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AMHERST ISLAND WIND ENERGY PROJECT

NATURAL HERITAGE ASSESSMENT & ENVIRONMENTAL IMPACT STUDY

Appendix B

Tables

Information Source and Contact Information	Records Requested	Records Received
Source: Ministry of the Environment	Copy of the Draft Project Description Report	None received
Name, position of contact:		
Doris Dumais, Director, Environmental Assessment and Approvals		
Date(s) contacted:		
August 17, 2011		
May 30, 2012		
Source: Canadian Environmental Assessment Agency	 Copy of the Draft Project Description Report 	None received
Name, position of contact:		
Mrs. Tracy Allison, Fish Habitat Biologist		
Date(s) contacted:		
August 17, 2011		
Source: Department of Fisheries and Oceans	 Waters supporting aquatic Species at Risk 	None received
Name, position of contact:	 Fish and fish habitat data including stream classifications (thermal regimes) 	
Ms. Louise Knox, Regional Director	Known groundwater seepage areasOther water bodies	
Date(s) contacted:	 Hazard lands Local wetlands or other environmentally sensitive or 	
August 17, 2011	significant areasAny other information regarding aquatic or terrestrial habitats or	
Source: Environment Canada	wildlife in the Study AreaWaters supporting aquatic Species	None received
Name, position of contact:	 at Risk Fish and fish habitat data including 	
Mr. Rob Dobos, Manager, Environmental Assessment Section	stream classifications (thermal regimes) Known groundwater seepage areas Other water bodies Hazard lands	
Date(s) contacted:	Local wetlands or other environmentally sensitive or	
August 17, 2011	significant areas • Any other information regarding aquatic or terrestrial habitats or	
	wildlife in the Study Area	

Table 1B: Agencies Contacted, Records Requested and Records Received

Information Source and Contact Information	Records Requested	Records Received
Source: Natural Resources Canada Name, position of contact: Mr. Mathieu Leblanc, Environmental Assessment Officer – Ecoenergy RP Date(s) contacted: August 17, 2011 Source: Cataraqui Region Conservation Authority (CRCA) Name, position of contact: Stephen Knechtal, General Manager of CRCA Date(s) contacted: September 16, 2008 August 17, 2011	 Waters supporting aquatic Species at Risk Fish and fish habitat data including stream classifications (thermal regimes) Known groundwater seepage areas Other water bodies Hazard lands Local wetlands or other environmentally sensitive or significant areas Any other information regarding aquatic or terrestrial habitats or wildlife in the Study Area Regulated Area mapping. Site records and/or lists of locally-and regionally-rare plant and animal species. Any natural area reports and/or mapping for Conservation Areas, ANSIs, Environmentally Sensitive Areas. ELC mapping Permitting requirements 	Response (March 28, 2011) and screening maps (Sept 26, 2008) Owl Woods Management Plan
October 6, 2011		
Source: Loyalist Township Name, position of contact: Murray Beckel, Planner/Chief Building Official of Loyalist Township Date(s) contacted: September 16, 2008 October 6, 2011	Notice of Draft Site Plan request	None received
Source: Ministry of Natural Resources Name, position of contact: Eric Prevost (Renewable Energy Planning Ecologist) and Kate Pitt (Species at Risk Biologist)	NHA Records review for the district including: Provincial Parks, Conservation Reserves, ANSIs Wetlands (PSWs) Woodlands Valleylands Significant Wildlife Habitat	NHA Records review for the district including: Provincial Parks, Conservation Reserves, ANSIs Wetlands (PSW Evaluations) Woodlands Valleylands

Table 1B: Agencies Contacted, Records Requested and Records Received

Information Source and Contact Information	Records Requested	Records Received
Date(s) contacted:		Significant Wildlife Habitat
May 12, 2011		
June 3, 2011		
February 2012		

Table 2B. Background Wildlife List	Ι								
Table 2D. Background Wilding Elst							Local Status		
			GLOBAL				PIF Priority Species (BCR		
COMMON NAME	SCIENTIFIC NAME	ONTARIO STATUS	STATUS	COSSARO	COSEWIC	ECO REGION (OWES)	13)		SOURCE
ODONATA			 						
Familiar Bluet	Enallagma civile	S5	G5						KFN
Fragile Forktail	Ischnura posita	S4	G5						KFN
Eastern Forktail	Ischnura verticalis	S5	G5						KFN
Twelve-Spotted Skimmer	Libellula pulchella	S5	G5						KFN
Common Whitetail	Plathemis lydia	S5	G5						KFN
DI ETTERRI IFO			1			1			
BUTTERFLIES Monarch	Panaua plavinaua	S4B, S2N	G5	SC	SC	<u> </u>			MNR
Ivoriarch	Danaus plexippus	34B, 32N	Go.	SC .	SC .				IVINK
AMPHIBIANS									
Spotted Salamander	Ambystoma maculatum	S4	G5						
American Toad	Anaxyrus americanus	S5	G5						HA
Whaters Charlin Frog (great lakes, shield)	Poor selección tripociónto	C4	CE	NAD	TUD				1.10.1ZTN1
Western Chorus Frog (great lakes - shield) Spring Peeper	Pseudacris triseriata Pseudacris crucifer	S4 S5	G5 G5	NAR	THR				HA/KFN HA
Bullfrog	Lithobates catesbeiana	\$4	G5						HAKFN
Northern Green Frog	Lithobates clamitans	S5	G5						HA
Northern Leopard Frog	Lithobates pipiens	S5	G5	NAR	NAR	1			HAKFN
Mink Frog	Lithobates septentrionalis	S5	G5						HA
REPTILES									
Snapping Turtle	Chelydra serpentina	S3	G5 CFTF	SC	SC	1			HAMNR
Midland Painted Turtle	Chrysemys picta marginata	S5	G5T5 G5	SC	SC				HA NHIC/HA/MNR
Northern Map Turtle Eastern Gartersnake	Graptemys geographica Thamnophis sirtalis	S3 S5	& &	<u>sc</u>	<u>sc</u>				HA/KFN
Northern Watersnake	Nerodia sipedon sipedon	S5	G5T5	NAR	NAR				HAKFN
Brown Snake	Storeria dekayi	S5	G5	1000	NAR				HA
Eastern Milksnake	Lampropeltis triangulum	S3	G5	SC	SC				HAMNR
BIRDS									
Canada Goose	Branta canadensis	S5	G5						OBBA/KFN
Mute Swan	Cygnus olor	SNA	G5						OBBA
Wood Duck	Aix sponsa	S5 S4	G5 G5						OBBA
Gadwall American Wigeon	Anas strepera Anas americana	S4 S4	& &			6			OBBAKFN OBBAKFN
American Black Duck	Anas rubripes	S4 S4	G5			0			OBBAKEN
Mallard	Anas platyrhynchos	S5	G5						OBBAKFN
Blue-winged Teal	Anas discors	S4	G5						OBBA
Northern Shoveler	Anas clypeata	S4	G5			6			OBBA
Northern Pintail	Anas acuta	S5	G5						OBBA
Green-winged Teal	Anas crecca	S4	C5						OBBA
Redhead	Aythya americana	S2B, S4N	G5						OBBA
Ring-necked Duck	Aythya collaris	S5	G5			6,7			OBBA
Lesser Scaup	Aythya affinis	S4	G5 G5			7			OBBA
Hooded Merganser Common Merganser	Lophodytes cucullatus	S5B,S5N S5B,S5N	G5			7			OBBA OBBA
Red-breasted Merganser	Mergus merganser Mergus serrator	\$4B,\$5N	G5			6,7			OBBA
Ruddy Duck	Oxyura jamaicensis	S4B,S4N	G5			5,1			OBBA
Ring-necked Pheasant	Phasianus colchicus	SNA	G5			1			OBBAKFN
Ruffed Grouse	Bonasa umbellus	S5	G5						OBBA
Common Loon	Gavia immer	S5B,S5N	G5	NAR	NAR				OBBA/KFN
Pied-billed Grebe	Podilymbus podiceps	S4B,S4N	G5						OBBA/KFN
Double-crested Cormorant	Phalacrocorax auritus	S5B	G5	NAR	NAR	1			OBBA/KFN
American Bittern	Botaurus lentiginosus	S4B	G4 G5			1			OBBAKEN OBBAKEN
Great Blue Heron Green Heron	Ardea herodias Butorides virescens	S5 S4B	G5			+			OBBA/KFN OBBA
Black-crowned Night-Heron	Nycticorax nycticorax	S3B,S3N	G5			1			OBBA/KFN
Turkey Vulture	Cathartes aura	S5B	G5						OBBAKFN
Osprey	Pandion haliaetus	S5B	G5			7			OBBAKFN
Northern Harrier	Circus cyaneus	S4B	G5	NAR	NAR		Х	Grass	OBBA/KFN
Sharp-shinned Hawk	Accipiter striatus	S5	G5	NAR	NAR				OBBA
Cooper's Hawk	Accipiter cooperii	S4	G5	NAR	NAR				OBBA
Northern Goshawk	Accipiter gentilis	S4	G5	NAR	NAR	7			OBBA
Red-tailed Hawk	Buteo jamaicensis	S5	G5	NAR	NAR	1			OBBAKEN OBBAKEN
American Kestrel	Falco sparverius	S5B	G5	NAD	A 145	<u> </u>	Х	Grass	OBBA/KFN
Merlin Virginia Pail	Falco columbarius Rallus limicola	S5B S5B	G5 G5	NAR	NAR	6			OBBA OBBA
Virginia Rail Sora	Porzana carolina	S4B	G5						OBBA OBBA
Common Moorhen	Gallinula chloropus	S4B	G5			†			OBBA
SIII	Sam loid of Hot Opolo	1010		1	1	ı			

American Coot	Fulica americana	S4B	G5	NAR	NAR	I			OBBA
Killdeer	Charadrius vociferus	S5B, S5N	G5	IVAR	IVAR		1		OBBA/KFN
Spotted Sandpiper	Actitis macularia	S5	G5						OBBA/KFN
Upland Sandpiper	Bartramia longicauda	S4B	G5						OBBA
Wilson's Snipe	Gallinago delicata	S5B	G5				1		OBBAKFN
American Woodcock	Scolopax minor	S4B	G5						OBBA
Wilson's Phalarope	Phalaropus tricolor	S3B	G5						OBBAKFN
Ring-billed Gull	Larus delawarensis	S5B,S4N	G5						OBBAKFN
Herring Gull	Larus argentatus	S5B,S5N	G5						OBBAKFN
Great Black-backed Gull	Larus marinus	S2B	G5						OBBAKFN
Caspian Tern	Hydroprogne caspia	S3B	G5	NAR	NAR				OBBA/KFN
Black Tern	Chlidonias niger	S3B	G4	SC	NAR				OBBA/NHIC/MNR
Common Tern	Sterna hirundo	S4B	G5	NAR	NAR				OBBA/KFN
Rock Pigeon	Columba livia	SNA	G5						OBBA
Mourning Dove	Zenaida macroura	S5	G5						OBBA/KFN
Yellow-billed Cuckoo	Coccyzus americanus	S4B	G5						OBBA
Black-billed Cuckoo	Coccyzus erythropthalmus	S5B	G5				Х	Shrub	OBBA
Eastern Screech-Owl	Megascops asio	S 5	G5	NAR	NAR				OBBA/KFN
Great Horned Owl	Bubo virginianus	S 5	G5						OBBA/KFN
Long-eared Owl	Asio otus	S4	G5						OBBA
Short-eared Owl	Asio flammeus	S2N, S4B	G5	SC	SC-3		X	Grass	OBBA/MNR
Common Nighthawk	Chordeiles minor	S4B	G5	SC	THR				OBBA/MNR
Ruby-throated Hummingbird	Archilochus colubris	S5B	G5						OBBA
Belted Kingfisher	Ceryle alcyon	S4B	G5				Х	Other	OBBAKFN
Yellow-bellied Sapsucker	Sphyrapicus varius	S5B	G5						OBBA
Downy Woodpecker	Picoides pubescens	S5	G5						OBBAKFN
Hairy Woodpecker	Picoides villosus	S5	G5						OBBA
Northern Flicker	Colaptes auratus	S4B	G5				Х	Forest	OBBA/KFN
Pileated Woodpecker	Dryocopus pileatus	S5	G5						OBBA
Olive-sided Flycatcher	Contopus borealis	S4B	G5	SC	THR	6			KFN
Eastern Wood-Pewee	Contopus virens	S4B	G5				Х	Forest	OBBAKFN
Alder Flycatcher	Empidonax alnorum	S5B	G5				.,	- ·	OBBA
Willow Flycatcher	Empidonax traillii	S5B	G5				Х	Shrub	OBBA/KFN
Least Flycatcher	Empidonax minimus	S4B SED	G5						OBBA OBBA
Eastern Phoebe	Sayornis phoebe	S5B	G5 G5						OBBA
Great Crested Flycatcher	Myiarchus crinitus	S4B S4B	G5				Х	Grass	OBBA/KFN OBBA/KFN
Eastern Kingbird Warbling Vireo	Tyrannus tyrannus Vireo gilvus	S5B	G5				^	Glass	OBBA/KFN
Red-eyed Vireo	Vireo glivaceus	S5B	G5						OBBA/KFN
Blue Jay	Cyanocitta cristata	S5	G5						OBBA/KFN
American Crow	Corvus brachyrhynchos	S5B	G5						OBBAKFN
Common Raven	Corvus corax	S5	G5			6			OBBA
Horned Lark	Eremophila alpestris	S5B	G5						OBBA
Purple Martin	Progne subis	S4B	G5						OBBA/KFN
Tree Swallow	Tachycineta bicolor	S4B	G5						OBBA/KFN
Northern Rough-winged Swallow	Stelgidopteryx serripennis	S4B	G5						OBBA/KFN
Bank Swallow	Riparia riparia	S4B	G5				Х	Other	OBBA
Cliff Swallow	Petrochelidon pyrrhonota	S4B	G5						OBBA
Black-capped Chickadee	Poecile atricapillus	S5	G5						OBBA/KFN
Red-breasted Nuthatch	Sitta canadensis	S5	G5						OBBA
White-breasted Nuthatch	Sitta carolinensis	S5	G5						OBBA/KFN
Brown Creeper	Certhia americana	S5B	G5						OBBA
Carolina Wren	Thryothorus ludovicianus	S4	G5						OBBA
House Wren	Troglodytes aedon	S5B	C5						OBBAKFN
Winter Wren	Troglodytes hiemalis	S5B	C5						OBBA
Sedge Wren	Cistothorus platensis	S4B	G5	NAR	NAR				OBBA
Marsh Wren	Cistothorus palustris	S4B	G5						OBBAKFN
Golden-crowned Kinglet	Regulus satrapa	S5B	G5			7			OBBA
Blue-gray Gnatcatcher	Polioptila caerulea	S4B	G5						OBBA
Eastern Bluebird	Sialia sialis	S5B	G5	NAR	NAR		<u> </u>		OBBA
Veery	Catharus fuscescens	S4B	G5						OBBA
Hermit Thrush	Catharus guttatus	S5B	G5			7	.,	-	OBBA (FILL
Wood Thrush	Hylocichla mustelina	S4B	G5				Х	Forest	OBBA/KFN
American Robin	Turdus migratorius	S5B	G5						OBBAKEN OBBAKEN
Gray Catbird	Dumetella carolinensis	S4B	G5						OBBAKFN
Northern Mockingbird	Mimus polyglottos	S4	G5				.,	CI	OBBA
Brown Thrasher	Toxostoma rufum	S4B	G5				Х	Shrub	OBBAKEN
European Starling	Sturnus vulgaris	SNA	G5				<u> </u>		OBBAKEN OBBAKEN
Cedar Waxwing	Bombycilla cedrorum	S5B	G5				V	Cl	OBBAKEN
	Vermivora cyanoptera	S4B	G5				X	Shrub	OBBA
Blue-winged Warbler	• •	CAD	C_4	~~	T :-				
Golden-winged Warbler	Vermivora chrysoptera	S4B SER	G4	SC	THR		Х	Shrub	OBBA/MNR
Golden-winged Warbler Nashville Warbler	Vermivora chrysoptera Oreothlypis ruficapilla	S5B	G5	SC	THR		X	Shrub	OBBA
Golden-winged Warbler	Vermivora chrysoptera			SC	THR		X	Shrub	

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Field Starrow							7			
Security			S4B	G5				Х	Grass	OBBA
Seasing Spartow	Vesper Sparrow	Pooecetes gramineus	S4B	G5				Х	Grass	OBBA
Septimen	Savannah Sparrow		S4B	G5				Х	Grass	OBBA/KFN
Seamy Stations	Grasshopper Sparrow	Ammodramus savannarum	S4B	C55				Х	Grass	OBBA/KFN
Whete-Instances Serror S	Song Sparrow	Melospiza melodia	S5B	G5						OBBA/KFN
Sarlet Transport	Swamp Sparrow	Melospiza georgiana	S5B	G5						OBBA
Northern Conference	White-throated Sparrow									
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White winger Crossbill	•									
American Goldfrich		•					67			
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MAMMALS										
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Wrighia Opcosum Dioblights virginiana \$4 65	MAMMALS									
Number Short-laied Strew Barina brevicauda S5 G5		Didelphis virginiana	S4	G5						MA
Star-nosed Mole	• .									
Little Brown Bat Myolis Judique SS GS THR MAKFN Northern Long-eared Bat Myolis septeminalis SS7 G4 BNDNS MA Eastern Pipistrible Pipistribles subflavus SS7 G5 BNDNS MA Red Bat Lasinus borealis S4 G5 BNDNS MA Bg Brown Bat Epistribus Subsus S5 G5 G5 MA Heary Bat Lasinus forereus S4 G5 MA MA Heary Bat Lasinus forereus S4 G5 MA MA Eastern Cottortail Symlagus floridanus S5 G5 G5 MA MA Eastern Chlorrunk Japus europeaus SNA G5 G5 7 MA Eastern Chlorrunk Tarrias striatus S5 G5 G5 MA MA <td< td=""><td>Star-nosed Mole</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Star-nosed Mole									
Northern Long-eared Bat	Little Brown Bat	Myotis lucifugus	S5	G5		THR				MA/KFN
Red Bat Lasinus boreelis \$4 65 MA MA Big Brown Bat Eptesica fusus \$5 65 MA MA Heary Bat Lesius chreeus \$4 65 MA MA Eastern Cottonial Sylvilegus finidanus \$5 65 MA MA Eastern Cottonial Sylvilegus finidanus \$5 65 MA MA Shoshee Hare Legus americanus \$5 65 MA MA European Hare Legus americanus \$5 65 MA MA Eastern Chipruruk Tarries striatus \$5 65 MA MA Bastern Woodchuck Mamata monax \$5 65 MA MA Woodchuck Mamata monax \$5 65 MA MA Red Squirrel Solutus cardinensis \$5 65 MA MA Beaver Castor caradensis \$5 65 MA MA Beaver Castor caradensis \$5<	Northern Long-eared Bat		S3?	G4		END-NS				MA
Big Brown Bat	Eastern Pipistrelle	Pipistrellus subflavus	S3?	C5		END-NS				MA
Heary Bat	Red Bat	Lasiurus borealis	S4	G5						MA
Eastern Cottontail	Big Brown Bat	Eptesicus fuscus	S5	G5						MA
Showshoe Haire Lepus americanus S5 G5 7 MA European Hare Lepus europeaus SNA G5	Hoary Bat	Lasiurus cinereus	S4							MA
European Haire		Sylvilagus floridanus								
Eastern Chipmunk	Snowshoe Hare	Lepus americanus	+				7			
Woodchuck Memota monex S5 G6 MA MA Grey Squirrel Soiuns carolinensis 55 G5 MA MA Red Squirel Tarrissciurus huboricus S5 G5 MA MA Beaver Castor canadensis S5 G5 MA MA White-footed Mouse Peronyscus feucopus S5 G5 MA MA Deer Mouse Peronyscus maniculatus S5 G5 MA MA Muskrat Ordatra zibethicus S5 G5 MA MA Meadow Vole Microtus pennsylvanicus S5 G5 MA MA Meadow Vole Microtus pennsylvanicus S5 G5 MA MA Meadow Vole Microtus pennsylvanicus S5 G5 MA MA Morvay Rati Pattus nonvegicus SNA G5 MA MA Porcypine Erethizon dovsatum S5 G5 T MA Coyote Canis latrans										
Grey Squirrel Sciurus carolinensis \$5 \$6 MA Red Squirrel Tamiasciurus hudsonicus \$5 \$6 MA Beaver Castor caracterisis \$5 \$6 MA White-footed Mouse Perconyscus leucopus \$5 \$6 MA Deer Mouse Perconyscus maniculatus \$5 \$6 MA Mustrat Ondetra zibethicus \$5 \$6 MA Meadow Vole Microtus pernisylvanicus \$5 \$6	·									
Red Squirrel Tarriasciurus hudsonicus \$5 \$6 MA Beaver Castor canadensis \$5 \$6										
Beaver Castor canadensis S5 G5 S S S MA										
White-footed Mouse Peronyscus leucopus S5 G5 S MA Deer Mouse Peronyscus maniculatus S5 G5 S S Marken Ma	·									
Deer Mouse Peromyscus maniculatus S5 G5										
Muskrat Ondatra zibethicus S5 C6 Image: Control of the control of		· · · · · · · · · · · · · · · · · · ·								
Meadow Vole Microtus pennsylvanicus S5 G5 G5 G5 MAKKFN Norway Rat Patitus norvegicus SNA G5 G5 MA Porcupine Erethizon dosatum S5 G5 G5 7 MA Coyote Canis latrans S5 G5 G5 G5 MA Red Fox Vulpes vulpes S5 G5 G5 G5 MA Reccoon Procyon lotor S5 G5 G5 G5 MA Mink Mustela vison S4 G5 G5 G5 MA Striped Skunk Mephitis mephitis S5 G5 G5 G5 G5 MA River Otter Lutra canadensis S5 G5 G5 G5 G5 MA White-tailed Deer Odocoileus virginianus S5 G5										
Norway Rat Rattus norvegicus SNA G5 MA Porcupine Erethizon dorsatum S5 G5 7 MA Coyote Canis latrans S5 G5 MA MA Red Fox Vulpes vulpes S5 G5 MA MA Raccoon Procyon lotor S5 G5 MA MA Mink Mustela vison S4 G5 MA MA Striped Skunk Mephitis mephitis S5 G5 MA MA River Otter Lutra canadensis S5 G5 MA MA White-tailed Deer Odocoileus virginianus S5 G5 MA MA SUMMARY MA MA MA MA MA MA MA Total Butterflies: Ma										
Porcupine Erethizon dorsatum S5 G5 G5 G5 MA										
Coyote Canis latrans S5 G5 G5 KFN Red Fox Vulpes vulpes S5 G5 MA MA Raccoon Procyon lotor S5 G5 MA MA Mink Mustela vison S4 G5 MA MA Striped Skunk Mephitis mephitis S5 G5 MA MA River Otter Lutra canadensis S5 G5 MA MA White-tailed Deer Odocoileus virginianus S5 G5 MA MA SUMWARY MA MA MA MA MA MA MA Total Butterflies: Ma MA <td></td> <td></td> <td>+</td> <td></td> <td></td> <td></td> <td>7</td> <td></td> <td> </td> <td></td>			+				7			
Red Fox Vulpes vulpes \$5 \$65 MA Raccoon Procyon lotor \$5 \$65 MA Mnk Mustela vison \$4 \$65 MA Striped Skunk Mephitis mephitis \$5 \$65 MA River Otter Lutra canadensis \$5 \$65 MA White-tailed Deer Odocoileus virginianus \$5 \$65 MAKFN SUMWARY										
Raccoon Procyon lotor \$5 \$6 \$			+						+ +	
Mink Mustela vison S4 G5 S MA Striped Skunk Mephitis mephitis S5 G5 S5 G5 MA River Otter Lutra canadensis S5 G5 S5 G5 MA White-tailed Deer Odocoileus virginianus S5 G5 S5 G5 MA SUMWARY SUMWARY ST S										
Striped Skunk Mephitis mephitis S5 G5 S MA River Otter Lutra canadensis S5 G5 S MA White-tailed Deer Odocoileus virginianus S5 G5 S MA SUMMARY MA MA MA Total Butterflies: S <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>										
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SUMWARY Image: Control of the property		Cooconeus virainianus							1	
Total Butterflies:		Coccolleus virginiarius								IVM
	White-tailed Deer	Coccineus virginiarius								IVIA
	White-tailed Deer	Coccolleus virginiarius								IVIA
	White-tailed Deer SUMWARY	Coccineus virginiarius								IVPA

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Total Reptiles:									
Total Birds:									
Total Breeding Birds:									
Total Mammals:									
SIGNIFICANT SPECIES									
Global:									
National:									
Provincial:									
Regional:									
Local:									
Explanation of Status and Acronymns									
COSSARO: Committee on the Status of Spec	cies at Risk in Ontario								
COSEMIC: Committee on the Status of Enda	angered Wildlife in Canada								
REGION: Rare in a Site Region								8	
S1: Critically Imperiled—Critically im	periled in the province (often 5 or	fewer occur	rrences)					6	
S2: Imperiled—Imperiled in the province, ven	· · · · · · · · · · · · · · · · · · ·	Tewer occur						4	
								-	
S3: Vulnerable—Vulnerable in the province, r		er)						13	
S4: Apparently Secure—Uncommon but not								31	
S5: Secure—Common, widespread, and abu	ndant in the province								
SX: Presumed extirpated									
SH: Possibly Extirpated (Historical)									
SNR: Unranked								L_	
SU: Unrankable—Currently unrankal	ole due to lack of information								
SNA: Not applicable—A conservation status		s is not a suita	ble target fo	or conservation a	ctivities.				
S#S#: Range Rank—A numeric range r						ies			
S#B- Breeding status rank	(= 0, ===, == ==========================	,		,					
S#N- Non Breeding status rank									
?: Indicates uncertainty in the assigned rank									
G1: Extremely rare globally; usually fewer that	an 5 occurrences in the overall range								
G1G2: Extremely rare to very rare globally									
G2: Very rare globally; usually between 5-10	occurrences in the overall range								
G2G3: Very rare to uncommon globally									
G3: Rare to uncommon globally; usually betv	veen 20-100 occurrences								
G3G4: Rare to common globally									
G4: Common globally; usually more than 100	occurrences in the overall range								
G4G5: Common to very common globally									
G5: Very common globally; demonstrably sed	cure								
T: Denotes that the rank applies to a subspec									
END: Endangered	- Control of the cont								
THR: Threatened									
SC: Special Concern	direction that are soint in sith or are Colore	dida O Calaas	-h -l O N	la Calanali da af	tha Charina A	Diale Act (C)	 D		
2, 3 or NS after a COSEMC ranking inc	dicates the species is either on Sched	dule 2, Sched	dule 3 or N	No Schedule of	tne Species A	t Risk Act (SA	NRA)		
NAR: Not At Risk									
IND: Indeterminant, insufficient information to	assign status								
DD: Data Deficient									
6: Rare in Site Region 6									
7: Rare in Site Region 7									
Area: Minimum patch size for area-sensitive	species (ha)								
H- highly significant in Hamilton Region (i.e. r									
m- moderately significant in Hamilton Region									
L1- extremely rare locally (Toronto Region)	(
L2- very rare locally (Toronto Region)									
L3- rare to uncommon locally (Toronto Regio	19								
HR- rare in Halton Region, highly significant									
HU- uncommon in Halton Region, moderately									
* The Pileated Woodpecker will incorporate s	maller woodlots into its homerange, there	fore it may not	be a true a	rea-sensitive spe	ecies (Naylor et a	al. 1996)		1	T
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Butterflies: September, 2009									
Amphibans: September, 2009									
Reptiles:June, 2011									
Birds: June, 2011									
Mammals: September, 2009									
•	3000								
S and G ranks and explanations: September,	2003								
NOTE									
NOTE									
All rankings for birds refer to breeding birds u	nless the ranking is followed by N								
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HA: Ontario Herpetofaunal Atlas									
KFN: Kingston Field Naturalists									
MA: Mammal Atlas of Ontario									
MNR: Ministry of Natural Resources									
NHIC: Natural Heritage Information Centre									
OBBA: Ontario Breeding Bird Atlas									

Common Name	Scientific Name	S- Rank	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Description of Habitat (OMNR 2010)
Butterflies			,			
Monarch	Danaus plexippus	S2N, S4B	SC	SC	NHIC	abandoned farmland and roadsides, but also in city gardens and parks. Larval host plant is milkweed.
REPTILES						
Snapping Turtle	Chelydra serpentina	S3	SC	SC	OHSA	permanent, semi-permanent fresh water; marshes, swamps or bogs; rivers and streams with soft muddy banks or bottoms
Northern Map Turtle	Graptemys geographica	S3	SC	SC	OHSA	large bodies of water with soft bottoms, and aquatic vegetation; basks on logs or rocks or on beaches and grassy edges, will bask in groups; uses soft soil or clean dry sand for nest sites
Milksnake	Lampropeltis triangulum	S 3	SC	SC	MNR	farmlands, meadows, hardwood or aspen stands; pine forest with brushy or woody cover; river bottoms or bog woods; hides under logs, stones, or boards or in outbuildings; often uses communal nest sites
AMPHIBIANS						
Western Chorus Frog	Pseudacris triseriata	S4		THR	OHSA	roadside ditches or temporary ponds in fields; swamps or wet meadows; woodland or open country with cover and moisture; small ponds and temporary pools
BIRDS						
Louisiana Waterthrush	Seiurus motacilla	S3B	SC	SC	NHIC	wooded ravines with running streams, woodlands swamps, and large tracts of mature deciduous or mixed forests
Black Tern	Chlidonias niger	S3B	SC		NHIC, OBBA, MNR	wetlands, coastal or inland marshes; large cattail marshes, marshy edges of rivers, lakes or ponds, wet open fens, wet meadows; returns to same area to nest each year in loose colonies; must have shallow (0.5 to 1 m deep) water and areas of open water near nests; prefers marshes >20 ha in size
Short-eared Owl	Asio flammeus	S2N, S4B	SC	SC	OBBA	grasslands, open areas or meadows that are grassy or bushy; marshes, bogs or tundra; both diurnal and nocturnal habits; ground nester; destruction of wetlands by drainage for agriculture is an important factor in the decline of this species; home range 25 -125 ha; prefers 75-100 ha of contiguous open habitat

Common Name	Scientific Name	S- Rank	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Description of Habitat (OMNR 2010)
Red-headed Woodpecker	Melanerpes erythrocephalus	S4B	SC	THR	MNR	open, deciduous forest with little understory; fields or pasture lands with scattered large trees; wooded swamps; orchards, small woodlots or forest edges; groves of dead or dying trees; feeds on insects and stores nuts or acorns for winter; loss of habitat is limiting factor; requires cavity trees with at least 40 cm dbh; require about 4 ha for a territory
Redhead	Aythya americana	S2B			OBBA	shallow cattail/bulrush marshes, lakes and ponds and fens; preferred nesting usually close to shallow water
Black- crowned Night Heron	Nycticorax nycticorax	S3B			OBBA/KFN	deciduous woodland swamps, cattail marshes, islands, wooded river and lake banks, coastal wetlands
Greater Black- backed Gull	Larus marinus	S2B			OBBA/KFN	flat rocky coastal islands, moorlands, rocky beaches, cliffs; nest is solitary or in small (rarely large) colonies
Caspian Tern	Hydroprogne caspia	S3B			OBBA/KFN	open habitat near large lakes or rivers, beaches, shorelines, rocky or sandy beaches, offshore islands
Wilson's Phalarope	Phalaropus tricolor	S3B			OBBA/KFN	open wetlands, ponds, lakes, marshes and sloughs with wet meadow vegetation; freshwater coastal marshes; nests on ground in loose colonies; sewage lagoons with grassy edges
Common Nighthawk	Chordeiles minor	S4B	SC	THR	ОВВА	open ground; clearings in dense forests; ploughed fields; gravel beaches or barren areas with rocky soils; open woodlands; flat gravel roofs. This also includes open, vegetation-free habitats, including dunes, beaches, recently harvested forests, burnt-over areas, logged areas, rocky outcrops, rocky barrens, grasslands, pastures, peat bogs, marshes, lakeshores, and river banks
Olive-sided Flycatcher	Contopus borealis	S4B	SC	THR	OBBA	semi-open, conifer forest, prefers spruce; near pond, lake or river; treed wetlands for nesting; burns with dead trees for perching
Golden- winged Warbler	Vermivora chrysoptera	S4B	SC	THR	OBBA	early successional habitat; shrubby, grassy abandoned fields with small deciduous trees bordered by low woodland and wooded swamps; alder bogs; deciduous, damp woods; shrubbery clearings in deciduous woods with saplings and grasses; brier-woodland edges; prefers >10 ha of habitat
Canada Warbler	Wilsonia canadensis	S4B	SC	THR	ОВВА	interior forest; dense, mixed coniferous, deciduous forests with closed canopy, wet bottomlands of cedar or alder; shrubby undergrowth in cool moist mature woodlands; riparian habitat; usually requires at least 30 ha

Table 3B Poten	itial Species of Con	servation	n Concern occurr	ing within the St	udy Area	
Common Name	Scientific Name	S- Rank	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Description of Habitat (OMNR 2010)
Yellow- breasted Chat	Icteria virens	S2B	SC	SC	OBBA, NHIC	thickets, tall tangles of shrubbery beside streams, ponds; overgrown bushy clearings with deciduous thickets; nests above ground in bush, vines etc
MAMMALS						
Little Brown Bat	Myotis lucifugus	S5		THR	MA	caves, quarries, tunnels, hollow trees or buildings for roosting; winters in humid caves; maternity sites in dark warm areas such as attics and barns; feeds primarily in wetlands, forest edges
Northern Long-eared Bat	Myotis septentrionalis	S3?		END-NS	MA	typically a species of forested landscapes. hibernates during winter in mines or caves; during summer males roost alone and females form maternity colonies of up to 60 adults; roosts in houses, manmade structures but prefers hollow trees or under loose bark
Eastern Pipistrelle	Pipistrellus subflavus	S3?		END-NS	MA	open woods near water; roosts in trees, cliff crevices, buildings or caves; hibernates in damp, draft-free, warm caves, mines or rock crevices
VEGETATION						
Stiff Gentian	Gentianella quinquefolia	S2			NHIC	moist soil, roadsides, streambanks and edges of woods; prairies
Carolina Whitlow-grass	Draba reptans	S3			NHIC	dry sandy areas, dry open flats, limestone pavements
Smith's Bulrush	Schoenoplectus smithii	S3			NHIC	wet shores and beaches
Branching Burreed	Sparganium androcladum	SH			NHIC	shallow water and muddy shores of ponds, lake margins and marshes

Table 3B Potential Species of Conservation Conc	ern occurring within the Study Area

Common		S -	Provincial	National		
	Scientific Name	Rank	Status	Status	Source	Description of Habitat (OMNR 2010)
Name		Rank	(COSSARO)	(COSEWIC)		

COSSARO – Committee on the Status of Species at Risk in Ontario

COSEWIC - Committee on the Status of Endangered Wildlife in Canada

Source:

EC - Environment Canada/Canadian Wildlife Service Species At Risk Website

NHIC - Natural Heritage Information Database

OBBA - Ontario Breeding Bird Atlas

OHSA – Ontario Herpetofaunal Summary Atlas

AMO - Atlas of the Mammals of Ontario

DFO - direct correspondence with DFO

MNR – direct correspondence with MNR

Stantec – observed in the Study Area during site investigations

Status:

S1 - Critically Imperiled

S2 – Imperiled

S3 – Vulnerable

S#B- Breeding status rank

? – Rank uncertain

END - Endangered

THR - Threatened

SC - Special Concern

Table 4B: Natural Feature Site Investigations, Amherst Island Wind Energy

Survey Date			Duration	Weather Conditions*			
(mm/dd/yyyy)	Purpose of Site	Field	(Person-	Air	Cloud		\A/:n al**
And t	Investigation	Personnel	Hours)	(°C)*	(%)	Precip.	Wind**
Site Investigation							
	ELC, vegetation						
	communities, wetland						
7/00/0044	delineation, and wildlife	lamas Laslis	Ob.	00	20	0	
7/26/2011	habitat assessment ELC, vegetation	James Leslie	8hr	22	30	0	2
	communities, wetland						
	delineation, and wildlife						
7/27/2011	habitat assessment	James Leslie	8hr	23	20	0	3
	ELC, vegetation						
	communities, wetland delineation, and wildlife						
7/28/2011	habitat assessment	James Leslie	8hr	26	70	0	2
1720/2011	ELC, vegetation	Carries Econe	Om	20	70		
	communities, wetland						
	delineation, and wildlife						
7/29/2011	habitat assessment	James Leslie	8hr	21	100	Rain	2
	ELC, vegetation communities, wetland						
	delineation, and wildlife						
8/2/2011	habitat assessment	James Leslie	8hr	26	10	0	3
	ELC, vegetation		-	_		-	
	communities, wetland						
0/0/0044	delineation, and wildlife		01	-00		•	
8/3/2011	habitat assessment	James Leslie	8hr	22	90	0	3
	ELC, vegetation communities, wetland						
	delineation, and wildlife						
8/4/2011	habitat assessment	James Leslie	8hr	26	0	0	2
	ELC, vegetation						
	communities, wetland						
8/5/2011	delineation, and wildlife habitat assessment	James Leslie	8hr	27	10	0	2
0/3/2011	ELC, vegetation	James Lesile	OH	21	10	U	
	communities, wetland						
	delineation, and wildlife						
8/17/2011	habitat assessment	James Leslie	8hr	23	30	0	2
	ELC, vegetation						
	communities, wetland delineation, and wildlife						
8/18/2011	habitat assessment	James Leslie	8hr	22	haze	0	2
0, 10,2011	ELC, vegetation	0400 2000	0				
	communities, wetland						
	delineation, and wildlife				_		_
8/19/2011	habitat assessment	James Leslie	8hr	25	5	0	2
	ELC, vegetation communities and wildlife						
11/11/2011	habitat assessment	Josh Mansell	8hr	2	60	0	3
	ELC, vegetation			_			
	communities and wildlife						
3/27/2012	habitat assessment	James Leslie	8hr	4	10	0	2
	ELC, vegetation						
3/28/2012	communities and wildlife habitat assessment	James Leslie	8hr	4	80	0	2
3/20/2012	ELC, vegetation	James Lesile	OH	-	50	U	
	communities and wildlife						
5/18/2012	habitat assessment	Josh Mansell	8hr	5	80	0	2
	ELC, vegetation						
0/45/0040	communities and wildlife	Katherine St.	41	00	00	^	
8/15/2012	habitat assessment	James	4hr	28	60	0	2

Project: 160960595

Table 4B: Natural Feature Site Investigations, Amherst Island Wind Energy

Survey Date			Duration		Weat	ther Conditions*	
(mm/dd/yyyy) And t	Purpose of Site Investigation	Field Personnel	(Person- Hours)	Air (°C)*	Cloud (%)	Precip.	Wind**
Evaluation of Sign	ificance			-			•
4/19/2011, 19:45-		B. Holden, J.					
22:00 4/20/2011, 20:00-	Amphibian Surveys	Heslop B. Holden, J.	2hr 15min	7	100	0	3-4
21:30	Amphibian Surveys	Heslop	1hr 30min	3-4	100	Drizzle	6-7
4/26/2011, 20:25- 21:58	Amphibian Surveys	D. Graham, M. Ross	1hr 23min	8	100	0	1
5/17/2011, 20:43- 22:50	Amphibian Surveys	B. Stamp	2hr 7min	8	95	0	5
5/17/2011, 21:52- 22:57	Amphibian Surveys	J. Heslop	1hr 5min	9	100	0	3
6/18/2011, 19:25-	·	B. Holden, A.					
23:45 6/19/2011, 21:35-	Amphibian Surveys	Wormington B. Holden, A.	4hr 20min	14	0	0	2-3
23.45	Amphibian Surveys	Wormington	2hr 10min	10	5	0	1
6/7/2011, 8:30- 9:15	Waterfowl Nesting Survey (WN1)	P. Read	45min	13	40	0	1
6/5/2011, 9:25- 9:40	Waterfowl Nesting Survey (WN2)	P. Read	15min	12	90	0	0
6/11/11, 5:00-9:57	Breeding Bird Surveys and Point Counts (P1, P2, G1, G2, W1, W2)	P. Read	4hr 57min	15	80	0	1
6/24/2011, 6:15- 10:45	Breeding Bird Surveys and Point Counts (P1, P2, G1, G2, W1, W2)	A. Wormington	4hr 47min	22	90	0	2
7/12/2011, 5:19- 10:30	Breeding Bird Surveys and Point Counts (P1, P2, G1, G2, W1, W2)	A. Wormington	1hr 23min	23	100	0	1
6/3/2011, 5:00- 10:45	Breeding Bird Surveys and Point Counts (P19-P23, G9, G13, G16, G17, W13, W15, W21, W30, W31, W33)	P. Read	5hr 45min	13	0	0	1
6/17/2011, 5:20- 12:02	Breeding Bird Surveys and Point Counts (P19-P23, G9, G13, G16, G17, W13, W15, W21, W30, W31, W33)	A. Wormington	6hr 45min	13	10	0	2
7/3/2011, 5:59- 10:53	Breeding Bird Surveys and Point Counts (P19-P23, G9, G13, G16, G17, W13, W15, W21, W30, W31, W33)	A. Wormington	4hr 55min	22	100	0	0
6/5/2011, 5:15- 11:10	Breeding Bird Surveys and Point Counts (P24, P28-P30, P32, P34, P62, P63, G14, G15, G20, W15, W33, W34, W36, W37, M3)	P. Read	5hr 55min	12	90	0	0
6/21/2011, 9:03-	Breeding Bird Surveys and Point Counts (P24, P28-P30, P32, P34, P62, P63, G14, G15, G20, W15, W33, W34,	A Marsington	Thu FOorin	44	10	0	
7/7/2011, 5:50-	W36, W37, M3) Breeding Bird Surveys and Point Counts (P24, P28-P30, P32, P34, P62, P63, G14, G15, G20, W15, W33, W34,	A. Wormington	5hr 50min	11	10	0	1
10:22 6/4/2011, 4:50-	W36, W37, M3) Breeding Bird Surveys and Point Counts (P27, P39, P40, P41, P42, G19, G22,	A. Wormington	5hr 40min	15	0	0	1
10:52 6/18/2011, 5:43-	G23, W24, W25, W27- W29) Breeding Bird Surveys and	P. Read	6hr 2min	13	80	0	1
9:41	Point Counts (P27, P39,	A. Wormington	5hr 17min	13	30	0	0

Table 4B: Natural Feature Site Investigations, Amherst Island Wind Energy

Survey Date			Duration	Weather Conditions*			
(mm/dd/yyyy) And t	Purpose of Site Investigation	Field Personnel	(Person- Hours)	Air (°C)*	Cloud (%)	Precip.	Wind**
	P40, P41, P42, G19, G22,		,		Ì	•	
	G23, W24, W25, W27- W29) Breeding Bird Surveys and						
	Point Counts (P27, P39,						
7/4/2011, 5:50-	P40, P41, P42, G19, G22,						
10:33	G23, W24, W25, W27- W29) Breeding Bird Surveys and	A. Wormington	4hr 30min	15	50	0	1
	Point Counts (P31, P33,						
6/6/2011, 5:00-	P35, P43, P44, G18, G21,						
9:38	G24, G25, W26, W32, W33)	P. Read	4hr 38min	12	0	fog	0
	Breeding Bird Surveys and Point Counts (P31, P33,						
6/19/2011, 5:36-	P35, P43, P44, G18, G21,						
11:00	G24, G25, W26, W32, W33)	A. Wormington	5hr 11min	10	10	0	0
	Breeding Bird Surveys and Point Counts (P31, P33,						
7/5/2011, 6:46-	P35, P43, P44, G18, G21,						
9:18	G24, G25, W26, W32, W33)	A. Wormington	4hr 35min	20	10	0	1
	Breeding Bird Surveys and Point Counts (P36-P38, P47,						
6/7/2011, 5:00-	G26-28, G30, W34,						
9:58	W35,W38, W40-W42, M4)	P. Read	4hr 58min	13	40	0	1
	Breeding Bird Surveys and Point Counts (P36-P38, P47,						
6/20/2011, 5:58-	G26-28, G30, W34,						
8:42	W35,W38, W40-W42, M4)	A. Wormington	6hr 42min	10	40	0	1
	Breeding Bird Surveys and Point Counts (P36-P38, P47,						
7/6/2011, 5:36-	G26-28, G30, W34,						
9:22	W35,W38, W40-W42, M4)	A. Wormington	4hr 54min	17	50	0	1
5/30/2011, 6:10-	Breeding Bird Surveys and Point Counts (P3-P5, P14,						
10:00	G3, G5-G9, W3, W6, M1)	P. Read	3hr 50min	16	80	0	0
	Breeding Bird Surveys and						
6/15/11, 5:30- 12:15	Point Counts (P3-P5, P14, G3, G5-G9, W3, W6, M1)	A. Wormington	5hrs 6min	12	10	0	3
12.13	Breeding Bird Surveys and	A. Womington	31115 0111111	12	10	0	3
6/27/2011, 5:42-	Point Counts (P3-P5, P14,						
9:13	G3, G5-G9, W3, W6, M1)	A. Wormington	3hr 10min	18	0	0	0
6/30/2011, 6:10-	Breeding Bird Surveys and Point Counts (P3-P5, P14,						
11:05	G3, G5-G9, W3, W6, M1)	A. Wormington	4hr 12min	16	10	0	1
	Breeding Bird Surveys and						
	Point Counts (P45, P46, P52, P53, P55, P56, G29,						
6/9/2011, 5:00-	G33, G35, G36, W38,						
10:25	W43,W45) Breeding Bird Surveys and	P. Read	5hr 25min	15	40	0	2
	Point Counts (P45, P46,						
	P52, P53, P55, P56, G29,						
6/23/2011, 5:40-	G33, G35, G36, W38,	A Marminatan	Ohr 10min	22	40	trans	2
8:50	W43,W45) Breeding Bird Surveys and	A. Wormington	3hr 10min	22	40	trace	2
	Point Counts (P45, P46,						
7/10/2011, 5:30-	P52, P53, P55, P56, G29,						
7/10/2011, 5:30- 12:15	G33, G35, G36, W38, W43,W45)	A. Wormington	4hr 32min	18	70	0	1
	Breeding Bird Surveys and					-	
6/0/0044 5:00	Point Counts (P48-P51, P54,						
6/8/2011, 5:00- 10:17	P64, G31, G32,G34, W38, W43, W45)	P. Read	5hr 17min	14	n/a	fog	2
6/22/2011, 5:25-	Breeding Bird Surveys and	A. Wormington	3hr 58min	18	100	light	2

Table 4B: Natural Feature Site Investigations, Amherst Island Wind Energy

Survey Date			Duration	Weather Conditions*			
(mm/dd/yyyy) And t	Purpose of Site Investigation	Field Personnel	(Person- Hours)	Air (°C)*	Cloud (%)	Precip.	Wind**
10:12	Point Counts (P48-P51, P54, P64, G31, G32,G34, W38, W43, W45)						
7/8/2011, 6:25- 7:58	Breeding Bird Surveys and Point Counts (P48-P51, P54, P64, G31, G32,G34, W38, W43, W45)	A. Wormington	4hr 43min	20	50	0	0
6/10/2011, 4:55- 10:15	Breeding Bird Surveys and Point Counts (P57, P58, G37-G39, G43, W46, W47)	P. Read	5hr 20min	13	80	0	2
6/25/2011, 5:20- 9:32	Breeding Bird Surveys and Point Counts (P57, P58, G37-G39, G43, W46, W47)	A. Wormington	5hr 24min	16	80	0	1
7/11/2011, 5:18- 10:35	Breeding Bird Surveys and Point Counts (P57, P58, G37-G39, G43, W46, W47) Breeding Bird Surveys and	A. Wormington	2hr 32min	22	85	0	1
6/10/2011, 8:05- 11:15	Point Counts (P59-P61, G40, G41, W22, W23, W44, M5)	P. Read	3hr 10min	16	100	0	2 to 3
6/26/2011, 6:10- 9:30	Breeding Bird Surveys and Point Counts (P59-P61, G40, G41, W22, W23, W44, M5)	A. Wormington	2hr 44min	18	80	0	1
7/9/2011, 5:40- 11:30	Breeding Bird Surveys and Point Counts (P59-P61, G40, G41, W22, W23, W44, M5)	A. Wormington	3hr 46min	20	0	0	1
6/1/2011, 5:00- 10:24	Breeding Bird Surveys and Point Counts (P6, P17, P18, P25, P26, G4, G11, G42, W7-WW11, W20)	P. Read	5hr 24min	19	10	0	2
6/13/11, 5:40- 11:30	Breeding Bird Surveys and Point Counts (P6, P17, P18, P25, P26, G4, G11, G42, W7-WW11, W20)	A. Wormington	5hr 55min	10	10	0	0
6/28/2011, 5:55- 11:35	Breeding Bird Surveys and Point Counts (P6, P17, P18, P25, P26, G4, G11, G42, W7-WW11, W20)	A. Wormington	4hr 30min	20	100	0	2
6/2/2011, 5:00-	Breeding Bird Surveys and Point Counts (P7, P9, P13, P15, P16, G9, G12, W14,						
10:40 6/14/2011, 5:19- 10:30	W15) Breeding Bird Surveys and Point Counts (P7, P9, P13, P15, P16, G9, G12, W14, W15)	P. Read A. Wormington	5hr 40min 4hr 9min	12	100	0	3 4
6/29/2011, 5:50- 10:25	Breeding Bird Surveys and Point Counts (P7, P9, P13, P15, P16, G9, G12, W14, W15)	A. Wormington	3hr 31min	17	50	0	2
5/31/2011, 5:15- 9:45	Breeding Bird Surveys and Point Counts (P8, P10-P12, G9,G10,W6, W15, M1, M2)	P. Read	4hr 30min	15	10	0	0
6/16/11, 5:18- 10:35	Breeding Bird Surveys and Point Counts (P8, P10-P12, G9,G10,W6, W15, M1, M2)	A. Wormington	3hr 53min	10	0	0	1
7/2/2011, 5:55- 10:25 9/1/2011, 6:35 -	Breeding Bird Surveys and Point Counts (P8, P10-P12, G9,G10,W6, W15, M1, M2) Fall Migratory landbird	A. Wormington B. Holden & A.	3hr 20min 3hr 40min	16 18-	0 100	0	<u>1</u> 1-4

Table 4B: Natural Feature Site Investigations, Amherst Island Wind Energy

			_	Weather Conditions*			
Survey Date (mm/dd/yyyy)	Purpose of Site	Field	Duration (Person-	Air	Cloud	ther Conditions*	
And t	Investigation	Personnel	Hours)	(°C)*	(%)	Precip.	Wind**
10:15	survey	Wormington	1100.107	22	(/-/	1100.61	
9/2/2011, 6:41 -	Fall Migratory landbird	B. Holden & A.		18-			
9:44	survey	Wormington	3hr 3min	21	5-50	0	1-5
9/8/2011, 6:38 -	Fall Migratory landbird	B. Holden & A.	01 00	16-	80-	0	4.5
9:58 9/9/2011, 6:35 -	survey Fall Migratory landbird	Wormington B. Holden & A.	3hr 20min	18 16-	100	0	1-5
9:38	survey	Wormington	3hr 3min	23	10-20	0	0-2
9/15/2011, 6:51 -	Fall Migratory landbird	B. Holden & M.	Orn Ornin	20	95-	0	02
10:17	survey	Ross	3hr 26min	9-12	100	Light drizzle	2-3
9/16/2011, 7:20 -	Fall Migratory landbird	B. Holden & M.					
10:43	Survey	Ross B. Holden &J.	3hr 23min	4-10 17-	0-15 30-	0	3-4
9/22/2011, 7:06 - 9:50	Fall Migratory landbird survey	Mansell	2hr 44min	17-	100	0	3
9/23/2011, 7:00 -	Fall Migratory landbird	B. Holden & J.	2111 4-111111	14-	10-	0	
10:30	survey	Mansell	3hr 30min	20	100	0	1-3
9/29/2011, 7:10 -	Fall Migratory landbird	B. Holden & J.			30-		
10:25	survey	Mansell	3hr 15min	18	100	Light rain	0-1
9/30/2011, 7:13 -	Fall Migratory landbird	B. Holden &J.	Ohr Emin	14-	20-	0	2.5
10:18 10/6/2011, 7:14 -	survey Fall Migratory landbird	Mansell B. Holden & J.	3hr 5min	18	100	0	2-5
11:00	survey	Mansell	3hr 46min	2-16	0	0	0-3
10/7/2011, 7:30 -	Fall Migratory landbird	B. Holden & J.			_	-	
10:15	survey	Mansell	2hr 45min	7-14	0	0	1-3
		B. Holden & Z.					
10/12/2011, 7:21 -	Fall Migratory landbird	Lebrun-	3hr 21min	12-	15-	0	1.2
10:42	survey	Southcott B. Holden & Z.	3111 2 1111111	16	100	0	1-3
10/13/2011, 7:10 -	Fall Migratory landbird	Lebrun-		13-			
10:31	survey	Southcott	3hr 21min	15	100	Light drizzle	1-4
		B. Holden & Z.					
10/20/2011, 7:14 -	Fall Migratory landbird	Lebrun-	Ohr Ocmin	10-	90-	Dain	4.6
10:40	survey	Southcott B. Holden & Z.	3hr 26min	13	100	Rain	4-6
10/21/2011, 7:20 -	Fall Migratory landbird	Lebrun-			80-		
10:19	survey	Southcott	2hr 59min	8-11	100	0	2-4
9/1/2011, 16:00 -		B. Holden and					
17:40	Fall Migratory Raptor Survey	A. Wormington	1hr 40min	25	50	0	1
9/8/2011, 16:30 - 19:00	Fall Migratory Raptor Survey	B. Holden and A. Wormington	2hr 30min	20	50	0	2
9/15/2011, 13:30 -	Tall Migratory Raptor Survey	B. Holden and	2111 30111111	17-	30	U	
16:30	Fall Migratory Raptor Survey	M. Ross	3hrs	19	40-80	0	3-4
9/22/2011, 13:20 -		B. Holden and		19-			
18:26	Fall Migratory Raptor Survey	J. Mansell	5hr 6min	23	20-40	0	3
9/29/2011, 13:00 - 18:00	Fall Migratory Raptor Survey	B. Holden and J. Mansell	5hrs	19	80	0	2
10/6/2011, 12:00 -	Fail Migratory Raptor Survey	B. Holden and	SIIIS	19	60	U	
15:10	Fall Migratory Raptor Survey	J. Mansell	3hr 10min	10	0	0	0-1
		B. Holden and					
10/12/2011, 13:27		Z. Lebrun-				Scattered	
-16:29	Fall Migratory Raptor Survey	Southcott	3hr 2min	16	90	showers	1-2
10/20/2011, 13:47		B. Holden and Z. Lebrun-					
-17:02	Fall Migratory Raptor Survey	Southcott	3hr 15min	14	90	0	3
-		J. Mansell & Z.			-	-	
10/27/2011,		Lebrun-					
12:03-16:25	Fall Migratory Raptor Survey	Southcott	4hr 22min	6	85	0	4
11/3/2011, 10:52-		J. Mansell & Z. Lebrun-					
3:33	Fall Migratory Raptor Survey	Southcott	4hr 41min	5-10	20-90	0	3-4
11/9/2011, 12:15-	g	B. Stamp & J.		- · · ·		Ü	<u> </u>
16:20	Fall Migratory Raptor Survey	Heslop .	4hr 5min	15	30	0	2

Table 4B: Natural Feature Site Investigations, Amherst Island Wind Energy

Survey Date			Duration	Weather Conditions*			
(mm/dd/yyyy)	Purpose of Site	Field	(Person-	Air	Cloud		
And t	Investigation	Personnel	Hours)	(°C)*	(%)	Precip.	Wind**
11/9/2011, 8:06- 8:11 & 13:18-		J. Mansell & Z. Lebrun-		10-			
0.11 & 13.10- 15:52	Fall Migratory Raptor Survey	Southcott	2hr 39min	15	15-70	0	2-3
10.02	Tall Migratory Hapter Salvey	J. Mansell & Z.	2111 00111111		10.70		
11/17/2011,		Lebrun-					
11:00-16:12	Fall Migratory Raptor Survey	Southcott	4hr 52min	2-4	50-75	Light flurries	3-4
11/24/2011, 8:55-		J. Heslop & Z. Lebrun-			30-		
13:00	Fall Migratory Raptor Survey	Southcott	4hr 5min	-1-5	100	0	2-3
		B. Holden & Z.					
12/1/2011, 11:58-	Foll Migraton, Pontor Sun, ov	Lebrun- Southcott	4hr 42min	6	40-60	0	1-2
16:40 9/1/2011, 16:00 -	Fall Migratory Raptor Survey Fall Waterfowl Migration	B. Holden and	4111 42111111	6	40-60	0	1-2
17:40	survey	A. Wormington	1hr 40min	25	50	0	1
9/8/2011, 16:30 -	Fall Waterfowl Migration	B. Holden and					
19:00	survey	A. Wormington	2hr 30min	n/a	n/a	n/a	n/a
9/15/2011, 13:30 - 16:30	Fall Waterfowl Migration	B. Holden and M. Ross	3hrs	17- 19	40-80	0	4
9/22/2011, 13:00 -	survey Fall Waterfowl Migration	B. Holden and	31113	19-	40-00	0	
18:30	survey	J. Mansell	5hr 30min	23	20-40	0	3
9/29/2011, 13:00 -	Fall Waterfowl Migration	B. Holden and	0.1	40	70	•	
16:00 10/6/2011, 12:00 -	survey Fall Waterfowl Migration	J. Mansell B. Holden and	3hrs	19 10-	70	0	2
15:10	Survey	J. Mansell	3hr 10min	17	0	0	0-3
		B. Holden and				-	
10/12/2011, 13:27	Fall Waterfowl Migration	Z. Lebrun-				Scattered	
-16:29	survey	Southcott B. Holden and	3hr 2min	16	90	showers	1-2
10/20/2011, 13:47	Fall Waterfowl Migration	Z. Lebrun-					
-17:02	survey	Southcott	3hr 15min	14	90	0	3
		J. Mansell and					
10/27/2011, 12:03-16:25	Fall Waterfowl Migration	Z. Lebrun- Southcott	4hr 22min	6	85	0	4
12.03-10.23	survey	J. Mansell and	4111 22111111	- 0	- 65	0	-
11/3/2011, 10:52-	Fall Waterfowl Migration	Z. Lebrun-			20-		
15:33	survey	Southcott	4hr 41min	5-10	100	0	3-4
11/9/2011, 13:08-	Fall Waterfowl Migration	J. Mansell and Z. Lebrun-					
15:49	Survey	Southcott	2hr 41min	15	15	0	2
11/9/2011, 12:00-	Fall Waterfowl Migration	B. Stamp and					
16:30	survey	J. Heslop	4hr 30min	15	30	0	2
11/17/2011,	Fall Waterfowl Migration	J. Mansell and Z. Lebrun-					
10:53-16:12	survey	Southcott	5hr 15min	2-4	50-75	Light flurries	3-4
		J. Heslop & Z.					
11/24/2011, 8:55-	Fall Waterfowl Migration	Lebrun-	41		30-	•	0.0
13:00	survey	Southcott B. Holden & Z.	4hr 5min	-1-5	100	0	2-3
12/1/2011, 11:59-	Fall Waterfowl Migration	Lebrun-					
16:40	survey	Southcott	4hr 41min	6	60	0	1-2
40/7/0044 0.50	Fall Market of and Minner Care	J. Mansell and					
12/7/2011, 9:50- 12:20	Fall Waterfowl Migration survey	Z. Lebrun- Southcott	2hr 30min	1	100	0	1-2
12/7/2011, 9:50-	Fall Waterfowl Migration	C. Payette & B.	2111 00111111	<u>'</u>	100		1.2
12:00	survey	Holden	2hr 10min	0	100	0	1
40/04/0044	Fall Mataufaced Advanced	C. Payette & Z.					
12/21/2011, 10:04-12:50	Fall Waterfowl Migration survey	Lebrun- Southcott	2hr 46min	4	100	Light rain	3
12/21/2011,	Fall Waterfowl Migration	B. Holden & N.	2111 -FOITHIT	-т	100	Light faili	
10:00-14:00	survey	Charlton	4hrs	4-5	100	Rain	2
5/3/2011, 2:07-	Charabird migratica arm	M. Ross and D.	4hrs,		100	_	
2:45; 4:15-7:47	Shorebird migration surveys	Graham	10min	8	100	0	3

Table 4B: Natural Feature Site Investigations, Amherst Island Wind Energy

Cumray Data			Duration	Weather Conditions*			
Survey Date (mm/dd/yyyy)	Purpose of Site	Field	Duration (Person-	Air	Cloud	ther Conditions"	
And t	Investigation	Personnel	Hours)	(°C)*	(%)	Precip.	Wind**
5/11/2011, 3:21 – n/a	Shorebird migration surveys	B. Stamp and D. Graham	n/a	20	0	0	0
5/17/2011, 14:20-	Onorchia inigration surveys	B. Stamp and	11/4	20	0	0	
17:20	Shorebird migration surveys	J. Heslop	3hrs	12	95	0	4
5/20/2011, 9:00- 11:00	Shorebird migration surveys	A. Taylor, N. Kopysh	2hrs	15	100	0	0
5/25/2011, 11:35- 2:59	Shorebird migration surveys	M. Ross and D. Graham	3hrs, 24min	20	5	0	3
5/26/2011, 9:24-							
10:30 4/27/2011, 6:25 -	Shorebird migration surveys Spring Landbird Stopover	D. Graham M. Ross and D.	1hr, 6min	14	80	0	1-3
12:31	surveys	Graham	6hrs 6min	6 - 8	100	0	1-3
4/28/2011, 7:04 - 7:21	Spring Landbird Stopover surveys	Don Graham	17min	10 - 15	5-10	0	3
5/4/2011, 6:00 -	Spring Landbird Stopover	M. Ross and D.		8 -	0.0		
12:53	surveys	Graham	6hr 53min	15	10	0	0-2
5/11/2011, 6:10 - 10:45	Spring Landbird Stopover surveys	B. Stamp	4hr 35min	5- 18	60- 100	0	2-4
5/12/2011, 6:06 -	Spring Landbird Stopover	,		12-	10-		
12:28	surveys	D. Graham	6hr 22min	21	100	0	1
5/18/2011, 6:25 - 14:50	Spring Landbird Stopover surveys	J. Heslop and B. Stamp	8hr 35min	14 - 16	80- 100	Light rain	2-4
5/19/2011, 6:30 -	Spring Landbird Stopover	J. Heslop and			400	5	
12:28 5/26/2011, 6:20-	surveys Spring Landbird Stopover	B. Stamp M. Ross and D.	5hr 58min	6- 8 10 -	100	0	0-2
2:40	surveys	Graham	8hr 20min	15	5-10	0	1-2
3/24/2011, 12:00- 15:20	Staging and Foraging Spring Waterfowl surveys	A. Taylor, N. Kopysh	3hr 20min	3	90	0	1
3/29/2011, 9:00- 12:30	Staging and Foraging Spring Waterfowl surveys	D. Graham, C. Karpijaakko	3hr 30min	-1	70	0	2
4/4/2011, 11:30-	Staging and Foraging Spring	A. Taylor, N.	JIII JUIIIIII	-1	70	0	
14:30	Waterfowl surveys	Kopysh	3hr	5	100	0	3 to 4
4/24/2011, 12:40- 16:30	Staging and Foraging Spring Waterfowl surveys	B. Stamp, J. Heslop	3hr 50min	10	60	0	2
4/19/2011, 11:20- 2:30	Staging and Foraging Spring Waterfowl surveys	B. Holden, J. Heslop	3hr	9	50-90	0	3 to 4
4/26/2011, 14:45- 18:00	Staging and Foraging Spring Waterfowl surveys	M. Ross, M. Strauss	3hr 15min	11	100	0	4
5/3/2011, 14:07-	Staging and Foraging Spring	M. Ross, D.					
14:45 14:15-19:47 5/11/2011, 15:31-	Waterfowl surveys Staging and Foraging Spring	Graham B. Stamp,	4hr	8	100	Rain	3
18:08	Waterfowl surveys	D.Graham	2hr 37min	20	0	0	1
5/17/2011, 14:40- 16:50	Staging and Foraging Spring Waterfowl surveys	B. Stamp, J. Heslop	2hr 10min	12	95	Light rain	4
5/25/2011, 11:35-	Staging and Foraging Spring	M. Ross, D.				Ü	
14:59 7/8/2011, 12:30 -	Waterfowl surveys	Graham	3hr 34min	20	5	0	3
16:15	Staging Swallow Survey	B. Holden	3hr 45min	26	30	0	0-1
7/13/2011, 11:30 - 15:00	Staging Swallow Survey	B. Holden	3hr 30min	22- 26	50- 100	0	2-6
7/23/2011, 11:00 - 14:40	Staging Swallow Survey	B. Holden	3hr 40min	32	10-30	0	2-3
7/27/2011, 8:40 - 12:00	Staging Swallow Survey	B. Holden	3hr 20min	27- 29	40-60	0	3
8/3/2011, 12:00 - 15:00	Staging Swallow Survey	B. Holden	3hrs	20- 23	100	0	2-3
8/9/2011, 14:00 -				19-			
16:00	Staging Swallow Survey	B. Holden	2hrs	21	100	Heavy rain	2-3
8/16/2011, 14:00 -	Staging Swallow and Migratory Butterfly Stopover	M Page	46.50	27	15 40	0	
18:00	Survey	M. Ross	4hrs	27	15-40	0	2

Table 4B: Natural Feature Site Investigations, Amherst Island Wind Energy

				Weather Conditions*			
Survey Date (mm/dd/yyyy)	Purpose of Site	Field	Duration (Person-	Air	Cloud	ther Conditions*	
And t	Investigation	Personnel	Hours)	(°C)*	(%)	Precip.	Wind**
0/00/0044 0 50	Staging Swallow and						
8/26/2011, 8:50 - 11:00	Migratory Butterfly Stopover Survey	M. Ross	2hr 10min	17- 20	35t-45	0	3
9/2/2011, 11:15 -	Guivey	171. 11000	2111 10111111	22-	001 10	Ŭ	
13:30	Staging Swallow Survey	B. Holden	2hr 15min	24	5	0	3-4
11/9/2011, 16:10-	Winter Raptor Driving and Walking Transects, including	Josh Mansell & Zoe Lebrun-					
17:22	Short-eared Owl Surveys	Southcott	1hr 11min	8	85	0	3
	Winter Raptor Driving and	Data Otaman 0					
11/9/2011, n/a	Walking Transects, including Short-eared Owl Surveys	Bob Stamp & Jim Heslop	n/a	12	90	0	3
11/0/2011,11/4	Winter Raptor Driving and	Jim Heslop &	11/ 4		- 00	Ŭ	
11/24/2011,	Walking Transects, including	Zoe Lebrun-	41 00 1		400		40070
15:47-17:11	Short-eared Owl Surveys Winter Raptor Driving and	Southcott Brandon	1hr 36min	4	100	0	40972
11/24/2011,15:55-	Walking Transects, including	Holden & Josh					
17:02	Short-eared Owl Surveys	Mansell	1hr 7min	5	100	0	40972
12/7/2011, 8:50-	Winter Raptor Driving and Walking Transects, including	Josh Mansell & Zoe Lebrun-					
9:05 & 9:50-12:20	Short-eared Owl Surveys	Southcott	2hr 45min	1	100	0	3
		Brandon					
12/7/2011, 16:27-	Winter Raptor Driving and Walking Transects, including	Holden & Cheryl-Anne					
16:55	Short-eared Owl Surveys	Payette	1hr 28min	0	100	0	2
	Winter Raptor Driving and	Brandon					
12/20/2011, n/a	Walking Transects, including Short-eared Owl Surveys	Holden & Nicole Charlton	n/a	n/a	70-90	0	2-3
12/20/2011, 11/4	Chort cared Own durveys	Cheryl-Anne	11/4	TI/A	70 30	Ŭ	2.5
	Winter Raptor Driving and	Payette & Zoe					
12/20/2011, 15:58-16:59	Walking Transects, including Short-eared Owl Surveys	Lebrun- Southcott	1hr 1min	0	10-20	0	2
10.00 10.00	Winter Raptor Driving and	Codificott		-	10-20	Ŭ	
12/21/2011,	Walking Transects, including	B. Holden & N.		_			_
10:04-13:17	Short-eared Owl Surveys Winter Raptor Driving and	Charlton C. Payette & Z.	3hrs13min	4	100	Light drizzle	2
12/21/2011,	Walking Transects, including	Lebrun-					
10:04-12:49	Short-eared Owl Surveys	Southcott	2hr 45min	3	100	Light rain	3
1/10/2012, 10:00- 11:45 &16:22-	Winter Raptor Driving and Walking Transects, including	Brandon Holden & Josh					
17:23	Short-eared Owl Surveys	Mansell	2hr 46min	4	60	0	3
1/10/2012, 10:15-	Winter Raptor Driving and						
12:25 &16:30- 17:20	Walking Transects, including Short-eared Owl Surveys	Don Graham & Matthew Ross	3hr	4	60	0	1
1/24/2012, 13:15-	Winter Raptor Driving and	Matthew 11033	Jili	-	00	0	<u>'</u>
14:46 & 16:40-	Walking Transects, including	Don Graham &					
17:28 1/24/2012, 13:10-	Short-eared Owl Surveys Winter Raptor Driving and	Matthew Ross Brandon	3hr 12min	1	100	0	2
15:05 & 16:20-	Walking Transects, including	Holden & Josh					
17:37	Short-eared Owl Surveys	Mansell	2hr 12min	1	100	0	3-4
2/7/2012, 10:52-	Winter Raptor Driving and	Don Graham & Carla					
12:58 & 16:58- 17:54	Walking Transects, including Short-eared Owl Surveys	Korpijaakko	3hr 2min	-2	100	0	1
2/7/2012, 10:55-	Winter Raptor Driving and	Josh Mansell &				-	
13:26 & 16:45-	Walking Transects, including	Brandon	2hr 20min	4	_	0	4
17:44 2/22/2012, 10:50-	Short-eared Owl Surveys Winter Raptor Driving and	Holden Don Graham &	3hr 30min	1	0	0	1
12:15 & 17:00-	Walking Transects, including	Carla			1		
17:55	Short-eared Owl Surveys	Korpijaakko	2hr 20min	4	100	0	1
2/22/2012, 10:45-	Winter Raptor Driving and Walking Transects, including	Brandon Holden & Josh			1		
13:30 & 17:00-n/a	Short-eared Owl Surveys	Mansell	2hr 45min	3	100	drizzle/snow/rain	5
3/7/2012, 10:50-	Winter Raptor Driving and	Brandon	2hr 47min	8	55-90	0	3-4

Table 4B: Natural Feature Site Investigations, Amherst Island Wind Energy

Survey Date			Duration	Weather Conditions*			
(mm/dd/yyyy)	Purpose of Site Investigation	Field Personnel	(Person- Hours)	Air (°C)*	Cloud (%)	Precip.	Wind**
And t 12:25 & 17:15-	Walking Transects, including	Holden & Josh	nours)	()	(70)	Frecip.	WIIIG
18:27	Short-eared Owl Surveys	Mansell					
3/7/2012, 14:35-	Winter Raptor Driving and	Andrew Taylor					
17:35 & 17:35- 18:30	Walking Transects, including Short-eared Owl Surveys	and Nicole	3hr 55min	8	30	0	3
6/9/2011, 20:20-	Short-eared Owl Breeding	Kopysh	3111 33111111	0	30	U	3
20:40	Driving Survey	P. Read	20min	19	100	0	3
6/9/2011, 21:05-	Short-eared Owl Breeding						
21:20 6/10/2011, 20:00-	Driving Survey Short-eared Owl Breeding	P. Read	15min	19	100	0	3
21:15	Driving Survey	P. Read	1hr15min	18	100	0	3
6/11/2011, 20:00-	Short-eared Owl Breeding						
21:15	Driving Survey	P. Read	1hr15min	19	100	Light	5
7/2/2011, 20:10-	Short-eared Owl Breeding	A \A/====:===t===	44 :	00	40	0	
20:51 7/3/2011, 20:12-	Driving Survey Short-eared Owl Breeding	A. Wormington	41min	23	40	0	0
21:08	Driving Survey	A. Wormington	56min	24	30	0	1
7/4/2011, 20:15-	Short-eared Owl Breeding	_					
20:53	Driving Survey	A. Wormington	38min	24	0	0	1
7/5/2011, 20:09- 21:02	Short-eared Owl Breeding Driving Survey	A. Wormington	53min	23	70	0	1
7/6/2011, 20:22-	Short-eared Owl Breeding	7t. Womington	COMMIT	20	70		<u> </u>
21:10	Driving Survey	A. Wormington	48min	22	25	0	1
7/7/2011, 20:17-	Short-eared Owl Breeding	A \A/====:===t===	E4	00	50	0	
21:06 7/8/2011, 20:19-	Driving Survey Short-eared Owl Breeding	A. Wormington	51min	22	50	0	0
21:07	Driving Survey	A. Wormington	48min	20	15	0	1
7/9/2011, 20:17-	Short-eared Owl Breeding	Ğ					
21:04	Driving Survey	A. Wormington	47min	18	30	0	1
6/7/2011, 20:30-	Short-eared Owl Observational Survey						
20:50	(Station 4)	P. Read	20min	20	20	0	0
	Short-eared Owl						
5/11/2011, 20:00-	Observational Surveys	D. Crohom	20min	10	20	0	1
20:20	(Station 1) Short-eared Owl	D. Graham	20min	10	20	U	1
6/6/2011, 20:50-	Observational Surveys						
21:10	(Station 1)	P. Read	20min	17	<10	0	1
0/04/0044 00 45	Short-eared Owl						
6/21/2011, 20:45- 21:05	Observational Surveys (Station 1)	A. Wormington	20min	21	100	0	1
21.00	Short-eared Owl	7t. Womington	2011111		100	, ,	<u> </u>
6/1/2011, 20:40-	Observational Surveys						
21:00	(Station 10) Short-eared Owl	P. Read	20min	20	<10	0	3
6/15/2011, 20:26-	Observational Surveys						
20:46	(Station 10)	A. Wormington	20min	22	10	0	0
	Short-eared Owl						
5/11/2011, 20:00-	Observational Surveys	D Stomp	20min	15	20	0	2
20:20	(Station 11) Short-eared Owl	B. Stamp	20min	15	20	0	2
5/30/2011, 20:55-	Observational Surveys						
21:15	(Station 11)	P. Read	20min	16	10	0	0
6/06/0044 00:04	Short-eared Owl						
6/26/2011, 20:34- 20:54	Observational Surveys (Station 11)	A. Wormington	20min	18	35	0	1
	Short-eared Owl					Ŭ	
5/11/2011, 20:26-	Observational Surveys					_	_
20:46	(Station 12) Short-eared Owl	B. Stamp	20min	15	20	0	2
5/30/2011, 20:20-	Observational Surveys						
20:40	(Station 12)	P. Read	20 min	16	10	0	0

Table 4B: Natural Feature Site Investigations, Amherst Island Wind Energy

Survey Date			Duration	Weather Conditions		ther Conditions*		
(mm/dd/yyyy) And t	Purpose of Site Investigation	Field Personnel	(Person- Hours)	Air (°C)*	Cloud (%)	Precip.	Wind**	
6/27/2011, 20:22- 20:42	Short-eared Owl Observational Surveys (Station 12)	A. Wormington	20min	20	50	0	0	
5/10/2011, 20:08-	Short-eared Owl Observational Surveys	A. Wolfflington	20111111	20	30	<u> </u>		
20:28	(Station 13) Short-eared Owl	B. Stamp	20min	14	30	0	1	
5/31/2011, 20:30- 20:50	Observational Surveys (Station 13) Short-eared Owl	P. Read	20min	20	<10	0	2	
6/27/2011, 20:46- 21:06	Observational Surveys (Station 13)	A. Wormington	20min	20	50	0	0	
5/10/2011, 20:32- 20:52	Short-eared Owl Observational Surveys (Station 14)	B. Stamp	20min	10	10	0	3	
6/9/2011, 20:40- 21:00	Short-eared Owl Observational Surveys (Station 14)	P. Read	20min	19	100	0	3	
6/22/2011, 20:17- 20:37	Short-eared Owl Observational Surveys (Station 14)	A. Wormington	20min	20	100	0	1	
5/31/2011, 20:55- 21:15	Short-eared Owl Observational Surveys (Station 15)	P. Read	20min	22	<10	0	2	
6/22/2011, 20:45- 21:05	Short-eared Owl Observational Surveys (Station 15)	A. Wormington	20min	20	100	0	1	
5/10/2011, 20:10- 20:30	Short-eared Owl Observational Surveys (Station 2)	D. Graham	20min	10	20	0	1	
6/6/2011, 20:30- 20:50	Short-eared Owl Observational Surveys (Station 2)	P. Read	20min	17	<10	0	1	
6/21/2011, 20:17- 20:37	Short-eared Owl Observational Surveys (Station 2)	A. Wormington	20min	21	90	0	1	
6/7/2011, 20:55- 21:15	Short-eared Owl Observational Surveys (Station 3)	P. Read	20min	18	20	0	0	
6/14/2011, 20:57- 21:17	Short-eared Owl Observational Surveys (Station 3)	A. Wormington	20min	13	0	0	0	
5/17/2011, 20:22- 20:37	Short-eared Owl Observational Surveys (Station 4)	B. Stamp	15min	8	95	0	5	
6/14/2011, 20:30- 20:50	Short-eared Owl Observational Surveys (Station 4)	A. Wormington	20min	15	0	0	0	
5/17/2011, 20:33- 21:00	Short-eared Owl Observational Surveys (Station 5)	J. Heslop	27min	9	100	0	2-3	
6/5/2011, 20:55- 21:15	Short-eared Owl Observational Surveys (Station 5)	P. Read	20min	16	30	0	0	
5/17/2011, 20:00- 20:30	Short-eared Owl Observational Surveys (Station 6)	J. Heslop	30min	10	100	0	2-3	
6/5/2011, 20:30- 20:50	Short-eared Owl Observational Surveys (Station 6)	P. Read	20min	17	30	0	0	
6/16/2011, 20:35- 20:53	Short-eared Owl Observational Surveys	A. Wormington	18min	20	50	0	0	

Table 4B: Natural Feature Site Investigations, Amherst Island Wind Energy

		Duration		Wea	ther Conditions*	
Purpose of Site Investigation	Field Personnel	(Person- Hours)	Air (°C)*	Cloud (%)	Precip.	Wind**
(Station 6)						
Short-eared Owl						
,						
()	B. Stamp	20min	8	95	Light	5
	P. Read	20min	18	<10	0	3
,					_	_
,	A. Wormington	20min	20	20	0	0
	D 0 1		4.0	-00	•	
,	D. Graham	20min	10	20	0	1
	D. D J	00	47	40	0	
(= :::: = = ;	P. Read	20min	17	10	U	1
	A Marminaton	20min	20	00	Linht	1
,	A. Wormington	2011111	20	60	Lignt	
	D. Graham	20min	10	20	0	1
(/	D. Glallalli	2011111	10	20	U	+ '-
	P Read	15min	17	10	0	1
()	1.IXCau	10111111	- ' '	10	0	 '
	A. Wormington	20min	20	80	Trace	1
Short-eared Owl						
Station 5)	A. Wormington	20min	18	60	0	0
	Investigation (Station 6) Short-eared Owl Observational Surveys (Station 7) Short-eared Owl Observational Surveys (Station 7) Short-eared Owl Observational Surveys (Station 7) Short-eared Owl Observational Surveys (Station 8) Short-eared Owl Observational Surveys (Station 9) Short-eared Owl Observational Surveys	Investigation (Station 6) Short-eared Owl Observational Surveys (Station 7) Short-eared Owl Observational Surveys (Station 7) Short-eared Owl Observational Surveys (Station 7) Short-eared Owl Observational Surveys (Station 8) Short-eared Owl Observational Surveys (Station 9) A. Wormington A. Wormington A. Wormington	Purpose of Site Investigation Personnel (Person-Hours) (Station 6) Short-eared Owl Observational Surveys (Station 7) Short-eared Owl Observational Surveys (Station 8) Short-eared Owl Observational Surveys (Station 9) Short-eared Owl Observational Surveys	Purpose of Site Investigation (Station 6) Short-eared Owl Observational Surveys (Station 7) Short-eared Owl Observational Surveys (Station 8) Short-eared Owl Observational Surveys (Station 9) A. Wormington 20min 20 Short-eared Owl Observational Surveys (Station 9) A. Wormington 20min 20	Purpose of Site Investigation Field Personnel (Person-Hours) Air (%) Cloud (%) (Station 6) Short-eared Owl Observational Surveys (Station 7) B. Stamp 20min 8 95 Short-eared Owl Observational Surveys (Station 7) P. Read 20min 18 <10	Purpose of Site Investigation

Table 5B: Summary of Corrections to Records Review for Amherst Island Wind Project								
Features within 120m of the Project Location	Records Review Results	Correction made as a result of site investigation	Report Section Providing Criteria Used in Determination of Correction					
Wetlands	Nut Island Duck Club Marsh; Long Point Marsh	32 additional wetland communities identified. Boundaries to Nut Island Duck Club Marsh and Long Point Marsh changed – adjacent wetland ELC communities added.	3.2.2.3					
Woodlands	Several significant woodland features identified	36 woodland communities confirmed in features 1 through 36.	3.2.3					
Valleylands	None identified	None identified	3.2.4					
ANSIs	Long Point Marsh Life Science ANSI (Provincially-Significant)	No additional ANSIs identified	3.2.5					

Table 6B:	Site Invest	igation Results - We	tland			
Feature #	Total Feature Size (ha)	Figure #	Composition	Attributes	Function	Significance
1	0.76	2	MAM2-2	This open community, a lacustrine wetland located along the north shore of the island, consists primarily of Reed-canary grass, with Goldenrod, Aster and Narrow-leaved cattail occurring in lesser proportions. Woody species present were rare and included Black willow and other Willow species.	Flood attenuation Short-term water quality improvement Preservation of biodiversity Fish habitat	Unknown, requires Evaluation of Significance
2a	1.2	2	MAS2-2	This small, open wetland is dominated by Wool grass, with less prominent occurrences of Soft Rush, Path Rush, Float-topped bushy goldenrod and Sedge species. Sparse willow species occur in the understory. No surface water was present although the soil was mesic.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significance
2b	0.3	2	MAM2-2	This community, associated with wetland 2a, consisted of a dense ground layer of herbaceous plants, dominated by reed-canary grass, with secondary components consisting of rice cut grass, Bebb's sedge, devil's beggar-ticks, and narrow-leaved cattail. Soil was moist.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significance
3a	4	2	CUM1-1, MAM2-2	This wetland is comprised of both meadow marsh and deciduous swamp communities. The meadow marsh consisted largely of Reed-canary grass with less frequent occurrence of forbs and other grasses. The deciduous swamp is comprised mainly of green ash, with Freeman's maple and White elm in lesser proportions. The understory consists of rare occurrences of canopy species, while the sparse herbaceous cover included Fowl meadow grass, Spotted touchme-not, Small jack-in-the-pulpit, Panicled aster, Black snakeroot and Sedge species. The soil was mesic/moist.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significance
3b	2.4	2	MAM2-2, SWD2-2	The meadow marsh community is dominated by Reed-canary grass, with rare occurrences of Narrow-leaved cattail and Wool grass. The deciduous swamp was dominated by Green ash, with Slippery elm present in small numbers. Ground cover consists largely of Fowl meadow grass, Kentucky bluegrass with some Fox sedge, Spotted touch-me-not,	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significance

Site Investig	gation Results - W	etland			
Total Feature Size (ha)	Figure #	Composition	Attributes	Function	Significance
			Panicled aster, White avens and Reed-canary grass. Scarlet strawberry and Carex species were present but sparse.		
0.8	2	MAM2-2, AG-PAS	The meadow marsh community is dominated by Reed-canary grass, with rare occurrences of Narrow-leaved cattail and Wool grass.	 Flood attenuation Short-term water quality improvement Preservation of biodiversity 	Unknown, requires Evaluation of Significance
105	3	SWD3-3, MAM2-2, SWT2-6	This large wetland encompasses several community types. Meadow marshes included: Reed-canary grass dominated with varying mixtures of less commonly observed species such as wool-grass, sedges, grass-leaved goldenrod, swamp milkweed, and hedge bindweed. Woody species were rare occurrences and consisted primarily of green ash, gray dogwood, and narrow-leaved meadowsweet, or; Sedge dominated with less frequent occurrences of Wool grass, Blue vervain, Perfoliate thoroughwort and Early goldenrod. Woody species were rare and included Green ash, Silky dogwood and Willow species. Thicket swamps were comprised of thick canopies of narrow-leaved meadowsweet above ground layers consisting primarily of reed-canary grass and grass-leaved goldenrod. Other less frequently observed species included swamp milkweed, sedges, and bulrushes. Deciduous swamp communities were include the following: Green ash dominated with varying canopy density and maturity with a lower abundance	 Flood attenuation Short-term water quality improvement Preservation of biodiversity 	Unknown, requires Evaluation of Significance
	Total Feature Size (ha)	Total Feature Size (ha) 0.8 2	Feature Size (ha) 0.8 2 MAM2-2, AG-PAS SWD3-3, MAM2-2,	Total Feature Size (ha) Figure # Composition Panicled aster, White avens and Reed-canary grass. Scarlet strawberry and Carex species were present but sparse. MAM2-2, AG-PAS MAM2-2, AG-PAS The meadow marsh community is dominated by Reed-canary grass, with rare occurrences of Narrow-leaved cattail and Wool grass. This large wetland encompasses several community types. Meadow marshes included: Reed-canary grass dominated with varying mixtures of less commonly observed species such as wool-grass, sedges, grass-leaved goldenrod, swamp milkweed, and hedge bindweed. Woody species were rare and consisted primarily of green ash, gray dogwood, and narrow-leaved meadowsweet, or; SWT2-6 SWD3-3, MAM2-2, SWT2-6 SWWD3-3, MAM2-2, SWT2-6 Thicket swamps were comprised of thick canopies of narrow-leaved meadowsweet above ground layers consisting primarily of reed-canary grass and grass-leaved goldenrod. Woody species were rare and included Green ash, Silky dogwood and Willow species. Thicket swamps were comprised of thick canopies of narrow-leaved meadowsweet above ground layers consisting primarily of reed-canary grass and grass-leaved goldenrod. Other less frequently observed species included swamp milkweed, sedges, and bulrushes. Deciduous swamp communities were include the following: Green ash dominated with varying canopy	Total Feature Size (ha) Figure # Composition Panicled aster, White avens and Reed-canary grass. Scarlet strawberry and Carex species were present but sparse. 10.8 2 MAM2-2, AG-PAS The meadow marsh community is dominated by Reed-canary grass, with rare occurrences of Narrow-leaved cattail and Wool grass. This large wetland encompasses several community types. Meadow marshes included: Reed-canary grass dominated with varying mixtures of less commonly observed species such as wool-grass, sedges, grass-leaved goldenrod, swamp milkweed, and hedge bindweed. Woody species were rare occurrences and consisted primarily of green ash, gray dogwood, and narrow-leaved meadowsweet, or; Sedge dominated with less frequent occurrences of Wood grass, Blue vervain, Perfoliate thoroughwort and Early goldenrod. Woody species were rare and included Green ash, Sikly dogwood and Willow species. Thicket swamps were comprised of thick canopies of narrow-leaved meadowsweet above ground layers consisting primarily of reed-canary grass and grass-leaved goldenrod. Other less frequent occurrences of Wood species included Green ash, Sikly dogwood and Willow species. Thicket swamps were comprised of thick canopies of narrow-leaved meadowsweet above ground layers consisting primarily of reed-canary grass and grass-leaved goldenrod. Other less frequently observed species included swamp milkweed, sedges, and bulrushes. Deciduous swamp communities were include the following: Green ash dominated with varying canopy density and maturity with a lower abundance

Table 6B:	Site Investi	gation Results - We	tland			
Feature #	Total Feature Size (ha)	Figure #	Composition	Attributes	Function	Significance
				species, with Fowl meadow grass, Reed-canary grass, Wool grass and Sensitive fern. Grass and sedge dominance is variable and the soil is moist, or; Freeman's maple dominated with lesser components of Green ash with the understory comprised of sparse occurrences of these species as well as Slippery elm. Ground cover consists of Sensitive fern, with less frequent occurrences of Spotted touch-me-not, Fowl meadow grass and Wood nettle. No surface water, soil mesic. Ash lowlands dominated by Green ash, with less frequent American basswood and Freeman's maple. Understory species consist of Gray dogwood, Narrow-leaved meadowsweet and Wild red raspberry, while the ground cover is variable depending on moisture regime but includes Sedge and violet species, Wood reed grass, Virginia wild rye, Fox sedge and Fowl meadow grass. Cultural woodland with mid age Green ash canopy, with less frequent occurrences of White elm. Understory and ground cover was variable and included Nannyberry, Gray dogwood, narrow-leaved meadowsweet, Scarlet strawberry, Brown Knapweed, Canada blue grass and Timothy. Cultural meadow with species composition including, timothy, Kentucky blue-grass, Canada goldenrod, wild carrot, common milkweed, bird's foot trefoil, tufted vetch, and scarlet strawberry. Mixtures of straw, red-top grass, and reed-canary grass were often observed where soil had higher moisture content.		
4b	1.2	3	SWD2-2	This deciduous swamp was dominated by Green ash with freeman maple associates. The understory was considered sparse with some willow species and meadowsweet present. Ground layers consisted mainly of	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significance

Table 6B:	Site Investigation Results - Wetland								
Feature #	Total Feature Size (ha)	Figure #	Composition	Attributes	Function	Significance			
				fowl meadow grass, fox sedge and abundant other sedge species. In some areas grasses dominated the ground layer. Soil was moist, but no standing water was present at time of investigation.					
4c	0.31	2	CUM1-1, MAM2-2	This small wetland associated with We4a has been isolated by a road, which bisects to the east, from We4a. This meadow marsh community is dominated by Reed canary grass with sedge associates. Woody species occur rarely and include some sparse occurrences of Green ash.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significand			
4d	0.23	5	SWT2-6	This small swamp thicket was dominated by narrow-leaved meadowsweet with associates including gray dogwood, red-osier dogwood and rarely willow species. Understory vegetation was abundant, and included various sedge species, Reed-canary grass, Aster species and goldenrod species. Canopy species were sparse and included rarely green ash.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significand			
5	8.45	3	MAM2, AG-PAS	This moderately sized meadow marsh community, which includes areas which have been actively grazed and pockets of shallow marsh, was dominated by woolly sedge, with abundant associates including redtop, path rush, blue vervain, Canada goldenrod, American water-horehound, heal-all, grassleaved goldenrod, fox sedge, and ragweed. Canopy species were sparse and included green ash and American elm. Soil was drymesic.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significand			
6a	19.5	3	MAM2-2, CUP3- 12, CUM1-1	This moderately sized meadow marsh community is associated with various intermittent channels and streams which intersect within the community. It is dominated by reed-canary grass accompanied by varying mixtures of less commonly observed species such as woolgrass, sedges, grass-leaved goldenrod, swamp milkweed, and hedge bindweed. Woody species are rare if present at all and consist of primarily green ash.	Flood attenuation Short-term water quality improvement Preservation of biodiversity Fish habitat	Unknown, requires Evaluation of Significand			

Table 6B:	Site Investi	igation Results - We	tland			
Feature #	Total Feature Size (ha)	Figure #	Composition	Attributes	Function	Significance
6b	2.1	3	MAM2-2	This small community associated with We6a is dominated by reed-canary grass accompanied by varying mixtures of less commonly observed species such as woolgrass, sedges, grass-leaved goldenrod, swamp milkweed, and hedge bindweed. Woody species are rare if present at all and consist of primarily green ash.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significance
6c	4.4	3	MAM2-2	This community associated with We6a is also associated with the various intermittent streams and channels which intersect the community. It is dominated by reed-canary grass accompanied by varying mixtures of less commonly observed species such as wool-grass, sedges, grass-leaved goldenrod, swamp milkweed, and hedge bindweed. Woody species are rare if present at all and consist of primarily green ash.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significance
6d	2.7	3	MAM2-2	This small community associated with We6a is also associated with the various intermittent streams and channels which intersect the community. It is dominated by reed-canary grass accompanied by varying mixtures of less commonly observed species such as wool-grass, sedges, grass-leaved goldenrod, swamp milkweed, and hedge bindweed. Woody species are rare if present at all and consist of primarily green ash.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significance
6e	2.35	3	SWD2-2	This small deciduous treed swamp community associated with We6d is also associated with the various intermittent streams and channels which intersect the community. It is dominated by green ash with white elm in the canopy. There are other various swamp associates such as gray dogwood, red-osier dogwood, and reed canary grass in the shrub and ground layers.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significance
7	2.1	4	MAM2-2, CUM1-1	This small meadow marsh community associated with a drainage feature was dominated by reed canary grass and accompanied by various mixtures of other species including species such as wool-grass, sedges, grass-leaved goldenrod, swamp milkweed, and hedge bindweed. A deep	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significance

Table 6B:		igation Results - W	etland			
Feature #	Total Feature Size (ha)	Figure #	Composition	Attributes	Function	Significance
				drainage channel cuts through the feature.		
8	0.56	4	SWD2-2, CUT1-4	This small deciduous swamp located adjacent to 2 nd Concession road was dominated by green ash in the canopy with Freeman's maple associates. The understory was sparse and included green ash and Freeman's maple saplings. The ground layer was dominated by various species of grasses and sedges, including Canada bluegrass, fox sedge and reed canary grass. No surface water was present at time of survey.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significand
9a	1.5	4	SWT2-2, FOD7-2	This small swamp thicket was dominated by narrow-leaved leaved meadowsweet with a dense ground layer of sedge species. No surface water was present in the community at time of survey.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significand
9b	5.1	4	CUT1-8, SWT2-6	This moderately sized swamp thicket community associated with We9a was dominated by narrow-leaved meadowsweet with rarely occurring gray dogwood, green ash, white elm and bur oak. The ground layer was dominated by redtop grass, goldenrod and sedge species. No surface water was present in this community at the time of survey. Disturbances include partial grazing in portions of the community.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significand
10a	167.5	4	SWD2-2, SWD3-3, MAM2-2, CUM1-1	This large wetland encompasses several community types. Meadow marshes were comprised of Reedcanary grass dominated with varying mixtures of less commonly observed species such as wool-grass, sedges, grass-leaved goldenrod, swamp milkweed, and hedge bindweed. Woody species were rare occurrences and consisted primarily of green ash, gray dogwood, and narrow-leaved meadowsweet. Swamp thickets include: Narrow-leaved meadowsweet dominated communities with ground layers consisting primarily of reed-canary grass and grass-	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Provincially-Significant

Table 6B:	Site Investig	gation Results - We	tland			
Feature #	Total Feature Size (ha)	Figure #	Composition	Attributes	Function	Significance
				leaved goldenrod. Other less frequently observed species included swamp milkweed, sedges, and bulrushes, or;		
				Gray dogwood dominated communities with scattered occurrences of narrow-leaved meadowsweet. Rare to occasional occurrences of green ash, Freeman's maple, and white elm made up a sparse canopy. The ground layer was thick and dominated by reed-canary grass, giant goldenrod, wild carrot, and an aster species.		
				Deciduous swamps include:		
				Freeman's maple dominated with green ash associates and American basswood as an occasional to rare occurrence among them. The sub-canopy composition typically included canopy species as well as blue beech and elm species. Shrub species were infrequent and varied between communities but included gray dogwood, narrow-leaved meadowsweet, winterberry, and red-osier dogwood. The ground layers were dense and consisted mainly of sedges, spotted touchme-not, fowl meadow grass, sensitive fern, wood nettle, jack-in-the-pulpit, and panicled aster, or;		
				Green ash dominated communities, associated with lower abundances of Freeman's maple, and occasionally white elm. Typical understory species ranged through silky dogwood, narrow-leaved meadowsweet, and nannyberry, while the ground layers consisted mainly of fowl meadow grass, fox sedge and other sedges, Northern water-horehound, panicled aster, and Virginia wild rye. Soil was moist throughout.		
				There is also a small Meadow marsh community dominated by reed canary grass		

Feature #	Total Feature Size (ha)	Figure #	Composition	Attributes	Function	Significance
				with varying mixtures of less commonly observed species such sedges, grass-leaved goldenrod, and hedge bindweed. Woody species were not observed in this community. Surface water was not present in this community.		
10b	30.1	4	SWD2-2, SWD3-3, MAM2-2, SWT2-2, SWT2-9	This wetland encompasses several community types. Deciduous swamps include: Green ash dominated with lower abundances of Freeman's maple and occasionally White Elm. Typical understory species ranged through silky dogwood, narrow-leaved meadowsweet, and nannyberry, while the ground layers consisted mainly of fowl meadow grass, fox sedge and other sedges, Northern water-horehound, panicled aster, and Virginia wild rye. Soil was moist throughout, with some surface pools of no more than 10 to 15cm depth in the wettest communities, or; Freeman's Maple dominated canopy with Green ash and occasional American Basswood. The subcanopy composition typically included canopy species as well as blue beech and elm species. Shrub species were infrequent and varied between communities but included gray dogwood, narrow-leaved meadowsweet, winterberry, and red-osier dogwood. The ground layers were dense and consisted mainly of sedges, spotted touch-me-not, fowl meadow grass, sensitive fern, wood nettle, jack-in-the-pulpit, and panicled aster. Swamp thickets include: Slender willow dominated with infrequent occurrences of Green ash. The understory was a moderately thick layer of narrow-leaved	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significand

Table 6B:	Site Investi	gation Results - We	etland			
Feature #	Total Feature Size (ha)	Figure #	Composition	Attributes	Function	Significance
				included redtop grass, fox sedge, timothy grass, and daisy fleabane. This community type was generally associated with or adjacent to culturally influenced habitat, or; Gray dogwood dominated with scattered occurrences of Narrow-leaved meadowsweet.		
				Rare to occasional occurrences of green ash, Freeman's maple, and white elm made up a sparse canopy. The ground layer was thick and dominated by reed-canary grass, giant goldenrod, wild carrot, and an aster species.		
				Cultural Thickets include Gray dogwood dominated with less common occurrences of Narrow-leaved meadowsweet. Tree cover was sparse but commonly included green ash and white elm. Ground cover varied but consistently included Kentucky bluegrass, Canada bluegrass, timothy, red-top grass, wild carrot, scarlet strawberry, flat-topped bushy goldenrod, Canada goldenrod, common heal-all, and path rush.		
				Meadow Marsh communities consisted of a mix of Reed-canary grass, Sedge species and Broad-leaved cattail.		
11	1.05	4	SWT2-6	This small thicket swamp community was dominated by narrow-leaved meadowsweet, with some instances of gray dogwood and rarely red-osier dogwood. A cattail marsh inclusion was also present within the community. Understory vegetation consisted of reed-canary grass and grass-leaved goldenrod. Other less frequently observed species included swamp milkweed and sedges.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significand
12	13.8	2	MAM2, MAM, SWD2-2, SWT2-9	This meadow marsh, deciduous swamp, and swamp thicket community is located northwest of the Nut Island Duck Club Marsh. The meadow marshes are dominated by reed-canary grass, while the deciduous swamp is dominated by Green Ash.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significand

Table 6B:	Site Invest	igation Results - We	etland			
Feature #	Total Feature Size (ha)	Figure #	Composition	Attributes	Function	Significance
				The swamp thicket community was dominated by a dense understory layer of gray dogwood with scattered occurrences of narrow-leaved meadowsweet. Rare to occasional occurrences of green ash, Freeman's maple, and white elm made up a sparse canopy. The ground layer was thick and dominated by reed-canary grass, giant goldenrod, wild carrot, and an aster species.		
13	0.32	4	MAM2-2	This small meadow marsh community consisted of a thick layer of reed-canary grass accompanied by varying mixtures of less commonly observed species such as woolgrass, sedges, grass-leaved goldenrod, swamp milkweed, and hedge bindweed.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significance
14	0.75	4	CUT1-4, CUM1-1	This small wetland community was dominated by gray dogwood with an inclusion of Reed Canary meadow marsh. Other species present within the community included giant goldenrod, wild carrot, and an aster species.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significance
15	2.6	4	SWD2-2	This mature swamp community was dominated by green ash with some American elm and ironwood in the understory. Ground cover was dominated by <i>Carex</i> with asters, grasses and sedges also present.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significance
16	1.7	4	MAM2-2, AG-PAS	This small disturbed meadow marsh community was dominated by Reed-canary grass with other commonly observed forb, grass and sedge species including woolgrass, grass-leaved goldenrod and swamp milkweed. Evidence of cattle grazing and pasture land was apparent.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significance
17	9.8	5	MAM2-2	This large meadow marsh community is found growing along either side of a small intermittent creek which bisects the community and runs parallel to 3 rd concession rd. This community is dominated by Reedcanary grass. Other species present within the community include various species such as wool-grass, sedges, grass-leaved goldenrod, swamp milkweed, and hedge bindweed. Woody species are rare if present at all and consist of primarily green ash.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significance

Table 6B:	Site Investigation Results - Wetland					
Feature #	Total Feature Size (ha)	Figure #	Composition	Attributes	Function	Significance
18	0.27	5	SWD2-2	This small deciduous swamp community is located as an inclusion within a deciduous forest community. It is dominated by mature green ash with reed-canary grass in the understory. Other species found occasionally in the understory include species of sedge and other grasses.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significanc
19	0.88	5	MAM2-2	This small meadow marsh community consisted of a thick layer of reed-canary grass accompanied by varying mixtures of less commonly observed species such as woolgrass, sedges, grass-leaved goldenrod, swamp milkweed, and hedge bindweed.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significanc
20	1.1	5	MAM2-2	This small meadow marsh community was interspersed with areas of cultural meadow and was overall considerably dry. The dominant species was reed-canary grass accompanied by varying mixtures of less commonly observed species such as woolgrass, sedges, grass-leaved goldenrod, swamp milkweed, and hedge bindweed.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significance
21	370.44	5	MAS3-1, MAS2-10	This large contiguous wetland known as Long Point Marsh has been previously surveyed and is considered provincially significant. Areas observed during 2011 surveys include the following communities: Marsh communities included: A large cattail organic shallow marsh dominated by narrow-leaved cattail. A sweet manna grass dominated shallow marsh community, with green ash forming a very sparse canopy layer along with rare occurrences of Freeman's maple and bur oak. Snags were abundant throughout and some surface water was present. Green ash dominated communities, associated with lower abundances of Freeman's maple, and occasionally white elm. Typical understory species ranged	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Provincially-Significant

Table 6B:	Site Investi	gation Results - Wet	tland			
Feature #	Total Feature Size (ha)	Figure #	Composition	Attributes	Function	Significance
				through silky dogwood, narrow-leaved meadowsweet, and nannyberry, while the ground layers consisted mainly of fowl meadow grass, fox sedge and other sedges, Northern water-horehound, panicled aster, and Virginia wild rye. Soil was moist throughout.		
22	1.2	1	MAM2	This is a young graminoid mineral meadow marsh located at the north end of a property on the mainland. It is dominated by broadleaved cattail, purple loosestrife, aster species, and grass species.	Flood attenuation Short-term water quality improvement Preservation of biodiversity	Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
1	3.05	4	SWD1-2 (Bur Oak Mineral Deciduous swamp)	Feature 1 is a small woodland feature occurring within an agricultural landscape, including active pasture, hay and fallow fields, and cultural meadow and cultural thicket areas. Feature 1 occurs to the east of Art McGinnis Rd. and south of 2 nd Concession Rd, and occupies a small central portion of the agricultural area.	Snags were considered rare to occasional Age structure primarily mature (most trees <10 to <50cm dbh) No trees were observed that were >25 dbh and contained cavities Overall canopy cover was >60%; characterized as closed canopy No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed Vernal pools absent, presence of surface water was present, infrequent pooling present within east side of community. No disturbance noted.	Woodland diversity representati on	Unknown, requires Evaluation of Significance.
2	2.99	4	SWD2-2 (Green Ash Mineral Deciduous Swamp)	Woodland feature 2 was comprised of a small Green ash swamp which is bisected north from south by a stream. Land use immediately surrounding the woodland feature is primarily managed agricultural lands. Feature 2 occurs South of 2 nd	Snags were considered rare Age structure primarily mid-age (most trees <10 to <24 dbh) Trees observed >25dbh were considered rare No trees were observed that were >25 dbh and contained	 Provides water protection Close to other significant natural features 	Unknown, requires Evaluation of Significance.

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
				Concession Rd., and to the west of Emerald 40 Foot Rd.	cavities Overall canopy cover was >60%; characterized as closed canopy No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed Vernal pools absent, presence of surface water <10cm depth No disturbance noted.		
3	136.03	4	Comprised of a mosaic of six different vegetation community types including: CUW1-3* (Green Ash Mineral Cultural woodland) SWD2-2 (Green Ash mineral Deciduous Swamp) CUW1-4* (Shagbark Hickory Mineral	Woodland feature 3 is found north of 2 nd Concession Rd. and on the east and west sides of Emerald 40 Foot Rd. The feature is comprised of a mosaic of vegetation community types and bisected by one north-south road. The road was considered a bisecting opening less than 20 m in width and was not considered to divide the woodland into separate features. The majority of the feature is not within 120m of the Project Location. Land use immediately surrounding the woodland feature is primarily managed	Snags considered rare to occasional Varying age structure ranging from young to mature (trees from <10 to, rarely, >50cm dbh) No trees were observed that were >25 dbh and contained cavities. The majority of Feature 3 consisted of closed (>60%) canopy cover. Patches of open (i.e. ≤ 60%) canopy cover occurred extensively along 2 nd concession rd. on the southern extent of the feature (CUT and CUW communities) near collector line	Large woodland Interior habitat Close to other significant natural features Provides connectivity between significant natural features Provides water protection	Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
			cultural woodland) CUT1-7* (Prickly Ash Mineral Cultural Thicket) CUT1-4 (Gray Dogwood Cultural Thicket) FOC (Coniferous Forest)	agricultural lands, as well as residences along the southern edge of the feature.	row. No vernal pools were observed within 120m of the Project Location. No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed. Pools of surface water present in some communities. Disturbance observed included: -evidence of past logging activity -Some cattle grazing		
4	214.72	4	FOD9-4 (Fresh-Moist Shagbark Hickory Deciduous Forest) FOD5-1 (Dry-Fresh Sugar Maple Deciduous Forest) CUW1-4* (Maple Mineral	Woodland feature 4 is a very large contiguous woodland and wetland community encompassing portions of the Southwest corner of the island. The area surrounding this wetland feature includes agriculture to the north, and Lake Ontario, agriculture and marsh to the southwest. Woodland composition within 120 m of the Project Location is composed of cultural woodland and deciduous forest. The majority of the feature is not	Snags considered rare to occasional (<24cm dbh). Varying age structure ranging from mid-age to mature age classes (trees from <10 to 50cm dbh). No trees were observed that were >25 dbh and contained cavities. The majority of woodland 4 consisted of closed (>60%) canopy cover.	Large woodland Interior habitat Close to other significant natural features Provides connectivity between significant natural features Provides Provides	Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
			Cultural Woodland) SWD3-2 (Silver Maple Mineral Deciduous Swamp) SWD2-2 (Green Ash Mineral swamp) FOD9 (Fresh-Moist Oak-Maple- Hickory Deciduous forest) CUT1-4 (Gray Dogwood Cultural Thicket) SWT2-9 (Gray Dogwood Mineral Thicket Swamp) SWD3-3 (Swamp Maple Mineral Deciduous Swamp)	within 120m of the Project Location. This feature is bisected by Art McGinnis Rd., Emerald 40 Foot Rd. and a stream runs the length of the feature from east to west, ending in the large marshlands occurring adjacent to Lake Ontario.	Patches of open (i.e. ≤ 60%) canopy cover occurred in CUT and SWT communities. No vernal pools were observed, surface water and pooling occurs in deciduous swamp communities. No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed. Fully surveyed area includes some heavily grazed woodland mixed with pasture, heavily disturbed community with ground cover grazed and unidentifiable.	water protection • Woodland diversity representati on	

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
			FOD9-4 (Fresh-Moist Shagbark Hickory Deciduous Forest)				
			FOD7-2 (Fresh-Moist Ash Lowland Deciduous Forest)				
			FOD5-2 (Dry-fresh Sugar Maple Beech Deciduous Forest)				
			SWT2-2 (Willow Mineral thicket Swamp) SWD Deciduous				
			Swamp				
5	2.87	4	CUW1-1 (Red Cedar Cultural Woodland)	Woodland feature 5 was a small red cedar woodland located north of 2 nd Concession Rd. and south of Front Rd.	No trees were observed that were >25 dbh and contained cavities. Open canopy.		Unknown, requires Evaluation of Significance
				Land use immediately surrounding the woodland	No vernal pools were observed.		

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
				feature was comprised of managed agricultural lands.	No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed.		
					Heavily disturbed with cattle grazing and trampling occurring throughout.		
6	2.58	4	SWD2-2 (Green Ash Mineral	Woodland feature 6 was a small isolated woodland found immediately adjacent to 2 nd	Snags considered rare to occasional.		Unknown, requires Evaluation of
			Deciduous Swamp)	Concession Rd, on the north side.	Mature forest (trees from <10 to, rarely, <50cm dbh).		Significance
				Land use immediately surrounding the woodland feature was comprised of managed agricultural lands.	No trees were observed that were >25 dbh and contained cavities.		
					Consisted of closed (>60%) canopy cover.		
					No vernal pools were observed.		
					No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed.		
					No disturbance noted.		
7	2.35	3	SWD2-2 (Green Ash Mineral Deciduous	Woodland 7 is a small isolated deciduous swamp located west of Lower 40 Foot Rd, south of Front Rd.	Snags considered rare to occasional. Mature forest (trees from <10 to,	Provides water protectionClose to	Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
			Swamp)	Land use immediately surrounding the woodland is a fallow agricultural field which has converted to a cultural meadow.	rarely, <50cm dbh). No trees were observed that were >25 dbh and contained cavities. Consisted of closed (>60%) canopy cover. No vernal pools were observed. No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed.	other significant natural features	
8	0.49	4	SWD2-2 (Green Ash Mineral Deciduous Swamp)	Woodland 8 is a small isolated deciduous swamp located north of 2 nd Concession Rd and to the east of Emerald 40 Foot Rd. Land use immediately surrounding the woodland feature was comprised of agricultural use, particularly pasture and some hay.	No disturbance noted. Snags considered rare to occasional (<10 to 24cm dbh). Mature forest (trees from <10 to, rarely, >50cm dbh). No trees were observed that were >25 dbh and contained cavities. Consisted of closed (>60%) canopy cover. No vernal pools were observed. No specialized wildlife habitat features (hibernacula, stick		Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
					nests, etc.) observed. No disturbance noted.		
9	15.82	4	FOD9 (Fresh-Moist Oak-Maple- Hickory Deciduous Forest Ecosite) FOD9-4 (Fresh-Moist Shagbark Hickory Deciduous forest) CUT1-4 (Gray Dogwood Cultural Thicket) FOD (Deciduous forest)	Woodland 9 was culturally influenced deciduous woodland immediately adjacent to the north of 2 nd Concession Rd., east of feature 6. Land use immediately surrounding the woodland feature was comprised residences and managed agricultural lands.	Woodlot was observed from edge due to lack of property access. No trees were observed that were >25 dbh and contained cavities. Overall canopy cover was variable>60%; in FOD characterized as closed canopy, CUT areas characterized as open canopy <60%. No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed. No vernal pools were observed. Some pasture and grazing abutting the woodland.	Large woodland Interior habitat Woodland diversity representati on	Unknown, requires Evaluation of Significance
10	14.69	4	FOD7-2 (Fresh-moist Ash Lowland Deciduous Forest)	Woodland 10 was moderately sized deciduous woodland located to the north of 3 rd Concession Rd.	Snags were considered absent to rare. Age structure young (<10cm dbh) or mature (10 to 50cm dbh); varying within the woodland by	Large woodland Interior habitat Close to other	Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
			CUT1-4 (Gray Dogwood Cultural Thicket)	surrounding the woodland feature was comprised of managed agricultural lands. A small water feature flows through the southern edge of the woodland.	community type. No trees were observed that were >25 dbh and contained cavities. Overall canopy cover was primarily >60%; characterized as closed canopy; CUT considered open canopy <60%. No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed. Vernal pools were not observed. No disturbance noted.	significant natural features Provides linkage between significant features Provides water protection	
11	2.55	4	FOD7-2 (Fresh-Moist ash Lowland Deciduous Forest) SWT2-2 (Willow Mineral Thicket Swamp) CUT1-8* (Meadowsweet Mineral Cultural Thicket)	Woodland 11 was a small meandering cultural woodland located north of woodlot 10, and south of 2 nd Concession Rd. Land use immediately surrounding the woodland feature was comprised of managed agricultural lands.	Snags were considered ocassional to rare (<10 to 24cm) Age structure mid-age (10 to 24cm dbh) No trees were observed that were >25 dbh and contained cavities Overall canopy cover was primarily >60%; characterized as closed canopy. No specialized wildlife habitat features (hibernacula, stick		Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
			SWT2-6 (Meadowsweet mineral Thicket Swamp)		nests, etc.) observed. Vernal pools were not observed.		
					Disturbance noted include partially grazed areas abutting woodland.		
12	1.23	4	FOD7-2 (Fresh-Moist ash Lowland Deciduous Forest)	Feature 12 was a small deciduous woodland, separated from woodland feature 11, located directly south, by a gap of approximately 200 m. Land use immediately surrounding the woodland feature was comprised of managed agricultural lands.	Snags were considered absent to rare. Age structure mid-age (10 to 24cm dbh). No trees were observed that were >25 dbh and contained cavities. Overall canopy cover was primarily >60%; characterized as closed canopy. No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed. Vernal pools were not observed within 120m.		Unknown, requires Evaluation of Significance
					No disturbance noted.		
13	1.11	4	FOD7-2 (Fresh-moist Ash Lowland Deciduous	Feature 13 was a small deciduous woodland immediately adjacent to 2 nd Concession Rd. on the southern side and separated from woodland feature	Snags were considered absent to rare. Age structure mid-age (10 to		Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
			Forest)	9 by 2 nd Concession Rd. and a gap of approximately 50 m. Land use immediately surrounding woodland feature 13 was comprised of pasture.	24cm dbh). No trees were observed that were >25 dbh and contained cavities. Overall canopy cover was primarily >60%; characterized as closed canopy. No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed. Vernal pools were not observed within 120m. No disturbance noted.		
14	3.24	4	CUT1-4 (Gray dogwood Cultural Thicket) SWD2-2 (Green Ash mineral Deciduous Swamp) FOD7-2 (Fresh-Moist ash Lowland Deciduous Forest)	Feature 14 was a small culturally influenced woodland located on both sides of 2nd Concession Rd. Land use immediately surrounding woodland feature 14 was actively managed agricultural land and 2 nd concession rd. which bisects the feature.	Snags were considered rare to occasional in FOD, with more abundant snags <10cm dbh in CUT areas. Age structure primarily young (most trees <10 to <24cm dbh)rarely >24 in FOD. No trees were observed that were >25 dbh and contained cavities. Overall canopy cover was variable>60%; in FOD		Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
			CUW1-3* (Green Ash Mineral Cultural Woodland)		characterized as closed canopy, CUT areas characterized as open canopy <60%. No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed. Vernal pools absent. Some disturbance noted; garbage in FOD.		
15	19.5	5	FOD7-2 (Fresh-moist Green Ash Lowland Deciduous Forest)	Woodland feature 15 is found south east of S Shore Rd. and is at the northwestern limit of the Long Point Marsh Provincially Significant Wetland. Land use immediately surrounding the woodland feature is primarily managed agricultural lands, and some cultural meadow to the south west.	Snags were considered absent to rare. Age structure mature (>10 to <50cm dbh. No trees were observed that were >25 dbh and contained cavities. Overall canopy cover was primarily >60%; characterized as closed canopy. No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed. Vernal pools were not observed within 120m.	Large woodland Close to other significant natural features Provides connectivity between significant natural features Provides water protection	Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
					No disturbance noted.		
16	1.54	5	FOD5-2 (Dry-Fresh Sugar Maple- Beech Deciduous forest) SWD2-2 (Green Ash mineral Deciduous Swamp)	Woodland feature 16 is a small isolated woodland found to the east of Stella 40 Foot Rd. Land use immediately surrounding the woodland feature is primarily actively managed agricultural lands.	Snags were considered rare in all size classes and occasional in the >10 to 24 cm dbh. Age structure primarily mature (most trees <10 to 50cm dbh). Mature trees >50cm dbh generally considered rare. No trees were observed that were >25 dbh and contained cavities. Overall canopy cover was primarily >60%; characterized as closed canopy. No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed. Vernal pools absent, no surface water present. No disturbance noted.		Unknown, requires Evaluation of Significance
17	0.55	5	FOD7-2 (Fresh-moist Green Ash	Woodland feature 17 is a small isolated woodland found west of Stella 40 Foot Rd.	Snags were considered rare. Age structure primarily mid age		Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
			Lowland)	Land use immediately surrounding the woodland feature is primarily actively managed agricultural lands and till.	to mature (trees abundant at <10 to 24cm dbh). Mature trees >25 dbh generally considered occasional. No trees were observed. that were >25 dbh and contained cavities. Overall canopy cover was primarily >60%; characterized as closed canopy. Potential snake hibernacula located to the west of woodland 17, adjacent to stella 40 foot rd (17t 365327 4890104) No other specialized wildlife habitat features (hibernacula, stick nests, etc.) observed. Vernal pools were not observed. No disturbance noted.		
18	3.42	2	SWD2-2 (Green Ash mineral Deciduous Swamp)	Woodland feature 18 is found directly south of 2 nd Concession Rd. Land use immediately surrounding the woodland feature is primarily managed	Snags were considered rare to occasional. Age structure primarily mature (most trees 10 to 24cm dbh). Mature trees >25 dbh generally	Close to other significant natural features Provides water	Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
			FOD7-2 (fresh-Moist Ash Lowland Deciduous forest)	agricultural lands, and cultural meadow as well as some residences on the east side of the woodland feature.	considered rare to absent. One trees was observed that was >25 dbh and contained cavities. Overall canopy cover was primarily >60%; characterized as closed canopy. Observed one potential bat roosting feature (large oak >50cm dbh, no cavities, decay class 1); no other significant habitat features observed. Vernal pools absent. No disturbance observations were noted.	protection	
19	0.84	2	SWD2-2 (Green Ash mineral Deciduous Swamp)	Woodland feature 19 is found south of 2 nd Concession Rd. is to the east of woodland feature 18 with a gap of approximately 125m separating the woodlands. Land use immediately surrounding the woodland feature is primarily actively managed agricultural lands.	Snags were considered rare to absent Age structure primarily mature (most trees 10 to 24cm dbh). Mature trees >25 dbh generally considered rare to absent. No trees were observed that were >25 dbh and contained cavities.		Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
20	(ha) 6.84	5	CUT1-9* (Willow Mineral Cultural Thicket) CUW1-5* (Ash mineral	Woodland feature 20 is found east of Stella 40 Foot Rd. and north of S Shore Rd. Land use immediately surrounding the woodland feature is primarily managed	Overall canopy cover was primarily >60%; characterized as closed canopy. No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed. Vernal pools absent. Disturbance observed include a small inactive garbage dump. Snags were considered rare in all communities. Age structure primarily mid age (most trees <10 to 24cm dbh).	• Large Woodland	Unknown, requires Evaluation of Significance
			Cultural Woodland) FOD7-2 (Fresh-Moist Ash Lowland deciduous Forest)	agricultural lands, pasture, till and woodland feature 21 which is located directly north.	Mature trees >25 dbh generally considered rare to absent. No trees were observed that were >25 dbh and contained cavities. Overall canopy cover was primarily >60%; characterized as closed canopy. No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed.		

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
					Vernal pools were not observed. Disturbance noted included: - moderate us of CUT and CUW areas as pasture with moderate grazing.		
21	197.93	3	CUT1-4 (Gray Dogwood Cultural Thicket) FOD7-2 (Fresh-moist Ash Lowland deciduous forest) SWD3-3 (Swamp Maple mineral Deciduous Swamp) SWT2-6 (Meadowsweet Mineral Thicket Swamp) SWD (Deciduous Swamp)	Woodland feature 21 is a very large contiguous swamp located north of S Shore Rd. and east of Marshall 40 Foot Rd. This feature is comprised of a mosaic of vegetation communities. The majority of the feature is not within 120m of the Project Location. Land use immediately surrounding the woodland feature is primarily actively managed agricultural lands and pasture.	Snags were considered rare to occasional (>25cm dbh,) throughout all communities. snags were abundant in FOD 7-2 community (<10cm dbh). Age structure primarily young to mid age (most trees <10 to 24cm dbh); SWD community was mature and contained abundant trees >25 dbh, with ocassional trees >50cm dbh). Mature trees >25 dbh generally considered rare with the exception of the SWD communities. No trees were observed that were >25 dbh and contained cavities. Overall canopy cover was primarily >60%; characterized as closed canopy.	Large woodland Interior habitat Close to other significant natural features Provides connectivity between significant natural features Provides water protection	Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
					No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed. Vernal pools present, particularly in the more mature northern portion of the woodlot. No disturbance noted.		
23	18.3	3	FOD7-2 (Fresh-moist ash Lowland Deciduous Forest) FOD5 (Dry-Fresh Sugar Maple Deciduous Forest) FOC1-1 (Dry Jack Pine Coniferous Forest) *The Owl Woods	Woodland feature 23 is a moderately sized woodland found directly on the east side of Marshall 40 Foot Rd., between Front Rd. and S Shore Rd. This woodlot forms part of the Owl Woods. Land use immediately surrounding the woodland feature is primarily managed agricultural lands. The coniferous forest is a naturalized jack pine plantation that is used in the winter by large numbers of roosting owls.	Snags were considered occasional (<10 to 24cm dbh, and rare to absent >24cm dbh. Age structure primarily mature (most trees <10 to 50cm dbh); abundant in the 10 to 24cm dbh range. Mature trees >25 dbh generally considered occasional. No trees were observed that were >25 dbh and contained cavities. Overall canopy cover was primarily >60%; characterized as closed canopy. No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed.	Large woodland Interior habitat Close to other significant natural features Provides linkage between significant features Provides water protection Forms part of the Owl Woods	Yes (Owl Woods)

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
					One Vernal pool approximately 8m x 2m was observed (18 t 367916 4892621) it did not contain water at time of observation. Disturbance noted included some trails extending throughout the community.		
24	0.26	4	FOD4-4* (Dry-Fresh Ironwood Deciduous Forest)	Woodland feature 24 is a small isolated woodlot found north of 2 nd concession rd. Land use immediately surrounding the woodland feature is primarily actively managed agricultural lands and cultural meadow.	Snags were considered rare. Age structure primarily mid age (trees <10 to 24cm dbh). Mature trees >25 dbh generally rare. No trees were observed that were >25 dbh and contained cavities. Overall canopy cover was primarily <60%; characterized as open canopy. No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed. Vernal pools absent. No disturbances were noted within the community.		Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
25	0.87	3	CUP3-12* (White Spruce Cultural Plantation)	Woodland feature 25 is a small plantation located to the west of Lower 40 Foot Rd. and north of woodland feature 26. Land use immediately surrounding the woodland feature is primarily managed agricultural lands, cultural meadow and pasture.	Snags were considered absent. Age structure primarily mid age (majority of tress 10 to 24cm dbh) rarely <10 or >25. No trees were observed that were >25 dbh and contained cavities. Overall canopy cover was primarily <60%; characterized as open canopy. No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed. Vernal pools were not observed. No evidence of disturbance.		Unknown, requires Evaluation of Significance
26	0.39	3	CUP3-12* (White Spruce Cultural Plantation)	Woodland feature 26 is found east of Lower 40 Foot Rd. and is situated south of woodland feature 25. Land use immediately surrounding the woodland	Snags were considered absent. Age structure primarily mid age (majority of tress 10 to 24cm dbh) rarely <10 or >25. No trees were observed that		Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
				feature is primarily managed agricultural lands, cultural meadow and pasture.	were >25 dbh and contained cavities. Overall canopy cover was primarily <60%; characterized as open canopy. No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed. Vernal pools were not observed. No evidence of disturbance.		
28	7.80	1	FOC2-1 (Dry-Fresh Red Cedar Coniferous Forest) FOD7-2 (Fresh-Moist Ash Lowland Deciduous Forest)	Woodland feature 28 is located on the mainland adjacent to Jim Snow Dr. on the east side of the road. Land use immediately surrounding the woodland feature is primarily industrial with some small areas of cultural meadow.	Snags were considered absent. Age structure primarily young (most trees <10 to, ocassionaly, >24cm dbh). -mature trees >25 dbh generally considered absent. No trees were observed that were >25 dbh and contained cavities. Overall canopy cover was primarily <60%; characterized as open canopy.	 Large woodland Provides water protection 	Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
					Due to lack of property access, identification of significant wildlife features could not be observed, including presence or absence of vernal pools. No disturbance noted.		
29	0.57	4	CUW1-6* (Maple-Pine Mineral Cultural Woodland)	Woodland feature 29 is very small woodland located south of 2 nd Concession Rd. and north of woodland feature 11. Land use immediately surrounding the woodland feature is primarily managed agricultural lands.	Snags were considered rare. Age structure primarily mature (most trees <10 to >50cm dbh); rarely <10cm dbh. Mature trees >25 dbh generally considered occasional. No trees were observed that were >25 dbh and contained cavities. Overall canopy cover was primarily >60%; characterized as closed canopy. No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed. Vernal pools absent. Disturbance includes a mowed path extending through the		Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
					community.		
30	2.13	2	FOD7-2 (Fresh-Moist Ash Lowland Deciduous Forest) CUT1-4 (Gray Dogwood cultural Thicket)	Woodland feature 30 is a small woodland located north of 2 nd Concession Rd. Land use immediately surrounding the woodland feature is primarily managed agricultural lands.	Snags were considered rare. Age structure primarily mid age (most trees <10 to 24cm dbh). Mature trees >25 dbh generally considered rare to absent. No trees were observed that were >25 dbh and contained cavities. Canopy cover was primarily >60%; characterized as open canopy in FOD community. Canopy cover was primarily <60%; characterized as open canopy in CUT community. One stick nest was observed in a green ash tree of approximately 40-50cm width, no species were observed using the feature. Vernal pools absent, presence of surface water was primarily absent. No disturbances noted within community.		Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
32	0.47	3	FOD5 (Dry-Fresh Sugar Maple Deciduous Forest)	This small deciduous forest is located adjacent to front rd. east of woodland 31, situated in a residential area. Land use surrounding the community is comprised of residences and pasture to the south of the road.	Snags were considered rare to occasional Age structure primarily mature (most trees 10 to 50cm dbh) -mature trees >25 dbh generally considered occasional. One tree was observed that was>25 dbh and contained cavities, although no cavities were seen as high as 10m. Canopy cover was primarily >60%; characterized as closed canopy. Due to limited access, significant wildlife features are unknown. Vernal pools absent, drainage valley extends through the community. No disturbances noted within community.	Close to other significant natural features Provides water protection Woodland diversity representati on	Unknown, requires Evaluation of Significance
33	0.44	3	FOD (Deciduous Forest)	This small deciduous forest is located north of Front Rd. and adjacent to the lake Ontario shoreline. Land use surrounding this community is comprised of	Snags were considered rare. Age structure primarily mid age (most trees <10 to 24cm dbh). Mature trees >25 dbh generally		Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
				residences and fragmented cultural woodland.	considered rare to absent. No trees were observed that were >25 dbh and contained cavities. Canopy cover was primarily >60%; characterized as open canopy in FOD community. Canopy cover was primarily <60%; characterized as open canopy in CUT community. No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed. Vernal pools absent, presence of surface water was primarily absent. No disturbances noted within community.		
35	0.28	5	FOD7-2 (Fresh-Moist Ash Lowland Deciduous Forest)	This small community is located west of Stella 40 Foot Rd. and south of 3 rd Concession Rd. Land use surrounding this woodland consists of agricultural land including hay and pasture.	Snags were considered rare to occasional Age structure primarily mature (most trees <10 to 50cm dbh). Mature trees >25 dbh generally considered abundant. No trees were observed that		Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
					were >25 dbh and contained cavities. Canopy cover was primarily >60%; characterized as closed canopy. No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed. Vernal pools absent, presence of surface water was primarily absent. No disturbances noted within community.		
36	306.9	1	FOD7-2 (Fresh-Moist Ash Lowland Deciduous Forest)	This large forest community is located on the mainland east of Jim Snow Drive. Land use surrounding this woodland varies but includes some agricultural and industrial property.	Snags were considered rare to occasional Age structure primarily mature (most trees <10 to 50cm dbh). Mature trees >25 dbh generally considered abundant. No trees were observed that were >25 dbh and contained cavities. Canopy cover was primarily >60%; characterized as closed canopy.	Large woodland Interior habitat Provides connectivity between significant natural features Provides water protection	Unknown, requires Evaluation of Significance

Table 7B: Site Investigation Results - Woodlands

Woodland #	Feature Size (ha)	Figure #	Composition	Description	Attributes	Functions	Significance
					No specialized wildlife habitat features (hibernacula, stick nests, etc.) observed.		
					Vernal pools not observed		
					No disturbances noted within community.		

eature ID	Size (ha)	Туре	Composition	Attributes	Function	Figure #	Significance
easonal Co	oncentratio	n Areas				<u></u>	
WT1	101.4	Waterfowl Stopover and Staging Area (Terrestrial)	AG	Pasture and Hay	These fields with spring sheet water may provide important invertebrate foraging habitat for migrating waterfowl.	4	Unknown, require Evaluation of Significance
WT2	2.7	Waterfowl Stopover and Staging Area (Terrestrial)	CUM1-1	Cultural Meadow	These fields with spring sheet water may provide important invertebrate foraging habitat for migrating waterfowl.	4	Unknown, require Evaluation of Significance
WT3	32.6	Waterfowl Stopover and Staging Area (Terrestrial)	AG	Pasture and Hay	These fields with spring sheet water may provide important invertebrate foraging habitat for migrating waterfowl.	2	Unknown, require Evaluation of Significance
WT4	83.5	Waterfowl Stopover and Staging Area (Terrestrial)	AG	Pasture	These fields with spring sheet water may provide important invertebrate foraging habitat for migrating waterfowl.	2	Unknown, require Evaluation of Significance
WA1	370.4	Waterfowl Stopover and Staging (Aquatic)	MAS3-1, MAS2-10	Cattail Organic Shallow Marsh, Mineral Shallow Marsh	This shallow marsh may provide important invertebrate foraging habitat for migrating waterfowl.	4	Unknown, require Evaluation of Significance
SM1	102.7	Shorebird Migratory Stopover Area	Shoreline	Residential, Agriculture, Natural Features	This shoreline may provide important stopover habitat for migrating shorebirds.	2, 3, 4, 5	Unknown, require Evaluation of Significance
RWA-1	136.6	Raptor Wintering Area	CUM1-1. AG	Cultural Meadow, Pasture, and Hay	This agricultural land >15ha adjacent to a woodlot may provide feeding and roosting habitat for wintering raptors.	4	Unknown, require Evaluation of Significance
RWA-2	567.0	Raptor Wintering Area	CUM1-1. AG	Cultural Meadow, Pasture, and Hay	This agricultural land >15ha adjacent to a woodlot may provide feeding and roosting habitat for wintering raptors.	2, 4	Unknown, require Evaluation of Significance
RWA-3	201.9	Raptor Wintering Area	CUM1-1. AG	Cultural Meadow, Pasture, and Hay	This agricultural land >15ha adjacent to a woodlot may provide feeding and roosting habitat for wintering raptors.	2, 4	Unknown, requir Evaluation of Significance
RWA-4	229.1	Raptor Wintering Area	CUM1-1, AG	Cultural Meadow, Pasture, and Hay	This agricultural land >15ha adjacent to a woodlot may provide feeding and roosting habitat for wintering raptors.	2	Unknown, requir Evaluation of Significance
RWA-5	969.8	Raptor Wintering Area	AG	Pasture and Hay	This agricultural land >15ha adjacent to a woodlot may provide feeding and roosting habitat for wintering raptors.	5	Unknown, require Evaluation of Significance
RWA-6	471.3	Raptor Wintering Area	CUM1-1, AG	Cultural Meadow, Pasture, and Hay	This agricultural land >15ha adjacent to a woodlot may provide feeding and roosting habitat for wintering raptors.	2, 3	Unknown, require Evaluation of Significance
RWA-7	111.9	Raptor Wintering Area	CUM1-1, AG	Cultural Meadow, Pasture, and Hay	This agricultural land >15ha adjacent to a woodlot may provide feeding and roosting habitat for wintering raptors.	3	Unknown, requir Evaluation of Significance
RWA-8	26.8	Raptor Wintering Area	CUM1-1, AG	Cultural Meadow, Pasture, and Hay	This agricultural land >15ha adjacent to a woodlot may provide feeding and roosting habitat for wintering raptors.	3	Unknown, requir Evaluation of Significance
RWA-9	26.1	Raptor Wintering Area	CUM1-1, AG	Cultural Meadow and Hay	This agricultural land >15ha adjacent to a woodlot may provide feeding and roosting habitat for wintering raptors.	1	Unknown, requir Evaluation of Significance
RWA-10	1027.8	Raptor Wintering Area	AG	Нау	This agricultural land >15ha adjacent to a woodlot may provide feeding and roosting habitat for wintering raptors.	1	Unknown, requir Evaluation of Significance
TO1	349.8	Turtle Overwintering	MAS3-1, MAS2-10	Cattail Organic Shallow Marsh, Mineral Shallow Marsh	This pond may provide overwintering habitat for turtles, including northern map turtle and common snapping turtle.	4	Unknown, require Evaluation of Significance
ML1	214.7	Landbird Migratory Stopover Areas	FOD9-4, FOD5-1, CUW1-4, SWD3-2, SWD2-2, FOD9, CUT1-4, SWT2-9, SWD3-3, FOD9-4, FOD7-2, FOD5-2, SWT2-2, SWD	Fresh-Moist Shagbark Hickory Deciduous Forest, Dry-Fresh Sugar Maple Deciduous Forest, Maple Mineral Cultural Woodland, Silver Maple Mineral Deciduous Swamp, Green Ash Mineral swamp, Fresh-Moist Oak-Maple-Hickory Deciduous forest, Gray Dogwood Cultural Thicket, Gray Dogwood Mineral Thicket Swamp, Swamp Maple Mineral Deciduous Swamp, Fresh-Moist Shagbark Hickory Deciduous Forest, Fresh-Moist Ash Lowland Deciduous Forest, Dry-fresh Sugar Maple Beech Deciduous Forest, Willow Mineral thicket Swamp, Deciduous Swamp	This woodland located close to Lake Ontario may provide resting and foraging habitat for migrating landbirds.	4	Unknown, requi Evaluation of Significance
ML2	28.9	Landbird Migratory Stopover Areas	FOD7-2	Fresh-Moist Ash Lowland Deciduous Forest	This woodland located close to Lake Ontario may provide resting and foraging habitat for migrating landbirds.	3	Unknown, require Evaluation of Significance
ML3	19.5	Landbird Migratory Stopover Areas	MAS3-1, MAS2-10	Cattail Organic Shallow Marsh, Mineral Shallow Marsh	This woodland located close to Lake Ontario may provide resting and foraging habitat for migrating landbirds.	5	Unknown, requi Evaluation o Significance

Table 8B:	Description	n and Characterizations	s of Candidate Significant Wild	ife Habitat found within 120 m of the Amherst Island Wind Project			
Feature ID	Size (ha)	Туре	Composition	Attributes	Function	Figure #	Significance
ML4	197.9	Landbird Migratory Stopover Areas	CUT1-4, FOD7-2, SWD3-3, SWT2-6, SWD	Gray Dogwood Cultural Thicket, Fresh-moist Ash Lowland deciduous forest, Swamp Maple mineral Deciduous Swamp, Meadowsweet Mineral Thicket Swamp, Deciduous Swamp	This woodland located close to Lake Ontario may provide resting and foraging habitat for migrating landbirds.	3	Unknown, requires Evaluation of Significance
ML5	18.3	Landbird Migratory Stopover Areas	FOD7-2, FOD5, FOC1-1	Fresh-Moist Ash Lowland Deciduous Forest, Dry-Fresh Sugar Maple, and Dry Jack Pine Coniferous Forest	This woodland located close to Lake Ontario may provide resting and foraging habitat for migrating landbirds.	3	Unknown, requires Evaluation of Significance
MB2	43.0	Migratory Butterfly Stopover Area	CUM1-1, MAM2-2, CUP3-12	Cultural Meadow, Reed-Canary Grass Mineral Meadow Marsh, White Spruce Conifer Plantation	This combined field and forest habitat may provide resting and foraging habitat for migrating butterflies.	3	Unknown, requires Evaluation of Significance
MB3	20.8	Migratory Butterfly Stopover Area	CUM1-1	Cultural Meadow	This combined field and forest habitat may provide resting and foraging habitat for migrating butterflies.	1	Unknown, requires Evaluation of Significance
Rare Vegeta	ation Commu	unities and Specialized	Habitat for Wildlife				
OGF1	3.8	Old Growth Forest	FOD5-2	Dry-fresh Sugar Maple Beech Deciduous Forest	This undisturbed, structurally-complex forest may provide habitat for a high diversity of wildlife species.	4	Significant
OGF2	16.9	Old Growth Forest	FOD9-4, FOD5-1	Fresh-Moist Shagbark Hickory Deciduous Forest and Dry-Fresh Sugar Maple Deciduous Forest	This undisturbed, structurally-complex forest may provide habitat for a high diversity of wildlife species.	4	Significant
OGF3	28.9	Old Growth Forest	FOD7-2	Fresh-Moist Ash Lowland Deciduous Forest	This undisturbed, structurally-complex forest may provide habitat for a high diversity of wildlife species.	4	Significant
WN1	5.4	Waterfowl Nesting Area	MAS3-1, MAS2-10	Cattail Organic Shallow Marsh, Mineral Shallow Marsh	These woodlands adjacent to a wetland may be used by waterfowl for nesting.	5	Unknown, requires Evaluation of Significance
WN2	2.7	Waterfowl Nesting Area	CUM1-1	Cultural Meadow	These woodlands adjacent to a wetland may be used by waterfowl for nesting.	4	Unknown, requires Evaluation of Significance
WR1	214.7	Woodland Raptor Nesting	FOD9-4, FOD5-1, CUW1-4, SWD3-2, SWD2-2, FOD9, CUT1-4, SWT2-9, SWD3-3, FOD9-4, FOD7-2, FOD5-2, SWT2-2, SWD	Fresh-Moist Shagbark Hickory Deciduous Forest, Dry-Fresh Sugar Maple Deciduous Forest, Maple Mineral Cultural Woodland, Silver Maple Mineral Deciduous Swamp, Green Ash Mineral swamp, Fresh-Moist Oak-Maple-Hickory Deciduous forest, Gray Dogwood Cultural Thicket, Gray Dogwood Mineral Thicket Swamp, Swamp Maple Mineral Deciduous Swamp, Fresh-Moist Shagbark Hickory Deciduous Forest, Fresh-Moist Ash Lowland Deciduous Forest, Dry-fresh Sugar Maple Beech Deciduous Forest, Willow Mineral thicket Swamp, Deciduous Swamp	These woodlands >30ha with >4ha of interior habitat may provide specialized woodland raptor nesting habitat.	4	Unknown, requires Evaluation of Significance
WR2	197.9	Woodland Raptor Nesting	CUT1-4, FOD7-2, SWD3-3, SWT2-6, SWD	Gray Dogwood Cultural Thicket, Fresh-Moist Ash Lowland Deciduous Forest, Swamp Maple mineral Deciduous Swamp, Meadowsweet Mineral Thicket Swamp, Deciduous Swamp	These woodlands >30ha with >4ha of interior habitat may provide specialized woodland raptor nesting habitat.	3	Unknown, requires Evaluation of Significance
ABWO1	3.3	Amphibian Breeding Habitat (Woodland)	MAM2-2	Reed-Canary Grass Mineral Meadow Marsh	These wetlands within 120m of a woodland may be used by several species of frogs and/or salamanders for breeding, including western chorus frog.	4	Unknown, requires Evaluation of Significance
ABWO2	43.6	Amphibian Breeding Habitat (Woodland)	SWD2-2	Green Ash Mineral Deciduous Swamp	These wetlands within 120m of a woodland may be used by several species of frogs and/or salamanders for breeding, including western chorus frog.	4	Unknown, requires Evaluation of Significance
ABWO3	1.2	Amphibian Breeding Habitat (Woodland)	MAM2	Graminoid Mineral Meadow Marsh	These wetlands within 120m of a woodland may be used by several species of frogs and/or salamanders for breeding, including western chorus frog.	1	Unknown, requires Evaluation of Significance
ABWE1	349.8	Amphibian Breeding Habitat (Woodland)	MAS3-1, MAS2-10	Cattail Organic Shallow Marsh, Mineral Shallow Marsh	These wetlands may be used by several species of frogs and/or salamanders for breeding, including western chorus frog.	4	Unknown, requires Evaluation of Significance
ABWE2	9.8	Amphibian Breeding Habitat (Wetland)	MAM2-2	Reed-Canary Grass Mineral Meadow Marsh	These wetlands may be used by several species of frogs and/or salamanders for breeding, including western chorus frog.	4	Unknown, requires Evaluation of Significance
Habitat for	Species of C	onservation Concern			<u> </u>		
MBB1	349.8	Marsh Bird Breeding Habitat	MAS3-1, MAS2-10	Cattail Organic Shallow Marsh, Mineral Shallow Marsh	This marsh may provide nesting and foraging habitat for marsh breeding birds, including Green Heron.	4	Unknown, requires Evaluation of Significance
ABB1	214.7	Woodland Area- Sensitive Breeding Bird Habitat	FOD9-4, FOD5-1, CUW1-4, SWD3-2, SWD2-2, FOD9, CUT1-4, SWT2-9, SWD3-3, FOD9-4, FOD7-2, FOD5-2, SWT2-2, SWD	Fresh-Moist Shagbark Hickory Deciduous Forest, Dry-Fresh Sugar Maple Deciduous Forest, Maple Mineral Cultural Woodland, Silver Maple Mineral Deciduous Swamp, Green Ash Mineral swamp, Fresh-Moist Oak-Maple-Hickory Deciduous forest, Gray Dogwood Cultural Thicket, Gray Dogwood Mineral Thicket Swamp, Swamp Maple Mineral Deciduous Swamp, Fresh-Moist Shagbark Hickory Deciduous Forest, Fresh-Moist Ash Lowland Deciduous Forest, Dry-fresh Sugar Maple Beech Deciduous Forest, Willow Mineral thicket Swamp, Deciduous Swamp	These large forested areas >30 ha with interior habitat may be used by area-sensitive breeding birds.	4	Unknown, requires Evaluation of Significance
ABB2	197.9	Woodland Area- Sensitive Breeding Bird Habitat	CUT1-4, FOD7-2, SWD3-3, SWT2-6, SWD	Gray Dogwood Cultural Thicket, Fresh-moist Ash Lowland deciduous forest, Swamp Maple mineral Deciduous Swamp, Meadowsweet Mineral Thicket Swamp, Deciduous Swamp	These large forested areas >30 ha with interior habitat may be used by area-sensitive breeding birds.	3	Unknown, requires Evaluation of Significance

Table 8B:	Description	and Characterizations	s of Candidate Significant Wildl	ife Habitat found within 120 m of the Amherst Island Wind Project			
Feature ID	Size (ha)	Туре	Composition	Attributes	Function	Figure #	Significance
OCB-1	105.1	Open Country Bird Breeding Habitat	CUM1-1. AG	Cultural Meadow, Pasture, and Hay	This large grassland area may provide nesting and foraging habitat for open country breeding birds.	4	Unknown, requires Evaluation of Significance
OCB-2	912.8	Open Country Bird Breeding Habitat	CUM1-1. AG	Cultural Meadow, Pasture, and Hay	This large grassland area may provide nesting and foraging habitat for open country breeding birds.	2, 4	Unknown, requires Evaluation of Significance
OCB-3	492.8	Open Country Bird Breeding Habitat	CUM1-1. AG	Cultural Meadow, Pasture, and Hay	This large grassland area may provide nesting and foraging habitat for open country breeding birds.	2, 4	Unknown, requires Evaluation of Significance
OCB-4	160.5	Open Country Bird Breeding Habitat	CUM1-1, AG	Cultural Meadow, Pasture, and Hay	This large grassland area may provide nesting and foraging habitat for open country breeding birds.	2	Unknown, requires Evaluation of Significance
OCB-5	208.2	Open Country Bird Breeding Habitat	AG	Pasture and Hay	This large grassland area may provide nesting and foraging habitat for open country breeding birds.	5	Unknown, requires Evaluation of Significance
OCB-6	238.2	Open Country Bird Breeding Habitat	CUM1-1, AG	Cultural Meadow, Pasture, and Hay	This large grassland area may provide nesting and foraging habitat for open country breeding birds.	4	Unknown, requires Evaluation of Significance
OCB-7	465.2	Open Country Bird Breeding Habitat	CUM1-1, AG	Cultural Meadow, Pasture, and Hay	This large grassland area may provide nesting and foraging habitat for open country breeding birds.	3	Unknown, requires Evaluation of Significance
OCB-8	418.6	Open Country Bird Breeding Habitat	CUM1-1, AG	Cultural Meadow, Pasture, and Hay	This large grassland area may provide nesting and foraging habitat for open country breeding birds.	3	Unknown, requires Evaluation of Significance
OCB-9	111.9	Open Country Bird Breeding Habitat	CUM1-1, AG	Cultural Meadow, Pasture, and Hay	This large grassland area may provide nesting and foraging habitat for open country breeding birds.	3	Unknown, requires Evaluation of Significance
SSB1	14.3	Shrub/Early Successional Bird Breeding Habitat	CUW1-3	Green Ash Mineral Cultural woodland	This large natural field area with shrub/thicket habitat may provide nesting and foraging habitat for early successional breeding birds.	4	Unknown, requires Evaluation of Significance
SSB2	22.7	Shrub/Early Successional Bird Breeding Habitat	CUT1-4	Gray Dogwood Cultural Thicket	This large natural field area with shrub/thicket habitat may provide nesting and foraging habitat for early successional breeding birds.	4	Unknown, requires Evaluation of Significance
SSB3	11.6	Shrub/Early Successional Bird Breeding Habitat	CUT1-4	Gray Dogwood Cultural Thicket	This large natural field area with shrub/thicket habitat may provide nesting and foraging habitat for early successional breeding birds.	3	Unknown, requires Evaluation of Significance
SSB4	74.8	Shrub/Early Successional Bird Breeding Habitat	CUT1-4, FOD7-2	Gray Dogwood Cultural Thicket and Fresh-Moist Ash Lowland Deciduous Forest	This large natural field area with shrub/thicket habitat may provide nesting and foraging habitat for early successional breeding birds.	3	Unknown, requires Evaluation of Significance
SSB5	35.7	Shrub/Early Successional Bird Breeding Habitat	CUT1-4, CUM1-1	Gray Dogwood Cultural Thicket and Cultural Meadow	This large natural field area with shrub/thicket habitat may provide nesting and foraging habitat for early successional breeding birds.	2	Unknown, requires Evaluation of Significance
LW1	214.7	Louisiana Waterthrush	FOD9-4, FOD5-1, CUW1-4, SWD3-2, SWD2-2, FOD9, CUT1-4, SWT2-9, SWD3-3, FOD9-4, FOD7-2, FOD5-2, SWT2-2, SWD	Fresh-Moist Shagbark Hickory Deciduous Forest, Dry-Fresh Sugar Maple Deciduous Forest, Maple Mineral Cultural Woodland, Silver Maple Mineral Deciduous Swamp, Green Ash Mineral swamp, Fresh-Moist Oak-Maple-Hickory Deciduous forest, Gray Dogwood Cultural Thicket, Gray Dogwood Mineral Thicket Swamp, Swamp Maple Mineral Deciduous Swamp, Fresh-Moist Shagbark Hickory Deciduous Forest, Fresh-Moist Ash Lowland Deciduous Forest, Dry-fresh Sugar Maple Beech Deciduous Forest, Willow Mineral thicket Swamp, Deciduous Swamp	This species prefers wooded ravines with running streams, woodlands swamps, and large tracts of mature deciduous or mixed forests. This habitat may provide nesting and foraging habitat for Louisiana Waterthrush.	3	Unknown, requires Evaluation of Significance
LW2	19.5	Louisiana Waterthrush	FOD7-2	Fresh-Moist Ash Lowland Deciduous Forest	This species prefers wooded ravines with running streams, woodlands swamps, and large tracts of mature deciduous or mixed forests. This habitat may provide nesting and foraging habitat for Louisiana Waterthrush.	5	Unknown, requires Evaluation of Significance
LW3	197.9	Louisiana Waterthrush	CUT1-4, FOD7-2, SWD3-3, SWT2-6, SWD	Gray Dogwood Cultural Thicket, Fresh-moist Ash Lowland deciduous forest, Swamp Maple mineral Deciduous Swamp, Meadowsweet Mineral Thicket Swamp, Deciduous Swamp	This species prefers wooded ravines with running streams, woodlands swamps, and large tracts of mature deciduous or mixed forests. This habitat may provide nesting and foraging habitat for Louisiana Waterthrush.	3	Unknown, requires Evaluation of Significance
OCB-1	105.1	Short-eared Owl	CUM1-1. AG	Cultural Meadow, Pasture, and Hay	This species prefers grasslands, open areas or meadows that are grassy or bushy. This habitat may provide nesting and foraging habitat for Short-eared Owl.	4	Unknown, requires Evaluation of Significance
OCB-2	912.8	Short-eared Owl	CUM1-1. AG	Cultural Meadow, Pasture, and Hay	This species prefers grasslands, open areas or meadows that are grassy or bushy. This habitat may provide nesting and foraging habitat for Short-eared Owl.	2, 4	Unknown, requires Evaluation of Significance
OCB-3	492.8	Short-eared Owl	CUM1-1. AG	Cultural Meadow, Pasture, and Hay	This species prefers grasslands, open areas or meadows that are grassy or bushy. This habitat may provide nesting and foraging habitat for Short-eared Owl.	2, 4	Unknown, requires Evaluation of Significance

Table 8B:	Descriptio	n and Characterizations	of Candidate Significant Wildli	fe Habitat found within 120 m of the Amherst Island Wind Project		
Feature ID	Size (ha)	Туре	Composition	Attributes Function	Figure #	Significance
OCB-4	160.5	Short-eared Owl	CUM1-1, AG	This species prefers grasslands, open areas or meadows that are grassy or bushy. This habitat may provide nesting and foraging habitat for Short-eared Owl.	2	Unknown, requires Evaluation of Significance
OCB-5	208.2	Short-eared Owl	AG	This species prefers grasslands, open areas or meadows that Pasture and Hay are grassy or bushy. This habitat may provide nesting and foraging habitat for Short-eared Owl.	5	Unknown, requires Evaluation of Significance
OCB-6	238.2	Short-eared Owl	CUM1-1, AG	This species prefers grasslands, open areas or meadows that are grassy or bushy. This habitat may provide nesting and foraging habitat for Short-eared Owl.	4	Unknown, requires Evaluation of Significance
OCB-7	465.2	Short-eared Owl	CUM1-1, AG	This species prefers grasslands, open areas or meadows that are grassy or bushy. This habitat may provide nesting and foraging habitat for Short-eared Owl.	3	Unknown, requires Evaluation of Significance
OCB-8	418.6	Short-eared Owl	CUM1-1, AG	Cultural Meadow, Pasture, and Hay This species prefers grasslands, open areas or meadows that are grassy or bushy. This habitat may provide nesting and foraging habitat for Short-eared Owl.	3	Unknown, requires Evaluation of Significance
OCB-9	111.9	Short-eared Owl	CUM1-1, AG	This species prefers grasslands, open areas or meadows that Cultural Meadow, Pasture, and Hay Cultural Meadow, Pasture, and Hay This species prefers grasslands, open areas or meadows that are grassy or bushy. This habitat may provide nesting and foraging habitat for Short-eared Owl.	3	Unknown, requires Evaluation of Significance
WP1	111.9	Wilson's Phalarope	CUM1-1, AG	Cultural Meadow, Pasture, and Hay Cultural Meadow, Pasture, and Hay This species prefers open wetlands, ponds, lakes, marshes and sloughs with wet meadow vegetation; freshwater coastal marshes; nests on ground in loose colonies; sewage lagoons with grassy edges.	3	Unknown, requires Evaluation of Significance
Generalized	d Significant	Wildlife Habitats				
MBB1	349.8	Marsh Bird Breeding Habitat	MAS3-1, MAS2-10	Cattail Organic Shallow Marsh, Mineral Shallow Marsh This marsh may provide nesting and foraging habitat for marsh breeding birds, including Green Heron.	4	Generalized, treated as Significant
SN1	<1 ha	Snake Hibernacula	Foundation/Stone Wall	Foundation/Stone Wall This habitat may provide underground hibernaculum for snakes.	3	Generalized, treated as Significant

Table 9B Wetland Characteristics and Ecological Functions Assessment, Amherst Island Wind Energy

Feature #	Size (ha)	Wetland Type	Site Type	Vegetation Communities	Proximity to other wetlands (approximate)	Interspersion	Catchment Area	Open Water Types	Water Quality Improvement (short term) Water Quality Improvement (long term nutrient trap)	Water Quality Improvement (groundwater discharge)	Shoreline Erosion	Groundwater Recharge	Summary of Hydrology	Significant Features	Fish Habitat
1	0.8	Marsh	Lacustrine	gc	295m	46	Exposed to Lake; 85 hectare catchment	No Open water	permanent inflow; over 50% agricultural landscape; high proportion of live herbs. Marsh with <50% coverage of organic soil	No evidence of discharge observed	High proportion of ground cover / emergent vegetation	Lacustrine feature with Bottomland loam soil complex	Lacustrine wetland on bottomland loam soil complex with permanent inflow situated in a predominantly agricultural watershed. No evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Present
2a	1.2	Marsh	Palustrine	re	125m	33	Headwater; 5 hectare catchment	No Open water	Intermittent inflow; over 50% agricultural landscape; high proportion of live herbs. Intermittent Marsh with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly Loam soil	Palustrine wetland on loam soil with intermittent inflow situated in a predominantly agricultural watershed. No evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
2b	0.3	Marsh	Palustrine	gc	125m		Headwater; 1 hectare catchment	Type 1	Intermittent inflow; over 50% agricultural landscape; high proportion of live herbs. Intermittent Marsh with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly Loam soil	Palustrine wetland on loam soil with intermittent inflow situated in a predominantly agricultural watershed. No evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
3a	4.0	Marsh	Palustrine	gc, h	15m		Mid-reach; 100 hectare catchment	No Open water	Intermittent inflow; over 50% agricultural landscape; high proportion of live herbs. Intermittent Marsh with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly clay soil	Palustrine wetland on clay soil with intermittent inflow situated in a predominantly agricultural watershed. No evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
3b	2.4	Marsh	Palustrine	gc, h	15m	62	Headwater; 80 hectare catchment	No Open water	Intermittent inflow; over 50% agricultural landscape; high proportion of live herbs. Intermittent Marsh with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly clay soil	Palustrine wetland on clay soil with intermittent inflow situated in a predominantly agricultural watershed. No evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
Зс	0.8	Swamp	Palustrine	h	15m		Headwater; 1 hectare catchment	No Open water	Intermittent inflow; over 50% agricultural landscape; high proportion of live trees. Swamp with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly clay soil	Palustrine wetland on clay soil with intermittent inflow situated in a predominantly agricultural watershed. No evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent

Table 9B Wetland Characteristics and Ecological Functions Assessment, Amherst Island Wind Energy

Feature #	Size (ha)	Wetland Type	Site Type	Vegetation Communities	Proximity to other wetlands (approximate)	Interspersion	Catchment Area	Open Water Types	Water Quality Improvement (short term)	Water Quality Improvement (long term nutrient trap)	Water Quality Improvement (groundwater discharge)	Shoreline Erosion	Groundwater Recharge	Summary of Hydrology	Significant Features	Fish Habitat
4 a	105.0	Swamp	Palustrine	h, gc, ne	30m		Mid-reach; 387 hectare catchment	No Open water	Intermittent inflow and outflow; over 50% agricultural landscape; high proportion of live trees.	Swamp with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly clay soil	Palustrine wetland on soils with high clay content and intermittent inflow. Situated in a predominantly agricultural watershed with no evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
4b	1.2	Swamp	Palustrine	h	30m	65	Headwater; 3 hectare catchment	No Open water	Intermittent inflow; over 50% agricultural landscape; high proportion of live trees.	Swamp with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly clay soil	Palustrine wetland on soils with high clay content and intermittent inflow. Situated in a predominantly agricultural watershed with no evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
4 c	0.3	Marsh	Palustrine	gc	1 5m		Headwater; 1 hectare catchment	No Open water	Intermittent inflow; over 50% agricultural landscape; high proportion of live herbs.	Marsh with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly clay soil	Palustrine wetland on soils with high clay content and intermittent inflow. Situated in a predominantly agricultural watershed with no evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
4d	0.2	Swamp	Palustrine	ts	140m		Headwater; 1 hectare catchment	No Open water	Intermittent inflow; over 50% agricultural landscape; high proportion of live shrubs.	Swamp with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly clay soil	Palustrine marsh on soils with high clay content and intermittent inflow. Situated in a predominantly agricultural watershed. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
5a	6.0	Marsh	Palustrine	gc, ne	20m		Mid-reach; 52 hectare catchment	No Open water	Intermittent inflow; over 50% agricultural landscape; high proportion of live herbs.	Marsh with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly clay soil	Palustrine wetland on soils with high clay content and intermittent inflow. Situated in a predominantly agricultural watershed with no evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
5b	0.9	Marsh	Palustrine	gc, ne	20m	50	Headwater; 13 hectare catchment	No Open water	Intermittent inflow; over 50% agricultural landscape; high proportion of live herbs.	Marsh with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly clay soil	Palustrine wetland on soils with high clay content and intermittent inflow. Situated in a predominantly agricultural watershed with no evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
5 c	1.4	Marsh	Palustrine	gc, ne	30m		Headwater; 4 hectare catchment	No Open water	Intermittent inflow; over 50% agricultural landscape; high proportion of live herbs.	Marsh with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly clay soil	Palustrine wetland on soils with high clay content and intermittent inflow. Situated in a predominantly agricultural watershed with no evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent

Feature #	Size (ha)	Wetland Type	Site Type	Vegetation Communities	Proximity to other wetlands (approximate)	Interspersion	Catchment Area	Open Water Types	Water Quality Improvement (short term)	Water Quality Improvement (long term nutrient trap)	Water Quality Improvement (groundwater discharge)	Shoreline Erosion	Groundwater Recharge	Summary of Hydrology	Significant Features	Fish Habitat
6a	19.5	Marsh	Palustrine	gc	115m		Mid-reach; 82 hectare catchment	Type 1	Intermittent inflow; over 50% agricultural landscape; high proportion of live herbs.	Marsh with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly loam soil	Palustrine wetland on loam soil with intermittent inflow. Situated in a predominantly agricultural watershed with no evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Present (in pond)
6b	2.1	Marsh	Palustrine	gc	155m	420	Headwater; 2 hectare catchment	No Open water	Intermittent inflow; over 50% agricultural landscape; high proportion of live herbs.	Marsh with <50% coverage of organic soil	No evidence of discharge	Not applicable	Palustrine feature with predominantly loam soil	Palustrine wetland on loam soil with intermittent inflow. Situated in a predominantly agricultural watershed with no evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
6 c	4.4	Marsh	Palustrine	gc	155m	139	Mid-reach; 22 hectare catchment	No Open water	Intermittent inflow; over 50% agricultural landscape; high proportion of live herbs.	Marsh with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly clay soil	Palustrine wetland on soils with high clay content and intermittent inflow. Situated in a predominantly agricultural watershed with no evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
6d	2.7	Marsh	Palustrine	gc	115m		Mid-reach; 64 hectare catchment	Type 1	Intermittent inflow; over 50% agricultural landscape; high proportion of live herbs.	Marsh with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly loam soil	Palustrine wetland on loam soil with intermittent inflow. Situated in a predominantly agricultural watershed with no evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
7	2.1	Marsh	Palustrine	gc	140m	45	Mid-reach; 273 hectare catchment	No Open water	permanent inflow; over 50% agricultural landscape; high proportion of live herbs.	Marsh with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly clay soil	Palustrine wetland on clay soil with permanent inflow situated in a predominantly agricultural watershed. No evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
8	0.6	Swamp	Palustrine	h, ts, gc	630m	84	Headwater; 2 hectare catchment	No Open water	Intermittent inflow; over 50% agricultural landscape; high proportion of live herbs.	Swamp with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly clay Soil	Palustrine wetland on clay soil with intermittent inflow situated in a predominantly agricultural watershed. No evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
9a	1.5	Swamp	Palustrine	ts, ne, gc	115m	54	Mid-reach; 94 hectare catchment	No Open water	Intermittent inflow and outflow; over 50% agricultural landscape; high proportion of live shrubs.	Swamp with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly clay soil	Palustrine wetland on soils with high clay content and intermittent inflow. Situated in a predominantly agricultural watershed with no evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent

Table 9B Wetland Characteristics and Ecological Functions Assessment, Amherst Island Wind Energy

Feature #	Size (ha)	Wetland Type	Site Type	Vegetation Communities	Proximity to other wetlands (approximate)	Interspersion	Catchment Area	Open Water Types	Water Quality Improvement (short term)	Water Quality Improvement (long term nutrient trap)	Water Quality Improvement (groundwater discharge)	Shoreline Erosion	Groundwater Recharge	Summary of Hydrology	Significant Features	Fish Habitat
9b	5.0	Swamp	Palustrine	ls, gc, ne	115m	J 4	Headwater; 7 hectare catchment	No Open water	Intermittent inflow and outflow; over 50% agricultural landscape; high proportion of live trees.	Swamp with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly clay soil	Palustrine wetland on soils with high clay content and intermittent inflow. Situated in a predominantly agricultural watershed with no evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
10b	30.1	Swamp	Palustrine	h, ts, gc	100m	130	Headwater; 81 hectare catchment	No Open water	Intermittent inflow; over 50% agricultural landscape; high proportion of live trees.	Swamp with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly clay soil	Palustrine wetland on soils with high clay content and surface water inflow. Situated in a predominantly agricultural watershed with minimal evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
11	1.0	swamp	Palustrine	ts, re, ne, gc	280m	34	Headwater; 2 hectare catchment	No Open water	Intermittent inflow; over 50% agricultural landscape; high proportion of live shrubs.	Swamp with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly clay soil	Palustrine wetland on soils with high clay content and surface water inflow. Situated in a predominantly agricultural watershed with minimal evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
12	13.8	Swamp	Palustrine	h, ts, gc, ne	15m	79	Mid-reach; 434 hectare catchment	No Open water	permanent inflow; over 50% agricultural landscape; high proportion of live trees.	Swamp/ marsh with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with clay and loam soils	Palustrine wetland on clay and loam soil with permanent inflow. Situated in a predominantly agricultural watershed with no evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
13	0.3	Marsh	Palustrine	gc	410m	20	Headwater; 13 hectare catchment	No Open water	Intermittent inflow; over 50% agricultural landscape; high proportion of live herbs.	Marsh with <50% coverage of organic soils	No evidence of discharge observed	Not applicable	Palustrine feature with Clay Soils	Palustrine wetland on clay soil with intermittent inflow situated in a predominantly agricultural watershed. No evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
14	0.7	Swamp	Palustrine	h, ts, gc	410m	39	Headwater; 24 hectare catchment	No Open water	Intermittent inflow; over 50% agricultural landscape; high proportion of live trees.	Swamp with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly clay soil	Palustrine wetland on clay soil with intermittent inflow situated in a predominantly agricultural watershed. No evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent

Table 9B Wetland Characteristics and Ecological Functions Assessment, Amherst Island Wind Energy

Feature #	Size (ha)	Wetland Type	Site Type	Vegetation Communities	Proximity to other wetlands (approximate)	Interspersion	Catchment Area	Open Water Types	Water Quality Improvement (short term)	Water Quality Improvement (long term nutrient trap)	Water Quality Improvement (groundwater discharge)	Shoreline Erosion	Groundwater Recharge	Summary of Hydrology	Significant Features	Fish Habitat
15	2.6	Swamp	Palustrine	h	250m	34	Mid-reach; 69 hectare catchment	No Open water	Intermittent inflow; over 50% agricultural landscape; high proportion of live trees.	Swamp with <50% coverage of organic soil	No evidence of discharge observed	Not applicable	Palustrine feature with predominantly clay soil	Palustrine wetland on soils with high clay content and intermittent inflow. Situated in a predominantly agricultural watershed with no evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
16	1.7	Marsh	Palustrine	gc	250m	44	Mid-reach; 67 hectare catchment	No Open water	Intermittent inflow; over 50% agricultural landscape; high proportion of live herbs.	Marsh with <50% coverage of organic soils	No evidence of discharge observed	Not applicable	Palustrine feature with Clay Soils	Palustrine wetland on soils with high clay content and intermittent inflow. Situated in a predominantly agricultural watershed with no evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
17	9.8	Marsh	Palustrine	gc, ne	210m	50	Mid-reach; 489 hectare catchment	No Open water	permanent inflow; over 50% agricultural landscape; high proportion of live herbs.	Marsh with <50% coverage of organic soil	No evidence of discharge	Not applicable	Palustrine feature with predominantly clay soil	Palustrine wetland on soils with high clay content and permanent inflow. Situated in a predominantly agricultural watershed with no evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
18	0.3	Swamp	Palustrine	h, ts, ne, gc	195m	31	Headwater; 1 hectare catchment	No Open water	Intermittent inflow; over 50% agricultural landscape; high proportion of live tress.	Swamp with <50% coverage of organic soil	No evidence of discharge	Not applicable	Palustrine feature with Clay soils	Palustrine wetland on soils with high clay content and intermittent inflow. Situated in a predominantly agricultural watershed with no evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
19	0.9	Marsh	Palustrine	gc	195m	31	Mid-reach; 19 hectare catchment	No Open water	Intermittent inflow; over 50% agricultural landscape; high proportion of live herbs.	Marsh with <50% coverage of organic soil	No evidence of discharge	Not applicable	Palustrine feature with predominantly clay soil	Palustrine wetland on soils with high clay content and intermittent inflow. Situated in a predominantly agricultural watershed with no evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent
20	1.1	Marsh	Palustrine	gc	660m	54	Mid-reach; 20 hectare catchment	No Open water	Intermittent inflow and outflow; over 50% agricultural landscape; high proportion of live herbs.	Marsh with <50% coverage of organic soil	No evidence of discharge	Not applicable	Palustrine feature with predominantly clay soil	Palustrine wetland on soils with high clay content and intermittent inflow. Situated in a predominantly agricultural watershed with no evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent

Table 9B Wetland Characteristics and Ecological Functions Assessment, Amherst Island Wind Energy

Feature #	Size (ha)	Wetland Type	Site Type	Vegetation Communities	Proximity to other wetlands (approximate)	•	Catchment Area	Open Water Types	•	Water Quality Improvement (long term nutrient trap)	Water Quality Improvement (groundwater discharge)	Shoreline Erosion	Groundwater Recharge	Summary of Hydrology	Significant Features	Fish Habitat
22	1.2	Marsh	Palustrine	gc	350m	31	Headwater; 5 hectare catchment	No Open water	Intermittent inflow and outflow; over 50% agricultural landscape; high proportion of live herbs.	organic soil	No evidence of discharge	Not applicable	Palustrine feature with predominantly clay soil	Palustrine wetland on soils with high clay content and intermittent inflow. Situated in a predominantly agricultural watershed with no evidence of groundwater discharge. Data based on surveys, air photo interpretation, and soil mapping*.	None known to be present	Absent

Table 10B: Evaluation of Significance – Woodlands

Woodland #	Size (>4 ha)	Woodland Interior	Proximity to Other Significant Woodlands or Habitats	Linkages	Water Protection	Woodland Diversity Representation	Uncommon Characteristics	Significant Woodland
	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N
1	No	No	No	No	No	Yes	No	Yes
2	No	No	Yes	No	Yes	No	No	Yes
3	Yes	Yes	Yes	Yes	Yes	No	No	Yes
4	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
5	No	No	No	No	No	No	No	No
6	No	No	No	No	No	No	No	No
7	No	No	Yes	No	Yes	No	No	Yes
8	No	No	No	No	No	No	No	No
9	Yes	Yes	No	No	No	Yes	No	Yes
10	Yes	Yes	Yes	Yes	Yes	No	No	Yes
11	No	No	No	No	No	No	No	No
12	No	No	No	No	No	No	No	No
13	No	No	No	No	No	No	No	No
14	No	No	No	No	No	No	No	No
15	Yes	No	Yes	Yes	Yes	No	No	Yes
16	No	No	No	No	No	No	No	No
17	No	No	No	No	No	No	No	No
18	No	No	Yes	No	Yes	No	No	Yes
19	No	No	No	No	No	No	No	No
20	Yes	No	No	No	No	No	No	Yes
21	Yes	Yes	Yes	Yes	Yes	No	No	Yes
23	Yes	Yes	Yes	Yes	Yes	No	No	Yes
24	No	No	No	No	No	No	No	No
25	No	No	No	No	No	No	No	No
26	No	No	No	No	No	No	No	No
28	Yes	No	No	No	Yes	No	No	Yes
29	No	No	No	No	No	No	No	No
30	No	No	No	No	No	No	No	No
32	No	No	Yes	No	Yes	Yes	No	Yes
33	No	No	No	No	No	No	No	No
35	No	No No		No	No	No	No	No
36	Yes	Yes	No	Yes	Yes	Yes	No	Yes

Table 11B Construction Plan Schedule

Phase Details	Approximate Schedule
Surveying	3-7 weeks
Delivery of construction materials, storage materials, site preparation, construction of access roads, crane pads and temporary dock	5-9 months
Installation of tower foundations	8-12 months
Tower/turbine delivery and erection	6-8 months
Installation of submarine cables	2-4 weeks
Installation of collector lines and transmission line	6-9 months
Installation of substation	4-7 months
Installation of operations and maintenance building	1-3 months
Installation of interconnect facility and switching station	1-4 months
Installation of switching station	2-5 months
Installation of batch plant	1-2 months
Installation of temporary site office	1 -2 months
Reclamation of temporary work areas, final grading, topsoil replacement	4-7 months
Project Testing/ Commission	3-6 months
Commercial Operation	1 week

Note: Construction activities will take place during normal business hours. When construction is anticipated to be required outside of normal business hours, the timing will be discussed in advance with Loyalist Township. In the event changes are required to the proposed construction schedule, updated construction schedules will be provided to the public through postings on the Project website (www.amherstislandwindproject.com).

Table 12B: Habitat Removal by Vegetation Community Type												
Vegetation Community Type	Amount to be removed/disturbed short term duration (ha) (i.e. <1 year)	Amount to be removed for long term (ha) (Project duration)	Total (ha)									
Cultural Meadow/Hay/Pasture	67.98	17.37	85.35									
Agriculture (Row Crops)	1.70	1.07	2.76									
Cultural Thicket	0.08	0.06	0.14									
Cultural Plantation	0.08	0.05	0.12									
Cultural Savannah	0.00	0.00	0.00									
Deciduous Forest	0.16	0.09	0.25									
Coniferous Forest	0.00	0.00	0.00									
Meadow Marsh	0.16	0.10	0.26									
Total	70.16	18.72	88.88									

Table 13B: Habitat Removal by Significan													
Natural Feature Type	Amount to be removed short term duration (ha) (i.e. <1 year)	Amount to be removed for long term (ha) (Project duration)	Total (ha)										
Significant Wetlands	0	0	0										
Significant Woodlands	0.16	0.09	0.25										
Significant Wildlife Habitat- Raptor Wintering Areas	68.62	17.68	86.30										
Significant Wildlife Habitat- Turtle Overwintering	0	0	0										
Significant Wildlife Habitat- Migratory Landbird Habitat	0.06	0.03	0.09										
Significant Wildlife Habitat- Old Growth Forest	0	0	0										
Significant Wildlife Habitat- Amphibian Breeding Habitat (Woodland)	0	0	0										
Significant Wildlife Habitat- Amphibian Breeding Habitat (Wetland)	0	0	0										
Significant Wildlife Habitat- Marsh Bird Breeding	0	0	0										
Significant Wildlife Habitat- Area-Sensitive Bird Breeding	0.06	0.03	0.09										
Significant Wildlife Habitat- Open Country Bird Breeding	67.82	17.18	85.00										
Significant Wildlife Habitat- Shrub/successional breeding bird habitat	0	0	0										
Significant Wildlife Habitat- Short-eared Owl	67.82	17.18	85.00										
Significant Wildlife Habitat- Snake Hibernacula	0	0	0										
Total **Note the sum of the babitat to be removed of the various	204.74	52.34	257.08										

^{**}Note the sum of the habitat to be removed of the various natural features does not equal the total amount of habitat to be removed as some vegetation community types are included in more than one natural feature category.

Table 14B Summary of the Negative Environmental Effects of the Project on Significant Natural Features during Construction and Decommissioning Phases

				Construction	Monitoring Plan	
Significant Natural Feature ID	Potential Negative Environmental Effects	Performance Objective	Mitigation Strategy	Monitoring Locations	Frequency of Monitoring	Contingency Measure
Significant Woodlands (1, 2, 3, 4, 7, 9, 10, 15, 18, 20, 21, 23, 28,32, and 36)	Loss of woodland habitat Accidental damage to root zones Accidental damage to trees or damage to limbs	Remove minimal amount of woodland Prevent damage to the root zones Prevent accidental damage to	Clearly delineate work area using a barrier such as a silt fence to avoid accidental encroachment on the feature that would lead to damage of trees and root zones. Workers will be advised not to trespass beyond the boundary of the marked area.	-check silt fencing along the periphery of significant woodlands	-daily when construction activities occur within the immediate vicinity of significant woodlands and when inclement weather is anticipated (i.e. rain events)	Any tree limbs or root zones that are accidentally damaged by construction activities will be pruned using proper arboricultural techniques
	Dust generation, sedimentation and erosion during construction Contamination through accidental spills during	trees or damage to limbs Minimize dust generation, prevent sedimentation and erosion Manage the risk of accidental spills	The boundaries of the limit of construction within Woodland 9 will be delineated and flagged / staked in the field by a qualified ecologist prior to construction to assist with the demarcation of the construction area, to ensure construction activities do not encroach beyond the limited construction area.	-check silt fencing along limits of construction through Woodland 9	-daily when construction activities occur within the immediate vicinity of Woodland 9	Any tree limbs or root zones that are accidentally damaged by construction activities will be pruned using proper arboricultural techniques
	construction		Erect silt fencing to prevent sedimentation within critical root zones Implement a sedimentation and erosion control plan. Any issues should be resolved in a timely	-check silt fencing along the periphery of significant woodlands to make sure it is fully functional	-daily when construction activities occur within the immediate vicinity of significant woodlands and when inclement weather is anticipated (i.e. rain events)	Any build up of sediment beyond the silt fence will be cleaned up and removed to avoid risk of further spread of sediment.
			fashion. Implement dust suppression (i.e. watering) on access roads as required.	- access roads within 30m of significant woodlands	-ongoing when construction activities occur within the immediate vicinity of woodlands	Increase frequency of dust suppression measures
			Re-vegetate disturbed areas as soon as construction activity within the disturbed areas is complete.	-check that seed grows in areas of disturbance within one growing season	-once after seeding area	Replant areas where seed does not grow to ensure vegetation establishes within the growing season
			All maintenance activities, vehicle refueling or washing and chemical storage will be located more than 30m from significant woodlands.	Not required	Not required	Keep emergency spill kits on site Implement MOE spill action plan if necessary Dispose of waste material by
Significant Wetlands (all except 6			Implement infiltration (i.e. minimize paved surfaces and design roads to promote infiltration) techniques to the maximum extent possible to avoid changes in soil moisture and compaction.	Not required	Not required	authorized and approved offsite vendors Not required
Significant Wetlands (all except 6 and 7)	Degradation of wetland through dust, erosion and/or sedimentation Changes in surface water flow patterns which impacts vegetation growth. Contamination through	Minimize dust generation, prevent erosion and sedimentation Maintain existing surface water flow patterns Manage the risk of accidental spills	Absolutely no encroachment into the wetland is permitted. The boundaries of all wetlands within 30 m of the proposed construction area will be flagged / staked in the field by a qualified ecologist prior to construction to assist with the demarcation of the construction area, to ensure construction activities avoid these sensitive areas, and	-check silt fencing along the periphery of significant wetlands	-daily when construction activities occur within the immediate vicinity of wetlands and when inclement weather is anticipated (i.e. rain events)	Restoration of damaged or degraded wetland habitat, which may involve reseeding with a native wetland seed mix.

Table 14B Summary of the Negative Environmental Effects of the Project on Significant Natural Features during Construction and Decommissioning Phases

				Construction	Monitoring Plan	
Significant Natural Feature ID	Potential Negative Environmental Effects	Performance Objective	Mitigation Strategy	Monitoring Locations	Frequency of Monitoring	Contingency Measure
	accidental spills during construction. New edge creation by	Avoid encroachment into significant wetlands	to assist with the proper field installation of E&S controls. Workers will be advised not to trespass beyond the boundary of the marked area.			
	vegetation removal close to wetlands.		Erect silt fencing to prevent sedimentation within critical root zones. Implement a sedimentation and erosion control plan. Any issues should be resolved in a timely fashion.	-check silt fencing along the periphery of each wetland to make sure it is fully functional	-daily when construction activities occur within the immediate vicinity of wetlands and when inclement weather is anticipated (i.e. rain events)	Any build up of sediment beyond the silt fence will be cleaned up and removed to avoid risk of further spread of sediment into the wetland.
			Implement dust suppression (i.e. watering) as required.	- access roads within 30m of significant wetlands	-ongoing when construction activities occur within the immediate vicinity of wetlands	Increase frequency of dust suppression measures
			Re-vegetate disturbed areas as soon as construction activity within the disturbed areas is complete.	-check that seed grows in areas of disturbance within one growing season	-once after seeding area	Replant areas where seed does not grow to ensure vegetation establishes within the growing season
			All maintenance activities, vehicle refueling or washing and chemical storage will be located more than 30m from wetlands.	Not required	Not required	Keep emergency spill kits on site Implement MOE spill action plan if necessary
						Dispose of waste material by authorized and approved offsite vendors
			Where possible, and as appropriate, access roads will be constructed at or near existing grade to maintain surface flow contributions to wetlands.	-upon completion of grading and after rain event ensure that surface water drainage patterns consistent with drainage patterns that occurred before grading	-once post-grading activity and after rain event	Adjust grading to achieve natural drainage patterns
			Limit changes in land contours to ensure natural drainage patterns are maintained.			
			Where new access roads cross existing drainage features, design will include culverts or other appropriate structures of sufficient size to accommodate flow.	-upon installation of culverts and after rain event ensure that surface water drainage patterns consistent with drainage patterns that occurred before grading	-once post-grading activity and after rain event	Adjust grading to achieve natural drainage patterns
Raptor Wintering Areas (RWA1, RWA2, RWA3, RWA4, RWA5, RWA6, RWA7, RWA8)	Loss of habitat Disturbance due to increased traffic and noise	Prevent habitat avoidance/disturbance of caused by noise and dust generation	Development of a management strategy with agencies, interested landowners and other interested parties to implement some of the recommendations provided in the Owl Woods Management Plan (Ecological Services 2011).	As will be outlined in the management strategy.	As will be outlined in the management strategy.	Not required.
	Dust generation, sedimentation and erosion during construction.		The boundaries of the limit of construction within grassland habitat will be delineated and flagged / staked in the field by a qualified ecologist prior to construction to assist with the demarcation of the construction area, to ensure construction activities do not encroach beyond the limited construction area.	-check limits of construction through significant grassland habitat is respected.	-daily when construction activities are ongoing in grassland habitat.	Immediately restore disturbed areas by reseeding.

Table 14B Summary of the Negative Environmental Effects of the Project on Significant Natural Features during Construction and Decommissioning Phases

				Construction	n Monitoring Plan		
Significant Natural Feature ID	Potential Negative Environmental Effects	Performance Objective	Mitigation Strategy	Monitoring Locations	Frequency of Monitoring	Contingency Measure	
			Limit tree clearing in hedgerows to maintain perch and roost sites.	Not required	Not required	Not required	
			Implement dust suppression (i.e. watering) on access roads as required.	- all access roads	-ongoing during construction	Increase frequency of dust suppression measures	
Turtle Overwintering Area (TO1**)	Wetland degradation due to dust, siltation or accidental spill	Minimize dust generation, prevent sedimentation and erosion Manage the risk of accidental spills	Turtle overwintering area is contained within the Long Point Marsh Provincially Significant Wetland. Implementation of mitigation measures for significant wetlands outlined above, will limit disturbance to stopover habitat.	Monitoring as outlined in significant wetlands (above)	Monitoring as outlined in significant wetland (above)	Contingency Plan as outlined in significant wetlands (above)	
Migratory Landbird Stopover Area (ML1, ML2, ML3, ML4, ML5)	Disturbance due to increased traffic, noise, or dust	Minimize disturbance to wildlife Minimize dust generation	Each of the migratory landbird stopover areas occurs within significant woodlands. Implementation of mitigation measures for significant woodlands outlined above, will limit disturbance to stopover habitat.	Monitoring as outlined in significant woodland (above)	Monitoring as outlined in significant woodland (above)	Contingency Plan as outlined in significant woodlands (above)	
Old Growth Forest (OGF1, OGF2, OGF3)	Woodland degradation due to dust or siltation.	Minimize dust generation and siltation.	Each of the old growth forest habitats occur within significant woodlands. Implementation of mitigation measures for Significant Woodlands outlined above, will limit disturbance to stopover habitat.	Monitoring as outlined in significant woodland (above)	Monitoring as outlined in significant woodland (above)	Contingency Plan as outlined in significant woodlands (above)	
Amphibian Breeding (Woodland and Wetland) (ABWO2, ABWO3, ABWE1, ABWE2)	Wetland degradation due to dust, siltation or accidental spill	Minimize dust generation, prevent sedimentation and erosion Manage the risk of accidental spills	Amphibian breeding habitat is contained within provincially significant wetlands. Implementation of mitigation measures for significant wetlands outlined above, will limit disturbance to stopover habitat.	Monitoring as outlined in significant wetlands (above)	Monitoring as outlined in significant wetland (above)	Contingency Plan as outlined in significant wetlands (above)	

Table 14B Summary of the Negative Environmental Effects of the Project on Significant Natural Features during Construction and Decommissioning Phases

				Construction	Monitoring Plan	
Significant Natural Feature ID	Potential Negative Environmental Effects	Performance Objective	Mitigation Strategy	Monitoring Locations	Frequency of Monitoring	Contingency Measure
			The boundaries of the amphibian breeding habitat at AB4 should be delineated and flagged / staked in the field by a qualified ecologist accurately demark where erosion and siltation controls should be installed.	-check silt fencing along limited of construction adjacent to AB4.	-daily when construction activities occur within the immediate vicinity of AB4.	Restoration of damaged or degraded wetland habitat, which may involve reseeding with a native wetland seed mix.
Marsh Breeding Bird Habitat (MBB1)	Disturbance due to increased traffic, noise, or dust Dust generation, sedimentation and erosion during construction.	Minimize disturbance to wildlife Minimize dust generation, prevent sedimentation and erosion Manage the risk of accidental spills	Limited encroachment into the marsh breeding bird habitat.	-check silt fencing along the periphery of significant woodlands	-daily when construction activities occur within the immediate vicinity of significant woodlands and when inclement weather is anticipated (i.e. rain events)	Any limbs or root zones that are accidentally damaged by construction activities will be pruned using proper arboricultural techniques
	Contamination through accidental spills during construction		The marsh breeding bird habitat occurs within significant woodlands. Implementation of mitigation measures for significant woodlands outlined above, will limit disturbance to breeding habitat.	Monitoring as outlined in significant woodland (above)	Monitoring as outlined in significant woodland (above)	Contingency Plan as outlined in significant woodlands (above)
Woodland Area-Sensitive Breeding Bird Habitat (ABB1)	Disturbance due to increased traffic, noise, or dust Dust generation, sedimentation and erosion during construction.	Minimize disturbance to wildlife Minimize dust generation, prevent sedimentation and erosion Manage the risk of accidental spills	Limited encroachment into the woodland area-sensitive breeding bird habitat.	-check silt fencing along the periphery of significant woodlands	-daily when construction activities occur within the immediate vicinity of significant woodlands and when inclement weather is anticipated (i.e. rain events)	Any limbs or root zones that are accidentally damaged by construction activities will be pruned using proper arboricultural techniques
	Contamination through accidental spills during construction		The woodland area-sensitive breeding bird habitat occurs within significant woodlands. Implementation of mitigation measures for significant woodlands outlined above, will limit disturbance to breeding habitat.	Monitoring as outlined in significant woodland (above)	Monitoring as outlined in significant woodland (above)	Contingency Plan as outlined in significant woodlands (above)
Open Country Breeding Bird Habitat and Short-eared Owl Habitat (OCB1, OCB2, OCB3, OCB4, OCB5, OCB6, OCB7, OCB8,	Harm to breeding birds or damage to nests Loss of habitat	Avoid harm to breeding birds or damage to nests Limit vegetation clearing in	Complete vegetation removal outside of the breeding bird and Short-eared Owl breeding season March 1 st to July 31 th .	-Not required	-Not required	-Not required
OCB9)	Disturbance due to increased traffic and noise	grassland habitat. Minimize disturbance to wildlife	Identification of potential Short-eared Owl breeding territories. Restricted construction activities in proximity to potential breeding territories.	Monitoring of Short-eared Owl behavior by qualified biologist.	Bi-weekly during construction activities throughout breeding season in proximity to nesting territories.	Further limit construction activities.

Table 14B Summary of the Negative Environmental Effects of the Project on Significant Natural Features during Construction and Decommissioning Phases

Breeding Habitat (SSB1, SSB3,				Construction	Monitoring Plan	
Significant Natural Feature ID	Potential Negative Environmental Effects	Performance Objective	Mitigation Strategy	Monitoring Locations	Frequency of Monitoring	Contingency Measure
	Dust generation, sedimentation and erosion during construction.	Minimize dust generation, prevent sedimentation and erosion	The boundaries of the limit of construction within grassland habitat will be delineated and flagged / staked in the field by a qualified ecologist prior to construction to assist with the demarcation of the construction area, to ensure construction activities do not encroach beyond the limited construction area.	-check limited of construction through grassland habitat is respected.	-daily when construction activities are ongoing in grassland habitat.	Immediately restore disturbed areas by reseeding.
			Implement dust suppression (i.e. watering) on access roads as required.	- all access roads	-ongoing during construction	Increase frequency of dust suppression measures
Shrub/Early Successional Bird Breeding Habitat (SSB1, SSB3, SSB4, SSB5)	Disturbance due to increased traffic, noise, or dust Dust generation, sedimentation and erosion during	Minimize disturbance to wildlife Minimize dust generation, prevent sedimentation and erosion Manage the risk of accidental	Erect silt fencing to prevent sedimentation Implement a sedimentation and erosion control plan Any issues should be resolved in a timely fashion	-check silt fencing along the periphery of feature significant shrub/early successional to make sure it is fully functional	-daily when construction activities occur within the immediate vicinity of significant shrub/early successional to and when inclement weather is anticipated (i.e. rain events)	Any build-up of sediment beyond the silt fence will be cleaned up and removed to avoid risk of further spread of sediment.
	construction. Contamination through	spills	Implement dust suppression (i.e access roads within 30m of -ongoing wher	-ongoing when construction activities occur within the immediate vicinity of woodlands	Increase frequency of dust suppression measures	
	accidental spills during construction		All maintenance activities, vehicle refueling or washing and chemical storage will be located more than 30m from significant woodlands	Not required	Not required	Keep emergency spill kits on site Implement MOE spill action plan if necessary Dispose of waste material by authorized and approved offsite vendors
			All maintenance activities, vehicle refueling or washing and chemical storage will be located more than 30m from significant woodlands	Not required	Not required	Keep emergency spill kits on site Implement MOE spill action plan if necessary
						Dispose of waste material by authorized and approved offsite vendors

Table 15B: Mitigat	ion Measures by Wetland Feature																						
Wetland Feature No.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	Significance assumed and assessed as per WCEFA	X	Х	Х	Х	Х			Х	Х		Х	Х	X	Х	Х	Х	Х	Х	Х	Х		Х
Significance	OWES evaluated as non-PSW						Х	Х															
	Designated PSW										Х											Х	
	Turbine base	>120	96	>120	>120	60	55	>120	>120	>120	55	105	65	>120	>120	>120	>120	>120	>120	106	>120	>120	>120
Project Component(s) located within 120 m	Substation	>120	>120	3	>120	>120	>120	>120	>120	>120	>120	>120	>120	>120	>120	>120	>120	>120	>120	>120	>120	>120	>120
(m)	Access Road	94	52	>120	38	11	0	0	>120	99	74	77	7	100	44	>120	15	>120	58	107	42	78	>120
()	Collector Line	74	96	41	<1	3	0	>120	28	18	13	115	4	1	40	18	19	3	62	102	24	>120	>120
	Direct Impacts	nil	nil	nil	low	nil	mod	mod	nil	nil	nil	nil	nil	mod	nil	low							
Potential for Impacts	Dust contamination, sedimentation or contamination from accidental spills during construction.	low	low	high	high	mod	high	high	low	low	low	low	mod	high	low	low	low	mod	low	low	low	low	mod
	Change in surface water input to wetlands.	low	low	high	high	mod	high	high	low	low	low	low	mod	high	low	low	low	mod	low	low	low	low	mod
	No development in wetland boundary.	Х	Х	Х	Х	Х			Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
	Boundary of wetlands within 30 m of construction areas to be staked.			Х	Х	Х	Х	Х	Х	Х	Х		Х	Х		Х	Х	Х			Х		Х
	Mitigation measures for vegetation removal will be implemented as outlined in Section 6.4.1.1	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Mitigation	No refuelling or maintenance of vehicles in, or adjacent to the wetland. In the event of an accidental spill, the MOE Spills Action Centre should be contacted and emergency spill procedures implemented immediately.	Х	х	х	Х	Х	х	х	Х	Х	х	Х	×	Х	Х	х	Х	x	Х	Х	Х	х	Х
	Mitigation measures for sediment and erosion control will be implemented as outlined in Section 6.4.1.2	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
	Mitigation measures for dewatering will be implemented as outlined in Section 6.4.1.3.	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
	New access road will be built at existing grades where possible.	Х	Х		Х	Х	Х	Х		Х	Х	Х	Х	Х	Х		Х		Х	Х	Х	Х	
	Drainage will be maintained via culverts or equivalent at watercourse crossings				Х		Х	Х						Х									

Table 16B: Potential Impacts and Mitigation Measures by Significant Wildlife Habitat Feature (pg 1 of 2)

	icts and Mitigation Measures by Significant Wildlif	1			1			T	1 1		1 1		1									
Wildlife Habitat Feature N	-		ABB1	ABWE1	ABWE2	ABWO2	ABWO3	MBB1	ML1	ML2	ML3	ML4	ML5	OCB1	OCB2	OCB3	OCB4	OCB5	OCB6	OCB7	OCB8	OCB9
Wildlife Habitat Feature S			215	350	9.8	43.6	1.2	349.7	214.7	28.9	19.5	197.9	18.3	105.1	912.8	492.8	160.5	208.2	238.2	465.2	418.6	111.9
Habitat to be removed	Temporarily (ha	a)	0.06	n/a	n/a	n/a	n/a	n/a	0.06	n/a	n/a	n/a	n/a	3.47	n/a	8.85	5.75	3.86	8.68	8	5.02	n/a
	Permanent (ha	a)	0.03	n/a	n/a	n/a	n/a	n/a	0.03	n/a	n/a	n/a	n/a	0.75	n/a	1.98	1.17	0.99	2.15	1.49	1.42	n/a
	Turbine base ³	In Feature	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ı	<u> </u>		-
	Turbine base	Within 120m Zone	Х	-	-	-	-	-	Х	-	-	Χ	-	Χ	X	Х	Х	Х	X	Х	X	-
	Turbine Construction Area	In Feature	-	-	-	-	-	-	-	-	-	-	-	Χ	Х	Х	Х	Х	Х	Х	Х	-
	Tubille Constituction Area	Within 120m Zone		Х	-	-	-	Х	Х	Х	Х	Χ	Х	Χ	Х	Х	Х	Х	Х	Х	Х	-
Project Component(s) located in and within	Turbine Blade Tips	In Feature		-	-	-	-	-	-	-	-	-	-	Х	Х	Х	Х	Х	Х	Х	Х	-
120 m	Turbine Biade Tips	Within 120m Zone	Х	Х	-	-	-	Х	Х	Х	Х	Χ	-	Χ	Х	Х	Х	Х	X	X	Х	-
		In Feature	-	-	-	-	-	-	-	-	-	-	-	Х	X	Х	Х	Х	Χ	Х	Х	-
	Access Road	Within 120m Zone	Х	Х	-	Х	-	Х	Х	-	-	Х	Х	Χ	Х	Х	Х	Х	Х	Х	Х	Х
		In Feature	Х	-	Х	-	-	-	Х	-	-	Х	-	Х	Х	Х	Х	Х	Х	Х	Х	-
	Collector Line	Within 120m Zone	Х	Х	Х	Х	-	-	Х	-	-	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
	Dust generation, sedimentation and erosion during of	construction (No if activity >30m away)	Yes	No	Yes	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Disturbance to vegetation during construction (in fea	ature) (No if activity >30m away)	Yes	No	Yes	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Potential for Impacts	Direct removal of vegetation(in feature)		Yes	No	Yes	No	No	No	Yes	No	No	Yes	No	Yes	Yes	No						
	Contamination through accidental spills during consactivity>30m away)	truction or operation (No if	Yes	No	Yes	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Potential for changes to hydrology during operation road within 30m of feature)	(i.e. turbine foundation and/or access	Yes	No	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Potential for edge effects and/or requirement of inva		Yes	No	Yes	No	No	No	Yes	No	No	Yes	No	Yes	Yes	No						
	Mitigation measures for vegetation removal will be in 5.4.1	mplemented as outlined in Section	Yes	No	Yes	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
	Mitigation measures for sediment and erosion control will be implemented as outlined in Section 5.4.2		Yes	No	Yes	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Mitigation measures for dewatering will be implemented as outlined in Section 5.4.3		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mitigation	Where possible, and as appropriate, access roads should be constructed at or near existing grade.)		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	No refuelling or maintenance of vehicles in, or adjacent to the feature. In the event of an accidental spill, the MOE Spills Action Centre should be contacted and emergency spill procedures implemented immediately. (anything within 30m of a feature)		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Creation of a Replanting and Restoration Plan		Yes	No	Yes	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
	Creation of an Invasive Species Management Plan		Yes Yes	No	Yes	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
	Creation of a Vegetation Monitoring Plan			No	Yes	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No

Table 16B: Potential Impacts and Mitigation Measures by Significant Wildlife Habitat Feature (pg 2 of 2)

Note Project Component(s) Project Compo		and Mitigation Measures by Significant Wildlife Hab	itat Feature (pg 2 of 2)					T =	T =	r =				r							
Habitat to be removed Temporarily flus																					T01
Permanent (ha)	Wildlife Habitat Feature Size	(ha)		3.8	16.9	28.9	136.6			201.9	229.1	969.8		111.9		n/a	14.3	11.6	74.8	35.7	349.8
Project Component(s) curtain Fall In Feature	Habitat to be removed	Tempora	rily (ha)	n/a	n/a	n/a	3.47	24.12	9.23	5.9	3.86	16.77	5.2	n/a	0.25	n/a	n/a	n/a	n/a	n/a	n/a
Turbine blase Wilhin 120m Zone	Habitat to be removed	Permane	ent (ha)	n/a	n/a	n/a	0.75	7.24	2.23	1.25	0.99	3.69	1.53	n/a	0.19	n/a	n/a	n/a	n/a	n/a	n/a
Virbin 120m Zone		Turbino baso ³	In Feature	-	ı	-	ı	-	-	-	-	-	1	-	-	ı	ı	-	-	-	-
Tubine Construction Area Within 120m Zone -		Tuibille base	Within 120m Zone	-	Χ	-	Х	Х	Х	X	Х	X	Х	-	-	-	-	-	Х	Х	-
Project Component(s) cocated in and within 120 m In Feature Midmin 120m Zone -		Turbing Construction Area	In Feature	-	-	-	Х	Х	Х	Х	Х	Х	Х	-	-	-	-	-	-		
Turbine Blade Tips Turbine Blade Tips Within 120m Zone		Turbine Construction Area	Within 120m Zone	-	Х	Х	Х	Х	Х	Х	Х	Х	Х	-	-	-	-	Х	Х	Х	Х
Multin 120m Zone -	Project Component(s)	Turking Diada Tina	In Feature	-	-	-	X	X	Х	Х	Х	X	Х	-	-	-	-	-	-	-	-
Access Road Within 120m Zone	located in and within 120 m	Turbine Blade Tips	Within 120m Zone	-	Χ	Х	Χ	Х	Х	Х	Х	Х	Χ	-	-	-	-	-	Х	Х	Х
Within 120m Zone		_	In Feature	-	-	-	X	Х	Х	X	Х	X	Х	-	Х	-	·	-	-	-	-
Dust generation, sedimentation and erosion during construction (No if activity >30m away) Yes No No Yes Yes		Access Road	Within 120m Zone	-	Х	-	X	Х	Х	Х	Х	Х	Х	Х	Х	-	Х	Х	Х	Х	-
Dust generation, sedimentation and erosion during construction ((No if activity >30m away)) Yes No No Yes Ye			In Feature	-	ı	1	Х	Х	Х	X	Х	Х	Х	-	Х	-	ı	-	-	-	-
Potential for Impacts Potential for Impacts Disturbance to vegetation during construction (in feature) (No if activity >30m away) Potential for Impacts No No No Yes		Collector Line	Within 120m Zone	Х	Х	-	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Direct removal of vegetation(in feature) No No No Yes		Dust generation, sedimentation and erosion during con	struction (No if activity >30m away)	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No
Contamination through accidental spills during construction or operation (No if activity>30m away) Ves No No Yes		Disturbance to vegetation during construction (in featur	e) (No if activity >30m away)	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No
Potential for changes to hydrology during operation (i.e. turbine foundation and/or access road within 30m of feature) No No No Yes	Potential for Impacts	Direct removal of vegetation(in feature)		No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No	No	No	No
feature) No No No Yes				Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No
Mitigation (highlight uncertain ones) Mitigation measures for vegetation removal will be implemented as outlined in Section 5.4.1 No No No Yes Yes Yes Yes Yes Yes Yes Yes Yes No		feature)		No	No	No	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No	No
Mitigation (highlight uncertain ones) Mitigation measures for sediment and erosion control will be implemented as outlined in Section 5.4.2 Yes						1															No
Mitigation (highlight uncertain ones) Mitigation measures for dewatering will be implemented as outlined in Section 5.4.3 Yes		Mitigation measures for vegetation removal will be impl	lemented as outlined in Section 5.4.1	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No	No	No	No
Where possible, and as appropriate, access roads should be constructed at or near existing grade.) Where possible, and as appropriate, access roads should be constructed at or near existing grade.) Where possible, and as appropriate, access roads should be constructed at or near existing grade.) No refuelling or maintenance of vehicles in, or adjacent to the feature. In the event of an accidental spill, the MOE Spills Action Centre should be contacted and emergency spill procedures implemented immediately. Yes Yes Yes Yes Yes Yes Yes Ye		Mitigation measures for sediment and erosion control v	vill be implemented as outlined in Section 5.4.2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No refuelling or maintenance of vehicles in, or adjacent to the feature. In the event of an accidental spill, the MOE Spills Action Centre should be contacted and emergency spill procedures implemented immediately. Yes									Yes												Yes
No refuelling or maintenance of vehicles in, or adjacent to the feature. In the event of an accidental spill, the MOE Spills Action Centre should be contacted and emergency spill procedures implemented immediately. Yes	Mitigation (highlight			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Creation of a Replanting and Restoration Plan No No No Yes Yes Yes Yes Yes Yes No Yes No	uncertain ones)	MOE Spills Action Centre should be contacted and em-		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Creation of an Invasive Species Management Plan No No No Yes Yes Yes Yes Yes Yes No Yes No				No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No	No	No	No
						1															No
		Creation of a Vegetation Monitoring Plan		No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No	No	No	No

					Environme	ental Effects Monitorin	g Plan		
Significant Feature ID	Potential Negative Environmental Effects	Performance Objective	Mitigation Strategy	Methods	Monitoring Locations	Frequency and Duration of Sample Collection	Rationale	Reporting Requirements	Contingency Measure
CONSTRUCTION									
Entire Project	Dust generation, sedimentation and erosion during construction to wetland and woodland habitat	Silt barriers to remain in good repair No deposition or erosion > 1cm outside silt barriers	Silt barriers to be erected along wetland, woodland and alvar edges that occur within 30m of construction work	Visual inspection of silt barriers	All silt barriers	Weekly	n/a	Monthly	Repair any gaps or holes in silt barriers Remove any silt accumulations or backfill eroded areas, and replant or reseed (if existing vegetation has been affected)
	Disturbance, fragmentation and removal of wetland and woodland habitats	No clearing beyond staked limits	Limits of vegetation clearing to be staked in the field	Visual inspections to ensure stakes are present and works stay within demarcated areas	All clearing areas in woodland	Weekly	n/a	Monthly	Replace any missing stakes Immediately stop work in off-limit areas a replant or reseed as needed
	Disturbance, fragmentation and removal of wetland and woodland habitats	Restoration of disturbed areas of the construction site back to grassland or wetland habitats.	Reseeding Plan to be developed for grassland and wetland communities.	Visual inspection of rehabilitated areas including botanical inventory	Disturbed areas within 120m of Project Location	Twice yearly (spring/summer and fall) for one year or until performance objectives are met	Ability to calculate percentage of species successfully seeded and measure ground coverage.	Annually	Repeat seeding if initial restoration efforts not meet performance objective.
	Contamination of natural heritage features through accidental spill	Minimize likelihood of spill Contain spill material	Proper storage of materials off-site in storage containers Adherence to Emergency Response Plan Contact MOE Spills Action Centre	Visual inspections to ensure proper storage	Storage areas	Weekly	n/a	Monthly	Follow-up monitoring /inspections in the event of an accidental spill/leak Remedial actions may be required in the event monitoring indicates a negative effet to natural features
	Disturbance to breeding birds due to increased traffic, noise, dust during construction Direct loss of birds' nests during vegetation clearing	Protect all known birds' nests from direct loss, and a suitable buffer to minimize disturbance effects	To the extent practical, tree and/or brush clearing will be completed prior to or after May 1 to July 23.	Not necessary if timing window is respected.	n/a	n/a	n/a	n/a	Should clearing be required during these dates, prior to construction, surveys will be undertaken to identify the presence/ absorbed for nesting birds. If a nest is located, a designated buffer will be marked off within which no construction activity will be allow while the nest is active.
	Changes to woodland or wetland hydrology due to roads and crane pads	Minimal change to existing hydrologic conditions; no significant ponding or drying	Access roads to be constructed at grade Use of permeable materials	Visual inspection	Access roads, crane pads	Weekly through spring during construction	n/a	Monthly	To be developed based on site-specific conditions; may include installation of additional culverts,

					Environme	ental Effects Monitorin	ng Plan		
Significant Feature ID	Potential Negative Environmental Effects	Performance Objective	Mitigation Strategy	Methods	Monitoring Locations	Frequency and Duration of Sample Collection	Rationale	Reporting Requirements	Contingency Measure
			Installation of equalization culverts where appropriate						
OPERATION									
0:	Potential Negative		Barri		Environme	ental Effects Monitorin	ng Plan		
Significant Feature ID	Environmental Effects	Performance Objective	Mitigation Strategy	Methods	Monitoring Locations	Frequency and Duration of Sample Collection	Rationale	Reporting Requirements	Contingency Measure
Raptor Wintering Area (RWA1, RWA2, RWA3, RWA4, RWA5, RWA6, RWA7, RWA8)	Avoidance by wintering raptors during operation within the Study Area Avoidance by wintering raptors in proximity to operating wind turbines	The number of species and the number of individual wintering raptors within the Study Area will be monitored and compared to pre-construction conditions MNR, along with the proponent and other relevant agencies, will collectively review the results of the post-construction monitoring to determine if an ecologically significant disturbance/avoidance effect to wintering raptors is occurring, and whether such effect is attributed to the wind turbines and not external factors. These discussions will determine whether contingency measures will be undertaken. Measure the potential degree of disturbance effects to hunting raptors (particularly Short-eared Owls) in proximity to operating wind turbines.	Post-construction Disturbance Monitoring Program Post-construction Disturbance Monitoring Program	Area searches by vehicle and by foot using pre-construction methodology. Behavioral studies in proximity to operations wind turbines.	Within features RWA1, RWA2, RWA3, RWA4, RWA5, RWA6, RWA7 and RWA8 Within features RWA1, RWA2, RWA3, RWA4, RWA5, RWA6, RWA7 and RWA8	Twice monthly surveys in November through March for three years. Twice monthly surveys in November through March for three years.	Evaluate extend of potential disturbance by wind turbines.	Annually	Should performance objectives not be met: 1. Compare declines to population trends noted through province or continent-wide breeding bird surveys 2. Compare annual fluctuations to local and provincial trends (Christmas Bird Counts) 3. Develop additional studies to determine extent of disturbance effect 4. Investigate habitat management means to increase breeding density Additional monitoring and/or mitigation may be required where post-construction monitoring identifies ecologically significant disturbance/avoidance effects associated with wintering raptors. Mitigation techniques may include (but are not limited to) operational controls, such as periodic shutdown and/or blade feathering as per MNR's Bird and Bird Habitat Guidelines (2011). Results will be reviewed collectively by the proponent, MNR and other relevant agencie to determine if and when additional monitoring and/or mitigation is required. The best available science and information should be considered when determining appropriate mitigation.
Landbird Migratory Stopover Area (ML1, ML2, ML3, ML4, ML5)	Disturbance to migrating landbirds during operation	The number of species and the number of individual migratory landbirds will be monitored and compared to preconstruction conditions MNR, along with the proponent and other relevant agencies, will collectively review the results of the post-construction monitoring to determine if an ecologically significant disturbance/avoidance effect to migratory landbirds is occurring, and	Post-construction Disturbance Monitoring Program	Transect survey using pre-construction methods (see NHA Section 4.1.3).	Within features ML1, ML2, ML3, ML4	Weekly surveys in May and in September through October, for three years.	Ability to directly compare numbers of species and individuals between years	Annually	Compare declines to population trends noted through local or province-wide migration monitoring Develop additional control/impact studies to assess whether decline is due to turbine disturbance, and determine extent of disturbance effect

Table 17B. Summary of the Environmental Effects Monitoring Plan for Significant Natural Features

_				Environmental Effects Monitoring Plan					
Significant Feature ID	Potential Negative Environmental Effects	Performance Objective	Mitigation Strategy	Methods	Monitoring Locations	Frequency and Duration of Sample Collection	Rationale	Reporting Requirements	Contingency Measure
		whether such effect is attributed to the wind turbines and not external factors. These discussions will determine whether contingency measures will be undertaken. For monitoring and comparison purposes, the list of species should be refined to only include migratory landbirds.							Additional monitoring and/or mitigation may be required where post-construction monitoring identifies ecologically significant disturbance/avoidance effects associated with landbird migration stopover habitat. Mitigation techniques may include (but are not limited to) operational controls, such as periodic shut-down and/or blade feathering as per MNR's Bird and Bird Habitat Guidelines (2011). Results will be reviewed collectively by the proponent, MNR and other relevant agencies to determine if and when additional monitoring and/or mitigation is required. The best available science and information should be considered when determining appropriate mitigation.
Woodland Area- Sensitive Breeding Bird Habitat (ABB1)	Disturbance to woodland area sensitive breeding birds during operation	The breeding woodland area-sensitive species (combined and individual), within the habitat, will be monitored and compared to pre-construction conditions. MNR, along with the proponent and other relevant agencies, will collectively review the results of the post-construction monitoring to determine if an ecologically significant disturbance/avoidance effect to woodland area-sensitive breeding birds is occurring, and whether such effect is attributed to the wind turbines and not external factors. These discussions will determine whether contingency measures will be undertaken.	Post-construction Disturbance Monitoring Program	Area searches using pre-construction methods (see NHA Section 4.1.3).	Within feature ABB1	Three rounds of surveys annually for 3 years.	Breeding diversity can be compared among years or between control/impact sites	Annually	Should performance objectives not be met: 1. Compare declines to population trends noted through province or continent-wide breeding bird surveys 2. Develop additional studies to determine extent of disturbance effect 3. Investigate habitat management means to increase breeding density Additional monitoring and/or mitigation may be required where post-construction monitoring identifies ecologically significant disturbance/avoidance effects associated with woodland area-sensitive breeding bird habitat. Mitigation techniques may include (but are not limited to) operational controls, such as periodic shut-down and/or blade feathering as per MNR's Bird and Bird Habitat Guidelines (2011). Results will be reviewed collectively by the proponent, MNR and other relevant agencies to determine if and when additional monitoring and/or mitigation is required. The best available science and information should be considered when determining appropriate mitigation.
Open Country Breeding Bird and Short-eared Owl Breeding Habitat (OCB1, OCB2, OCB3, OCB4, OCB5, OCB6, OCB7, OCB8,	Disturbance to open country breeding birds, including Short-eared Owls, during operation.	The breeding density of open country breeding birds and sensitive species (combined and individual), within the habitat, will be monitored and compared to pre-construction conditions. MNR, along with the proponent and other relevant agencies, will collectively review	Post-construction Disturbance Monitoring Program	Point count survey and area searches using pre-construction methods (see NHA Section 4.1.3).	Within features OCB1, OCB2, OCB3, OCB4, OCB5, OCB6, OCB7, OCB8 and OCB9	Three rounds of surveys annually for 3 years.	Breeding pair density is a standard measure that can be compared among years or between control/impact sites	Annually	Should performance objectives not be met: Compare declines to population trends noted through province or continent-wide breeding bird surveys Develop additional studies to determine extent of disturbance

Table 17B. Summary of the Environmental Effects Monitoring Plan for Significant Natural Features

		mental Effects Monitoring Plan for S		Environmental Effects Monitoring Plan]
Significant Feature ID	Potential Negative Environmental Effects	Performance Objective	Mitigation Strategy	Methods	Monitoring Locations	Frequency and Duration of Sample Collection	Rationale	Reporting Requirements	Contingency Measure
OCB9)	Avoidance from open country	the results of the post-construction monitoring to determine if an ecologically significant disturbance/avoidance effect to open country breeding birds, including Short-eared Owls, is occurring, and whether such effect is attributed to the wind turbines and not external factors. These discussions will determine whether contingency measures will be undertaken. The breeding density of open country breeding birds and sensitive species will be	Post-construction Disturbance	Paired point counts	Within features OCB1, OCB2,	Three rounds of surveys annually	Breeding pair density is a	Annually	effect 3. Investigate habitat management means to increase breeding density Additional monitoring and/or mitigation may be required where post-construction monitoring identifies ecologically significant disturbance/avoidance effects associated with open country breeding bird and Shorteared Owl habitat. Mitigation techniques may include (but are not limited to)
	breeding birds, including Short-eared Owls in proximity to operational wind turbines.	monitored and compared at different distance regimes from operating wind turbines. MNR, along with the proponent and other relevant agencies, will collectively review the results of the post-construction monitoring to determine if an ecologically significant disturbance/avoidance effect to open country breeding birds, including Short-eared Owls, is occurring, and whether such effect is attributed to the wind turbines and not external factors. These discussions will determine whether contingency measures will be undertaken.	Monitoring Program	extending from the base of wind turbine generators located in grassland habitat with an equal number of paired point counts located more than 120 m from wind turbine generators in grassland	OCB3, OCB4, OCB5, OCB6, OCB7, OCB8 and OCB9	for 3 years.	standard measure that can be compared between distance regimes.		operational controls, such as periodic shutdown and/or blade feathering as per MNR's Bird and Bird Habitat Guidelines (2011). Results will be reviewed collectively by the proponent, MNR and other relevant agencies to determine if and when additional monitoring and/or mitigation is required. The best available science and information should be considered when determining appropriate mitigation.
Shrub/early Successional Bird Breeding Habitat (SBB4, SBB5)	Disturbance to shrub/early successional bird breeding habitat, during operation.	The breeding density of shrub/early successional breeding birds, within the habitat, will be monitored and compared to pre-construction conditions. MNR, along with the proponent and other relevant agencies, will collectively review the results of the post-construction monitoring to determine if an ecologically significant disturbance/avoidance effect to shrub/early successional, is occurring, and whether such effect is attributed to the wind turbines and not external factors. These discussions will determine whether contingency measures will be undertaken.	Post-construction Disturbance Monitoring Program	Area searches using pre-construction methods (see NHA Section 4.1.3).	Within features SBB4 AND SBB5.	Three rounds of surveys annually for 3 years.	Breeding diversity can be compared among years or between control/impact sites	Annually	1. Compare declines to population trends noted through province or continent-wide breeding bird surveys 2. Develop additional studies to determine extent of disturbance effect 3. Investigate habitat management means to increase breeding density Additional monitoring and/or mitigation may be required where post-construction monitoring identifies ecologically significant disturbance/avoidance effects associated with shrub/early successional breeding bird habitat. Mitigation techniques may include (but are not limited to) operational controls, such as periodic shut-down and/or blade feathering as per MNR's Bird and Bird Habitat Guidelines (2011). Results will be reviewed collectively by the proponent, MNR and other relevant agencies to determine if and when additional monitoring and/or mitigation is required. The best available science and information should be considered when determining appropriate

Table 17B. Summ	Table 17B. Summary of the Environmental Effects Monitoring Plan for Significant Natural Features											
					Environm	ental Effects Monitorin	g Plan					
Significant Feature ID	Potential Negative Environmental Effects	Performance Objective	Mitigation Strategy	Methods	Monitoring Locations	Frequency and Duration of Sample Collection	Rationale	Reporting Requirements	Contingency Measure			
									mitigation.			

Table 18B. Summary of Potential Effects and Mitigation Measures for Generalized Wildlife Habitat during the Construction and Decommissioning Phases

Project Component	Project Activity	Potential Negative Effects	Mitigation Measures	Objectives, Monitoring, and Contingency Plans
Wind Turbine Erection	Clearing, grubbing, grading, and topsoil removal	Increased erosion and sedimentation into significant woodlands, significant wetlands, and other significant natural features, Soil compaction	 Develop and implement an erosion and sediment control plan, Utilize erosion blankets, silt fencing, straw bales, etc for construction activities within 30m of a significant wetland, significant woodland, or water body, Maintain erosion control measures for the duration of construction or decommissioning activities, Suspend work if high runoff volume is noted or excessive sediment discharge occurs, Any stockpiled material will be stored more than 30m from a significant wetland, significant woodland, or water body, No vehicle traffic on exposed soils, and no heavy machinery traffic on sensitive slopes 	Minimize direct impacts on vegetation communities and protect rare/sensitive habitats, Maintain vegetated buffers, particularly within riparian zones, Minimize the impacts of sedimentation on nearby significant natural features
	Noise/human activity and vehicle traffic	 Disturbance and/or mortality to local wildlife 	Clearly post construction speed limits	Limit potential wildlife road mortalities
	Accidental damage to vegetation	Damage or removal of vegetation adjacent to the project location	 Where construction activity occurs within 30m of a significant feature, the construction area should be clearly delineated with protective fencing, such as silt fencing, Damaged trees should be pruned through implementation of proper arboricultural techniques 	Minimize impacts to natural vegetation
	Chemical spills or accidental fluid release (ie oil, gasoline, grease, etc)	Soil or water contamination	 Implement best management practices, Develop a spill response plan and train staff on appropriate procedures, Keep emergency spill kits on site, Vehicle washing, refueling stations, and chemical storage will all be located more than 30m from significant natural features or water bodies, Dispose of waste material by authorized and approved offsite vendors 	Minimize impacts to natural features and wildlife habitats, Avoid contamination of water or significant wetland features
	Dewatering activities (if necessary)	Reduced stream flow rate, Increased water temperature	Control rate and timing of water pumping, Pump from deep wells to infiltration galleries adjacent to water bodies or significant wetlands or use off-site water,	Maintain ground and surface water conditions with those near pre- construction conditions

Table 18B. Summary of Potential Effects and Mitigation Measures for Generalized Wildlife Habitat during the Construction and Decommissioning Phases

Project Component	Project Activity	Potential Negative Effects	Mitigation Measures	Objectives, Monitoring, and Contingency Plans
			Do not take water during periods of extreme low flow	
	Installation of impervious surfaces	Increase surface run-off, Changes in surface water drainage	 Maintain vegetative buffers around water bodies, Control quantity and quality of stormwater discharge using best management practices, Minimize grading activities to maintain existing drainage patterns as much as possible 	Limit disturbances to surface water drainage patterns
Temporary Access Roads, Crane Paths, and Turnaround Areas	Clearing, grubbing, grading, and topsoil removal	Increased erosion and sedimentation into significant woodlands, significant wetlands, and other natural features, Soil compaction	 Develop and implement an erosion and sediment control plan, Utilize erosion blankets, silt fencing, straw bales, etc for construction activities within 30m of a significant wetland, significant woodland, or water body, Maintain erosion control measures for the duration of construction or decommissioning activities, Any stockpiled material will be stored more than 30m from a significant wetland, significant woodland, or water body, No vehicle traffic on exposed soils, or heavy machinery traffic on sensitive slopes, Re-vegetate temporary roads to preconstruction conditions as soon as possible after construction activities are complete 	Minimize direct impacts on vegetation communities and protect rare/sensitive habitats, Maintain vegetated buffers, particularly within riparian zones, Minimize the impacts of sedimentation on nearby significant natural features
	Noise/human activity	Disturbance and/or mortality to local wildlife	 Avoid construction or decommissioning activities during sensitive time periods (ie breeding bird season), wherever possible, Conduct nest searches if vegetation removal will occur during the breeding bird season (May 1-July 31) Construction and decommissioning activities within 30m of significant woodlands or significant wetlands should occur during daylight hours, wherever possible, Clearly post construction speed limits 	Limit potential wildlife road mortalities
	Accidental damage to vegetation	Damage or removal of vegetation adjacent to the project location	 Where construction activity occurs within 30m of a naturally vegetated feature (ie significant woodland or significant wetland), the 	Minimize impacts to natural vegetation

Table 18B. Summary of Potential Effects and Mitigation Measures for Generalized Wildlife Habitat during the Construction and Decommissioning Phases

Project Component	Project Activity	Potential Negative Effects	Mitigation Measures	Objectives, Monitoring, and Contingency Plans
			construction area should be clearly delineated with protective fencing, such as silt fencing, • Damaged trees should be pruned through implementation of proper arboricultural techniques	
	Chemical spills or accidental fluid release (ie oil, gasoline, diesel fuel, grease, etc)	Soil or water contamination	 Implement best management practices, Develop a spill response plan and train staff on appropriate procedures, In the event of an accidental spill, the MOE Spills Action Centre will be contacted and emergency spill procedures implemented immediately. Keep emergency spill kits on site, Vehicle washing, refueling stations, and chemical storage will all be located more than 30m from significant natural features or water bodies, Dispose of waste material by authorized and approved offsite vendors 	Minimize impacts to significant natural features and wildlife habitats, Avoid contamination of water or significant wetland features
	Installation of impervious surfaces	Increase surface run-off, Changes in surface water drainage	 Maintain vegetative buffers around water bodies, Control quantity and quality of stormwater discharge using best management practices, Minimize grading activities to maintain existing drainage patterns as much as possible 	Limit disturbances to surface water drainage patterns
Permanent Access Roads	Clearing, grubbing, grading, and topsoil removal	Increased erosion and sedimentation into significant woodlands, significant wetlands, and other significant natural features, Soil compaction	 Develop and implement an erosion and sediment control plan, Utilize erosion blankets, silt fencing, straw bales, etc for construction activities within 30m of a significant wetland, significant woodland, or water body, Maintain erosion control measures for the duration of construction or decommissioning activities, Any stockpiled material will be stored more than 30m from a significant wetland, significant woodland, or water body, No vehicle traffic on exposed soils, and no heavy machinery traffic on sensitive slopes 	Minimize direct impacts on vegetation communities and protect rare/sensitive habitats, Maintain vegetated buffers, particularly within riparian zones, Minimize the impacts of sedimentation on nearby significant natural features

Table 18B. Summary of Potential Effects and Mitigation Measures for Generalized Wildlife Habitat during the Construction and Decommissioning Phases

Project Component	Project Activity	Potential Negative Effects	Mitigation Measures	Objectives, Monitoring, and Contingency Plans
	Noise/human activity	Disturbance and/or mortality to local wildlife	 Avoid construction or decommissioning activities during sensitive time periods (ie breeding bird season), wherever possible, Conduct nest searches if vegetation removal will occur during the breeding bird season (May 1-July 31) Construction and decommissioning activities within 30m of significant woodlands or significant wetlands should occur during daylight hours, wherever possible, Clearly post construction speed limits 	Limit potential wildlife road mortalities
	Accidental damage to vegetation	Damage or removal of vegetation adjacent to the project location	Where construction activity occurs within 30m of a naturally vegetated feature (ie significant woodland or significant wetland), the construction area should be clearly delineated with protective fencing, such as silt fencing, Damaged trees should be pruned through implementation of proper arboricultural techniques	Minimize impacts to natural vegetation
	Chemical spills or accidental fluid release (ie oil, gasoline, grease, etc)	Soil or water contamination	 Implement best management practices, Develop a spill response plan and train staff on appropriate procedures, Keep emergency spill kits on site, Vehicle washing, refueling stations, and chemical storage will all be located more than 30m from significant natural features or water bodies, Dispose of waste material by authorized and approved offsite vendors 	 Minimize impacts to significant natural features and wildlife habitats, Avoid contamination of water or significant wetland features
	Installation of impervious surfaces	Increase surface run-off, Changes in surface water drainage	 Maintain vegetative buffers around water bodies, Control quantity and quality of stormwater discharge using best management practices, Minimize grading activities to maintain existing drainage patterns as much as possible 	Limit disturbances to surface water drainage patterns
Underground/ overhead Cabling	Clearing, grubbing, grading, and topsoil removal	Increased erosion and sedimentation into significant woodlands, significant wetlands, and	 Develop and implement an erosion and sediment control plan, Locate all entry and exit pits at least 30m from significant natural features (ie significant 	Minimize direct impacts on vegetation communities and protect rare/sensitive habitats,

Table 18B. Summary of Potential Effects and Mitigation Measures for Generalized Wildlife Habitat during the Construction and Decommissioning Phases

Project Component	Project Activity	Potential Negative Effects	Mitigation Measures	Objectives, Monitoring, and Contingency Plans
		other significant natural features	woodlands, significant wetlands) or water bodies, • Any stockpiled material will be stored more than 30m from a significant wetland, significant woodland, or water body • Horizontal directional drill entry/exit pits should be located at least 30m from any significant natural feature • Restore and re-vegetate entry/exit pits to preconstruction conditions as soon as possible after construction	 Maintain vegetated buffers, particularly within riparian zones, Minimize the impacts of sedimentation on nearby significant natural features Minimize the presence of exposed soil to reduce the potential for erosion
	Noise/human activity	Disturbance and/or mortality to local wildlife	 Avoid construction or decommissioning activities during sensitive time periods (ie breeding bird season), wherever possible, Construction and decommissioning activities within 30m of significant woodlands or significant wetlands should occur during daylight hours, wherever possible, Restore and re-vegetate entry and exit pits to pre-construction conditions as soon as possible after construction 	Limit potential wildlife road mortalities
	Accidental damage to vegetation	Damage or removal of vegetation adjacent to the project location	Where construction activity occurs within 30m of a naturally vegetated feature (ie significant woodland or significant wetland), the construction area should be clearly delineated with protective fencing, such as silt fencing, Damaged trees should be pruned through implementation of proper arboricultural techniques	Minimize impacts to natural vegetation
	Chemical spills or accidental fluid release (ie oil, gasoline, grease, etc)	Soil or water contamination	 Implement best management practices, Develop a spill response plan and train staff on appropriate procedures, Keep emergency spill kits on site, Vehicle washing, refueling stations, and chemical storage will all be located more than 30m from significant natural features or water bodies, Ensure drill depth is at an appropriate level below the watercourse. 	 Minimize impacts to significant natural features and wildlife habitats, Avoid contamination of water or significant wetland features

Table 18B. Summary of Potential Effects and Mitigation Measures for Generalized Wildlife Habitat during the Construction and Decommissioning Phases

Project Component	Project Activity	Potential Negative Effects	Mitigation Measures	Objectives, Monitoring, and Contingency Plans
			 Drill entry and exit pits should be at least 30m from significant natural features (ie significant woodland or significant wetland) or water bodies, Dispose of waste material by authorized and approved offsite vendors 	
Operation of Substation	Clearing, grubbing, grading, and topsoil removal	Increased erosion and sedimentation into significant woodlands, significant wetlands, and other significant natural features, Soil compaction	 Develop and implement an erosion and sediment control plan, Utilize erosion blankets, silt fencing, straw bales, etc for construction activities within 30m of a significant wetland, significant woodland, or water body, Maintain erosion control measures for the duration of construction or decommissioning activities, Suspend work if high runoff volume is noted or excessive sediment discharge occurs, Any stockpiled material will be stored more than 30m from a significant wetland, significant woodland, or water body, No vehicle traffic on exposed soils, and no heavy machinery traffic on sensitive slopes 	Minimize direct impacts on vegetation communities and protect rare/sensitive habitats, Maintain vegetated buffers, particularly within riparian zones, Minimize the impacts of sedimentation on nearby significant natural features
	Noise/human activity	Disturbance and/or mortality to local wildlife	 Avoid construction or decommissioning activities during sensitive time periods (ie breeding bird season), wherever possible, Construction and decommissioning activities within 30m of significant woodlands or significant wetlands should occur during daylight hours, wherever possible, Clearly post construction speed limits 	Limit potential wildlife road mortalities
	Accidental damage to vegetation	Damage or removal of vegetation adjacent to the project location	Where construction activity occurs within 30m of a naturally vegetated feature (ie significant woodland or significant wetland), the construction area should be clearly delineated with protective fencing, such as silt fencing, Damaged trees should be pruned through implementation of proper arboricultural techniques	Minimize impacts to natural vegetation

Table 18B. Summary of Potential Effects and Mitigation Measures for Generalized Wildlife Habitat during the Construction and Decommissioning Phases

Project Component	Project Activity	Potential Negative Effects	Mitigation Measures	Objectives, Monitoring, and Contingency Plans
	Chemical spills or accidental fluid release (ie oil, gasoline, grease, etc)	Soil or water contamination	 Implement best management practices, Develop a spill response plan and train staff on appropriate procedures, Keep emergency spill kits on site, Vehicle washing, refueling stations, and chemical storage will all be located more than 30m from significant natural features or water bodies, Dispose of waste material by authorized and approved offsite vendors 	 Minimize impacts to significant natural features and wildlife habitats, Avoid contamination of water or significant wetland features