

wp 321

**ELC**  
Community Description and Classification

Site: 460 PLW 1619 Polygon: 2  
 Surveyor(s): SAH Date: Oct 6/11 Time start: 10:20h finish: 10:45h  
 UTMZ: 17T UTMZ: 450245 UTMN: 4812712

**Polygon Description**

System	Substrate	Topographic Feature	Plant Form	Community
<input checked="" type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic Site <input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input checked="" type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Mln. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input type="checkbox"/> Tableland <input checked="" type="checkbox"/> Roll, Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD <input type="checkbox"/> Graminoid <input type="checkbox"/> Forb <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte <input checked="" type="checkbox"/> Deciduous <input type="checkbox"/> Coniferous <input type="checkbox"/> Mixed	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Marsh <input type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Barren <input type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input type="checkbox"/> Woodland <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Plantation

**Stand Description**

Layer	HT	CVR	Species In Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To)
1	2-4	4	Aw > MH > DP > HC
2	3-4	3	Aw = MH >> <del>DP</del> Spinebush > CWK Cherry
3	5	2-3	Callio Aster > Fowl Mamm & = Genus sp.
4	7-6	3	Carex dr. clata > Geomys obsoletus > Fedge Solomon's Seal

HT Codes: 7 < 0.2m 8 > 0.2-0.5m 9 > 0.5-1m 4 > 1-2m 3 > 2-8m 2 > 8-25m 1 > 25m  
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 50% 4 50 - 80%

Stand Composition: Size Class Analysis: A < 10 A 10-24 A 25-50 O > 50  
 Standing Snags: A > 10-21 - Bw - Herb Standing Snags: R < 10 R 10-24 R 25-50 R > 50  
 Deadfall / Logs: BA: 41 O < 10 A 10-24 O 25-50 R > 50

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

Com. Age:  Pioneer  Young  Mid-Age  Mature  Old Growth

Ecosite: Dry-Fresh Hardwood-Hemlock Mixed Forest Code: FOM3  
 Vegetation Type: Dry-Fresh Sugar Maple-Hemlock Mixed Forest Type Code: FOM3-1  
 Inclusion: Code: /  
 Complex: Code: /

**Community Profile Diagram/Comments**

Notes:

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Rel. Avg
Bp	2	2	6		10	10
Aw	5	7	6		18	29
Bc	5	2	1		8	13
Mh	6	3	4		13	21
Hc	2	3	3		8	13
D	2	2	1		5	8
Total	22	19	21		62	100
Basal Area (BA)	48	38	42		124	(4)
Dead	1	2			3	5

**Soils Ontario and ELC Soils Description**

Site Metrics	PI/Auger #	Zone	Summary
5m		Fasting	Moisture Regime
		Nothing	
		Position	
Slope		Aspect	Drainage
		Percent	
		Slope Length	
Depth to		Mottles	Effective Texture (Indicate below)
		Gley	
		Water Table	
		Carbonates	% CF
		Bedrock	
		Depth from zero	
		Texture	% CF
		Depth from zero	
		Texture	
		Depth from zero	% CF
		Texture	
		Depth from zero	
		Texture	% CF
		Depth from zero	
		Texture	
		% Surface Stones/Rock	% CF
		Moisture Regime	
		Drainage	





VASCULAR PLANT CHECKSHEET

Location: *400- BLW 16A*  
 Observer: *SAM*

Date: *Oct-6/11*

Job Number:

DICOT HERBS												MONOCOT HERBS											
1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
<i>Achillea millefolium</i>						<i>Erigeron annuus</i>						<i>Plantago lanceolata</i>						<i>Alisma plantago-aquatica</i>					
<i>Actaea pachyphloea</i>						<i>Erigeron philadelphicus</i>						<i>Plantago major</i>						<i>Allium tricoccum</i>					
<i>Actaea rubra</i>						<i>Erigeron strigosus</i>						<i>Plantago rugelii</i>						<i>Allium</i>					
<i>Agalinus</i>						<i>Erysimum cheiranthoides</i>						<i>Podophyllum peltatum</i>						<i>Arisaema triphyllum</i>					
<i>Agromonia gryposepala</i>						<i>Eupatorium maculatum</i>						<i>Polygonum</i>						<i>Asparagus officinalis</i>					
<i>Ailanthus petiolaris</i>						<i>Eupatorium perfoliatum</i>						<i>Polygonum</i>						<i>Calla palustris</i>					
<i>Amaranthus retrofractus</i>						<i>Eupatorium rugosum</i>						<i>Polygonum</i>						<i>Clintonia borealis</i>					
<i>Ambrosia artemisiifolia</i>						<i>Euphorbia</i>						<i>Polygonum lapathifolium</i>						<i>Conwallertia majus</i>					
<i>Ampelopsis brevipedata</i>						<i>Euthamia graminifolia</i>						<i>Polygonum persicaria</i>						<i>Cyrtopodium caelocolum</i>					
<i>Arnica montana</i>						<i>Fragaria virginiana</i>		<input checked="" type="checkbox"/>				<i>Potentilla</i>						<i>Elodea canadensis</i>					
<i>Anemone canadensis</i>	<input checked="" type="checkbox"/>					<i>Fragaria vesca</i>						<i>Potentilla norvegica</i>						<i>Epipactis helleborine</i>					
<i>Anemone virginiana</i>						<i>Galeopsis tetrahit</i>						<i>Potentilla recta</i>						<i>Erythronium americanum</i>					
<i>Antennaria neglecta</i>						<i>Gallium</i>						<i>Prunella alba</i>						<i>Hemerocallis fulva</i>					
<i>Apocynum androsaemifolium</i>						<i>Gallium palustre</i>						<i>Prunella vulgaris</i>						<i>Iris versicolor</i>					
<i>Apocynum cannabinum</i>						<i>Gallium triflorum</i>						<i>Pyrola elliptica</i>						<i>Lemna minor</i>					
<i>Aquilegia canadensis</i>						<i>Geranium maculatum</i>						<i>Ranunculus</i>						<i>Lemna trisulca</i>					
<i>Arnica montana</i>						<i>Geranium robertianum</i>		<input checked="" type="checkbox"/>				<i>Ranunculus abortivus</i>						<i>Lilium</i>					
<i>Arnica montana</i>						<i>Geum aleppicum</i>						<i>Ranunculus acris</i>						<i>Mesanthemum canadense</i>					
<i>Arnica montana</i>						<i>Geum canadense</i>						<i>Rubus hirta</i>						<i>Mesanthemum racemosum</i>			<input checked="" type="checkbox"/>		
<i>Arnica montana</i>						<i>Geum sp</i>		<input checked="" type="checkbox"/>				<i>Rumex acetosella</i>						<i>Mesanthemum stellata</i>					
<i>Asclepias incarnata</i>						<i>Glechoma hederacea</i>						<i>Rumex crispus</i>						<i>Pistacia</i>					
<i>Asclepias syriaca</i>						<i>Hepatica acutiloba</i>						<i>Rumex</i>						<i>Potentilla canadensis</i>					
<i>Aster <del>pilosus</del></i>	<input checked="" type="checkbox"/>					<i>Hesperis matronalis</i>						<i>Sanguinaria canadensis</i>						<i>Polygonatum pubescens</i>					
<i>Aster cordifolius</i>						<i>Hieracium aurantiacum</i>						<i>Sanicula maritima</i>						<i>Potamogeton crispus</i>					
<i>Aster ericoides</i>						<i>Hieracium caespitosum</i>						<i>Saponaria officinalis</i>						<i>Potamogeton pectinatus</i>					
<i>Aster lanceolatus</i>	<input checked="" type="checkbox"/>					<i>Hieracium</i>						<i>Satureja vulgaris</i>						<i>Potamogeton</i>					
<i>Aster lateriflorus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<i>Hydrophyllum virginianum</i>						<i>Scutellaria perfoliata</i>						<i>Potamogeton</i>					
<i>Aster macrophyllus</i>						<i>Hypericum perforatum</i>						<i>Silene vulgaris</i>						<i>Potamogeton</i>					
<i>Aster novae-angliae</i>	<input checked="" type="checkbox"/>					<i>Impatiens capensis</i>						<i>Sium suave</i>						<i>Sagittaria latifolia</i>					
<i>Aster purpureus</i>						<i>Inula helenium</i>						<i>Solanum dulcamara</i>						<i>Sisyrinchium montanum</i>					
<i>Barbarea vulgaris</i>						<i>Lactuca</i>						<i>Solidago</i>						<i>Smilax herbacea</i>					
<i>Bidens cernua</i>						<i>Lapsana canadensis</i>						<i>Solidago altissima</i>		<input checked="" type="checkbox"/>				<i>Spiranthes cernua</i>					
<i>Bidens frondosa</i>						<i>Lapsana communis</i>						<i>Solidago casea</i>						<i>Spiranthes polytrix</i>					
<i>Bismarckia cylindrica</i>						<i>Leonurus cardiaca</i>						<i>Solidago canadensis</i>						<i>Streptopus roseus</i>					
<i>Caltha palustris</i>						<i>Lepidium</i>						<i>Solidago flexicapsula</i>						<i>Trillium erectum</i>					
<i>Calystegia sepium</i>						<i>Lineria vulgaris</i>						<i>Solidago gigantea</i>						<i>Trillium grandiflorum</i>					
<i>Cardamine diphylla</i>						<i>Lithospermum officinale</i>						<i>Solidago nemoralis</i>						<i>Uvularia grandiflora</i>					
<i>Cardamine</i>						<i>Lobelia</i>						<i>Solidago rugosa</i>											
<i>Caulophyllum thalictroides</i>						<i>Lobelia inflata</i>						<i>Sonchus oleracea</i>											
<i>Cerastrum fontanum</i>						<i>Lotus corniculatus</i>						<i>Sonchus asper</i>											
<i>Ceratophyllum demersum</i>						<i>Lycopus americanus</i>						<i>Stellaria</i>											
<i>Chelidonium majus</i>						<i>Lycopus</i>						<i>Taraxacum vulgare</i>											
<i>Chenopodium album</i>						<i>Lysimachia ciliata</i>						<i>Taraxacum officinale</i>											
<i>Chrysanthemum leucanthemum</i>						<i>Lythrum salicaria</i>						<i>Thalictrum dioicum</i>											
<i>Dichrorum intybus</i>						<i>Medicago lupulina</i>						<i>Thalictrum pubescens</i>											
<i>Cicuta</i>						<i>Medicago sativum</i>						<i>Tiarra cordifolia</i>											
<i>Circaea leutelliana</i>						<i>Melilotus sibiricus</i>						<i>Trigonopogon pratensis</i>											
<i>Cirsium arvense</i>						<i>Mertensia arvensis</i>						<i>Trientalis borealis</i>											
<i>Cirsium vulgare</i>						<i>Menyanthes triflorata</i>						<i>Trifolium</i>											
<i>Clematis virginiana</i>						<i>Menyanthes triflorata</i>						<i>Trifolium pratense</i>											
<i>Clintonia borealis</i>						<i>Mertensia triflora</i>						<i>Trifolium repens</i>											
<i>Coryza canadensis</i>						<i>Mitella diphylla</i>						<i>Tussilago farfara</i>											
<i>Coronilla varia</i>						<i>Moroneja flabellata</i>						<i>Urtica dioica</i>											
<i>Cynanchum rossicum</i>						<i>Mycosotis</i>						<i>Urtica dioica</i>											
<i>Cynoglossum officinale</i>						<i>Nasturtium officinale</i>						<i>Verbascum thapsus</i>		<input checked="" type="checkbox"/>									
<i>Daucus carota</i>						<i>Nepeta cataracta</i>						<i>Verbena hastata</i>											
<i>Desmodium canadense</i>						<i>Nepeta cataracta</i>						<i>Verbena urticifolia</i>											
<i>Dianthus armeria</i>						<i>Nyctaginia odorata</i>						<i>Veronica</i>											
<i>Dipsacus fullonum</i>						<i>Oenothera biennis</i>						<i>Veronica officinalis</i>											
<i>Echinopsys lobata</i>						<i>Oenothera biennis</i>						<i>Viola cracca</i>											
<i>Echium vulgare</i>						<i>Oxalis stricta</i>						<i>Viola fimbriata</i>											
<i>Epilobium</i>						<i>Phytolacca heterophylla</i>						<i>Viola pubescens</i>											
<i>Epilobium ciliatum</i>												<i>Viola sororia</i>											
<i>Epilobium hirsutum</i>																							
<i>Epilobium parviflorum</i>																							

1: *polygon ①* 4: \_\_\_\_\_  
 2: *polygon ②* 5: \_\_\_\_\_  
 3: \_\_\_\_\_ 6: \_\_\_\_\_







<b>ELC</b>  <b>WILDLIFE</b>	SITE: 460-BL W 1619
	POLYGON: D J(2)
	DATE: Oct-16/11
	SURVEYORS: SAM
	START TIME: 0950

TEMP (°C): 10	CLOUD (10th): -	WIND: 1-2	PRECIPITATION: nil
CONDITIONS:			

**POTENTIAL WILDLIFE HABITAT:**

<input type="checkbox"/>	VERNAL POOLS	<input checked="" type="checkbox"/>	SNAGS
<input type="checkbox"/>	HIBERNACULA	<input checked="" type="checkbox"/>	FALLEN LOGS
<input checked="" type="checkbox"/>	ditch		

**SPECIES LIST:**

TY	SP. CODE	EV	NOTES	#	TY	SP. CODE	EV	NOTES	#
B	MOBO	OB		1					
B	SOSP	OB		5					
B	BCCH	OB		10					
B	HOLA	VO		3					
B	ANCO	VO		2					
B	BLJA	VO		2					
B	BAWO	OB		1					
M	WT Deer	FE		1+					

**FAUNAL TYPE CODES (TY):**

B = BIRD M = MAMMAL H = HERPETOFAUNA L = LEPIDOPTERA F = FISH O = OTHER

**EVIDENCE CODES (EV):**

**BREEDING BIRD - POSSIBLE:**

SH = SUITABLE HABITAT SM = SINGING MALE

**BREEDING BIRD - PROBABLE:**

T = TERRITORY D = DISPLAY P = PAIR  
A = ANXIETY BEHAVIOUR N = NEST BUILDING V = VISITING NEST

**BREEDING BIRD - CONFIRMED:**

DD = DISTRACTION NU = USED NEST FY = FLEDGED YOUNG  
NE = EGGS NY = YOUNG FS = FOOD/FECAL SACK  
AE = NEST ENTRY

**OTHER WILDLIFE EVIDENCE:**

OB = OBSERVED VO = VOCALIZATION CA = CARCASS  
DP = DISTINCTIVE PARTS HO = HOUSE/DEN FY = EGGS/YOUNG  
TK = TRACKS FE = FEEDING EVIDENCE SC = SCAT  
SI = OTHER SIGNS (specify)



# Bluewater Feature: 462/BLW1555/1557

(Percent of the contour. Features within 126m from Collection lines and 171.5m from Turbines)

October 3, 2011

↑

Propts:  
Access/Collection Line  
Survey to be Completed  
To-line Buffer: (171.5m)

ELC Survey Complete!  
Turbine Buffer/Feature Intersect  
Proximity Factor  
Bluewater Wind Energy Corp





**ELC** Community Description and Classification

Site: Blw 462 Polygon: 2  
 Surveyor(s): JD+TS Date: Oct 19, 2011 Time start: finish:  
 UTMZ: 17T UTMZ: 481343Z UTMN: 0445860

**Polygon Description**

System	Substrate	Topographic Feature	Plant Form	Community
<input checked="" type="checkbox"/> Terrestrial	<input type="checkbox"/> Organic	<input type="checkbox"/> Lacustrine	<input type="checkbox"/> Plankton	<input type="checkbox"/> Lake
<input type="checkbox"/> Wetland	<input checked="" type="checkbox"/> Mineral Soil	<input type="checkbox"/> Riverine	<input type="checkbox"/> Submerged	<input type="checkbox"/> Pond
<input type="checkbox"/> Aquatic	<input type="checkbox"/> Parent Min.	<input type="checkbox"/> Bottomland	<input type="checkbox"/> Floating-LVD	<input type="checkbox"/> River
	<input type="checkbox"/> Acidic Bedrk	<input type="checkbox"/> Terrace	<input type="checkbox"/> Graminoid	<input type="checkbox"/> Stream
<input type="checkbox"/> Open Water	<input type="checkbox"/> Basic Bedrk	<input type="checkbox"/> Valley Slope	<input type="checkbox"/> Forb	<input type="checkbox"/> Marsh
<input type="checkbox"/> Shallow Water	<input type="checkbox"/> Carb. Bedrk	<input checked="" type="checkbox"/> Tableland	<input type="checkbox"/> Lichen	<input type="checkbox"/> Swamp
<input checked="" type="checkbox"/> Surficial Dep.	<input type="checkbox"/> Bedrock	<input type="checkbox"/> Roll, Upland	<input type="checkbox"/> Bryophyte	<input type="checkbox"/> Fen
		<input type="checkbox"/> Cliff	<input checked="" type="checkbox"/> Deciduous	<input type="checkbox"/> Bog
<b>History</b>		<input type="checkbox"/> Talus	<input type="checkbox"/> Coniferous	<input type="checkbox"/> Barren
<input checked="" type="checkbox"/> Natural		<input type="checkbox"/> Crevice/Cave	<input type="checkbox"/> Mixed	<input type="checkbox"/> Meadow
<input type="checkbox"/> Cultural		<input type="checkbox"/> Alvar		<input type="checkbox"/> Prairie
<b>Cover</b>		<input type="checkbox"/> Rockland		<input type="checkbox"/> Thicket
<input type="checkbox"/> Open		<input type="checkbox"/> Beach / Bar		<input type="checkbox"/> Savannah
<input type="checkbox"/> Shrub		<input type="checkbox"/> Sand Dune		<input type="checkbox"/> Woodland
<input checked="" type="checkbox"/> Treed		<input type="checkbox"/> Bluff		<input type="checkbox"/> Forest
				<input type="checkbox"/> Plantation

**Stand Description**

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp)
1	2	4	green Ash >> white Elm = choke cherry
2			
3	3	3	Alternate - favored dominant = spicobush
4	6	2	Big long golden red = wild ginger = cutout sp

HT Codes: 7 < 0.2m 6 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-5m 2 > 6-25m 1 > 25m  
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 50% 4 > 50%

**Stand Composition: Size Class Analysis:**

< 10	A	10-24	25-50	> 50
Standing Snags:	< 10	10-24	25-50	> 50
Deadfall / Logs:	< 10	10-24	25-50	> 50

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

**Com. Age:**  Pioneer  Young  Mid-Age  Mature  Old Growth

**Ecosite:** Fresh-moist Lowland Deciduous Forest Ecosite Code: F007  
**Vegetation Type:** Fresh-moist Green Ash Deciduous Forest Type Code: F07-2  
**Inclusion:** Code:  
**Complex:** Code:

**Community Profile Diagram/Comments**

Notes:

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Prism Factor	2
<b>Total</b>							100
<b>Basal Area (BA)</b>							
<b>Dead</b>							

**Soils Ontario and ELC Soils Description**

Site Metrics	PIWAuger #	Soils Ontario and ELC Soils Description				Summary
<b>Zone</b>						<b>Moisture Regime</b>
<b>Easting</b>						
<b>Northing</b>						
<b>Position</b>						
<b>Aspect</b>						<b>Drainage</b>
<b>Percent</b>						
<b>Slope</b>						<b>Effective Texture (indicate below)</b>
<b>Length</b>						
<b>Mottles</b>						
<b>Gley</b>						
<b>Water Table</b>						<b>Depth to...</b>
<b>Carbonates</b>						
<b>Bedrock</b>						
<b>1</b>	Depth from zero	% CF	% CF	% CF	% CF	
	Texture					<b>Soil Horizon Description</b>
<b>2</b>	Depth from zero	% CF	% CF	% CF	% CF	
	Texture					
<b>3</b>	Depth from zero	% CF	% CF	% CF	% CF	
	Texture					<b>% Surface Stone/Rock</b>
<b>4</b>	Depth from zero	% CF	% CF	% CF	% CF	
	Texture					
	% Surface Stone/Rock					
	Moisture Regime					
	Drainage					<b>Drainage</b>













463 BLW-1055  
Bluewater Feature ~~100-0100000~~

(Proprietary but common) Features within 2.5m from Collection lines and 171.5m from Turbines)

- Collection lines in type sets
- Turbine Buffer (100m) - Inset
- Property Fabric
- Bluewater Wind Energy Centre

- Roads
- Access/Collection line
- Collection Buffer (120m)
- Turbine buffer (171.5m)



August 29, 2011





**\* Roadside - ASA**

**ASA = Roadside**

**ELC**  
Community Description and Classification

Site: **463-BLW 1055** Polygon: **0**  
 Surveyor(s): **SAW** Date: **Oct 6/11** Time start: **13:05h**  
 UTMZ: **17T** UTMZ: **447479** UTMN: **4813660**  
 finish: **14:00h**  
 wp: **324**

**Polygon Description**

System	Substrate	Topographic Feature	Plant Form	Community
<input checked="" type="checkbox"/> Terrestrial	<input type="checkbox"/> Organic	<input type="checkbox"/> Lacustrine	<input type="checkbox"/> Plankton	<input type="checkbox"/> Lake
<input type="checkbox"/> Wetland	<input checked="" type="checkbox"/> Mineral Soil	<input type="checkbox"/> Riverine	<input type="checkbox"/> Submerged	<input type="checkbox"/> Pond
<input type="checkbox"/> Aquatic	<input type="checkbox"/> Parent Min.	<input type="checkbox"/> Bottomland	<input type="checkbox"/> Floating-LVD.	<input type="checkbox"/> River
Site	<input type="checkbox"/> Acidic Bedrk	<input type="checkbox"/> Terrace	<input type="checkbox"/> Graminoid	<input type="checkbox"/> Stream
<input type="checkbox"/> Open Water	<input type="checkbox"/> Basic Bedrk	<input type="checkbox"/> Valley Slope	<input type="checkbox"/> Forb	<input type="checkbox"/> Marsh
<input type="checkbox"/> Shallow Water	<input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Tableland	<input type="checkbox"/> Bryophyte	<input type="checkbox"/> Swamp
<input checked="" type="checkbox"/> Surficial Dep.		<input checked="" type="checkbox"/> Roll. Upland	<input checked="" type="checkbox"/> Deciduous	<input type="checkbox"/> Fen
<input type="checkbox"/> Bedrock		<input type="checkbox"/> Cliff	<input type="checkbox"/> Coniferous	<input type="checkbox"/> Bog
History		<input type="checkbox"/> Talus	<input type="checkbox"/> Mixed	<input type="checkbox"/> Barren
<input checked="" type="checkbox"/> Natural		<input type="checkbox"/> Crevice/Cave		<input type="checkbox"/> Meadow
<input type="checkbox"/> Cultural		<input type="checkbox"/> Aiver		<input type="checkbox"/> Prairie
Cover		<input type="checkbox"/> Rockland		<input type="checkbox"/> Thicket
<input type="checkbox"/> Open		<input type="checkbox"/> Beach / Bar		<input type="checkbox"/> Savannah
<input type="checkbox"/> Shrub		<input type="checkbox"/> Sand Dune		<input type="checkbox"/> Woodland
<input checked="" type="checkbox"/> Treeid		<input type="checkbox"/> Bluff		<input checked="" type="checkbox"/> Forest
				<input type="checkbox"/> Plantation

**Stand Description**

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) (> > Much Greater Than; > Greater Than; = About Equal To)
1	2	4	MA > Bc > Aw
2	3	3	MA > Bc > Aw > Blue Beech
3	5	3	Calliopteris = zigzag Goldenrod > White Baneberry
4	6-7	3	Enchanter's Nightshade > Herb Robert > MH > Wild Rose

HT Codes: 7 < 0.2m 6 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-4m 2 > 5-25m 1 > 25m  
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 50% 4 > 50%

Stand Composition: Size Class Analysis:  
 Standing Snags: A < 10 A 10-24 A 25-50 OR > 50  
 Deadfall / Logs: 0 < 10 R 10-24 R 25-50 P 50

Abundance Codes: N = None R = Rare O = Occasional A = Abundant  
 Com. Age:  Pioneer  Young  Mid-Age  Mature  Old Growth

Ecosite: **Pry-Fresh Sugar Maple Deciduous forest** Code: **F015**  
 Vegetation Type: Code: **F015-1?**  
 Inclusion: Code: /  
 Complex: Code: /

**Community Profile Diagram/Comments**

Notes:	
--------	--

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Re. Avg.	Pfem Factor
N/A (Front side)							
Total						100	
Basal Area (BA)							
Dead							

**Soils Ontario and ELC Soils Description**

Site Metrics		PIVAuger #	Soils Ontario and ELC Soils Description			Summary
Zone	Easting	Zone				Moisture Regime
Northing	Position	Northing				
Aspect	Percent	Aspect	N/A			
Slope	Slope	Slope				Drainage
Length	Length	Length				
Mottles		Mottles		% CF	% CF	Effective Texture (Indicate below)
Clay	Clay	Clay			% CF	
Water Table	Water Table	Water Table				Effective Texture
Carbonates	Carbonates	Carbonates				
Bedrock	Bedrock	Bedrock				% CF
Depth from zero	Depth from zero	Depth from zero				
Texture	Texture	Texture				% CF
Depth from zero	Depth from zero	Depth from zero				
Texture	Texture	Texture				% CF
Depth from zero	Depth from zero	Depth from zero				
Texture	Texture	Texture				% CF
Depth from zero	Depth from zero	Depth from zero				
Texture	Texture	Texture				% CF
Depth from zero	Depth from zero	Depth from zero				
% Surface Stone/Rock	% Surface Stone/Rock	% Surface Stone/Rock				% CF
Moisture Regime	Moisture Regime	Moisture Regime				
Drainage	Drainage	Drainage				% CF
Drainage	Drainage	Drainage				



8

Roadside  
~~BLWA~~

Roadside

<b>ELC</b>  Plant Species List	SITE: 480-BLW 1499	463-BLW 1055
	POLYGON: ①	①
	DATE: Oct. 6/11	Oct. 6/11
	SURVEYOR(S): SAM	SAM

Roadside

LAYERS: 1 = CANOPY 2 = SUB-CANOPY 3 = UNDERSTORY 4 = GROUND (GRD.) LAYER

ABUNDANCE CODES: R = RARE O = OCCASSIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER				COLL.
	1	2	3	4	
ROD					
NEAspr					
Frod "					
Tall G'rod		D			
Sw. Bryne	D		D		
Pan. Asper					
EW	O				
Mman	R				
Can G'rod					
G-L G'rod					
Blue Vervain					
Junelwood					
Hillkweed					
Orch Gmg					
B-L Callon					
Teasel					
Salix (Bebb's)					
RA Lace					
Beggars Ticks					
Can Thistle					
Rice Cutgrass					
So. <del>rubus</del>					
Yellow G'rod					
SBulrush					
BKR Bulrush					

Monarch  
BLWA

SPECIES CODE	LAYER				COLL.
	1	2	3	4	
Sourcherry					
Mt		D			
Calico					
Be		O			
Aw		O			
Green sp.					
Ra sp.					
Per. Redit					
BSNT shd.					
BKR Elder					
Strawb					
Red Osier					
Zig Zag					
Ench Mshd					
Blue Beech					
Jacr					
Id		A			
Bn		O			
CB		O			
Piny					
Wt Boreberry					

Am GO  
RBWA  
e



ASA Roadside

VASCULAR PLANT CHECKSHEET

Location: 463-BLW1055  
 Observer: SAM

Date: Oct. 6/11

Job Number:

DICOT HERBS												MONOCOT HERBS												
1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6							
Achillea millefolium						Erigeron annuus						Plantago lanceolata						Alliaria plantago-aquatica						
Actaea pachypoda	X					Erigeron philadelphicus						Plantago major						Alium tricoccum						
Actaea rubra						Erigeron strigosus						Plantago rugellii						Allium						
Agalinus						Erysimum cheiranthoides						Podophyllum peltatum						Arisaema triphyllum				X		
Agriaria gryposepala						Eupatorium maculatum						Polygonum						Asparagus officinalis						
Ajuria petiolaris						Eupatorium perfoliatum						Polygonum						Cella palustris						
Amaranthus retrofractus						Eupatorium rugosum						Polygonum						Clintonia borealis						
Ambrosia artemisiifolia						Euphorbia						Polygonum lapathifolium						Corvularia majus						
Amphicarpaea bracteata						Eulhamia graminifolia						Polygonum persicaria						Cypripedium calceolus						
Anaphalis margaritacea						Fragaria virginiana	X					Potentilla						Eiodia canadensis						
Anemone						Fragaria vesca						Potentilla norvegica						Epipactis helleborina						
Anemone canadensis						Galopsis tetralix						Potentilla recta						Erythronium americanum						
Anemone virginiana						Gallium						Pranarthis alba						Hemerocallis fulva						
Arenaria neglecta						Gallium						Prunella vulgaris						Iris versicolor						
Apocynum androsaemifolium						Gallium palustre						Ranunculus						Linna minor						
Apocynum cannabinum						Gallium triflorum						Ranunculus						Linna trialeuca						
Aquilegia canadensis						Geranium maculatum						Ranunculus abortivus						Ullum						
Arnica montana						Geranium robertianum	X					Ranunculus acris						Adiantum canadense						
Aralia nudicaulis						Geum aleppicum						Rudbeckia hirta						Melantherum racemosa						
Arctium minus						Geum canadense						Rumex acetosella						Melantherum strobilata						
Artemisia						Geum	sp	X				Rumex crispus						Platanthera						
Asarum canadense						Glechoma hederacea						Rumex						Potamogeton						
Asclepias incarnata						Hepatica acutiloba						Sanguinaria canadensis						Potamogeton crispus						
Asclepias syriaca						Hesperis matronalis						Sanicula marilandica						Potamogeton perfoliatus						
Aster						Hieracium aurantiacum						Saponaria officinalis						Potamogeton						
Aster cordifolius						Hieracium caespitosum						Satureja vulgaris						Potamogeton						
Aster ericoides						Hieracium						Scutellaria galericulata						Potamogeton						
Aster lanceolatus						Hydrophyllum virginianum						Silene vulgaris						Potamogeton						
Aster lateriflorus	X					Hypericum perforatum						Sium suave						Sagittaria latifolia						
Aster macrophyllus						Impatiens capensis						Solanum dulcamara	X					Sisynchium montanum						
Aster novae-angliae						Inula helianthem						Solidago						Smilax herbacea						
Aster purpureus						Lactuca						Solidago altissima						Spiraea						
Barbarea vulgaris						Lappula canadensis						Solidago canadensis						Spiraea polyrrhiza						
Bidens cernua						Lapsana communis						Solidago flexicaulis	X					Streptopus roseus						
Bidens frondosa						Leonurus cardiaca						Solidago gigantea						Tillium erectum						
Boehmeria cylindrica						Lepidium						Solidago nemoralis						Tillium grandiflorum						
Calla palustris						Linaria vulgaris						Solidago rugosa						Uvularia grandiflora						
Calystegia sepium						Lithospermum officinale						Sonchus oleraceus												
Cardamine diphylla						Lobelia						Sonchus asper												
Cardamine						Lobelia inflata						Stellaria												
Caulophyllum thalictroides						Lobelia corniculata						Taraxacum vulgare												
Cerastrum fontanum						Lycopus americanus						Taraxacum officinale												
Ceratophyllum demersum						Lycopus						Thalictrum dioicum												
Chelidonium majus						Lysimachia olerata						Thalictrum pubescens												
Chenopodium album						Lythrum salicaria						Tiarella cordifolia												
Chrysanthemum leucanthemum						Medicago lupulina						Tragopogon pratensis												
Cichorium intybus						Medicago sativum						Trientalis borealis												
Cicuta						Mollis alba						Trifolium												
Cirsium leucolium	X					Monarda fistulosa						Trifolium pratense												
Cirsium arvense						Myosotis						Trifolium repens												
Cirsium vulgare						Nasturtium officinale						Tussilago farfara												
Clematis virginiana						Nepeta cataria						Urtica dioica												
Clintonia borealis						Nuphar variegatum						Urtica vulgaris												
Coryza canadensis						Nymphaea odorata						Verbascum thapsus												
Coronilla varia						Oenothera biennis						Verbena hastata												
Cynanchum rossicum						Osmorhiza						Veronica												
Cynoglossum officinale						Oxalis stricta						Veronica officinalis												
Daucus carota						Phytolacca						Viola cretica												
Desmodium canadense						Physalis heterophylla						Viola lasiocarpa												
Dianthus armeria												Viola sororia												
Dipsacus fullonum																								
Echinocystis lobata																								
Echium vulgare																								
Epilobium																								
Epilobium ciliatum																								
Epilobium hirsutum																								
Epilobium parviflorum																								

- 1: Polygon (1) 4: \_\_\_\_\_  
 2: \_\_\_\_\_ 5: \_\_\_\_\_  
 3: \_\_\_\_\_ 6: \_\_\_\_\_

SITE LOCATIONS









**Bluewater Feature: 463\_BLW1497/1521/1522/1055**

(Property lines that contain Features with a 125m from Collection lines and 171.5m from Turbines)

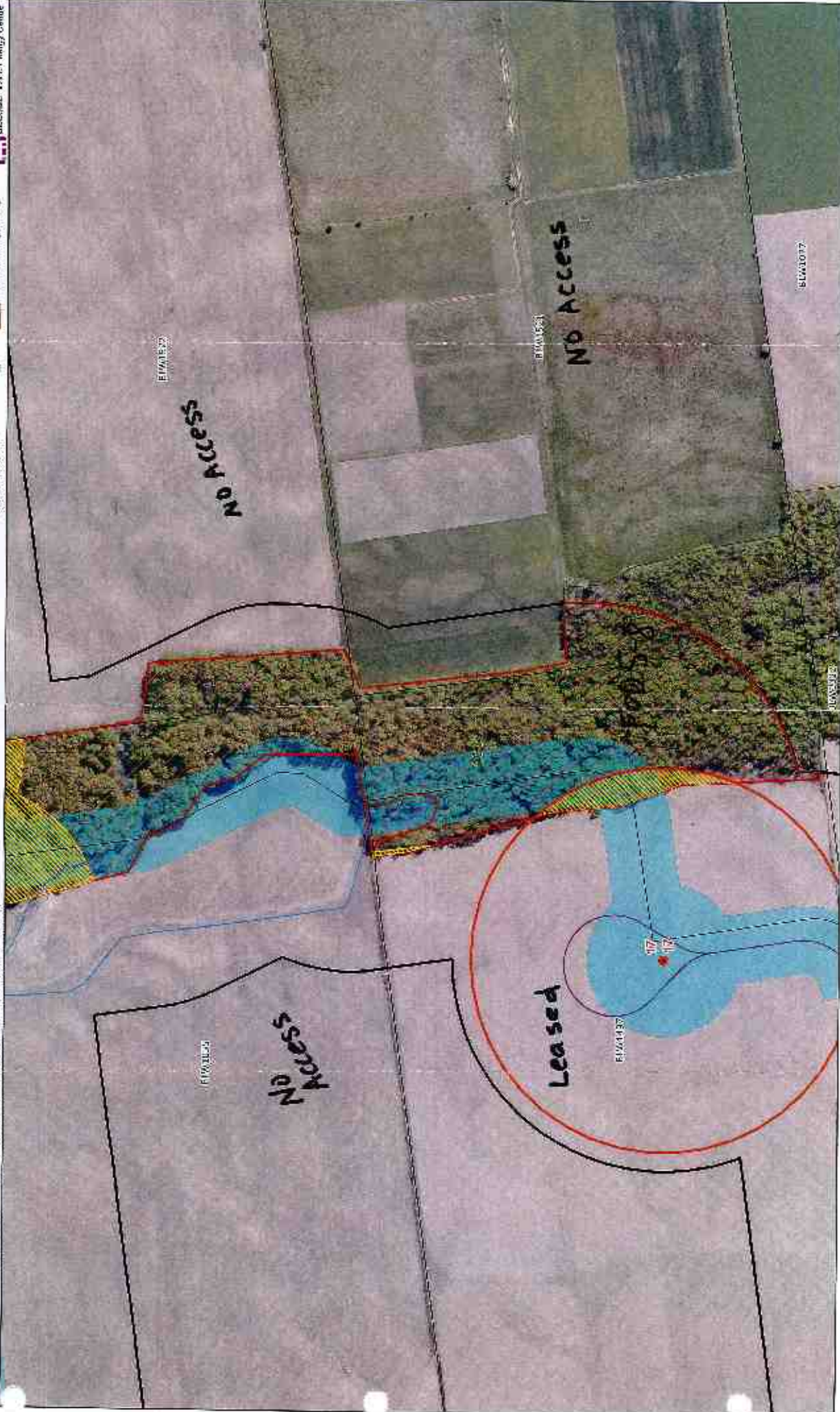


October 3, 2011



- Roads
- Access/Collection Line
- Survey to be Completed
- Thinning Buffer (171.5m)

- ELC Survey Contour
- Turbine Buffers/Feature Intersect
- Property Fabric
- Bluewater: WYA Planning Centre









### VASCULAR PLANT CHECKSHEET

Location: *BLW 463*

Date: *Oct 19, 2011*

Observer: *JD+TS*

Job Number:

DICOT HERBS											MONOCOT HERBS											
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	6	
<i>Chilisa multiflora</i>																						
<i>Chilisa pachypoda</i>	<input checked="" type="checkbox"/>																					
<i>Ardara rubra</i>																						
<i>Agalinus</i>																						
<i>Agimonia gryposepala</i>																						
<i>Alliaria petiolata</i>																						
<i>Amaranthus retrofractus</i>																						
<i>Ambrosia artemisiifolia</i>																						
<i>Amphicarpaea bracteata</i>																						
<i>Anaphalis margaritacea</i>																						
<i>Anemone</i>																						
<i>Anemone canadensis</i>																						
<i>Anemone virginiana</i>																						
<i>Antennaria neglecta</i>																						
<i>Apocynum androsaemifolium</i>																						
<i>Apocynum cannabinum</i>																						
<i>Aquilegia canadensis</i>																						
<i>Arisaema nudicaulis</i>																						
<i>Arolium minus</i>																						
<i>Arnica</i>																						
<i>Arnica canadensis</i>																						
<i>Asclepias incarnata</i>																						
<i>Asclepias syriaca</i>																						
<i>Aster</i>																						
<i>Aster cordifolius</i>																						
<i>Aster erinoides</i>																						
<i>Aster lanceolatus</i>																						
<i>Aster latifolius</i>																						
<i>Aster macrophyllus</i>																						
<i>Aster novae-angliae</i>																						
<i>Aster paniculatus</i>																						
<i>Bartonia vulgaris</i>																						
<i>Bidens cernua</i>																						
<i>Bidens frondosa</i>																						
<i>Boehmeria cylindrica</i>																						
<i>Callitriche</i>																						
<i>Callitriche septentrionalis</i>																						
<i>Cardamine diphylla</i>																						
<i>Cardamine</i>																						
<i>Caulophyllum thalictroides</i>																						
<i>Cerastium fontanum</i>																						
<i>Cerastophyllum demersum</i>																						
<i>Chelidonium majus</i>																						
<i>Chenopodium album</i>																						
<i>Chrysanth. leucanthemum</i>																						
<i>Cichorium intybus</i>																						
<i>Cnicus</i>																						
<i>Cnicus leucellianus</i>																						
<i>Cnicus arvensis</i>																						
<i>Cnicus vulgaris</i>																						
<i>Clematis virginiana</i>																						
<i>Clintonia borealis</i>																						
<i>Coryza canadensis</i>																						
<i>Coronilla varia</i>																						
<i>Cyananthium montanum</i>																						
<i>Cynoglossum officinale</i>																						
<i>Daucus carota</i>																						
<i>Dasydrum canadense</i>																						
<i>Dianthus armeria</i>																						
<i>Dipacis fulvotum</i>																						
<i>Echinocystis lobata</i>																						
<i>Epithim vulgare</i>																						
<i>Epithim</i>																						
<i>Epithim ellipticum</i>																						
<i>Epithim hirsutum</i>																						
<i>Epithim parviflorum</i>																						

1: *F80* 4: \_\_\_\_\_  
 2: \_\_\_\_\_ 5: \_\_\_\_\_  
 3: \_\_\_\_\_ 6: \_\_\_\_\_

SITE LOCATIONS

CONIFERS						TREES and SHRUBS						GRAMINOIDS					
1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
Abies balsamea						+ Rosa multiflora						Agrostis gigantea					
Juniperus communis						Rosa						Agrostis stolonifera					
Juniperus virginiana						Rubus allegheniensis						Agropyron repens					
Larix laricina						Rubus idaeus			✓			Alopecurus					
Picea abies						Rubus occidentalis						Bromus inermis					
Picea glauca						Rubus odoratus						Calamagrostis canadensis					
Pinus resinosa						Rubus plumbosus						Carex acrota					
Pinus strobus						Salix alba						Carex alata					
Pinus sylvestris						Salix amygdaloides						Carex bebbii					
Thuja occidentalis						Salix bebbiana						Carex blanda					
Tsuga canadensis						+ Salix discolor						Carex gracillima					
						Salix eriocephala						Carex granularis					
						Salix exigua						Carex hystericina					
						Salix lucida						Carex pennsylvanica					
						Salix petiolaris						Carex radiata					
						+ Salix purpurea						Carex retrosa					
TREES and SHRUBS						Salix x rubans						Carex stipata					
Acer negundo						+ Salix						Carex stricta					
Acer rubrum						Sambucus canadensis						Carex vulpinoidea					
Acer saccharinum						Sambucus racemosa						Carex <del>sp.</del>					
Acer saccharum	✓					Sorbus aucuparia						Carex					
Acer spicatum						Spiraea alba						Carex					
Alnus rugosa						Syringa vulgaris						Carex					
Amelanchier						+ Tilia americana				✓		Carex					
Berberis thunbergii						Ulmus americana				✓		Carex					
Betula alleghaniensis						Ulmus						Carex					
Betula papyrifera						Vaccinium						Carex					
Carpinus caroliniana						Viburnum lentago						Carex					
Carya cordiformis						Viburnum opulus						Cyperus					
Celastrus scandens						Viburnum						Cyperus					
Cornus alternifolia						Vitis riparia						Dactylis glomerata					
Cornus amomum												Danthonia spicata					
Cornus rugosa												Echinochloa crus-galli					
Cornus stolonifera												Eleocharis erythropoda					
Corylus cornuta												Eleocharis					
Crataegus monogyna												Elymus virginicus					
Crataegus punctata												Elymus					
Crataegus sp.												Festuca arundinacea					
Crataegus						FERNS						Glyceria striata					
Diervilla lonicera						Adiantum pedatum						Glyceria					
Fagus grandifolia	✓					Athyrium filix-femina						Juncus dudleyi					
Fraxinus americana	✓					Botrychium multifidum						Juncus effusus					
Fraxinus nigra						Botrychium virginianum						Juncus tenuis					
Fraxinus pennsylvanica						Cystopteris bulbifera						Juncus					
Ilex verticillata						Dryopteris caroliniana						Juncus					
Juglans cinerea						Dryopteris cristata						Leersia oryzoides					
Juglans nigra						Dryopteris marginalis						Muhlenbergia					
Lonicera mackenzii						Dryopteris						Oryzopsis asperifolia					
Lonicera tartarica						Equisetum arvense						Panicum					
Lonicera						Equisetum hyemale						Panicum					
Malus pumila						Equisetum variegatum						Phalaris arundinacea					
Ostrya virginiana						Equisetum						Panicum pratense					
Parthenocissis vitacea						Gymnocarpium dryopteris						Phragmites australis					
Populus balsamifera						Lycopodium digitatum						Poa compressa					
Populus grandidentata						Lycopodium obscurum						Poa pratensis					
Populus tremuloides						Lycopodium						Poa sp.					✓
Populus						Lycopodium						Scirpus atrovirens					
Prunus pennsylvanica						Matricaria struthiopteris						Scirpus cyperinus					
Prunus serotina						Onclea sensibilis						Scirpus validus					
Prunus virginiana						Osmunda cinnamomea						Scirpus					
Prunus						Osmunda regalis						Scirpus					
Quercus macrocarpa						Polystichum acrostichoides						Setaria					
Quercus rubra						Pteridium aquilinum						Sperganium					
Quercus						Thelypteris palustris						Typa angustifolia					
Rhamnus cathartica												Typa latifolia					
Rhus radicans												Typa glauca					
Rhus typhina																	
Ribes americana																	
Ribes cynosbati																	
Ribes x rubrum																	
Robinia pseudo-acacia																	







463 - BLW 1022 463 - BLW 1022



July 19/11

Temp:	26.0
Humid:	82%
Wind:	8-12 SW
Cloud:	10%
precip:	0.1

463 - BLW 1022

Soil

no p055 pits 256-361  
Soil pit

pits 257-355 w p053

13

GE25-4

Went

Went

Went

463 - BLW 1022







<b>ELC</b>  Plant Species List	SITE: <i>Blue water 463</i>
	POLYGON: <i>①</i>
	DATE: <i>July 19X11</i>
	SURVEYOR(S): <i>SAM</i>

LAYERS: 1 = CANOPY 2 = SUB-CANOPY 3 = UNDERSTORY 4 = GROUND (GRD.) LAYER

ABUNDANCE CODES: R = RARE O = OCCASSIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER				COLL.
	1	2	3	4	
<i>NL Catterl</i>					
<i>EW</i>					
<i>Bd</i>	<i>O</i>				
<i>Apple</i>					
<i>Cur led Dock</i>					
<i>BS Ntshd</i>					
<i>Virg. Creeper</i>					
<i>Orch Grass</i>					
<i>Helibone</i>					
<i>Spread Dog</i>					
<i>Can Buck</i>					
<i>Car. Poplar</i>					
<i>Poa comp.</i>					
<i>Eng. Hawthorn</i>					
<i>Grape</i>					
<i>Sour Cherry</i>					
<i>Sm. G'rod</i>					
<i>Red Rasp.</i>					
<i>Bur dock</i>					
<i>MH</i>	<i>D</i>				
<i>Tall G'rod</i>					
<i>Choke Cherry</i>					
<i>Ip</i>	<i>A</i>				
<i>Shagbark</i>	<i>O</i>				
<i>Blk Rasp.</i>					
<i>Tall <del>Blk</del> Rasp.</i>					
<i>Strawb.</i>					
<i>Oxeye</i>					

SPECIES CODE	LAYER				COLL.
	1	2	3	4	
<del>Red Currant</del> <i>Red Currant</i>					
<i>Wt Anas</i>					
<i>Garlic Must.</i>					
<i>Coat. punct.</i>					
<i>Ench. Ntshd</i>					
<i>Au</i>	<i>A</i>				
<i>Van Ast.</i>					
<i>Calico Ast.</i>					
<i>Jewelwrd.</i>					
<i>Fox Sedge</i>					
<i>Mand. Horse</i>					
<i>Cur led Dock</i>					
<i>S. ericaph.</i>					
<i>NE Aster</i>					
<i>P1</i>					
<i>Herb Robin</i>					
<i>Carex gr. giff.</i>					
<i>Can. Sp. wood</i>					
<i>Black Cherry</i>					
<i>Be</i>	<i>O</i>				
<i>Jack In the Pod</i>					
<i>Running Strawb Bush</i>					
<i>Maple Leaved Vib.</i>					
<i>White Trill.</i>					
<i>Bl. Cohosh</i>					
<i>False Sol. Seal</i>					

*AM RO*  
*How R*  
*SO SP*  
*AM GO*

*CENA*  
*INBU*

*Ohm my Crayfish*  
*Am. Toad*  
*Raccoon*  
*Deer*