

ELC
Community
Description and
Classification

Site: 280 GSH 1802 Polygon: 3
 Surveyor(s): JM, JS Date: Nov 29, 2011 Time start: finish:
 UTMZ: UTMZ: UTMN:

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"/> Site	<input type="checkbox"/> Basic Bedrk	<input type="checkbox"/> Valley Slope	<input checked="" type="checkbox"/> Forb	<input type="checkbox"/> Marsh
<input type="checkbox"/> Open Water	<input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Tableland	<input type="checkbox"/> Lichen	<input type="checkbox"/> Swamp
<input type="checkbox"/> Shallow Water		<input type="checkbox"/> Roll. Upland	<input type="checkbox"/> Bryophyte	<input type="checkbox"/> Fen
<input checked="" type="checkbox"/> Surficial Dep.		<input type="checkbox"/> Cliff	<input type="checkbox"/> Deciduous	<input type="checkbox"/> Bog
<input type="checkbox"/> Bedrock		<input type="checkbox"/> Talus	<input type="checkbox"/> Coniferous	<input type="checkbox"/> Barren
<input type="checkbox"/> History		<input type="checkbox"/> Crevice/Cave	<input type="checkbox"/> Mixed	<input checked="" type="checkbox"/> Meadow
<input type="checkbox"/> Natural		<input type="checkbox"/> Alvar		<input type="checkbox"/> Prairie
<input checked="" type="checkbox"/> Cultural		<input type="checkbox"/> Rockland		<input type="checkbox"/> Thicket
<input type="checkbox"/> Cover		<input type="checkbox"/> Beach / Bar		<input type="checkbox"/> Savannah
<input type="checkbox"/> Open		<input type="checkbox"/> Sand Dune		<input type="checkbox"/> Woodland
<input type="checkbox"/> Shrub		<input type="checkbox"/> Bluff		<input type="checkbox"/> Forest
<input type="checkbox"/> Treed				<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			
3			
4	6	4	4 <i>S. speciosus</i> > <i>Rubide</i> = <i>aster</i> sp.

HT Codes: 7 > 0.2m 6 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-6m 2 > 6-25m 1 > 25m
 CVR Codes: 0 = none 1 0% 2 10% 3 25% 4 50% 5 60%

Stand Composition:	Size Class Analysis:	Standing Snags:	Deadfall/Legs:
	<10	<10	<10
	10-24	10-24	10-24
	25-50	25-50	25-50

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

Ecosite:	Vegetation Type:	Inclusion:	Complex:
Mineral Cultural Meadow Ecosite	Dry-moist Old Field Meadow Type		
Code: CUM2	Code: CUM 2-2	Code:	Code:

Community Profile Diagram/Comments

Garbage being dumped in floor
 Area few rock piles scattered

Notes:

Tree Tally by Species

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Bal. Avg.
Total						100
Basal Area (BA)						
Dead						

Soils Ontario and ELC Soils Description

Site Metrics	Pit/Auger #		Soil Horizon Description				Summary
	UTM	Zone	1	2	3	4	
Easting							Moisture Regime
Northing							
Position							Drainage
Aspect							
Percent							Effective Texture (indicate below)
Slope							
Mottles							% CF
Gley							
Water Table							% CF
Carbonates							
Bedrock							% CF
Depth from zero							
Texture							% CF
Depth from zero							
Texture							% CF
Depth from zero							
Texture							% CF
Depth from zero							
Texture							% CF
Depth from zero							
% Surface Stone/Rock							% CF
Moisture Regime							
Drainage							

Site: _____ Polygon: _____
 Surveyor(s): _____ Date: _____ Time start: _____ finish: _____
 UTMZ: _____ UTMZ: _____ UTMN: _____

Polygon Description

System	Substrate	Topographic Feature	Plant Form	Community
<input type="checkbox"/> Terrestrial	<input type="checkbox"/> Organic	<input type="checkbox"/> Lacustrine	<input type="checkbox"/> Plankton	<input type="checkbox"/> Lake
<input type="checkbox"/> Wetland	<input 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"/> Lichen	<input type="checkbox"/> Swamp
<input type="checkbox"/> Surficial Dep.		<input type="checkbox"/> Roll. Upland	<input type="checkbox"/> Bryophyte	<input type="checkbox"/> Fen
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<input type="checkbox"/> Cultural		<input type="checkbox"/> Alvar		<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 type="checkbox"/> Treed		<input type="checkbox"/> Bluff		<input type="checkbox"/> Forest
				<input type="checkbox"/> Plantation

Stand Description

Layer	HT	CVR
1		
2		
3		
4		

HT Codes: 7 < 0.2m 8 > 0.2-0.5m 9 > 0.5-1m 4 > 1-2m 3 > 2-8m 2 > 6-25m 1 > 25m
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 60% 4 > 60%

Stand Composition: Size Class Analysis: < 10 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

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

Ecotope:	Code:
Vegetation Type:	Code:
Inclusion:	Code:
Complex:	Code:

Community Profile Diagram/Comments

Notes:

Tree Tally by Species

Species	Tally 1	Tally 2	Tally 3	Tally 4	Tally 5	Tally 6	Tally 7	Tally 8	Tally 9	Tally 10	Total
Basal Area (BA)											
Dead											
Total											100

Soils Ontario and ELC Soils Description

PIVAuger #	Soils Description		Summary	
UTM	Zone			
	Easting			
Slope	Northing			
	Position			
Site Metrics	Aspect			
	Percent			
Depth to ...	Slope			
	Length			
Soil Horizon Description	Mottles			
	Gley			
	Water Table			
	Carbonates			
1	Bedrock			
	Depth from zero	% CF	% CF	% CF
2	Texture			
	Depth from zero	% CF	% CF	% CF
3	Texture			
	Depth from zero	% CF	% CF	% CF
4	Texture			
	Depth from zero	% CF	% CF	% CF
Moisture Regime	% Surface Stone/Rock			
	Moisture Regime			
Drainage	Drainage			

VASCULAR PLANT CHECKSHEET

Location: 280 GSH 1802
Observer: JAM TS

Date: Nov 29, 2011
Job Number:

DICOT HERBS							MONOCOT HERBS										
1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
<i>Viburnum trilobum</i>						<i>Erigeron annuus</i>						<i>Plantago lanceolata</i>					
<i>Azara pachyloba</i>						<i>Erigeron philadelphicus</i>						<i>Plantago major</i>					
<i>Chamaenerion</i>						<i>Erigeron strigosus</i>						<i>Plantago rugelii</i>					
<i>Agalinus</i>						<i>Erysimum cheiranthoides</i>						<i>Podophyllum peltatum</i>					
<i>Agrimonia gryposepala</i>						<i>Eupatorium maculatum</i>						<i>Polygonum</i>					
<i>Allaria petiolata</i>						<i>Eupatorium perfoliatum</i>						<i>Polygonum</i>					
<i>Amaranthus retrofractus</i>						<i>Eupatorium rugosum</i>						<i>Polygonum</i>					
<i>Ambrosia artemisiifolia</i>						<i>Euphorbia</i>						<i>Polygonum lapathifolium</i>					
<i>Amphicarpum lychnoides</i>						<i>Euthamia graminifolia</i>						<i>Polygonum persicaria</i>					
<i>Ampelopsis maritima</i>						<i>Fragaria virginiana</i>						<i>Potentilla</i>					
<i>Anemone</i>						<i>Fragaria vesca</i>						<i>Potentilla norvegica</i>					
<i>Anemone canadensis</i>						<i>Galeopsis tetrahit</i>						<i>Potentilla recta</i>					
<i>Anemone virginiana</i>						<i>Gallium</i>						<i>Pranthes alba</i>					
<i>Androsace neglecta</i>						<i>Gallium</i>						<i>Prunella vulgaris</i>					
<i>Apocynum androsaemifolium</i>						<i>Gallium palustre</i>						<i>Pyrola elliptica</i>					
<i>Apocynum cannabinum</i>						<i>Gallium triflorum</i>						<i>Ranunculus</i>					
<i>Aquilegia canadensis</i>						<i>Geranium maculatum</i>						<i>Ranunculus abortivus</i>					
<i>Aralia nudicaulis</i>						<i>Geranium robertianum</i>						<i>Ranunculus acris</i>					
<i>Arcium minus</i>						<i>Geum alepicum</i>						<i>Rubus odoratus</i>					
<i>Arisaema</i>						<i>Geum canadense</i>						<i>Rumex acetosella</i>					
<i>Asterum canadense</i>						<i>Geum</i>						<i>Rumex crispus</i>					
<i>Achillea millefolium</i>						<i>Glecoma hederacea</i>						<i>Rumex</i>					
<i>Achillea syriaca</i>						<i>Hepatica acutiloba</i>						<i>Sanguinaria canadensis</i>					
<i>Aster</i>						<i>Hesperis matronalis</i>						<i>Sanicula marilandica</i>					
<i>Aster cordifolius</i>						<i>Hieracium aurantiacum</i>						<i>Saponaria officinalis</i>					
<i>Aster ericoides</i>						<i>Hieracium cespitosum</i>						<i>Satureja vulgaris</i>					
<i>Aster lanceolatus</i>						<i>Hieracium</i>						<i>Scutellaria galericulata</i>					
<i>Aster laevis</i>						<i>Hydrophyllum virginianum</i>						<i>Silene vulgaris</i>					
<i>Aster macrophyllum</i>						<i>Hypericum perforatum</i>						<i>Sium suave</i>					
<i>Aster novae-angliae</i>						<i>Impatiens capensis</i>						<i>Solanum dulcamara</i>					
<i>Aster puniceus</i>						<i>Inula helenium</i>						<i>Solidago</i>					
<i>Barbarea vulgaris</i>						<i>Lactuca</i>						<i>Solidago speciosa</i>					
<i>Bidens cernua</i>						<i>Lapsana canadensis</i>						<i>Solidago caesia</i>					
<i>Bidens frondosa</i>						<i>Lapsana communis</i>						<i>Solidago canadensis</i>					
<i>Boninaria cylindrica</i>						<i>Leonurus cardiaca</i>						<i>Solidago flexicaulis</i>					
<i>Calluna palustris</i>						<i>Lepidium</i>						<i>Solidago gigantea</i>					
<i>Colymba septemloba</i>						<i>Linaria vulgaris</i>						<i>Solidago nemoralis</i>					
<i>Composita</i>						<i>Lithospermum officinale</i>						<i>Solidago rugosa</i>					
<i>Cordophyllum thalictroides</i>						<i>Lobelia</i>						<i>Sonchus oleraceus</i>					
<i>Cerastium fontanum</i>						<i>Lobelia inflata</i>						<i>Sonchus asper</i>					
<i>Cerastophyllum demersum</i>						<i>Lotus corniculatus</i>						<i>Sisleria</i>					
<i>Chelidonium majus</i>						<i>Lycopus americanus</i>						<i>Tanacetum vulgare</i>					
<i>Chenopodium album</i>						<i>Lycopus</i>						<i>Tanacetum officinale</i>					
<i>Chrysanth. leucanthemum</i>						<i>Lythrum alba</i>						<i>Thalictrum dioicum</i>					
<i>Cichorium intybus</i>						<i>Medicago lupulina</i>						<i>Thalictrum pubescens</i>					
<i>Cicuta</i>						<i>Medicago sativum</i>						<i>Tharalia cordata</i>					
<i>Cirsium leucostoma</i>						<i>Melilotus alba</i>						<i>Thlaspi perfoliatum</i>					
<i>Cirsium arvense</i>						<i>Mertensia arvensis</i>						<i>Trifolium</i>					
<i>Cirsium vulgare</i>						<i>Mimulus stipens</i>						<i>Trifolium pratense</i>					
<i>Clematis virginiana</i>						<i>Mimulus stipens</i>						<i>Trifolium repens</i>					
<i>Chloris borealis</i>						<i>Miscanthus giganteus</i>						<i>Tussilago farfara</i>					
<i>Coryza canadensis</i>						<i>Miscanthus giganteus</i>						<i>Urtica dioica</i>					
<i>Coronilla varia</i>						<i>Mosses</i>						<i>Urtica dioica</i>					
<i>Cynanchum latifolium</i>						<i>Nasturtium officinale</i>						<i>Verbascum thapsus</i>					
<i>Cynoglossum officinale</i>						<i>Nepeta cataria</i>						<i>Verbena hastata</i>					
<i>Daucus carota</i>						<i>Nepeta hirtellifolia</i>						<i>Verbena urticifolia</i>					
<i>Democodium canadense</i>						<i>Nyctaginia canadensis</i>						<i>Veronica</i>					
<i>Diarrhiza serotina</i>						<i>Oenanthe</i>						<i>Veronica officinalis</i>					
<i>Dianthus barbatus</i>						<i>Oenanthe</i>						<i>Vicia cracca</i>					
<i>Echinopsyla lobata</i>						<i>Oenanthe</i>						<i>Vicia tetrasperma</i>					
<i>Echium vulgare</i>						<i>Polygonum lapathifolium</i>						<i>Vicia</i>					
<i>Epilobium</i>						<i>Polygonum heterophyllum</i>						<i>Vicia</i>					
<i>Epilobium ciliatum</i>												<i>Vicia pubescens</i>					
<i>Epilobium montanum</i>												<i>Vicia serotina</i>					
<i>Epilobium parviflorum</i>																	

SITE LOCATIONS

- 1: SWD2-1
- 2: MAM2-10
- 3: CUM2-2
- 4: _____
- 5: _____
- 6: _____

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 pubescens						Carex arcata					
Pinus strobus						Salix alba						Carex aurea					
Pinus sylvestris						Salix amygdaloides						Carex bebbii					
Thuja occidentalis						Salix bebbiana						Carex blanda					
Thuja canadensis						+ Salix discolor						Carex gracillima					
						Salix eriocephala						Carex granularis					
						Salix excisa						Carex hystericina					
						Salix lucida						Carex pennsylvanica					
						Salix petiolaris						Carex radiata					
						+ Salix purpurea						Carex retrosa					
						Salix x rubens						Carex stipula					
TREES and SHRUBS						+ Salix						Carex stricta					
Acer negundo						Sambucus canadensis						Carex vulpinoidea					
Acer rubrum						Sambucus racemosa						Carex sp.	✓	✓			
Acer saccharinum						Sorbus aucuparia						Carex					
Acer saccharum						Spines alba						Carex					
Acer spicatum						Syringa vulgaris						Carex					
Alnus rugosa						+ Tilia americana	✓					Carex					
Amelanchier						Ulmus americana		✓				Carex					
Berberis thunbergii						Ulmus						Carex					
Betula allegheniensis						Vaccinium						Carex					
Betula papyrifera	✓					Viburnum lentago						Carex					
Carpinus caroliniana						Viburnum opulus						Cyperus					
Carya cordiformis						Viburnum						Cyperus					
Celastrus scandens						Vitis riparia						Dactylis glomerata					
Cornus alternifolia												Danthonia spicata					
Cornus amomum												Echinochloa crus-galli					
Cornus rugosa												Eleocharis erythropoda					
Cornus stolonifera												Eleocharis					
Corylus cornuta												Elymus virginicus					
Crataegus monogyne												Elymus					
Crataegus punctata												Festuca arundinacea					
Crataegus sp.												Glyceria stricta					
Crataegus												Glyceria					
Diervilla lonicera						FERNS						Juncus dudleyi					
Fagus grandifolia	✓					Adiantum pedatum						Juncus effusus					
Fraxinus americana						Athyrium filix-femina						Juncus tenuis					
Fraxinus nigra						Botrychium multifidum						Juncus					
Fraxinus pennsylvanica	✓					Botrychium virginianum						Juncus					
Ilex verticillata						Cystopteris bulbifera						Leersia oryzoides					
Juglans cinerea						Dryopteris caroliniana						Muhlenbergia					
Juglans nigra						Dryopteris cristata						Oryzopsis asperifolia					
Leonora morrowi						Dryopteris marginalis						Panicum					
Leonora styrice						Dryopteris						Panicum					
Leonora						Equisetum arvense						Panicum					
Morus pumila						Equisetum hyemale						Panicum					
Ostrya virginiana	✓					Equisetum variegatum						Panicum					
Panthenocissus litoralis						Equisetum						Panicum					
Populus balsamifera						Gymnocarpium dryopteris						Panicum					
Populus grandidentata						Lycopodium dilatatum						Panicum					
Populus tremuloides						Lycopodium obscurum						Panicum					
Populus delt	✓					Lycopodium						Panicum					
Prunus pennsylvanica						Lycopodium						Panicum					
Prunus serotina						Lycopodium						Panicum					
Prunus virginiana						Lycopodium						Panicum					
Prunus						Lycopodium						Panicum					
Quercus macrocarpa						Marsilea striatoptera						Panicum					
Quercus rubra						Oenoclea sensibilis						Panicum					
Quercus						Onoclea cinnamomina						Panicum					
Rhamnus cathartica						Osmunda regalis						Panicum					
Rhus glabra						Polytaichia acrostichoides						Panicum					
Rhus typhina						Pteridium aquilinum						Panicum					
Ribes americana						Thelypteris palustris						Panicum					
Ribes cynosbati												Panicum					
Ribes x rubrum												Panicum					
Robinia pseudo-acacia												Panicum					
Acer x Fre	✓											Panicum					
Lin Ben	✓											Panicum					
Haman	✓											Panicum					

ELC WILDLIFE	SITE: 280 GSH 1802	
	POLYGON:	
	DATE: Nov 29, 2011	
	SURVEYORS: JDM, TS	
	START TIME:	END TIME:

TEMP (°C): 3°C	CLOUD (10th): overcast	WIND: 30km	PRECIPITATION: Rain
CONDITIONS: Cold, windy, Rain			

POTENTIAL WILDLIFE HABITAT:

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

SPECIES LIST:

TY	SP. CODE	EV	NOTES	#	TY	SP. CODE	EV	NOTES	#
M	Deer	SE	Browse						

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)



- Legend**
- Property Boundary
 - GE Turbine
 - ELC Completed 2011
 - Natural Feature and ID
 - ELC Polygon Boundary
 - Disturbance Areas
 - Area of Disturbance, plus 10m
 - ANSI
 - Evaluated Wetlands - PSW
 - ABCA Watercourse

0.5 ha

Basemap from Ontario Ministry of Natural Resources
 Cartography 2010

UTM Zone 17N, NAD 83
 12,500

0 25 50 100
 Meters

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ELC
 Goshen Amphibian Survey

282_GSH2238

April 2012
 Project 60155032

AECOM

Figure 1

ELC Community Description and Classification

Map #: 282-GSH 9238 Polygon: 1

Surveyor(s): S.R.K. Date: Apr 12, 2012 Time start: 10:30 AM finish: 4:11 PM

UTMZ: UTMZ: UTMZ: UTMZ:

Polygon Description

System	Substrate	Topographic Features	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 History <input type="checkbox"/> Natural <input type="checkbox"/> Cultural Cover <input type="checkbox"/> Open <input type="checkbox"/> Shrub <input checked="" type="checkbox"/> Treed	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <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 checked="" type="checkbox"/> Tableland <input type="checkbox"/> Cliff, Upland <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	4	2	Acc. succ 77 for ambr > Ulmaras =
2	2	3	Acc. succ 77 Ulmaras
3	4	3	White 2 Ulmaras paving 2 abundant V. lichen
4	7	4	Em. ambr > Trig. lichen

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 - 60% 4 > 60%

Stand Composition: Size Class Analysis:

Standing Snags:	A < 10	A 10-24	A 25-50	A > 50
Deadfall / Logs:	0 < 10	0 10-24	R 25-50	N 25-50
	0 < 10	0 10-24	N 25-50	N > 50

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

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

Ecoclim: Fresh. moist sugar maple deciduous Code: FOD 6

Vegetation Type: Fresh. moist sugar maple - white Ash. Code: FOD 6-4

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
Total Basal Area (BA)							100
Dead							

Soils Ontario and ELC Soils Description

Site Metrics	PIV/Auger #	Soils Ontario and ELC Soils Description		Summary
		UTM	Zone	
Easting	0445673			Moisture Regime
Northing	4796466			
Position	Table			Drainage
Aspect	0			
Percent	0			Effective Texture (indicate below)
Slope	N/A			
Length	25t			% CF
Mottles	N/A			
Gley	N/A			% CF
Water Table	N/A			
Carbonates	N/A			% CF
Bedrock	N/A			
Depth from zero	0-25			% CF
Texture	silt loam			
Depth from zero	25t			% CF
Texture	silt/sand.			
Depth from zero				% CF
Texture				
Depth from zero				% CF
Texture				
Depth from zero				% CF
Texture				
% Surface Stone/Rock				% CF
Moisture Regime	moist			
Drainage	I/p			

ELC
Community Description and Classification

Map #: 282-GSH 2238 Polygon: 2
 Surveyor(s): SG, RA Date: Apr 25, 2012 Time start: 10:00 am finish: 1:32 pm
 UTMZ: UTMZ: UTMN:

Polygon Description

System	Substrate	Topographic Feature	Plant Form	Community
<input type="checkbox"/> Terrestrial <input checked="" type="checkbox"/> Wetland <input type="checkbox"/> Aquatic <input type="checkbox"/> 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 Min. <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 checked="" type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input type="checkbox"/> Tableland <input 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 checked="" 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 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	1	4	1. Spruce > Acer tree
2	2	2	2. Spruce
3	3	2	3. Acer tree > Ulm minor
4	4	2	4. Oak plant

HT Codes: 7 < 0.2m 8 > 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 - 60% 4 > 60%

Stand Composition: Size Class Analysis:

Standing Snags:	< 10	10-24	25-50	> 50
Deadfall / Logs:	0	0	0	0

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

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

Ecosite: Ash mineral deciduous swamp Code: SWD 2
Vegetation Type: Green Ash mineral deciduous swamp Code: SWD 2-2
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.	Prism Factor
Total					100		2
Basal Area (BA)							
Dead							

Soils Ontario and ELC Soils Description

Site Metrics	PI/Auger #	Zone	Summary
UTM	17X	Easting 0445432	Moisture Regime
		Northing 4796331	
		Position Table	
Slope		Aspect ---	Drainage
		Percent ---	
		Slope ---	
Depth to...		Mottles 0 cm	Effective Texture (indicate below)
		Gley 0 cm	
		Water Table 0 cm	
		Carbonates ---	% CF
		Bedrock ---	
		Depth from zero 0+	
		Texture Silt loam	% CF
		Depth from zero	
		Texture	
		Depth from zero	% CF
		Texture	
		Depth from zero	
		Texture	% CF
		Depth from zero	
		Texture	
		% Surface Stone/Rock	% CF
		Moisture Regime	
		Drainage	

ELC Community Description and Classification

Map #: 082 GSH 2238 Polygon: 3

Surveyor(s): Sky RA Date: Apr 15, 2012 Time start: 10:00 am finish: 1:00 pm

UTMZ: _____ UTMN: _____

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 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 checked="" type="checkbox"/> Graminoid	<input type="checkbox"/> Stream
	<input type="checkbox"/> Basic Bedrk	<input type="checkbox"/> Valley Slope	<input type="checkbox"/> Forb	<input type="checkbox"/> Marsh
<input type="checkbox"/> Open Water	<input type="checkbox"/> Carb. Bedrk	<input checked="" type="checkbox"/> Tableland	<input type="checkbox"/> Lichen	<input type="checkbox"/> Swamp
<input checked="" type="checkbox"/> Shallow Water		<input type="checkbox"/> Roll. Upland	<input type="checkbox"/> Bryophyte	<input type="checkbox"/> Fen
<input checked="" type="checkbox"/> Surficial Dep.		<input type="checkbox"/> Cliff	<input type="checkbox"/> Deciduous	<input type="checkbox"/> Bog
<input type="checkbox"/> Bedrock		<input type="checkbox"/> Talus	<input type="checkbox"/> Coniferous	<input type="checkbox"/> Barren
<input type="checkbox"/> Volcanic		<input type="checkbox"/> Crevice/Cave	<input type="checkbox"/> Mixed	<input checked="" type="checkbox"/> Meadow
<input type="checkbox"/> Natural		<input type="checkbox"/> Alvar		<input type="checkbox"/> Prairie
<input checked="" type="checkbox"/> Cultural		<input type="checkbox"/> Rockland		<input type="checkbox"/> Thicket
		<input type="checkbox"/> Beach / Bar		<input type="checkbox"/> Savannah
		<input type="checkbox"/> Sand Dune		<input type="checkbox"/> Woodland
		<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	4	1	Pop trem
2	4	1	
3	4	1	Rubus
4	6	4	Prunus

HT Codes: 7 < 0.2m 6 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-8m 2 > 6-25m 1 > 25m
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 60% 4 > 60%

Stand Composition: Size Class Analysis:

Standing Stock: Deadfall / Logs:	< 10	10-24	25-50	> 50
R	W	W	W	W
N	W	W	W	W
W	W	W	W	W

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

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

Ecosite: Wetland Cultural meadow Code: CUM 1

Vegetation Type: Dry-moist cultural meadow type Code: CUM 1-1

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.
Total					100	
Basal Area (BA)						
Dead						

Soils Ontario and ELC Soils Description

Pit/Auger #	Zone	Easting	Northing	Position	Aspect	Percent	Slope	Length	Mottles	Gley	Water Table	Carbonates	Bedrock	Depth from zero	Texture	Depth from zero	Texture	Depth from zero	Texture	Depth from zero	Texture	% Surface Stone/Rock	Moisture Regime	Drainage	Summary
1	17F	0445614	4796074	table	South	1%	10m																		
2																									
3																									
4																									

Handwritten notes: day lawn, cultural soil (fill from stream), very dry

Plant Species List
2012

Trees & Shrubs						Tree & Shrubs						Graminoids					
1	2	3	4	5		1	2	3	4	5		1	2	3	4	5	
Conifers						Deciduous						Grasses					
Balsam Fir (<i>Abies balsamea</i>)						White Oak (<i>Quercus alba</i>)						Giant Redtop (<i>Agrostis gigantea</i>)					
Common Juniper (<i>Juniperus communis</i>)						Bur Oak (<i>Quercus macrocarpa</i>)						Redtop (<i>Agrostis stolonifera</i>)					
Eastern Red Cedar (<i>Juniperus virginiana</i>)						Red Oak (<i>Quercus rubra</i>)						Awnless Brome (<i>Bromus inermis</i>)					
Tamarack (<i>Larix laricina</i>)						Alder Buckthorn (<i>Rhamnus alnifolia</i>)						Bromus					
Norway Spruce (<i>Picea abies</i>)						Common Buckthorn (<i>Rhamnus cathartica</i>)						Blue-joint Grass (<i>Calamagrostis canadensis</i>)					
White Spruce (<i>Picea glauca</i>)						Smooth Sumac (<i>Rhus glabra</i>)						Orchard Grass (<i>Dactylis glomerata</i>)					
Black Spruce (<i>Picea mariana</i>)						Staghorn Sumac (<i>Rhus hirta</i>)						Poverty Oat Grass (<i>Danthonia spicata</i>)					
Jack Pine (<i>Pinus banksiana</i>)						Wild Black Currant (<i>Ribes americanum</i>)						Quack Grass (<i>Elymus repens</i>)					
Red Pine (<i>Pinus resinosa</i>)						Prickly Gooseberry (<i>Ribes cynosbati</i>)						Virginia Wild Rye (<i>Elymus virginicus</i>)					
Eastern White Pine (<i>Pinus strobus</i>)						Swamp Black Currant (<i>Ribes lacustre</i>)						Elymus					
Scotch Pine (<i>Pinus sylvestris</i>)						Red Currant (<i>Ribes rubrum</i>)						Fowl Manna Grass (<i>Glyceria striata</i>)					
Canada Yew (<i>Taxus canadensis</i>)						Roses						Glyceria					
Eastern White Cedar (<i>Thuja occidentalis</i>)						Black Locust (<i>Robinia pseudo-acacia</i>)						Rice Cut Grass (<i>Leersia oryzoides</i>)					
Eastern Hemlock (<i>Tsuga canadensis</i>)						Prickly Rose (<i>Rosa acicularis</i>)						Tall Fescue (<i>Lolium arundinaceum</i>)					
						Smooth Rose (<i>Rosa blanda</i>)						Muhlenbergia					
						Multiflora Rose (<i>Rosa multiflora</i>)						Witch-grass (<i>Panicum capillare</i>)					
						Rosa						Panicum					
Deciduous						Com. Blackberry (<i>Rubus allegheniensis</i>)						Reed Canary Grass (<i>Phalaris arundinacea</i>)					
Manitoba Maple (<i>Acer negundo</i>)						Wild Red Raspberry (<i>Rubus idaeus</i>)						Timothy (<i>Phleum pratense</i>)					
Black Maple (<i>Acer nigrum</i>)						Black Raspberry (<i>Rubus occidentalis</i>)						Common Reed (<i>Phragmites australis</i>)					
Norway Maple (<i>Acer platanoides</i>)						Purple-fl. Raspberry (<i>Rubus odoratus</i>)						Canada Blue Grass (<i>Poa compressa</i>)					
Red Maple (<i>Acer rubrum</i>)						Dwarf Raspberry (<i>Rubus pubescens</i>)						Fowl Meadow Grass (<i>Poa palustris</i>)					
Silver Maple (<i>Acer saccharinum</i>)						RUBUS						Kentucky Bluegrass (<i>Poa pratensis</i>)					
Freeman's Maple (<i>Acer X freemanii</i>)						Peach-leaved Willow (<i>Salix amygdaloides</i>)						Yellow Foxtail (<i>Setaria pumila</i>)					
Sugar Maple (<i>Acer saccharum</i>)						Bebb's Willow (<i>Salix bebbiana</i>)						Green Foxtail (<i>Setaria viridis</i>)					
Mountain Maple (<i>Acer spicatum</i>)						Pussy Willow (<i>Salix discolor</i>)											
Speckled Alder (<i>Alnus incana</i>)						Missouri Willow (<i>Salix eriocephala</i>)											
Downy Serviceberry (<i>Amelanchier arborea</i>)						Sandbar Willow (<i>Salix exigua</i>)											
Serviceberry (<i>Amelanchier sanguinea</i>)						Shining Willow (<i>Salix lucida</i>)											
Yellow Birch (<i>Betula allegheniensis</i>)						Black Willow (<i>Salix nigra</i>)											
White Birch (<i>Betula papyrifera</i>)						Slender Willow (<i>Salix petiolaris</i>)											
European Birch (<i>Betula pendula</i>)						SALIX											
Blue Beech (<i>Carpinus caroliniana</i>)						Hybrid Crack Willow (<i>Salix X rubens</i>)											
Bitternut hickory (<i>Carya cordiformis</i>)						Black-berried Elder (<i>Sambucus nigra</i>)											
Shagbark Hickory (<i>Carya ovata</i>)						Red-berried Elder (<i>Sambucus racemosa</i>)											
Climbing Bittersweet (<i>Celastrus scandens</i>)						Buffaloberry (<i>Shepherdia canadensis</i>)											
Common Hackberry (<i>Celtis occidentalis</i>)						Eur. Mountain Ash (<i>Sorbus aucuparia</i>)											
Buttonbush (<i>Cephalanthus occidentalis</i>)						Narrow Meadow-sweet (<i>Spiraea alba</i>)											
Alt.-leaved Dogwood (<i>Cornus alternifolia</i>)						Common Lilac (<i>Syringa vulgaris</i>)											
Silky Dogwood (<i>Cornus amomum</i>)						Poison-ivy (<i>Toxicodendron rydbergii</i>)											
Bunchberry (<i>Cornus canadensis</i>)						Climbing Poison-ivy (<i>Toxicodendron radicans</i>)											
Gray dogwood (<i>Cornus racemosa</i>)						White Elm (<i>Ulmus americana</i>)											
Round-leaved Dogwood (<i>Cornus rugosa</i>)						Siberian Elm (<i>Ulmus pumila</i>)											
Red-osier Dogwood (<i>Cornus sericea</i>)						Slippery Elm (<i>Ulmus rubra</i>)											
American Hazel (<i>Corylus americana</i>)						Low Blueberry (<i>Vaccinium angustifolium</i>)											
Beaked Hazel (<i>Corylus cornuta</i>)						Maple-leaf Viburnum (<i>Viburnum acerifolium</i>)											
Cockspur Thorn (<i>Crataegus crus-galli</i>)						Hobblebush (<i>Viburnum lantanoides</i>)											
English Hawthorn (<i>Crataegus monogyna</i>)						Nannyberry (<i>Viburnum lentago</i>)											
Large-fruited Thorn (<i>Crataegus punctata</i>)						Guelder-Rose (<i>Viburnum opulus</i>)											
Crataegus sp						Downy Arrow-wood (<i>Vib. rafinesquianum</i>)											
Crataegus						Riverbank Grape (<i>Vitis riparia</i>)											
Bush Honeysuckle (<i>Diervilla lonicera</i>)						Am. Prickly-ash (<i>Zanthoxylum americanum</i>)											
Russian Olive (<i>Elaeagnus angustifolia</i>)						TILIAER											
Autumn Olive (<i>Elaeagnus umbellata</i>)						Spotted Alder											
Run. Strawberry-bush (<i>Euonymus obovata</i>)						Vine sp											
American Beech (<i>Fagus grandifolia</i>)						Malus pumila											
Glossy Buckthorn (<i>Frangula alnus</i>)						Ferns & Allies											
White Ash (<i>Fraxinus americana</i>)						Lady Fern (<i>Athyrium filix-femina</i>)											
Black Ash (<i>Fraxinus nigra</i>)						Rattlesnake Fern (<i>Botrychium virginianum</i>)											
Green Ash (<i>Fraxinus pennsylvanica</i>)						Bulbet Bladder Fern (<i>Cystopteris bulbifera</i>)											
Witch-hazel (<i>Hamamelis virginiana</i>)						Spin. Wood Fern (<i>Dryopteris carthusiana</i>)											
Winterberry (<i>Ilex verticillata</i>)						Crested Wood Fern (<i>Dryopteris cristata</i>)											
Butternut (<i>Juglans cinerea</i>)						Marginal Wood Fern (<i>Dryopteris marginalis</i>)											
Black Walnut (<i>Juglans nigra</i>)						Dryopteris <i>intermedia</i>											
Common Privet (<i>Ligustrum vulgare</i>)						Ostrich Fern (<i>Matteuccia struthiopteris</i>)											
Spicebush (<i>Lindera benzoin</i>)						Sensitive Fern (<i>Onoclea sensibilis</i>)											
Fly Honeysuckle (<i>Lonicera canadensis</i>)						Cinnamon Fern (<i>Osmunda cinnamomea</i>)											
Glaucous Honeysuckle (<i>Lonicera dioica</i>)						Interrupted Fern (<i>Osmunda claytoniana</i>)											
Morrow's Honeysuckle (<i>Lonicera morrowii</i>)						Royal Fern (<i>Osmunda regalis</i>)											
Tartarian Honeysuckle (<i>Lonicera tatarica</i>)						Christmas Fern (<i>Polystichum acrostichoides</i>)											
Common Apple (<i>Malus pumila</i>)						Eastern Bracken-fern (<i>Pteridium aquilinum</i>)											
White Mulberry (<i>Morus alba</i>)						Marsh Fern (<i>Thelypteris palustris</i>)											
Sweet Gale (<i>Myrica gale</i>)												Other Graminoids					
Ironwood (<i>Ostrya virginiana</i>)												Broad Bur-reed (<i>Sparganium eurycarpum</i>)					
Thicket-creeper (<i>Parthenocissus inserta</i>)												Narrow-leaved Cattail (<i>Typha angustifolia</i>)					
Ninebark (<i>Physocarpus opulifolius</i>)												Broad-leaved Cattail (<i>Typha latifolia</i>)					
Balsam Poplar (<i>Populus balsamifera</i>)												Broad-leaved Cattail (<i>Typha X glauca</i>)					
Eastern Cottonwood (<i>Populus deltoides</i>)												Articulated Rush (<i>Juncus articulatus</i>)					
Large-tooth Aspen (<i>Populus grandidentata</i>)												Soft Rush (<i>Juncus effusus</i>)					
Trembling Aspen (<i>Populus tremuloides</i>)												Path Rush (<i>Juncus tenuis</i>)					
Sweet Cherry (<i>Prunus avium</i>)												Juncus					
Pin Cherry (<i>Prunus pensylvanica</i>)												Juncus					
Black Cherry (<i>Prunus serotina</i>)																	
Choke Cherry (<i>Prunus virginiana</i>)																	
Prunus																	

D - Dominant: represented by large numbers, generally forming >10% ground cover or >25% vegetation cover in any one stratum
 F - Fairly common (Abundant in ELC) generally widespread represented by fairly large numbers of individual clumps; usually forming >10% ground cover
 U - Uncommon (Occasional in ELC) present as widespread scattered individuals or represented by one or more clumps of many individuals (most species will fall into this category)
 R - Rare: represented in the polygon by less than about five individuals or small clumps

Map Number:	282-65H2238	1	FQD6-4	4
Date:	Apr 12, 2012	2	SWD2-2	8
Surveyors:	RA, SG	3	CW1-1	

Significant Wildlife Habitat Form

AECOM

Study Area:	BLW JER <u>GSH</u>	Map #:	<u>282-GSH 2238</u>
Date:	<u>April 25, 2012</u>	Time Started:	<u>10:00 am</u>
Field Staff:	<u>SG, RA</u>	Time Finished:	<u>1:00 pm</u>
Weather Conditions:	<u>Sunny, 10°C.</u>		

Colonial Nesting Tree/Shrub Birds, Osprey Breeding/Feeding, Bald Eagle Breeding/Nesting Habitat
(FET1, FOC, FOM, FOD, SWC, SWM, SWD)

Nest bowls present: No Yes (if yes, photograph and complete the following)

UTMs: 0445658, 4796449 Number of nests: 1

Description of nests (location, e.g. in tree/on built structure; material; evidence of recent use; birds present):
photos 16, 17 located @ top of large tree by open.

Description of habitat (note riparian areas if present, evidence of disturbance): sugar maple forest, next to field (30m)

Waterfowls Stopover/Nesting, Amphibian Breeding, Turtle Nesting/Over-wintering, Marsh Breeding Birds
(CUM1, CUT1, MAM, MAS, SAS1, SAM1, SAF1, SWD, SWT1, SWT2) (FOC, FOM, FOD, SWC, SWM, SWD, BOO1, FEO1)

Standing water present: No Yes (if yes, photograph and complete the following)

UTMs: _____ Area of standing water delineated on field map

Water depth (m): _____ % open water: _____ % emergent vegetation: _____

Description of standing water (permanent pool, evidence of annual spring flooding, etc): _____

Area and soil/substrate of shoreline habitat: _____

Type and abundance of cover in open water habitat: _____

Type and abundance of cover in surrounding habitat: _____

Evidence of disturbance (e.g. cattle grazing): _____

Evidence of use by waterfowl, amphibians, turtles (e.g. broken eggs), marsh breeding birds: _____

Complete Vernal Pool Habitat Description Form

Snake Hibernacula

Fissured rock/foundation or rock/debris pile present: No Yes (if yes, photograph and complete the following)

UTMs: _____ Likelihood to extend below frost line: _____

% canopy cover: _____ % slope: _____ Distance to open canopy (m): _____

Description of fissure or stone pile (composition/material, dimensions, etc): _____

Description of surrounding habitat (type & abundance of cover, evidence of disturbance, etc): _____

Seeps and Springs (FOC, FOM, FOD, SWC, SWM, SWD)

Evidence of seep or spring: No Yes (if yes, photograph and complete the following)

UTMs: _____ Description (indicator species, etc): _____

NHA Site Investigation - Significant Wildlife Habitat Form

AECOM

Colonial Nesting Bird Breeding Habitat (Bank and Cliff Swallows)
 (CUM1, CUT1, CUS, BLO1, BLS1, BLT1, CLO1, CLS1, CLT1)

Eroding bank, sandy hill, pits, steep slope or rock face present:
 No Yes (if yes, photograph and complete the following)

UTMs: _____ Location (e.g. aggregate pit, bridge): _____

Evidence of use by bank or cliff swallows (provide number of nests): _____

Colonial Nesting Ground Breeding Birds, Shorebird Migratory Stopover Areas
 (BBO1, BBO2, BBS1, BBS2, BBT1, BBT2, SDO1, SDS2, SDT1, MAM1, MAM2, MAM3, MAM4, MAM5)

Shoreline of lake, large river or large wetland present:
 No Yes (if yes, photograph and complete the following)

UTMs: _____ Rocky island or peninsula present: _____
 Mudflat present: _____ Evidence of disturbance (e.g. cattle grazing): _____

Description of habitat (size of rocky outcrop/mudflat, substrate/soil type, type and abundance of cover):

Raptor Winter Feeding and Roosting, Open Country or Shrub/Early Successional Bird Breeding Habitat
 CUT1, CUS1, >30ha, CUM1 >30ha, FOC, FOD, FOM with a CUM, CUT, CUS, CUW > 20ha, or a CUM, CUS, CUT, CUW > 15ha

Large meadow, old field or generally open habitat (e.g. CUM, CUS, CUT, CUS, CUW) present:
 Large open habitat present: No Yes (if yes, photograph and complete the following)

UTMs: _____ Evidence of disturbance (e.g. cattle grazing): _____

Description of habitat (abundance of food plants for rodents, abundance of perches, height of vegetation):

Old-growth or Mature Forests, Interior Forest Breeding Birds
 (FOD, FOC, FOM, SWC, SWM, SWD. Mature forest (>60 years) present)

Mature forest present: No Yes (if yes, photograph and complete the following)

UTMs: _____ Age of oldest trees: _____

Evidence of disturbance (e.g. selective cutting): _____

Description of habitat (structural complexity, abundance of snags and/or downed woody debris, etc):

Photo #	Location or Subject	Photo #	Location or Subject

Species Conservation Concern Habitat and Incidental Wildlife - Goshen



Map No: 282-GS12238 Field Staff: BA, SG Time Started: 10:30 am
 Date (yyyy-mm-dd): 2012-04-25 Time Finished: 1:00 pm

Observed Species List

Species Code	UTM	EV	Notes	Species Code	UTM	EV	Notes
Song Sparrow		VO					
White-collared Woodpecker		OB					
White-collared Woodpecker		VO					
White-collared Woodpecker		OB					
Downy Woodpecker		VO					
Red-shouldered Hawk		OB					
Yellow-bellied Sapsucker		VO					
i. American Crow		VO					
Ruby-crowned Kinglet		VO					
Geothlypis trichas		OB					
Bumblebee		OB					
White-throated Sparrow		VO					
American Robin		VO					
opidae		VO					

Notes: Evidence Codes (EV) Breeding Bird (Possible) SH=Suitable Habitat, SM=Singing Male;
 Breeding Bird (Probable) T-Territory, D=Display, P=Pair, N=Nest Building, V= Visiting Nest, A=Anxiety Behavior;
 Breeding Bird (Confirmed) DD=Distraction, NU=Used Nest, FY=Fledged Young, NE=Eggs, NY=Young, FS=Foos/faecal 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)
 NO=Not observed

ELC	Species	Habitat Description	Habitat Present (Y/N; UTM; description of habitat if present)
FOD7	American Gromwell (Lithospermum latifolium) - S3 Bloom Time - Spring	Shaded river banks, wooded floodplains. River floodplains, woods and edges of woods.	Y (N) UTM: NO
ALO, TPO	Muehlenberg's astomum moss (Astomum muehlenbergianum) - S2 Bloom Time - Spring	Thin soil over level outcrop ledges and on soil under grasses in open prairie	Y (N) UTM: NO
FOM1, FOM2, CUP3	Autumn Coral-root (Corallorhiza odontorhiza) - S2 Bloom Time - summer to fall	Oak-pine woods or occasionally in open, red pine or white pine plantations. Dry, sandy woods.	Y (N) UTM: NO
FOC, FOM, FOD	Burning Bush (Euonymus atropurpureus) - S3 Bloom Time - April - June	Species occurs in dry to moist deciduous thickets and woods	Y (N) UTM: NO
SWC1, SWC3, SWC4, SWM1, SWM2, SWM4, SWM5, SWM6	Chinese Hemlock Parsley (Cotiloselinum chinense) - S2 Bloom Time - summer to fall	Swampy places with deciduous trees, white cedars, tamarack; springy river banks, wet borders of streams and rivers. Also found among calcareous seepage slopes	Y (N) UTM: NO
SWC, SWM, SWD, SWT, MAM, MAS	Crowned Beggarticks (Bidens trichosperma) - S2 Bloom Time - late summer	Found in openings in swamps, marshes, along shores & wet fields within the Carolinian zone and southeastern Georgian bay. Bogs, fens, tamarack swamps	Y (N) UTM: NO
ALT1, FOD7	Eastern Green-violet (Hybanthus concolor) - S2 Bloom Time - mid March to August	Occurs in rich, wet-mesic floodplain forests as well as mesic forests over limestone. Includes floodplains and river banks.	Y (N) UTM: NO
TPS, TPW, FOM1, FOM2	Fogg's Goosefoot (Chenopodium foggii) - S2	Species occurs in sandy areas on limestone under oak or pine-oak forests	Y (N) UTM: NO
TPO2, TPS2, TPW2	Giant Ironweed (Vernonia gigantea) - S1? Bloom Time -	Found in mesic prairies, thickets, moist woods, roadsides and grassy meadows	Y (N) UTM: NO

Species of Conservation Concern Habitat and Incidental Wildlife – Goshen

ELC	Species	Habitat Description	Habitat Present (Y/N); UTM; description of habitat if present
CUM1, MAM, FOD6, FOD7, FOD9	June – August Green Dragon (<i>Arisaema dracontium</i>) - S1/S3 <u>Bloom Time – May and June</u>	Species found in damp deciduous forest and along river streams. Particularly Maple forest and forest dominated by Red Ash and White Elm.	Y N UTM: NO
TPO1, TPS1, TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	June-August Hairy Bedstraw (<i>Galium pilosum</i>) - S3 <u>Bloom Time – June-August</u>	Occurs in dry, sandy woods and thickets; occasionally in dry sandy fields	Y N UTM: NO
FEOT1, FES1, FET1, SWC, SWM, SWD, SWT, TPO, TPS, TPW	Hairy Valerian (<i>Valeriana edulis</i>) - S1 <u>Bloom Time – June to August</u>	Inhabits swampy river flats and meadows, wet prairies, and wooded, rocky riverbanks and fens.	Y N UTM: NO
FOD6, FOD7, SWM, SWD	Hairy Wood Mint (<i>Blephilia hirsuta</i>) - S1 <u>Bloom Time – Summer</u>	Woodlands, often rocky, especially rivers. Rich woods, swamp forests, floodplains.	Y N UTM: NO
FOD6, FOD7, FOD8, FOD9	Harbinger-of-spring (<i>Erigenia bulbosa</i>) - S3 <u>Bloom Time – early to late April</u>	Occurs in rich, moist deciduous woods, especially on floodplains.	Y N UTM: NO
SAS1, SAM1, SAF1	Hill's Pond Weed (<i>Potamogeton hillii</i>) - S1/S2 <u>Bloom Time – summer</u>	Aquatic plant found in highly alkaline waters of ditches, ponds, beaver ponds, and slow-moving cold waters.	Y N UTM: NO
FOM6, FOM7, FOM8	Large Round-leaved Orchid (<i>Platanthera macrophylla</i>) - S2 <u>Bloom Time – June to August</u>	Species inhabits moist mixed woods. Found in fairly mature, upland sugar maple-beech-eastern hemlock woodlands.	Y N UTM: NO
MAM2, MAM3, MAS2, MAS3, SWD	Lizard's Tail (<i>Saururus cernuus</i>) - S3 <u>Bloom Time – June – September</u>	Species inhabits shores and streambanks along shallow water. As well as swamps, floodplains, shallow water and mudflats at the borders of streams and ponds.	Y N UTM: NO
FOD6, FOD7, FOD9	Pawpaw (<i>Asimina triloba</i>) - S3 <u>Bloom Time – March-May</u>	Occurs in moist deciduous woods and stream banks.	Y N UTM: NO
FOM8, FOD6, FOD7, FOD9, CUM1	Pilose Evening Primrose (<i>Oenothera pilosella</i>) - S2 <u>Bloom Time – Late Spring – Early Summer</u>	Moist edges of woods and open, disturbed ground.	Y N UTM: NO
TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	Prostate Tick-trefoil (<i>Desmodium rotundifolium</i>) - S2 <u>Bloom Time – July-September</u>	Dry, sandy or rocky woods	Y N UTM: NO
FOD7, SWD	Pumpkin Ash (<i>Fraxinus profunda</i>) - S2? <u>Bloom Time – March - June</u>	Swamps and floodplains	Y N UTM: NO
CUW1, ALO, FET1, SWC	Ram's-head Lady's-slipper (<i>Cypripedium arietinum</i>) - S3 <u>Bloom Time – mid May to mid June</u>	Found in cedar woodlands, limestone plains and wooded fens, moist coniferous swamps, dry-sandy woods, and limestone barren.	Y N UTM: NO
FOD1, FOD2, FOD3, FOD4, FOD5, FOC1, FOM1, FOM5	Rattlesnake Hawkweed (<i>Hieracium venosum</i>) - S2 <u>Bloom Time – April – September</u>	Species inhabits open, dry sandy woods. Jack pine, oak, and aspen woodlands.	Y N UTM: NO
FOD6, FOD7, FOD9	Round-leaved Groundsel (<i>Packera obovata</i>) - S3 <u>Bloom Time – May - June</u>	Found in moist woods	Y N UTM: NO
CUM1, CUT1, CUS1	Round-leaved hawthorn (<i>Crataegus lumnica</i>) - S3?	Species occurs in old fields, poorly managed pastures, fencelines and roadsides	Y N UTM: NO
FOD6, FOD7, FOD8, FOD9, SWT2, SWT3	Scarlet Beebalm (<i>Monarda didyma</i>) - S3 <u>Bloom Time – May to October</u>	Found in moist rich woods, thicket swamps, banks and floodplains.	Y N UTM: NO
ALO, ALS, ALT, TPO, TPS, TPW	Slender Blazing Star (<i>Liatris cylindracea</i>) - S3	Species occurs in limestone and dolostone pavement, prairies, open woods, aivars and moist sandy meadows.	Y N UTM: NO
SBO, SBS, SBT, TPO1, TPS1, TPW1, FOD1, FOD2	Slender Knotweed (<i>Polygonum tenue</i>) - S2	Found in dry, sandy, open areas in deciduous (often oak woods), prairie meadows; at edges of sand pits	Y N UTM: NO
SDT1, FOD5, FOD9	Slim-flowered Muhly (<i>Muhlenbergia tenuiflora</i>) - S2	Found in rich deciduous forest, often on rocky or sandy soils, wooded dunes, hillsides, and riverbanks whether in oak or beech-maple woods	Y N UTM: NO
BLO1, BLS1, BLT1, TPO2, TPS2, TPW2, MAM2, FOD7	Stiff Gentian (<i>Gentiana quinquefolia</i>) - S2 <u>Bloom Time – late summer to mid fall</u>	Found in moist soils of streambanks, edges of woods, wet prairies, marshy meadows, bluffs and wooded hillsides.	Y N UTM: NO
TPS1, TPW1, CUW1, RBO, SBO	Sundial Lupine (<i>Lupinus perennis</i>) - S3 <u>Bloom Time – mid-March to mid-June</u>	Inhabits dry, sandy oak savannahs, prairies, open barrens or clearings in woodlands of oak, jack pine, and/or aspen.	Y N UTM: NO

Species Conservation Concern Habitat and Incidental Wildlife - Goshen



Species		Habitat Description	Habitat Present (Y/N); UTM; description of habitat if present
TP01, TPS1, TPW1, CUM1	Tail Blazing Star (<i>Liatris aspera</i>)-S3/SC	Occurs in open, sandy woods, dry roadsides and sandy prairies	Y (N) UTM: NO
FEO, FES, FET, MAM2, MAM3	Tuberous Indian Plantain (<i>Amoglossum plantagineum</i>) - S3 Bloom Time -mid-March to mid-June	Occurs mainly in flat, sandy areas of the Bruce Peninsula. Fens, wet meadows, and calcareous river flats.	Y (N) UTM: NO
FOC1, FOC2, FOC3, FOC4	Woodland Pinedrops (<i>Pterospora andromedea</i>) - S2 Bloom Time - summer	Found in conifer woods, under pines, but also hemlock, spruce, fir, and white cedar. In dry or rocky soil, often with common juniper and sometimes aspen or birch.	Y (N) UTM: NO
CUM1, CUT1, CUW1, RBO1, SBO1	Yellow Ladies'-tresses (<i>Spiranthes ochroleuca</i>) - S2 Bloom Time - August to November	Dry, open sites, usually on acidic sandy soil, dry to mesic open woodland, thickets, meadows, barrens, ledges, outcrops, banks and roadsides, old fields.	Y (N) UTM: NO
BIRDS			
-	Bald Eagle (<i>Haliaeetus leucocephalus</i>) - SC	Assessed as SWH. Record species if found.	not required.
CUW, SDO, RBO, TPS	Common Nighthawk (<i>Chordeiles minor</i>) - SC	Hunts insects over a wide variety of habitats, in particular open or semi-open areas. Nests on ground in a wide range of open, sparse or vegetation-free habitats.	Y (N) UTM: NO
FOD, FOM	Louisiana Waterthrush (<i>Seturus motacilla</i>) - SC	Inhabits mature forests along steeply sloped ravines adjacent to running water. Trees, bushes, exposed roots, cliffs, banks and mossy logs are favoured nesting spots. Riparian woodlands are preferred stopover sites during migration	Y (N) UTM: NO
FOD, CUW, CUT	Red-headed Woodpecker (<i>Melanerpes erythrocephalus</i>) - SC	Species inhabits open woodland/ edges (oak savannahs and riparian forest), open, deciduous forest, with little understory; fields or pasture lands with scattered large trees; wooded swamps; orchards, small woodlots or forest edges; groves of dead or dying trees; requires cavity trees with at least 40 cm dbh; requires about 4 ha for a territory.	Y (N) UTM: NO
-	Short Eared Owl (<i>Asio flammeus</i>) - SC	Assessed as SWH. Record species if found.	not required.
CUT1	Yellow-breasted Chat (<i>Icteria virens</i>) - SC	Inhabits thickets, tall tangles of shrubbery beside streams, ponds; overgrown bushy clearings with deciduous thickets; nests above ground in bush, vines	Y (N) UTM: NO
REPTILES			
-	Eastern Ribbonsnake (<i>Thamnophis sauritus</i>) - SC	Assessed as SWH. Record species if found.	not required.
-	Milksnake (<i>Lampropeltis triangulum</i>) -SC	Assessed as SWH. Record species if found.	not required.
-	Snapping Turtle (<i>Chelydra serpentina</i>) - SC	Assessed as SWH. Record species if found.	not required.
INSECTS			
OAO, SA, SWM, SWD	Azure Bluet (<i>Enallagma aspersum</i>) -S3	Species inhabits fishless ponds, lakes and boggy swamps	Y (N) UTM: NO
TPS, TPW	Sleepy Duskywing (<i>Erynnis brize</i>) - S1	Occurs in oak/oak-pine scrub, chaparral, barrens, well-drained sandy or shaly soils. Species regularly seen at flowers in oak woods, on the ground, and at mud puddles	Y (N) UTM: NO
CUM1, CUT1, CUW1	Monarch Butterfly (<i>Danaus plexippus</i>) - SC	Their larvae only feed on milkweeds (<i>Asclepius</i> spp.). Habitat includes abandoned farmland, along roadsides, open spaces where these plants grow	Y (N) UTM: NO
TPS, CUW	Mottled Duskywing (<i>Erynnis martialis</i>) -S2	Usually seen nectaring on wet sandy roads. Larvae feeds on New Jersey Tea and adults only likely near where this plant is present	Y (N) UTM: NO
SWT, SWD, SWM, FOM, FOD4-3, TPW, TPS, CUM1	Tawny Emperor (<i>Asterocampa clyten</i>) - S3	Species inhabits densely wooded riparian areas, dry woods, open woods, fencerows and parks. Usually occurs near Hackberry, the larval foodplant	Y (N) UTM: NO
FOD5	West Virginia White (<i>Pieris virginiensis</i>) - SC	This species is restricted to rich, moist, deciduous woods, where its foodplant Toothwort occur	Y (N) UTM: NO

Wetland Data Collection Sheet



Study area: <i>GSH</i>	Map No: <i>282-GSH2238</i>
Date (yyyy-mm-dd): <i>2012-04-25</i>	Time Started: <i>10:30 am</i>
Field Staff: <i>BA, SG</i>	Time Finished: <i>1:00 pm</i>

Presence of Groundwater No Yes

bank seepage iron staining groundwater indicator

Site Type

Lacustrine (associated with lakes) Isolated

Riverine (associated with rivers)

Palustrine absent or intermittent inflow and either intermittent or permanent outflow

what are the water inputs and outputs? _____

Soils refer to ELC card for soils information

% open Water

Type 1 - <5% Type 5 - 26-75% (water occurring in a small pattern)

Type 2 - 5-25% (water occurring in one central location) Type 6 - 76-95% (occurring in a central location, vegetation is peripheral)

Type 3 - 5-25% (water occurring in ponds of various sizes) Type 7 - 76-95% (vegetation occurs in patches or diffuse, open stands)

Type 4 - 26-75% (water occurring in a central location) Type 8 - >95% (water occupies over 95% of the area)

Community Descriptions

Vegetation forms

h (deciduous trees)	ne (narrow leaved emergents)	ts (tall shrubs 1-6m)	f (aquatic with floating leaf)
c (coniferous trees)	be (broad leaved emergents)	ls (low shrubs up to 1m)	ff (free floating)
dh (dead deciduous trees)	gc (ground cover)	ds (dead shrubs)	su (all under water)
dc (dead coniferous trees)	m (mosses)	re (robust emergents)	u (unvegetated)

Map Code/ ELC Code	Community Description - list at least four dominant species for each form
<i>SWD2-2</i>	<i>h - FRAPEN > ACEFREE</i>

Wetland Data Collection Sheet



Notes on Ecological Functions or features

should include notes on: furbearer, cranberries, wild rice, baitfish, bullfrogs, winter cover for wildlife, suitability for waterfowl breeding staging, moulting, evidence of recreational activities, disturbance, surrounding topography (flat, rolling, hilly, steep), and surrounding habitat diversity

mineral swamp surrounded by Sugar Maple Forest and agricultural land, potential for swamp to hold more water in wetter year.

Significant Wildlife Habitat Form

Re-visit Stick Nests. AECOM

Study Area:	BLW JER <u>GSH</u>	Map #:	<u>282-6542238</u>
Date:	<u>17-May-2012</u>	Time Started:	<u>6:15 PM</u>
Field Staff:	<u>J. Kamstra & A. Dait</u>	Time Finished:	<u>6:30 PM</u>
Weather Conditions:	<u>Sunny, 18°C</u>		

Colonial Nesting Tree/Shrub Birds, Osprey Breeding/Feeding, Bald Eagle Breeding/Nesting Habitat
(FET1, FOC, FOM, FOD, SWC, SWM, SWD)

Nest bowls present: No Yes (if yes, photograph and complete the following)

UTMs: 0445688, 4796449 Number of nests: 1

Description of nests (location, e.g. in tree/on built structure; material; evidence of recent use; birds present):
Nest broken, old nest from last year.

Description of habitat (note riparian areas if present, evidence of disturbance):
Medium age Tr Aspen - Sugar Maple

Waterfowls Stopover/Nesting, Amphibian Breeding, Turtle Nesting/Over-wintering, Marsh Breeding Birds
(CUM1, CUT1, MAM, MAS, SAS1, SAM1, SAF1, SWD, SWT1, SWT2) (FOC, FOM, FOD, SWC, SWM, SWD, BOO1, FEO1)

Standing water present: No Yes (if yes, photograph and complete the following)

UTMs: _____ Area of standing water delineated on field map

Water depth (m): _____ % open water: _____ % emergent vegetation: _____

Description of standing water (permanent pool, evidence of annual spring flooding, etc): _____

Area and soil/substrate of shoreline habitat: _____

Type and abundance of cover in open water habitat: _____

Type and abundance of cover in surrounding habitat: _____

Evidence of disturbance (e.g. cattle grazing): _____

Evidence of use by waterfowl, amphibians, turtles (e.g. broken eggs), marsh breeding birds: _____

Complete Vernal Pool Habitat Description Form

Snake Hibernacula

Fissured rock/foundation or rock/debris pile present: No Yes (if yes, photograph and complete the following)

UTMs: _____ Likelihood to extend below frost line: _____

% canopy cover: _____ % slope: _____ Distance to open canopy (m): _____

Description of fissure or stone pile (composition/material, dimensions, etc): _____

Description of surrounding habitat (type & abundance of cover, evidence of disturbance, etc): _____

Seeps and Springs (FOC, FOM, FOD, SWC, SWM, SWD)

Evidence of seep or spring: No Yes (if yes, photograph and complete the following)

UTMs: _____ Description (indicator species, etc): _____

★ Additional - Bird calls heard are noted on back sheet

NHA Site Investigation - Significant Wildlife Habitat Form

AECOM

Colonial Nesting Bird Breeding Habitat (Bank and Cliff Swallows)

(CUM1, CUT1, CUS, BLO1, BLS1, BLT1, CLO1, CLS1, CLT1)

Eroding bank, sandy hill, pits, steep slope or rock face present:

 No

 Yes (if yes, photograph and complete the following)

UTMs: _____

Location (e.g. aggregate pit, bridge): _____

Evidence of use by bank or cliff swallows (provide number of nests): _____

Colonial Nesting Ground Breeding Birds, Shorebird Migratory Stopover Areas

(BBO1, BBO2, BBS1, BBS2, BBT1, BBT2, SDO1, SDS2, SDT1, MAM1, MAM2, MAM3, MAM4, MAM5)

Shoreline of lake, large river or large wetland present:

 No

 Yes (if yes, photograph and complete the following)

UTMs: _____

Rocky island or peninsula present: _____

Mudflat present: _____

Evidence of disturbance (e.g. cattle grazing): _____

Description of habitat (size of rocky outcrop/mudflat, substrate/soil type, type and abundance of cover): _____

Raptor Winter Feeding and Roosting, Open Country or Shrub/Early Successional Bird Breeding Habitat

CUT1, CUS1, >30ha, CUM1 >30ha, FOC, FOD, FOM with a CUM, CUT, CUS, CUW > 20ha, or a CUM, CUS, CUT, CUW>15ha

Large meadow, old field or generally open habitat (e.g. CUM, CUS, CUT, CUW) present:

Large open habitat present: No

Yes (if yes, photograph and complete the following)

UTMs: _____

Evidence of disturbance (e.g. cattle grazing): _____

Description of habitat (abundance of food plants for rodents, abundance of perches, height of vegetation): _____

Old-growth or Mature Forests, Interior Forest Breeding Birds

(FOD, FOC, FOM, SWC, SWM, SWD. Mature forest (>60 years) present)

Mature forest present: No

Yes (if yes, photograph and complete the following)

UTMs: _____

Age of oldest trees: _____

Evidence of disturbance (e.g. selective cutting): _____

Description of habitat (structural complexity, abundance of snags and/or downed woody debris, etc): _____

Photo #	Location or Subject	Photo #	Location or Subject
YTVI	Singy		
REVI			
SOSP			

- Legend**
- Property Boundary
 - GE Turbine
 - ELC Completed 2011
 - Natural Feature and ID
 - ELC Polygon Boundary
 - Disturbance Areas
 - Area of Disturbance, plus 10m
 - ANSI
 - Evaluated Wetlands - PSW
 - ABCA Watercourse



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Orthophotography 2010



Metres
25 50 100

UTM Zone 17N, NAD 83

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Goshen ELC Survey

285_GSH1802

May 2012
Project 60195032



Figure 1



ELC
 Community Description and Classification

Map #: 285 GSH 1802 Polygon: 1
 Surveyor(s): SK Date: June 18, 2012 Time start: 1:15 pm finish: 4:00 pm
 UTMZ: UTMN:

Polygon Description

System	Substrate	Topographic Feature	Plant Form	Community
<input checked="" type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <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 checked="" type="checkbox"/> Valley Slope <input type="checkbox"/> Upland <input 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 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	Fraxinus → V. sp. → P. sp. → A. sp.
2	2	4	V. sp. → Fraxinus → P. sp. → A. sp.
3	2-3	3-4	V. sp. → Fraxinus → P. sp. → A. sp.
4	2-6	4	P. sp. → Fraxinus → V. sp. → A. sp.

HT Codes: 7 < 0.2m 8 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-6m 2 > 6-25m 1 > 25m
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 60% 4 > 60%

Stand Composition: Size Class Analysis:

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

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

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

Ecosite: Fresh-Moist to wet dec. for. Code: FDD7
Vegetation Type: Fresh-Moist Ash lowland, D.F. Code: FDD7-2
Inclusion: 1m mineral cultural monsoon Code: CUM1-1
Complex: Code:

Community Profile Diagram/Comments

Ash only slightly greater than elm.
 1cm inclusion dominated by Solidago altissima.

Tree Tally by Species

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

Soils Ontario and ELC Soils Description

Site Metrics	PI/Auger #	Soils Description	Summary
Zone	17T		
Easting	0448032		
Northing	1796825		
Position	Table		
Aspect			
Percent			
Slope			
Length			
Mottles	5 cm		
Gley	5 cm		
Water Table			
Carbonates			
Bedrock			
Depth from zero	0-5	% CF	% CF
Texture	Silty loam	% CF	% CF
Depth from zero	5+	% CF	% CF
Texture	clay	% CF	% CF
Depth from zero		% CF	% CF
Texture		% CF	% CF
Depth from zero		% CF	% CF
Texture		% CF	% CF
% Surface Stone/Rock			
Moisture Regime			
Drainage			

ELC Community Description and Classification

Map #: 185 GSH 1802 Polygon: 2
 Surveyor(s): SG Date: June 18, 2012 Time start: 1:15 pm finish: 4:00 pm
 UTMZ: UTMN:

Polygon Description

System	Substrate	Topographic Feature	Plant Form	Community
<input checked="" type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic <input type="checkbox"/> Site <input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock <input type="checkbox"/> History <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Cultural <input type="checkbox"/> Cover <input type="checkbox"/> Open <input type="checkbox"/> Shrub <input type="checkbox"/> Tree	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <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 checked="" type="checkbox"/> Tableland <input type="checkbox"/> Roll. Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Aivar <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 type="checkbox"/> Deciduous <input checked="" 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 type="checkbox"/> Forest <input checked="" type="checkbox"/> Plantation

Stand Description

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp)
1	2	4	P > Much Greater Than; > Greater Than; = About Equal To
2	3-2	2-3	P > Much Greater Than; > Greater Than; = About Equal To
3	4-3	2-3	P > Much Greater Than; > Greater Than; = About Equal To
4	7-6	1-2	P > Much Greater Than; > Greater Than; = About Equal To

HT Codes: 7 < 0.2m 6 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-6m 2 > 6-25m 1 > 25m
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 60% 4 > 60%

Stand Composition:	Size Class Analysis:	Standing Snags:	Deadfall / Logs:
	A < 10 10-24 25-50 > 50	A < 10 10-24 25-50 > 50	A < 10 10-24 25-50 > 50
BA:			

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

Ecosite:	Vegetation Type:	Inclusion:	Complex:
Coniferous plantation	White pine coniferous plantation	Populus heterophylla swamp (WPEL)	
Code: CUP3	Code: CUP3-2	Code: (WPEL)	Code: (WPEL)

Community Profile Diagram/Comments

Some small linear swamp-like features with little ground cover, some bushes.

Inclusion is dominated by cottonwood

Tree Tally by Species

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

Soils Ontario and ELC Soils Description

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

Significant Wildlife Habitat Form

AECOM

Study Area:	BLW JER GSH	Map #:	285 GSH 1802
Date:	June 28, 2017	Time Started:	1:15 pm
Field Staff:	Sam Goldiner	Time Finished:	4:00 pm
Weather Conditions:	31°C, 0% clouds, light breeze		

Colonial Nesting Tree/Shrub Birds, Osprey Breeding/Feeding, Bald Eagle Breeding/Nesting Habitat
(FET1, FOC, FOM, FOD, SWC, SWM, SWD)

Nest bowls present: No Yes (if yes, photograph and complete the following)

UTMs: _____ Number of nests: _____

Description of nests (location, e.g. in tree/on built structure; material; evidence of recent use; birds present): _____

Description of habitat (note riparian areas if present, evidence of disturbance): _____

Waterfowls Stopover/Nesting, Amphibian Breeding, Turtle Nesting/Over-wintering, Marsh Breeding Birds
(CUM1, CUT1, MAM, MAS, SAS1, SAM1, SAF1, SWD, SWT1, SWT2) (FOC, FOM, FOD, SWC, SWM, SWD, BOO1, FEO1)

Standing water present: No Yes (if yes, photograph and complete the following)

UTMs: _____ Area of standing water delineated on field map

Water depth (m): _____ % open water: _____ % emergent vegetation: _____

Potential to hold water until at least July in most years: Yes / No

Description of standing water (permanent pool, evidence of annual spring flooding, etc): _____

Area and soil/substrate of shoreline habitat: _____

Type and abundance of cover in open water habitat: _____

Type and abundance of cover in surrounding habitat: _____

Evidence of disturbance (e.g. cattle grazing): _____

Evidence of use by waterfowl, amphibians, turtles (e.g. broken eggs), marsh breeding birds: _____

*****Complete Vernal Pool Habitat Description Form*****

Snake Hibernacula

Fissured rock/foundation or rock/debris pile present: No Yes (if yes, photograph and complete the following)

UTMs: _____ Likelihood to extend below frost line: _____

% canopy cover: _____ % slope: _____ Distance to open canopy (m): _____

Description of fissure or stone pile (composition/material, dimensions, etc): _____

Description of surrounding habitat (type & abundance of cover, evidence of disturbance, etc): _____

Seeps and Springs
(FOC, FOM, FOD, SWC, SWM, SWD)

Evidence of seep or spring: No Yes (if yes, photograph and complete the following)

UTMs: _____ Description (indicator species, etc): _____

NHA Site Investigation - Significant Wildlife Habitat Form

AECOM

Colonial Nesting Bird Breeding Habitat (Bank and Cliff Swallows)

(CUM1, CUT1, CUS, BLO1, BLS1, BLT1, CLO1, CLS1, CLT1)

Eroding bank, sandy hill, pits, steep slope or rock face present:

 No

 Yes (if yes, photograph and complete the following)

UTMs: _____

Location (e.g. aggregate pit, bridge): _____

Evidence of use by bank or cliff swallows (provide number of nests): _____

Colonial Nesting Ground Breeding Birds, Shorebird Migratory Stopover Areas

(BBO1, BBO2, BBS1, BB52, BBT1, BBT2, SDO1, SDS2, SDT1, MAM1, MAM2, MAM3, MAM4, MAM5)

Shoreline of lake, large river or large wetland present:

 No

 Yes (if yes, photograph and complete the following)

UTMs: _____

Rocky island or peninsula present: _____

Mudflat present: _____

Evidence of disturbance (e.g. cattle grazing): _____

Description of habitat (size of rocky outcrop/mudflat, substrate/soil type, type and abundance of cover): _____

Raptor Winter Feeding and Roosting, Open Country or Shrub/Early Successional Bird Breeding Habitat

CUT1, CUS1, >30ha, CUM1 >30ha, FOC, FOD, FOM with a CUM, CUT, CUS, CUW > 20ha, or a CUM, CUS, CUT, CUW >15ha

Large meadow, old field or generally open habitat (e.g. CUM, CUS, CUT, CUW) present:

Large open habitat present: No

 Yes (if yes, photograph and complete the following)

UTMs: _____

Evidence of disturbance (e.g. cattle grazing): _____

Description of habitat (abundance of food plants for rodents, abundance of perches, height of vegetation): _____

Old-growth or Mature Forests, Interior Forest Breeding Birds

(FOD, FOC, FOM, SWC, SWM, SWD. Mature forest (>60 years) present)

Mature forest present: No

 Yes (if yes, photograph and complete the following)

UTMs: _____

Age of oldest trees: _____

Evidence of disturbance (e.g. selective cutting): _____

Description of habitat (structural complexity, abundance of snags and/or downed woody debris, etc): _____

Photo #	Location or Subject	Photo #	Location or Subject

Species of Conservation Concern Habitat and Incidental Wildlife - Goshen

AECOM

Map No: 285 Date (yyyy-mm-dd): 2012-06-28 Field Staff: Sam Gidner

Time Started: 1:17 pm
Time Finished: 4:20 pm

Observed Species List

Species Code	UTM	EV	Notes	Species Code	UTM	EV	Notes
<u>Wild turkey</u>		<u>OB</u>	<u>1 in @ AO to NE of 285</u>				
<u>black cap chickadee</u>		<u>VO</u>					
<u>marsh wren</u>		<u>VO</u>					
<u>K. bluebird</u>		<u>OB</u>					
<u>blue jay</u>		<u>VO</u>					

Note: Evidence Codes (EV) Breeding Bird (Possible) SH=Suitable Habitat, SM=Singing Male;
Breeding Bird (Probable) T=Territory, D=Display, P=Pair, N=Nest Building, V=Visiting Nest, A=Anxiety Behavior,
Breeding Bird (Confirmed) DD=Distraction, NU=Used Nest, FY=Fledged Young, NE=Eggs, NY=Young, FS=Feces/Faecal 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)

ELC	Species	Habitat Description	Habitat Present (Y/N; UTM; description of habitat if present)
<u>FOD7</u>	American Gromwell (Lithospermum latifolium) - S3 <u>Bloom Time - Spring</u>	Shaded river banks, wooded floodplains. River floodplains, woods and edges of woods.	<u>Y</u> N UTM: <u>n/a</u>
ALO, TPO	Muehlenberg's astomum moss (Astorum muehlenbergianum) - S2 <u>Bloom Time - Spring</u>	Thin soil over level outcrop ledges and on soil under grasses in open prairie	<u>Y</u> N UTM:
FOM1, FOM2, <u>CUP3</u>	Autumn Coral-root (Corallorhiza odontorhiza) - S2 <u>Bloom Time - summer to fall</u>	Oak-pine woods or occasionally in open, red pine or white pine plantations. Dry, sandy woods.	<u>Y</u> N UTM: <u>n/a</u>
FOC, FOM, <u>FO8</u>	Burning Bush (Euonymus atropurpureus) - S3 <u>Bloom Time - April - June</u>	Species occurs in dry to moist deciduous-thickets-and-woods	<u>Y</u> N UTM: <u>n/a</u>
SWC1, SWC3, SWC4, SWM1, SWM2, SWM4, SWM5, SWM6	Chinese Hemlock Parsley (Corioselinum chinense) - S2 <u>Bloom Time - summer to fall</u>	Swampy places with deciduous trees, white cedars, tamarack, springy river banks, wet borders of streams and rivers. Also found among calcareous seepage slopes.	<u>Y</u> N UTM: <u>n/a</u>
SWC, SWM, SWD, SWT, MAM, MAS	Crowned Beggarticks (Bidens trichosperma) - S2 <u>Bloom Time - late summer</u>	Found in openings in swamps, marshes, along shores & wet fields within the Carolinian zone and southeastern Georgian bay. Bogs, fens, tamarack swamps	<u>Y</u> N UTM:
ALT1, <u>FOD7</u>	Eastern Green-violet (Hybanthus concolor) - S2 <u>Bloom Time - mid March to August</u>	Occurs in rich, wet-mesic floodplain forests as well as mesic forests over limestone. Includes floodplains and river banks.	<u>Y</u> N UTM: <u>n/a</u>
TPS, TPW, FOM1, FOM2	Fogg's Goosefoot (Chenopodium foggii) - S2	Species occurs in sandy areas on limestone under oak or pine-oak forests	<u>Y</u> N UTM:
TPO2, TPS2, TPW2,	Giant Ironweed (Vernonia gigantea) - S17 <u>Bloom Time -</u>	Found in mesic prairies, thickets, moist woods, roadsides and grassy meadows	<u>Y</u> N UTM: <u>n/a</u>

Species of Conservation Concern Habitat and Incidental Wildlife - Goshen



ELC	Species	Habitat Description	Habitat Present (Y/N; UTM; description of habitat if present)
CUM1, MAM	June - August		
FOD6, FOD7, FOD9	Green Dragon (<i>Arisaema dracontium</i>) - SC/S3 Bloom Time - May and June	Species found in damp deciduous forest and along river streams. Particularly Maple forest and forest dominated by Red Ash and White Elm	Y N UTM: n/o.
TPO1, TPS1, TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	Hairy Bedstraw (<i>Gallium pilosum</i>) - S3 Bloom Time - June-August	Occurs in dry, sandy woods and meadows, occasionally in dry sandy fields	Y N UTM:
FE01, FES1, FET1, SWC, SWM, SWD, SWT, TPO, TPS, TPW	Hairy Valerian (<i>Valeriana edulis</i>) - S1 Bloom Time - June to August	Inhabits swampy river flats and meadows, wet prairies, and wooded, rocky riverbanks and fens.	Y N UTM:
FOD6, FOD7, SWM, SWD	Hairy Wood Mint (<i>Blephilia hirsuta</i>) - S1 Bloom Time - Summer	Woodlands, often rocky, especially rivers. Rich woods, swamp forests, floodplains.	Y N UTM: n/o.
FOD6, FOD7, FOD8, FOD9	Harbinger-of-spring (<i>Eriogonum bulbosum</i>) - S3 Bloom Time - early to late April	Occurs in rich, moist deciduous woods, especially on floodplains.	Y N UTM: n/o.
SAS1, SAM1, SAF1	Hill's Pond Weed (<i>Potamogeton hillii</i>) - SC/S2 Bloom Time - summer	Aquatic plant found in highly alkaline waters of ditches, ponds, beaver ponds, and slow-moving cold waters.	Y N UTM: n/o.
FOM6, FOM7, FOM8	Large Round-leaved Orchid (<i>Platanthera macrophylla</i>) - S2 Bloom Time - June to August	Species inhabits moist mixed woods. Found in fairly mature, upland sugar maple-beech-eastern hemlock woodlands.	Y N UTM:
MAM2, MAM3, MAS2, MAS3, SWD	Lizard's Tail (<i>Saururus cernuus</i>) - S3 Bloom Time - June - September	Species inhabits shores and streambanks along shallow water. As well as swamps, floodplains, shallow water and mudflats at the borders of streams and ponds.	Y N UTM:
FOD6, FOD7, FOD9	Pawpaw (<i>Asimina triloba</i>) - S3 Bloom Time - March-May	Occurs in moist deciduous woods and stream banks.	Y N UTM: n/o.
FOM8, FOD6, FOD7, FOD9, CUM1	Pilose Evening Primrose (<i>Oenothera pilosella</i>) - S2 Bloom Time - Late Spring - Early Summer	Moist edges of woods and open, disturbed ground	Y N UTM: n/o.
TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	Prostrate Tick-trefoil (<i>Desmodium rotundifolium</i>) - S2 Bloom Time - July-September	Dry, sandy or rocky woods	Y N UTM:
FOD7, SWD	Pumpkin Ash (<i>Fraxinus profunda</i>) - S2? Bloom Time - March - June	Swamps and floodplains	Y N UTM: n/o.
CUM1, ALO, FET1, SWC	Ram's-head Lady's-slipper (<i>Cypripedium arietinum</i>) - S3 Bloom Time - mid May to mid June	Found in cedar woodlands, limestone plains and wooded fens, moist coniferous swamps, dry-sandy woods, and limestone barrens.	Y N UTM:
FOD1, FOD2, FOD3, FOD4, FOD5, FOC1, FOM1, FOM5	Rattlesnake Hawkweed (<i>Hieracium venosum</i>) - S2 Bloom Time - April - September	Species inhabits open, dry sandy woods. Jack pine, oak, and aspen woodlands	Y N UTM:
FOD6, FOD7, FOD9	Round-leaved Groundsel (<i>Packera obovata</i>) - S3 Bloom Time - May - June	Found in moist woods	Y N UTM: n/o.
CUM1, CUT1, CUS1	Round-leaved hawthorn (<i>Crataegus lumaria</i>) - S3?	Species occurs in old fields, poorly managed pastures, fencelines and roadsides	Y N UTM:
FOD6, FOD7, FOD8, FOD9, SWT2, SWT3	Scarlet Beebalm (<i>Monarda didyma</i>) - S3 Bloom Time - May to October	Found in moist, rich woods, thicket swamps, banks and floodplains.	Y N UTM: n/o.
ALO, ALS, ALT, TPO, TPS, TPW	Slender Blazing Star (<i>Liatris cyindracea</i>) - S3	Species occurs in limestone and dolostone pavement, prairies, open woods; always and moist sandy meadows.	Y N UTM:
SBO, SBS, SBT, TPO1, TPS1, TPW1, FOD1, FOD2	Slender Knotweed (<i>Polygonum tenue</i>) - S2	Found in dry, sandy, open areas in deciduous (often oak woods), prairie meadows; at edges of sand pits	Y N UTM:
SDT1, FOD5, FOD9	Slim-flowered Muihy (<i>Muhlenbergia tenuiflora</i>) - S2	Found in rich deciduous forest, often on rocky or sandy soils, wooded dunes, hillsides, and riverbanks whether in oak or beech-maple woods	Y N UTM:
BLO1, BLS1, BLT1, TPO2, TPS2, TPW2, MAM2, FOD7	Stiff Gentian (<i>Gentianella quinquefolia</i>) - S2 Bloom Time - late summer to mid fall	Found in moist soils of streambanks, edges of woods, wet prairies, marshy meadows, bluffs and wooded hillsides.	Y N UTM: n/o.
TPS1, TPW1, CUW1, RBO, SBO	Sundial Lupine (<i>Lupinus perennis</i>) - S3 Bloom Time - mid-March to mid-June	Inhabits dry, sandy oak savannahs, prairies, open barrens or clearings in woodlands of oak, jack pine, and/or aspen.	Y N UTM:

Species of Conservation Concern Habitat and Incidental Wildlife – Goshen



ELC	Species	Habitat Description	Habitat Present (Y/N; UTM; description of habitat if present)
TP01, TPS1, TPW1, CUM1	Tall Blazing Star (<i>Liatris aspera</i>) - S3/SC	Occurs in open, sandy woods, dry roadsides and sandy prairies	Y (N) UTM
FEO, FES, FET, MAM2, MAM3	Tuberous Indian Plantain (<i>Amoglossum plantagineum</i>) - S3 Bloom Time - mid-March to mid-June	Occurs mainly in flat, sandy areas of the Bruce Peninsula. Fens, wet meadows, and calcareous river flats	Y (N) UTM
FOC1, FOC2, FOC3, FOC4	Woodland Pinedrops (<i>Pterospora andromedea</i>) - S2 Bloom Time - summer	Found in conifer woods, under pines, but also hemlock, spruce, fir, and white cedar, in dry or rocky soil, often with common juniper and sometimes aspen or birch	Y (N) UTM
CUM1, CUT1, CUW1, RBO1, SBO1	Yellow Ladies'-tresses (<i>Spiranthes ochroleuca</i>) - S2 Bloom Time - August to November	Dry, open sites, usually on acidic sandy soil, dry to mesic open woodland, thickets, meadows, barrens, edges, outcrops, banks and roadsides, old fields.	Y (N) UTM
BIRDS			
-	Bald Eagle (<i>Haliaeetus leucocephalus</i>) - SC	Assessed as SWH. Record species if found	not required.
CUW, SDO, RBO, TPS	Common Nighthawk (<i>Chordeiles minor</i>) - SC	Hunts insects over a wide variety of habitats, in particular open or semi-open areas. Nests on ground in a wide range of open, sparse or vegetation-free habitats.	Y (N) UTM
FOD, FOM	Louisiana Waterthrush (<i>Selurus motacilla</i>) - SC	Inhabits mature forests along steeply sloped ravines adjacent to running water. Trees, bushes, exposed roots, cliffs, banks and mossy logs are favoured nesting spots. Riparian woodlands are preferred stopover sites during migration	Y (N) UTM
FOD, CUW, CUT	Red-headed Woodpecker (<i>Melanerpes erythrocephalus</i>) - SC	Species inhabits open woodland/ edges (oak savannahs and riparian forest), open, deciduous forest with little understory, fields or pasture lands with scattered large trees, wooded swamps, orchards, small woodlots or forest edges; groves of dead or dying trees. requires cavity trees with at least 40 cm dbh; requires about 4 ha for a territory	Y (N) UTM
-	Short Eared Owl (<i>Asio flammeus</i>) - SC	Assessed as SWH. Record species if found	not required.
CUT1	Yellow-breasted Chat (<i>Icteria virens</i>) - SC	Inhabits thickets, tall tangles of shrubbery beside streams, ponds; overgrown bushy clearings with deciduous thickets, nests above ground in bush, vines	Y (N) UTM
REPTILES			
-	Eastern Ribbonsnake (<i>Thamnophis sauritus</i>) - SC	Assessed as SWH. Record species if found.	not required.
-	Milksnake (<i>Lampropeltis triangulum</i>) - SC	Assessed as SWH. Record species if found.	not required.
-	Snapping Turtle (<i>Chelydra serpentina</i>) - SC	Assessed as SWH. Record species if found.	not required.
INSECTS			
OAO, SA, SWM, SWD	Azure Bluet (<i>Enallagma aspersum</i>) - S3	Species inhabits fishless ponds, lakes and boggy swamps	Y (N) UTM
TPS, TPW	Sleepy Duskywing (<i>Erynnis brizo</i>) - S1	Occurs in oak/oak-pine scrub, chaparral, barrens, well-drained sandy or shaly soils. Species regularly seen at flowers in oak woods, on the ground, and at mud puddles	Y (N) UTM
CUM1, CUT1, CUW1	Monarch Butterfly (<i>Danaus plexippus</i>) - SC	Their larvae only feed on milkweeds (<i>Asclepius</i> spp.). Habitat includes abandoned farmland, along roadsides, open spaces where these plants grow	Y (N) UTM
TPS, CUW	Mottled Duskywing (<i>Erynnis martialis</i>) - S2	Usually seen hibernating or on wet sandy roads. Larvae feeds on New Jersey Tea and adults only likely near where this plant is present	Y (N) UTM
SWT, SWD, SWM, FOM, FOD4-3, TPW, TPS, CUM1	Tawny Emperor (<i>Asterocampa clyton</i>) - S3	Species inhabits densely wooded riparian areas, dry woods, open woods, fencerows and parks. Usually occurs near Hackberry, the larval foodplant	Y (N) UTM
FOD5	West Virginia White (<i>Pieris virginianensis</i>) - SC	This species is restricted to rich, moist, deciduous woods, where its foodplant Toothwort occur	Y (N) UTM



Legend

- Property Boundary
- GE Turbine
- ELC Completed 2011
- Natural Feature and ID
- ELC Polygon Boundary
- Disturbance Areas
- Area of Disturbance, plus 10m
- ANSI
- Evaluated Wetlands - PSW
- ABCA Watercourse



Basemapping from Ontario Ministry of Natural Resources
 Orthophotography 2010

UTM Zone 17N NAD 83

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Plant Species List
2012

Trees & Shrubs						Tree & Shrubs						Graminoids					
1	2	3	4	5		1	2	3	4	5		1	2	3	4	5	
Conifers						Deciduous						Grasses					
Balsam Fir (<i>Abies balsamea</i>)						White Oak (<i>Quercus alba</i>)						Giant Redtop (<i>Alopecurus pratensis</i>)					
Common Juniper (<i>Juniperus communis</i>)						Bur Oak (<i>Quercus macrocarpa</i>)						Redtop (<i>Alopecurus stolonifera</i>)					
Eastern Red Cedar (<i>Juniperus virginiana</i>)						Red Oak (<i>Quercus rubra</i>)						Awnless Brome (<i>Bromus inermis</i>)					
Tamarack (<i>Larix laricina</i>)						Alder Buckthorn (<i>Rhamnus alnifolia</i>)						Brome					
Norway Spruce (<i>Picea abies</i>)						Common Buckthorn (<i>Rhamnus cathartica</i>)						Brome Joint Grass (<i>Calamagrostis canadensis</i>)					
White Spruce (<i>Picea glauca</i>)						Smooth Sumac (<i>Rhus glabra</i>)						Orchard Grass (<i>Dactylis glomerata</i>)					
Black Spruce (<i>Picea mariana</i>)						Smooth Sumac (<i>Rhus hirta</i>)						Poverty Oat Grass (<i>Danthonia spicata</i>)					
Jack Pine (<i>Pinus banksiana</i>)						Wild Black Currant (<i>Ribes americanum</i>)						Quack Grass (<i>Elymus repens</i>)					
Red Pine (<i>Pinus resinosa</i>)						Prickly Gooseberry (<i>Ribes rosbatii</i>)						Virginia Wild Rye (<i>Elymus virginicus</i>)					
Eastern White Pine (<i>Pinus strobus</i>)						Swamp Black Currant (<i>Ribes lacustre</i>)						Elymus					
Scotch Pine (<i>Pinus vestris</i>)						Red Currant (<i>Ribes rubrum</i>)						Fowl Manna Grass (<i>Glyceria striata</i>)					
Canada Yew (<i>Taxus canadensis</i>)						Ribes						Glyceria					
Eastern White Cedar (<i>Thuja occidentalis</i>)						Black Locust (<i>Robinia pseudo-acacia</i>)						Rice Cut Grass (<i>Leersia oryzoides</i>)					
Eastern Hemlock (<i>Tsuga canadensis</i>)						Prickly Rose (<i>Rosa acicularis</i>)						Tall Fescue (<i>Lolium arundinaceum</i>)					
						Smooth Rose (<i>Rosa blanda</i>)						Muhlenbergia					
						Multiflora Rose (<i>Rosa multiflora</i>)						Witchgrass (<i>Panicum capillare</i>)					
						Rosa						Panicum					
Deciduous						Corn. Blackberry (<i>Rubus alpinus</i>)						Reed Canary Grass (<i>Phalaris arundinacea</i>)					
Manitoba Maple (<i>Acer nigrundo</i>)						Wild Red Raspberry (<i>Rubus idaeus</i>)						Timothy (<i>Phleum pratense</i>)					
Black Maple (<i>Acer nigrum</i>)						Black Raspberry (<i>Rubus occidentalis</i>)						Common Reed (<i>Phragmites australis</i>)					
Norway Maple (<i>Acer platanoides</i>)						Purple-fl. Raspberry (<i>Rubus odoratus</i>)						Canada Blue Grass (<i>Poa compressa</i>)					
Red Maple (<i>Acer rubrum</i>)						Dwarf Raspberry (<i>Rubus subescens</i>)						Fowl Meadow Grass (<i>Poa palustris</i>)					
Silver Maple (<i>Acer saccharinum</i>)						Rubus						Kentucky Bluegrass (<i>Poa pratensis</i>)					
Freeman's Maple (<i>Acer X freemanii</i>)						Peach-leaved Willow (<i>Salix amygdaloides</i>)						Yellow Foxtail (<i>Setaria pumila</i>)					
Sugar Maple (<i>Acer saccharum</i>)						Bebb's Willow (<i>Salix bebbiana</i>)						Green Foxtail (<i>Setaria viridis</i>)					
Mountain Maple (<i>Acer spicatum</i>)						Pussy Willow (<i>Salix discolor</i>)											
Spotted Alder (<i>Alnus incana</i>)						Missouri Willow (<i>Salix eriochaefolia</i>)											
Downy Serviceberry (<i>Amelanchier arborea</i>)						Sandbar Willow (<i>Salix eximia</i>)											
Serviceberry (<i>Amelanchier sanguinea</i>)						Shining Willow (<i>Salix lucida</i>)											
Yellow Birch (<i>Betula alleghaniensis</i>)						Black Willow (<i>Salix nigra</i>)											
White Birch (<i>Betula papyrifera</i>)						Slender Willow (<i>Salix petiolaris</i>)											
European Birch (<i>Betula pendula</i>)						Salix											
Blue Beech (<i>Carynus caroliniana</i>)						Hybrid Crack Willow (<i>Salix X rubens</i>)											
Bitternut hickory (<i>Carya cordiformis</i>)						Black-berryed Elder (<i>Sambucus nigra</i>)											
Shagbark Hickory (<i>Carya ovata</i>)						Red-berryed Elder (<i>Sambucus racemosa</i>)											
Climbing Bittersweet (<i>Celastrus scandens</i>)						Buffaloberry (<i>Shepherdia canadensis</i>)											
Common Highberry (<i>Celtis occidentalis</i>)						Eur. Mountain Ash (<i>Sorbus aucuparia</i>)											
Buttonbush (<i>Ceanothus occidentalis</i>)						Narrow Meadow-sweet (<i>Spiraea alba</i>)											
Alt-leaved Dogwood (<i>Cornus alternifolia</i>)						Common Lilac (<i>Syringa vulgaris</i>)											
Silky Dogwood (<i>Cornus amomum</i>)						Poison-ivy (<i>Toxicodendron radicans</i>)											
Bunchberry (<i>Cornus canadensis</i>)						Climbing Poison-ivy (<i>Toxicodendron radicans</i>)											
Gray dogwood (<i>Cornus racemosa</i>)						White Elm (<i>Ulmus americana</i>)											
Round-leaved Dogwood (<i>Cornus rugosa</i>)						Siberian Elm (<i>Ulmus pumila</i>)											
Red-osier Dogwood (<i>Cornus sericea</i>)						Striped Elm (<i>Ulmus rubra</i>)											
American Hazel (<i>Corylus americana</i>)						Low Blueberry (<i>Vaccinium angustifolium</i>)											
Beaked Hazel (<i>Corylus cornuta</i>)						Maple-leaf Viburnum (<i>Viburnum acerifolium</i>)											
Cockspur Thorn (<i>Crataegus crus-galli</i>)						Hobblebush (<i>Viburnum lentago</i>)											
English Hawthorn (<i>Crataegus mollis</i>)						Nannyberry (<i>Viburnum lentago</i>)											
Large-fruited Thorn (<i>Crataegus punctata</i>)						Guelder-Rose (<i>Viburnum opulus</i>)											
Crataegus						Down Arrow-wood (<i>Vib. rafinesquianum</i>)											
Crataegus						Riverbank Grape (<i>Vitis riparia</i>)											
Bush Honeysuckle (<i>Diervilla lonicera</i>)						Am. Prickly-ash (<i>Zanthoxylum americanum</i>)											
Russian Olive (<i>Elaeagnus angustifolia</i>)						Tilia											
Autumn Olive (<i>Elaeagnus umbellata</i>)																	
Run. Strawberry-bush (<i>Euonymus obovata</i>)																	
American Beech (<i>Fagus grandifolia</i>)																	
Gloss Buckthorn (<i>Fraxinus alnus</i>)																	
White Ash (<i>Fraxinus americana</i>)																	
Black Ash (<i>Fraxinus nigra</i>)																	
Green Ash (<i>Fraxinus pennsylvanica</i>)																	
Witch-hazel (<i>Hamamelis virginiana</i>)																	
Winterberry (<i>Ilex verticillata</i>)																	
Butternut (<i>Juglans cinerea</i>)																	
Black Walnut (<i>Juglans nigra</i>)																	
Common Privet (<i>Ligustrum vulgare</i>)																	
Spicebush (<i>Lindera benzoin</i>)																	
Fl. Honeysuckle (<i>Lonicera canadensis</i>)																	
Glaucous Honeysuckle (<i>Lonicera dioica</i>)																	
Morrow's Honeysuckle (<i>Lonicera morrowii</i>)																	
Tartarian Honeysuckle (<i>Lonicera tatarica</i>)																	
Common Apple (<i>Malus pumila</i>)																	
White Mulberry (<i>Morus alba</i>)																	
Sweet Gale (<i>Myrica gale</i>)																	
Ironwood (<i>Ostrya virginiana</i>)																	
Thicket-creep (<i>Parthenocissus inserta</i>)																	
Ninebark (<i>Physocarpus opulifolius</i>)																	
Balsam Poplar (<i>Populus balsamifera</i>)																	
Eastern Cottonwood (<i>Populus deltoides</i>)																	
Large-tooth Aspen (<i>Populus grandidentata</i>)																	
Trembling Aspen (<i>Populus tremuloides</i>)																	
Sweet Cherry (<i>Prunus avium</i>)																	
Pin Cherry (<i>Prunus pensylvanica</i>)																	
Black Cherry (<i>Prunus serotina</i>)																	
Choke Cherry (<i>Prunus virginiana</i>)																	
Prunus																	
D - Dominant - represented by large numbers, generally forming >10% ground cover or >25% vegetation cover in any one stratum																	
F - Fairly common (=Abundant in ELC) - generally widespread scattered individuals or represented by fairly large numbers of individual clumps, usually forming >10% ground cover																	
U - Uncommon (=Occasional in ELC) - present as widespread scattered individuals or represented by one or more clumps of many individuals (most species will fall into this category)																	
R - Rare - represented in the polygon by less than about five individuals or small clumps																	
Map Number: 29051H20/2013						1						4					
Date: Aug 25, 2012						2						8					
Surveyors: JP - JS						3											

Significant Wildlife Habitat Form

AECOM

Study Area: BLW JER (SSH) Map #: 290-GSH2089/2043
 Date: 2012-04-25 Time Started: 12:30
 Field Staff: Tom Shorey Jess Pette Time Finished: 2:30
 Weather Conditions: Sunny, 86c, Light Breeze

Colonial Nesting Tree/Shrub Birds, Osprey Breeding/Feeding, Bald Eagle Breeding/Nesting Habitat
 (FET1, FOC, FOM, FOD, SWC, SWM, SWD)
 Nest bowls present: No Yes (if yes, photograph and complete the following)
 UTM's: 454264 4796841 Number of nests: 1
 Description of nests (location, e.g. in tree/on built structure; material; evidence of recent use; birds present):
medium sized stick nest in crotch of beach tree - approx 20m
 Description of habitat (note riparian areas if present, evidence of disturbance): FODS-6
Pic # 1 #24

Waterfowls Stopover/Nesting, Amphibian Breeding, Turtle Nesting/Over-wintering, Marsh Breeding Birds
 (CUM1, CUT1, MAM, MAS, SAS1, SAM1, SAF1, SWD, SWT1, SWT2) (FOC, FOM, FOD, SWC, SWM, SWD, BOO1, FE01)
 Standing water present: No Yes (if yes, photograph and complete the following)
 UTM's: _____ Area of standing water delineated on field map
 Water depth (m): _____ % open water: _____ % emergent vegetation: _____
 Description of standing water (permanent pool, evidence of annual spring flooding, etc):
★ Potential habitat for breeding amphibians during wetter years ★
 Area and soil/substrate of shoreline habitat: _____
 Type and abundance of cover in open water habitat: _____
 Type and abundance of cover in surrounding habitat: _____
 Evidence of disturbance (e.g. cattle grazing): _____
 Evidence of use by waterfowl, amphibians, turtles (e.g. broken eggs), marsh breeding birds: _____
 Complete Vernal Pool Habitat Description Form

Snake Hibernacula
 Fissured rock/foundation or rock/debris pile present: No Yes (if yes, photograph and complete the following)
 UTM's: See Hibernacula Form Likelihood to extend below frost line: _____
 % canopy cover: _____ % slope: _____ Distance to open canopy (m): _____
 Description of fissure or stone pile (composition/material, dimensions, etc): _____
 Description of surrounding habitat (type & abundance of cover, evidence of disturbance, etc): _____

Seeps and Springs (FOC, FOM, FOD, SWC, SWM, SWD)
 Evidence of seep or spring: No Yes (if yes, photograph and complete the following)
 UTM's: _____ Description (indicator species, etc): _____

NHA Site Investigation - Significant Wildlife Habitat Form

AECOM

Colonial Nesting Bird Breeding Habitat (Bank and Cliff Swallows)
 (CUM1, CUT1, CUS, BLO1, BLS1, BLT1, CLO1, CLS1, CLT1)
 Eroding bank, sandy hill, pits, steep slope or rock face present:
 No Yes (if yes, photograph and complete the following)
 UTM: _____ Location (e.g. aggregate pit, bridge): _____
 Evidence of use by bank or cliff swallows (provide number of nests): _____

Colonial Nesting Ground Breeding Birds, Shorebird Migratory Stopover Areas
 (BBO1, BBO2, BBS1, BBS2, BBT1, BBT2, SDO1, SDS2, SDT1, MAM1, MAM2, MAM3, MAM4, MAM5)
 Shoreline of lake, large river or large wetland present:
 No Yes (if yes, photograph and complete the following)
 UTM: _____ Rocky island or peninsula present: _____
 Mudflat present: _____ Evidence of disturbance (e.g. cattle grazing): _____
 Description of habitat (size of rocky outcrop/mudflat, substrate/soil type, type and abundance of cover): _____

Raptor Winter Feeding and Roosting, Open Country or Shrub/Early Successional Bird Breeding Habitat
 CUT1, CUS1, >30ha, CUM1 >30ha, FOC, FOD, FOM with a CUM, CUT, CUS, CUW >20ha, or a CUM, CUS, CUT, CUW >15ha
 Large meadow, old field or generally open habitat (e.g. CUM, CUS, CUT, CUW) present:
 Large open habitat present: No Yes (if yes, photograph and complete the following)
 UTM: _____ Evidence of disturbance (e.g. cattle grazing): _____
 Description of habitat (abundance of food plants for rodents, abundance of perches, height of vegetation): _____

Old-growth or Mature Forests, Interior Forest Breeding Birds
 (FOD, FOC, FOM, SWC, SWM, SWD. Mature forest (>60 years) present)
 Mature forest present: No Yes (if yes, photograph and complete the following)
 UTM: _____ Age of oldest trees: _____
 Evidence of disturbance (e.g. selective cutting): _____
 Description of habitat (structural complexity, abundance of snags and/or downed woody debris, etc): _____

Photo #	Location or Subject	Photo #	Location or Subject
22.23	Rock Pile		
24	Stick nest		

Species Conservation Concern Habitat and Incidental Wildlife - Goshen



Map No: 290-6541089/2043
 Date (yyyy-mm-dd): 2012-04-25

Field Staff: Tom Sporey
 Jess Hately

Time Started: 12:30
 Time Finished: 2:30

Observed Species List

Species Code	UTM	EV	Notes	Species Code	UTM	EV	Notes
Vesper Spar		VO	calling along Edge				
Downy Wood		OB	Pecking				
Eastern Crows		OB	within Feature				
Black Capped Chickadee		VO					
Red Admiral		OB	Flying within Feature				
Red winged Blackbird		VO					

Note: Evidence Codes (EV) Breeding Bird (Possible) SH=Suitable Habitat, SM= Singing Male;
 Breeding Bird (Probable) T-Territory, D=Display, P=Pair, N=Nest Building, V= Visiting Nest, A=Anxiety Behavior;
 Breeding Bird (Confirmed) DD=Distraction, NU=Used Nest, FY=Fledged Young, NE=Eggs, NY=Young, FS=Foos/Faecal 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) *Not observed*

ELC	Species	Habitat Description	Habitat Present (Y/N; UTM; description of habitat if present)
PLANTS			
FOD7	American Gromwell (Lithospermum latifolium) - S3 Bloom Time - Spring	Shaded river banks, wooded floodplains. River floodplains, woods and edges of woods.	Y (N) UTM:
ALO, TPO	Muehlenberg's astomum moss (Astomum muehlenbergianum)- S2 Bloom Time - Spring	Thin soil over level outcrop ledges and on soil under grasses in open prairie	Y (N) UTM:
FOM1, FOM2, CUP3	Autumn Coral-root (Coralorrhiza odontorhiza) - S2 Bloom Time - summer to fall	Oak-pine woods or occasionally in open, red pine or white pine plantations. Dry, sandy woods.	Y (N) UTM:
FOC, FOM, FOD	Burning Bush (Euonymus alropurpureus) - S3 Bloom Time- April - June	Species occurs in dry to moist deciduous thickets and woods	Y (N) UTM: N/O
SWC1, SWC3, SWC4, SWM1, SWM2, SWM4, SWM5, SWM6	Chinese Hemlock Parsley (Conioselinum chinense) - S2 Bloom Time -summer to fall	Swampy places with deciduous trees, white cedars, tamarack, springy river banks, wet borders of streams and rivers. Also found among calcareous seepage slopes.	Y (N) UTM:
SWC, SWM, SWD, SWT, MAM, MAS	Crowned Beggarticks (Bidens trichosperma) -S2 Bloom Time - late summer	Found in openings in swamps, marshes, along shores & wet fields within the Carolinian zone and southeastern Georgian bay. Bogs, fens, tamarack swamps.	Y (N) UTM:
ALT1, FOD7	Eastern Green-violet (Hybanthus concolor) - S2 Bloom Time -mid March to August	Occurs in rich, wet-mesic floodplain forests as well as mesic forests over limestone. Includes floodplains and river banks.	Y (N) UTM:
TPS, TPW, FOM1, FOM2	Fogg's Goosefoot (Chenopodium foggii) -S2	Species occurs in sandy areas on limestone under oak or pine-oak forests	Y (N) UTM:
TPO2, TPS2, TPW2,	Giant Ironweed (Vernonia gigantea)-S1? Bloom Time-	Found in mesic prairies, thickets, moist woods, roadsides and grassy meadows	Y (N) UTM:

Species of Conservation Concern Habitat and Incidental Wildlife – Goshen



ELC	Species	Habitat Description	Habitat Present (Y/N; UTM; description of habitat if present)
CUM1, MAM, FOD6, FOD7, FOD9	June – August Green Dragon (<i>Arisaema dracontium</i>) - SC/S3 <u>Bloom Time – May and June</u>	Species found in damp deciduous forest and along river streams. Particularly Maple forest and forest dominated by Red Ash and White Elm.	Y (N) UTM
TPO1, TPS1, TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	June-August Hairy Bedstraw (<i>Galium pilosum</i>) –S3 <u>Bloom Time – June-August</u>	Occurs in dry, sandy woods and thickets; occasionally in dry sandy fields	Y (N) UTM
FE01, FES1, FET1, SWC, SWM, SWD, SWT, TPO, TPS, TPW	June to August Hairy Valerian (<i>Valeriana edulis</i>) -S1 <u>Bloom Time – June to August</u>	Inhabits swampy river flats and meadows, wet prairies, and wooded, rocky riverbanks and fens.	Y (N) UTM
FOD6, FOD7, SWM, SWD	Summer Hairy Wood Mint (<i>Blephilia hirsuta</i>) –S1 <u>Bloom Time – Summer</u>	Woodlands, often rocky, especially rivers. Rich woods, swamp forests, floodplains	Y (N) UTM
FOD6, FOD7, FOD8, FOD9	Time – early to late April Harbinger-of-spring (<i>Engenia bulbosa</i>) - S3 <u>Bloom Time – early to late April</u>	Occurs in rich, moist deciduous woods, especially on floodplains.	Y (N) UTM
SAS1, SAM1, SAF1	Hill's Pond Weed (<i>Potamogeton hillii</i>) - SC/S2 <u>Bloom Time – summer</u>	Aquatic plant found in highly alkaline waters of ditches, ponds, beaver ponds, and slow-moving cold waters.	Y (N) UTM
FOM6, FOM7, FOM8	Large Round-leaved Orchid (<i>Platanthera macrophylla</i>) - S2 <u>Bloom Time – June to August</u>	Species inhabits moist mixed woods. Found in fairly mature, upland sugar maple-beech-eastern hemlock woodlands.	Y (N) UTM
MAM2, MAM3, MAS2, MAS3, SWD	Lizard's Tail (<i>Saururus cernuus</i>) - S3 <u>Bloom Time – June – September</u>	Species inhabits shores and streambanks along shallow water. As well as swamps, floodplains, shallow water and mudflats at the borders of streams and ponds.	Y (N) UTM
FOD6, FOD7, FOD9	Pawpaw (<i>Asimina triloba</i>) –S3 <u>Bloom Time – March-May</u>	Occurs in moist, deciduous woods and stream banks.	Y (N) UTM
FOM8, FOD6, FOD7, FOD8, CUM1	Pilose Evening Primrose (<i>Oenothera pilosella</i>) –S2 <u>Bloom Time – Late Spring – Early Summer</u>	Moist edges of woods and open, disturbed ground.	Y (N) UTM
TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	Prostate Tick-trefoil (<i>Desmodium rotundifolium</i>) –S2 <u>Bloom Time – July-September</u>	Dry, sandy or rocky woods	Y (N) UTM
FOD7, SWD	Pumpkin Ash (<i>Fraxinus profunda</i>)–S2? <u>Bloom Time – March - June</u>	Swamps and floodplains	Y (N) UTM
CUW1, ALO, FET1, SWC	Ram's-head Lady's-slipper (<i>Cypripedium arietinum</i>) - S3 <u>Bloom Time –mid May to mid June</u>	Found in cedar woodlands, limestone plains and wooded fens, moist coniferous swamps, dry-sandy woods, and limestone barren.	Y (N) UTM
FOD1, FOD2, FOD3, FOD4, FOD5, FOC1, FOM1, FOM5	Rattlesnake Hawkweed (<i>Hieracium venosum</i>) - S2 <u>Bloom Time – April – September</u>	Species inhabits open, dry sandy woods. Jack pine, oak, and aspen woodlands.	Y (N) UTM
FOD6, FOD7, FOD9	Round-leaved Groundsel (<i>Packera obovata</i>) –S3 <u>Bloom Time – May - June</u>	Found in moist woods	Y (N) UTM
CUM1, CUT1, CUS1	Round-leaved hawthorn (<i>Crataegus lumarina</i>) –S3?	Species occurs in old fields, poorly managed pastures, fencelines and roadsides	Y (N) UTM
FOD6, FOD7, FOD8, FOD9, SWT2, SWT3	Scarlet Beebalm (<i>Monarda didyma</i>) - S3 <u>Bloom Time – May to October</u>	Found in moist, rich woods, thicket swamps, banks and floodplains.	Y (N) UTM
ALO, ALS, ALT, TPO, TPS, TPW	Slender Blazing Star (<i>Liatris cylindracea</i>) –S3	Species occurs in limestone and dolostone pavement, prairies, open woods, alvars and moist sandy meadows.	Y (N) UTM
SBO, SBS, SBT, TPO1, TPS1, TPW1, FOD1, FOD2	Slender Knotweed (<i>Polygonum tenue</i>)–S2	Found in dry, sandy, open areas in deciduous (often oak woods), prairie meadows, at edges of sand pits	Y (N) UTM
SDT1, FOD5, FOD9	Slim-flowered Miuhly (<i>Muhlenbergia tenuiflora</i>) - S2	Found in rich deciduous forest, often on rocky or sandy soils, wooded dunes, hillsides, and riverbanks whether in oak or beech-maple woods	Y (N) UTM
BLO1, BLS1, BLT1, TPO2, TPS2, TPW2, MAM2, FOD7	Stiff Gentian (<i>Gentiana quinquefolia</i>) - S2 <u>Bloom Time – late summer to mid fall</u>	Found in moist soils of streambanks, edges of woods, wet prairies, marshy meadows, bluffs and wooded hillsides.	Y (N) UTM
TPS1, TPW1, CUW1, RBO, SBO	Sundial Lupine (<i>Lupinus perennis</i>) - S3 <u>Bloom Time – mid-March to mid-June</u>	Inhabits dry, sandy oak savannahs, prairies, open barrens or clearings in woodlands of oak, jack pine, and/or aspen	Y (N) UTM

Species Conservation Concern Habitat and Incidental Wildlife – Goshen



ELC	Species	Habitat Description	Habitat Present (Y/N); UTM; description of habitat if present
TP01, TPS1, TPW1, CUM1	Tall Blazing Star (<i>Liatris aspera</i>) - S3/SC	Occurs in open, sandy woods, dry roadsides and sandy prairies	Y (N) UTM:
FE0, FES, FET, MAM2, MAM3	Tuberous Indian Plantain (<i>Amoglossum plantagineum</i>) - S3 Bloom Time - mid-March to mid-June	Occurs mainly in flat, sandy areas of the Bruce Peninsula. Fens, wet meadows, and calcareous river flats.	Y (N) UTM:
FOC1, FOC2, FOC3, FOC4	Woodland Pinedrops (<i>Pterospora andromedea</i>) - S2 Bloom Time - summer	Found in conifer woods, under pines, but also hemlock, spruce, fir, and white cedar. In dry or rocky soil, often with common juniper and sometimes aspen or birch.	Y (N) UTM:
CUM1, CUT1, CUW1, RBO1, SBO1	Yellow Ladies'-tresses (<i>Spiranthes ochroleuca</i>) - S2 Bloom Time - August to November	Dry, open sites, usually on acidic sandy soil, dry to mesic open woodland, thickets, meadows, barrens, ledges, outcrops, banks and roadsides, old fields.	Y (N) UTM:
BIRDS			
-	Bald Eagle (<i>Haliaeetus leucocephalus</i>) - SC	Assessed as SWH. Record species if found.	not required.
CUW, SDO, RBO, TPS	Common Nighthawk (<i>Chordeiles minor</i>) - SC	Hunts insects over a wide variety of habitats, in particular open or semi-open areas. Nests on ground in a wide range of open, sparse or vegetation-free habitats.	Y (N) UTM:
FOD, FOM	Louisiana Waterthrush (<i>Seiurus motacilla</i>) - SC	Inhabits mature forests along steeply sloped ravines adjacent to running water. Trees, bushes, exposed roots, cliffs, banks and mossy logs are favoured nesting spots. Riparian woodlands are preferred stopover sites during migration	Y (N) UTM:
FOD, CUW, CUT	Red-headed Woodpecker (<i>Melanerpes erythrocephalus</i>) - SC	Species inhabits open woodland/ edges (oak savannahs and riparian forest) open, deciduous forest with little understory; fields or pasture lands with scattered large trees; wooded swamps; orchards, small woodlots or forest edges; groves of dead or dying trees; requires cavity trees with at least 40 cm dbh; requires about 4 ha for a territory.	Y (N) UTM: N/O
-	Short Eared Owl (<i>Asio flammeus</i>) - SC	Assessed as SWH. Record species if found.	not required.
CUT1	Yellow-breasted Chat (<i>Icteria virens</i>) - SC	Inhabits thickets, tall tangles of shrubbery beside streams, ponds; overgrown bushy clearings with deciduous thickets; nests above ground in bush, vines	Y (N) UTM:
REPTILES			
-	Eastern Ribbonsnake (<i>Thamnophis sauritus</i>) - SC	Assessed as SWH. Record species if found.	not required.
-	Milksnake (<i>Lampropeltis triangulum</i>) - SC	Assessed as SWH. Record species if found.	not required.
-	Snapping Turtle (<i>Chelydra serpentina</i>) - SC	Assessed as SWH. Record species if found.	not required.
INSECTS			
OAO, SA, SWM, SWD	Azure Bluet (<i>Enallagma aspersum</i>) - S3	Species inhabits fishless ponds, lakes and boggy swamps	Y (N) UTM:
TPS, TPW	Sleepy Duskywing (<i>Erynnis brizo</i>) - S1	Occurs in oak/oak-pine scrub, chaparral, barrens, well-drained sandy or shaly soils. Species regularly seen at flowers in oak woods, on the ground, and at mud puddles	Y (N) UTM:
CUM1, CUT1, CUW1	Monarch Butterfly (<i>Danaus plexippus</i>) - SC	Their larvae only feed on milkweeds (<i>Asclepius</i> spp.). Habitat includes abandoned farmland, along roadsides, open spaces where these plants grow	Y (N) UTM:
TPS, CUW	Mottled Duskywing (<i>Erynnis martialis</i>) - S2	Usually seen nectaring on or wet sandy roads. Larvae feeds on New Jersey Tea and adults only likely near where this plant is present	Y (N) UTM:
SWT, SWD, SWM, FOM, FOD4-3, TPW, TPS, CUM1	Tawny Emperor (<i>Asterocampa clyton</i>) - S3	Species inhabits densely wooded riparian areas, dry woods, open woods, fencerows and parks. Usually occurs near Hackberry, the larval foodplant	Y (N) UTM:
FOD5	West Virginia White (<i>Pieris virginianensis</i>) - SC	This species is restricted to rich, moist deciduous woods, where its foodplant Toothwort occur	Y (N) UTM: N/O

290-GSH2089 / 2043

- Collection Feature Interest
- Turbine Buffer/Feature Interest
- Property Value
- Access/Collection Line
- Collection Buffer (125m)
- Turbine Buffer (171.5m)

- Roads
- Access/Collection Line
- Collection Buffer (125m)
- Turbine Buffer (171.5m)

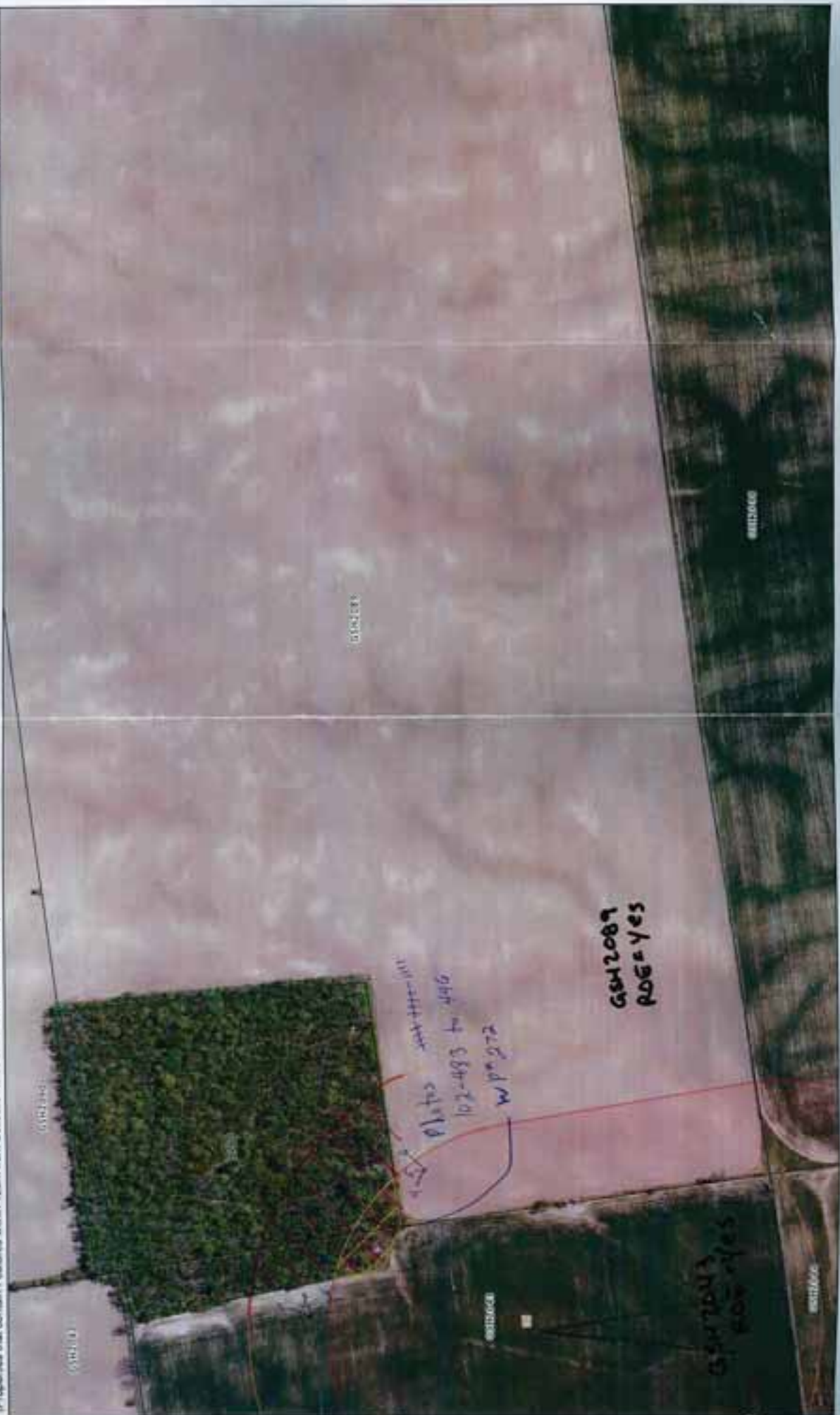
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September 1, 2011



Goshen Feature: 290 GSH2089 / GFSB

(Properties that contain Features within 125m from Collection lines and 171.5m from Turbines)



Please contact
102-483 for info
w/p 272

GSH2089
ROE = YES

GOSHEN
ROE = YES

0812660

0812660

0812662

0812662

ELC
Community Description and Classification

Site: 290_GSH2088 Polygon: 0

Surveyor(s): SAH Date: 2012/11/11 Time start: 0952h finish: 1137h

UTMZ: 17T UTMZ: 45A314 UTMN: 4796740

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 Min. <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 checked="" type="checkbox"/> Valley Slope <input checked="" type="checkbox"/> Tableland <input 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)
1	2	4	MH > HD > AW > BC
2	3	3	MH > BC
3	5-4	3	CWR < MRY > BC > MH > AW
4	7-6	3	B < S < L > A < H < J > E < M < Y < C < D < U < V > W < L < A < V < S

HT Codes: 7 < 0.2m 6 > 0.2-0.5m 5 > 0.5-1m 4 > 1-3m 3 > 2.5m 2 > 0.25m 1 > 25m
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 50% 4 > 50%

Stand Composition: Size Class Analysis:

BA: 2-5	10-24	10-24	10-24	25-50	25-50	>50
Standing Snags:	<10	<10	<10	25-50	25-50	>50
Deadfall / Logs:	<10	<10	<10	25-50	25-50	>50

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

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

Ecosite: Dry-Fresh Sugar Maple Deciduous Forest Code: F055
 Vegetation Type: Dry-Fresh Sugar Maple-Basswood Deciduous Forest Type Code: F055-6
 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
MH	1	5	1	1	14	2
HD	1	2	1	1	10	27
AW	1	5	1	1	6	16
BC	1	1	1	1	4	11
WB	1	1	1	1	1	3
BA	1	1	1	1	1	3
Total	15	9	14	14	37	100
Basal Area (BA)	30	16	28	28	74	85
Dead	1	1	1	1	3	

Soils Ontario and ELC Soils Description

PI/Auger #	Soils Ontario and ELC Soils Description				Summary
UTM	Zone	Easting	Northing	Position	Moisture Regime
Slope	Aspect	Percent	Slope	Drainage	
Length	Mottles				Effective Texture (Indicate below)
Depth to...	Clay	Water Table	Carbonates	Bedrock	
1	Depth from zero	Texture	Depth from zero	Texture	% CF
2	Depth from zero	Texture	Depth from zero	Texture	% CF
3	Depth from zero	Texture	Depth from zero	Texture	% CF
4	Depth from zero	Texture	Depth from zero	Texture	% CF
% Surface Stone/Rock		Moisture Regime		Drainage	

N/A

290-GSH 2089/2043 / GE 35
 VASCULAR PLANT CHECKSHEET
 Date: Sept-21/11

Location:
 Observer: SAM

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>Chilisa multiflora</i>						<i>Erigeron annuus</i>						<i>Plantago lanceolata</i>						<i>Allium plantago-aquatica</i>					
<i>Cirsium pachyoides</i>						<i>Erigeron philadelphicus</i>						<i>Plantago major</i>						<i>Allium trioccosum</i>					
<i>Cirsium rubra</i>						<i>Erigeron strigosus</i>						<i>Plantago rugelii</i>						<i>Allium</i>					
<i>Agalinus</i>						<i>Erythronium chieranthoides</i>						<i>Podophyllum peltatum</i>						<i>Artemisia trifyllum</i>					
<i>Agrimonia gryposepala</i>						<i>Eupatorium maculatum</i>						<i>Polygonum</i>						<i>Asparagus officinalis</i>					
<i>Alliaria petiolata</i>						<i>Eupatorium perfoliatum</i>						<i>Polygonum</i>						<i>Cala palustris</i>					
<i>Anemone nemorosa</i>						<i>Eupatorium rugosum</i>						<i>Polygonum</i>						<i>Clethra barnebyi</i>					
<i>Anemone canadensis</i>						<i>Euphorbia</i>						<i>Polygonum lapatholium</i>						<i>Conoclinium majus</i>					
<i>Anemone virginiana</i>						<i>Euthamia graminifolia</i>						<i>Polygonum pensilvanicum</i>						<i>Corynepedium calceosum</i>					
<i>Androsace neglecta</i>						<i>Fragaria virginiana</i>						<i>Potentilla</i>						<i>Elaeagnus canadensis</i>					
<i>Apocynum androsaemifolium</i>						<i>Fragaria vesca</i>						<i>Potentilla norvegica</i>						<i>Elymus helleborifolius</i>					
<i>Apocynum cannabinum</i>						<i>Galeopsis tetrahit</i>						<i>Potentilla recta</i>						<i>Erythronium americanum</i>					
<i>Aquilegia canadensis</i>						<i>Galium</i>						<i>Prunella alba</i>						<i>Hemerocallis flava</i>					
<i>Analis nudicaulis</i>						<i>Galium</i>						<i>Prunella vulgaris</i>						<i>Iris versicolor</i>					
<i>Ansilium nitens</i>						<i>Galium palustre</i>						<i>Pyrola elliptica</i>						<i>Lenaxa rubra</i>					
<i>Artemisia</i>						<i>Galium triflorum</i>						<i>Ranunculus</i>						<i>Lenaxa tridactyla</i>					
<i>Anarum canadense</i>						<i>Geranium maculatum</i>						<i>Ranunculus abortivus</i>						<i>Lilium</i>					
<i>Azoclepis incarnata</i>						<i>Geranium robertianum</i>						<i>Ranunculus acris</i>						<i>Milanthera canadensis</i>					
<i>Azoclepis syriaca</i>						<i>Geum aleppicum</i>						<i>Ranunculus abortivus</i>						<i>Milanthera racemosa</i>					
<i>Aster</i>						<i>Geum canadense</i>						<i>Ranunculus acris</i>						<i>Milanthera stralkata</i>					
<i>Aster cordifolius</i>						<i>Geum</i>						<i>Rumex crispus</i>						<i>Panicum</i>					
<i>Aster ericoides</i>						<i>Glechoma hederacea</i>						<i>Rumex</i>						<i>Parthenocis cordata</i>					
<i>Aster lanceolatus</i>						<i>Hepatica scutellata</i>						<i>Sanguinaria canadensis</i>						<i>Polygonatum pubescens</i>					
<i>Aster lateriflorus</i>						<i>Hesperis matronalis</i>						<i>Sanicula marilandica</i>						<i>Potamogeton crispus</i>					
<i>Aster macrophyllus</i>						<i>Hieracium aurantiacum</i>						<i>Saponaria officinalis</i>						<i>Potamogeton pectinatus</i>					
<i>Aster novae-angliae</i>						<i>Hieracium cespitosum</i>						<i>Satureja vulgaris</i>						<i>Potamogeton</i>					
<i>Aster purpureus</i>						<i>Hieracium</i>						<i>Scutellaria palmerioides</i>						<i>Potamogeton</i>					
<i>Barbarea vulgaris</i>						<i>Hydrophyllum virginianum</i>						<i>Silene vulgaris</i>						<i>Scirpus setosus</i>					
<i>Bidens cernua</i>						<i>Hypericum perforatum</i>						<i>Sium suave</i>						<i>Stachys montana</i>					
<i>Bidens frondosa</i>						<i>Impatiens capensis</i>						<i>Solanum dulcamara</i>						<i>Stachys hercynica</i>					
<i>Boninaria cylindrica</i>						<i>Inula helenium</i>						<i>Solidago</i>						<i>Spiranthes cernua</i>					
<i>Calluna palustris</i>						<i>Lactuca</i>						<i>Solidago altissima</i>						<i>Scirpus polytrichus</i>					
<i>Calystegia sepium</i>						<i>Laportea canadensis</i>						<i>Solidago canadensis</i>						<i>Strepocarpus roseus</i>					
<i>Cardenaria diphylla</i>						<i>Lapsana communis</i>						<i>Solidago serotina</i>						<i>Trifolium arvense</i>					
<i>Cardamine</i>						<i>Leonurus cardiaca</i>						<i>Solidago gigantea</i>						<i>Trifolium grandiflorum</i>					
<i>Caulophyllum thalictroides</i>						<i>Lepidium</i>						<i>Solidago nemoralis</i>						<i>Urtica grandiflora</i>					
<i>Cerastium lanatum</i>						<i>Liveria vulgaris</i>						<i>Solidago rugosa</i>											
<i>Caulophyllum demersum</i>						<i>Labella</i>						<i>Sonchus oleraceus</i>											
<i>Chelidonium majus</i>						<i>Labella inflata</i>						<i>Sonchus asper</i>											
<i>Chenopodium album</i>						<i>Leibis corniculata</i>						<i>Stellaria</i>											
<i>Chrysanth. leucanthemum</i>						<i>Lycopus americanus</i>						<i>Tanacetum vulgare</i>											
<i>Cichorium intybus</i>						<i>Lycopus</i>						<i>Tanacetum officinale</i>											
<i>Cnicus</i>						<i>Lythrum ciliata</i>						<i>Thalictrum dioicum</i>											
<i>Cnicus scutellariifolius</i>						<i>Lythrum salicaria</i>						<i>Thalictrum pubescens</i>											
<i>Cnicus arvensis</i>						<i>Medicago lupulina</i>						<i>Thymus cordifolia</i>											
<i>Cnicus vulgaris</i>						<i>Medicago sativum</i>						<i>Tragopogon pratensis</i>											
<i>Clematis virginiana</i>						<i>Melilotus alba</i>						<i>Trientalis borealis</i>											
<i>Clethra barnebyi</i>						<i>Mercurialis annua</i>						<i>Trifolium</i>											
<i>Coryza canadensis</i>						<i>Melilotus alba</i>						<i>Trifolium pratense</i>											
<i>Cornilla varia</i>						<i>Mentha arvensis</i>						<i>Trifolium repens</i>											
<i>Cynanchum montanum</i>						<i>Mentha arvensis</i>						<i>Urtica dioica</i>											
<i>Cynoglossum officinale</i>						<i>Mentha arvensis</i>						<i>Urtica dioica</i>											
<i>Caucus carola</i>						<i>Mentha arvensis</i>						<i>Urtica dioica</i>											
<i>Desmodium canadense</i>						<i>Mentha arvensis</i>						<i>Urtica dioica</i>											
<i>Dianthus arvensis</i>						<i>Mentha arvensis</i>						<i>Urtica dioica</i>											
<i>Dipsacus filiformis</i>						<i>Mentha arvensis</i>						<i>Urtica dioica</i>											
<i>Echinops alba</i>						<i>Mentha arvensis</i>						<i>Urtica dioica</i>											
<i>Echinops vulgaris</i>						<i>Mentha arvensis</i>						<i>Urtica dioica</i>											
<i>Epilobium</i>						<i>Mentha arvensis</i>						<i>Urtica dioica</i>											
<i>Epilobium ciliatum</i>						<i>Mentha arvensis</i>						<i>Urtica dioica</i>											
<i>Epilobium hirsutum</i>						<i>Mentha arvensis</i>						<i>Urtica dioica</i>											
<i>Epilobium parviflorum</i>						<i>Mentha arvensis</i>						<i>Urtica dioica</i>											

1: poly (1) _____ 4: _____
 2: _____ 5: _____
 3: _____ 6: _____

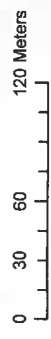
SITE LOCATIONS

Goshen Feature: 291/300 GSH2108/2110

(Properties that contain Features within 125m from Collection lines and 171.5m from Turbines)

Legend:

- ELC Survey Completed
- Turbine Buffer/Feature Intersect
- Property Fabric
- Goshen Wind Energy Centre
- Roads
- Access/Collection Line
- Survey to be Completed
- Turbine Buffer (171.5m)



October 28, 2011



NEW SITE
(1st survey)

NO ACCESS

ACCESS = YES

Leased

Access = yes

roe = yes

GSH2107

GSH2108

32

291

GSH2110

284

ELC Community Description and Classification

Site: 291 GSH 2108 Polygon: A
 Surveyor(s): Kowsta Date: Nov 7/11 Time start: 13:45 finish:
 UTMZ: 17T UTMZ: 4S2210 UTMN: 479678S

Polygon Description

System	Substrate	Topographic Feature	Plant Form	Community
<input type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic <input type="checkbox"/> Site <input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock <input type="checkbox"/> History <input type="checkbox"/> Natural <input type="checkbox"/> Cultural <input type="checkbox"/> Cover <input type="checkbox"/> Open <input type="checkbox"/> Shrub <input type="checkbox"/> Tree	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <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 type="checkbox"/> Roll. Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Ailvar <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 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 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	Populus > Fir/Aspen
2	3	4	Rubus - Juniper - 2 Pines
3	4	4	Rubus - Juniper - Pines
4	6	4	Geococcyx - Asplatic - Enochy - Rumex

HT Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 60% 4 > 60%
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 > 2-5m 2 > 6-25m 1 > 25m

Stand Composition:

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

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

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

Ecosite: moist Tr. Aspen - Gr. Ash
Vegetation Type: FOD 8-1
Inclusion: Small pockets of seasonal flooding
Complex:

Community Profile Diagram/Comments

Abundance of ground in wetland - low over swamp and slightly elevated areas forest
 Occasional disturbance canopy gaps in stand.
 Rub. dec - Geococcyx

Tree Tally by Species

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

Soils Ontario and ELC Soils Description

Site Metrics	Pit/Auger #		Soil Horizon Description		Summary	
	UTM	Zone	Depth from zero	Texture	% CF	% CF
Slope	Easting	Northing	Depth from zero	Texture	% CF	% CF
	Position	Aspect	Depth from zero	Texture	% CF	% CF
Mottles	Percent	Slope	Depth from zero	Texture	% CF	% CF
	Length	Length	Depth from zero	Texture	% CF	% CF
Gley	Mottles		Depth from zero	Texture	% CF	% CF
	Water Table		Depth from zero	Texture	% CF	% CF
Carbonates	Gley		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Effective Texture (indicate below)	Depth to ...		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Drainage	Mottles		Depth from zero	Texture	% CF	% CF
	Gley		Depth from zero	Texture	% CF	% CF
Moisture Regime	Water Table		Depth from zero	Texture	% CF	% CF
	Carbonates		Depth from zero	Texture	% CF	% CF
Drainage	Bedrock		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Effective Texture (indicate below)	Depth to ...		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Drainage	Mottles		Depth from zero	Texture	% CF	% CF
	Gley		Depth from zero	Texture	% CF	% CF
Moisture Regime	Water Table		Depth from zero	Texture	% CF	% CF
	Carbonates		Depth from zero	Texture	% CF	% CF
Drainage	Bedrock		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Effective Texture (indicate below)	Depth to ...		Depth from zero	Texture	% CF	% CF
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Drainage	Mottles		Depth from zero	Texture	% CF	% CF
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Moisture Regime	Water Table		Depth from zero	Texture	% CF	% CF
	Carbonates		Depth from zero	Texture	% CF	% CF
Drainage	Bedrock		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Effective Texture (indicate below)	Depth to ...		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Drainage	Mottles		Depth from zero	Texture	% CF	% CF
	Gley		Depth from zero	Texture	% CF	% CF
Moisture Regime	Water Table		Depth from zero	Texture	% CF	% CF
	Carbonates		Depth from zero	Texture	% CF	% CF
Drainage	Bedrock		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Effective Texture (indicate below)	Depth to ...		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Drainage	Mottles		Depth from zero	Texture	% CF	% CF
	Gley		Depth from zero	Texture	% CF	% CF
Moisture Regime	Water Table		Depth from zero	Texture	% CF	% CF
	Carbonates		Depth from zero	Texture	% CF	% CF
Drainage	Bedrock		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Effective Texture (indicate below)	Depth to ...		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Drainage	Mottles		Depth from zero	Texture	% CF	% CF
	Gley		Depth from zero	Texture	% CF	% CF
Moisture Regime	Water Table		Depth from zero	Texture	% CF	% CF
	Carbonates		Depth from zero	Texture	% CF	% CF
Drainage	Bedrock		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Effective Texture (indicate below)	Depth to ...		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Drainage	Mottles		Depth from zero	Texture	% CF	% CF
	Gley		Depth from zero	Texture	% CF	% CF
Moisture Regime	Water Table		Depth from zero	Texture	% CF	% CF
	Carbonates		Depth from zero	Texture	% CF	% CF
Drainage	Bedrock		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Effective Texture (indicate below)	Depth to ...		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Drainage	Mottles		Depth from zero	Texture	% CF	% CF
	Gley		Depth from zero	Texture	% CF	% CF
Moisture Regime	Water Table		Depth from zero	Texture	% CF	% CF
	Carbonates		Depth from zero	Texture	% CF	% CF
Drainage	Bedrock		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Effective Texture (indicate below)	Depth to ...		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Drainage	Mottles		Depth from zero	Texture	% CF	% CF
	Gley		Depth from zero	Texture	% CF	% CF
Moisture Regime	Water Table		Depth from zero	Texture	% CF	% CF
	Carbonates		Depth from zero	Texture	% CF	% CF
Drainage	Bedrock		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Effective Texture (indicate below)	Depth to ...		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Drainage	Mottles		Depth from zero	Texture	% CF	% CF
	Gley		Depth from zero	Texture	% CF	% CF
Moisture Regime	Water Table		Depth from zero	Texture	% CF	% CF
	Carbonates		Depth from zero	Texture	% CF	% CF
Drainage	Bedrock		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Effective Texture (indicate below)	Depth to ...		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Drainage	Mottles		Depth from zero	Texture	% CF	% CF
	Gley		Depth from zero	Texture	% CF	% CF
Moisture Regime	Water Table		Depth from zero	Texture	% CF	% CF
	Carbonates		Depth from zero	Texture	% CF	% CF
Drainage	Bedrock		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Effective Texture (indicate below)	Depth to ...		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Drainage	Mottles		Depth from zero	Texture	% CF	% CF
	Gley		Depth from zero	Texture	% CF	% CF
Moisture Regime	Water Table		Depth from zero	Texture	% CF	% CF
	Carbonates		Depth from zero	Texture	% CF	% CF
Drainage	Bedrock		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Effective Texture (indicate below)	Depth to ...		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Drainage	Mottles		Depth from zero	Texture	% CF	% CF
	Gley		Depth from zero	Texture	% CF	% CF
Moisture Regime	Water Table		Depth from zero	Texture	% CF	% CF
	Carbonates		Depth from zero	Texture	% CF	% CF
Drainage	Bedrock		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
Effective Texture (indicate below)	Depth to ...		Depth from zero	Texture	% CF	% CF
	Bedrock		Depth from zero	Texture	% CF	% CF
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	Gley		Depth from zero	Texture	% CF	% CF
Moisture Regime	Water Table		Depth from zero	Texture	% CF	% CF
	Carbonates		Depth from zero	Texture	% CF	% CF
Drainage	Bedrock		Depth from zero	Texture	% CF	% CF
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