

258-1659

HS6



ELC

Community
Classification

Site: Goshen
Surveyor(s):
Date: July 19, 2011
UTMZ: UTMN: 3 70

Polygon: GE17/SMN17
Time start: 1:17
Time finish: 3:30

Polygon Description 25°C, feels like 38°C

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

Stand Description

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp)
1	1	4	ACESAC > CAROVAT = FILANER
2	2	3	AVESAC > CARCARO = OSTVIRE
3	5	1	CARALTE
4	6	1	CAREX sp > VIOLA sp > MAIStELL

HT Codes: 7 < 0.2m 8 > 0.2-0.5m 9 > 0.5-1m 4 > 1-2m 3 > 2-8m 2 > 8-25m 1 > 25m
CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 50% 4 50 - 60% 5 60 - 75% 6 75 - 85% 7 85 - 95% 8 95 - 100%

Stand Composition:	Size Class Analysis:	Standing Snags:	Deadfall / Logs:
	A < 10 A < 10 A < 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
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Ecosite:	Code: F0D
Vegetation Type:	Code: F0D9-4
Inclusion:	Code:
Complex:	Code:

Community Profile Diagram/Comments

young community - lots of pole pop trees
community on track different than along stream
stream more disturbed open canopy

Notes:

Free Tally by Species

Species	Tally 1	Tally 2	Tally 3	Total
CAROVAT	111			
ACESAC	111			
OSTVIRE	111			
FILANER	111			
Total	15			100
Basal Area (BA)	30			
Dead				

Soils Ontario and ELC Soils Description

Soil Profile	Plt/Auger #	Zone	Easting	Northing	Position	Aspect	Percent	Slope	Length	Summary
S1		East	444291	4793764	107	12	12			Moisture Regime
										Drainage
										Effective Texture (Indicate below)
										% CF
S2										% CF
										% CF
										% CF
										% CF
S3										% CF
										% CF
										% CF
										% CF
S4										% CF
										% CF
										% CF
										% CF
S5										% CF
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										% CF
										% CF
S6										% CF
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										% CF
S7										% CF
										% CF
										% CF
										% CF
S8										% CF
										% CF
										% CF
										% CF
S9										% CF
										% CF
										% CF
										% CF
S10										% CF
										% CF
										% CF
										% CF

40cm

Location: Foster GE17/SMN17
Observer: Jess + Jay

Observer: Jess + Jac

Job Number.

1: Ford 9-4
2: _____
3: _____

4: _____
5: _____
6: _____

SITE LOCATIONS

I CONIFERS						II TREES and SHRUBS						III GRAMINIDS					
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						Robus alleghaniensis						Agropyron repens					
Larix laricina						Robus idaeus						Alopecurus					
Picea abies						Robus occidentalis						Bromus inermis					
Picea canadensis						Robus odoratus						Calamagrostis canadensis					
Pinus resinosa						Robus pubescens						Carex acutata					
Pinus strobus						Salix alba						Carex aurea					
Pinus sylvestris						Salix amygdaloides						Carex babingtonii					
Thuja occidentalis						Salix bebbiana						Carex blanda					
Thuja canadensis						+ Salix discolor						Carex gracillima					
						Salix ericophylla						Carex granularis					
						Salix nigra						Carex heterophylla					
						Salix torida						Carex pennsylvanica					
						Salix petiolaris						Carex radiata					
TREES and SHRUBS						+ Salix purpurea						Carex retrorsa					
Acer negundo						Salix x rubens						Carex stipata					
Acer rubrum						+ Salix						Carex stricta					
Acer saccharinum						Sambucus canadensis						Carex vulpincula					
Acer saccharum						Sambucus racemosa						Carex					
Acer spicatum						Sorbus aucuparia						Carex					
Alnus incana						Spirea alba						Carex					
Aster laevis						Syringa vulgaris						Carex					
Berberis thunbergii						+ Ulmus americana						Carex					
Betula alba						Ulmus americana						Carex					
Betula papyrifera						Ulmus						Carex					
Cornus caroliniana						Vaccinium						Carex					
Corya cordiformis						Viburnum lentago						Carex					
Celastrus scandens						Viburnum opulus						Cyperus					
Cornus alternifolia						Viburnum						Cyperus					
Cornus mas						Vitis riparia						Dactylis glomerata					
Cornus rugosa						Vitis rotundifolia						Danthonia spicata					
Cotinus stolonifera												Echinochloa crus-galli					
Corylus cornuta												Echinochloa					
Crataegus monogyna												Echinochloa					
Crataegus punctata												Elymus virginicus					
Crataegus sp.												Elymus					
Crataegus												Festuca arundinacea					
Diervilla lonicera												Glyceria striata					
Fagus grandifolia												Glyceria					
Fraxinus americana												Juncus dudleyi					
Fraxinus nigra						FERNS						Juncus effusus					
Fraxinus pennsylvanica						Adiantum pedatum						Juncus tenuis					
Ilex verticillata						Adiantum filix-femina						Juncus					
Juglans cinerea						Bolophanes multifidum						Juncus					
Juglans nigra						Bolophanes virginianum						Leersia oryzoides					
Lonicera maackii						Cyanus baltica						Muhlenbergia					
Lonicera tatarica						Dryopteris carthusiana						Oryzopsis asperifolia					
Lonicera						Dryopteris cristata						Panicum					
Malus pumila						Dryopteris marginalis						Panicum					
Ostrya virginiana						Equisetum arvense						Phalaris arundinacea					
Parthenocissus vitacea						Equisetum hyemale						Phalaris pectinatus					
Populus balsamifera						Equisetum variegatum						Phalaris pectinatus					
Populus grandidentata						Equisetum						Poa compressa					
Populus tremuloides						Gymnocarpium dryopteris						Poa pratensis					
Populus						Lycopodium digitatum						Poa					
Prunus pennsylvanica						Lycopodium obscurum						Scirpus atrovirens					
Prunus serotina						Lycopodium						Scirpus cyperinus					
Prunus virginiana						Lycopodium						Scirpus validus					
Prunus						Lycopodium						Scirpus					
Quercus macrocarpa						Marsilea stratigraphica						Scirpus					
Quercus rubra						Oenothera biennis						Setaria					
Quercus						Oenothera lamarckiana						Spartina					
Rhus copallina						Oenothera rugosa						Typha angustifolia					
Rhus radicans						Polypodium acrostichoides						Typha latifolia					
Rhus typhina						Polypodium virginicum						Typha latifolia					
Ribes americanum						Rubus idaeus											
Ribes cynosbati						Rubus odoratus											
Ribes x rubrum						Rubus pubescens											
Robinia pseudo-acacia						Salix alba											
CRATAEGUS						Salix discolor											

258 - GSH1658

Goshen Feature: 258 GSH1658

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

- Roads
- Access/Collection Line
- Collection Buffer (125m)
- Turbine Buffer (171.5m)
- Collection/Feature Intersect
- Turbine Buffer/Feature Intersect
- Property Fabric
- Goshen Wind Energy Centre

h

September 1, 2011

0 25 50 100 Meters



System	Substrate	Topographic Feature	Plant Form	Community
☒ Terrestrial	☐ Organic	☐ Lacustrine	☐ Plankton	☐ Lake
☐ Wetland	☒ Mineral Soil	☐ Riverine	☐ Submerged	☐ Pond
☐ Aquatic	☐ Parent Min.	☐ Bottomland	☐ Floating-L.V.D.	☐ River
<i>Site</i>	☐ Acidic Bedrk	☐ Terrace	☐ Granitoid	☐ Stream
☐ Open Water	☐ Basic Bedrk	☐ Valley Slope	☐ Forb	☐ Marsh
☒ Shallow Water	☐ Carb. Bedrk	☐ Tableland	☐ Lichen	☐ Swamp
☒ Surficial Dep.		☒ Troll. Upland	☐ Bryophyte	☐ Fen
☐ Bedrock		☐ Cliff	☒ Caducous	☐ Bog
<i>Habitat</i>		☐ Talus	☐ Coniferous	☐ Barren
☒ Natural		☐ Crevices/Cave	☐ Mixed	☐ Meadow
☐ Cultural		☐ Alover		☐ Prairie
<i>Cover</i>		☐ Rockland		☐ Thicket
☐ Open		☐ Beach / Bar		☐ Savannah
☐ Shrub		☐ Sand Dune		☐ Woodland
☒ Treed		☐ Bluff		☐ Forest
				☐ Plantation

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) >> Much Greater Than; > Greater Than; = About Equal To
1	2	4	$W > Aw > Bp$
2	3	2	$Aw > H > am. pumc.$
3	5	3-3	$caric > H > ford > Calico > B > ambr.$
4	7-6	2	$16.5m > v > uon > abou > ell > Auas > w > d > N > k$

Abundance Codes:	N = None	R = Rare	O = Occasional	A = Abundant
Standard Composition:				
EWG - W289-B02				
BA:	24			
Size Class Analysis:				
Standing Snags:	N	N	R	O
Deadfall / Logs:	N	R	O	R
	<10	<10	10-24	25-50
			10-24	25-50
				>50

Ecosite:	Code:
Vegetation Type:	Code:
Inclusion:	Code:
Complex:	Code:
Fresh-Nel of Lowland Deciduous Forest	POD7
Fresh-Moist Shrub ^{High} in Lowland Deciduous Forest Type	POD7-1
—	—

Notes:

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Avg.
CW	26	15			41	440
Bd	3	3			5	81
AC	3	4			7	29
MA	1	1			2	4
Total	13	12			24	100
Basal Area (BA)	24	24			24	
Dead	—	1			1	

Site Metrics						Summary	
		Pit/Auger #				Moisture Regime	Drainage
Slope		UTM	Zone				
	Easting						
	Northing						
	Position						
	Aspect						
	Percent						
Slope							
Length							

Soil Horizon Description						Depth to...		Effective Texture (Indicate below)
Mottles	Gley	Water Table	Carbonates	Bedrock				
1	Depth from zero	% CF	% CF	% CF	% CF			
	Texture							
2	Depth from zero	% CF	% CF	% CF	% CF			
	Texture							
3	Depth from zero	% CF	% CF	% CF	% CF			
	Texture							
4	Depth from zero	% CF	% CF	% CF	% CF			
	Texture							
	% Surface Stone/Rock							
	Moisture Regime							
	Drainage							

Polygon Description				
System	Substrate	Topographic Feature	Plant Form	Community
☒ Terrestrial ☐ Wetland ☐ Aquatic Slope ☐ Open Water ☐ Shallow Water ☒ Surficial Dep. ☐ Bedrock	☐ Organic ☒ Mineral Soil ☐ Parent Min. ☐ Acidic Bedrk ☐ Basic Bedrk ☐ Carb. Bedrk	☐ Acustrine ☒ Riverine ☐ Bottomland ☐ Terrace ☐ Valley Slope ☐ Tableland ☐ Scoll. Upland ☐ Cliff ☐ Talus ☐ Cretaceous Cave	☐ Plankton ☐ Submerged ☐ Floating-LVD. ☐ Graminoid ☐ Forb ☐ Lichen ☐ Bryophyte ☒ Deciduous ☐ Coniferous ☐ Mixed	☐ Lake ☐ Pond ☐ River ☐ Stream ☐ Marsh ☐ Swamp ☐ Fen ☐ Bog ☐ Barren ☐ Meadow ☐ Prairie ☐ Thicket ☐ Savannah ☐ Woodland ☒ Forest ☐ Plantation
History ☒ Natural ☐ Cultural Cover ☐ Open ☐ Shrub ☒ Tree				

			Species In Order of Decreasing Dominance (up to 4 sp) -> Much Greater Than; > Greater Than = About Equal To
Layer	HT	CVR	
1	2	4	H5 > Hw > Ht > Be
2	3	3-2	Rucheech > W > Lard > O
3	5	-	Abe har. > Rils mst skala ill. > Lab fira
4	7	2-3	Vernon fic > Piv > Carpa dora > car vic nusford >

HT Codes:	7 < 2m	8 < 2-2.5m	9 < 2.5-3m	10 > 3m	2 < 8-25m	1 > 25m
CVR Codes:	0 = none	1 0% - 10%	2 10 - 25%	3 25 - 50%	4 > 50%	
Grand Composition:	Size Class Analysis:					
Standing Snags:						
Deadfall / Logs:						
BA:	13					

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

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

Ecozone:	Fresh Water Maple-Hickory-Deciduous Forest	Code:	FOD9
Vegetation Type:	Fresh Moist Shagbark Hickory Deciduous Forest Type	Code:	FOD9-4
Insulation:	—	Code:	—
Complex:	—	Code:	—

Community Profile Diagram/Comments

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
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Tree Tally by Species

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Rel. Ave
H5	1: 5	10	11	7	21	52
PH	1	-	11	3	3	10
OR	10	3	-	-	-	8
IP	-	-	-	-	-	-
BC	11	3	-	-	3	8
AW	1	11	5	11	4	22
Total	12	15	14	14	40	100
Estal Area (BA)	24	30	28		82	
Dated	2				2	

Soils Ontario and ELC Soils Description

[illegible]

VASCULAR PLANT CHECKSHEET

Location: 2586SH 1658
Observer: SAM

Date: Sept. 22/11
Job Number:

DICOT HERBS												MONOCOT HERBS												
1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	
Achillea millefolia						Eriogonum annuum						Plantago lanceolata						Alisma plantago-aquatica						
Actaea pachypoda						Eriogonum philadelphicum						Plantago major						Allium tricoccum						
Actaea rubra						Eriogonum strigosum						Plantago rugelii						Allium						
Agalinus						Eryngium chieranthoides						Podophyllum peltatum						Arisaema triphyllum						
Agriomonia gryposepala						Eupatorium maculatum						Polygonum						Asparagus officinalis						
Ailanthia petiolata						Eupatorium perfoliatum						Polygonum						Celastrus						
Amaranthus retroflexus						Eupatorium rugosum						Polygonum						Cirsium boreale						
Ambrosia artemisiifolia						Euphorbia						Polygonum lapathifolium						Convallaria majus						
Amphicarpaea baccata						Euthamia graminifolia						Polygonum persicaria						Cypripedium calceolus						
Anaphalis margaritacea						Fraxinea virginiana						Potentilla						Elodea canadensis						
Anemone						Fraxinea vesca						Potentilla norvegica						Elymus hystrix						
Anemone canadensis						Galeopsis tetrahit						Potentilla recta						Erythronium americanum						
Anemone virginiana						Galium						Prenanthes alba						Hemerocallis fulva						
Antennaria neglecta						Galium						Prunella vulgaris						Iris versicolor						
Apocynum androsaemifolium						Galium pilosum						Rumex crispus						Lemna minor						
Apocynum cannabinum						Galium triflorum						Ranunculus						Lemna trisulca						
Aquilegia canadensis						Geranium maculatum						Ranunculus abortivus						Urtica						
Aralia nudicaulis						Geranium robertianum						Ranunculus acris						Melantherum canadense						
Arctium minus						Geum aleppicum						Rudbeckia hirta						Melantherum racemosa						
Artemisia						Geum canadense						Rumex acetosella						Melantherum stellata						
Asarum canadense						Geum						Rumex crispus						Phlox						
Asclepias incarnata						Gecoma hederacea						Rumex						Pontederia cordata						
Asclepias syriaca						Hepatica acutiloba						Sanguinaria canadensis						Polygonum pubescens						
Aster						Hesperis matronalis						Sanicula marilandica						Potamogeton crispus						
Aster cordifolius						Hieracium aurantiacum						Saponaria officinalis						Potamogeton pectinatus						
Aster ericoides						Hieracium campylosomum						Satureia vulgaris						Potamogeton						
Aster lanceolatus						Hieracium						Scutellaria perfoliata						Potamogeton						
Aster lateriflorus						Hydrophyllum virginianum						Silene vulgaris						Potamogeton						
Aster macrophyllus						Hypericum perforatum						Sium suave						Sagittaria latifolia						
Aster novae-angliae						Impatiens capensis						Solanum dulcamara						Saxifraga montana						
Aster punctatus						Inula helenium						Solidago						Smilax herbacea						
Barbarea vulgaris						Lactuca						Solidago altissima						Spiraea cernua						
Bidens cernua						Lappula canadensis						Solidago caesia						Spiraea polytricha						
Bidens frondosa						Lappula communis						Solidago canadensis						Staphylea trifolia						
Boehmeria cylindrica						Leonurus cardiaca						Solidago flexicaulis						Trillium erectum						
Caltha palustris						Lepidium						Solidago gigantea						Trillium grandiflorum						
Calyptegia sepium						Linaria vulgaris						Solidago nemoralis						Urtica grandiflora						
Candollea cephalypha						Urtica dioica						Solidago rugosa												
Cardamine						Lobelia						Sonchus arvensis												
Caulophyllum thalictroides						Lobelia inflata						Sonchus asper												
Cerastium fontanum						Lotus corniculatus						Stellaria												
Cerastium glomeratum						Lycopus americanus						Tanacetum vulgare												
Chelidonium majus						Lycopus						Taraxacum officinale												
Chenopodium album						Lysimachia ciliata						Thalictrum flavum												
Chrysanth. leucanthemum						Lythrum salicaria						Thalictrum pubescens												
Cichorium intybus						Medicago lupulina						Tiarella cordifolia												
Cicuta						Medicago sativum						Trigonotis borealis												
Circaea leutetiana						Melilotus alba						Trifolium												
Cirsium arvense						Mentha arvensis						Trifolium pratense												
Cirsium vulgare						Mimulus ringens						Trifolium repens												
Clematis virginiana						Mimulus ringens						Tussilago farfara												
Clinlonia borealis						Mitella diphylla						Urtica dioica												
Coryza canadensis						Monarda fistulosa						Urtica dioica												
Coronilla varia						Myosotis						Urtica dioica												
Cyananthus rossicum						Nasturtium officinale						Urtica dioica												
Cynopogon officinale						Nepeta cataracta						Urtica dioica												
Daucus carota						Nuphar variegatum						Urtica dioica												
Desmodium canadense						Nymphaea odorata						Urtica dioica												
Dianthus armeria						Oenothera biennis						Urtica dioica												
Dipsacus fullonum						Osmorhiza						Urtica dioica												
Echinocystis lobata						Oxalis stricta						Urtica dioica												
Echium vulgare						Phytolacca americana						Urtica dioica												
Epilobium						Physalis heterophylla						Urtica dioica												
Epilobium ciliatum												Urtica dioica												
Epilobium hirsutum												Urtica dioica												
Epilobium parviflorum												Urtica dioica												

SITE LOCATIONS

- 1: Polygon¹
2: Polygon²
3: _____
4: _____
5: _____
6: _____

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

(awaiting species confirmation)

Goshen Feature: 259 GSH1662

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

- Roads
- Access/Collection Line
- Collection Buffer (125m)
- Turbine Buffer (171.5m)
- Collection/Feature Intersect
- Turbine Buffer/Feature Intersect
- Property Fabric
- Goshen Wind Energy Centre

h

September 1, 2011

100 Meters

50

25

0

GS162526

GS162536

CREATION RD

GS162505

GSH1662 = 1662

171.5m

GS 1662

GS162504

POD5-1

GS162503

Village

POD7a

POD7b

POD7c

POD7d

POD7e

POD7f

POD7g

POD7h

POD7i

POD7j

POD7k

POD7l

POD7m

POD7n

POD7o

POD7p

POD7q

POD7r

POD7s

POD7t

POD7u

POD7v

POD7w

POD7x

POD7y

POD7z

Goshen Feature: 259 GSH1498 (G52)

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

h

September 1, 2011



Polygon
E

259

Sept 9

UTM 446150/4794520

Native Sugar Maple Forest

1/2-4 Acesacu >> Tibumer - Fraumer (FOD 5-1)

3-3 Acesacu > Carcaro - Tildue - Carovat

4-3 Acesacu >> Pruvir

5-4 Eucobor > Solfox - Crx - Asthote

Size 0 < 10 A < 25 A > 25

Shag R

Dead A O R

Polygon G 259 UTM 446075/4794640

Mont Shagbark - Green Ash Dec Forest (FOD 9-4)

2-4 Carovat >> Quemacr - Fraper

3-4 Fraper >> Ulman - Quemacr

4-3 Pruvir - Fraper

6-3 Rhual >> Eucobor - Fraving - Carovat

Size A < 10 A < 25 A > 25

Shag R R

Dead A O

mid age

ELC	Site: 400-867-0000	Polygon:	F
Community Description and Classification	Surveyor(s): JX	Date: Sept 9	Time start: 12:30 finish:
	UTMZ:	UTMZ:	UTMN:

Polygon Description

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

Stand Description

Layer	HT	OVR	Species in Order of Decreasing Dominance (up to 4 sp) (>> Much Greater Than; > Greater Than; = About Equal To)
1	2	4	<i>Eleocharis</i> >> <i>Spartina</i>
2	3	3	<i>Eleocharis</i> > <i>Cratogeomys</i>
3			
4	6	3	<i>Rhynchos</i> > <i>Cirrhoides</i> - <i>Astilbe</i>

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

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

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

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

Ecosite:		Code:	
Vegetation Type:	Young mixed Green Ash	Code:	FOD 7-2
Inclusion:		Code:	
Complex:		Code:	

Community Profile Diagram/Comments

[illegible]

Tree Tally by Species

[illegible]

Soils Ontario and ELC Soils Description

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

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

Layer	HT	CVR	Species In Order of Decreasing Dominance (up to 4 sp) (>= Much Greater Than; > Greater Than; = About Equal To)
1	3	4	Fraxinus - 77 Carrot
2	3	3	Fraxinus - 25 Wundtner
3			
4	6	3	Glycyrrhiza - 80 CRX - Astilbe

HT Codes: 7 < 0.2m 8 > 0.2-0.5m 6 > 0.5-1m 4 > 1-2m 3 > 2-6m 1 > 25m
CVR Codes: 0 = none 10% - 20% 20 - 25% 35 - 60% 4 > 60%

Stand Composition:		Size Class Analysis:		Abundance Codes:			
		Standing Snags:	Deadfall / Logs:	N = None	R = Rare	O = Occasional	A = Abundant
BA:							

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

EcoSite:		Code:	
Vegetation Type:	Green Ash Mineral Swamp	Code:	SND 2-2
Inclusion:		Code:	
Complex:		Code:	

[illegible]

Tree Tally by Species						Prism Factor	2
Species	Tally 1	Tally 2	Tally 3	Tally 4	Total		Rel. Avg.
Total							100
Basal Area (BA)							
Dead							

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



Site 259

Polygon I UTM 445950 / 4794650

Super Map

2-4 Aesau $\Rightarrow$ Poptren $>$ Fraumer

8-3 Aesau

6-3 Aesau - Euoda - Puvig

VASCULAR PLANT CHECKSHEET

Location: Goshen 258
 Observer: J. Samsta

Date: Sept 8
 Job Number:

DICOT HERBS												MONOCOT HERBS					
1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
Achillea millefolium						Erigeron annuus						Plantago lanceolata					
Actaea pachypoda						Erigeron philadelphicus						Plantago major					
Actaea rubra						Erigeron strigosus						Plantago rugelii					
Agalinus						Erysimum chieranthoides						Podophyllum peltatum					
Agrimonia gryposepala						Eupatorium maculatum						Polygonum virginicum					
Alliaria petiolata						Eupatorium perfoliatum						Polygonum					
Amaranthus retrofractus						Eupatorium rugosum						Polygonum					
Ambrosia artemisiifolia						Euphorbia						Polygonum lapathifolium					
Amphicarpaea bracteata						Euthamia graminifolia						Polygonum persicaria					
Anaphalis margaritacea						Fragaria virginiana						Potentilla					
Anemone						Fragaria vesca						Potentilla norvegica					
Anemone canadensis						Galeopsis tetrahit						Potentilla recta					
Anemone virginiana						Galium						Prenanthes alba					
Antennaria neglecta						Galium						Prunella vulgaris					
Apocynum androsaemifolium						Galium palustre						Pyrola elliptica					
Apocynum cannabinum						Galium triflorum						Ranunculus recurv					
Aquilegia canadensis						Geranium maculatum						Ranunculus abortivus					
Aralia nudicaulis						Geranium robertianum						Ranunculus acris					
Arcium minus						Geum aleppicum						Rudbeckia hirta					
Artemisia						Geum canadense						Rumex acetosella					
Asarum canadense						Geum						Rumex crispus					
Asclepias incarnata						Glechoma hederacea						Rumex verticillata					
Asclepias syriaca						Hepatica acutiloba						Sanguinaria canadensis					
Aster						Heperis matronalis						Sanicula marilandica					
Aster cordifolius						Hieracium aurantiacum						Saponaria officinalis					
Aster ericoides						Hieracium caespitosum						Satureja vulgaris					
Aster lanceolatus						Hieracium						Scutellaria galatensis					
Aster lateriflorus						Hydrophyllum virginianum						Silene vulgaris					
Aster macrophyllus						Hypericum perforatum						Sium suave					
Aster novae-angliae						Impatiens capensis						Solanum dulcamara					
Aster puniceus						Inula helenium						Solidago					
Barbarea vulgaris						Lactuca serriola						Solidago altissima					
Bidens cernua						Laportea canadensis						Solidago caesia					
Bidens frondosa						Lapsana communis						Solidago canadensis					
Boehmeria cylindrica						Leonurus cardiaca						Solidago flexicaulis					
Caltha palustris						Lepidium						Solidago gigantea					
Calystegia sepium						Linaria vulgaris						Solidago nemoralis					
Cardamine diphylla						Lithospermum officinale						Solidago rugosa					
Cardamine						Lobelia						Sonchus arvensis					
Caulophyllum thalictroides						Lobelia inflata						Sonchus asper					
Cerastium fontanum						Lotus corniculatus						Stellaria					
Ceratophyllum demersum						Lycopus americanus						Tanacetum vulgare					
Chelidonium majus						Lycopus						Taraxacum officinale					
Chenopodium album						Lysimachia ciliata						Thalictrum dioicum					
Chrysanth. leucanthemum						Lythrum salicaria						Thalictrum pubescens					
Cichorium intybus						Medicago lupulina						Tiarrellia cordifolia					
Cicuta						Medicago sativum						Tragopogon pratensis					
Circaea leutetiana						Medicago alba						Trifolium borealis					
Cirsium arvense						Mentha arvensis						Trifolium					
Cirsium vulgare						Mimulus ringens						Trifolium pratense					
Clematis virginiana						Mimulus ringens						Trifolium repens					
Clintonia borealis						Mitella						Tussilago farfara					
Coryza canadensis						Morone fistulosa						Urtica dioica					
Coronilla varia						Myrica						Urticularia vulgaris					
Cynanchum roscum						Nasturtium officinale						Verbascum thapsus					
Cynoglossum officinale						Nepeta cataria						Verbena hastata					
Daucus carota						Nuphar variegatum						Verbena urticifolia					
Desmodium canadense						Nymphaea odorata						Veronica					
Dianthus armeria						Oenothera biennis						Veronica officinalis					
Dipsacus fullonum						Osmorhiza						Vicia cracca					
Echinocystis lobata						Oxalis stricta						Vicia tetrasperma					
Echium vulgare						Pharisma leptostachya						Viola					
Epilobium						Phytolacca heterophylla						Viola cuspida					
Epilobium ciliatum						Plantago sept						Viola pubescens					
Epilobium hirsutum						Mitchella repens						Viola sororia					
Epilobium parviflorum						Hypericum punct						Solidum nigrum					
Chelone glabra																	
Colletium II -																	
Acalypha																	

SITE LOCATIONS

1: 258 GSH 1662
 2: 259 GSH 1498
 3: 259 GSH 1498

4: _____
 5: _____
 6: _____

I CONIFERS						I TREES and SHRUBS						I 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	X		X			Agropyron repens					
Larix laricina						Rubus idaeus	X		X			Alopecurus					
Picea abies						Rubus occidentalis			X			Bromus inermis					
Picea glauca						Rubus odoratus						Calamagrostis canadensis					
Pinus resinosa						Rubus pubescens	X					Carex acutata					
Pinus strobus						Salix alba						Carex aurea					
Pinus sylvestris						Salix amygdaloides	X					Carex bebbii					
Thuja occidentalis						Salix bebbiana						Carex blanda		X			
Tsuga canadensis						+ Salix discolor						Carex gracillima		X			
						Salix eriocephala						Carex granularis				X	
						Salix exigua						Carex hystericina					
						Salix lucida						Carex pensylvanica					
						Salix petiolaris						Carex radiata		X			
TREES and SHRUBS						+ Salix purpurea						Carex retrorsa					
Acer negundo						Salix x rubens						Carex stipata					
Acer rubrum		X	X			+ Salix						Carex stricta					
Acer saccharinum x free	X		X			Sambucus canadensis						Carex vulpinoidea				X	
Acer saccharum	X		X			Sambucus racemosa						Carex lupulina		X			
Acer spicatum						Sorbus aucuparia						Carex intumesc		X			
Alnus rugosa						Spiraea alba						Carex cristatella				X	
Amelanchier						Syringa vulgaris						Carex cincta				X	
Berberis thunbergii						+ Tilia americana		X	X			Carex glauca		X			
Betula alleghaniensis	X					Ulmus americana	X					Carex					
Betula papyrifera	X					Ulmus						Carex					
Carpinus caroliniana	X		X			Vaccinium						Carex					
Carya cordiformis						Viburnum lentago			X			Carex					
Celastrus scandens						Viburnum opulus						Cyperus					
Cornus alternifolia						Viburnum acerifolium	X		X			Cyperus					
Cornus amomum						Vitis riparia	X					Dactylis glomerata					
Cornus rugosa x fremleyi	X					Hamamelis	X		X			Danthonia spicata					
Cornus stolonifera	X											Echinochloa crus-galli		X			
Corylus cornuta												Eleocharis erythropoda					
Crataegus monogyna												Eleocharis					
Crataegus punctata			X									Elymus virginicus		X		X	
Crataegus sp.	X		X									Elymus hystrix				X	
Crataegus												Festuca arundinacea					
Diervilla lonicera												Glyceria striata		X			
Fagus grandifolia			X									Glyceria					
Fraxinus americana	X					FERNS						Juncus dudleyi					
Fraxinus nigra						Adiantum pedatum						Juncus effusus					
Fraxinus pennsylvanica	X		X			Athyrium filix-femina						Juncus tenuis		X		X	
Ilex verticillata			X			Botrychium multifidum						Juncus					
Juglans cinerea			X			Botrychium virginianum						Juncus					
Juglans nigra						Cystopteris bulbifera						Leersia oryzoides					
Lonicera morrowi						Dryopteris carthusiana		X				Muhlenbergia					
Lonicera tatarica						Dryopteris cristata						Oryzopsis asperifolia					
Lonicera dioica			X			Dryopteris marginalis						Panicum					
Malus pumila						Dryopteris						Panicum					
Ostrya virginiana			X			Equisetum arvense						Phalaris arundinacea					
Parthenocissus inserta	X		X			Equisetum hyemale						Phleum pratense				X	
Populus balsamifera						Equisetum variegatum						Phragmites australis					
Populus grandidentata						Equisetum						Poa compressus					
Populus tremuloides	X		X			Gymnocarpium dryopteris						Poa pratensis					
Populus deltoides	X		X			Lycopodium digitatum						Poa					
Prunus pensylvanica						Lycopodium obscurum						Scirpus atrovirens				X	
Prunus serotina			X			Lycopodium						Scirpus cyperinus					
Prunus virginiana	X		X			Lycopodium						Scirpus validus					
Prunus						Lycopodium						Scirpus					
Quercus macrocarpa	X					Matteucia struthiopteris						Scirpus					
Quercus rubra			X			Onoclea sensibilis		X	X			Setaria					
Quercus						Osmunda cinnamomea						Sparganium					
Rhamnus cathartica			X			Osmunda regalis						Typha angustifolia					
Rhus radicans	X		X			Polystichum acrostichoides						Typha latifolia					
Rhus typhina			X			Pteridium aquilinum	X					Typha x glauca					
Ribes americana	X		X			Thelypteris palustris											
Ribes cynosbati																	
Ribes x rubrum																	
Robinia pseudo-acacia																	
Carya ovata	X		X														
Eubryum obor	X		X														
Menispermum	X																
Lindera benz	X																

ELC Community Description and Classification	Site: 259_GSH498		Polygon: B	
	Surveyor(s): Kamusta	Date:	Time start:	
		Sept 9/11	10:30 finish:	
	UTMZ: 17	UTMZ: 445925	UTMIN: 4744350	

Polygon Description

System	Substrate	Topographic Features	Plant Form	Community
☐ Terrestrial	☐ Organic	☐ Lacustrine	☐ Plankton	☐ Lake
☐ Wetland	☒ Mineral Soil	☐ Riverine	☐ Submerged	☐ Pond
☐ Aquatic	☐ Parent Min.	☐ Bottomland	☐ Floating-LVD.	☐ River
Site	☐ Acidic Bedrk	☐ Terrace	☐ Graminoid	☐ Stream
☐ Open Water	☐ Basic Bedrk	☐ Valley Slope	☐ Forb	☐ Marsh
☐ Shallow Water	☐ Carb. Bedrk	☒ Tableland	☐ Lichen	☐ Swamp
☐ Surficial Dep.		☐ Roll. Upland	☐ Bryophyte	☐ Fen
☐ Bedrock		☐ Cliff	☒ Deciduous	☐ Bog
History		☐ Talus	☐ Coniferous	☐ Barren
☐ Natural		☐ Crevice/Cave	☐ Mixed	☐ Meadow
☐ Cultural		☐ Alvar		☐ Prairie
Cover		☐ Rockland		☐ Thicket
☐ Open		☐ Beach / Bar		☐ Savannah
☐ Shrub		☐ Sand Dune		☐ Woodland
☐ Treed		☐ Bluff		☒ Forest
				☐ 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	Fragaria >>> Carex
2	3	3	Fragaria - Urtica
3			> Carex
4	8	1	Solcaea - Rhynchospora - Carex

HT Codes: 7 < 0.2m 8 > 0.2-0.5m 9 > 0.5-1m 4 > 1-2m 3 > 2-8m 2 > 8-25m 1 > 25m - Prunus

CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 50% 4 > 50%

Stand Composition:	Size Class Analysis:			
	Standing Snags:	A	A	25-50
	Deadfall / Logs:	O	O	25-50
BA:		O	R	25-50

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

Com. Age:	☐ Pioneer	☒ Young	☐ Mid-Age	☐ Mature	☐ Old Growth
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EcoSite#					
Vegetation Type:					
Inclusion:					
Comments:					

Community Profile Diagram/Comments

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	5
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Tree Tally by Species

[illegible]

Soils Ontario and ELC Soils Description

Site Metrics		PIU/Auger #							Summary
Slope	UTM	Zone							Moisture Regime
		Easting							
		Northing							
		Position							
		Aspect							
Slope		Percent							Drainage
		Slope Length							
Depth to ...		Mottles							Effective Texture (Indicate below)
		Gley							
		Water Table							
		Carbonates							
		Bedrock							
Soil Horizon Description	1	Depth from zero	20	% CF		% CF		% CF	
		Texture	dark gray-brown loam						
	2	Depth from zero	30	% CF		% CF		% CF	
		Texture	light gray v-f sandy-silt						
	3	Depth from zero		% CF		% CF		% CF	
		Texture							
	4	Depth from zero		% CF		% CF		% CF	
		Texture							
		% Surface Stone/Rock							
		Moisture Regime							
		Drainage							

ELC WILDLIFE	SITE: GSH 259		
	POLYGON: perimeter GSH 1498 + 1662		
	DATE:		
	SURVEYORS: Kammstra		
	START TIME: 9:00	END TIME: 13:30	

TEMP (°C): 23	CLOUD (10th): 0	WIND: 1	PRECIPITATION: 0
CONDITIONS:			

POTENTIAL WILDLIFE HABITAT:

☐	VERNAL POOLS	☐	SNAGS
☐	HIBERNACULA	☐	FALLEN LOGS
☐		☐	

SPECIES LIST:

TY	SP. CODE	EV	NOTES	#	TY	SP. CODE	EV	NOTES	#
B	BLJA	VO			L	Appalachian Pewee	OB	in. ash - maple swamp	
	AMCR	"			L	Cabot's	OB		
	RWBL	OB			L	Mocker	"		
	HOWR	VO			O	Annual Cicada	VO		
	BOCH				L	R.S. Purple	OB		
	AMRO								
	EWPE								
	WBNH								
	AMGO								
	NOFL				B	BLPW	OB		
	POWO	OB				REVI	VO		
	WTSP	OB							
	BAWW								
M	Raccoon	CA	old bones						
	Gray Squirrel	VO							
	E. Chipmunk								
H	Wood Frog	OB	GSH 1498						
H	Spring Frog	VO							

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)



Page 1 of 2

D - Dominant: represented by tree 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 fairly common in the canopy
 U - Uncommmon (=Occasional in ELC): present as widespread scattered individuals or represented by one or more clumps of many individuals
 R - Rare: represented in the polygon by less than about five individuals or small clumps

Map Number: JWGSH 1492/2052 1 F006-5
 Date: Aug 30, 2012 2 SWD2-2/SWD4 (Complex)
 Surveyors: JB + JS 3

Significant Wildlife Habitat Form

AECOM

Study Area:	BLW	JER	(GSH)	Map #:	261-GSH1492/2052
Date:	2012-04-30			Time Started:	9:25 a.m.
Field Staff:	Tom Shorney, Jess Piette			Time Finished:	11:40 a.m.
Weather Conditions: overcast, 6°C, 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: 454515 479400 ☒ Area of standing water delineated on field map

Water depth (m): 20-30cm % open water: 70 % emergent vegetation: 10%

Description of standing water (permanent pool, evidence of annual spring flooding, etc): Vernal Pooling, Potentially dry by mid-July

Area and soil/substrate of shoreline habitat: Shoreline habitat: Mineral Soil → moderate cover along edge

Type and abundance of cover in open water habitat: Julex sp → 5%, Phragmites sp → 5%

Type and abundance of cover in surrounding habitat: Surrounding habitat: Mature trees and regeneration → 80% cover → Pine 40%, Cottonwood 50%, Juniper 10%

Evidence of disturbance (e.g. cattle grazing): Forest management

Evidence of use by waterfowl, amphibians, turtles (e.g. broken eggs), marsh breeding birds: No evidence of activity in area

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
1, 9, 12	Vernal Pools		

261-651192/2052

For

9.756

2012-04-30

Test 2

Time Started: 1:53 a.m.
Time Finished: 11:40 a.m.

Observed Species List

[illegible]

Note:	Evidence Codes (EV)	<u>Breeding Bird (Possible)</u>	SH=Suitable Habitat, SM=Singinaq Male:
-------	---------------------	---------------------------------	--

T-Territory, D=Display, P=Pair, N=Nest Building, V= Visiting Nest: A=Anxiety Behavior.

DD=Distraction, NU=Used Nest, FY=Fledged Young, NE=Eggs, NY=Young, FS=Foraging

carcass, DP=Distinctive Parts, HO=House/Den, FY=Eggs/young, TK=tracks, FE=Feeding

2

Habitat Description	Habitat
---------------------	---------

Y (N)	Shaded river banks, wooded floodplains. River floodplains, woods and edges of woods
-------	---

WOODS.	Thin soil over level outcrop ledges and on soil under grasses in open areas.	Y
--------	--	---

1. Limit soil cover over outcrop ledges and on soil under glassess in open prairie

	Oak-pine woods or occasionally in open, red pine or white pine plantations. Dry.	Y	N
--	--	---	---

sandy woods.

	(Y)	(N)
Species occurs in dry to moist deciduous thickets and woods		

52	Swarney glange with deciduous trees	white nodosa	formosula: resinous, must be hauled
----	-------------------------------------	--------------	-------------------------------------

Swampy places with deciduous trees, white cedars, tall alack, springy river banks, wet borders of streams and rivers. Also found among calcareous seepage slopes

Found in openings in swamps, marshes, along shores & wet fields within the

Carolinian zone and southeastern Georgian Bay Bogs, tens tamarack swamps	
Occurs in rich wet mesic floodplain forests as well as mesic forests over limestone	

occurs in rich, wet-mesic floodplain forests as well as mesic forests over limestone. Includes floodplains and river banks.

	Y(N)
Species occurs in sandy areas on limestone under oak or pine-	

oak forests

Y N
Found in mesic prairies, thickets, moist woods, roadsides and grassy meadows

Species of Conservation Concern Habitat and Incidental Wildlife – Goshen

AECOM

ELC	Species	Habitat Description	Habitat Present (Y/N; UTM; description of habitat if present)
CUM1, MAM, FOD6, FOD7, FOD9	Green Dragon (Arisaema dracontium) - S1/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 (Galium pilosum) - S3 Bloom Time - June-August	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	Hairy Valerian (Valeriana edulis) - 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 (Blephilia hirsuta) - 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 (Erigenia bulbosa) - 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 (Potamogeton hillii) - 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
FOM6, FOM7, FOM8	Large Round-leaved Orchid (Platanthera macrophylla) - 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 (Saururus cernuus) - 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 N/O
FOD6, FOD7, FOD9	Pawpaw (Asimina triloba) - S3 Bloom Time - March-May	Occurs in moist deciduous woods and stream banks.	Y N UTM N/O
FOM8, FOD8, FOD7, FOD9, CUM1	Pilose Evening Primrose (Oenothera pilosella) - 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 (Desmodium rotundifolium) - S2 Bloom Time - July-September	Dry, sandy or rocky woods	Y N UTM
FOD7, SWD	Pumpkin Ash (Fraxinus profunda) - S2? Bloom Time - March - June	Swamps and floodplains	Y N UTM N/O
CUW1, ALO, FET1, SWC	Ram's-head Lady's-slipper (Cypripedium arietinum) - 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 barren	Y N UTM
FOD1, FOD2, FOD3, FOD4, FOD5, FOC1, FOM1, FOM5	Rattlesnake Hawkweed (Hieracium venosum) - 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 (Packera obovata) - S3 Bloom Time - May - June	Found in moist woods	Y N UTM N/O
CUM1, CUT1, CUS1	Round-leaved hawthorn (Crataegus lumaria) - S3?	Species occurs in old fields, poorly managed pastures, fencelines and roadsides	Y N UTM
FOD6, FOD7, FOD8, FOD9, SWT2, SWT3	Scarlet Beebalm (Monarda didyma) - 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 (Liatris cylindracea) - 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 (Polygonum tenue) - 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 Muhly (Muhlenbergia tenuiflora) - 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 (Gentiana quinquefolia) - 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
TPS1, TPW1, CUW1, RBO, SBO	Sundial Lupine (Lupinus perennis) - 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 Conservation Concern Habitat and Incidental Wildlife – Goshen

A'OM

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 Pinetrops (<i>Pterospira 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>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 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:
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 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:
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:

Wetland Data Collection Sheet



Study area: <u>GOSHEN</u>	Map No: <u>261 GSH1492/2052</u>
Date (yyyy-mm-dd): <u>April 30, 2012</u>	Time Started: <u>9:25 am</u>
Field Staff: <u>Jess Little + Tam Shaney</u>	Time Finished: <u>11:40 am</u>

Presence of Groundwater	No ☒	Yes ☐	
	☐ bank seepage	☐ iron staining	☐ groundwater indicator

Site Type	Lacustrine ☐ (associated with lakes) Riverine ☐ (associated with rivers) Palustrine ☐ absent or intermittent inflow and either intermittent or permanent outflow	Isolated ☒ <u>no inputs noted in general water indicators</u> what are the water inputs and outputs? <u>surface water</u>
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Soils	refer to ELC card for soils information
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% 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			
<u>25%</u> 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
<u>SW02-2/ SW04 S1</u>	<u>h*: Cottonwood, Green ash, Freeman's maple</u>

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

→ several large dens were observed adjacent to wetlands

→ there are very small communities within larger Furb-5 community



