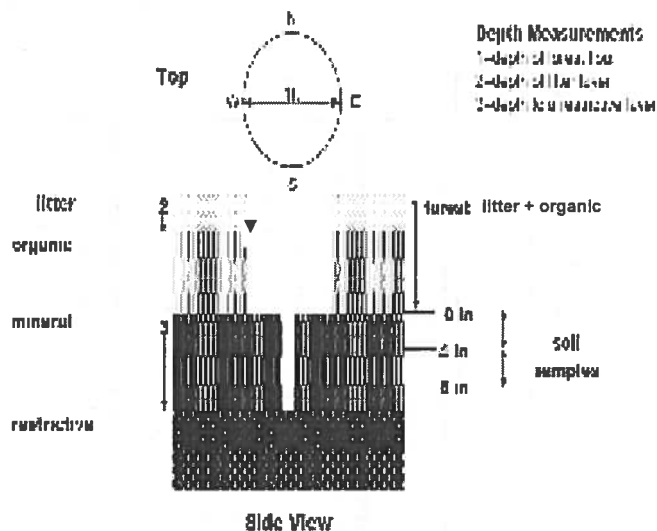


FIGURE 3-20.—Generalized section of Upper Devonian, Mississippian, and Lower Pennsylvanian formations in northeastern Ohio. Asterisks indicate units that are fossiliferous. This composite section represents about 400 meters of rock exposed across the area. The section is not to scale, but the thicknesses 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 3-13 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 # 3 (one per entire plot)

|       |                  |            |
|-------|------------------|------------|
| 5 cm  | matrix color     | 2.5y 2.5/1 |
|       | mottle color     | N/A        |
|       | %mottle          | N/A        |
|       | oxid roots       | Y (N)      |
|       | texture*         | 1          |
|       | redox features** | Y (N)      |
|       | hydr. cond ***   | 1 S (N) D  |
| 20 cm | matrix color     | 10y 3/2    |
|       | mottle color     | N/A        |
|       | %mottle          | N/A        |
|       | oxid roots       | (N) N      |
|       | texture*         | 2          |
|       | redox features** | (Y) N      |
|       | hydro. cond ***  | 1 S (N) D  |

\* refer to texture classes on reverse side  
\*\* e.g. hydrogen sulfide odor, gleying, etc.  
\*\*\* Circle one:  
[undrained] S-saturated M-moist D-dry  
Notes: include evidence of earthworms (worms, castings, middens)

No worms or castings

|   |                           |
|---|---------------------------|
| Soil Collection Module/ Horizon (A, B, C) | A                         |
| 2.3, 8.9, composite                       |                           |
| Soil Series/Type                          | Mt4, Mt10wng4 silt + loam |
| Soil Series Source                        | Ohio Soil Survey          |
| Landform type:                            | Lake plains               |
| Depth to rest. Layer                      | 20-40 inches              |
| Parent Material:                          | Till                      |

|  |   |
|--|---|
| <input type="checkbox"/> Excessively dr.     | <input type="checkbox"/> Somewhat excessively |
| <input type="checkbox"/> Well drained        | <input type="checkbox"/> Moderately well dr.  |
| <input type="checkbox"/> Somewhat poorly dr. | <input type="checkbox"/> Very poorly dr.      |
| <input type="checkbox"/> Impermeable surface |   |

TK 8-17-12

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

| mod# | 1 litter+ organic depth (cm) | 2 litter depth (cm) | water depth (cm) | depth sat soil (cm) |
|------|------------------------------|---------------------|------------------|---------------------|
| 2    | 2.2                          | 2.0                 | 0                | >30                 |
| 3    | 3.0                          | 2.0                 | 0                | >30                 |
| 8    | 2.5                          | 2.2                 | 0                | >30                 |
| 9    | 3.0                          | 2.6                 | 0                | >30                 |

**EARTH SURFACE & GROUND COVER**

| Underlying Earth Surface*  | Ground Cover           | percent |
|----------------------------|------------------------|---------|
| (Sum = 100%)               | (Each ≤ 100%)          |         |
| Histosol                   | Coarse Woody Debris*** | 8       |
| Mineral Soil               | Fine Woody Debris****  | 4       |
| Gravel-Cobble*             | Litter                 | 93      |
| Boulder**                  | Duff (Ferm + Humus)    | 93      |
| Bedrock                    | Bryophyte-Lichen       | 2       |
| * Gravel-Cobble = 1/16-10" | Water                  | 0       |
| ** Boulder = > 10 in       | Bare Soil              | 2       |
| *** > 5 cm in diameter     | Road/Trail             | 0       |
| **** < 5 cm in diameter    | Other                  | 0       |

**COVER BY STRATA**

estimate using midpoints of 5, 8, 13

%

| Strata      | Height Range (m) | Total Cover (%) |
|-------------|------------------|-----------------|
| Tree        | ≥ 5              | 93              |
| Shrub       | 0.5-5            | 78              |
| Herb        | < 0.5            | 8               |
| (Floating)* | -                |                 |
| (Aquatic)*  | -                |                 |

\* rooted and floating or slightly emersed  
\*\* submersed, most plant mass below surface

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

**TRAIL INFORMATION:**

| record type and cover for each | %Cover |
|--------------------------------|--------|
| Type                           |        |
| All Purpose                    |        |
| Bridle                         |        |
| Hiking sanctioned              |        |
| Bocceleg unsanctioned          |        |
| Gravel                         |        |
| Deer                           |        |

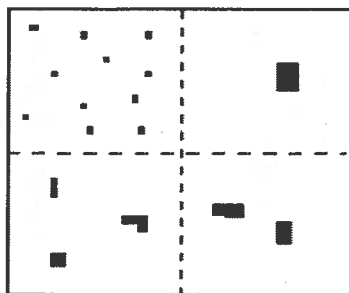
No trails

**STAND SIZE**

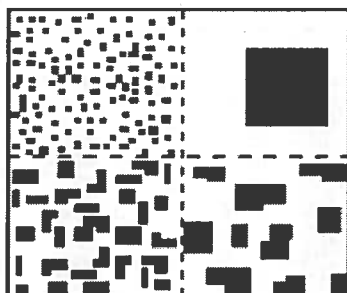
- ☐ > 600 x plot size
- ☐ > 100 x plot size
- ☐ 10-100 x plot size
- ☐ 3-10 x plot size
- ☒ 1-3 x plot size
- ☐ < plot size

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

| Class  | Code | Conv. | NASIS          | Criteria: % of Surface Area Covered |
|--------|------|-------|----------------|-------------------------------------|
| Few    | f    |       | $\frac{1}{16}$ | < 2                                 |
| Common | c    |       | $\frac{1}{4}$  | 2 to < 20                           |
| Many   | m    |       | $\frac{1}{2}$  | $\geq 20$                           |



2%



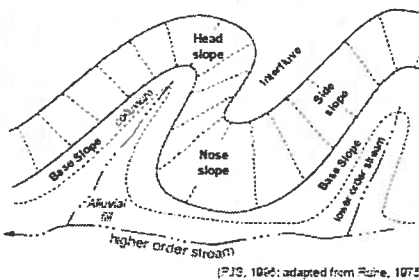
20%

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

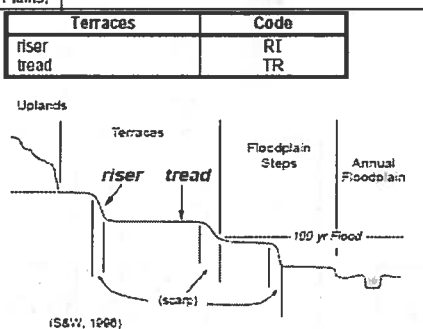
- 0= Organic
- 1= Loamy
- 2= Clayey
- 3= Sandy
- 4= Coarse Sand
- 9= Not measured - make plot note

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

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

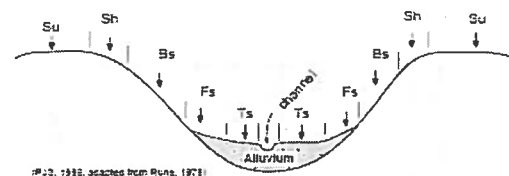


(PJS, 1966; adapted from Ruess, 1975)



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

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



**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/SEMI-PERMANENTLY 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.

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

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

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



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

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

Site ID: PCAP NC 1284DATE: 08/15/2012

Location:

☐ AA Center
 ☐ N
 ☐ S
 ☐ E
 ☒ W

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

☐ Plot 1
     
 ☐ Plot 2
     
 ☐ Plot 3

## Buffer Natural Cover Strata

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

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

| Buffer Plot 1                         | Canopy Type: <input checked="" type="radio"/> D <input type="radio"/> E  | Absent: <input type="radio"/> | Leaf Type: <input checked="" type="radio"/> B <input type="radio"/> N | Flag | Buffer Plot 2                         | Canopy Type: <input checked="" type="radio"/> D <input type="radio"/> E  | Absent: <input type="radio"/> | Leaf Type: <input checked="" type="radio"/> B <input type="radio"/> N | Flag | Buffer Plot 3                         | Canopy Type: <input type="radio"/> D <input type="radio"/> E   | Absent: <input checked="" 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 checked="" 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 checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 | <input type="radio"/>         |   |      | Big Trees (>0.3m DBH)                 | <input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 | <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 checked="" type="radio"/> 3 <input type="radio"/> 4 | <input type="radio"/>         |   |      | Small Trees (<0.3m DBH)               | <input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 | <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-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-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 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 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 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 type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" 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 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 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 type="radio"/> 3 <input checked="" 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 checked="" 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"/>                    |  |      |
| Rock                                  | <input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 | <input type="radio"/>         |   |      | Rock                                  | <input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 | <input type="radio"/>         |   |      | Rock                                  | <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"/>         |   |      | 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"/> | <input type="radio"/> | <input type="radio"/> |      | Ditches, Channelization                    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Pasture/Hay                                  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      |
| Road - two lane                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Dike/Dam/Road/RR Bed (IMPEDE FLOW)         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Range  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      |
| Road - four lane                | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Water Level Control Structure              | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Row Crops                                    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      |
| Parking Lot/Pavement            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Excavation, Dredging                       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Fallow Field (RECENT-RESTING ROW CROP FIELD) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      |
| Golf Course                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Fill/Spoil Banks                           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Fallow Field (OLD - GRASS, SHRUBS, TREES)    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      |
| Lawn/Park                       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Freshly Deposited Sediment (UNVEGETATED)   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Nursery                                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      |
| Suburban Residential            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Soil Loss/Root Exposure                    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Dairy  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      |
| Urban/Multifamily               | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Wall/Riprap                                | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Orchard                                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      |
| Landfill                        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Inlets, Outlets                            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Confined Animal Feeding                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      |
| Dumping                         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Point Source/Pipe (EFFLUENT OR STORMWATER) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Rural Residential                            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      |
| Trash                           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Impervious surface input (SHEETFLOW)       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Gravel Pit                                   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      |
| Other: _____                    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Other: _____                               | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Irrigation                                   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      |
| Other: _____                    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Other: _____                               | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Other: _____                                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      |

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

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

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

Buffer Sample Plots 05/27/2011

2428168304



## Reviewed by (initial):

DATE: 08/15/2012



|        |  |                       |                       |                       |  |
|--------|--|-----------------------|-----------------------|-----------------------|--|
| 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.

Flag

1009

Longitude West 081.43324

\_\_\_\_\_

[illegible]



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

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

Site ID: PCAP NC 1284DATE: 08/15/2012

Location:

☐ AA Center
 ☒ N
 ☐ S
 ☐ E
 ☐ W

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

☐ Plot 1
     
 ☐ Plot 2
     
 ☐ Plot 3

## Buffer Natural Cover Strata

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

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

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

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

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

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

Buffer Sample Plots 05/27/2011

2428168304



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

DATE: 08/15/2017



|        |  |                       |                       |                       |
|--------|--|-----------------------|-----------------------|-----------------------|
| 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.

Flag

1

**Use Decimal Degrees; NAD83**

[illegible]



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

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

Site ID: PCAP NC 1284DATE: 08/15/2012

Location:

☒ AA Center ☐ N ☐ S ☐ E ☐ W

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

☐ Plot 1 ☐ Plot 2 ☐ Plot 3

## Buffer Natural Cover Strata

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

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

| Buffer Plot 1                         | Canopy Type: <input checked="" type="radio"/> D <input type="radio"/> E  | Absent: <input type="radio"/> | 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 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 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 type="radio"/> 3 <input checked="" 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 checked="" 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"/>         |  |      | 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 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 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 <3' HIGH) | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2            |   |   |      | Soil erosion (FROM WIND, WATER, OR OVERUSE) | <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 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):

DATE: 08 / 15 / 2012

| 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"/> |      |

## 7966623548



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

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

Site ID: PCAP NC 1284DATE: 08/15/2012

Location:

☐ AA Center
 ☐ N
 ☒ S
 ☐ E
 ☐ W

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

☒ Plot 1
  
 ☒ Plot 2
  
 ☒ Plot 3

## Buffer Natural Cover Strata

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

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

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

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

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

| Industrial Development Stressors |                       |                       |                       |      | Habitat/Vegetation Stressors             |                       |                       |                       |      |   |                       |                       |                       |      |
|----------------------------------|-----------------------|-----------------------|-----------------------|------|--|-----------------------|-----------------------|-----------------------|------|---|-----------------------|-----------------------|-----------------------|------|
| Fill bubble if present - Plot    | 1                     | 2                     | 3                     | Flag | Fill bubble if present - Plot            | 1                     | 2                     | 3                     | Flag | Fill bubble if present - Plot               | 1                     | 2                     | 3                     | Flag |
| Oil Drilling                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Forest Clear Cut                         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Herbicide Use                               | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      |
| Gas Wells                        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Forest Selective Cut                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Mowing/Shrub Cutting                        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      |
| Mine (surface)                   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Tree Plantation                          | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Trails                                      | <input 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 <5' HIGH) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Soil erosion (FROM WIND, WATER, OR OVERUSE) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      |
| Other: _____                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Recently Burned Forest Canopy            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Other: _____                                | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      |
| Other: _____                     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Recently Burned Grassland (BLACKENED)    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      | Other: _____                                | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |      |

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

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

Buffer Sample Plots 05/27/2011

2428168304



## NZ KNOTS

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

DATE: 08 / 15 / 2012

| 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

1

Longitude West 081.43172

**Use Decimal Degrees; NAD83**

[illegible]

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

7966623548



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

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

Site ID: PCAP NC 1284DATE: 08/1/2012

Location:

☐ AA Center
 ☐ N
 ☐ S
 ☒ E
 ☐ W

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

☐ Plot 1
     
 ☐ Plot 2
     
 ☐ Plot 3

## Buffer Natural Cover Strata

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

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

| Buffer Plot 1                         | Canopy Type: <input checked="" type="radio"/> D <input type="radio"/> E  | Absent: <input type="radio"/> | 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 type="radio"/> 3 <input checked="" type="radio"/> 4 |                               |   |      | Big Trees (>0.3m DBH)                 | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4 |                               |   |      | Big Trees (>0.3m DBH)                 | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4 |                               |   |      |
| 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 |                               |   |      | Small Trees (<0.3m DBH)               | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4 |                               |   |      | 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 |                               |   |      |
| 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 |                               |   |      | 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 |                               |   |      | 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 |                               |   |      |
| 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 |                               |   |      | 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 |                               |   |      | 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 |                               |   |      |
| 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 |                               |   |      | 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 |                               |   |      | 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 |                               |   |      |
| Bare ground                           | <input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |                               |   |      | Bare ground                           | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4 |                               |   |      | Bare ground                           | <input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |                               |   |      |
| Litter, duff                          | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4 |                               |   |      | Litter, duff                          | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4 |                               |   |      | Litter, duff                          | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4 |                               |   |      |
| Rock                                  | <input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |                               |   |      | Rock                                  | <input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |                               |   |      | Rock                                  | <input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |                               |   |      |
| Water                                 | <input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |                               |   |      | Water                                 | <input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |                               |   |      | Water                                 | <input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |                               |   |      |
| Submerged Vegetation                  | <input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |                               |   |      | Submerged Vegetation                  | <input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |                               |   |      | Submerged Vegetation                  | <input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |                               |   |      |

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

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

| Industrial Development Stressors |   |   |   |      | Habitat/Vegetation Stressors             |   |   |   |      |   |   |   |   |      |
|----------------------------------|---|---|---|------|--|---|---|---|------|---|---|---|---|------|
| Fill bubble if present - Plot    | 1   | 2 | 3 | Flag | Fill bubble if present - Plot            | 1   | 2 | 3 | Flag | Fill bubble if present - Plot               | 1   | 2 | 3 | Flag |
| Oil Drilling                     | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |   |   |      | Forest Clear Cut                         | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4                       |   |   |      | Herbicide Use                               | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |   |   |      |
| Gas Wells                        | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |   |   |      | Forest Selective Cut                     | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4                       |   |   |      | Mowing/Shrub Cutting                        | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |   |   |      |
| Mine (surface)                   | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |   |   |      | Tree Plantation                          | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4                       |   |   |      | Trails                                      | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |   |   |      |
| Mine (underground)               | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |   |   |      | Tree Canopy Herbivory (INSECT)           | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4                       |   |   |      | Soil Compaction (ANIMAL OR HUMAN)           | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |   |   |      |
| Military                         | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |   |   |      | Shrub Layer Browsed (WILD OR DOMESTIC)   | <input checked="" type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |   |   |      | Offroad vehicle damage                      | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |   |   |      |
| Other: _____                     | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |   |   |      | Highly Grazed Grasses (OVERALL <3' HIGH) | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4                       |   |   |      | Soil erosion (FROM WIND, WATER, OR OVERUSE) | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |   |   |      |
| Other: _____                     | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |   |   |      | Recently Burned Forest Canopy            | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4                       |   |   |      | Other: _____                                | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |   |   |      |
| Other: _____                     | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |   |   |      | Recently Burned Grassland (BLACKENED)    | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4                       |   |   |      | Other: _____                                | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 |   |   |      |

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

Buffer Sample Plots 05/27/2011

2428168304



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

DATE: 08/1/2012

| 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"/> |      |