

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page 2 of 4

Site: see #1 →

Polygon:

UTM:

Date: Time:

Surveyor(s):

Weather:

Community Classification Naturalized Coniferous Plantation FOCM6

Vegetation Type: White Spruce Plantation - TAGM3

Inclusion: none visible

Complex: n/a

Polygon Description

System	Substrate	Topo Feature	Community		
<input checked="" type="checkbox"/> Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
<input type="checkbox"/> Wetland	<input checked="" type="checkbox"/> Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
<input type="checkbox"/> Aquatic	Parent Min.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
<input checked="" type="checkbox"/> Cultural		<input checked="" type="checkbox"/> Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	<input checked="" type="checkbox"/> Plantation

Cover	Open Water	Plant Form		
<input type="checkbox"/> Open	Shallow Water	Plankton	Forb	<input type="checkbox"/> Coniferous
<input type="checkbox"/> Shrub	<input checked="" type="checkbox"/> Surficial Dep.	Submerged	Lichen	<input checked="" type="checkbox"/> Mixed
<input checked="" type="checkbox"/> Treed	Bedrock	Floating-Lyd.	Bryophyte	
		Graminoid	Deciduous	

Stand Description

Layer	HT	Cover	Species
- Super-canopy	2	1	White Ash, Tamarack
1 Canopy	2	2	White Spruce, Black Walnut, White Pine
2 Sub-canopy	3	3	White Spruce, Black Walnut, White Pine, White Ash, Basswood, Sunac, willow
3 Understorey	4	4	White Spruce, Pine, willow spp., Sunac, Strawberry
4 Groundcover	4	4	Asters, Goldenrods, Teasel, Graminoids

HT Codes: 1: >25m 2: 25-10m 3: 10-2m 4: 2-1m 5: 1-0.5m 6: 0.5-0.2m 7: <0.2m

Cover Codes: 0: none 1: 0-10% 2: 10-25% 3: 25-60% 4: >60%

Size Class Analysis	O	A	10-24	25-50	N	>50
Snags	R	<10	R	10-24	R	25-50
Deadfall/Logs not visible	<10			10-24		25-50

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

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth
			<input checked="" type="checkbox"/>		

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page 1 of 4

PLANT SPECIES LIST

Site: 1230 Adelaide

Polygon: WOD-022

UTM:

Date: October 4 2011 Time: 4:55 pm

Surveyor(s): KNP, KJU

Weather: Sunny, 19°C, 0% cc, wind 3 west

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer				Sample	Species	Layer				Sample
	1	2	3	4			1	2	3	4	
White Spruce	D	D	O	R		NE Aster				A	
Black Walnut	O	O				Heath Aster				A	
Tamarack	R					Canada Goldenrod				A	
Starbark Sunac		O	O	O		Mts Goldenrod				O	
Willow spp.		O	O	O		Teasel				A	
Basswood		O	O	O		Wild Carrot				O	
Snowberry spp.			O	O		veg. cree. fl.					
White Pine	O	O				riverbank sp.					
White Ash	O	O				grass sp. 0					
Grey Sallow						U. betula					
European Cranberry						Ench. Nidusora					
						phragmites aust.					

Wildlife and Other Notes

Site is an old white spruce plantation being colonized by other species
 - updated 11/10/2011 waw, HAW
 UTM - 0439412 - 476124

* Roadside assessment due to restricted site access

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page 1 of 4

Site: 1230 - Adalade
 Polygon: W00-023 - Roadside
 UTM: 17T 043937 - 4760555
 Date: 05/10/2011 Time: 11:15
 Surveyor(s): KNP - WGW
 Weather: 14°C - Wind 2 SW - CC - 80%

Community Classification

Vegetation Type: W00M4-2 Dry - fresh white oak - deciduous *woodland*
 Inclusion:
 Complex:

Polygon Description

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

Stand Description

Layer	HT	Cover	Species
* Super-canopy			
1 Canopy	2	3	white-ash > beech > sugar maple
2 Sub-canopy	3	3	hophornbeam > blue beech
3 Understorey	5	2-3	Solidago sp. > N.E. aster
4 Groundcover	2	100%	grass - sp.

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

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

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

Community Age	Pioneer	Young	<input checked="" type="checkbox"/> Mid-age	Mature	Old Growth
---------------	---------	-------	---	--------	------------

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page 2 of 4

PLANT SPECIES LIST

Site: 1230 Adalade
 Polygon: W00-023
 UTM: 17T 043937 - 4760555
 Date: 05/10/2011 Time: 11:15
 Surveyor(s): KNP - WGW
 Weather: 14°C - Wind 2-SW - CC - 80%

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer				Sample	Species	Layer				Sample
	1	2	3	4			1	2	3	4	
Sugar Maple	R	O				Wild Strawberry					A
White ash	D					Herb Robert					A
Tremb. Asp		R				Garlic Mustard					A
Solidago sp.				A		Black Raspberry					O
N.E. Aster				A		Dox. Ivy					O
Grey Sycamore				O		Toad. Mat. not					R
Red Spruce - DW				R		Zig-zag Goldenrod					R
Common Apple				R		Enchanter's - nightshade					R
hop hornbeam			A	O							
blue beech	O	A									
Am. beech	O										

Other Notes (Landowner Contact, General Notes, etc.)

- Roadside - all description and abundance codes are estimations
 - Many trees w/o leaves - are snags or scammed
 - Updated 11/10/2011 - WGW-HLW
 - change to woodland
 change UTM - 17T 0439208 - 4760344

PLANT SPECIES LIST

Site: 1230 Adelaide
 Polygon: W00-024
 UTM:
 Date: 5 Oct, 2011 Time: 11:50
 Surveyor(s): KNP, WJW
 Weather: 14°C, cloud cover 50%, wind speed 2 from W

Community Classification

Vegetation Type: Mixed Plantation (White Spruce/Black Walnut) TAGM2
 Inclusion:
 Complex:

Polygon Description

System	Substrate	Topo Feature	Community
<input checked="" type="checkbox"/> Terrestrial	Organic	Lacustrine	Talus
<input type="checkbox"/> Wetland	<input checked="" type="checkbox"/> Mineral Soil	Riverine	Crevice/Cave
<input type="checkbox"/> Aquatic	Parent Min.	<input checked="" type="checkbox"/> Bottomland	Alvar
	Acidic Bedrock	Terrace	Rockland
	Basic Bedrock	Valley Slope	Beach/Bar
History	Carb. Bedrock	Tableland	Sand Dune
<input type="checkbox"/> Natural		Roll. Upland	Bluff
<input checked="" type="checkbox"/> Cultural		Cliff	
	Site		
Cover	Open Water	Plant Form	
<input type="checkbox"/> Open	Shallow Water	Plankton	Forb
<input type="checkbox"/> Shrub	<input checked="" type="checkbox"/> Surficial Dep.	Submerged	Lichen
<input checked="" type="checkbox"/> Treed	Bedrock	Floating-Lvd.	Bryophyte
		Graminoid	Deciduous
			Coniferous
			<input checked="" type="checkbox"/> Mixed

Stand Description

Layer	HT	Cover	Species
* Super-canopy			
1 Canopy	2	4	White Spruce >> Black Walnut
2 Sub-canopy	3	3	White Spruce >> black Walnut
3 Understorey	5	3	golden rod sp = Canada golden rod & New England aster & aster sp.
4 Groundcover	6	4	grass sp.

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

Size Class Analysis	< 10	10-24	25-50	> 50
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

Mid-age Mature Old Growth

} None visible from road

Site:
 Polygon: See page 1
 UTM:
 Date: Time:
 Surveyor(s):
 Weather:

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer				Sample	Species	Layer				Sample
	1	2	3	4			1	2	3	4	
White Spruce						Grass sp.					D
Black Walnut						Canada Golden Rod					O
						Golden Rod sp.					O
						New England Aster					O
						Aster sp.					O
						Teasel					

Other Notes (Landowner Contact, General Notes, etc.)

* Roadside ELC due to restricted site access

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page 1 of 4

Site: Adelaide
 Polygon: W00-025
 UTM: 0441192 4757444 17T
 Date: October 11, 2011 Time: 11:55
 Surveyor(s): WGW, HLW
 Weather: 19°C, 50% cloud cover, wind 2 from S

Community Classification

Vegetation Type: FODM4-2 Dry - Fresh White Ash Hardwood Deciduous Forest
 Inclusion:
 Complex:

Polygon Description

System	Substrate	Topo Feature	Community
<input checked="" type="checkbox"/> Terrestrial	Organic	Lacustrine	Talus
<input type="checkbox"/> Wetland	Mineral Soil	Riverine	Crevise/Cave
<input type="checkbox"/> Aquatic	Parent Min.	Bottomland	Alvar
	Acidic Bedrock	Terrace	Rockland
	Basic Bedrock	Valley Slope	Beach/Bar
History	Carb. Bedrock	Tableland	Sand Dune
<input type="checkbox"/> Natural		Roll, Upland	Bluff
<input type="checkbox"/> Cultural		Cliff	Bog
	Site		Lake
			Pond
			River
			Stream
			Marsh
			Swamp
			Fen
			Plantation

Cover	Open Water	Plant Form
<input type="checkbox"/> Open	Shallow Water	Plankton
<input type="checkbox"/> Shrub	<input checked="" type="checkbox"/> Surficial Dep.	Submerged
<input checked="" type="checkbox"/> Tree	Bedrock	Floating-Lvd.
		Graminoid
		Forb
		Lichen
		Bryophyte
		Deciduous
		<input checked="" type="checkbox"/> Coniferous
		<input type="checkbox"/> Mixed

Stand Description

Layer	HT	Cover	Species
• Super-canopy			
1 Canopy	2	4	White Ash > Basswood
2 Sub-canopy	3	3	White Ash > Basswood > Sugar Maple
3 Understorey	4	1	Gray Dogwood
4 Groundcover	5	1	Goldenrod sp. > New England Aster

HT Codes: 1: >25m 2: 25-10m 3: 10-2m 4: 2-1m 5: 1-0.5m 6: 0.5-0.2m 7: <0.2m
 Cover Codes: 0: none 1: 0-10% 2: 10-25 3: 25-80% 4: >80%

Size Class Analysis	< 10	10-24	25-50	> 50
Snags	N	N	N	N
Deadfall/Logs	N	N	N	N

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

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth
			<input checked="" type="checkbox"/>		

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page 2 of 4

PLANT SPECIES LIST

Site: Adelaide 1230
 Polygon: W00-025
 UTM: 0441192 4757444
 Date: October 11, 2011 Time: 11:55
 Surveyor(s): WGW, HLW
 Weather: 19°C, cloud cover 50%, wind 2 from S

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer				Sample	Species	Layer				Sample
	1	2	3	4			1	2	3	4	
Sugar Maple		A				New England Aster					O
White Ash		A	A			Goldenrod sp.					O
Gray Dogwood				O							
Basswood			O	O							

Other Notes (Landowner Contact, General Notes, etc.)

- ELC completed from roadside, no access to site

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page 1 of 4

Site: Adelaide
 Polygon: W00-026
 UTM: 0441359 4757489
 Date: October 11, 2011 Time: 12:05
 Surveyor(s): WGW, HLW
 Weather: 19°C, 50% cloud cover, wind 2 from S

Community Classification

Vegetation Type: W00MH - Dry-Fresh Deciduous Woodland
 Inclusion: Forb Meadow (MEF) with Submerged Shallow Aquatic Scum (SAS2)
 Complex:

Polygon Description

System	Substrate	Topo Feature	Community
<input checked="" type="checkbox"/> Terrestrial	Organic	Lacustrine	Talus
<input type="checkbox"/> Wetland	Mineral Soil	Riverine	Crevice/Cave
<input type="checkbox"/> Aquatic	Parent Min.	Bottomland	Alvar
	Acidic Bedrock	Terrace	Rockland
	Basic Bedrock	Valley Slope	Beach/Bar
<input checked="" type="checkbox"/> Natural	Carb. Bedrock	Tableland	Sand Dune
<input type="checkbox"/> Cultural		Roll. Upland	Bluff
		Cliff	

Cover	Open Water	Plant Form
<input type="checkbox"/> Open	Shallow Water	Plankton
<input type="checkbox"/> Shrub	<input checked="" type="checkbox"/> Surficial Dep.	Submerged
<input checked="" type="checkbox"/> Treed	Bedrock	Floating-Lvd.
		Graminoid
		Forb
		Lichen
		Bryophyte
		<input checked="" type="checkbox"/> Deciduous
		Coniferous
		Mixed

Stand Description

Layer	HT	Cover	Species
* Super-canopy			
1 Canopy	2	3	Bitternut Hickory > Basswood > White Ash
2 Sub-canopy	3	3	Bitternut Hickory > Sugar Maple > White Ash
3 Understorey	4	2	Sugar Maple > Red Raspberry
4 Groundcover	5	1	Wild Strawberry > Poison Ivy > Herb Robert

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

Size Class Analysis	O	A	O	N
Snags	R < 10	O 10-24	O 25-50	N > 50
Deadfall/Logs	R < 10	O 10-24	O 25-50	N > 50

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

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth
			<input checked="" type="checkbox"/>		

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page 2 of 4

PLANT SPECIES LIST

Site: Adelaide
 Polygon: W00-026
 UTM: E 0441359 N 4757489
 Date: October 11, 2011 Time: 12:05
 Surveyor(s):
 Weather: 19°C, 50% cloud cover, wind 2 from S

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer				Sample	Species	Layer				Sample
	1	2	3	4			1	2	3	4	
Bitternut Hickory	A	A				Poison Ivy					O
White Ash	O	O				Wild Strawberry					A
Basswood	A	O				Wild Ginger					O
Common Apple		O				Goldenrod sp.					O
Grass (various)			O			Herb Robert					O
Red Elm				R		Aster sp.					O
Sugar Maple		O	O	O		Black Raspberry					O
Am. Beech		O				Red Raspberry					O
Hawthorn sp.		O				Red Clover					O
E. Buckthorn			O			New England Aster					O
Prunus sp.			R			Canada Goldenrod					O
						Can Vetch					O
						White Redstart					O
						Swamp Sunflower					O
						Teasel W					O
						Common Milkweed					O
						Wild Cornet					O
						Common Nettle					O
						Enchanter's Nightshade					O

Wildlife and Other Notes

- open pond inclusion, less than 1m in depth, some duckweed, some submerged grasses
 - meadow inclusion = goldenrod, aster dominated, grasses sp. abundant



NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Wetland Vegetation Communities

Project Name: Adelaide WF

Project #: 1230

Observer(s): KNP, AMD

Date: Oct. 20/11

Time (24h): 11:45

Field #:

Weather: Precipitation: light/on/off Temp (°C): 9

Map Code: W0D026/WETO05 Wind Speed & Direction: 3 from Cloud %: 100

Wetland Type: P Site Type: IS Dominant Form: open - forb.

% Open Water: 80-90 ELC Code: open water < 2 m deep

Photos: 100-0715, 0716

Forms % (Circle those ≥25%) Species (dominant species, secondary species, present species)

h crack willow, wh. elm

c -

dc, dh, ds -

ts red osier dogwood

ls rubus idaeus, gray dogwood, tartarian honey suckle

gc purple stemmed ^{and} panicled aster, rice cut grass, tall goldenrod, lycopus (willow) leaves, clover, barnyard grass, N.E. aster

ne soft stem bulrush, soft rush

be water plantain, woolgrass, polygonum sp., bidens frondosa, typha lat.

re -

ff duckweed

f -

su -

m moss spp.

Soil type:

Organic Mineral

Rare Species (Local, Regional, Provincial):

Wildlife Notes:

- none observed

- many tadpoles observed (~ > 20) - mature

SAR observations must also include a specific UTM location.

Forms: h=deciduous trees; c=coniferous trees; dh, dc, ds=dead trees/shrubs; ts=tall shrubs; ls=low shrubs; gc=ground cover; ne=narrow emergents; be=broad emergents; f=floating plants; ff=free-floating plants; su=submerged plants; m=mosses

Wetland Type: S=swamp; M=marsh; B=bog; F=fen P=pond

Site Type: L=lacustrine; P=palustrine; R=riverine; IS=isolated

Soil type: cl=clay/loam; sl=silt/loam; l=limestone; s=sand; hm=humic/mesic; f=fibric; g=granite Organic= >60cm depth over mineral (>10cm over bedrock) Mineral= <60cm depth over mineral

- appears man-made w berms around pond edges
- appears to have no inlet or outlet, possible rainwater fed.

photos: 100-0715, 0716

flood attenuation: occurs in a depression in surrounding topography, would appear to attenuate floods, however given no ~~in~~ inflow/outflow, only large flood events would affect this wetland.

water quality improvement: surrounded by agriculture, ~30m from edge of closest field - soy beans this season, plant pop^s appear relatively healthy
w/ no invasives or areas of exposed soil

shoreline erosion control: n/a.

groundwater recharge: clay content of soil would prevent GW recharge.

species rarity: no rare species observed

sig. features + habitats: none observed

fish habitat: no fish observed, < 2m depth + relatively small - would not appear to support significant fish habitat

↳ also many (>20) tadpoles observed while conducting proximity walk, might indicate absence of fish?

↳ mature tadpoles.

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page 1 of 4

Site: Adelaide
 Polygon: WOD-027
 UTM: 0441511 4757476
 Date: October 11, 2011 Time: 12:30
 Surveyor(s): WGW, HLW
 Weather: 19°C, 30% cloud cover, wind from S

Community Classification

Vegetation Type: FDDS-2 Dry-Fresh Sugar Maple-Beech forest
 Inclusion:
 Complex:

Polygon Description

System	Substrate	Topo Feature	Community
<input checked="" type="checkbox"/> Terrestrial	Organic	Lacustrine	Talus
<input type="checkbox"/> Wetland	Mineral Soil	Riverine	Crevice/Cave
<input type="checkbox"/> Aquatic	Parent Min.	Bottomland	Alvar
	Acidic Bedrock	Terrace	Rockland
	Basic Bedrock	Valley Slope	Beach/Bar
History	Carb. Bedrock	<input checked="" type="checkbox"/> Tableland	Sand Dune
<input checked="" type="checkbox"/> Natural		Roll, Upland	Bluff
<input type="checkbox"/> Cultural		Cliff	Bog
	Site		
Cover	Open Water	Plant Form	
<input type="checkbox"/> Open	Shallow Water	Plankton	Forb
<input type="checkbox"/> Shrub	Surficial Dep.	Submerged	Lichen
<input checked="" type="checkbox"/> Treed	Bedrock	Floating-Lvd.	Bryophyte
		Graminoid	<input checked="" type="checkbox"/> Deciduous

Stand Description

Layer	HT	Cover	Species
* Super-canopy			
1 Canopy	2	4	Sugar Maple > Am. Beech > Basswood
2 Sub-canopy	3	3	Am. Beech > Sugar Maple
3 Understorey	4	1	Bitternut Hickory
4 Groundcover	6	1	Garlic Mustard > Herb Robert > Poison Ivy

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

Size Class Analysis	A < 10	A 10-24	O 25-50	N > 50
Snags	R < 10	O 10-24	O 25-50	N > 50
Deadfall/Logs	R < 10	R 10-24	N 25-50	N > 50

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

Community Age	Pioneer	Young	<input checked="" type="checkbox"/> Mid-age	Mature	Old Growth
---------------	---------	-------	---	--------	------------

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page 2 of 4

PLANT SPECIES LIST

Site: Adelaide
 Polygon: WOD-027
 UTM: 0441511 4757476
 Date: October 11, 2011 Time: 12:30
 Surveyor(s): WGW, HLW
 Weather: 19°C, 30% cloud cover, wind from S

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer				Sample	Species	Layer				Sample
	1	2	3	4			1	2	3	4	
Hoptornbeam						Garlic Mustard					0
Sugar Maple	A	A				Herb Robert					0
Bitternut Hickory			O	O		Ziziaa Goldenrod				O	O
American Beech	A	A	O	O		Poison Ivy					0
White Ash	O	O	R			Aster sp.					0
Basswood	O	O				Wild Leek					0
Blue Beech	R										
Black Maple	R										

Wildlife and Other Notes

Wildlife Observation Form
NATURAL RESOURCE SOLUTIONS INC.

Site: 1730 - Ahalao
 Polygon: WNW-027
 UTM: FT 044511 - 4957486
 Date: 11/01/2011 Time: 12:30
 Surveyor(s): WNW - HLW
 Weather: 19° - Wind: E - CC: 50%

Species Observed					Check for Wildlife Habitat that may be associated with an observation				
TY	Species	EV	Notes	#	TY	Species	EV	Notes	#
R	- Blue Jay	OB							
R	Blue Jay	VO							
B	Starling	VO							

Faunal Type Codes (TY)
 B=Bird M=Mammal H=Herpetofauna L=Lepidoptera F=Fish D=Dragonfly or Damselfly

Evidence Codes (EV)
Breeding Birds
 SH- Suitable Habitat
 SM- Singing Male
 T- Territory
 A- Anxiety Behavior
 D- Courtship Display
 N- Nest Building
 P- Pair
 V- Visiting Nest
 DD- Distraction Display
 NE- Nest with Eggs
 AE- Adult entering nest
 NU- Used nest
 FY- Fledged Young
 FS- Food/Fecal Sac

Other Wildlife
 OB- Observed
 DP- Distinctive Parts
 TK- Tracks
 VO- Vocalization
 HO- House/Den
 FE- Feeding Evidence
 CA- Carcass/Bones
 FY- Eggs or young
 SC- Scat
 SI- Other Signs (Specify)

Wildlife Habitat Form
NATURAL RESOURCE SOLUTIONS INC.

Site:
 Polygon: see page 3.
 UTM:
 Date:
 Surveyor(s):
 Weather:

Wildlife Habitat (Check all that apply AND record UTM / mark on map)
 Habitats and Habitat Features are independent of wildlife observations

Habitat Type	Birds	Snakes
<input checked="" type="checkbox"/> Deciduous Forest	<input type="checkbox"/> Spring Flooded Field	<input type="checkbox"/> Burrow
<input type="checkbox"/> Mixed Forest	<input type="checkbox"/> Stick Nest (Raptors, Herons)	<input checked="" type="checkbox"/> Fallen Rotting Log
<input type="checkbox"/> Coniferous Forest	<input checked="" type="checkbox"/> Snag (Raptors, Herons)	<input type="checkbox"/> Old Well
<input type="checkbox"/> Marsh	<input type="checkbox"/> Tree Cavity Nest (Ducks)	<input type="checkbox"/> Rock Pile/Stone Wall
<input type="checkbox"/> Swamp	<input type="checkbox"/> Seep/Spring (Turkeys/Grouse)	<input type="checkbox"/> Organics Pile
<input type="checkbox"/> Bog	<input type="checkbox"/> Cliffs/Banks	<input type="checkbox"/> Log Pile
<input type="checkbox"/> Fen	Bats	<input type="checkbox"/> Karst
<input type="checkbox"/> Water	<input type="checkbox"/> Cave Entrance	<input type="checkbox"/> Broken/Fissured Rock
(Shallow & Open)	<input type="checkbox"/> Mine Shaft	<input type="checkbox"/> Old Foundation
<input type="checkbox"/> Meadow	<input checked="" type="checkbox"/> Snag (>20cm DBH)	<input type="checkbox"/> Old Bridge/Concrete Culvert
<input type="checkbox"/> Tallgrass Prairie	Mink/Otter/Fisher/Marten	Amphibians and Turtles
<input type="checkbox"/> Thicket	<input type="checkbox"/> Snag	<input type="checkbox"/> Vernal Pool/Woodland Pond (Amphibian Breeding)
<input type="checkbox"/> Savannah	<input type="checkbox"/> Burrow	<input type="checkbox"/> Sand (Turtle Nesting)
<input type="checkbox"/> Woodland	<input type="checkbox"/> Den	<input type="checkbox"/> Fine/Sandy Gravel (Turtle Nesting)
<input type="checkbox"/> Valley	<input type="checkbox"/> Tree Cavity	Invertebrates
(Describe Below)	<input type="checkbox"/> Fallen Log	<input type="checkbox"/> Crayfish Chimney
<input type="checkbox"/> Headwater Area	Deer/Moose	
(check for Seeps/Springs)	<input type="checkbox"/> Seep/Spring	
	<input type="checkbox"/> Mineral Lick	

For every Habitat Type or Habitat Feature, record UTM below (for each occurrence) or mark on map

Habitat Feature:	UTM	Description
Snag	See main UTM	4+ large snags in ha

Describe Valley (depth, geomorphological traits):

Additional Details:

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page 1 of 4

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page 2 of 4

PLANT SPECIES LIST

Site: 1230 Adelaide
 Polygon: W01D-02B
 UTM: 17T-m444709-4762983
 Date: 11/10/2011 Time: 3:30
 Surveyor(s): WGIW-HLW
 Weather: 28°C Wind: 2-S -10:90'

Site:
 Polygon:
 UTM: See Page 1
 Date:
 Time:
 Surveyor(s):
 Weather:

Community Classification

Vegetation Type: F05S-8 Dry-Fresh Sugar Maple-White Ash Deciduous Forest
 Inclusion:
 Complex:

White Ash Deciduous Forest

Polygon Description

System	Substrate	Topo Feature	Community
<input checked="" type="checkbox"/> Terrestrial	Organic	Lacustrine	Talus
<input type="checkbox"/> Wetland	Mineral Soil	Riverine	Crevice/Cave
<input type="checkbox"/> Aquatic	Parent Min.	Bottomland	Alvar
	Acidic Bedrock	Terrace	Rockland
	Basic Bedrock	Valley Slope	Beach/Bar
History	Carb. Bedrock	Tableland	Sand Dune
<input type="checkbox"/> Natural		Roll, Upland	Bluff
<input type="checkbox"/> Cultural		Cliff	
	Site		
Cover	Open Water	Plant Form	
<input type="checkbox"/> Open	Shallow Water	Plankton	Forb
<input type="checkbox"/> Shrub	Surficial Dep.	Submerged	Lichen
<input checked="" type="checkbox"/> Treed	Bedrock	Floating-Lvd.	Bryophyte
		Graminoid	Deciduous
			Coniferous
			Mixed

Stand Description

Layer	HT	Cover	Species
* Super-canopy			
1 Canopy	2	4	Sugar Maple > white ash > bur oak
2 Sub-canopy	3	3	Sugar Maple > blue beech
3 Understorey	4	3	Sugar Maple > hophornbeam > blue beech
4 Groundcover	5/6	2	Sugar Maple > black rasp. > Solidago sp.

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

Size Class Analysis	A < 10	A 10-24	O 25-50	R > 50
Snags	O < 10	O 10-24	R 25-50	M > 50
Deadfall/Logs	A < 10	O 10-24	O 25-50	M > 50

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

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth
			<input checked="" type="checkbox"/>		

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer				Sample	Species	Layer				Sample
	1	2	3	4			1	2	3	4	
Burdock	O	R	O			running wild st. flax					R
Sugar Maple	A	A	A			Aster sp.					O
White Ash	O	O				Solidago sp.					A
b. nut - Hickory			O	O		wild strawberry					O
hop horn beam				A		black					
blue beech		O	O			vine?					
Am. beech		O				Black raspberry					A
Am. Elm		O				Christmas fern					O
Bittersweet		O				gastic Mustard					O
hawthorn			O			horkwort					O
						Enchanter's -					O
						night shade					
						Jack in the pulpit					R
						Nival grape					R

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page 1 of 4

Site: Adelaide
 Polygon: WOD-029
 UTM: 0441862 4762971
 Date: October 13, 2011 Time: 14:42
 Surveyor(s): WGW, HLW
 Weather: 15°C, 100% cloud cover, wind E from SW

Community Classification

Vegetation Type: FODMS-1 Dry-Fresh Sugar Maple Deciduous Forest
 Inclusion:
 Complex:

3-Nov-2011 KNP comment: Satellite image suggests woodland as does note below
 Polygon Description: cover codes not provided. Maybe WODM4-3 Dry-Fresh Sugar Maple deciduous woodland

System	Substrate	Topo Feature	Community
<input checked="" type="checkbox"/> Terrestrial	Organic	Lacustrine	Lake
<input type="checkbox"/> Wetland	Mineral Soil	Riverine	Pond
<input type="checkbox"/> Aquatic	Parent Min.	Bottomland	River
	Acidic Bedrock	Terrace	Stream
	Basic Bedrock	Valley Slope	Marsh
<input checked="" type="checkbox"/> Natural	Carb. Bedrock	Tableland	Swamp
<input type="checkbox"/> Cultural		Roll, Upland	Fen
		Cliff	Bog

Cover	Open Water	Plant Form
<input type="checkbox"/> Open	Shallow Water	Plankton
<input type="checkbox"/> Shrub	Surficial Dep.	Submerged
<input checked="" type="checkbox"/> Treed	Bedrock	Floating-Lvd.
		Graminoid
		Forb
		Lichen
		Bryophyte
		Deciduous
		Coniferous
		Mixed

Stand Description

Layer	HT	Cover	Species
* Super-canopy			
1 Canopy	2		Sugar Maple > Am Beech > White Ash
2 Sub-canopy	3		Sugar Maple > Am Beech > Baldpate
3 Understorey	4		Sugar Maple > Am Beech
4 Groundcover	4		Wild Strawberry > Poison Ivy > Herb Robert

HT Codes: 1: >25m 2: 25-10m 3: 10-2m 4: 2-1m 5: 1-0.5m 6: 0.5-0.2m 7: <0.2m

Cover Codes: 0:none 1: 0-10% 2: 10-25 3: 25-60% 4: >60%

Size Class Analysis	A	< 10	A	10-24	O	25-50	N	> 50
Snags	O	< 10	O	10-24	O	25-50	N	> 50
Deadfall/Logs	O	< 10	O	10-24	O	25-50	N	> 50

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

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth
			<input checked="" type="checkbox"/>		

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page 2 of 4

PLANT SPECIES LIST

Site: Adelaide
 Polygon: WOD-029
 UTM: 0441862 4762971
 Date: October 13, 2011 Time: 14:42
 Surveyor(s): WGW, HLW
 Weather: 15°C, 100% cloud cover, wind E from SW

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer				Sample	Species	Layer				Sample
	1	2	3	4			1	2	3	4	
White Ash	O	O				Teasel					
Silver Maple	O					Goldenrod sp			O		
Gray Birch			O			Blackberry			O	O	
Franklin's Spine	O					Aster sp.			O	O	
Bitternut Hickory		O	O			Garlic Mustard			O		
Am. Beech		O	O			Swamp Milkweed			O		
Box Elder		O	O			Pinkish Ivy				O	
Basswood		O	O	O		Burdock			O		
Sugar Maple		O	O	O		Rhinoceros Horn			O		
Slip Beech		O				Wild Strawberry				O	
Green Ash			O			Blackberry				O	
						Green Wood Suet				O	

Wildlife and Other Notes

only canopy openings throughout the woods

Site: Adelaide WF
 Polygon: WOD-030
 UTM:
 Date: Oct. 20/11 Time: 12:50
 Surveyor(s): AMD, KNP
 Weather: 9°C, light rain (on+off), Wind 3 from SW

Community Classification

Vegetation Type: Dry - Fresh Oak - Hardwood Decid. Forest
 Inclusion: (FODM2-4)
 Complex:

Polygon Description

System	Substrate	Topo Feature	Community
<input checked="" type="checkbox"/> Terrestrial	Organic	Lacustrine	Talus
<input type="checkbox"/> Wetland	<input checked="" type="checkbox"/> Mineral Soil	Riverine	Crevice/Cave
<input type="checkbox"/> Aquatic	Parent Min.	Bottomland	Alvar
	Acidic Bedrock	Terrace	Rockland
	Basic Bedrock	Valley Slope	Beach/Bar
History	Carb. Bedrock	<input checked="" type="checkbox"/> Tableland	Sand Dune
<input checked="" type="checkbox"/> Natural		Roll, Upland	Bluff
<input type="checkbox"/> Cultural		Cliff	Bog

Cover	Open Water	Plant Form
<input type="checkbox"/> Open	Shallow Water	Plankton
<input type="checkbox"/> Shrub	<input checked="" type="checkbox"/> Surficial Dep.	Submerged
<input checked="" type="checkbox"/> Treed	Bedrock	Floating-Lvd.
		Graminoid
		Forb
		Lichen
		Bryophyte
		<input checked="" type="checkbox"/> Deciduous

Stand Description

Layer	HT	Cover	Species
* Super-canopy	1	2	bur oak > red oak
1 Canopy	2	3	sugar maple > wh. ash > basswood = shag hickory
2 Sub-canopy	3	4	ironwood = beech = sugar maple
3 Understorey	4	3	rubus idaeus > ironwood > black raspberry
4 Groundcover	5	4	avens sp. > goldenrod spp. = aster spp. > running strawberry

HT Codes: 1: >25m 2: 25-10m 3: 10-2m 4: 2-1m 5: 1-0.5m 6: 0.5-0.2m 7: <0.2m

Cover Codes: D:none 1: 0-10% 2: 10-25 3: 25-50% 4: >50%

Size Class Analysis	A < 10	A 10-24	O 25-50	R > 50
Snags	N < 10	R 10-24	N 25-50	N > 50
Deadfall/Logs	O < 10	R 10-24	R 25-50	N > 50

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

Community Age	Pioneer	Young	<input checked="" type="checkbox"/> Mid-age	Mature	Old Growth
---------------	---------	-------	---	--------	------------

PLANT SPECIES LIST

Site: Adelaide WF
 Polygon: WOD-030
 UTM:
 Date: Oct. 20/11 Time: 12:50
 Surveyor(s):
 Weather:

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer				Sample	Species	Layer				Sample
	1	2	3	4			1	2	3	4	
gray dogwood			R	R		tall goldenrod				O	
wh. elm		R				agrimony				R	
black raspberry			O	O		yellow avens				A	
poison ivy				O		blackberry					
bur oak	R					herb robert				R	
red maple		R	R			strawberry (furry)				A	check
ironwood		A	A	A		running strawberry				A	
basswood	O	R				bottlebrush grass				O	
shag hickory	O	R				Xmas fern				R	
blue beech		O	O			avens sp.				D	
hackberry			R			golden rod sp.				A	
ribes cynostabi			R	R		aster sp.				A	
ribes americanum			R	R		sensitive fern				R	
rubus idaeus			A	A		zig zag GR				O	
black cherry		R	R								
beech		R	A	O							
green ash		R	R								
sugar maple	O	A									
red oak	R										
wh. ash	O	O	O								
black maple			R								
hawkhorn sp.		R									

super canopy

super canopy

Wildlife and Other Notes

- evidence of past logging
 - a few very large bur oak (~50-100)
 - oaks do not appear to be regenerating - only large mature oaks remain
 - lots of ironwood.