Stantec

BOW LAKE WIND FARM

NATURAL HERITAGE ASSESSMENT AND ENVIRONMENTAL IMPACT STUDY

Appendix F

Field Notes (M.K. Ince & Associates and Natural Resource Solutions Inc.)

Appendix F-1

Amphibian Call Surveys

Project Name/Number: Bow Lake Phase/	
Item ID:	Station (A-Z): ABH 10 (A).
Field Crew: Robert Timstra / Jul Jameson	
GPS Lat./long coordinates: NILT 0 684478, 5 2 3 18 3 2	Sunset Time: 20,48
Date: (yr/mm/dd): 12/05/01 Start Time: スによる Finish Tim	ne: 뭐; 33 5-minute Survey?/
Precip: None/Dry Damp Haze Fog	Drizzle Rain
Air Temp ° C 10 ° C Water Temp ° C No. 2.6° C	Beaufort Wind Scale
Amphibian breeding area within 120m of woodland: Yes	No
General Aquatic Vegetation:	
Overhead Canopy: Yes No	
Surrounding landscape: Agricultural Wooded	Wetland Other
Note: In the diagram, fully indicate the calling code and the estimated number of individuals calling. e.g. AMTO 2-6. The first number is the calling code; the second number is the	- peepers dealenny -hust my ears
estimated number of individuals calling.	
individuals calling.	\mathcal{U}
581	PE4
in medile magnism ne american ne manu diberana na manu antiberana na diberana na diberana	50m 100m

Remarks: Station 1082. (A).

Species Common Name	Code
American Toad	AMTO
Blanchard's Cricket Frog	BCFR
Boreal/Western Chorus Frog	CHFR
Bullfrog	BULL
Fowler's Toad	FOTO
Gray Treefrog	GRTF
Green Frog	GRFR
Leopard Frog	NLFR
Mink Frog	MIFR
Pickerel Frog	PIFR
Spring Peeper	SPPE
Wood Frog	WOFR

	Abundance Codes
0=	No Frongs or Toads seen or heard
1=	Frog(s) or Toad(s) seen but not heard
2=	Individuals can be counted, calls not overlapping
3=	Some individuals can be counted, other calls overlapping
4=	Full chorus, calls continuous and overlapping, individuals not distinguishable

Project Name/Number: 15ow Lake PI	
Item ID:	Station (A-Z): 4BH 104
Field Crew: Rober Timsky Toel Jameson	
GPS Lat./long coordinates: <u>**/LT** 0644 380, 52 31896</u>	Sunset Time: 20:48
Date: (yr/mm/dd): ♣♠♠♠♠♠ Start Time: ڪَانَا الله Finish Tim	ne: ᢓ(∑25 5-minute Survey? <u>√</u>
Precip: None/Dry Damp Haze Fog	Drizzle Rain
Air Temp ° C 12.5 ° Water Temp • C 2° C	Beaufort Wind Scale
Amphibian breeding area within 120m of woodland: Yes	No
General Aquatic Vegetation:	
Overhead Canopy: Yes No	
Surrounding landscape: Agricultural Wooded	Other
Note: In the diagram,	
fully indicate the	
calling code and the	
estimated number of	
individuals calling. e.g. AMTO 2-6.	
The first number is the	
calling code; the	
second number is the estimated number of	
individuals calling.	
	\mathcal{A}
Barrier Committee Co	
Domorko	50т 100т

Species Common Name	Code
American Toad	AMTO
Blanchard's Cricket Frog	BCFR
Boreal/Western Chorus Frog	CHFR
Bullfrog	BULL
Fowler's Toad	FOTO
Gray Treefrog	GRTF
Green Frog	GRFR
Leopard Frog	NLFR
Mink Frog	MIFR
Pickerel Frog	PIFR
Spring Peeper	SPPE
Wood Frog	WOFR

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GPS Lat./long coordinates: NIST 684282.00, 5231827.00 SI	unset Time: 20:48
Date: (yr/mm/dd): /2/05/6 と Start Time: えいい Finish Time:	
Precip: None/Dry Damp Haze Fog D	
Air Temp ° C Water Temp ° C Be	eaufort Wind Scale
Amphibian breeding area within 120m of woodland: Yes No	
General Aquatic Vegetation:	
Overhead Canopy: Yes 150% No	
Surrounding landscape: Agricultural Wooded Wooded	Wetland Other
Note: In the diagram,	
fully indicate the	
calling code and the estimated number of	andrometria (n. 1915). Santaria de la composición de la comp
individuals calling.	
e.g. AMTO 2-6. The first number is the	
calling code; the	
second number is the estimated number of	
individuals calling.	4-3
o woth	(2-2
PSPPES	2-2
SPREAT	
	50m 100m
Remarks:	

Species Common Name	Code
American Toad	AMTO
Blanchard's Cricket Frog	BCFR
Boreal/Western Chorus Frog	CHFR
Bullfrog	BULL
Fowler's Toad	FOTO
Gray Treefrog	GRTF
Green Frog	GRFR
Leopard Frog	NLFR
Mink Frog	MIFR
Pickerel Frog	PIFR
Spring Peeper	SPPE
Wood Frog	WOFR

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4=	Full chorus, calls continuous and overlapping, individuals not distinguishable

Project Name/Number: Bow Lake Phase Station (A-Z): ABH 101 Item ID: Field Crew: Robert Timstra Toel Jameson 20:48 GPS Lat./long coordinates: ~16 \(\tag{684455}\), 5 2 31910 Sunset Time: Finish Time: 21:40 | 5-minute Survey? V Date: (yr/mm/dd): /2/かち/ひ/ Start Time: 21:35 None/Dry V Damp Haze Precip: Fog Drizzle Rain Water Temp · C 12-6 Air Temp °C Beaufort Wind Scale Amphibian breeding area within 120m of woodland: Yes No General Aquatic Vegetation: Yes Overhead Canopy: No Surrounding landscape: Agricultural Wooded_ \ Wetland Other Note: In the diagram, fully indicate the calling code and the estimated number of individuals calling. e.g. AMTO 2-6. The first number is the SPPE4 calling code; the second number is the estimated number of individuals calling. WOFR 2-2 SPPE4 100m 50m

Remarks: STATION 2 OF 2 (B)

Species Common Name	Code
American Toad	AMTO
Blanchard's Cricket Frog	BCFR
Boreal/Western Chorus Frog	CHFR
Bullfrog	BULL
Fowler's Toad	FOTO
Gray Treefrog	GRTF
Green Frog	GRFR
Leopard Frog	NLFR
Mink Frog	MIFR
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Project Name/Number: Sow Lake Phase Station (A-Z): AB H 20
Item ID: Station (A-Z): AB ₩ Q0
Field Crew: JOEL JAMESON/ROBTYMSTRA
Field Crew: JUEZ JAMESON ROBTYMSTRA GPS Lat./long coordinates: N/6 T 68 4413.04, 52 31600.86 Sunset Time: 20:48
Date: (yr/mm/dd): 12/05/07 Start Time: スス:の Finish Time: スピック 5-minute Survey?
Precip: None/Dry Damp Haze Fog Drizzle Rain
Air Temp ° C 7.5 °C Water Temp ° C 10 °C Beaufort Wind Scale
Amphibian breeding area within 120m of woodland: Yes No
General Aquatic Vegetation:
Overhead Canopy: Yes No
Surrounding landscape: Agricultural Wooded Wetland Other
Note: In the diagram, fully indicate the calling code and the estimated number of individuals calling. e.g. AMTO 2-6. The first number is the calling code; the second number of individuals calling. AMTO 2-1 AMTO 2-1 SPPE2-1 50th 100

F	
Species Common Name	Code
American Toad	AMTO
Blanchard's Cricket Frog	BCFR
Boreal/Western Chorus Frog	CHFR
Bullfrog	BULL
Fowler's Toad	FOTO
Gray Treefrog	GRTF
Green Frog	GRFR
Leopard Frog	NLFR
Mink Frog	MIFR
Pickerel Frog	PIFR
Spring Peeper	SPPE
Wood Frog	WOFR

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3=	Some individuals can be counted, other calls overlapping	
4=	Full chorus, calls continuous and overlapping, individuals not distinguishable	

Remarks:

Project Name/Number: But /
Item ID: A6H212 Station (A-Z): 1
Field Crew: DCS REL GPS Lat./long coordinates: ICT OGRASTIE 5231CICN Sunset Time: 8"45pm
GPS Lat./long coordinates: 167 066457 16 5231(16N Sunset Time: 847) pm
Date: (yr/mm/dd): 12/05/01 Start Time: 10:09/6 Finish Time: 10:14/6 5-minute Survey? X
Precip: None/Dry X Damp Haze Fog Drizzle Rain
Air Temp ° C //o ° C Water Temp ° C Beaufort Wind Scale
Amphibian breeding area within 120m of woodland: Yes No
General Aquatic Vegetation: Mosh margold, wetland grasses scarce
Overhead Canopy: Yes No
Surrounding landscape: Agricultural Wooded_ Wetland Other
Note: In the diagram, fully indicate the calling code and the estimated number of individuals calling. e.g. AMTO 2-6. The first number is the calling code; the second number is the estimated number of individuals calling.
50m 100m
Remarks:

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Project Name/Number: Bow Lar & Parke 1
Item ID: APXY 2017 - WETUND WIN A LIRUE FUREST Station (A-Z): A
Field Crew: RHYMNOW L. C. DAN. STUART.
GPS Lat./long coordinates: 16 T 160 5325 5232477. Sunset Time: 8:45 P.M.
Date: (yr/mm/dd): 12 05 01 Start Time: 915 2M Finish Time: 9100M 5-minute Survey?
Precip: None/Dry Damp Haze Fog Drizzle Rain
Air Temp ° C Water Temp ° C Beaufort Wind Scale
Amphibian breeding area within 120m of woodland: Yes No
General Aquatic Vegetation: Mash Greasses, Swall Core, B. Speck Leather Leaf. Sping
Overhead Canopy: Yes No
Surrounding landscape: Agricultural Wooded Wetland Other Other
Note: In the diagram,
Note. In the diagram,
fully indicate the calling code and the
estimated number of
individuals calling. e g AMTO 2-6 WOFR 2 - \
e.g. AMTO 2-6. The first number is the
calling code; the
second number is the
estimated number of individuals calling.
individuals calling.
C284-4
When
66 y
X C
50 _т 100 _т
Remarks:
FULL PERPLE CHORUS.
I WING WHOLE CHORUS

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Boreal/Western Chorus Frog	CHFR
Bullfrog	BULL
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Pickerel Frog	PIFR
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Project Name/Number: Bow Lake Phase 1.	
Item ID:	Station (A-Z): Aby 206.
Field Crew: Anoin Fairmint.	4
GPS Lat./long coordinates: 167 684941 5233086	Sunset Time: 8:45 PM.
Date: (yr/mm/dd): 2012 05 \ 01 Start Time: 9:15 PM Finish Time	e: 9⋅20 የм 5-minute Survey?_X_
Precip: None/Dry X Damp Haze Fog	
Air Temp ° C / 0 ° C. Water Temp ° C 9 ° C.	Beaufort Wind Scale
Amphibian breeding area within 120m of woodland: Yes N	lo
General Aquatic Vegetation: SWAET. CARLE LEAF,	MYRSH GREASSES, Bix SPRICE
Overhead Canopy: Yes No	
Surrounding landscape: Agricultural Wooded	Other
Note: In the diagram, fully indicate the calling code and the estimated number of individuals calling. e.g. AMTO 2-6. The first number is the calling code; the second number is the estimated number of individuals calling. SPRE-	4 Spey. V.
	50m 100m

Remarks:					
Terriario.		A	7	0	1 -
DESVIOR	LISTENHALLS	ONE ITUDIO	DONE 154	RHANNON	LESHYK.
1000000	213 20, 011001	٥,	· · · · · · · · · · · · · · · · · · ·		

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Air Temp ° C	Project Name/Number: 84/	
GPS Lat./long coordinates: 16 664 465 1 57335 N Sunset Time: 1/16 pm Date: (yr/mm/dd): 1/2 1/2 Start Time: 1/16 pm Finish Time: 1/16 pm 5-minute Survey? Precip: None/Dry		Station (A-Z):
Date: (yr/mm/dd): 1/2 /05 /02 Start Time: 9 /5 /	Field Crew: DCS PCT	
Precip: None/Dry Damp Haze Fog Drizzle Rain Air Temp ° C		
Air Temp ° C	Date: (yr/mm/dd): 12/05/02 Start Time: 9/15pm Finish Ti	me: 9:20pm 5-minute Survey? <u>K-</u>
Amphibian breeding area within 120m of woodland: Yes No General Aquatic Vegetation: Marsh grasses, seet gale, last erlest Overhead Canopy: Yes Surrounding landscape: Agricultural Wooded Wetland Other Note: In the diagram, fully indicate the calling code and the estimated number of individuals calling, e.g. AMTO 2-6. The first number is the calling code; the second number of individuals calling. SPPE SP		
General Aquatic Vegetation: March grasses, seet gale, latter of the diagram, fully indicate the calling code and the estimated number of individuals calling. e.g. AMTO 2-6. The first number is the estimated number of individuals calling. e.g. AMTO and the estimated number of individuals calling. SPPE SP	Air Temp ° C Water Temp ° C	Beaufort Wind Scale
Surrounding landscape: Agricultural Wooded Wetland Other Note: In the diagram, fully indicate the calling code and the estimated number of individuals calling. e.g. AMTO 2-6. The first number is the calling code; the second number of individuals calling.	Amphibian breeding area within 120m of woodland: Yes	No
Surrounding landscape: Agricultural Wooded Wetland Other Note: In the diagram, fully indicate the calling code and the estimated number of individuals calling. e.g. AMTO 2-6. The first number is the calling code; the second number of individuals calling.	General Aquatic Vegetation: Marsh grasses, such gale,	latterleaf
Note: In the diagram, fully indicate the calling code and the estimated number of individuals calling. e.g. AMTO 2-6. The first number is the calling code; the second number of individuals calling. SPPE	Overnead Canopy: Yes No	
fully indicate the calling code and the estimated number of individuals calling, e.g. AMTO 2-6. The first number is the calling code; the second number of individuals calling. SPPE SP	Surrounding landscape: Agricultural Wooded $_$ $ imes$	Wetland <i>X</i> Other
fully indicate the calling code and the estimated number of individuals calling, e.g. AMTO 2-6. The first number is the calling code; the second number of individuals calling. SPPE SP	Note: In the diagram	1
calling code and the estimated number of individuals calling. e.g. AMTO 2-6. The first number is the calling code; the second number of individuals calling. SPPE SPPE		
individuals calling. e.g. AMTO 2-6. The first number is the calling code; the second number is the estimated number of individuals calling: SPPE SPPE SPPE SPPE SPPE SPPE SPPE SP	calling code and the	
e.g. AMTO 2-6. The first number is the calling code; the second number is the estimated number of individuals calling. SPFE SPFE SPFE SPFE SOM 100m Remarks:		
The first number is the calling code; the second number is the estimated number of individuals calling. SPPE SPPE SPPE SPPE SPPE SPPE SPPE SPP		
second number is the estimated number of individuals calling. SPPE SPPE SPPE SPPE SPPE SPPE SPPE SPP		
estimated number of individuals calling. SPPE SPPE SPPE SPPE SPPE SPPE SPPE SPP	calling code; the	
SPPE SPPE SPPE SPPE SPPE SPPE SPPE SPPE		
Remarks:		SPPE
Remarks:	H .	4
Remarks:	SPPt	
Remarks:		50m 100m
· · · · · · · · · · · · · · · · · · ·	Domorko	70m 100m
1 1 1 1 Carlo cardare	Full charus, spring peepers	

Species Common Name	Code
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Project Name/Number: 1818/	
Item ID: ABHIO3	Station (A-Z):/
Field Crew: DCS 12T	
GPS Lat./long coordinates: 16T 068 1808 E 5233974 N	
Date: (yr/mm/dd): 12/05/02 Start Time: 9:36/m Finish T	ime: १:५/m 5-minute Survey?X
Precip: None/Dry Damp Haze Fog	
Air Temp ° C Water Temp • C// C	Beaufort Wind Scale
Amphibian breeding area within 120m of woodland: Yes	No
General Aquatic Vegetation: Sweet gale, leather leaf, E. M. Overhead Canopy: Yes No	white redor, marsh arasses
Surrounding landscape: Agricultural Wooded_X	Wetland Other
Note: In the diagram, fully indicate the calling code and the estimated number of individuals calling. e.g. AMTO 2-6. The first number is the calling code; the second number is the estimated number of individuals calling:	SME
SPE	SME
Full charus	50m 100m
Remarks:	
7 cated salaman last al sacal in Shallows (7 of	Thick is not fronting

Species Common Name	Code
American Toad	AMTO
Blanchard's Cricket Frog	BCFR
Boreal/Western Chorus Frog	CHFR
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Appendix F-2

Amphibian Egg Searches

AMPHIBIAN EGG SEARC	LILC
AMEDIAN BURY OF ARU	

MAT AMPHIBIAN EGG SEARCHES	1 OF 2
Date: AR. 26 /2 ABH ID: 101 UTMs: 684456 5231938 Observer(s): RR Des, 37 / RT.	Polarized Sunglasses?:\(\forall \)/N
Temp: 8 Water Temp: 13 Wind: CC: 10 10 Precip: X Last 24 hrs: No land:	0
Start Time: 7:45 AM End Time: 7:45 AMTotal Time Actively Searching: 30 MINS Water Clarity Notes:	121 6150

For calling frogs use the Call Index Value - 1: Individuals of the species can be counted; there is silence between the calls you hear. 2: Calls of individuals can be distinguished but there is some acceptance of the call of the species can be counted; there is silence between the calls you hear. 2: Calls of individuals can be

distinguished, but there is	e is some overlapping of the species' calls. 3: Full chorus for the species. Calls are constant, continuous, and overlapping.								
	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog	3 CREOUPS OF NOO WASSES.	1150.							
Spotted Salamander		4							
Blue-spotted Salamander		e				-			
Spring Peeper					•				1
Chorus Frog									
Four-toed Salamander									
Eastern Newt									
American Toad									
Gray Treefrog									
Mink Frog									
Green Frog									
American Bullfrog				•					
N. Leopard Frog									
Pickerel Frog									
E. Red-backed Salamander									
Other (include reptiles):									

Date: ARO. We 12 A	BH ID: <u>1/3</u> UTMs: 0684686 emp: <u>8°C</u> Wind: 1 CC: (0)(0) MEnd Time: <u>6:00 PM</u> Total Time	AMP 52334	PHIBIAN EGG S 건 Observer(s):	SEARCH Un, 1	ES 1, DUS, KW-B 1 R	1	Polarized :	Sunglass	2 of 2 ses? (V /N
Temp: 150 Water T	emp: 8° Wind: 1 CC: 10 10	Pred	rip:Last	24 hrs:	Ran				
Start Time: 5.35 Pr	MEnd Time: 6:00 PM Total Time	Activel	v Searching: 2	KNIM Z	Water Clarity Notes	. Voe	1 Cum	and the second	
			,			•			
Tally counts for each life	stage. Where counts cannot be made us	e estima	tes: 0-10, 20-50, 5	50-100, 10	0-500, 500-1000, >1	000.			
For calling fue as weether	Call Indian Walnes of Today 1 1 1 1 1 1		1 . 1 . 1	•			0.011.0		
distinguished, but there is	Call Index Value - 1: Individuals of the spessions some overlapping of the species' calls.	ecies ca 3. Full c	in be counted; the chorus for the sne	re is sileno cies Calls	ce between the calls y	you hear	r. 2: Calls of d overlanni	individu Ja	als can be
	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
		<u> </u>			.			1000	
Wood Frog							and the		*.
	1	1		+					<u> </u>
Spotted Salamander		1	. -				*		
				+				<u> </u>	
Blue-spotted Salamander				-				1 5	
•									
Spring Peeper									
Chorus Frog									
Four-toed Salamander									
Eastern Newt									
American Toad									
Gray Treefrog				+					
Mink Frog									
Green Frog									
American Bullfrog		**************************************	7.						
N. Leopard Frog									
Pickerel Frog									
E. Red-backed									
Salamander									
Other (include reptiles):			,				,		
RANO OHUR	EMMORE FOUND NO VICTOR	1.							7
COCAL					v.				•

Following: http://flash.lakeheadu.ca/~shecnar/uploads/docs/LS_VES_form_eggs.pdf

QA/QC: _____(Data Manager)

AMPHIBIAN EGG SEARCHES	
	Polarized Sunglasses?(Y/N
Temp: 1 Water Temp: 8°C Wind: 1 CC: 19/10 Precip: Show Last 24 hrs: Clean. Shows N Mc	ven.
Start Time: 10:00 End Time: 10:00 MTotal Time Actively Searching: 25 MIND Water Clarity Notes:	ed Clarke.
Tally counts for each life stage. Where counts cannot be made use estimates: 0-10, 20-50, 50-100, 100-500, 500-1000, >1000.	

For calling frogs use the Call Index Value - 1: Individuals of the species can be counted; there is silence between the calls you hear. 2: Calls of individuals can be distinguished but there is some everlapping of the species calls are species. Calls are species.

	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog									
Spotted Salamander	14+ H+ \	11							
Blue-spotted Salamander									
Spring Peeper									*
Chorus Frog									
Four-toed Salamander			•	i i					27 - 2
Eastern Newt			Market and the control of the contro						
American Toad				÷					
Gray Treefrog									
Mink Frog							-		
Green Frog									
American Bullfrog			-						14
N. Leopard Frog									
Pickerel Frog									
E. Red-backed Salamander									
Other (include reptiles):						-	1		

Wing of x2.

Date: 1°C Water T Start Time: 8.30	BH ID: 20\ UTMs: 69363 Temp: 5°C Wind: 1-2 CC: 1°C End Time: 7:05 pm Total Tire	AMP	HIBIAN EGG Observer(s) ip: Las Searching:	SEARCHI : Land S t 24 hrs: SS min S	ES XS JJ YRT CLURR - RAI Vater Clarity Note	N W W	Polarized	Sunglass	4 of 21 ses?(V/N
For calling frogs use the (stage. Where counts cannot be made	e species ca	n be counted; the	ere is silenc	e between the calls	you hea	r. 2: Calls of	individu	als can be
distinguished, but there is	s some overlapping of the species' ca Egg Mass	lls. 3: Full c	horus for the spe Larvae	cies. Calls a	are constant, contin Metamorph	uous, an Total	d overlappi Adult	ng. Total	Calling
Wood Frog	255 11400	Total	Barvac	Total	месаногри	Total	Aduit	Total	Cannig
Spotted Salamander	infl.	4		, 3	A 4 (1)				
Blue-spotted Salamander		,			7.70 mm - 1.00 m	€ 1		Ass.	
Spring Peeper			· · · · · · · · · · · · · · · · · · ·						# 1 ²
Chorus Frog									
Four-toed Salamander									-
Eastern Newt				ı					
American Toad									
Gray Treefrog									
Mink Frog									
Green Frog			-						
American Bullfrog N. Leopard Frog			``			ļ			
Pickerel Frog									
E. Red-backed Salamander					·			,	
Other (include reptiles):					·				

QA/QC:	(Data Manager)
	(Data Intaliago)

For calling frogs use the Call Index Value - 1: Individuals of the species can be counted; there is silence between the calls you hear. 2: Calls of in listinguished, but there is some overlapping of the species' calls. 3: Full chorus for the species. Calls are constant, continuous, and overlapping in the species of the species calls are constant, continuous, and overlapping in the species of the species. Calls are constant, continuous, and overlapping in the species of the species. Calls are constant, continuous, and overlapping in the species of the species. Calls are constant, continuous, and overlapping in the species of the species. Calls are constant, continuous, and overlapping in the species of the species. Calls are constant, continuous, and overlapping in the species of the species of the species. Calls are constant, continuous, and overlapping in the species of the species. Calls are constant, continuous, and overlapping in the species of the species of the species. Calls are constant, continuous, and overlapping in the species of	orus for the species. Calls are constant, continuous, and overlapping.		all Index Value - 1: Individual	le of the energies ser)-500, 500-1000, >				
Egg Mass Total Larvae Total Metamorph Total Adult Wood Frog Spotted Salamander Blue-spotted Salamander Spring Peeper Chorus Frog Four-toed Salamander Eastern Newt American Toad		stinguished, but there is	some overlapping of the spe	cies' calls. 3: Full ch	orus for the spe	cies. Calls a	re constant, contin	s you near 1uous, and	. 2: Calls of l overlappi	individu: ng.	als can be
Spotted Salamander Slue-spotted Salamander Spring Peeper Chorus Frog Cour-toed Salamander Castern Newt American Toad			Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Blue-spotted Salamander Spring Peeper Chorus Frog Cour-toed Salamander Castern Newt Castern Toad		Wood Frog					•			-	
Spring Peeper		Spotted Salamander	1111	4.							
Chorus Frog Cour-toed Salamander Castern Newt Comerican Toad		Blue-spotted Salamander									
Chorus Frog Cour-toed Salamander Castern Newt Camerican Toad		pring Peeper			*						
Sastern Newt Sumerican Toad											
merican Toad		our-toed Salamander					<u> </u>				
		astern Newt								<u> </u>	
ray Treefrog		merican Toad									
		ray Treefrog									
link Frog								1			
reen Frog		reen Frog									
merican Bullfrog		merican Bullfrog							-		
. Leopard Frog		. Leopard Frog									
ickerel Frog					.					. ,	
. Red-backed alamander											
ther (include reptiles):		ther (include reptiles):									
		•									
									4		
								*			
		Following: http://flash.la	keheadu.ca/~shecnar/uploads/d	docs/LS_VES_form	eggs.pdf	QA/Q0	D:		(Data N	(Ianager)	
Following: http://flash.lakeheadu.ca/~shecnar/uploads/docs/LS_VES_form_eggs.pdf QA/QC:(Data Ma	eggs.pdf QA/QC:(Data Manager)										
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Red-backed		Red-backed	ette ette generale og en								
Red-backed		Red-backed									
Red-backed Red-backed		Red-backed			*************************************						
ther (include reptiles):		ther (include reptiles):									
		•									
		•						,	46		

Date: 12 12 A	BH ID: 2\2. UTMs: 06 24553 emp: 29° Wind: \ CC: 9/10 End Time: 8.25m. Total Time	AMP 52316	HIBIAN EGG SI	EARCH	ES CM D		Dolorizad	Cungloss	6 of 28
Temp: 3° Water To	emp: 29°C Wind: \ CC: 0//0	Prec	in (% Last ?	A hree	AD RAN.		Polarizeu	Sungiass	es::(Y//N
Start Time: 8 K AM	End Time: 8.25m. Total Time	1 1 cc Actively	Searching:	MIN:	Water Clarity Note	c. 1/7	W MOA	P	
			, bear ening.	Sant 1	water clarity Note	s	y ocen	1	
Tally counts for each life s	tage. Where counts cannot be made us	e estima	tes: 0-10, 20-50, 50)-100, 10	00-500, 500-1000, >	1000.			
For calling frogs use the C	all Index Value - 1: Individuals of the sp	ecies ca	n be counted: there	e is silen	ce between the calls	vou hear	· 2· Calls of	individu	als can ha
distinguished, but there is	some overlapping of the species' calls.	3: Full c	horus for the speci	es. Calls	are constant, contin	uous, and	l overlappii	ng.	ns can be
	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog					:				
Spotted Salamander									
Blue-spotted Salamander			1					- ,	
Spring Peeper									
Chorus Frog						·			
Four-toed Salamander									
Eastern Newt									
American Toad									
Gray Treefrog									
Mink Frog			-		*				1
Green Frog									
American Bullfrog									
N. Leopard Frog									
Pickerel Frog			4 2						
E. Red-backed Salamander									
Other (include reptiles):									
Notional OVE	SETLINE D.			·					
Following: http://flash.la	keheadu.ca/~shecnar/uploads/docs/LS_V	ES_form	_eggs.pdf	QA/Q	OC:		(Data N	(Ianager)	

Date: 190.27 12. A)	BH ID: 103 UTMs: 0684801 emp: 7°C Wind: 1 CC: 1/10 L End Time: 10:55 AM Total Time	AMPH 523391	HIBIAN EGG \mathcal{L} Observer(s):	SEARCH	ES	· :	Polarized	Sunglass	+ 0F2 es? : ⅓/N
Start Time: 980 AM	emp: <u> </u>	Actively	p: <u> </u>	24 hrs: <u>k</u>	CHUD Y STURDM Water Clarity Note	neen.	sey Civi	W.	
Cally counts for each life s	stage. Where counts cannot be made us	e estimat	es: 0-10, 20-50,	50-100, 10	00-500, 500-1000, >	1000.		. •	
or calling frogs use the C listinguished, but there is	all Index Value - 1: Individuals of the species' calls	pecies can . 3: Full ch	be counted; the	re is silend cies. Calls	ce between the calls are constant, contir	s you hear luous, and	: 2: Calls of	individua	als can be
	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog									
Spotted Salamander	JUT INI	9.	ani						
Blue-spotted Salamander					The state of the s				
Spring Peeper									
Chorus Frog									
Four-toed Salamander		\$ 11 T							
Eastern Newt									
American Toad								14.1	
Gray Treefrog									
Mink Frog									
Green Frog									
American Bullfrog									
N. Leopard Frog								No.	
Pickerel Frog									
E. Red-backed Salamander									
Other (include reptiles):									

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QA/QC: _____(Data Manager)

Temp: -+°C Water T Start Time:	BH ID: 101 UTMs: 694455 Cemp: 5米と Wind: 夕 CC: 0	Precip	: <u>Ø</u> Last Searching: <u>3</u>	24 hrs:	Vater Clarity Note	es:	try Cu	AR.	
	stage. Where counts cannot be made ι						\		
For calling frogs use the (Call Index Value - 1: Individuals of the s some overlapping of the species' call	species can	be counted: the	re is silenc	e between the calls	s vou hea	r. 2: Calls of d overlappi	individu ng	als can l
(A)	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Callin
Wood Frog	3 GROWS OF N 50 MAGSIR.	N150							
Spotted Salamander	HTH	10.)
Blue-spotted Salamander									
Spring Peeper							1	1	
Chorus Frog			-						
Four-toed Salamander									
Eastern Newt							_		
American Toad									
Gray Treefrog									
Mink Frog									
Green Frog									
American Bullfrog			-						
N. Leopard Frog					·				
Pickerel Frog									
E. Red-backed Salamander									
Other (include reptiles):			· ·						
FOUND 1 # SPE	UNCA. PEEPCL.		*						
Following: http://flash.l	akeheadu.ca/~shecnar/uploads/docs/LS_	VES_form_6	eggs.pdf	QA/Q0	C:		(Data M	Manager)	

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Date: Apr 28/12 ABH ID: ABH 10: UTMs: 0684264 5231893 Observer(s): DCS	Polarized Sunglasses?:�/N
Temp:3'C Water Temp: _5'C Wind: _0 CC: _O/IO Precip: _No Last 24 hrs:	
Start Time: End Time: Total Time Actively Searching: Water Clarity Notes: C	lear

Tally counts for each life stage. Where counts cannot be made use estimates: 0-10, 20-50, 50-100, 100-500, 500-1000, >1000.

For calling frogs use the Call Index Value - 1: Individuals of the species can be counted; there is silence between the calls you hear. 2: Calls of individuals can be

distinguished, but there is some overlapping of the species' calls 3: Full charges for the species. Calls are constant, continuous, and evenlapping

	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog									
Spotted Salamander	2 clusters, cloudy, each alsom	2	0	0	0	0	0	0	0
Blue-spotted Salamander									
Spring Peeper						•			
Chorus Frog									
Four-toed Salamander									
Eastern Newt		**************************************							
American Toad				1.200					
Gray Treefrog							* · · · · · · · · · · · · · · · · · · ·		
Mink Frog									
Green Frog									
American Bullfrog									
N. Leopard Frog									
Pickerel Frog								-	
E. Red-backed Salamander									
Other (include reptiles):	1 A 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -								3

 Date:
 Apr 28/12
 ABH ID:
 ABH212
 UTMs:
 068 H553
 523/629
 Observer(s):
 DCS
 Polarized Sunglasses?:Y/N Temp: __3°C Water Temp: _/°C Wind: _O CC: __O//O Precip: _ Abre __ Last 24 hrs: __None Start Time: 7:45 End Time: 8:00am Total Time Actively Searching: 15 mins Water Clarity Notes: Clear, some thin ice.

Tally counts for each life stage. Where counts cannot be made use estimates: 0-10, 20-50, 50-100, 100-500, 500-1000, >1000.

For calling frogs use the Call Index Value - 1: Individuals of the species can be counted; there is silence between the calls you hear. 2: Calls of individuals can be

uisunguisneu, but there is	some overlapping of the species' calls.		1	1			d overlappir	ng.	
	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog									
Spotted Salamander									
Blue-spotted Salamander									
Spring Peeper									
Chorus Frog									
Four-toed Salamander								1.	
Eastern Newt				2					
American Toad								•	
Gray Treefrog									
Mink Frog							-		
Green Frog									
American Bullfrog)		
N. Leopard Frog									
Pickerel Frog							-		
E. Red-backed Salamander									
Other (include reptiles):									

none observed

AMPHIBIAN EGG SEARCHES	
Date: HR 78 2 ABH ID: UTMs: Observer(s):	Polarized Sunglasses?(Y)/N
Temp: L.y°C Water Temp: 63°C Wind: CC: Olo Precip: Last 24 hrs: N	O RAN - CLEAR - 20°C
Start Time: 7:20PM End Time: 7:40 PM Total Time Actively Searching: 20 Min Wal	
	POLLEM CONFILED (N
Tally counts for each life stage. Where counts cannot be made use estimates: 0-10, 20-50, 50-100, 100-5	00,500-1000,>1000. Wist SIDE.

	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog		- The state of the							
Spotted Salamander							6.		
Blue-spotted Salamander									
Spring Peeper									
Chorus Frog									
Four-toed Salamander									
Eastern Newt								,	
American Toad							- <u>i</u>		
Gray Treefrog									
Mink Frog									
Green Frog									-
American Bullfrog									
N. Leopard Frog								*	
Pickerel Frog			<u>-</u>				··		1
E. Red-backed Salamander							•		
Other (include reptiles):								7	

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$\overline{}$	WIPH	IDIAN			IKI HH

Date: MR 18 17 ABH ID: OV UTMs: Observer(s): RFL, JJ, YRT,	Polarized Sunglasses?(Y)/N
Temp: Water Temp: Wind: CC: Precip: Last 24 hrs: No RAN	
Start Time: 7:50 End Time: 840 Total Time Actively Searching: 50 M W Water Clarity Notes:	Ital Cuera

	s some overlapping of the species' calls Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog									
Spotted Salamander	1+8 was a second	9.					V		
Blue-spotted Salamander	•								
Spring Peeper									
Chorus Frog									
Four-toed Salamander			erania de la compositación de la compositació					4.	
Eastern Newt			· .				III (TRAPE)	7	
American Toad									
Gray Treefrog									
Mink Frog									
Green Frog									
American Bullfrog									
N. Leopard Frog									
Pickerel Frog	· ·								
E. Red-backed Salamander									
Other (include reptiles):						1			

o Cale		4	·
			1

Date: Apr 28/12 ABH ID: A6420 UTMs: 068 4363 5231559N Observer(s): DCS	Polarized Sung	lasses?(Y)N
Temp: 1°C Water Temp: 3°C Wind: O CC: 0/10 ^{ths} Precip: Note Last 24 hrs: None		
Start Time: 8:30 a.m. End Time: 8:30 a.m. Total Time Actively Searching: 30 mins Water Clarity Notes:	Clear	

Tally counts for each life stage. Where counts cannot be made use estimates: 0-10, 20-50, 50-100, 100-500, 500-1000, >1000.

	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog				. .					
Spotted Salamander	2 - cloudy, a 15th deep. Same two as observed during egg seach 1	2		0	*O	0	0	0	0
Blue-spotted Salamander									
Spring Peeper									
Chorus Frog									
Four-toed Salamander									
Eastern Newt									
American Toad									
Gray Treefrog						** * *			
Mink Frog									
Green Frog									
American Bullfrog									
N. Leopard Frog									
Pickerel Frog									
E. Red-backed Salamander									
Other (include reptiles):		. ,							

Eallarring	1. the //G ask 1.1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	TIEC	C	1.10
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)A/Q((Data Manager)

Date: APR 29 12 ABH ID: 103. UTMs: UTMs: 4800 Observer(s): RPL, DCS, JJ, VR7. Polarized Sunglasses?	OFZ
Temp: You Water Temp: 5° Wind: 1 CC: 1/10 Precip: Ø Last 24 hrs: No. land, Bruch Freeziewich	CY/N
Start Time: 9:05 m End Time: 9:40 m Total Time Actively Searching: 35 m Water Clarity Notes: Very Curry, Swi	W.
	William

For calling frogs use the Call Index Value - 1: Individuals of the species can be counted; there is silence between the calls you hear. 2: Calls of individuals can be

distinguished, but there is some overlapping of the species' calls. 3: Full chorus for the species. Calls are constant, continuous, and overlapping.

	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog			1 (1emp)	AMERICA:					
Spotted Salamander	THE THE I	Π.				*** 1 1 1 1 1 1 1 1 1			
Blue-spotted Salamander							. %		
Spring Peeper								4	1
Chorus Frog									
Four-toed Salamander									
Eastern Newt						2 POX.			1 2 2
American Toad				-					at a superior
Gray Treefrog									
Mink Frog									
Green Frog			"	2.					
American Bullfrog			III (come)	5					
N. Leopard Frog						·			·
Pickerel Frog									
E. Red-backed Salamander									
Other (include reptiles):		-				-			

QA/QC:	(Data Manager
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	161	AMP	HIBIAN EGG SI	EARCH	HES				10 OF 2
Date: APR 29 12 A	BH ID: 101 UTMs: 684454	572192	% Observer(s)	RA	DOS. IT WE	T ·	Polarized	Sunglass	ses?:�/N
Temp: <u>V</u> Water T	'emp: <u>+3℃</u> Wind: <u>少</u> CC: <u>/10</u>	Prec	cip: Ø Last 2	24 hrs:	No RAIN BUZO	W FREEZE	ZNZ.		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Start Time: 7:10 Am.	_End Time: Total Time	Activel	v Searching: 40	MINIS	Water Clarity Notes	. \	W Clean		
			y bear ching.		water charity notes	»	1 OUT		
Tally counts for each life	stage. Where counts cannot be made us	e estima	tes: 0-10, 20-50, 50	0-100, 1	100-500, 500-1000. >	1000.			
distinguished, but there i	Call Index Value - 1: Individuals of the species' calls.	ecies ca 3. Full <i>c</i>	n be counted; there	e is sile: es Call	nce between the calls	you hea	r. 2: Calls of	individu	als can be
	Egg Mass	Total	Larvae	Total		Total	Adult	Total	Calling
	NSO-7 MB 34+ PROBABLY N			1	recumorph	Total	Adult	Total	Canning
Wood Frog	50	102							
Spotted Salamander	HH IH I	11			~				. 65 ₈
Spotted Salamander	Some Smaller macses ~ 50 caps.								
Blue-spotted Salamander		1.21.2							
Brue-spotted Salamander									
Spring Peeper									
Chorus Frog									
Four-toed Salamander									
Eastern Newt									
American Toad									
Gray Treefrog					30 (19) (19) (19) (19) (19) (19) (19) (19)				
Mink Frog					y				
Green Frog				1					
American Bullfrog					•				
N. Leopard Frog		-			-				
Pickerel Frog			/						
E. Red-backed Salamander							,,		
Other (include reptiles):							•		
		······································		•					

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Date AVL 29 12 ABH ID: 164 UTMs:	Observer(s):	Polarized Sunglasses? N
Temp: 14° Water Temp: 54° Wind: $\cancel{\bigcirc}$ CC: $\cancel{\bigcirc}$	Precip: D Last 24 hrs: No RAN	
Start Time: 6:40 PM End Time: 6:55 PM Total Time	Actively Searching: 15 Mins Water Clarity I	Notes: MOSTLY CLUBE, SOME
		20 1 00 L 1

	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog		1							
Spotted Salamander									
Blue-spotted Salamander			· · · · · · · · · · · · · · · · · · ·						
Spring Peeper									1
Chorus Frog									
Four-toed Salamander									
Eastern Newt									
American Toad			· · · · · · · · · · · · · · · · · · ·				J.		
Gray Treefrog									
Mink Frog	X A A SECTION AND A SECTION								- 1
Green Frog					· · · · · · · · · · · · · · · · · · ·				- e
American Bullfrog								1 22	
N. Leopard Frog								- m*	
Pickerel Frog									
E. Red-backed Salamander									
Other (include reptiles):		•	······································			1			

Date: Apr 24/12 ABH ID: ABH 202 UTMs: 668 4363 E 5231559 Observer(s): DCS	Polarized Sunglasses?(Y/N
Temp: -7°C Water Temp: 3°C Wind: O CC: 6/10125 Precip: None Last 24 hrs: None	-
Start Time: 7:45an End Time: 8:15am Total Time Actively Searching: 30 mms Water Clarity Notes: 6	lear, some thin ice.

Tally counts for each life stage. Where counts cannot be made use estimates: 0-10, 20-50, 50-100, 100-500, 500-1000, >1000.

For calling frogs use the Call Index Value - 1: Individuals of the species can be counted; there is silence between the calls you hear. 2: Calls of individuals can be distinguished but there is some overlapping of the species calls 2: Evil shows for the species Calls are constant.

	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog		e e							
Spotted Salamander	2-cloudy, nitron deep. Some two as obstited egyspearch and 2								
Blue-spotted Salamander									
Spring Peeper									
Chorus Frog									
Four-toed Salamander									
Eastern Newt							-		
American Toad									
Gray Treefrog				181				, i	
Mink Frog					·				1
Green Frog									
American Bullfrog			-						
N. Leopard Frog									1
Pickerel Frog									
E. Red-backed Salamander									
Other (include reptiles):									

AMPHIRIAN ECC SEADCHES

Date: All 2012 ABH ID: 48H 202 UTMs: 0684264 5231893 Observer(s): 05	Polarized Sunglasses? (Y)N
Temp: _ 6°C Water Temp: _ 5°C _ Wind: _ CC: _ O// O _ Precip: _ None _ Last 24 hrs: _ None	
Start Time: 6:45am End Time: 7:00am Total Time Actively Searching: 15 mins Water Clarity Notes:	Clear

Tally counts for each life stage. Where counts cannot be made use estimates: 0-10, 20-50, 50-100, 100-500, 500-1000, >1000.

For calling frogs use the Call Index Value - 1: Individuals of the species can be counted; there is silence between the calls you hear. 2: Calls of individuals can be distinguished, but there is some overlapping of the species' calls. 3: Full chorus for the species. Calls are constant, continuous, and overlapping

	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog									
Spotted Salamander	2 clusters, cloudy, each ~15cm depth. Same as 10'd Apr 28/12	2	0	0	O	0	0	0	8
Blue-spotted Salamander									
Spring Peeper									
Chorus Frog									
Four-toed Salamander									
Eastern Newt			+ i						
American Toad							· .		
Gray Treefrog									
Mink Frog									
Green Frog									
American Bullfrog									
N. Leopard Frog			1						
Pickerel Frog									
E. Red-backed Salamander									
Other (include reptiles):									

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ronowing.	http://flash.lakeheadu.ca/~shecnar/uploads/docs/LS	VES	Iorm eg	gs.pdf

QA/QC:	(Data Manager

Date: Apr 29/12 ABH ID: 18H212 UTMs: 0684573E Observer(s): OCS	Polarized Sunglasses?��/N
Temp: _3ºC Water Temp: /ºC Wind: _O CC: _o/lo Precip: None Last 24 hrs: N one	•
Start Time: 7:30 am End Time: 7:45 am Total Time Actively Searching: Sound Water Clarity Notes:	and some the in

Tally counts for each life stage. Where counts cannot be made use estimates: 0-10, 20-50, 50-100, 100-500, 500-1000, >1000.

For calling frogs use the Call Index Value - 1: Individuals of the species can be counted; there is silence between the calls you hear. 2: Calls of individuals can be

	some overlapping of the species' calls Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog									
Spotted Salamander			~ 1 .			-			
Blue-spotted Salamander						-			
Spring Peeper									
Chorus Frog									
Four-toed Salamander					A control of the cont				
Eastern Newt							· · · · · · · · · · · · · · · · · · ·		
American Toad			The first of the second se				**************************************		V
Gray Treefrog									
Mink Frog				•			· . · · ·		
Green Frog									
American Bullfrog									
N. Leopard Frog							-		
Pickerel Frog									
E. Red-backed Salamander									
Other (include reptiles):									

None observed.

Following: http://flash.lakeheadu.ca/~shecnar/uploads/docs/LS VES form eggs.pdf

QA/QC: (Data Manager)

Date: Apr 30/12 ABH ID: ABH 20 UTMs: 0684994 E 5232979 Observer(s): DCS	Polarized Sunglasses?:(Y)/N
Temp: 6°C Water Temp: 6°C Wind: Z CC: 10/10 ths Precip: Light wet Last 24 hrs: Nort	
Start Time: // / End Time: 12:15pm Total Time Actively Searching: 30 mins Water Clarity Notes:	Clear

Tally counts for each life stage. Where counts cannot be made use estimates: 0-10, 20-50, 50-100, 100-500, 500-1000, >1000.

IT

For calling frogs use the Call Index Value - 1: Individuals of the species can be counted; there is silence between the calls you hear. 2: Calls of individuals can be distinguished, but there is some overlapping of the species' calls, 3: Full charges for the species. Calls are constant, continuous, and overlapping

	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog	15 - in five pretaclusters, communally laid	15							
Spotted Salamander	63 - in five metaclusters, communally laid.	53						-	
Blue-spotted Salamander									. 3
Spring Peeper							1(not observed)	1	1
Chorus Frog		-	1				300,4 00,		
Four-toed Salamander									
Eastern Newt						·			1.
American Toad									
Gray Treefrog								-	
Mink Frog									
Green Frog									
American Bullfrog									
N. Leopard Frog									
Pickerel Frog						-			
E. Red-backed Salamander			•						
Other (include reptiles):			4						1,

16T

AMPHIBIAN EGG SEARCHES

Date: Apr 30/12 ABH ID: ABH207 UTMs: Observer(s): DCS	_ Polarized Sunglasses?:(Y)/N
Temp: 6°C Water Temp: 6°C Wind: 2 CC: 10/10 Precip: Nove Last 24 hrs: Nove	- · · · · · · · · · · · · · · · · · · ·
Start Time: 17:30pm End Time: 17:40pm Total Time Actively Searching: 10 mins Water Clarity Notes: (lea	27

Tally counts for each life stage. Where counts cannot be made use estimates: 0-10, 20-50, 50-100, 100-500, 500-1000, >1000.

For calling frogs use the Call Index Value - 1: Individuals of the species can be counted; there is silence between the calls you hear. 2: Calls of individuals can be distinguished but there is some overlapping of the species (calls as species Calls are species).

	some overlapping of the species' calls. Egg Mass	Total	Larvae	Total		Total	T	T	C 11:
	266 1/1033	Total	Laivae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog	- communally laid	7	Mari	ggastrian	and the second s	gagano.	alasterio.	perauce	Allerazor*
Spotted Salamander	7 (4 in cluster, I done	7	_	-	- · ·	_			Secon
Blue-spotted Salamander									
Spring Peeper			7	į.			i a		
Chorus Frog									
Four-toed Salamander									
Eastern Newt			Communication of the second of						
American Toad									
Gray Treefrog		-							
Mink Frog		·							
Green Frog									
American Bullfrog								1400	
N. Leopard Frog									-
Pickerel Frog									
E. Red-backed Salamander									
Other (include reptiles):							• .		

Very little open water. Clusters at S. end.

QA/QC: (Data Manager)

ABAT		Eco Cr	ADOTTE
AMP	HIBIAN	EGG 3E	ARCHES

Date: ABH ID: 104 UTMs: Observer(s): LF , WT	Polarized Sunglasses?
Temp: 6°C Water Temp: 3.8°C Wind: 6 CC: 19/10 Precip: 6 Last 24 hrs: No Report	•
Start Time: End Time: Total Time Actively Searching: Water Clarity Notes:	
	CONSEDIN OTHERS.

For calling frogs use the Call Index Value - 1: Individuals of the species can be counted; there is silence between the calls you hear. 2: Calls of individuals can be

	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog		1		2					
Spotted Salamander									
Blue-spotted Salamander						·	#14.4 -	1,84-	
Spring Peeper						· · · · · · · · · ·			
Chorus Frog					-				
Four-toed Salamander									
Eastern Newt									
American Toad									
Gray Treefrog									
Mink Frog									
Green Frog									
American Bullfrog									
N. Leopard Frog								-	
Pickerel Frog									×
E. Red-backed Salamander								··	
Other (include reptiles):			**************************************						

WTS8 x2 AMRO

POND NUT FROZEN THIS MORNING IST IN 4 Days.

Following: http://flash.lakeheadu.ca/~shecnar/uploads/docs/LS VES form eggs.pdf

QA/QC: (Data Manager)

AMPHIRIAN FCC SEADCHES

Date: APR 30 2 ABH ID: 213 UTMs: Observer(s): PFL YR1	_ Polarized Sunglasses?: Y(N
Temp: 7.7 Water Temp: 4.4° Wind: 0-1 CC: 10/10 Precip: Delast 24 hrs: No Paga P- Low 10-1	
Start Time: 11. 20 AM End Time: 11. 25 AM Total Time Actively Searching: 25 MINS Water Clarity Notes:	M CLAR-

Tally counts for each life stage. Where counts cannot be made use estimates: 0-10, 20-50, 50-100, 100-500, 500-1000, >1000.

For calling frogs use the Call Index Value - 1: Individuals of the species can be counted; there is silence between the calls you hear. 2: Calls of individuals can be

	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog								7	
Spotted Salamander		1							-
Blue-spotted Salamander						-			
Spring Peeper						•			
Chorus Frog									
Four-toed Salamander							8		
Eastern Newt									
American Toad									
Gray Treefrog									·
Mink Frog									
Green Frog		8.	•				,	1 4	
American Bullfrog									
N. Leopard Frog									
Pickerel Frog								,	1.
E. Red-backed Salamander									
Other (include reptiles):									N. STEEL STORT LOSS STORT STOR

HARD TO PHOTO EGG, MASS AR IT'S FAR I'M MIDDLE OF PAND.

Date: 1 MAY 12 A	BH ID: <u>203</u> UTMs: <u>684702</u> emp: <u>16°C</u> Wind: <u>S-1</u> CC: <u>O</u> End Time: <u>17³⁰</u> Total Tim	AMPH 52339	IBIAN EGG SI 7 Observer(s):_	EARCH YR	IES Lt	rspray	Polarized S	Sunglass	24 of 2 ses?(Y/N
Temp: 17°C Water T	emp: 16° C Wind: 5^{-1} CC: 0	Precir	e C Last 2	4 hrs:	-0				
Start Time: 1720	End Time: 17 ³⁶ Total Tim	e Actively	Searching: 10 M	nih.	Water Clarity Notes	s: <u>Cl</u> e	ar		
	stage. Where counts cannot be made (
For calling frogs use the C distinguished, but there is	all Index Value - 1: Individuals of the some overlapping of the species' call	species can	be counted; there	is siler	ice between the calls	you hear	r. 2: Calls of	individua	als can be
	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog									, ,
Spotted Salamander									
Blue-spotted Salamander									
Spring Peeper				-					
Chorus Frog									*
Four-toed Salamander				. ,<			±1		
Eastern Newt									
American Toad									
Gray Treefrog							*		
Mink Frog									
Green Frog									
American Bullfrog									
N. Leopard Frog							,		
Pickerel Frog									
E. Red-backed Salamander									
Other (include reptiles):									

AMPHIRIAN ECC SFARCHES

	161	The Hibrid Edd Statelles	
Date: May 1/12	ABH ID: <u>ABH206</u> UTMs	<u>0685126E </u>	Polarized Sunglasses?(Y)N
Temp: 21°C Wat	er Temp: <u>9º</u> C Wind: <u>1</u>	CC: 1/10 Precip: None Last 24 hrs: None	
Start Time: Clspm	End Time: 6:45pm	Total Time Actively Searching: Water Clarity Notes: _	Clear

Tally counts for each life stage. Where counts cannot be made use estimates: 0-10, 20-50, 50-100, 100-500, 500-1000, >1000.

For calling frogs use the Call Index Value - 1: Individuals of the species can be counted; there is silence between the calls you hear. 2: Calls of individuals can be distinguished but there is some everlapping of the species can be counted; there is silence between the calls you hear. 2: Calls of individuals can be

	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog	20 - Sadditional to first survey	20		À					
Spotted Salamander	53 - No additional occurrences	53		٠.					
Blue-spotted Salamander									
Spring Peeper				·			Many	Full chorus	Full
Chorus Frog					ţ.		11	l i	I
Four-toed Salamander									
Eastern Newt									
American Toad					· .	·			
Gray Treefrog							-		
Mink Frog									
Green Frog					* *				
American Bullfrog									
N. Leopard Frog				1					
Pickerel Frog									
E. Red-backed Salamander									
Other (include reptiles):			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \						

Wood

Date: My 187 12 ABH ID: 207 UTMs: Observer(s): Des Recommendation	Polarized Sunglasses?(Y)N
	YI-37 LDM
Start Time: 4:45 PM End Time: 4:55 PM Total Time Actively Searching: 10 MINS Water Clarity Notes:	Very CLEMP
Tally counts for each life stage. Where counts cannot be made use estimates: 0-10, 20-50, 50-100, 100-500, 500-1000, >1000.	

For calling frogs use the Call Index Value - 1: Individuals of the species can be counted; there is silence between the calls you hear. 2: Calls of individuals can be distinguished, but there is some overlapping of the species' calls. 3: Full chorus for the species. Calls are constant, continuous, and overlapping.

	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog								*	1
Spotted Salamander									
Blue-spotted Salamander									
Spring Peeper									1
Chorus Frog					And the second s				A
Four-toed Salamander				2					
Eastern Newt									
American Toad									
Gray Treefrog					i de la companya de l		i e je to s		
Mink Frog				*					
Green Frog									427
American Bullfrog					and the state of t		and the state of	su	
N. Leopard Frog									
Pickerel Frog		*		. 3 %					
E. Red-backed Salamander		*		-					
Other (include reptiles):									

ADURS OF WHILMOUN SPP. SUZN. VBSA WISR.

Following: http://flash.lakeheadu.ca/~shecnar/uploads/docs/LS VES form eggs.pdf

OA/OC: (Data Manage				
	QA/QC:	C:		(Data Manager

AMPHIBIAN EGG SEARCHES

Date: May 2/12 ABH ID: ABH 20 7 UTMs: 668 5 792 5275KN Observer(s): DCS	Polarized Sunglasses?/Ŷ)N
Temp: 12° C Water Temp: 11° Wind: O CC: 10/10 Precip: None Last 24 hrs: Last 24 hrs:	
Start Time: End Time: Coops Total Time Actively Searching: Water Clarity Notes: _	Clear

Tally counts for each life stage. Where counts cannot be made use estimates: 0-10, 20-50, 50-100, 100-500, 500-1000, >1000.

For calling frogs use the Call Index Value - 1: Individuals of the species can be counted; there is silence between the calls you hear. 2: Calls of individuals can be

distinguished, but there is some overlapping of the species' calls. 3: Full chorus for the species. Calls are constant, continuous, and overlapping.

	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog	1 - some as prov. Identified	1							
Spotted Salamander	111 - 1	4							
Blue-spotted Salamander						•			
Spring Peeper								-	
Chorus Frog						1.			
Four-toed Salamander									
Eastern Newt							£ .		-
American Toad									
Gray Treefrog		1							
Mink Frog				112				÷	
Green Frog									
American Bullfrog							~ ·	:	
N. Leopard Frog			· ·						
Pickerel Frog									
E. Red-backed Salamander				. \	363 H. G.				
Other (include reptiles):							Unknown	1 ,	

(jumped into

Following: http://flash.lakeheadu.ca/~shecnar/uploads/docs/LS_VES_form_eggs.pdf

QA/QC: (Data Manager)

165

AMPHIRIAN EGG SEARCHES

- That indian Edu SEARCHES	
Date: May 2/12 ABH ID: 164206 UTMs: 0684824 5 5133205N Observer(s): DCS 127	Polarized Sunglasses?:�/N
Temp: 12'C Water Temp: (10C Wind: 1 CC: 10/10 Precip: None Last 24 hrs: Pain in morning	,
Start Time: 6:15pm End Time: 6:45pm Total Time Actively Searching: 30 minutes Water Clarity Notes:	Clear

Tally counts for each life stage. Where counts cannot be made use estimates: 0-10, 20-50, 50-100, 100-500, 500-1000, >1000.

For calling frogs use the Call Index Value - 1: Individuals of the species can be counted; there is silence between the calls you hear. 2: Calls of individuals can be distinguished, but there is some overlapping of the species' calls. 3: Full charus for the species. Calls are constant, continuous, and overlapping.

	Egg Mass	Total	Larvae	Total	Metamorph	Total	Adult	Total	Calling
Wood Frog	# # ##	15			•				
Spotted Salamander	## ## ## ## ## ### ###	77							
Blue-spotted Salamander					y 1				
Spring Peeper					· · · · · · · · · · · · · · · · · · ·		AHATT	NOU	10
horus Frog							V -		
our-toed Salamander		e se							
Eastern Newt									
american Toad									
Fray Treefrog									
Mink Frog									
Green Frog									
American Bullfrog									
l. Leopard Frog									
ickerel Frog									
E. Red-backed Galamander		e e e e e e e e e e e e e e e e e e e							
Other (include reptiles):									

Appendix F-3

Bat Maternity Roosting Areas

Investiga	tors 0	C RF1			Wo	odland ID				Data/Time	M. 1 21/10	4
	iois o	.) ' 6-			WO					Date/Time_	10101Ch SI/ 12	- Apr > //
Temp	NA	Cloud	NA	Wind	NA	Precip	NA	Precip in last 24 hrs	NA			-

CANDIDATE BAT MATERNITY ROOSTING AREAS

Plo	Easting	Northing	Snag/tree	Tree	DBH	Height	Height of	# of	Size of	State	Peeling bark?	# of
#	ICT		#	Species	(cm)	(m)	cavity (m)	Cavities	hole(s)	of decay	(lots/little/none)	Photos
)	0684314	5232269	None identified	N/A	NIA	NA	NA	NIA	NA	NA	NA	N/A
2	0884989	523/552		ACESACC	43	15	NA	MA	N/A	Dra d	Medium	Z
1	••	- 11	2	BETALLE	45	(snapped)	4	1	3 cm diam.	Dead	Lots.	1
3	0.684974	5231862	None identified.	NA	NIA	NIA	NIA	·N/A	NA	N/A	NA	NIA
4	0685551	5231794	None	NA	NA "	NA	NA	NA	NA	NA	NA	NA
5	0682608	5132347	and the same of th	BEALE	80 .	25	O, 10 Denck base	2	large crocks when Lian	Dead	redium	Z
5	0685608	5232347	Z	BETALLE	25	20	NA	~ A	NA	Alive, bealthy	Lots	, 1
6	0685480	5233501	None i dentified	NA	NA	NA	NA	NA.	AN	NA	MA	NA
7	0685420	5233964		SETA LLE	60	22	NA	- NA	NA	Alive, healthy	Lots	2
8	0681328	5252995	1	Unsure	40	15	8-12	6	woodpeder holes, ~ Sim OBH	decated,	medium	Z
9	0685492	5232251	MIA	NA	NA	NA	AM	NA	NA	NA	NA.	2/4
10	. 00 82228	5232795	NA	NA	NA	NA	WA	· NA	NA	NA	NA.	N/A
11	0685456	5233108		Act Spec	94.	10	5	2	NISem	DEAD	Lots.	
- 11	0685456	5233108	2.	BETALLE	63	15	MENUM	E BOI CONDALL SEE ONKNOWN.	Mr	MOSTLY. DENO ILIVE BROW	CH. LOTS	
12	0685438	5233856	1	ACESACC	43	10	5-7 M	4	110-20 diamojer	~	Some	2



Investigators OC RFL Woodland ID NA
Temp 7'' Cloud 10/10 Wind 1 Precip Nove

Date/Time Apr 2/12

	Temp 7°C Cloud 16/16 Wind Precip Nowe				me.	Precip in last 24 hrs None							
	Plot #	Easting	Northing	Snag/tree #	Tree Species	DBH (cm)	Height (m)	Height of cavity (m)	# of Cavities	Size of hole(s)	State of decay	Peeling bark? (lots/little/none)	# of Photos
MR205	13	0 68 4899	5234213	1.2	BETALLE	57	20	8-12	2,	large crocks in main from K	heartwood rotted, but live	wedium	2
BM 1206	14	0684787	5132729		BETALLE	55	20	12	la, (vacled trans open at to	width of thee	large split, but live	lots	Z
Smelo6	15	0682153	5232317		Bernie	63	15	10-14	2	N/dcm	MOSILY	Little	Z
DWETOF	16.	0684636	5232811	1	ACESACC	83.	15	10-14	15	some woodper carlities heartre	ar Mustly at alload	Little	3.
763	17	0684412	5235072	Ø	NA	NA	NA	NA	NA	NA	NA	NA	N/A.
Dun108	18	0624429	5233049	1 2 2	BETALLE	73	15	Mounn	POSSIBLY	menand.	DEAD	· LUTS	2
188	19	0685140	5232265	Ø	NIA	NA	NA	NA	NA	A.		N	N/4
BN \$207	20	०६८५५५०	5233685		BETALE	30	20	NA	~A	NA	Alive, peeling book	Medium	2
MR708	21	0684169	5233391		ACESACC	35	20	15	Z	nivem diametr (both)	alve, Poor nealth	1,7+le	
6Me209	22	0684998	5 2333 22		ACESACC	45	12	7,10,12		Bottom 3 : 15cm×5cm Rest: 10cm × 10cm	Doad, Crackel	little	2
M18210	23	0 686269	5234805		Orknow	65	18	NA	~A	NA	Dood	Extensive	3
3MR	24	0683376	5234310	ł	ACESACC	63	13	13	1	~20 cm	DoxD.	Lette)
									9 / Carlot				
				*									
-	*								v				





CANDIDATE BAT MATERNITY ROOSTING AREAS

Investigator: Joel Jameson

Plot #	Easting Zone 16T	Northing	Snag/ tree #	Tree Species	DBH (cm)	Heig ht (m)	Height of cavity (m)	# of Cavities	Size of hole(s) (cm)	State of decay	Peeling bark? (lots/little/non e)	# of Phot os	Flagg ed?	Quality + comments
вмк104	685456	5233108	1	ACESACC	94	10	5	2	~15 cm DIAMETER	DEAD	LOTS	1	?	SUITABLE, IT WILL DO, ONLY ASSESSED PHOTO
вмк105	685458	5233856	1	ACESACC	43	10	5-7	4	~10-20 DIAMETER	DEAD	SOME	2	Y	SUITABLE (QUITE POSSIBLE), ONLY ASSESSED PHOTO
вмк108	684429	5233049	1	BETALLE	73	15	UNKNOWN	POSSIBLE	UNKNOWN	DEAD	LOTS	2	Y	SUITABLE (WILL DO), ONLY ASSESSED PHOTO
вмк201	685608	5232347	1	BETALLE	80	25	CRACK FROM 0-10	2	LARGE CRACKS ~10CM DIAMETER	DEAD	MEDIUM	2	Y	
BMR206	684787	5232729	1	BETALLE	55	20	12	1 CRACKED TRUNCK OPEN AT TOP	WIDTH OF TREE	LARGE SPLIT BUT ALIVE	LOTS	2	Y	SUITABLE (WILL DO), ONLY ASSESS PHOTO
вмк208	684169	5233391	1	ACESACC	35	20	15	2	~10 DIAMETER (BOTH)	ALIVE, POOR HEALTH	LITTLE	1	Y	SUITABLE, ONLY ASSESSED PHOTO
вмк209	684998	5233322	1	ACESACC	45	12	7, 10, 12	9	BOTTOM 3 = 15x15, REST=10x10	DEAD CRACKED	LITTLE	2	Y	SUITABLE, DON'T SEE MUCH IN PHOTO BUT WILL ACCEPT AS MEETS CRITERIA FROM DESCRIPTION, ONLY ASSESSED PHOTO
вмк210	686289	5234802	1	UNKNOWN	65	18	NA	NA	NA	DEAD	EXTENSIVE	3	Y	SUITABLE, NOT SURE IF TOO DECAYED, ONLY ASSESSED PHOTO
вмк601	684903	5234201	1	UNKNOWN	UNKN OWN	UNK NOW N	UNKNOWN	1 GOOD CRACK – FACES GROUND, GOOD EMERGENCE SPACE	UNKNOWN	UNKNOW N	UNKNOWN	12	Y	OTHER LARGE CRACKS, TOO BIG, TOO EXPOSED, LAST PHOTO IS A VIEW TO THE SOUTH FROM THE TREE'S LOCATION
вмк602	684610.60	5233746.02	1	UNKNOWN	UNKN OWN	UNK NOW N	UNKNOWN	1 GOOD ONE, NO CRACKS	UNKNOWN	UNKNOW N	NONE	3	Y	
вмк603	684627.10	5233642.53	1	BETALLE	~50	UNK NOW N	NA	NA	NA	UNKNOW N	ALL, ALOT	4	Y	



mvestig	gator. Joer Ja	incom				110	ect. bow Lak	C I Huse I I	VIII 1, DI		,	Juivey	1 01100	. 23 April – 3 May, 201
Plot #	Easting Zone 16T	Northing	Snag/ tree #	Tree Species	DBH (cm)	Heig ht (m)	Height of cavity (m)	# of Cavities	Size of hole(s) (cm)	State of decay	Peeling bark? (lots/little/non e)	# of Phot os	Flagg ed?	Quality + comments
вмк604	684439.69	5233677.72	1	UNKNOWN	40	UNK NOW N	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOW N	SOME	4	Y	A GOOD ONE
вмк605	684790.82	5233681.47	1	BETALLE	UNKN OWN	UNK NOW N	UNKNOWN	>5 WOODPECKE R HOLES	UNKNOWN	UNKNOW N	NONE	4	Y	OK LAST PHOTO IS VIEW TO SOUTH FROM TREE
вмк606	684713.27	5234658.55	1	UNKNOWN	35	UNK NOW N	UNKNOWN	1 LARGE CAVITY/CHA MBER AT TOP	UNKNOWN	DEAD, TOP BROKEN OFF	2-3 POTENTIAL BAT ROOSTS	NA	Y	PLENTY OF SUN EXPOSURE
вмк607	686123.52	5234911.08	1	UNKNOWN	81	VERY TALL	UNKNOWN	1 LARGE CRACK ALONG SIDE THAT FEEDS INTO LARGE CAVITY	UNKNOWN	UNKNOW N	SUITABLE PEELING BARK ALL ALONG TRUNK	NA	Y	DIFFICULT TO ASSESS CANOPY WHEN NO LEAVES PRESENT BUT SEEMS LIKE WILL BE NEAR 100% CANOPY IN IMMEDIATE VICINITY OF TREE
вмк608	684960.80	5231821.99	1	UNKNOWN	58	~16 -20	NA	NA	NA	ALIVE	A LOT, 15-20 POTENTIAL ROOSTS	4	N	SUITABLE, BEST I COULD DO, PHOTOS INCLUDE 1 PHOTO OF CANOPY, ~50% CANOPY
вмк609	685494.87	5232054.85	1	UNKNOWN	60-70 (NOT MEASU RED)	~16 -20	14 (SPLIT IN BARK), 12 (UNDERSIDE OF BRANCH), 13 (END OF BROKEN BRANCH)	≥3	WIDTH = 30cm, 10cm, 20cm, all ARE LONG AND NARROW	ALIVE	NO POTENTIAL ROOSTS	4	N	SUITABLE (PROBABLY HIGHLY SUITABLE)
вмк610	685315.41	5232233.20	1	UNKNOWN	36	~14	9, 9.5, 10, 11, 12, ALL WOODPECKER HOLES	≥5	ROUND AND ALL ~5CM DIAMETER	PARTLY ALIVE	NONE	2	Y	SUITABLE (QUITE POSSIBLE)
вмк611	683264.76	5234325.31	1	UNKNOWN	62	~13 -15	1, 2, 3, 7, 9.5, 8, + ≥3 WOODPECKER HOLES AT TOP	~10	RANGE 2- 20CM DIAMETER	DEAD	A LOT, ≥6 POTENTIAL ROOSTS	6	Y	HIGHLY SUTABLE, A LOT OF SUN EXPOSURE, GOOD TAKE- OFF ROOM FOR BATS, GOOD TREES AROUND THIS ONE, AT LEAST 3 IN VIEW.
вмк612	684078.00	5232094.00	1	BETALLE	60	~20	8, 17 (LARGE DEAD BRANCH)	2	1 OBVIOUS LARGE CAVITY, 2 OPENINGS (20- 30CMX5CM), OTHER IS IN IN BROKEN	2 LARGE LIVE BRANCHE S, 1 LARGE DEAD BRANCH	A LOT, ≥5 POTENTIAL ROOSTS	3	Y	HIGHLY SUITABLE



	ator. Joer Ja			1			Ect. Bow Lak							i. 23 April – 3 May, 201
Plot #	Easting Zone 16T	Northing	Snag/ tree #	Tree Species	DBH (cm)	Heig ht (m)	Height of cavity (m)	# of Cavities	Size of hole(s) (cm)	State of decay	Peeling bark? (lots/little/non e)	# of Phot os	Flagg ed?	Quality + comments
									BRANCJ					
вмк613	684139.75	5231097.92	1	UNKNOWN	78	~20	1, 4, 10, 10,	≥4	2x30-40cm NARROWN OPENING, 5x10cm SPACE UNDER KNOT, 30x2.5cm CRACK, UNDERSIDE OF DEAD BRANCH	ALIVE	~3 POTENTIAL ROOSTS	3	Y	HIGHLY SUITABLE, NOT MUCH CANOPY (50%)
вмк614	684101.73	5231084.61	1	UNKNOWN	51	~15	ONE AT 7-8	1	CRACK 30x2cm, PROBABLY HOLLOW INSIDE	DEAD	A LOT, ≥5 POTENTIAL ROOSTS, LIFTING THROUGHOUT TREE	4	Y	SUITABLE, SIDE OF HILL
BMR615	684165.92	5230953.69	1	BETALLE	79.7	~18	FOLLOWS LENGTH OF BASE OF TREE AND OVERLAID WITH BARK, ~10 LONG, OVERHAING BRANCH AT 13M THAT COULD GIVE SUITABLE SHELTER AT UNDERSIDE	≥1	NA	HALF ALIVE	NOWHERE REALLY EXCEPT AROUND THE CRACK	3	Y	SUITABLE (WILL DO), ONE OTHER GOOD TREE AT WEST OF THIS ONE WITH CRACK ALONG SIDE.
вмк616	682849.14	5233418.47	1	BETALLE	74.7	24	6, 7, 9, 10, 12, 10, 9 (under A BRANCH), ALL PRETTY SHALLOW	≥7	7x7cm, 5x5cm, 20x4cm crack, 10x5cm	ALIVE	NONE FOR ROOSTING	6	Y	SUITABLE, PRETTY GOOD. RELATIVELY DENSE CANOPY (80%)
BMR617	683362.60	5234275.52	1	UNKNOWN	62	19	4 AT 8-10M, 1 AT 15M	≥5	WOODPECKER HOLES ALL 5- 10CMX5- 10CM, HOLLOW AT BASE SO COULD BE HOLLOW ALL WAY THROUGH	DEAD	EXTENSIVE, ≥5 POTENTIAL ROOSTS	4	Y	

	,uto1. 5001 5u					- 3	ect. Bow Eur		, , , -					. 25 7 pm 5 way, 201
Plot #	Easting Zone 16T	Northing	Snag/ tree #	Tree Species	DBH (cm)	Heig ht (m)	Height of cavity (m)	# of Cavities	Size of hole(s) (cm)	State of decay	Peeling bark? (lots/little/non e)	# of Phot os	Flagg ed?	Quality + comments
вмк618	683765.62	5234351.12	1	Unknown	49.5	14- 15	≥8 WOODPECKER HOLES BETWEEN 10- 13M HIGH	≥8	A RANGE OF SIZES E.G. 2x2cm, 5x5cm, 30x5cm	2 LIVE BRANCHE S, REST SEEMS DEAD	NOT MUCH, 1 POTENTIAL ROOST SITE	3	Y	SUITABLE, IT WILL DO. WOOD SEEMS A LITTLE DAMP AT THE BASE
вмк619	686543.12	5234707.09	1	BETALLE	59.5	15	NA	NA	NA	TRUNK DEAD, 1 LIVE BRANCH	≥3 POTENTIAL ROOSTS	4	Y	SUITABLE, PRETTY GOOD, TOP OF TREE BROKEN OFF, WOOD AND BARK SPLITTING
вмк620	686507.31	5234663.24	1	BETALLE	79.3	17(R HIAN NON) , 22(ME)	9 (BRANCH BROKEN OFF SO BARE WOOD SPLIT WITH A LONG NARROW 1x30CM CRACK + SOME PEELING BARK	1	UNKNOWN	ALIVE	NONE	4	Y	NOT AS GREAT AS OTHERS BUT BEST I COULD DO.
вмк621	686296.00	5234618.00	1	BETALLE	90.2	16 (ME), 21 (RHI ANN ON)	8-10 (LONG CRACK 30X2- 3CM)	≥1	30х2-3см	2 LARGE DEAD BRANCHE S, REST ALIVE	EXTENSIVE AT TOP, ≥5 POTENTIAL ROOSTS	4	UNKN OWN	GOOD ONE
BMR622	686658.82	5234706.63	1	BETALLE	73.1	13(M3), 14(R HIAN NON)	3-10	3	100x2-3cm (LONG CRACK), 30x2-3 (LONG CRACK), 15x10cm (CRACK)	TOP OF TREE BROKEN OFF, 2 LIVE BRANCHE S + REST OF TREE DEAD REALLY	BARK IS GONE ON ONE SIDE ALONG THE LENGTH OF TREE SO POTENTIAL ROOSTS ON EITHER SIDE	4	Y	CANOPY=70%, ABOUT 10- 15M FROM A STREAM
вмк623	684989.04	5231552.02	1	UNKNOWN	46	15	5, 12, 12	3	20 (NARROW), 5 (ROUND), 5 (OVAL)	DEAD	A LOT, ~9 POTENTIAL ROOSTS	5	Y	SUITABLE
вмк624	686088.00	5235081.37	1	BETALLE	49	15	7, 8, 9, 9.5, 12	≥6	FIRST 5 ARE ~5CM DIAMETER (LIKELY WOODPECKER HOLES) > 2CM DEEP	DEAD	≥3 POTENTIAL ROOSTS	3	Y	SUITABLE



Appendix F-4

Features & Wildlife Habitat Daily Summaries

Date: Apr 1/12
Project Name: BLP1
Site Investigators: DCS RFL

Feature ID	Associated Features	Easting	Northing	# of Photos	Comments
ABH204	NA	Spot 8 9 0	5231412	4	depth aug ~30 cm. coniferas
ABH705	NA	0685531	5231903	2	Depth n socm, surrounded by conif. the cover.
ABH206	NA	0684635	5231721	3	Depth n30 cm. closed coropy decid-ois.
A6H102	NA	0684131	5231487	. 3	woodland vernal pool
RN201	NA	0 6 8 5 1 6 4	5231495	A STATE OF THE STA	see attacked 12M form
ABHZOH	NA	0685093	S231412	Ч	eptereral pool and flowing int. Stream
ABH205	NA	068 5531	5231903	2	vernal pool
SH202	BH F201 BH F202	0684449	5231450	3	with whom tall; fissures
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	M.K. INCE AND ASSOCIATES LTD.
(35)	Renewable Energy & Environmental Consulting

QA/QC:	•	Data Manage
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Date: Apr 2/12
Project Name: SLP1
Site Investigators: DC RFL

Feature ID	Associated Features	Easting IST	Northing	# of Photos	Comments
SH 703	NA	0685278	5233093	2	Large boulder ("Sont Sont Son Leight) Unique to onea. No snakes.
BH F203	NA	0 685453	5234110	3	Unique to over. No snakes. Brain's Holly Fern. 3 individuals. EOS later in season.
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(35)	Renewable Energy & Environmental Consulti	ng

QA/QC:	(Data	Manager
QA/QC.	(Data	Manager

Date: Apr 3/12
Project Name: BLP/
Site Investigators: DC5

RFL

Feature ID	Associated Features	Easting 16T	Northing	# of Photos	Comments
SHIOI.	NA	0685076	5232594	2	Sm Leyht. 20mx Sm, crucked rocks and crevices
v E201	ABHZOG, MBB201, WFNZO1	0685245	5233048	1	Ben Am Letland Den-Im dept
WEZEZ	ABH207, WEN202, MBB202, WEZ02	6685321	5232507	2	Ben Am hetland. Den-Imdept only rentral channel is mater. very little standing mater, mostly at centre.
ABH208	NA	0684691	5232415	4	vemal pools draining into
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HEALT ST. TANKS AND THE STREET					
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(35)	Renew	able Enc	ergy & .	Environmental	Consulting

QA/QC:	(Data Manager

NATURAL FEATURES AND WILDLIFE HABITAT TOTALS Date: Project Name: BLP! Site Investigators: PC PFL

Feature ID	Associated Features	Easting	Northing	# of Photos	Comments
SH102.	NA	0695143	5233445	5	ciff 5m tall x 2am wide
ABH209	NA	0684916	5234402	2	-no inflow or outflow
5HZ04	NA	0684605	5234021	2	Two large boolders (3mx1-x 3moleigh NO snotes. (1mx1mx1.5m)e
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	MK	INCE	4ND	ASSOCIATES LTD)
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(-(5)	Renew	able Enc	ergy & .	Environmental Consultin	28

QA/QC:	(Data Manager

Date: Ppr 5/12
Project Name: BLP1
Site Investigators: DCS QFL

Feature ID	Associated Features	Easting	Northing	# of Photos	Comments
ABH210	NA	6687651	5234924	8	most woods = shallow, braided, eptemenal pooling
ABHZII	NA	0685841	5231562	1	. 11
w E 203	MBB 203	0685616	52349-12	5	Marsh along hydro line nock fore asm, rubble,
51+103	NA	06831916	5234351	Ч	nick fore asm, rubble, very mossy.
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	Renew	able End	ergy & .	Environmentai	Consulting

A/QC:	(Data	Manager
	 (

NATURAL FEATURES AND WILDLIFE HABITAT TOTALS					
Date: Mar 30/12					
Project Name: BLP!					
Site Investigators: DCS RFL					

Feature ID	Associated Features	Easting 16T	Northing	# of Photos	Comments
WFS 201	WFNZOH	0683533	5233874	9 Photos GPSI 2 Photos GPS.A	7 surveys required
WFS10Z	WEZON WFN103 / TOWZON WAZUN/ ACHIOS	6684696	5233833	5 CPS 4	7 surveys required, Towers April
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QA/QC:	 (Data	Manager)

Date: Mar 31, 2012 Project Name: BLP1

Site Investigators: DCS RFL

Feature ID	Associated Features	Easting	Northing	# of Photos	Comments
ABH 201	WAZOI	0684248	5231555	2	connected ponds
A 6H202	WA202	0684277	5231859	2	Assoc. wintermittent stram
ABH 203	WA203	0684178	5232323	Ч	Associ intermittent
ABHIOI	WEIOI MBBIOI, WAIOZ, TOWOI	0684480	5231975	5	asha vetland. late April
SP 101	WAIOI	6684414	5232013	G	spring, flowing intermittent
50201	WAZO4	0684432	5237013	2	seep in spring flowing from it.
SH 20 1	BHF201	0.684343	5232359	2	DDS in late April, Cliffe. Very snowy near cliffs,
	-				
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A/QC:		(Data Manager)

Also see woodland Habitat Assessment form worz, 78, 77 - Apr 1/12

NATURAL FEATURES AND WILDLIFE HABITAT TOTALS

Date: Apr 1/12

Project Name: BLP/

Site Investigators: DCS RFL

Feature ID	Associated Features	Easting 161	Northing	# of Photos	Comments
104204	W1207	068 5093	5231412	4	Depth org ~30 cm, conif. treed, no breeding sign
A64705	WA210	0685531	5231903	2	Depth n 50 cm, surrounded by conif. trees
AB11206	WA212	0684635	5231721	3	Depth ~30cm, closed Conopy decid.
ABHIOZ	WAIOT	0684531	5231487	3	WOODUMD VERNA POUL
PN201	NA	6685164	5231495	1	see attacked PLN form
WAVZOI	NA	0684449	523 1450	7	E/W portions screenzed by cliffs a low hight
WA206	~ \(\lambda \)	0684807	5231375)	Spring, visible for mom, disappears of the fermines
WAZOŦ	A\$H 704	0685093	5231412	4	expineral pool and flowing intermittent stream.
WA208	~A	0685091	5631849	3	stream
WA209	NA	0685201	5 231999	3	intermittent streum, crosses to access road
VA210	ARHZO5	0685531	5231903	2	vernal pool
WAZII	\$1202	0684789	5232132	2	seep to nestword Flowing spring
WAZIZ	NA	0184135	5231721	3	sectional broaded steams and pools, very distribed
WA 103	SP.102.	0694822	5231455	3	SPRING FLOWS UNST.
WAIOH	NIA	0685205	5231986	6	STREM. WTERMITTUM.
WAIOS	SP103	0684868	5231772	3.	SPRING.
J01AW	N/A.	0684840	5 231588	43.	INTERMITION STEEM
WA 167	AbHOZ.	0684531	5231487.	3.	MSO ABH. WOODLAND
W1205	NA	0684732	5231367	2	spring running S. Disoppeous after zoon.
5H202	cliffs near wave	0 0681449	523/450	3	niom fall, fissures
2					

, E	M.K.	INCE	AND	ASSO	CIAT	ES LTD.
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QA/QC:	 (Data	Manager

Companion to BLP1 Apr 2/12 woodland Habitat Assessment for - WOBS

NATURAL FEATURES AND WILDLIFE HABITAT TOTALS

Date: Apr 2/12

Project Name: BLP1

Site Investigators: DCS RFL

Feature ID	Associated Features	Easting 16T	Northing	# of Photos	Comments
51+203	NA	0685278	5233093	2	unique to area. No snakes observed.
WAIDQ	NA	0685518	5232481	6	Permanent stream - Aul assessment
WAZ13 (A+6)	NA	0685544	5233087	7	permanent stream
WAZI4 (A1B)C	· NA	0685407	5233069	10	Permanent stream Flowing from Bear Paw Wetland, WAZIH IS inflow
WA215	SP203	0685388	5233578	7	large seep draining into
WA216AB	SP204	0685521	5233746	3	Is red Leve, reappears NW TI)
WA217	59205	0683345	5233889	4	listed Texe, reappears NW TII large seep at S. and drains into int. stram
	1 . X . + 1/2 - X		(*) (*) (*) (*)		
BHFW3	NA	0685453	5234110	3	3 individuals, EOS to be completed later
. '*			\(\frac{1}{\sqrt{2}}\)		
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λ	<i>M.K.</i>	INCE	AND	<i>ASSOC</i>	IATES I	LTD.
(35)	Renew	able En	ergy & .	Environme	mtal Con	sulting

QA/QC:	(Data Manager

Date: App 3PD/12

Project Name: Bow Larr Prinse 1

Site Investigators: 2PL & DCS

Feature ID	Associated Features	Easting 16 T	Northing	# of Photos	Comments .
SH101	W/A.	0685076	5232594.	12.	JM Wt, 20M X3M chacked rows creves
SP104	WA108	0684628	5233048	12.	MULTIPLY STREETHS COMME
WA 1060	SPIOH	Cl	U.	11	INTURMITTUNT STREAM FROM ON SENT MI WATOR A. B. C. D. WATORTO
WA109	N/A	0684883	2232351	12	INT. O. M. TRANS STORM IT
WX110	NIV	0684904	5232237	1	Morwith Stram.
WA218	AB17206, MEBZOI, WFN201.WEZOI	0685245	52330418		Beor paw netland, som-
WAZ19.	AB1207, WFN202, NBB202, WEZOZ	0685321	5232507	7	very little standing water, at center, sometime to some the sound of t
WAZZO	59206	0615106	5232554	4	Spring atvent drains into WEOZ
WA221	NA	0685106	5232713	4	splits from yoman art stream it
WAZZZ	5007	0684805	5232831	6	intermittent stream drains from possible seep/possible basin
NAZZZ	50208	0684838	573 7968	5	Spring, flows Einto Bear Paw Letland (WEZOI)
WAZZH	50209	6684384	5233022	7+2(oshich	
WA225	NA	0684453	5232790	4	to form int, stream.
WA 276	ABH208	0684691	5232415	4	into int. sheom
WAZZZ	SP210	0684711	5232548	2	Seep. No visible antilow. Groundwater source confirms
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(35)	Renew	able En	ergy &	Environ	mental Ci	msulting

A/QC:	(Data Manager
LIQU.	 (Data Manago

Date: APR 4/12

Project Name: Box LAKE PHASE !
Site Investigators: LPL & DCS

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Feature ID	Associated Features	Easting	Northing	# of Photos	Comments
WAIII	N/A	0684325	2533240	5	Spence ICE DATE CON ARRA TO STEPRAM FROMS TO WAS 102
PITAL	SPIO9	0694525	(73353)	2	CONNECTS TO LIMIT SLOW
WANZ	SP105	0684012	5233658	2.	STREAM FIRES N TOWES
ElinW	59106	0694002	5233389	4	SKEP FLOWS TO STEAM. FLOWS N U/M THON DO
WANH	NA	0684050	5233358	4	LOW CEDAL ARTA LEADS TO STREAM FLUID N
WANS	NIA	0684067	5233335	6	CONFER LOW ARY FROM
WALL	59107	0684831	5233280	4.	SIEUR TO STREAM. LIAM PROJECT FLOWS N. 4KM
CLIOI	SH 102	06 95143	5233445	5	CLIFF 5 m tall by 20m wing POTINTAL SNAWEY HI BERNACUM NO HOWITAT FO
WAII7	50108	0695033	5233491	5	N ON OF PROPER
WATI 8	NIA	0684397	5233454	2	Minumatur STROM. 701NS WALL - FROMS N.
WA128	A6H209	0684916	52344 02	2	-no inflow or outflow, standing wester
WA229	58211	0684233	5233633	Ч	spring, collecting in conification, goundwater confirmed, forsed
WALSO	58212	0683987	5233297	LI	seep w mouse scat and grand water, int. sheam at w
WA23/	58242	6 684174	5233285	7	drainage area to int. Sheam Plans into scepti grandua
WA232	NA	0685043	5233175	4	drainage basin flows W in Stream, terminates Ber
w A233	59213	0684828	523378	2	spring and collection bosin, limited flow
WA234	50214	6684452	5233310	5	spring flowing of to wFS102.
5H204	NA	0684605	5234021	2	no snakes observed (Imxl
WA 119	SP109	0684175	5233531	2	slow intermittent spring.

	M.K.	INCE	AND	ASSO	CIATES	LTD.
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QA/QC:		(Data Manager

Date: Apr 5/12

Project Name: BLP1

Site Investigators: DCS PFL

Feature ID	Associated Features	Easting	Northing	# of Photos	Comments
ABH210	~A	0682221 E	5234924N	8	moist woods with Shallow eptemeral pooling
ABH211	NA	0685841	5231562	and the same of th	tt v v
WAOI B	SP215	0685195	\$234477	4	permanent stream orig. From numerous springs, vary steep
wt235	SP216	6686215	5234759	4	intermittent Stream, N-flowing
w A 236	SP217	0686147	5234732	4	intermittent sheam N- flowing, disappears underground
W1237	SP218	0685985	523467-9	5	intermittent steam from unterous springs, N-flowing, disappears
WA 238	SP2 19	0685802	5234639	2	small spring running Einto underground int. Stream
w#239	SP220	0685848	5234854	4	seep a-twoold from N-Facing hillside as int. steam
W A 240	NA	0685638	5234969	3	disappeared steams, drains into hydro corridor.
WA243	WERS OF	06 85616	5239142	5	along hydro live, marsh
SH103	NA	0683196.	5234351	Ψ.	SHOPE POR FACE NS M. WASH AMEUNAS. WOOD STEWN LOW HOUSE STEWN. SH.
WA120.	8P110	0685256	5234528.	3.	SPRING TO INTERMITTUM STREAM BUDS IN POUL SY RUMO, FROMS!
WA121	88111	0695206	5234465	2	JOINE WAOLB FLEND
WK122	SP112	0685241	5234498	1	SPRING TO SEREM. JOHNS.
WAILS	SP113.	0696178	5234826	2.	Spender Way Swine May BE Sack From Thems N For Fow M. May BE Sack From Zon.
WA124	SP114.	0686158	5234806	8.	and of Spring
WARLS	SPILS	0685980	5234768	5	Spenish only Giors A Fraw M.
W4126	NIA.	0685931	5234503	4.	INTERMITTENT STRAM NO ENIONE ORIGINATING CONFESS OF SEPT.
-	<u>†</u>			7	
		,	4		<u> </u>

L	M.K.	INCE	AND	ASSO	CIAT	ES L	TD.
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NOTE TO READER:

For greater clarity, the consultant's note on the following page indicates that the field data collected in April 2012 for the water assessment is to be made public only after it has undergone standard quality assurance and quality control reviews and been properly analyzed and integrated into the project design. The referenced data has been made public along with the results of all environment field studies undertaken in relation to this project (See entirety of Appendices E and F of this Natural Heritage Assessment, as well as Appendices B, C, and D of the Water Body and Water Assessment Report) for review and comment.

In addition, the water assessment field work referenced in the note was subsequently re-done by Stantec and made public in the Draft Water Body and Water Assessment Report (Stantec 2012). All such data and results have been submitted to and reviewed by the relevant government agencies.

These files include water body reconnaissance work that was completed at Bow Lake Phase 1 during late March/early
April 2012. Due to the sensitivity of this information (i.e. that the public does not become aware that surveys took
place at this early point in the season due to timing of public meeting/report submissions), handlers of this data should
not allow this information become open to the public at any time.

DCS

Date: Mar 30 / 12

Project Name: BLP!
Site Investigators: DCS RFL

Feature ID	Associated Features	Easting	Northing	# of Photos	Comments
WFS 101	WFN204	0683533	5233874	<i>i</i> 11 · · · ·	7 EDS visits required.
w \$5102	WEZON, WENDER, TOWZON, MERZON, TOWZON, ABH203	0684696	5233833	5	7 EDS visits required. 7 EDS visits required.
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<u> </u>	M.K. INCE AND ASSOCIATES LTD.
(35)	Renewable Energy & Environmental Consulting

QA/QC:	(Data	Manager)

Date: Mar 31/12
Project Name: BLP1
Site Investigators: DCS RFL

Feature ID	Associated Features	Easting	Northing	# of Photos	Comments
ABH201	NA	6684248	623,555	2	connected pools
ABH202	~ A	0684277	5231859	2	Assoc. I intermittent stream
ABHZ03	NA	0684178	5232323	4	1.
AGHIOI	WEIOI, MB 8101. TOW 101	0684480	5231975	5	n5 ha retland. Tow EOS rate April
SH201	cliffs (210m)	0684303	5232359	2	The Letland. TOW EOS Lute April EOS in late April very snowy year cliffs.
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(35)	Renewable Energy & Environmental	Consulting

QA/QC:	(Data	Manaaaa
JA/QC.	(Data	Manager

Stantec

BOW LAKE WIND FARM

M.K. Ince & Associates Field Notes

Appendix F-5

Raptor Nests

Ontario Raptor Nest Form - BLP) - EN20 \ 523 149 5A	
Ontario Raptor Nest Form	
Date* Apr 1 / 2012 Your Name Dan Shart (DCS) District Algoria Township sm. 15 ky / Peever General Location Probable Hawk Species	
Active? O Yes O No & Unsure - No raplars observed	
Evidence of Activity (please check off all that apply) adult(s) in nest adults nearby adults calling chicks seen or heard in the nest chicks seen or heard nearby whitewash on nest or tree or ground fresh green decoration on nest fresh sticks on nest (see white ends if fresh) down feathers on the nest egg shells nearby other Nest Features (these help to identify hawk species) location in the tree and height thills de decides woods, yellow birch with (e.g., lowest main fork, upper fork in the canopy, upper side branch)	W
outside diameter of nest (cm) ~60.0 cm outside depth of nest (cm) ~30 cm thickness of sticks in the nest (straw [fine], pencil [medium], thumb or larger [large])	
nest materials STOKS - No evidence of greenery nest condition numerous larges juffing from rest four ondition	
Nest Tree (you may add details later after fledging) species of nest tree パール	

Habitat Features

d FRI stand codes (age, height, stocking, species composition)

fellow Birch / Sign Maple Decid. 85 29. 1

d general habitat type distance to nearest water and type in from Hruf shaim ~ 20 m write out months

Please Attach a Map

Active-> adult observed sitting in rest- Logan orlarm calls. Flew from rest and remained in area (vantage point a loom N of vest).

Please Attach a Map

BOW LAKE WIND FARM

M.K. Ince & Associates Field Notes

Appendix F-6

Salamander Trap Surveys

Aquatic Funnel Trap Survey Form

Observer Name: Remark L. Dw. S. Jos. J., Rob T.

Start Time: 7:00 AM Air T: 1°C. Water T: 5°C Wind: De Sky Code: 19/10 Last Rain Days Ago End Time: 7:15 AM. Remin De Sky Code: 19/10 Last Rain Days Ago End Time: 7:15 AM. Remin De Sky Code: 19/10 Last Rain Days Ago End Time: 7:15 AM. Remin De Sky Code: 19/10 Last Rain Days Ago End Time: 7:15 AM. Remin De Sky Code: 19/10 Last Rain Days Ago End Time: 7:15 AM. Remin De Sky Code: 19/10 Last Rain Days Ago End Time: 7:15 AM. Remin De Sky Code: 19/10 Last Rain Days Ago End Time: 7:15 AM. Remin De Sky Code: 19/10 Last Rain Days Ago End Time: 7:15 AM. Remin De Sky Code: 19/10 Last Rain Days Ago End Time: 7:15 AM. Remin De Sky Code: 19/10 Last Rain Days Ago End Time: 7:15 AM. Remin De Sky Code: 19/10 Last Rain Days Ago End Time: 7:15 AM. Remin De Sky Code: 19/10 Last Rain Days Ago End Time: 7:15 AM. Remin De Sky Code: 19/10 Last Rain Days Ago End Time: 7:15 AM. Remin De Sky Code: 19/10 Last Rain Days Ago End Time: 7:15 AM. Remin Days Ago En

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
N/A.	Ø	a.e.	Ø	Ø	Ø		2			
BLUE SOTTISHIM	CAN.									
34			e e							_
žs.										× .
			-				*	<i>A</i>		
*										
4.4										

Visual observations:

Calling frogs:

Aquatic Funnel Trap Survey Form

Observer Name: Revision, Dav. Jan. Robert.

Start Time: 7 Man. Air T: 18 Water T: 85°C Wind: B Sky Code: 10/10 Last Rain Wind: Days Ago End Time: 7.40 mm. Rain Site Name and location (give coordinates): ABH 101

list species below	Trap 1	Trap 2	Trap 3	Trap 4	つろ Trap 5	Trap 6	Trap 7	7]. Trap 8	Trap 9	Trap 10
NOTHING										
INSECTS				3 WATER SHUTLES SHE PHONES	***	All and the second second	& WKECT	Le ech see photo	NO PHOTO.	BREITE BOLL
										n ii saata ta ka
							•			
							•			

Visual observations:

AT LUAST 50 WOOD FLOG EGGS INPL & 25 WOOD PROYEGGS

CHUNG OF RUBEX LIKEY BREEDING & TURKITORIAL. OF WISP - CHLING.

P HOODED MERCHANSER (HOME) - FLY - OVER PRENTING WIN ADHO! AMRO - DISTANT GLUNG.

Calling frogs:

Aquatic Funnel Trap Survey Form Observer Name: RFL, DCS, J3 127 Date: ARL 26 1 2012 Start Time: 8 300 Air T: Water T: 50 Wind: 192 B Sky Code: 10/10 Last Rain Days Ago End Time: 8 4000 Site Name and location (give coordinates): ABAZOI - NEW ROND TO TOS list species Trap 1 Trap 2 Trap 3 Trap 4 Trap 5 Trap 6 Trap 7 Trap 8 Trap 9 Trap 10 below A MACULATUM A LATERALE Normals

Visual observations:

XZ WIWR of of whisp-chink

XI PORI OF PURI ONLINE

XZ YBSA DRUMAINU. 4 MASSES OF SPOTIO STUMMOND ECOLS ≥100 CTOS FERMASS. 2 MASSES MINM, ZCLEM

Calling frogs:

Aquatic Funnel Trap Survey Form

Observer Name: Rec. Des, J, YRE Date: MR 1 26 12012

Start Time: 7 50 Air T: 1°C Water T: 81°C Wind: D B Sky Code: 10/10 Last Rain Days Ago End Time: 7 55 MM.

Site Name and location (give coordinates): ABH 202

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
Normala							ggggggganesia kapina di GETA di Printini Ministra di Santa Printini GETA di Antonio di Santa Printini GETA di Santa Printini			
INSECTS.					NZ PARASTIC D. BOLL VANIOS					
		e c								CHARIN
	. j. 5							•		
			_							
and Make						•				
								.		
eng e										

Visual observations:

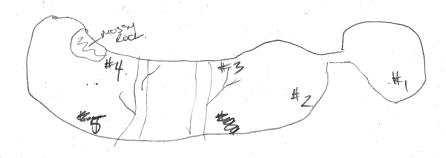
STAMPO -11

or ack "

Calling frogs:

PREPIL 1 CHUNKS

orruge - Deminion YBSA - Deminion



Aquatic Funnel Trap Survey Form

Observer Name: Respect Start Time: 8.10 M. Air T: 12. Water T: 5.20 Wind: B Sky Code: 10/10 Last Rain Days Ago End Time: 8.15 mi Respect Site Name and location (give coordinates): ABA 202. - News Long to Met Towns

Site Name and location (give coordinates): ABA 202. - News Long to Met Towns

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
NUMBA						Annual Commence of the Commenc				
			· · · · · · · · · · · · · · · · · · ·					•••		
. A.						•				
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ting a										
	X					Section 1				
***							- •			
			•							

Visual observations:

or while charles ?

Calling frogs:

GRASSES TO THE TOTAL TOTAL STATE OF THE STAT

Aquatic Funnel Trap Survey Form

Observer Name: DCS JJ

Start Time: 7.00 or Air T: -40 Water T: 5.3° Wind: DB Sky Code: 0/10 Last Rain Days Ago End Time: 7.10 or Site Name and location (give coordinates): ABH 202

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
water beefle				1						,
Norman		/							•	
										•
								-		
										e e e e e e e e e e e e e e e e e e e
									-	
					•					. 4

Visual observations:

some ice on the pond - cold morning. No signs of amphibian activity.

Calling frogs:

	Aquatic Funnel Trap Survey Form	Observer Name:	TL 9 9 3 3	Date: <u>April 251 2012</u>
	Start Time: 9:49 Air T: 2.1°C	70	n ci a Makalli in:	Days Ago End Time: 10:55
	Start Time: 1:41 Air 1: 6.10	Water 1: / Wind: _ V	B Sky Code: Last Rain	YESTERN WOLD
S	Site Name and location (give coordinate	s): ABH 103		

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
	26 minuous (took chotes	(took photos)	400 k bustor of 1 80 think brotos	5 minums (trokphotos of1)	(took photo				or makes or your measurements and the control of th	
	of Minn as 33		I tadpole (pabably bull Engl)		2 Insect larvae					
			Itadpole (bittiggame as ab less defined)		1 water beetle					
			I water beetle							
							•			
			-	**		6				

THOPOURS HAVE SPOTS. 9 PHOTOS WERE TAKEN.

Aquatic Funnel Trap Survey Form	Observer Name: Rf., Lw.B		Date: 1 27 1 12		
Start Time: 4:15 Air T: -4°C Wate	er T: O4° Wind: B Sky Code: 9/10	Last Rain	_ Days Ago End Time: 7:20		
Site Name and location (give coordinates):	ABH 104				

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
GROTIET.	. 1					_				
Northba										
									.	
	-						-	· ., -		
			•							
· .										
										v

AMILO CHUNG.

MOLINITY OF BLUE SPOTTED SALMANDER. LAST NIGHT TEMPERATURES DROPPED & KENAL POOL FROZE WATER WAS O'R @ TRAP CITICK. PERHAPS HE FROZE? NO EVIDENCE OF WOUNDS OR INJURY.

Aquatic Funnel Trap Survey Form Observer Name: Ft, Des 71, KMB 127. Date: All 124 1 2017 Start Time: 7.20 Air T: 4°C Water T: 57°C Wind: B Sky Code: 10 Last Rain Days Ago End Time: 7:55°C Site Name and location (give coordinates): MSH 101. Trap 2 11 Trap 4 009 list species Trap 🖔 Trap 1 Trap 3 Trap 8 Trap 9 Trap 6 Trap 7 Trap 10 below MANGERLE WALL BYENLE INSECTS. THORON E NOTHNU SPRING BUDIN.

Visual observations:

SANOHILL (RAM:

2x CANADA CROSSE

WINDLAZ

Calling frogs:

SPOTED SAMMONED - 10 ELL MASSES.

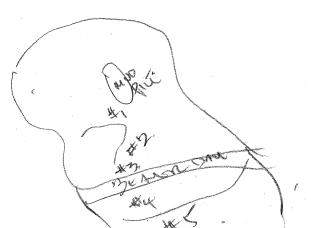
2003 7745-# 6 003 44 Brun Sam # 2. # 3/

Aquatic Funnel Trap Survey Form	Observer Name:	Khiannon	Leshyk	Date	Date: 27/04/2016		
Start Time: 8.15 Air T: -3	Water T: 2.9 Wind: _	B Sky Code: _	O/10 Last Rain		End Time: 8:00		
Site Name and location (give coordinate	es): ABHUZ.						

list species below	Trap 1	Trap 2	Trap 3	JTrap 4 1 beetle	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
North Na:	Adozen Waterbeetles	waterbeetles	I water beetle	1 beetle	Mater SeeHe	and the state of t				
,										
			y n							

Aquatic Funnel Trap Survey Form	Observer Name:	Rhiannon L	eshyh	Date: 27 04 1 20		
Start Time: <u>8-25</u> Air T: <u>-3</u>	Water T: NE Wind:	_B Sky Code:	Last Rain	_Days Ago	End Time: \(\sqrt{\chi}_{\chi} \)	35
Site Name and location (give coordinat	es): ABH 201					<u> </u>

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
₩.		Nothing	Notono	Minny	I water beetle		and the second of the second o			· ·
BUNGOTEN		J								
	•									
	**************************************						;			



Aquatic Funnel Trap Survey Form	Observer Name: DC	5, KM, 127	Da	ite: 28/18/2/2012
Start Time: 945 Air T: 5°C	Water T: 6°C Wind: B	Sky Code: //o Las	st Rain <u>Z</u> Days Ag	o End Time: 10
Site Name and location (give coordinat	es): ABH 103	5		

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
CHOMIN	8.		2.		15					
LADONICS	Bufacu PHOTOS		4 BULLFROM PHOTOS	7			₩,			7
とろまとろ										
								1.0 P. 201.		
										.
	•			-					-	

PARROLE LIVERY BULFROG - PHOTOS (~ Gam LONG - Very LARGE) SHOWING LIME DEMORNING HINDLEGS
ALL MINNOWS THE SAME - PHOTOS

Rus SQUERUS.

WISR WINE.

Observer Name: LFL, NRT, 33 Date: 1 28 12012 **Aquatic Funnel Trap Survey Form** Start Time: 7 60 Air T: 62 Water T: 62 Wind: 5 B Sky Code: 6/10 Last Rain 2 Days Ago End Time: 8 40 Site Name and location (give coordinates): ABH 101.

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
Namon	1					2 margar et			,	
INSUNS	1 14xxx	3 which		• • • • • • • • • • • • • • • • • • •		3 BEELS	2 Brefles 1 LmWA			- -
				WARRA				*		
CASTUM										
	e e e e e e e e e e e e e e e e e e e									
										· · · · · · · · · · · · · · · · · · ·

Visual observations:

EURU XZ: ROW. XZ

BEDAS - WING HAVE

JRWA +MYWA) + 3. 2 NEWES! HOW EXCORD

PINO X 2.

BOH

HETH

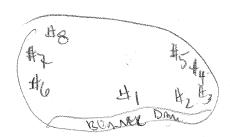
AMRO

SANDALL CROW LONGED IN HORTERA BREA, NOTIONS?

SWSP CACKI XD Calling frogs:

THIS IS SECOND PIME.

YPR (GIBF) DELINIATED. - NEWD TO



Observer Name: Print 10 Date: 28 / APR / 2012 **Aquatic Funnel Trap Survey Form** Start Time: 7.15 AM Air T: -2°C Water T: 1.1°C Wind: B Sky Code: 10 Last Rain 2 Days Ago End Time: 7.25 AM Site Name and location (give coordinates): ABH 104.

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
Nombra		$\int_{-\infty}^{\infty}$								Annual Philippe Control of the Contr
		-		v .		* .				
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· · · · · · · · · · · · · · · · · · ·		.						*		
				÷ 1	•					
3			3		- -			<u>.</u>		
						4				
						*.				

Visual observations:

VERNE POOR FROLEN ANT DO ECCE MASS SURREHES THIS WORM. Will- Guing X3.

SAND HILL CRANE - OKCUMB IN DISPACE YBSA - DRIMING XZ.

AMRO - CTUNDO.

WTSP - QUEING XZ.

BLPI **Aquatic Funnel Trap Survey Form** Observer Name: DCS

Date: 2012 / 04 / 28

Site Name and location (give coordinates): ABH212 16T 06845T3 E 523161 9 P

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
beefle			_)					`	
NorthNi						delikarikan gerinan dan dan dan dan dan dan dan dan dan	and and the state of the state			
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								,		
					<u>.</u>				<i>1</i>	
								-	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

Start Time: 7th Air T: -3°C Water T: 1°C Wind: O B Sky Code: O/10 Last Rain 2 Days Ago End Time: 8:00 am

Visual observations:

None

Calling frogs:

Nove

	Aquatic Funnel Trap Survey Form	Observer N	Name: DCS	e transfer i kan		Date	: 2012 / 04	128
	Start Time: 8'00 am Air T: 100	Water T:V	Wind:OB	Sky Code: <u>6/10</u>	Last Rain 2	_ Days Ago	End Time:	8:30am
S	ite Name and location (give coordinat	BLP1 es): <u>ABH201,</u>	16T 06f436	3E 5231559 N		A		

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
Leech)						
Northnu						-				
										, *
						1				
		*					<i>e</i>			-
						:				

None

Calling frogs:

	Aquatic Funnel Trap Survey Form	Observer Name:	Des			Date: 212 / 04 / 28
	Start Time: 7:000 Air T: -30C	Water T:5°C Wind:6	<u>0</u> В	Sky Code: 0/10 Last	Rain <u>2</u> Day	/s Ago End Time: 7:20am
S	ite Name and location (give coordinate	es): BLP1, ABH202	16 T	0684258 5231904	λ	

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
water beetle)		4			1.		
Naman						-				
									·	
		-								
		-								

Mone

Calling frogs:

Aquatic Funnel Trap Survey Form	Observer Name:	DCS 1	<u> Sawa Baran Barang</u> an Baran J	Date: 2012 / 04 / 29
Start Time: 7:30 am Air T: -3°C	Water T: 1°C Wind:	O B Sky Code: 0/10	Last Rain 3 Days A	Ago End Time: 7:45am
Site Name and location (give coordinate	es): ABH212, 6T 0684553	E 5231629 N		

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
water brette -			1		No.	1944. 1				
Johnson			en e							
					¥					
										•
					~					
							-			

None

Calling frogs:

Aquatic Funnel Trap Survey Form	Observer Name: D	<u>CS</u>	D	Date: 202 /04 /29
Start Time: 7.459m Air T: -2°C	Water T: 3° (Wind: 0	B Sky Code: 0/10	_ Last Rain <u>3</u> Days A	go End Time: 8:15a.m.
	BLPI			•
Site Name and location (give coordinate	es): ABH201, 16T 0684363E	5231559 N		

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
Blue Spotted Salamonder										
NOTHING										
30								,		
		-								
			e e							
						entre en	-			
			· · · · · · · · · · · · · · · · · · ·							

None (Que spotted salamander in trap)

Calling frogs:

Aquatic Funnel Trap Survey Form	Observer Name: 1)()		Date: 2012 / 04 / 29
Start Time: 6:45am Air T: -6°6	Water T:ڰ L _ Wind: _O	B Sky Code:0/10 Last Rain _	3 Days Ago End Time: 7 '00 a in
Site Name and location (give coordinat	es): ABH202, 16T 06842	(4 528 1 893	

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
Water Beetle										
HURNN										
· · · · · · · · · · · · · · · · · · ·										
								No.		
		: :								
						- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1				
			. 1.							
			•							

Nore

Calling frogs:

Aquatic Funnel Trap Survey Form

Observer Name: RFL, DCS, 30, VRT.

Start Time: 7004M Air T: -60 Water T: 060 Wind: B Sky Code: 10 Last Rain 3 Days Ago End Time: 710 MM.

Site Name and location (give coordinates): ABH 104.

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
North NG.						de stransverske de state de skriver de skriv	mentana salah di angga pambalik kecama ka salah ka			
			•	.						

	lie.									
4										

Visual observations:

BYRWA (MYWA).

JAWISP XZ.

METH

DONO OR HAND (Demm. 26)

Calling frogs:

POND FROM AGAIN ONR NIGHT. - CAN'T DO EGG MASS SURREHUS WILL DO THIS EVENING

Date: 1801 29 1 2012 Observer Name: REL JS DUS, VRT. **Aquatic Funnel Trap Survey Form** Start Time: 7:10 M Air T: Water T: 7 Wind: B Sky Code: 10 Last Rain 3 Days Ago End Time: 2:15 M Site Name and location (give coordinates): _ AGH 101

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
News								proper propers)		
Masamin				2 WATEL	1 WATER					
	Streda.	3 BOOTLOS	1 Usela	4	4				3 herry	LARVA
			A Control of the Cont							
			1 × 1 · · ·							

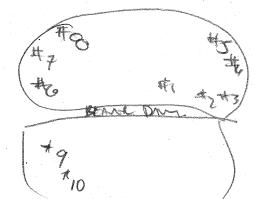
Visual observations:

GUNI INTSPX2 PINO. SX WIMA HUTH. RUBL.

ROND AND OR DOND (DRUMMING)

SWSPXZ RUGR (DROMMING.

5x (AUYM) AND



Aquatic Funnel Trap Survey Form

Observer Name: PFL, DCS, YET, JJ.

Start Time: 9.00 MA Air T: 4°C Water T: 5°C Wind: 9 B Sky Code: 10 Last Rain 3 Days Ago End Time: 7.40 MM.

Site Name and location (give coordinates): ABH 103.

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
Topas	Glish me		GRUEN FRANT		(BHOLO).			general tradition in comments and the Comments of Comm		
MIMOUS	15.	7	20		1					
INSIETS	1510	1 STICK								
								: :		
							en e			
					e e e e e e e e e e e e e e e e e e e					
								Ý .		
			,							
		•				:				8

Visual observations:

YEND RYD SOSIERN. FUBL. HETH WISP RENU -DCOGLS MESTING PAIR POTINIAL.

PAR OF COGL.

YBSA X3

Calling frogs:

1 Perper

Aquatic Funnel Trap Survey Form

Observer Name:

Observe

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
Monno	r.	26.	30		10.					enggggg Strigg (Ng Standard Professor Strandard Professor Are 1974)
TAPPLES	2 BLCO	Z Burgar (PHOTOS)	(PHOTOS)	1 WEADOWN		galantenen conservation and a second	Manganasian and a second and a	The continues of the co	Annial Street of Flower or Films Street Street And New Art & Street Annial Street Annia (Street Annia) (Street	 additional of the second delicities of the second delection of the second delicities of the second delicitie
News.		(PHONE)	a			ghildhease-warromanisasishi in 12-4-44-450	hancos esta en esta esta esta esta esta esta esta esta	Anther was a conference of the	get op sam flest het de fan de fa	
2										
· · · · · · · · · · · · · · · · · · · ·										
			-							

Visual observations:

MALE COCAL.

UNKNOWN TAPPOLE FROM TEAPOH4 - SMALLER THAN OTHERS WE HAVE CAUGHT. (SCE PHOTOS).

EVES DORSAL, VENT, DEATERT.

PAIR OF ABDU (0° 19). POTENTIANLY NESTINES., ONE OF COGIL. YRWA, WINE, RIPI., PAWA (PAUM WORDSIGN)

Calling frogs:

IT'S ENOWING (SUST BARRILY)

Observer Name: REC YET Date: 184 30 / 2011 **Aquatic Funnel Trap Survey Form** Start Time: 7:35 AM Air T: 6°C. Water T: 7°C. Wind: 1-2 B Sky Code: 10 10 Last Rain 4 Days Ago End Time: 8:30 AM. Site Name and location (give coordinates): _______ _______\.

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
TADPAIS.	1 BULLED					ICHERA FROM	2 BULLFROM.	PROU		
ENSCIEN NEWT.						V .				
1420612.	2 LARMA	1 beach	1 BUETLE	1 PARASTIC DIVING BOOK 2 SWALL GASTLE		8 WATER	1 Ser 1 LE		SZOW LANA	6. Megres
Norma										
,		*								
							* .			
			*							
					\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \					

RUBL.

Visual observations:

PANR (PCOR) COGL.

NOWA - 12 NORTHAL WATERTHANK & HOGILING ROGER.

MERLIN. HETHX2. Brond-WING HANK

RTHA

w, w.

Calling frags:

GUERN PROUS WALE SWELL THAN PULL PROUS) BYMAN BULFROUS NOCH LONG. - BLYCK SPOTS

W CHORD FROG CHINUT

x2 REO GOVIERNA

#16 #10.

Aquatic Funnel Trap Survey Form	Observer Name:	(C)	_ Date	: (PR.1 30 12012.
Start Time: 7 10 An Air T: 6°C	Water T: 32° Wind: 0 B Sky Co	ode: Last Rain L	Days Ago	End Time: 7 25mm
Site Name and location (give coordinat	es): ABH 104.			· · · · · · · · · · · · · · · · · · ·

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
MORNER		and the state of t	g fart to distribute the second	and the second	or the state of th	and the state of t	, may are written hand to be had been been proported to the second of th	yetta adazan xwezi, mengapungan Adazan ada apremiatan gipunan ayesi senambasa		Commission (Commission of Commission of Comm
						£				
The state of the s	And the second s									

	t. •							٠.		

MUSIX

MOD.

Aquatic F	unnel Trap S	Survey Form	Obs	erver Name <u>:</u>	DCS JJ			D	nte: 2012 / 04	/ 30
Start Time:	8:00am A	Air T: 6°C	_ Water T:	1°C Wind:	B Sky	Code: 9/10 ¹¹	Last Rain	Uays Ag	o End Time:	8:20am
Site Name a	nd location (g	give coordina	tes): BLPI,	16T 0684358	SE 523 56ZN	, ABH201			* * * * * * * * * * * * * * * * * * *	
list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
Spotted Schamenter	•				1					
Nymnh	/									
٠										
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	V									4
		4.								2 · · · · · · · · · · · · · · · · · · ·
				i -		1		1	4	1

None

Calling frogs:

Aquatic Funnel Trap Survey Form	Observer Name:	DCS JJ		Date: 2012 / 04 / 30	_
Start Time: 7:30am. Air T: 6°C	Water T: 6°C Wind: _	B Sky Code:9//0	Last Rain	_ Days Ago End Time: 7:50a.m.	_
Site Name and location (give coordinate	es): BLP1, AB4212, 16T	0684553E 5231629	N	<u> </u>	

										· · · · · · · · · · · · · · · · · · ·
list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
Beetle		2								
NUPLY CHERT	3).									
乙とまるい		**************************************								
			4							
				•						

None - Fing in trap (CIRERN).

Calling frogs:

Aquatic Funnel Trap Survey Form	Observer Name <u>:</u>	Drs 15	Date	2012 / 04 / 30
Start Time: 7.00 Air T: 6°C	Water T: _7°C Wind: _	B Sky Code:9//0	Last Rain 4 Days Ago	End Time: 7:15am
Site Name and location (give coordinate	es): BLP1, ABH 202 16	T 0684258E 5231901	1 N	

list species below	Trap 1	Trap 2	Trap 3	Trap 4	Trap 5	Trap 6	Trap 7	Trap 8	Trap 9	Trap 10
とってきりのる										
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				-						
						1 				
- A - Carrier Control of Control									: :	
		-	·							

None observed

Calling frogs:

Nous opzerneg

Project Title Report Title

The first round of salamander trapping occurred between April 26 and April 30 2012. Six areas were surveyed (ABH101, ABH103, ABH104, ABH 201, ABH202, ABH212). With the exception of ABH 103 all sites were surveyed for 5 nights while ABH 103 was only surveyed for four. The reason that ABH 103 was not surveyed for 5 nights is because on the first night (April 25th) we ran out of daylight when setting the traps for the first time and ABH 103 was in the northern part of the project and hard to get to. Therefore there is no form for April 26th for ABH103. Under the protocol (Casper and Hecnar 2011) it states that 4-5 trapping nights is sufficient.

Appendix F-7

Waterfowl Stopover & Staging

WATERFOWL STOPOVER AND STAGING OBSERVATION FORM									
Project Name: RLP	Site 1	nvestigators: XS RFL							
Weather Conditions									
Temperature: NA	Wind: ~A	Cloud Cov	er: NA						
Precipitation: NA	Precipitation (last 24 hor	irs): NA							

Date	Start Time	End Time	Feature ID	Point ID (if more than 1)	Aquatic/ Terrestrial	Species	Number of Individuals	Comments
Mar 30, 2012	6:15pm		WESTOZ		Aquatic	BUFF (24, 101)	3	Flying over water
Mar 31,2012	12:45pm	1:15pm	wFS102		Aquatic	BUFF (201 12)	3	on water in SW area of lake
Apr 1,2012	9:45 am	10:15am	WF9102		Agentic	BUFF (07)		Forgy and, visibility reduced
Apr 2,7012	10.00am	10:300m	w \$5.102		Aquatic	BUFF (29 181) COGO (187)	4	Thin layer of ice year shallow portion of large
Apr 3, 2012	10:00am	10:30 am	WFS 102		Aquatic	None	0	
Apr 4,2012	10:00av	10:20am	WESTOZ		Aquatic	BUFF (10) COGO (10)	2	
Apr 5,2012	10:30	10:50	WFS102		Aquatic	C060 (28)	2	
		Avenue e						

M.K.	INCE	AND	ASSOCI	ATES L	TD.
Renewo	able Ene	rgy & i	Environmen	ital Cons	ulting

QA/QC: Complete			(Data Manager)

	WATERFOWI	L STOPOVER A	ND STAGING O	BSERVATION FORM		
Project Name: BLP			Site Investigators:	DCS RFL		
Weather Conditions						
Temperature: NA		Wind: ~A		Cloud Cover:	MA	
Precipitation:		Precipitation (last	t 24 hours): ~A			

Date	Start Time	End Time	Feature ID	Point ID (if more than 1)	Aquatic/ Terrestrial	Species	Number of Individuals	Comments
Mar 30,7012	3:00	4:00	WFS 101		Aquatic	vone	0	
Mar 31, 7612	1:00	1:15	wrs tol		Aquatic	None	0	
Apr 1,2012	11:00	11:15	wF\$101		Aquatic	None	0	Faggy conditions, visibility poor
Apr 2,2012	10:45	11:00	wF\$101		Aquatic	None	0	
Apr 3,2012	10:45	11:00	WFS 101		Aquatic	No ne	0	
Apr 4.2012	9:45	10:00	WFS 101		Aquatic	None	0	
Apr 5, 2012	9:45	10:00	wFSI0)		Agratic	None	0	Sanch ill crane heard in distance, railing from Wesetion of cettand, outside of suitable stoppan
			*					

QA/QC: Complete		 (Dat	a Manager)

hobitat

Appendix F-8

Wetland Habitat Assessments

Site Investigators: RFL & DCS. Date: My 30/12 Time (S/End): 2:00Pm 7 45Pm Temp: 3°C Wind: 1 Cloud: 10/10+m Precip: Lnant Fund Precip in last 24 hrs: UNKNOWN
Temp: 3°C Wind: 1 Cloud: 10110th Precip: Lnant Fuend Precip in last 24 hrs: UNKNOWN
WETLAND HABITAT ASSESSMENT For Suny Thinks By Worland ID (indicate on man)
Project Name Bowlace Place 1 Form # (to be tallied at end of the day) 1 of 1 WFN & WFS
wetiand in (indicate on map)
Property Access?YN Type of Investigation (show on map) _ FullPartialNone - no access
ELC code (broad ecosite code if more than one ELC code): TBD
UTMs (where sheet was started): Track file name
Habitat boundaries delineated (within 120 m)?Yes ELC code (ecosite code if more than one ELC):
UTMs (where sheet was started):
Habitat delineated? Yes
Important wetland/aquatic food plants - eg Duckweed (i.e. waterfowl or marsh birds):AbundantPresentAbsentWANDEL WFN 204
Emergent vegetation for nesting marsh birds or waterfowl - eg. Cattail:Abundant _Present _Absent
Adjacent grassy shrubby fields with dense vegetation at least 50 cm tall or the presence of >60 cm dbh cavity trees near wetland areas (waterfowl nesting)PresentAbsentUnknown - no access
Vertical sandy banks (bank swallow)Present _/Absent
Shorelines, including beach areas, bars, and seasonally flooded shoreline, usually muddy and unvegetated (migrating shorebirds)PresentAbsent ONLY if within 5 km of a Great Lake
Presence of stick nests (herons/osprey)PresentAbsent
Standing water present at least part of the growing season, suitable for use by:
breeding amphibiansturtlesforaging waterfowl (stopover/nesting)fish
Depressions that may serve as vernal/autumnal pools: Present Absent Unknown - no access If yes, fill out below:
Table 1: Amphibian Breeding Habitat
ABH ID UTMs Depth of water Size of pond Presence of Veg Spps ID and Form (i.e. egg/larval)
Admen Whitehamen murama Milandiation ANA.

L	M.K. INCE AND ASSOCIATES LTD.	
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QA/QC:	(Data	Manager)

Permanent waterbodies with			ed by hibernati	ng turtles Present
Absent	d, sandy soil suitable for turn		ent Absent	
IF THERE ARE WATERBO				Carlos Salar
Species Observations – provide seen, track, other sign, carcass			ich they were id	entified (e.g. heard,
Table 2: Species observations		·		
Taxa (i.e. bird, mammal, he	rp etc.) Spec	eies		ervation Type
Bed	Russy BLACKBIE	20 (RUBL)	Prir SEEN	MIN MEIOL
				er er after og til 12 i d
	1,537			
				# 1
		Service Control of the Control of th		
**All identified/confirmed fea below to record photo file name			cumented with a	a photo. Use Table 3
Table 3: Photo file names		· · · · · · · · · · · · · · · · · · ·		ta in the state of
			V.	
<u> </u>				

Site Investigators: RFL 3 DCS. Date: MAR. 30/12 Time (S/End): 2009M 7-45 PM. Temp: 3 C Wind: 1 Cloud: 10/16 Precip: Light TrumPrecip in last 24 hrs: UNKNEWN.
Temp: 5 C wind: Cloud: Cloud: Freeip. Light Toursteelp in last 24 ins.
WETLAND HABITAT ASSESSMENT
Project Name Bow Love Panse 1. Form # (to be tallied at end of the day) 2 of 2
Wetland ID (indicate on map) WE 10 4
Property Access?YN Type of Investigation (show on map)FullPartialNone - no access
ELC code (broad ecosite code if more than one ELC code): TSO
UTMs (where sheet was started): Track file name <u>WF5102</u> .
Habitat boundaries delineated (within 120 m)?Yes ELC code (ecosite code if more than one ELC)
UTMs (where sheet was started): LID SOME - WITHIN PROJECT OTHER BURDING STRIP WILL BE DELINEATED USING STRIP
Habitat delineated? Yes
Important wetland/aquatic food plants – eg Duckweed (i.e. waterfowl or marsh birds):Abundant _PresentAbsent
Emergent vegetation for nesting marsh birds or waterfowl – eg. Cattail:Abundant _Present _Absent
Adjacent grassy shrubby fields with dense vegetation at least 50 cm tall or the presence of >60 cm dbh cavity trees near wetland areas (waterfowl nesting)PresentUnknown - no access
Vertical sandy banks (bank swallow)PresentAbsent
Shorelines, including beach areas, bars, and seasonally flooded shoreline, usually muddy and unvegetated (migrating shorebirds)PresentAbsent ONLY if within 5 km of a Great Lake
Presence of stick nests (herons/osprey)PresentAbsent
Standing water present at least part of the growing season, suitable for use by:
breeding amphibiansturtlesforaging waterfowl (stopover/nesting)fish
Depressions that may serve as vernal/autumnal pools: Present Absent Unknown - no access If yes, fill out below:
Table 1: Amphibian Breeding Habitat
ABH ID UTMs Depth of water Size of pond Presence of Veg Spps ID and Form (i.e. egg/larval)
ABH 211 UNKNOWN BUT MUNICLE YES GRASSIS I NA MATCHARS HARCHARS LEARNING WATER

QA/QC:

(Data Manager)

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xposed areas of well draine	ed, sandy soil	suitable for turt	le nestingPres	sent <u> </u>	osent
THERE ARE WATERBO	DDIES FILL	OUT A WATEI	RBODIES FORM	[! <u></u>	mpleted
pecies Observations – provi en, track, other sign, carcass				nich they we	ere identified (e.g. heard,
able 2: Species observations					
axa (i.e. bird, mammal, he	rp etc.)	Spec	ies		Observation Type
B18 D.	Bi	AFFLIFHEAD &	COMMON EYE	VISUMU	E OBSISEVATION
		- and the second se	A		
man Starten					
		FIELD P			
		date Wildlife Ha		ocumented v	with a photo. Use Table 3
elow to record photo file nam		date Wildlife Ha		ocumented v	with a photo. Use Table 3
low to record photo file nam		date Wildlife Ha		ocumented v	with a photo. Use Table 3
low to record photo file nam		date Wildlife Ha		ocumented v	with a photo. Use Table 3
low to record photo file nam		date Wildlife Ha		ocumented v	with a photo. Use Table 3
low to record photo file nam		date Wildlife Ha		ocumented v	with a photo. Use Table 3
low to record photo file nam		date Wildlife Ha		ocumented v	with a photo. Use Table 3
low to record photo file nam		date Wildlife Ha		ocumented v	with a photo. Use Table 3
All identified/confirmed fea elow to record photo file nam able 3: Photo file names		date Wildlife Ha		ocumented v	with a photo. Use Table 3

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11/OC.	(Data	Manager
QA/QC:	(Data	Manager)

Site Investi	gators:	00	RFL_			Dat	e: Mar 3	31/12	_ Time (S/End):_ tip in last 24 hrs:	12:30pm- 630pi
Temp: 5	*C_ V	Vind:	2	Cloud:	9/10 145	_ Precip	Notice	Prec	ip in last 24 hrs:	Light Snow
			•						•	
				WETLA	ND HABI	TAT AS	SESSM	ENT		
Project Nan	ne	BLPI		Form # (to be	e tallied at e	end of the	day)	_ of _ /		
Wetland II		•								
Property A	ccess?	YN	$\mathbf{T}_{\mathbf{y}}$	pe of Investi	gation (sho	w on map) Full	Partial	_None - no ac	cess
ELC code ((broad	ecosite co	de if m	ore than one	ELC code):	pendino)			
UTMs (who	ere she	et was sta	rted):	16T 068	1521F 52	31915 N	Track file	e name	WEIOI	
						a				C). no. 1:
							some on	e FRI	ore than one EL	C). penaina
Habitat del	lineate	d? <u> </u>	S							
Important _Absent		d/aquatio	e food p	olants – eg D	uckweed (i	.e. water	fowl or m	arsh bir	ds):Abunda	ntPresent
Emergent v	vegetat	ion for n	esting 1	narsh birds	or waterfo	wl – eg. (Cattail:	✓Abunda	ant Present	_Absent MBB
Adjacent g trees near v	rassy s wetland	hrubby f d areas (v	ields w vaterfo	ith dense veg wl nesting) _\	getation at 1 Present	least 50 c	e m tall or tUnkr	the pres	ence of >60 cm	dbh cavity
Vertical sa	ndy ba	nks (banl	swallo	ow)Presen	t <u>Absent</u>	•				
Shorelines, (migrating s	includ horebi	l ing beac l rds)Pro	h areas esent <u></u>	, bars, and s Absent <i>ONI</i>	easonally fl LY if within	looded sl 5 km of a	oreline, i Great La	usually n uke	nuddy and unve	getated
Presence of	stick	nests (her	ons/osp	orey)Prese	nt <u></u> Absen	t				
Standing w	ater pi	resent at	least pa	art of the gro	owing seaso	n, suitab	ole for use	e bv:		
	_			esforagii	C	,			h	
Depression out below:	s that i	may serv	e as vei	rnal/autumn	al pools: _	Presen	itAbs	entUni	known – no acce	ess If yes, fill
Table 1: Ar	nphibia	an Breedi	ng Hab	itat						
ABH ID	UTM	İs	Dept	h of water	Size of p	ond	Presence	of Veg	Spps ID and l	
ABHIOI	6684	521 E 715 N		rs ~1-2 m - deepest.	n. l. ha.		Marsh ve	9.	Note obsent	24
	- 6.49 /	(*		a regions						
		*				-		-	~	

QA/QC:

(Data Manager)

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Permanent waterbodies with pAbsent Towld!	presence of wetla	and vegetation	on that may	be used by hibe	ernating turtle	es Present
Exposed areas of well drained	, sandy soil suita	ble for turtl	e nesting	PresentA	bsent	
IF THERE ARE WATERBO	DIES FILL OUT	A WATER	BODIES FO	ORM!C	ompleted	
Species Observations – provid seen, track, other sign, carcass,	e details of identi eggs, larva etc.) –	fied species a - don't repeat	and the form in the the ABH date	in which they w	ere identified (e.g. heard,
Table 2: Species observations						•
Taxa (i.e. bird, mammal, her	p etc.)	Spec	ies		Observation	Туре
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		Company of the second s	's			
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		FIELD P	нотоѕ		• 1	
**All identified/confirmed feat below to record photo file name	ures or candidate es of features and	Wildlife Hal	oitat needs to	be documented	with a photo.	Use Table 3
Table 3: Photo file names				• .		
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Renewable Energy & Environmental Consulting	1

QA/QC:	(Data	Manager)

	Site Investigators: OC PFL Date: Apr 2/12 Time (S/End): 9:45-6:30pm Temp: 306-1006 Wind: 2 Cloud: 0/1045 Precip: None Precip in last 24 hrs: None
	WETLAND HABITAT ASSESSMENT - Bear Paw
	Project Name Form # (to be tallied at end of the day) of
	Wetland ID (indicate on map)
	Property Access? Y N Type of Investigation (show on map) Full Partial None – no access
	ELC code (broad ecosite code if more than one ELC code):ows_ Completed
/	UTMs (where sheet was started): 0685245E 5233048N Track file name pend 15
	Habitat boundaries delineated (within 120 m)?Yes ELC code (ecosite code if more than one ELC):
A	UTMs (where sheet was started):
	Habitat delineated? Yes expl, full delineation April May when wetland veg has grown
	Important wetland/aquatic food plants – eg Duckweed (i.e. waterfowl or marsh birds):AbundantPresent/Absent> to be revisited
	Emergent vegetation for nesting marsh birds or waterfowl – eg. Cattail:Abundant _Present _Absent M & B20
	Adjacent grassy shrubby fields with dense vegetation at least 50 cm tall or the presence of >60 cm dbh cavity trees near wetland areas (waterfowl nesting) Present Absent Unknown - no access Unknown - no access
	Vertical sandy banks (bank swallow)Present/Absent
	Shorelines, including beach areas, bars, and seasonally flooded shoreline, usually muddy and unvegetated (migrating shorebirds)Present _ Absent ONLY if within 5 km of a Great Lake
	Presence of stick nests (herons/osprey)PresentAbsent
	Standing water present at least part of the growing season, suitable for use by:
	breeding amphibians turtlesforaging waterfowl (stopover/nesting) fish
	Depressions that may serve as vernal/autumnal pools : Present Absent Unknown - no access If yes, fill out below:
	Table 1: Amphibian Breeding Habitat
	ABH ID UTMs Depth of water Size of pond Presence of Veg Spps ID and Form (i.e. egg/larval)
	ABH206 10+ 0683245E 50cm-100cm Medium, who has Marsh veg None seen.



01/00	(D)	N # .
QA/QC:	(1)ata	Manager)
4 4	_ (1,14114201)

Exposed areas of well drain	avbres har	oil suitable for tur	rtle nesting Dra	sent / Al	sent	
					oseni	•
IF THERE ARE WATERE	BODIES FII	LL OUT A WATE	ERBODIES FORM	1!Co	mpleted	
Species Observations – prov				hich they we	re identified	(e.g. hear
seen, track, other sign, carcas	ss, eggs, larv	a etc.) – don't repe	eat the ABH data			
Table 2: Species observation	าร				i i	5/40 × 4/5
Taxa (i.e. bird, mammal, h	orn ota)	Sno	ecies		Observation	n Tyne
	ier preic.)	Бре	ecies		Observatio	птурс
NA			· · ·			
A Carrier						
					· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
	es d'ésperation	Field l	Рнотоs			
**All identified/confirmed for below to record photo file na		ndidate Wildlife H		locumented v	vith a photo.	Use Tabl
		ndidate Wildlife H		locumented v	vith a photo.	Use Table
Table 3: Photo file names		ndidate Wildlife H		locumented v	vith a photo.	Use Table
below to record photo file na		ndidate Wildlife H		locumented v	vith a photo.	Use Table
Table 3: Photo file names	imes of featu	andidate Wildlife H ares and habitat	abitat needs to be o		vith a photo.	Use Table
below to record photo file na Table 3: Photo file names NA	imes of featu	andidate Wildlife H ares and habitat	abitat needs to be o	locumented v	vith a photo.	
Table 3: Photo file names	imes of featu	andidate Wildlife H ares and habitat	abitat needs to be o	•	vith a photo.	Use Table
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below to record photo file na Table 3: Photo file names NA	imes of featu	andidate Wildlife H ares and habitat	abitat needs to be o	•	vith a photo.	

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(5)	Renewable Energy & Environmental Consultin	g

QA/QC	(Data	Manager)
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Site Investigators: DCS RFL Date: Apr 3/12 Time (S/End): 10:00-6:45 pm Temp: 700 Wind: 1 Cloud: 10/10 Precip: Nove Precip in last 24 hrs: Nove
WETLAND HABITAT ASSESSMENT
Project Name BLP/ Form # (to be tallied at end of the day) of
Wetland ID (indicate on map) <u>WEZoZ</u>
Property Access?YN Type of Investigation (show on map)Y FullPartialNone - no access
ELC code (broad ecosite code if more than one ELC code): owes pending
UTMs (where sheet was started): 67 668532 E 5232507 Track file name Pendiro
Habitat boundaries delineated (within 120 m)?Yes ELC code (ecosite code if more than one ELC):
UTMs (where sheet was started):
Habitat delineated? Yes e Fiel, full delineation April / May when we fload veg has grown
Important wetland/aquatic food plants – eg Duckweed (i.e. waterfowl or marsh birds):AbundantPresentvAbsent
Emergent vegetation for nesting marsh birds or waterfowl – eg. Cattail:Abundant _Present _Absent MBBIOL
Adjacent grassy shrubby fields with dense vegetation at least 50 cm tall or the presence of >60 cm dbh cavity trees near wetland areas (waterfowl nesting) Present Absent Unknown - no access FN202_
Vertical sandy banks (bank swallow)PresentAbsent
Shorelines, including beach areas, bars, and seasonally flooded shoreline, usually muddy and unvegetated (migrating shorebirds)PresentAbsent ONLY if within 5 km of a Great Lake
Presence of stick nests (herons/osprey)Present Present Absent
Standing water present at least part of the growing season, suitable for use by:
breeding amphibians turtlesforaging waterfowl (stopover/nesting)fish
Depressions that may serve as vernal/autumnal pools : Present Absent Unknown – no access If yes, fill out below:
Table 1: Amphibian Breeding Habitat
ABH ID UTMs Depth of water Size of pond Presence of Veg Spps ID and Form (i.e. egg/larval)
ABHZO7 DEST321 E SOLM-100 CM Small Lettory Marsh veg. Nove seen

(Data Manager)

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Species Observations — provide details of identified species and the form in which they were identified seen, track, other sign, carcass, eggs, larva etc.) — don't repeat the ABH data Table 2: Species observations Taxa (i.e. bird, mammal, herp etc.) Species Observations FIELD PHOTOS **All identified/confirmed features or candidate Wildlife Habitat needs to be documented with a photobelow to record photo file names of features and habitat	
Species Observations – provide details of identified species and the form in which they were identified seen, track, other sign, carcass, eggs, larva etc.) – don't repeat the ABH data Table 2: Species observations Taxa (i.e. bird, mammal, herp etc.) Species Observations	urtlesPresent
Species Observations – provide details of identified species and the form in which they were identified seen, track, other sign, carcass, eggs, larva etc.) – don't repeat the ABH data Table 2: Species observations Taxa (i.e. bird, mammal, herp etc.) Species Observation FIELD PHOTOS **All identified/confirmed features or candidate Wildlife Habitat needs to be documented with a photobelow to record photo file names of features and habitat	
Species Observations – provide details of identified species and the form in which they were identified species, track, other sign, carcass, eggs, larva etc.) – don't repeat the ABH data Table 2: Species observations Taxa (i.e. bird, mammal, herp etc.) Species Observation FIELD PHOTOS **All identified/confirmed features or candidate Wildlife Habitat needs to be documented with a photobelow to record photo file names of features and habitat	* ,
FIELD PHOTOS **All identified/confirmed features or candidate Wildlife Habitat needs to be documented with a photobelow to record photo file names of features and habitat	ed (e.g. heard,
FIELD PHOTOS **All identified/confirmed features or candidate Wildlife Habitat needs to be documented with a photoelow to record photo file names of features and habitat	
FIELD PHOTOS **All identified/confirmed features or candidate Wildlife Habitat needs to be documented with a photoelow to record photo file names of features and habitat	tion Type
**All identified/confirmed features or candidate Wildlife Habitat needs to be documented with a photoelow to record photo file names of features and habitat	
**All identified/confirmed features or candidate Wildlife Habitat needs to be documented with a photoelow to record photo file names of features and habitat	Y
**All identified/confirmed features or candidate Wildlife Habitat needs to be documented with a photoelow to record photo file names of features and habitat	
**All identified/confirmed features or candidate Wildlife Habitat needs to be documented with a photoelow to record photo file names of features and habitat	4
**All identified/confirmed features or candidate Wildlife Habitat needs to be documented with a photoelow to record photo file names of features and habitat	
	o. Use Table 3



QA/QC:	(D)	1.6
JA/UC:	i i jata	Manager)
	(Duill	munuger j

Site Investig	ators: DCS RI	Cloud:	0/10 h Pred	Date: Apr 5/12	Precip in last 24 hrs: Nove
		WETLAN	D HABITAT	Assessmen	r
Project Nam	e <u>BLP1</u>	Form # (to be	tallied at end of	the day) of	1
Wetland ID	(indicate on maj	p)_w63			
Property A	ccess?YN	Type of Investiga	ation (show on r	nap)FullP	artialNone - no access
ELC code (broad ecosite cod	le if more than one E	LC code): _penc	ling	
UTMs (whe	re sheet was star	ted): 0 685664 E	5235075 N	_ Track file na	me_ <i>w_03</i>
Habitat bou	ındaries delinea	ted (within 120 m)?	Yes ELC c	ode (ecosite cod	e if more than one ELC): fending
UTMs (whe	re sheet was star	ted):		-	
Habitat del	ineated? <u></u> Yes				
Important v ✓Absent	wetland/aquatic	food plants – eg Du	ickweed (i.e. wa	terfowl or mars	h birds):AbundantPresent
Emergent v	egetation for ne	sting marsh birds o	r waterfowl – e	g. Cattail:A	bundant Present Absent MSB 20
		elds with dense vego vaterfowl nesting)			presence of >60 cm dbh cavity n – no access
Vertical san	ndy banks (bank	swallow)Present	Absent		
		areas, bars, and se sentAbsent ONL			ally muddy and unvegetated
Presence of	stick nests (hero	ons/osprey)Presen	t <u>Absent</u>		
Standing w	ater present at l	east part of the grov	wing season, sui	table for use by	• • • • • • • • • • • • • • • • • • •
breeding	amphibians	turtlesforaging	g waterfowl (sto	pover/nesting) _	fish
Depressions out below:	s that may serve	as vernal/autumna	l pools: Pre	sentAbsent _	Unknown – no access If yes, fill
Table 1: An	nphibian Breedin	g Habitat			
ABH ID	UTMs l ₆ ⊤	Depth of water	Size of pond	Presence of	Veg Spps ID and Form (i.e. egg/larval)
ABH210	0645864 E 5235075N	~30-50cm	low area T stinding water marshy	cat tails	nike observed
	* ****		, , , , , ,		



QA/QC:	•	(Data Manager)

Exposed areas of well dra	ined, sandy	soil suitable for tur	tle nestingPre	sentA	bsent	
IF THERE ARE WATER	RBODIES F	ILL OUT A WATE	RBODIES FORM	I!Co	mpleted	
Species Observations – proseen, track, other sign, card				hich they we	ere identifi	ed (e.g. hear
Table 2: Species observati	ons					
Taxa (i.e. bird, mammal	, herp etc.)	Spe	cies		Observat	ion Type
NA					V. A	
					, , , , , , , , , , , , , , , , , , ,	
						· · · · · · · · · · · · · · · · · · ·
		3				***************************************
		FIELD F	Р нотоs			
		candidate Wildlife Ha	PHOTOS abitat needs to be d	ocumented	with a pho	to. Use Tabl
**All identified/confirmed below to record photo file Table 3: Photo file names		candidate Wildlife Ha		ocumented	with a pho	to. Use Tabl
below to record photo file		candidate Wildlife Ha		ocumented	with a pho	to. Use Tabl
Table 3: Photo file names		candidate Wildlife Ha		ocumented	with a pho	to. Use Tabl
Table 3: Photo file names		candidate Wildlife Ha		ocumented	with a pho	to. Use Tabl
Table 3: Photo file names		candidate Wildlife Ha		ocumented	with a pho	to. Use Tabl
Table 3: Photo file names		candidate Wildlife Ha		ocumented	with a pho	to. Use Tabl
Table 3: Photo file names		candidate Wildlife Ha		ocumented	with a pho	to. Use Tabl
Table 3: Photo file names		candidate Wildlife Ha		ocumented	with a pho	to. Use Tabl

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Renewable Energy & Environmental Consulting

QA/QC:	(Data Manager)	

Appendix F-9

Woodland Habitat Assessments

		r		M	ar 31/12		
Site Investiga	tors: Thiam	m ? D	AN.	Date: 🔽	2:30	Time (S/End):_ ip in last 24 hrs:_	8:30 PM
Temp: S		Cloud	: 9/10m	Precip:	7 Prec	ip in last 24 hrs:	LIGHT SNOW.
				·			•
		Wooi	DLAND HAB	BITAT ASSE	SSMENT		
	Bankak F						
Project Name	DONAINE H	156 - Form # (to be falled at a	end of the day)	of	-) ~ 20. Legas	
Woodland II	O (indicate on m	1ap) [1001 -11	Age of	Stand (approx	timate in years) ~ 20. CREAL	
						GIGING WIN	
Property Acc	cess? _Y _N	Type of Inv	estigation (sho	w on map) <u>/</u>	FullPartial	None – no acce	ess
ELC code (b	road ecosite coo	le if more than	one ELC code):	W/A T	BD.		
U TMs (where	e sheet was star	ted):	,a0:				
) m)? <u>/</u> Yes		15 YES.		
				to the	dant Presen	tAbsentUnl	known – no
	ah atandina d-	ad tuana am ace	itu tuana (t	tial for ac-it	RESPER	roosting)Abu	, , , , , , , , , , , , , , , , , , ,
None	Unknown –no a	iccess	ity trees (poten	tial for cavity	nesting or bat	roosung)Abu	ndant Few
$10 \text{ snags } \leq 10$	0 ha, or 30 sna	gs ≤ 30 ha - co	nduct BMR can	didate study (1	BMR form) 🗸	_ completed -	STARTED
						known – no acces	
	ohibian Breedin		• • • • • • • • • • • • • • • • • • •				
-	UTMs	Depth of	Size of pon-	d Veg	Sni	os ID and Form	Photo #
		water	parties.		-	. egg/larval)	
18H201 "	6T 0684248 5231555	~50cm	ponds near c	1 1 1 1 1 1	~	or.	2
1BH202 1	6T 0684777 5731859	~50cm	Several connecte	N/A	. 🖊	ne	2
ABH 203	6T 0684178 5232323	~30cm	several connect	ed N/A	N.)nl	4
10-12-10A	7 0094490	NAKHONN POL	tc.) Yes (de	rum) some en	oldry D	ove.	5 shotes
Evidence of s	stick nests (rap	tors, herons, e >>	tc.) Yes (de	tails below)⊻	NoUnknov	vn – no access	
	·		·				
Seeps/springs	s Present	Absent If ye	es, fill out below	AND A WA	TER BODY A	ASSESSMENT f	or each
Гable 2: Seep	s and Springs						- 1946 -
Seep/Spring	ID UTMs	De	scription		w/in 30 m of	Tur or SubS?	# of Photos
						Printerenance on the account of the control of the	
-		5					
M.K	. INCE AND AS wable Energy & Env	SOCIATES LT	<u>D.</u>				
Company Rener	wable Energy & Env	ironmental Consult	ing	OA/OC:		C	Data Manager)

QA/QC: _____

A. F. Sugar		takes adjacent to agriculture (turk	ev wintering areas)	Present
XAbsent _Unki	nown – no access	er patches adjacent to agriculture (turk		· · · · · · · · · · · · · · · · · · ·
IF THERE ARE	WATERBODIES FI	ILL OUT A WATERBODIES FORM	Completed	
Cliffs (raptor nes	ts, roosting vultures, ta	lus slopes)PresentAbsentUnk	known – no access	· · · · · · · · · · · · · · · · · · ·
Presence of fissu	ired rock piles or rocl	k crevices (hibernating snakes) Presen	ntAbsentUnknow	vn – no access
Presence of kars	st topography or cave	s (hibernating bats) PresentAbso	entUnknown – no a	access
If evidence of hi	bernacula fill out table	below:		
Table 3: Bat or	Reptile Hibernacula			D
Feature ID	Feature Type	Description including Location and Species Use		Photo #
SHO	SWACE HIBER.	NO VOE: CLIFFS WIOM \$ 10.	T 066 4393 5232359	2
SILD	V	,		
Species Observ seen, track, othe	rations – provide detail er sign, carcass, eggs, la	s of identified species and the form in whi arva etc.) – don't repeat the ABH data	ch they were identified	l (e.g. heard,
Table 4: Specie	es Observations			en e
Taxa (i.e. bird	, mammal, herp etc.)	Species Ruck, Pitch Nat.	Observatio	on Type
Ham C	ARDS.	PUFI, Down, BBNN, BACE, MILELIN.	Chus : 0B	
Her	P	Garter Shake		
		I DI I CALLEDO PRIDER DE PERSONA MARCO	I control of the cont	

FIELD PHOTOS

**All identified/confirmed features or candidate Wildlife Habitat needs to be documented with a photo. Use Table 5 below to record photo file names of features and habitat. Make sure every photo name has a feature ID

Table 5: Photo file names

Mammal

	· · · · · · · · · · · · · · · · · · ·		
	ABHZON (2 photos)		
WFN101, MESICH			
BHF201 (3 photos)	ABHZOZ (4 photos)	A	
BHF20Z (3 Photos)			



Site Investigators: DCS RFL Date: Apr 1/12 Time (S/End): 9:45 m - 6:45 pm Temp: 2°C Wind: O Cloud: 9/10 ^{ths} 10/10 ^{ths} Precip: Light rain Precip in last 24 hrs: Light Show, light rain
WOODLAND HABITAT ASSESSMENT
Project Name Form # (to be tallied at end of the day) of
Woodland ID (indicate on map) Tubires 6+7 Age of Stand (approximate in years) ~20
Evidence of Human Disturbance (i.e. logging, trails, garbage) \checkmark Y N; Type Mojerry logged in lost 5-10 years
Property Access? Y_N Type of Investigation (show on map) Full Partial None – no access
ELC code (broad ecosite code if more than one ELC code): TED
UTMs (where sheet was started):
Habitat boundaries delineated (within 120 m)? Yes Transacts
Important upland plants (hard mast and fruit/berry producers)AbundantPresentAbsentUnknown - no access
Large >25 dbh standing dead trees or cavity trees (potential for cavity nesting or bat roosting)AbundantFewNoneUnknown -no access
10 snags ≤ 10 ha, or 30 snags ≤ 30 ha - conduct BMR candidate study (BMR form) completed - 5 to record
Depressions that may serve as vernal/autumnal pools: Present Absent Unknown - no access
Table 1: Amphibian Breeding Habitat
ABH ID UTMs Depth of Size of pond Veg Spps ID and Form (i.e. egg/larval) Photo #
See attacked summary steet For April 1/12
Evidence of stick nests (raptors, herons, etc.) Yes (details below) No Unknown – no access
RNDOI - SIN: PAPEUR MIST FORM.
Seeps/springs Present Absent If yes, fill out below AND A WATER BODY ASSESSMENT for each
Table 2: Seeps and Springs
Seep/Spring ID UTMs Description w/in 30 m of Tur or SubS? # of Photos
M.K. INCE AND ASSOCIATES LTD. Renewable Energy & Environmental Consulting ON IOC: (Data Managery)

QA/QC: _____(Data Manager)

Presence of seeps/springs within conit ★ AbsentUnknown - no access	fer patches adjacent to agricultur	e (turkey wintering areas)	Present
IF THERE ARE WATERBODIES F	ILL OUT A WATERBODIES FO	ORMCompleted	
Cliffs (raptor nests, roosting vultures, ta	alus slopes)PresentAbsent _	Unknown – no access	
Presence of fissured rock piles or rock	k crevices (hibernating snakes)	PresentAbsentUnkno	own – no access
Presence of karst topography or cave	s (hibernating bats) Present _	✓AbsentUnknown – no	o access
If evidence of hibernacula fill out table	below:		
Table 3: Bat or Reptile Hibernacula			
Feature ID Feature Type	Description including Location and Species Use	UTMs	Photo #
See attacked summary fo	sp.		
A Section 1			
Species Observations – provide details seen, track, other sign, carcass, eggs, land Table 4: Species Observations Taxa (i.e. bird, mammal, herp etc.)		ta .	
	FIELD PHOTOS		
**All identified/confirmed features or combelow to record photo file names of features of features 5: Photo file names			
SIDE SUMMARY SUT.			

	mp: <u>3°(-</u>	10PL Wi	nd:	C	loud:	0/10145	Prec	p: None	P	recip in last	24 hrs: _	Fair, son
				W	OODL	AND HA	BITAT	ASSESSI	MENT			
Dr	roject Nan	ne Ri	101			be tallied at						
											(0	
w	oodiand	(maio	cate on n	1ap) <u>(</u> (***)	Lay >	T9. Age of $\frac{7}{7}$, $\frac{7}{7}$, $\frac{7}{2}$, trails, gar		approxima	ne m ye	ars) <u>20 (</u>	<u> </u>	
						igation (sh			IPart	ialNone	- no acce	ess
						e ELC code						
U.	TMs (who	ere sheet	was star	ted): See	attack	ed maps						
H	abitat bo	undarie	s delinea	ted (within	n 120 m)?Yes						
	nportant cess	upland	plants (l	nard mast a	nd fruit/	berry produ	icers)	_Abundan	t <u>~</u> Pre	sentAbs	entUnl	known -
10 De	_None _) snags \le epression	Unkno	own –no or 30 sna nay serve	access ngs≤30 ha e as vernal	ı - condı	trees (pote	ndidate	study (BM sent <u>✓</u> Ab	R form	com	pleted -	EOS p
	BH ID	UTMs		Depth o	f	Size of po	nd '	/eg		Spps ID at		
	211 12	02772		water	_			-D		(i.e. egg/la		
^	Jone											
						1.		ı		*		
			*									
E	vidence o	f stick n	ests (raj	otors, hero	ons, etc.)Yes (c	letails be	low) _No	Unk	nown – no	access	
			Procent	Absent	If yes,	fill out belo	w AND	A WATE	R BOD	Y ASSESS	SMENT f	for each
												or each
Ta	eeps/sprin able 2: Se eep/Sprin	eps and			Desc	ription		w	/in 30 n	1 of Tur or	·SubS?	# 01
Ta	able 2: Se	eps and	Springs		Desc	ription		w	/in 30 n	ı of Tur or	· SubS?	

	M.K. INCE AND ASSOCIATES LTD.
35	Renewable Energy & Environmental Consulting

0.4.10.0		
QA/QC:	(Data Manager)	

	os/springs within coni mown – no access	fer patches adjacen	t to agriculture (tu	rkey wintering are	as)Present
IF THERE ARI	E WATERBODIES F	TILL OUT A WATE	RBODIES FORM	Completed	
Cliffs (raptor nes	sts, roosting vultures, t	alus slopes)Prese	ent <u></u> AbsentU	nknown – no access	
Presence of fiss	ured rock piles or roc	k crevices (hiberna	ting snakes) <u>/</u> Pres	sentAbsentUn	known – no access
Presence of kar	st topography or cave	es (hibernating bats)	Present/Ab	sentUnknown -	- no access
If evidence of hi	bernacula fill out table	below:			
Table 3: Bat or	Reptile Hibernacula				
Feature ID	Feature Type	Description includ and Species Use		ГМs	Photo #
SH203	Cond. Snake hiterroclum	Large boulder (50 unique to area. No	nx Smx Smheight), lot snakes observed.	5233493 N	2 photos
Ya Ya					
Table 4: Species	ations – provide detail r sign, carcass, eggs, la s Observations mammal, herp etc.)	rva etc.) – don it repe	ecies		ation Type
		FIELD 1	Рното ѕ		
below to record	/confirmed features or photo file names of fea				
Table 5: Photo fil	le names		T		
NA				1	
- \					
*****		-9.	1 (

Site Investigators: Precipinal Cloud: Date: Precipinal Precipinal Cloud: Precipinal
Temp. Wind Cloud
WOODLAND HABITAT ASSESSMENT
Project Name Bow Law P1 Form # (to be tallied at end of the day) of
Woodland ID (indicate on map) $\sqrt{168}$, $\sqrt{64}$, $\sqrt{63}$ Age of Stand (approximate in years) $20-46$
Evidence of Human Disturbance (i.e. logging, trails, garbage) Y N; Type N, Type N, Type
Property Access?N Type of Investigation (show on map)FullPartialNone - no access
ELC code (broad ecosite code if more than one ELC code):
UTMs (where sheet was started): 0108507 6, 5232594
Habitat boundaries delineated (within 120 m)?Yes
Important upland plants (hard mast and fruit/berry producers)Abundant _Present _Absent _Unknown - no access
Large >25 dbh standing dead trees or cavity trees (potential for cavity nesting or bat roosting)AbundantFewNoneUnknown -no access
10 snags ≤ 10 ha, or 30 snags ≤ 30 ha - conduct BMR candidate study (BMR form) completed
Depressions that may serve as vernal/autumnal pools: Present Absent Unknown - no access
Table 1: Amphibian Breeding Habitat
ABH ID UTMs Depth of water Size of pond Veg Spps ID and Form (i.e. egg/larval) Photo #
See NH Summary Sheet
Evidence of stick nests (raptors, herons, etc.)Yes (details below) _No _Unknown - no access
Seeps/springsPresentAbsent If yes, fill out below AND A WATER BODY ASSESSMENT for each
Table 2: Seeps and Springs Seep/Spring ID JITMs Description w/in 30 m of Tur or SubS? # of Photos
Seep/Spring ID UTMs Description w/in 30 m of Tur or SubS? # of Photos
M.K. INCE AND ASSOCIATES LTD. Renewable Energy & Environmental Consulting QA/QC: (Data Manager)

	ps/springs within coni known – no access	fer patches adjacent	to agriculture (turkey winterii	ng areas)Present	
IF THERE AR	E WATERBODIES F	ILL OUT A WATE	RBODIES FOR	MComp	leted	
Cliffs (raptor ne	sts, roosting vultures, ta	alus slopes)Preser	ntAbsent	_Unknown – no	access	
Presence of fiss	ured rock piles or roc	k crevices (hibernati	ng snakes) P	resentAbsent	Unknown – no access	
Presence of kar	st topography or cave	es (hibernating bats)	Present	AbsentUnkr	nown – no access	11
If evidence of hi	bernacula fill out table	below:				
Table 3: Bat or	Reptile Hibernacula					
Feature ID	Feature Type	Description includi and Species Use		UTMs	Photo #	
SH101.	SNAVE HOSEDNACULA	None Tog-U	DIKNOWN SP.	5237	594 2	-
				_		·
	ations – provide details r sign, carcass, eggs, la			which they were	identified (e.g. heard,	
122	mammal, herp etc.)	Spec	cies	O	bservation Type	
Bies.		Woodcock		Such it	ti	
			·			
	MININ	Field P	HOTOS			
**All identified/confirmed features or candidate Wildlife Habitat needs to be documented with a photo. Use Table 5 below to record photo file names of features and habitat. Make sure every photo name has a feature ID Table 5: Photo file names						
NA						
			*	in the second		,
,		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		* **		
. , , , , , , , , , , , , , , , , , , ,			The state of the s		**************************************	

Site Investigators: KFL DCS Date: ARM 4/12 Time (S/End): 94500 10 158 Temp: 3 6 Wind: 1 Cloud: 0/10 Precip: Description Precipinals 24 hrs: Notation
1100tp in 1600 2 in 1600
WOODLAND HABITAT ASSESSMENT
Project Name Bowlow Page Form # (to be tallied at end of the day) of
Woodland ID (indicate on map) To 1, To 2 5 TIV Age of Stand (approximate in years) 20 - 40
Evidence of Human Disturbance (i.e. logging, trails, garbage) VY N; Type LOGGING (NOT RECENT > 10
Property Access? Y_N Type of Investigation (show on map)FullPartialNone - no access
ELC code (broad ecosite code if more than one ELC code):
UTMs (where sheet was started): 0684325 5233570
Habitat boundaries delineated (within 120 m)?Yes
Important upland plants (hard mast and fruit/berry producers)Abundant _Present _Absent _Unknown - no access
Large >25 dbh standing dead trees or cavity trees (potential for cavity nesting or bat roosting)AbundantFewNoneUnknown -no access
10 snags ≤ 10 ha, or 30 snags ≤ 30 ha - conduct BMR candidate study (BMR form) completed
Depressions that may serve as vernal/autumnal pools: Present Absent Unknown - no access
Table 1: Amphibian Breeding Habitat
ABH ID UTMs Depth of Size of pond Veg Spps ID and Form Photo # (i.e. egg/larval)
NA NA
Fridonos of stick mosts (mosts and houses at a) No. (144 il. 144 a) No. (144 il. 144 a)
Evidence of stick nests (raptors, herons, etc.)Yes (details below)NoUnknown - no access
Seeps/springsPresentAbsent If yes, fill out below AND A WATER BODY ASSESSMENT for each
Table 2: Seeps and Springs
Seep/Spring ID UTMs Description w/in 30 m of Tur or SubS? # of Photos
M.K. INCE AND ASSOCIATES LTD. Renewable Energy & vironmental Consulting ON/OC: (Data Manager)
QA/QC:(Data Manager)

	os/springs within coni known – no access	fer patches adjacent to agriculture	(turkey wintering areas)	Present
IF THERE AR	E WATERBODIES F	ILL OUT A WATERBODIES FOI	RMCompleted	
Cliffs (raptor nes	sts, roosting vultures, ta	alus slopes)PresentAbsent	_Unknown – no access	
Presence of fiss	ured rock piles or roc	k crevices (hibernating snakes)	PresentAbsentUnkno	wn – no access
Presence of kar	st topography or cave	es (hibernating bats) Present	AbsentUnknown – no	access
If evidence of hi	bernacula fill out table	below:		
Table 3: Bat or	Reptile Hibernacula			
Feature ID	Feature Type	Description including Location and Species Use	UTMs	Photo #
8H102	SNARLY HIBERNACULA	RUBBLY @ BOTTOM OF SMFALL	167 0685145	5
51+204	(1	Two large boilders (3mx/m x5m leight), No shakes observed. (Inximxi.sm leight),	5233445 16T 0684605 5-234021	2
		s of identified species and the form in rva etc.) – don't repeat the ABH data		d (e.g. heard,
Table 4: Specie				
Taxa (i.e. bird,	, mammal, herp etc.)	Species	Observation	on Type
NA			. The state of the	
				<u>}</u>
		FIELD PHOTOS		
**All identified	/confirmed features or	candidate Wildlife Habitat needs to b	e documented with a photo	. Use Table 5

**All identified/confirmed features or candidate Wildlife Habitat needs to be documented with a photo. Use Table 5 below to record photo file names of features and habitat. Make sure every photo name has a feature ID

Table 5: Photo file names

AN		
		e de la companya de La companya de la co
e e e e e e e e e e e e e e e e e e e		



Site Investigators: DCS FFL Temp: 4°C Wind: 1	Clauda O (10%)	Date: Apr L	7/12 Time (S/End):	5.50pm-615pm
Temp: 4°C Wind:	Cloud:	Precip: Nore	Precip in last 24 hrs: _	7006
		F 4-		
	WOODLAND H.	ABITAT ASSESSM	IENT	
Project Name BLPI				
Woodland ID (indicate on map)	Substation Age	of Stand (approximat	te in years)	
Evidence of Human Disturbance	e (i.e. logging, trails, g	arbage) <u>✓</u> Y N; T	ype plantation, uple	aved soil
Property Access? VY_N T	ype of Investigation (show on map)Full	PartialNone - no acce	ess
ELC code (broad ecosite code if a	nore than one ELC co	de): FEC to be con	npleted - Juck Pine	
UTMs (where sheet was started):		No.	plantation	
Habitat boundaries delineated (within 120 m)? <u>∨</u> Ye	S		
Important upland plants (hard naccess	nast and fruit/berry pro	ducers)Abundant	PresentAbsentUnl	known – no
Large >25 dbh standing dead trNoneUnknown -no acces		tential for cavity nesti	ng or bat roosting)Abu	ndantFew
10 snags ≤ 10 ha, or 30 snags ≤ 3	30 ha - conduct BMR	candidate study (BMR	R form) completed A	ι Δ
				/ P ^a 7
Depressions that may serve as v	ernal/autumnal pools		•	
Depressions that may serve as v Table 1: Amphibian Breeding Ha			•	
Table 1: Amphibian Breeding Ha	bitat oth of Size of p	:PresentAbs	•	
Table 1: Amphibian Breeding Ha ABH ID UTMs Dep	bitat oth of Size of p	:PresentAbs	entUnknown - no acces	S
Table 1: Amphibian Breeding Ha ABH ID UTMs Dep was	bitat oth of Size of p	:PresentAbs	entUnknown - no acces	S
Table 1: Amphibian Breeding Ha ABH ID UTMs Dep was	bitat oth of Size of p	:PresentAbs	entUnknown - no acces	S
Table 1: Amphibian Breeding Ha ABH ID UTMs Dep was Nore	bitat oth of Size of p	:PresentAbs	Spps ID and Form (i.e. egg/larval)	S
Table 1: Amphibian Breeding Ha ABH ID UTMs Dep was	bitat oth of Size of p	:PresentAbs	Spps ID and Form (i.e. egg/larval)	S
Table 1: Amphibian Breeding Ha ABH ID UTMs Dep was Nore	bitat oth of Size of particles herons, etc.)Yes	error Present Abs	Spps ID and Form (i.e. egg/larval) Unknown — no access	Photo #
Table 1: Amphibian Breeding Ha ABH ID UTMs Dep was Nore Evidence of stick nests (raptors,	bitat oth of Size of particles herons, etc.)Yes	error Present Abs	Spps ID and Form (i.e. egg/larval) Unknown — no access	Photo #
Table 1: Amphibian Breeding Ha ABH ID UTMs Degwar Nore Evidence of stick nests (raptors, Seeps/springs Present Al Table 2: Seeps and Springs Seep/Spring ID UTMs	bitat oth of Size of particles herons, etc.)Yes	PresentAbs	Spps ID and Form (i.e. egg/larval) Unknown — no access	Photo #
Table 1: Amphibian Breeding Ha ABH ID UTMs Deg was Nove Seeps/springs Present Al Table 2: Seeps and Springs	herons, etc.)Yes	PresentAbs	Spps ID and Form (i.e. egg/larval) Unknown — no access BODY ASSESSMENT form	Photo #
Table 1: Amphibian Breeding Ha ABH ID UTMs Degwar Nore Evidence of stick nests (raptors, Seeps/springs Present Al Table 2: Seeps and Springs Seep/Spring ID UTMs	herons, etc.)Yes	PresentAbs	Spps ID and Form (i.e. egg/larval) Unknown — no access BODY ASSESSMENT form	Photo #

QA/QC: _____

AbsentUnknown - no	access	atches adjacen	it to agricultur	e (turkey winte	ering areas)	Present
IF THERE ARE WATER	RBODIES FILL	OUT A WATE	ERBODIES FO	DRM <u>NA</u> Co	mpleted	
Cliffs (raptor nests, roosting	g vultures, talus	slopes)Prese	entAbsent _	Unknown –	no access	
Presence of fissured rock	piles or rock cre	evices (hiberna	ting snakes) _	Present <u></u> Abs	ent Unknow	wn – no access
Presence of karst topogra	The same					
If evidence of hibernacula			1 3	- y		
Table 3: Bat or Reptile Hi	bernacula					
Feature ID Feature		cription includ Species Use	ling Location	UTMs	1	Photo#
NA	· ·					
			-			
Species Observations – proseen, track, other sign, card	ass, eggs, larva e	dentified species tc.) – don't repe	s and the form i	n which they wa	ere identified	(e.g. heard,
Taxa (i.e. bird, mammal,	hern etc.)	Sne	cies		Observation	Type
NA			200		<u> </u>	I I y pe
		\$ ³ 04				
**All identified/confirmed	features or candi	date Wildlife H	PHOTOS abitat needs to b	pe documented v	with a photo.	Use Table 5
below to record photo file i	names of features	and habitat. Ma	ike sure every p	hoto name has	a feature ID	
Table 5: Photo file names	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·				
NA					-	
. •						
				, and the second	Section 1	

Site Investig	ators: RFL	ws.		Date: Apr 5/12	Time (S/End): Precip in last 24 hrs:	175 3:45 m
Temp: -1.\ 0	Wind:	Cloud:	of 10 m Pre	cip:	Precip in last 24 hrs:	Brung NO PAR
	4					
		Wood	AND HABITAT	Accecemen'	r	
		W OODL	AND HADHA	ASSESSMEN	= to (N.BP).	
Project Nam	ie Bow Lace Par	<u>F</u> Form # (to)	be tallied at end of	the day) of_	2 -> (N BP).	O M) #
Woodland l	ID (indicate on ma	ap) <u>LM Down M</u>	Age of Stand	I (approximate in y	rears) 20 540 (1888)	
				,	Grochage (OIL D	1 (1 ma / V)
• •					rtialNone - no acc	ess DiRT.
			e ELC code): <u>TB</u>		C, Foc	
			56, 52345			
Habitat bou	undaries delineat	ted (within 120 m)? <u>/</u> Yes - 0F F	encules no we		
Important access	upland plants (ha	ard mast and fruit	/berry producers)	AbundantPr	resent Absent Un	known – no
_	dbh standing dea Unknown –no a		trees (potential fo	or cavity nesting or	bat roosting)Abi	undant Few
10 snags ≤	10 ha, or 30 snag	$gs \le 30 \text{ ha} - \text{cond}$	uct BMR candidat	e study (BMR form	m) completed	
Depression	s that may serve	as vernal/autum	nnal pools: <u>/</u> Pr	resentAbsent _	_Unknown – no acce	SS
Table 1: At	mphibian Breedin	g Habitat		,		
ABH ID	UTMs	Depth of water	Size of pond	Veg	Spps ID and Form (i.e. egg/larval)	Photo #
AB H209	0685651 E 5234924 N	~ SOCW MAX	Several small vernal pools	Ostrich femo mosses, Vaireh,	None observed	1
ABH 210	0685841 E 5235162 N	~ 50cm max	large area cerrul	Degwoods, W. Birch Rulson fer	. Nore observed	6
	300 3100		Mulbred w peels	Bussan		<u> </u>
						n de mente de la proprieta de la companya del la companya de la co
Evidence o	f stick nests (rap	tors, herons, etc.	.)Yes (details	below) <u>~</u> NoUı	nknown – no access	
Seeps/sprii	ngsPresent	Absent If yes,	fill out below AN	D A WATER BO	DDY ASSESSMENT	for each
Table 2: Se	eps and Springs					- 10 Maria
Seep/Sprin	ng ID UTMs	Desc	eription	w/in 30	m of Tur or SubS?	# of Photos
			<u> </u>			
$\frac{N}{R}$	A.K. INCE AND A. enewable Energy & Em	SSOCIATES LTD. vironmental Consultin	<u>.</u> 8	QA/QC:		(Data Manager)

QA/QC: _____

Presence of seeps/springs within con AbsentUnknown - no access			wintering areas)	Present
IF THERE ARE WATERBODIES	FILL OUT A WATERB	ODIES FORM _	Completed	
Cliffs (raptor nests, roosting vultures,	talus slopes)Present _	AbsentUnkno	wn – no access	
Presence of fissured rock piles or ro	ck crevices (hibernating	snakes) Present	AbsentUnkno	own – no access
Presence of karst topography or cav	ves (hibernating bats)	Present Absent	Unknown – no	access
If evidence of hibernacula fill out tabl				
Table 3: Bat or Reptile Hibernacula		rs		
Feature ID Feature Type	Description including and Species Use	Location UTMs		Photo #
Nove			. 7	
e i e e e e e e e e e e e e e e e e e e				
Table 4: Species Observations Taxa (i.e. bird, mammal, herp etc.)	Specie Braun's Holly Fron	10	Observation	
	FIELD PH	отоѕ		
**All identified/confirmed features of below to record photo file names of fe Table 5: Photo file names				. Use Table 5
NA				
			<u></u>	

'emp: -10	Wind:	Cloud:	0/101h3 Pr	ecip: Nove	Time (S/End): 9 : Precip in last 24 hrs: <i>r</i>	Jore
		Mills and the second				
		Wood	LAND HABITA	T ASSESSMEN'		
oject Nan	ne BLP	Form # (to	o be tallied at end o	f the day) of _	and a second of the second of	
oodland	ID (indicate on m	nap)	Age of Stan	d (approximate in y	vears) <u>50</u>	
vidence o	f Human Disturl	bance (i.e. loggi	ng, trails, garbage)	Y N; Type _	logging	
roperty A	.ccess? _Y _N	Type of Inve	stigation (show on	map) <u>~</u> Full <u>P</u> a	rtialNone - no acces	S
LC code ((broad ecosite cod	de if more than o	ne ELC code): FEC	upcoming - late	April 2012	
TMs (who	ere sheet was star	ted): 2 site	S, T(C and	northern BP		
abitat bo	undaries delinea	ted (within 120	m)? <u>✓</u> Yes			
nportant cess	upland plants (h	ard mast and fru	it/berry producers)	Abundant <u>^</u> Pr	esentAbsentUnkn	own – no
_	dbh standing dea Unknown –no a		ty trees (potential f	or cavity nesting or	bat roosting)Abund	dant <u>/</u> Few
) enage <						0.0
snags _	10 ha, or 30 sna	$gs \le 30 \text{ ha} - con$	duct BMR candidate	te study (BMR forn	n) completed	
					n) _ ✓ completed _Unknown – no access	
epression		as vernal/autu				
epression	s that may serve	as vernal/autu	mnal pools: P	resentAbsent Veg	_Unknown – no access	Photo #
epression able 1: At	with the street of the street	e as vernal/autu	mnal pools: <u> </u>	resentAbsent Veg	_Unknown – no access Spps ID and Form	Photo #
epression able 1: An BH ID	s that may serve mphibian Breedin UTMs 67	e as vernal/auturing Habitat Depth of water	Size of pond We woods, several shallow pools broided series of wide in Steam	resentAbsent Veg	_Unknown – no access Spps ID and Form (i.e. egg/larval)	Photo #
epression able 1: An BH ID	with the state of	e as vernal/autumng Habitat Depth of water ~ 50cm	Size of pond We was, several shallow pools	Veg Spinlose wood from	Unknown – no access Spps ID and Form (i.e. egg/larval)	Photo #
epression able 1: At BH ID 18H 2H 8H210	what may serve mphibian Breeding UTMs 67 0685841 E 523 5162 ~ 0685651 E 5234924 N	e as vernal/autum ng Habitat Depth of water ~ 50cm ~ 50cm	Size of pond wet woods, several shallow pools broided series of wide int. Steam Overflow	Veg spinlose wood from spinlose wood from	Unknown – no access Spps ID and Form (i.e. egg/larval) NA NA	Photo #
epression able 1: At BH ID 18H 2H 8H210	what may serve mphibian Breeding UTMs 67 0685841 E 523 5162 ~ 0685651 E 5234924 N	e as vernal/autum ng Habitat Depth of water ~ 50cm ~ 50cm	Size of pond wet woods, several shallow pools broided series of wide int. Steam Overflow	Veg spinlose wood from spinlose wood from	Unknown – no access Spps ID and Form (i.e. egg/larval)	Photo #
epression able 1: At BH ID OBH 211 BH210 vidence of	what may serve mphibian Breeding UTMs 167 0685841 E 523 5162 ~ 0685651 E 5234924 ~ N	e as vernal/autumng Habitat Depth of water ~ 50cm ~ 50cm	Size of pond We woods, several shallow pools broided series of wide int. Steam Overflow c.)Yes (details	Veg spiniose wood from spiniose wood from below) _No _Un	Unknown – no access Spps ID and Form (i.e. egg/larval) NA NA known – no access	
epression able 1: An BH ID BH 211 SH210 widence of	what may serve mphibian Breedin UTMs 16T 16T 16E 5841 E 1723 5162 M 16E 5734 924 M 16E STICK nests (rap	e as vernal/autumng Habitat Depth of water ~ 50cm ~ 50cm	Size of pond We woods, several shallow pools broided series of wide int. Steam Overflow c.)Yes (details	Veg spiniose wood from spiniose wood from below) _No _Un	Unknown – no access Spps ID and Form (i.e. egg/larval) NA NA	
epression able 1: An BH ID ABH 211 BH210 vidence of eeps/sprin able 2: See	s that may serve mphibian Breedin UTMs 167 0685841 E 523 5162 ~1 0685651 E 5234924 ~1 f stick nests (rap mgs Present eps and Springs	e as vernal/autumng Habitat Depth of water ~ 50cm ~ 50cm otors, herons, etc. Absent If yes.	Size of pond We woods, several shallow pools broided series of wide int. Steam Overflow c.)Yes (details	Veg Spiniose wood from Spiniose wood from Spiniose wood from Delow) _No _Un	Unknown – no access Spps ID and Form (i.e. egg/larval) NA NA known – no access	each
epression able 1: At BH ID BH 211 BH 210 vidence of eeps/sprin able 2: See	s that may serve mphibian Breedin UTMs 167 0685841 E 523 5162 ~1 0685651 E 5234924 ~1 f stick nests (rap mgs Present eps and Springs	e as vernal/autumng Habitat Depth of water ~ 50cm ~ 50cm otors, herons, etc. Absent If yes.	Size of pond We woods, several shallow pools broided series of wide in Steam Overflow c.)Yes (details	Veg Spiniose wood from Spiniose wood from Spiniose wood from Delow) _No _Un	Unknown – no access Spps ID and Form (i.e. egg/larval) NA NA known – no access DY ASSESSMENT for	
epression able 1: At BH ID ABH 211 BH 210 vidence of	s that may serve mphibian Breedin UTMs 167 0685841 E 523 5162 ~1 0685651 E 5234924 ~1 f stick nests (rap mgs Present eps and Springs	e as vernal/autum ng Habitat Depth of water ~ 50cm ~ 50cm otors, herons, etc. Absent If yes.	Size of pond We woods, several shallow pools broided series of wide in Steam Overflow c.)Yes (details	Veg Spiniose wood from Spiniose wood from Spiniose wood from Delow) _No _Un	Unknown – no access Spps ID and Form (i.e. egg/larval) NA NA known – no access DY ASSESSMENT for	each

QA/QC:

Presence of seeps/springs within Absent Unknown - no access	conifer patches adjacen	t to agriculture (tu	rkey winteri	ng areas)Present	
IF THERE ARE WATERBOD	ES FILL OUT A WATE	RBODIES FORM	Com	pleted	
Cliffs (raptor nests, roosting vultu	res, talus slopes)Prese	entAbsentU	nknown – no	access	
Presence of fissured rock piles of	r rock crevices (hibernat	ting snakes)Pres	sent <u></u> Absen	tUnknown – no acc	cess
Presence of karst topography or	caves (hibernating bats)	Present / Ab	sentUnk	nown – no access	
If evidence of hibernacula fill out	table below:				
Table 3: Bat or Reptile Hibernaci	ıla	en en de la companya br>La companya de la co			
Feature ID Feature Type	Description includ and Species Use	ing Location U	ГМѕ	Photo #	
Table 4: Species Observations Taxa (i.e. bird, mammal, herp of the second seco	Spe Braun's Holly	ecies Fern	~ 10 indiv	Dbservation Type I chals AL SEII4	
			M320c. (2)	× 3411 1	
• 1000					
**All identified/confirmed feature		PHOTOS abitat needs to be do	ocumented wi	th a photo. Use Table	5
below to record photo file names	of features and habitat. Ma	ke sure every photo	name has a f	Feature ID	
Table 5: Photo file names					
NA					X-4444
					
		<u>'</u>			

Stantec

BOW LAKE WIND FARM

Natural Resources Solutions Inc. Field Notes

Appendix F-10

Wetland Assessments

Map Legend

Map Code	Wetland	Forms	Dominant Species
cS1	Swamp	c, ls, m	Eastern White Cedar (Thuja occidentalis); Sweetgale (Myrica gale), Leatherleaf (Chamaedaphne calyculata);
			Sphagnum magellanicum, Sphagnum palustre, Sphagnum girgensohnii, Sphagnum rubellum
cS2	Swamp	c, ts, m	Black spruce (Picea mariana); Speckled alder (Alnus incana spp. rugosa); Sphagnum angustifolium,
			S. girgensohnii
cS3	Swamp	c, dc, ls, ne	Black spruce (P. mariana); Black spruce (P. mariana); Sweetgale (M. gale), Leatherleaf (C. calyculata);
			Livid sedge (Carex livida), Canada blue joint (C. canadensis)
cS4	Swamp	c, ne	Eastern white cedar (Thuja occidentalis); Canada blue joint (Calamagrostis canadensis)
lsS1	Swamp	ls, ne, gc	Sweetgale (M. gale), Leatherleaf (C. calyculata); Tussock sedge (Carex stricta),
			Canada blue joint (<i>C. canadensis</i>); Marsh St. Johns-wort (<i>Triadenum fraseri</i>)
lsS2	Swamp	ls, ne	Sweetgale (M gale); Carex livida , Tussock sedge (C. stricta), Bottle sedge (Carex utriculata)
lsS3	Swamp	ls, ne	Sweetgale (M. gale), Leatherleaf (Chamaedaphne calyculata); Carex livida
lsS4	Swamp	ls	Sweetgale (Myrica gale); Canada blue joint (C. canadensis)
lsS5	Swamp	ls	Sweetgale (M. gale)
lsS6	Swamp	ls	Sweetgale (M. gale), Leatherleaf (C. calyculata)
neM1	Marsh	ne, gc	Canada blue joint (C. canadensis), Bottle sedge (C. utriculata); St. John's wort (Hypericum punctatum)
neM2	Marsh	ne, m	Canada blue joint (<i>C. canadensis</i>); <i>Sphagnum</i> spp.
neM3	Marsh	ne, Is	Bottle sedge (C. utriculata); Sweetgale (M. gale)
neM4	Marsh	ne, m	Three-way sedge (Dulichium arundinaceum), Bottle sedge (C. utriculata); Sphagnum spp.
neM5	Marsh	ne, Is	Carex spp., Canada blue joint (C. canadensis); Sweetgale (M. gale)
neM6	Marsh	ne	Canada blue joint (C. canadensis), Bottlesedge (C. utriculata), Three-way sedge (Carex arundinaceum)
neM7	Marsh	ne	Bottlesedge (C. utriculata)
neM8	Marsh	ne, Is	Carex livida ; Leatherleaf (C. calyculata)
neW1	Marsh	ne, su	Eleocharis spp.; Unknown Aquatic Species
suW1	Marsh	su, be, ff	Unknown Aquatic Species; Sparganium fluctuan s , Potamegeton epihydrus
tsS1	Swamp	ts, ne	Speckled alder (A. incana spp. rugosa); Canada blue joint (C. canadensis)
tsS2	Swamp	ts, hb, m	Speckled alder (A. incana spp. rugosa); Evergreen woodfern (Dryopteris intermedia); Sphagnum girgensohnii
tsS3	Swamp	ts, ne, m	Speckled alder (A. incana spp . rugosa); Carex spp.; Sphagnum squarrosum
tsS4	Swamp	ts, ls, ne	Speckled alder (A. incana spp. rugosa); Sweetgale (M. gale); Bottle sedge (C. utriculata), Rattlesnake grass
			(Glyceria canadensis)
tsS5	Swamp	ts, ne, m	Speckled alder (A. incana spp . rugosa); Canada blue joint (C. canadensis), Carex livida ;
			S. girgensohnii, S. angustifolium, S. palustre, Sphagnum wolfianum
tsS6	Swamp	ts	Black spruce (Picea mariana)

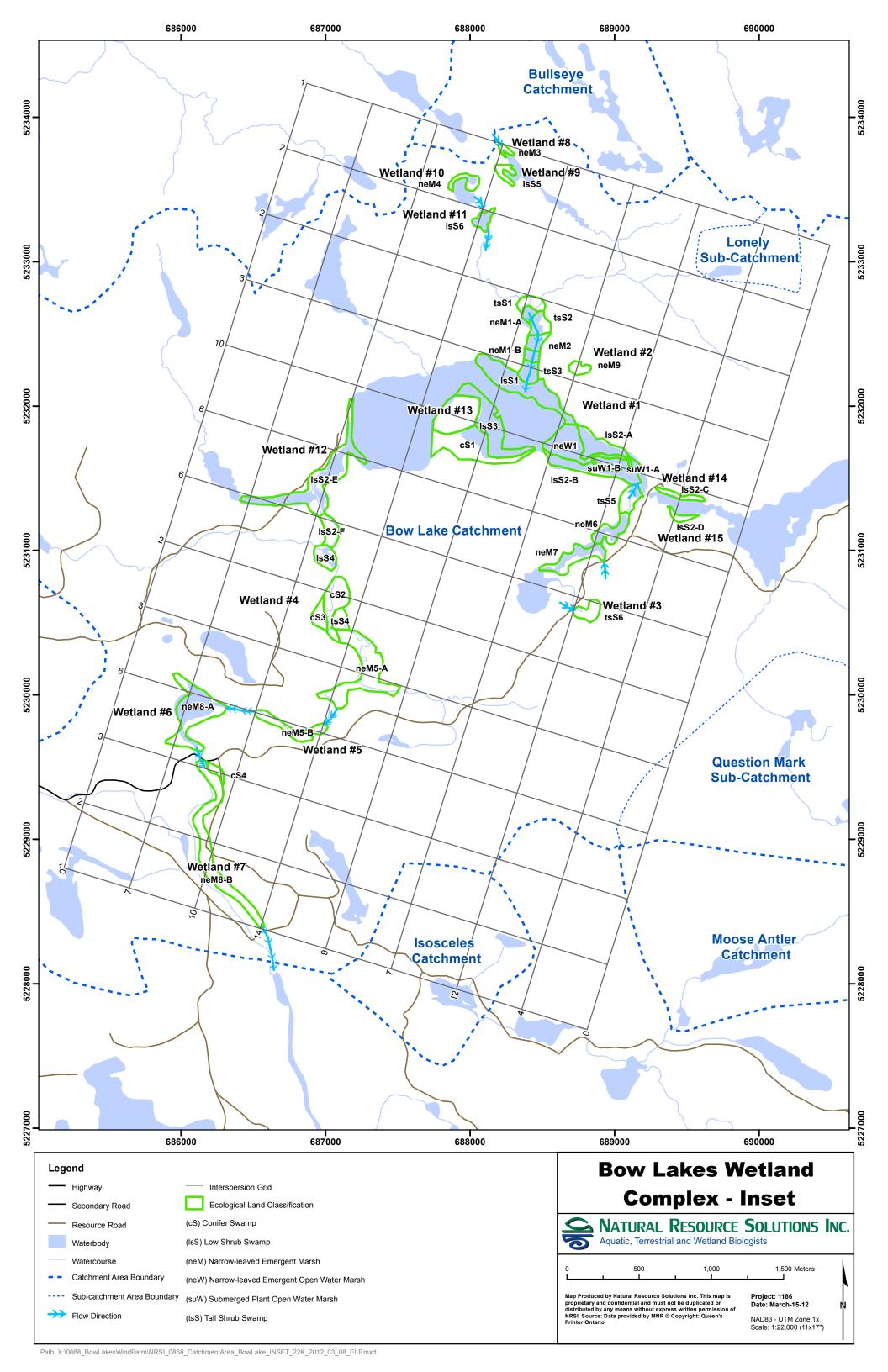
Wildlife Observations

Includes tracks and/or signs observed in the field.

Common Name	Scientific Name
Beaver	Castor canadensis
Common merganser	Mergus merganser
Rusty blackbird*	Euphagus carolinus

Unidentified cyprinids

^{*5 (}total) rusty blackbirds were observed in communities cS1, lsS3, and tsS6.



	Bow Lake Wetland Complex							
	Wetland Evaluation Edition 2002							
World Distriction Edition								
November 22, 2010								
		Comments						
Attached Documents	include:							
1) C CW. 1.	. 1	1 1						
	and types, site types and	d dominant form areas						
2) Map of Bow Lake								
3) List of vegetation of4) Map of Interspersion								
	Wetland Complex Cat	chmont Rasin						
6) Vascular Plant List		CHITICHE Dashi						
7) Fauna list								
8) Letter from Batche	wana First Nation							
o) zever nom zavene		Additional Informatio	n					
Official Name:		Bow Lake We						
Evaluation Edition:	2002	Class:	Wetland					
		th Last Evaluated	N	November 22, 201)			
		th Last Updated		March 2012				
Special Planning Con	siderations:			Scores				
				Biologica	1: 108			
				Socia				
				Hydrologica	1: 121			
				Special Feature				
				Overa	1: 491			
Submitted by:		esources Solutions Inc.						
Date:	M	Iarch 15, 2012						

N	ort	thern Ontario Wetland Evaluatio	n, Data and Scoring Record	(November 22, 2010)
		WETLAN	ND DATA AND SCORING RECORD	
i)		WETLAND NAME:	Bow Lake Wetland Com	plex
ii)		MNR ADMINISTRATIVE REC	GION: North East DISTRICT:	Sault Ste. Marie
		AREA OFFICE (if different from	m District):	
iii)		CONSERVATION AUTHORIT	Y JURISDICTION:	
		(If not within a designated CA, che	eck here: X	
iv)		COUNTY OR REGIONAL MU	NICIPALITY: City of Sa	nult Ste. Marie
v)		TOWNSHIP:	Peever and Smilsky	
vi)		LOTS & CONCESSIONS:	None	
		(attach separate sheet if necessary)		
vii)		MAP AND AIR PHOTO REFE	RENCES	
	a)	Latitude: Long	gitude:	
	b)	UTM grid reference:	Zone: 16 Grid:E 688439.93	Block: <u>T</u> N 5232165.82
	c)	National Topographic Series:		
		map name(s)	Mamainse Point	
		map number(s)	41 N/2 edition 3	<u>; </u>
		scale	1:50,000	
	d)	Aerial photographs: Date photo ta	aken: Scale: _	
		Flight & plate numbers:	Google Earth Images 2004	
		(attach separate sheet if necessary)		
	e)	Ontario Base Map numbers & sca	#166805230 1:20,	000
		(attach separate sheets if necessary	······································	
		•		

a) Single contiguous wetland area:		hectares	8	
, 2 2				
b) Wetland complex comprised of	15	individu	ıal wetlands:	
Wetland Unit Number				Size of each
(for reference)				wetland unit
	Isolated	Palustrine	Riverine	Lacustrine
Wetland Unit No. 1		16.43		24.49
Wetland Unit No. 2	0.99			_
Wetland Unit No. 3		1.75		_
Wetland Unit No. 4			17.00	_
Wetland Unit No. 5			3.13	_
Wetland Unit No. 6			8.54	
Wetland Unit No. 7			9.74	_
Wetland Unit No. 8		0.47		_
Wetland Unit No. 9		1.05		_
Wetland Unit No. 10		1.33		_
Wetland Unit No. 11		1.23		_
Wetland Unit No. 12			2.00	13.05
Wetland Unit No. 13				15.15
Wetland Unit No. 14				1.04
Wetland Unit No. 15				0.75
Wetland Unit No.				
Wetland Unit No.				
Wetland Unit No.	0.00	22.26	10.11	
Wetland Unit Totals:	0.99	22.26	40.41	54.48
(Attach additional sheets if neces	ssary)			
TOTAL WEST LAND GROWN			440.44	
TOTAL WETLAND SIZE	Š	_	118.14	ha =
c) Brief documentation of reasons	for including any	y areas less than 2 h	na in size:	
At the time this evaluation was u	ndertaken. MNR	L's recommendation	with respect to	o wetlands
assessed for the purpose of an ev				
was to include all wetland areas				

1.0 BIOLOGICAL COMPONENT

1.1 PRODUCTIVITY

1.1.1 GROWING DEGREE-DAYS/SOILS

GROWING DEGREE DAYS			SOILS	
(chec	k one)		Estimated Frac	tional Area
1)		<1600	0.210	clay/loam
2)		1600-2000	0.330	silt/marl
3)	X	2000-2400		limestone
4)		2400-2800	0.250	sand
5)		2800-3000	0.190	humic/mesic
6)		>3000		fibric
			0.010	granite

SCORING:

Growing	Clay-	Silt-	Lime-	Sand	Humic-	Fibric	Granite
Degree-	Loam	Marl	stone		Mesic		
Days							
<1600	12	11	9	7	7	6	4
1600-2000	15	13	11	9	8	7	5
2000-2400	18	15	13	11	9	8	7
2400-2800	22	18	15	13	11	9	7
2800-3000	26	21	18	15	13	10	8
>3000	30	25	20	18	15	12	9

(maximum score 30; if wetland contains more than one soil type,

evaluate based on the fractional area)

Steps required for evaluation: (maximum score 30 points)

- 1. Select GDD line in evaluation table applicable to your wetland;
- 2. Determine fractional area of the wetland for each soil type;
- 3. Multiply fractional area of each soil type by score;
- 4. Sum individual soil type scores (round to nearest whole number).

In wetland complexes the evaluator should aim at determining the percentage of area occupied by the categories for the complex as a whole.

clay/loam	3.78
silt/marl	4.95
limestone	0.00
sand	2.75
humic/mesic	1.71
fibric	0.00
granite	0.07
	silt/marl limestone sand humic/mesic fibric

Final Score Growing Degree-Days/Soils (maximum 30 points)

10

Northern Ontario Wetland Evaluation, Data and Scoring Record (November 22, 2010) 1.1.2 WETLAND TYPE (Fractional Area = area of wetland type/total wetland area) Score Fractional Area Bog 3 0.00 0.00 Fen 6 0.59 4.72 Swamp 8 Marsh 0.41 15 6.15 Wetland type score (maximum 15 points) 1.1.3 SITE TYPE (Fractional Area = area of site type/total wetland area) Fractional Area Score Isolated 0.010 0.010 Palustrine (permanent or intermittent flow) 0.190 0.380 2 = Riverine 0.340 4 1.360 = Riverine (at rivermouth) 5 0.000 = 5 0.000 Lacustrine (at rivermouth) Lacustrine (on enclosed 0.000 bay, with barrier beach) 3 Lacustrine (exposed to lake) 0.460 2 0.920 Sub Total: 2.670 **Site Type Score (maximum 5 points)** 1.2 BIODIVERSITY 1.2.1 NUMBER OF WETLAND TYPES Score (Check only one) 9 points 1) one 2) 13 two 20 3) three 4) four 30 **Number of Wetland Types Score (maximum 30 points)** 13 4

1.2.2 VEGETATION COMMUNITIES

Attach a separate sheet listing community (map) codes, vegetation forms and dominant species. Use the form on the following page to record percent area by dominant vegetation form. This information will be used in other parts of the evaluation.

Communities should be grouped by number of forms. For example, 2 form communities might appear as follows:

2 forms

Code	Forn	ns	Don	ninant Species	_		
M6	re,	ff	re,	Typha latifolia;	ff,	Lemna minor,	Wolffia
S 1	ts,	gc	ts,	Salix discolor;	gc,	lmpatiens capens	sis, Thelypteris palustris

Note that the dominant species for each form are separated by a semicolon. The dominant species (maximum of 2) within a form are separated by commas.

Scoring:

Total # of communities	Total # of communities	Total # of communities
with 1-3 forms = 40	with $4-5$ forms = 23	with 6 or more forms = 1
1 = 1.5 points	1 = 2 points	1 = 3 points
2 = 2.5	2 = 3.5	2 = 5
3 = 3.5	3 = 5	3 = 7
4 = 4.5	4 = 6.5	4 = 9
5 = 5	5 = 7.5	5 = 10.5
6 = 5.5	6 = 8.5	6 = 12
7 = 6	7 = 9.5	7 = 13.5
8 = 6.5	8 = 10.5	8 = 15
9 = 7	9 = 11.5	9 = 16.5
10 = 7.5	10 = 12.5	10 = 18
11 = 8	11 = 13	11 = 19
11 – 8	11 – 13	11 – 19
+.5 each additional	+.5 each additional	+ 1 each additional
community = 11.5	community = 2.0	community =

e.g., a wetland with 3 one form communities 4 two form communities 12 four form communities and 8 six form communities would score:

6+13.5+15=34.5=35 points

Vegetation Communities Score (maximum 45 points)

13

Northern Ontario Wetland Eva	(November 22, 2010)					
Wetland Name: Bow Lake Wetland Complex						
Wetland Size (ha):	118.14					
Vegetation Form	% area in which form is dominant					
h						
c	12.39					
dh						
dc						
ts	8.76					
ls	37.46					
ds						
gc						
m						
ne	40.29					
be						
re						
ff						
f						
su	1.10					
u (unvegetated)						
Total = 100%	100.00					
	6					

Northern Ontari	io Wetland Evaluation, Data and Scoring Record	(November 22, 2010)
1.2.3 DIVERSITY	OF SURROUNDING HABITAT	
(Check all appropria		
	recent burn (< 5 yr)	
	abandoned agricultural land	
	utility corridor	
X	deciduous forest	
***	recent cutover or clearcut (<5 yr)	
X	coniferous forest	
X	mixed forest (at least 25% conifer and 75% deciduous or vice versa)	
	crops	
	abandoned pits and quarries	
	pasture ravine	
	fence rows	
X	open lake or deep river	
$\frac{X}{X}$	creek flood plain	
X	rock outcrop	
Di	iversity of Surrounding Habitat Score (1 for each, maximum 7 points	s) 6
1 2 4 PROXIMITY	TO OTHER WETLANDS	
	propriate category only)	Scoring
(Chien mist wh	proprime unegoty only)	Storms
1) X	Hydrologically connected by surface water to other wetlands	
	(different dominant wetland type) or open lake or river	
	within 1.5 km	8 points
		_
2)	Hydrologically connected by surface water to other wetlands	
	(same dominant wetland type) within 0.5 km	8
3)	Hydrologically connected by surface water to other wetlands	
	(different dominant wetland type),or open lake or river from	
	1.5 to 4 km away (Second Marsh Wetland)	5
4)	The declarically assume at all has an officer of the second of the	
4)	Hydrologically connected by surface water to other wetlands	-
	(same dominant wetland type) from 0.5 to 1.5 km away	5
5)	Within 0.75 km of other wetlands (different dominant wetland type)	
3)	or open lake or river, but not hydrologically connected by	
	surface water	5
	Surface water	J
6)	Within 1 km of other wetlands, but not hydrologically	
	connected by surface water	2
	•	
7)	No wetland within 1 km	0
Pı	roximity to other Wetlands Score (Choose one only, maximum 8 points	nts) 8
	7	

Northern Ontario	Wetland Evaluation, Data and S	coring Record (Novem	nber 22, 2010)
1.2.5 INTERSPERSI	ON		
Nun	nber of Intersections		
	eck one)	Score	
1)	26 or less	3	
2)	27 to 40	6	
3)	41 to 60	9	
4)	61 to 80	12	
5)	81 to 100	15	
6)	101 to 125 X	18	
7)	126 to 150	21	
8)	151 to 175	24	
9)	176 to 200	27	
10)	>200	30	
10)	, 200	30	
	Interspersion Sco	ore (Choose one only maximum 30 points)	18
1.2.6 OPEN WATER	R TYPES		
Permanently floo	odad:		
	oded.	Score	
(Check one)		Score	
1)	town a 1	0	
1)	type 1	8	
2) X	type 2	8	
3)	type 3	14	
4)	type 4	20	
5)	type 5	30	
6)	type 6	8	
7)	type 7	14	
8)	type 8	3	
9)	no open water	0	
	Open Water Type Scor	re (Choose one only maximum 30 points)	8
1			
		8	

(November 22, 2010)

1.3 SIZE

hectares 66 Subtotal for Biodiversity

Size Score (Biological Component) (maximum 50 points)

15

Evaluation Table Size Score (Biological component)

	1 aoic	Size Score (Biological	,						
Wetland										
size (ha)	<37	37-47	48-60	61-72	73-84	85-96	97-	109-	121-	>132
							108	120	132	
<20 ha	1	5	7	8	9	17	25	34	43	50
20-40	5	7	8	9	10	19	28	37	46	50
41-60	6	8	9	10	11	21	31	40	49	50
61-80	7	9	10	11	13	23	34	43	50	50
81-100	8	10	11	13	15	25	37	46	50	50
101-120	9	11	13	15	18	28	40	49	50	50
121-140	10	13	15	17	21	31	43	50	50	50
141-160	11	15	17	19	23	34	46	50	50	50
161-180	13	17	19	21	25	37	49	50	50	50
181-200	15	19	21	23	28	40	50	50	50	50
201-400	17	21	23	25	31	43	50	50	50	50
401-600	19	23	25	28	34	46	50	50	50	50
601-800	21	25	28	31	37	49	50	50	50	50
801-1000	23	28	31	34	40	50	50	50	50	50
1001-1200	25	31	34	37	43	50	50	50	50	50
1201-1400	28	34	37	40	46	50	50	50	50	50
1401-1600	31	37	40	43	49	50	50	50	50	50
1601-1800	34	40	43	46	50	50	50	50	50	50
1801-2000	37	43	47	49	50	50	50	50	50	50
>2000	40	46	50	50	50	50	50	50	50	50

Northern Ontario Wetlan	d Evaluation, Data and	d Scoring Record	(November 22,	2010)					
	• • • • •								
2.0 SOCIAL COMPONENT									
2.1 ECONOMICALLY VALUABLE PRODUCTS									
2.1 ECONOMICALLY V	ALUABLE PRODU	<u> </u>							
2.1.1 WOOD PRODUCTS									
	•								
Area of wetland forested (ha),	i.e. dominant form is	h or c. Note that this is no	t wetland size. (Check one						
only)									
		Score							
· · · · · · · · · · · · · · · · · · ·	<5 ha	0							
· · · · · · · · · · · · · · · · · · ·	25 ha	4							
	50 ha	6							
	00 ha	8							
5) 101 -2		11							
6) >2	00 ha	14							
Source of information:	Field Obse	ervations (NRSI 2010)							
	Wood Product	ts Score (Score one only,	maximum 14 points)	4					
2.1.2 Lowbush Cranberry									
(Check one)			Score (Choose one)						
Present	1)		2 points						
Absent	2)	X	0						
	_/		· ·						
Source of information:	Field Obse	ervations (NRSI 2010)							
	Lo	wbush Cranberry Score	(maximum 2 noints)	0					
	Lo	woush cranberry score	(maximum 2 points)	0					
2.1.3 Wild Rice									
(Check one)			Score (Choose one)					
Present (at least 0.5 ha)	1)		10 points						
Absent	2)	X	0						
Source of infolmation:	Field Obse	ervations (NRSI 2010)							
	Wi	ld Rice Score (maximum	10 points)	0					
	***	ia ideo peore (mammam	_						
		10							
		10							

Northern Ontario Wetl	and Evaluation, Data and Scorir	ng Record	(November	22, 2010)				
2.1.4 COMMERCIAL FIS	H (BAIT FISH AND/OR COAF	RSE FISH)						
(Check one)			Score (Choose	one)				
Present	1)	X	12 points					
Absent	2)		0					
Source of information: Field Observations - Cyprinids observed - NRSI 2010								
	Commerci	al Fish Score (maxi	mum 12 points)	12				
2.1.5 FURBEARERS (Consult Appendix 9)								
Name of furbearer	Sour	ce of information						
1) Beaver (<i>Castor co</i> 2)	anadensis) 3	Field Observations (1	NRSI 2010)					
3)								
4)								
5)								
,								

Scoring: 3 points for each species. maximum 12

Furbearer Score (maximum 12 points)

3

2.2 RECREATIONAL ACTIVITIES

Type of Wetland-Associated Use									
Intensity of Use	Hunting	Fishing							
High	40 points	40 points			40 points				
Moderate	20	X	20		20				
Low	8		8	X	8	X			
Not possible/NotKnown	0	0			0				
Totals									

(score one level for each of the three wetland uses; scores are cumulative; maximum score 80 points) Sources of information:

Hunting: No evidence of hunting observed, however it is likely due to

size of wetland and easy access.

Nature: Bow Lake is fairly accessible - however, no one observed

in the field. No sign of human activity within wetlands.

Fishing: A boat was observed at the shore of Bow Lake. Fishing is

possible.

Recreational Activities Score (maximum 80 points)

Northern Ontario Wetland Evaluation, Data and Scoring Re	ecord (November 2	22, 2010)
2.3 LANDSCAPE AESTHETICS		
2.5 LANDSCAPE AESTHETICS		
2.3.1 DISTINCTNESS		
(Check one)	Score (Choose one)	
Clearly distinct 1)	3 points	
Indistinct 2) X	0	
· 		
Landscape Distinctn	ess Score (maximum 3 points)	0
2.3.2 ABSENCE OF HUMAN DISTURBANCE		
(Check one)	Score (Choose one)	
Human disturbances absent or nearly so	1) X 7 points	
One or several localized disturbances	2) 4	
Moderate disturbance; localized water pollution	3) 2	
Wetland intact but impairment of ecosystem quality	3)	
intense in some areas	4) 1	
Extreme ecological degradation, or water pollution	1)	
severe and widespread	5)0	
Source of information: Field Observa	tions (NRSI 2010)	
		_
Absence of Human Distur	bance Score (maximum 7 points)	7
2.4 EDUCATION AND DUDI IC AMADENIESS		
2.4 EDUCATION AND PUBLIC AWARENESS		
2.4.1 EDUCATIONAL USES		
(Check one)	Score (Choose one)	
Frequent 1)	20 points	
Infrequent 2)	12	
No visits 3) X	0	
Source of information: Field Observations	- Access issues (NRSI 2010)	
	1100000 (111012010)	
Educational U	ses Score (maximum 20 points)	0
2.4.2 FACILITIES AND PROGRAMS		
(check one)	Score (Ch	noose one)
Staffed interpretation centre	1) 8 points	
No interpretation centre or staff but a system of		
self-guiding trails or brochures available	2) 4	
Facilities such as maintained paths (e.g., woodchips)		
boardwalks, boat launches or observation towers		
but no brochures or other interpretation	3) 2	
No facilities or programs	4) <u>X</u> 0	
Source of information: Field Obse	rvations (NRSI 2010)	
Frailitian on J December	oma Coona (marimura 9 - si-4s)	0
Facilities and Progra	ams Score (maximum 8 points)	0

Northern Ontario Wetland Evaluation	Data and Coorin	a Dage	and			(NIc	ovember 22	2010)
	i, Data and Scoring	g Kec	лu			(110	ovember 22	, 2010)
2.4.3 RESEARCH AND STUDIES								
(check appropriate spaces)						Score		
Long term research has been done							nts	
Research papers published in refereed scientific								
journal or as a thesis						10		
One or more (non-research) reports								
on some aspect of the wetland 's flo	ra fauna					_		
hydrology etc.			_	***		5		
No research or reports				X		0		
Attach list of known reports by above	e categories							
Research and Stu	ıdies Score (Scor	e is cu	ımulati	ve, maxim	um 12	2 points	s)	0
							·	
2.5 PROXIMITY TO AREAS OF H	UMAN SETTLE	MEN'	<u> </u>					
Circle the highest applicable score								
Distance of wetland from	1)		2)	populati	ion	3)	popul	ation
settlement	population> 10	,000	ĺ	2,500 -10			<2,500 or	
	1 1						comm	nunity
1) Within or adjoining	40 points			26			16	
settlement								
2) 0.5 to 10 km from settlement	26			16			10	X
3) 10 to 60 km from settlement	12			8			4	
4) >60 km from settlement	5			2			0	
5) >100 km from settlement	0			0			0	
		0			0			10
Name of settlement:	Montreal Riv	er Hai	bour O	ntario				
Traine of Settlement.	Wionarcai ICIV	CI IIu	bour, o	ilui10				
Proxi	mity to Human S	Settlen	nent Sc	ore (maxii	mum 4	40 poin	ts)	10
							•	
2.6 OWNERSHIP (FA= fraction Are	ea)					Score		
FA of wetland in public or private o	_				1.0		0.00	
held under contract or in trust for we	etland protection		0.00	X	10	=	0.00	
held under contract or in trust for we FA of wetland area in public owners	etland protection ship,not as above		0.99	9 x	8	=	7.92	
held under contract or in trust for we	etland protection ship,not as above		0.99	9 x		_		
held under contract or in trust for we FA of wetland area in public owners FA of wetland area in private owner	etland protection ship,not as above	ilues N	0.01	9 x 1 x	8 4	=	7.92	
held under contract or in trust for we FA of wetland area in public owners FA of wetland area in private owner	etland protection ship,not as above ship,not as above	ılues N	0.01	9 x 1 x	8 4	=	7.92	
held under contract or in trust for we FA of wetland area in public owners FA of wetland area in private owner	etland protection ship,not as above ship,not as above		0.01 Map (De	9 x 1 x	8 4	= =	7.92 0.04	8

(November 22, 2010)

2.7 SIZE

118.14 hectares 65 Subtotal for Social

Evaluation Table for Size Score (Social Component)

Evaluation	Table	TOT SIZE SEC	ne (Boeiai e	omponent)						
Wetland Size (ha)	Total for Size Dependent Score									
2-2 ()	<31	31-45	46-60	61-75	76-90	91-105	106-109	121-135	136-150	>150
<2 ha	1	2	4	8	10	12	14	14	14	15
2 - 4ha	1	2	4	8	12	13	14	14	15	16
5 - 8ha	2	2	5	9	13	14	15	15	16	16
9 - 12ha	3	3	6	10	14	15	15	16	17	17
13-17	3	4	7	10	14	15	16	16	17	17
18-28	4	5	8	11	15	16	16	17	17	18
29-37	5	7	10	13	16	17	18	18	19	19
38-49	5	7	10	13	16	17	18	18	19	20
50-62	5	8	11	14	17	17	18	19	20	20
63-81	5	8	11	15	17	18	19	20	20	20
82-105	6	9	11	15	18	18	19	20	20	20
106-137	6	9	12	16	18	19	20	20	20	20
138-178	6	9	13	16	18	19	20	20	20	20
179-233	6	9	13	16	18	20	20	20	20	20
234-302	7	9	13	16	18	20	20	20	20	20
303-393	7	9	14	17	18	20	20	20	20	20
394-511	7	10	14	17	18	20	20	20	20	20
512-665	7	10	14	17	18	20	20	20	20	20
666-863	7	10	14	17	19	20	20	20	20	20
864-1123	8	12	15	17	19	20	20	20	20	20
1124-1460	8	12	15	17	19	20	20	20	20	20
1461-1898	8	13	15	18	19	20	20	20	20	20
1899-2467	8	14	16	18	20	20	20	20	20	20
>2467	8	14	16	18	20	20	20	20	20	20

Total Size Score (Social Component)

(November 22, 2010)

2.8 ABORIGINAL AND CULTURAL HERITAGE VALUES

Either or both Aboriginal or Cultural Values may be scored. However, the maximum score permitted for 2.8 is 30 points. Attach documentation.

2.8.1 ABORIGINAL VALUES

Full documentation of sources must be attached to the data record.

1)	Significant	X	=	30 points
2)	Not Significant		=	0
3)	Unknown		=	0
	Total:	30		

2.8.2 CULTURAL HERITAGE

1)	Significant		=	30 points
2)	Not Significant	X	=	0
3)	Unknown		=	0
	Total:	0		

Aboriginal Values/Cultural Heritage Score (maximum 30 points)

Batchewana First Nation (BFN) was contacted on October 19, 2010 and asked about the significance of this wetland in terms of aboriginal values. A response was received on November 17, 2010 (letter appended), which states the wetlands are "very valuable to the surrounding area, environment, wild life and BFN reliance on the land and resources to sustain our cultural activities." (Dave Sewell, BNR Field Technician)

3.0 HYDROLOGICAL COMPONENT

3.1 FLOOD ATTENUATION

If the wetland is a complex including isolated wetlands, apportion the 100 points according to area. For example if 10 ha of a 100 ha complex is isolated, the isolated portion receives the maximum proportional score of 10. The remainder of the wetland is then evaluated out of 90.

Step 1:	If wetland is entirely	Isolated on	directly to Step 5
DICP I.	II wettand is entirely	isolated, go	uncerry to step 3.

If wetland is lacustrine and the ratio of wetland area: lake area is <0.1, <u>or</u> wetland is riverine on the St. Mary's River, go to Step 5

All other wetlands, go through steps 2, 3, 4 and 5.

Step 2: Determination of Upstream Detention Factor (DF)

(a)	Wetland area (ha)					
(b)	Total area (ha) of upstream detention area	444.08				
	(include the wetland itself)					
(c)	Ratio of (a):(b)		0.27			
(d)	Upstream detention factor: (c) x 2 =	0.53		0.53		
	(maximum allowable factor = 1)	•				

Step 3: Determination of Peak Flow Attenuation Factor (AF)

(a)	Wetland area (ha)			118.14
(b)	Size of catchment basin (ha) upstream of	_		
	(include wetland itself in catchment area)			4626.25
(c)	Ratio of (a):(b)			0.03
(d)	Wetland attenuation factor: (c) x $10 = 0.3$		0.30	
	(maximum allowable factor = 1)		•	

Step 4: Determination of Wetland Surface Form Factor (FF)

From the list below, select the surface form which best describes the wetland.

	Factor	
Flooded with little or no aquatic vegetation		0
Flooded but with submergent, emergent or floating vegetation	X	0.2
Flat (lawn) vegetation (typical of fens)		0.5
Hummock-depression microtopography		0.7
Patterned (e.g., string bog, ribbed fen)		1
Surface Form Factor (FF)	0.2	

(Maximum allowable factor = 1)

(November 22, 2010)

Step 5:

1. Wetland is entirely Isolated

100 points

2. Wetland is lacustrine and the ratio of

0 points

wetland area: lake area is <0.1

3. Wetland is riverine along the St. Mary's River

0 points

4. For all other wetlands*, calculate as follows:

a) Upstream Detention Factor (DF) (Step 2)b) Wetland Attenuation Factor (AF) (Step 3)

0.53

c) Surface Form Factor (FF) (Step 4)

0.30

(117) (Step 4)

0.20

 $[(DF + AF + FF)/3] \times 99.16*$

34.04

Isolated score: 0.84

*Unless wetland is a complex including isolated portions -- see above

Total Flood Attenuation Score (maximum 100 points)

35

3.2 GROUND WATER RECHARGE

3.2.1 SITE TYPE

(a) Wetland > 50% lacustrine (by area) or located on the

St. Mary's River

Score = 0

(b) Wetland not as above. Calculate final score as follows:

(FA= area of site type/total area of wetland)

0.2 FA of isolated or palustrine wetland

20 = 4.00

0.34 FA of riverine wetland

5 = 1.70

0.46 FA of lacustrine wetland (wetland <50% lacustrine)

x = 0.00

Site Type Score: (maximum 20 points)

6

3.2.2 SOILS

EVALUATION:

Dominant Wetland Type	Sand, loam, gravel, till	Clay or bedrock		
Lacustrine or on St. Mary's River	0	X	0	
Isolated	10		5	
Palustrine	7		4	
Riverine (not on St. Mary's River)	5		2	
Totals		0		0

Hydrological Soil Class Score (maximum 10 points)

(November 22, 2010)

3.3 DOWNSTREAM WATER QUALITY IMPROVEMENT

3.3.1 WATERSHED IMPROVEMENT FACTOR

Calculation of Watershed Improvement Score is based upon the fractional area (FA) of each site type within the wetland. FA = area of site type/total area of the wetland.

Site Type	Impro	ovement Fac	tor (IF	<u>(?)</u>	
Isolated	FA	0.01	X	0.5 =	0.01
Riverine	FA	0.34	X	1 =	0.34
Palustrine with no inflow	FA		X	0.7 =	0.00
Palustrine with inflows	FA	0.19	X	1 =	0.19
Lacustrine on lake shoreline	FA	0.37	X	0.2 =	0.07
Lacustrine at lake inflow or outflow	FA	0.09	X	1 =	0.09

Watershed Improvement Score (IF x 30) (maximum = 30)

ADJACENT AND WATERSHED LAND USE

EVALUATION

Step 1: **Determination of Maximum Initial Score**

Wetland on the Great Lakes or St. Mary's River (Go to Step 5a) X All other wetlands (Go through steps 2, 3,4 and 5b)

Step 2: **Determination of Broad Upslope Land Use (BLU)**

Assess broad upslope land uses within the previous 5 years, agriculture, or other activities which alter the natural vegetation cover in an extensive manner.

Choose one	Score
>50% of catchment basin	20
20-50% of catchment basin	14
<20% of catchment basin	4

Score for BLU

Step 3: **Determination of Linear Upslope Land Uses (LUU)**

Assess linear upslope uses (LUU) e.g., roads, railways, hydro corridors, pipelines, etc., crossing the upslope catchment within 200m of the wetland boundary.

Choose the highest only	Score
Major corridor*	15
Secondary corridor	11
Tertiary corridor	6
Temporary or abandoned	3
None	0

Score for LUU

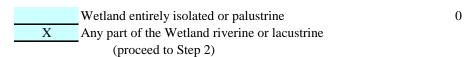
Major, secondary and tertiary roads are those that are indicated as such on the provincial highways maps. Major hydro corridors are trunk lines coming directly from a generating station. Major pipelines are transcontinental lines. Secondary corridors are regional distribution lines (i.e. multi-cable hydro corridors not emanating directly from a generating station or regional gas distribution lines). Tertiary corridors are single hydro lines or local gasdistribution lines (i.e. to domestic users).

No	rthern Ontario Wetla	nd Evaluation, Data and S	Scoring Record	(November 22, 201	0)
olants, ma	oint source (PS) land ajor aggregate operat	ions (but not small pits us	effluents such a e for local road	as heavy industry, pulp and paper d construction), etc. Score as	
present' o	nly if a point source	land use is located less that	ın 1km upstrea	m from the wetland.	
		Score			
	Present Not present	15 0			
	Not present		core for PS	0	
Step 5:	Calculation of to	tal score for Adjacent an	d Watershed	Land Use	
	Vetland on the Great All other wetlands, ca	Lakes or St. Mary's River clculate as follows:			
		F	inal Score BL	U+LUU+PS 17	
3.3.3 VE	GETATION FORM				
	oose the category that etation of the wetland				
Em	es, shrubs or herbs (hergents, submergents) le or no vegetation (t	(ne, re, be, f, ff, su)	X	Score 8 points 10	
		Dominant Ve	egetation Forn	m Score (maximum 10 points)	8
3.4	CARBON SINK				
Cho	oose the category that	t best describes the wetlan	d		
1)	Wetland a bog or	fen with >50% organic so	ils	15 points	
2)	_	nic soils occupying 10 to 5 ainly mineral or undesignatype)		6	
3)	Marshes and swan	nps with >50% organic so	il	9	
4)	Wetland with less	than 10% of soils organic		0	
		C	arbon Sink So	core (maximum 15 points) 6	
			19		

3.5 SHORELINE EROSION CONTROL

From the wetland vegetation map determine the <u>dominant</u> vegetation type within the erosion zone for <u>lacustrine</u> and <u>riverine</u> site type areas only. Score according to the factors listed below.

Step 1: Score



Step 2:

Choose the one characteristic that best describes the shoreline vegetation (see text for a definition of shoreline)

			Score
1)	X	Trees and shrubs	15
2)		Emergent vegetation	8
3)		Submergent vegetation	6
4)		Other shoreline vegetation	3
5)		No vegetation	0

Shoreline Erosion Control Score (maximum 15 points)

15

3.6 GROUNDWATER DISCHARGE

(Circle the characteristics that best describe the wetland being evaluated and then sum the scores)

Category		Catchment Interaction					
Wetland type	Bog = 0		Swamp/Marsh = 2	2	Fen = 5		
Basin topography	Flat/Rolling = 5		Hilly = 2		Major relief		
				2	break = 5		
Weland area: Upslope	Large (>50%) = 0		Moderate		Small ($<5\%$) = 5		
catchment area			(6-50%) = 2	2			
Lagg Development	None found $= 0$	0	Minor = 2		Extensive $= 5$		
Seeps at wetland	None found $= 0$		1-3 seeps = 5		4 or more		
edge	<u> </u>	0			seeps = 10		
Iron precipitates	None $= 0$		1-3 deposits = 2		4 or more		
evident at edge	 	0			deposits = 5		
Surface marl deposits	None = 0	0	1-3 deposits = 2		>3 = 5		
Wetland pH	Low < 4.2 = 0		Moderate $4.2-5.7 = 5$	5	High $> 5.7 = 10$		
Catchment soil	Patchy = 0		Thin $(<20cm) = 2$		Thick = 5		
coverage				2			
Catchment soil	Low = 0		Moderate = 2		High = 5		
permeability		0					
Totals		0		13		0	

(Scores are cumulative maximum score 30 points)

Groundwater Discharge Score (maximum 30 points)

4.0 SPECIAL FEATURES COMPONENT

4.1 RARITY

4.1.1 WETLANDS

Hills Site Region	5E-13	
Wetland type (ch		
	Bog	
	Fen	
X	Swamp	
X	Marsh	

Evaluation Table for Scoring Rarity of Wetland Type.

Unit	Site Region				
Number	& District	Marsh	Swamp	Fen	Bog
2E	James Bay	20	20	0	20
2W	Big Trout Lake	20	20	0	10
3E	Lake Abitibi	20	20	10	0
3W	Lake Nipigon	20	20	10	0
3S	Lake St. Joseph	20	20	10	0
4E	Lake Temagami	20	20	10	0
4W	Pigeon River	20	10	20	0
4S	Wabigoon Lake	20	10	20	0
5E-1	Thessalon	10	0	30	20
5E-2	Gore Bay	20	0	20	20
5E-3	La Cloche	20	0	30	20
5E-4	Sudbury	10	0	30	10
5E-5	North Bay	10	0	20	0
5E-6	Tomiko	10	0	20	0
5E-7	Parry Sound	20	0	30	20
5E-8	Huntsville	20	0	30	20
5E-9	Algonquin Park	10	0	30	0
5E-10	Brent	20	0	30	0
5E-11	Bancroft	0	10	30	10
5E-12	Renfrew	0	0	30	10
5E-13	Batchewana	10	0	10	30
5-S	Lake of the Woods	10	10	20	10

Rarity of Wetland Type Score (maximum 70 points)

North	ern Ontario Wetland Evaluation	n, Data and Scoring	Record	(November 22,	2010)
4.1.2 SPEC	IES				
4.1.2.1	RREFDING HARITAT	FOR AN ENDAN	NCEREI	O OR THREATENED SPECIES	
		TOR AIT EILDAI	IOLKEL		_
N	Name of species			Source of information	
1)					
2)					
3) _					
4) 5)					
<i>"</i> Γ	Total:		0		
Attach docun		1		ı	
Caarina					
Scoring: For one	e species	250 points			
	ch additional species	250 points			
	1				
(score is cum	nulative, no maximum score)				
	Breeding Habitat for En	dangered Species	Score (n	o maximum)	0
4122	TRADITIONAL MICH	ATION OD EFER	NING II A		D
4.1.2.2	OR THREATENED SP		JING HA	ABITAT FOR AN ENDANGERE	ַם
	Name of species			Source of information	
1) 2)					
3)					
4)					
5)					
	Total:		0		
Attach docum	nentation				
Scoring:					
		150			
	e species ch additional species	150 points 75			
	-				
(score is cum	nulative, no maximum score)				
	Traditional Habita	t for Endangered	Species	Score (no maximum)	0

	Name o	f species				Source of inf	formation	
1)	*Ru	sty Black	bird (Euphagu	s carolinus)		Field Obser	rvation (NRSI Oc	et 5, 2010)
2)								
3)								
4)								
5)								
6)								
7)								
8)								
9)								
10)								
11)								
12)								
13) 14)								
15)								
-5)		enarata 1	ist if nacessam	; Attach documenta	ation			
ng:	racked by	NHIC		pecies in the wetla	nd:			
ng: oer o	racked by	NHIC	ficant animal sp	pecies in the wetlar	nd: =	154		
spe	of provincial ecies	NHIC ally signi	ficant animal space of 50 points 80	pecies in the wetland 14 species 15 species		156		
spe spe spe	of provincial ecies ecies ecies	NHIC ally signi = = = =	50 points 80 95	14 species 15 species 16 species	= =	156 158		
spe spe spe spe spe	of provincia ecies ecies ecies ecies ecies	NHIC ally signi = = = = =	50 points 80 95 105	14 species 15 species 16 species 17 species	= = =	156 158 160		
spe spe spe spe spe	of provincial ecies ecies ecies ecies ecies ecies ecies ecies ecies	NHIC ally signi = = = = =	50 points 80 95 105 115	14 species 15 species 16 species 17 species 18 species	= = = =	156 158 160 162		
specific spe	of provincial ecies	NHIC ally signi = = = = = =	50 points 80 95 105 115 125	14 species 15 species 16 species 17 species 18 species 19 species	= = = = =	156 158 160 162 164		
specific spe	of provincia ecies ecies ecies ecies ecies ecies ecies ecies ecies	NHIC ally signi = = = = = = = =	50 points 80 95 105 115 125 130	14 species 15 species 16 species 17 species 18 species 19 species 20 species	= = = = =	156 158 160 162 164 166		
spe	of provincia ecies ecies ecies ecies ecies ecies ecies ecies ecies ecies ecies	NHIC ally signi = = = = = = = = =	50 points 80 95 105 115 125 130 135	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species	= = = = = =	156 158 160 162 164 166 168		
special specia	provincial	NHIC ally signi = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species	= = = = = =	156 158 160 162 164 166 168 170		
spe	provinciants of provinciants o	NHIC ally signi = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species	= = = = = = =	156 158 160 162 164 166 168 170 172		
spee spee spee spee spee spee spee spee	provincial	ally signi	50 points 80 95 105 115 125 130 135 140 143 146	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species	= = = = = =	156 158 160 162 164 166 168 170 172 174		
spee spee spee spee spee spee spee spee	provinciant of provin	ally signi = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species	= = = = = = =	156 158 160 162 164 166 168 170 172		
special specia	ecies	ally signi = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species 25 species	= = = = = = = = = = = = = = = = = = = =	156 158 160 162 164 166 168 170 172 174	ecies = 178	
spec spec spec spec spec spec spec spec	ecies	ally signi = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species	= = = = = = = = = = = = = = = = = = = =	156 158 160 162 164 166 168 170 172 174	ecies = 178	
specific spe	ecies	ally signi = = = = = = = = = e = e = e = e = e	50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species 25 species	= = = = = = = = = = = = = = = = = = = =	156 158 160 162 164 166 168 170 172 174	ecies = 178	

	PRO	OVINCIALLY	SIGNIFICANT	PLANT SP	ECIES	
	cientific ommon N	names must be Name		Scientific N	Jame	Source of information
1)						<u> </u>
2)			,			
3)						
4)						
5)						
6)						
7)						<u> </u>
8)			 ,			
9)			 ,			
10)			 ,			
11)						
12) 13)						
14)						
15)						_
			 ,			
ring:	in ai a11s	v sionificant nle	ont anacias in the	otland.		
	ovincially	y significant pla	ant species in the	wetland:		
	ovincially =	y significant pla 50 points	ant species in the	wetland:	154	
nber of pro			-		154 156	
mber of pro	=	50 points	14 species	=	-	
mber of pro pecies pecies	=	50 points 80	14 species 15 species	= =	156	
mber of pro	= =	50 points 80 95	14 species 15 species 16 species	= = =	156 158	
mber of properties	= = =	50 points 80 95 105	14 species 15 species 16 species 17 species	= = = =	156 158 160	
mber of pro pecies pecies pecies pecies pecies	= = =	50 points 80 95 105 115	14 species 15 species 16 species 17 species 18 species	= = =	156 158 160 162	
mber of properties pecies peci	= = = =	50 points 80 95 105 115 125	14 species 15 species 16 species 17 species 18 species 19 species	= = = = =	156 158 160 162 164	
mber of pro	= = = = =	50 points 80 95 105 115 125 130	14 species 15 species 16 species 17 species 18 species 19 species 20 species	= = = =	156 158 160 162 164 166	
mber of pro	= = = = =	50 points 80 95 105 115 125 130 135	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species	= = = = = =	156 158 160 162 164 166 168	
mber of pro	= = = = =	50 points 80 95 105 115 125 130 135 140	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species	= = = = =	156 158 160 162 164 166 168 170	
mber of pro pecies	= = = = =	50 points 80 95 105 115 125 130 135 140	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species	= = = = = =	156 158 160 162 164 166 168 170	
mber of pro	= = = = = =	50 points 80 95 105 115 125 130 135 140 143	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species	= = = = =	156 158 160 162 164 166 168 170 172 174	
mber of pro pecies	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species		156 158 160 162 164 166 168 170 172 174	7 species = 178
mber of pro pecies	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149 152 ry species past 2	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species 25 species	= = = = = = = = = = =	156 158 160 162 164 166 168 170 172 174 176	

Northern Ontario	Wetland	Evaluation,	Data and	d Scoring	Record
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(November 22, 2010)

4.1.2.5 REGIONALLY SIGNIFICANT SPECIES (SITE REGION)

Scientific names must be recorded for plant species. Lists of significant species must be approved by MNR.

SIGNIFICANT IN SITE REGION:

	Common Name	Scientific Name	Source of information
1)			
2)			
3)			
4)			
5)			
6)			
7)			
8)		_	
9)			
10)			
11)			
12)			
13)		_	
14)			
15)			

Attach separate list if necessary .Attach documentation.

** Score only if there is an approved list

Scoring:

No. of species significant in Site Region

1 species	=	20	6 species	=	55
2 species	=	30	7 species	=	58
3 species	=	40	8 species	=	61
4 species	=	45	9 species	=	64
5 species	=	50	10 species	=	67

Add one point for every species past 10. (no maximum score)

Significant Species (Site Region) Score (no maximum)

(November 22, 2010)

4.2.1.6 LOCALLY SIGNIFICANT SPECIES (SITE DISTRICT)

Scientific names must be recorded for plant species. Lists of significant species must be approved by MNR.

Common Name	Scientific Name	Source of information
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16	 -	
17		
18		

Attach separate list if necessary .Attach documentation.

Scoring:

No. of species significant in Site District

=	10	6 species	=	41
=	17	7 species	=	43
=	24	8 species	=	45
=	31	9 species	=	47
=	38	10 species	=	49
	= = = =	= 17 = 24 = 31	= 17 7 species = 24 8 species = 31 9 species	= 17 7 species = = 24 8 species = = 31 9 species =

For each significant species over 10 in the wetland, add 1 point.

Locally Significant Species (Site District) Score (no maximum)

(November 22, 2010)

4.1.2.7 SPECIES OF SPECIAL STATUS

Black Duck

Suitable breeding habitat present and within assessment range (Figure 17)

Assessment Category	Check one	Score
40-80 Indicated Pairs/100 km sq		25 points
20-40 Indicated Pairs/100 km sq		20
10-20 Indicated Pairs/100 km sq	X	15
5-10 Indicated Pairs/100 km sq		10
1-5 Indicated Pairs/100 km sq		5
Habitat not suitable		0
Out of assessment range		0

Black Duck Score (maximum 25 points)

15

4.2 SIGNIFICANT FEATURES AND/OR FISH & WILDLIFE HABITAT

4.2.1 NESTING OF COLONIAL WATERBIRDS

Status	Name of species	Source of Information	Score
Currently nesting			50 points
Known to have nested within past 5 years			25
Active feeding area (great blue heron excluded)			15
None known			0

Attach documentation (nest locations etc., if known)

Colonial Waterbirds Score (maximum 50 points)

0

4.2.2. WINTER COVER FOR WILDLIFE

(Check only highest level of significance)

Score (one only)

1)		Provincially significant	100
2)		Significant in Site Region	50
3)		Significant in Site District	25
3)		Locally significant	10
4)	X	Little or poor winter cover present	0

Source of information:

<u>Field Observations (NRSI 2010)</u> - Only 14.6ha of treed swamp was observed within this wetland, which is a very small area compared to the surrounding landscape.

Winter Cover for Wildlife Score (maximum 100 points)

No	thern Ontario Wetland Evalua	tion, Data a	nd Scoring Reco	rd	(November 22	, 2010)
4.2.3 WA	TERFOWL STAGING AND	OR MOUL	TING			
	ly highest level of significance	e for both sta	ging and moulting	ng; score is cum	ulative	
across col	umns, maximum score 150)					
		Staging	Score	Moulting	Score	
4.5			(one only)		(one only)	
1)	Nationally significant		150		150	
2)	Provincially significant		100		100	
3)	Regionally significant		50		50	
4)	Known to occur		10		10	
5)	Not possible		0	***	0	
6)	Not known	X	0	X	0	
	Total:	0		0		
G G						
Source of	information:	-1 M14'	1 C4 C	(<u>•</u>	150	0
	Wateriov	vi Moulting	and Staging Sco	ore (maximum	150 points)	0
121 374	TERFOWL BREEDING					
4.2.4 W P	TERFOWL BREEDING	_				
	(Charle only highest level of) C o	0.00		
	(Check only highest level of	significance	s) SC	ore		
1)	Drovingially sign	nificent	1	00		
1)	Provincially sign			50		
2)	X Habitat suitable	ilicant		10		
3)	Habitat not suita	hla		0		
4)	Habitat not suita	ible		U		
Source of	information:	Field Ob	servations (NRS	I 2010)		
Source of	miormation.	Ticia Ob	scivations (IVIX)	1 2010)		
		Waterfow	l Breeding Sco	re (maximum l (OO noints)	10
		Waterion	i breeding beor	c (maximum re	oo points)	10
4 2 5 MI	GRATOR PASSERINE, SHO	REBIRD O	R RAPTOR STO	DPOVER AREA		
112.5 1111		TEBIND 0	ittun Tott BTC	or o vertimeer		
	(check highest applicable ca	tegory)				
	(eneck inghest appreade ea					
1)	Provincially sign	nificant	1	00		
2)	Significant in Si			50		
3)	Significant in Si	-		10		
4)	X Not significant			0		
-/						
Source of	information:	OMNR Va	lues Map (June 2	25, 2010)		
			T (- , ,		
	Passerine, Shor	ebird or Ra	ptor Stopover S	Score (maximu	m 100 points)	0
	,		- • •	,	• /	
			28			

4.2.6 UNGULATE HABITAT	
EVALUATION	
Score $(1) + (2) + $ one of (3) to (6)	
	Score
(1) X Ungulate summer cover	15 points
(2) Mineral licks	50
(3) Moose aquatic feeding area Class 1	0
(4) X Moose aquatic feeding area Class 2	10
(5) Moose aquatic feeding area Class 3	20
(6) Moose aquatic feeding area Class 4	35
Score is cumulative for a maximum possible score of 100)	
•	re (maximum 100 points) 25
ğ	• /
1.2.7 FISH HABITAT	
1.2.7.1 Spawning and Nursery Habitat	
Гable 5. Area Factors for Low Marsh, High Marsh, and Swan	np Communities.
	Area Factor
< 0.5 ha	0.1
0.5- 4.9	0.2
5.0- 9.9	0.4
	0.6
10.0- 14.9 15.0 -19.9 20.0+ ha	0.6
15.0 -19.9 20.0+ ha	0.6 0.8
15.0 -19.9 20.0+ ha	0.6 0.8
15.0 -19.9 20.0+ ha	0.6 0.8 1.0
Step 1: Fish habitat is not present within the wetland (Score =	0.6 0.8 1.0
15.0 -19.9 20.0+ ha Step 1:	0.6 0.8 1.0
15.0 -19.9 20.0+ ha Step 1: Fish habitat is not present within the wetland (Score =	0.6 0.8 1.0
Step 1: Fish habitat is not present within the wetland (Score = X Fish habitat is present within the wetland (Go to Step 2 Choose only one option X Significance of the spawning and nursery habita	0.6 0.8 1.0 0)
Step 1: Fish habitat is not present within the wetland (Score = X Fish habitat is present within the wetland (Go to Step 2) Step 2: Choose only one option	0.6 0.8 1.0 0)
Fish habitat is not present within the wetland (Score = X Fish habitat is present within the wetland (Go to Step 2) Step 2: Choose only one option X Significance of the spawning and nursery habita (Go to Step 3)	0.6 0.8 1.0 0) 2) t within the wetland is known
Step 1: Fish habitat is not present within the wetland (Score = X Fish habitat is present within the wetland (Go to Step 2) Step 2: Choose only one option X Significance of the spawning and nursery habita (Go to Step 3) Significance of the spawning and nursery habita	0.6 0.8 1.0 0) 2) t within the wetland is known
Fish habitat is not present within the wetland (Score = X Fish habitat is present within the wetland (Go to Step 2) Choose only one option X Significance of the spawning and nursery habita (Go to Step 3)	0.6 0.8 1.0 0) 2) t within the wetland is known
Step 1: Fish habitat is not present within the wetland (Score = X Fish habitat is present within the wetland (Go to Step 2) Step 2: Choose only one option X Significance of the spawning and nursery habita (Go to Step 3) Significance of the spawning and nursery habita	0.6 0.8 1.0 0) 2) t within the wetland is known
Step 1: Fish habitat is not present within the wetland (Score = X Fish habitat is present within the wetland (Go to Step 2) Step 2: Choose only one option X Significance of the spawning and nursery habita (Go to Step 3) Significance of the spawning and nursery habita	0.6 0.8 1.0 0) 2) t within the wetland is known
Step 1: Fish habitat is not present within the wetland (Score = X Fish habitat is present within the wetland (Go to Step 2) Step 2: Choose only one option X Significance of the spawning and nursery habita (Go to Step 3) Significance of the spawning and nursery habita	0.6 0.8 1.0 0) 2) t within the wetland is known
Step 1: Fish habitat is not present within the wetland (Score = X Fish habitat is present within the wetland (Go to Step 2) Step 2: Choose only one option X Significance of the spawning and nursery habita (Go to Step 3) Significance of the spawning and nursery habita	0.6 0.8 1.0 0) 2) t within the wetland is known

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Step	3:	Select the highest appropriate category below a	ttach documentation:			
1)		Significant in Site Region	100 points			
2)		Significant in Site District	50			
3)	X	Locally Significant Habitat (5.0+ ha)	25			
4)		Locally Significant Habitat (<5.0 ha)	15			
		Score for Spawning and Nursery Habit	at (maximum score 100	points)	25	
<u>Step</u>	<u>4:</u> Proc	eed to Steps 4 to 7 <u>only</u> if Step 3 was <u>not</u> answ	vered.			
(Low	(Low Marsh: marsh area from the existing water line out to the outer boundary of the wetland)					
	Low marsh not present (Continue to Step 5) Low marsh present (Score as follows)					

Scoring for Presence of Key Vegetation Groups

Scoring is based on the one most clearly dominant plant species of the dominant form in each Low Marsh vegetation community. Check the appropriate Vegetation Group (see Appendix 16) for each Low Marsh community. Sum the areas of the communities assigned to each Vegetation Group and multiply by the appropriate size factor from Table 5.

Vegetation	Vegetation	Present	Total	Area	Score	Final
Group Number	Group Name	as a	Area	Factor		Score
		Dominant	(ha)			(area
		Form		(see		factor
		(check)		Table 5)		x score)
1	Tallgrass				6 pts	0.0
2	Shortgrass-Sedge				11	0.0
3	Cattail-Bulrush-Burreed				5	0.0
4	Arrowhead-Pickerelweed				5	0.0
5	Duckweed				2	0.0
6	Smartweed-Waterwillow				6	0.0
7	Waterlily-Lotus				11	0.0
8	Waterweed-Watercress				9	0.0
9	Ribbongrass				10	0.0
10	Coontail-Naiad-Watermilfoil				13	0.0
11	Narrowleaf Pondweed				5	0.0
12	Broadleaf Pondweed				8	0.0
	Total Score (max	imum 75 point	cs)			0.0

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Step 5: (**High Marsh**: area from the water line to the inland boundary of marsh wetland type. This is essentially what is commonly referred to as a wet meadow, in that there is insufficient standing water to provide fisheries habitat except during flood or high water conditions.)

High marsh not present (Continue to Step 6)
High marsh present (Score as follows)

Scoring for Presence of Key Vegetation Groups

Scoring is based on the one most clearly dominant plant species of the dominant form in each High 1Marsh vegetation community. Check the appropriate Vegetation Group for each High Marsh community. Sum the areas of the communities assigned to each Vegetation Group and multiply by the appropriate size factor from Table 5.

Vegetation	Vegetation	Present	Total	Area	Score	Final
Group Number	Group Name	as a	Area	Factor		Score
		Dominant	(ha)	(see		(area
		Form		Table 5)		factor
		(check)				x score)
1	Tallgrass				6 pts	0.0
2	Shortgrass-Sedge				11	0.0
3	Cattail-Bulrush-Burreed				5	0.0
4	Arrowhead-Pickerelweed				5	0.0
_	Total Score (ma	ximum 25 po	oints)			12.0

Step 6: (**Swamp**: Swamp communities containing fish habitat, either seasonally or permanently. Determine the total area of seasonally flooded swamps and permanently flooded swamps containing fish habitat.)

Swamp containing fish habitat not present (Continue to Step 7)

X Swamp containing fish habitat present (Score as follows)

Swamp containing fish	Present	Total	Area Factor	Score	TOTAL SCORE
Habitat	(check)	area (ha)	(see Table 5)		(factor x score)
Seasonally flooded				10	0.0
Permanently flooded 10				0.0	
SCO	RE (maximu	m 20 points))		4.0

	Northern Ontario Wetland Evaluation, Data and Sco	oring Record	(Nove	ember 22, 2	010)
<u>Step</u>	7: Calculation of final score				
Score	e for Spawning and Nursery Habitat (Low Marsh) (ma	eximum 75)	=		
Score	e for Spawning and Nursery Habitat (High Marsh) (ma	aximum 25)	=		
Score	e for Swamp Containing Fish Habitat (maximum 20)		=		
		Sum (maximum score	100 points) =	=	0
	4.2.6.2 Migration and Staging Habitat			_	
Step	<u>1:</u>				
1)	X Staging or Migration Habitat is not present in	the wetland (Score = 0)			
2)	Staging or Migration Habitat is present in the to Step 2)	wetland significance of the	ne habitat is k	nown (Go	
3)	Staging or Migration Habitat is present in the (Go to Step 3)	wetland significance of th	ne habitat is no	ot known	
NOT	TE: Only <u>one</u> of Step 2 <u>or</u> Step 3 is to be scored.				
<u>Step</u>	2: Select the highest appropriate category below,	attach documentation:		,	
1)	Significant in Site Region			Score 25 points	
2)	Significant in Site District		1	15	
3)	Locally Significant		1	10	
4)	Fish staging and/or migration habitat		2	-	
	present, but not as above		5)	
	Score for Fish Migration and Staging	Habitat (maximum scor	e 25 points)		0
Step (does	3: Select the highest appropriate category below s not have to be dominant). Note name of river for 2) a	_	designated sit	te type	
				Score	
1)	Wetland is riverine at rivermouth or lacustrine	at rivermouth	2	25 points	
2)	Wetland is riverine, within 0.75 km of rivermore	uth	1	15	
3)	Wetland is lacustrine, within 0.75 km of riverm	outh	1	10	
4)	Fish staging and/or migration habitat		_	-	
	present, but not as above		5)	
	Score for Staging and Migration	Habitat (maximum sco	re 25 points)		0

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4.3 ECOSYSTEM AGE

(Fractional Area = area of wetland type/total area of wetland)

	Area			Scoring
Bog		X	25 =	0.0
Fen, treed to open on deep soils				
floating mats or marl		X	20 =	0.0
Fen, on limestone rock		X	5 =	0.0
Swamp	0.59	X	3 =	1.8
Marsh	0.41	X	0 =	0.0
		Sub Total:		1.8

Fractional

Ecosystem Age Score (maximum 25 points)

2

4.4 GREAT LAKES COASTAL WETLANDS

Score for **coastal** (see text for definition) wetlands only

Choose one only

 wetland < 10 ha</td>
 =
 0 points

 wetland 10- 50 ha
 =
 25

 wetland 51 -IOO ha
 =
 50

 wetland > 100 ha
 =
 75

Great Lakes Coastal Wetlands Score (maximum 75 points)

Northern Ontario Wetland Evaluation, Data and	Scoring R	ecord	(November 22, 2010)
5.0 EXTRA INFORMATION			
5.1 PURPLE LOOSESTRIFE			
X Absent/Not seen			
Present	(a)	One location in wetland Two to many locations	<u>—</u>
	(b)	Abundance code (1 < 20 plants (2 20-99 plants (3 100-999 plants (4 >1000 plants	
5.2 SEASONALLY FLOODED AREAS			
Indicate length of seasonal flooding Check one or more			
Ephemeral Temporal Seasonal Semi-permanent No seasonal flooding		(less than 2 weeks) (2 weeks to 1 month) (1 to 3 months) (>3 months)	X X X
5.3 SPECIES OF SPECIAL SIGNIFICANCE			
5.3.1 Osprey			
Present and nesting (attach map showing nest site) Known to have nested in last 5 yr Feeding area for osprey Not as above		<u>X</u>	
5.3.2 Common Loon			
Nesting in wetland (attach map showing nest site) Feeding at edge of wetland Observed or heard on lake or river adjoining the wetland Not as above		X	
	34		

Northern Ontario Wetland Evaluation, Data and Scoring Record	(November 22, 2010)
INVESTIGATORS	AFFILIATION
INVESTIGATORS	AFFILIATION
Lisa Keable	Natural Resource Solutions Inc.
Derek Goertz	Natural Resource Solutions Inc.
DATES WETLAND VISITED	
September 21 and October	5th, 2010
DATE THIS EVALUATION COMPLETED:	
DATE THIS EVALUATION COMPLETED:	
ESTIMATED TIME DEVOTED TO COMPLETING THE FIEL	LD SURVEY IN "PERSON HOURS"
32 hours (2 people	
September 21 0830-1430hrs and O	ct 5 0800-1800hrs
WE A TOWN CONTINUES OF THE STATE OF THE STAT	
WEATHER CONDITIONS	
i) at time of field work	
Sept 21: Sunny, 16°C, Wind 3 (SW), no p	precipitation
Oct 5: Sunny, 5°-13°C, Wind 2 (W), no pred	•
ii) summer conditions in general	
Overall the summer of 2010 was fairly dry and very hot. Howe	
fall months heavy rains did occur, bringing w OTHER POTENTIALLY USEFUL INFORMATION:	vater levels up substantially.
OTHER FOTENTIALLY USEFUL INFORMATION:	
CHECKLIST OF PLANT AND ANIMAL SPECIES RECORDED IN	N THE WETLAND:
A list of all flora and fauna observed in the wetland is appended.	
35	

Northern Ontario Wetland Evaluation, D	ata and Scoring Record (N	(ovember 22, 2010)
WETLAND I	EVALUATION SCORING RECORD	
WETLAND NAME	Bow Lake Wetland Com	nplex
		•
<u>1.0 E</u>	IOLOGICAL COMPONENT	
1.1 PRODUCTIVITY		
1.1 <u>PRODUCTIVITY</u>		
1.1.1 Growing Degree-Days/Soils		13
1.1.2 Wetland Type		11
1.1.3 Site Type		3
	Total for Productivity	27
	Total for Floductivity	
1.2 <u>BIODIVERSITY</u>		
1.2.1 Number of Wetland Types	45)	13
1.2.2 Vegetation Communities (maxixmu1.2.3 Diversity of Surrounding Habitat (1)		<u>13</u> 6
1.2.4 Proximinty to Other Wetlands	maximum 7)	8
1.2.5 Interspersion		18
1.2.6 Open Water Type		8
	The LC Division in	
Sub Total for Biodiversity	Total for Biodiversity	66
1.3 SIZE (Biological Component)	00	15
TOTAL FOR BIOLOGICAL COMPONE	INT (not to exceed 250)	108
TOTAL FOR BIOLOGICAL COMI ON	(not to exceed 250)	100

Northern Ontario Wetland Evaluation, Data and Scoring Record (November 22, 2	2010)
2.0 SOCIAL COMPONENT	
2.1 ECONOMICALLY VALUABLE PRODUCTS	
2.1 Been on the trade and the second	
2.1.1 Wood Products	
2.1.2 Lowbush Cranberry 0	
2.1.3 Wild Rice 0	
2.1.4 Commercial Fish 2.1.6 Furbearers 3	
2.1.0 Furbearers	_
Total for Economically Valuable Products	19
2.2 RECREATIONAL ACTIVITIES (maximum 80)	36
A A LANDSGADE A ESTIMETICS	
2.3 LANDSCAPE AESTHETICS	
2.3.1 Distinctness 0	
2.3.2 Absence of Human Disturbance 7	
	7
Total for Landscape Aesthetics	7
2.4 EDUCATION AND PUBLIC AWARENESS	
2.4.1 Educational Uses 0	
2.4.2 Facilities and Programs 0	-
2.4.3 Research and Studies (maximum 12)	-
Total for Education and Public Awareness	0
2.5 PROXIMITY TO AREAS OF HUMAN SETTLEMENT	10
2.6 OWNERSH1P	8
Subtotal for Social Component 65 2.7 SIZE (Social Component)	16
2.7 SIZZ (Social Component)	10
2.8 ABORIGINAL AND CULTURAL VALUES (maximum 30)	30
TOTAL FOR SOCIAL COMPONENT (not to exceed 250)	126

2 GROUNDWATER RECHARGE 3.2.1 Site Type 3.2.2 Soils Total for Groundwater Recharge 6 3 WATER QUALITY IMPROVEMENT 3.3.1 Watershed Improvement Factor 3.3.2 Adjacent and Watershed Land Use 3.3.3 Vegetation Form Total for Water Quality Improvement 4 CARBON SINK 6 SHORELINE EROSION CONTROL 12 13 16 17 17 18 17 18 18 19 10 11 11 11 12 13 14 15 16 17 17 18 18 18 18 18 18 18 18	Northern Ontario Wetland Evaluation, Data an	nd Scoring Record	(November 22, 2	2010)
2 GROUNDWATER RECHARGE 3.2.1 Site Type 3.2.2 Soils Total for Groundwater Recharge 6 3 WATER QUALITY IMPROVEMENT 3.3.1 Watershed Improvement Factor 3.3.2 Adjacent and Watershed Land Use 3.3.3 Vegetation Form Total for Water Quality Improvement 4 CARBON SINK 6 SHORELINE EROSION CONTROL 12 13 16 17 17 18 17 18 18 19 10 11 11 11 12 13 14 15 16 17 17 18 18 18 18 18 18 18 18	3.0 HYDRO	DLOGICAL COMPONENT		
3.2.1 Site Type 3.2.2 Soils Total for Groundwater Recharge 6 3 WATER QUALITY IMPROVEMENT 3.3.1 Watershed Improvement Factor 3.3.2 Adjacent and Watershed Land Use 3.3.3 Vegetation Form Total for Water Quality Improvement 4 CARBON SINK 5 SHORELINE EROSION CONTROL 6 GROUNDWATER DISCHARGE	1 FLOOD ATTENUATION			35
Total for Groundwater Recharge 3 WATER QUALITY IMPROVEMENT 3.3.1 Watershed Improvement Factor 3.3.2 Adjacent and Watershed Land Use 3.3.3 Vegetation Form Total for Water Quality Improvement 4 CARBON SINK 5 SHORELINE EROSION CONTROL 12 13 15 16 17 17 18 17 18 19 10 11 11 11 11 11 11 11 11	2 <u>GROUNDWATER RECHARGE</u>			
3.3.1 Watershed Improvement Factor 3.3.2 Adjacent and Watershed Land Use 3.3.3 Vegetation Form Total for Water Quality Improvement 4 CARBON SINK 5 SHORELINE EROSION CONTROL 6 GROUNDWATER DISCHARGE 13 3.3.1 Watershed Improvement Factor 21 21 27 28 29 20 21 20 21 21 20 21 21 21 21 21 21 21 22 21 21 22 21 22 21 22 21 22 21 22 22				
3.3.1 Watershed Improvement Factor 3.3.2 Adjacent and Watershed Land Use 3.3.3 Vegetation Form Total for Water Quality Improvement 4 CARBON SINK 5 SHORELINE EROSION CONTROL 6 GROUNDWATER DISCHARGE 12 13 15 16 17 18 17 18 19 10 11 11 11 12 13 14 15 15 16 17 18 18 18 18 18 18 18 18 18		Total for Groundwater Recharge		6
3.3.2 Adjacent and Watershed Land Use 3.3.3 Vegetation Form Total for Water Quality Improvement 4 CARBON SINK 5 SHORELINE EROSION CONTROL 6 GROUNDWATER DISCHARGE	3 WATER QUALITY IMPROVEMENT			
4 CARBON SINK 5 SHORELINE EROSION CONTROL 6 GROUNDWATER DISCHARGE 13	3.3.2 Adjacent and Watershed Land Use	,	17	
5 SHORELINE EROSION CONTROL 6 GROUNDWATER DISCHARGE 13		Total for Water Quality Improve	ment	46
6 GROUNDWATER DISCHARGE	4 <u>CARBON SINK</u>			6
	5 SHORELINE EROSION CONTROL			15
TOTAL FOR HYDROLOGICAL COMPONENT (not to around 250)	6 GROUNDWATER DISCHARGE			13
TOTAL FOR HYDROLOGICAL COMPONENT (not to exceed 250)	TOTAL FOR HYDROLOG	ICAL COMPONENT (not to exce	ed 250)	12:

Northern Ontario Wetland Evaluation, Data and Scoring Record	(November 22, 2010)
Totalon Shano Wedana Diananash, Bana and Besting Record	(110 tember 22, 2010)
4.0 SPECIAL FEATURES	
4.1 <u>RARITY</u>	
4.1.1 Wetlands	10
 4.1.2 Species 4.1.2.1 Endangered or Threatened Species Breeding 4.1.2.2 Traditional Use by Endangered or Threatened Species 4.1.2.3 Provincially Significant Animals 4.1.2.4 Provincially Significant Plants 4.1.2.5 Regionally Significant Species 	0 0 50 0
4.1.2.6 Locally Significant Species4.1.2.7 Species of Special Status	0 15
Total for Species Rarity	y 65
4.2 <u>SIGNIFICANT FEATURES OR HABITAT</u>	
 4.2.1 Colonial Waterbirds 4.2.2 Winter Cover for Wildlife 4.2.3 Waterfowl Staging and Moulting 4.2.4 Waterfowl Breeding 4.2.5 Migratory Passerine, Shorebird or Raptor Stopover 4.2.6 Ungulate Habitat 4.2.7 Fish Habitat 	0 0 0 10 0 25 25
Total for Significant Fe	eatures and Habitat 60
4.3 <u>ECOSYSTEM AGE</u>	2
4.4 GREAT LAKES COASTAL WETLANDS	0
TOTAL FOR SPECIAL FEATURES (m	aximum 250) 137

Nort	hern Ontario Wetland Evaluation, Data and Sco	ring Record	(November 22, 2010)				
	SUMMARY OF EV	ALUATION RESULT					
Wetland	Bow Lake	Wetland Complex					
TOTAL FO	OR 1.0 BIOLOGICAL COMPONENT		108				
TOTAL FO	OR 2.0 SOCIAL COMPONENT		126				
TOTAL FO	DR 3.0 HYDROLOGICAL COMPONENT		121				
TOTAL FO	OR 4.0 SPECIAL FEATURES COMPONENT		137				
		WETLAND TOTAL	491				
INVESTIC							
Derek Goer							
	Walton (evaluation revision, March 2012)						
Katharnia Walton (Cvaluation Tevision, Match 2012)							
A DELL LATE	IONI						
AFFILIATION							
Natural Resource Solutions Inc.							
Natural Resource Solutions Inc.							
Natural Res	source Solutions Inc.						
<u>DATE</u>	March 15, 2012						

BOTANICAL NA	AME	COMMON NAME	PROVINCIAL STATUS	OMNR STATUS	COSEWIC STATUS	NRSI
	SOURCE		MNR RARE 4th Ed. 2009	SARO List	SARA Registry	Field Observations (2010)
PTERIDOPHYTES		FERNS & ALLIES				
Dryopteridaceae		Wood Fern Family				
Dryopteris	carthusiana	Spinulose Wood Fern	S5			Χ
Dryopteris	intermedia	Evergreen Wood Fern	S5			Х
Onoclea	sensibilis	Sensitive Fern	S5			X
Equisetaceae		Horsetail Family				
Equisetum	fluviatile	Water Horsetail	S5			Х
Isoetaceae		Quillwort Family				
Isoetes	spp.					Х
GYMNOSPERMS		CONIFERS				
Cupressaceae		Cedar Family				
Thuja	occidentalis	Eastern White Cedar	S5			X
						· · · · · · · · · · · · · · · · · · ·
Pinaceae		Pine Family				
Larix	laricina	Tamarack	S5			Χ
Picea	mariana	Black Spruce	S5			X
DICOTYLEDONS		DICOTS				
Asteraceae		Composite or Aster Family				
Eupatorium	maculatum ssp. maculatum	Spotted Joe-pye-weed	S5			Х
Solidago	rugosa ssp. rugosa	Rough Goldenrod	S5			Х
Balsaminaceae		Touch-me-not Family				
Impatiens	capensis	Spotted Touch-me-not	S5			X
трайоно	очротного	Opolica Todoli ilic ilot				
Betulaceae		Birch Family				
Alnus	incana spp. rugosa	Speckled Alder	S5			Х
Betula	papyrifera	White Birch	S5			Х
Ericaceae		Heath Family				
Andromeda	polifolia ssp. glaucophylla	Bog Rosemary	S5			X
Chamaedaphne	calyculata	Leatherleaf	S5			X
Gaultheria	hispidula	Creeping Snowberry	S5			X
Kalmia	polifolia	Bog Laurel	S5			X
Ledum	groenlandicum	Labrador-tea	S5			Х
Vaccinium	myrtilloides	Velvet-leaf Blueberry	S5			Х
Grossulariaceae		Currant Family				
Ribes	glandulosum	Skunk Currant	S5			X
Guttiferae	, ,	St. John's-wort Family				
Hypericum 	boreale	Northern St. John's-wort	S5			X
Hypericum	punctatum	Corymbed St. John's-wort	S5			X
Triadenum	fraseri	Fraser's St. John's-wort	S5			X

	1	T		
		Batter Francisco		
Lamiaceae		Mint Family		
Lycopus	uniflorus	Northern Water-horehound	S5	X
Myricaceae		Wax-myrtle Family		
Myrica	gale	Sweet Gale	S5	X
Inyrica	gaic	Sweet Gale	- 00	^
Nymphaeaceae		Water-lily Family		
Nymphaea	odorata	Fragrant Water-lily	S5	X
		- regress results my		
Ranunculaceae		Buttercup Family		
Coptis	trifolia	Goldthread	S5	X
Thalictrum	pubescens	Tall Meadow-rue	S5	X
Rosaceae		Rose Family		
Comarum	palustre	Marsh Cinquefoil	S5	X
Rubus	allegheniensis	Alleghany Blackberry	S5	X
Rubus	idaeus ssp. melanolasius	Wild Red Raspberry	S5	X
Cyperaceae		Sedge Family		
Carex	gynandra	Nodding Sedge	S5	X
Carex	intumescens	Bladder Sedge	S5	X
Carex	livida	Livid Sedge	S5	X
Carex	stricta	Tussock Sedge	S5	X
Carex	trisperma var. trisperma	Three-seeded Sedge	S5	X
Carex	utriculata	Beaked Sedge	S5	X
Dulichium	arundinaceum	Reed-like Three-way Sedge	S5	X
Eleocharis	spp.			X
Schoenoplectus	pungens	Common Three-square	S5	X
Scirpus	cyperinus	Wool-grass	S5	X
		<u> </u>		
Eriocaulaceae		Pipewort Family	0.5	
Eriocaulon	aquaticum	Seven-angled Pipewort	S5	X
lui de e e e e		laia Familia		
Iridaceae	varainalar	Iris Family	C.F.	
Iris	versicolor	Multi-coloured Blue-flag	S5	X
Juncaceae		Rush Family		
Juncus	brevicaudatus	Short-tailed Rush	S5	X
Juncus	effusus ssp. solutus	Soft Rush	S5	X
Poaceae		Grass Family		
Calamagrostis	canadensis	Blue-joint Grass	S5	Х
Glyceria	canadensis	Rattlesnake Grass	S4S5	Х
Potamogetonacea	ae	Pondweed Family		
Potamogeton	spp.			Х
Potamogeton	epihydrus	Nuttall's Pondweed	S4S5	X
Potamogeton	natans	Common Floating Pondweed	S5	X
Sparganiaceae		Bur-reed Family		
Sparganium	americanum	Nuttall's Bur-reed	S4?	X

Sparganium	fluctuans	Floating Bur-reed	S4?	X
BRYOPHYTES				
Sphagnaceae				
Sphagnum	girgensohnii	Common Green Peat Moss	S5	X
Sphagnum	magellanicum	Midway Peat Moss	S5	X
Sphagnum	palustre		S5	X
Sphagnum	rubellum	Red Peat Moss	S5	X
Sphagnum	squarrosum	Shaggy Peat Moss	S5	X
Sphagnum	wolfianum	Wulfe's Peat Moss	S5	X

BOW LAKE PHASE 1 WETLAND EVALUATION

BEAR PAW WETLAND COMPLEX



Prepared for:
M.K. Ince & Associates Ltd.
11 Cross Street
Dundas, Ontario
L9H 2R3

Project No. 1186A Date: November 10, 2010





November 10, 2010 Project: 1186a

Thomas Bernacki M. K. Ince and Associates Ltd. 11 Cross St. Dundas, ON L9H 2R3

Dear Mr. Bernacki

Re: Bow Lake Phase I Wetland Evaluation (Bear Paw Wetland Complex)
MNR Recommendations

On behalf of Natural Resource Solutions Inc., I am pleased to provide to you an amended version of the Wetland Evaluation for Bear Paw Wetland Complex, originally submitted on September 12, 2010.

This amendment is a result of recommendations prepared by the OMNR (Sault Ste. Marie) upon review of the original evaluation. All recommendations for Bear Paw Wetland Complex have been addressed throughout the OWES data and scoring records resulting in a change in final score from 501 (September 12, 2010) to a score of 547. Based on the scores of each subsection, as well as the overall score of the evaluation, this wetland is not considered to be Provincially Significant.

Below are the recommendations which were provided by MNR as well corresponding comments or changes made by NRSI;

Pg. 1: iv) County or Regional Municipality = District of Algoma and not City of SSM vii) OBM scale = 1:20,000

These edits have been made and are included in the new document.

Pg. 2: viii) If the wetland is a complex, chose 'option b' only

These edits have been made and are included in the new document.

Pg. 4: 1.2.2 Wetland Type – Only marsh and swamp identified; however, low bush cranberry observed (section 2.1.2) which indicates bog or sometimes fen condition. Please provide rationale.

The community in which the cranberry was observed was comprised of yellow birch and red maple as the tall shrub component. It was my recollection that more than one indicator species was needed to call a community a bog or a fen and the presence of the birch and maple initially suggested a swamp community. Wetland Plants of Ontario (Newmaster et. al 1997) indicates that V. macrocarpon can be found in swamps and on wet shores. However, in looking into this further, I came across a reading in the OWES Northern Ontario manual stating that low bush cranberry is restricted to bogs and fens. Due to this finding, we have changed the mapping and scoring so as to include a fen community where the cranberry

was observed. Appropriate maps, legends, and scores have been changed to reflect this edit.

Pg. 5: 1.2.2 Vegetation Communities – Wetland map definitions includes neW2; however it is not shown on map or listed on the data summary form in the appendix. If it does not exist as a separate community then the scoring is correct and we request that you fix the Wetland Evaluation Map Definitions. However, it looks like there could be one vegetation community not labelled on the vegetation map in wetland unit #1. Please address.

The community neW2 does not exist, and should not have appeared on the wetland map definitions. It has been removed. The polygon that was not labelled on the original map is not a wetland community, it was deep water (>2m) with no wetland vegetation present. We have removed the polygon from the map for visual clarity.

Pg. 15: 2.8.1 Aboriginal Values: As part of the wetland evaluation please provide documentation for sources.

A letter documenting an interview with a member of Batchewana First Nation and a biologist from NRSI is appended to the evaluation.

Pg. 18: 3.3.2 Step 2: Determination of Broad Upslope Land Use – Since the area south of wetland unit #2 within the catchment area has been harvested, we would think that the BLU would likely represent more than 20% but less than 50%. If that is not the case, please provide rationale.

NRSI agrees with this recommendation, and has made the appropriate changes to the data and scoring record.

Pg. 21: 4.1.1 Wetlands – Site Region and Site District = 5E-13 (Batchewanan) [Marsh - 10, Swamp - 0, Fen – 10, Bog – 30].

We have included this Site Region and Site District to the table, and have made the appropriate scoring changes resulting from this edit.

- Pg. 23: 4.1.2.3 Provincially Significant Animal Species Please provide a list of faunal species. We apologize for not appending this list originally. A list of all wildlife observations within Bear Paw Wetland Complex is now included.
- Pg. 27: 4.1.2.7 Species of Special Status: Black Duck Please check the line associated with '10-20 pairs/100km sq'.

Noted. This edit has been made and the scoring has been changed accordingly.

- Pg 30: 4.2.7.1 Spawning and Nursery Habitat We are inclined to score Step 3 Item 4 'Locally significant habitat (<0.5ha)' as baitfish were observed by NRSI in section 2.1.4. Palustrine habitats would provide spawning and nursery habitats for these fish. NRSI agrees with this recommendation. We have changed the data scoring record to reflect this change.
- Pg. 32: 4.2.7.2 Migration and Staging Habitat Ensure that Step 1, #1 is checked off. Step 1 is now checked off.

If you have any questions regarding this updated evaluation for Bear Paw Wetland Complex, or require further comment on MNR recommendations, please feel free to contact Lisa Keable at (705) 971-4771.

Sincerely, Natural Resource Solutions Inc.

Lisa Keable

Sisa Kealle

Wetland & Terrestrial Biologist

WETLAND DATA AND SCORING RECORD

	NR ADMINISTRATIVE REGION: NOrth East district: Soult Ste. M
AF	REA OFFICE (if different from District):
(I	DNSERVATION AUTHORITY JURISDICTION: f not within a designated CA, check here:
CC	DUNTY OR REGIONAL MUNICIPALITY: DISTRICT OF Algoma
TC	OWNSHIP: Smilsky Township & Peever Township
(at	ors & concessions: None trach separate sheet if necessary)
M	AP AND AIR PHOTO REFERENCES
a)	Latitude 47° 13′763″ Longitude: 84° 33′ 20.1″
b)	UTM grid reference: Zone: 10 Block: T Grid: E69 50 56 N 5232954
c)	National Topographic Series:
	map name(s) Mamainst Point
	map number(s) $41 N/2$ edition 3
	scale
d)	Aerial photographs: Date photo taken: Scale:
	Flight & plate numbers: Google Earth Images
	(attach separate sheet if necessary)
e) (Ontario Base Map numbers & scale #166805230 1'.20,000
,	

viii) WETLAND SIZE AND BOUNDARIES

a) Single contiguous wetle	and area: hectares
b) Wetland complex comp	prised of 3 individual wetlands:
Wetland Unit Number (for reference)	Size of each wetland unit
Wetland Unit No. 1	3.61 ha
Wetland Unit No. 2	3,71 ha
Wetland Unit No. 3	1.12 ha
Wetland Unit No. 4	ha
Wetland Unit No. 5	ha
Wetland Unit No. 6	ha
Wetland Unit No. 7	ha
Wetland Unit No. 8	ha
Wetland Unit No. 9	ha
Wetland Unit No. 10	ha
(Attach additional sheets if	necessary)
TOTAL WETLAN	ND SIZE 8.44 ha
Brief documentation of reasons for includin	g any areas less than 0.5 ha in size:
(Attach separate sheets if necessary.)	

1.0 BIOLOGICAL COMPONENT

1.1 PRODUCTIVITY

1.1.1 GROWING DEGREE-DAYS/SOILS

GROWING DEGREE DAYS SOILS

(check one)	Estimated Fractional Area
<1600	0.73 clay/loam
1600-2000	0.23 silt/marl
√ 2000-2400	() limestone
2400-2800	0 sand
2800-3000	D humic/mesic
>3000	() fibric
	0.04 granite

SCORING:

Growing Degree Days	Clay/ Loam	Silt/ Marl	Lime- stone	Sand	Humic/ Mesic	Fibric	Granite	
<1600	12	11	9	7	7	6	4	
1600-2000	15	13	11	9	8	7	5	1
2000-2400 🗸	18 10.73	15×0.23	13	11	9	8	7 X 0.04	= 16.8
2400-2800	22	18	15	13	11	9	7	
2800-3000	26	21	18	15	13	10	8	
>3000	30	25	20	18	15	12	9	

(maximum score 30; if wetland contains more than one soil type, evaluate based on the fractional area)

Steps required for evaluation: (maximum score 30 points)

- 1. Select GDD line in evaluation table applicable to your wetland;
- 2. Determine % of area of the wetland for each soil type;
- 3. Multiply fractional area of each soil type by score;
- 3. Sum individual soil type scores (round to nearest whole number).

In wetland complexes the evaluator should aim at determining the percentage of area occupied by the categories for the complex as a whole.

Growing Degree Days/Soils Score (maximum 30 points)

1.1.2 WETLAND TYPE (Fractional Area = area of wetland type/ total wetland area)

Fractional Area Score

Bog		x 3 =
Fen	0,94/8,44	x 6 = 0
Swamp	2.34/8.44	x 8 = 2.22
Marsh	5.16/8.44	x 15 = 9.17

Wetland Type Score (maximum 15 points)

1.1.3 SITE TYPE (Fractional Area = area of site type/ total wetland area)

Fractional Area Score

isolated	x 1 =
palustrine (permanent or intermittent flow)	x 2 = 2
riverine	x 4 =
riverine (at rivermouth)	x 5 =
lacustrine (at rivermouth	x 5 =
lacustrine (on enclosed	
bay, with barrier beach)	x 3 =
lacustrine (exposed to lake)	x 2 =

1.2 BIODIVERSITY

1.2.1 NUMBER OF WETLAND TYPES

Score (Choose one only)	
9 points	
13	
20	
30	

Number of Wetland Types Score (Maximum 30 points) 20

1.2.2 VEGETATION COMMUNITIES

Attach a separate sheet listing community (map) codes, vegetation forms and dominant species. Use the form on the following page to record percent area by dominant vegetation form. This information will be used in other parts of the evaluation.

Communities should be grouped by number of forms. For example, 2 form communities might appear as follows:

2 forms

Code	Forms	Dominant Species
M6	re, ff	re, Typha latifolia; ff, Lemna minor, Wolffia
S1	ts, gc	ts, Salix discolor; gc, Impatiens capensis, Thelypteris palustris

Note that the dominant species for each form are separated by a semicolon. The dominant species (maximum of 2) within a form are separated by commas.

Scoring:

Total # of communities with 1-3 forms	Total # of communities with 4-5 forms	Total # of communities with 6 or more forms
1 = 1.5 points	1 = 2 points	1 = 3 points
2 = 2.5	2 = 3.5	2 = 5
(3) = 3.5	3 = 5	3 = 7
4 = 4.5	(4) = 6.5	4 = 9
5 = 5	5 = 7.5	5 = 10.5
6 = 5.5	6 = 8.5	6 = 12
7 = 6	7 = 9.5	7 = 13.5
8 = 6.5	8 = 10.5	8 = 15
9 = 7	9 = 11.5	9 = 16.5
10 = 7.5	10 = 12.5	10 = 18
11 = 8	11 = 13	11 = 19
+.5 each additional community = $\frac{2}{5}$	+.5 each additional community = \frac{10.5}{0.5}	+1 each additional community =

e.g., a wetland with 3 one form communities, 4 two form communities, 12 four form communities and 8 six form communities would score:

$$6 + 13.5 + 15 = 34.5 = 35$$
 points

Vegetation Communities Score (maximum 45 points)

Wetland Name: Bear I	Paw Wetland Complex
Wetland Size (ha):	8.44 ha
Vegetation Form	% area in which form is dominant
h	_
c	<u>1.4</u> 2
dh	_
de	13.1
ts	24,4
ls	_
ds	_
gc	
m	_
ne	37.9
be	_
re	_
ff	_
f	
su	23.2
u (unvegetated)	<u></u>
Total = 100%	

1.2.3		OF SURROUNDING HABITAT	
1.2.3		recent burn (< 5yr) abandoned agricultural land utility corridor deciduous forest recent cutover or clearcut (<5 yr) coniferous forest mixed forest (at least 25% conifer and 75% deciduous or vic crops abandoned pits or quarries pasture	ee versa)
		ravine fence rows open lake or deep river creek floodplain rock outcrop	
		Diversity of Surrounding Habitat Score (1 for each, maximum 7	points) <u></u>
1.2.4		Y TO OTHER WETLANDS appropriate category only)	Scoring
	1)	Hydrologically connected by surface water to other wetlands (different dominant wetland type), or open lake or river within 1.5 km	8 points
	2)	Hydrologically connected by surface water to other wetlands (same dominant wetland type) within 0.5 km	8
	3)	Hydrologically connected by surface water to other wetlands (different dominant wetland type), or open lake or river from 1.5 to 4 km away	5
	4)	Hydrologically connected by surface water to other wetlands (same dominant wetland type) from 0.5 to 1.5 km away	5
	5)	Within 0.75 km of other wetlands (different dominant wetland type) or open lake or river, but not hydrologically connected by surface water	5
	6)	Within 1 km of other wetlands, but not hydrologically connected by surface water	2
	7)	No wetland within 1 km	0
	р	Proximity to other Wetlands Score (Choose one only maximum 8	noints) 8

1.2.5 INTERSPERSION

Number of Intersections (check one)

Score

1) 26 or less		3 points
2) 27 to 40		6
3) 41 to 60	V	9
4) 61 to 80		12
5) 81 to 100		15
6) 101 to 125		18
7) 126 to 150		21
8) 151 to 175		24
9) 176 to 200		27
10) >200		30

Interspersion Score (Choose one only, maximum 30 points)

1.2.6 OPEN WATER TYPES

Permanently flooded:

1100aca.		
(Check one)		Score
1)	no open water	0 points
2)	type 1	8
3)	type 2	8
4)	type 3	14
5)	type 4	20
6)	type 5	30
7)	type 6	8
8)	type 7	14
9)	type 8	3

Open Water Score (Choose one only, maximum 30 points) 30

1.3 SIZE

8,44 hectares

Size Score (Biological Component) (maximum 50 points)

Table 2. Evaluation Table for Size Score (Biological Component)

Wetland size (ha)	Total Score for Biodiversity Subcomponent									
	<37	37-47	48-60	61-72	73-84 77	85-96	97- 108	109- 120	121- 132	>132
<20 ha	1	5	7	8	(9)	17	25	34	43	50
20-40	5	7	8	9	10	19	28	37	46	50
41-60	6	8	9	10	11	21	31	40	49	50
61-80	7	9	10	11	13	23	34	43	50	50
81-100	8	10	11	13	15	25	37	46	50	50
101-120	9	11	13	15	18	28	40	49	50	50
121-140	10	13	15	17	21	31	43	50	50	50
141-160	11	15	17	19	23	34	46	50	50	50
161-180	13	17	19	21	25	37	49	50	50	50
181-200	15	19	21	23	28	40	50	50	50	50
201-400	17	21	23	25	31	43	50	50	50	50
401-600	19	23	25	28	34	46	50	50	50	50
601-800	21	25	28	31	37	49	50	50	50	50
801-1000	23	28	31	34	40	50	50	50	50	50
1001-1200	25	31	34	37	43	50	50	50	50	50
1201-1400	28	34	37	40	46	50	50	50	50	50
1401-1600	31	37	40	43	49	50	50	50	50	50
1601-1800	34	40	43	46	50	50	50	50	50	50
1801-2000	37	43	47	49	50	50	50	50	50	50
>2000	40	46	50	50	50	50	50	50	50	50

2.0 SOCIAL COMPONENT

2.1 ECONOMICALLY VALUABLE PRODUCTS

2.1.1 WOOD PRODUCTS

Area of wetland forested (ha); not wetland size

1			Score
1) _ \	_ =	<5 ha	0 points
2)	=	5 - 25 ha	4
3)	=	26 - 50 ha	6
4)	=	51 - 100 ha	8
5)	=	101 - 200 ha	11
6)		>200 ha	14

Source of information: NRSI FIELD Observations - Aug 30/31, 2010

Wood Products Score (Score one only, maximum 14 points)

2.1.2 LOWBUSH CRANBERRY

(Check one) Score (Choose one)

present 1) $\sqrt{}$ 2 points absent 2) 0

Source of information: NRSI FIELD OBSEL VATIONS - Aug 30/31, 2010

Lowbush Cranberry Score (maximum 2 points) 2

2.1.3 WILD RICE

(Check one) Score (Choose one)

present (at least 0.5 ha) 1) 10 points absent 2) 0

Source of information: NRSI FIRID Observations - Aug 30/31, 2010

Wild Rice Score (maximum 10 points)

2.1.4 COMMERCIAL FISH (BAIT FISH AND/OR COARSE FISH)

Score (Choose one) present 12 points absent

Source of information: NRSI Field Observations (Aug 30, 2010)

Commercial Fish Score (maximum 12 points) 2

2.1.5 FURBEARERS

(Consult Appendix 9)

Source of information
NRSI Field observation (Aug 30, 2010) NRSI Field observations (Aug 30, 2010) NRSI Field observations (Aug 31, 2010)

Scoring: 3 points for each species, maximum 12

Furbearer Score (maximum 12 points)

2.2 RECREATIONAL ACTIVITIES

	Type of W	etland-Associated Use	
Intensity of Use	Hunting	Nature Enjoyment/ Ecosystem Study	Fishing
High	40 points	40 points	40 points
Moderate	20	20	20
Low	(8)	(8)	8)
Not Possible	0	0	0

(score one level for each of the three wetland uses; scores are cumulative; maximum score 80 points)

Sources of information:

hunting: Field Observations (NRSI-Aug 30/31, 2010)
nature: Field Observations - access issues (NRSI-Aug 30/31)

fishing: Field Observations - (NRSI - Aug 30/31, 2010

Recreational Activities Score (maximum 80 points) 24

2.3 LANDSCAPE AESTHETICS

2.3.1 DISTINCTNESS	
(Check one)	Score (Choose one)
Clearly distinct 1)	3 points
Indistinct 2) \square	0
	
Landscape Distinct	tness Score (maximum 3 points)
2.3.2 ABSENCE OF HUMAN DISTURBANCE	
(Check one)	Score (Choose one)
Human disturbances absent or nearly so	1) $\sqrt{}$ 7 points
One or several localized disturbances	
Moderate disturbance; localized water pollution	2) 4 2
Wetland intact but impairment of ecosystem quality	2) 2
intense in some areas	4) 1
Extreme ecological degradation, or water pollution	7)1
severe and widespread	5) 0
The state of the s	
Source of information: NVSI Field DISELY VOTO	XIS CAUG 30/31 2010/
Absence of Human Disturb	pance Score (maximum 7 points) 7
2.4 EDUCATION AND PUBLIC AWARENESS	
2.4.1 EDUCATIONAL USES	
(Check one)	Score (Choose one)
Frequent 1)	20 points
Infrequent 2)	12
Frequent 1) Infrequent 2) No visits 3)	0
Source of information:	
20222 80 00 00 00 00 00	
Educational U	Jses Score (maximum 20 points)
2.4.2 FACILITIES AND PROGRAMS	
04.00 1: 4	6
Staffed interpretation centre with shelters,	Score (choose one)
trails, literature	= 8 points
No interpretation centre or staff, but a system	
of self-guiding trails and observation points	
or brochures available.	= 4
Facilities such as maintained paths (e.g., wood chips)	
boardwalks, boat launches, or observation towers	
but no brochures or other interpretation	= 2
No facilities or programs	= 0
Source of information: NRSI FIELD OBSET 40 TONS (MADN/21 2010)
Facilities and Pro	grams Score (maximum 8 points)

2.4.3 RESEARCH AND STUDIES

(check appropriate spaces)

Long term research has been done

Research papers published in refereed scientific
journal or as a thesis

One or more (non-research) reports have been written
on some aspect of the wetland's flora, fauna,

hydrology, etc. 3) ____ 5
No reports known 4) ____ 0

Attach list of known reports by above categories

Research and Studies Score (Score is cumulative, maximum 12 points)

2.5 PROXIMITY TO AREAS OF HUMAN SETTLEMENT

Circle the highest scoring category applicable

Distance of wetland from settlement	population >10,000	population 2,500 - 10,000	population <2,500 or cottage community
Within or adjoining settlement	40 points	26	16
0.5 to 10 km from settlement	26	16	(10)
10 to 60 km from settlement	12	8	4
>60 km from settlement	5	2	0
>100 km from settlement	0	0	0

Name of settlement: MONT LOW HALL DOWN
--

Proximity to Human Settlement Score (maximum 40 points)

2.6	OWNERSHIP (FA = fractional area)	Fractional Score Area
	Wetland in public or private ownership, held under contract or in trust for wetland protection	
	Wetland in public ownership, not as above	$N = N \times N = N \times N = N \times N \times N \times N \times N \times $
	Wetland in private ownership, not as above	x 4 =
	Source of information:	Ownership Score (maximum 10 points)

2.7 SIZE (See size table -- Social Component) hectares

Size Score (Social Component) (maximum 20 points) 5

Table 3. Evaluation Table for Size Score (Social Component)

Wetland size (ha)	Total for Size Dependent Score									
	<30	31-45	46-60	61-75	76-90	91-105	106-120	121-135	136-150	>150
2-4	1	2	4	8	12	13	14	14	15	16
5-8	2	2	5	9	13	14	15	15	16	16
9-12	3	3	6	10	14	15	15	16	17	17
13-17	3	4	7	10	14	15	16	16	17	17
18-28	4	5	8	11	15	16	16	17	17	18
29-37	5	7	10	13	16	17	18	18	19	19
38-49	5	7	10	13	16	17	18	18	19	20
50-62	5	8	11	14	17	17	18	19	20	20
63-81	5	8	11	15	17	18	19	20	20	20
82-105	6	9	11	15	18	18	19	20	20	20
106-137	6	9	12	16	18	19	20	20	20	20
138-178	6	9	13	16	18	19	20	20	20	20
179-233	6	9	13	16	18	20	20	20	20	20
234-302	7	9	13	16	18	20	20	20	20	20
303-393	7	9	14	17	18	20	20	20	20	20
394-511	7	10	14	17	18	20	20	20	20	20
512-665	7	10	14	17	18	20	20	20	20	20
666-863	7	10	14	17	19	20	20	20	20	20
864-1123	8	12	15	17	19	20	20	20	20	20
1124-1460	8	12	15	17	19	20	20	20	20	20
1461-1898	8	13	15	18	19	20	20	20	20	20
1899-2467	8	14	16	18	20	20	20	20	20	20
>2467	8	14	16	18	20	20	20	20	20	20

2.8 ABORIGINAL AND CULTURAL VALUES

Either or both Aboriginal or Cultural Values may be scored. However, the maximum score permitted for 2.8 is 30 points.

2.8.1 ABORIGINAL VALUES

Full documentation of sources must be attached to the data record.

 Significant
 =
 30 points

 Not Significant
 =
 0

 Unknown
 =
 0

2.8.2 CULTURAL HERITAGE

Significant = 30 points

Not Significant = 0

Unknown = 0

Aboriginal Values/Cultural Heritage Score (maximum 30 points) 30

3.0 HYDROLOGICAL COMPONENT

3.1 FLOOD ATTENUATION

If the wetland is a complex including isolated wetlands, apportion the 100 points according to area. For example, if 10 ha of a 100 ha complex is isolated, the isolated portion receives the maximum proportional score of 10. The remainder of the wetland is then evaluated out of the remaining 90 points.

Step 1.

If wetland is entirely Isolated, go directly to Step 5.

If wetland is lacustrine and the ratio of wetland area:lake area is <0.1, or wetland is riverine on the St. Mary's River, go to Step 5.

All other wetlands, go through steps 2, 3, 4 and 5.

Step 2.	Determination of Upstream Detention Factor (I	OF)
(a)	Wetland area (ha)	8,44
(b)	Total area (ha) of upstream detention areas	10.34
4.5	(include the wetland itself)	211.2
(c)	Ratio of (a):(b)	0.8102
(d)	Upstream detention factor: (c) x 2 =	
	(Maximum allowable factor = 1)	
Step 3.	Determination of Peak Flow Attenuation Factor	(AF)
(a)	Wetland area (ha)	8,44
(b)	Size of catchment basin (ha) upstream of wetland	.20 M
	(include wetland itself in catchment area)	124,0+
(c)	Ratio of (a):(b)	0,0604
(d)	Wetland attenuation factor: (c) $\times 10 =$	0.664
	(Maximum allowable factor = 1)	-
Step 4.	Determination of Wetland Surface Form Factor	(FF)

From the list below, select the surface form which best describes the wetland.

	Factor
Flooded with little or no aquatic vegetation	0
Flooded but with submergent, emergent or floating vegetation	0.2
Flat (lawn) vegetation (typical of fens)	V 0.5
Hummock-depression microtopography	0.7
Patterned (e.g., string bog, ribbed fen)	1.0
	Factor (FF) 015
(Maximum allo	wable factor = 1)

Step 5. Calculation of Final Score 1. Wetland is entirely Isolated 100 points 2. Wetland is lacustrine and the ratio of wetland area: lake area is <0.1 0 points 3. Wetland is riverine along the St. Mary's River 0 points 4. For all other wetlands*, calculate as follows: Upstream Detention Factor (DF) (Step2) (a) Wetland Attenuation Factor (AF) (Step 3) (b) Surface Form Factor (FF) (Step 4) (c) $[(DF + AF + FF)/3] \times 100*$ * Unless wetland is a complex including isolated portions -- see above Total Flood Attenuation Score (maximum 100 points) 3.2 GROUND WATER RECHARGE 3.2.1 SITE TYPE (a) Wetland > 50% lacustrine (by area) or located on the Score = 0St. Mary's River Wetland not as above. Calculate final score as follows: (b) (FA = area of site type/total area of wetland) x20 = 20FA of isolated or palustrine wetland FA of riverine wetland x 5 =FA of lacustrine wetland (wetland <50% lacustrine) x 0 =

3.2.2 SOILS

EVALUATION:

Dominant Wetland Type	Sand, loam, gravel, till	Clay, bedrock
Lacustrine or on St. Mary's River	0	0
Isolated	10	5
Palustrine	(b)	4
Riverine (not on St. Mary's River)	5	2

Hydrological Soil Class Score (maximum 10 points) +

Site Type Score: (maximum 20 points) 20

3.3 DOWNSTREAM WATER QUALITY IMPROVEMENT

3.3.1 WATERSHED IMPROVEM	1ENT	FACTOR
--------------------------	------	--------

Calculation of Watershed Improvement Score is based upon the fractional area (FA) of each site type within the wetland. FA = area of site type/total area of the wetland

Site Type	Improvement Factor (IF)
Isolated	\overline{FA} $\times 0.5 =$
Riverine	$FA = x \cdot 1.0 = $
Palustrine with no inflow	$FA 0.5723 \times 0.7 = 0.4006 7 24 949$
Palustrine with inflows	FA 0.4277x 1.0 = 0.4277
Lacustrine on lake shoreline	A = 0.2 = 0.2
Lacustrine at lake inflow or outflow	FA = x 1.0 =
그 아이들은 사람이 없는 사람이 가장 하는 것이 되었다. 그 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들이 없다.	

Watershed Improvement Score (IF x 30) (maximum = 30) 25

3.3.2 ADJACENT AND WATERSHED LAND USE EVALUATION:

Step 1. Determination of Maximum Initial Score

Wetland on the Great Lakes or St. Mary's River (Go to Step 5a)

✓ All other wetlands (Go through steps 2, 3, 4, and 5b)

Step 2. Determination of Broad Upslope Land Use (BLU)

Assess broad upslope land uses as logging within the previous 5 years, agriculture, or other activities which alter the natural vegetation cover in an extensive manner.

Choose one	Score
> 50% of catchment basin	20
20-50% of catchement basin	(14)
< 20% of catchment basin	4
	0

Score for BLU 14

Step 3. Determination of Linear Upslope Land Uses (LUU)

Assess linear upslope uses (LUU) e.g., roads, railways, hydro corridors, pipelines, etc., crossing the upslope catchment within 200 m of the wetland boundary.

Choose the highest only	Score
Major corridor ¹	15
Secondary corridor	11
Tertiary corridor	6
Temporary or abandoned	3
None	0
	Score for LUU points

¹ Major, secondary and tertiary roads are those that are indicated as such on the provincial highways map. Major hydro corridors are trunk lines coming directly from a generating station. Major pipelines are trans-continental lines. Secondary corridors are regional distribution lines (i.e. multi-cable hydro corridors not emanating directly from a generating station or regional gas distribution lines). Tertiary corridors are single hydro lines or local gas distribution lines (i.e. to domestic users).

Step 4. Determination of Point-source Land Uses (PS)

Assess pont source (PS) land uses producing industrial effluents such as heavy industry, pulp and paper plants, major aggregate operations (but not small pits use for local road construction), etc. Score as 'present' only if a point source land use is located less than 1 km upstream from the wetland.

Present Score
Not present 0

Score for PS 0

Step 5. Calculation of total score for Adjacent and Watershed Land Use

a) Wetland on the Great Lakes or St. Mary's River 0

b) All other wetlands, calculate as follows:

Final Score BLU + LUU + PS 17

3.3.3 VEGETATION FORM

Choose the category that best describes the vegetation of the wetland

Score

Trees, shrubs or herbs (h, c, ts, ls, gc)

Emergents, submergents (ne, re, be, f, ff, su)

Little or no vegetation (u)

8 points

10

0

Dominant Vegetation Form Score (maximum 10 points)

3.4 CARBON SINK

Choose the category that best describes the wetland.

1) Wetland a bog or fen with > 50% organic soils 15 points

2) Wetland has organic soils occupying 10 to 50% of the area (i.e. mainly mineral or undesignated soils, any wetland type) 6

3) Marshes and swamps with >50% organic soil 9

4) Wetland with less than 10% or soils organic 0

Carbon Sink Score (maximum 15 points)

3.5 SHORELINE EROSION CONTROL

From the wetland vegetation map determine the dominant vegetation type within the erosion zone for lacustrine and riverine site type areas only. Score according to the factors listed below.

Step 1.	Score	
Wetland entirely isolated or palustrine	0	
Any part of the wetland riverine, or lac	ustrine (proce	ed to Step 2)
Step 2. Choose the one characteristic that best describ (See text for the definition of shoreline.)	es the shoreling	ne vegetation.
	Score	
Trees and shrubs		15
Emergent vegetation	8	
Submergent vegetation	6	
Other shoreline vegetation		3
No vegetation	0	

Shoreline Erosion Control Score (maximum 15 points)

3.6 GROUNDWATER DISCHARGE

(Circle the characteristics that best describe the wetland being evaluated and sum the scores.)

Category	Catchment interaction			
Wetland type	Bog = 0	Swamp/Marsh = 2	Fen = 5	
Basin topography	Flat/Rolling = 0	Hilly =(2)	Major relief break = 5	
Wetland area:Upslope catchment area	Large (>50%) = 0	Moderate (6 - 50%) = 2	Small (<5%) = 5	
Lagg development	None found = 0	Minor = 2	Extensive = 5	
Seeps at wetland edge	None found = 0	1 to 3 seeps = 5	4 or more seeps = 10	
Iron precipitates evident at edge	None = 0	1-3 deposits = 2	4 or more deposits = 5	
Surface marl deposits	None = 0	1-3 deposits = 2	> 3 = 5	
Wetland pH	Low < 4.2 = 0	Moderate 4.2-5.7 = 5	High >5.7 = 10	
Catchment soil coverage	Patchy = 0	Thin (<20 cm) = 2	Thick = 5	
Catchment soil permeability	Low = 0	Moderate = 2	High = 5	

(Scores are cumulative, maximum score 30 points)

Groundwater Discharge Score (maximum 30 points)

4.0 SPECIAL FEATURES COMPONENT

4.1 RARITY

4.1.1 WETLANDS

Hills Site Re	egion and Site District (5E only):	5E-13
	e (check one or more)	00
	Bog	
	Fen	
V	Swamp	
V	Marsh	

Evaluation Table for Scoring Rarity of Wetland Type.

Unit Number	Site Region & District	Marsh	Swamp	Fen	Bog
2E	James Bay	20	20	0	20
2W	Big Trout Lake	20	20	0	10
3E	Lake Abitibi	20	20	10	0
3W	Lake Nipigon	20	20	10	0
3S	Lake St. Joseph	20	20	10	0
4E	Lake Temagami	20	20	10	0
4W	Pigeon River	20	10	20	0
4S	Wabigoon Lake	20	10	20	0
5E-1	Thessalon	10	0	30	20
5E-2	Gore Bay	20	0	20	20
5E-3	La Cloche	20	0	30	20
5E-4	Sudbury	10	0	30	10
5E-5	North Bay	10	0	20	0
5E-6	Tomiko	10	0	20	0
5E-7	Parry Sound	20	0	30	20
5E-8	Huntsville	20	0	30	20
5E-9	Algonquin Park	10	0	30	0
5E-10	Brent	20	0	30	0
5E-11	Bancroft	0	10	30	10
5E-12	Renfrew	0	0	30	10
5E-13	Batchewana	10)	(0)	(0)	30
5-S	Lake of the Woods	10	10	20	10

Rarity of Wetland Type Score (maximum 70 points) 20

4.1.2 SPECIES

4.1.2.1 BREEDING HABITA	AT FOR AN ENDANGERED OR THREATENED SPECIES
Name of species	Source of information
1)	
2)	
3)	
Attach documentation	
Scoring	
For one species	250 points
For each additional species	250
Score is cumulative, no maximum	score)
Breeding Habitat for	Endangered or Threatened Species Score (no maximum)
4.1.2.2 TRADITIONAL MIGRA	TION OR FEEDING HABITAT FOR AN ENDANGERED
OR THREATENED SPECIES	THE TOTAL PROPERTY OF THE PROP
Name of species	Source of information
1)	
2)	
3)	
Attach documentation	
Scoring	
For one species	150 points
For each additional species	75
Score is cumulative, no maximum s	score)
Traditional Habitat fo	r Endangered or Threatened Species Score (no maximum)

4.1.2.3 PROVINCIALLY SIGNIFICANT ANIMAL SPECIES

Attach documentation.

Scoring

Number of provincially significant animal species in the wetland:

One species	=	50 points	14 species	=	154
2 species	=	80	15 species	=	156
3 species	=	95	16 species	=	158
4 species	=	105	17 species	=	160
5 species	=	115	18 species	=	162
6 species	=	125	19 species	=	164
7 species	=	130	20 species	=	166
8 species	=	135	21 species	=	168
9 species	=	140	22 species	=	170
10 species	=	143	23 species	=	172
11 species	=	146	24 species	=	174
12 species	=	149	25 species	=	176
13 species	=	152	40.000		

Add one point for every species past 25 (for example, 26 species = 177 points, 27 species = 178 points etc.)

(no maximum score)

Provincially Significant Animal Species Score (no maximum)

4.1.2.4 PROVINCIALLY SIGNIFICANT PLANT SPECIES

(Scientific names must be recorded)

Common Name	Scientific Name	Source of information
1) Oval-leaved bilberry	Vaccinum ovalifoli	UM NRSI Field Observation
2)		(Aug 30, 2010)
4)		
5)		-

Attach separate list if necessary. Attach documentation.

Scoring

Number of provincially significant plant species in the wetland:

=	50 points	14 species	=	154
=	80	15 species	=	156
=	95	16 species	=	158
=	105	17 species	=	160
=	115	18 species	=	162
=	125	19 species	=	164
=	130	20 species	=	166
=	135		=	168
=	140	The state of the s	=	170
=	143		=	172
=	146		=	174
=	149		=	176
=	152	2000		
		= 80 = 95 = 105 = 115 = 125 = 130 = 135 = 140 = 143 = 146 = 149	= 80 15 species = 95 16 species = 105 17 species = 115 18 species = 125 19 species = 130 20 species = 135 21 species = 140 22 species = 143 23 species = 146 24 species = 149 25 species	= 80 15 species = 95 16 species = 105 17 species = 115 18 species = 125 19 species = 130 20 species = 135 21 species = 140 22 species = 143 23 species = 146 24 species = 149 25 species = 149 25 species = 149

Add one point for every species past 25 (for example, 26 species = 177 points, 27 species = 178 points etc.)

Provincially Significant Plant Species Score (no maximum) 50

4.1.2.5 REGIONALLY SIGNIFICANT SPECIES (SITE REGION)

Scientific names must be recorded for plant species. Lists of significant species to be scored must be approved by MNR.

SIGNIFICANT IN SITE REGION:

Common Name	Scientific Name	Source of information
1)		
2)		
3)		
4)		
5)		
6)		
7)		
8)		

Attach separate list if necessary; Attach documentation

Scoring

No. of species significant in Site Region

One species	=	20	6 species	=	55
2 species	=	30	7 species	=	58
3 species	=	40	8 species	=	61
4 species	=	45	9 species	=	64
5 species	=	50	10 species	=	67

Add one point for every species past 10. (No maximum score)

Significant Species (Site Region) Score (no maximum)

^{**} Score only if there is an approved list.

4.2.1.6 LOCALLY SIGNIFICANT SPECIES (SITE DISTRICT)

Scientific names must be recorded for plant species. Lists of significant species to be scored must be approved by MNR.

Common Name	Scientific Name	Source of information
1)		
2)		
3)		
4)		
5)		
6)		
7)		
8)	_	
9)		
10)		

Attach separate list if necessary; Attach documentation.

Scoring

No. of species significant in Site District

						_
One species	=	10	6 species	=	41	
2 species	=	17	7 species	=	43	
3 species	=	24	8 species	=	45	
4 species	=	31	9 species	=	47	
5 species	=	38	10 species	=	49	

For each significant species over 10 in the wetland, add 1 point.

Locally Significant Species (Site District) Score (no maximum)

4.1.2.7 SPECIES OF SPECIAL STATUS

Black Duck

Suitable breeding habitat present and within assessment range (Figure 17)

Assessment Category	Check one	Score
40 - 80 Indicated Pairs/100 km sq		25 points
20 - 40 Indicated Pairs/100 km sq		20
10 - 20 Indicated Pairs/100 km sq		15
5 - 10 Indicated Pairs/100 km sq		10
1 - 5 Indicated Pairs/100 km sq		5
Habitat not suitable		0
Out of assessment range		0

Black Duck Score (maximum 25 points) 15

4.2 SIGNIFICANT FEATURES AND HABITATS

4.2.1 NESTING OF COLONIAL WATERBIRDS

Status	Name of species	Source of information	Score
Currently nesting			50 points
Known to have nested within past 5 years			25
Active feeding area (great blue heron excluded)			15
None known			0

Attach documentation (nest locations, etc., if known)

Colonial Waterbirds Score (maximum 50 points)

4.2.2. WINTER COVER FOR WILDLIFE

(Check only highest level of significance)	Score (one only
1) Provincially significant	100 points
Significant in Site Region	50
3) Significant in Site District	25
3) Locally significant	10
4) Little or poor winter cover present	0

Source of information: NRSI Observations (Aug30/31, 2010) -> Only 0, 12 ha of treed swamp present in wetland. Also referred to MNR values Map (June 25, 10) winter cover for Wildlife Score (maximum 100 points) 0

4.2.3 WATERFOWL STAGING AND/OR MOULTING

(Check only highest level of significance for both staging and moulting; score is cumulative across columns, maximum 150 points)

		Staging	Score (one only)	Moulting	Score (one only)
1)	Nationally significant		150		150
2)	Provincially significant		100		100
3)	Regionally significant		50		50
4)	Known to occur		10		10
5)	Not possible		0		0
6)	Not known		0		0
So	urce of information:				

Waterfowl Moulting and Staging Score (maximum 150 points)

4.2.4 WATERFOWL BREEDING

(Che	Score	
1)	Provincially significant	100
2)	Regionally significant	50
3) V	Habitat suitable	10)
4)	Habitat not suitable	0

Source of information: Field Observations (NESI-Aug 30/31, 2010)

Waterfowl Breeding Score (maximum 100 points)

4.2.5 MIGRATORY PASSERINE, SHOREBIRD OR RAPTOR STOPOVER AREA

(check highest applicable category)

		Score
1)	Provincially significant	100
2)	Significant in Site Region	50
3)	Significant in Site District	10
4)	Not significant	0

Source of information: MNR Value Map (June 25, 2010) & Field Observations

Passerine, Shorebird or Raptor Stopover Score (maximum 100 points)

4.2.6 UNGULATE HABITAT

EVALUATION:

Score (1)	+(2) + one of (3) to (6)	
,		Score
(1) <u>V</u>	Ungulate summer cover	= 15 points
(2)	Mineral licks	= 50
(3)	Moose aquatic feeding area Class 1	= 0
(4)	Moose aquatic feeding area Class 2	= 10
(5) 🗸	Moose aquatic feeding area Class 3	= 20
(6)	Moose aquatic feeding area Class 4	= 35

(Score is cumulative for a maximum possible score of 100)

Ungulate Habitat Score (maximum 100 points) 35

4.2.7 FISH HABITAT

4.2.7.1 Spawning and Nursery Habitat

Table 5. Area Factors for Low Marsh, High Marsh and Swamp Communities.

No. of ha of Fish Habitat	Area Factor	
< 0.5 ha	0.1	
0.5 - 4.9	0.2	
5.0 - 9.9	0.4	
10.0 - 14.9	0.6	
15.0 - 19.9	0.8	
20.0+ ha	1.0	

Step 1:

____ Fish habitat is not present within the wetland (Score = 0)

✓ Fish habitat is present within the wetland (Go to Step 2)

Step 2: Choose only one option

1) V Significance of the spawning and nursery habitat within the wetland is known (Go to Step3)

2) ____ Significance of the spawning and nursery habitat within the wetland is not known (Go through Steps 4, 5, 6, and 7)

Step 3:	Select the highest appropriate category below, attach documentation: Significant in Site Region	100 points
2)	Significant in Site District	50
3)	Locally Significant Habitat (5.0+ ha)	25
4)	Locally Significant Habitat (<5.0 ha) Score for Spawning and Nursery Habitat (maximum score	15) 100 points) <u>15</u>
	roceed to Steps 4 to 7 only if Step 3 was not scored w Marsh: marsh area from the existing water line out to the outer boundary	of the wetland)
_	Low marsh not present (Continue to Step 5) Low marsh present (Score as follows)	

Scoring for Presence of Key Vegetation Groups

Scoring is based on the one most clearly dominant plant species of the dominant form in each Low Marsh vegetation community. Check the appropriate Vegetation Group (see Appendix 16) for each Low Marsh community. Sum the areas of the communities assigned to each Vegetation Group and multiply by the

appropriate size factor from Table 5.

Vegetation Group Number	Vegetation Group Name	Present as a Dominant Form (check)	Total Area (ha)	Area Factor (see Table 5)	Score	Final Score (area factor x score)
1	Tallgrass				6 pts	
2	Shortgrass-Sedge				11	
3	Cattail-Bulrush-Burreed				5	
4	Arrowhead-Pickerelweed				5	
5	Duckweed				2	
6	Smartweed-Waterwillow				6	
7	Waterlily-Lotus				11	
8	Waterweed-Watercress				9	
9	Ribbongrass				10	
10	Coontail-Naiad-Watermilfoil				13	
11	Narrowleaf Pondweed				5	
12	Broadleaf Pondweed				8	
	Tota	l Score (maxi	imum 75	points)		

High marsh	not present (Continue to Step 6)
	present (Score as follows)

Scoring is based on the one most clearly dominant plant species of the dominant form in each High Marsh vegetation community. Check the appropriate Vegetation Group for each High Marsh community. Sum the areas of the communities assigned to each Vegetation Group and multiply by the appropriate size factor from Table 5.

Vegetation Group Number	Vegetation Group Name	Present as a Dominant Form (check)	Total Area (ha)	Area Factor (see Table 5)	Score	Final Score (area factor x score)
1	Tallgrass				6 pts	
2	Shortgrass-Sedge				11	
3	Cattail-Bulrush-Burreed				5	
4	Arrowhead-Pickerelweed				5	
	Tota	l Score (maximum	25 points			

Swamp : Swamp communities containing fish habitat, either seasonally or permanently. the total area of seasonally flooded swamps and permanently flooded swamps containing fish
 Swamp containing fish habitat not present (Continue to Step 7) Swamp containing fish habitat present (Score as follows)

Swamp containing fish habitat	Present (check)	Total area (ha)	Area Factor (see Table 5)	Score	TOTAL SCORE (factor x score)
seasonally flooded				10	
permanently flooded				10	

Northern Ontario Wetlands Evaluation, Data and Scoring Record	March 1993
Step 7: Calculation of final score	
Score for Spawning and Nursery Habitat (Low Marsh) (maximum 75 points)	=
Score for Spawning and Nursery Habitat (High Marsh) (maximum 25 points)	=
Score for Swamp Containing Fish Habitat (maximum 20 points)	=
Sum (maximum sc	ore 100 points) =
4.2.7.2 Migration and Staging Habitat	
Step 1:	
1) $$ Staging or Migration Habitat is not present in the wetland (Score = 0)	
2) Staging or Migration Habitat is present in the wetland, significance of the Step 2)	habitat is known (Go to
3) Staging or Migration Habitat is present in the wetland, significance of the h to Step 3)	abitat is not known (Go
Only one of Step 2 or Step 3 is to be scored.	
Step 2: Select the highest appropriate category below, attach documentation	on:
Score 1) Significant in Site Region	25 points
2) Significant in Site District	15
Locally Significant	10
	10
Fish staging and/or migration habitat present, but not as above	5
Score for Fish Migration and Staging Habitat (maximum	score 25 points)
<u>Step 3:</u> Select the highest appropriate category below based on presence of the ci.e. does not have to be the dominant site type). Note name of river for 2) and 3).	designated site type
Wetland is riverine at rivermouth or lacustrine at rivermouth	Score 25 points
2) Wetland is riverine, within 0.75 km of rivermouth	15
3) Wetland is lacustrine, within 0.75 km of rivermouth	10
4) Fish staging and/or migration habitat present, but not as above Score for Staging and Migration Habitat (maximum)	score 25 points)

4.3 ECOSYSTEM AGE (Fractional Area = Area of wetland type/total area of wetland)

	Fractional Area	Scoring
Bog	x 2	5
Fen, treed to open on deep soils, floating mats or marl	0.1114 x 2	0 2,2274
Fen, on limestone rock	x 5	5
Swamp	0,2773 x 3	0,8318
Marsh	0,6114 x (0_0

4.4 GREAT LAKES COASTAL WETLANDS

Score for coastal (see text for definition) wetlands only

Great Lakes Coastal Wetlands Score (maximum 75 points)

5.0 EXTRA INFORMATION

5.1 PURPLE LOOSESTRIFE

✓ Absent/Not seen			
Present	(a)	One location in wetlar Two to many locations	
	(b)	abundance code (1) < 20 plants (2) 20-99 plants (3) 100-999 plants (4) >1000 plants	Ξ
5.2 SEASONALLY FLO	ODED	AREAS	
Indicate length of seasonal fl	looding		
check one or more			
No seasonal flooding Ephemeral Temporal Seasonal Semi-permanent No seasonal flooding	(2 v (1 t (>3	s than 2 weeks) weeks to 1 month) o 3 months) months)	<u>√</u>
5.3.1 Osprey	- E-E-R		
	ve neste for Os	attach map showing need in last 5 yrs. prey	est site)
5.3.2 Common Loon			
Feeding at ed	ige of wheard o	attach map showing ne vetland n lake or river adjoining	

INVESTIGATORS	AFFILIATION
Devek Goertz	Natural Resource Solutions Inc (NRSI)
Lisa Keable	129M
DATES WETLAND VISITED	
Aug 30/31,2010	
DATE THIS EVALUATION C	OMPLETED:
Friday Sept 10,2010	- Amended Nov 9, 2010
ESTIMATED TIME DEVOTE HOURS"	ED TO COMPLETING THE FIELD SURVEY IN "PERSON
WEATHER CONDITIONS	
i) at time of field work 24.20	1°C, no rain, wind (3-5 beautort scale) SW
ii) summer conditions in genera	over last week prior to site visits.
OTHER POTENTIALLY USE	FUL INFORMATION:
*While conducting field of	us community sown (titlly a book four due
while he voucher of ova office) has photographs	I - Haved bilberry was collected was i Cault SIL Mane of this species of with is provided in plant list

CHECKLIST OF PLANT AND ANIMAL SPECIES RECORDED IN THE WETLAND:

attach list of all flora and faun observed in the wetland:

^{*} Indicate if voucher specimens or photos have been obtained, where located, etc.)

WETLAND EVALUATION SCORING RECORD

WETLAND NAME BOW POW WETLAND COMPLEX

1.0 BIOLOGICAL COMPONENT

1.1 PRODUCTIVITY	
1.1.1 Growing Degree-Days/Soils	_17_
1.1.2 Wetland Type	()
1.1.3 Site Type	_2
Total for Productivity	_30_
1.2 <u>BIODIVERSITY</u>	
1.2.1 Number of Wetland Types	_20_
1.2.2 Vegetation Communities (maxixmum 45)	_10
1.2.3 Diversity of Surrounding Habitat (maximum 7)	7
1.2.4 Proximinty to Other Wetlands	_8
1.2.5 Interspersion	9
1.2.6 Open Water Type	30
Total for Biodiversity	-84
1.3 <u>SIZE</u> (Biological Component)	9
TOTAL FOR BIOLOGICAL COMPONENT (not to exceed 250)	123

2.0 SOCIAL COMPONENT

2.1	ECONOMICALLY V	ALUABLE PRODUCTS

2.1.1 Wood Products	0	
2.1.2 Low Bush Cranberry	2	
2.1.3 Wild Rice	0	
2.1.4 Commercial Fish	12	
2.1.5 Furbearers	9	
Total for Economically Valuable Products	_	23
2.2 <u>RECREATIONAL ACTIVITIES</u> (maximum 80)	_	24
2.3 <u>LANDSCAPE AESTHETICS</u>		
2.3.1 Distinctness	0	
2.3.2 Absence of Human Disturbance	7	
Total for Landscape Aesthetics	_	7
2.4 EDUCATION AND PUBLIC AWARENESS		
2.4.1 Educational Uses	_0_	
2.4.2 Facilities and Programs	0	
2.4.3 Research and Studies	_0_	
Total for Education and Public Awareness	_	0
2.5 PROXIMITY TO AREAS OF HUMAN SETTLEMENT	_	10
2.6 OWNERSHIP		8
2.7 SIZE (Social Component)		5
2 2 (South Component)		0-
2.8 ABORIGINAL AND CULTURAL VALUES	_	30
TOTAL FOR SOCIAL COMPONENT (not to exceed 250)		107

3.0 HYDROLOGICAL COMPONENT

3.1 FLOOD ATTENUATION	72
3.2 GROUNDWATER RECHARGE	
3.2.1 Site Type	20
3.2.2 Soils	7
Total for Groundwater Recharge	_27_
3.3 <u>WATER QUALITY IMPROVEMENT</u>	
3.3.1 Watershed Improvement Factor	25
3.2.2 Adjacent and Watershed Land Use	17
3.2.3 Vegetation Form	10
Total for Water Quality Improvement	_52
3.4 <u>CARBON SINK</u>	0
3.5 SHORELINE EROSION CONTROL	O
3.6 GROUNDWATER DISCHARGE (maximum 30)	_18
TOTAL FOR HYDROLOGICAL COMPONENT (not to exceed	250) 169

4.0 SPECIAL FEATURES

4.1 <u>RARITY</u>	
4.1.1 Wetlands	_20_
4.1.2 Species	
4.1.2.1 Endangered or Threatened Species	
Breeding Habitat	
4.1.2.2 Traditional Use by Endangered	
or Threatened Species	
4.1.2.3 Provincially Significant Animals	O
4.1.2.4 Provincially Significant Plants	50
4.1.2.5a Regionally Significant Species	
4.1.2.5b Locally Significant Species	_ 0
4.1.2.6 Species of Special Status	15
Total for Species Rarity	85
4.2 <u>SIGNIFICANT FEATURES OR HABITAT</u>	
4.2.1 Colonial Waterbirds	
4.2.2 Winter Cover for Wildlife	O
4.2.3 Waterfowl Staging and Moulting	
4.2.4 Waterfowl Breeding	
4.2.5 Migratory Passerine, Shorebird or Raptor Stopover	
4.2.6 Ungulate Habitat	_35
4.2.7 Fish Habitat	_15
Total for Significant Features and Habitat	_60
4.3 ECOSYSTEM AGE	3
4.4 GREAT LAKES COASTAL WETLANDS	

TOTAL FOR SPECIAL FEATURES (not to exceed 250)

SUMMARY OF EVALUATION RESULT

Wetland Bear Paw Wetland Complex

TOTAL FOR 1.0 BIOLOGICAL COMPONENT	123
TOTAL FOR 2.0 SOCIAL COMPONENT	107
TOTAL FOR 3.0 HYDROLOGICAL COMPONENT	169
TOTAL FOR 4.0 SPECIAL FEATURES COMPONENT	148
WETLAND TOTAL	547

INVESTIGATORS	
150 129 DIE	
Derek Goertz	

AFFILIATION RESOURCE	Solutions Inc.	

DATE NOV 9, 7010

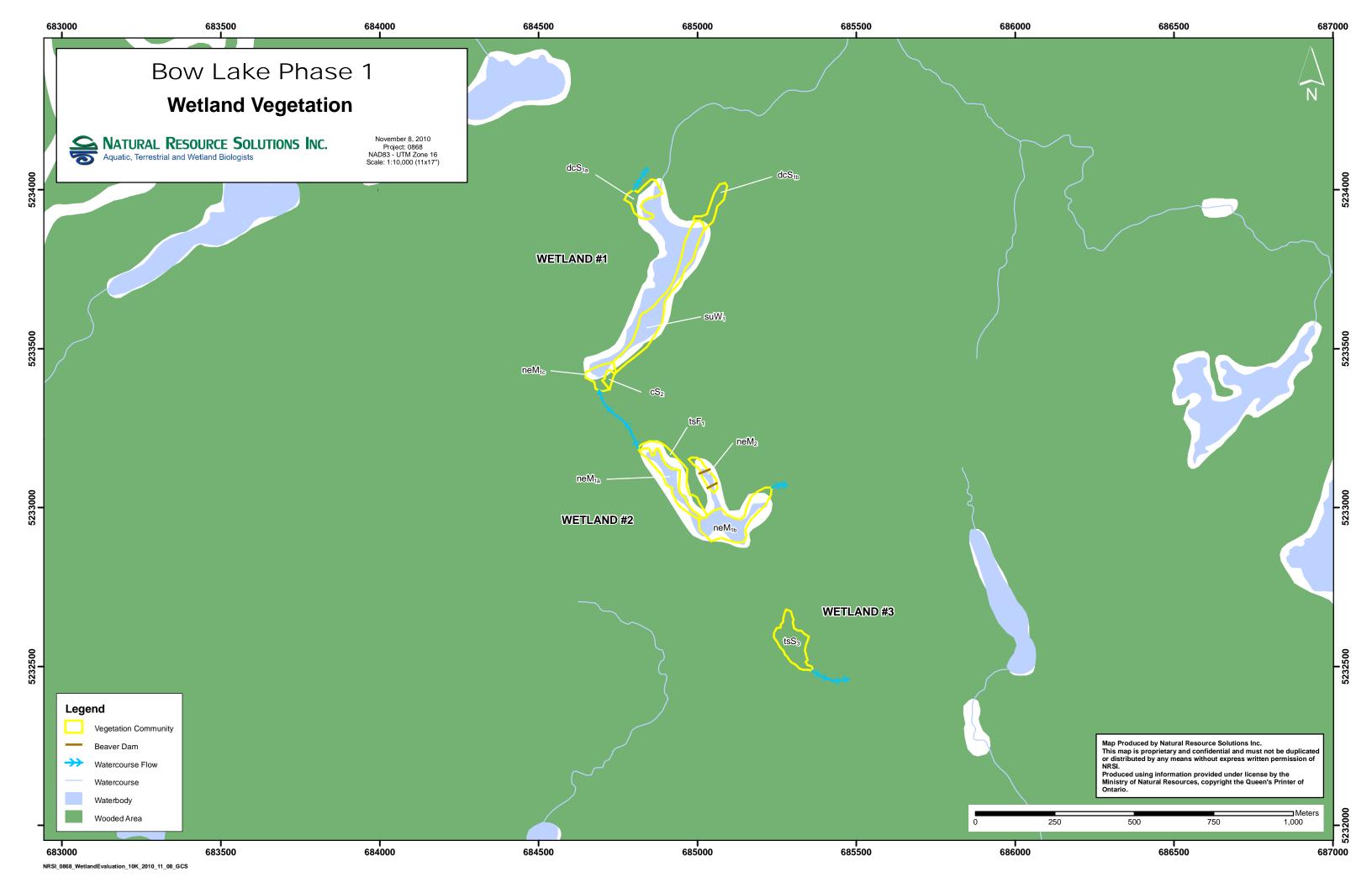
Wetland Name Bear Paw Wetland Complex Page 1 of 1

Map Code	Field Code	# Forms	Dominant Form	Forms	% open water	area (ha)	ha open water	Soils	Site Type	Fish Habitat (LM or HM)
nemi	M	3	ne	1s, m	20	0.84+	0.574	clay/loam	Palustrine	
heMz	M2	3	ne	re,ff	50	0.33	0.165	granite	Palustrine	
SUWI	M3	2	SU	ff	90	1.96	1.764	silt/marl	Palustrine	· V
1226	S2	5	dc.	citsine, m	0	0.65+	0	day/loam	Palustine	
CS2	53	4	C	ts, ne, m	5	0.12		daylloum	Polushine	
ts53	Sy	4	+5	dc, ne, m	0	1.12	0	clay/loom	Polustine	
ts Fi	Sı	4	.+5	ne,gc,m	0	0.94	Ó	clay/lown	Palustrine	

MARSH

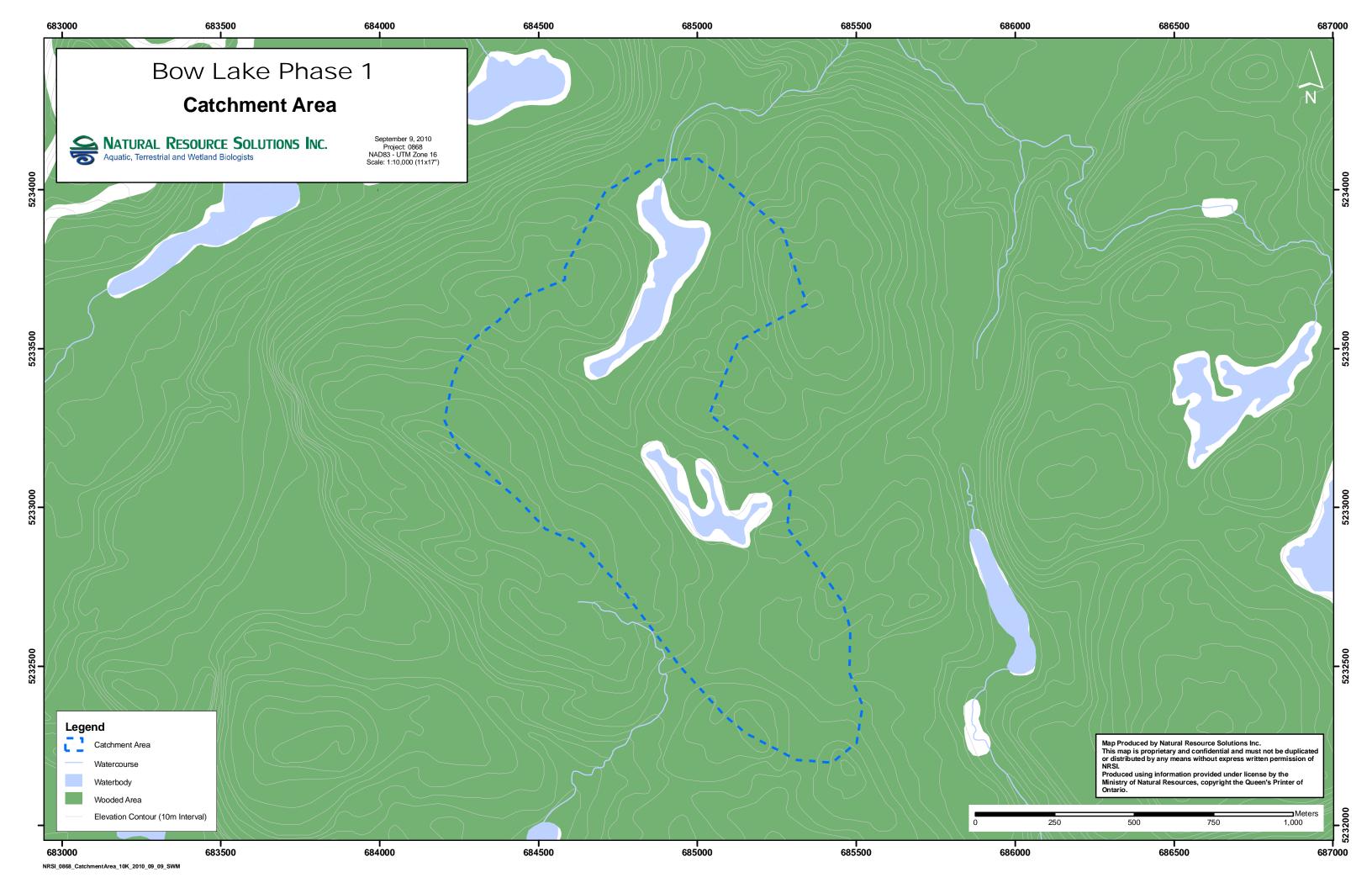
SWAM

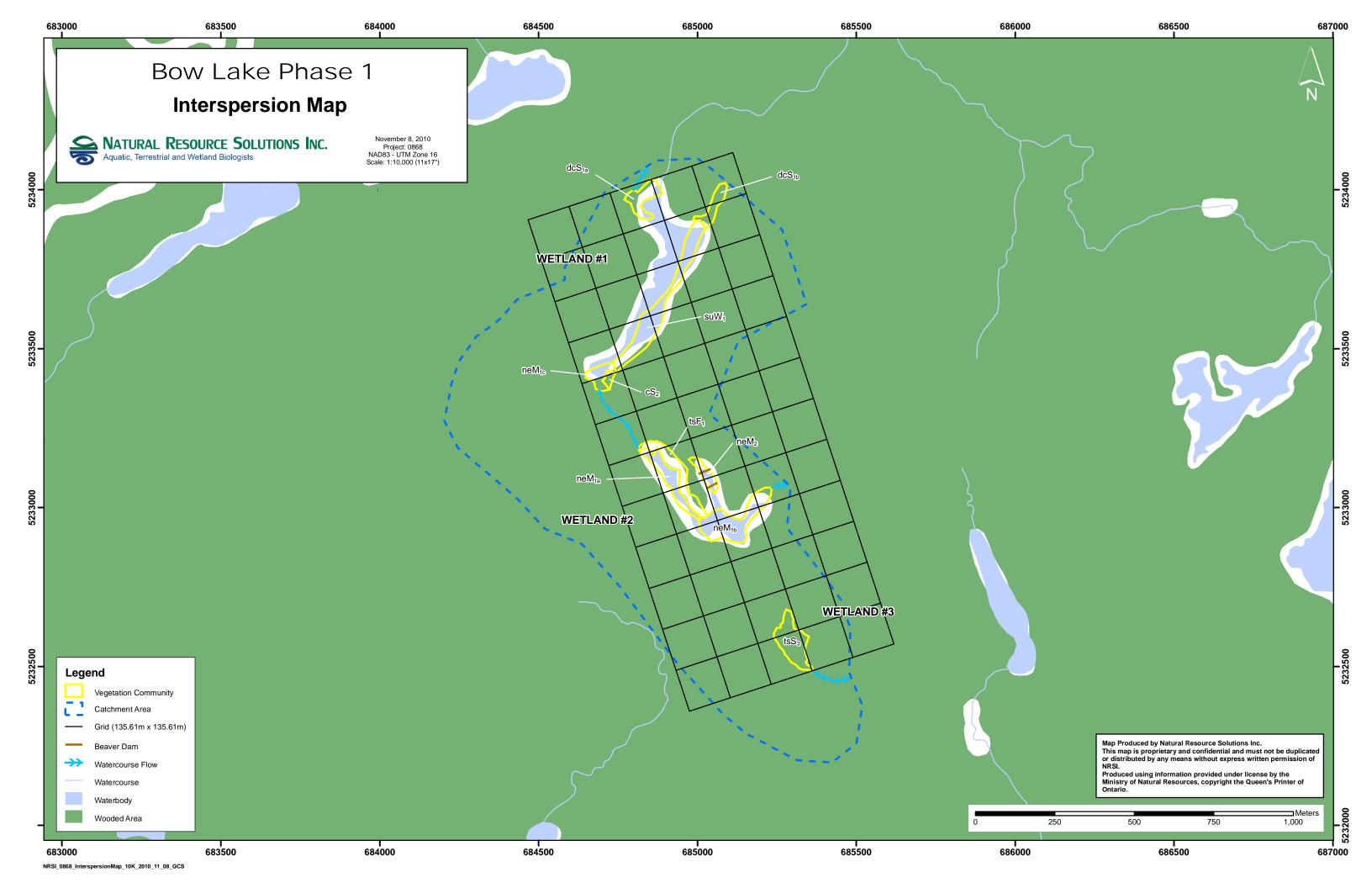
P



Bow Lake Phase 1 Wetland Evaluation Map Definitions Bear Paw Wetland Complex

Map Code	Wetland Type	Forms	Dominant Species
neM1	Marsh	ne, ls, m	Carex utriculata, Calamagrostis canadensis; Myrica gale, Chaemaedaphne calyculata;
			Sphagnum spp.
neM2	Marsh	ne, re	Carex utriculata, Dulichium arundinaceum, Calamagrostis canadensis; Sparganium americanum
suW1	Marsh	su, ff	Hippuris vulgaris; Sparganium fluctuans, Potemogeton natans
tsF1	Fen	ts, ne, gc, m	Betula alleghaniensis, Acer rubrum; Carex utriculata; Triadenum fraseri; Sphagnum spp.
dcS1	Swamp	dc, c, ts, ne, m	Dead Picea mariana; Thuja occidentalis, Picea mariana; Betula alleghaniensis;
			Calamgrostis canadensis; Sphagnum spp.
cS2	Swamp	c, ts, ne, m	Picea mariana, Thuja occidentalis; Picea mariana, Thuja occidentalis; Carex utriculata,
			Calamagrostis canadensis; Sphagnum spp.
tsS3	Swamp	ts, dc, ne, m	Picea mariana; Picea mariana; Carex utriculata, Calamogrostis canadensis; Sphagnum spp.





Bow Lake Phase 1 Wetland Evaluation

Bear Paw Wetland Complex Plant List

BOTANICAL NAME		COMMON NAME	Location (UTM)	
PTERIDOPHYTES		FERNS & ALLIES		
Dryopteridaceae		Wood Fern Family		
Athyrium	filix-femina var. angustum	Northern Lady Fern		
Dryopteris	cristata	Crested Wood Fern		
Dryopteris	intermedia	Evergreen Wood Fern		
Onoclea	sensibilis	Sensitive Fern		
Equisetaceae		Horsetail Family		
Equisetum	sylvaticum	Wood Horsetail		
Osmundaceae		Royal Fern Family		
Osmunda	cinnamomea	Cinnamon Fern		
Osmunda		Interrupted Fern	- 	
Osmunua	claytoniana	ппениргеи г епт		
Thelypteridaceae		Marsh Fern Family		
Phegopteris	connectilis	Northern Beech Fern		
GYMNOSPERMS		CONIFERS		
Cupressaceae		Cedar Family		
Thuja	occidentalis	Eastern White Cedar		
· · · · · · · · · · · · · · · · · · ·	- Coordon Mario			
Pinaceae		Pine Family		
Abies	balsamea	Balsam Fir		
Picea	mariana	Black Spruce		
DICOTYLEDONS		DICOTS		
Aceraceae		Maple Family		
Acer	rubrum	Red Maple		
Acer	saccharum ssp. saccharum	Sugar Maple		
Aquifoliaceae		Holly Family		
llex	mucronata	Mountain-holly		
Asteraceae		Composite or Aster Family		
Anaphalis	margaritacea	Pearly Everlasting		
Eupatorium	perfoliatum	Perfoliate Thoroughwort		
Eupatorium	maculatum ssp. maculatum	Spotted Joe-pye-weed		
Symphyotrichum	puniceum var. puniceum	Purple-stemmed Aster		
Balsaminaceae		Touch-me-not Family		
Impatiens	capensis	Spotted Touch-me-not		
Betulaceae		Birch Family		
Betula	alleghaniensis	Yellow Birch	 	

Betula	papyrifera	White Birch	
Cornaceae		Dogwood Family	
Cornus	canadensis	Bunchberry	
Dunnananan		Considerer Fermiller	
Droseraceae	un to un differii	Sundew Family Round-leaved Sundew	
Drosera	rotundifolia	Round-leaved Sundew	
Ericaceae		Heath Family	
Chamaedaphne	calyculata	Leatherleaf	
Gaultheria	hispidula	Creeping Snowberry	
Vaccinium	macrocarpon	Large Cranberry	
Vaccinium	myrtilloides	Velvet-leaf Blueberry	
Vaccinium	ovalifolium	Oval-leaf Bilberry	16T 688151 5228199
U		Ot Jahrela was & Sancilla	
Hypericaceae	fue a su'	St. John's-wort Family	
Triadenum	fraseri	Fraser's St. John's-wort	
Hippuridaceae	+	Mare's-tail Family	
Hippuris	vulgaris	Common Mare's-tail	
	<u> </u>		
Lamiaceae		Mint Family	
Lycopus	uniflorus	Northern Water-horehound	
Lentibulariaceae		Bladderwort Family	
Utricularia	intermedia	Flat-leaved Bladderwort	
Myricaceae		Wax-myrtle Family	
Myrica	gale	Sweet Gale	
Wyrica	gaie	Sweet Gale	
Onagraceae		Evening-primrose Family	
Epilobium	palustre	Marsh Willow-herb	
, , , , , ,			
Rosaceae		Rose Family	
	allegheniensis	Rose Family Alleghany Blackberry	
Rosaceae	allegheniensis idaeus		
Rosaceae Rubus		Alleghany Blackberry	
Rosaceae Rubus Rubus	idaeus	Alleghany Blackberry Wild Red Raspberry	
Rosaceae Rubus Rubus Rubus Sorbus	idaeus pubescens	Alleghany Blackberry Wild Red Raspberry Dwarf Raspberry Showy Mountain-ash	
Rosaceae Rubus Rubus Rubus Sorbus Rubiaceae	idaeus pubescens decora	Alleghany Blackberry Wild Red Raspberry Dwarf Raspberry Showy Mountain-ash Madder Family	
Rosaceae Rubus Rubus Rubus Sorbus	idaeus pubescens	Alleghany Blackberry Wild Red Raspberry Dwarf Raspberry Showy Mountain-ash	
Rosaceae Rubus Rubus Rubus Sorbus Rubiaceae	idaeus pubescens decora trifidum ssp. trifidum	Alleghany Blackberry Wild Red Raspberry Dwarf Raspberry Showy Mountain-ash Madder Family	
Rosaceae Rubus Rubus Sorbus Rubiaceae Galium	idaeus pubescens decora trifidum ssp. trifidum	Alleghany Blackberry Wild Red Raspberry Dwarf Raspberry Showy Mountain-ash Madder Family Small Bedstraw MONOCOTS	
Rosaceae Rubus Rubus Sorbus Rubiaceae Galium MONOCOTYLEDO	idaeus pubescens decora trifidum ssp. trifidum	Alleghany Blackberry Wild Red Raspberry Dwarf Raspberry Showy Mountain-ash Madder Family Small Bedstraw MONOCOTS Sedge Family	
Rosaceae Rubus Rubus Rubus Sorbus Rubiaceae Galium MONOCOTYLEDO Cyperaceae Carex	idaeus pubescens decora trifidum ssp. trifidum DNS gynandra	Alleghany Blackberry Wild Red Raspberry Dwarf Raspberry Showy Mountain-ash Madder Family Small Bedstraw MONOCOTS Sedge Family Nodding Sedge	
Rosaceae Rubus Rubus Sorbus Rubiaceae Galium MONOCOTYLEDO Cyperaceae Carex Carex	idaeus pubescens decora trifidum ssp. trifidum DNS gynandra utriculata	Alleghany Blackberry Wild Red Raspberry Dwarf Raspberry Showy Mountain-ash Madder Family Small Bedstraw MONOCOTS Sedge Family Nodding Sedge Beaked Sedge	
Rosaceae Rubus Rubus Rubus Sorbus Rubiaceae Galium MONOCOTYLEDO Cyperaceae Carex	idaeus pubescens decora trifidum ssp. trifidum DNS gynandra	Alleghany Blackberry Wild Red Raspberry Dwarf Raspberry Showy Mountain-ash Madder Family Small Bedstraw MONOCOTS Sedge Family Nodding Sedge	
Rosaceae Rubus Rubus Sorbus Rubiaceae Galium MONOCOTYLEDO Cyperaceae Carex Carex	idaeus pubescens decora trifidum ssp. trifidum DNS gynandra utriculata	Alleghany Blackberry Wild Red Raspberry Dwarf Raspberry Showy Mountain-ash Madder Family Small Bedstraw MONOCOTS Sedge Family Nodding Sedge Beaked Sedge	

Juncaceae Rush Family Juncus brevicaudatus Short-tailed Rush Juncus effusus Short-tailed Rush Juncus effusus Soft Rush Liliaceae Lily Family Cilntonia borealis Bluebead-illy Poaceae Grass Family Calarnagrostis canadensis Blue-joint Grass Giyceria canadensis Rattlesnake Grass Giyceria striata Fowl Meadow Grass Potamogetonaceae Pondwed Family Potamogeton spp. Pondwed Family Sparganium americanum Nuttall's Bur-reed Sparganium fluctuans Floating Bur-reed BRYOPHYTES Sphagnum squarrosum Shaggy Peat Moss Sphagnum palustre Sparganium palustre Rubbed Bog Moss Aulacomnium palustre Ribbed Bog Moss Rush Family Short Rush Short				1	
Juncus effusus Soft Rush Liliaceae Lily Family Clintonia borealis Bluebead-lily Poaceae Grass Family Calamagrostis canadensis Blue-joint Grass Glyceria canadensis Rattlesnake Grass Glyceria striata Fowl Meadow Grass Potamogetonaceae Pondweed Family Potamogeton spp. Pondweed Sparganiaceae Bur-reed Family Sparganium americanum Nuttall's Bur-reed Sparganium fluctuans Floating Bur-reed BRYOPHYTES Sphagnaceae Sphagnum Squarrosum Shaggy Peat Moss Sphagnum girgensohnii Common Green Peat Moss Sphagnum palustre Spon-leaved Peat Moss Aulacomniaceae Bog Moss Family		Juncaceae		Rush Family	
Liliaceae Lily Family Clintonia borealis Bluebead-lily Poaceae Grass Family Calamagrostis canadensis Blue-joint Grass Glyceria canadensis Rattlesnake Grass Glyceria striata Fowl Meadow Grass Potamogetonaceae Pondweed Family Potamogeton Sparganiaceae Bur-reed Family Sparganium Auttall's Bur-reed Sphagnum fluctuans Floating Bur-reed BRYOPHYTES Sphagnum Sphagnum Sphagnum Sphagnum Spiagrosohnii Common Green Peat Moss Sphagnum palustre Spoon-leaved Peat Moss Aulacomniaceae Bog Moss Family		Juncus	brevicaudatus	Short-tailed Rush	
Clintonia borealis Bluebead-lily		Juncus	effusus	Soft Rush	
Clintonia borealis Bluebead-lily					
Poaceae Calamagrostis Calamagrostis Glyceria canadensis Rattlesnake Grass Glyceria striata Fowl Meadow Grass Potamogetonaceae Pondweed Family Potamogeton spp. Pondweed Sparganiaceae Bur-reed Family Sparganium Americanum Nuttall's Bur-reed Sparganium fluctuans Floating Bur-reed BRYOPHYTES Sphagnaceae Sphagnum Sphagnum Squarrosum Shaggy Peat Moss Sphagnum palustre Spoon-leaved Peat Moss Aulacomniaceae Bog Moss Family		Liliaceae		Lily Family	
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Potamogetonaceae Pondweed Family			canadensis		
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Sparganium fluctuans Floating Bur-reed			americanum		
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Aulacomniaceae Bog Moss Family					
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Autacommuni paiustre Nibbeu Bog Nioss			nalustro		
		Aulacominium	paiustre	Ribbed Bog Woss	
	\vdash				

Wildlife Observations

Wetland: Bear Paw Wetland Complex

*Observations include tracks and signs

MammalsScientific NameBeaverCastor canadensis

Moose Alces alces
Red Fox Vulpes vulpes

Red Squirrel Tamiasciurus hudsonicus

Birds

American Black Duck

Sparrow spp.

Anas rubripes

Fish

Cyprinid species

Northern Redbelly Dace Phoxinus eos

Salmonid species* *Likely Salvelinus fontinalis fontinalis

Amphibians

Green Frog Rana clamitans melanota

Wood Frog Rana sylvatica



September 9, 2010 1186A

Subject: Source Documentation for OWES Data and Scoring Record Section 2.8 - Aboriginal and Cultural Values

Natural Resource Solutions Inc. Biologist Derek Goertz held a meeting at 3pm on September 9, 2010 at the Batchewana First Nation Band Office located at 236 Frontenac Street, Sault Ste. Marie, Ontario, in order to discuss the aboriginal values attached to the subject wetland complex.

Discussion with Mr. Dan Sayers Jr., Batchewana First Nation Natural Resource Manager, indicated that the subject wetland complex holds significant value to the Batchewana First Nation community. Mr. Sayers explained that this wetland complex has been used by the Batchewana First Nation community for the purpose of hunting, trapping, and the collection of medicinal plants. The subject wetland complex has also historically acted as a ceremonial site.

As a result of this discussion with Mr. Sayers it has been determined that the subject wetland complex holds significant value to the Batchewana First Nation community from the perspective of Aboriginal Values (OWES Section 2.8.1).

Any questions regarding the significance held by Batchewana First Nation of the subject wetland complex can be addressed directly to:

Dan Sayers Jr.
Natural Resource Manager
Batchewana First Nation
236 Frontenac St.
Sault Ste. Marie, ON
P6A 5K9
(705)759-0914

	В	ullseye Wetland Comp	olex						
	337.41	IE I C EEC		2002					
	Wetland	d Evaluation Edition		2002					
		November 20, 2010	1						
		Comments							
Attached Documents in	nclude:								
1) Cummary of Watlan	d types, site types and d	laminant form areas							
2) Map of Bullseye We		ionimant form areas							
3) List of vegetation co									
4) Map of Interspersion									
	etland Complex Catchm	ent Basin							
6) Vascular Plant List	cuano compren carenn								
7) Fauna list									
8) Letter from Batchew	vana First Nation								
,		Additional Informatio	on						
0.00 4.437		5.11							
Official Name:	2002	Bullseye We							
Evaluation Edition:	2002	Class:	Wetla	nd ID.:					
		h Last Evaluated		November					
		h Last Updated		March	_				
Special Planning Cons	iderations:				Scores				
]	Biological:	97			
					Social:	91			
					drological:	169			
				Specia	l Features:	224			
	1				Overall:	582			
Submitted by:		esources Solutions Inc.		ļ					
Date:	l N	March 9, 2012		ĺ					

No	orth	nern Ontario Wetland Evaluation, Data	a and Sco	ring Reco	ord		(November 20, 2010)
		WETLAND DA	ATA AND	SCORI	NG RECOF	RD	
•						~ .	
i)		WETLAND NAME:		Bullsey	ye Wetland	Complex	
ii)		MNR ADMINISTRATIVE REGION:	: Nor	th East	DISTRIC	CT:	Sault Ste. Marie
		AREA OFFICE (if different from Dis	strict):				
iii)		CONSERVATION AUTHORITY JU	RISDICT	ION:			
		(If not within a designated CA, check he	ere:	X			
iv)		COUNTY OR REGIONAL MUNICIPAL	PALITY:		D	istrict of	Algoma
v)		TOWNSHIP:		Peev	er Townshij	р	
vi)		LOTS & CONCESSIONS:			Noi	ne	
1-)		(attach separate sheet if necessary)					
vii)		MAP AND AIR PHOTO REFERENCE	CES				
VII ,							
	a)	Latitude: 47°14'09'' Longitude	e: 84°30'	18''			
	b)	UTM grid reference:	Zone: Grid:E	16 68884	43	B	Block: <u>T</u> § 5234421
	c)	National Topographic Series:					
		map name(s)	_	M	Iamainse Po	oint	
		map number(s)	41 N/2		edition	3	_
		scale		1: 5	50,000		
	d)	Aerial photographs: Date photo taken:			Sca	le:	
		Flight & plate numbers:	Ge	ogle Ear	rth Images 2	2004	
		(attach separate sheet if necessary)					
	e)	Ontario Base Map numbers & scale		#	166805230	1:20,000	
		(attach separate sheets if necessary)					
			1	-			

a) Single contiguous wetland are	ea:	hectares	1	
b) Wetland complex comprised of	of 7	individu	al wetlands:	
Wetland Unit Number				Size of each
(for reference)				wetland unit
	Isolated	Palustrine	Riverine	Lacustrin
Wetland Unit No. 1		2.78		_
Wetland Unit No. 2		4.08		
Wetland Unit No. 3		0.72		
Wetland Unit No. 4	0.85			
Wetland Unit No. 5		0.56		_
Wetland Unit No. 6		5.49		
Wetland Unit No. 7		0.71		
Wetland Unit No.				
Wetland Unit No.				
Wetland Unit No.				
Wetland Unit No.				
Wetland Unit No.				
Wetland Unit No.				_
Wetland Unit No.				
Wetland Unit No.				
Wetland Unit No. Wetland Unit No.				
Wetland Unit No.				
Wetland Unit No.			-	_
Wetland Unit No.			-	_
Wetland Unit No.				
Wetland Unit No.				
Wetland Unit No.				_
Wetland Unit No.				_
Wetland Unit Totals:	0.85	14.34	0.00	0.00
(Attach additional sheets if nec		14.54	0.00	0.00
TOTAL WETLAND OF	T.		15.10	
TOTAL WETLAND SIZ			15.19	ha
c) Brief documentation of reason	is for including any	areas less than 2 h	a in size:	
At the time this evaluation was				
assessed for the purpose of an				Assessment
was to include all wetland area	s within the evaluat	ion regardless of	size.	

(November 20, 2010)

1.0 BIOLOGICAL COMPONENT

1.1 PRODUCTIVITY

1.1.1 GROWING DEGREE-DAYS/SOILS

GROW	ING DEG	REE DAYS	SOILS	
(check o	one)		Estimated	Fractional Area
1)		<1600		clay/loam
2)		1600-2000	0.13	silt/marl
3)	X	2000-2400		limestone
4)		2400-2800		sand
5)		2800-3000	0.41	humic/mesic
6)		>3000	0.14	fibric
			0.32	granite

SCORING:

Growing	Clay-	Silt-	Lime-	Sand	Humic-	Fibric	Granite
Degree-	Loam	Marl	stone		Mesic		
Days							
<1600	12	11	9	7	7	6	4
1600-2000	15	13	11	9	8	7	5
2000-2400	18	15	13	11	9	8	7
2400-2800	22	18	15	13	11	9	7
2800-3000	26	21	18	15	13	10	8
>3000	30	25	20	18	15	12	9

(maximum score 30; if wetland contains more than one soil type,

evaluate based on the fractional area)

Steps required for evaluation: (maximum score 30 points)

- 1. Select GDD line in evaluation table applicable to your wetland;
- 2. Determine fractional area of the wetland for each soil type;
- 3. Multiply fractional area of each soil type by score;
- 4. Sum individual soil type scores (round to nearest whole number).

In wetland complexes the evaluator should aim at determining the percentage of area occupied by the categories for the complex as a whole.

Final Score Growing Degree-Days/Soils (maximum 30 points)

Northern Ontario Wetland Evaluation	Data and Scoring Record	(November 20, 2010)
1.1.2 WETLAND TYPE (Fractional Ar	ea = area of wetland type/total wetland area)	
Fractional Area	Score	
Bog	x 3 0.00	
Fen 0.14	x 6 0.84	
Swamp 0.77	x 8 6.16	
Marsh 0.09	x 15 1.35	
	Wetland type score (maxim	um 15 points)
1.1.3 SITE TYPE (Fractional Area = a	rea of site type/total wetland area)	
	Fractional Area	Score
Isolated	0.06 x 1 =	0.060
Palustrine (permanent or		
intermittent flow)	0.94	1.880
Riverine	x - 4 =	0.000
Riverine (at rivermouth)	x 5 =	0.000
Lacustrine (at rivermouth	x 5 =	0.000
Lacustrine (on enclosed		
bay, with barrier beach)	$\mathbf{x} 3 =$	0.000
Lacustrine (exposed to lake)	x 2 =	0.000
	Sub Total:	1.940
	Site Type Score (maxi	imum 5 points) 2
Note: Inflows and outflows are perman	nent.	
1.2 BIODIVERSITY		
1.2.1 NUMBER OF WETLAND TYPES	<u> </u>	
(Check only one)	Score	
1) one	9 points	
2) two	13	
3) X three	20	
4) four	30	
N N	umber of Wetland Types Score (maximum	30 points) 20
	4	

(November 20, 2010)

1.2.2 VEGETATION COMMUNITIES

Attach a separate sheet listing community (map) codes, vegetation forms and dominant species. Use the form on the following page to record percent area by dominant vegetation form. This information will be used in other parts of the evaluation.

Communities should be grouped by number of forms. For example, 2 form communities might appear as follows:

2 forms

Code	Forn	ns	Dom	inant Species	_		
M6	re,	ff	re,	Typha latifolia;	ff,	Lemna minor,	Wolffia
S1	ts,	gc	ts,	Salix discolor;	gc,	lmpatiens capens	sis, Thelypteris palustris

Note that the dominant species for each form are separated by a semicolon. The dominant species (maximum of 2) within a form are separated by commas.

Scoring:

Total # of communities	Total # of communities	Total # of communities
with 1-3 forms = 40	with $4-5$ forms = 23	with 6 or more forms $= 1$
1 = 1.5 points	1 = 2 points	1 = 3 points
2 = 2.5	2 = 3.5	2 = 5
3 = 3.5	3 = 5	3 = 7
4 = 4.5	4 = 6.5	4 = 9
5 = 5	5 = 7.5	5 = 10.5
6 = 5.5	6 = 8.5	6 = 12
7 = 6	7 = 9.5	7 = 13.5
8 = 6.5	8 = 10.5	8 = 15
9 = 7	9 = 11.5	9 = 16.5
10 = 7.5	10 = 12.5	10 = 18
11 = 8	11 = 13	11 = 19
+.5 each additional	+.5 each additional	+ 1 each additional
community = 5.5	community = 6.5	community = 0.0

e.g., a wetland with 3 one form communities 8 six form communities would score:

4 two form communities

12 four form communities and

6+13.5+15=34.5=35 points

Vegetation Communities Score (maximum 45 points)

12

Northern Ontario Wetland E	(November 20, 2010)	
Wetland Name:	Bullseye Wetland Complex	
Wetland Size (ha):	15.19	
Vegetation Form	% area in which form is dominant	_
h		
С	36.6	
dh		
dc		
ts	10.3	
ls	43.8	
ds		
gc		
m		
ne	9.3	
be		
re		
ff		
f		
su		
u (unvegetated)		
Total = 100%	100.00	
	6	

Northern Ontar	io Wetland Evaluation Data and Scoring Record	(November 20, 2010)
1.2.3 DIVERSITY O	F SURROUNDING HABITAT	
(Check all appropriate		
	recent burn (< 5 yr)	
X	abandoned agricultural land	
X	utility corridor deciduous forest	
Λ	recent cutover or clearcut (<5 yr)	
X	coniferous forest	
X	mixed forest (at least 25% conifer and 75% deciduous or vice versa)
71	crops	,
	abandoned pits and quarries	
	pasture	
	ravine	
	fence rows	
X	open lake or deep river	
X	creek flood plain	
X	rock outcrop	
Div	versity of Surrounding Habitat Score (1 for each, maximum 7 point	ts) 7
	O OTHER WETLANDS	a .
(Check first app	propriate category only)	Scoring
1) 8	Hydrologically connected by surface water to other watlands	
1) 8	Hydrologically connected by surface water to other wetlands (different dominant wetland type) or open lake or river	
	within 1.5 km	8 points
	Within 1.5 Kin	o points
2)	Hydrologically connected by surface water to other wetlands	
,	(same dominant wetland type) within 0.5 km	8
	`	
3)	Hydrologically connected by surface water to other wetlands	
	(different dominant wetland type),or open lake or river from	
	1.5 to 4 km away (Second Marsh Wetland)	5
4)		
4)	Hydrologically connected by surface water to other wetlands	E
	(same dominant wetland type) from 0.5 to 1.5 km away	5
5)	Within 0.75 km of other wetlands (different dominant wetland type	2)
	or open lake or river, but not hydrologically connected by	,
	surface water	5
6)	Within 1 km of other wetlands, but not hydrologically	
	connected by surface water	2
7)	No wetland within 1 km	0
Pro	oximity to other Wetlands Score (Choose one only, maximum 8 poi	nts) 8

Northern Ontario Wetland Evaluation Data and Scori	ng Record (November	20, 2010)
1.2.5 INTERSPERSION		
Number of Intersections		
(Check one)	Score	
1) 26 or less	3	
2) 27 to 40	6	
3) 41 to 60 X	9	
4) 61 to 80	12	
5) 81 to 100	15	
6) 101 to 125	18	
7) 126 to 150	21	
8) 151 to 175	24	
9) 176 to 200	27	
10) >200	30	
Interspersion Score (C	Choose one only maximum 30 points)	9
1.2.6 OPEN WATER TYPES		
Permanently flooded:		
(Check one)	Score	
(enech one)	20010	
1) type 1	8	
2) type 2	8	
3) X type 3	14	
4) type 4	20	
5) type 5	30	
6) type 6	8	
7) type 7	14	
8) type 8	3	
9) no open water	0	
Open Water Type Score (C	hoose one only maximum 30 points)	14
8		
δ		

(November 20, 2010)

1.3 SIZE

15.19 hectares

Subtotal for Biodiversity

Size Score (Biological Component) (maximum 50 points)

8

Evaluation Table Size Score (Biological component)

Wetland		(<u> </u>		re for Biodi	versity Subc	omponent			
size (ha)	<37	37-47	48-60	61-72	73-84	85-96	97- 108	109- 120	121- 132	>132
<20 ha	1	5	7	8	9	17	25	34	43	50
20-40	5	7	8	9	10	19	28	37	46	50
41-60	6	8	9	10	11	21	31	40	49	50
61-80	7	9	10	11	13	23	34	43	50	50
81-100	8	10	11	13	15	25	37	46	50	50
101-120	9	11	13	15	18	28	40	49	50	50
121-140	10	13	15	17	21	31	43	50	50	50
141-160	11	15	17	19	23	34	46	50	50	50
161-180	13	17	19	21	25	37	49	50	50	50
181-200	15	19	21	23	28	40	50	50	50	50
201-400	17	21	23	25	31	43	50	50	50	50
401-600	19	23	25	28	34	46	50	50	50	50
601-800	21	25	28	31	37	49	50	50	50	50
801-1000	23	28	31	34	40	50	50	50	50	50
1001-1200	25	31	34	37	43	50	50	50	50	50
1201-1400	28	34	37	40	46	50	50	50	50	50
1401-1600	31	37	40	43	49	50	50	50	50	50
1601-1800	34	40	43	46	50	50	50	50	50	50
1801-2000	37	43	47	49	50	50	50	50	50	50
>2000	40	46	50	50	50	50	50	50	50	50

Northern Ontario	Wetland Evaluation	(November 20, 2	2010)		
		2.0 SOCIAL	COMPONENT		
2.1 ECONOMICALI	LY VALUABLE	PRODUCTS	<u>S</u>		
2.1.1 WOOD PRODUC	TS				
Area of wetland forested only)	(ha), i.e. dominar	nt form is h or	c. Note that this is <u>n</u>	not wetland size. (Check one	
			Score		
1)	<5 ha		0		
2) 5.57 ha	5 -25 ha		4		
3)	26 -50 ha		6		
4)	51- 100 ha		8		
·	01 -200 ha		11		
6)	>200 ha		14		
Source of information:	F	ield Investigati	ions (NRSI 2010)		
	Wood	l Products Sco	ore (Score one only	, maximum 14 points)	4
				-	
2.1.2 Lowbush Cranberr (Check one)	У			Scara (Chassa ana)	
Present		1)	X	Score (Choose one) 2 points	
Absent		2)	A	2 points 0	
Source of information:	F	ield Investigati	ions (NRSI 2010)		
		Lowbus	sh Cranberry Score	e (maximum 2 points)	2
2.1.2 WILLDIA			•	•	
2.1.3 Wild Rice (Check one)				Score (Choose one	a)
Present (at least 0.5	5 ha)	1)		10 points	′)
Absent	,	2)	X	0	
Source of infolmation:					
		Wild Ri	ice Score (maximur	m 10 points)	0
		1	10		

Northern Ontario Wetland Ev	valuation Data and Scoring Record	(November 20, 2010)
2.1.4 COMMERCIAL FISH (BAIT	Γ FISH AND/OR COARSE FISH)	
(Check one)		Score (Choose one)
Present	1) X	12 points
Absent	2)	0
Source of information: No fi	ish observed, however, fish habitat is present.	<u>. </u>
	Commercial Fish Score (maxi	mum 12 points) 12
2.1.5 FURBEARERS		
(Consult Appendix 9)		
Name of furbearer	Source of information	
) Beaver	Beaver dams observed	(NRSI 2010)
Beaver Red squirrel	Beaver dams observed Field observation (N	<u> </u>
		<u> </u>
Red squirrel		<u> </u>

2.2 RECREATIONAL ACTIVITIES

Scoring: 3 points for each species. maximum 12

Type of Wetland-Associated Use								
Intensity of Use	Hunting		Nature Enjoyment/ Ecosystem Study		Fishing			
High	40 points		40 points		40 points			
Moderate	20		20		20			
Low	8 X		8		8			
Not possible/NotKnown	0		0	X	0	X		
Totals		8		0		0		

(score one level for each of the three wetland uses; scores are cumulative; maximum score 80 points) Sources of information:

Hunting: No signs of hunting observed, however it is possible.

Nature: Unlikey, due to remote location and access issues.

Fishing: Unlikey due to remote location and access issues,

as well as very small waterbodies associated with wetlands.

Furbearer Score (maximum 12 points)

Recreational Activities Score (maximum 80 points)

8

Northern Ontario Wetland Evaluation Data	and Scoring Record (November 20, 2010)	
2.3 LANDSCAPE AESTHETICS		
2.3.1 DISTINCTNESS		
(Check one)	Score (Choose one)	
Clearly distinct 1)	3 points	
Indistinct 2) X	0	
Lands	cape Distinctness Score (maximum 3 points)	
2.3.2 ABSENCE OF HUMAN DISTURBANCE	<u> </u>	
(Check one)	Score (Choose one)	
Human disturbances absent or nearly so	1) X 7 points	
One or several localized disturbances	2) 4	
Moderate disturbance; localized water pollu	ation 3) 2	
Wetland intact but impairment of ecosyster	n quality	
intense in some areas	4) 1	
Extreme ecological degradation, or water p	ollution	
severe and widespread	5)0	
Source of information:	Field Observations (NRSI 2010)	
Absence of 1	Human Disturbance Score (maximum 7 points) 7	
2.4 EDUCATION AND PUBLIC AWAREN	ESS	
2.4.1 EDUCATIONAL USES		
(Check one)	Score (Choose one)	
Frequent 1)	20 points	
Infrequent 2)	12	
No visits 3) X	0	
Source of information:		
]	Educational Uses Score (maximum 20 points) 0	
2.4.2 FACILITIES AND PROGRAMS		
(check one)	Score (Choose one))
Staffed interpretation centre	1) 8 points	
No interpretation centre or staff but a system	m of	
self-guiding trails or brochures available	2) 4	
Facilities such as maintained paths (e.g., we	podchips)	
boardwalks, boat launches or observation to	owers	
but no brochures or other interpretation	3) 2	
No facilities or programs	4) X 0	
Source of information:	Field Observations (NRSI 2010)	
Facilit	ies and Programs Score (maximum 8 points)	
	12	

Northern Ontario Wetland Evaluation Data and Scoring Record (November 20, 2010)							
2.4.3 RESEARCH AND STUDIES							
(check appropriate spaces)	<u>-</u>				Score		
Long term research has been done	12 points						
Research papers published in refere							
journal or as a thesis					10		
One or more (non-research) reports							
on some aspect of the wetland 's flo	ora fauna						
hydrology etc.					5		
No research or reports			X		0		
Attach list of known reports by abo	ve categories						
Research and St	udies Score (Scor	e is cu	mulative, maxim	num 12	2 points)	0	
2.5 PROXIMITY TO AREAS OF H	IIMAN SETTLEN	MENT	ין				
Circle the highest applicable score		VILLITI	<u>. </u>				
Distance of wetland from	1)		2) populat	ion	3) populatio	n	
settlement	population> 10	,000	2,500 -10		<2,500 or cot		
			·		communit	-	
1) Within or adjoining	40 points		26		16		
settlement	-						
2) 0.5 to 10 km from settlement	26		16		10	X	
3) 10 to 60 km from settlement	12		8		4		
4) >60 km from settlement	5		2		0		
5) >100 km from settlement	0		0		0		
		0		0		10	
	15: 11	011					
Name of settlement: Mont	real River Harbour	r, ON	(just under 10 km	away)			
Prox	imity to Human S	ettlen	nent Score (maxi	mum 4	10 points)	10	
2.6 OWNERSHIP (FA= fraction Are	22)				Score		
2.0 OWNERSHIP (FA= Haction Aid	ea)				Score		
FA of wetland in public or private of	wnership						
held under contract or in trust for w	_		Х	10	= 0.00		
FA of wetland area in public owner	-		1.00 x	8	= 8.00		
FA of wetland area in private owner	_		X	4	= 0.00		
	F	. •					
	e Forest Manageme (Feb 27, 2009) Ba			Basema	ap		
2009-2010	(Feb 27, 2009) Ba		#100803230 ership Score (ma	vimun	a 10 noints)	Q	
		Own	ersinp Score (ma	XIIIIUII	1 10 points)	8	
	13						

(November 20, 2010)

2.7 SIZE

15.19 hectares 42 Subtotal for Social

Evaluation Table for Size Score (Social Component)

W-411	Table	101 SIZE SEO	ic (Social C	omponent)						
Wetland Size (ha)				Tot	tal for Size I	Dependent So	core			
	<31	31-45	46-60	61-75	76-90	91-105	106-109	121-135	136-150	>150
<2 ha	1	2	4	8	10	12	14	14	14	15
2 - 4ha	1	2	4	8	12	13	14	14	15	16
5 - 8ha	2	2	5	9	13	14	15	15	16	16
9 - 12ha	3	3	6	10	14	15	15	16	17	17
13-17	3	4	7	10	14	15	16	16	17	17
18-28	4	5	8	11	15	16	16	17	17	18
29-37	5	7	10	13	16	17	18	18	19	19
38-49	5	7	10	13	16	17	18	18	19	20
50-62	5	8	11	14	17	17	18	19	20	20
63-81	5	8	11	15	17	18	19	20	20	20
82-105	6	9	11	15	18	18	19	20	20	20
106-137	6	9	12	16	18	19	20	20	20	20
138-178	6	9	13	16	18	19	20	20	20	20
179-233	6	9	13	16	18	20	20	20	20	20
234-302	7	9	13	16	18	20	20	20	20	20
303-393	7	9	14	17	18	20	20	20	20	20
394-511	7	10	14	17	18	20	20	20	20	20
512-665	7	10	14	17	18	20	20	20	20	20
666-863	7	10	14	17	19	20	20	20	20	20
864-1123	8	12	15	17	19	20	20	20	20	20
1124-1460	8	12	15	17	19	20	20	20	20	20
1461-1898	8	13	15	18	19	20	20	20	20	20
1899-2467	8	14	16	18	20	20	20	20	20	20
>2467	8	14	16	18	20	20	20	20	20	20

Total Size Score (Social Component)

4

(November 20, 2010)

2.8 ABORIGINAL AND CULTURAL HERITAGE VALUES

Either or both Aboriginal or Cultural Values may be scored. However, the maximum score permitted for 2.8 is 30 points. Attach documentation.

2.8.1 ABORIGINAL VALUES

Full documentation of sources must be attached to the data record.

1)	Significant	X	=	30 points
2)	Not Significant		=	0
3)	Unknown		=	0
	Total:	30		

2.8.2 CULTURAL HERITAGE

1)	Significant		=	30 points
2)	Not Significant		=	0
3)	Unknown	X	=	0
	Total:	0		

Aboriginal Values/Cultural Heritage Score (maximum 30 points)

Batchewana First Nation (BFN) was contacted on October 19, 2010 and asked about the significance of this wetland in terms of aboriginal values. A response was received on November 17, 2010 (letter appended), which states the wetlands are "very valuable to the surrounding area, environment, wild life and BFN reliance on the land and resources to sustain our cultural activities." (Dave Sewell, BNR Field Technician)

(November 20, 2010)

3.0 HYDROLOGICAL COMPONENT

3.1 FLOOD ATTENUATION

If the wetland is a complex including isolated wetlands, apportion the l00 points according to area. For example if 10 ha of a l00 ha complex is isolated, the isolated portion receives the maximum proportional score of 10. The remainder of the wetland is then evaluated out of 90.

Step 1:	If wetland is entirely <u>Isolated</u> , go directly to Step 5.
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If wetland is lacustrine and the ratio of wetland area: lake area is <0.1, or wetland is riverine on the St. Mary's River, go to Step 5

All other wetlands, go through steps 2, 3, 4 and 5.

Step 2: Determination of Upstream Detention Factor (DF)

(a)	Wetland area (ha)		15.19	
(b)	Total area (ha) of <u>upstream</u> detention areas		30.92	
	(include the wetland itself)			
(c)	Ratio of (a):(b)		0.49	
(d)	Upstream detention factor: (c) x 2 =	0.98		0.98
	(maximum allowable factor = 1)		•	

Step 3: Determination of Peak Flow Attenuation Factor (AF)

(a)	Wetland area (ha)		15.19	
(b)	Size of catchment basin (ha) <u>upstream</u> of wetland			
	(include wetland itself in catchment area)		170.72	
(c)	Ratio of (a):(b)		0.09	
(d)	Wetland attenuation factor: (c) x 10 =	0.9		0.89
	(maximum allowable factor = 1)			

Step 4: Determination of Wetland Surface Form Factor (FF)

From the list below, select the surface form which best describes the wetland.

	Factor	
Flooded with little or no aquatic vegetation		0
Flooded but with submergent, emergent or floating vegetation		0.2
Flat (lawn) vegetation (typical of fens)	X	0.5
Hummock-depression microtopography		0.7
Patterned (e.g., string bog, ribbed fen)		1
Surface Form Factor (FF)	0.5	

(Maximum allowable factor = 1)

	TVOIT	hern Ontario Wetland Evaluation Data and Scoring Record		(Novemb	er 20, 2010)
Step 5	5:				
1. We	tland	is entirely Isolated	100 points		
2. We		is lacustrine and the ratio of and area: lake area is <0.1	0 points		
3. We	tland	is riverine along the St. Mary's River	0 points		
4. For	all o	ther wetlands*, calculate as follows:			
	a)b)c)	Upstream Detention Factor (DF) (Step 2) Wetland Attenuation Factor (AF) (Step 3) Surface Form Factor (FF) (Step 4)	0.98 0.89 0.50		
Unle	ss we	$[(DF + AF + FF)/3] \times 94.5$ etland is a complex including isolated portions see above	75	Isolated sco	ore: 5.5
		Total Flood Attenuation Sco	ore (maximum	100 points)	81
3.2	GR	OUND WATER RECHARGE			
3.2.1	SITI	E TYPE			
	(a) (b)	Wetland > 50% lacustrine (by area) or located on the St. Mary's River Wetland not as above. Calculate final score as follows		Score = 0	

1	FA of isolated or palustrine wetland	X	20	=	20.00
0	FA of riverine wetland	X	5	=	0.00
0	FA of lacustrine wetland (wetland <50% lacustrine)	X	0	=	0.00

(FA= area of site type/total area of wetland)

Site Type Score: (maximum 20 points)

3.2.2 SOILS

EVALUATION:

Dominant Wetland Type Sand, loam, gravel, till			Clay or bedrock	
Lacustrine or on St. Mary's River	0		0	
Isolated	10		5	
Palustrine	7		4	X
Riverine (not on St. Mary's River)	5		2	
Totals		0		4

Hydrological Soil Class Score (maximum 10 points)

(November 20, 2010)

3.3 DOWNSTREAM WATER QUALITY IMPROVEMENT

3.3.1 WATERSHED IMPROVEMENT FACTOR

Calculation of Watershed Improvement Score is based upon the fractional area (FA) of each site type within the wetland. FA = area of site type/total area of the wetland.

Site Type	<u>Impro</u>	ovement Fac	tor (IF	<u>)</u>	
Isolated	FA	0.06	X	0.5 =	0.03
Riverine	FA		X	1 =	0.00
Palustrine with no inflow	FA	0.36	X	0.7 =	0.25
Palustrine with inflows	FA	0.58	X	1 =	0.58
Lacustrine on lake shoreline	FA		X	0.2 =	0.00
Lacustrine at lake inflow or outflow	FA		x	1 =	0.00

Watershed Improvement Score (IF x 30) (maximum = 30)

26

3.3.2 ADJACENT AND WATERSHED LAND USE

EVALUATION

Step 1: Determination of Maximum Initial Score

Wetland on the Great Lakes or St. Mary's River (Go to Step 5a)

X All other wetlands (Go through steps 2, 3,4 and 5b)

Step 2: Determination of Broad Upslope Land Use (BLU)

Assess broad upslope land uses within the previous 5 years, agriculture, or other activities which alter the natural vegetation cover in an extensive manner.

Choose one	Score
>50% of catchment basin	20
20-50% of catchment basin	14
<20% of catchment basin	4

Score for BLU

4

Step 3: Determination of Linear Upslope Land Uses (LUU)

Assess linear upslope uses (LUU) e.g., roads, railways, hydro corridors, pipelines, etc., crossing the upslope catchment within 200m of the wetland boundary.

Choose the highest only	Score
Major corridor*	15
Secondary corridor	11
Tertiary corridor	6
Temporary or abandoned	3
None	0

Score for LUU

3

Major, secondary and tertiary roads are those that are indicated as such on the provincial highways maps. Major hydro corridors are trunk lines coming directly from a generating station. Major pipelines are transcontinental lines. Secondary corridors are regional distribution lines (i.e. multi-cable hydro corridors not emanating directly from a generating station or regional gas distribution lines). Tertiary corridors are single hydro lines or local gas distribution lines (i.e. to domestic users).

	Present	Score 15				
	Not present	0				
	- · · · · · · · · · · · · · · · · · · ·	·	Score for PS		0	
ер 5:	Calculation of tot	al score for Adjac	ent and Watershed	d Lan	d Use	
	Vetland on the Great lall other wetlands, cal		River			
-,	,		Final Score Bl	LU+L	LUU+PS 7	
.3 VE	GETATION FORM					
Cho	ose the category that	best describes the				
vege	etation of the wetland	l				
Trac	og ghanha og hogha (h	a to 10 co)	V		Score	
	es, shrubs or herbs (hergents, submergents		<u>X</u>		8 points 10	
	e or no vegetation (u		,		0	
3.4	CARBON SINK	Domin	ant Vegetation For	rm Sc	ore (maximum 10 points)	8
·· ·	CARDON SINK					
Cho	ose the category that	best describes the	wetland			
1)	Wetland a bog or f	en with >50% orga	nic soils		15 points	
2)	Wetland has organ					
	of the area (i.e. ma soils, any wetland		esignated		6	
3)	Marshes and swam	nps with >50% orga	nic soil		9	
4)	Wetland with less	than 10% of soils o	rganic		0	
			Carbon Sink S	Score	(maximum 15 points)	9

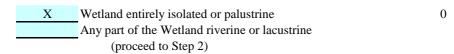
Northern Ontario Wetland Evaluation Data and Scoring Record

Northern Ontario Wetla	ıd Evaluation Data	and Scoring	Record
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3.5 SHORELINE EROSION CONTROL

From the wetland vegetation map determine the <u>dominant</u> vegetation type within the erosion zone for <u>lacustrine and riverine site type areas only.</u> Score according to the factors listed below.

Step 1: Score



Step 2:

Choose the one characteristic that best describes the shoreline vegetation (see text for a definition of shoreline)

		Score
1)	Trees and shrubs	15
2)	Emergent vegetation	8
3)	Submergent vegetation	6
4)	Other shoreline vegetation	3
5)	No vegetation	0

Shoreline Erosion Control Score (maximum 15 points)

0

3.6 GROUNDWATER DISCHARGE

(Circle the characteristics that best describe the wetland being evaluated and then sum the scores)

Category		C	Catchment Interaction			
Wetland type	Bog = 0		Swamp/Marsh = 2	2	Fen = 5	
Basin topography	Flat/Rolling = 5		Hilly = 2		Major relief	
				2	break = 5	
Weland area: Upslope	Large (>50%) = 0		Moderate		Small ($<5\%$) = 5	
catchment area			(6-50%) = 2	2		
Lagg Development	None found = 0	0	Minor = 2		Extensive $= 5$	
Seeps at wetland	None found $= 0$		1-3 seeps = 5		4 or more	
edge		0			seeps = 10	
Iron precipitates	None = 0		1-3 deposits = 2		4 or more	
evident at edge		0			deposits = 5	
Surface marl deposits	None = 0	0	1-3 deposits = 2		>3 = 5	
Wetland pH	Low < 4.2 = 0		Moderate $4.2-5.7 = 5$	5	High $> 5.7 = 10$	
Catchment soil	Patchy = 0		Thin $(<20cm) = 2$		Thick $= 5$	
coverage				2		
Catchment soil	Low = 0	_	Moderate = 2		High = 5	
permeability				2		
Totals		0		15		0

(Scores are cumulative maximum score 30 points)

Groundwater Discharge Score (maximum 30 points)

4.0 SPECIAL FEATURES COMPONENT

4.1 RARITY

4.1.1 WETLANDS

Hills Site Region and Site District (5E only): 5E-13
Wetland type (check one or more)

Bog
V Ear

 X
 Fen

 X
 Swamp

 X
 Marsh

Evaluation Table for Scoring Rarity of Wetland Type.

Unit	Site Region				
Number	& District	Marsh	Swamp	Fen	Bog
2E	James Bay	20	20	0	20
2W	Big Trout Lake	20	20	0	10
3E	Lake Abitibi	20	20	10	0
3W	Lake Nipigon	20	20	10	0
3S	Lake St. Joseph	20	20	10	0
4E	Lake Temagami	20	20	10	0
4W	Pigeon River	20	10	20	0
4S	Wabigoon Lake	20	10	20	0
5E-1	Thessalon	10	0	30	20
5E-2	Gore Bay	20	0	20	20
5E-3	La Cloche	20	0	30	20
5E-4	Sudbury	10	0	30	10
5E-5	North Bay	10	0	20	0
5E-6	Tomiko	10	0	20	0
5E-7	Parry Sound	20	0	30	20
5E-8	Huntsville	20	0	30	20
5E-9	Algonquin Park	10	0	30	0
5E-10	Brent	20	0	30	0
5E-11	Bancroft	0	10	30	10
5E-12	Renfrew	0	0	30	10
5E-13	Batchewana	10	0	10	30
5-S	Lake of the Woods	10	10	20	10

Rarity of Wetland Type Score (maximum 70 points)

Northern	n Ontario Wetland Evalua	ation Data and Scoring	Record	(November 20	, 2010)
.2 SPECII	ES				
4.1.2.1	BREEDING HABIT	ΓAT FOR AN ENDA	NGEREI	O OR THREATENED SPECIES	
			., 022122		_
Na	ame of species			Source of information	
1)					
2)					
3)					
4) 5)					
	Total:		0		
tach docume	entation.			_	
oring:					
For one	species	250 points			
For each	additional species	250 points			
ore is cumu	lative, no maximum score	a)			
ore is cumu.	iative, no maximum score	•)			
	Breeding Habitat for	r Endangered Species	s Score (n	o maximum)	C
4.1.2.2	TDADITIONAL MI	CDATION OD EEE	DINC H	ABITAT FOR AN ENDANGERE	n
7.1.2.2	OR THREATENED		DING II	IDITAT FOR AN ENDANGERE	<u> </u>
1)	ame of species			Source of information	
2)					
3)					
4)					
5)					
<u> </u>	Total:		0	<u>J</u>	
tach docume	entation.				
oring:					
For one		150 mainta			
For one s	additional species	150 points 75			
	r				
core is cumu	lative, no maximum score	e)			
	Traditional Ha	abitat for Endangered	d Snecies	Score (no maximum)	0
	Tructional Tru	ibitut for Distungered	a opecies	Score (no maximum)	

	vormern On	tario weti	and Evaluation	Data and Scoring	Record		(November	20, 2010)
4	.1.2.3	PROVINC	CIALLY SIGNI	IFICANT ANIMAI	L SPECIE	S		
	Name	of species				Source of inf	formation	
1) Ru	sty Blackb	oird (Euphagus	carolinus)*		Field O	bservation (NRSI 2	010)
2		cked by N		, , , , , , , , , , , , , , , , , , ,			`	
3								
4	.)			_				
5								
6								
7								
8								
9	0)							
	1)							
	2)							
	2)							
	1)							
1	5)							
	Attach	separate 1	ist if necessary;	; Attach documenta	ation			
		cially signi	ficant animal sp	pecies in the wetlar	nd:			
mbe	er of provinc					154		
mbe	er of provinc	=	50 points	14 species	=	154		
mbe	er of provinc	= =	50 points 80	14 species 15 species	= =	156		
1 s 2 s 3 s	er of province species species species	= = =	50 points 80 95	14 species 15 species 16 species	= = =	156 158		
1 s 2 s 3 s 4 s	er of province species species species species species	= =	50 points 80 95 105	14 species 15 species 16 species 17 species	= =	156 158 160		
1 s 2 s 3 s 4 s 5 s	species species species species species species species	= = =	50 points 80 95	14 species 15 species 16 species 17 species 18 species	= = =	156 158		
1 s 2 s 3 s 4 s 5 s 6 s	er of province species species species species species	= = = =	50 points 80 95 105 115	14 species 15 species 16 species 17 species	= = = =	156 158 160 162		
1 s 2 s 3 s 4 s 5 s 6 s 7 s 8 s	species species species species species species species species species species species	= = = =	50 points 80 95 105 115 125	14 species 15 species 16 species 17 species 18 species 19 species	= = = =	156 158 160 162 164		
1 s 2 s 3 s 4 s 5 s 6 s 7 s 8 s	species species species species species species species species species	= = = = = =	50 points 80 95 105 115 125 130	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species	= = = = =	156 158 160 162 164 166		
1 s 2 s 3 s 4 s 5 s 6 s 7 s 8 s 9 s	species species species species species species species species species species species species species species	= = = =	50 points 80 95 105 115 125 130 135 140 143	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species	= = = = = =	156 158 160 162 164 166 168 170		
1 s 2 s 3 s 4 s 5 s 6 s 7 s 8 s 9 s 10 s	species species species species species species species species species species species species species species species	= = = = = =	50 points 80 95 105 115 125 130 135 140 143 146	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species	= = = = =	156 158 160 162 164 166 168 170 172		
1 s 2 s 3 s 4 s 5 s 6 s 8 s 7 s 8 s 9 s 110 s 111 s 112 s	species species species species species species species species species species species species species species species	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species	= = = = = = = =	156 158 160 162 164 166 168 170		
1 s 2 s 3 s 4 s 5 s 6 s 8 s 9 s 110 s 112 s 112 s 113 s	species species species species species species species species species species species species species species species species species species	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species 25 species	= = = = = = = = =	156 158 160 162 164 166 168 170 172 174	. 170	
1 s 2 s 3 s 4 s 5 s 5 s 6 s 7 s 8 s 8 s 9 s 110 s 112 s 112 s 113 s d on	species	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species	= = = = = = = = =	156 158 160 162 164 166 168 170 172 174	cies = 178	
1 s 2 s 3 s 4 s 5 s 6 s 7 s 8 s 8 s 10 s 11 s 112 s 113 s 115 d d on ints 6	species	= = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species 25 species	= = = = = = = = =	156 158 160 162 164 166 168 170 172 174	cies = 178	
1 s 2 s 3 s 4 s 5 s 6 s 5 s 8 s 8 s 10 s 111 s 112 s d onnts 6	species specie	= = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149 152 ies past 25 (for	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species 25 species	= = = = = = = = = = = = = = = = = = =	156 158 160 162 164 166 168 170 172 174 176 points, 27 spe		50

	mmon Nar	imes must be me	,	Scientific N	lame	Source of	f information
1)	Oval-	leaved bilber	rry	Vaccinii	ım ovalifolium	Field v	work (NRSI 201
2)	Northe	ern wild licor	rice	Galium l	kamtschaticum	Field v	work (NRSI 201
3)							
4)						<u> </u>	
5)							
6)							
7)							
8)							
9)							
10)						<u> </u>	
11)						<u> </u>	
14)							
Att	ach separa			cumentation			
ng:	ach separa	ate list if nece	essary; Attach do	cumentation			
Att ag: er of provi	ach separa	ate list if nece	essary; Attach do ant species in the	cumentation			
Att ag: er of provines ies ies	each separa vincially si = 5 = 8	ignificant pla	essary; Attach do ant species in the 14 species 15 species	cumentation	154 156		
Att g: er of provi ies ies ies ies	each separa vincially si = 50 = 8 = 9	ignificant pla	essary; Attach do ant species in the 14 species 15 species 16 species	cumentation wetland:	154 156 158		
Att g: er of provings ies ies ies ies ies	each separa vincially si = 5 = 8 = 9 = 1	ignificant pla one of points	essary; Attach do ant species in the 14 species 15 species 16 species 17 species	cumentation wetland: = = =	154 156 158 160		
Att ag: er of prov ies ies ies ies ies ies	= 50 = 8 = 9 = 10 = 1	ignificant pla of points of points of points of points of points	essary; Attach do ant species in the 14 species 15 species 16 species 17 species 18 species	wetland:	154 156 158 160 162		
Att g: er of prov ies ies ies ies ies ies ies	= 50 = 8 = 9 = 10 = 11 = 1	ignificant pla 50 points 50 55 15 25	essary; Attach do ant species in the 14 species 15 species 16 species 17 species 18 species 19 species	wetland:	154 156 158 160 162 164		
Att g: er of prov ies ies ies ies ies ies ies ie	= 50 = 80 = 10 = 11 = 1 = 1	ignificant pla 50 points 50 50 50 51 525 30	essary; Attach do ant species in the 14 species 15 species 16 species 17 species 18 species 19 species 20 species	wetland:	154 156 158 160 162 164 166		
Att g: er of prov ies ies ies ies ies ies ies ies ies	= 50 = 80 = 10 = 11 = 11 = 11 = 1	ignificant pla 60 points 60 points 15 15 25 30 35	essary; Attach do ant species in the 14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species	wetland:	154 156 158 160 162 164 166 168		
Att g: er of prov ies ies ies ies ies ies ies ies ies	= 50 = 8 = 9 = 10 = 11 = 11 = 11 = 11 = 11	ignificant pla 60 points 60 15 15 25 30 35 40	essary; Attach do ant species in the 14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species	wetland:	154 156 158 160 162 164 166 168 170		
Att g: er of prov ies ies ies ies ies ies ies ies ies	= 50 = 80 = 10 = 1 = 1 = 1 = 1 = 1 = 1	ignificant pla 30 points 30 35 40 43	essary; Attach do ant species in the 14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species	wetland:	154 156 158 160 162 164 166 168 170		
Atteng: er of provinces eies eies eies eies eies eies eies e	each separa vincially si = 50 = 80 = 10 = 1 = 1 = 1 = 1 = 10 = 10	ignificant pla 50 points 50 points 50 points 50 points 50 points 50 points 50 points 50 points 50 points 40 poi	essary; Attach do ant species in the 14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species	wetland:	154 156 158 160 162 164 166 168 170 172		
Att	each separa vincially si = 50 = 80 = 10 = 1 = 1 = 1 = 1 = 10 = 10	ignificant pla 30 points 30 35 40 43	essary; Attach do ant species in the 14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species	wetland:	154 156 158 160 162 164 166 168 170		
Atteng: oer of provenies cies cies cies cies cies cies cies c	= 50 = 80 = 10 = 11 = 11 = 11 = 14 = 14 = 14 = 14 = 14	ignificant pla 60 points 60 poi	essary; Attach do ant species in the 14 species 15 species 16 species 17 species 18 species 20 species 21 species 22 species 23 species 24 species 25 species	wetland:	154 156 158 160 162 164 166 168 170 172		

Northern Ontario Wetland Evaluation Data and Scoring Record	Northern Ontario	Wetland	l Evaluation	Data and	Scoring	Record
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4.1.2.5 REGIONALLY SIGNIFICANT SPECIES (SITE REGION)

Scientific names must be recorded for plant species. Lists of significant species must be approved by MNR.

SIGNIFICANT IN SITE REGION:

Common Name Scientific Name Source of information 1) 2) 3) 4) 5) 7) 8) 9) 10) 11) 12) 13) 14) 15)

Attach separate list if necessary .Attach documentation.

Scoring:

No. of species significant in Site Region

1 species	=	20	6 species	=	55
2 species	=	30	7 species	=	58
3 species	=	40	8 species	=	61
4 species	=	45	9 species	=	64
5 species	=	50	10 species	=	67

Add one point for every species past 10. (no maximum score)

Significant Species (Site Region) Score (no maximum)

^{**} Score only if there is an approved list

(November 20, 2010)

4.2.1.6 LOCALLY SIGNIFICANT SPECIES (SITE DISTRICT)

Scientific names must be recorded for plant species. Lists of significant species must be approved by MNR.

Common Name	Scientific Name	Source of information
1		
3		
2		
3		
4		
5		
6	<u> </u>	<u></u>
7		
8		
9		
10		
11		
12		
13		<u> </u>
14		
15		
16		
17		
18		

Attach separate list if necessary .Attach documentation.

Scoring:

No. of species significant in Site District

1 species	=	10	6 species	=	41
2 species	=	17	7 species	=	43
3 species	=	24	8 species	=	45
4 species	=	31	9 species	=	47
5 species	=	38	10 species	=	49

For each significant species over 10 in the wetland, add 1 point.

Locally Significant Species (Site District) Score (no maximum)

(November 20, 2010)

4.1.2.7 SPECIES OF SPECIAL STATUS

Black Duck

Suitable breeding habitat present and within assessment range (Figure 17)

Assessment Category	Check one	Score
40-80 Indicated Pairs/100 km sq		25 points
20-40 Indicated Pairs/100 km sq		20
10-20 Indicated Pairs/100 km sq	X	15
5-10 Indicated Pairs/100 km sq		10
1-5 Indicated Pairs/100 km sq		5
Habitat not suitable		0
Out of assessment range		0

Black Duck Score (maximum 25 points)

15

4.2 SIGNIFICANT FEATURES AND/OR FISH & WILDLIFE HABITAT

4.2.1 NESTING OF COLONIAL WATERBIRDS

Status	Name of species	Source of Information	Score
Currently nesting			50 points
Known to have nested within past 5 years			25
Active feeding area (great blue heron excluded)			15
None known			0

Attach documentation (nest locations etc., if known)

Colonial Waterbirds Score (maximum 50 points)

0

4.2.2. WINTER COVER FOR WILDLIFE

(Check only highest level of significance) Score (one only)

1)		Provincially significant	100
2)		Significant in Site Region	50
3)		Significant in Site District	25
3)		Locally significant	10
4)	X	Little or poor winter cover present	0

Source of information: Field Observations (NRSI 2010)

Winter Cover for Wildlife Score (maximum 100 points)

Nort	hern Ontario W	etland Evaluation	n Data and	Scoring Recor	·d	(November	20, 2010)
4.2.3 WA	TERFOWL STA	AGING AND/OF	R MOULT	ING			
(Check onl	(Check only highest level of significance for both staging and moulting; score is cumulative						
	mns, maximum	-	a com sug	,ing and moun	ing, score is cuit	ididii (C	
	.,	,					
		S	Staging	Score	Moulting	Score	
				(one only)		(one only)	
1)	Nationally sig	gnificant		150		150	
2)	Provincially s			100		100	
3)	Regionally sig	_		50		50	
4)	Known to occ	eur		10		10	
5)	Not possible	_		0		0	
6)	Not known	_	X	0	X	0	
	Total:		0		0		
Source of i	nformation:						
Source of 1	mormation.	Waterfowl N	Moulting a	nd Staging So	core (maximum	150 points)	0
			O		•	•	
4.2.4 WA	TERFOWL BR	EEDING					
	(Chaoly only b	ichest level of si	::::::	C			
	(Cneck only n	ighest level of sig	gnificance)	3	core		
1)	Pr	ovincially signifi	cant		100		
2)		egionally signific			50		
3)		abitat suitable			10		
4)		abitat not suitable)		0		
Source of i	nformation:		Field Obs	ervations (NR	SI 2010)		
		7	Vaterfowl	Breeding Sco	ore (maximum l	OO noints)	10
		·	v acci io wi	Diceums See	i (maximum i	oo pomes)	10
4.2.5 MIC	GRATOR PASS	SERINE, SHORE	BIRD OR	RAPTOR STO	OPOVER AREA	<u> </u>	
	(check highest	t applicable categ	ory)				
1)	Dr	ovincially signifi	cant		100		
2)		gnificant in Site			50		
3)		gnificant in Site I			10		
4)		ot significant	District		0		
Source of i	nformation:		MNR Valu	ies Map (June	25, 2010)		
	D	aggarina Charab	ind on Don	stan Stanavan	Saara (maximu	m 100 nainta)	0
	Pa	asserine, Shoreb	nu or Kaj	nor stopover	Score (maximu	m 100 points)	0
				28			

Northern Ontario Wetland Evaluation Data and Scoring Record (November 20, 2010) 4.2.6 UNGULATE HABITAT **EVALUATION** Score (1) + (2) +one of (3) to (6)Score (1) Ungulate summer cover 15 points Mineral licks 50 Moose aquatic feeding area Class 1 0 (3) (4) Moose aquatic feeding area Class 2 10 (5) Moose aquatic feeding area Class 3 20 Moose aquatic feeding area Class 4 35 (6) (Score is cumulative for a maximum possible score of 100) **Ungulate Habitat Score (maximum 100 points)** 4.2.7 FISH HABITAT 4.2.7.1 Spawning and Nursery Habitat Table 5. Area Factors for Low Marsh, High Marsh, and Swamp Communities. No. of ha of Fish Habitat Area Factor < 0.5 ha 0.1 0.5- 4.9 0.2 5.0-9.9 0.4 10.0-14.9 0.6 15.0 -19.9 0.8 20.0+ ha 1.0 Step 1: Fish habitat is not present within the wetland (Score = 0) Fish habitat is present within the wetland (Go to Step 2) X Step 2: Choose only one option 1) Significance of the spawning and nursery habitat within the wetland is known (Go to Step 3) Significance of the spawning and nursery habitat within the wetland is not 2) known (Go through Steps 4, 5, 6 and 7)

	Northern Ontario Wetland Evaluation Data and Scoring Record (Novem						
Step	3:	Select the highest appropriate category below at	tach documentation:				
1)		Significant in Site Region	100 points				
2)		Significant in Site District	50				
3)		Locally Significant Habitat (5.0+ ha)	25				
4)	X	Locally Significant Habitat (<5.0 ha)	15				
		Score for Spawning and Nursery Habit	at (maximum score 100 p	points)	15		
<u>Step</u>	Step 4: Proceed to Steps 4 to 7 only if Step 3 was not answered.						
(Low Marsh: marsh area from the existing water line out to the outer boundary of the wetland)							
	X Low marsh not present (Continue to Step 5) Low marsh present (Score as follows)						

Scoring for Presence of Key Vegetation Groups

Scoring is based on the one most clearly dominant plant species of the dominant form in each Low Marsh vegetation community. Check the appropriate Vegetation Group (see Appendix 16) for each Low Marsh community. Sum the areas of the communities assigned to each Vegetation Group and multiply by the appropriate size factor from Table 5.

Vegetation	Vegetation	Present	Total	Area	Score	Final
Group Number	Group Name	as a	Area	Factor		Score
		Dominant	(ha)			(area
		Form		(see		factor
		(check)		Table 5)		x score)
1	Tallgrass				6 pts	0.0
2	Shortgrass-Sedge				11	0.0
3	Cattail-Bulrush-Burreed				5	0.0
4	Arrowhead-Pickerelweed				5	0.0
5	Duckweed				2	0.0
6	Smartweed-Waterwillow				6	0.0
7	Waterlily-Lotus				11	0.0
8	Waterweed-Watercress				9	0.0
9	Ribbongrass				10	0.0
10	Coontail-Naiad-Watermilfoil				13	0.0
11	Narrowleaf Pondweed				5	0.0
12	Broadleaf Pondweed				8	0.0
_	Total Score (max	imum 75 point	s)			0.0

Northern Ontario Wetland Evaluation Data and Scoring	Record
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Step 5: (**High Marsh**: area from the water line to the inland boundary of marsh wetland type. This is essentially what is commonly referred to as a wet meadow, in that there is insufficient standing water to provide fisheries habitat except during flood or high water conditions.)

High marsh not present (Continue to Step 6)

X High marsh present (Score as follows)

Scoring for Presence of Key Vegetation Groups

Scoring is based on the one most clearly dominant plant species of the dominant form in each High 1Marsh vegetation community. Check the appropriate Vegetation Group for each High Marsh community. Sum the areas of the communities assigned to each Vegetation Group and multiply by the appropriate size factor from Table 5.

Vegetation	Vegetation	Present	Total	Area	Score	Final
Group Number	Group Name	as a	Area	Factor		Score
		Dominant	(ha)	(see		(area
		Form		Table 5)		factor
		(check)				x score)
1	Tallgrass				6 pts	0.0
2	Shortgrass-Sedge	X	0.85	0.2	11	2.2
3	Cattail-Bulrush-Burreed				5	0.0
4	Arrowhead-Pickerelweed				5	0.0
Total Score (maximum 25 points)						2

Step 6: (**Swamp**: Swamp communities containing fish habitat, either seasonally or permanently. Determine the total area of seasonally flooded swamps and permanently flooded swamps containing fish habitat.)

Swamp containing fish habitat not present (Continue to Step 7)

X Swamp containing fish habitat present (Score as follows)

	<u></u>		T	1_	
Swamp containing fish	Present	Total	Area Factor	Score	TOTAL SCORE
Habitat	(check)	area (ha)	(see Table 5)		(factor x score)
Seasonally flooded	X	0.8	0.2	10	2.0
Permanently flooded	0.0				
SCO	2.0				

Northern Ontario Wetland Evaluation Data and Scoring Record	(November 20, 2010)									
Step 7: Calculation of final score										
Score for Spawning and Nursery Habitat (Low Marsh) (maximum 75)	= 0.0									
Score for Spawning and Nursery Habitat (High Marsh) (maximum 25)	= 2.0									
Score for Swamp Containing Fish Habitat (maximum 20) = 2.0										
Sum (maximum score 100 points) = 4										
4.2.6.2 Migration and Staging Habitat										
Step 1:										
1) X Staging or Migration Habitat is not present in the wetland (Sco.	ore = 0)									
2) Staging or Migration Habitat is present in the wetland significa to Step 2)	ance of the habitat is known (Go									
3) Staging or Migration Habitat is present in the wetland significa (Go to Step 3)	ance of the habitat is not known									
NOTE: Only <u>one</u> of Step 2 <u>or</u> Step 3 is to be scored.										
Step 2: Select the highest appropriate category below, attach documentates										
1) Significant in Site Region	Score 25 points									
2) Significant in Site District	15									
3) Locally Significant	10									
4) Fish staging and/or migration habitat present,but not as above	5									
Score for Fish Migration and Staging Habitat (maxim	num score 25 points)									
Select the highest appropriate category below based on presence (does not have to be dominant). Note name of river for 2) and 3).										
Wetland is riverine at rivermouth or lacustrine at rivermouth	Score 25 points									
2) Wetland is riverine, within 0.75 km of rivermouth	15									
3) Wetland is lacustrine, within 0.75 km of rivermouth	10									
4) Fish staging and/or migration habitat present, but not as above	5									
·										
Score for Staging and Migration Habitat (maxin	num score 25 points)									
22										

(November 20, 2010)

4.3 ECOSYSTEM AGE

(Fractional Area = area of wetland type/total area of wetland)

	Area			Scoring
Bog		X	25 =	0.0
Fen, treed to open on deep soils		•		
floating mats or marl	0.14	X	20 =	2.8
Fen, on limestone rock		X	5 =	0.0
Swamp	0.77	X	3 =	2.3
Marsh	0.09	X	0 =	0.0
		Sub Total:		5.1

Fractional

Ecosystem Age Score (maximum 25 points)

-5

4.4 GREAT LAKES COASTAL WETLANDS

Score for **coastal** (see text for definition) wetlands only

Choose one only

 wetland < 10 ha</td>
 =
 0 points

 wetland 10- 50 ha
 =
 25

 wetland 51 -lOO ha
 =
 50

 wetland > 100 ha
 =
 75

Great Lakes Coastal Wetlands Score (maximum 75 points)

Northern Ontario Wetland Evaluation Data and S	Scoring Red	cord	(November 20, 2010)
5.0 EXTRA INFORMATION			
5.1 PURPLE LOOSESTRIFE			
X Absent/Not seen			
Present	(a)	One location in wetland Two to many locations	<u> </u>
	(b)	Abundance code (1 < 20 plants (2 20-99 plants (3 100-999 plants (4 >1000 plants	
5.2 SEASONALLY FLOODED AREAS			
Indicate length of seasonal flooding			
Check one or more			
Ephemeral Temporal Seasonal Semi-permanent No seasonal flooding		(less than 2 weeks) (2 weeks to 1 month) (1 to 3 months) (>3 months)	X X
5.3 SPECIES OF SPECIAL SIGNIFICANCE			
5.3.1 Osprey			
Present and nesting (attach map showing nest site) Known to have nested in last 5 yr Feeding area for osprey Not as above		<u></u>	
5.3.2 Common Loon			
Nesting in wetland (attach map showing nest site) Feeding at edge of wetland Observed or heard on lake or		_	
river adjoining the wetland Not as above		X	
	34		

Northern Ontario Wetland Evaluation Data and Scoring Record	(November 20, 2010)
INVESTIGATORS	AFFILIATION
Lisa Keable	Natural Resource Solutions Inc.
Derek Goertz	Natural Resource Solutions Inc.
DATES WETLAND VISITED September 20, 201	0
DATE THIS EVALUATION COMPLETED:	November 20, 2010
DATE THIS EVALUATION COMPLETED.	November 20, 2010
ESTIMATED TIME DEVOTED TO COMPLETING THE FIEL 12 hours (2 people between 103	
WEATHER CONDITIONS	
i) at time of field work	
Temperature = 11 - 15°C, Light Rain with 100% cloud cover. W	Vind = 1-2 (NW) Beaufort Scale.
25 12 1	
ii) summer conditions in generalOverall, summer months were hot and very dry. However, heavy	y rains fell during the first week of September.
o voluit, summer months were not and very dry. 110 we ver, near,	y runs for during the first week of september.
OTHER POTENTIALLY USEFUL INFORMATION:	
Rusty blackbird was observed foraging	g in community lsS1.
,	,
CHECKLIST OF PLANT AND ANIMAL SPECIES RECORDED IN	THE WETLAND:
Lists of all flora and fauna observed in the wetland.	
35	

North	ern Ontario Wetland Evaluation Da	ta and Scoring Record	(No	vember 20, 2	2010)			
	WETLAND	EVALUATION SCORI	NG RECORD					
WETLAND	NAME	В	sullseye Wetland Comple	ex				
1.0 BIOLOGICAL COMPONENT								
1.1	PRODUCTIVITY							
1.1.2	Growing Degree-Days/Soils Wetland Type Site Type			9 8 2				
			Total for Productivity		19			
1.2	BIODIVERSITY							
1.2.2 1.2.3 1.2.4 1.2.5	Number of Wetland Types Vegetation Communities (maxixmu Diversity of Surrounding Habitat (n Proximinty to Other Wetlands Interspersion Open Water Type			20 12 7 8 9				
			Total for Biodiversity		70			
1.3	Sub Total for Biodiversity SIZE (Biological Component)	70			8			
TOTA	AL FOR BIOLOGICAL COMPONE	NT (not to exceed 250)			97			

Northern Ontario Wetland Evaluation Data and Scoring Record (November 1)	mber 20, 2010)
2.0 SOCIAL COMPONENT	
2.1 ECONOMICALLY VALUABLE PRODUCTS	
2.1.1 Wood Products 2.1.2 Lowbush Cranberry 2.1.3 Wild Rice 2.1.4 Commercial Fish 2.1.6 Furbearers	4 2 0 12 6
Total for Economically Valuable Products	24
2.2 RECREATIONAL ACTIVITIES (maximum 80)	8
2.3 LANDSCAPE AESTHETICS	
2.3.1 Distinctness 2.3.2 Absence of Human Disturbance	<u>0</u> 7
Total for Landscape Aesthetics	7
2.4 EDUCATION AND PUBLIC AWARENESS	
2.4.1 Educational Uses 2.4.2 Facilities and Programs 2.4.3 Research and Studies (maximum 12)	0 0 0
Total for Education and Public Awareness	0
2.5 PROXIMITY TO AREAS OF HUMAN SETTLEMENT	10
2.6 OWNERSH1P Subtotal for Social Component 2.7 SIZE (Social Component)	8
2.8 ABORIGINAL AND CULTURAL VALUES (maximum 30)	30
TOTAL FOR SOCIAL COMPONENT (not to exceed 250)	91

Northern Ontario Wetland Evaluation Data a	nd Scoring Record	(November 20, 2010)
3.0 HYDE	ROLOGICAL COMPONENT	
3.1 FLOOD ATTENUATION		81
3.2 <u>GROUNDWATER RECHARGE</u>		
3.2.1 Site Type 3.2.2 Soils		20 4
	Total for Groundwater Recha	rge 24
3.3 <u>WATER QUALITY IMPROVEMENT</u>		
3.3.1 Watershed Improvement Factor3.3.2 Adjacent and Watershed Land Us3.3.3 Vegetation Form	se	26 7 8
	Total for Water Quality Impro	ovement 41
3.4 <u>CARBON SINK</u>		9
3.5 SHORELINE EROSION CONTROL		0
3.6 <u>GROUNDWATER DISCHARGE</u>		15

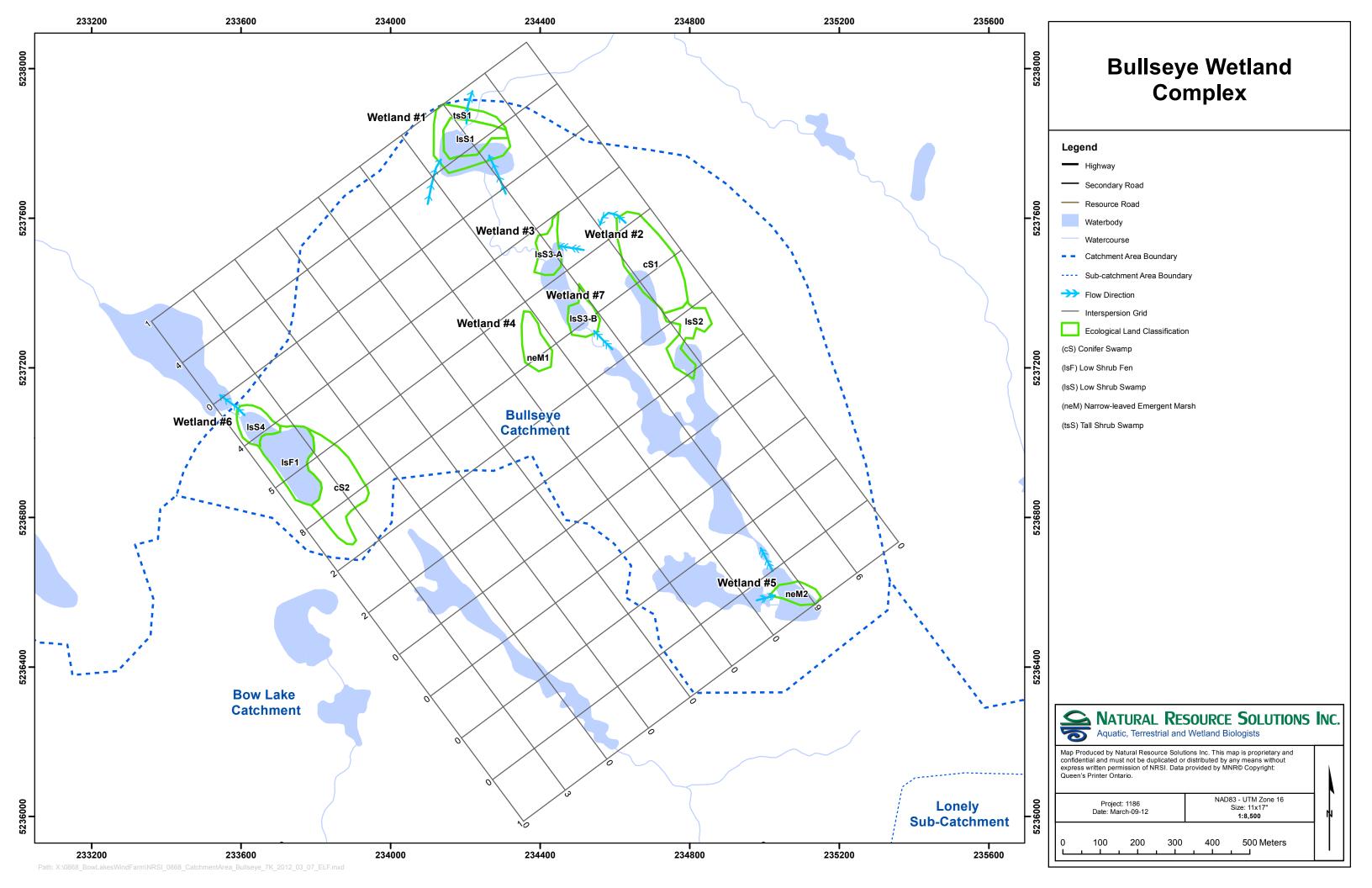
Northern Ontario Wetland Evaluation Data and Scoring Record	(November 20, 2010)
	(, ,
4.0 SPECIAL FEATURES	
4.1 <u>RARITY</u>	
4.1.1 Wetlands	20
4.1.1 Wettalius	20
4.1.2 Species	0
4.1.2.1 Endangered or Threatened Species Breeding4.1.2.2 Traditional Use by Endangered or Threatened Species	0
4.1.2.3 Provincially Significant Animals	50
4.1.2.4 Provincially Significant Plants	80
4.1.2.5 Regionally Significant Species	0
4.1.2.6 Locally Significant Species4.1.2.7 Species of Special Status	<u>0</u> 15
4.1.2.7 Species of Special Status	13
Total for Species Rarity	145
4.2 <u>SIGNIFICANT FEATURES OR HABITAT</u>	
42.1 C.1 : 1W. 1: 1	0
4.2.1 Colonial Waterbirds4.2.2 Winter Cover for Wildlife	0
4.2.3 Waterfowl Staging and Moulting	0
4.2.4 Waterfowl Breeding	10
4.2.5 Migratory Passerine, Shorebird or Raptor Stopover	0
4.2.6 Ungulate Habitat	25
4.2.7 Fish Habitat	19
Total for Significant Feat	ures and Habitat 54
4.3 <u>ECOSYSTEM AGE</u>	5
4.4 GREAT LAKES COASTAL WETLANDS	0
TOTAL FOR SPECIAL FEATURES (maxi	mum 250) 224

Nort	hern Ontario Wetland Evaluation Data and Scoring Record	(November 20, 2010)							
	SUMMARY OF EVALUATION RESULT								
Wetland	Bullseye Wetland Complex								
TOTAL FO	OTAL FOR 1.0 BIOLOGICAL COMPONENT 97								
TOTAL FO	OR 2.0 SOCIAL COMPONENT	91							
TOTAL FO	TOTAL FOR 3.0 HYDROLOGICAL COMPONENT								
TOTAL FO	OR 4.0 SPECIAL FEATURES COMPONENT	224							
	WETLAND TOTAL	582							
INVESTIG Lisa Keabl Derek Goe	e rtz								
Katharina \	Walton (evaluation revision, March 2012)								
	Natural Resource Solutions Inc. Natural Resource Solutions Inc. Natural Resource Solutions Inc.								
DATE	March 7, 2012								

Data Summary Form

Wetland: Bullseye Wetland Complex

Wetland	Wetland	Map Code	Field	#	Dominant	Forms	% Open	Area (ha)	Open Water	Soils	Site Type	Fish Habitat
Type	Unit		Code	Forms	Form		Water		(ha)			
	1	lsS1	2	3	ls	ne, gc	20	1.21	0.24	Organic (H)	Palustrine	Yes
	2	lsS2	6	3	ls	ne, m	20	1.12	0.22	Silt	Palustrine	Yes
	3	lsS3-A	4	2	ls	m	30	0.72	0.22	Bedrock	Palustrine	No
Swamp	7	lsS3-B	4b	2	ls	m	30	0.71	0.21	Bedrock	Palustrine	No
	6	lsS4	1	2	ls	ne	35	0.80	0.28	Bedrock	Palustrine	High Marsh
	1	tsS1	3	3	ts	ne, gc	5	1.57	0.08	Organic (H)	Palustrine	No
	2	cS1	5	4	С	ls, gc, m	0	2.96	0.00	Organic (M)	Palustrine	No
	6	cS2	3	5	С	ts, Is, gc, m	0	2.61	0.00	Bedrock	Palustrine	N
Marsh	4	neM1	7	1	ne		30	0.85	0.26	Silt	Isolated	Yes
ividiSII	5	neM2	19	4	ne	ls, gc, m	5	0.56	0.03	Organic (H)	Palustrine	No
Fen	6	lsF1	2	5	ls	c, ts, gc, m	5	2.09	0.10	Organic (F)	Palustrine	N



Map Legend

Мар	Wetland	Wetland	Forms	Dominant Species
Code	Type	#		
lsS1	Swamp	1	ls, ne, gc	Sweetgale (Myrica gale), Leatherleaf (Chamaedaphne calyculata); Juncus brevicaudatus ,
				Rattlesnake grass (Glyceria canadensis), Bottlesedge (Carex utriculata); Spotted St. John's-wort
				(Hypericum perforatum)
tsS1	Swamp	1	ts, ne, gc	Speckled alder (Alnus incana spp. rugosa); Canada blue joint (Calamagrostis canadensis),
				St. John's-wort (<i>Hypericum punctatum</i>)
lsS2	Swamp	2	ls, ne, m	Sweetgale (M. gale), Leatherleaf (C. calyculata); Bottlesedge (C. utriculata); Sphagnum girgensohnii
cS1	Swamp	2	c, ls, gc, m	Black spruce (<i>Picea mariana</i>); Black spruce (<i>P. mariana</i>); Creeping snowberry (<i>Gaultheria hispidula</i>),
				Small cranberry (Vaccinium oxycoccus); S. magellanicum, S. girgensohnii
lsS3-A	Swamp	3	ls, m	Sweetgale (M. gale), Leatherleaf (C. calyculata); Sphagnum wolfianum , Sphagnum palustre ,
				S. girgensohnii, Sphagnum magellanicum
neM1	Marsh	4	ne	Bottle sedge (<i>C. utriculata</i>), <i>Glyceria</i> spp.
neM2	Marsh	5	ne, Is, gc, m	Carex spp.; Sweetgale (M. gale); St. John's wort (H. punctatum); S. palustre, Sphagnum angustifolium,
				S. magellanicum
lsF1	Fen	6	c, ts, ls, gc, m	Eastern white cedar (<i>Thuja occidentalis</i>), Black spruce (<i>Picea mariana</i>); Eastern white cedar
				(T. occidentalis), Black spruce (P. mariana); Leatherleaf (C. calyculata), Sweetgale (M. gale)
				Small cranberry (Vaccinium oxycoccus); Sphagnum magellanicum, Sphagnum squarrosum,
				Sphagnum fuscum, Sphagnum rubellum, Sphagnum centrale
cS2	Swamp	6	c, ts, ls, m	Black spruce (<i>P. mariana</i>), Eastern white cedar (<i>T. occidentalis</i>); Black spruce (<i>P. mariana</i>),
				Eastern white cedar (<i>T. occidentalis</i>); Labrador tea (<i>Ledum groenlandicum</i>), Creeping snowberry
				(Gaultheria hispidula); Sphagnum girgensohnii, S. magellanicum
lsS4	Swamp	6	ls, ne	Sweetgale (Myrica gale), Leatherleaf (Chamaedaphne calyculata); Canada blue joint
				(Calamagrostis canadensis), Bottle sedge (Carex utriculata)
lsS3-B	Swamp	7	ls, m	Sweetgale (M. gale), Leatherleaf (C. calyculata); Sphagnum wolfianum , Sphagnum palustre ,
				S. girgensohnii, Sphagnum magellanicum

				Ι		NRSI	
			S-			Observations	
BOTANICAL NAME		COMMON NAME	Rank	COSSARO	COSEWIC	2010	Rare Plant Locations
PTERIDOPHYTES		FERNS & ALLIES		i			
Osmundaceae		Royal Fern Family					
Osmunda	cinnamomea	Cinnamon Fern	S5			Х	
GYMNOSPERMS		CONIFERS					
Cupressaceae		Cedar Family					
Thuja	occidentalis	Eastern White Cedar	S5			Х	
Pinaceae		Pine Family					
Picea	mariana	Black Spruce	S5			X	
Pinus	strobus	Eastern White Pine	S5			Х	
DICOTYLEDONS		DICOTS					
Aceraceae		Maple Family					
Acer	rubrum	Red Maple	S5			Х	
71007	rabiani	rtea maple	1 5			7.	
Asteraceae		Composite or Aster Family					
Euthamia	graminifolia	Flat-topped Bushy Goldenrod	S5			X	
D							
Betulaceae	1.	Birch Family	0.5				
Alnus	incana spp. rugosa	Speckled Alder	S5			X	
Betula	papyrifera	White Birch	S5			Х	
Cornaceae		Dogwood Family					
Cornus	canadensis	Bunchberry	S5			Х	
Droseraceae		Sundew Family					
Drosera	intermedia	Spatulate-leaved Sundew	S5			X	
Drosera	rotundifolia	Round-leaved Sundew	S5			X	
Ericaceae		Heath Family					
Chamaedaphne	calyculata	Leatherleaf	S5	 		X	
Gaultheria	hispidula	Creeping Snowberry	S5	 		X	
Ledum	groenlandicum	Labrador-tea	S5	 		X	
Vaccinium	myrtilloides		S5			X	
Vaccinium Vaccinium	ovalifolium	Velvet-leaf Blueberry	S3			X	16T 687996 5233865
		Tall Huckleberry	S5	 		X	101 00/990 5233005
Vaccinium	oxycoccos	Small Cranberry	১১		<u> </u>	X	

	St. John's-wort Family		 		
punctatum		S5		Х	
fraseri	Fraser's St. John's-wort	S5		Х	
	Mint Family				
uniflorus	Northern Water-horehound	S5		X	
	Wax-myrtle Family				
gale	Sweet Gale	S5		X	
	Evening-primrose Family				
palustre	Marsh Willow-herb	S5		X	
	Primrose Family				
borealis ssp. borealis	Star-flower	S5		X	
	Buttercup Family				
trifolia	Goldthread	S5		X	
	Madder Family				
kamtschaticum	Northern Wild Licorice	S2		X	16 T688027 5233767
	Rose Family				
allegheniensis	Alleghany Blackberry	S5		X	
	Sedge Family				
species		1		Х	
utriculata		S5		Х	
arundinaceum	Reed-like Three-way Sedge	S5	1	Х	
cyperinus	Wool-grass	S5		X	
	Iris Family				
versicolor	Multi-coloured Blue-flag	S5		X	
	Rush Family				
brevicaudatus	Short-tailed Rush	S5		Х	
effusus ssp. solutus	Soft Rush	S5		Х	
	fraseri uniflorus gale palustre borealis ssp. borealis trifolia kamtschaticum allegheniensis species utriculata arundinaceum cyperinus versicolor brevicaudatus	punctatum fraseri Fraser's St. John's-wort Mint Family uniflorus Northern Water-horehound Wax-myrtle Family gale Sweet Gale Evening-primrose Family Marsh Willow-herb Primrose Family borealis ssp. borealis Star-flower Buttercup Family trifolia Goldthread Madder Family kamtschaticum Northern Wild Licorice Rose Family allegheniensis Alleghany Blackberry Sedge Family species utriculata Beaked Sedge arundinaceum Reed-like Three-way Sedge cyperinus Wool-grass Iris Family versicolor Multi-coloured Blue-flag Rush Family Short-tailed Rush	punctatum Corymbed St. John's-wort S5 fraseri Fraser's St. John's-wort S5 Mint Family uniflorus Northern Water-horehound S5 Wax-myrtle Family gale Sweet Gale S5 Evening-primrose Family palustre Marsh Willow-herb S5 Primrose Family borealis ssp. borealis Star-flower S5 Buttercup Family trifolia Goldthread S5 Madder Family kamtschaticum Northern Wild Licorice S2 Rose Family allegheniensis Alleghany Blackberry S5 Sedge Family species Sedge Family species Sedge species utriculata Beaked Sedge S5 arundinaceum Reed-like Three-way Sedge S5 Versicolor Multi-coloured Blue-flag S5 Rush Family brevicaudatus Short-tailed Rush S5	Dunctatum Corymbed St. John's-wort S5	Dunctatum

Orchidaceae		Orchid Family			
Cypripedium	Cypripedium acaule Pink Lady's Slipper		S5	Х	
		5 "			
Poaceae		Grass Family			
Calamagrostis	canadensis	Blue-joint Grass	S5	X	
Glyceria	spp.			Х	
Glyceria	borealis	Northern Manna Grass	S5		
Glyceria	canadensis	Rattlesnake Grass	S4S5	X	
Potamogetonaceae		Pondweed Family			
Potamogeton	gramineus	Grass-like Pondweed	S5	X	
Potamogeton			S5	Х	
Sparganiaceae		Bur-reed Family			
Sparganium	fluctuans	Floating Bur-reed	S4?	X	
BRYOPHYTES					
Sphagnaceae					
Sphagnum	spp.			X	
Sphagnum	angustifolium	Narrow-leaf Peat Moss	S5	X	
Sphagnum	fuscum		S5	X	
Sphagnum	girgensohnii	Common Green Peat Moss	S5	X	
Sphagnum	magellanicum	Midway Peat Moss	S5	X	
Sphagnum	palustre	·	S5	X	
Sphagnum	wolfianum	Wulfe's Peat Moss	S5	X	

Wildlife Observations

Includes tracks and/or signs observed in the field.

Common Name	Scientific Name		
Birds			
Black duck	Anas rubripes		
Rusty blackbird	Euphagus carolinus		
Song sparrow	Melospiza melodia		

Mammals

Beaver Castor canadensis

Deer mouse Peromyscus maniculatus

Moose Alces alces

Red squirrel Tamiasciurus hudsonicus

Amphibians

Green frog Rana clamitans melanota

Spring peeper Pseudacris crucifer

Natural Resources Department BNR

BATCHEWANA FIRST NATION OF OJIBWAYS

RANKIN RESERVE 15 D GOULAIS BAY RESERVE 15 A OBADJIWAN RESERVE 15 E WHITEFISH ISLAND 15

> Administration Office: 236 Frontenac Street Rankin Reserve 15D Batchewana Territory, ON P6A 5K9 Ph: (705) 759-0914 / Fax: (705) 759-9171 www.batchewana.ca

November 17, 2010

Derek Goertz Natural Resource Solutions Inc. 111 Elgin Street Sault Ste. Marie, ON P6A 6L6

Dear Derek:

Re: Site Evaluation for the Wetlands of Bow Lakes Wetlands

As per your request, BNR Field Technician, David Sewell has completed a site evaluation for the Two Wetlands in the vicinity of the proposed Bow Lake Wind Farm within Batchewana First Nation.

I have attached Dave's report that we are hope is going to be helpful to you. We also request that you provide a copy to your employee and any other necessary agencies that are involved with this project.

Thank you very much for requesting BFN participation. If you have any questions or need more information please contact Dave Sewell or myself at 705-759-0914.

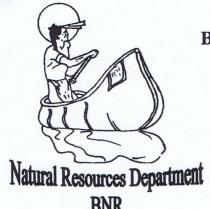
Miigwetch

Danny Sayers JR. (BNR Manager)

c.c. Chief and Council

Dave Sewell (BNR Field Technician)

Vortex



BATCHEWANA FIRST NATION OF OJIBWAYS

RANKIN RESERVE 15 D GOULAIS BAY RESERVE 15 A OBADJIWAN RESERVE 15 E WHITEFISH ISLAND 15

> Administration Office: 236 Frontenac Street Rankin Reserve 15D Batchewana Traditional Territory, ON P6A 5K9 Ph: (705) 759-0914 / Fax: (705) 759-9171 www.batchewana.ca

BNR Site Visit and Recommendations on Two Bow Lake Wetlands

On October 26, 2010 I visited the area of the Bow Lake Wind Farms to take a look at the wetlands in that area. There are two big pieces of wetland, one to the north of Bow Lake and, one to the south of Bow Lake. There are a few smaller pieces of wetland around Negick Lake which is within the Wind Farm area. From what I seen these wetlands play an important role to the surrounding area. These wetlands are nature's way of filtering the water which the animals drink (and sometimes humans). In this area there are a lot of animals such as the moose, deer; bear, wolves, foxes, beaver and a lot of other smaller animals. There is plenty of plant life around the wetlands that animals and aquatic life use as food and others use as their homes. There are also a lot of plants that we (BFN) use for medicines. The loss of these wetlands will have on huge burden on the BFN community and the surrounding area that may have irreversible damage.

Recommendations:

- I believe that these wetlands are very valuable to the surrounding area, environment, wild life and BFN reliance on the land and resources to sustain our cultural activities.
- The Bzhki Ziibi (Montreal River) has and continues to be valuable resources to BFN
 community members to access, for harvest and manage our Natural Resources that
 include but not limited to hunting, fishing, cultural sites.
- More BFN field work is needed to provide a complete evaluation and values of these wetlands.

It is my recommendation that Batchewana First Nation should be a part of any Environmental Evaluations from the beginning stages. It is very important to have BFN participation in order to understand and/or to receive appropriate data related to direct impacts and/or values. BNR field Technician is requesting that any future work in our Territory involves our participation which includes but not limited to; covering the cost associated with providing BFN involvement. It's essential for the government, Industry, and contractors to budget for First Nation participation because it becomes costly to our First Nation departments to complete these tasks in a manner that the community will accept. Without BFN reasonable participation in future Environmental Evaluations or Environmental Impacts studies, BFN will not endorse or except the final copies of those reports.

Dave Sewell BNR Field Technician

	Is	osceles Wetland Compl	ex			
	Wetland	d Evaluation Edition		2002		
		November 13, 2010				
		Comments				
Attached Documents incl	lude:					
4) C CW (1 1 1		1				
4) Summary of Wetland		lominant form areas				
 Map of Isosceles Wetl List of vegetation com 						
5) Map of Interspersion	iniunities					
7) Map of Isosceles Wetl	and Complex Catchin	nent Rasin				
10) Vascular Plant List	and complex catemi	ient Busin				
11) Fauna list						
,						
		Additional Information	1			
Official Name:		Isosceles Wet	land Comple	ex		
Evaluation Edition:	2002	Class:	Wetlar			
Not Provincially Signific		h Last Evaluated		November	13, 2010	
Jan B		h Last Updated		Mar		
Special Planning Conside]			Scores	
					Biological:	96
					Social:	79
				Hy	drological:	160
					ıl Features:	68
				•	Overall:	403
Submitted by:	Natural Re	esources Solutions Inc.				
Date:	N	March 9, 2012				

N	orth	hern Ontario Wetland Evaluation, Dat	a and Scoring Record	(November 13, 2010)
		WETLAND D	ATA AND SCORING RECORD	
i)		WETLAND NAME:	Isosceles Wetland Comple	ex
ii)		MNR ADMINISTRATIVE REGION	: North East DISTRICT:	Sault Ste. Marie
		AREA OFFICE (if different from Dis	trict):	
iii)		CONSERVATION AUTHORITY JU	RISDICTION:	
		(If not within a designated CA, check he	ere: X	
iv)		COUNTY OR REGIONAL MUNICI	PALITY: District	of Algoma
v)		TOWNSHIP:	Smilsky Township	
vi)		LOTS & CONCESSIONS:	None	
ŕ		(attach separate sheet if necessary)		
vii)		MAP AND AIR PHOTO REFERENCE	CES	
	a)	Latitude: 47°10'43" Longitude	e: 84°31'10''	
	b)	UTM grid reference:	Zone: 16 Grid:E 687948	Block: T N 5228022
	c)	National Topographic Series:		
		map name(s)	Mamainse Point	
		map number(s)	41 N/2 edition 3	
		scale	1: 50,000	
	d)	Aerial photographs: Date photo taken:	Scale:	
		Flight & plate numbers:	Google Earth Images 2004	
		(attach separate sheet if necessary)		
	e)	Ontario Base Map numbers & scale	# 166805230 1:20,00	00
	-,			
		(attach separate sheets if necessary)		
			1	

a) Single contiguous wetland	area:		hectares	S	
b) Wetland complex compris	ed of	3	individu	ual wetlands:	
Wetland Unit Number					Size of each
(for reference)			5 1	D	wetland unit
XX (1 1 1 1 1 1 X X I	Isola	ted	Palustrine	Riverine	Lacustrin
	<u> </u>		1.00		
Wetland Unit No.	$\frac{2}{3}$ 0	00	1.77		
		.99			
Wetland Unit No.					
Wetland Unit No.					_
Wetland Unit No.				-	
Wetland Unit No. Wetland Unit No.				-	
				-	
Wetland Unit No. Wetland Unit No.				-	
Wetland Unit No.				-	
Wetland Unit No.				-	
Wetland Unit No.				-	
Wetland Unit No.				-	
Wetland Unit No.					_
Wetland Unit No.					
Wetland Unit No.					_
Wetland Unit No.					
Wetland Unit No.					
Wetland Unit No.				-	
Wetland Unit No.					
Wetland Unit No.				-	
Wetland Unit No.				-	
Wetland Unit No.				-	
Wetland Unit Totals:		.99	2.77	0.00	0.00
(Attach additional sheets if			2.77	0.00	0.00
TOTAL WETLAND	SIZE			3.75	ha
c) Brief documentation of re-	asons for inclu	ding any are	as less than 2 h	na in size:	
At the time this evaluation	was undertake	n MNR's re	commendation	with respect to	wetlands
assessed for the purpose of					
was to include all wetland					1550551110110
was to include all wettand	areas within th	e e raraation	, reguratess or	SIEC.	

(November 13, 2010)

1.0 BIOLOGICAL COMPONENT

1.1 PRODUCTIVITY

1.1.1 GROWING DEGREE-DAYS/SOILS

GRO	WING DEG	REE DAYS	SOILS	
(chec	k one)		Estimated Fra	actional Area
1)		<1600		clay/loam
2)		1600-2000	0.74	silt/marl
3)	X	2000-2400		limestone
4)		2400-2800		sand
5)		2800-3000	0.26	humic/mesic
6)		>3000		fibric
		•		granite

SCORING:

Growing	Clay-	Silt-	Lime-	Sand	Humic-	Fibric	Granite
Degree-	Loam	Marl	stone		Mesic		
Days							
<1600	12	11	9	7	7	6	4
1600-2000	15	13	11	9	8	7	5
2000-2400	18	15	13	11	9	8	7
2400-2800	22	18	15	13	11	9	7
2800-3000	26	21	18	15	13	10	8
>3000	30	25	20	18	15	12	9

(maximum score 30; if wetland contains more than one soil type,

evaluate based on the fractional area)

Steps required for evaluation: (maximum score 30 points)

- 1. Select GDD line in evaluation table applicable to your wetland;
- 2. Determine fractional area of the wetland for each soil type;
- 3. Multiply fractional area of each soil type by score;
- 4. Sum individual soil type scores (round to nearest whole number).

In wetland complexes the evaluator should aim at determining the percentage of area occupied by the categories for the complex as a whole.

Score		
	clay/loam	0.00
15	silt/marl	11.10
	limestone	0.00
	sand	0.00
9	humic/mesic	2.34
	fibric	0.00
	granite	0.00

Final Score Growing Degree-Days/Soils (maximum 30 points)

Northern Ontario Wetland Evaluation, Dat	a and Scoring Record	(November 13, 2010)
1.1.2 WETLAND TYPE (Fractional Area = ar	rea of wetland type/total wetland	area)
Fractional Area	So	core
Bog		0.00
Fen 0.27 Swamp 0.47		.76
Marsh 0.26		90
	Wetland type score (n	naximum 15 points) 9
1.1.3 SITE TYPE (Fractional Area = area of	site type/total wetland area)	
Fr	actional Area	Score
Isolated	0.26 x 1	= 0.263
Palustrine (permanent or intermittent flow)	0.74 x 2	= 1.474
Riverine	x 4	= 0.000
Riverine (at rivermouth)	x 5	= 0.000
Lacustrine (at rivermouth Lacustrine (on enclosed	x 5	= 0.000
bay, with barrier beach)	x 3	= 0.000
Lacustrine (exposed to lake)	x 2	= 0.000
_	Sub Total:	1.737
	Site Type Score	(maximum 5 points) 2
1.2 BIODIVERSITY		
1.2.1 NUMBER OF WETLAND TYPES		
(Check only one)	Score	
1) one	9 points	
2) two	13	
3) X three	20	
4) four	30	
Number	r of Wetland Types Score (max	imum 30 points) 20

1.2.2 VEGETATION COMMUNITIES

Attach a separate sheet listing community (map) codes, vegetation forms and dominant species. Use the form on the following page to record percent area by dominant vegetation form. This information will be used in other parts of the evaluation.

Communities should be grouped by number of forms. For example, 2 form communities might appear as follows:

2 forms

Code	Forn	ns	Dom	Dominant Species			
M6	re,	ff	re,	Typha latifolia;	ff,	Lemna minor,	Wolffia
S1	ts,	gc	ts,	Salix discolor;	gc,	lmpatiens capens	sis, Thelypteris palustris

Note that the dominant species for each form are separated by a semicolon. The dominant species (maximum of 2) within a form are separated by commas.

Scoring:

Total # of communities	Total # of communities	Total # of communities
Total # of communities	Total # of communities	Total # of communities
with 1-3 forms = 40	with $4 - 5$ forms $= 23$	with 6 or more forms $= 1$
1 = 1.5 points	1 = 2 points	1 = 3 points
2 = 2.5	2 = 3.5	2 = 5
3 = 3.5	3 = 5	3 = 7
4 = 4.5	4 = 6.5	4 = 9
5 = 5	5 = 7.5	5 = 10.5
6 = 5.5	6 = 8.5	6 = 12
7 = 6	7 = 9.5	7 = 13.5
8 = 6.5	8 = 10.5	8 = 15
9 = 7	9 = 11.5	9 = 16.5
10 = 7.5	10 = 12.5	10 = 18
11 = 8	11 = 13	11 = 19
+.5 each additional	+.5 each additional	+ 1 each additional
community = 3.5	community =	community =
community = 3.5	community =	community =

e.g., a wetland with 3 one form communities 8 six form communities would score:

4 two form communities

12 four form communities and

6+13.5+15=34.5=35 points

Vegetation Communities Score (maximum 45 points)

Northern Ontario Wetland	(November 13, 2010)	
Wetland Name:	Isosceles Wetland Complex	
Wetland Size (ha):	3.75	
Vegetation Form	% area in which form is dominant	
h		
с		
dh		
dc		
ts		
ls	47.10	
ds		
gc		
m		
ne	26.60	
be		
re		
ff	26.30	
f		
su		
u (unvegetated)		
Total = 100%	100.00	
	6	

Northern Ont	ario Wetland Evaluation, Data and Scoring Record (Nover	nber 13, 2010)
1 2 2 DIVEDSITY O	F SURROUNDING HABITAT	
(Check all appropriate		
(Check an appropriate	c rems(1))	
	recent burn (< 5 yr)	
	abandoned agricultural land	
	utility corridor	
X	deciduous forest	
	recent cutover or clearcut (<5 yr)	
X	coniferous forest	
X	mixed forest (at least 25% conifer and 75% deciduous or vice versa)	
	crops	
X	abandoned pits and quarries	
	pasture	
	ravine	
	fence rows	
	open lake or deep river	
X	creek flood plain	
X	rock outcrop	
D:		
DIV	versity of Surrounding Habitat Score (1 for each, maximum 7 points)	6
1 2 / PROXIMITY T	O OTHER WETLANDS	
	propriate category only)	Scoring
(Check thist up)	propriate eatings of simply	Scoring
1) X	Hydrologically connected by surface water to other wetlands	
·	(different dominant wetland type) or open lake or river	
	within 1.5 km	8 points
		_
2)	Hydrologically connected by surface water to other wetlands	
	(same dominant wetland type) within 0.5 km	8
3)	Hydrologically connected by surface water to other wetlands	
	(different dominant wetland type),or open lake or river from	
	1.5 to 4 km away (Second Marsh Wetland)	5
4)	Hadaladalla anna dalla Company da di di	
4)	Hydrologically connected by surface water to other wetlands	<i>-</i>
	(same dominant wetland type) from 0.5 to 1.5 km away	5
5)	Within 0.75 km of other watlands (different dominant watland trans)	
5)	Within 0.75 km of other wetlands (different dominant wetland type) or open lake or river, but not hydrologically connected by	
	surface water	5
	surface water	3
6)	Within 1 km of other wetlands, but not hydrologically	
	connected by surface water	2
	competed of surface mater	<u>~</u>
7)	No wetland within 1 km	0
Pro	eximity to other Wetlands Score (Choose one only, maximum 8 points)	8

Northern Ontario Wetland Evaluation, Data and	d Scoring Record (November 1	3, 2010)
1.2.5 INTERSPERSION		
Number of Intersections		
(Check one)	Score	
1) 26 or less	3	
2) 27 to 40 X 3) 41 to 60	6 9	
3) 41 to 60 4) 61 to 80	12	
5) 81 to 100	15	
6) 101 to 125	18	
7) 126 to 150	21	
8) 151 to 175	24	
9) 176 to 200	27	
10) >200	30	
Interspersion Scot	re (Choose one only maximum 30 points)	6
1.2.6 OPEN WATER TYPES		
Permanently flooded:	Cana	
(Check one)	Score	
1) type 1	8	
2) type 2	8	
3) type 3	14	
4) X type 4	20	
5) type 5	30	
6) type 6	8	
7) type 7	14	
8) type 8	3	
9) no open water	0	
Open Water Type Score	e (Choose one only maximum 30 points)	20
	8	
	U	

(November 13, 2010)

1.3 SIZE

3.75 hectares 63 Subtotal for Biodiversity

Size Score (Biological Component) (maximum 50 points)

8

Evaluation Table Size Score (Biological component)

Wetland		(<u> </u>		re for Biodi	versity Subc	omponent			
size (ha)	<37	37-47	48-60	61-72	73-84	85-96	97- 108	109- 120	121- 132	>132
<20 ha	1	5	7	8	9	17	25	34	43	50
20-40	5	7	8	9	10	19	28	37	46	50
41-60	6	8	9	10	11	21	31	40	49	50
61-80	7	9	10	11	13	23	34	43	50	50
81-100	8	10	11	13	15	25	37	46	50	50
101-120	9	11	13	15	18	28	40	49	50	50
121-140	10	13	15	17	21	31	43	50	50	50
141-160	11	15	17	19	23	34	46	50	50	50
161-180	13	17	19	21	25	37	49	50	50	50
181-200	15	19	21	23	28	40	50	50	50	50
201-400	17	21	23	25	31	43	50	50	50	50
401-600	19	23	25	28	34	46	50	50	50	50
601-800	21	25	28	31	37	49	50	50	50	50
801-1000	23	28	31	34	40	50	50	50	50	50
1001-1200	25	31	34	37	43	50	50	50	50	50
1201-1400	28	34	37	40	46	50	50	50	50	50
1401-1600	31	37	40	43	49	50	50	50	50	50
1601-1800	34	40	43	46	50	50	50	50	50	50
1801-2000	37	43	47	49	50	50	50	50	50	50
>2000	40	46	50	50	50	50	50	50	50	50

Northern Ontario V	Vetland Evaluation	, Data and S	coring Record	(November 13, 20	10)
	2.0	SOCIAL C	COMPONENT		
2.1 ECONOMICALLY	VALUABLE PI	RODUCTS	<u> </u>		
2.1.1 WOOD PRODUCTS	<u>. </u>				
Area of wetland forested (honly)	a), i.e. dominant fo	orm is h or c	. Note that this is	not wetland size. (Check one	
			Score		
1) X	<5 ha		0		
	5 -25 ha		4		
	6 -50 ha		6		
	1 - 100 ha		8		
	-200 ha		11		
6)	>200 ha		14		
Source of information:	Field	Investigation	ons (NRSI 2010)		
	Wood Pr	oducts Sco	re (Score one onl	ly, maximum 14 points)	0
2.1.2 Lowbush Cranberry					
(Check one)				Score (Choose one)	
Present		1)		2 points	
Absent		2)	X	0	
Source of information:	Field	Investigation	ons (NRSI 2010)		
		Lowbusł	n Cranberry Sco	re (maximum 2 points)	0
0.1.2 W/LLD:			,	.	
2.1.3 Wild Rice (Check one)				Score (Choose one	.)
Present (at least 0.5 h	ia)	1)		10 points	·)
Absent	,	2)	X	0	
Source of infolmation:	Field	Investigation	ons (NRSI 2010)		
		Wild Ric	e Score (maximu	um 10 noints)	0
		Wha Kit	e score (maxime	am 10 pomis)	0
		10	0		

2.1.4 COMMERCIAL FISH (BAIT FISH AND/OR COARSE FISH) (Check one)	
(Chack one)	
(Check one)	Score (Choose one)
Present 1) X	12 points
Absent 2)	0
Source of information: No fish observed, however, fish habitat is pres	ent (Field Obs, NRSI 2010).
Commercial Fish Score (m	naximum 12 points) 12
2.1.5 FURBEARERS (Consult Appendix 9)	
Name of furbearer Source of information	<u>. </u>
1) Beaver (Castor canadensis) 3 Field Observation 2)	ns (NRSI 2010)
3)	
4)	
5)	

2.2 RECREATIONAL ACTIVITIES

Type of Wetland-Associated Use								
Intensity of Use	Hunting		Nature Enjoym Ecosystem Stu		Fishing			
High	40 points		40 points		40 points			
Moderate	20		20		20			
Low	8	8	8	8	8			
Not possible/NotKnown	0		0		0	0		
Totals	_	8		8	_	0		

(score one level for each of the three wetland uses; scores are cumulative; maximum score 80 points) Sources of information:

Hunting: No signs of hunting observed, however it is possible.

Nature: Possible due to easy road access, however no observations

Furbearer Score (maximum 12 points)

made.

Fishing: Likely not within the wetland itself - more likely within the

waterbody that the wetland surrounds.

Recreational Activities Score (maximum 80 points)

Northern Ontario Wetland Evaluation, Data and Scorin	ng Record (November 13, 2	010)
2.3 LANDSCAPE AESTHETICS		
2.3.1 DISTINCTNESS		
(Check one)	Score (Choose one)	
Clearly distinct 1)	3 points	
Indistinct 2) X	0	
Landscape Distinc	tness Score (maximum 3 points)	0
	F)	
2.3.2 ABSENCE OF HUMAN DISTURBANCE		
(Charle ana)	Saara (Chassa ana)	
(Check one) Human disturbances absent or nearly so	Score (Choose one) 7 points	
One or several localized disturbances	1) 7 points 2) X 4	
Moderate disturbance; localized water pollution	3) 2	
Wetland intact but impairment of ecosystem quality	3)2	
intense in some areas	4) 1	
Extreme ecological degradation, or water pollution	1)	
severe and widespread	5) 0	
1	, <u> </u>	
Source of information: Field Observations (NRSI	2010). Road in extremely close proximity	
to wetland.		
Absence of Human Distu	urbance Score (maximum 7 points)	4
2.4 EDUCATION AND PUBLIC AWARENESS		
2.4.1 EDUCATIONAL USES	g (G)	
(Check one)	Score (Choose one)	
Frequent 1)	20 points	
Infrequent 2) No visits 3) X	12 0	
NO VISITS 5)	U	
Source of information:		
Source of information.		
Educational	Uses Score (maximum 20 points)	0
2.4.2 FACILITIES AND PROGRAMS		
(check one)	Score (Cho	ose one)
Staffed interpretation centre	1) 8 points	
No interpretation centre or staff but a system of		
self-guiding trails or brochures available	2) 4	
Facilities such as maintained paths (e.g., woodchips)		
boardwalks, boat launches or observation towers		
but no brochures or other interpretation	3) 2	
No facilities or programs	4) <u>X</u> 0	
Source of information:	corrections (NPSI 2010)	
Source of information: Field Obs	servations (NRSI 2010)	
Facilities and Prog	grams Score (maximum 8 points)	0
12	rumo seore (maamam o pomo)	

Northern Ontario Wetland Evalua	tion, Data and Sco	ring F	Record		(November 13, 20)	10)	
	,	8			, , , ,	-,	
2.4.3 RESEARCH AND STUDIES							
(check appropriate spaces)					Score		
Long term research has been done					12 points		
Research papers published in referee	ed scientific				10		
journal or as a thesis			10				
One or more (non-research) reports on some aspect of the wetland 's flo							
hydrology etc.	ia iaulia				5		
No research or reports X 0							
1.0 research of reports							
Attach list of known reports by above	e categories						
Desearch and Str	idias Scara (Scar	o is on	ımulatiya may	imum 13	2 noints)	0	
Research and Stu	idles Score (Scor	e is cu	mulauve, max	IIIIUIII 12	z points)	U	
2.5 PROXIMITY TO AREAS OF HU	UMAN SETTLE	MENT	Γ				
Circle the highest applicable score							
Distance of wetland from	1)		2) popul	ation	3) popula	ation	\neg
settlement	population> 10	.000	2,500 -		<2,500 or		e
	F - F	,	_,	,	comm	_	
1) Within or adjoining	40 points		26		16		
settlement	F						
2) 0.5 to 10 km from settlement	26		16		10		
3) 10 to 60 km from settlement	12		8		4		X
4) >60 km from settlement	5		2		0		
5) >100 km from settlement	0		0		0		
		0		0			4
	16 . 15						
Name of settlement:	Montreal R	iver H	Iarbour, ON				
Proxi	mity to Human S	ettlen	nent Score (ma	ximum 4	40 points)	4	
	•		`		_		
2.6 OWNERSHIP (FA= fraction Are	ea)				Score		
	1.						
FA of wetland in public or private o	_			. 10	0.00		
held under contract or in trust for we FA of wetland area in public owners	•		1.00 ×		= 0.00 = 8.00		
FA of wetland area in private owners	•		1.00 X		= 0.00		
171 of wettand area in private owner	simp, not us usove			•	- 0.00		
Source of information:	MNR Values Ma	apping	(June 25 - 2009	9)			
		0	owahin Caama (m		- 10 mainta)	O	
		Own	ership Score (n	ıaxımun	n 10 points)	8	
	13						

(November 13, 2010)

2.7 SIZE

3.75 hectares

35 Subtotal for Social

Evaluation Table for Size Score (Social Component)

	Table	for Size Sco	ie (Sociai C	omponent)						
Wetland Size (ha)		Total for Size Dependent Score								
222 (23)	<31	31-45	46-60	61-75	76-90	91-105	106-109	121-135	136-150	>150
<2 ha	1	2	4	8	10	12	14	14	14	15
2 - 4ha	1	2	4	8	12	13	14	14	15	16
5 - 8ha	2	2	5	9	13	14	15	15	16	16
9 - 12ha	3	3	6	10	14	15	15	16	17	17
13-17	3	4	7	10	14	15	16	16	17	17
18-28	4	5	8	11	15	16	16	17	17	18
29-37	5	7	10	13	16	17	18	18	19	19
38-49	5	7	10	13	16	17	18	18	19	20
50-62	5	8	11	14	17	17	18	19	20	20
63-81	5	8	11	15	17	18	19	20	20	20
82-105	6	9	11	15	18	18	19	20	20	20
106-137	6	9	12	16	18	19	20	20	20	20
138-178	6	9	13	16	18	19	20	20	20	20
179-233	6	9	13	16	18	20	20	20	20	20
234-302	7	9	13	16	18	20	20	20	20	20
303-393	7	9	14	17	18	20	20	20	20	20
394-511	7	10	14	17	18	20	20	20	20	20
512-665	7	10	14	17	18	20	20	20	20	20
666-863	7	10	14	17	19	20	20	20	20	20
864-1123	8	12	15	17	19	20	20	20	20	20
1124-1460	8	12	15	17	19	20	20	20	20	20
1461-1898	8	13	15	18	19	20	20	20	20	20
1899-2467	8	14	16	18	20	20	20	20	20	20
>2467	8	14	16	18	20	20	20	20	20	20

Total Size Score (Social Component)

2

(November 13, 2010)

ABORIGINAL AND CULTURAL HERITAGE VALUES

Either or both Aboriginal or Cultural Values may be scored. However, the maximum score permitted for 2.8 is 30 points. Attach documentation.

2.8.1 ABORIGINAL VALUES

Full documentation of sources must be attached to the data record.

1)	Significant	X	=	30 points
2)	Not Significant		=	0
3)	Unknown		=	0
	Total:	30		

2.8.2 CULTURAL HERITAGE

1)	Significant		=	30 points
2)	Not Significant	X	=	0
3)	Unknown		=	0
	Total:	0		

Aboriginal Values/Cultural Heritage Score (maximum 30 points)

Batchewana First Nation (BFN) was contacted on October 19, 2010 and asked about the significance of this wetland in terms of aboriginal values. A response was received on November 17, 2010 (letter appended), which states the wetlands are "very valuable to the surrounding area, environment, wild life and BFN reliance on the land and resources to sustain our cultural activities." (Dave Sewell, BNR Field Technician)

(November 13, 2010)

3.0 HYDROLOGICAL COMPONENT

3.1 FLOOD ATTENUATION

If the wetland is a complex including isolated wetlands, apportion the l00 points according to area. For example if 10 ha of a l00 ha complex is isolated, the isolated portion receives the maximum proportional score of 10. The remainder of the wetland is then evaluated out of 90.

ii welland is entirely isolated, go directly to steb.	Step 1:	If wetland is entirely Isolated, go directly to Step 5.
---	---------	---

If wetland is lacustrine and the ratio of wetland area: lake area is <0.1, or wetland is riverine on the St. Mary's River, go to Step 5

All other wetlands, go through steps 2, 3, 4 and 5.

Step 2: Determination of Upstream Detention Factor (DF)

(a)	Wetland area (ha)			3.75
(b)	Total area (ha) of upstream detention are	9.57		
	(include the wetland itself)			
(c)	Ratio of (a):(b)			0.39
(d)	Upstream detention factor: (c) $\times 2 =$	0.78		0.78
	(maximum allowable factor = 1)			

Step 3: Determination of Peak Flow Attenuation Factor (AF)

(a)	Wetland area (ha)		3.75
(b)	Size of catchment basin (ha) upstream of	wetland	
	(include wetland itself in catchment area)		115.97
(c)	Ratio of (a):(b)		0.03
(d)	Wetland attenuation factor: (c) $\times 10 =$	0.32	0.32
	(maximum allowable factor = 1)		

Step 4: Determination of Wetland Surface Form Factor (FF)

From the list below, select the surface form which best describes the wetland.

	1 actor	
Flooded with little or no aquatic vegetation		0
Flooded but with submergent, emergent or floating vegetation	X	0.2
Flat (lawn) vegetation (typical of fens)		0.5
Hummock-depression microtopography		0.7
Patterned (e.g., string bog, ribbed fen)		1
Surface Form Factor (FF)	0.2	

(Maximum allowable factor = 1)

Factor

Norther	n Ontario Wetland Evaluation, Data and Scoring Record	d	(November	13, 2010)
Step 5:				
1. Wetland is en	tirely Isolated	100 points		
	custrine and the ratio of area: lake area is <0.1	0 points		
3. Wetland is riv	verine along the St. Mary's River	0 points		
4. For all other v	vetlands*, calculate as follows:			
b) We	stream Detention Factor (DF) (Step 2) tland Attenuation Factor (AF) (Step 3) face Form Factor (FF) (Step 4)	0.78 0.32 0.20		
Unless wetland	$[(DF + AF + FF)/3] \times 73.6$ is a complex including isolated portions see above	31.89	Isolated sco	ore: 26.4
	Total Flood Attenuation So	core (maximum	100 points)	58
3.2 GROUN	D WATER RECHARGE			
3.2.1 SITE TY	<u>PE</u>			
(a) X (b)	Wetland > 50% lacustrine (by area) or located on the St. Mary's River Wetland not as above. Calculate final score as follow (FA= area of site type/total area of wetland)		Score = 0	
1 0 0	FA of isolated or palustrine wetland FA of riverine wetland FA of lacustrine wetland (wetland <50% lacustrine)		x 20 = x 5 = x 0 =	20.00 0.00 0.00
	Site Type Score	: (maximum 20	points)	20

3.2.2 SOILS EVALUATION:

Dominant Wetland Type	Sand, loam, gravel, till		Clay or bedrock	
Lacustrine or on St. Mary's River	0		0	
Isolated	10		5	
Palustrine	7	X	4	
Riverine (not on St. Mary's River)	5		2	
Totals		7		0

Hydrological Soil Class Score (maximum 10 points)

(November 13, 2010)

3.3 DOWNSTREAM WATER QUALITY IMPROVEMENT

3.3.1 WATERSHED IMPROVEMENT FACTOR

Calculation of Watershed Improvement Score is based upon the fractional area (FA) of each site type within the wetland. FA = area of site type/total area of the wetland.

Site Type	<u>Impro</u>	Improvement Factor (IF)				
Isolated	FA	0.26	X	0.5 =	0.13	
Riverine	FA		X	1 =	0.00	
Palustrine with no inflow	FA		X	0.7 =	0.00	
Palustrine with inflows	FA	0.74	X	1 =	0.74	
Lacustrine on lake shoreline	FA		X	0.2 =	0.00	
Lacustrine at lake inflow or outflow	FA		X	1 =	0.00	

Watershed Improvement Score (IF x 30) (maximum = 30)

26

3.3.2 ADJACENT AND WATERSHED LAND USE

EVALUATION

Step 1: Determination of Maximum Initial Score

Wetland on the Great Lakes or St. Mary's River (Go to Step 5a)

X All other wetlands (Go through steps 2, 3,4 and 5b)

Step 2: Determination of Broad Upslope Land Use (BLU)

Assess broad upslope land uses within the previous 5 years, agriculture, or other activities which alter the natural vegetation cover in an extensive manner.

Score
20
14
4

Score for BLU

14

Step 3: Determination of Linear Upslope Land Uses (LUU)

Assess linear upslope uses (LUU) e.g., roads, railways, hydro corridors, pipelines, etc., crossing the upslope catchment within 200m of the wetland boundary.

Choose the highest only	Score
Major corridor*	15
Secondary corridor	11
Tertiary corridor	6
Temporary or abandoned	3
None	0

Score for LUU

3

Major, secondary and tertiary roads are those that are indicated as such on the provincial highways maps. Major hydro corridors are trunk lines coming directly from a generating station. Major pipelines are transcontinental lines. Secondary corridors are regional distribution lines (i.e. multi-cable hydro corridors not emanating directly from a generating station or regional gas distribution lines). Tertiary corridors are single hydro lines or local gas distribution lines (i.e. to domestic users).

	No	thern Ontario Wetla	nd Evaluation, Data	and Sco	ring Record			(November 1	13, 201	0)	
plants,	poin majo	Determination of P It source (PS) land use or aggregate operation by if a point source later than the property of the proper	es producing indust ns (but not small pit	rial efflus s use for	uents such as r local road c	constru	ction), etc.	Score as	r		
		Present Not present	Score 15 0	Score	e for PS	0					
Step 5:	_	Calculation of tota	l score for Adjacen	t and W	atershed La	and Us	se				
		etland on the Great L other wetlands, calc		iver							
				Final	Score BLU	+LUU	+PS	17			
3.3.3 \	/EG	ETATION FORM									
		se the category that bation of the wetland	est describes the								
E	mer	, shrubs or herbs (h, gents, submergents (or no vegetation (u)	-		X	:	Score 8 points 10				
2.4		CADDON CINIZ	Dominar	t Veget	ation Form	Score	(maximum	10 points)		10	
3.4	Choo	carbon SINK se the category that b	pest describes the we	etland							
1)	Wetland a bog or fe	n with >50% organi	c soils			15 po	ints			
2)	Wetland has organic of the area (i.e. main soils, any wetland ty	nly mineral or undes			X	6				
3)	Marshes and swamp	s with >50% organi	c soil			9				
4)	Wetland with less th	an 10% of soils org	anic			0				
				Carb	on Sink Sco	re (ma	ximum 15	points)	6		
				19							

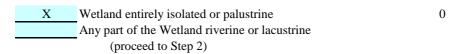
Northern Ontario Wetland Evaluation, Data and Scoring Reco
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Score

3.5 SHORELINE EROSION CONTROL

From the wetland vegetation map determine the <u>dominant</u> vegetation type within the erosion zone for <u>lacustrine and riverine site type areas only.</u> Score according to the factors listed below.

Step 1:



Step 2:

Choose the one characteristic that best describes the shoreline vegetation (see text for a definition of shoreline)

		Score
1)	Trees and shrubs	15
2)	Emergent vegetation	8
3)	Submergent vegetation	6
4)	Other shoreline vegetation	3
5)	No vegetation	0

Shoreline Erosion Control Score (maximum 15 points)

0

3.6 GROUNDWATER DISCHARGE

(Circle the characteristics that best describe the wetland being evaluated and then sum the scores)

Category		C	Catchment Interaction			
Wetland type	Bog = 0		Swamp/Marsh = 2	2	Fen = 5	
Basin topography	Flat/Rolling = 5		Hilly = 2		Major relief	
				2	break = 5	
Weland area: Upslope	Large (>50%) = 0		Moderate		Small ($<5\%$) = 5	
catchment area			(6-50%) = 2			5
Lagg Development	None found $= 0$	0	Minor = 2		Extensive $= 5$	
Seeps at wetland	None found $= 0$		1-3 seeps = 5		4 or more	
edge		0			seeps = 10	
Iron precipitates	None = 0		1-3 deposits = 2		4 or more	
evident at edge		0			deposits = 5	
Surface marl deposits	None = 0	0	1-3 deposits = 2		>3 = 5	
Wetland pH	Low < 4.2 = 0		Moderate $4.2-5.7 = 5$	5	High $> 5.7 = 10$	
Catchment soil	Patchy = 0		Thin $(<20cm) = 2$		Thick = 5	
coverage				0		
Catchment soil	Low = 0		Moderate = 2		High = 5	
permeability				2		
Totals		0		11		5

(Scores are cumulative maximum score 30 points)

Groundwater Discharge Score (maximum 30 points)

Northern Ontario Wetland E	valuation, Data and	d Scoring Record
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4.0 SPECIAL FEATURES COMPONENT

4.1 RARITY

4.1.1 WETLANDS

Hills Site Region and Site District (5E only): 5E-13

Wetland type (check one or more)

	bog
X	Fen
X	Swamp
X	Marsh

Evaluation Table for Scoring Rarity of Wetland Type.

Unit	Site Region		_		
Number	& District	Marsh	Swamp	Fen	Bog
2E	James Bay	20	20	0	20
2W	Big Trout Lake	20	20	0	10
3E	Lake Abitibi	20	20	10	0
3W	Lake Nipigon	20	20	10	0
3S	Lake St. Joseph	20	20	10	0
4E	Lake Temagami	20	20	10	0
4W	Pigeon River	20	10	20	0
4S	Wabigoon Lake	20	10	20	0
5E-1	Thessalon	10	0	30	20
5E-2	Gore Bay	20	0	20	20
5E-3	La Cloche	20	0	30	20
5E-4	Sudbury	10	0	30	10
5E-5	North Bay	10	0	20	0
5E-6	Tomiko	10	0	20	0
5E-7	Parry Sound	20	0	30	20
5E-8	Huntsville	20	0	30	20
5E-9	Algonquin Park	10	0	30	0
5E-10	Brent	20	0	30	0
5E-11	Bancroft	0	10	30	10
5E-12	Renfrew	0	0	30	10
5E-13	Batchewana	10	0	10	30
5-S	Lake of the Woods	10	10	20	10

Rarity of Wetland Type Score (maximum 70 points)

Norther	n Ontario Wetland Evalua	ation, Data and Scoring Rec	cord	(November 13, 2010)
SPECIE	<u>s</u>			
4.1.2.1	BREEDING HABITA	AT FOR AN ENDANGER	RED OR THREA	TENED SPECIES
Nar	ne of species		Source of inf	• Cormation
			<u> </u>	
1)				
2)				
4)				
5)				
	Total:	0		
h documer	ntation.	·!	 -	
ng:		250 mainta		
For each a	additional species	250 points 250 points		
Tor each a	idditional species	250 points		
e is cumula	ntive, no maximum score)			
	,			
	Breeding Habitat for	Endangered Species Score	e (no maximum)	
	G	2	()	_
4.1.2.2				AN ENDANGERED
4.1.2.2		GRATION OR FEEDING		AN ENDANGERED
	TRADITIONAL MICOR THREATENED	GRATION OR FEEDING	HABITAT FOR	
Nar	TRADITIONAL MIC	GRATION OR FEEDING		
Nar	TRADITIONAL MICOR THREATENED	GRATION OR FEEDING	HABITAT FOR	
Nar 1)	TRADITIONAL MICOR THREATENED	GRATION OR FEEDING	HABITAT FOR	
Nar 1) 3)	TRADITIONAL MICOR THREATENED	GRATION OR FEEDING	HABITAT FOR	
Nar 1) 2) 3) 4)	TRADITIONAL MICOR THREATENED	GRATION OR FEEDING	HABITAT FOR	
Nar 1) 3)	TRADITIONAL MICON THREATENED ne of species	GRATION OR FEEDING SPECIES	HABITAT FOR	
Nar 1) 2) 3) 4)	TRADITIONAL MICOR THREATENED	GRATION OR FEEDING	HABITAT FOR	
Nar 1) 2) 3) 4) 5)	TRADITIONAL MICON THREATENED ne of species Total:	GRATION OR FEEDING SPECIES	HABITAT FOR	
Nar 1) 3) 4) 5) h documer	TRADITIONAL MICON THREATENED ne of species Total:	GRATION OR FEEDING SPECIES	HABITAT FOR	
Nar 1) 2) 3) 4) 5) h documer ng:	TRADITIONAL MICON OR THREATENED me of species Total:	GRATION OR FEEDING SPECIES 0	HABITAT FOR	
Nar 1) 2) 3) 4) 5) h documer ng:	TRADITIONAL MICON OR THREATENED ne of species Total:	GRATION OR FEEDING SPECIES 0 150 points	HABITAT FOR	
Nar 1) 2) 3) 4) 5) h documer ng:	TRADITIONAL MICON OR THREATENED me of species Total:	GRATION OR FEEDING SPECIES 0	HABITAT FOR	
Nar 1) 2) 3) 4) 5) h documer ng: For one sp For each a	TRADITIONAL MICON OR THREATENED me of species Total: ntation. pecies additional species	SRATION OR FEEDING SPECIES 0 150 points 75	HABITAT FOR	
Nar 1) 2) 3) 4) 5) h documer ng: For one sp For each a	TRADITIONAL MICON OR THREATENED ne of species Total:	SRATION OR FEEDING SPECIES 0 150 points 75	HABITAT FOR	
Nar 1) 2) 3) 4) 5) h documer ng: For one sp For each a	TRADITIONAL MICE OR THREATENED me of species Total: tation. becies additional species attive, no maximum score)	SRATION OR FEEDING SPECIES 0 150 points 75	Source of inf	Formation
Nar 1) 2) 3) 4) 5) h documer ng: For one sp For each a	TRADITIONAL MICE OR THREATENED me of species Total: tation. becies additional species attive, no maximum score)	SPECIES 150 points 75	Source of inf	Formation
Nar 1) 2) 3) 4) 5) th documer ng: For one sp For each a	TRADITIONAL MICE OR THREATENED me of species Total: tation. becies additional species attive, no maximum score)	SPECIES 150 points 75	Source of inf	Formation
Nar 1) 2) 3) 4) 5) th documer ng: For one sp For each a	TRADITIONAL MICE OR THREATENED me of species Total: tation. becies additional species attive, no maximum score)	SPECIES 150 points 75	Source of inf	Formation
Nar 1) 2) 3) 4) 5) h documer ng: For one sp For each a	TRADITIONAL MICE OR THREATENED me of species Total: tation. becies additional species attive, no maximum score)	SPECIES 150 points 75	Source of inf	Formation

rame o	of species				Source of in	formation	
5)							
6)							
7)							
۵)							
9)							
12)							
1.4)							
14) 15)							
	senarate lis	st if necessary	; Attach documenta	ntion			
	ally signifi	icant animal s _l	pecies in the wetlar	nd:			
er of provinci				nd: =	154		
er of provinci species species		icant animal sp 50 points 80	14 species 15 species		154 156		
er of provinci species species species	=	50 points 80 95	14 species 15 species 16 species	=			
er of provinci species species species species species	= =	50 points 80 95 105	14 species 15 species 16 species 17 species	= =	156 158 160		
er of provinci species species species species species species	= = = = =	50 points 80 95 105 115	14 species 15 species 16 species 17 species 18 species	= = = =	156 158 160 162		
er of provinci species species species species species species species	= = = = =	50 points 80 95 105 115 125	14 species 15 species 16 species 17 species 18 species 19 species	= = = = =	156 158 160 162 164		
er of provinci species species species species species species species species	= = = = =	50 points 80 95 105 115 125 130	14 species 15 species 16 species 17 species 18 species 19 species 20 species	= = = = =	156 158 160 162 164 166		
species species species species species species species species species species species	= = = = = = =	50 points 80 95 105 115 125 130 135	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species	= = = = = =	156 158 160 162 164 166 168		
er of provinci species	= = = = =	50 points 80 95 105 115 125 130 135 140	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species	= = = = = =	156 158 160 162 164 166 168 170		
species species species species species species species species species species species species species species	= = = = = = =	50 points 80 95 105 115 125 130 135 140	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species	= = = = = =	156 158 160 162 164 166 168 170		
species species species species species species species species species species species species species species species species	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species	= = = = = =	156 158 160 162 164 166 168 170		
species species species species species species species species species species species species species species species species species species species	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species 25 species	= = = = = = = = = =	156 158 160 162 164 166 168 170 172 174		
species species species species species species species species species species species species species species species species species species species	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species	= = = = = = = = = =	156 158 160 162 164 166 168 170 172 174	ecies = 178	
species species species species species species species species species species species species species species species species species species	= = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species 25 species	= = = = = = = = = =	156 158 160 162 164 166 168 170 172 174	ecies = 178	

4.1.2.4	PRO	OVINCIALLY	SIGNIFICANT	PLANT SPE	CCIES	
	cientific ommon N	names must be Name	recorded)	Scientific N	ame	Source of information
1)						
2)						<u> </u>
3)						
4) —						_
5)						
6)						
7)						
8)						
9)						
10)						
11)						
12)						
13)						<u> </u>
14)						<u> </u>
15)						<u> </u>
nber of pro	vincially	y significant pla	ant species in the	e wetland:		
nber of pro	ovincially	y significant pla	ant species in the	e wetland:		
mber of pro	ovincially =	y significant pla	ant species in the	e wetland:	154	
	-				154 156	
pecies	=	50 points	14 species 15 species 16 species	=		
pecies pecies pecies pecies	=	50 points 80	14 species 15 species 16 species 17 species	= =	156 158 160	
pecies pecies pecies pecies pecies	= =	50 points 80 95 105 115	14 species 15 species 16 species 17 species 18 species	= = =	156 158 160 162	
pecies pecies pecies pecies pecies pecies	= = =	50 points 80 95 105 115 125	14 species 15 species 16 species 17 species 18 species 19 species	= = = =	156 158 160 162 164	
pecies pecies pecies pecies pecies pecies pecies	= = =	50 points 80 95 105 115	14 species 15 species 16 species 17 species 18 species 19 species 20 species	= = = =	156 158 160 162 164 166	
pecies pecies pecies pecies pecies pecies pecies pecies pecies	= = = =	50 points 80 95 105 115 125 130	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species	= = = = =	156 158 160 162 164 166 168	
pecies pecies pecies pecies pecies pecies pecies pecies pecies pecies	= = = = =	50 points 80 95 105 115 125 130 135 140	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species	= = = = = =	156 158 160 162 164 166 168 170	
pecies	= = = = = =	50 points 80 95 105 115 125 130 135 140	14 species 15 species 16 species 17 species 18 species 20 species 21 species 22 species 23 species	= = = = =	156 158 160 162 164 166 168 170	
pecies	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143	14 species 15 species 16 species 17 species 18 species 20 species 21 species 22 species 23 species 24 species	= = = = = =	156 158 160 162 164 166 168 170 172	
pecies	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149	14 species 15 species 16 species 17 species 18 species 20 species 21 species 22 species 23 species	= = = = = =	156 158 160 162 164 166 168 170	
pecies	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143	14 species 15 species 16 species 17 species 18 species 20 species 21 species 22 species 23 species 24 species		156 158 160 162 164 166 168 170 172	
pecies species species species species species species	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 20 species 21 species 22 species 23 species 24 species		156 158 160 162 164 166 168 170 172 174	species = 178
pecies pecies pecies pecies pecies pecies pecies pecies species species species species species	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 20 species 21 species 22 species 23 species 24 species 25 species		156 158 160 162 164 166 168 170 172 174	species = 178
pecies species species species species species species	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149 152 y species past 2	14 species 15 species 16 species 17 species 18 species 20 species 21 species 22 species 23 species 24 species 25 species	= = = = = = = = = = = =	156 158 160 162 164 166 168 170 172 174 176	

Northern Ontario Wetland Evaluation, Data and Scoring Reco
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4.1.2.5 REGIONALLY SIGNIFICANT SPECIES (SITE REGION)

Scientific names must be recorded for plant species. Lists of significant species must be approved by MNR.

SIGNIFICANT IN SITE REGION:

Common Name Scientific Name Source of information 1) 2) 3) 4) 5) 7) 8) 9) 10) 11) 12) 13) 14) 15)

Attach separate list if necessary .Attach documentation.

Scoring:

No. of species significant in Site Region

1 species	=	20	6 species	=	55
2 species	=	30	7 species	=	58
3 species	=	40	8 species	=	61
4 species	=	45	9 species	=	64
5 species	=	50	10 species	=	67

Add one point for every species past 10. (no maximum score)

Significant Species (Site Region) Score (no maximum)

^{**} Score only if there is an approved list

(November 13, 2010)

4.2.1.6 LOCALLY SIGNIFICANT SPECIES (SITE DISTRICT)

Scientific names must be recorded for plant species. Lists of significant species must be approved by MNR.

1 2 3 4 5 5 6 7 7 8 9 9 9 10 11 12 12 13 14 15 16	Common Name	Scientific Name	Source of information
3 4 5 6 7 8 9 10 11 12 13 14 15			
3 4 5 6 7 8 9 10 11 12 13 14 15	1		
4 5 6 7 8 9 10 11 12 13 14 15			
5 6 7 8 9 10 11 12 13 14 15	3		
6 7 8 9 10 11 12 13 14 15	4		
7 8 9 10 11 12 13 14 15	5		
9 10 11 12 13 14 15	6		
9 10 11 12 13 14 15	7		
10 11 12 13 14 15			
11	9		
12 13 14 15	10		
13 14 15	11		<u> </u>
14 15	12		<u></u>
15	13		<u> </u>
	14		
16	15		
	16		
17	17		
18	18		

Attach separate list if necessary .Attach documentation.

Scoring:

No. of species significant in Site District

1 species	=	10	6 species	=	41
2 species	=	17	7 species	=	43
3 species	=	24	8 species	=	45
4 species	=	31	9 species	=	47
5 species	=	38	10 species	=	49

For each significant species over 10 in the wetland, add 1 point.

Locally Significant Species (Site District) Score (no maximum)

(November 13, 2010)

4.1.2.7 SPECIES OF SPECIAL STATUS

Black Duck

Suitable breeding habitat present and within assessment range (Figure 17)

Assessment Category	Check one	Score
40-80 Indicated Pairs/100 km sq		25 points
20-40 Indicated Pairs/100 km sq		20
10-20 Indicated Pairs/100 km sq	X	15
5-10 Indicated Pairs/100 km sq		10
1-5 Indicated Pairs/100 km sq		5
Habitat not suitable		0
Out of assessment range		0

Black Duck Score (maximum 25 points)

15

4.2 SIGNIFICANT FEATURES AND/OR FISH & WILDLIFE HABITAT

4.2.1 NESTING OF COLONIAL WATERBIRDS

Status	Name of species	Source of Information	Score
Currently nesting			50 points
Known to have nested within past 5 years			25
Active feeding area (great blue heron excluded)			15
None known			0

Attach documentation (nest locations etc., if known)

Colonial Waterbirds Score (maximum 50 points)

0

4.2.2. WINTER COVER FOR WILDLIFE

(Check only highest level of significance) Score (one only)

1)		Provincially significant	100
2)		Significant in Site Region	50
3)		Significant in Site District	25
3)		Locally significant	10
4)	X	Little or poor winter cover present	0

Source of information:

No treed swamps occur within the subject wetlands - entire wetland only 3.75ha which is extremely small compared to the surrounding available habitat.

Winter Cover for Wildlife Score (maximum 100 points)

No	orthern Ontario Wetland Evalu	ation, Data a	nd Scoring Reco	ord	(November 13,	2010)
.2.3 WA	TERFOWL STAGING AND	OR MOULT	ING			
Theck on	ly highest level of significance	for both stag	oing and moultin	g: score is cum	ulative	
	umns, maximum score 150)	Tor both stag	sing and mountin	ig, score is cum	native	
		Staging	Score	Moulting	Score	
1)	Nationally significant		(one only)		(one only) 150	
2)	Provincially significant		100		100	
3)	Regionally significant		50		50	
4)	Known to occur		10		10	
5)	Not possible		0		0	
6)	Not known	X	0	X	0	
- /	Total:	0		0		
			_			
ource of	information:		10: 10			0
	Waterfow	d Moulting a	and Staging Sco	re (maximum 1	150 points)	0
24 WA	TERFOWL BREEDING					
.2. 4 ** F	TERIOWE BREEDING	_				
	(Check only highest level of	significance)	Sco	ore		
1)	Provincially sign	nificant	10	00		
2)	Regionally signi			50		
3)	X Habitat suitable			10		
4)	Habitat not suita	ible		0		
Source of	information:	Field Obs	servations (NRS)	I 2010)		
		Waterfow	Breeding Scor	e (maximum lC	OO points)	10
.2.5 MIC	GRATOR PASSERINE, SHO	REBIRD OR	RAPTOR STO	POVER AREA		
	(check highest applicable ca	tegory)				
1)	Provincially sign			00		
2)	Significant in Si	-		50		
3)	Significant in Si	te District		10		
4)	X Not significant			0		
Source of	information: MNR Val	ues Map (Jun	e 25, 2010) and	Field Observation	ons	
	Passerine, Shor	ebird or Ra	ntor Stonover S	core (maximun	n 100 points)	0
	i disserince, bliot	->iiu oi itaj	Prof Stopoter S	core (mammun	- 200 Points)	- 0

Northern Ontario Wetland Evaluation, Data and Scoring Record (November 13, 2010) 4.2.6 UNGULATE HABITAT **EVALUATION** Score (1) + (2) +one of (3) to (6)Score (1) Ungulate summer cover 15 points (2) Mineral licks 50 Moose aquatic feeding area Class 1 0 (3) (4) Moose aquatic feeding area Class 2 10 (5) Moose aquatic feeding area Class 3 20 Moose aquatic feeding area Class 4 35 (6) (Score is cumulative for a maximum possible score of 100) **Ungulate Habitat Score (maximum 100 points)** 4.2.7 FISH HABITAT 4.2.7.1 Spawning and Nursery Habitat Table 5. Area Factors for Low Marsh, High Marsh, and Swamp Communities. No. of ha of Fish Habitat Area Factor < 0.5 ha 0.1 0.5- 4.9 0.2 5.0-9.9 0.4 10.0-14.9 0.6 15.0 -19.9 0.8 20.0+ ha 1.0 Step 1: Fish habitat is not present within the wetland (Score = 0) Fish habitat is present within the wetland (Go to Step 2) X Step 2: Choose only one option 1) Significance of the spawning and nursery habitat within the wetland is known (Go to Step 3) Significance of the spawning and nursery habitat within the wetland is not 2) known (Go through Steps 4, 5, 6 and 7)

Nort	hern Ontario Wetland Evaluation, Data and Scor	ring Record	(November 13, 2010)				
Step 3:	Select the highest appropriate category below attach documentation:						
1)	Significant in Site Region	100 points					
2)	Significant in Site District	50					
3)	Locally Significant Habitat (5.0+ ha)	25					
4)	Locally Significant Habitat (<5.0 ha)	15					
	Score for Spawning and Nursery I	Habitat (maximum sco	ore 100 points)				
<u>Step 4:</u>	Proceed to Steps 4 to 7 only if Step 3 was not	answered.					
(Low Marsh: marsh area from the existing water line out to the outer boundary of the wetland)							
	Low marsh not present (Continue to Step 5) Low marsh present (Score as follows)						

Scoring for Presence of Key Vegetation Groups

Scoring is based on the one most clearly dominant plant species of the dominant form in each Low Marsh vegetation community. Check the appropriate Vegetation Group (see Appendix 16) for each Low Marsh community. Sum the areas of the communities assigned to each Vegetation Group and multiply by the appropriate size factor from Table 5.

Vegetation	Vegetation	Present	Total	Area	Score	Final
Group Number	Group Name	as a	Area	Factor		Score
		Dominant	(ha)			(area
		Form		(see		factor
		(check)		Table 5)		x score)
1	Tallgrass				6 pts	0.0
2	Shortgrass-Sedge				11	0.0
3	Cattail-Bulrush-Burreed				5	0.0
4	Arrowhead-Pickerelweed				5	0.0
5	Duckweed				2	0.0
6	Smartweed-Waterwillow				6	0.0
7	Waterlily-Lotus	X	0.99	0.2	11	2.2
8	Waterweed-Watercress				9	0.0
9	Ribbongrass				10	0.0
10	Coontail-Naiad-Watermilfoil				13	0.0
11	Narrowleaf Pondweed				5	0.0
12	Broadleaf Pondweed				8	0.0
Total Score (maximum 75 points)						

Northern Ontario Wetla	and Evaluation,	Data and	Scoring I	Record
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Step 5: (**High Marsh**: area from the water line to the inland boundary of marsh wetland type. This is essentially what is commonly referred to as a wet meadow, in that there is insufficient standing water to provide fisheries habitat except during flood or high water conditions.)

High marsh not present (Continue to Step 6)

X High marsh present (Score as follows)

Scoring for Presence of Key Vegetation Groups

Scoring is based on the one most clearly dominant plant species of the dominant form in each High 1Marsh vegetation community. Check the appropriate Vegetation Group for each High Marsh community. Sum the areas of the communities assigned to each Vegetation Group and multiply by the appropriate size factor from Table 5.

Vegetation	Vegetation	Present	Total	Area	Score	Final
Group Number	Group Name	as a	Area	Factor		Score
		Dominant	(ha)	(see		(area
		Form		Table 5)		factor
		(check)				x score)
1	Tallgrass				6 pts	0.0
2	Shortgrass-Sedge	X	1	0.2	11	2.2
3	Cattail-Bulrush-Burreed				5	0.0
4 Arrowhead-Pickerelweed 5						0.0
Total Score (maximum 25 points)					2.2	

^{*}High marsh consists of low shrub as the dominant form, which cannot be scored.

Step 6: (**Swamp**: Swamp communities containing fish habitat, either seasonally or permanently. Determine the total area of seasonally flooded swamps and permanently flooded swamps containing fish habitat.)

Swamp containing fish habitat not present (Continue to Step 7)

X Swamp containing fish habitat present (Score as follows)

Swamp containing fish	TOTAL SCORE				
Habitat	(check)	heck) area (ha) (see Table 5)			(factor x score)
Seasonally flooded	X	1.77	0.2	10	2.0
Permanently flooded	0.0				
SCOF	2.0				

Northern Ontario Wetland Evaluation, Data and Scoring Record	(November 13, 2010)							
Step 7: Calculation of final score								
Score for Spawning and Nursery Habitat (Low Marsh) (maximum 75) = 2.0								
Score for Spawning and Nursery Habitat (High Marsh) (maximum 25) = 2.2								
Score for Swamp Containing Fish Habitat (maximum 20) = 2.0								
Sum (maximum score	e 100 points) = 6							
4.2.6.2 Migration and Staging Habitat								
Step 1:								
1) X Staging or Migration Habitat is not present in the wetland (Score = 0)								
2) Staging or Migration Habitat is present in the wetland significance of the to Step 2)	he habitat is known (Go							
3) Staging or Migration Habitat is present in the wetland significance of the (Go to Step 3)	he habitat is not known							
NOTE: Only <u>one</u> of Step 2 <u>or</u> Step 3 is to be scored.								
Step 2: Select the highest appropriate category below, attach documentation:	g.							
1) Significant in Site Region	Score 25 points							
2) Significant in Site District	15							
3) Locally Significant	10							
4) Fish staging and/or migration habitat present,but not as above	5							
Score for Fish Migration and Staging Habitat (maximum scor	re 25 points)							
Step 3: Select the highest appropriate category below based on presence of the (does not have to be dominant). Note name of river for 2) and 3).	<u> </u>							
Wetland is riverine at rivermouth or lacustrine at rivermouth	Score 25 points							
2) Wetland is riverine, within 0.75 km of rivermouth	15							
3) Wetland is lacustrine, within 0.75 km of rivermouth	10							
4) Fish staging and/or migration habitat present, but not as above	5							
Score for Staging and Migration Habitat (maximum sco								
Secretor Staging and Angration Habitat (maximum sec								
22								

(November 13, 2010)

4.3 ECOSYSTEM AGE

(Fractional Area = area of wetland type/total area of wetland)

	Area			Scoring
Bog		X	25 =	0.0
Fen, treed to open on deep soils				
floating mats or marl	0.27	X	20 =	5.4
Fen, on limestone rock		X	5 =	0.0
Swamp	0.47	X	3 =	1.4
Marsh	0.26	X	0 =	0.0
		Sub Total:		6.8

Fractional

Ecosystem Age Score (maximum 25 points)

7

4.4 GREAT LAKES COASTAL WETLANDS

Score for **coastal** (see text for definition) wetlands only

Choose one only

 wetland < 10 ha</td>
 =
 0 points

 wetland 10- 50 ha
 =
 25

 wetland 51 -lOO ha
 =
 50

 wetland > 100 ha
 =
 75

Great Lakes Coastal Wetlands Score (maximum 75 points)

Northern Ontario Wetland Evaluation, Data and S	Scoring I	Record	(November 13, 2010)
5.0 EXTRA INFORMATION			
5.1 PURPLE LOOSESTRIFE			
X Absent/Not seen			
Present	(a)	One location in wetland Two to many locations	<u> </u>
	(b)	Abundance code (1 < 20 plants (2 20-99 plants (3 100-999 plants (4 >1000 plants	
5.2 SEASONALLY FLOODED AREAS			
Indicate length of seasonal flooding			
Check one or more			
Ephemeral Temporal Seasonal Semi-permanent No seasonal flooding		(less than 2 weeks) (2 weeks to 1 month) (1 to 3 months) (>3 months)	<u>X</u> X
5.3 SPECIES OF SPECIAL SIGNIFICANCE			
5.3.1 Osprey			
Present and nesting (attach map showing nest site) Known to have nested in last 5 yr Feeding area for osprey Not as above		<u>X</u>	
5.3.2 Common Loon			
Nesting in wetland (attach map showing nest site) Feeding at edge of wetland Observed or heard on lake or		_	
river adjoining the wetland		X	
Not as above			
34	4		

Northern Ontario Wetland Evaluation, Data and Scoring Record	(November 13, 2010)
INVESTIGATORS	AFFILIATION
Lisa Keable	Natural Resources Solutions Inc.
Derek Goertz	Natural Resources Solutions Inc.
	-
DATES WETLAND VISITED	
September 5, 2010	
DATE THIS EVALUATION COMPLETED: N	ovember 13, 2010
ESTIMATED TIME DEVOTED TO COMPLETING THE 5 hours (2 people from	
WEATHER CONDITIONS	
i) at time of field work	
15°C, 100% cloud cover, wind = 0 (Beaufort Scale)	
ii) summer conditions in general	
Very hot and dry summer however substantial rainfa fieldwork conducted for this wetland.	all occurred over the last few nights prior to the
OTHER POTENTIALLY USEFUL INFORMATION:	
OTHER TOTENTIALLY USEFUL INFORMATION.	
CHECKLIST OF PLANT AND ANIMAL SPECIES RECORDI	ED IN THE WETLAND:
A list of all flora and fauna observed in the wetland is appended	I.
	35

No	thern Ontario Wetland Evaluation, l	Data and Scoring Record	l (Nov	ember 13, 20	10)
	WETLAND	EVALUATION SCORI	NG RECORD		
WETLAND	NAME	I	sosceles Wetland Compl	ex	
	1.0 1	BIOLOGICAL COMPO	<u>NENT</u>		
1.1	PRODUCTIVITY				
1.1.2	Growing Degree-Days/Soils Wetland Type Site Type			13 9 2	
			Total for Productivity		25
1.2	BIODIVERSITY				
1.2.2 1.2.3 1.2.4 1.2.5	Number of Wetland Types Vegetation Communities (maxixmonic Diversity of Surrounding Habitat (Proximinty to Other Wetlands Interspersion Open Water Type			20 3 6 8 6 20	
			Total for Biodiversity		63
1.3	Sub Total for Biodiversity SIZE (Biological Component)	63			8
		NT (1250)			
1012	AL FOR BIOLOGICAL COMPONE	INT (not to exceed 250)			96

Northern Ontario Wetland Evaluation, Data and Scoring Record (Novem	nber 13, 2010)
2.0 SOCIAL COMPONENT	
2.1 ECONOMICALLY VALUABLE PRODUCTS	
2.1.1 Wood Products 2.1.2 Lowbush Cranberry 2.1.3 Wild Rice 2.1.4 Commercial Fish 2.1.6 Furbearers	0 0 0 12 3
Total for Economically Valuable Products	15
2.2 RECREATIONAL ACTIVITIES (maximum 80)	16
2.3 LANDSCAPE AESTHETICS	
2.3.1 Distinctness 2.3.2 Absence of Human Disturbance	0 4
Total for Landscape Aesthetics	4
2.4 EDUCATION AND PUBLIC AWARENESS	
2.4.1 Educational Uses 2.4.2 Facilities and Programs 2.4.3 Research and Studies (maximum 12)	0 0 0
Total for Education and Public Awareness	0
2.5 PROXIMITY TO AREAS OF HUMAN SETTLEMENT	4
2.6 OWNERSH1P Subtotal for Social Component 2.7 SIZE (Social Component)	2
2.8 ABORIGINAL AND CULTURAL VALUES (maximum 30)	30
TOTAL FOR SOCIAL COMPONENT (not to exceed 250)	79

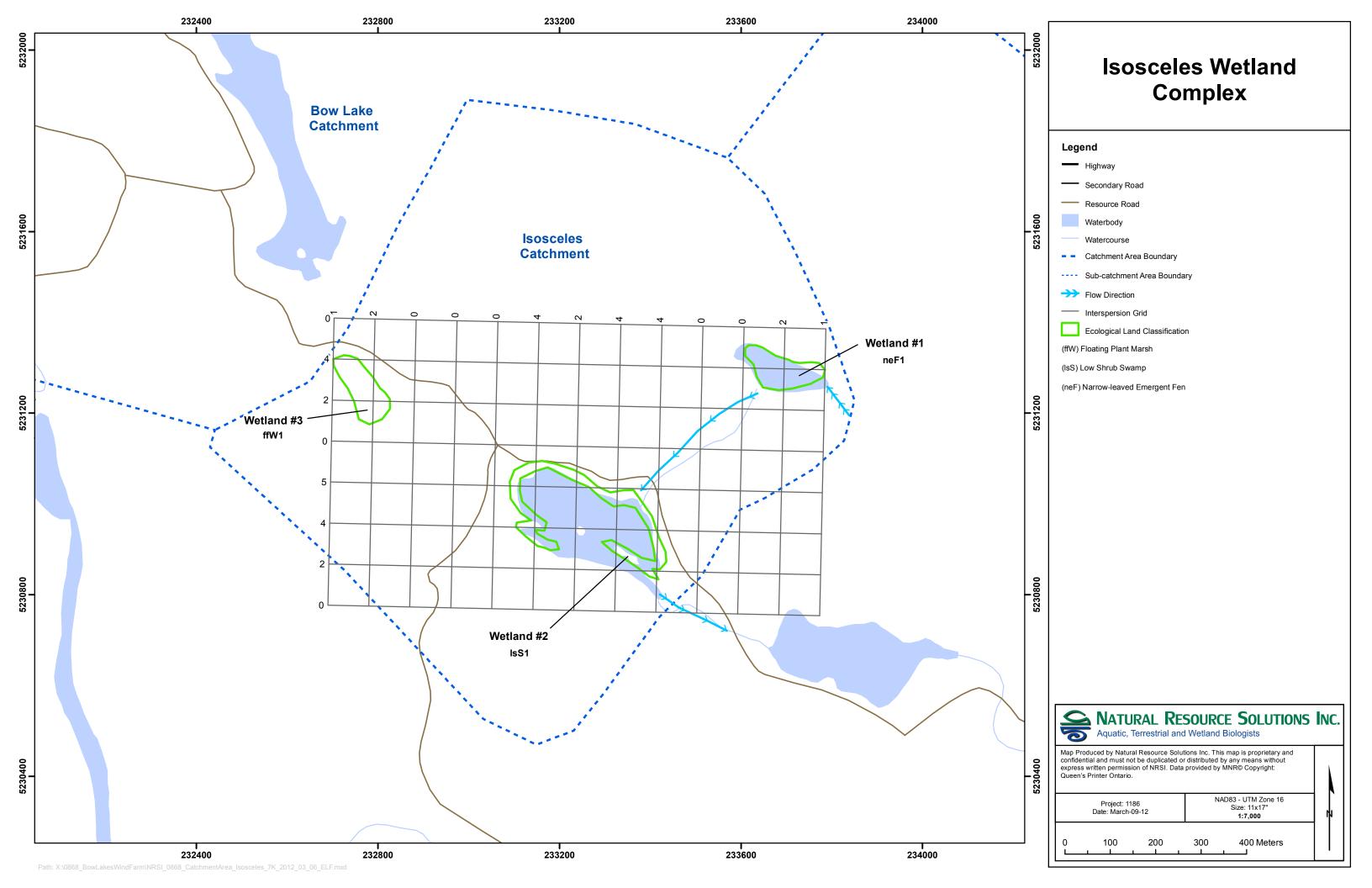
3.2 GROUNDWATER RECHARGE 3.2.1 Site Type 3.2.2 Soils Total for Groundwater Recharge 2.3.3 WATER QUALITY IMPROVEMENT 3.3.1 Watershed Improvement Factor 3.3.2 Adjacent and Watershed Land Use 3.3.3 Vegetation Form Total for Water Quality Improvement 5.3.4 CARBON SINK 3.5 SHORELINE EROSION CONTROL 3.6 GROUNDWATER DISCHARGE	Northern Ontario Wetland Evaluation, Data and	Scoring Record	(November 13, 2010)
3.2 GROUNDWATER RECHARGE 3.2.1 Site Type 3.2.2 Soils Total for Groundwater Recharge 22 3.3 WATER QUALITY IMPROVEMENT 3.3.1 Watershed Improvement Factor 3.3.2 Adjacent and Watershed Land Use 3.3.3 Vegetation Form Total for Water Quality Improvement 53 3.4 CARBON SINK 6 3.5 SHORELINE EROSION CONTROL 3.6 GROUNDWATER DISCHARGE	3.0 HYDROLO	OGICAL COMPONENT	
3.2.1 Site Type 3.2.2 Soils Total for Groundwater Recharge 22 3.3 WATER QUALITY IMPROVEMENT 3.3.1 Watershed Improvement Factor 3.3.2 Adjacent and Watershed Land Use 3.3.3 Vegetation Form Total for Water Quality Improvement 52 3.4 CARBON SINK 3.5 SHORELINE EROSION CONTROL 3.6 GROUNDWATER DISCHARGE	FLOOD ATTENUATION		58
Total for Groundwater Recharge 3.3 WATER QUALITY IMPROVEMENT 3.3.1 Watershed Improvement Factor 3.3.2 Adjacent and Watershed Land Use 3.3.3 Vegetation Form Total for Water Quality Improvement 53 4 CARBON SINK 3.4 CARBON SINK 3.5 SHORELINE EROSION CONTROL 3.6 GROUNDWATER DISCHARGE	GROUNDWATER RECHARGE		
3.3.1 Watershed Improvement Factor 3.3.2 Adjacent and Watershed Land Use 3.3.3 Vegetation Form Total for Water Quality Improvement 3.4 CARBON SINK 3.5 SHORELINE EROSION CONTROL 3.6 GROUNDWATER DISCHARGE			
3.3.1 Watershed Improvement Factor 3.3.2 Adjacent and Watershed Land Use 3.3.3 Vegetation Form Total for Water Quality Improvement 3.4 CARBON SINK 3.5 SHORELINE EROSION CONTROL 3.6 GROUNDWATER DISCHARGE 10 10 10 10	T	otal for Groundwater Recharge	27
3.3.2 Adjacent and Watershed Land Use 3.3.3 Vegetation Form Total for Water Quality Improvement 3.4 CARBON SINK 3.5 SHORELINE EROSION CONTROL 3.6 GROUNDWATER DISCHARGE	VATER QUALITY IMPROVEMENT		
3.4 CARBON SINK 3.5 SHORELINE EROSION CONTROL 3.6 GROUNDWATER DISCHARGE 10	3.3.2 Adjacent and Watershed Land Use		17
3.5 SHORELINE EROSION CONTROL 3.6 GROUNDWATER DISCHARGE 10	Т	otal for Water Quality Improvem	nent 53
3.6 GROUNDWATER DISCHARGE	CARBON SINK		6
	HORELINE EROSION CONTROL		0
TOTAL FOR HYDROLOGICAL COMPONENT (not to exceed 250) 16	GROUNDWATER DISCHARGE		16
	TOTAL FOR HYDROLOGICA	L COMPONENT (not to exceed	250) 160

Northern Ontario Wetland Evaluation, Data and Scoring Record	(November 13, 2010)
Normerii Ontario wetiand Evaluation, Data and Scoring Record	(November 13, 2010)
4.0 SPECIAL FEATURES	
4.1 <u>RARITY</u>	
4.1.1 Wetlands	20
4.1.2 Species	
4.1.2.1 Endangered or Threatened Species Breeding	0
4.1.2.2 Traditional Use by Endangered or Threatened Species	0
4.1.2.3 Provincially Significant Animals	0
4.1.2.4 Provincially Significant Plants4.1.2.5 Regionally Significant Species	0
4.1.2.5 Regionally Significant Species 4.1.2.6 Locally Significant Species	0
4.1.2.7 Species of Special Status	15
Total for Species Ran	rity 15
4.2 SIGNIFICANT FEATURES OR HABITAT	
······································	
4.2.1 Colonial Waterbirds	0
4.2.2 Winter Cover for Wildlife	0
4.2.3 Waterfowl Staging and Moulting4.2.4 Waterfowl Breeding	<u> </u>
4.2.5 Migratory Passerine, Shorebird or Raptor Stopover	0
4.2.6 Ungulate Habitat	10
4.2.7 Fish Habitat	6
Total for Significant	Features and Habitat 26
Total for Significant	1 catales and Habitat
4.3 ECOSYSTEM AGE	7
A A CONTAIN AND COLORAL WINTEN AND C	
4.4 GREAT LAKES COASTAL WETLANDS	0
TOTAL FOR SPECIAL FEATURES (1	maximum 250) 68

Noi	thern Ontario Wetland Evaluation, Data and Sco	(November 13, 2010)						
	SUMMARY OF EVALUATION RESULT							
Wetland	Wetland							
TOTAL FO	R 1.0 BIOLOGICAL COMPONENT		96					
TOTAL FO	R 2.0 SOCIAL COMPONENT		79					
TOTAL FO	R 3.0 HYDROLOGICAL COMPONENT		160					
TOTAL FO	R 4.0 SPECIAL FEATURES COMPONENT		68					
		WETLAND TOTAL	403					
<u>INVESTIG</u>								
Lisa Keable								
Derek Goer								
Katnarina v	Valton (evaluation revision, March 2012)							
AFFILIATI	ON							
	ources Solutions Inc.							
	ources Solutions Inc.							
	ources Solutions Inc.							
1 (400141 110)								
DATE	November 13, 2010							
	, , , , , , , , , , , , , , , , , , ,							

Data Summary Form Wetland: Isosceles Wetland Complex

Wetland	Wetland	Маре	Field	# Forms	Dominant	Forms	% Open	Area (ha)	Open	Soils	Site Type	Fish
Type	Unit	Code	Code		Form		Water		Water (ha)			Habitat
Fen	1	neF1	7	3	ne	gc, m	10	1.00	0.10	Organic (H)	Palustrine	high marsh
Swamp	2	lsS1	5	2	ls	ne	20	1.77	0.35	Silt	Palustrine	Yes - swamp
Marsh	3	ffW1	3	1	ff		90	0.99	0.89	Silt	Isolated	low marsh



Map Legend

Map Code	Wetland	Forms	Dominant Species
	Type		
ffW1	Marsh	ff	Yellow lily (Nuphar variegata), Potamogeton spp.; Bottle sedge (Carex utriculata); Wild
			mint (Mentha arvensis ssp. borealis)
lsS1	Swamp	ls, ne	Sweetgale (Myrica gale), Speckled alder (Alnus incana spp. rugosa); Canada blue joint
			(Calamagrostis canadensis)
neF1	Fen	ne, m	Carex spp., Cottongrass (Eriophorum gracile); Sphagnum spp.

BOTANICAL NA	ME	COMMON NAME	PROVINCIAL STATUS	OMNR STATUS	COSEWIC STATUS	NRSI
	SOURCE		MNR RARE 4th Ed. 2009	SARO List	SARA Registry	Observations (2010)
PTERIDOPHYTES		FERNS & ALLIES				
Oamum daaaa		David Fam Family				
Osmundaceae	atau da uta u a	Royal Fern Family	05			
Osmunda	claytoniana	Interrupted Fern	S5			X
Osmunda	regalis var. spectabilis	Royal Fern	S5			X
<u>GYMNOSPERMS</u>		CONIFERS				
Cupressaceae		Cedar Family				
Thuja	occidentalis	Eastern White Cedar	S5			X
•						
Pinaceae		Pine Family				
Abies	balsamea	Balsam Fir	S5			Χ
Picea	mariana	Black Spruce	S5			Χ
DICOTYLEDONS		DICOTS				
		a a · a · ·				
Anacardiaceae	,	Sumac or Cashew Family	0.5			
Toxicodendron	radicans ssp. negundo	Poison-ivy	S5			X
Apiaceae		Carrot or Parsley Family				
Sium	suave	Hemlock Water-parsnip	S5			X
Glain	Suave	Tiernioek water paranip	- 00			
Asteraceae		Composite or Aster Family				
Eupatorium	maculatum ssp. maculatum	Spotted Joe-pye-weed	S5			X
Solidago	uliginosa	Marsh Goldenrod	S5			Χ
Caprifoliaceae		Honeysuckle Family				
Symphoricarpos	albus	Snowberry	S5			X
Cornaceae		Dogwood Family				
Cornus	stolonifera	Red-osier Dogwood	S5			X
Droseraceae		Sundew Family				
Drosera	rotundifolia	Round-leaved Sundew	S5			X
2100014	- Cananona	TOUTION TOUTOU OUT INCOME	- 55			
Ericaceae		Heath Family				
Chamaedaphne	calyculata	Leatherleaf	S5			Х
Guttiferae		St. John's-wort Family				
Triadenum	fraseri	Fraser's St. John's-wort	S5			X
Lamiaceae		Mint Family	0.5			
Lycopus	americanus	Cut-leaved Water-horehound	S5			X
Lycopus	uniflorus	Northern Water-horehound	\$5 \$5			X
Mentha	arvensis ssp. borealis	American Wild Mint	S5			^
Lentibulariaceae		Bladderwort Family				
Utricularia	cornuta	Horned Bladderwort	S5			X
		THE PARTY OF THE P				
Myricaceae		Wax-myrtle Family				

Myrica	gale	Sweet Gale	S5	X
,				
Nymphaeaceae		Water-lily Family		
Nuphar	variegata	Bulhead Pond-lily	S5	X
Onagraceae		Evening-primrose Family		
Epilobium	palustre	Marsh Willow-herb	S5	Х
Rosaceae		Rose Family		
Comarum	palustre	Marsh Cinquefoil	S5	X
Rubus	idaeus ssp. melanolasius	Wild Red Raspberry	S5	X
ve 1		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		
Violaceae		Violet Family		
Viola	lanceolata	Lance-leaved Violet	S4	X
Cyperaceae		Sedge Family	+ + +	
Carex	species	Sedge species		Х
Eriophorum	gracile	Slender Cotton-grass	S5	X
Rhynchospora	alba	White Beaked-rush	S5	X
Scirpus	cyperinus	Wool-grass	S5	X
,				
Iridaceae		Iris Family		
Iris	versicolor	Multi-coloured Blue-flag	S5	Х
Juncaceae		Rush Family		
Juncus	spp.			X
Juncus	brevicaudatus	Short-tailed Rush	S5	Х
Poaceae		Grass Family		
Calamagrostis	canadensis	Blue-joint Grass	S5	Х
Glyceria	canadensis	Rattlesnake Grass	S4S5	X
Potamogetonaceae		Pondweed Family	+ + +	
		Foliuweed Failing		
Potamogeton	spp.			X
BRYOPHYTES			+ + +	
Sphagnaceae			1 1	
Sphagnum	spp.			Х
Sphagnum	girgensohnii	Common Green Peat Moss	S5	Х
Sphagnum	magellanicum	Midway Peat Moss	S5	X

Wildlife Observations

Includes tracks and signs observed while in the field

Common Name Scientific Name

Mammals

Beaver Castor canadensis

Moose Alces alces

Amphibians

Green frog Rana clamitans melanota

Natural Resources Department BNR

BATCHEWANA FIRST NATION OF OJIBWAYS

RANKIN RESERVE 15 D GOULAIS BAY RESERVE 15 A OBADJIWAN RESERVE 15 E WHITEFISH ISLAND 15

> Administration Office: 236 Frontenac Street Rankin Reserve 15D Batchewana Territory, ON P6A 5K9 Ph: (705) 759-0914 / Fax: (705) 759-9171 www.batchewana.ca

November 17, 2010

Derek Goertz Natural Resource Solutions Inc. 111 Elgin Street Sault Ste. Marie, ON P6A 6L6

Dear Derek:

Re: Site Evaluation for the Wetlands of Bow Lakes Wetlands

As per your request, BNR Field Technician, David Sewell has completed a site evaluation for the Two Wetlands in the vicinity of the proposed Bow Lake Wind Farm within Batchewana First Nation.

I have attached Dave's report that we are hope is going to be helpful to you. We also request that you provide a copy to your employee and any other necessary agencies that are involved with this project.

Thank you very much for requesting BFN participation. If you have any questions or need more information please contact Dave Sewell or myself at 705-759-0914.

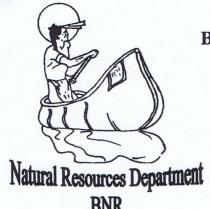
Miigwetch

Danny Sayers JR. (BNR Manager)

c.c. Chief and Council

Dave Sewell (BNR Field Technician)

Vortex



BATCHEWANA FIRST NATION OF OJIBWAYS

RANKIN RESERVE 15 D GOULAIS BAY RESERVE 15 A OBADJIWAN RESERVE 15 E WHITEFISH ISLAND 15

> Administration Office: 236 Frontenac Street Rankin Reserve 15D Batchewana Traditional Territory, ON P6A 5K9 Ph: (705) 759-0914 / Fax: (705) 759-9171 www.batchewana.ca

BNR Site Visit and Recommendations on Two Bow Lake Wetlands

On October 26, 2010 I visited the area of the Bow Lake Wind Farms to take a look at the wetlands in that area. There are two big pieces of wetland, one to the north of Bow Lake and, one to the south of Bow Lake. There are a few smaller pieces of wetland around Negick Lake which is within the Wind Farm area. From what I seen these wetlands play an important role to the surrounding area. These wetlands are nature's way of filtering the water which the animals drink (and sometimes humans). In this area there are a lot of animals such as the moose, deer; bear, wolves, foxes, beaver and a lot of other smaller animals. There is plenty of plant life around the wetlands that animals and aquatic life use as food and others use as their homes. There are also a lot of plants that we (BFN) use for medicines. The loss of these wetlands will have on huge burden on the BFN community and the surrounding area that may have irreversible damage.

Recommendations:

- I believe that these wetlands are very valuable to the surrounding area, environment, wild life and BFN reliance on the land and resources to sustain our cultural activities.
- The Bzhki Ziibi (Montreal River) has and continues to be valuable resources to BFN
 community members to access, for harvest and manage our Natural Resources that
 include but not limited to hunting, fishing, cultural sites.
- More BFN field work is needed to provide a complete evaluation and values of these wetlands.

It is my recommendation that Batchewana First Nation should be a part of any Environmental Evaluations from the beginning stages. It is very important to have BFN participation in order to understand and/or to receive appropriate data related to direct impacts and/or values. BNR field Technician is requesting that any future work in our Territory involves our participation which includes but not limited to; covering the cost associated with providing BFN involvement. It's essential for the government, Industry, and contractors to budget for First Nation participation because it becomes costly to our First Nation departments to complete these tasks in a manner that the community will accept. Without BFN reasonable participation in future Environmental Evaluations or Environmental Impacts studies, BFN will not endorse or except the final copies of those reports.

Dave Sewell BNR Field Technician

Lonely Wetland									
	Wetland Evaluation Edition	2002							
Wettand Evaluation Edition 2002									
	November 19, 2010								
	Comments								
Attached Documents in	nclude:								
1) Summary of Wetlan	d types, site types and dominant form areas								
2) Map of Lonely Wet	**								
3) List of vegetation co									
4) Map of Interspersion									
5) Map of Lonely Wet									
	Spawning/Nursery Habitat Selection with pictu	res							
7) Vascular Plant List									
8) Fauna list (Including									
9) Letter from Batchev									
	Additional Information	1							
Official Name:	Lonely V	Vetland							
Evaluation Edition:	2002 Class:	Wetland ID:							
	Year/Month Last Evaluated	November 19, 2010							
	Year/Month Last Updated	8-Mar-12							
Special Planning Cons	iderations:	Scores							
		Biological: 75							
		Social: 73							
		Hydrological: 132							
		Special Features: 35							
		Overall: 315							
Submitted by:	Natural Resources Solutions Inc								
Date:	March 9, 2012								

Nor	thern Ontario Wetland Evaluation, Data and Scoring Record (November 19, 2010)
	WETLAND DATA AND SCORING RECORD
i)	WETLAND NAME: Lonely Wetland
ii)	MNR ADMINISTRATIVE REGION: North East DISTRICT: Sault Ste. Marie
	AREA OFFICE (if different from District):
iii)	CONSERVATION AUTHORITY JURISDICTION:
	(If not within a designated CA, check here: X
iv)	COUNTY OR REGIONAL MUNICIPALITY: District of Algoma
v)	TOWNSHIP: Smilsky Township
vi)	LOTS & CONCESSIONS: None
	(attach separate sheet if necessary)
vii)	MAP AND AIR PHOTO REFERENCES
	a) Latitude: 47°13'21.4" Longitude: 84°29'36.0"
	b) UTM grid reference: Zone: 16 Block: T N 5232951
	c) National Topographic Series:
	map name(s) Batchewana
	map number(s) 41 N/1 edition 3
	scale
	d) Aerial photographs: Date photo taken: Scale:
	Flight & plate numbers: Google Earth Images 2004
	(attach separate sheet if necessary)
	e) Ontario Base Map numbers & scale
	(attach separate sheets if necessary)
	1

Northern Ontario Wetland Evaluation, D	ata and Scoring	Record	(No	ovember 19, 2010)
viii) WEILAND SIZE AND BOUNDA	ARIES			
a) Single contiguous wetland are	a:	hectares	3	
b) Wetland complex comprised or	f 3	individu	al wetlands:	
Wetland Unit Number (for reference)				Size of each wetland unit
Wetland Unit No. 1	Isolated	Palustrine 0.20	Riverine	Lacustrine ha
Wetland Unit No. 2		0.15		ha
Wetland Unit No. 3			0.29	ha
Wetland Unit No.				ha
Wetland Unit No.				ha
Wetland Unit No.				ha
Wetland Unit No.				ha
Wetland Unit No.				ha
Wetland Unit No.				ha
Wetland Unit No.				ha
Wetland Unit No.				ha
Wetland Unit No.				ha
Wetland Unit No.				ha
Wetland Unit No.				ha
Wetland Unit No.				ha
Wetland Unit No.				ha
Wetland Unit No.				ha
Wetland Unit Totals:	0.00	0.35	0.29	0.00
(Attach additional sheets if nec	cessary)			
TOTAL WETLAND SIZE	E		0.64	ha
c) Brief documentation of reason	s for including a	nv areas less th	an 2 ha in si	7e.
This wetland was evaluated ba	•	•		
September 1, 2010 stating that a			· ·	
of their size. Only two commun		•		· · · · · · · · · · · · · · · · · · ·
0.5ha. Communities less than 0			· ·	
biologists did observe brooktro				
have been spawning. Young o				**
a possible redd. Based on thes				
a possible read. Dasea on thes				

(November 19, 2010)

1.0 BIOLOGICAL COMPONENT

1.1 PRODUCTIVITY

1.1.1 GROWING DEGREE-DAYS/SOILS

GROV	VING DEG	REE DAYS	SOILS	
(check	(one)		Estimated 1	Fractional Area
1)		<1600		clay/loam
2)		1600-2000	0.500	silt/marl
3)	X	2000-2400		limestone
4)		2400-2800	0.500	sand
5)		2800-3000		humic/mesic
6)		>3000		fibric
				granite

SCORING:

Growing	Clay-	Silt-	Lime-	Sand	Humic-	Fibric	Granite
Degree-	Loam	Marl	stone		Mesic		
Days							
<1600	12	11	9	7	7	6	4
1600-2000	15	13	11	9	8	7	5
2000-2400	18	15	13	11	9	8	7
2400-2800	22	18	15	13	11	9	7
2800-3000	26	21	18	15	13	10	8
>3000	30	25	20	18	15	12	9

(maximum score 30; if wetland contains more than one soil type, evaluate based on the fractional area)

Steps required for evaluation: (maximum score 30 points)

- 1. Select GDD line in evaluation table applicable to your wetland;
- 2. Determine fractional area of the wetland for each soil type;
- 3. Multiply fractional area of each soil type by score;
- 4. Sum individual soil type scores (round to nearest whole number).

In wetland complexes the evaluator should aim at determining the percentage of area occupied by the categories for the complex as a whole.

SCOIC	,	
	clay/loam	0.00
15	silt/marl	7.50
	limestone	0.00
11	sand	5.50
	humic/mesic	0.00
	fibric	0.00
	granite	0.00

Final Score Growing Degree-Days/Soils (maximum 30 points)

Northern Ontario Wetland Evaluatio	n, Data and Scoring Record	(November 19, 2010)				
1.1.2 WETLAND TYPE (Fractional A	Area = area of wetland type/total wet	aland area)				
Fractional Area	Sc	core				
Bog	x 3 0	.00				
Fen		.00				
Swamp		.00				
Marsh 1.00	x 15 15	5.00				
	Wetland type score ((maximum 15 points) 15				
1.1.3 SITE TYPE (Fractional Area	= area of site type/total wetland area))				
	Fractional Area	Score				
Isolated	x 1	= 0.000				
Palustrine (permanent or						
intermittent flow)	0.550 x 2	= 1.100				
Riverine	0.450 x 4	= 1.800				
Riverine (at rivermouth)	x 5	= 0.000				
Lacustrine (at rivermouth Lacustrine (on enclosed	x 5	= 0.000				
bay, with barrier beach)	x 3	= 0.000				
Lacustrine (exposed to lake)	x 2	= 0.000				
,	Sub Total					
	Site Type Score	e (maximum 5 points) 3				
1.2 BIODIVERSITY						
1.2.1 NUMBER OF WETLAND TYPES						
(Check only one)	Score					
1) X one	9 points					
2) two	13					
3) three	20					
4) four	30					
Number of Wetland Types Score (maximum 30 points)						
	4					

(November 19, 2010)

1.2.2 VEGETATION COMMUNITIES

Attach a separate sheet listing community (map) codes, vegetation forms and dominant species.

Use the form on the following page to record percent area by dominant vegetation form. This information will be used in other parts of the evaluation.

Communities should be grouped by number of forms. For example, 2 form communities might appear as follows:

2 forms

Code	Forms	Do	ominant Species		
M6	re, f	ff re,	Typha latifolia; ff,	Lemna minor, V	Volffia
S1	ts, g	gc ts,	Salix discolor; gc,	lmpatiens capens	ris, Thelypteris palustris

Note that the dominant species for each form are separated by a semicolon. The dominant species (maximum of 2) within a form are separated by commas.

Scoring:

Total # of communities	Total # of communities	Total # of communities		
with 1-3 forms = 40	with $4-5$ forms = 23	with 6 or more forms = 1		
1 = 1.5 points	1 = 2 points	1 = 3 points		
2 = 2.5	2 = 3.5	2 = 5		
3 = 3.5	3 = 5	3 = 7		
4 = 4.5	4 = 6.5	4 = 9		
5 = 5	5 = 7.5	5 = 10.5		
6 = 5.5	6 = 8.5	6 = 12		
7 = 6	7 = 9.5	7 = 13.5		
8 = 6.5	8 = 10.5	8 = 15		
9 = 7	9 = 11.5	9 = 16.5		
10 = 7.5	10 = 12.5	10 = 18		
11 = 8	11 = 13	11 = 19		
+.5 each additional	+.5 each additional	+ 1 each additional		
community = 1.5	community = 2.0	community =		
5 = 5 6 = 5.5 7 = 6 8 = 6.5 9 = 7 10 = 7.5 11 = 8 +.5 each additional	5 = 7.5 6 = 8.5 7 = 9.5 8 = 10.5 9 = 11.5 10 = 12.5 11 = 13 +.5 each additional	5 = 10.5 6 = 12 7 = 13.5 8 = 15 9 = 16.5 10 = 18 11 = 19 + 1 each additional		

e.g., a wetland with 3 one form communities 4 two form communities 12 four form communities and 8 six form communities would score:

6+13.5+15=34.5=35 points

Vegetation Communities Score (maximum 45 points)

3.0

Northern Ontario Wetland Evaluat	tion, Data and Scoring Record	(November 19, 2010)
Wetland Name:	Lonely Wetland	
Wetland Size (ha):	0.64	
Vegetation Form	% area in which form is dominant	-
h		
С		
dh		
dc		
ts		
ls		
ds		
gc		
m		
ne	100.00	
be		
re		
ff		
f		
su		
u (unvegetated)		
Total = 100%	100.00	
	6	

Northern Ontario	Wetland Evaluation, Data and Scoring Record	(November 19, 2010)
123 DIVERSITY OF	F SURROUNDING HABITAT	
(Check all appropriate		
(Circuit un appropria	te kens(1))	
	recent burn (< 5 yr)	
	abandoned agricultural land	
	utility corridor	
X	deciduous forest	
	recent cutover or clearcut (<5 yr)	
X	coniferous forest	
X	mixed forest (at least 25% conifer and 75% deciduous or vice	versa)
	crops	,
	abandoned pits and quarries	
	pasture	
	ravine	
	fence rows	
X	open lake or deep river	
	creek flood plain	
X	rock outcrop	
Div	ersity of Surrounding Habitat Score (1 for each, maximum 7 p	oints) 5
1.2.4 PROXIMITY T	O OTHER WETLANDS	
	propriate category only)	Scoring
(* * * * * * * * * * * * * * * * * * *	1 1 8 3 . 3,	
1) X	Hydrologically connected by surface water to other wetlands	3
<u> </u>	(different dominant wetland type) or open lake or river	
	within 1.5 km	8 points
		•
2)	Hydrologically connected by surface water to other wetlands	3
	(same dominant wetland type) within 0.5 km	8
	•	
3)	Hydrologically connected by surface water to other wetlands	3
	(different dominant wetland type),or open lake or river from	
	1.5 to 4 km away (Second Marsh Wetland)	5
4)	Hydrologically connected by surface water to other wetlands	3
	(same dominant wetland type) from 0.5 to 1.5 km away	5
5)	Within 0.75 km of other wetlands (different dominant wetland	l type)
	or open lake or river, but not hydrologically connected by	
	surface water	5
6)	Within 1 km of other wetlands, but not hydrologically	
	connected by surface water	2
7)	No wetland within 1 km	0
Pro	eximity to other Wetlands Score (Choose one only, maximum 8	points) 8
	7	

Northern Ontai	rio Wetland Evaluat	tion, Data and Scoring Record	(November 19, 2010)
2.5 INTERSPE	RSION		
N	Number of Intersect	ions	
(Check one)	Score	
1	26 loss	2	
	26 or less 27 to 40	X 3 6	
	6) 41 to 60	9	
	e) 61 to 80	12	
	81 to 100	15	
	i) 101 to 125	18	
7	1) 126 to 150	21	
8) 151 to 175	24	
) 176 to 200	27	
1	0) >200	30	
	Inte	erspersion Score (Choose one only maximum	30 points) 6
		or special control of the same	ou points)
2.6 OPEN WA	ΓER TYPES		
Permanently		_	
(Check one)	ı	Score	
1)	type 1	8	
2) X	type 1	8	
3)	type 2	14	
4)	type 4	20	
5)	type 5	30	
6)	type 6	8	
7)	type 7	14	
8)	type 8	3	
9)	no open	water 0	
	Open Wa	ater Type Score (Choose one only maximum 3	0 points) 8

(November 19, 2010)

1.3 SIZE

0.64 hectares

39 Subtotal for Biodiversity

Size Score (Biological Component) (maximum 50 points)

- 5

Evaluation Table Size Score (Biological component)

Wetland		Total Score for Biodiversity Subcomponent										
size (ha)	<37	37-47	48-60	61-72	73-84	85-96	97- 108	109- 120	121- 132	>132		
<20 ha	1	5	7	8	9	17	25	34	43	50		
20-40	5	7	8	9	10	19	28	37	46	50		
41-60	6	8	9	10	11	21	31	40	49	50		
61-80	7	9	10	11	13	23	34	43	50	50		
81-100	8	10	11	13	15	25	37	46	50	50		
101-120	9	11	13	15	18	28	40	49	50	50		
121-140	10	13	15	17	21	31	43	50	50	50		
141-160	11	15	17	19	23	34	46	50	50	50		
161-180	13	17	19	21	25	37	49	50	50	50		
181-200	15	19	21	23	28	40	50	50	50	50		
201-400	17	21	23	25	31	43	50	50	50	50		
401-600	19	23	25	28	34	46	50	50	50	50		
601-800	21	25	28	31	37	49	50	50	50	50		
801-1000	23	28	31	34	40	50	50	50	50	50		
1001-1200	25	31	34	37	43	50	50	50	50	50		
1201-1400	28	34	37	40	46	50	50	50	50	50		
1401-1600	31	37	40	43	49	50	50	50	50	50		
1601-1800	34	40	43	46	50	50	50	50	50	50		
1801-2000	37	43	47	49	50	50	50	50	50	50		
>2000	40	46	50	50	50	50	50	50	50	50		

Northern Ontario Wetland E	valuation, Data and Scoring Record	(November 19, 2010)
	2.0 SOCIAL COMPONENT	
2.1 ECONOMICALLY VAL	UABLE PRODUCTS	
2.1.1 WOOD PRODUCTS		
Area of wetland forested (ha), i	e. dominant form is h or c. Note that this	is <u>not</u> wetland size. (Check one
	Score	
1) X <5 ha	a 0	
2) 5 -25 ha	a 4	
3) 26 -50 ha	a 6	
4) 51- 100 ha		
5) 101 -200 ha		
6) >200 ha	a 14	
Source of information:	Field Observations (NRSI 2010)	
	Wood Products Score (Score one only,	, maximum 14 points) 0
2.1.2 Lowbush Crophora		
2.1.2 Lowbush Cranberry (Check one)		Score (Choose one)
Present	1)	2 points
Absent	2) X	2 points 0
Source of information:	Field Observations (NRSI 2010)	
		_
	Lowbush Cranberry Score	(maximum 2 points)
2.1.3 Wild Rice		
(Check one)		Score (Choose one)
Present (at least 0.5 ha)	1)	10 points
Absent	2) X	0
Source of infolmation:	Field Observations (NRSI 2010)	
	Wild Rice Score (maximum	110 points) 0
	Wild Rice Score (maximum	To points)
I		

	Northern Ontario Wetland E	valuation, Data an	d Scor	ing Record		(November 19, 20	010)
	COMMERCIAL FISH (BAI	Γ FISH AND/OR	COAR	SE FISH)		9 (9)	
	(Check one)	15		37		Score (Choose or	ne)
	Present Absent	1) 2)		X		12 points 0	
•	Ausciit	2)				U	
Source	e of information:	Field Observ	vations	(NRSI 2010)			
		Com	merci	al Fish Score (maxi	mum 12	2 points)	12
2.1.5	FURBEARERS						
	(Consult Appendix 9)						
	•						
lame	of furbearer		Sourc	e of information			
`	D (C)		E' 11	I d' d' AIDG	T C . A	1 2010)	
.) _	Beaver (Castor canadens	is) 3	Field	Investigations (NRS	1 Sept 2	1, 2010)	
2) -							
<u> </u>							
<u> </u>							
<u> </u>							
corin	g: 3 points for each species.	maximum 12					
	8. · I · · · · · · · · · · · · · · · · ·			Furbearer Score (1	maximu	m 12 points)	3
2.2	RECREATIONAL ACTIVI	TIES					
F							a
		Type of Wet	land-A	ssociated Use			
ľ	I	114		Nature Enjoymen	ment/		
	Intensity of Use	Hunting		Ecosystem Study	/	Fishing	
	High	40 points		40 points		40 points	T

Type of Wetland-Associated Use									
Intensity of Use	Hunting		Nature Enjoyment/ Ecosystem Study		Fishing				
High	40 points		40 points	40 points					
Moderate	20		20		20				
Low	8	8	8		8				
Not possible/NotKnown	0		0	0	0	0			

(score one level for each of the three wetland uses; scores are cumulative; maximum score 80 points) Sources of information:

8

No sign of hunting observed, however, it is a Hunting:

possibility.

Totals

Very unlikely due to remote location and poor Nature:

accessibility.

Fishing: Very unlikely due to remote location and poor

accessibility. Very small wetland/waterbody on mapping.

0

Recreational Activities Score (maximum 80 points)

Northern Ontario Wetland Evaluation	(November 1	(November 19, 2010)		
2.3 LANDSCAPE AESTHETICS				
2.3.1 DISTINCTNESS				
(Check one)		Score (Choose one)	
Clearly distinct 1)		3 points		
Indistinct 2)		0		
	Landscape Distinctness Score	(maximum 3 points)	0	
2.3.2 ABSENCE OF HUMAN DISTURE	BANCE			
(Check one)		Score (Choose one)	
Human disturbances absent or nearly	y so 1)	X 7 points	,	
One or several localized disturbance		4 7 points		
Moderate disturbance; localized wat	· · · · · · · · · · · · · · · · · · ·	2		
Wetland intact but impairment of ec	•			
intense in some areas	4)	1		
Extreme ecological degradation, or v				
severe and widespread	5)	0		
•				
Source of information:	Field Investigations (NR	RSI 2010)		
Abser	nce of Human Disturbance Sco	ore (maximum 7 points)	7	
		F	-	
2.4 EDUCATION AND PUBLIC AW	ARENESS			
2.4.1 EDUCATIONAL USES				
(Check one)		Score (Choose one)	
Frequent 1)		20 points		
Infrequent 2)		12		
No visits 3)	X	0		
	Field Observation - Very remote	e location and		
	poor accessibility.			
	Educational Uses Score	(maximum 20 points)	0	
2 4 2 FACH WINES AND DROCK AND				
2.4.2 FACILITIES AND PROGRAMS				
(abaak ana)		Saara	(Chasse one)	
(check one)	1		(Choose one)	
Staffed interpretation centre No interpretation centre or staff but	1 a system of	8 poin	ıs	
self-guiding trails or brochures avail		4		
Facilities such as maintained paths (.)4		
boardwalks, boat launches or observ				
but no brochures or other interpretat		2		
No facilities or programs	4			
Two facilities of programs	4	<u> </u>		
Source of information:	Field Observations (I	NRSI 2010)		
	Facilities and Programs Scare	(maximum & nainta)	0	
	Facilities and Programs Score	(maximum o points)	0	

Northern Ontario Wetland Evaluation, Data and Scoring Record (November 19, 2010)								
2.4.3 RESEARCH AND STUDIES								
(check appropriate spaces) Score								
Long term research has been done Research papers published in refereed scientific								
journal or as a thesis	ed scientific					10		
One or more (non-research) reports	have been written					10		
on some aspect of the wetland 's flo								
hydrology etc.	ra radiia					5		
No research or reports				X		0		
Two research of reports				71				
Attach list of known reports by above	ve categories							
Research and St	udies Score (Scor	e is cu	ımula	tive, maxim	um 12	2 points)	0	
2.5 PROXIMITY TO AREAS OF HU	IMAN SETTLEI	MEN	г					
Circle the highest applicable score	JWAN SETTLE	VILIT	<u>.</u>	-				
Distance of wetland from	1)		2)	populati	on	3) population		
settlement	population> 10	000	2)	2,500 -10		<2,500 or cott		
settiement	population> 10	,000		2,300 -10	,000	<2,300 of control community	_	
1) Within on adjaining	40 mainta			26			/	
1) Within or adjoining	40 points			20		16		
settlement 2) 0.5 to 10 km from settlement	26		16			10		
3) 10 to 60 km from settlement	12			8		4 4		
4) >60 km from settlement	5		2			0		
5) >100 km from settlement	0		0			0		
3) >100 km from settlement	U	0		U	0	U U	4	
		U			U		4	
Name of settlement:	Montreal R	ivor L	Iorbou	ır ON				
Name of settlement.	Montreal N	ivei i	iaibou	II, ON				
Proxi	mity to Human S	Settler	nent S	Score (maxir	num 4	10 noints)	4	
	inity to IIIIIII			core (mam				
2.6 OWNERSHIP (FA= fraction Are	ea)					Score		
FA of wetland in public or private o	wnership							
held under contract or in trust for we				X	10	= 0.00		
FA of wetland area in public owners	•		1.	.00 x	8	= 8.00		
FA of wetland area in private owner	_			Х	4	= 0.00		
	_	. 7		· /D				
	ie Forest Manager				тар #	<u> </u>		
166805230	Algoma Forests (10 ' 1)	0	
		Own	ersnıp	Score (max	kımun	n 10 points)	8	
							ļ	
							ļ	
	13						ļ	
	13							

(November 19, 2010)

2.7 SIZE

0.64 hectares

27 Subtotal for Social

Evaluation Table for Size Score (Social Component)

Evaluation	Table for Size Score (Social Component)									
Wetland Size (ha)				Tot	al for Size D	Dependent So	core			
. ,	<31	31-45	46-60	61-75	76-90	91-105	106-109	121-135	136-150	>150
<2 ha	1	2	4	8	10	12	14	14	14	15
2 - 4ha	1	2	4	8	12	13	14	14	15	16
5 - 8ha	2	2	5	9	13	14	15	15	16	16
9 - 12ha	3	3	6	10	14	15	15	16	17	17
13-17	3	4	7	10	14	15	16	16	17	17
18-28	4	5	8	11	15	16	16	17	17	18
29-37	5	7	10	13	16	17	18	18	19	19
38-49	5	7	10	13	16	17	18	18	19	20
50-62	5	8	11	14	17	17	18	19	20	20
63-81	5	8	11	15	17	18	19	20	20	20
82-105	6	9	11	15	18	18	19	20	20	20
106-137	6	9	12	16	18	19	20	20	20	20
138-178	6	9	13	16	18	19	20	20	20	20
179-233	6	9	13	16	18	20	20	20	20	20
234-302	7	9	13	16	18	20	20	20	20	20
303-393	7	9	14	17	18	20	20	20	20	20
394-511	7	10	14	17	18	20	20	20	20	20
512-665	7	10	14	17	18	20	20	20	20	20
666-863	7	10	14	17	19	20	20	20	20	20
864-1123	8	12	15	17	19	20	20	20	20	20
1124-1460	8	12	15	17	19	20	20	20	20	20
1461-1898	8	13	15	18	19	20	20	20	20	20
1899-2467	8	14	16	18	20	20	20	20	20	20
>2467	8	14	16	18	20	20	20	20	20	20

Total Size Score (Social Component)

.

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2.8 ABORIGINAL AND CULTURAL HERITAGE VALUES

Either or both Aboriginal or Cultural Values may be scored. However, the maximum score permitted for 2.8 is 30 points. Attach documentation.

2.8.1 ABORIGINAL VALUES

Full documentation of sources must be attached to the data record.

1)	Significant	X	=	30 points
2)	Not Significant		=	0
3)	Unknown		=	0
	Total:	30		

2.8.2 CULTURAL HERITAGE

1)	Significant		=	30 points
2)	Not Significant	X	=	0
3)	Unknown		=	0
	Total:	0		

Aboriginal Values/Cultural Heritage Score (maximum 30 points)

Batchewana First Nation (BFN) was contacted on October 19, 2010 and asked about the significance of this wetland in terms of aboriginal values. A response was received on November 17, 2010 (letter appended), which states the wetlands are "very valuable to the surrounding area, environment, wild life and BFN reliance on the land and resources to sustain our cultural activities." (Dave Sewell, BNR Field Technician)

(November 19, 2010)

3.0 HYDROLOGICAL COMPONENT

3.1 FLOOD ATTENUATION

If the wetland is a complex including isolated wetlands, apportion the l00 points according to area. For example if 10 ha of a l00 ha complex is isolated, the isolated portion receives the maximum proportional score of 10. The remainder of the wetland is then evaluated out of 90.

	Step 1:	If wetland is entirely Isolated	go directly to Step 5.
--	---------	---------------------------------	------------------------

If wetland is lacustrine and the ratio of wetland area: lake area is <0.1, or wetland is riverine on the St. Mary's River, go to Step 5

All other wetlands, go through steps 2, 3, 4 and 5.

Step 2: Determination of Upstream Detention Factor (DF)

(a)	Wetland area (ha)			0.64
(b)	Total area (ha) of <u>upstream</u> detention areas			2.06
	(include the wetland itself)			
(c)	Ratio of (a):(b)			0.31
(d)	Upstream detention factor: (c) $\times 2 =$	0.62		0.62
	(maximum allowable factor = 1)		•	

Step 3: Determination of Peak Flow Attenuation Factor (AF)

(a)	Wetland area (ha)		0.64	
(b)	Size of catchment basin (ha) upstream of wetland			
	(include wetland itself in catchment area)		30.63	
(c)	Ratio of (a):(b)			0.02
(d)	Wetland attenuation factor: (c) x 10 =	0.21		0.21
	(maximum allowable factor = 1)			

Step 4: Determination of Wetland Surface Form Factor (FF)

From the list below, select the surface form which best describes the wetland.

	ractor	
Flooded with little or no aquatic vegetation		0
Flooded but with submergent, emergent or floating vegetation		0.2
Flat (lawn) vegetation (typical of fens)	X	0.5
Hummock-depression microtopography		0.7
Patterned (e.g., string bog, ribbed fen)		1
Surface Form Factor (FF)	0.5	
Surface Form Factor (FF)	0.5	

(Maximum allowable factor = 1)

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Step 5:

1. Wetland is entirely Isolated

100 points

2. Wetland is lacustrine and the ratio of

0 points

wetland area: lake area is <0.1

3. Wetland is riverine along the St. Mary's River

0 points

4. For all other wetlands*, calculate as follows:

Upstream Detention Factor (DF) (Step 2)

0.62

Wetland Attenuation Factor (AF) (Step 3)

0.21

c) Surface Form Factor (FF) (Step 4) 0.50

44.22

 $[(DF + AF + FF)/3] \times 100*$

*Unless wetland is a complex including isolated portions -- see above

Total Flood Attenuation Score (maximum 100 points)

GROUND WATER RECHARGE

3.2.1 SITE TYPE

(a) Wetland > 50% lacustrine (by area) or located on the

St. Mary's River

Score = 0

Wetland not as above. Calculate final score as follows: (b)

(FA= area of site type/total area of wetland)

0.55	FA of isolated or palustrine wetland	X	20	=	11.00
0.45	FA of riverine wetland	X	5	=	2.25
0	FA of lacustrine wetland (wetland <50% lacustrine)	X	0	=	0.00

Site Type Score: (maximum 20 points)

3.2.2 SOILS

EVALUATION:

Dominant Wetland Type	Sand, loam, gravel, till		Clay or bedrock	
Lacustrine or on St. Mary's River	0		0	
Isolated	10		5	
Palustrine	7	7	4	
Riverine (not on St. Mary's River)	5		2	
Totals		7		0

Hydrological Soil Class Score (maximum 10 points)

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3.3 DOWNSTREAM WATER QUALITY IMPROVEMENT

3.3.1 WATERSHED IMPROVEMENT FACTOR

Calculation of Watershed Improvement Score is based upon the fractional area (FA) of each site type within the wetland. FA = area of site type/total area of the wetland.

Site Type	<u>Impro</u>	ovement Factor (IF)	
Isolated	FA	X	0.5 =	0.00
Riverine	FA	0.45 x	1 =	0.45
Palustrine with no inflow	FA	X	0.7 =	0.00
Palustrine with inflows	FA	0.55 x	1 =	0.55
Lacustrine on lake shoreline	FA	X	0.2 =	0.00
Lacustrine at lake inflow or outflow	v FA	X	1 =	0.00

Watershed Improvement Score (IF x 30) (maximum = 30)

30

3.3.2 ADJACENT AND WATERSHED LAND USE

EVALUATION

Step 1: Determination of Maximum Initial Score

X

Wetland on the Great Lakes or St. Mary's River (Go to Step 5a)

All other wetlands (Go through steps 2, 3,4 and 5b)

Step 2: Determination of Broad Upslope Land Use (BLU)

Assess broad upslope land uses within the previous 5 years, agriculture, or other activities which alter the natural vegetation cover in an extensive manner.

Choose one	Score
>50% of catchment basin	20
20-50% of catchment basin	14
<20% of catchment basin	4

Score for BLU

4

Step 3: Determination of Linear Upslope Land Uses (LUU)

Assess linear upslope uses (LUU) e.g., roads, railways, hydro corridors, pipelines, etc., crossing the upslope catchment within 200m of the wetland boundary.

Choose the highest only	Score
Major corridor*	15
Secondary corridor	11
Tertiary corridor	6
Temporary or abandoned	3
None	0

Score for LUU

Λ

Major, secondary and tertiary roads are those that are indicated as such on the provincial highways maps. Major hydro corridors are trunk lines coming directly from a generating station. Major pipelines are transcontinental lines. Secondary corridors are regional distribution lines (i.e. multi-cable hydro corridors not emanating directly from a generating station or regional gas distribution lines). Tertiary corridors are single hydro lines or local gas distribution lines (i.e. to domestic users).

	Nort	hern Ontario Wetla	and Evaluation, Data a	nd Scori	ng Record			(Novembe	er 19, 201	10)	
plants	s poir , maj	nt source (PS) land or aggregate operat	f Point-source Land Uses producing industions (but not small pit land use is located less	rial efflu s use for	local road	consti	ruction), e	etc. Score as	nper		
		Present Not present	Score 15 0	Score	for PS		0				
Step 5	<u>5:</u>	Calculation of to	tal score for Adjacen	t and W	atershed I	and U	Use				
			Lakes or St. Mary's Ralculate as follows:	iver							
				Final	Score BLU	J +LU	U+PS	4			
3.3.3	VEG	ETATION FORM									
		se the category tha	t best describes the								
	Emer	s, shrubs or herbs (legents, submergents or no vegetation (s (ne, re, be, f, ff, su)		X		Score 8 points 10 0				
2.4		CARRON GRAVE	Dominan	t Vegeta	ition Form	Scor	e (maxim	um 10 points	s)	10	
3.4	C!	CARBON SINK		.1 1							
			t best describes the we								
	1)	Wetland a bog or	fen with >50% organic	c soils			15	5 points			
	2)	_	nic soils occupying 10 ainly mineral or undes type)				6				
	3)	Marshes and swar	mps with >50% organi	c soil			9				
	4)	Wetland with less	than 10% of soils org	anic		X	0				
				Carbo	on Sink Sc	ore (n	naximum	15 points)	C)	
				19							

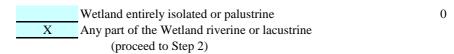
Northern Ontario Wetland Evaluation, Data and Scoring Recor	Northern Onta	rio Wetland	Evaluation,	Data and	1 Scoring	Record
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3.5 SHORELINE EROSION CONTROL

From the wetland vegetation map determine the <u>dominant</u> vegetation type within the erosion zone for <u>lacustrine and riverine site type areas only.</u> Score according to the factors listed below.

Step 1: Score



Step 2:

Choose the one characteristic that best describes the shoreline vegetation (see text for a definition of shoreline)

			Score
1)		Trees and shrubs	15
2)	X	Emergent vegetation	8
3)		Submergent vegetation	6
4)		Other shoreline vegetation	3
5)		No vegetation	0

Shoreline Erosion Control Score (maximum 15 points)

8

3.6 GROUNDWATER DISCHARGE

(Circle the characteristics that best describe the wetland being evaluated and then sum the scores)

Category		C	Catchment Interaction			
Wetland type	Bog = 0		Swamp/Marsh = 2	2	Fen = 5	
Basin topography	Flat/Rolling = 5		Hilly = 2		Major relief	
				2	break = 5	
Weland area: Upslope	Large (>50%) = 0		Moderate		Small ($<5\%$) = 5	
catchment area			(6-50%) = 2			5
Lagg Development	None found $= 0$	0	Minor = 2		Extensive $= 5$	
Seeps at wetland	None found $= 0$		1-3 seeps = 5		4 or more	
edge		0			seeps = 10	
Iron precipitates	None = 0		1-3 deposits = 2		4 or more	
evident at edge		0			deposits = 5	
Surface marl deposits	None = 0	0	1-3 deposits = 2		>3 = 5	
Wetland pH	Low < 4.2 = 0		Moderate $4.2-5.7 = 5$	5	High $> 5.7 = 10$	
Catchment soil	Patchy = 0		Thin $(<20cm) = 2$		Thick = 5	
coverage				2		
Catchment soil	Low = 0		Moderate = 2		High = 5	
permeability		0				
Totals		0		11		5

(Scores are cumulative maximum score 30 points)

Groundwater Discharge Score (maximum 30 points)

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4.0 SPECIAL FEATURES COMPONENT

4.1 RARITY

4.1.1 WETLANDS

Hills Site Region	and Site District (5E only):	5E-13
Wetland type (ch	neck one or more)	
	Bog	
	Fen	
	Swamp	
X	Marsh	

Evaluation Table for Scoring Rarity of Wetland Type.

Unit	Site Region				
Number	& District	Marsh	Swamp	Fen	Bog
2E	James Bay	20	20	0	20
2W	Big Trout Lake	20	20	0	10
3E	Lake Abitibi	20	20	10	0
3W	Lake Nipigon	20	20	10	0
3S	Lake St. Joseph	20	20	10	0
4E	Lake Temagami	20	20	10	0
4W	Pigeon River	20	10	20	0
4S	Wabigoon Lake	20	10	20	0
5E-1	Thessalon	10	0	30	20
5E-2	Gore Bay	20	0	20	20
5E-3	La Cloche	20	0	30	20
5E-4	Sudbury	10	0	30	10
5E-5	North Bay	10	0	20	0
5E-6	Tomiko	10	0	20	0
5E-7	Parry Sound	20	0	30	20
5E-8	Huntsville	20	0	30	20
5E-9	Algonquin Park	10	0	30	0
5E-10	Brent	20	0	30	0
5E-11	Bancroft	0	10	30	10
5E-12	Renfrew	0	0	30	10
5E-13	Batchewana	10	0	10	30
5-S	Lake of the Woods	10	10	20	10

Rarity of Wetland Type Score (maximum 70 points)

	Ontario Wetland Evalua	tion, Data and Scori	ng Record	(November	19, 2010)
.2 SPECIE	<u>S</u>				
4.1.2.1	BREEDING HABIT	'AT FOR AN ENDA	ANGEREI	O OR THREATENED SPEC	IES
Nar	ne of species			Source of information	
1)]	
2)					
3) 4)					
5)					
	Total:		0		
tach documer	ntation.			_	
oring:					
For one sp	pecies	250 points			
For each a	additional species	250 points			
ora is cumuls	ative, no maximum score)			
ore is cumura	ative, no maximum score	,			
	Breeding Habitat for	Endangered Specie	es Score (n	o maximum)	0
4122	TDADITIONAL MI	CDATION OD EEE	EDING II		7DFD
4.1.2.2	OR THREATENED		DING DE	ABITAT FOR AN ENDANGI	LKED
		SPECIES			
		SPECIES			
	me of species	<u>SPECIES</u>		Source of information	
1)		SPECIES		Source of information	
1)		SPECIES		Source of information	
1)				Source of information	
1) 2) 3)				Source of information	
1) 2) 3) 4)			0	Source of information	
1) 2) 3) 4) 5)	me of species Total:		0	Source of information	
1) 2) 3) 4) 5)	me of species Total:		0	Source of information	
1) 2) 3) 4)	me of species Total:		0	Source of information	
1) 2) 3) 4) 5) tach documer oring:	Total:	150 points	0	Source of information	
1) 2) 3) 4) 5) tach documer oring:	Total:		0	Source of information	
1) 2) 3) 4) 5) tach documer oring: For one spreach a	Total: Total: pecies additional species	150 points 75	0	Source of information	
1) 2) 3) 4) 5) tach documer oring: For one spreach a	Total: Total: ntation. pecies additional species ative, no maximum score	150 points 75			
1) 2) 3) 4) 5) ctach documer coring: For one spreach a	Total: Total: ntation. pecies additional species ative, no maximum score	150 points 75		Source of information	0
1) 2) 3) 4) 5) ctach documer coring: For one spreach a	Total: Total: ntation. pecies additional species ative, no maximum score	150 points 75			0
1) 2) 3) 4) 5) ttach documer oring: For one spreach a	Total: Total: ntation. pecies additional species ative, no maximum score	150 points 75			
1) 2) 3) 4) 5) tach documer oring: For one spreach a	Total: Total: ntation. pecies additional species ative, no maximum score	150 points 75			
1) 2) 3) 4) 5) tach documer oring: For one spreach a	Total: Total: ntation. pecies additional species ative, no maximum score	150 points 75			

1,44110	of species			Source of int	formation	
1)						
2)						
5) 6)						
7)						
8)						
9)						
10)						
11)						
14) 15)						
	senarate list if ne	ecessary; Attach document	ation			
	ially significant a	unimal species in the wetla	nd:			
per of provinc	= 50 po	ints 14 species	nd: =	154		
species species	= 50 po: = 80	ints 14 species 15 species	= =	156		
species species species species	= 50 po = 80 = 95	ints 14 species 15 species 16 species	= = =	156 158		
species species species species species	= 50 po = 80 = 95 = 105	ints 14 species 15 species 16 species 17 species	= = = =	156 158 160		
species species species species species species	= 50 po = 80 = 95 = 105 = 115	ints 14 species 15 species 16 species 17 species 18 species	= = = =	156 158 160 162		
species species species species species species species species	= 50 po = 80 = 95 = 105	ints 14 species 15 species 16 species 17 species 18 species 19 species	= = = =	156 158 160		
species species species species species species species species species	= 50 po = 80 = 95 = 105 = 115 = 125	ints 14 species 15 species 16 species 17 species 18 species	= = = =	156 158 160 162 164		
species species species species species species species species species species species species	= 50 po = 80 = 95 = 105 = 115 = 125 = 130 = 135 = 140	ints 14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species	= = = = = = =	156 158 160 162 164 166 168 170		
species species species species species species species species species species species species species species species	= 50 po = 80 = 95 = 105 = 115 = 125 = 130 = 135 = 140 = 143	ints 14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species	= = = = = = =	156 158 160 162 164 166 168 170		
species species species species species species species species species species species species species species species species	= 50 po = 80 = 95 = 105 = 115 = 125 = 130 = 135 = 140 = 143 = 146	ints 14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species	= = = = = = = = = = = = = = = = = = = =	156 158 160 162 164 166 168 170 172		
species species species species species species species species species species species species species species species species	= 50 po = 80 = 95 = 105 = 115 = 125 = 130 = 135 = 140 = 143 = 146 = 149	ints 14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species	= = = = = = = = = = = = = = = = = = = =	156 158 160 162 164 166 168 170		
species species species species species species species species species species species species species species species species	= 50 po = 80 = 95 = 105 = 115 = 125 = 130 = 135 = 140 = 143 = 146 = 149 = 152	ints 14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species 25 species	= = = = = = = = = =	156 158 160 162 164 166 168 170 172 174	ories – 178	
species specie	= 50 po = 80 = 95 = 105 = 115 = 125 = 130 = 135 = 140 = 143 = 146 = 149 = 152	ints 14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species	= = = = = = = = = =	156 158 160 162 164 166 168 170 172 174	ocies = 178	
species	= 50 po = 80 = 95 = 105 = 115 = 125 = 130 = 135 = 140 = 143 = 146 = 149 = 152 every species past	ints 14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species 25 species	= = = = = = = = = =	156 158 160 162 164 166 168 170 172 174	ccies = 178	

4.1.2.4			luation, Data an SIGNIFICANT	_		(November 19, 2010)
	cientific ommon N	names must be Name	recorded)	Scientific N	ame	Source of information
1)						
1) 2)						_
3) —						
4) —						
5)						
6)						
7) —				-		
8)						_
9)						_
10)						
11)						
12)						
13)						
14)						
15)						
ımber of pro	vincially	z significant pla	int species in the	e wetland:		
amber of pro	ovincially	/ significant pla	ant species in the	e wetland:		
	ovincially =	y significant pla 50 points	ant species in the	e wetland:	154	
species			-		154 156	
pecies	=	50 points	14 species 15 species 16 species	=		
species species species species	=	50 points 80	14 species 15 species 16 species 17 species	= =	156	
species species species species species	= =	50 points 80 95	14 species 15 species 16 species 17 species 18 species	= =	156 158	
species species species species species species	= = =	50 points 80 95 105	14 species 15 species 16 species 17 species 18 species 19 species	= = = =	156 158 160	
species species species species species species species	= = =	50 points 80 95 105 115	14 species 15 species 16 species 17 species 18 species 19 species 20 species	= = = =	156 158 160 162	
species species species species species species species species	= = = =	50 points 80 95 105 115 125 130	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species	= = = = =	156 158 160 162 164 166 168	
species species species species species species species species species	= = = = =	50 points 80 95 105 115 125 130 135 140	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species	= = = = = =	156 158 160 162 164 166 168 170	
species species species species species species species species species species	= = = = = =	50 points 80 95 105 115 125 130 135 140	14 species 15 species 16 species 17 species 18 species 20 species 21 species 22 species 23 species	= = = = =	156 158 160 162 164 166 168 170	
species species species species species species species species species species species species	= = = = = = =	50 points 80 95 105 115 125 130 135 140 143	14 species 15 species 16 species 17 species 18 species 20 species 21 species 22 species 23 species 24 species	= = = = =	156 158 160 162 164 166 168 170 172	
species species species species species species species species species species species species species species species	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149	14 species 15 species 16 species 17 species 18 species 20 species 21 species 22 species 23 species	= = = = = = =	156 158 160 162 164 166 168 170	
species species species species species species species species species species species species species species species	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143	14 species 15 species 16 species 17 species 18 species 20 species 21 species 22 species 23 species 24 species		156 158 160 162 164 166 168 170 172	
species species species species species species species species species species species species species	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 20 species 21 species 22 species 23 species 24 species		156 158 160 162 164 166 168 170 172 174	species = 178
species species species species species species species species species species species species species	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species 25 species		156 158 160 162 164 166 168 170 172 174	species = 178
species species species species species species species species species species species species species species	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149 152 y species past 2	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species 25 species	= = = = = = = = = = = = = = = = = = =	156 158 160 162 164 166 168 170 172 174 176	

Northern Ontario Wetland Evaluation, Data and Scoring Recor

(November 19, 2010)

4.1.2.5 REGIONALLY SIGNIFICANT SPECIES (SITE REGION)

Scientific names must be recorded for plant species. Lists of significant species must be approved by MNR.

SIGNIFICANT IN SITE REGION:

Common Name Scientific Name Source of information 1) 2) 3) 4) 5) 7) 8) 9) 10) 11) 12) 13) 14) 15)

Attach separate list if necessary .Attach documentation.

Scoring:

No. of species significant in Site Region

1 species	=	20	6 species	=	55
2 species	=	30	7 species	=	58
3 species	=	40	8 species	=	61
4 species	=	45	9 species	=	64
5 species	=	50	10 species	=	67

Add one point for every species past 10. (no maximum score)

 $Significant\ Species\ (Site\ Region)\ Score\ (no\ maximum)$

^{**} Score only if there is an approved list

(November 19, 2010)

4.1.2.6 LOCALLY SIGNIFICANT SPECIES (SITE DISTRICT)

Scientific names must be recorded for plant species. Lists of significant species must be approved by MNR.

1 2 3 4 5 5 6 7 8 9 9 10 11 11 12 13 14 15 15 16 17 17 17 17 17 17 17 17 17 17 17 17 17	Common Name	Scientific Name	Source of information
3 4 5 6 7 8 9 10 11 12 13 14 15 16			
3 4 5 6 7 8 9 10 11 12 13 14 15 16	1		
4 5 6 7 8 9 10 11 12 12 13 14 15 16	-		
5 6 7 8 9 10 11 12 13 14 15 16	3		
6 7 8 9 10 11 12 13 14 15 16	4		
7 8 9 10 11 12 13 14 15 16	5	<u> </u>	
9 10 11 12 13 14 15 16	6	<u> </u>	
9 10 11 12 13 14 15 16	7		
10 11 12 13 14 15 16			
11	9		
12 13 14 15 16	10		
13 14 15 16	11	<u> </u>	<u> </u>
14 15 16	12		<u></u>
15 16	13		<u> </u>
16	14		
	15		
17	16		
17	17		
18	18		

Attach separate list if necessary .Attach documentation.

Scoring:

No. of species significant in Site District

1 species	=	10	6 species	=	41
2 species	=	17	7 species	=	43
3 species	=	24	8 species	=	45
4 species	=	31	9 species	=	47
5 species	=	38	10 species	=	49

For each significant species over 10 in the wetland, add 1 point.

Locally Significant Species (Site District) Score (no maximum)

Northern Ontario Wetland Evaluation, Data and Scoring Record (November 19, 2010) 4.1.2.7 SPECIES OF SPECIAL STATUS Black Duck Suitable breeding habitat present and within assessment range (Figure 17) Assessment Category Check one Score 40-80 Indicated Pairs/100 km sq 25 points 20-40 Indicated Pairs/100 km sq 20 10-20 Indicated Pairs/100 km sq 15 5-10 Indicated Pairs/100 km sq 10 1-5 Indicated Pairs/100 km sq 5 0 Habitat not suitable Out of assessment range 0 Black Duck Score (maximum 25 points) * Less than 0.5ha of suitable habitat exists. 4.2 SIGNIFICANT FEATURES AND/OR FISH & WILDLIFE HABITAT 4.2.1 NESTING OF COLONIAL WATERBIRDS Status Name of species Source of Information Score Currently nesting 50 points Known to have nested within past 5 years 25 Active feeding area (great blue heron excluded) 15 None known 0 Attach documentation (nest locations etc., if known) **Colonial Waterbirds Score (maximum 50 points)** 4.2.2. WINTER COVER FOR WILDLIFE (Check only highest level of significance) Score (one only) 1) Provincially significant 100 Significant in Site Region 50 2) 3) Significant in Site District 25 Locally significant 10 3) Little or poor winter cover present Source of information: Field Observations (NRSI 2010) Winter Cover for Wildlife Score (maximum 100 points)

INO.	rthern Ontario Wetland Evalua	ation, Data a	nd Scoring Recor	rd	(November 19,	2010)
.2.3 WA	ATERFOWL STAGING AND	OR MOUL	ΓING			
Check on	ly highest level of significanc	e for both sta	ging and moultin	g: score is cumu	lative	
	umns, maximum score 150)		.88	.6,		
		Ctorino	Caana	Maultina	Casus	
		Staging	Score (one only)	Moulting	Score (one only)	
1)	Nationally significant		150		150	
2)	Provincially significant		100		100	
3)	Regionally significant		50		50	
4)	Known to occur		10		10	
5)	Not possible		0		0	
6)	Not known	X	0	X	0	
0)	Total:	0		0	O	
	Total.	0	_	0		
Source of	information:					
source or		vl Moulting	and Staging Sco	re (maximum 1	50 points)	0
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				ero pozzes)	
4.2.4 WA	ATERFOWL BREEDING					
		_				
	(Check only highest level of	significance	e) Sco	ore		
	` ; ;	C				
1)	Provincially sig	nificant	1	00		
2)	Regionally sign			50		
3)	10 Habitat suitable			10		
4)	Habitat not suit			0		
,	· · · · · · · · · · · · · · · · · · ·					
Source of	information:	Field Ob	servations (NRS)	I 2010)		
			`	,		
		Waterfow	l Breeding Scor	e (maximum lO	O points)	10
			G	•	•	
4.2.5 MI	GRATOR PASSERINE, SHO	REBIRD OI	R RAPTOR STO	POVER AREA		
	(check highest applicable ca	tegory)				
1)	Provincially sig	nificant	1	00		
2)	Significant in S	ite Region		50		
3)	Significant in S	-		10		
4)	X Not significant			0		
7)						
7)	information: MNR Val	ues Map (Ju	ne 25, 2010) and	Field Observation	ons	
		rebird or Ra	ptor Stopover S	core (maximun	100 points)	0
		rebird or Ra	ptor Stopover S	core (maximun	n 100 points)	0

Northern Ontario Wetland Evaluation, Data and Scorin	ng Record (November 19, 2010)
4.2.6 UNGULATE HABITAT	
EVALUATION	
Score $(1) + (2) + $ one of (3) to (6)	
Score $(1) + (2) + \text{one of } (3) \text{ to } (0)$	Score
(1) Ungulate summer cover	15 points
(2) 0 Mineral licks	50
(3) 0 Moose aquatic feeding area Class 1	0
(4) Moose aquatic feeding area Class 2	10
(5) Moose aquatic feeding area Class 3	20
(6) Moose aquatic feeding area Class 4	35
(Score is cumulative for a maximum possible score of 100)	
	Score (maximum 100 points)
4.2.7 FISH HABITAT	
4.2.7.1 Spawning and Nursery Habitat	
112.771 Spawning and Ivaisory Hadrace	
Table 5. Area Factors for Low Marsh, High Marsh, and S	Swamp Communities.
No. of ha of Fish Habitat	Area Factor
< 0.5 ha	0.1
0.5- 4.9	0.2
5.0- 9.9	0.4
10.0- 14.9	0.6
15.0 -19.9	0.8
20.0+ ha	1.0
Step 1:	
Fish habitat is not present within the wetland (Sco	ore = 0)
X Fish habitat is present within the wetland (Go to	Step 2)
Step 2: Choose only one option	
1) X Significance of the spawning and nursery h (Go to Step 3)	nabitat within the wetland is known
Significance of the spawning and nursery h known (Go through Steps 4, 5, 6 and 7)	abitat within the wetland is not
20	
29	

	Northern	Ontario Wetland Evaluation, Data and Scoring R	ecord	(November 19, 201	.0)		
Step	3:	Select the highest appropriate category below a	ttach docume	entation:			
1)		Significant in Site Region	100 points				
2)		Significant in Site District	50				
3)		Locally Significant Habitat (5.0+ ha)	25				
4)	15	Locally Significant Habitat (<5.0 ha)	15	*Please see appended explanat	ion.		
		Score for Spawning and Nursery Habi	tat (maximu	m score 100 points)	15		
<u>Step</u>	Step 4: Proceed to Steps 4 to 7 only if Step 3 was not answered.						
(Low	Low Marsh: marsh area from the existing water line out to the outer boundary of the wetland)						
	Low marsh not present (Continue to Step 5) Low marsh present (Score as follows)						
Scori	Scoring for Presence of Key Vegetation Groups						

Scoring is based on the one most clearly dominant plant species of the dominant form in each Low Marsh vegetation community. Check the appropriate Vegetation Group (see Appendix 16) for each Low Marsh community. Sum the areas of the communities assigned to each Vegetation Group and multiply by the appropriate size factor from Table 5.

Vegetation	Vegetation	Present	Total	Area	Score	Final
Group Number	Group Name	as a	Area	Factor		Score
		Dominant	(ha)			(area
		Form		(see		factor
		(check)		Table 5)		x score)
1	Tallgrass				6 pts	0.0
2	Shortgrass-Sedge				11	0.0
3	Cattail-Bulrush-Burreed				5	0.0
4	Arrowhead-Pickerelweed				5	0.0
5	Duckweed				2	0.0
6	Smartweed-Waterwillow				6	0.0
7	Waterlily-Lotus				11	0.0
8	Waterweed-Watercress				9	0.0
9	Ribbongrass				10	0.0
10	Coontail-Naiad-Watermilfoil				13	0.0
11	Narrowleaf Pondweed				5	0.0
12	Broadleaf Pondweed				8	0.0
	Total Score (max	imum 75 point	rs)		•	0.0

Northern (Ontario Wetland Evaluation, I	Data and Scor	ring Reco	rd	(Nov	ember 19, 2010
essentially what	gh Marsh: area from the water is commonly referred to as a vices habitat except during floo	wet meadow,	in that the	re is insufficio		
	marsh not present (Continue					
High	marsh present (Score as follo	ows)				
Scoring for Pres	sence of Key Vegetation Gro	oups				
vegetation commareas of the com	on the one most clearly dominunity. Check the appropriate amunities assigned to each Ve	Vegetation G	roup for e	ach High Mar	sh communi	ty. Sum the
vegetation comm	nunity. Check the appropriate	Vegetation G	roup for e	ach High Mar	sh communi	ty. Sum the
vegetation commareas of the commareas of the commareas Trom Table 5.	nunity. Check the appropriate amunities assigned to each Ve	Present as a Dominant Form	roup for e p and mu Total Area	ach High Mar ltiply by the a Area Factor	sh communit ppropriate siz	Final Score (area factor
regetation commareas of the comma	nunity. Check the appropriate amunities assigned to each Ve Vegetation Group Name	Vegetation Groupetation Groupet	roup for e p and mu Total Area	Area Factor (see	sh community ppropriate size	Final Score (area factor x score)
regetation commareas of the commareas of	Vegetation Group Name Tallgrass	Present as a Dominant Form	roup for e p and mu Total Area	Area Factor (see	sh community ppropriate size	Final Score (area factor x score) 0.0
vegetation commareas of the commareas of	Vegetation Group Name Tallgrass Shortgrass-Sedge	Present as a Dominant Form	roup for e p and mu Total Area	Area Factor (see	Score 6 pts 11	Final Score (area factor x score) 0.0 0.0
regetation commareas of the commareas of	Vegetation Group Name Tallgrass Shortgrass-Sedge Cattail-Bulrush-Burreed	Present as a Dominant Form	roup for e p and mu Total Area	Area Factor (see	Score 6 pts 11 5	Final Score (area factor x score) 0.0 0.0
vegetation commareas of the commareas of	Vegetation Group Name Tallgrass Shortgrass-Sedge	Present as a Dominant Form (check)	Total Area (ha)	Area Factor (see	Score 6 pts 11	Final Score (area factor x score) 0.0 0.0

Swamp containing fish habitat not present (Continue to Step 7)

Swamp containing fish habitat present (Score as follows)

Swamp containing fish	Present	Total	Area Factor	Score	TOTAL SCORE
Habitat	(check)	area (ha)	(see Table 5)		(factor x score)
Seasonally flooded				10	0.0
Permanently flooded				10	0.0
SCO	RE (maximu	m 20 points))		

Northern Ontario Wetland Evaluation, Data and Scoring Record	(November 19, 2010)
Step 7: Calculation of final score	
Score for Spawning and Nursery Habitat (Low Marsh) (maximum 75)	= 0.0
Score for Spawning and Nursery Habitat (High Marsh) (maximum 25)	= 0.0
Score for Swamp Containing Fish Habitat (maximum 20)	= 0.0
	m score 100 points) =
4.2.6.2 Migration and Staging Habitat	
Step 1:	
1) X Staging or Migration Habitat is not present in the wetland (Score	e = 0
2) Staging or Migration Habitat is present in the wetland significant to Step 2)	nce of the habitat is known (Go
Staging or Migration Habitat is present in the wetland significant (Go to Step 3)	nce of the habitat is not known
NOTE: Only <u>one</u> of Step 2 <u>or</u> Step 3 is to be scored.	
Step 2: Select the highest appropriate category below, attach documental	
1) Significant in Site Region	Score 25 points
2) Significant in Site District	15
3) Locally Significant	10
4) Fish staging and/or migration habitat present,but not as above	5
Score for Fish Migration and Staging Habitat (maximu	um score 25 points)
Step 3: Select the highest appropriate category below based on presence (does not have to be dominant). Note name of river for 2) and 3).	· · ·
Wetland is riverine at rivermouth or lacustrine at rivermouth	Score 25 points
2) Wetland is riverine, within 0.75 km of rivermouth	15
Wetland is lacustrine, within 0.75 km of rivermouth	10
4) Fish staging and/or migration habitat present, but not as above	5
Score for Staging and Migration Habitat (maxim	
Score for Staging and Migration Habitat (maxim	um score 25 points)
22	

Northern Ontario Wetland Evaluation, Data and Scoring Record

(November 19, 2010)

4.3 ECOSYSTEM AGE

(Fractional Area = area of wetland type/total area of wetland)

	Area			Scoring
Bog		X	25 =	0.0
Fen, treed to open on deep soils				
floating mats or marl		X	20 =	0.0
Fen, on limestone rock		X	5 =	0.0
Swamp		X	3 =	0.0
Marsh	1.00	X	0 =	0.0
		Sub Total:		0.0

Fractional

Ecosystem Age Score (maximum 25 points)

0

4.4 GREAT LAKES COASTAL WETLANDS

Score for **coastal** (see text for definition) wetlands only

Choose one only

 wetland < 10 ha</td>
 =
 0 points

 wetland 10- 50 ha
 =
 25

 wetland 51 -lOO ha
 =
 50

 wetland > 100 ha
 =
 75

Great Lakes Coastal Wetlands Score (maximum 75 points)

Northern Ontario Wetland Evaluation, Data and	Scoring R	ecord ((November 19, 2010)
5.0 EXTRA INFORMATION			
5.1 PURPLE LOOSESTRIFE			
X Absent/Not seen			
Present	(a)	One location in wetland Two to many locations	<u> </u>
	(b)	Abundance code (1 < 20 plants (2 20-99 plants (3 100-999 plants (4 >1000 plants	
5.2 SEASONALLY FLOODED AREAS			
Indicate length of seasonal flooding			
Check one or more			
Ephemeral Temporal Seasonal Semi-permanent No seasonal flooding		(less than 2 weeks) (2 weeks to 1 month) (1 to 3 months) (>3 months)	X X X
5.3 SPECIES OF SPECIAL SIGNIFICANCE			
5.3.1 Osprey			
Present and nesting (attach map showing nest site) Known to have nested in last 5 yr Feeding area for osprey Not as above		<u>X</u>	
5.3.2 Common Loon			
Nesting in wetland (attach map showing nest site) Feeding at edge of wetland Observed or heard on lake or		_	
river adjoining the wetland Not as above		X	
	34		

Northern Ontario Wetland Evaluation, Data and Scoring Record	(November 19, 2010)
INVESTIGATORS	AFFILIATION
IVVESTIGATORS	AFFILIATION
Lisa Keable	Natural Resource Solutions Inc
Derek Goertz	Natural Resource Solutions Inc
DATES WETLAND VISITED	
September 21, 2010	
September 21, 2010	
DATE THIS EVALUATION COMPLETED:	November 3, 2010
ESTIMATED TIME DEVOTED TO COMPLETING THE FIELD S	URVEY IN "PERSON HOURS"
6 hours (2 people)	
This wetland was surveyed by two people between 1530 hrs	and 1830hrs on September 21, 2010.
WEATHER CONDITIONS	
WEATHER CONDITIONS	
i) at time of field work Sunny, 0% cloud cover, T	emperature 16°C, Wind 3 (SW)
1) at time of field work Sumiy, 6% cloud cover, 1	emperature to e, while s (s w)
ii) summer conditions in general: Overall summer conditions were fair	
However, there was some substantial rainfall occuring throu	ighout the first week of September.
OTHER POTENTIALLY USEFUL INFORMATION:	11 1 .
Approximately 50 young of the year brook trout observed within the wetl	
Approximately 6 mature brook trout were observed within the wetland but 1 redd was observed approximately 2m outside of wetland boundary (with	
1 read was observed approximately 2111 outside of wettaild boundary (with	im sucam).
Pictures of these observations have been appended.	
CHECKLIST OF PLANT AND ANIMAL SPECIES RECORDED IN TH	IE WETLAND:
Lists of all flows and forms absorbed in the mattend is amounted	
Lists of all flora and fauna observed in the wetland is appended.	
35	

Northern Ontario Wetland Evaluation, D	ata and Scoring Record	(Nove	ember 19, 2010)
WETLAND	EVALUATION SCORING	G RECORD	
WETLAND NAME		Lonely Wetland	
101	BIOLOGICAL COMPONI	FNT	
	BIOLOGICAL COM ON		
1.1 <u>PRODUCTIVITY</u>			
1.1.1 Growing Degree-Days/Soils			13
1.1.2 Wetland Type 1.1.3 Site Type			15 3
Since Syptem			
	Т	Cotal for Productivity	31
1.2 <u>BIODIVERSITY</u>			
1.2.1 Number of Wetland Types			9
1.2.2 Vegetation Communities (maxixm			3
1.2.3 Diversity of Surrounding Habitat (1.2.4 Proximinty to Other Wetlands	maximum 7)		<u>5</u>
1.2.5 Interspersion			6
1.2.6 Open Water Type			8
		Total for Biodiversity	39
Sub Total for Biodiversity 1.3 SIZE (Biological Component)	39		5
TOTAL FOR BIOLOGICAL COMPONE	ENT (not to exceed 250)		75

Northern Ontario Wetland Evaluation, Data and Scoring Record (Nove	ember 19, 2010)
2.0 SOCIAL COMPONENT	
2.1 ECONOMICALLY VALUABLE PRODUCTS	
2.1.1 Wood Products2.1.2 Lowbush Cranberry2.1.3 Wild Rice2.1.4 Commercial Fish2.1.6 Furbearers	0 0 0 12 3
Total for Economically Valuable Products	15
2.2 RECREATIONAL ACTIVITIES (maximum 80)	8
2.3 LANDSCAPE AESTHETICS	
2.3.1 Distinctness2.3.2 Absence of Human Disturbance	7
Total for Landscape Aesthetics	7
2.4 EDUCATION AND PUBLIC AWARENESS	
2.4.1 Educational Uses2.4.2 Facilities and Programs2.4.3 Research and Studies (maximum 12)	0 0 0
Total for Education and Public Awareness	0
2.5 PROXIMITY TO AREAS OF HUMAN SETTLEMENT	4
2.6 OWNERSH1P Subtotal for Social Component 27	8
Subtotal for Social Component 2.7 SIZE (Social Component)	1
2.8 ABORIGINAL AND CULTURAL VALUES (maximum 30)	30
TOTAL FOR SOCIAL COMPONENT (not to exceed 250)	73

Northern Ontario Wetland Evaluation, Data an	d Scoring Record	(November 19, 2010)
<u>3.0 HYDRO</u>	LOGICAL COMPONENT	
3.1 <u>FLOOD ATTENUATION</u>		44
3.2 <u>GROUNDWATER RECHARGE</u>		
3.2.1 Site Type 3.2.2 Soils		13 7
	Total for Groundwater Recharge	20
3.3 <u>WATER QUALITY IMPROVEMENT</u>		
3.3.1 Watershed Improvement Factor3.3.2 Adjacent and Watershed Land Use3.3.3 Vegetation Form		30 4 10
	Total for Water Quality Improvement	ent 44
3.4 <u>CARBON SINK</u>		0
3.5 SHORELINE EROSION CONTROL		8
3.6 <u>GROUNDWATER DISCHARGE</u>		16
TOTAL FOR HYDROLOGIC	CAL COMPONENT (not to exceed	250) 132

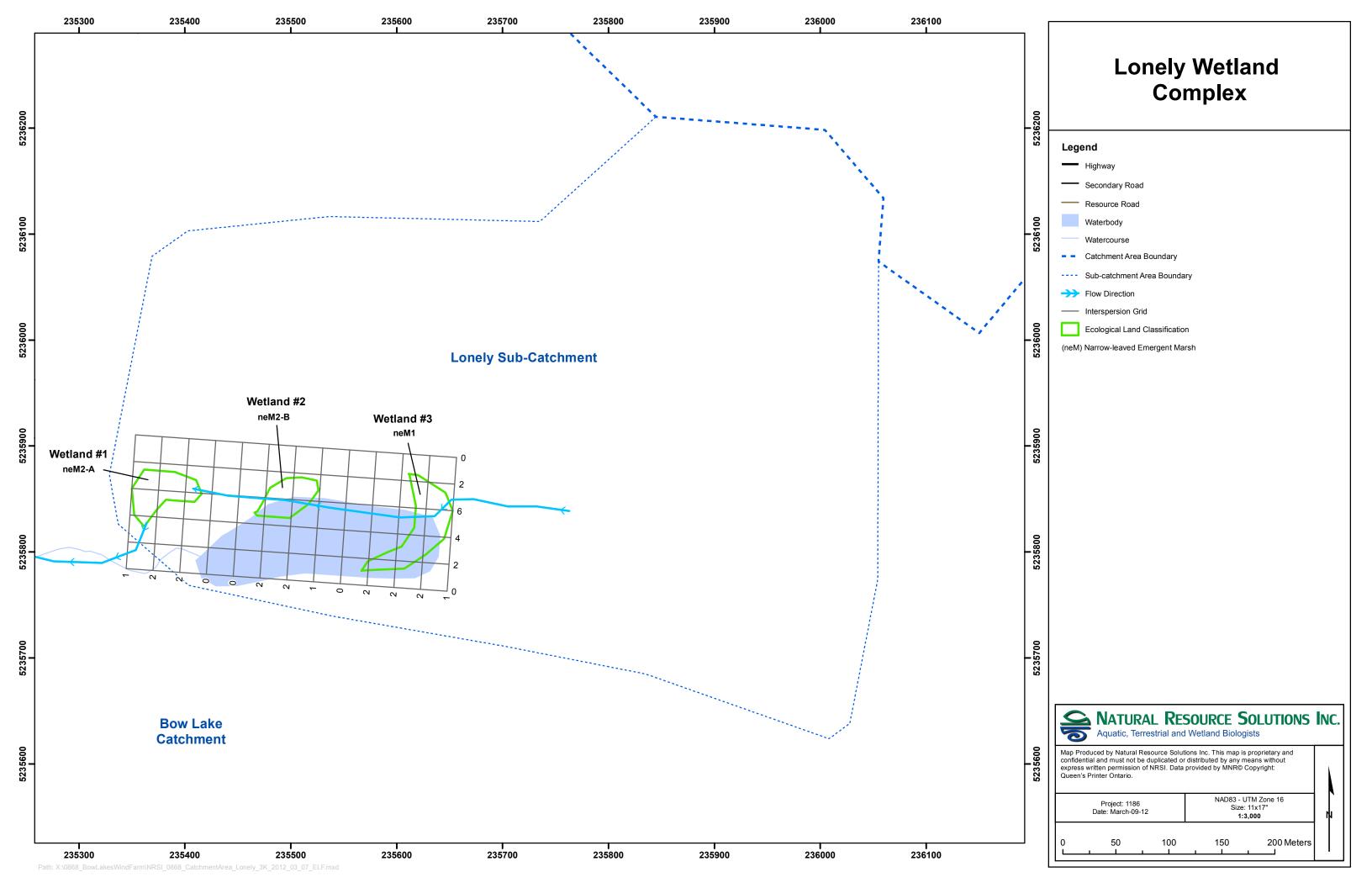
Northern Ontario Wetland Evaluation, Data and Scoring Record	(November 19, 2010)
40 GDEGLAV EFFATEID	
4.0 SPECIAL FEATUR	<u>ES</u>
4.1 <u>RARITY</u>	
4.1.1 Wetlands	10
4.1.2 Species	
4.1.2.1 Endangered or Threatened Species Breeding	0
4.1.2.2 Traditional Use by Endangered or Threatened Specie	0
4.1.2.3 Provincially Significant Animals	0
4.1.2.4 Provincially Significant Plants	0
4.1.2.5 Regionally Significant Species	0
4.1.2.6 Locally Significant Species	0
4.1.2.7 Species of Special Status	0
Total for S	Species Rarity 0
4.2 <u>SIGNIFICANT FEATURES OR HABITAT</u>	
4.2.1 Colonial Waterbirds	0
4.2.2 Winter Cover for Wildlife	0
4.2.3 Waterfowl Staging and Moulting	0
4.2.4 Waterfowl Breeding	10
4.2.5 Migratory Passerine, Shorebird or Raptor Stopover	0
4.2.6 Ungulate Habitat	0
4.2.7 Fish Habitat	15
Total for S	Significant Features and Habitat 25
4.3 ECOSYSTEM AGE	0
4.4 GREAT LAKES COASTAL WETLANDS	0
TOTAL FOR SPECIAL FEA	ATURES (maximum 250) 35

Nor	thern Ontario Wetland Evaluation, Data and Sco	ring Record	(November 19, 2010)
	SUMMARY OF EV	ALUATION RESULT	
Wetland		ely Wetland	
TOTAL FO	OR 1.0 BIOLOGICAL COMPONENT		75
TOTAL FO	OR 2.0 SOCIAL COMPONENT		73
TOTAL FO	DR 3.0 HYDROLOGICAL COMPONENT		132
TOTAL FO	DR 4.0 SPECIAL FEATURES COMPONENT		35
		WETLAND TOTAL	315
<u>INVESTIC</u> Lisa Keabl			
Derek Goe			
	Walton (evaluation revision, March 2012)		
Kamama	waiton (evaluation revision, water 2012)		
AFFILIAT			
	Natural Resource Solutions Inc.		
	Natural Resource Solutions Inc.		
	Natural Resource Solutions Inc.		
DATE	November 19, 2010		

Data Summary Form

Wetland: Lonley Wetland

	Map Code	Field Code	# Forms	Dominant	Forms	% Open	Area (ha)	Open Water	Soils	Site Type	Fish Habitat
				Form		Water		(ha)			
	neM1	17	5	ne	Is, gc, m, ff	40	0.29	0.11	silt/sand	Riverine	LM
Marsh	neM2-A	18	2	ne	gc	10	0.20	0.02	silt/sand	Palustrine	НМ
	neM2-B	18	2	ne	gc	10	0.15	0.01	silt/sand	Palustrine	НМ



Map Code	Wetland Type	Forms	Dominant Species
neM1	Marsh	ne, ls, gc, ff, m	Bottlesedge (Carex utriculata), Canada blue joint (Calamagrostis canadensis);
			Sweetgale (Myrica gale); Viola spp., St. John's-wort (Hypericum punctatum);
			Potamogeton natans ; Sphagnum palustre , Sphagnum angustifolium,
			Sphagnum girgensohnii
neM2-A	Marsh	ne, gc	Canada blue joint (C. canadensis); Joe-pye weed (Eupatorium maculatum ssp.
			maculatum), Bugleweed (Lycopus uniflorus)
neM2-B	Marsh	ne, gc	Canada blue joint (C. canadensis); Joe-pye weed (Eupatorium maculatum ssp.
			maculatum), Bugleweed (Lycopus uniflorus)

4.2.7 FISH HABITAT

4.2.7.1 Spawning and Nursery Habitat

NRSI biologists observed approximately 50 young of the year brook trout, as well as 6 mature brook trout within the subject wetland. A potential redd was also observed approximately 2 meters outside of the wetland boundary, within the stream that runs into the wetland. Based on these observations, Option 4 in Step 3 - Locally Significant Habitat (<5ha) was selected.



Figure 1. Mature brook trout observed in the stream which flows into community neM1.



Figure 2. Young of the year brook trout observed in the stream which flows into community neM2.

BOTANICAL NA	ME	COMMON NAME	PROVINCIAL STATUS	OMNR STATUS	COSEWIC STATUS	OBSERVATIONS
SOURCE			MNR RARE 4th Ed. 2009	SARO List	SARA Registry	NRSI (2010)
DICOTYLEDONS		<u>DICOTS</u>				
Asteraceae		Composite or Aster Family				
Anaphalis	margaritacea	Pearly Everlasting	S5			Х
Eupatorium	maculatum ssp. maculatum	Spotted Joe-pye-weed	S5			Х
Droseraceae		Sundew Family				
Drosera	rotundifolia	Round-leaved Sundew	S5			Х
Guttiferae		St. John's-wort Family				
Hypericum	punctatum	Corymbed St. John's-wort	S5			Х
Triadenum	fraseri	Fraser's St. John's-wort	S5			Х
Lamiaceae		Mint Family				
Lycopus	uniflorus	Northern Water-horehound	S5			X
Myricaceae		Wax-myrtle Family				
Myrica	gale	Sweet Gale	S5			Х
Violaceae		Violet Family	-			
Hybanthus	concolor	Green Violet	S2			
Viola	spp.	Order Visite				Х
MONOCOTYLEDOI	<u>vs</u>	<u>MONOCOTS</u>				
Cyperaceae		Sedge Family				
Carex	gynandra	Nodding Sedge	S5			Χ
Carex	utriculata	Beaked Sedge	S5			X
Iridaceae		Iris Family				
Iris	versicolor	Multi-coloured Blue-flag	S5			Х
1110	Verdicolor	Watti coloured Blue hag				Λ
Juncaceae		Rush Family				
Juncus	brevicaudatus	Short-tailed Rush	S5			Х
Juncus	effusus ssp. solutus	Soft Rush	S5			Х
Poaceae		Grass Family	-			
Calamagrostis	canadensis	Blue-joint Grass	S5			X
Potamogetonaceae		Pondweed Family				
Potamogeton	natans	Common Floating Pondweed	S5			X
BRYOPHYTES						
Sphagnaceae						
Sphagnum	angustifolium	Narrow-leaf Peat Moss	S5			Х
Sphagnum	girgensohnii	Common Green Peat Moss	S5			Х
Sphagnum	palustre		S5			Х
Sphagnum	squarrosum	Shaggy Peat Moss	S5			Х

Wildlife Observations

*Includes tracks and signs

Common Name	Scientific Name	Description
Brook trout	Salvelinus fontinalis fontinalis	Approximately 50 young of the year brook trout observed within wetland.
		Approximately 6 mature brook trout observed within wetland.
		1 redd was observed within 2m of wetland boundary.
Beaver	Castor canadensis	

Natural Resources Department BNR

BATCHEWANA FIRST NATION OF OJIBWAYS

RANKIN RESERVE 15 D GOULAIS BAY RESERVE 15 A OBADJIWAN RESERVE 15 E WHITEFISH ISLAND 15

> Administration Office: 236 Frontenac Street Rankin Reserve 15D Batchewana Territory, ON P6A 5K9 Ph: (705) 759-0914 / Fax: (705) 759-9171 www.batchewana.ca

November 17, 2010

Derek Goertz Natural Resource Solutions Inc. 111 Elgin Street Sault Ste. Marie, ON P6A 6L6

Dear Derek:

Re: Site Evaluation for the Wetlands of Bow Lakes Wetlands

As per your request, BNR Field Technician, David Sewell has completed a site evaluation for the Two Wetlands in the vicinity of the proposed Bow Lake Wind Farm within Batchewana First Nation.

I have attached Dave's report that we are hope is going to be helpful to you. We also request that you provide a copy to your employee and any other necessary agencies that are involved with this project.

Thank you very much for requesting BFN participation. If you have any questions or need more information please contact Dave Sewell or myself at 705-759-0914.

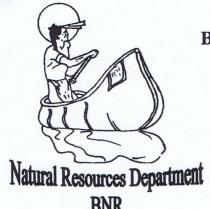
Miigwetch

Danny Sayers JR. (BNR Manager)

c.c. Chief and Council

Dave Sewell (BNR Field Technician)

Vortex



BATCHEWANA FIRST NATION OF OJIBWAYS

RANKIN RESERVE 15 D GOULAIS BAY RESERVE 15 A OBADJIWAN RESERVE 15 E WHITEFISH ISLAND 15

> Administration Office: 236 Frontenac Street Rankin Reserve 15D Batchewana Traditional Territory, ON P6A 5K9 Ph: (705) 759-0914 / Fax: (705) 759-9171 www.batchewana.ca

BNR Site Visit and Recommendations on Two Bow Lake Wetlands

On October 26, 2010 I visited the area of the Bow Lake Wind Farms to take a look at the wetlands in that area. There are two big pieces of wetland, one to the north of Bow Lake and, one to the south of Bow Lake. There are a few smaller pieces of wetland around Negick Lake which is within the Wind Farm area. From what I seen these wetlands play an important role to the surrounding area. These wetlands are nature's way of filtering the water which the animals drink (and sometimes humans). In this area there are a lot of animals such as the moose, deer; bear, wolves, foxes, beaver and a lot of other smaller animals. There is plenty of plant life around the wetlands that animals and aquatic life use as food and others use as their homes. There are also a lot of plants that we (BFN) use for medicines. The loss of these wetlands will have on huge burden on the BFN community and the surrounding area that may have irreversible damage.

Recommendations:

- I believe that these wetlands are very valuable to the surrounding area, environment, wild life and BFN reliance on the land and resources to sustain our cultural activities.
- The Bzhki Ziibi (Montreal River) has and continues to be valuable resources to BFN
 community members to access, for harvest and manage our Natural Resources that
 include but not limited to hunting, fishing, cultural sites.
- More BFN field work is needed to provide a complete evaluation and values of these wetlands.

It is my recommendation that Batchewana First Nation should be a part of any Environmental Evaluations from the beginning stages. It is very important to have BFN participation in order to understand and/or to receive appropriate data related to direct impacts and/or values. BNR field Technician is requesting that any future work in our Territory involves our participation which includes but not limited to; covering the cost associated with providing BFN involvement. It's essential for the government, Industry, and contractors to budget for First Nation participation because it becomes costly to our First Nation departments to complete these tasks in a manner that the community will accept. Without BFN reasonable participation in future Environmental Evaluations or Environmental Impacts studies, BFN will not endorse or except the final copies of those reports.

Dave Sewell BNR Field Technician

	Mod	ose Antler Wetland Com	nplex							
	Wetland	d Evaluation Edition		2002						
	November 20, 2010									
		Comments								
Attached Documents in	nclude:									
1) Summary of Watlan	d types, site types and d	lominant form areas								
2) Map of Moose Antle		ionimant form areas								
3) List of vegetation co										
4) Map of Interspersion										
5) Map of Moose Antle		ntchment Basin								
6) Vascular Plant List	•									
7) Fauna list										
8) Letter from Batchew										
		Additional Information	n							
Official Name:		Moose Antler W	Vetland Comp	olex						
Evaluation Edition:	2002	Class:	Wetlan	d ID.:						
	Year/Mont	h Last Evaluated		November 20, 2	2010					
	Year/Mont	h Last Updated		March 2012	2					
Special Planning Consi	iderations:			Sco	ores					
		=		Biolo	gical:	104				
				S	ocial:	71				
				Hydrolo	gical:	153				
				Special Fea	tures:	42				
				Ov	verall:	370				
Submitted by:		esources Solutions Inc.		•						
Date:	N	March 9, 2012								

No	orth	nern Ontario Wetland Evaluation, Data	a and Scor	ing Reco	ord	(November 20, 2010)
		WETLAND DA	ATA AND	SCORI	NG RECORD	
						-
i)		WETLAND NAME:	N.	Ioose Ar	ntler Wetland C	omplex
ii)		MNR ADMINISTRATIVE REGION	: Nort	h East	DISTRICT:	Sault Ste. Marie
		AREA OFFICE (if different from Dis	trict):			
iii)		CONSERVATION AUTHORITY JU	RISDICTI	iON:		
		(If not within a designated CA, check he	ere:	X		
iv)		COUNTY OR REGIONAL MUNICIPAL	PALITY:		Distri	ict of Algoma
v)		TOWNSHIP:		Smils	sky Township	
vi)		LOTS & CONCESSIONS:			None	
· = /		(attach separate sheet if necessary)			<u> </u>	
vii)		MAP AND AIR PHOTO REFERENCE	TES.			
VII ;		MAI AND AIR I HOTO REFERENCE	والار			
	a)	Latitude: 47°10'49'' Longitude	e: 84°29'4	11"		
	b)	UTM grid reference:	Zone: Grid:E	16 68981	14	Block: <u>T</u> N 5228258
	c)	National Topographic Series:				
		map name(s)			Batchewana	
		map number(s)	41 N/1		edition	3
		scale		1:5	0,000	
	d)	Aerial photographs: Date photo taken:			Scale:	
		Flight & plate numbers:	Go	ogle Ear	rth Images 2004	<u> </u>
		(attach separate sheet if necessary)				
	e)	Ontario Base Map numbers & scale				
		(attach separate sheets if necessary)				
				1		

a) Single contiguous wetland area:		hectares		
b) Wetland complex comprised of	2	individu	al wetlands:	
Wetland Unit Number				Size of each
(for reference)				wetland unit
	Isolated	Palustrine	Riverine	Lacustrin
Wetland Unit No. 1		5.53		_
Wetland Unit No. 2		0.99		_
Wetland Unit No.				_
Wetland Unit No.				_
Wetland Unit No.				_
Wetland Unit No.				
Wetland Unit No.				
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Wetland Unit No.				
Wetland Unit No.				
Wetland Unit No.				
Wetland Unit No.				
Wetland Unit No.				
Wetland Unit Totals:	0.00	6.52	0.00	0.00
(Attach additional sheets if necess	sary)			
TOTAL WETLAND SIZE			6.52	ha
TOTAL WEILAND SIZE		_	0.32	na
c) Brief documentation of reasons for	or including any	areas less than 2 h	a in size:	
At the time this evaluation was un	ndertaken MNR's	recommendation	with respect to	wetlands
assessed for the purpose of an eva				
		ion, regardless of		1550551110111

(November 20, 2010)

1.0 BIOLOGICAL COMPONENT

1.1 PRODUCTIVITY

1.1.1 GROWING DEGREE-DAYS/SOILS

SOILS			
rea			
oam			
arl			
tone			
c/mesic			
te			
arl tone			

SCORING:

Growing	Clay-	Silt-	Lime-	Sand	Humic-	Fibric	Granite
Degree-	Loam	Marl	stone		Mesic		
Days							
<1600	12	11	9	7	7	6	4
1600-2000	15	13	11	9	8	7	5
2000-2400	18	15	13	11	9	8	7
2400-2800	22	18	15	13	11	9	7
2800-3000	26	21	18	15	13	10	8
>3000	30	25	20	18	15	12	9

(maximum score 30; if wetland contains more than one soil type,

evaluate based on the fractional area)

Steps required for evaluation: (maximum score 30 points)

- 1. Select GDD line in evaluation table applicable to your wetland;
- 2. Determine fractional area of the wetland for each soil type;
- 3. Multiply fractional area of each soil type by score;
- 4. Sum individual soil type scores (round to nearest whole number).

In wetland complexes the evaluator should aim at determining the percentage of area occupied by the categories for the complex as a whole.

Score		
18	clay/loam	6.84
	silt/marl	0.00
	limestone	0.00
	sand	0.00
	humic/mesic	0.00
	fibric	0.00
7	granite	4.34

Final Score Growing Degree-Days/Soils (maximum 30 points)

Northern Ontario Wetland Evaluation D	ata and Scoring Record	(November 20, 2010)
1.1.2 WETLAND TYPE (Fractional Area	a = area of wetland type/total wetland	area)
Fractional Area	S	core
Bog Fen Swamp 0.62	x 6	0.00 0.00 1.96
Marsh 0.38	x 15	5.70
	Wetland type score (a	maximum 15 points) 11
1.1.3 SITE TYPE (Fractional Area = are	a of site type/total wetland area)	
	Fractional Area	Score
Isolated	x 1	= 0.000
Palustrine (permanent or intermittent flow)	1.000 x 2	= 2.000
Riverine Riverine (at rivermouth)	x 4 x 5	= 0.000 $=$ 0.000
Lacustrine (at rivermouth Lacustrine (on enclosed	x 5	= 0.000
bay, with barrier beach) Lacustrine (exposed to lake)	x 3 x 2	= 0.000 $= 0.000$
Lacusume (exposed to take)	Sub Total:	2.000
	Site Type Score	(maximum 5 points) 2
1.2 BIODIVERSITY		
1.2.1 NUMBER OF WETLAND TYPES	_	
(Check only one)	Score	
1) one	9 points	
2) X two three	13 20	
4) four	30	
Nui	mber of Wetland Types Score (max	imum 30 points) 13
Ĭ		

1.2.2 VEGETATION COMMUNITIES

Attach a separate sheet listing community (map) codes, vegetation forms and dominant species.

Use the form on the following page to record percent area by dominant vegetation form. This information will be used in other parts of the evaluation.

Communities should be grouped by number of forms. For example, 2 form communities might appear as follows:

2 forms

Code	Forn	ns	Dom	Dominant Species			
M6	re,	ff	re,	Typha latifolia;	ff,	Lemna minor,	Wolffia
S1	ts,	gc	ts,	Salix discolor;	gc,	lmpatiens capens	sis, Thelypteris palustris

Note that the dominant species for each form are separated by a semicolon. The dominant species (maximum of 2) within a form are separated by commas.

Scoring:

Total # of communities	Total # of communities	Total # of communities
with $1-3$ forms = 40	with $4 - 5$ forms $= 23$	with 6 or more forms $= 1$
1 = 1.5 points	1 = 2 points	1 = 3 points
2 = 2.5	2 = 3.5	2 = 5
3 = 3.5	3 = 5	3 = 7
4 = 4.5	4 = 6.5	4 = 9
5 = 5	5 = 7.5	5 = 10.5
6 = 5.5	6 = 8.5	6 = 12
7 = 6	7 = 9.5	7 = 13.5
8 = 6.5	8 = 10.5	8 = 15
9 = 7	9 = 11.5	9 = 16.5
10 = 7.5	10 = 12.5	10 = 18
11 = 8	11 = 13	11 = 19
+.5 each additional	+.5 each additional	+ 1 each additional
community = 3.5	community = 0.0	community = 0.0

e.g., a wetland with 3 one form communities 8 six form communities would score:

4 two form communities

12 four form communities and

6+13.5+15=34.5=35 points

Vegetation Communities Score (maximum 45 points)

Northern Ontario Wetland Eva	(November 20, 2010)	
Wetland Name:	Moose Antler Wetland Complex	X.
Wetland Size (ha):	6.52	
Vegetation Form	% area in which form is dominant	
h		
С		
dh		
dc		
ts		
ls	61.66	
ds		
gc		
m		
ne	38.34	
be		
re		
ff		
f		
su		
u (unvegetated)		
Total = 100%	100.00	
	6	

Northern Ontari	o Wetland Evaluation Data and Scoring Record	(November 20, 2010)
	F SURROUNDING HABITAT	
(Check all appropriate	e items(1))	
	recent burn (< 5 yr)	
	abandoned agricultural land	
	utility corridor	
X	deciduous forest	
	recent cutover or clearcut (<5 yr)	
X	coniferous forest	
X	mixed forest (at least 25% conifer and 75% deciduous or vice versa))
	crops	
	abandoned pits and quarries	
	pasture	
	ravine	
V	fence rows	
X	open lake or deep river	
X	creek flood plain rock outcrop	
Λ	rock outcrop	
Div	rersity of Surrounding Habitat Score (1 for each, maximum 7 point	(s) 6
1.2.4 PROXIMITY T	O OTHER WETLANDS	
	propriate category only)	Scoring
1) 8	Hydrologically connected by surface water to other wetlands	
	(different dominant wetland type) or open lake or river	
	within 1.5 km	8 points
2)	Hadada da d	
2)	Hydrologically connected by surface water to other wetlands	8
	(same dominant wetland type) within 0.5 km	8
3)	Hydrologically connected by surface water to other wetlands	
3)	(different dominant wetland type), or open lake or river from	
	1.5 to 4 km away (Second Marsh Wetland)	5
	,	
4)	Hydrologically connected by surface water to other wetlands	
	(same dominant wetland type) from 0.5 to 1.5 km away	5
5)	Within 0.75 km of other wetlands (different dominant wetland type)
l	or open lake or river, but not hydrologically connected by	
	surface water	5
6)	Within 1 km of other wetlands, but not hydrologically	2
	connected by surface water	2
7)	No wetland within 1 km	0
/)	NO wendin winini i kin	U
Pro	oximity to other Wetlands Score (Choose one only, maximum 8 poi	nts) 8
	7	

Northern Ontario Wetland Evaluation Data and Scor	ring Record (November 2	0, 2010)
1.2.5 INTERSPERSION		
Number of Intersections		
(Check one)	Score	
1) 26 or less	3	
2) 27 to 40	6	
3) 41 to 60	9	
4) 61 to 80 X	12	
5) 81 to 100	15	
6) 101 to 125	18	
7) 126 to 150	21	
8) 151 to 175	24	
9) 176 to 200	27	
10) >200	30	
Interspersion Score ((Choose one only maximum 30 points)	12
1.2.6 OPEN WATER TYPES		
Permanently flooded:	_	
(Check one)	Score	
1)	0	
1) type 1	8	
2) type 2	8 14	
3) type 3	20	
4) type 4 5) X type 5	30	
6) type 6	8	
7) type 7	14	
8) type 8	3	
9) no open water	0	
Open Water Type Score (C	Choose one only maximum 30 points)	30
•	•	
8		

Northern Ontario Wetland Evaluation Data and Scoring Record

(November 20, 2010)

1.3 SIZE

6.52 hectares

72 Subtotal for Biodiversity

Size Score (Biological Component) (maximum 50 points)

8

Evaluation Table Size Score (Biological component)

Wetland	Total Score for Biodiversity Subcomponent									
size (ha)	<37	37-47	48-60	61-72	73-84	85-96	97- 108	109- 120	121- 132	>132
<20 ha	1	5	7	8	9	17	25	34	43	50
20-40	5	7	8	9	10	19	28	37	46	50
41-60	6	8	9	10	11	21	31	40	49	50
61-80	7	9	10	11	13	23	34	43	50	50
81-100	8	10	11	13	15	25	37	46	50	50
101-120	9	11	13	15	18	28	40	49	50	50
121-140	10	13	15	17	21	31	43	50	50	50
141-160	11	15	17	19	23	34	46	50	50	50
161-180	13	17	19	21	25	37	49	50	50	50
181-200	15	19	21	23	28	40	50	50	50	50
201-400	17	21	23	25	31	43	50	50	50	50
401-600	19	23	25	28	34	46	50	50	50	50
601-800	21	25	28	31	37	49	50	50	50	50
801-1000	23	28	31	34	40	50	50	50	50	50
1001-1200	25	31	34	37	43	50	50	50	50	50
1201-1400	28	34	37	40	46	50	50	50	50	50
1401-1600	31	37	40	43	49	50	50	50	50	50
1601-1800	34	40	43	46	50	50	50	50	50	50
1801-2000	37	43	47	49	50	50	50	50	50	50
>2000	40	46	50	50	50	50	50	50	50	50

Northern Ontario Wetla	(November 20, 2	2010)		
	2.0 SOCIAL	COMPONENT		
2.1 ECONOMICALLY	VALUABLE PRODUCT	<u>S</u>		
2.1.1 WOOD PRODUCTS	_			
Area of wetland forested (ha) only)), i.e. dominant form is h or	c. Note that this is no	t wetland size. (Check one	
		Score		
1) 0	<5 ha	0		
	-25 ha	4		
	-50 ha	6		
	100 ha	8		
·	200 ha	11		
6) >	200 ha	14		
Source of information:	Field Observati	ions (NRSI 2010)		
	Wood Products Sc	ore (Score one only,	maximum 14 points)	0
2.1.2 Lowbush Cranberry				
(Check one)			Score (Choose one)	
Present	1)		2 points	
Absent	2)	X	0	
Source of information:	Field Observati	ions (NRSI 2010)		
	Lowbu	sh Cranberry Score	(maximum 2 points)	0
O 1 2 Wild Dies		•	- -	
2.1.3 Wild Rice (Check one)			Score (Choose one	9)
Present (at least 0.5 ha)	1)		10 points	,
Absent	2)	X	0	
Source of infolmation:	Field Observat	ions (NRSI 2010)		
		,		
	Wild R	cice Score (maximum	10 points)	0
		10		

Northern Ontario Wetlar	nd Evaluatio	n Data a	nd Sc	oring Record		(November 2	20, 2010	0)
2.1.4 COMMERCIAL FISH (BAI	Γ FISH ANI	O/OR CO	OARS	E FISH)				
(Check one)				,		Score (Ch	oose on	ie)
Present		1) <u>X</u>				12 points		
Absent		2)				0		
Source of information: Fish	observed in	Wetland	1 #1					
		Comm	ercia	l Fish Score (m	aximum	12 points)		12
2.1.5 FURBEARERS								
(Consult Appendix 9)								
Name of furbearer		S	Source	e of information				
	·	_ =1						
1) Muskrat	3	-	F	ield Observation	s (NRSI	2010)		
2)		-						
3)		-						
4)		-						
5)		_						
Scoring: 3 points for each species.	maximum 1	2						
Scoring: 3 points for each species.	maximum 1	2		Furbearer Scor	e (maxir	mum 12 points))	3
		2		Furbearer Scor	e (maxiı	mum 12 points))	3
Scoring: 3 points for each species. 2.2 RECREATIONAL ACTIVIT		2		Furbearer Scor	e (maxiı	mum 12 points))	3
	ΓΙES_			Furbearer Scor	e (maxii	mum 12 points))	3
2.2 RECREATIONAL ACTIVIT	Type o	of Wetla		ssociated Use)	3
	Type o			ssociated Use Nature Enjoyr	ment/	mum 12 points) Fishing		3
2.2 RECREATIONAL ACTIVIT	Type o	of Wetla		ssociated Use	ment/			3
2.2 RECREATIONAL ACTIVITY	Type o	of Wetla	nd-As	Sociated Use Nature Enjoyr Ecosystem St 40 points 20	ment/	Fishing 40 points 20		3
Intensity of Use High Moderate Low	Type of Hu 40 poi 20 8	of Wetla		Sociated Use Nature Enjoyr Ecosystem St 40 points 20 8	ment/	Fishing 40 points 20 8		3
Intensity of Use High Moderate Low Not possible/NotKnown	Type of Hu 40 poi 20	of Wetla	nd-As	Sociated Use Nature Enjoyr Ecosystem St 40 points 20	ment/	Fishing 40 points 20	0	3
Intensity of Use High Moderate Low Not possible/NotKnown Totals	Type of Hu 40 poi 20 8 0	of Wetlan	nd-As	Sociated Use Nature Enjoyr Ecosystem St 40 points 20 8 0	ment/ cudy 0 0	Fishing 40 points 20 8 0	0 0	3
Intensity of Use High Moderate Low Not possible/NotKnown Totals (score one level for each of the	Type of Hu 40 poi 20 8 0	of Wetlan	nd-As	Sociated Use Nature Enjoyr Ecosystem St 40 points 20 8 0	ment/ cudy 0 0	Fishing 40 points 20 8 0	0 0	3
Intensity of Use High Moderate Low Not possible/NotKnown Totals	Type of Hu 40 poi 20 8 0	of Wetlan	nd-As	Sociated Use Nature Enjoyr Ecosystem St 40 points 20 8 0	ment/ cudy 0 0	Fishing 40 points 20 8 0	0 0	3
Intensity of Use High Moderate Low Not possible/NotKnown Totals (score one level for each of the	Type of Hu 40 poi 20 8 0	of Wetland uses	X 8 8	Sociated Use Nature Enjoyr Ecosystem St 40 points 20 8 0	ment/ cudy 0 0 ve; maxin	Fishing 40 points 20 8 0 mum score 80 p	0 0	3
Intensity of Use High Moderate Low Not possible/NotKnown Totals (score one level for each of the	Type of Hu 40 poi 20 8 0 0 me three wet	of Wetland Inting Ints Inting Ints Interest Inte	X 8 8 lle, ho	Sociated Use Nature Enjoyr Ecosystem St 40 points 20 8 0 res are cumulative wever no signs of	ment/ cudy 0 0 ve; maxin	Fishing 40 points 20 8 0 mum score 80 p	0 0	3
Intensity of Use High Moderate Low Not possible/NotKnown Totals (score one level for each of the	Type of Hu 40 poi 20 8 0	of Wetland Inting Ints Inting Ints Interest Inte	X 8 8 lle, ho	Nature Enjoyr Ecosystem St 40 points 20 8 0	ment/ cudy 0 0 ve; maxin	Fishing 40 points 20 8 0 mum score 80 p	0 0	3
Intensity of Use High Moderate Low Not possible/NotKnown Totals (score one level for each of the	Type of Hu 40 poi 20 8 0 0 me three wet	of Wetland unting Ints Ints Ints Ints Ints Ints Ints Ints	x 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Sociated Use Nature Enjoyr Ecosystem St 40 points 20 8 0 res are cumulative wever no signs of	ment/ cudy 0 0 we; maxin	Fishing 40 points 20 8 0 mum score 80 p	0 0	3
Intensity of Use High Moderate Low Not possible/NotKnown Totals (score one level for each of the	Type of Hu 40 poi 20 8 0 ne three wet Hunting: Nature: Fishing:	nting nts land use: Possib: Unlike	X 8 8 Note: The second seco	Nature Enjoyr Ecosystem St 40 points 20 8 0 res are cumulative	ment/ cudy 0 0 ve; maxin	Fishing 40 points 20 8 0 mum score 80 p	0 0	3

Northern Ontario Wetland Evaluat	ion Data and Scoring Record (Nove	rd (November 20, 2010)			
2.3 LANDSCAPE AESTHETICS					
2.3.1 DISTINCTNESS					
(Check one)		noose one)			
Clearly distinct 1)	3 points				
Indistinct 2) X	0				
La	ndscape Distinctness Score (maximum 3 points	s) 0			
2.3.2 ABSENCE OF HUMAN DISTURBA	NCE				
(Check one)		noose one)			
Human disturbances absent or nearly so		oints			
One or several localized disturbances	2) <u>X</u> 4				
Moderate disturbance; localized water	·				
Wetland intact but impairment of ecosy					
intense in some areas	4)1				
Extreme ecological degradation, or wat					
severe and widespread	5)0				
Source of information: Road is	very close to wetland boundary - at one point the	road			
	th into wetland.				
	of Human Disturbance Score (maximum 7 po	ints) 4			
120052100	Pos				
2.4 EDUCATION AND PUBLIC AWAR	RENESS				
2.4.1 EDUCATIONAL USES					
(Check one)	Score (Ch	noose one)			
Frequent 1)	20 points				
Infrequent 2)	12				
No visits 3)	X 0				
<u> </u>					
Source of information:					
_		_			
	Educational Uses Score (maximum 20 point	ts) 0			
2.4.2 FACILITIES AND PROGRAMS	<u></u>				
(check one)		Score (Choose one)			
Staffed interpretation centre	1)	8 points			
No interpretation centre or staff but a s					
self-guiding trails or brochures available		4			
Facilities such as maintained paths (e.g	* '				
boardwalks, boat launches or observation					
but no brochures or other interpretation		2			
No facilities or programs	4) <u>X</u>	0			
Source of information:	Field Surveys (NRSI 2010)				
Fa	cilities and Programs Score (maximum 8 point	(s) <u>0</u>			

Northern Ontario Wetland Eval	uation Data and So	coring	Record	(1)	November 20, 2010))	
2.4.3 RESEARCH AND STUDIES							
(check appropriate spaces)					Score		
Long term research has been done					12 points		
Research papers published in refere	ed scientific			_	12 points		
journal or as a thesis	ed scientific				10		
One or more (non-research) reports	have been written				10		
on some aspect of the wetland 's flo							
hydrology etc.	ra radia				5		
No research or reports	X		0				
The research of reports				_	·		
Attach list of known reports by above	ve categories						
Research and St	udies Score (Score	e is cu	ımulative. maxin	num 12	2 points)	0	
researen una se	adies score (score	C 15 Cu			points)		
2.5 PROXIMITY TO AREAS OF H	UMAN SETTLEN	MENT	<u>r</u>				
Circle the highest applicable score							
Distance of wetland from	1)		2) populat	tion	3) popula	ation	٦
settlement	population> 10.	.000	2,500 -10		<2,500 or		
		,	,	,	comm		
1) Within or adjoining	40 points		26		16		T
settlement	io points						
2) 0.5 to 10 km from settlement	26		16		10		\dashv
3) 10 to 60 km from settlement	12		8		4	X	_
4) >60 km from settlement	5		2		0		
5) >100 km from settlement	0		0		0		
	-	0		0	-	4	
					<u> </u>		_
Name of settlement:	Montreal R	iver H	Iarbour, ON				
_		_					
Prox	mity to Human S	ettlen	nent Score (maxi	mum ²	40 points)	4	
2.6 OWNERSHIP (FA= fraction Are	·a)				Score		
2.0 OWILLSIII (I A- Haction Aid	<i>(</i> 4)				Score		
FA of wetland in public or private of	wnershin						
held under contract or in trust for w			Х	10	= 0.00		
FA of wetland area in public owners			1.00 x	8	= 8.00		
FA of wetland area in private owner			X X	4	= 0.00		
Titor westand area in private owner	5p,,ov us us o v			·	0.00		
Source of information: OM	NR Critical Value	s Map	(December 21, 2	2009)			
		Own	oushin Coons (mo		n 10 nainta)	8	
		Own	ership Score (ma	ixiiiiuii	ii 10 points)	0	
	13						

(November 20, 2010)

2.7 SIZE

6.52 hectares

27 Subtotal for Social

Evaluation Table for Size Score (Social Component)

	Table	for Size Sco	re (Social C	omponent)						
Wetland Size (ha)				Tot	al for Size D	Dependent So	core			
2327 (333)	<31	31-45	46-60	61-75	76-90	91-105	106-109	121-135	136-150	>150
<2 ha	1	2	4	8	10	12	14	14	14	15
2 - 4ha	1	2	4	8	12	13	14	14	15	16
5 - 8ha	2	2	5	9	13	14	15	15	16	16
9 - 12ha	3	3	6	10	14	15	15	16	17	17
13-17	3	4	7	10	14	15	16	16	17	17
18-28	4	5	8	11	15	16	16	17	17	18
29-37	5	7	10	13	16	17	18	18	19	19
38-49	5	7	10	13	16	17	18	18	19	20
50-62	5	8	11	14	17	17	18	19	20	20
63-81	5	8	11	15	17	18	19	20	20	20
82-105	6	9	11	15	18	18	19	20	20	20
106-137	6	9	12	16	18	19	20	20	20	20
138-178	6	9	13	16	18	19	20	20	20	20
179-233	6	9	13	16	18	20	20	20	20	20
234-302	7	9	13	16	18	20	20	20	20	20
303-393	7	9	14	17	18	20	20	20	20	20
394-511	7	10	14	17	18	20	20	20	20	20
512-665	7	10	14	17	18	20	20	20	20	20
666-863	7	10	14	17	19	20	20	20	20	20
864-1123	8	12	15	17	19	20	20	20	20	20
1124-1460	8	12	15	17	19	20	20	20	20	20
1461-1898	8	13	15	18	19	20	20	20	20	20
1899-2467	8	14	16	18	20	20	20	20	20	20
>2467	8	14	16	18	20	20	20	20	20	20

Total Size Score (Social Component)

2

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2.8 ABORIGINAL AND CULTURAL HERITAGE VALUES

Either or both Aboriginal or Cultural Values may be scored. However, the maximum score permitted for 2.8 is 30 points. Attach documentation.

2.8.1 ABORIGINAL VALUES

Full documentation of sources must be attached to the data record.

1)	Significant	X	=	30 points
2)	Not Significant		=	0
3)	Unknown		=	0
	Total:	30		

2.8.2 CULTURAL HERITAGE

1)	Significant		=	30 points
2)	Not Significant	X	=	0
3)	Unknown		=	0
	Total:	0		

Aboriginal Values/Cultural Heritage Score (maximum 30 points)

Batchewana First Nation (BFN) was contacted on October 19, 2010 and asked about the significance of this wetland in terms of aboriginal values. A response was received on November 17, 2010 (letter appended), which states the wetlands are "very valuable to the surrounding area, environment, wild life and BFN reliance on the land and resources to sustain our cultural activities." (Dave Sewell, BNR Field Technician)

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3.0 HYDROLOGICAL COMPONENT

3.1 FLOOD ATTENUATION

If the wetland is a complex including isolated wetlands, apportion the l00 points according to area. For example if 10 ha of a l00 ha complex is isolated, the isolated portion receives the maximum proportional score of 10. The remainder of the wetland is then evaluated out of 90.

	Step 1:	If wetland is entirely Isolated	go directly to Step 5.
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If wetland is lacustrine and the ratio of wetland area: lake area is <0.1, or wetland is riverine on the St. Mary's River, go to Step 5

All other wetlands, go through steps 2, 3, 4 and 5.

Step 2: Determination of Upstream Detention Factor (DF)

(a)	Wetland area (ha)		6.52
(b)	Total area (ha) of upstream detention area	as	13.58
	(include the wetland itself)		
(c)	Ratio of (a):(b)		0.48
(d)	Upstream detention factor: (c) $\times 2 =$	0.96	0.96
	(maximum allowable factor = 1)		

Step 3: Determination of Peak Flow Attenuation Factor (AF)

(a)	Wetland area (ha)		6.52
(b)	Size of catchment basin (ha) upstream of	wetland	
	(include wetland itself in catchment area)		214.39
(c)	Ratio of (a):(b)		0.03
(d)	Wetland attenuation factor: (c) x 10 =	0.30	0.30
	(maximum allowable factor = 1)		

Step 4: Determination of Wetland Surface Form Factor (FF)

From the list below, select the surface form which best describes the wetland.

	Factor	
Flooded with little or no aquatic vegetation		0
Flooded but with submergent, emergent or floating vegetation		0.2
Flat (lawn) vegetation (typical of fens)	X	0.5
Hummock-depression microtopography		0.7
Patterned (e.g., string bog, ribbed fen)		1
Surface Form Factor (FF)	0.5	

(Maximum allowable factor = 1)

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Step 5:

1. Wetland is entirely Isolated

2. Wetland is lacustrine and the ratio of 0 points

wetland area: lake area is <0.1

3. Wetland is riverine along the St. Mary's River 0 points

4. For all other wetlands*, calculate as follows:

0.96 Upstream Detention Factor (DF) (Step 2) Wetland Attenuation Factor (AF) (Step 3) 0.30 c) Surface Form Factor (FF) (Step 4) 0.50

 $[(DF + AF + FF)/3] \times 100*$

*Unless wetland is a complex including isolated portions -- see above

Total Flood Attenuation Score (maximum 100 points)

100 points

58.67

GROUND WATER RECHARGE

3.2.1 SITE TYPE

(b)

Wetland > 50% lacustrine (by area) or located on the (a)

St. Mary's River

Score = 0Wetland not as above. Calculate final score as follows:

(FA= area of site type/total area of wetland)

FA of isolated or palustrine wetland 20.00 20 FA of riverine wetland 5 0.00 FA of lacustrine wetland (wetland <50% lacustrine) 0.00

Site Type Score: (maximum 20 points)

3.2.2 SOILS

EVALUATION:

Dominant Wetland Type	Sand, loam, gravel, till		Clay or bedrock	
Lacustrine or on St. Mary's River	0		0	
Isolated	10		5	
Palustrine	7		4	X
Riverine (not on St. Mary's River)	5		2	
Totals		0		4

Hydrological Soil Class Score (maximum 10 points)

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3.3 DOWNSTREAM WATER QUALITY IMPROVEMENT

3.3.1 WATERSHED IMPROVEMENT FACTOR

Calculation of Watershed Improvement Score is based upon the fractional area (FA) of each site type within the wetland. FA = area of site type/total area of the wetland.

Site Type	<u>Impro</u>	vement Facto	or (IF	<u>)</u>	
Isolated	FA		X	0.5 =	0.00
Riverine	FA		X	1 =	0.00
Palustrine with no inflow	FA		X	0.7 =	0.00
Palustrine with inflows	FA	1	X	1 =	1.00
Lacustrine on lake shoreline	FA		X	0.2 =	0.00
Lacustrine at lake inflow or outflow	FA		X	1 =	0.00

Watershed Improvement Score (IF x 30) (maximum = 30)

30

3.3.2 ADJACENT AND WATERSHED LAND USE

EVALUATION

Step 1: Determination of Maximum Initial Score

Wetland on the Great Lakes or St. Mary's River (Go to Step 5a)

X All other wetlands (Go through steps 2, 3,4 and 5b)

Step 2: Determination of Broad Upslope Land Use (BLU)

Assess broad upslope land uses within the previous 5 years, agriculture, or other activities which alter the natural vegetation cover in an extensive manner.

Choose one		Score
>50% of catchment basin		20
20-50% of catchment basin		14
<20% of catchment basin	X	4

Score for BLU

4

Step 3: Determination of Linear Upslope Land Uses (LUU)

Assess linear upslope uses (LUU) e.g., roads, railways, hydro corridors, pipelines, etc., crossing the upslope catchment within 200m of the wetland boundary.

Choose the highest only		Score
Major corridor*		15
Secondary corridor		11
Tertiary corridor		6
Temporary or abandoned	X	3
None		0

Score for LUU

3

Major, secondary and tertiary roads are those that are indicated as such on the provincial highways maps. Major hydro corridors are trunk lines coming directly from a generating station. Major pipelines are transcontinental lines. Secondary corridors are regional distribution lines (i.e. multi-cable hydro corridors not emanating directly from a generating station or regional gas distribution lines). Tertiary corridors are single hydro lines or local gas distribution lines (i.e. to domestic users).

		Present Not present	Score 15 0	Score for PS	: <u> </u>	0			
Step	<u>5:</u>	Calculation of tot	al score for Adjac	ent and Watersho	ed Land	Use			
		Vetland on the Great Ill other wetlands, ca		River					
				Final Score	BLU+L	UU+PS	17		
3.3.3	3 VE	GETATION FORM							
		ose the category that etation of the wetland				a			
	Eme	es, shrubs or herbs (hergents, submergents de or no vegetation (u	(ne, re, be, f, ff, su	X		Score 8 points 10 0			
			Domin	ant Vegetation Fo	orm Sco	re (maximu	ım 10 points)		8
3.4	4	CARBON SINK							
	Cho	ose the category that	best describes the	wetland					
	1)	Wetland a bog or f	en with >50% orga	nic soils		15	points		
	2)	-	ic soils occupying inly mineral or und type)			6			
	3)	Marshes and swam	nps with >50% orga	anic soil		9			
	4)	Wetland with less	than 10% of soils o	organic	X	0			
				Carbon Sink	x Score (maximum	15 points)	0	
							•		

Northern Ontari	o Wetland Eva	aluation Data a	and Scoring Record
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3.5 SHORELINE EROSION CONTROL

From the wetland vegetation map determine the <u>dominant</u> vegetation type within the erosion zone for <u>lacustrine and riverine site type areas only.</u> Score according to the factors listed below.

Step 1:

Score

X Wetland entirely isolated or palustrine
Any part of the Wetland riverine or lacustrine
(proceed to Step 2)

0

Step 2:

Choose the one characteristic that best describes the shoreline vegetation (see text for a definition of shoreline)

		Score
1)	Trees and shrubs	15
2)	Emergent vegetation	8
3)	Submergent vegetation	6
4)	Other shoreline vegetation	3
5)	No vegetation	0

Shoreline Erosion Control Score (maximum 15 points)

0

3.6 GROUNDWATER DISCHARGE

(Circle the characteristics that best describe the wetland being evaluated and then sum the scores)

Category		C	Catchment Interaction			
Wetland type	Bog = 0		Swamp/Marsh = 2	2	Fen = 5	
Basin topography	Flat/Rolling = 5		Hilly = 2		Major relief	
				2	break = 5	
Weland area: Upslope	Large (>50%) = 0		Moderate		Small ($<5\%$) = 5	
catchment area			(6-50%) = 2	2		
Lagg Development	None found = 0	0	Minor = 2		Extensive $= 5$	
Seeps at wetland	None found = 0		1-3 seeps = 5		4 or more	
edge		0			seeps = 10	
Iron precipitates	None = 0		1-3 deposits = 2		4 or more	
evident at edge		0			deposits = 5	
Surface marl deposits	None = 0	0	1-3 deposits = 2		>3 = 5	
Wetland pH	Low < 4.2 = 0		Moderate $4.2-5.7 = 5$	5	High $> 5.7 = 10$	
Catchment soil	Patchy = 0		Thin $(<20cm) = 2$		Thick = 5	
coverage				2		
Catchment soil	Low = 0		Moderate = 2		High = 5	
permeability				2		
Totals		0		15		0

(Scores are cumulative maximum score 30 points)

Groundwater Discharge Score (maximum 30 points)

Northern Ontario Wetland Evaluation Data and Scoring Recor	Northern (Ontario	Wetland	Evaluation	Data and	Scoring Recor	ď
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4.0 SPECIAL FEATURES COMPONENT

4.1 RARITY

4.1.1 WETLANDS

Hills Site Region and Site District (5E only): 5E-13

Wetland type (check one or more)

| Bog | Fen | X | Swamp | X | Marsh

Evaluation Table for Scoring Rarity of Wetland Type.

Unit	Site Region		_		
Number	& District	Marsh	Swamp	Fen	Bog
2E	James Bay	20	20	0	20
2W	Big Trout Lake	20	20	0	10
3E	Lake Abitibi	20	20	10	0
3W	Lake Nipigon	20	20	10	0
3S	Lake St. Joseph	20	20	10	0
4E	Lake Temagami	20	20	10	0
4W	Pigeon River	20	10	20	0
4S	Wabigoon Lake	20	10	20	0
5E-1	Thessalon	10	0	30	20
5E-2	Gore Bay	20	0	20	20
5E-3	La Cloche	20	0	30	20
5E-4	Sudbury	10	0	30	10
5E-5	North Bay	10	0	20	0
5E-6	Tomiko	10	0	20	0
5E-7	Parry Sound	20	0	30	20
5E-8	Huntsville	20	0	30	20
5E-9	Algonquin Park	10	0	30	0
5E-10	Brent	20	0	30	0
5E-11	Bancroft	0	10	30	10
5E-12	Renfrew	0	0	30	10
5E-13	Batchewana	10	0	10	30
5-S	Lake of the Woods	10	10	20	10

Rarity of Wetland Type Score (maximum 70 points)

Northern	n Ontario Wetland Evalua	ation, Data and Scorin	ng Record	(November 20,	2010)
.1.2 SPECIE	<u>S</u>				
4.1.2.1	BREEDING HABIT	'AT FOR AN ENDA	NGEREI	O OR THREATENED SPECIES	<u>_</u>
Nar	me of species			Source of information	
45		F		1	
1)					
2) 3)					
4) —					
5)					
	Total:		0		
ttach documer	ntation.			<u>-</u>	
coring:					
For one sp	pecies	250 points			
	additional species	250 points			
core is cumula	ative, no maximum score)			
	Breeding Habitat for	Endangered Specie	s Score (n	o maximum)	0
4400		CD A EVON OD EEE	D. 11.0 11.	DIELE COR LANDANGER	
4.1.2.2	OR THREATENED		DING HA	ABITAT FOR AN ENDANGEREI	<u>)</u>
	OK TIME!TE!(ED	<u>STECIES</u>			
	me of species	F		Source of information	
1)					
2)					
3)					
4) 5)					
<i>3)</i>	Total:		0		
<u> </u>			-	<u>1</u>	
ttach documer	ntation.				
coring:					
For one s	necies	150 points			
	additional species	75			
core is cumula	ative, no maximum score)			
	Traditional Ha	bitat for Endangere	d Species	Score (no maximum)	0
		8	<u>.</u>	· · · · · · · · · · · · · · · · · · ·	
		22			

	ame of species				Source of in	nformation	
1)							
3)							
4)							
5)							
6)							
7)							
8)							
9) 10)							
11)							
12)							
13)							
14)							
15)							
At	tach separate	list if necessary	; Attach documenta	ation			
	vincially sign	ificant animal s	pecies in the wetlar	nd:			
1 species	vincially sign	50 points	14 species	nd: =	154		
1 species 2 species	= =	50 points 80	14 species 15 species	= =	156		
1 species 2 species 3 species	= =	50 points 80 95	14 species 15 species 16 species	= =	156 158		
1 species 2 species 3 species 4 species	= = =	50 points 80 95 105	14 species 15 species 16 species 17 species	= = = =	156 158 160		
1 species 2 species 3 species 4 species 5 species	= = = = =	50 points 80 95 105 115	14 species 15 species 16 species 17 species 18 species	= = = =	156 158 160 162		
1 species 2 species 3 species 4 species 5 species 6 species	= = = = = =	50 points 80 95 105 115 125	14 species 15 species 16 species 17 species 18 species 19 species	= = = =	156 158 160 162 164		
1 species 2 species 3 species 4 species 5 species 6 species 7 species	= = = = =	50 points 80 95 105 115 125 130	14 species 15 species 16 species 17 species 18 species 19 species 20 species	= = = =	156 158 160 162 164 166		
1 species 2 species 3 species 4 species 5 species 6 species 7 species 8 species	= = = = = =	50 points 80 95 105 115 125	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species	= = = = =	156 158 160 162 164		
1 species 2 species 3 species 4 species 5 species 6 species 7 species	= = = = = = =	50 points 80 95 105 115 125 130 135	14 species 15 species 16 species 17 species 18 species 19 species 20 species	= = = = = = =	156 158 160 162 164 166 168		
1 species 2 species 3 species 4 species 5 species 6 species 7 species 8 species 9 species	= = = = = = = =	50 points 80 95 105 115 125 130 135 140	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species	= = = = =	156 158 160 162 164 166 168 170		
1 species 2 species 3 species 4 species 5 species 6 species 7 species 8 species 9 species 0 species	= = = = = = = =	50 points 80 95 105 115 125 130 135 140 143	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species	= = = = = = =	156 158 160 162 164 166 168 170		
1 species 2 species 3 species 5 species 6 species 7 species 8 species 9 species 1 species 2 species 2 species 3 species 3 species 5 species 6 species 7 species 8 species 9 species 9 species 1 species 2 species 3 species	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species 25 species	= = = = = = =	156 158 160 162 164 166 168 170 172 174		
1 species 2 species 3 species 5 species 6 species 7 species 8 species 9 species 1 species 2 species 2 species 3 species 3 species 5 species 6 species 7 species 8 species 9 species 9 species 1 species 2 species 3 species	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species	= = = = = = =	156 158 160 162 164 166 168 170 172 174	pecies = 178	
1 species 2 species 3 species 5 species 6 species 7 species 8 species 9 species 0 species 1 species 2 species 2 species 3 species one point	= = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species 25 species	= = = = = = =	156 158 160 162 164 166 168 170 172 174	pecies = 178	
1 species 2 species 3 species 5 species 6 species 7 species 8 species 9 species 1 species 2 species 2 species 3 species one point ats etc.)	= = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149 152 cies past 25 (for	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species 25 species	= = = = = = = = = = = = = = = = = = =	156 158 160 162 164 166 168 170 172 174 176 points, 27 sp		

4.1.2.4	PRO	OVINCIALLY	SIGNIFICANT	PLANT SPE	CCIES	
	cientific mmon N	names must be Name	recorded)	Scientific N	Jame	Source of information
1)						
2)						
3)						
4)						
5)						
6)						<u> </u>
7)						
8)						
9)						
10)						
11)						
12) 13)			-			
14)						
15)						
						_
ing:	vincially	v sionificant nla	nt species in the	e wetland:		
	vincially	y significant pla	ant species in the	e wetland:		
	vincially =	y significant pla 50 points	ant species in the	e wetland: =	154	
nber of pro					154 156	
nber of pro ecies ecies ecies	=	50 points	14 species 15 species 16 species	=		
nber of pro ecies ecies ecies ecies	=	50 points 80 95 105	14 species 15 species 16 species 17 species	= =	156 158 160	
ecies ecies ecies ecies ecies ecies	= =	50 points 80 95 105 115	14 species 15 species 16 species 17 species 18 species	= = =	156 158 160 162	
ecies ecies ecies ecies ecies ecies ecies	= = =	50 points 80 95 105 115 125	14 species 15 species 16 species 17 species 18 species 19 species	= = = =	156 158 160 162 164	
ecies ecies ecies ecies ecies ecies ecies ecies	= = = =	50 points 80 95 105 115 125 130	14 species 15 species 16 species 17 species 18 species 19 species 20 species	= = = =	156 158 160 162 164 166	
nber of pro ecies	= = = =	50 points 80 95 105 115 125 130	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species	= = = = =	156 158 160 162 164 166 168	
ecies ecies ecies ecies ecies ecies ecies ecies ecies ecies	= = = = =	50 points 80 95 105 115 125 130 135 140	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species	= = = = = =	156 158 160 162 164 166 168 170	
ecies ecies ecies ecies ecies ecies ecies ecies ecies ecies ecies	= = = = = =	50 points 80 95 105 115 125 130 135 140	14 species 15 species 16 species 17 species 18 species 20 species 21 species 22 species 23 species	= = = = = = = = = = = = = = = = = = = =	156 158 160 162 164 166 168 170	
ecies	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143	14 species 15 species 16 species 17 species 18 species 29 species 20 species 21 species 22 species 23 species 24 species		156 158 160 162 164 166 168 170 172	
ecies	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149	14 species 15 species 16 species 17 species 18 species 20 species 21 species 22 species 23 species	= = = = = = = = = = = = = = = = = = = =	156 158 160 162 164 166 168 170	
ecies	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143	14 species 15 species 16 species 17 species 18 species 29 species 20 species 21 species 22 species 23 species 24 species		156 158 160 162 164 166 168 170 172	
ecies pecies pecies pecies		50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 29 species 20 species 21 species 22 species 23 species 24 species	= = = = = = =	156 158 160 162 164 166 168 170 172 174	7 species = 178
nber of pro ecies pecies pecies pecies pecies pecies pecies		50 points 80 95 105 115 125 130 135 140 143 146 149 152 y species past 2	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species 25 species	= = = = = = = = = = = = = = = = = = =	156 158 160 162 164 166 168 170 172 174 176	

Northern Ontario Wetland Evaluation Data and Scoring Record	rd
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4.1.2.5 REGIONALLY SIGNIFICANT SPECIES (SITE REGION)

Scientific names must be recorded for plant species. Lists of significant species must be approved by MNR.

SIGNIFICANT IN SITE REGION:

Common Name Scientific Name Source of information 1) 2) 3) 4) 5) 7) 8) 9) 10) 11) 12) 13) 14) 15)

Attach separate list if necessary .Attach documentation.

No. of species significant in Site Region

1 species	=	20	6 species	=	55
2 species	=	30	7 species	=	58
3 species	=	40	8 species	=	61
4 species	=	45	9 species	=	64
5 species	=	50	10 species	=	67

Add one point for every species past 10. (no maximum score)

Significant Species (Site Region) Score (no maximum)

^{**} Score only if there is an approved list Scoring:

(November 20, 2010)

4.2.1.6 LOCALLY SIGNIFICANT SPECIES (SITE DISTRICT)

Scientific names must be recorded for plant species. Lists of significant species must be approved by MNR.

Common Name	Scientific Name	Source of information
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15	<u> </u>	
16	<u> </u>	
17	<u> </u>	
18		

Attach separate list if necessary .Attach documentation.

Scoring:

No. of species significant in Site District

1 species	=	10	6 species	=	41
2 species	=	17	7 species	=	43
3 species	=	24	8 species	=	45
4 species	=	31	9 species	=	47
5 species	=	38	10 species	=	49

For each significant species over 10 in the wetland, add 1 point.

Locally Significant Species (Site District) Score (no maximum)

Λ

(November 20, 2010)

4.1.2.7 SPECIES OF SPECIAL STATUS

Black Duck

Suitable breeding habitat present and within assessment range (Figure 17)

Assessment Category	Check one	Score
40-80 Indicated Pairs/100 km sq		25 points
20-40 Indicated Pairs/100 km sq		20
10-20 Indicated Pairs/100 km sq	X	15
5-10 Indicated Pairs/100 km sq		10
1-5 Indicated Pairs/100 km sq		5
Habitat not suitable		0
Out of assessment range		0

Black Duck Score (maximum 25 points)

15

4.2 SIGNIFICANT FEATURES AND/OR FISH & WILDLIFE HABITAT

4.2.1 NESTING OF COLONIAL WATERBIRDS

Status	Name of species	Source of Information	Score
Currently nesting			50 points
Known to have nested within past 5 years			25
Active feeding area (great blue heron excluded)			15
None known			0

Attach documentation (nest locations etc., if known)

Colonial Waterbirds Score (maximum 50 points)

0

Score (one only)

4.2.2. WINTER COVER FOR WILDLIFE

(Check only highest level of significance)

1)		Provincially significant	100
2)		Significant in Site Region	50
3)		Significant in Site District	25
3)		Locally significant	10
4)	X	Little or poor winter cover present	0

Source of information:

Field Observations - Very little treed/tall shrub habitat within wetland

compared to surrounding landscape.

Winter Cover for Wildlife Score (maximum 100 points)

Northern Ontario Wetland E	valuation Dat	a and Scoring Re	ecord	(November 20,	2010)
4.2.3 WATERFOWL STAGING AND	O/OR MOULT	ΓING			
(Check only highest level of significant across columns, maximum score 150)	ce for both sta	ging and moulting	ng; score is cum	ulative	
 Nationally significant Provincially significant Regionally significant Known to occur Not possible Not known Total: 	Staging X 0	Score (one only) 150 100 50 10 0	Moulting X 0	Score (one only) 150 100 50 10 0	
Source of information:	135 14	10: 1 0	ore (maximum	170	0
4.2.4 WATERFOWL BREEDING (Check only highest level of the provincially significant provincial	gnificant		core 100 50		
3) X Habitat suitable 4) Habitat not sui	e		10		
Source of information:	Waterfow	_	re (maximum lC		10
4.2.5 MIGRATOR PASSERINE, SHO		R RAPTOR STO	POVER AREA		
(check highest applicable control of the control of	gnificant Site Region Site District	lues Map (Junen	100 50 10 0		
		_	Score (maximur	n 100 points)	0
		28			

Northern Ontario Wetland Evaluation Data and Scoring Record (November 20, 2010) 4.2.6 UNGULATE HABITAT **EVALUATION** Score (1) + (2) +one of (3) to (6)Score Ungulate summer cover 15 points (1) Mineral licks 50 Moose aquatic feeding area Class 1 0 Moose aquatic feeding area Class 2 10 (4) (5) Moose aquatic feeding area Class 3 20 Moose aquatic feeding area Class 4 35 (6) (Score is cumulative for a maximum possible score of 100) **Ungulate Habitat Score (maximum 100 points)** 4.2.7 FISH HABITAT 4.2.7.1 Spawning and Nursery Habitat Table 5. Area Factors for Low Marsh, High Marsh, and Swamp Communities. No. of ha of Fish Habitat Area Factor < 0.5 ha 0.1 0.5- 4.9 0.2 5.0-9.9 0.4 10.0-14.9 0.6 15.0 -19.9 0.8 20.0+ ha 1.0 Step 1: Fish habitat is not present within the wetland (Score = 0) Fish habitat is present within the wetland (Go to Step 2) X Step 2: Choose only one option 1) Significance of the spawning and nursery habitat within the wetland is known (Go to Step 3) Significance of the spawning and nursery habitat within the wetland is not 2) known (Go through Steps 4, 5, 6 and 7)

	Northern Ontario Wetland Evaluation Data and Sc	oring Record	(November 20, 2010)				
Step 3:	Select the highest appropriate category belo	ow attach documents	ation:				
1)	Significant in Site Region	100 points					
2)	Significant in Site District	50					
3)	Locally Significant Habitat (5.0+ ha)	25					
4)	Locally Significant Habitat (<5.0 ha)	15					
	Score for Spawning and Nursery F	Iabitat (maximum	score 100 points)				
Step 4: Proceed to Steps 4 to 7 only if Step 3 was not answered.							
(Low Marsh: marsh area from the existing water line out to the outer boundary of the wetland)							
Low marsh not present (Continue to Step 5) X Low marsh present (Score as follows)							

Scoring for Presence of Key Vegetation Groups

Scoring is based on the one most clearly dominant plant species of the dominant form in each Low Marsh vegetation community. Check the appropriate Vegetation Group (see Appendix 16) for each Low Marsh community. Sum the areas of the communities assigned to each Vegetation Group and multiply by the appropriate size factor from Table 5.

Vegetation	Vegetation	Present	Total	Area	Score	Final
Group Number	Group Name	as a	Area	Factor		Score
		Dominant	(ha)			(area
		Form		(see		factor
		(check)		Table 5)		x score)
1	Tallgrass	X	0.99	0.2	6 pts	1.2
2	Shortgrass-Sedge				11	0.0
3	Cattail-Bulrush-Burreed				5	0.0
4	Arrowhead-Pickerelweed				5	0.0
5	Duckweed				2	0.0
6	Smartweed-Waterwillow				6	0.0
7	Waterlily-Lotus				11	0.0
8	Waterweed-Watercress				9	0.0
9	Ribbongrass				10	0.0
10	Coontail-Naiad-Watermilfoil				13	0.0
11	Narrowleaf Pondweed				5	0.0
12	Broadleaf Pondweed				8	0.0
_	Total Score (max	imum 75 point	s)	-	-	1.0

Northern Ontario Wetland Evaluation Data and Scoring Recor
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Step 5: (**High Marsh**: area from the water line to the inland boundary of marsh wetland type. This is essentially what is commonly referred to as a wet meadow, in that there is insufficient standing water to provide fisheries habitat except during flood or high water conditions.)

High marsh not present (Continue to Step 6)

X High marsh present (Score as follows)

Scoring for Presence of Key Vegetation Groups

Scoring is based on the one most clearly dominant plant species of the dominant form in each High 1Marsh vegetation community. Check the appropriate Vegetation Group for each High Marsh community. Sum the areas of the communities assigned to each Vegetation Group and multiply by the appropriate size factor from Table 5.

Vegetation	Vegetation	Present	Total	Area	Score	Final
Group Number	Group Name	as a	Area	Factor		Score
		Dominant	(ha)	(see		(area
		Form		Table 5)		factor
		(check)				x score)
1	Tallgrass				6 pts	0.0
2	Shortgrass-Sedge	X	1.51	0.2	11	2.2
3	Cattail-Bulrush-Burreed				5	0.0
4	Arrowhead-Pickerelweed				5	0.0
Total Score (maximum 25 points)					2.0	

Step 6: (**Swamp**: Swamp communities containing fish habitat, either seasonally or permanently. Determine the total area of seasonally flooded swamps and permanently flooded swamps containing fish habitat.)

__Swamp containing fish habitat not present (Continue to Step 7)

X Swamp containing fish habitat present (Score as follows)

Swamp containing fish	Present	Total	Area Factor	Score	TOTAL SCORE
Habitat	(check)	area (ha)	(see Table 5)		(factor x score)
Seasonally flooded	X	4.02	0.2	10	2.0
Permanently flooded				10	0.0
SCOI	2.0				

Northern Ontario Wetland Evaluation Data and Scoring Record	(November 20, 2010)
Step 7: Calculation of final score	
Score for Spawning and Nursery Habitat (Low Marsh) (maximum 75)	= 1.0
Score for Spawning and Nursery Habitat (High Marsh) (maximum 25)	= 2.0
Score for Swamp Containing Fish Habitat (maximum 20)	= 2.0
Sum (maximum sc	ore 100 points) =5
4.2.6.2 Migration and Staging Habitat	
Step 1:	
1) X Staging or Migration Habitat is not present in the wetland (Score = 6	0)
2) Staging or Migration Habitat is present in the wetland significance of to Step 2)	of the habitat is known (Go
3) Staging or Migration Habitat is present in the wetland significance of (Go to Step 3)	of the habitat is not known
NOTE: Only one of Step 2 or Step 3 is to be scored.	
Step 2: Select the highest appropriate category below, attach documentation:	
1) Significant in Site Region	Score 25 points
2) Significant in Site District	15
3) Locally Significant	10
4) Fish staging and/or migration habitat present,but not as above	5
Score for Fish Migration and Staging Habitat (maximum s	score 25 points)
Step 3: Select the highest appropriate category below based on presence of (does not have to be dominant). Note name of river for 2) and 3).	the designated site type
Wetland is riverine at rivermouth or lacustrine at rivermouth	Score 25 points
2) Wetland is riverine, within 0.75 km of rivermouth	15
Wetland is lacustrine, within 0.75 km of rivermouth	10
4) Fish staging and/or migration habitat	5
present, but not as above	5 georg 25 points)
Score for Staging and Migration Habitat (maximum	score 25 points)

(November 20, 2010)

4.3 ECOSYSTEM AGE

(Fractional Area = area of wetland type/total area of wetland)

	Area			Scoring
Bog		x	25 =	0.0
Fen, treed to open on deep soils		•		
floating mats or marl		X	20 =	0.0
Fen, on limestone rock		X	5 =	0.0
Swamp	0.62	X	3 =	1.9
Marsh	0.38	X	0 =	0.0
		Sub Total:		1.9

Fractional

Ecosystem Age Score (maximum 25 points)

2

4.4 GREAT LAKES COASTAL WETLANDS

Score for **coastal** (see text for definition) wetlands only

Choose one only

 wetland < 10 ha</td>
 = 0 points

 wetland 10- 50 ha
 = 25

 wetland 51 -lOO ha
 = 50

 wetland > 100 ha
 = 75

Great Lakes Coastal Wetlands Score (maximum 75 points)

Northern Ontario Wetland Evaluation Data and	d Scoring	g Record (November 20, 2010)
5 0 EVTDA INEODMATION			
5.0 EXTRA INFORMATION			
5.1 PURPLE LOOSESTRIFE			
X Absent/Not seen			
Present	(a)	One location in wetlan Two to many locations	
	(b)	Abundance code (1 < 20 plants (2 20-99 plants (3 100-999 plants (4 >1000 plants	
5.2 SEASONALLY FLOODED AREAS			
Indicate length of seasonal flooding Check one or more			
Ephemeral Temporal Seasonal Semi-permanent No seasonal flooding		(less than 2 weeks) (2 weeks to 1 month) (1 to 3 months) (>3 months)	<u>X</u> X
5.3 SPECIES OF SPECIAL SIGNIFICANCE			
5.3.1 Osprey			
Present and nesting (attach map showing nest site) Known to have nested in last 5 yr Feeding area for osprey Not as above		<u></u>	
5.3.2 Common Loon			
Nesting in wetland (attach map showing nest site) Feeding at edge of wetland Observed or heard on lake or river adjoining the wetland		<u> </u>	
Not as above		X	
3	4		

Northern Ontario Wetland Evaluation Data and Scoring Recor	d (November 20, 2010)
INVESTIGATORS	AFFILIATION
Lisa Keable	Natural Resource Solutions Inc.
Derek Goertz	Natural Resource Solutions Inc.
DATA COVIL	Transfer Research Solutions Inc.
DATES WETLAND VISITED	
September 6, 2010	
DATE THIS EVALUATION COMPLETED:	
ESTIMATED TIME DEVOTED TO COMPLETING THE FIELD S 16 hours (2 people between 0800 an	
WEATHER CONDITIONS	
i) at time of field work	
14°C, 90% Cloud cover, no precipitation, wind = 4 (E) (Beaufort So	cale)
ii) summer conditions in general Summer conditions were dry and hot, however substantial rainfa	ll over last few days prior to site visits.
OTHER POTENTIALLY USEFUL INFORMATION:	
CHECKLIST OF PLANT AND ANIMAL SPECIES RECORDED IN TH	E WETLAND:
Lists of all flora and fauna observed in the wetland.	
35	

1	Northern Ontario Wetland Evaluation	Data and Scoring R	Record	(November 20, 2010))			
WETLAND EVALUATION SCORING RECORD								
WETLANI	WETLAND NAME Moose Antler Wetland Complex							
	1.0 E	BIOLOGICAL COM	IPONENT					
1.1	PRODUCTIVITY							
	Growing Degree-Days/Soils Wetland Type			11 11				
	Site Type			2				
			Total for Produ	activity	24			
1.2	BIODIVERSITY							
	Number of Wetland Types Vegetation Communities (maxixmu	ım 45)		13				
1.2.3	Diversity of Surrounding Habitat (r			6				
	Proximinty to Other Wetlands Interspersion			8 12				
	Open Water Type			30				
			Total for Biodi	varsity	72			
	Sub Total for Biodiversity	72	Total for Blodi	iversity	12			
1.3	SIZE (Biological Component)				8			
тот	AL FOR BIOLOGICAL COMPONE	NT (not to exceed 2)	50)		104			
1017	ALTOR BIOLOGICAL COMI ONL	141 (not to exceed 2.	30)		104			

Northern Ontario Wetland Evaluation Data and Scoring Record ((November 20, 2010)
Northern Ontario Wedand Evaluation Data and Scoring Record	140vember 20, 2010)
2.0 SOCIAL COMPONENT	
2.1 ECONOMICALLY VALUABLE PRODUCTS	
2.1.1 Wood Products2.1.2 Lowbush Cranberry	0
2.1.3 Wild Rice	0
2.1.4 Commercial Fish	12
2.1.6 Furbearers	3
Total for Economically Valuable P	Products 15
2.2 RECREATIONAL ACTIVITIES (maximum 80)	8
2.3 LANDSCAPE AESTHETICS	
221 B. C.	0
2.3.1 Distinctness2.3.2 Absence of Human Disturbance	<u>0</u> 4
	4
Total for Landscape Aesthetics	4
2.4 EDUCATION AND PUBLIC AWARENESS	
2.4.1 Educational Uses	0
2.4.2 Facilities and Programs	0
2.4.3 Research and Studies (maximum 12)	0
Total for Education and Public Aw	vareness 0
2.5 PROXIMITY TO AREAS OF HUMAN SETTLEMENT	4
2.6 OWNERSHIP	8
Subtotal for Social Component 27	
2.7 <u>SIZE</u> (Social Component)	2
2.8 ABORIGINAL AND CULTURAL VALUES (maximum 30)	30
TOTAL FOR SOCIAL COMPONENT (not to exceed 250)	71

Northern Ontario Wetland Evaluation Data	and Scoring Record	(Noven	nber 20, 2010))
3.0 HYDRO	DLOGICAL COMPONENT			
3.1 <u>FLOOD ATTENUATION</u>			ļ	59
3.2 <u>GROUNDWATER RECHARGE</u>				
3.2.1 Site Type 3.2.2 Soils			20	
	Total for Groundwater Rech	arge		24
3.3 <u>WATER QUALITY IMPROVEMENT</u>				
3.3.1 Watershed Improvement Factor3.3.2 Adjacent and Watershed Land Use3.3.3 Vegetation Form			30 17 8	
	Total for Water Quality Impr	rovement	ļ	55
3.4 <u>CARBON SINK</u>				0
3.5 SHORELINE EROSION CONTROL				0
3.6 <u>GROUNDWATER DISCHARGE</u>				15
TOTAL FOR HYDROLOGIC	CAL COMPONENT (not to e	xceed 250)		153

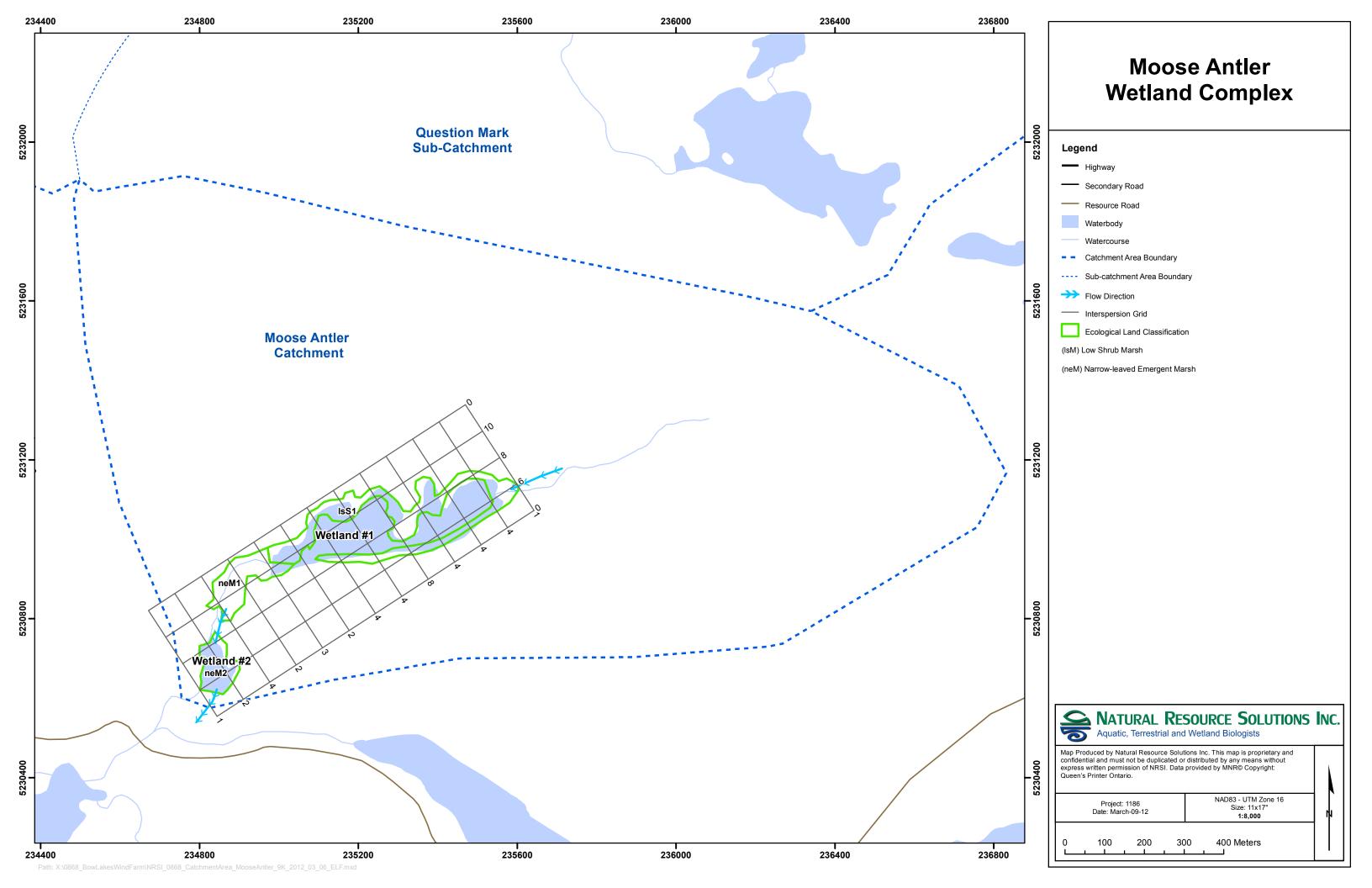
Northern Ontario Wetland Evaluation Data and Scoring Record (November 20, 2010)))
4.0 SPECIAL FEATURES	
4.1 <u>RARITY</u>	
4.1.1 Wetlands	10
4.1.2 Species	
4.1.2.1 Endangered or Threatened Species Breeding 4.1.2.2 Traditional Use by Endangered or Threatened Species 0	
4.1.2.3 Provincially Significant Animals	
4.1.2.4 Provincially Significant Plants 0 4.1.2.5 Regionally Significant Species 0	
4.1.2.6 Locally Significant Species 0	
4.1.2.7 Species of Special Status Total for Species Rarity	15
4.2 <u>SIGNIFICANT FEATURES OR HABITAT</u>	
4.2.1 Colonial Waterbirds 0	
4.2.1 Colonial waterblids 4.2.2 Winter Cover for Wildlife 0	
4.2.3 Waterfowl Staging and Moulting 0	
4.2.4 Waterfowl Breeding 4.2.5 Migratory Passerine, Shorebird or Raptor Stopover 0	
4.2.6 Ungulate Habitat 0	
4.2.7 Fish Habitat 5	L
Total for Significant Features and Habitat	15
4.3 ECOSYSTEM AGE	2
4.4 GREAT LAKES COASTAL WETLANDS	0
	0
TOTAL FOR SPECIAL FEATURES (maximum 250)	42

]	Northern Ontario Wetland Evaluation Data and Scor	ing Record	(November 20, 2010)
	SUMMARY OF EVALU	UATION RESULT	
Wetland	Moose Antler W	Vetland Complex	
TOTAL FO	R 1.0 BIOLOGICAL COMPONENT		104
TOTAL FO	OR 2.0 SOCIAL COMPONENT		71
TOTAL FO	R 3.0 HYDROLOGICAL COMPONENT		153
TOTAL FO	R 4.0 SPECIAL FEATURES COMPONENT		42
	<u>W</u>	ETLAND TOTAL	370
INVESTIG Lisa Keabl			
Derek Goe			
Katharina V	Valton (evaluation revision, March 2012)		
AFFILIAT			
	source Solutions Inc.		
	source Solutions Inc.		
Natural Re	source Solutions Inc.		
<u>DATE</u>	November 20, 2010		
1			

Data Summary Form Wet

Wetland: Moose Antler Wetland Complex

Wetland	Wetland	Мар	Field	#	Dominant	Forms	% Open	Area	Open Water	Soils	Site	Fish
Type	Unit	Code	Code	Forms	Form		Water	(ha)	(ha)		Туре	Habitat
Swamp	1	lsS1	11	2	ls	ne	40	4.02	1.61	Bedrock	Palustrine	Yes
Marsh	1	neM1	14	3	ne	ls, gc	30	1.51	0.45	Clay/loam	Palustrine	НМ
IVIdISII	2	neM2	15	2	ne	gc	25	0.98	0.25	Clay/loam	Palustrine	LM



Map Legend

Map Code	Wetland	Forms	Dominant Species
	Type		
lsS1	Marsh	ls, ne	Sweetgale (Myrica gale), Leatherleaf (Chamaedaphne calyculata); Canada blue joint
			(Calamagrostis canadensis)
neM1	Marsh	ne, Is, gc	Bottlesedge (Carex utriculata), Canada blue joint (C. canadensis);
			Sweetgale (M. gale); Joe-pye weed (E. maculatum ssp. maculatum), Marsh st. johns-wort (Triadenum fraseri)
neM2	Marsh	ne, gc	Canada blue joint (C. canadensis), Juncus effusus, Three-way sedge (Dulichium arundinaceum),
			Bottlesedge (C. utriculata); Joe-pye weed (E. maculatum ssp. maculatum), St. John's-wort spp.

BOTANICAL NAME		COMMON NAME	PROVINCIAL STATUS	OMNR STATUS	COSEWIC STATUS	Observations
	SOURCE		MNR RARE 4th Ed. 2009	SARO List	SARA Registry	NRSI (2010)
PTERIDOPHYTES		FERNS & ALLIES				
Dryopteridaceae		Wood Fern Family				
Dryopteris	intermedia	Evergreen Wood Fern	S5			Х
Onoclea	sensibilis	Sensitive Fern	S5			Х
Lycopodiaceae		Clubmoss Family				
Lycopodiella	inundata	Nothern Bog Club-moss	S5			X
<u>GYMNOSPERMS</u>		CONIFERS				
Cupressaceae		Cedar Family				
Thuja	occidentalis	Eastern White Cedar	S5			Х
Dinasas		Dina Familia				
Pinaceae	halaanaa	Pine Family	S5			
Abies	balsamea	Balsam Fir				X
Larix	laricina	Tamarack	S5			
Picea	mariana	Black Spruce	S5			X
DICOTYLEDONS		DICOTS				
Asteraceae		Composite or Aster Family				
Eupatorium	maculatum ssp. maculatum	Spotted Joe-pye-weed	S5			Х
Euthamia	graminifolia	Flat-topped Bushy Goldenrod	S5			Х
Symphyotrichum	puniceum var. puniceum	Purple-stemmed Aster	S5			Х
Balsaminaceae		Touch-me-not Family				
Impatiens	capensis	Spotted Touch-me-not	S5			X
Betulaceae		Birch Family				
Alnus	incana spp. rugosa	Speckled Alder	S5			X
Caprifoliaceae		Honeysuckle Family				
Symphoricarpos	albus	Snowberry	S5			Х
Drocerocce		Sunday Family				
Droseraceae Drosera	rotundifolia	Sundew Family Round-leaved Sundew	S5			X

malfalla ann al du	Heath Family		
	li leath i ainny		
polifolia ssp. glaucophylla	Bog Rosemary	S5	Х
calyculata	Leatherleaf	S5	Х
polifolia	Bog Laurel	S5	Х
groenlandicum	Labrador-tea	S5	Х
oxycoccos	Small Cranberry	S5	X
	St. John's-wort Family		
fraseri	Fraser's St. John's-wort	S5	X
	Mare's-tail Family	 	
vulgaris	Common Mare's-tail	S5	Х
	Mint Family	+ + +	
uniflorus	Northern Water-horehound	S5	Х
galericulata	Hooded Skullcap	S5	Х
	Bladderwort Family		
intermedia	Flat-leaved Bladderwort	S5	Х
	Wax-myrtle Family		
gale	Sweet Gale	S5	Х
	Water-lily Family	+ +	
variegata		S5	Х
odorata	Fragrant Water-lily	S5 S5	X
+	Rose Family	+ + +	
idaeus ssp. melanolasius	Wild Red Raspberry	S5	Х
	Violet Family		
spp.	,		Х
<u> </u> <u>NS</u>	MONOCOTS		
	0. 1 5		
		05	
			X
	<u> </u>		X X
	groenlandicum oxycoccos fraseri vulgaris uniflorus galericulata intermedia gale variegata odorata idaeus ssp. melanolasius spp.	groenlandicum	St. John's-wort Family St. John's-wort Family Fraseri Fraser's St. John's-wort St. John's-wo

Eleocharis	spp.			X
Eriophorum	virginicum	Virginia Cotton-grass	S5	Х
Scirpus	spp.			X
Scirpus	cyperinus	Wool-grass	S5	X
Eriocaulaceae		Pipewort Family	+ + +	
Eriocaulon	aquaticum	Seven-angled Pipewort	S5	Х
Iridaceae		Iris Family	+ + +	
Iris	versicolor	Multi-coloured Blue-flag	S5	Х
Juncaceae		Rush Family	+ + +	
Juncus	brevicaudatus	Short-tailed Rush	S5	X
Juncus	effusus ssp. solutus	Soft Rush	S5	Х
Poaceae		Grass Family	+ +	
Agrostis	spp.			X
Calamagrostis	canadensis	Blue-joint Grass	S5	X
Glyceria	canadensis	Rattlesnake Grass	S4S5	X
Sparganiaceae		Bur-reed Family	+ + +	
Sparganium	americanum	Nuttall's Bur-reed	S4?	X
Sparganium	fluctuans	Floating Bur-reed	S4?	X
BRYOPHYTES			+ + +	
Sphagnaceae				
Sphagnum	spp.			X
Sphagnum	girgensohnii	Common Green Peat Moss	S5	X
Sphagnum	magellanicum	Midway Peat Moss	S5	X

Wildlife Observations

Includes tracks and signs

Common Name Scientific Name

Mammals

Moose Alces alces

Muskrat Ondatra zibethicus

Amphibians

Wood frog Rana sylvatica

Natural Resources Department BNR

BATCHEWANA FIRST NATION OF OJIBWAYS

RANKIN RESERVE 15 D GOULAIS BAY RESERVE 15 A OBADJIWAN RESERVE 15 E WHITEFISH ISLAND 15

> Administration Office: 236 Frontenac Street Rankin Reserve 15D Batchewana Territory, ON P6A 5K9 Ph: (705) 759-0914 / Fax: (705) 759-9171 www.batchewana.ca

November 17, 2010

Derek Goertz Natural Resource Solutions Inc. 111 Elgin Street Sault Ste. Marie, ON P6A 6L6

Dear Derek:

Re: Site Evaluation for the Wetlands of Bow Lakes Wetlands

As per your request, BNR Field Technician, David Sewell has completed a site evaluation for the Two Wetlands in the vicinity of the proposed Bow Lake Wind Farm within Batchewana First Nation.

I have attached Dave's report that we are hope is going to be helpful to you. We also request that you provide a copy to your employee and any other necessary agencies that are involved with this project.

Thank you very much for requesting BFN participation. If you have any questions or need more information please contact Dave Sewell or myself at 705-759-0914.

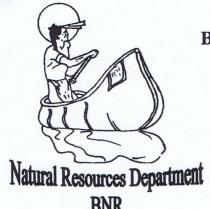
Miigwetch

Danny Sayers JR. (BNR Manager)

c.c. Chief and Council

Dave Sewell (BNR Field Technician)

Vortex



BATCHEWANA FIRST NATION OF OJIBWAYS

RANKIN RESERVE 15 D GOULAIS BAY RESERVE 15 A OBADJIWAN RESERVE 15 E WHITEFISH ISLAND 15

> Administration Office: 236 Frontenac Street Rankin Reserve 15D Batchewana Traditional Territory, ON P6A 5K9 Ph: (705) 759-0914 / Fax: (705) 759-9171 www.batchewana.ca

BNR Site Visit and Recommendations on Two Bow Lake Wetlands

On October 26, 2010 I visited the area of the Bow Lake Wind Farms to take a look at the wetlands in that area. There are two big pieces of wetland, one to the north of Bow Lake and, one to the south of Bow Lake. There are a few smaller pieces of wetland around Negick Lake which is within the Wind Farm area. From what I seen these wetlands play an important role to the surrounding area. These wetlands are nature's way of filtering the water which the animals drink (and sometimes humans). In this area there are a lot of animals such as the moose, deer; bear, wolves, foxes, beaver and a lot of other smaller animals. There is plenty of plant life around the wetlands that animals and aquatic life use as food and others use as their homes. There are also a lot of plants that we (BFN) use for medicines. The loss of these wetlands will have on huge burden on the BFN community and the surrounding area that may have irreversible damage.

Recommendations:

- I believe that these wetlands are very valuable to the surrounding area, environment, wild life and BFN reliance on the land and resources to sustain our cultural activities.
- The Bzhki Ziibi (Montreal River) has and continues to be valuable resources to BFN
 community members to access, for harvest and manage our Natural Resources that
 include but not limited to hunting, fishing, cultural sites.
- More BFN field work is needed to provide a complete evaluation and values of these wetlands.

It is my recommendation that Batchewana First Nation should be a part of any Environmental Evaluations from the beginning stages. It is very important to have BFN participation in order to understand and/or to receive appropriate data related to direct impacts and/or values. BNR field Technician is requesting that any future work in our Territory involves our participation which includes but not limited to; covering the cost associated with providing BFN involvement. It's essential for the government, Industry, and contractors to budget for First Nation participation because it becomes costly to our First Nation departments to complete these tasks in a manner that the community will accept. Without BFN reasonable participation in future Environmental Evaluations or Environmental Impacts studies, BFN will not endorse or except the final copies of those reports.

Dave Sewell BNR Field Technician

	Ques	stion Mark V	Vetland Compl	lex				
	W-41-	1 E1	E 4141		2002	1		
	wetiand	d Evaluation	Edition		2002	j		
	November 20, 2010							
		Com	ments					
4 1 15								
Attached Documents i	include:							
1) Summary of Wetlar	nd types, site types and d	lominant for	m areas					
2) Map of Moose Ant		ioniniunt for	in areas					
3) List of vegetation c								
4) Map of Interspersion								
	ler Wetland Complex Ca	tchment Ba	sin					
6) Vascular Plant List								
7) Fauna list								
8) Letter from Batchev	wana First Nation							
	1	Additional	Information					
0.00 1.137								
Official Name:	2002		tion Mark Wet	_		ī		
Evaluation Edition:	2002	Class:		Wetland 1		<u> </u>		
		h Last Evalı		N		er 20, 2010		
		h Last Upda	ted		Ma	r-12		
Special Planning Cons	siderations:					Scores		
						Biological:	111	
						Social:	73	
						ydrological:	148	
					Spec	al Features:	113	
						Overall:	444	
Submitted by:	Natural Re	esources Sol	utions Inc.					
Date:	N	March 9, 201	2.					

No	orth	nern Ontario Wetland Evaluation, Data	a and Scor	ing Reco	ord	(November 20, 2010)
		WETLAND DA	ATA AND	SCORI	NG RECORD	
						_
i)		WETLAND NAME:	Qı	ıestion N	Mark Wetland Co	omplex
ii)		MNR ADMINISTRATIVE REGION:	: Nort	h East	DISTRICT:	Sault Ste. Marie
		AREA OFFICE (if different from Dist	trict):			_
iii)		CONSERVATION AUTHORITY JUI	RISDICTI	ON:		
		(If not within a designated CA, check he	ere:	X		
iv)		COUNTY OR REGIONAL MUNICIPAL	PALITY:		District	t of Algoma
v)		TOWNSHIP:		Smils	ky Township	
vi)		LOTS & CONCESSIONS:			None	
		(attach separate sheet if necessary)				
vii)		MAP AND AIR PHOTO REFERENC	CES			
V = 1.						
	a)	Latitude: 47°10'49" Longitude	e: 84°29'4	11"		
	b)	UTM grid reference:	Zone: _Grid:E	16 68981	4	Block: <u>T</u> N 5228258
	c)	National Topographic Series:				
		map name(s)			Batchewana	
		map number(s)	41 N/1		edition 3	
		scale		1:5	0,000	
	d)	Aerial photographs: Date photo taken:			Scale:	
		Flight & plate numbers:	•	Google I	Earth Images	
		(attach separate sheet if necessary)				
	e)	Ontario Base Map numbers & scale				
		(attach separate sheets if necessary)				
				1		

Wetland Unit Number (for reference) Isolated	a) Single contiguous wetland area:		hectares		
Wetland Unit No.	b) Wetland complex comprised of	2	individu	al wetlands:	
Solated Palustrine Riverine Lacustri	Wetland Unit Number				Size of each
Wetland Unit No. 1 5.53 Wetland Unit No. 2 0.83 Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. Wetland Unit No. <td>(for reference)</td> <td></td> <td></td> <td></td> <td></td>	(for reference)				
Wetland Unit No. Wetland Unit Totals: O.00 6.36 0.00 0.00 At the time this evaluation was undertaken, MNR's recommendation with respect to wetlands		Isolated		Riverine	Lacustrin
Wetland Unit No. Wetland Unit Totals: O.00 6.36 0.00 0.00 At the time this evaluation was undertaken, MNR's recommendation with respect to wetlands					_
Wetland Unit No. Wetland Unit Totals: O.00 6.36 0.00 0.00 CAttach additional sheets if necessary) TOTAL WETLAND SIZE At the time this evaluation was undertaken, MNR's recommendation with respect to wetlands	Wetland Unit No. 2		0.83		_
Wetland Unit No. Wetland U					_
Wetland Unit No. Wetland U					_
Wetland Unit No. Wetlan					_
Wetland Unit No. Wetlan					_
Wetland Unit No. Wetlan					_
Wetland Unit No. Totals: O.00 O.00 O.00 O.00 O.00 Attach additional sheets if necessary) TOTAL WETLAND SIZE O.00 D.00 At the time this evaluation was undertaken, MNR's recommendation with respect to wetlands					_
Wetland Unit No. Wetland Unit Totals: 0.00 6.36 0.00 0.00 (Attach additional sheets if necessary) TOTAL WETLAND SIZE 6.36 ha					_
Wetland Unit No. Wetlan					_
Wetland Unit No. Wetland Unit Totals: O.00 6.36 0.00 0.00 0.00 Attach additional sheets if necessary) TOTAL WETLAND SIZE 6.36 ha c) Brief documentation of reasons for including any areas less than 2 ha in size: At the time this evaluation was undertaken, MNR's recommendation with respect to wetlands					_
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Wetland Unit No. TOTAL WETLAND SIZE Brief documentation of reasons for including any areas less than 2 ha in size: At the time this evaluation was undertaken, MNR's recommendation with respect to wetlands					_
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Wetland Unit No. Wetland Unit Totals: O.00 O.00 O.00 TOTAL WETLAND SIZE At the time this evaluation was undertaken, MNR's recommendation with respect to wetlands					_
Wetland Unit No. Wetland Unit Totals: O.00 O.00 (Attach additional sheets if necessary) TOTAL WETLAND SIZE Brief documentation of reasons for including any areas less than 2 ha in size: At the time this evaluation was undertaken, MNR's recommendation with respect to wetlands					
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Wetland Unit No. Wetland Unit Totals: O.00 O.00 (Attach additional sheets if necessary) TOTAL WETLAND SIZE Brief documentation of reasons for including any areas less than 2 ha in size: At the time this evaluation was undertaken, MNR's recommendation with respect to wetlands					
Wetland Unit No. Wetland Unit Totals: O.00 6.36 0.00 0.00 0.00 CAttach additional sheets if necessary) TOTAL WETLAND SIZE 6.36 ha c) Brief documentation of reasons for including any areas less than 2 ha in size: At the time this evaluation was undertaken, MNR's recommendation with respect to wetlands					_
Wetland Unit Totals: (Attach additional sheets if necessary) TOTAL WETLAND SIZE 6.36 ha c) Brief documentation of reasons for including any areas less than 2 ha in size: At the time this evaluation was undertaken, MNR's recommendation with respect to wetlands					_
(Attach additional sheets if necessary) TOTAL WETLAND SIZE 6.36 ha c) Brief documentation of reasons for including any areas less than 2 ha in size: At the time this evaluation was undertaken, MNR's recommendation with respect to wetlands					_
TOTAL WETLAND SIZE 6.36 ha c) Brief documentation of reasons for including any areas less than 2 ha in size: At the time this evaluation was undertaken, MNR's recommendation with respect to wetlands	Wetland Unit Totals:	0.00	6.36	0.00	0.00
c) Brief documentation of reasons for including any areas less than 2 ha in size: At the time this evaluation was undertaken, MNR's recommendation with respect to wetlands	(Attach additional sheets if necessar	ary)			
c) Brief documentation of reasons for including any areas less than 2 ha in size: At the time this evaluation was undertaken, MNR's recommendation with respect to wetlands					
c) Brief documentation of reasons for including any areas less than 2 ha in size: At the time this evaluation was undertaken, MNR's recommendation with respect to wetlands	TOTAL WETLAND SIZE			6.36	ha
At the time this evaluation was undertaken, MNR's recommendation with respect to wetlands			_		
At the time this evaluation was undertaken, MNR's recommendation with respect to wetlands	c) Brief documentation of reasons fo	r including any a	areas less than 2 h	a in size:	
		2 ,			
assessed for the purpose of an evaluation of significance under a Natural Heritage Assessment was to include all wetland areas within the evaluation, regardless of size.					Assessment

1.0 BIOLOGICAL COMPONENT

1.1 PRODUCTIVITY

1.1.1 GROWING DEGREE-DAYS/SOILS

GROWING I	DEGREE DAYS	SOIL	S	
(check one)		Estim	ated Fraction	onal Area
1)	<1600	0.1	00	clay/loam
2)	1600-2000	0.2	.10	silt/marl
3) X	2000-2400			limestone
4)	2400-2800			sand
5)	2800-3000	0.1	10	humic/mesic
6)	>3000	0.5	90	fibric
				granite

SCORING:

Growing	Clay-	Silt-	Lime-	Sand	Humic-	Fibric	Granite
Degree-	Loam	Marl	stone		Mesic		
Days							
<1600	12	11	9	7	7	6	4
1600-2000	15	13	11	9	8	7	5
2000-2400	18	15	13	11	9	8	7
2400-2800	22	18	15	13	11	9	7
2800-3000	26	21	18	15	13	10	8
>3000	30	25	20	18	15	12	9

(maximum score 30; if wetland contains more than one soil type,

evaluate based on the fractional area)

Steps required for evaluation: (maximum score 30 points)

- 1. Select GDD line in evaluation table applicable to your wetland;
- 2. Determine fractional area of the wetland for each soil type;
- 3. Multiply fractional area of each soil type by score;
- 4. Sum individual soil type scores (round to nearest whole number).

In wetland complexes the evaluator should aim at determining the percentage of area occupied by the categories for the complex as a whole.

Score		
18	clay/loam	1.80
15	silt/marl	3.15
	limestone	0.00
	sand	0.00
9	humic/mesic	0.99
8	fibric	4.72
	granite	0.00

Final Score Growing Degree-Days/Soils (maximum 30 points)

Northern Ontario Wetland Evaluation Data and S	Scoring Record (November 20, 2010)
1.1.2 WETLAND TYPE (Fractional Area = area of	of wetland type/total wetland area)
Fractional Area	Score
Bog Fen 0.59	x 3 x 6 0.00 3.54
Swamp 0.11 Marsh 0.30	x 8 0.88 x 15 4.50
	Wetland type score (maximum 15 points)
1.1.3 SITE TYPE (Fractional Area = area of site	type/total wetland area)
Fraction	ional Area Score
Isolated Palustrine (permanent or	x 1 = 0.000
intermittent flow) 1.0 Riverine	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Riverine (at rivermouth) Lacustrine (at rivermouth	$ \begin{array}{rcl} x & 5 & = & 0.000 \\ x & 5 & = & 0.000 \end{array} $
Lacustrine (on enclosed bay, with barrier beach)	$x \ 3 = 0.000$
Lacustrine (exposed to lake)	x = 2 = 0.000 Sub Total: 2.000
	Site Type Score (maximum 5 points) 2
1.2 BIODIVERSITY	
1.2.1 NUMBER OF WETLAND TYPES	
(Check only one)	Score
1) one two	9 points 13
3) X three four	20 30
	Wetland Types Score (maximum 30 points) 20
Number of	wettand Types Score (maximum 50 points)
	4

1.2.2 VEGETATION COMMUNITIES

Attach a separate sheet listing community (map) codes, vegetation forms and dominant species. Use the form on the following page to record percent area by dominant vegetation form. This information will be used in other parts of the evaluation.

Communities should be grouped by number of forms. For example, 2 form communities might appear as follows:

2 forms

Code	Forn	ns	Dom	inant Species	_		
M6	re,	ff	re,	Typha latifolia;	ff,	Lemna minor,	Wolffia
S1	ts,	gc	ts,	Salix discolor;	gc,	lmpatiens capens	sis, Thelypteris palustris

Note that the dominant species for each form are separated by a semicolon. The dominant species (maximum of 2) within a form are separated by commas.

Scoring:

Total # of communities	Total # of communities	Total # of communities
with $1-3$ forms = 40	with $4-5$ forms = 23	with 6 or more forms $= 1$
1 = 1.5 points	1 = 2 points	1 = 3 points
2 = 2.5	2 = 3.5	2 = 5
3 = 3.5	3 = 5	3 = 7
4 = 4.5	4 = 6.5	4 = 9
5 = 5	5 = 7.5	5 = 10.5
6 = 5.5	6 = 8.5	6 = 12
7 = 6	7 = 9.5	7 = 13.5
8 = 6.5	8 = 10.5	8 = 15
9 = 7	9 = 11.5	9 = 16.5
10 = 7.5	10 = 12.5	10 = 18
11 = 8	11 = 13	11 = 19
+.5 each additional	+.5 each additional	+ 1 each additional
community = 4.5	community = 2.0	community =

e.g., a wetland with 3 one form communities 8 six form communities would score:

4 two form communities

12 four form communities and

6+13.5+15=34.5=35 points

Vegetation Communities Score (maximum 45 points)

Northern Ontario Wetland Ev	(November 20, 2010)	
Wetland Name:	Question Mark Wetland Comp	plex
Wetland Size (ha):	6.36	
Vegetation Form	% area in which form is dominant	_
h		
С	58.96	
dh		
dc		
ts		
ls	10.69	
ds		
gc		
m		
ne	22.80	
be		
re		
ff		
f		
su	7.55	
u (unvegetated)		
Total = 100%	100.00	
	6	

Northern Ontari	o Wetland Evaluation Data and Scoring Record	(November 20, 2010)
	F SURROUNDING HABITAT	
(Check all appropriate	e items(1))	
	recent burn (< 5 yr)	
	abandoned agricultural land	
	utility corridor	
X	deciduous forest	
	recent cutover or clearcut (<5 yr)	
X	coniferous forest	
X	mixed forest (at least 25% conifer and 75% deciduous or vice versa))
	crops	
	abandoned pits and quarries	
	pasture	
	ravine	
	fence rows	
X	open lake or deep river	
X	creek flood plain	
X	rock outcrop	
Div	ersity of Surrounding Habitat Score (1 for each, maximum 7 point	(s) 6
1.2.4 PROXIMITY T	O OTHER WETLANDS	
	propriate category only)	Scoring
, 11		C
1) 8	Hydrologically connected by surface water to other wetlands	
	(different dominant wetland type) or open lake or river	
	within 1.5 km	8 points
2)	Hydrologically connected by surface water to other wetlands	
	(same dominant wetland type) within 0.5 km	8
2)	Hadrala de la companya de de la conferencia de contra de	
3)	Hydrologically connected by surface water to other wetlands	
	(different dominant wetland type),or open lake or river from 1.5 to 4 km away (Second Marsh Wetland)	5
	1.5 to 4 km away (Second Maish Wetland)	J
4)	Hydrologically connected by surface water to other wetlands	
T)	(same dominant wetland type) from 0.5 to 1.5 km away	5
	(Same dominant wettand type) from 0.5 to 1.5 km away	J
5)	Within 0.75 km of other wetlands (different dominant wetland type)
- /	or open lake or river, but not hydrologically connected by	,
	surface water	5
6)	Within 1 km of other wetlands, but not hydrologically	
	connected by surface water	2
7)	No wetland within 1 km	0
Pro	ximity to other Wetlands Score (Choose one only, maximum 8 points)	nts) 8
	7	

Northern Ontario Wetland Evaluation Data and Scorin	g Record (November	r 20, 2010)
1.2.5 INTERSPERSION		
Number of Intersections		
(Check one)	Score	
1) 26 or less	3	
2) 27 to 40	6	
3) 41 to 60 X	9	
4) 61 to 80	12	
5) 81 to 100	15	
6) 101 to 125	18	
7) 126 to 150	21	
8) 151 to 175	24	
9) 176 to 200	27	
10) >200	30	
Interspersion Score (C	hoose one only maximum 30 points)	9
1.2.6 OPEN WATER TYPES		
Downsonatty flooded.		
Permanently flooded: (Check one)	Score	
(Check one)	Score	
1) type 1	8	
2) type 2	8	
3) type 3	14	
4) type 4	20	
5) X type 5	30	
6) type 6	8	
7) type 7	14	
8) type 8	3	
9) no open water	0	
Open Water Type Score (Ch	noose one only maximum 30 points)	30
8		

(November 20, 2010)

1.3 SIZE

6.36 hectares

80 Subtotal for Biodiversity

Size Score (Biological Component) (maximum 50 points)

9

Evaluation Table Size Score (Biological component)

Wetland	Total Score for Biodiversity Subcomponent									
size (ha)	<37	37-47	48-60	61-72	73-84	85-96	97- 108	109- 120	121- 132	>132
<20 ha	1	5	7	8	9	17	25	34	43	50
20-40	5	7	8	9	10	19	28	37	46	50
41-60	6	8	9	10	11	21	31	40	49	50
61-80	7	9	10	11	13	23	34	43	50	50
81-100	8	10	11	13	15	25	37	46	50	50
101-120	9	11	13	15	18	28	40	49	50	50
121-140	10	13	15	17	21	31	43	50	50	50
141-160	11	15	17	19	23	34	46	50	50	50
161-180	13	17	19	21	25	37	49	50	50	50
181-200	15	19	21	23	28	40	50	50	50	50
201-400	17	21	23	25	31	43	50	50	50	50
401-600	19	23	25	28	34	46	50	50	50	50
601-800	21	25	28	31	37	49	50	50	50	50
801-1000	23	28	31	34	40	50	50	50	50	50
1001-1200	25	31	34	37	43	50	50	50	50	50
1201-1400	28	34	37	40	46	50	50	50	50	50
1401-1600	31	37	40	43	49	50	50	50	50	50
1601-1800	34	40	43	46	50	50	50	50	50	50
1801-2000	37	43	47	49	50	50	50	50	50	50
>2000	40	46	50	50	50	50	50	50	50	50

Evaluation Data and Sco	ring Record	(November 20, 2	2010)
2.0 SOCIAL C	COMPONENT		
LUABLE PRODUCTS	_		
e. dominant form is h or c	. Note that this is <u>no</u>	ot wetland size. (Check one	
	Score		
5 ha	0		
5 ha	4		
	6		
) ha	14		
Field Observatio	ns (NRSI 2010)		
Wood Products Sco	re (Score one only,	maximum 14 points)	0
		Score (Choose one)	
1)	X		
2)	21	0	
Field Observatio	ns (NRSI 2010)		
Lowbusl	1 Cranberry Score	(maximum 2 points)	2
		_	
45			e)
	V	_	
2)	Λ	Ü	
Field Observatio	ns (NRSI 2010)		
Wild Ric	ce Score (maximum	10 points)	0
		_	
10	0		
	2.0 SOCIAL C LUABLE PRODUCTS e. dominant form is h or c ha ha ha ha ha ha ha ha Tield Observation Wood Products Scot 1) 2) Field Observation Lowbush 1) 2) Field Observation Wild Rich	2.0 SOCIAL COMPONENT LUABLE PRODUCTS e. dominant form is h or c. Note that this is not start the start of the content of the	2.0 SOCIAL COMPONENT LUABLE PRODUCTS e. dominant form is h or c. Note that this is not wetland size. (Check one Score 5 ha 0 5 ha 4 0 ha 6 0 ha 8 0 ha 11 0 ha 14 Field Observations (NRSI 2010) Wood Products Score (Score one only, maximum 14 points) Score (Choose one) 1) X 2 points 0 Field Observations (NRSI 2010) Lowbush Cranberry Score (maximum 2 points) Score (Choose one 10 points) 1) Score (Choose one 10 points)

N. d. O. C. W. d.	1E 1 (1.0	' D 1		OI 1 0/	0. 201/	<u> </u>
Northern Ontario Wetlan	nd Evaluation Data	and So	coring Record		(November 20	0, 2010))
2.1.4 COMMERCIAL FISH (BAI	Γ FISH AND/OR C	COARS	SE FISH)				
(Check one)			,		Score (Cho	ose on	e)
Present	1)		X		12 points		
Absent	2)				0		
Source of information: No f	ish observed, howe	ver, fi	sh habitat is prese	ent.			
	Com	mercia	al Fish Score (ma	aximum	12 points)		12
2.1.5 FURBEARERS							
(Consult Appendix 9)							
(Compare 1 appendix 3)							
Name of furbearer		Sourc	e of information				
1) M. L.		-		AIDGI	2010)		
1) Muskrat	3		ield Observation	s (NRSI	2010)		
2)							
3)							
4)							
5)							
Scoring: 3 points for each species	mavimum 12						
Scoring: 3 points for each species.	maximum 12		Furbearer Scor	e (maxii	mum 12 points)		3
Scoring: 3 points for each species.	maximum 12		Furbearer Scor	e (maxiı	mum 12 points)		3
Scoring: 3 points for each species. 2.2 RECREATIONAL ACTIVIT			Furbearer Score	e (maxii	mum 12 points)		3
			Furbearer Scor	e (maxii	mum 12 points)		3
	ΠES		Furbearer Score	e (maxii	mum 12 points)		3
2.2 RECREATIONAL ACTIVITATION A	Type of Wetl		ssociated Use				3
	ΠES			nent/	mum 12 points) Fishing		3
2.2 RECREATIONAL ACTIVITATION A	Type of Wetl		ssociated Use Nature Enjoyn	nent/			3
2.2 RECREATIONAL ACTIVITATION Intensity of Use	Type of Wetl Hunting		ssociated Use Nature Enjoyn Ecosystem St	nent/	Fishing		3
2.2 RECREATIONAL ACTIVITATION Intensity of Use High Moderate Low	Type of Wetl Hunting 40 points		ssociated Use Nature Enjoyn Ecosystem St 40 points	nent/ udy	Fishing 40 points 20 8		3
2.2 RECREATIONAL ACTIVITATION OF USE Intensity of Use High Moderate Low Not possible/NotKnown	Type of Wetl Hunting 40 points 20	and-A	SSOCIATED USE Nature Enjoyn Ecosystem St 40 points 20	nent/ udy 0	Fishing 40 points 20	0	3
Intensity of Use High Moderate Low Not possible/NotKnown Totals	Type of Wetl Hunting 40 points 20 8 0	and-A	SSOCIATED USE Nature Enjoyn Ecosystem St 40 points 20 8 0	nent/ udy 0	Fishing 40 points 20 8 0	0	3
Intensity of Use High Moderate Low Not possible/NotKnown Totals (score one level for each of the	Type of Wetl Hunting 40 points 20 8 0	and-A	SSOCIATED USE Nature Enjoyn Ecosystem St 40 points 20 8 0	nent/ udy 0	Fishing 40 points 20 8 0	0	3
Intensity of Use High Moderate Low Not possible/NotKnown Totals	Type of Wetl Hunting 40 points 20 8 0	and-A	SSOCIATED USE Nature Enjoyn Ecosystem St 40 points 20 8 0	nent/ udy 0	Fishing 40 points 20 8 0	0	3
Intensity of Use High Moderate Low Not possible/NotKnown Totals (score one level for each of the	Type of Wetl Hunting 40 points 20 8 0	and-A	Nature Enjoyn Ecosystem St 40 points 20 8 0	ment/ udy 0 0	Fishing 40 points 20 8 0 mum score 80 po	0	3
Intensity of Use High Moderate Low Not possible/NotKnown Totals (score one level for each of the	Type of Wetl Hunting 40 points 20 8 0	and-A	SSOCIATED USE Nature Enjoyn Ecosystem St 40 points 20 8 0	ment/ udy 0 0	Fishing 40 points 20 8 0 mum score 80 po	0	3
Intensity of Use High Moderate Low Not possible/NotKnown Totals (score one level for each of the	Type of Wetl Hunting 40 points 20 8 0 me three wetland us Hunting: Possi	and-A 8 8 es; scc	Nature Enjoyn Ecosystem St 40 points 20 8 0	nent/ udy 0 0 ve; maxin	Fishing 40 points 20 8 0 mum score 80 po	0	3
Intensity of Use High Moderate Low Not possible/NotKnown Totals (score one level for each of the	Type of Wetl Hunting 40 points 20 8 0 ne three wetland us Hunting: Possi Nature: Unlik	and-A 8 8 es; sco	Nature Enjoyn Ecosystem St 40 points 20 8 0 ores are cumulative wever no signs of the to remote location	nent/ udy 0 0 ve; maxin	Fishing 40 points 20 8 0 mum score 80 po	0	3
Intensity of Use High Moderate Low Not possible/NotKnown Totals (score one level for each of the	Type of Wetl Hunting 40 points 20 8 0 ne three wetland us Hunting: Possi Nature: Unlik	and-A 8 8 es; sco	Nature Enjoyn Ecosystem St 40 points 20 8 0 ores are cumulativ	nent/ udy 0 0 ve; maxin	Fishing 40 points 20 8 0 mum score 80 po	0	3
Intensity of Use High Moderate Low Not possible/NotKnown Totals (score one level for each of the	Type of Wetl Hunting 40 points 20 8 0 ne three wetland us Hunting: Possi Nature: Unlik	and-A 8 8 es; sco	Nature Enjoyn Ecosystem St 40 points 20 8 0 ores are cumulative wever no signs of the to remote location	nent/ udy 0 0 ve; maxin	Fishing 40 points 20 8 0 mum score 80 po	0	3
Intensity of Use High Moderate Low Not possible/NotKnown Totals (score one level for each of the	Type of Wetl Hunting 40 points 20 8 0 The three wetland us Hunting: Possi Nature: Unlik Fishing: Unlik	and-A 8 8 es; scc	Nature Enjoyn Ecosystem St 40 points 20 8 0 ores are cumulative wever no signs of the to remote location	nent/ udy 0 0 0 ve; maxim	Fishing 40 points 20 8 0 mum score 80 po	0	3

Northern Ontario Wetland Evaluation	n Data and Scoring Record (November 20, 2010))
2.3 LANDSCAPE AESTHETICS		
2.3.1 DISTINCTNESS		
(Check one)	Score (Choose one)	
Clearly distinct 1)	3 points	
Indistinct 2) X	0	
Land	dscape Distinctness Score (maximum 3 points)	0
2.3.2 ABSENCE OF HUMAN DISTURBANC	<u>CE</u>	
(Check one)	Score (Choose one)	
Human disturbances absent or nearly so	1) 7 points	
One or several localized disturbances	2) <u>X</u> 4	
Moderate disturbance; localized water pol		
Wetland intact but impairment of ecosyste		
intense in some areas	4)1	
Extreme ecological degradation, or water		
severe and widespread	5)0	
Common of informations — Doublings		
	y close to wetland boundary - at one point the road into wetland.	
	f Human Disturbance Score (maximum 7 points)	4
Absence of	Truman Disturbance Score (maximum / points)	4
2.4 EDUCATION AND PUBLIC AWARE	NESS	
2.4 EDGCHTIGHTIAND I CDEIC HWIRE		
2.4.1 EDUCATIONAL USES		
(Check one)	Score (Choose one)	
Frequent 1)	20 points	
Infrequent 2)	12	
	X 0	
,		
Source of information:		
	Educational Uses Score (maximum 20 points)	0
2.4.2 FACILITIES AND PROGRAMS	<u>-</u>	
(check one)	Score (Choo	se one)
Staffed interpretation centre	1) 8 points	
No interpretation centre or staff but a syst		
self-guiding trails or brochures available	2) 4	
Facilities such as maintained paths (e.g., v	•	
boardwalks, boat launches or observation		
but no brochures or other interpretation	3)2	
No facilities or programs	4) <u>X</u> 0	
Source of information:	Field Surveys (NRSI 2010)	
Facil	ities and Programs Score (maximum 8 points)	0
	12	

Northern Ontario Wetland Eval	uation Data and So	coring	Record	(1)	November 20, 2010))	
2.4.3 RESEARCH AND STUDIES							
(check appropriate spaces)					Score		
Long term research has been done					12 points		
Research papers published in refere	ed scientific				12 points		
journal or as a thesis					10		
One or more (non-research) reports	have been written						
on some aspect of the wetland 's flo							
hydrology etc.	100110				5		
No research or reports			X		0		
1							
Attach list of known reports by above	ve categories						
Dosoarah and St	udies Score (Score	o is on	mulativa mavi	mum 13	2 noints)	0	\
Research and St	udies Score (Score	e is cu	muiauve, maxi	IIIUIII 12	2 points)	U	
2.5 PROXIMITY TO AREAS OF H	UMAN SETTLEN	MENT	<u>r </u>				
Circle the highest applicable score							
Distance of wetland from	1)		2) popula	ation	3) popula	ation	
settlement	population> 10.	.000	2,500 -1		<2,500 or		ge
	populations 10	,000	2,000	. 0,000	comm	-	50
1) Within or adjoining	40 points		26		16	1	
settlement	10 points		20		10		
2) 0.5 to 10 km from settlement	26		16		10		
3) 10 to 60 km from settlement	12		8		4		X
4) >60 km from settlement	5		2		0		- 21
5) >100 km from settlement	0		0		0		
ey / 100 km from Sectional	Ü	0	Ü	0		_	4
		<u> </u>			<u> </u>		•
Name of settlement:	Montreal R	iver H	larbour, ON				
Prox	imity to Human S	ettlen	nent Score (max	imum 4	40 points)	4	ļ
					~		
2.6 OWNERSHIP (FA= fraction Are	ea)				Score		
	1.						
FA of wetland in public or private of				10	0.00		
held under contract or in trust for w			1.00		= 0.00		
FA of wetland area in public owners			1.00 x		= 8.00		
FA of wetland area in private owner	siip,not as above		X	4	= 0.00		
Source of information: OM	INR Critical Value	s Map	(December 21,	2009)			
		Own	ership Score (m	aximun	n 10 points)	8	8
	13						

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2.7 SIZE

6.36 hectares 2

29 Subtotal for Social

Evaluation Table for Size Score (Social Component)

Evaluation	Table	TOI SIZE SCO	ie (Sociai C	omponent)						
Wetland Size (ha)	Total for Size Dependent Score									
2327 (333)	<31	31-45	46-60	61-75	76-90	91-105	106-109	121-135	136-150	>150
<2 ha	1	2	4	8	10	12	14	14	14	15
2 - 4ha	1	2	4	8	12	13	14	14	15	16
5 - 8ha	2	2	5	9	13	14	15	15	16	16
9 - 12ha	3	3	6	10	14	15	15	16	17	17
13-17	3	4	7	10	14	15	16	16	17	17
18-28	4	5	8	11	15	16	16	17	17	18
29-37	5	7	10	13	16	17	18	18	19	19
38-49	5	7	10	13	16	17	18	18	19	20
50-62	5	8	11	14	17	17	18	19	20	20
63-81	5	8	11	15	17	18	19	20	20	20
82-105	6	9	11	15	18	18	19	20	20	20
106-137	6	9	12	16	18	19	20	20	20	20
138-178	6	9	13	16	18	19	20	20	20	20
179-233	6	9	13	16	18	20	20	20	20	20
234-302	7	9	13	16	18	20	20	20	20	20
303-393	7	9	14	17	18	20	20	20	20	20
394-511	7	10	14	17	18	20	20	20	20	20
512-665	7	10	14	17	18	20	20	20	20	20
666-863	7	10	14	17	19	20	20	20	20	20
864-1123	8	12	15	17	19	20	20	20	20	20
1124-1460	8	12	15	17	19	20	20	20	20	20
1461-1898	8	13	15	18	19	20	20	20	20	20
1899-2467	8	14	16	18	20	20	20	20	20	20
>2467	8	14	16	18	20	20	20	20	20	20

Total Size Score (Social Component)

2

(November 20, 2010)

ABORIGINAL AND CULTURAL HERITAGE VALUES

Either or both Aboriginal or Cultural Values may be scored. However, the maximum score permitted for 2.8 is 30 points. Attach documentation.

2.8.1 ABORIGINAL VALUES

Full documentation of sources must be attached to the data record.

1)	Significant	X	=	30 points
2)	Not Significant		=	0
3)	Unknown		=	0
	Total:	30		

2.8.2 CULTURAL HERITAGE

1)	Significant		=	30 points
2)	Not Significant	X	=	0
3)	Unknown		=	0
	Total:	0		

Aboriginal Values/Cultural Heritage Score (maximum 30 points)

Batchewana First Nation (BFN) was contacted on October 19, 2010 and asked about the significance of this wetland in terms of aboriginal values. A response was received on November 17, 2010 (letter appended), which states the wetlands are "very valuable to the surrounding area, environment, wild life and BFN reliance on the land and resources to sustain our cultural activities." (Dave Sewell, BNR Field Technician)

(November 20, 2010)

3.0 HYDROLOGICAL COMPONENT

3.1 FLOOD ATTENUATION

If the wetland is a complex including isolated wetlands, apportion the l00 points according to area. For example if 10 ha of a l00 ha complex is isolated, the isolated portion receives the maximum proportional score of 10. The remainder of the wetland is then evaluated out of 90.

	Step 1:	If wetland is entirely Isolated	go directly to Step 5.
--	---------	---------------------------------	------------------------

If wetland is lacustrine and the ratio of wetland area: lake area is <0.1, or wetland is riverine on the St. Mary's River, go to Step 5

All other wetlands, go through steps 2, 3, 4 and 5.

Step 2: Determination of Upstream Detention Factor (DF)

(a)	Wetland area (ha)	6.36	
(b)	Total area (ha) of upstream detention are	20.50	
	(include the wetland itself)		
(c)	Ratio of (a):(b)		0.31
(d)	Upstream detention factor: (c) $\times 2 =$	0.62	0.62
	(maximum allowable factor = 1)		

Step 3: Determination of Peak Flow Attenuation Factor (AF)

(a)	Wetland area (ha)			6.36	
(b)	Size of catchment basin (ha) upstream of				
	(include wetland itself in catchment area)	241.08			
(c)	Ratio of (a):(b)	Ratio of (a):(b)			
(d)	Wetland attenuation factor: (c) $\times 10 =$	0.26		0.26	
	(maximum allowable factor = 1)				

Step 4: Determination of Wetland Surface Form Factor (FF)

From the list below, select the surface form which best describes the wetland.

	Factor	
Flooded with little or no aquatic vegetation		0
Flooded but with submergent, emergent or floating vegetation		0.2
Flat (lawn) vegetation (typical of fens)	X	0.5
Hummock-depression microtopography		0.7
Patterned (e.g., string bog, ribbed fen)		1
Surface Form Factor (FF)	0.5	

(Maximum allowable factor = 1)

Northern Ontario Wetland Evaluation Data and Scoring Record Step 5: 1. Wetland is entirely Isolated 2. Wetland is lacustrine and the ratio of

wetland area: lake area is <0.1

0 points

100 points

3. Wetland is riverine along the St. Mary's River

0 points

4. For all other wetlands*, calculate as follows:

a)	Upstream Detention Factor (DF) (Step 2)	0.62
b)	Wetland Attenuation Factor (AF) (Step 3)	0.26
c)	Surface Form Factor (FF) (Step 4)	0.50

 $[(DF + AF + FF)/3] \times 100*$ 46

*Unless wetland is a complex including isolated portions -- see above

Total Flood Attenuation Score (maximum 100 points)

GROUND WATER RECHARGE

3.2.1 SITE TYPE

(a) Wetland > 50% lacustrine (by area) or located on the

St. Mary's River

Score = 0

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Wetland not as above. Calculate final score as follows: (b)

(FA= area of site type/total area of wetland)

1	FA of isolated or palustrine wetland $x = 20 =$	20.00
0	FA of riverine wetland $x = 5$	0.00
0	FA of lacustrine wetland (wetland $<50\%$ lacustrine) $x = 0$	0.00

Site Type Score: (maximum 20 points)

3.2.2 SOILS

EVALUATION:

Dominant Wetland Type	Sand, loam, gravel, till		Clay or bedrock	
Lacustrine or on St. Mary's River	0		0	
Isolated	10		5	
Palustrine	7		4	X
Riverine (not on St. Mary's River)	5		2	
Totals		0		4

Hydrological Soil Class Score (maximum 10 points)

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3.3 DOWNSTREAM WATER QUALITY IMPROVEMENT

3.3.1 WATERSHED IMPROVEMENT FACTOR

Calculation of Watershed Improvement Score is based upon the fractional area (FA) of each site type within the wetland. FA = area of site type/total area of the wetland.

Site Type	<u>Improv</u>	vement Fact	or (IF)	
Isolated	FA		X	0.5 =	0.00
Riverine	FA		X	1 =	0.00
Palustrine with no inflow	FA	0.13	X	0.7 =	0.09
Palustrine with inflows	FA	0.87	X	1 =	0.87
Lacustrine on lake shoreline	FA		X	0.2 =	0.00
Lacustrine at lake inflow or outflow	FA		X	1 =	0.00

Watershed Improvement Score (IF x 30) (maximum = 30)

29

3.3.2 ADJACENT AND WATERSHED LAND USE

EVALUATION

Step 1: Determination of Maximum Initial Score

Wetland on the Great Lakes or St. Mary's River (Go to Step 5a)

X All other wetlands (Go through steps 2, 3,4 and 5b)

Step 2: Determination of Broad Upslope Land Use (BLU)

Assess broad upslope land uses within the previous 5 years, agriculture, or other activities which alter the natural vegetation cover in an extensive manner.

Choose one		Score
>50% of catchment basin		20
20-50% of catchment basin		14
<20% of catchment basin	X	4

Score for BLU

4

Step 3: Determination of Linear Upslope Land Uses (LUU)

Assess linear upslope uses (LUU) e.g., roads, railways, hydro corridors, pipelines, etc., crossing the upslope catchment within 200m of the wetland boundary.

Choose the highest only	Score
Major corridor*	15
Secondary corridor	11
Tertiary corridor	6
Temporary or abandoned X	3
None	0

Score for LUU

3

Major, secondary and tertiary roads are those that are indicated as such on the provincial highways maps. Major hydro corridors are trunk lines coming directly from a generating station. Major pipelines are transcontinental lines. Secondary corridors are regional distribution lines (i.e. multi-cable hydro corridors not emanating directly from a generating station or regional gas distribution lines). Tertiary corridors are single hydro lines or local gas distribution lines (i.e. to domestic users).

	Northern Ontario	Wetland Evaluation Data	and Scoring Rec	ord	(November 2	0, 2010)	
plants, i	point source (PS) lan- major aggregate oper	of Point-source Land Used uses producing industriations (but not small pits the land use is located less to	al effluents such a use for local road	construction	n), etc. Score as	er	
	Present Not present	Score 15 0	Score for PS	0			
		otal score for Adjacent and Lakes or St. Mary's Riveralculate as follows:		Land Use			
			Final Score BL	U+LUU+PS	17	<u> </u>	
C	TEGETATION FORM	at best describes the					
T E	rees, shrubs or herbs mergents, submergen ittle or no vegetation	(h, c, ts, ls, gc) ts (ne, re, be, f, ff, su)	X	Scor 8 po 10 0			
2.4	GA DDOM GDW		Vegetation Forn	n Score (ma	ximum 10 points)		8
3.4	CARBON SINI	<u> </u>					
C	hoose the category th	at best describes the wetl	and				
1)	Wetland a bog o	r fen with >50% organic	soils		15 points		
2)	-	anic soils occupying 10 to nainly mineral or undesig d type)			6		
3)	Marshes and swa	amps with >50% organic	soil	X	9		
4)) Wetland with les	s than 10% of soils organ	nic		0		
			Carbon Sink So	core (maxim	um 15 points)	9	
			19				

Northern Ontario Wetland Evaluation Data and Scoring Record	Northern	Ontario	Wetland	Evaluation	Data and	Scoring Record
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3.5 SHORELINE EROSION CONTROL

From the wetland vegetation map determine the <u>dominant</u> vegetation type within the erosion zone for <u>lacustrine and riverine site type areas only.</u> Score according to the factors listed below.

Step 1:

Score

X Wetland entirely isolated or palustrine
Any part of the Wetland riverine or lacustrine
(proceed to Step 2)

0

Step 2:

Choose the one characteristic that best describes the shoreline vegetation (see text for a definition of shoreline)

			Score
1)		Trees and shrubs	15
2)		Emergent vegetation	8
3)		Submergent vegetation	6
4)		Other shoreline vegetation	3
5)	_	No vegetation	0

Shoreline Erosion Control Score (maximum 15 points)

0

3.6 GROUNDWATER DISCHARGE

(Circle the characteristics that best describe the wetland being evaluated and then sum the scores)

Category	Catchment Ir				Interaction			
Wetland type	Bog = 0		Swamp/Marsh = 2		Fen = 5			
Basin topography	Flat/Rolling = 5		Hilly = 2		Major relief			
				2	break = 5			
Weland area: Upslope	Large (>50%) = 0		Moderate		Small ($<5\%$) = 5			
catchment area			(6-50%) = 2	2				
Lagg Development	None found = 0	0	Minor = 2		Extensive $= 5$			
Seeps at wetland	None found = 0		1-3 seeps = 5		4 or more			
edge		0			seeps = 10			
Iron precipitates	None = 0		1-3 deposits = 2		4 or more			
evident at edge		0			deposits = 5			
Surface marl deposits	None = 0	0	1-3 deposits = 2		>3 = 5			
Wetland pH	Low < 4.2 = 0		Moderate $4.2-5.7 = 5$	5	High $> 5.7 = 10$			
Catchment soil	Patchy = 0		Thin $(<20cm) = 2$		Thick = 5			
coverage				2				
Catchment soil	Low = 0		Moderate = 2		High = 5			
permeability				2				
Totals		0		15		0		

(Scores are cumulative maximum score 30 points)

Groundwater Discharge Score (maximum 30 points)

4.0 SPECIAL FEATURES COMPONENT

4.1 RARITY

4.1.1 WETLANDS

Hills Site Region and Site District (5E only): 5E-13
Wetland type (check one or more)

 X
 Fen

 X
 Swamp

 X
 Marsh

Evaluation Table for Scoring Rarity of Wetland Type.

Unit	Site Region		_		
Number	& District	Marsh	Swamp	Fen	Bog
2E	James Bay	20	20	0	20
2W	Big Trout Lake	20	20	0	10
3E	Lake Abitibi	20	20	10	0
3W	Lake Nipigon	20	20	10	0
3S	Lake St. Joseph	20	20	10	0
4E	Lake Temagami	20	20	10	0
4W	Pigeon River	20	10	20	0
4S	Wabigoon Lake	20	10	20	0
5E-1	Thessalon	10	0	30	20
5E-2	Gore Bay	20	0	20	20
5E-3	La Cloche	20	0	30	20
5E-4	Sudbury	10	0	30	10
5E-5	North Bay	10	0	20	0
5E-6	Tomiko	10	0	20	0
5E-7	Parry Sound	20	0	30	20
5E-8	Huntsville	20	0	30	20
5E-9	Algonquin Park	10	0	30	0
5E-10	Brent	20	0	30	0
5E-11	Bancroft	0	10	30	10
5E-12	Renfrew	0	0	30	10
5E-13	Batchewana	10	0	10	30
5-S	Lake of the Woods	10	10	20	10

Rarity of Wetland Type Score (maximum 70 points)

Northern	ontario Wetland Evalua	tion, Data and Scorin	g Record	(November 20,	2010)
1.1.2 SPECIE	<u>s</u>				
4.1.2.1	BREEDING HABIT	AT FOR AN ENDA	NGEREL	O OR THREATENED SPECIES	_
Nar	ne of species			Source of information	
4)		-		ī	
1)		<u> </u>			
2) 3)					
4) —					
5)					
	Total:		0		
ttach documen	ntation.			_	
coring:					
For one sp	pecies	250 points			
	additional species	250 points			
core is cumula	ative, no maximum score))			
	Breeding Habitat for	Endangered Species	s Score (n	o maximum)	0
4.1.2.2	OR THREATENED		DING HA	ABITAT FOR AN ENDANGEREI	<u>)</u>
	OR THREATENED	SIECIES			
Nar	me of species	=		Source of information	
1)					
2)					
3)					
4)		<u> </u>			
5)	Total:		0		
<u> </u>	Total.		0		
ttach documen	ntation.				
coring:					
E		150 mainta			
For one sp	additional species	150 points 75			
1 of cacif (raditional species	7.5			
core is cumula	ative, no maximum score))			
	T 1:4:1 II-1	Ŀ\$4-4 € E J	1 C	S	0
	i raditional Hat	oitat for Endangered	1 Species	Score (no maximum)	0

	Name of specie	s			Source of i	nformation	
1)					-		
2)							
3)							
4) 5)							
6)							
7)							
8)							
9)							
10)							
11)							
12)							
13)							
14)							
15)							
	Attach separate	list if necessary	y; Attach documenta	ation			
	rovincially sigr	nificant animal s	species in the wetlar	nd:			
					 154		
mber of p	es =	50 points	14 species	nd: = =	154 156		
1 species 2 species	ss = = ss =	50 points 80	14 species 15 species	=	156		
1 specie 2 specie 3 specie	ss = ss = ss =	50 points 80 95	14 species 15 species 16 species	=			
1 species 2 species	es = s = s = s = s = s	50 points 80 95 105	14 species 15 species	= =	156 158		
1 specie 2 specie 3 specie 4 specie 5 specie 6 specie	ss = ss	50 points 80 95 105 115	14 species 15 species 16 species 17 species 18 species 19 species	= = = =	156 158 160		
1 specie 2 specie 3 specie 4 specie 5 specie 6 specie 7 specie	SS = SS	50 points 80 95 105 115 125 130	14 species 15 species 16 species 17 species 18 species 19 species 20 species	= = = =	156 158 160 162 164 166		
1 specie 2 specie 3 specie 4 specie 5 specie 6 specie 7 specie 8 specie	SS = SS	50 points 80 95 105 115 125 130 135	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species	= = = =	156 158 160 162 164 166 168		
1 specie 2 specie 3 specie 4 specie 5 specie 6 specie 7 specie 8 specie 9 specie	ss = ss	50 points 80 95 105 115 125 130 135 140	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species	= = = = =	156 158 160 162 164 166 168 170		
1 specie 2 specie 3 specie 4 specie 5 specie 6 specie 7 specie 8 specie 9 specie 0 specie	S	50 points 80 95 105 115 125 130 135 140 143	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species	= = = = = = = = = = = = = = = = = = = =	156 158 160 162 164 166 168 170 172		
1 specie 2 specie 3 specie 4 specie 5 specie 6 specie 7 specie 8 specie 9 specie 0 specie 1 specie	S	50 points 80 95 105 115 125 130 135 140 143 146	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species	= = = = = = = = = = = = = = = = = = = =	156 158 160 162 164 166 168 170 172		
1 specie 2 specie 3 specie 4 specie 5 specie 6 specie 7 specie 8 specie 9 specie 1 specie 2 specie 2 specie	S = S = S = S = S = S = S = S = S = S =	50 points 80 95 105 115 125 130 135 140 143 146 149	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species	= = = = = = = = = = = = = = = = = = = =	156 158 160 162 164 166 168 170 172		
1 specie 2 specie 3 specie 4 specie 5 specie 6 specie 7 specie 8 specie 9 specie 1 specie 2 specie 2 specie 3 specie 3 specie	S	50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species 25 species	= = = = = = =	156 158 160 162 164 166 168 170 172 174 176	pagios – 178	
1 specie 2 specie 3 specie 4 specie 5 specie 6 specie 7 specie 8 specie 9 specie 1 specie 2 specie 2 specie 3 specie 3 specie	S	50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species	= = = = = = =	156 158 160 162 164 166 168 170 172 174 176	pecies = 178	
1 specie 2 specie 3 specie 4 specie 5 specie 6 specie 7 specie 8 specie 9 specie 1 specie 2 specie 2 specie 3 specie d one poi	ss = ss	50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species 25 species	= = = = = = =	156 158 160 162 164 166 168 170 172 174 176	pecies = 178	
1 specie 2 specie 3 specie 4 specie 5 specie 6 specie 7 specie 8 specie 9 specie 1 specie 2 specie 3 specie d one points etc.)	ss = ss	50 points 80 95 105 115 125 130 135 140 143 146 149 152 cies past 25 (fo	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species 25 species	= = = = = = = = = = = = = = = = = = =	156 158 160 162 164 166 168 170 172 174 176 points, 27 sp		m)

C		names must be	recorded)	PLANT SPE	ECIES	
	Common N		recorded)	Scientific N	lame	Source of information
1)	Ov	al-leaved bilber	rry	Vaccinii	ım ovalifolium	Field work (NRSI 2010
2)						
3)						
4)						
5) _						
6) _						
7) _						
8) _						·
9) _						-
10)						
11) 12)						•
13)						
14)						<u> </u>
15)						
mber of pr	rovincially	y significant pla	ant species in th	e wetland:		
pecies	rovincially =	50 points	14 species	e wetland:	154	
pecies pecies	=	50 points 80	14 species 15 species	= =	156	
pecies pecies pecies	= =	50 points 80 95	14 species 15 species 16 species	= = =	156 158	
pecies pecies pecies pecies	= = =	50 points 80 95 105	14 species 15 species 16 species 17 species	= = = =	156 158 160	
pecies pecies pecies pecies pecies	= = =	50 points 80 95 105 115	14 species 15 species 16 species 17 species 18 species	= = = = =	156 158 160 162	
pecies pecies pecies pecies pecies pecies pecies	= = = =	50 points 80 95 105 115 125	14 species 15 species 16 species 17 species 18 species 19 species	= = = = =	156 158 160 162 164	
pecies pecies pecies pecies pecies pecies pecies pecies pecies	= = = = =	50 points 80 95 105 115 125 130	14 species 15 species 16 species 17 species 18 species 19 species 20 species	= = = = = =	156 158 160 162 164 166	
pecies	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species	= = = = =	156 158 160 162 164 166 168	
pecies	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species	= = = = = =	156 158 160 162 164 166 168 170	
pecies species species	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140	14 species 15 species 16 species 17 species 18 species 20 species 21 species 22 species 23 species	= = = = = = = = = = = = = = = = = = = =	156 158 160 162 164 166 168 170	
pecies species species species	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species		156 158 160 162 164 166 168 170 172	
pecies species species species species species	= = = = = = = = = = = = = = = = = = = =	50 points 80 95 105 115 125 130 135 140 143 146 149	14 species 15 species 16 species 17 species 18 species 20 species 21 species 22 species 23 species	= = = = = = = = = = = = = = = = = = = =	156 158 160 162 164 166 168 170	
pecies species species species species species species d one poir		50 points 80 95 105 115 125 130 135 140 143 146 149 152	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species 25 species		156 158 160 162 164 166 168 170 172	ecies = 178
pecies pecies pecies pecies pecies pecies pecies pecies pecies species species species species species species		50 points 80 95 105 115 125 130 135 140 143 146 149 152 y species past 2	14 species 15 species 16 species 17 species 18 species 19 species 20 species 21 species 22 species 23 species 24 species 25 species	= = = = = = = = = = = = = = = = = = =	156 158 160 162 164 166 168 170 172 174	

Northern Ontario Wetland Evaluation Data and Scoring Record

4.1.2.5 REGIONALLY SIGNIFICANT SPECIES (SITE REGION)

Scientific names must be recorded for plant species. Lists of significant species must be approved by MNR.

SIGNIFICANT IN SITE REGION:

Common Name Scientific Name Source of information 1) 2) 3) 4) 5) 7) 8) 9) 10) 11) 12) 13) 14) 15)

Attach separate list if necessary .Attach documentation.

Scoring:

No. of species significant in Site Region

1 species	=	20	6 species	=	55
2 species	=	30	7 species	=	58
3 species	=	40	8 species	=	61
4 species	=	45	9 species	=	64
5 species	=	50	10 species	=	67

Add one point for every species past 10. (no maximum score)

Significant Species (Site Region) Score (no maximum)

^{**} Score only if there is an approved list

(November 20, 2010)

4.2.1.6 LOCALLY SIGNIFICANT SPECIES (SITE DISTRICT)

Scientific names must be recorded for plant species. Lists of significant species must be approved by MNR.

1 2 3 4 5 5 6 7 7 8 9 9 9 10 11 12 12 13 14 15 16	Common Name	Scientific Name	Source of information
3 4 5 6 7 8 9 10 11 12 13 14 15			
3 4 5 6 7 8 9 10 11 12 13 14 15	1		
4 5 6 7 8 9 10 11 12 13 14 15			
5 6 7 8 9 10 11 12 13 14 15	3		
6 7 8 9 10 11 12 13 14 15	4		
7 8 9 10 11 12 13 14 15	5		
9 10 11 12 13 14 15	6		
9 10 11 12 13 14 15	7		
10 11 12 13 14 15			
11	9		
12 13 14 15	10		
13 14 15	11		<u> </u>
14 15	12		<u></u>
15	13		<u> </u>
	14		
16	15		
	16		
17	17		
18	18		

Attach separate list if necessary .Attach documentation.

Scoring:

No. of species significant in Site District

1 species	=	10	6 species	=	41
2 species	=	17	7 species	=	43
3 species	=	24	8 species	=	45
4 species	=	31	9 species	=	47
5 species	=	38	10 species	=	49

For each significant species over 10 in the wetland, add 1 point.

Locally Significant Species (Site District) Score (no maximum)

(November 20, 2010)

4.1.2.7 SPECIES OF SPECIAL STATUS

Black Duck

Suitable breeding habitat present and within assessment range (Figure 17)

Assessment Category	Check one	Score
40-80 Indicated Pairs/100 km sq		25 points
20-40 Indicated Pairs/100 km sq		20
10-20 Indicated Pairs/100 km sq	X	15
5-10 Indicated Pairs/100 km sq		10
1-5 Indicated Pairs/100 km sq		5
Habitat not suitable		0
Out of assessment range		0

Black Duck Score (maximum 25 points)

15

4.2 SIGNIFICANT FEATURES AND/OR FISH & WILDLIFE HABITAT

4.2.1 NESTING OF COLONIAL WATERBIRDS

Status	Name of species	Source of Information	Score
Currently nesting			50 points
Known to have nested within past 5 years			25
Active feeding area (great blue heron excluded)			15
None known			0

Attach documentation (nest locations etc., if known)

Colonial Waterbirds Score (maximum 50 points)

0

4.2.2. WINTER COVER FOR WILDLIFE

(Check only highest level of significance) Score (one only)

1)		Provincially significant	100
2)		Significant in Site Region	50
3)		Significant in Site District	25
3)		Locally significant	10
4)	0	Little or poor winter cover present	0

Source of information:

Field Observations - Very little treed/tall shrub habitat within wetland

compared to surrounding landscape.

Winter Cover for Wildlife Score (maximum 100 points)

Northern Ontario Wetland E	valuation Dat	a and Scoring Re	ecord	(November 20,	2010)
4.2.3 WATERFOWL STAGING AND	O/OR MOULT	ΓING			
(Check only highest level of significant across columns, maximum score 150)	ce for both sta	ging and moulting	ng; score is cum	ulative	
 Nationally significant Provincially significant Regionally significant Known to occur Not possible Not known Total: 	Staging X 0	Score (one only) 150 100 50 10 0	Moulting X 0	Score (one only) 150 100 50 10 0	
Source of information:	135 14	10: 1 0	ore (maximum	170	0
4.2.4 WATERFOWL BREEDING (Check only highest level of the provincially signally sig	gnificant		core 100 50		
3) X Habitat suitable 4) Habitat not sui	e		10		
Source of information:	Waterfow	_	re (maximum lC		10
4.2.5 MIGRATOR PASSERINE, SHO		R RAPTOR STO	POVER AREA		
(check highest applicable control of the control of	gnificant Site Region Site District	lues Map (Junen	100 50 10 0		
		_	Score (maximur	n 100 points)	0
		28			

Northern Ontario Wetland Evaluation Data and Scoring Record (November 20, 2010) 4.2.6 UNGULATE HABITAT **EVALUATION** Score (1) + (2) +one of (3) to (6)Score Ungulate summer cover 15 points (1) Mineral licks 50 Moose aquatic feeding area Class 1 0 Moose aquatic feeding area Class 2 10 (4) (5) Moose aquatic feeding area Class 3 20 Moose aquatic feeding area Class 4 35 (6) (Score is cumulative for a maximum possible score of 100) **Ungulate Habitat Score (maximum 100 points)** 4.2.7 FISH HABITAT 4.2.7.1 Spawning and Nursery Habitat Table 5. Area Factors for Low Marsh, High Marsh, and Swamp Communities. No. of ha of Fish Habitat Area Factor < 0.5 ha 0.1 0.5- 4.9 0.2 5.0-9.9 0.4 10.0-14.9 0.6 15.0 -19.9 0.8 20.0+ ha 1.0 Step 1: Fish habitat is not present within the wetland (Score = 0) Fish habitat is present within the wetland (Go to Step 2) X Step 2: Choose only one option 1) Significance of the spawning and nursery habitat within the wetland is known (Go to Step 3) Significance of the spawning and nursery habitat within the wetland is not 2) known (Go through Steps 4, 5, 6 and 7)

No	rthern Ontario Wetland Evaluation Data and Sc	oring Record	(November 20, 2010)
Step 3:	Select the highest appropriate category belo	ow attach documenta	ation:
1)	Significant in Site Region	100 points	
2)	Significant in Site District	50	
3)	Locally Significant Habitat (5.0+ ha)	25	
4)	Locally Significant Habitat (<5.0 ha)	15	
	Score for Spawning and Nursery I	Habitat (maximum s	score 100 points)
Step 4: P	Proceed to Steps 4 to 7 only if Step 3 was not	answered.	
(Low Marsh:	marsh area from the existing water line out to	the outer boundary o	f the wetland)
	ow marsh not present (Continue to Step 5) ow marsh present (Score as follows)		

Scoring for Presence of Key Vegetation Groups

Scoring is based on the one most clearly dominant plant species of the dominant form in each Low Marsh vegetation community. Check the appropriate Vegetation Group (see Appendix 16) for each Low Marsh community. Sum the areas of the communities assigned to each Vegetation Group and multiply by the appropriate size factor from Table 5.

Vegetation	Vegetation	Present	Total	Area	Score	Final
Group Number	Group Name	as a	Area	Factor		Score
		Dominant	(ha)			(area
		Form		(see		factor
		(check)		Table 5)		x score)
1	m 11	77	1 47	0.0		1.0
1	Tallgrass	X	1.45	0.2	6 pts	1.2
2	Shortgrass-Sedge	X	3.75	0.2	11	2.2
3	Cattail-Bulrush-Burreed				5	0.0
4	Arrowhead-Pickerelweed				5	0.0
5	Duckweed				2	0.0
6	Smartweed-Waterwillow				6	0.0
7	Waterlily-Lotus				11	0.0
8	Waterweed-Watercress				9	0.0
9	Ribbongrass				10	0.0
10	Coontail-Naiad-Watermilfoil				13	0.0
11	Narrowleaf Pondweed				5	0.0
12	Broadleaf Pondweed		_		8	0.0
	Total Score (max	imum 75 point	s)			3.4

Northern Ontario Wetland Evaluation Data and Scoring	g Record
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Step 5: (**High Marsh**: area from the water line to the inland boundary of marsh wetland type. This is essentially what is commonly referred to as a wet meadow, in that there is insufficient standing water to provide fisheries habitat except during flood or high water conditions.)

High marsh not present (Continue to Step 6)

X High marsh present (Score as follows)

Scoring for Presence of Key Vegetation Groups

Scoring is based on the one most clearly dominant plant species of the dominant form in each High 1Marsh vegetation community. Check the appropriate Vegetation Group for each High Marsh community. Sum the areas of the communities assigned to each Vegetation Group and multiply by the appropriate size factor from Table 5.

Vegetation	Vegetation	Present	Total	Area	Score	Final
Group Number	Group Name	as a	Area	Factor		Score
		Dominant	(ha)	(see		(area
		Form		Table 5)		factor
		(check)				x score)
1	Tallgrass				6 pts	0.0
2	Shortgrass-Sedge				11	0.0
3	Cattail-Bulrush-Burreed				5	0.0
4	Arrowhead-Pickerelweed	X	0.48	0.1	5	0.5
Total Score (maximum 25 points)				0.5		

Step 6: (**Swamp**: Swamp communities containing fish habitat, either seasonally or permanently. Determine the total area of seasonally flooded swamps and permanently flooded swamps containing fish habitat.)

_Swamp containing fish habitat not present (Continue to Step 7)

Swamp containing fish habitat present (Score as follows)

Swamp containing fish	Present	Total	Area Factor	Score	TOTAL SCORE	
Habitat	(check)	area (ha)	(see Table 5)		(factor x score)	
Seasonally flooded	X	0.68	0.2	10	2.0	
Permanently flooded				10	0.0	
SCORE (maximum 20 points)					2.0	

Northern Ontario Wetland Evaluation Data and Scoring Record	(November 20, 2010)
	(1.0.1011)
Step 7: Calculation of final score	
Score for Spawning and Nursery Habitat (Low Marsh) (maximum 75) =	3.4
Score for Spawning and Nursery Habitat (High Marsh) (maximum 25)	0.5
Score for Swamp Containing Fish Habitat (maximum 20) =	2.0
Sum (maximum score 100	0 points) = 6
4.2.6.2 Migration and Staging Habitat	
<u>Step 1:</u>	
1) X Staging or Migration Habitat is not present in the wetland (Score = 0)	
2) Staging or Migration Habitat is present in the wetland significance of the h to Step 2)	abitat is known (Go
3) Staging or Migration Habitat is present in the wetland significance of the h (Go to Step 3)	abitat is not known
NOTE: Only <u>one</u> of Step 2 <u>or</u> Step 3 is to be scored.	
Step 2: Select the highest appropriate category below, attach documentation:	
1) Significant in Site Region	Score 25 points
2) Significant in Site District	15
3) Locally Significant	10
4) Fish staging and/or migration habitat	
present,but not as above	5
Score for Fish Migration and Staging Habitat (maximum score 25	5 points)
Step 3: Select the highest appropriate category below based on presence of the des (does not have to be dominant). Note name of river for 2) and 3).	ignated site type
Wetland is riverine at rivermouth or lacustrine at rivermouth	Score 25 points
2) Wetland is riverine, within 0.75 km of rivermouth	15
3) Wetland is lacustrine, within 0.75 km of rivermouth	10
4) Fish staging and/or migration habitat	5
present, but not as above	5
Score for Staging and Migration Habitat (maximum score 2	25 points) 0

(November 20, 2010)

4.3 ECOSYSTEM AGE

(Fractional Area = area of wetland type/total area of wetland)

	Area			Scoring
Bog Fen, treed to open on deep soils		X	25 =	0.0
floating mats or marl	0.59	X	20 =	11.8
Fen, on limestone rock		X	5 =	0.0
Swamp	0.11	X	3 =	0.3
Marsh	0.30	X	0 =	0.0
	Sub Total:			12.1

Fractional

Ecosystem Age Score (maximum 25 points)

12

4.4 GREAT LAKES COASTAL WETLANDS

Score for **coastal** (see text for definition) wetlands only

Choose one only

 wetland < 10 ha</td>
 =
 0 points

 wetland 10- 50 ha
 =
 25

 wetland 51 -lOO ha
 =
 50

 wetland > 100 ha
 =
 75

Great Lakes Coastal Wetlands Score (maximum 75 points)

Northern Ontario Wetland Evaluation Data and	d Scoring	g Record ((November 20, 2010)
5 A EVTDA INICADMATION			
5.0 EXTRA INFORMATION			
5.1 PURPLE LOOSESTRIFE			
X Absent/Not seen			
Present	(a)	One location in wetlan Two to many locations	
	(b)	Abundance code (1 < 20 plants (2 20-99 plants (3 100-999 plants (4 >1000 plants	
5.2 SEASONALLY FLOODED AREAS			
Indicate length of seasonal flooding Check one or more			
Ephemeral Temporal Seasonal Semi-permanent No seasonal flooding		(less than 2 weeks) (2 weeks to 1 month) (1 to 3 months) (>3 months)	X X
5.3 SPECIES OF SPECIAL SIGNIFICANCE			
5.3.1 Osprey			
Present and nesting (attach map showing nest site) Known to have nested in last 5 yr Feeding area for osprey Not as above		<u></u>	
5.3.2 Common Loon			
Nesting in wetland (attach map showing nest site) Feeding at edge of wetland Observed or heard on lake or river adjoining the wetland		<u> </u>	
Not as above		X	
3	34		

Northern Ontario Wetland Evaluation Data and Scoring Recor	d (November 20, 2010)			
INVESTIGATORS	AFFILIATION			
Lisa Keable	Natural Resource Solutions Inc.			
Derek Goertz	Natural Resource Solutions Inc.			
DATA COVIL	Transfer Research Solutions Inc.			
DATES WETLAND VISITED				
September 6, 2010				
DATE THIS EVALUATION COMPLETED:				
ESTIMATED TIME DEVOTED TO COMPLETING THE FIELD S 16 hours (2 people between 0800 an				
WEATHER CONDITIONS				
i) at time of field work				
14°C, 90% Cloud cover, no precipitation, wind = 4 (E) (Beaufort So	cale)			
ii) summer conditions in general Summer conditions were dry and hot, however substantial rainfa	ll over last few days prior to site visits.			
OTHER POTENTIALLY USEFUL INFORMATION:				
CHECKLIST OF PLANT AND ANIMAL SPECIES RECORDED IN TH	E WETLAND:			
Lists of all flora and fauna observed in the wetland.				
35				

N	Northern Ontario Wetland Evaluation	Data and Scori	ng Record	(November 20, 20	10)
	WETLAND	EVALUATION	SCORING RECORD		
WETLAND) NAME		Question Mark Wet	tland Complex	
				,	
	<u>1.0 E</u>	BIOLOGICAL C	COMPONENT		
1.1	PRODUCTIVITY				
	Growing Degree-Days/Soils			11	
	Wetland Type Site Type			$\frac{9}{2}$	
111.0	Site Type				
			Total for Prod	uctivity	22
1.2	BIODIVERSITY				
1.2.1	Number of Wetland Types			20	
	Vegetation Communities (maxixmu Diversity of Surrounding Habitat (r			7 6	
	Proximinty to Other Wetlands	naximum 7)		8	
	Interspersion			9 30	
1.2.0	Open Water Type			30	
	Sub Total for Biodiversity	80	Total for Biod	liversity	80
1.3	SIZE (Biological Component)	00			9
TOTA	AL FOR BIOLOGICAL COMPONE	NT (not to excee	ed 250)		111

Northern Ontario Wetland Evaluation Data and Scoring Record (November	r 20, 2010)
2.0 SOCIAL COMPONENT	
2.1 ECONOMICALLY VALUABLE PRODUCTS	
2.1.1 Wood Products 2.1.2 Lowbush Cranberry 2.1.3 Wild Rice 2.1.4 Commercial Fish 2.1.6 Furbearers	0 2 0 12 3
Total for Economically Valuable Products	17
2.2 RECREATIONAL ACTIVITIES (maximum 80)	8
2.3 LANDSCAPE AESTHETICS	
2.3.1 Distinctness 2.3.2 Absence of Human Disturbance	0 4
Total for Landscape Aesthetics	4
2.4 EDUCATION AND PUBLIC AWARENESS	
2.4.1 Educational Uses 2.4.2 Facilities and Programs 2.4.3 Research and Studies (maximum 12)	0 0 0
Total for Education and Public Awareness	0
2.5 PROXIMITY TO AREAS OF HUMAN SETTLEMENT	4
2.6 OWNERSH1P Subtotal for Social Component 2.7 SIZE (Social Component)	2
2.8 ABORIGINAL AND CULTURAL VALUES (maximum 30)	30
TOTAL FOR SOCIAL COMPONENT (not to exceed 250)	73

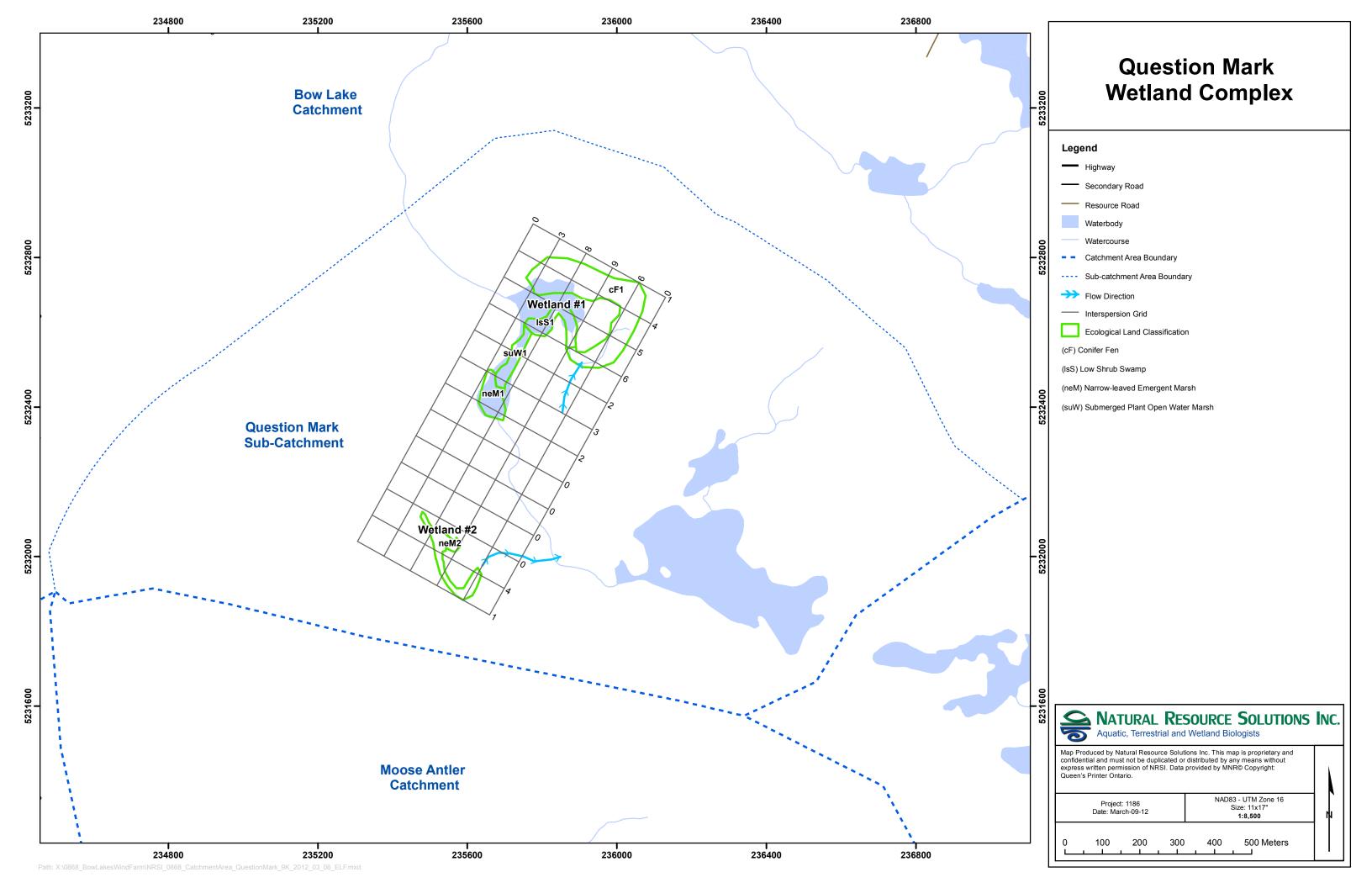
Northern Ontario Wetland Evaluation Data an	nd Scoring Record	(Nove	mber 20, 2010))
3.0 HYDROLO	OGICAL COMPONENT			
3.1 <u>FLOOD ATTENUATION</u>				46
3.2 GROUNDWATER RECHARGE				
3.2.1 Site Type 3.2.2 Soils			20 4	
T	otal for Groundwater Rech	narge		24
3.3 <u>WATER QUALITY IMPROVEMENT</u>				
3.3.1 Watershed Improvement Factor3.3.2 Adjacent and Watershed Land Use3.3.3 Vegetation Form			29 17 8	
T	otal for Water Quality Imp	rovement		54
3.4 <u>CARBON SINK</u>				9
3.5 SHORELINE EROSION CONTROL				0
3.6 GROUNDWATER DISCHARGE				15
TOTAL FOR HYDROLOGICA	L COMPONENT (not to e	exceed 250)		148

Northern Ontario Wetland Evaluation Data and Scoring Record (November 2	20, 2010)
4.0 SPECIAL FEATURES	
4.1 <u>RARITY</u>	
4.1.1 Wetlands	20
4.1.2 Species 4.1.2.1 Endangered or Threatened Species Breeding 4.1.2.2 Traditional Use by Endangered or Threatened Species 4.1.2.3 Provincially Significant Animals 4.1.2.4 Provincially Significant Plants 4.1.2.5 Regionally Significant Species 4.1.2.6 Locally Significant Species	0 0 0 50 0
4.1.2.7 Species of Special Status Total for Species Rarity	15 65
4.2 SIGNIFICANT FEATURES OR HABITAT	
4.2.1 Colonial Waterbirds 4.2.2 Winter Cover for Wildlife 4.2.3 Waterfowl Staging and Moulting 4.2.4 Waterfowl Breeding 4.2.5 Migratory Passerine, Shorebird or Raptor Stopover 4.2.6 Ungulate Habitat 4.2.7 Fish Habitat	0 0 0 10 0 0
Total for Significant Features and Habit	tat 16
4.3 ECOSYSTEM AGE	12
4.4 <u>GREAT LAKES COASTAL WETLANDS</u>	0
TOTAL FOR SPECIAL FEATURES (maximum 250)	113

	Northern Ontario Wetland Evaluation Data and Sc	oring Record	(November 20, 2010)
	SUMMARY OF EVA	LUATION RESULT	
Wetland	Question Mark	x Wetland Complex	
TOTAL FO	OR 1.0 BIOLOGICAL COMPONENT		111
TOTAL FO	OR 2.0 SOCIAL COMPONENT		73
TOTAL FO	OR 3.0 HYDROLOGICAL COMPONENT		148
TOTAL FO	DR 4.0 SPECIAL FEATURES COMPONENT		113
	` =	WETLAND TOTAL	444
INVESTIC Lisa Keabl Derek Goe	e		
	Walton (evaluation revision, March 2012)		
AFFILIAT	ION		
Natural Re	source Solutions Inc.		
	source Solutions Inc.		
<u>DATE</u>	November 20, 2010		

Data Summary Form Wetland: Question Mark Wetland Complex

Wetland	Wetland	Мар	Field	#	Dominant	Forms	% Open	Area	Open Water	Soils	Site	Fish
Type	Unit	Code	Code	Forms	Form		Water	(ha)	(ha)		Type	Habitat
Swamp	1	neM1	Wet-009	5	ne	dc, gc, m, su	35	0.62	0.22	Clay/loam	Palustrine	LM
Swarrip	1	lsS1	lsm	3	ls	ne, m	10	0.68	0.07	Organic (M)	Palustrine	Yes - swamp
Fen	1	cF1	Cedar S	3	С	ls, ne, m	25	3.75	0.94	Organic (F)	Palustrine	LM
Marsh	1	suW1	suW	1	su		90	0.48	0.43	Silt	Palustrine	НМ
IVIdISII	2	neM2	17	2	ne	gc	30	0.83	0.25	Silt/Sand	Palustrine	LM



Map Legend

Map Code	Wetland	Forms	Dominant Species
	Type		
neM1	Marsh	ne, gc	Scirpus spp., Agrostis spp.; St. John's-wort spp.
neM2	Marsh	dc, ne, gc, m, su	Dead black spruce (P. mariana); Canada blue joint (C. canadensis), Bottlesedge (C. utriculata);
			Marsh st. john's-wort (<i>T. fraseri</i>); <i>S. girgensohnii</i>
cF1	Fen	c, ls, ne, m	Eastern white cedar (<i>Thuja occidentalis</i>); Sweetgale (<i>M. gale</i>); <i>Carex</i> spp., Bog rosemary (<i>Andromeda polifolia</i>
			ssp. glaucophylla); Sphagnum magellanicum, S. girgensohnii, Sphagnum spp.
lsS1	Swamp	ls, ne, m	Sweetgale (M. gale); Canada blue joint (C. canadensis), Bottlesedge (C. utriculata); S. girgensohnii
suW1	Marsh	su	Bladderwort (Utricularia intermedia)

BOTANICAL NAME		COMMON NAME	PROVINCIAL STATUS	OMNR STATUS	COSEWIC STATUS	Observations
	SOURCE		MNR RARE 4th Ed. 2009	SARO List	SARA Registry	NRSI (2010)
PTERIDOPHYTES		FERNS & ALLIES				
Dryopteridaceae		Wood Fern Family				
Dryopteris	intermedia	Evergreen Wood Fern	S5			Х
Onoclea	sensibilis	Sensitive Fern	S5			Х
Lycopodiaceae		Clubmoss Family				
Lycopodiella	inundata	Nothern Bog Club-moss	S5			X
<u>GYMNOSPERMS</u>		CONIFERS				
Cupressaceae		Cedar Family				
Thuja	occidentalis	Eastern White Cedar	S5			Х
Dinasas		Dina Familia				
Pinaceae	halaanaa	Pine Family	S5			
Abies	balsamea	Balsam Fir				X
Larix	laricina	Tamarack	S5			
Picea	mariana	Black Spruce	S5			X
DICOTYLEDONS		DICOTS				
Asteraceae		Composite or Aster Family				
Eupatorium	maculatum ssp. maculatum	Spotted Joe-pye-weed	S5			Х
Euthamia	graminifolia	Flat-topped Bushy Goldenrod	S5			Х
Symphyotrichum	puniceum var. puniceum	Purple-stemmed Aster	S5			Х
Balsaminaceae		Touch-me-not Family				
Impatiens	capensis	Spotted Touch-me-not	S5			X
Betulaceae		Birch Family				
Alnus	incana spp. rugosa	Speckled Alder	S5			X
Caprifoliaceae		Honeysuckle Family				
Symphoricarpos	albus	Snowberry	S5			Х
Drocerocce		Sunday Family				
Droseraceae Drosera	rotundifolia	Sundew Family Round-leaved Sundew	S5			X

Ericaceae		Heath Family		
Andromeda	polifolia ssp. glaucophylla	Bog Rosemary	S5	X
Chamaedaphne	calyculata	Leatherleaf	S5	X
Kalmia	polifolia	Bog Laurel	S5	X
Ledum	groenlandicum	Labrador-tea	S5	X
Vaccinium	oxycoccos	Small Cranberry	S5	X
Guttiferae		St. John's-wort Family		
Triadenum	fraseri	Fraser's St. John's-wort	S5	X
Hippuridaceae		Mare's-tail Family	+ + -	
Hippuris	vulgaris	Common Mare's-tail	S5	X
Lamiaceae		Mint Family		
Lycopus	uniflorus	Northern Water-horehound	S5	X
Scutellaria	galericulata	Hooded Skullcap	S5	Х
Lentibulariaceae		Bladderwort Family		
Utricularia	intermedia	Flat-leaved Bladderwort	S5	X
Myricaceae		Wax-myrtle Family		
Myrica	gale	Sweet Gale	S5	Х
Nymphaeaceae		Water-lily Family		
Nuphar	variegata	Bulhead Pond-lily	S5	X
Nymphaea	odorata	Fragrant Water-lily	S5	X
Rosaceae		Rose Family		
Rubus	idaeus ssp. melanolasius	Wild Red Raspberry	S5	X
Violaceae		Violet Family		+ +
Viola	spp.	-		Х
MONOCOTYLEDO	 <u>NS</u>	MONOCOTS		
Cyperaceae		Sedge Family	+ + -	
Carex	gynandra	Nodding Sedge	S5	X
Carex	utriculata	Beaked Sedge	S5	X
Dulichium	arundinaceum	Reed-like Three-way Sedge	S5	X

Eleocharis	spp.			X
Eriophorum	virginicum	Virginia Cotton-grass	S5	Х
Scirpus	spp.			X
Scirpus	cyperinus	Wool-grass	S5	X
Eriocaulaceae		Pipewort Family	+ + +	
Eriocaulon	aquaticum	Seven-angled Pipewort	S5	Х
Iridaceae		Iris Family	+ + +	
Iris	versicolor	Multi-coloured Blue-flag	S5	Х
Juncaceae		Rush Family	+ + +	
Juncus	brevicaudatus	Short-tailed Rush	S5	X
Juncus	effusus ssp. solutus	Soft Rush	S5	Х
Poaceae		Grass Family	+ +	
Agrostis	spp.			X
Calamagrostis	canadensis	Blue-joint Grass	S5	X
Glyceria	canadensis	Rattlesnake Grass	S4S5	X
Sparganiaceae		Bur-reed Family	+ + +	
Sparganium	americanum	Nuttall's Bur-reed	S4?	X
Sparganium	fluctuans	Floating Bur-reed	S4?	X
BRYOPHYTES			+ + +	
Sphagnaceae				
Sphagnum	spp.			X
Sphagnum	girgensohnii	Common Green Peat Moss	S5	X
Sphagnum	magellanicum	Midway Peat Moss	S5	X

Wildlife Observations

Includes tracks and signs

Common Name Scientific Name

Mammals

Muskrat Ondatra zibethicus

Amphibians

Wood frog Rana sylvatica

Natural Resources Department BNR

BATCHEWANA FIRST NATION OF OJIBWAYS

RANKIN RESERVE 15 D GOULAIS BAY RESERVE 15 A OBADJIWAN RESERVE 15 E WHITEFISH ISLAND 15

> Administration Office: 236 Frontenac Street Rankin Reserve 15D Batchewana Territory, ON P6A 5K9 Ph: (705) 759-0914 / Fax: (705) 759-9171 www.batchewana.ca

November 17, 2010

Derek Goertz Natural Resource Solutions Inc. 111 Elgin Street Sault Ste. Marie, ON P6A 6L6

Dear Derek:

Re: Site Evaluation for the Wetlands of Bow Lakes Wetlands

As per your request, BNR Field Technician, David Sewell has completed a site evaluation for the Two Wetlands in the vicinity of the proposed Bow Lake Wind Farm within Batchewana First Nation.

I have attached Dave's report that we are hope is going to be helpful to you. We also request that you provide a copy to your employee and any other necessary agencies that are involved with this project.

Thank you very much for requesting BFN participation. If you have any questions or need more information please contact Dave Sewell or myself at 705-759-0914.

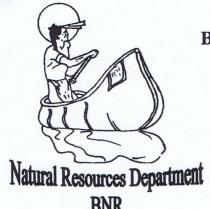
Miigwetch

Danny Sayers JR. (BNR Manager)

c.c. Chief and Council

Dave Sewell (BNR Field Technician)

Vortex



BATCHEWANA FIRST NATION OF OJIBWAYS

RANKIN RESERVE 15 D GOULAIS BAY RESERVE 15 A OBADJIWAN RESERVE 15 E WHITEFISH ISLAND 15

> Administration Office: 236 Frontenac Street Rankin Reserve 15D Batchewana Traditional Territory, ON P6A 5K9 Ph: (705) 759-0914 / Fax: (705) 759-9171 www.batchewana.ca

BNR Site Visit and Recommendations on Two Bow Lake Wetlands

On October 26, 2010 I visited the area of the Bow Lake Wind Farms to take a look at the wetlands in that area. There are two big pieces of wetland, one to the north of Bow Lake and, one to the south of Bow Lake. There are a few smaller pieces of wetland around Negick Lake which is within the Wind Farm area. From what I seen these wetlands play an important role to the surrounding area. These wetlands are nature's way of filtering the water which the animals drink (and sometimes humans). In this area there are a lot of animals such as the moose, deer; bear, wolves, foxes, beaver and a lot of other smaller animals. There is plenty of plant life around the wetlands that animals and aquatic life use as food and others use as their homes. There are also a lot of plants that we (BFN) use for medicines. The loss of these wetlands will have on huge burden on the BFN community and the surrounding area that may have irreversible damage.

Recommendations:

- I believe that these wetlands are very valuable to the surrounding area, environment, wild life and BFN reliance on the land and resources to sustain our cultural activities.
- The Bzhki Ziibi (Montreal River) has and continues to be valuable resources to BFN
 community members to access, for harvest and manage our Natural Resources that
 include but not limited to hunting, fishing, cultural sites.
- More BFN field work is needed to provide a complete evaluation and values of these wetlands.

It is my recommendation that Batchewana First Nation should be a part of any Environmental Evaluations from the beginning stages. It is very important to have BFN participation in order to understand and/or to receive appropriate data related to direct impacts and/or values. BNR field Technician is requesting that any future work in our Territory involves our participation which includes but not limited to; covering the cost associated with providing BFN involvement. It's essential for the government, Industry, and contractors to budget for First Nation participation because it becomes costly to our First Nation departments to complete these tasks in a manner that the community will accept. Without BFN reasonable participation in future Environmental Evaluations or Environmental Impacts studies, BFN will not endorse or except the final copies of those reports.

Dave Sewell BNR Field Technician