Stantec

NIAGARA REGION WIND FARM

WATER ASSESSMENT AND WATER BODY REPORT

Appendix C

Field Notes



Stantet				
Station #	Project Name Niagara Wind			
Watercourse Name_unknawn	Project # 1/009.58269			
Photos	Field Staff J. Velne, 1c clayten			
Weather conditions in previous 24 hrs				
GPS Coordinates (Zone)	N Datum Nad 8.			
Descriptive Location Not Rail Co	the and Greenlane with of			
And verys	and which of recently the post of			
Water Quality	noacces			
	·			
Water Temperature (°C)	pHConductivity (μS/cm)			
Time in situ measurements taken	Air Temperature (°C)			
Time in situ measurements taken				
Watercourse Dimensions & Morphology				
Mean Watercourse Width (m)				
Mean Bankfull Width (m)	Mean Water Depth(cm)			
	% Run% Flat			
Evidence of eroding banks, Comments on ba	ank stability			
Substrate (% cover)				
	SandSiltMuck			
Boulder Gravel	SandSiltMuck ClayMarl Detritus			
	Detitus			
In-water Cover				
Cover Types Present (circle): Underco	tut Banks Deep Pool Watercress Aquatic Veg			
Overhanging Vegetation Woody Debris	Boulder Other			
Riparian Zone				
Riparian Cover (% of watercourse shaded, de	lominant vegetation, mature or early successional)			
Adjacent Land Use				
orchard				
Fish Habitat Potential Critical Habitat (spawning or nursery areas, g	groundwater upwellings)			
<u> </u>				
Migratory Obstructions (seasonal, permanent				
Note any fish observations no access				
Waterbody Notes Natural Watercourse Trapezoidal Characteristics Character	nannel Grassed Swale Buried Tile ut Pond Dominated by Aquatic Veg Dry			
Other Habitat Notes, Incidental Wildlife Ob	oservations, etc. <u>No access, seep frama</u>			
1/ 0/ 1/0-				
Field Notes Authored by Field	Id Notes QA/QCed by			





		1
Station #	Project Name Niagara W	ind
Watercourse Name unknown	Project # 160958269	
Photos	Field Staff J. Veene . V. Claut	9-1
Date June 22/12.	Time	
Weather conditions in previous 24 hrs	- ethumid ~32°C+	
GPS Coordinates (Zone) 17T E 621	130 N 478 1286	Datum Nad 83
Descriptive Location off of lange	street, East of	ThirtyRd
Water Quality		
	Conductivity (uS/cm)	
Water Temperature (°C)	Conductivity (μS/cm) Air Temperature (°C)	
Time in situ measurements taken	7 Tomporatore (o)	
Watercourse Dimensions & Morphology		
Mean Watercourse Width (m)	Maximum Pool Depth((cm)
Mean Bankfull Width (m)	Mean Water Depth((cm)
% Riffle % Poo		% Flat
Evidence of eroding banks, Comments on bank sta	ability	
Substrate (% cover)		
Bedrock 4 O Cobble	Sand 40 Silt	Muck
Boulder Gravel	Clay Mari	Detritus
In-water Cover Cover Types Present (circle): Undercut Ban Overhanging Vegetation Woody Debris	iks Deep Pool Watercress Boulder Other	Aquatic Veg
Riparian Zone		
Riparian Cover (% of watercourse shaded, domina	nt vegetation, mature or early succession	onal)
Adjacent Land Use	natue	
residential, bushlot.	roads.	
Fish Habitat Potential		
Critical Habitat (spawning or nursery areas, ground	water upwellings)	
Migratory Obstructions (seasonal, permanent)	sen, foraging	
an-perched	culvert	
Note any fish observations		
Waterbody Notes		The second secon
Natural Watercourse Trapezoidal Channel	Grassed Swale Bu	ried Tile
Surficial Drainage (i.e. furrows) Dugout Pond		Dry
Other Ḥabitat Notes, Incidental Wildlife Observa	itions, etc. Channel is defined -	hos balles &
cobble over mygim yeg is	Sumar Winner cugary	rado, manto lo
maple, grape		
Field Notes Authored by K. C. (WHO) Field Notes	NAE	
ried Notes Additioned by The Control of the Control	QA/QCed by	



outside Project Lock Aug 26 mp.

REAX

Station # Project Name Nagara Wind Watercourse Name unknown Project Name Nagara Wind Project # 160958269 Field Staff Staff Time 0:46 Weather conditions in previous 24 hrs hat humid 132°C+ GPS Coordinates (Zone) 17T E 6220 6 N 478132 Datum Nad 83 Descriptive Location
Water Quality Dissolved Oxygen (mg/L) 8.00 pH 8.70 Conductivity (μS/cm) 835 Water Temperature (°C) 20.10 Air Temperature (°C) 25.00 Time in situ measurements taken 10.46
Watercourse Dimensions & Morphology Mean Watercourse Width(m)
Substrate (% cover) BedrockOCobbleSandOSiltMuckBoulderOGravelClayMarlDetritus In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg Overhanging Vegetation Woody Debris Boulder OtherA
Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Adjacent Land Use
Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Hair Gray Note any fish observations
Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry
Other Habitat Notes, Incidental Wildlife Observations, etc. Channel to lots of wedges abble Shaded by jewel weed walnuts of sugar made Fast side of Road's more open Field Notes Authored by K Many Field Notes QA/QCed by ME to soil falling in





Stantec

Station # 2-3	Project Name Ning of a state of
Watercourse Name unknown	Project Name Niagara Wind Project #_ 160950269
Photos	Field Staff L. Ve on L. Clauta.
Date June 2/12:	Time
	humida 232°C
GPS Coordinates (Zone) 17T E 622	300 N 4781050 Datum Nad 83
Descriptive Location Off of Vone	the et east of 2-3
Water Quality	
Dissolved Oxygen (mg/L) pH	Conductivity (uS/om)
Water Temperature (°C)	Conductivity (μS/cm) Air Temperature (°C)
Time in situ measurements taken	All Temperature (°C)
	£
Watercourse Dimensions & Morphology - O	
Mean Watercourse Width(m)	Maximum Pool Depth(cm)
Mean Bankfull Width (m)	Mean Water Depth(cm)
% Riffle % Poo	/
Evidence of eroding banks, Comments on bank sta	ıbility
Cubatrata (0/ cavar)	
Substrate (% cover) Bedrock 50 Cobble	Cond City Mark
BedrockCobble BoulderGravel	SandO SiltMuck Clay Marl Detritus
Gravei	ClayDetritus
In-water Cover	
Cover Types Present (circle): Undercut Ban	
Overhanging Vegetation Woody Debris	Boulder Other
Riparian Zone	
Riparian Cover (% of watercourse shaded, dominal	nt vegetation, mature or early successional)
7590, trees, make	
Adjacent Land Use	
residential Road	
Figh Habitat Data wild	
Fish Habitat Potential	
Critical Habitat (spawning or nursery areas, ground	water upwellings)
COA . MINA C I C.	70 0 A 0
Migraton Obstructions (202000) nursery for	aging.
Migratory Obstructions (seasonal, permanent)	aging.
Migratory Obstructions (seasonal, permanent)	aging.
Migratory Obstructions (seasonal, permanent)	aging.
Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes	aging.
Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel	Grassed Swale Buried Tile
Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes	Grassed Swale Buried Tile
Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Surficial Drainage (i.e. furrows) Dugout Pond	Grassed Swale Buried Tile Dominated by Aquatic Veg Dry
Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Surficial Drainage (i.e. furrows) Dugout Ponco Other Habitat Notes, Incidental Wildlife Observa	Grassed Swale Buried Tile d Dominated by Aquatic Veg Dry tions, etc. Channel well defined to Cabble
Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Surficial Drainage (i.e. furrows) Dugout Pond	Grassed Swale Buried Tile Dominated by Aquatic Veg Dry tions, etc. Channel well defined to cabble
Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Surficial Drainage (i.e. furrows) Dugout Ponco Other Habitat Notes, Incidental Wildlife Observa	Grassed Swale Buried Tile Dominated by Aquatic Veg Dry tions, etc. Channel well defined to cabble
Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Surficial Drainage (i.e. furrows) Dugout Ponco Other Habitat Notes, Incidental Wildlife Observa	Grassed Swale Buried Tile Dominated by Aquatic Veg Dry tions, etc. Channel well defined to cable





Station # 3-1	Project Name Niagara Wind
Watercourse Name unknown	Project Name Niagara Wind Project # 160950269 Field Staff Nogne, K. Clayton
Photos	Field Staff J. Vo ane, K. Clayton
Date June 21/12.	Time
Weather conditions in previous 24 hrs	Ahumid ~32°C
GPS Coordinates (Zone) 17 E 6 30	2156 N 4780325 Datum Nad 83
Descriptive Location Off Man	Hainview Road, North of Mctood
Water Quality - Dr V	
Dissolved Oxygen (mg/L) pH	Conductivity (μS/cm)
Water Temperature (°C)	Air Temperature (°C)
Time in situ measurements taken	
Watercourse Dimensions & Morphology	M : / B 18 11
Mean Watercourse Width (m)	Maximum Pool Depth(cm)
Mean Bankfull Width (m)	Mean Water Depth(cm)
% Riffle% I Evidence of eroding banks, Comments on bank	Pool% Run% Flat
Evidence of eroding banks, Comments on bank	stability
Substrate (% cover) - all uca Bedrock Cobble	zetated
BedrockCobble	SandSiltMuck
BoulderGravel	Clay Marl Detritue
In water Cover	Typha
In-water Cover Cover Types Present (circle): Undercut E	Banks Deep Pool Watercress Aquatic Veg
Overhanging Vegetation Woody Debris	Boulder Other
Riparian Zone Riparian Cover (% of watercourse shaded, dom	ninant vegetation, mature or early successional)
85% Typha, ear	W
Adjacent Land Use	*
grape vine orchan	d, woodlot, Road.
	
Fish Habitat Potential	
Critical Habitat (spawning or nursery areas, grounds	undwater upwellings)
Migratory Obstructions (seasonal, permanent)	
Waterbody Notes Natural Watercourse Trapezoidal Channel	nel Grassed Swale Buried Tile
Surficial Drainage (i.e. furrows) Dugout P	Pond Dominated by Aquatic Veg Dry
Other Habitat Notes, Incidental Wildlife Obse	
Road dominated by Typha & Pr	gragmites. on, west-side of Maintains
Channel Haw into Farent. J	haded by Willan, maple, grape etc
Field Notes Authored by K Clautan Field No	lotes QA/QCed by
cleid Notes Authored by / Link All VIV Link Held No	otes CA/CLed DV 1 * * C





~ -	
V 2	ntor
-740	nuc

Station # 3-2	Project Name Niagara Wind
Watercourse Name unknown	Project # 160950269
Photos see photo log Date June 2/12.	Field Staff J. Veene K. Clauten
Date June 2/12.	Time : 33
Weather conditions in previous 24 hrs	hat shumid 232°C+
GPS Coordinates (Zone) 17 E	(022170 N 4779879 Datum Nad 8=
Descriptive Location Offor	Maintain View Rd. NWest OF McCood
Acet	
Water Ovelity	DM A
Water Quality	Oceanies de la Colonia
Dissolved Oxygen (mg/L)	pH Conductivity (μS/cm)
Water Temperature (°C)	Air Temperature (°C)
Time in situ measurements taken	
Watercourse Dimensions & Morphology	y /
Mean Watercourse Width (m)	
Mean Bankfull Width (m)	
% Riffle	
Evidence of eroding banks, Comments on	
Evidence of croding banks, Comments of	Dank Stability
Substrate (% cover)	
BedrockCobb	leSandSilt Muck
Boulder Grave	
Overhanging Vegetation Woody Debr Riparian Zone Riparian Cover (% of watercourse shaded,	rcut Banks Deep Pool Watercress Aquatic Veg Boulder Other, dominant vegetation, mature or early successional)
Adjacent Land Use	
	21
Fish Habitat Potential	
Critical Habitat (spawning or nursery areas	s groundwater upwellings)
Contider Flacting Continues of Marcolly around	s, ground vacor aptroximage)
Migratory Obstructions (seasonal, permand	ent) ched culvert -extreme doce
Note any fish observations	The same of the sa
. Tota any non-about anona	
Waterbody Notes Natural Watercourse Trapezoidal Countries Dug	Channel Grassed Swale Buried Tile
Other Helitat Blates Included 1989 1995	Observations as observation challes to the
Other Habitat Notes, Incidental Wildlife	hing it.
§ /	
Field Notes Authored by K. C. M.	Field Notes QA/QCed by W

Maintainview. Mc/2001 Rd.





Station # 3 -3 Watercourse Name unknown Photos Date Dune 20/92 Weather conditions in previous 24 hrs GPS Coordinates (Zone) 171 E 022 Descriptive Location Descriptive Location	Project Name Niagara Wind Project # 160958269 Field Staff Scene Roads Time 12:00 8 N 477938 Datum Nad 83
Water Quality Dissolved Oxygen (mg/L) pH Water Temperature (°C) Time in situ measurements taken	Conductivity (μS/cm) Air Temperature (°C)
Watercourse Dimensions & Morphology Mean Watercourse Width(m) Mean Bankfull Width(m)% Riffle% Pool Evidence of eroding banks, Comments on bank sta	
Substrate (% cover) BedrockCobbleBoulderGravel	Clay Marl Detritus ks Deep Pool Watercress Aquatic Veg
Riparian Zone Riparian Cover (% of watercourse shaded, domina Adjacent Land Use	nt vegetation, mature or early successional)
Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground	lwater upwellings)
Migratory Obstructions (seasonal, permanent)	
Note any fish observations	
Waterbody Notes Natural Watercourse Trapezoidal Channel Surficial Drainage (i.e. furrows) Dugout Pone	
Other Habitat Notes, Incidental Wildlife Observation of the Habitat Notes, Incidental William Notes, I	next dow creating a bear next
Field Notes Authored by L. Clauda Field Notes	QA/QCed by



	I NO REASI.
Station #	Project Name Niagara Wind mp 3
Watercourse Name unknown	Project #160958269
Photos see photo (as	Field Staff Jileene, K. Clayton
Date June 20/12.	Time 2 : 1, 2
Weather conditions in previous 24 hrs	not a humid
GPS Coordinates (Zone) 17T E 6 3 3	208 N 478942 Datum Nad 83
Descriptive Location 04+04 Mo	untainview Rd, South of 3.3.
Water Quality	Dry
Dissolved Ovygen (mg/L)	Conductivity (μS/cm)
Water Temperature (°C)	Air Temperature (°C) Δ5 C.
Time in situ measurements taken	3 / m / on polation (o)
Watercourse Dimensions & Morphology	· /
Mean Watercourse Width (m)	Maximum Pool Depth(cm)
Mean Bankfull Width (m)	Mean Water Depth(cm)
% Riffle % P	
Evidence of eroding banks, Comments on bank	stability
Substrate (% cover)	
BedrockCobble	Sand 80 Silt Muck
BoulderGravel	ClayMarl 2 O Detritus
In-water Cover	
Cover Types Present (circle): Undercut B	anks Deep Pool Watercress Aquatic Veq
Overhanging Vegetation Woody Debris	
Name of the state	Doddor Othor
Riparian Zone	
Riparian Cover (% of watercourse shaded, domin	nant vegetation, mature or early successional)
	ypha, early
Adjacent Land Use	
grape VInis	
Fish Habitat Potential	
Critical Habitat (spawning or nursery areas, grou	indivator unwallings)
Citical riabitat (spawning of fluisery areas, grou	illuwater upweilings)
Migratory Obstructions (seasonal, permanent)	
Note any fish observations	
Waterbody Notes	a 200 East
Natural Watercourse Trapezoidal Chann	nel Grassed Swale Buried Tile
Surficial Drainage (i.e. furrows) Dugout Po	
Light Side	Borninated by Aquatic Veg Bry
Other Habitat Notes, Incidental Wildlife Obser	rvations, etc. Small shallon channel it
aguatic veg (Tupha) 1	Mater Clauma on wed side worth
on pact latert ride icin	a bush of the inicia cuponox sumac
Walnut a avano	The state of the s
Field Notes Authored by K. C. Harris Field Notes	tes OA/OCed by M.F.



No longer in Project Lown MP.



Stantec				
0 " 5-1		D : N1		~ 1
Station #		Project Name	agara Wi	1 (0)
Watercourse Name unknown		Project # 1609	79767	
Photos June 20/12:			ere, 1cc	ayten
	()	Time 10 : 15	2000	`
Weather conditions in previous 24		t ghumid		1 10
GPS Coordinates (Zone) 171		N'4	and the second	atum Nad 8
Descriptive Location Office	T BAGE	Road East,	027+V+ IV	mtyled.
Water Quality				
Dissolved Oxygen (mg/L)	pH	Conductivity	/ (μS/cm)	
Water Temperature (°C)		Conductivity Air Temperature (°C	n'as'°C	
rime in situ measurements taken				
Watercourse Dimensions & Mo				
	(m)	Maximum Pool Dept		m)
Mean Bankfull Width/_	, ,			m)
	% Po		% Run	% Fla
Evidence of eroding banks, Comm	nents on bank s	tability		
Substrate (% cover)				
Bedrock	Cobble	Sand	Silt	Muck
Boulder	Gravel		Siit Marl	Detritus
bodidci	aravcr	Olay	IVIQII	Dening (
n-water Cover			Al and a second and	
Cover Types Present (circle):	Undercut Ba	nks Deep Pool	Watercress	Aquatic Veg
Overhanging Vegetation Woo	ody Debris	Boulder Other		
Riparian Zone				
Riparian Cover (% of watercourse	shaded, domin		or early successio	nal)
Adjacent Land Use		1		
Residentia	Road			
	F			
Fish Habitat Potential Critical Habitat (spawning or nurse	onvarage group	dwatar upwallings)		
Childa Habitat (spawiing of hurst	Siy aleas, gioun	end foragmen		
Migratory Obstructions (seasonal,				
nigratory Obstructions (seasonal,	permanenty			
Note any fish observations				
Vaterbody Notes				
Vaterbody Notes Vatural Watercourse Transport	ezoidal Channe	el Grassed S	wale Bu	ried Tile
Surficial Drainage (i.e. furrows)		nd Dominated b	y Aquatic Veg defined Char	Dry
Other Habitat Notes, Incidental	Wildlife Ohsen		- AND 1	
Cobblet haddona N		of Road & Co		LOCKA TIN
			LLIMETOTIC TO	VIJIKIA <u>U</u> V
Chaded) Jatha	<u>.C/OV- 0 00</u>		000000000000000000000000000000000000000	146

Field Notes QA/QCed by



No longs in Project Locu mp

Station #	Project Name Niagara Wind
Watercourse Name unknown	Project #
Photos	Field Staff J Young K Clay
Date June 22/12.	Time (0 : 2)
	thumid ~ 32°C+
GPS Coordinates (Zone) 17T E 620	931 N 4780534 Datum Nad 83
Descriptive Location Off of Thirt	1 Rd. Nof Elm tree Rd Valentro
	The state of the s
Water Quality	
	Constructivity (Ohm)
Dissolved Oxygen (mg/L) pH	Conductivity (µS/cm)
Water Temperature (°C)	Air Temperature (°C)
Time in situ measurements takén	
Watercourse Dimensions & Morphology	
Mean Watercourse Width(m)	Maximum Pool Depth(cm)
Mean Bankfull Width (m)	Mean Water Depth(cm)
% Riffle% Poo	l% Run % Flat
Evidence of eroding banks, Comments on bank sta	bility
Substrate (% cover)	
Bedrock 50 Cobble	SandOSiltMuck
BoulderGravel	ClayMarlDetritus
	Detitus
In-water Cover	
Cover Types Present (circle): Undercut Bank	
Overhanging Vegetation Woody Debris	Boulder Other
Riparian Zone	
Riparian Cover (% of watercourse shaded, dominar	nt vegetation, mature or early successional)
50% trees, mat	ure
Adjacent Land Use	
bushlot, orchard, Ro	ad
Fish Habitat Potential	
	votor unwallingo)
Critical Habitat (spawning or nursery areas, ground	Nater upwenings)
Migratory Obstructions (seasonal, permanent)	-nw. Alginor / 1
$\frac{\partial \mathcal{M}}{\partial \mathcal{M}} = \mathcal{D} \mathcal{E} \mathcal{M}$	they culted a separation
Note any fish observations	
Waterbady Natas	/
Waterbody Notes Natural Watercourse Trapezoidal Channel	Crossed Swele Buried Tile
Surficial Drainage (i.e. furrows) Dugout Pond	Grassed Swale Buried Tile
Sufficial Dialitage (i.e. fullows) Dugout Police	Dominated by Aquatic Veg Dry
Other Habitat Notes, Incidental Wildlife Observa	tions, etc. Alop, dofined dannel
II TUDha hac collide & bail	donc or allenge in underlying of
Mannel over through avape	VIND OVER A A CLASS OF BURNETH
Dortion of change That are through has	hot - arranded but fam wad walnut
partianot channel that goes through but	holot - surrainded by Bassinged, walnut,
Field Notes Authored by K. Clay Field Notes (Field Notes of Supplementary)	Shilot - surrainded by Bassings walnut, or bank grape etc -vent steep - on pedrock



Station # Watercourse Name Whotos Date Weather conditions in previous GPS Coordinates (Zone) 17 Descriptive Location	24 hrs 4 0 0 3 0 3	Project Name Nice Project # 16093 Field Staff July Time 2 48	8269 6 Folant 32°C 779250 Da	atum Nad 83
Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements take	pH	Conductivity Air Temperature (°C)	(μS/cm) 25°C	
Watercourse Dimensions & Mean Watercourse Width Mean Bankfull Width % Riffle Evidence of eroding banks, Con	(m) (m) %Poo	shilita.	(cr (cr _% Run	n) % Flat
Substrate (% cover)Bedrock Boulder	CobbleGravel	Sand Clay	Silt Marl	Muck Detritus
In-water Cover Cover Types Present (circle): Overhanging Vegetation W			Watercress <	Aquatic Veg
Riparian Zone Riparian Cover (% of watercour	'se shaded, domina	nt vegetation, mature o	r early successior	nal)
Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nu	, ,	rape vinus	Y	
Migratory Obstructions (season				
Note any fish observations				
Waterbody Notes Natural Watercourse Tr Surficial Drainage (i.e. furrows)	rapezoidal Channel Dugout Pond			ed Tile Dry
other Habitat Notes, Incidenta onorgal Conniction East Side does has a distinct	al Wildlife Observa	t - Igwo Cu Wich channel	definition or than or ci	Scovoida but RCG
Field Notes Authored by K. Clayla	Field Notes	QA/QCed by		M.f.

W:\resource\Internal Info and Teams\Aquatic Resources\Field Sheets\Stantec\Form 02 Wind Farm Waterbody Rapid Assessment Form.doc





Stantec Project Name Niagara Wind Station # Watercourse Name_unknoim Project # Photos __ Field Staff Time Date Weather conditions in previous 24 hrs Datum Mad GPS Coordinates (Zone) 17T E Descriptive Location **Water Quality** Dissolved Oxygen (mg/L)_ Conductivity (μS/cm) Water Temperature (°C) Air Temperature (°C) QS C Time in situ measurements taken **Watercourse Dimensions & Morphology** Maximum Pool Depth_ Mean Watercourse Width 🏂 Mean Bankfull Width (m) Mean Water Depth (cm) % Run % Riffle % Pool % Flat Evidence of eroding banks, Comments on bank stability Substrate (% cover) Sand Silt Muck Bedrock Cobble Marl Boulder Gravel Clay **Detritus** 80G **In-water Cover** Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Ved Overhanging Vegetation Woody Debris Other Boulder Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) 100% - trees, mature. Adjacent Land Use **Fish Habitat Potential** Critical Habitat (spawning or nursery areas, groundwater upwellings) ¿Dawning nursens foraa Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse ____ Trapezoidal Channel _____ Grassed Swale Surficial Drainage (i.e. furrows) ____ Dugout Pond ____ Dominated by Aquatic Veg Other Habitat Notes, Incidental Wildlife Observations, etc. REA water buch of wade fined channol undercut banks Field Notes QA/QCed by _______ Field Notes Authored by Y

Bushlot
REA
8-1



Stantec					, chama
9-1		Project Na	me Niago	ara Wir	<u>(d) </u>
Station # Watercourse Name_unknaum	_	Project #	160950	269	
- Andrewski		Field Staff	J. Veer	e, K.cl	auton.
Photos June 20/12.		Time	13:20		
Weather conditions in previous 24	hrs ho-	& humid			
GPS Coordinates (Zone) 171	F (2)90=		N 4 / /	5456 Da	tum Nad 83
Descriptive Location	I Ra H	northio	Funithi	le north	of Yourg
Descriptive Location	and now	th of You		`	
		*	J-		
Water Quality	~LJ	^	onductivity (μS	/cm)	
Dissolved Oxygen (mg/L)	— pn_	O	erature (°C) $\underline{3}$	100	
Water Temperature (°C)		All rempe	rature (O)		
Time in situ measurements taken_					
Watercourse Dimensions & Mor	phology	<u></u>		/a=	~ \
Mean Watercourse Width	(m)		Pool Depth		•
Mean Bankfull Width 5-7	(m)	\	ter Depth		% Flat
% Riffle	% P		%	Run	/o i iat
Evidence of eroding banks, Comm	ients on bank :	stability —			
Substrate (% cover)	Orbbla		and	Silt	Muck
Bedrock	Cobble		ay		Detritus
Boulder	Gravel		ay	IVICII	
Overhanging Vegetation Woo	Undercut B ody Debris	Boulder			
Riparian Cover (% of watercourse	shaded, domi	inant vegetati A	on, mature or e	arry succession	<u> </u>
Adjacent Land Use					
farm land	SOY				
Fish Habitat Potential		indwater unw	ellings)		
Critical Habitat (spawning or nurse	HINDEN 1	Jan Jan J	` 1		
Migratory Obstructions (seasonal,	, permanent)	¥	- remain		
Note any fish observations					
Waterbody Notes Natural Watercourse	1				
Waterbody Notes				. D.,	riad Tila
Natural Watercourse V N Trap	pezoidal Chani	nel	Grassed Swal	eBu	ned rile
Surficial Drainage (i.e. furrows)	Dugout P	ond	Dominated by A	quatic veg	Dry
Other Habitat Notes, Incidental	Wildlife Obse	ervations, etc			
-					
	**		ME		
Field Notes Authored by K - Clauto	Field N	iotes QA/QCed by	V - C C		



N	ON	REA	2	
RM			WK-	

Stantec				4
Station #	Pro	iect Name 📈	agara Wi	nd
Watercourse Name unknown	Pro	ect #	158267 <u> </u>	
	Fie		~ L Clay	10/ ·
Photos Date June 20/12.	Tin	ne <u>B∶≲∂</u>	<u> </u>	
Weather conditions in previous 24 hrs	hotth			
GPS Coordinates (Zone) 17T E	1770	N 4		atum Nad 83
Descriptive Location Off Saut	h Grim	264 Rd	-North	ail Line
Water Quality \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			(0 /)	
Dissolved Oxygen (mg/L)	pH	Conductivity	y (μS/cm) :) _ <u>30°C</u>	
Water Temperature (°C)	Air	Temperature (°C	30 (
Time in situ measurements taken				
Watercourse Dimensions & Morphology	,		4.	
Mean Watercourse Width(m)		ximum Pool Dept		cm)
Mean Bankfull Width 2 - 5 (m)		an Water Depth_		cm)
% Riffle	_% Pool	\	% Run	% Flat
Evidence of eroding banks, Comments on	bank stabilit	у —		
Cubatrata (9/ aguar)				
Substrate (% cover) Bedrock Cobb	ام	Sand	Silt	Muck
				Detritus
bouldeldidve		····_		
In-water Cover Cover Types Present (circle): Unde Overhanging Vegetation Woody Debri	rcut Banks is Bo	Deep Pool ulder Othe	Watercress r	Aquatic Veg
Riparian Zone Riparian Cover (% of watercourse shaded,	, dominant v	egetation, mature	or early succession	onal)
Adjacent Land Use Say	/			
Fish Habitat Potential Critical Habitat (spawning or nursery areas	s, groundwat	er upwellings)		
Migratory Obstructions (seasonal, perman	ent)			
Note any fish observations				
Waterbody Notes Natural Watercourse Trapezoidal Surficial Drainage (i.e. furrows) Dug	Channel^ jout Pond	Grassed S	Swale Buby Aquatic Veg	uried Tile
Other Habitat Notes, Incidental Wildlife	Observation	ns, etc.		
Field Notes Authored by K Clayton		QCed by ME		





	~				
Stantec	tribonile				1
Station # 11-2	TOVE	Project Name	Niago	ura Wi	nd
Watercourse Name water	wr	Project #	6095800	(69)	
Photos		Field Staff	INDOV.	. K. clau	ton
Date June 20/12	-	Time 3	:55	,	
Weather conditions in previou	s 24 hrs հձ	ta humid			
GPS Coordinates (Zone) 1	7T E 6176		N		atum Nad 8.
Descriptive Location	ff of S.C	avinoshy ec	15 Sauth	of Rai	1 By walk
- YO	access	*			
Water Quality		cry pur prof _		. 10 <	and a
Dissolved Oxygen (mg/L)		8.58 Condu	uctivity (μS/d	m) <u> </u>	<u> </u>
Water Temperature (°C)		Air Temperatu	re (°C) <u><</u>	2 00	
Time in situ measurements ta	ken				
Watercourse Dimensions &		Massium Dan	I D th		
Mean Watercourse Width	<u>(m)</u>	Maximum Poo	Deptn		cm)
Mean Bankfull Width ~ 5	(III) % Po	Mean Water D	% R	<u> </u>	cm) % Flat
Evidence of eroding banks, C			Ew und		Tooks mos
Stable -	regerented	banks			
Substrate (% cover)	<i>y</i>				
Bedrock	Cobble Gravel	Sand	50	Silt	Muck
Boulder	Gravel	<u> </u>		Marl	Detritus
Cover Types Present (circle): Overhanging Vegetation			ool Wate Other	ercress 	Aquatic Veg
Riparian Zone Riparian Cover (% of waterco	urse shaded, domin		ature or ear	ly succession	onal)
Adjacent Land Use	111031110				ŧ.
Fish Habitat Potential Critical Habitat (spawning or n	oursery areas, grour	ndwater upwelling	s)		
Migratory Obstructions (seaso	(3)				
Note any fish observations		× 11			
Waterbody Notes Natural Watercourse Surficial Drainage (i.e. furrows					
Other Habitat Notes, Inciden					
	tuchid al	gu maling.			
· (Right fleater	· Kildoer	<u> </u>			
Field Notes Authored by K. Claud	- Addressed	es QA/QCed by^			
I IOIU INOLOS AUGIOTOU DY	I IGIU IAOK	Jo an according			





Stantoc	

Station #		Project Name	liagara U	sind
Watercourse Name unknow		Project #l(oC	958269	w
Photos			Veene, K	-clayter
Duit	f	Time 14:5) O	8
Weather conditions in previous 2		& humid		
GPS Coordinates (Zone) 17		<u> </u>		<u>Datum Nad</u> 8
Descriptive Locationoff_	Crell:	Brimsby Ro	Lo Satthe	of 20 mils
Water Quality - dry	L			
Dissolved Oxygen (mg/L)	pH	Conductiv Air Temperature (°	rity (uS/cm)	
Water Temperature (°C)		Air Temperature (°	c) 32-6	
Time in situ measurements taker	n	, , , , , , , , , , , , , , , , , , , ,		
Watercourse Dimensions & Me				
Mean Watercourse Width		Maximum Pool De	pth	_(cm)
Mean Bankfull Width	(m)	Mean Water Depth		_(cm)
% Riffle	% Po	ol \	% Run	% Flat
Evidence of eroding banks, Com	ments on bank st	ability		
Substrate (% cover)		ŧ		
Bedrock	Cobble	Sand	Silt	Muck
Boulder	Gravel	Clay	Marl	Detritus
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours	oody Debris	Boulder Othe	er	
Adjacent Land Use	-			
Fish Habitat Potential				
Critical Habitat (spawning or nurs	sery areas, ground	lwater upwellings)		
Migratory Obstructions (seasonal		. 5-7		
	, permanent)			
Note any fish observations				
Waterbody Notes Natural Watercourse Tra Surficial Drainage (i.e. furrows)	pezoidal Channel Dugout Pond	Grassed S	Swale E by Aquatic Veg_	Buried Tile
Other Habitat Notes, Incidental	Wildlife Observa	itions, etc.		-
Field Notes Authored by K. Clauter		8.		
rield Notes Authored by F LU LANA	Field Notes	QA/QCed by I/\/ \/		





GPS Coordinates (Zone) 17T E 616302	Project # 1609 Field Staff J. Ke Time 4:36	Pt2029	Datum Nad 83
Water Quality Dissolved Oxygen (mg/L) pH Water Temperature (°C) Time in situ measurements taken	Conductivity Air Temperature (°C	y (μS/cm))? <i>O</i> * C -	
Watercourse Dimensions & Morphology Mean Watercourse Width(m) Mean Bankfull Width(m) % Riffle% Pool Evidence of eroding banks, Comments on bank sta			
Substrate (% cover) BedrockCobbleBoulderGravel	Sand Clay	Silt_ Marl	Muck Detritus
In-water Cover Cover Types Present (circle): Undercut Bar Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, domina	Boulder Other	or early succes	Aquatic Veg Marsh marigot
Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground Migratory Obstructions (seasonal, permanent)	dwater upwellings)	unna)
Note any fish observations			
Waterbody Notes Natural Watercourse Trapezoidal Channel Surficial Drainage (i.e. furrows) Dugout Pon Other Habitat Notes, Incidental Wildlife Observa	d Dominated b	y Aquatic Veg_	Dry
Field Notes Authored by K Clanton Field Notes			



				1	10NREAS
	WIND FARI	M WATERBOD	Y RAPID ASSESSI	MENT FORM	detression
Photos Date Weather cond GPS Coordina	Name_unknau itions in previous ates (Zone)17 ocation	24 hrs 10 + +	Project Name Nice Project # 16093 Field Staff N 45 N 45 Road Sautho	771895 Da	uter.
Water Temper	<i>f</i>	Marie and the second	Conductivity Air Temperature (°C)	(μS/cm) -3 Ο	
Mean Waterco Mean Bankfull	l Width <u> </u>		ol		
Substrate (%	cover) Bedrock Boulder	CobbleGravel	Sand Clay		Muck Detritus
	Present (circle):	Undercut Bar oody Debris	nks Deep Pool Boulder Other_	Watercress (Aquatic Veg Hupiu
Riparian Zone Riparian Cove			ant vegetation, mature o	or early succession	al)
Adjacent Land	I Use Residen	tial, sou	, woodlat	to N	
Fish Habitat F Critical Habita		sery areas, ground	dwater upwellings)		
Migratory Obs	tructions (seasona	al, permanent)			
Note any fish o	observations	necessitation and the second s			
Surficial Draina	courseTransfer age (i.e. furrows)_	Dugout Por	I Grassed Swind Dominated by	Aquatic Veg	Dry
Field Notes Authore	ed by K Claud	Field Notes	s QA/QCed by		





Stantec	1
010110111	Project Name Niagara Wind
Station #	Project # 1/0950269
	Field Staff J. Reene V. Cayton.
Photos Date June 20/12.	Time 4:50
	thumid:
GPS Coordinates (Zone) 17 E 6170	15 N 4771275 Datum Nad 8
Descriptive Location Off of Tober	Rd Sarthof SmithvilleRoad South
/3-2	
W	
Water Quality	3.45 Conductive (10/20) 2884
Dissolved Oxygen (mg/L) 13.04 pH	Air Temperature (°C) 30°C+
	Air Temperature (°C)
Time in situ measurements taken \(\simeq \)	<u> </u>
Watercourse Dimensions & Morphology	
Mean Watercourse Width 3 (m)	Maximum Pool Depth 0,50 (cm)
Mean Bankfull Width(m)	Mean Water Depth(cm)
% Riffle% Poo	
Evidence of eroding banks, Comments on bank sta	ability
Substrate (% cover)	15 0 1 10 000
Bedrock Cobble Gravel	Sand 90 Silt Muck
BoulderGravel	So Clay Marl Detritus
In-water Cover	+41
Cover Types Present (circle): Undercut Ban	nks Deep Pool Watercress Aquatic Veg
Overhanging Vegetation Woody Debris	
Riparian Zone	ent vogetation, mature or early evenesional
Riparian Cover (% of watercourse shaded, domina	
Adjacent Land Use	arly
Adjacent Land Ose	,
Fish Habitat Potential	
Critical Habitat (spawning or nursery areas, ground	
Stawaing, nu ser	y, foraging
Migratory Obstructions (seasonal, permanent)	
Note any fish observations	Din-head YOUS.
Note any non-observations	
Waterbady Nata	
Waterbody Notes Netweel Wetersource National Channel	Crossed Swales Buried Tile
Surficial Proinces (i.e. furrows) Pugget Box	Grassed Swale Buried Tile d Dominated by Aquatic Veg Dry
Other Habitat Notes, Incidental Wildlife Observa	ations, etc. Red wing BB.
· froge green.	J
. J U	
	· · · · · · · · · · · · · · · · · · ·
Field Notes Authored by Field Notes	QA/QCed by
Field Notes	UNIQUED BY TVUC





C4	
V 13	ntec
	IILEC

Station # Project Name Niagara Wind Watercourse Name unknown Project # 160950269	
I I OUT IT I I OUT IN IT	
	400
Photos Field Staff & K. Clay Date Time ? 04	~
Weather conditions in previous 24 hrs hot shumid	
GPS Coordinates (Zone) 17T E 617914 N4T71492 Datum N	Jad8
Descriptive Location, off of Part Davidson Rd South of Smi	thuil(
Water Quality — no water	
Dissolved Oxygen (mg/L) pH Conductivity (μS/cm)	
Dissolved Oxygen (mg/L) pH Conductivity (μS/cm) Water Temperature (°C) Air Temperature (°C)	
Time in situ measurements taken	
Watercourse Dimensions & Morphology	
Mean Watercourse Width (m) Maximum Pool Depth (cm)	
Mean Watercourse Width(m) Maximum Pool Depth(cm) Mean Bankfull Width(m) Mean Water Depth(cm)	
% Riffle% Pool% Run	% Flat
Evidence of eroding banks, Comments on bank stability	
Substrate (% cover)	
Bedrock Cobble Sand Silt M Gravel Clay Marl D	uck
BoulderGravelClayMarlD	etritus
In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquation Overhanging Vegetation Woody Debris Boulder Other Riparian Zone	c Veg
Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional)	
Adjacent Land Use	
Say	
Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings)	
Migratory Obstructions (seasonal, permanent)	
Note any fish observations	
Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dr	у
Other Habitat Notes, Incidental Wildlife Observations, etc	



	Jon
1 "	DEA

Stantec Project Name Niagara Wind Station # 15-1 Watercourse Name unknown Project #__160958269 Photos Field Staff Date Time / Weather conditions in previous 24 hrs & humid GPS Coordinates (Zone) 17T E Descriptive Location Carth of 13-Mithville Water Quality - no water Dissolved Oxygen (mg/L) _____ _____ Conductivity (μS/cm) _ Water Temperature (°C) Air Temperature (°C) ______?o ~ + Time in situ measurements taken Watercourse Dimensions & Morphology Mean Watercourse Width_____(m) Maximum Pool Depth____(cm) Mean Bankfull Width (m) Mean Water Depth ____(cm) % Riffle /% Pool % Flat Evidence of eroding banks, Comments on bank stability Substrate (% cover) Cobble _____ Bedrock _Sand____Silt Muck Boulder Gravel Clay Marl **Detritus In-water Cover** Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) no shading - Creve Adjacent Land Use **Fish Habitat Potential** Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse____ Trapezoidal Channel ____ Grassed Swale ___ Buried Tile_ Surficial Drainage (i.e. furrows)_____ Dugout Pond_____ Dominated by Aquatic Veg_____ Other Habitat Notes, Incidental Wildlife Observations, etc.





Station # 5	Project Name Niagara	wind
Watercourse Name unknown	Project # 160958269	
Photos	Field Staff Voone, Kela	UHANN
	Time 15:27	* * *
Weather conditions in previous 24 hrs		
GPS Coordinates (Zone) 17T E (a (7))		Datum Nad 83
Descriptive Location Offor Tob	er Dd N of act	en Road
		##
Water Quality — no water		
Dissolved Oxygen (mg/L) pH Water Temperature (°C)	Conductivity (μS/cm)	
Water Temperature (°C)	Air Temperature (°C)	y subjective.
Time in situ measurements taken		
Watercourse Dimensions & Morphology		
Mean Watercourse Width (m)	Maximum Pool Depth	(cm)
Mean Bankfull Width (m)	Mean Water Depth	
% Riffle % Poo		
Evidence of eroding banks, Comments on bank sta		
Substrate (% cover)		
BedrockCobble	SandSilt_	
BoulderGravel	ClayMar	lDetritus
In-water Cover		
Cover Types Present (circle): Undercut Bank	ks Deen Pool Watercross	Aquatic Veg
Overhanging Vegetation Woody Debris	Boulder Other	Aqualic veg
- Troody Bobins	Bodider Other	
Riparian Zone		
Riparian Cover (% of watercourse shaded, dominar	nt vegetation, mature or early succ	essional)
- Crops		
Adjacent Land Use		
Crope.		
Fish Ushitet Detection		
Fish Habitat Potential		
Critical Habitat (spawning or nursery areas, ground	water upweilings)	
Migratory Obstructions (seasonal, permanent)		
day		
Note any fish observations		
Waterbody Notes	M.P.	
Natural Watercourse Trapezoidal Channel	Grassed Swale	Buriod Tilo
Surficial Drainage (i.e. furrows) Dugout Pond		
Sufficial Drainage (i.e. luffows) Dugout Polic	Dominated by Aquatic Vet	g Dry
Other Habitat Notes, Incidental Wildlife Observa	tions, etc.	
Field Notes Authored by Canton Field Notes (QA/QCed by	



No lorger in Proj. Loca m.P.

REAX

7	WIND FARM	WATERBODY	RAPID	ASSESSMENT	FORM

Station #	Project Name Niagara Wind	
Watercourse Name unknown	Project # 160958269	
Photos Field Staff J. Coon e , K. Clayton Time Time		
Descriptive Location <u>Facing</u> West look.		
	THE REP. LOTT CA PAY DANION RE	
Water Quality		
Dissolved Oxygen (mg/L) 5.89 pH_7	7.95 Conductivity (μS/cm) 3236	
Water Temperature (°C)3_3	Air Temperature (°C)	
Time in situ measurements taken 9:39	7.11 Temperature (o)	
Watercourse Dimensions & Morphology	,	
Mean Watercourse Width (m)	Maximum Pool Depth < m (cm)	
Mean Bankfull Width (m)		
% Riffle % Poo		
Evidence of eroding banks, Comments on bank sta	DIIITY all vegetated - tarry stable	
Substrate (% cover)		
BedrockCobble	60 Sand 40 Silt Muck	
BoulderGravel	So Clay Marl Detritus	
In-water Cover	ty	
Cover Types Present (circle): Undercut Ban	ks Deep Pool Watercress Aquatic Veg	
Overhanging Vegetation Woody Debris		
Riparian Zone		
Riparian Cover (% of watercourse shaded, dominal	nt vegetation, mature or early successional)	
53 RCB earl	7	
Adjacent Land Use	,	
Fish Habitat Potential		
Critical Habitat (spawning or nursery areas, ground		
Migratory Obstructions (seasonal, permanent)	traging	
permanen	nt.	
Note any fish observations 10+5 of Ca	201-lobig individuals.	
Waterbody Notes		
Natural Watercourse Trapezoidal Channel	Grassed Swale Buried Tile	
Surficial Drainage (i.e. furrows) Dugout Pond	Dominated by Aquatic Veg Dry	
Other Habitat Notes, Incidental Wildlife Observa	tions, etc. Heron	
V Claulen	IO A TE	
Field Notes Authored by Field Notes	QA/QCed by	



& No longer in Projetoch up

Janet	None
Station # \(\(\begin{array}{c} - \begin{array}{c} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	Project Name Niagara Wind wes
Watercourse Name unknown	Project # 160958269
	Field Staff J. Voone, K. clayfon
Photos	Time 9:47
Weather conditions in previous 24 hrs	
GPS Coordinates (Zone) 17 E 6179	38 N 4770529 Datum Nad 83
	avidean Rd south of mitheville Rd
Cuth of 10-1	27/1000 P A JAIS NOT IMITITIEVING RE
Water Quality — ary	
Dissolved Oxygen (mg/L) pH	Conductivity (μS/cm)
Water Temperature (°C)	Conductivity (μS/cm) Air Temperature (°C)
Time in situ measurements taken	
Watersource Dimensions & March start	
Watercourse Dimensions & Morphology	Marrian Deal Death (and)
Mean Watercourse Width (m)	Maximum Pool Depth(cm)
Mean Bankfull Width (m)	Mean Water Depth(cm)
% Riffle % Peo	
Evidence of eroding banks, Comments on bank sta	tollity
······································	
Substrate (% cover)	
BedrockCobble BoulderGravel	10 Sand 90 Silt Muck
Boulder Gravel	So Clay Marl Detritus
In-water Cover	
Cover Types Present (circle): Undercut Ban	ka Doop Bool Wetergroep Agustia Vag
Overhanging Vegetation Woody Debris	
	Boulder Other
Riparian Zone an east fixed.	
Riparian Cover (% of watercourse shaded, dominal	nt vegetation, mature or early successional)
0% on west side ac	2% on East ride RGG, Early
Adjacent Land Use	
tormand say	
Fish Habitat Potential	
Critical Habitat (spawning or nursery areas, ground	water upwellings)
Minuster Obet Higgs (2000)	
Migratory Obstructions (seasonal, permanent)	
Note any fish observations	MINISTER 100 100 100 100 100 100 100 100 100 10
Note any list observations	
Waterbody Notes	
Natural Watercourse Trapezoidal Channel	
Surficial Drainage (i.e. furrows) Dugout Pond	
En west si	
Other Habitat Notes, Incidențal Wildlife Observa	
in no are - cauld be played thin	
REA (caudon't drive through, has ag	wate veg defined channel).
- I day tan	A A form
Final Ricks A. Managed L. 1/ (1/1/4/1/1/4/1/4/4/4/4/4/4/4/4/4/4/4/4/4	0.4.00 . 1.1



No longer in Proj. Cocharl REA WIND FARM WATERBODY RAPID ASSESSMENT FORM

	_ / \
Station # $10-3$	Project Name Niagara Wind
Watercourse Name_unknaw	Project # 160950269
Photos	Field Staff J. Keene rely Clarker
Date June 21/12.	Time 9:54
Weather conditions in previous 24 hrs	
GPS Coordinates (Zone) 17 E 617	946 N. 4769975 Datum Nad 8.
	viden Road South of 16-2
North of Sixteer	Rd
Water Quality - /	10 water
Dissolved Oxygen (mg/L) pH	Conductivity (uS/om)
Water Temperature (°C)	
Time in situ measurements taken	Air Temperature (°C) 30°C
Watercourse Dimensions & Morphology	Main a David David
Mean Watercourse Width(m)	Maximum Pool Depth(cm)
Mean Bankfull Width 3 (m)	Mean Water Depth(cm)
% Riffle% Po	/ / / / / / / / / / / / / / / / / / / /
Evidence of eroding banks, Comments on bank s	tability
Substrate (% cover)	
BedrockCobble	20 Sand 40 Silt Muck
Boulder Gravel	
Graver	<u> </u>
In-water Cover Cover Types Present (circle): Overhanging Vegetation Woody Debris	nks Deep Pool Watercress Aquatic Veg Boulder Other
Riparian Zone Riparian Cover (% of watercourse shaded, domina	ant vegetation, mature or early successional)
Adjacent Land Llee	
Adjacent Land Use	farmland
T G / CG / T / Cd / A	TUANTUMA
Fish Habitat Potential	
Critical Habitat (spawning or nursery areas, groun	dwater upwellings)
Migratory Obstructions (seasonal, permanent)	
Note any fish observations	
Waterbody Notes	
Natural Watercourse Trapezoidal Channe	I Grassed Swale Buried Tile
Surficial Drainage (i.e. furrows) Dugout Por	nd Dominated by Aquatic Veg Dry
Other Habitat Notes, Incidental Wildlife Observ	ations, etc. 'navoca) Channal Gula
	He bushy -no water
	The state of the s
. / al . !	
Field Notes Authored by K. Clayda. Field Notes	s QA/QCed by



vest of	Side PDR
L	>5D-4
east	>REA

Station #	Proied	t Name IN La a	ara Du	. (0)
Watercourse Name_unknawn	Projec	t Name <u>Niag</u> t # 160958 Staff <u>Voon</u>	269	
	Field	Staff Voon	2 K - (a	14-61
Photos	Time	18:00		
Weather conditions in previous 24 hrs				
GPS Coordinates (Zone) 17T E	17954	N 476	,9752 Da	atum Mad
Descriptive Location Off Of Po	A Day	don Roll	action	sixteen
Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken	pHAir Te	_ Conductivity (μS mperature (°C)	S/cm)	
		· ·		
Watercourse Dimensions & Morphology				
Mean Watercourse Width (m) Mean Bankfull Width (m)	Maxim	num Pool Depth	(C	n)
Mean Bankfull Width (m)	Mean	Water Depth	(CI	n)
% Riffle	% Pool	%	Run	% FI
Evidence of eroding banks, Comments on b	ank stability			
Substrate (% cover)				
Redrock Cobble	· 18 -	Sand HO	Cilt	Muck
Bedrock Cobble Boulder Gravel	,		Siit Marl	
Graver		_Clay	wari	Detritus
In-water Cover				
	cut Banke	Doon Pool We	atororogo (Aguatia Voa
Cover Types Present (circle): Under	cut Banks			
Cover Types Present (circle): Under	cut Banks Boulde		atercress (
Cover Types Present (circle): Underdown Overhanging Vegetation Woody Debris	cut Banks Boulde			
Cover Types Present (circle): Underdoverhanging Vegetation Woody Debris Riparian Zone	Boulde	er Other		
Cover Types Present (circle): Underdoverhanging Vegetation Woody Debris Riparian Zone	Boulde	er Other		
Cover Types Present (circle): Under Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, of cast), typha 1026 (%)	Boulde	er Other		
Riparian Zone	Boulde	er Other		
Cover Types Present (circle): Under Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, of cast), typha 1026 (%)	Boulde	er Other		
Cover Types Present (circle): Under Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, of the control of the contr	Boulde	er Other		
Cover Types Present (circle): Under Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, of Cast), typha 1024 (1994) Adjacent Land Use Fish Habitat Potential	Boulde	tation, mature or ea		
Cover Types Present (circle): Under Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, of Cast), typha 1024 (1994) Adjacent Land Use Fish Habitat Potential	Boulde	tation, mature or ea		
Cover Types Present (circle): Under Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, of Cast), typha Jozeff Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas,	Boulde dominant vege Scrub,	tation, mature or ea		
Cover Types Present (circle): Under Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, of cast), typha 1026	Boulde dominant vege Scrub,	tation, mature or ea		
Cover Types Present (circle): Under Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, of Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, Migratory Obstructions (seasonal, permaner	Boulde dominant vege Scrub,	tation, mature or ea		
Cover Types Present (circle): Under Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, of Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, Migratory Obstructions (seasonal, permaner Note any fish observations	Boulde dominant vege Scrub,	tation, mature or ea		
Cover Types Present (circle): Under Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, of Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, Migratory Obstructions (seasonal, permaner Note any fish observations	Boulde dominant vege Scrub,	tation, mature or ea		
Cover Types Present (circle): Under Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, of Cast Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, Migratory Obstructions (seasonal, permaner Note any fish observations	Boulde dominant vege Scrub, groundwater u	tation, mature or each	arly succession	nal)
Cover Types Present (circle): Under Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, of Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, Migratory Obstructions (seasonal, permaner Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Ch	Boulde dominant vege Cerub, groundwater unt)	tation, mature or each	arly succession	ed Tile
Cover Types Present (circle): Under Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, of Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, Migratory Obstructions (seasonal, permaner Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Ch Surficial Drainage (i.e. furrows) Dugo	Bouldedominant vege	tation, mature or each	arly succession	nal)
Cover Types Present (circle): Under Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, of Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, Migratory Obstructions (seasonal, permaner Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Ch Surficial Drainage (i.e. furrows) Dugo	Bouldedominant vege	tation, mature or each of the station of the statio	arly succession Buriuatic Veg	ed Tile
Cover Types Present (circle): Underdoverhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, of Cart) typha 102 market of a large of the course of the course shaded, of Cart) typha 102 market of a large of the course	Bouldedominant vege	pwellings) Grassed Swale Dominated by Aquetc.	Buri	ed Tile
Cover Types Present (circle): Under Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, of Cart Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, Migratory Obstructions (seasonal, permaner Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Che Surficial Drainage (i.e. furrows) Dugo Other Habitat Notes, Incidental Wildlife O	groundwater unt) nannelut Pond bservations, e	cr Other tation, mature or execution, mature or execution powellings) Grassed Swale Dominated by Aquetc. ** east Specific Power powe	arly succession Buriuatic Veg	ed Tile
Cover Types Present (circle): Underdoverhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, of Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, Migratory Obstructions (seasonal, permaner Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Chesurficial Drainage (i.e. furrows) Dugo Other Habitat Notes, Incidental Wildlife O	Bouldedominant vege	cr Other tation, mature or execution, mature or execution powellings) Grassed Swale Dominated by Aquetc. ** east Specific Power powe	Buri	ed Tile
Cover Types Present (circle): Under Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, of Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, Migratory Obstructions (seasonal, permaner Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Chesurficial Drainage (i.e. furrows) Dugo Other Habitat Notes, Incidental Wildlife O	groundwater unt) nannelut Pond bservations, enter of Chan	grassed Swale Dominated by Aquetc.	Buriuatic Veg	ed Tile
Cover Types Present (circle): Under Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, of Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, Migratory Obstructions (seasonal, permaner Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Chesurficial Drainage (i.e. furrows) Dugo Other Habitat Notes, Incidental Wildlife O	groundwater unt) nannelut Pond bservations, enter of Chan	grassed Swale Dominated by Aquetc.	Buriuatic Veg	ed Tile





Cta	ntec
Ju	IIIEC

Station # 19-1	Project Name Niagara Wind
Watercourse Name unknown	Project # 160950269
The state of the s	Field Staff J. Koons V. Clayton
Photos	Time \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\
	thurnid
GPS Coordinates (Zone) 17T E (al (a7)	
Descriptive Location off of Mc Collum Canc. 4.	Rd, South of Sixteen Rd, Nof
Water Quality — dm/	
	Conductivity (μS/cm)
Water Temperature (°C)	Air Temperature (°C)
Time in situ measurements taken	
Watercourse Dimensions & Morphology	
Moon Watercourse Width (m)	Maximum Pool Depth(cm)
Mean Bankfull Width(m)	Mean Water Depth(cm)
Mean Bankfull Width (m) % Poo	ol% Run% Flat
Evidence of eroding banks, Comments on bank sta	ubility
Substrate (% cover)	
Bedrock Cobble	10 Sand 10 Silt Muck
Boulder Gravel	Sand Silt Muck Clay Marl Detritus
	,
In-water Cover Cover Types Present (circle): Undercut Ban Overhanging Vegetation Woody Debris	ks Deep Pool Watercress Aquatic Veg Boulder Other
Riparian Zone Riparian Cover (% of watercourse shaded, domina	nt vegetation, mature or early successional)
Adjacent Land Use	
Fish Habitat Potential	
Critical Habitat (spawning or nursery areas, ground	water upwellings)
Migratory Obstructions (seasonal, permanent)	
Note any fish observations	
Waterbody Notes Natural Watercourse Trapezoidal Channel Surficial Drainage (i.e. furrows) Dugout Pond	Dominated by Aquatic Veg Dry
Other Habitat Notes, Incidental Wildlife Observa	itions, etc. see photo?
	tract M.P. large a reasof Surficial
- no agrianci	Hey . Walnuge
Field Notes Authored by 6.69View Field Notes	QA/QCed by





WIND I AITIII WATE	.11000	I IIAI ID AGGEG	DIVILIAL I OLIVI	The state of the s
Stantec				
Station # 19 - 2		Project Name	agara W	ind
Watercourse Name unknow		Project #1(00°	158269	
Photos June 20/12.		Field Staff J Vo	me, k. cl	auton_
		Time \(\scale \) : < <	7	
Weather conditions in previous 24 hrs		<u>Ahumid</u>		
GPS Coordinates (Zone) 17 E		79 N 4		Datum Nad 8.
Descriptive Location off of C	onc.	7 , tast of	- Mc Collur	n voaa
Water Quality \ -no wa	Her	•		
	На	Conductivit	v (uS/cm)	
Dissolved Oxygen (mg/L) Water Temperature (°C)	1	Air Temperature (°C	30°04	·····
Time in situ measurements taken		,,		
Watercourse Dimensions & Morpholog	y			
Mean Watercourse Width(m)	•	Maximum Pool Dep	th(cm)
Mean Bankfull Width(m)		Mean Water Depth_		cm)
	% Poc		% Run	% Flat
Evidence of eroding banks, Comments on	i bank sta	ability		
Substrate (% cover)				
	ole	Sand	Silt	Muck
Boulder Grave	el	Clay	Marl	Detritus
In-water Cover				
Cover Types Present (circle): Unde	ercut Ban	ks Deen Pool	Watercress	Aquatic Veg
Overhanging Vegetation Woody Debr				riquatio vog
Riparian Zone	ممائمت ا			
Riparian Cover (% of watercourse shaded	, dominai	nt vegetation, mature	or early succession	onal)
Adjacent Land-Use	Tree	J. J. Martos	(m southing	(C)) Cyrig
forcet, farm	Jan	d		0+
Fish Habitat Potential				
Critical Habitat (spawning or nursery areas	s, ground	water upwellings)		
Migratory Obstructions (seasonal, perman	ent)			
Note any fish observations				

Waterbody Notes Other Habitat Notes, Incidental Wildlife Observations, etc. Field Notes QA/QCed by ______





Station # 4-5	Project Name Niagara Wind				
Watercourse Name unknown	Project # 160958269				
Photos Date June 20/12	Field Staff J. Veane, K. Clayton				
Date <u>June 20/12</u> .	Time 4:22 pm				
weather conditions in previous 24 hrs	8 humid.				
GPS Coordinates (Zone) 17T E 6166	40 N 476762 / Datum Nad 8=				
Descriptive Location off of Conc	+ west of part Dalliton				
Water Quality - no water					
Dissolved Oxygen (mg/L) pH	Conductivity (μS/cm)				
Water Temperature (°C)	Air Temperature (°C)				
Time in situ measurements taken	7 iii Tomporature (O)				
The state of the s					
Watercourse Dimensions & Morphology					
Mean Watercourse Width(m)	Maximum Pool Depth(cm)				
Mean Bankfull Width 25-3 (m)	Mean Water Depth(cm)				
% Riffle% Poo	ol% Run% Flat				
Evidence of eroding banks, Comments on bank st	ability				
/					
Substrate (% cover)					
BedrockCobble	Sand 40 Silt Muck SO Clay Marl Detritus				
BoulderGravel	SO Clay Marl Detritus				
In-water Cover	PC				
Cover Types Present (circle): Undercut Bar					
Overhanging Vegetation Woody Debris					
Troody Dobins	Suidoi Otrici				
Riparian Zone					
Riparian Cover (% of watercourse shaded, domina					
829. Typha grasses ea	rly				
Adjacent Land Use	į				
tarm land					
Fish Habitat Potential					
Critical Habitat (spawning or nursery areas, ground	Iwater upwellings)				
Minusters Obstructions (account name and					
Migratory Obstructions (seasonal, permanent)					
Note any fish observations					
Note any list observations					
Waterbody Notes					
Natural Watercourse Trapezoidal Channel					
Surficial Drainage (i.e. furrows) Dugout Pon	d Dominated by Aquatic Veg Dry				
Other Hebitet Notes Insidental Wildlife Observe	ations at a				
Other Habitat Notes, Incidental Wildlife Observa					
- on Sutherde of conc 4 channel is deeply					
incised teroard banks. On	in that of Coad it is				
reavily office Ku					
Field Notes Authored by K. Claufar Field Notes	QA/QCed by				
Field Notes	CANCIONAL TO				

W:\resource\Internal Info and Teams\Aquatic Resources\Field Sheets\Stantec\Form 02 Wind Farm Waterbody Rapid Assessment Form.doc





Station # 19-4	Project Name <u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	agara Wir	nd			
Watercourse Name unknown	Project # 160950269 Field Staff Years, V clayton					
notos Field Staff J. Verne, V. claytan Time 4:3 em						
	Time4 : 31	OVA				
Weather conditions in previous 24 hrs		*				
GPS Coordinates (Zone) 17T E 616	320 N 4	767608 D	atum Nad 8.			
Descriptive Location off of conc	4, west of M	c Collum R	ع م ما			
Water Quality						
Dissolved Oxygen (mg/L) ph	1 Conductivity	(μS/cm)				
Water Temperature (°C) Air Temperature (°C)						
Time in situ measurements taken						
Watercourse Dimensions & Morphology						
Mean Watercourse Width(m)	Maximum Pool Depth)(CI	m)			
Mean Bankfull Width (m)	Mean Water Depth	(CI	m)			
% Riffle%	Pool	_% Run	% Flat			
Evidence of eroding banks, Comments on bank	k stability					
Substrate (% cover)						
Bedrock Cobble	Sand	Silt	Muck			
Boulder Gravel	Clay	Marl	Detritus			
	7					
In-water Cover Cover Types Present (circle): Undercut Overhanging Vegetation Woody Debris			Aquatic Veg			
Riparian Zone Riparian Cover (% of watercourse shaded, dom			nal)			
Adjacent Land Use residential, farm	Y					
Fish Habitat Potential	or and a superior and the superior					
Critical Habitat (spawning or nursery areas, gro	undwater upweilings)					
Migratory Obstructions (seasonal, permanent)						
Note any fish observations						
Waterbody Notes Natural Watercourse Trapezoidal Chan Surficial Drainage (i.e. furrows) Dugout F	nnel Grassed Sv Pond Dominated by	vale Buri v Aquatic Veg	ed Tile			
Other Habitat Notes, Incidental Wildlife Obse	ervations, etc					
Field Notes Authored by Karlander Field N	Notes QA/QCed by					





Station # 19-5 Watercourse Name_unknawn	Project Name Niagara Wind Project # 160950269
Photos Date Weather conditions in provious 24 hrs	Field Staff J. Voone, C. Clayton
Weather conditions in previous 24 hrsh	Time 4:46.
GPS Coordinates (Zone) 17 E 6 17 4	76 N 4767658 Datum Nad 83
Descriptive Location off of Conc H	Datum Nago
Water Quality - a little water	poded a culvert - no ys1
	Conductivity (uS/cm)
Water Temperature (°C)	Conductivity (μS/cm) Air Temperature (°C)
Time in situ measurements taken	
Watercourse Dimensions & Morphology	
Mean Watercourse Width(m)	Maximum Pool Depth(cm)
Mean Bankfull Width(m)% Riffle% Po	Mean Water Depth(cm)
Evidence of eroding banks, Comments on bank st	
Substrate (% cover)	100
Boulder Gravel	Sand (O Silt Muck So Clay Marl Detritus
Graver	So Clay Marl Detritus
In-water Cover Cover Types Present (circle): Undercut Bar Overhanging Vegetation Woody Debris	nks Deep Pool Watercress Aquatic Veg R Boulder Other a gae
Riparian Zone Riparian Cover (% of watercourse shaded, domina	int vegetation, mature or early successional)
Adjacent Land Use	
- farmland (sai	thought conc 4
Fish Habitat Potential (North	hoide of conc.4
Critical Habitat (spawning or nursery areas, ground	lwater upwellings)
Migraton Obstructions (assessed assessed assessed)	ng, fraging, nurser,
Migratory Obstructions (seasonal, permanent)	
Note any fish observations	
Waterbody Notes Natural Watercourse Trapezoidal Channel Surficial Drainage (i.e. furrows) Dugout Pond	Grassed Swale Buried Tile
Dagout I on	Dominated by Aquatic Veg Dry
	- · · · · · · · · · · · · · · · · · · ·
Other Habitat Notes, Incidențal Wildlife Observa	ations, etc. except a except a
Other Habitat Notes, Incidental Wildlife Observa	- · · · · · · · · · · · · · · · · · · ·
Other Habitat Notes, Incidental Wildlife Observa	Alarth Side of road there is an pand on South side it is pooled as
Other Habitat Notes, Incidental Wildlife Observa	Alarth Side of road there is an pand on South side it is pooled as

reachoso	re	RE	A	264	~
					è



Station #	Project Name Niagara Wind - spatar
Station #	Project # 160958269
Photos	
	Time REA
Weather conditions in previous 24 hrs	
GPS Coordinates (Zone) 17T E (a)	8005 N 4768086 Datum Nad 83
Descriptive Location Off of	Part Davidson Rd, Saith of 16. Road.
Water Quality - no water	
Dissolved Oxygen (mg/L)	pH Conductivity (μS/cm)
Water Temperature (°C)	Air Temperature (°C) <u></u>
Time in situ measurements taken	
Watercourse Dimensions & Morphology	
Mean Watercourse Width(m)	Maximum Pool Depth(cm)
Mean Bankfull Width(m)	Mean Water Depth(cm)
% Riffle	% Pool% Run% Flat
Evidence of eroding banks, Comments on ba	ank stability
Substrate (% cover)	
BedrockCobble	Sand 40 Silt Muck Clay Marl Detritus
BoulderGravel	CoClayMarlDetritus
In-water Cover Cover Types Present (circle): Underco	
Riparian Zone Riparian Cover (% of watercourse shaded, d	ominant vegetation, mature or early successional)
Adjacent Land Use	
Fish Habitat Potential Critical Habitat (spawning or nursery areas, g	groundwater upwellings)
Migratory Obstructions (seasonal, permanen	t)
Note any fish observations	
Surficial Drainage (i.e. furrows) Dugou	annel Grassed Swale Buried Tile ut Pond Dominated by Aquatic Veg Dry
Other Habitat Notes, Incidental Wildlife Ob	oservations, etc. <u>Fast side has a defined channel</u>
Taguatic veg, can't driv	e through it on the west side thoir
is a portion real the culsert	-hat is Channelized havever the channel
disappears of the farmer ha	S been driving through it - lots of typha
./ ^\ .	throughatt.
Field Notes Authored by Field	d Notes QA/QCed by





Station # 20-2 Watercourse Name unknown Photos Date June 2//2 Weather conditions in previous 24 hrs GPS Coordinates (Zone) 17T E 6187 Descriptive Location off of Conc 4	Time 10:4	158269 no Kicla 7	atum Nad 83
Water Quality Dissolved Oxygen (mg/L) pH Water Temperature (°C) Time in situ measurements taken	Conductivity Air Temperature (°C	y (μ\$/cm) 	
Watercourse Dimensions & Morphology Mean Watercourse Width	Maximum Pool Dept Mean Water Depth_ ol ability		m) m) % Flat
In-water Cover Cover Types Present (circle): Undercut Bank	SandSandSandSandSandSandSandSandSand_Sand	Marl	MuckDetritus Aquatic Veg
Riparian Zone Riparian Cover (% of watercourse shaded, dominar Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, grounds)	nt vegetation, mature		nal)
Migratory Obstructions (seasonal, permanent) Note any fish observations			
Waterbody Notes Natural Watercourse Trapezoidal Channel _ Surficial Drainage (i.e. furrows) Dugout Pond Other Habitat Notes, Incidental Wildlife Observat	Dominated by	valeBuri Aquatic Veg Sqth Sid a RFA, a uto though M	ed Tile Dry Le of Canc-4 apped by MNR
Field Notes Authored by Field Notes O	A/QCed by WF		

W:\resource\Internal Info and Teams\Aquatic Resources\Field Sheets\Stantec\Form 02 Wind Farm Waterbody Rapid Assessment Form.doc





Station #	Project Name <u>Niagara Wind</u>
Watercourse Name unknown	Project #
Photos ,	Field Staff J. Veene, & Clayton
Date	Time 3:3
Weather conditions in previous 24 hrs	147 N 4765865 Datum Nad 83
GPS Coordinates (Zone) 17T E 6177	vidson Road just south of Silver Rd
Descriptive Location off of Part Day	Diduar Road, just start of the
Water Quality Dissolved Oxygen (mg/L) pH	8·19 Conductivity (μS/cm) 547
Water Temperature (°C) 24 25	Air Temperature (°C) 32°C
Time in situ measurements taken/3	30
Watercourse Dimensions & Morphology	
Mean Watercourse Width (m)	Maximum Pool Depth (cm)
Mean Bankfull Width (m)	Mean Water Depth ONO (cm)
% Riffle% Po	JO
Evidence of eroding banks, Comments on banks	
Substrate (% cover)	
	10 Sand 50 Silt Muck
Boulder Gravel	O_ClayDetritus
In-water Cover Cover Types Present (circle): Undercut Ba Overhanging Vegetation Woody Debris	anks Deep Pool Watercress Aquatic Veg
Riparian Zone Riparian Cover (% of watercourse shaded, domin	nant vegetation, mature or early successional)
Adjacent Land Use	iheat
Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground	ndwater unwellings)
Chilical Habitat (spawning of hursery areas, ground	wreng & faraging
Migratory Obstructions (seasonal, permanent)	,
bernane	n+
Note any fish observations Fish Co	ming to surface for air
Waterbody Notes Natural Watercourse Trapezoidal Chann	el Grassed Swale Buried Tile
Surficial Drainage (i.e. furrows) Dugout Po	ond Dominated by Aquatic Veg Dry
Other Habitat Notes, Incidental Wildlife Obser	lots of ducknowled on East side of PDE
Field Notes Authored by K. Claytan Field Not	tes QA/QCed by



Von-	REA	Z	M
IVOVI	1		

Station # $\propto 4^{-1}$		Project Name	agara WII	(0)
Watercourse Name unkna	<u> </u>	Project #1(009	50269	
Photos Date June 21/12		Project Hame 1009 Field Staff 1009	La Kiclar	Han
Date Oune 21/12				
Weather conditions in previous	24 hrs		3à°C+	
GPS Coordinates (Zone) 17	T E 61716	<u> </u>	<u> 16 4866 </u>	atum Nad 83
Descriptive Location off	of Yaugh	n ed A Por	+ Dawids	<u>nater</u> s
501+	<u> </u>			·
Water Quality Dissolved Oxygen (mg/L) Water Temperature (90)	no wat	-C-V		
Dissolved Oxygen (mg/L)	nH	Conductivity	(uSlom)	
Dissolved Oxygen (mg/L) Water Temperature (°C) Time in city mass removes to be	Pi '	Air Temporature (°C)	(μο/σιι)	
Time in situ measurements take	en .	All reinbelature (C)	$-\mathcal{O}\mathcal{A}$	
Watercourse Dimensions & N		And the state of t		
Mean Watercourse Width	(m) /	Maximum Pool Depti	n(cr	n)
Mean Bankfull Width	· (m) /	Mean Water Depth	(cr	n)
% Riffle	% Poo		_% Run`	% Flat
Evidence of eroding banks, Cor	nments on bank sta	hilih.		
Substrate (% cover)				
Bedrock	Cobble	Sand	Silt	Muck
Boulder	Gravel	Clav	Marl	Nack Detritus
	/			
In-water Cover	,			
Cover Types Present (circle):	Undercut Bank	s Deep Pool	Watercress (Aquatic Veq
Overhanging Vegetation W	oody Debris			
		_		
Riparian Zone	a a alacada at at at at		_	
Riparian Cover (% of watercours	se snaded, dominan	t vegetation, mature of	or early succession	al)
Adjacent Land Use		7		
Adjacent Land Ose	and read	intal		
	$\alpha \alpha$, α	CYTTCL!		
Fish Habitat Potential				
Critical Habitat (spawning or nur	reery areas aroundy	rator unwallings)		
Constant (opawing or nar	sory areas, grounds	vater upweilings)		
Migratory Obstructions (seasona	al. permanent)			
	, p			
Note any fish observations	Was constituted by .			
Note any fish observations	Spengerated 9			
	dinascreed*			
Waterbody Notes	Stranger of 1			
Waterbody Notes Natural Watercourse Tra	apezoidal Channel _	Grassed Sw	rale Burie	ed Tile
Waterbody Notes Natural Watercourse Tra	apezoidal Channel _ Dugout Pond	Grassed Sw	rale Burie	ed Tile
Surficial Drainage (i.e. furrows)_	Dugout Pond	Dominated by	Aquatic Veg	
Waterbody Notes Natural Watercourse Tra Surficial Drainage (i.e. furrows)_ Other Habitat Notes, Incidenta	Dugout Pond_ I Wildlife Observat	Dominated by	Aquatic Veg	
Waterbody Notes Natural Watercourse Tra Surficial Drainage (i.e. furrows)_ Other Habitat Notes, Incidenta	Dugout Pond	Dominated by	Aquatic Veg	
Waterbody Notes Natural Watercourse Tra Surficial Drainage (i.e. furrows) Other Habitat Notes, Incidenta	Dugout Pond I Wildlife Observati Apple but	Dominated by	Aquatic Veg	
Waterbody Notes Natural Watercourse Tra Surficial Drainage (i.e. furrows)_ Other Habitat Notes, Incidenta	Dugout Pond I Wildlife Observati Apple but	Dominated by	Aquatic Veg	
Waterbody Notes Natural Watercourse Tra Surficial Drainage (i.e. furrows) Other Habitat Notes, Incidenta Channe A Channe The	Dugout Pond I Wildlife Observat Appel, but I dran 2000 A 24-1 Flav	Dominated by	Aquatic Veg	
Waterbody Notes Natural Watercourse Tra Surficial Drainage (i.e. furrows) Other Habitat Notes, Incidenta	Dugout Pond I Wildlife Observati Apple but	Dominated by	Aquatic Veg	
Waterbody Notes Natural Watercourse Tra Surficial Drainage (i.e. furrows)_ Other Habitat Notes, Incidenta Channe A Part Dan Channe A Part Dan	Dugout Pond I Wildlife Observati A A A A A A A A A A A A A A A A A A A	Dominated by ions, etc. July Sindistrict Sinto A/QCed by	Aquatic Veg	Dry Dry a Cornidor





	11, 1200
Station # $23-$	Project Name Niagara Wind Project # 160950269
Watercourse Name unknown	Project # 160958269
Photos	rield Staff Color
Date June 21/12.	Time <u>14:05</u>
Weather conditions in previous 24 hrs	ot thurnid
GPS Coordinates (Zone) 17 E (ol(a	0013 N 4764798 Datum Nad 83
Descriptive Location off of Vaughn	KOQQ 1061+0+24-1
no no	water
Water Quanty	
	I Conductivity (μS/cm) Air Temperature (°C)3 2°C
Water Temperature (°C)	Air Temperature (°C)
Time in situ measurements taken	
Watercourse Dimensions & Morphology	- no real channe
Mean Watercourse Width (m)	Maximum Pool Depth(cm)
Mean Watercourse Width(m) Mean Bankfull Width(m)	Mean Water Depth(cm)
% Riffle%	Pool% Run% Flat
Evidence of eroding banks, Comments on bank	stability
/	
Substrate (% cover)	
Bedrock Cobble	SandSiltMuck
BoulderGravel	Clay <u>Marl</u> Detritus
In-water Cover	Base Bask Watersteen Agustic Von
Cover Types Present (circle): Undercut I	Banks Deep Pool Watercress Aquatic Veg
Overhanging Vegetation Woody Debris	Boulder Other
Riparian Zone	
Riparian Cover (% of watercourse shaded, dom	ninant vegetation, mature or early successional)
100%, RCG, Ear	
Adjacent Land Use	
demonstrated by agreement	
Fish Habitat Potential	unduster unwellings)
Critical Habitat (spawning or nursery areas, gro	undwater upwenings)
Migratory Obstructions (seasonal, permanent)	
dv4	
Note any fish observations	
Waterbody Notes	
Natural Material Chan	nnel Grassed Swale Buried Tile
Surficial Drainage (i.e. furrows) Dugout F	Pond Dominated by Aquatic Veg Dry
Sufficial Draffage (i.e. fullows) Dugout 1	Dominated by Aquatio veg Diff
Other Habitat Notes, Incidental Wildlife Obse	ervations, etc.
Red Canan grass vig	ht by road walittle channel
definition thather	on no change (Clom)
ee st	
Field Nation Authorized by K. C. A. Attico	lotes ON/OCod by ME



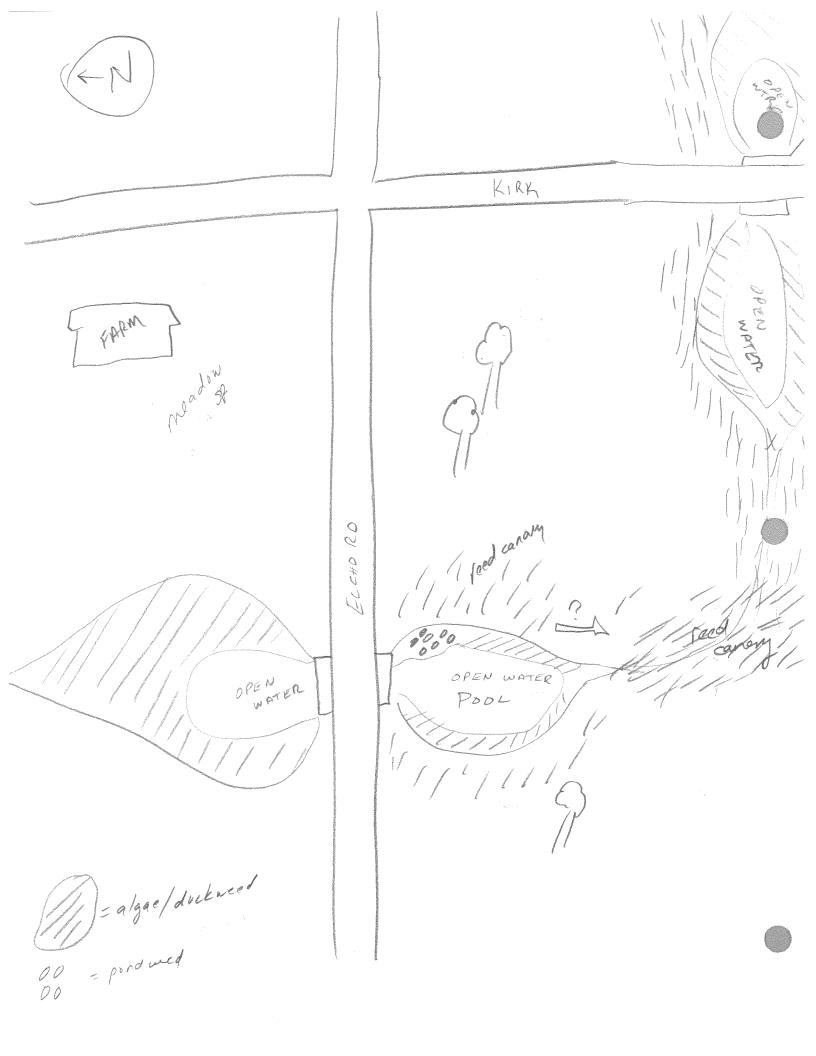
WIND FARM WATERBODY RAPID ASSESSMENT FORM, Non READ No side

Station #	Project Name Niagara Wind Project # 160950269 Field Staff News Country Time 19: 19 An unit of the North Nad 8
Water Quality Dissolved Oxygen (mg/L) 4.10 pH_ Water Temperature (°C) 23.82 Time in situ measurements taken 14.22	8.18 Conductivity (µS/cm) 674 Air Temperature (°C) 30 °C+
Watercourse Dimensions & Morphology Mean Watercourse Width	ool% Run% Flat
Substrate (% cover) BedrockCobble BoulderGravel	Sand Go Silt Muck So Clay Marl Detritus
In-water Cover Cover Types Present (circle): Undercut Ba Overhanging Vegetation Woody Debris Riparian Zone	anks Deep Pool Watercress Aquatic Veg Boulder Other agae
Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground potential)	ndwater upwellings)
Migratory Obstructions (seasonal, permanent) Note any fish observations	
Waterbody Notes Natural Watercourse Trapezoidal Channe Surficial Drainage (i.e. furrows) Dugout Poi	el Grassed Swale Buried Tile nd Dominated by Aquatic Veg Dry
Other Habitat Notes, Incidental Wildlife Observation	vations, etc. Sa. Nan eff - SD Walth ed Channel, aguatic utg.
Field Notes Authored by // Clayter Field Note	s QA/QCed by

REA



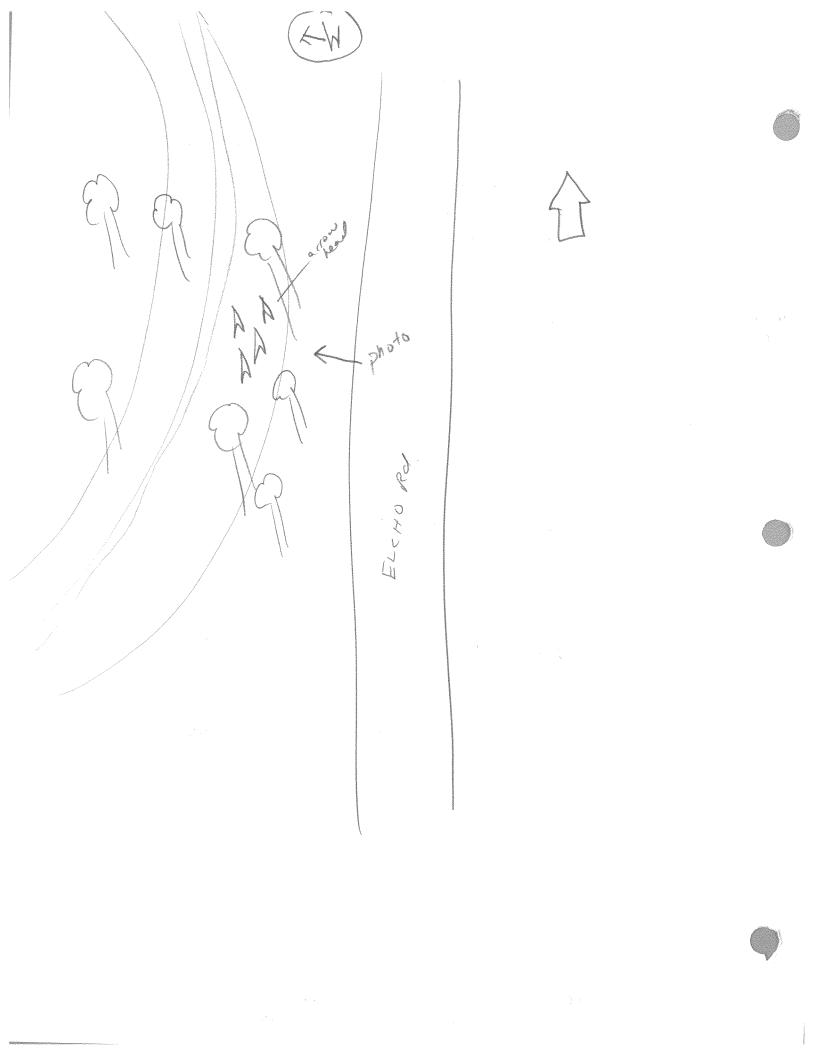
Station # 26-1	Project Name Niagara Wind
Watercourse Name Un Known	Project #_//00950269
	Field StaffME_MF
Photos See photo Log Date 2012 06 18	Time
Weather conditions in previous 24 hrs	(O(CCID
GPS Coordinates (Zone) 17 E 0617	-964 N 4763459 Datum NAO8:
Descriptive Location On Elcho Rd -	- 70 m east of Port Davidson Rd.
Water Quality	
Dissolved Oxygen (mg/L) 017 pH_	9 03 Conductivity (μS/cm) 436 Air Temperature (°C) 30°2
Water Temperature (°C)	Air Temperature (°C)
Time in situ measurements taken / 4:1)	
Watercourse Dimensions & Morphology	
Mean Watercourse Width / 5 (m)	Maximum Pool Depth <u>► 165</u> (¢m)
Mean Watercourse Width / 5 (m) Mean Bankfull Width ~ 25 (m)	Mean Water Depth(cm)
% Riffle% Po	ool% Run% Flat
Evidence of eroding banks, Comments on bank s	tabilityobserved
Substrate (% cover)	
BedrockCobble	Sand 40 Silt 40 Muck 20 Clay Marl Detritus
Boulder Gravel	20 Clay Marl Detritus
Cover Types Present (circle): Undercut Ba Overhanging Vegetation Woody Debris	
Riparian Zone Riparian Cover (% of watercourse shaded, domina	ant vegetation, mature or early successional)
Adjacent Land Use	
Faim buildings meadow fields.	
We do not have a second of the	
Fish Habitat Potential	
Critical Habitat (spawning or nursery areas, ground	dwater upwellings)
Migratory Obstructions (seasonal, permanent)	
Note any fish observations	
14016 any listi observations	
Waterbody Notes Natural Watercourse Trapezoidal Channel Surficial Drainage (i.e. furrows) Dugout Pone	Grassed Swale Buried Tile d Dominated by Aquatic Veg Dry
Other Habitat Notes, Incidental Wildlife Observa	tions, etc. Jumping fish sp
·	
	,
Field Notes Authored by Field Notes	QA/QCed by







Stantec			- 1 11 1	\sim
station #		Project Name Na	Cara Com	<u> </u>
Vatercourse Name UN Chok		Project #//\delta	SURWI	
Photos See Moto log		Field Staff <u>ME M</u>	11	
		Time 14-00		
Date 10 0 18 0 18 0 19 0 19 0 19 0 19 0 19 0	4 hrs Minor Pre	cip-	n a // A - il A	atum MAS
veather conditions in previous a	E 06184	19 N 49		
GPS Coordinates (Zone) 171	cho Rd ~ 430°	m west of Ki	rk rd on s	00+h
Side No across , rd s			minatoraijaga.	
Nater Quality	pH	Conductivity ((μS/em)	~
Dissolved Oxygen (mg/L)	Pn	Air Temperature (°C)	American State Control of the Contro	
Mater Temperature (°C)		All Temperature (9).		
Time in situ measurements take	n	. 2		
Watercourse Dimensions & M	orphology		15	m)
Mean Watercourse Width	(m)/	Maximum Pool Depth	-	m)
Mean Bankfull Width	(m)	Mean Water Depth		··· <i>)</i>
	70 FUU		_% Run	,,,
Evidence of eroding banks, Con	nments on bank sta	bility		
	6	, and the second se		
Substrate (% cover)			Silt	Muck
Bedrock	Cobble	Sand	Marl	Detri
Boulder	Gravel	Clay	Mail	
Overrianging together	Undercut Ban	Boulder Other_	Watercress or early succession	
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercounts)	loody Debris	Boulder Other_		
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercould be a second se	loody Debris	Boulder Other_		
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercounts)	loody Debris	Boulder Other_	or early successio	onal)
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercounts) Adjacent Land Use	/oody Debris rse shaded, domina	Boulder Other_ nt vegetation, mature o	or early successio	onal)
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercounts) Adjacent Land Use	/oody Debris rse shaded, domina	Boulder Other_ nt vegetation, mature o	or early successio	onal)
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercour) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or no	rse shaded, domina	Boulder Other_ nt vegetation, mature o		onal)
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercour) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or no	rse shaded, domina	Boulder Other_ nt vegetation, mature o	or early successio	onal)
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercounts) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or number of the counts) Migratory Obstructions (season	rse shaded, domina	Boulder Other_ nt vegetation, mature of	or early successio	onal)
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercounts of the content of the con	rse shaded, domina	Boulder Other_ nt vegetation, mature of	or early successio	onal)
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercounts) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or number of the counts) Migratory Obstructions (season	rse shaded, domina	Boulder Other_ nt vegetation, mature of	or early successio	onal)
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercour) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or number) Migratory Obstructions (season Note any fish observations	rse shaded, domina	nt vegetation, mature of	or early succession	onal)
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercour) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or number) Migratory Obstructions (season Note any fish observations	rse shaded, domina	nt vegetation, mature of	or early succession	onal)
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercour) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or number) Migratory Obstructions (season Note any fish observations	rse shaded, domina	nt vegetation, mature of	or early succession	onal)
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercourse) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or number of the course) Migratory Obstructions (season of the course) Waterbody Notes Natural Watercourse Surficial Drainage (i.e., furrows)	rse shaded, dominary of the control	Boulder Other_ nt vegetation, mature of the control of the contro	wale Buy Aquatic Veg	onal) S uried Tile Dry
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercourse) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or number of the course) Migratory Obstructions (season of the course) Waterbody Notes Natural Watercourse Surficial Drainage (i.e., furrows)	rse shaded, dominary of the control	Boulder Other_ nt vegetation, mature of the control of the contro	wale Buy Aquatic Veg	onal) S uried Tile Dry
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercourse) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or number of the course) Migratory Obstructions (season of the course) Waterbody Notes Natural Watercourse Surficial Drainage (i.e., furrows)	rse shaded, dominary of the control	Boulder Other_ nt vegetation, mature of the control of the contro	wale Buy Aquatic Veg	onal) S uried Tile
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercour) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or number) Migratory Obstructions (season Note any fish observations	rse shaded, dominary of the control	Boulder Other_ nt vegetation, mature of the control of the contro	wale Buy Aquatic Veg	onal) S uried Tile Dry
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercourse) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or number of the course) Migratory Obstructions (season of the course) Waterbody Notes Natural Watercourse Surficial Drainage (i.e., furrows)	rse shaded, dominary of the control	Boulder Other_ nt vegetation, mature of the control of the contro	wale Buy Aquatic Veg	onal) S uried Tile Dry
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or number of the county of	rse shaded, dominated and the service of the servic	Boulder Other_ nt vegetation, mature of the control of the contro	wale Buy Aquatic Veg	uried Tile
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or number of the county of	rse shaded, dominated and the service of the servic	Boulder Other_ nt vegetation, mature of the control of the contro	wale Buy Aquatic Veg	onal) S uried Tile
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercourse) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or number of the course) Migratory Obstructions (season of the course) Waterbody Notes Natural Watercourse Surficial Drainage (i.e., furrows)	rse shaded, dominar rse shaded, dominar rsery areas, ground rapezoidal Channel Dugout Pon tal Wildlife Observe	Boulder Other_ nt vegetation, mature of the control of the contro	waleBuy Aquatic Veg	uried Tile

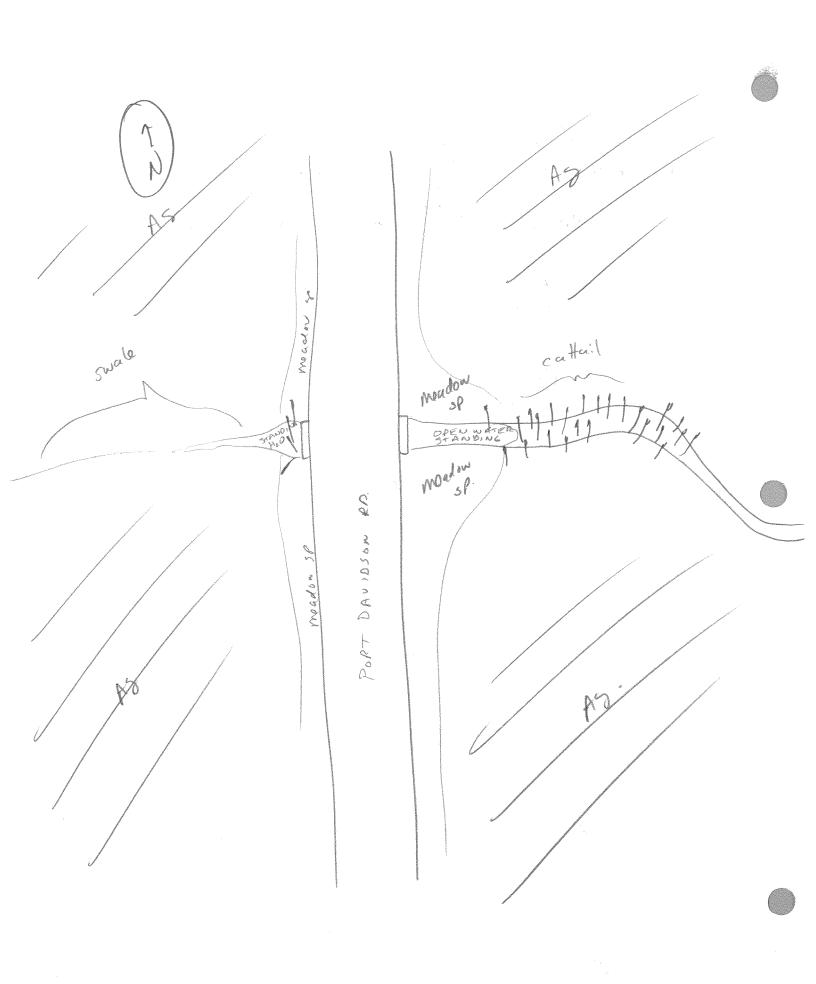




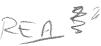


WIND FARM WATERBODY RAPID ASSESSMENT FORM
REA dis but partial REA vis thear culvert only

Station # 28-1	Pro	oject Name	Viagara L	wind
Watercourse Name on Known	Pro	oject # //^/	7950260	9
Photos See photo log. Date 2012 06 19	Fie	eld Staff	MEME	
Date 2012 06 19	Tin	0 AG: AII		
Weather conditions in previous 24 hrs	MMO prec	:10-		
Weather conditions in previous 24 hrs GPS Coordinates (Zone)	06/747	3- N	4762295	Datum NOAO
Descriptive Location On Post Do	2011150n Rd ~	400m n	oith of Zu	instein Rd.
Water Quality				
Dissolved Oxygen (mg/L) 3.49	nH 7.79	Conducti	uibe (Clama)	w m
Dissolved Oxygen (mg/L) 2 4 9 Water Temperature (°C) 23.82	Air.	Tomporature /	vity (μο/cm)/	003
Time in situ measurements taken		remperature (· ()	
Watercourse Dimensions & Morpho	logy			
Mean Watercourse Width(r	m) Mai	kimum Pool De	pth15.0	(cm)
Mean Watercourse Width 20 (r Mean Bankfull Width 25 (r	n) Mea	an Water Depth	7.0	(cm)
70 RIIIIE / 00	% P001		% Dun	0/ E
Evidence of eroding banks, Comments	on bank stability	None of	oscived.	
Substrate (% cover)				
Bedrock C	obble 20	Sand	40 Sitt	30 Muck
BoulderG	ravel 10	Clay	Mari	Mdck Detritus
Overhanging Vegetation Woody Description Woody D			or early succes	ssional)
Adjacent Land Use				
Fish Habitat Potential Critical Habitat (spawning or nursery are	∍as, groundwater	upwellings)		
Migratory Obstructions (seasonal, perma	anent)			
dry etimes	.			•
Note any fish observations				
Vaterbody Notes /				
	al Channel	C		_ /
Surficial Drainage (i.e. furrows) Drainage	al Channel ugout Pond	_ Grassed Si Dominated b	wale <u> </u>	Buried Tile Dry
Other Habitat Notes, Incidental Wildlif			-	
		U/	0 /	
100m/		. where we		
eld Notes Authored by	Field Notes QA/QCed	by MEE	/	







WIND FARM WATERBODY RAPID ASSESSMENT FORM Road side accessionly. Project Name Niagara Wind Station #

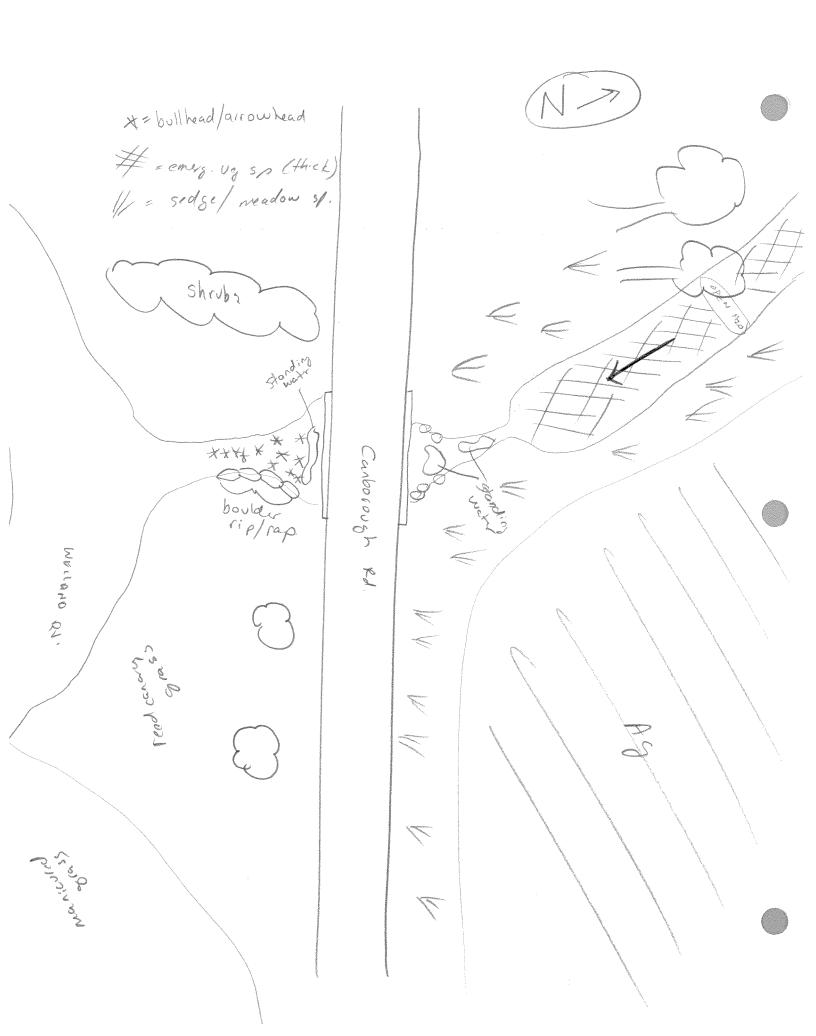
Photos See photo log Date 2012 106 19 Weather conditions in accidence 24 has	Field Staff ME, ME
	Field Staff <u>me mr</u> Time 09:23
Weather conditions in previous 24 hrs	inor arcia
GPS Coordinates (Zone) 174 E Ok	
Descriptive Location On Polt Davidso	on Rd ~ 700m north of Canbaraus
Water Quality	
Dissolved Oxygen (mg/L)pl	H Conductivity (Slow)
Water Temperature (°C)	H Conductivity (μS/cm) Air Temperature (°C)
Time in situ measurements taken	7. Temperature (*C)
Watercourse Dimensions & Morphology	
Mean Watercourse Width 0.40 (m)	Maximum Pool Depth D & (cm)
Mean Bankfull Width / S (m)	Mean Water Depth 0 Ry (cm)
% Riffle%	Pool % Run
Evidence of eroding banks, Comments on bank	k stability winds unascuts
Substrate (% cover)	
BedrockCobble	Sand30Silt_40 Mu
BoulderGravel	3 C Clay Marl Det
•	Det
In-water Cover	
Cover Types Present (circle): Undercut I	Banks Deep Pool Watercress Aquatic
Overhanging Vegetation Woody Debris	Boulder Other
Riparian Zone	
Riparian Cover (% of watercourse shaded, dom	ninant vegetation, mature or early successional)
Riparian Cover (% of watercourse shaded, dom	ninant vegetation, mature or early successional)
Adjacent Land Use	ninant vegetation, mature or early successional)
ATB CONCLOS	ninant vegetation, mature or early successional)
Adjacent Land Use	ninant vegetation, mature or early successional)
Adjacent Land Use	
Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, grounds)	undwater upwellings)
Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground in the company of the company o	undwater upwellings)
Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground in the company of the company o	undwater upwellings)
Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, grounds)	undwater upwellings)
Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground in the second in th	undwater upwellings)
Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground in the second in the	undwater upwellings)
Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground in the second in the	undwater upwellings) lel Grassed Swale Buried Tile
Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground in the second in the	undwater upwellings)
Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground in the second in th	undwater upwellings) tel Grassed Swale Buried Tile_ ond Dominated by Aquatic Veg Dry_
Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground in the second in th	undwater upwellings) lel Grassed Swale Buried Tile
Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground in the second in th	undwater upwellings) tel Grassed Swale Buried Tile_ ond Dominated by Aquatic Veg Dry_
Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground in the second in th	undwater upwellings) tel Grassed Swale Buried Tile_ ond Dominated by Aquatic Veg Dry_
Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, grounding at the control of the contro	undwater upwellings) tel Grassed Swale Buried Tile_ ond Dominated by Aquatic Veg Dry_

No access, Rd side vicou





Field Staff Time O 3 4 5 Weather conditions in previous 24 hrs Marie Post Post Pesent (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Watercress Pover Types Present (circle): Undercut Banks Deep Pool Water Pove	<u> </u>
GPS Coordinates (Zone) TE Dod O75 N 476 (297 Dat Descriptive Location On Canbacough Rd Name and A Kind Rd	
Dissolved Oxygen (mg/L) pH Conductivity (µS/cm) Water Temperature (°C) Air Temperature (°C) Time in situ measurements taken Watercourse Dimensions & Morphology Mean Watercourse Width (m) Mean Water Depth 2.0 (cm) Mean Bankfull Width 6.0 (m) Mean Water Depth 9.00 (cm) % Riffle 100 % Pool Evidence of eroding banks, Comments on bank stability Manager Panks 100 (cm) Bedrock 20 Cobble Sand 30 Silt 30 Boulder Gravel 20 Clay Marl In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successiona (circle): (um N M
Water Jemperature (°C) Time in situ measurements taken Watercourse Dimensions & Morphology Mean Watercourse Width (m) Mean Water Depth (cm) Mean Bankfull Width (m) Mean Water Depth (cm) % Riffle 100 % Pool Evidence of eroding banks, Comments on bank stability Substrate (% cover) Bedrock 20 Cobble Sand 30 Silt 30 Boulder Gravel 20 Clay Marl In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional Cover Marks (in mature in mature of early successional Cover Mature (in mature of early successional Cover Mature (in mature of early successional Cover Mature (in mature of early successional Cover (% of watercourse shaded, dominant vegetation, mature or early successional Cover (% of watercourse shaded, dominant vegetation, mature or early successional Cover (% of watercourse shaded, dominant vegetation, mature or early successional Cover (% of watercourse shaded, dominant vegetation, mature or early successional Cover (% of watercourse shaded, dominant vegetation, mature or early successional Cover (% of watercourse shaded, dominant vegetation, mature or early successional Cover (% of watercourse shaded, dominant vegetation, mature or early successional Cover (% of watercourse shaded, dominant vegetation, mature or early successional Cover (% of watercourse shaded, dominant vegetation, mature or early successional Cover (% of watercourse shaded, dominant vegetation, mature or early successional Cover (% of watercourse shaded, dominant vegetation, mature or early successional Cover (% of watercourse shaded, dominant vegetation, mature or early successional Cover (% of watercourse shaded) Cover (% of wat	
Watercourse Dimensions & Morphology Mean Watercourse Width	
Watercourse Dimensions & Morphology Mean Watercourse Width 36 (m) Maximum Pool Depth 0.20 (cm) Mean Bankfull Width 60 (m) Mean Water Depth 0.10 (cm) % Riffle 100 % Pool % Run Evidence of eroding banks, Comments on bank stability hilds Substrate (% cover) Bedrock 20 Cobble Sand 30 Silt 30 Boulder Gravel 20 Clay Marl In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional 10 / mature / in mature /	
Mean Watercourse Width	
Mean Bankfull Width 6 (m) Mean Water Depth 7 (cm % Riffle 100 % Pool % Run Evidence of eroding banks, Comments on bank stability Minor variety banks of bank	
Substrate (% cover) Substrate (% cover) Bedrock 20 Cobble Sand 30 Silt 30 Boulder Gravel 20 Clay Mari In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercess Average Cover Types Present (circle): Undercut Banks Deep Pool Watercess Average Cover Types Present (circle): Undercut Banks Deep Pool Watercess Average Cover Types Present (circle): Undercut Banks Deep Pool Watercess Average Cover Types Cover Types Average Cover Types Cover T	
Evidence of eroding banks, Comments on bank stability hilds hilds	
Substrate (% cover) Bedrock 20 Cobble Sand 30 Silt 30 Boulder Gravel 20 Clay Marl In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress According Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional Color Market In mature for early successional Color Mature In mature f	%
Bedrock 20 Cobble Sand 30 Silt 30 Boulder Gravel Z0 Clay Marl In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Action	0 6
Boulder Gravel Zo Clay Mari	
In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Acoverhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional Modern Cover (% of watercourse shaded, dominant vegetation, mature or early successional Modern Cover (% of watercourse shaded, dominant vegetation, mature or early successional Modern Cover (% of watercourse shaded, dominant vegetation, mature or early successional Modern Cover (% of watercourse shaded, dominant vegetation, mature or early successional Modern Cover (% of watercourse shaded, dominant vegetation, mature or early successional Modern Cover (% of watercourse shaded, dominant vegetation, mature or early successional Modern Cover (% of watercourse shaded, dominant vegetation, mature or early successional Modern Cover (% of watercourse shaded, dominant vegetation, mature or early successional Modern Cover (% of watercourse shaded, dominant vegetation, mature or early successional Modern Cover (% of watercourse shaded, dominant vegetation, mature or early successional Modern Cover (% of watercourse shaded, dominant vegetation, mature or early successional Modern Cover (% of watercourse shaded, dominant vegetation, mature or early successional Modern Cover (% of watercourse shaded, dominant vegetation, mature or early successional Modern Cover (% of watercourse shaded, dominant vegetation, mature or early successional Modern Cover (% of watercourse shaded, dominant vegetation, mature or early successional Modern Cover (% of watercourse shaded, dominant vegetation, mature or early successional Modern Cover (% of watercourse shaded, dominant vegetation, mature or early successional Modern Cover (% of watercourse shaded, dominant vegetation, mature or early successional Modern Cover (% of watercourse shaded, dominant vegetation, mature or early successional Modern Cover (% of watercourse shaded, dominant vegetation, mature or early successional Modern Cover (% of watercou	Mud Deta
Cover Types Present (circle): Undercut Banks Deep Pool Watercress Action Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional Company of the State	
Adjacent Land Use Tish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried)
Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried	
Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried	
Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried	
Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried	
Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried	
Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried	
Natural Watercourse / Trapezoidal Channel Grassed Swale Buried	
Natural Watercourse Trapezoidal Channel Grassed Swale Buried	
Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg. 🗸	Tile
Sufficial Diamage (i.e. luttows) Dugout Folid Dominated by Aduatic Veg	Dry_
Other Habitat Notes, Incidental Wildlife Observations, etc.	
Song bilds	





Could not properly assess as area is off Row Row = Non REA



Sta	n	te	C

Photos See photo log Date June 20/12.		Field Staff ME		
GPS Coordinates (Zone) 171 Descriptive Location On Coepe	E 06	22345 N 4	761279 D	atum Na
Water Quality Dissolved Oxygen (mg/L)	pH_		(μS/cm)	
Water Temperature (°C) Time in situ measurements taken		Air Temperature (°C)		
Watercourse Dimensions & Moi	rphology			
Mean Watercourse Width	(m)	Maximum Pool Depth		m)
Mean Bankfull Width	(m) % P	Mean Water Depth ool	(C	m) %
Evidence of eroding banks, Comn			_/o Nurr	/0
Substrate (% cover)				
Bedrock		Sand	Silt	Muc
Boulder	Gravel	Ćlay	Marl	Detr
		Boulder Other_		
Riparian Zone Riparian Cover (% of watercourse	shaded, domii			nal)
	shaded, domin			nal)
Adjacent Land Use	shaded, domin			nal)
Riparian Cover (% of watercourse		nant vegetation, mature o		nal)
Adjacent Land Use Fish Habitat Potential	ery areas, grou	nant vegetation, mature o		nal)
Riparian Cover (% of watercourse Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurse	ery areas, grou	nant vegetation, mature o		nal)
Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurse) Migratory Obstructions (seasonal,	permanent)	nant vegetation, mature of the control of the contr	r early succession	ried Tile
Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurse) Migratory Obstructions (seasonal, Note any fish observations Waterbody Notes Natural Watercourse Trap	permanent) pezoidal Chann Dugout Po	nant vegetation, mature of the control of the contr	r early succession ale Bur Aquatic Veg	ried Tile
Riparian Cover (% of watercourse Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurse Migratory Obstructions (seasonal, Note any fish observations Waterbody Notes Natural Watercourse Trap Surficial Drainage (i.e. furrows)	permanent) pezoidal Chann Dugout Po	nant vegetation, mature of the control of the contr	r early succession ale Bur Aquatic Veg	ried Tile





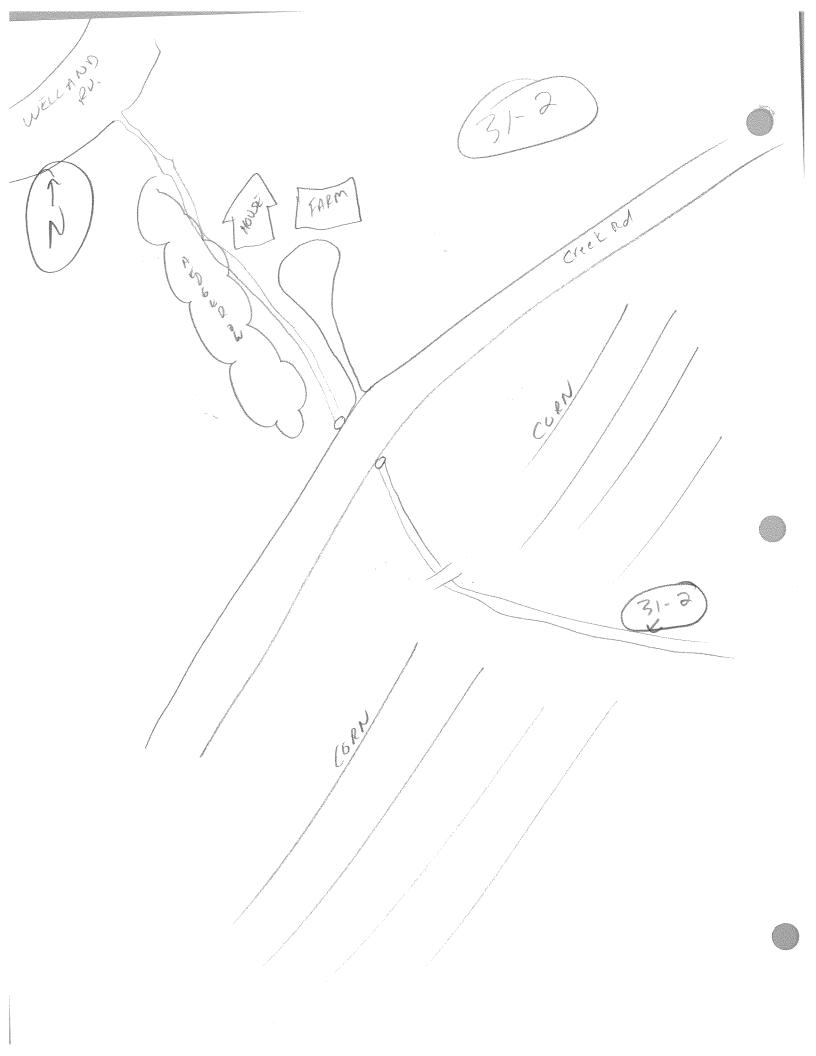
Field Notes Authored by _____

WIND FARM WATERBODY RAPID ASSESSMENT FORM

REA	
Dey	
1 1 01	

Stantec Station # 2 - 2 Watercourse Name_unknawn	Project Name Niagara Wind
Watercourse Name unknown	
Watercourse Name unknown	Project Name Nice of a 14) inch
	Project # 160950269
Photos Sen photo 104	Field Staff ME ME
Date June 21/12.	Time 10° 11.0
Weather conditions in previous 24 hrs NO DOC	cipilation
GPS Coordinates (Zone) 17T E 06 22	462 N 4761306 Datum Nad
Descriptive Location On Creek Rd - 6	2.4 km east of Krik Rd on Hardy
Water Quality	
Dissolved Oxygen (mg/L) pH_	Conductivity (UC/ST)
(vater / emperature (°C)	Conductivity (μS/cm)Air Temperature (°C)
ime in situ measurements taken	/ iii demperature (C)
Watercourse Dimensions & Morphology	
Mean Watercourse Width 0.25 (m)	Maximum Pool Depth(cm)
Mean Bankfull Width 20 (m)	Mean Water Depth (cm)
% Riffle % Po	ool% Run % Fla
Evidence of eroding banks, Comments on bank s	stability some undercut banks + scour
Substrate (% cover)	
BedrockCobble	Sand 3D Silt 3D Muck
BoulderGravel	Sand 30 Silt 30 Muck 30 Clay Marl Detritus
-water Cover	Detilius
verhanging Vegetation Woody Debris	nks Deep Pool Watercress Aquatic Veg Boulder Other
Riparian Zone	Boulder Other
Riparian Cover (% of watercourse shaded, domina	Only to make the state of the s
30% = d/5 + 2% = v/5 matrictions	ant vegetation, mature or early successional)
djacent Land Use	= + shives 415 , recovery 415.
an fields, house, rd	
8	
ish Habitat Potential	
Critical Habitat (spawning or nursery areas, ground	dwater upwellings)
IND 20104 SOUNT WAS NOT WITH	times.
ligratory Obstructions (seasonal, permanent)	
ote any fish observations work	
ote any fish observations	
31/	V15.
aterbody Notes	
aterbody Notes	
aterbody Notes Itural Watercourse Trapezoidal Channel	Builed life
aterbody Notes atural Watercourse Trapezoidal Channel	Grassed Swale Buried Tile d Dominated by Aquatic Veg Dry
aterbody Notes	d Dominated by Aquatic Veg Dry

Field Notes QA/QCed by ______

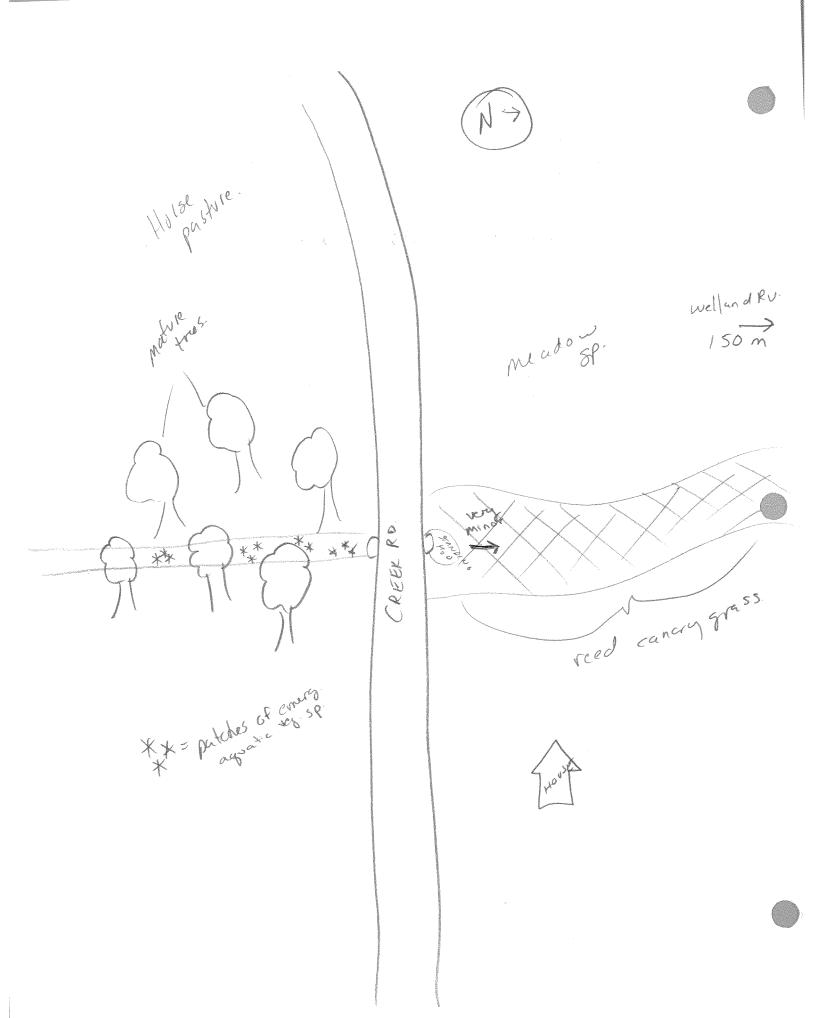




REA

STANDING WATER ONLY STAGE

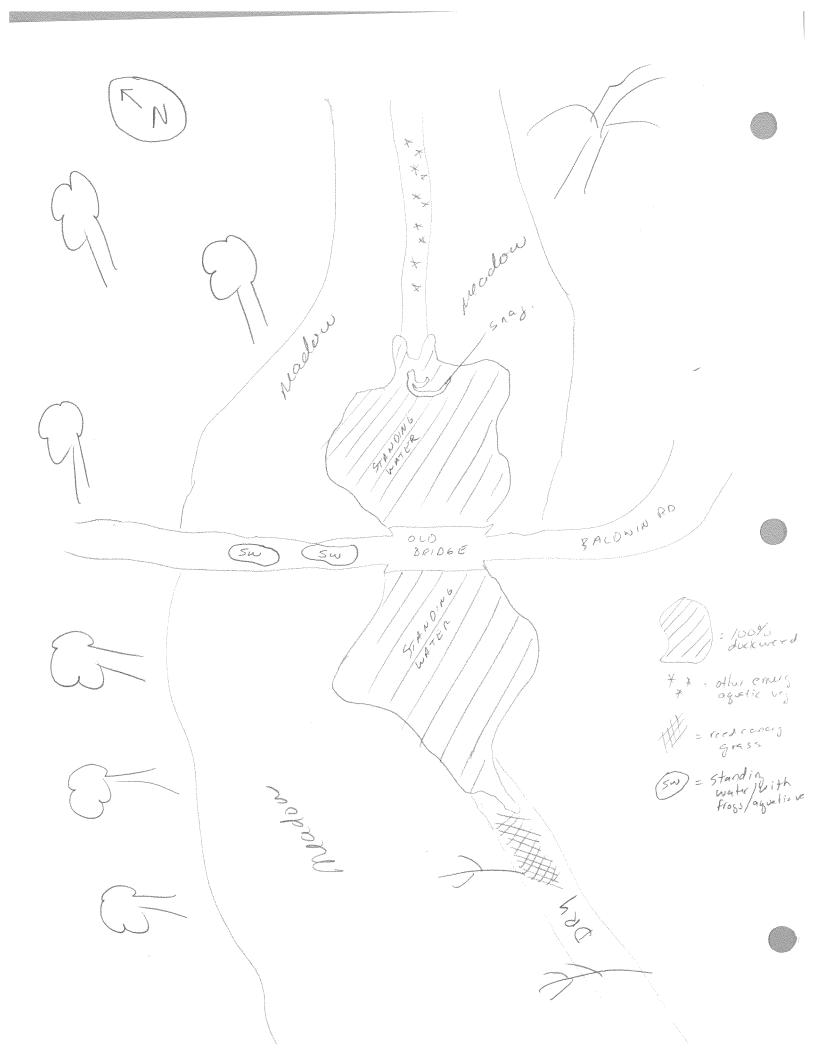
Station # 50 -				
Watercourse Name UNKno		Project Name	Niagara	Wind
		Project # //	095026	29
		Field Staff	MEINE	
Date 2012 06	19	Time 10515		
Weather conditions in previous	s 24 hrs	rul pricip		
GPS Coordinates (Zone) 13	T E 062		V 476122	2 Datum N
Descriptive Location	Creek Rd m	250 m west		
Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C)	PH	Condu Air Temperature	etivity (µS/cm) _	
Time in situ measurements take	en	""Whitehological and the second and		
Watercourse Dimensions & N	Morphology			
1400m \A/minumum 1000 1000 100	2 (m)	Maximum Deal	D = = 11	
Mean Bankfull Width 25	(m).	Maximum Pool	nebru 2	(cm)
% Riffle	` /	Mean Water De		(cm)
Evidence of eroding banks, Cor	<u>100 </u> % P		% Run	
	minerits on bank	stability <u>wone</u>	observed	
Substrate (% cover)				
Bedrock	Cobble_	In cont		
Boulder	Gravel	<u>/</u>	3 <i>o</i> Silt_ Mar	,,,,,,
Riparian Zone	Undercut Ba	Boulder Of	her	
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours	oody Debris	Boulder Of	her	
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Sold manda @ 1/5 \o Adjacent Land Use	se shaded, domin	Boulder Of	her	
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours 50% manual @ 1/5 \o Adjacent Land Use	se shaded, domin	Boulder Of	her	
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurs Adjacent Spawning or nurs Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurs	se shaded, domin	Boulder Of ant vegetation, materials states of the state	her	essional)
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercours Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurs Migratory Obstructions (seasonal Iote any fish observations Vaterbody Notes latural Watercourse Tran	se shaded, domin	Boulder Of ant vegetation, materials of the second	her	essional)
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercours Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurs Migratory Obstructions (seasonal Iote any fish observations Vaterbody Notes latural Watercourse Tran	se shaded, domin	Boulder Of ant vegetation, materials of the second	her	essional)
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercours Solve manhable 1/2 / o Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurs Migratory Obstructions (seasonal John Country Migratory Obstructions (seasonal John Country Migratory Obstructions (seasonal John Country Materbody Notes Jatural Watercourse Trap urficial Drainage (i.e. furrows)	se shaded, domin	Boulder Of ant vegetation, material control of the second	Swale MAN	Buried Tile
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercours Solve manhable 1/2 / o Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurs Migratory Obstructions (seasonal John Country Migratory Obstructions (seasonal John Country Migratory Obstructions (seasonal John Country Materbody Notes Jatural Watercourse Trap urficial Drainage (i.e. furrows)	se shaded, domin	Boulder Of ant vegetation, material control of the second	Swale MAN	essional) Buried Tile Dry
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercours Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurs Migratory Obstructions (seasonal Iote any fish observations Vaterbody Notes latural Watercourse Tran	se shaded, domin	Boulder Of ant vegetation, material control of the second	Swale MAN	Buried Tile
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercours Solve manhable 1/2 / o Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurs Migratory Obstructions (seasonal John Country Migratory Obstructions (seasonal John Country Migratory Obstructions (seasonal John Country Materbody Notes Jatural Watercourse Trap urficial Drainage (i.e. furrows)	se shaded, domin	Boulder Of ant vegetation, material control of the second	Swale MAN	essional) Buried Tile Dry
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercours Solve manhable 1/2 / o Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurs Migratory Obstructions (seasonal John Country Migratory Obstructions (seasonal John Country Migratory Obstructions (seasonal John Country Materbody Notes Jatural Watercourse Trap urficial Drainage (i.e. furrows)	se shaded, domin	Boulder Of ant vegetation, material control of the second	Swale MAN	Buried Tile
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercours Solve manhable 1/2 / o Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurs Migratory Obstructions (seasonal John Country Migratory Obstructions (seasonal John Country Migratory Obstructions (seasonal John Country Materbody Notes Jatural Watercourse Trap urficial Drainage (i.e. furrows)	se shaded, domin	Boulder Of ant vegetation, material control of the second	Swale MAN	Buried Tile
Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercours Solve manhable 1/2 / o Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurs Migratory Obstructions (seasonal John Country Migratory Obstructions (seasonal John Country Migratory Obstructions (seasonal John Country Materbody Notes Jatural Watercourse Trap urficial Drainage (i.e. furrows)	se shaded, domin	Boulder Of ant vegetation, material control of the second	Swale Manager	Buried Tile



REA



Station #		Project Name <u>Niago</u>	ura Wina	1
Watercourse Name unknown		Project # <u>1160958</u> 2	169	
Photos See photo log.		Field Staffme, m	F	
Date June 20/12.		Time <u>09 : 10</u>		
Weather conditions in previous 24				
GPS Coordinates (Zone) 17		7 N 4762	726 Datu	<u>m Nad</u> 8
Descriptive Location On un ma	THE NOW (OR O	E Baldwin ~ 800,	<u> </u>	
Water Quality				
Dissolved Oxygen (mg/L) 2.40		<u>}</u> Conductivity (μS/c	m)401	
Water Temperature (°C)23.14	<u></u>	Air Temperature (°C)	2902	
Time in situ measurements taken_	09:15			
Watercourse Dimensions & Mor Mean Watercourse Width 20		And the second second second		
Mean Bankfull Width 3.5		Maximum Pool Depth ~ /s	<u>, O . O (cm)</u>	
% Riffle		Mean Water Depth		0/ 5 1 1
Evidence of eroding banks, Comm	ents on bank stabi	lity Manar Scoul ale	un	% Flat
Substrate (% cover)	Ochble	• • • • •		
Bedrock Boulder	Cobble Gravel	Sand <i>SO</i>	Silt <i>50</i> Marl	Muck Detritus
Overhanging Vegetation Wood Riparian Zone Riparian Cover (% of watercourse solutions and large descriptions of the solutions	shaded, dominant	oulder Othervegetation, mature or early		
Adjacent Land Use	**			
\$				
Fish Habitat Potential Critical Habitat (spawning or nurser	v areas aroundws	ter upwellings)		
foray, spawn, hursery	y aroas, groundwa	ter apwenings)		
Migratory Obstructions (seasonal, plack of flows / water	permanent)			
Note any fish observations Many	Ed. Corchi	01 0.000 -11	1 1 1 E A	
water in stream vis of	9/51. 4 Ca	p curasses	nt bridg. M	Jo
Waterbody Notes /				
Natural Watercourse Trape	zoidal Channel	Grassed Swale	Buriod	Tilo
Surficial Drainage (i.e. furrows)	Dugout Pond	Dominated by Aqua	Buried tic Vea	Dry V
Other Habitat Notes Incidental W	lildlifa Obaamiatia	///a/cc @ /A	_	<i></i>
Other Habitat Notes, Incidental W	DALLA COVO F	olding air	11dg 0119.	
Man gicen frogs, lappord	Frogs. 0	, 0		
Field Notes Authored by	Field Notes QA/	QCed by		



Landowner has possibly removed colvert which has consed old stream to pool east of potential collector rable. Pool is being used by cows and has altered the banks and inlet. Inlet is a non-RED.

No culvert found under Bydain NON

WIND FARM WATERBODY RAPID ASSESSMENT FORM

NON

Stantec

		Project Name 1\	1 71 64 /1 4 1	
Station # 34-2 Watercourse Name_unkno	. ~	Project Name	<u>Jagara L</u>	VITO
Photos State Of the Control of the C	W/\	Project #(o	2958269	
Photos See proto 167 Date June 20/12		Field Staff	EIME	
Westher conditions in			32	
Weather conditions in previous	s 24 hrs	TCIP.		
GPS Coordinates (Zone) 1	TE 06	01124 N	4762268	Datum N
Descriptive Location	in maintained	Rd of Baldwin A	400 m not	th of
Canborough Rd				
Water Quality				
Dissolved Oxygen (mg/L)	/ pH_	Conduction	with the Clare	
Water Temperature (°C)	/ P.I		vity (μS/cm)	
Time in situ measurements take	cen	Air Temperature (°C)	
Watercourse Dimensions &	Morbuology			
Mean Watercourse Width	(m)	Maximum Pool De	pth	(cm)
Mean Bankfull Width		Mean Water Depti	1	_(cm)
% Riffle	% P	òol <u>/</u>	% Run	
Evidence of eroding banks, Co	mments on bank s	stability		
Cook at the Action of the Acti				
Substrate (% cover)				
Bedrock	Cobble	Sand	Silt	Mu
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Gravel	Clay	Mari	Det
In-water Cover Cover Types Present (circle): Overhanging Vegetation	Undercut Ba		Watercress	Aquatic
In-water Cover Cover Types Present (circle): Overhanging Vegetation W Riparian Zone	Undercut Ba Voody Debris	nks Deep Pool Boulder Oth	Watercress er	Aquatic
In-water Cover Cover Types Present (circle): Overhanging Vegetation N Riparian Zone Riparian Cover (% of watercount)	Undercut Ba Voody Debris	nks Deep Pool Boulder Oth	Watercress er	Aquatic
In-water Cover Cover Types Present (circle): Overhanging Vegetation W Riparian Zone	Undercut Ba Voody Debris	nks Deep Pool Boulder Oth	Watercress er	Aquatic
In-water Cover Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount Adjacent Land Use	Undercut Ba Voody Debris	nks Deep Pool Boulder Oth	Watercress er	Aquatic
In-water Cover Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential	Undercut Ba Voody Debris rse shaded, domin	ant vegetation, matur	Watercress er	Aquatic
In-water Cover Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential	Undercut Ba Voody Debris rse shaded, domin	ant vegetation, matur	Watercress er	Aquatic
In-water Cover Cover Types Present (circle): Overhanging Vegetation W Riparian Zone Riparian Cover (% of watercour Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nu	Undercut Ba Voody Debris rse shaded, domin rsery areas, groun	ant vegetation, matur	Watercress er	Aquatic
In-water Cover Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential	Undercut Ba Voody Debris rse shaded, domin rsery areas, groun	ant vegetation, matur	Watercress er	Aquatic
In-water Cover Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nu Migratory Obstructions (seasons	Undercut Ba Voody Debris rse shaded, domin rsery areas, groun al, permanent)	ant vegetation, matur	Watercress er	Aquatic
In-water Cover Cover Types Present (circle): Overhanging Vegetation W Riparian Zone Riparian Cover (% of watercour Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nu	Undercut Ba Voody Debris rse shaded, domin rsery areas, groun al, permanent)	ant vegetation, matur	Watercress er	Aquatic
In-water Cover Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nu Migratory Obstructions (seasons	Undercut Ba Voody Debris rse shaded, domin rsery areas, groun al, permanent)	ant vegetation, matur	Watercress er	Aquatic
In-water Cover Cover Types Present (circle): Overhanging Vegetation W Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nu Migratory Obstructions (seasons) Note any fish observations	Undercut Ba Voody Debris rse shaded, domin rsery areas, groun al, permanent)	ant vegetation, matur	Watercress er	Aquatic
In-water Cover Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nu Migratory Obstructions (seasons Note any fish observations Waterbody Notes	Undercut Ba Voody Debris rse shaded, domin rsery areas, groun al, permanent)	ant vegetation, matur	e or early succes	Aquatic sional)
In-water Cover Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nu Migratory Obstructions (seasons Note any fish observations Waterbody Notes Natural Watercourse Tr	Undercut Ba Voody Debris rse shaded, dominarsery areas, grounal, permanent)	ant vegetation, matur	e or early succes	Aquatic sional)
In-water Cover Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nu Migratory Obstructions (seasons Note any fish observations Waterbody Notes Natural Watercourse Tr	Undercut Ba Voody Debris rse shaded, dominarsery areas, grounal, permanent)	ant vegetation, matur	e or early succes	Aquatic sional)
In-water Cover Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nu Migratory Obstructions (seasons Note any fish observations Waterbody Notes Natural Watercourse Surficial Drainage (i.e. furrows)	Undercut Ba Voody Debris rse shaded, domin rsery areas, groun al, permanent) apezoidal Channel Dugout Pon	dwater upwellings) Grassed S Dominated	e or early succes SwaleE by Aquatic Veg	Aquatic sional) Buried Tile
In-water Cover Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nu Migratory Obstructions (seasons Note any fish observations Waterbody Notes Natural Watercourse Tresurficial Drainage (i.e. furrows)_ Other Habitat Notes, Incidental	Undercut Ba Voody Debris rse shaded, domin rsery areas, groun al, permanent) apezoidal Channel Dugout Pon	dwater upwellings) Grassed S Dominated ations, etc. Meado	e or early succes SwaleE by Aquatic Veg	Aquatic sional) Buried Tile
In-water Cover Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nu Migratory Obstructions (seasons Note any fish observations Waterbody Notes Natural Watercourse Tr	Undercut Ba Voody Debris rse shaded, domin rsery areas, groun al, permanent) apezoidal Channel Dugout Pon	dwater upwellings) Grassed S Dominated ations, etc. Meado	e or early succes SwaleE by Aquatic Veg	Aquatic sional) Buried Tile
In-water Cover Cover Types Present (circle): Overhanging Vegetation Riparian Zone Riparian Cover (% of watercount Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nu Migratory Obstructions (seasons Note any fish observations Waterbody Notes Natural Watercourse Tresurficial Drainage (i.e. furrows)_ Other Habitat Notes, Incidental	Undercut Ba Voody Debris rse shaded, domin rsery areas, groun al, permanent) apezoidal Channel Dugout Pon	dwater upwellings) Grassed S Dominated ations, etc. Meado	e or early succes SwaleE by Aquatic Veg	Aquatic sional) Buried Tile

TEARM The state of the s Canborough Rd 1717 01/21 g (a3e / LOW'S BALDWIN RO of white Porn HEDSEROW g(038 | 600 m



R	EAON
	017

	Station #35-		Project Name	Nigag	- 1)ca.	ا ا
	Watercourse Name	WN	Project #/(o	1950	1/00/1/0	-1
	Photos See moto 100		Field Staff	ME ME	(0-)	
	Date 708 08 18		Time)6:0			
	Weather conditions in previou		0 C+10			
W	GPS Coordinates (Zone)		o'24 N		८३ Date	IM NA
~ Pu		Collver Rd - 30,	n southor	Frence Ro		
O CO	Water Quality					
\ o'	Dissolved Oxygen (mg/L)					
W.O.	Water Temperature (°C)	pH	Conduct	ivity (μS/cm)		
F	Time in situ measurements tak	ten	Air Temperature	(°C)3 ₀	0	
	Watercourse Dimensions & I					
	Mean Watercourse Width 3	On.	Massian			
	Mean Bankfull Width	No.	Maximum Pool De	pth3 <u></u>	(cm)	
	% Riffle	% Pool	Mean Water Dept	h/5	(cm)	
	Evidence of eroding banks, Co	mments on bank stat		% Run		% F
				3 2 3 3 4 7 7 7		
	Substrate (% cover)					
	Bedrock	Cobble	Sand	50 s	ilt 50	Muck
•	Boulder	Gravel	Clay		lari	Muck Detritu
- 	n-water Cover	•	-	•		
	Cover Types Present (circle):			da.		
(Undercut Banks oody Debris E	Deep Pool Soulder Othe		ss Aqu	atic Veg
5	Riparian Zone	_	odidor Out	31		
F	Riparian Cover (% of watercour	بالسباب المامطة مع				
_	Riparian Cover (% of watercours	se shaded, dominant	vegetation, mature	or early suc	cessional)	
	djacent Land Use					
	houses ag field	, 5 .				
	/					
F	ish Habitat Potential					
C	ritical Habitat (spawning or nurs	sery areas, groundwa	ter upwellings)			
NA.	igratory Obstructions (seasonal	Ny.				
101	Juck of water	i, permanent)				
N	ote any fish observations	The.			•	
-	"					
W	aterbody Notes					
Na	atural Watercourse Trap	pezoidal Channel	Gracead C	wale /	D	•
Sı	rficial Drainage (i.e. furrows)	Dugout Pond	Dominated b	v Aquatio Va	Buried Til	
)ry
Ot	her Habitat Notes, Incidental	Wildlife Observation	s, etc.			
4-1-1-1-1						

Field	Notes Authored by	Field Notes QA/QC	Ced by MET	•		
	7 70	Field Notes QA/Q0	Ced by MEE	,		
	d Notes Authored by	Field Notes QA/QC	Cled byCAForm 02 Wind Farm Wi	aterbody Rapid A	ssessment Form	doc

0002 Freure Rd



REA

Station #	Project Name Niagara Wind
Station # 50-2 Watercourse Name Trib of Welland M	Ry Project # 1/0/09/50 2/09
Photos See photo 104 Date 2012 06 18	Field Staff ME, MF
Date 2012 06 18	Time
Weather conditions in previous 24 hrs	623682 N 4762560 Datum NMD8
GPS Coordinates (Zone) FT E O	623682 N 4762560 Datum AMDS
Descriptive Location On R R 2 23 ~	40m north of Canbornin Rs.
Water Quality	
Discolard Ongress/mg/L)	
Dissolved Oxygen (mg/L)	pHConductivity (μS/cm) Air Temperature (°C) 30 %
Time in situ measurements taken	Air Temperature (°C) 30 %
Watercourse Dimensions & Morphology	
Mean Watercourse Width(m)	Maximum Pool Depth 7 / 0 (cm) Mean Water Depth 5 (cm)
Mean Bankfull Width(m)	Mean Water Depth 50 (cm)
% Riffle / <i>O</i> O	% Pool % Run % Fla
Evidence of eroding banks, Comments on ba	ank stability none observed.
Substrate (% cover)	
BedrockCobble	Sand 40 Silt 20 Muck 20 Clay Marl Detritus
BoulderGravel	20 Clay Marl Detritus
in-water Cover	•
	ut Banks Deep Pool Watercress Aquatic Veg
Sorbi Typod i Luboni (circio). Circioi	di Danks (Deep Fooi) Watercless (Aquatic veg
Overhanging Vegetation \ \ Woody Debris	Boulder Other
Overhanging Vegetation Woody Debris	Boulder Other
Riparian Zone	Boulder Other
Riparian Zone Riparian Cover (% of watercourse shaded, de	Boulder Other ominant vegetation, mature or early successional)
Riparian Zone Riparian Cover (% of watercourse shaded, de 30% ash se, willow se	Boulder Other
Riparian Zone Riparian Cover (% of watercourse shaded, de 30% ash se willow se	Boulder Otherominant vegetation, mature or early successional)
Riparian Zone Riparian Cover (% of watercourse shaded, do 30% ash sp., will ow sp. Adjacent Land Use	Boulder Other ominant vegetation, mature or early successional)
Riparian Zone Riparian Cover (% of watercourse shaded, de 30% ash se, willow se. Adjacent Land Use	Boulder Other ominant vegetation, mature or early successional)
Riparian Zone Riparian Cover (% of watercourse shaded, de 30% ash se, willow se Adjacent Land Use Positives house, cds. Fish Habitat Potential Critical Habitat (spawning or nursery areas, g	Boulder Other ominant vegetation, mature or early successional)
Riparian Zone Riparian Cover (% of watercourse shaded, de 30% ash se, will ow se Adjacent Land Use Positives of the se and see a se	Boulder Other ominant vegetation, mature or early successional) proundwater upwellings)
Riparian Zone Riparian Cover (% of watercourse shaded, de 30% as hos positions (seasonal, permanent	ominant vegetation, mature or early successional) proundwater upwellings)
Riparian Zone Riparian Cover (% of watercourse shaded, de 30% as hos positions (seasonal, permanent	ominant vegetation, mature or early successional) proundwater upwellings)
Riparian Zone Riparian Cover (% of watercourse shaded, de 30% as hos positions (seasonal, permanent	Boulder Other ominant vegetation, mature or early successional) proundwater upwellings)
Riparian Zone Riparian Cover (% of watercourse shaded, de 30% as how see a shaded, de	Boulder Other ominant vegetation, mature or early successional) proundwater upwellings)
Riparian Zone Riparian Cover (% of watercourse shaded, de 30% as how see a shaded, de	Boulder Other ominant vegetation, mature or early successional) groundwater upwellings)
Riparian Zone Riparian Cover (% of watercourse shaded, de 30% as how see a shaded, de	ominant vegetation, mature or early successional) proundwater upwellings)
Riparian Zone Riparian Cover (% of watercourse shaded, de 30 %	Boulder Other ominant vegetation, mature or early successional) groundwater upwellings) annel Grassed Swale Buried Tile t Pond Dominated by Aquatic Veg Dry servations, etc
Riparian Zone Riparian Cover (% of watercourse shaded, de 30 %	Boulder Other ominant vegetation, mature or early successional) groundwater upwellings) t) annel Grassed Swale Buried Tile t Pond Dominated by Aquatic Veg Dry
Riparian Zone Riparian Cover (% of watercourse shaded, de 30 %	Boulder Other ominant vegetation, mature or early successional) groundwater upwellings) annel Grassed Swale Buried Tile t Pond Dominated by Aquatic Veg Dry servations, etc



WIND FARM WATERBODY RAPID ASSESSMENT FORM Welland RV

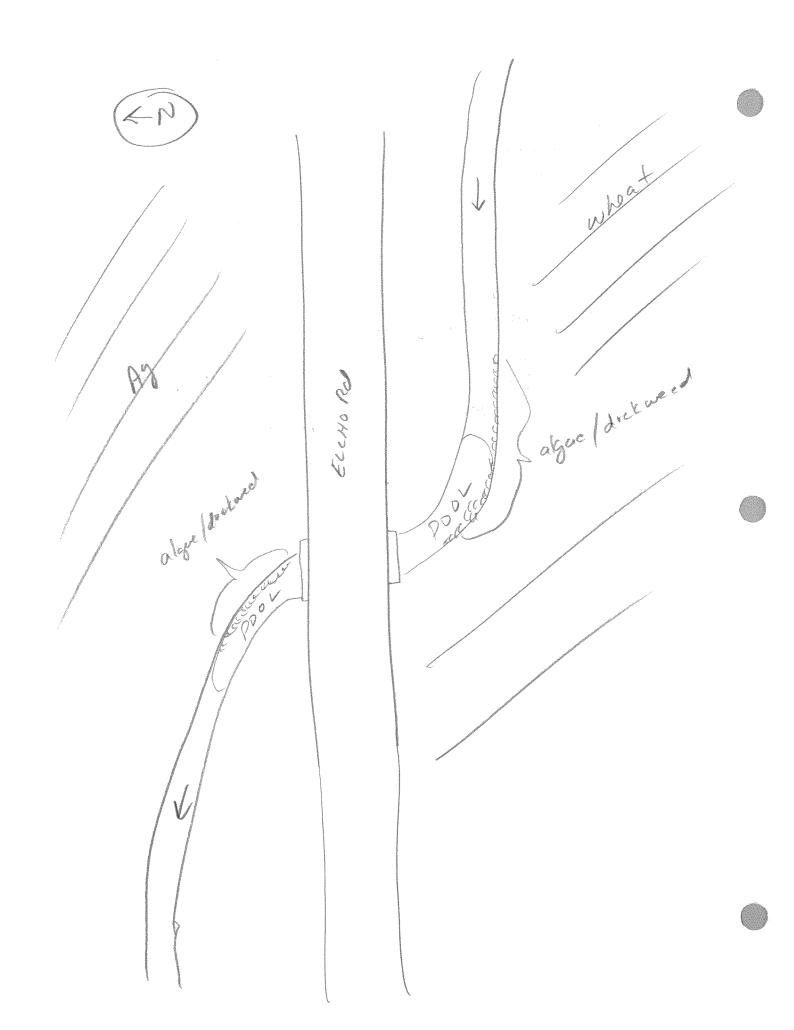
Station # 35 - 3	Project Name Niagara Wind					
Watercourse Name	Project # 1/ COE 00/0					
Photos See photo log						
Photos See who to log Field Staff MEIME Date 2012 06 18 Time 16:46						
Weather conditions in previous 24 hrs	100 10.40					
GPS Coordinates (Zone)	0623724 N 4762460 Datum (1408)					
Descriptive Location On Diversi	de Dr 40m South of Canborough Rd.					
Y	a bi 40th South of Canborough Rd.					
Water Quality						
Dissolved Oxygen (mg/L)	pH Conductivity (uS/cm)					
Water Temperature (°C)						
Time in situ measurements taken	Air Temperature (°C)					
Watercourse Dimensions & Morphol	ogy					
Mean Watercourse Width 30 (n	1) Maximum Pool Donth \ / 0 0 (1772)					
Mean Bankfull Width 40 (m	Maximum Pool Depth > / D D (cm) Mean Water Depth (cm) > / D D (cm)					
% Riffle 10.0	Mean Water Depth (cm) >/>> % Pool % Run % Flat					
Evidence of eroding banks, Comments						
	on bank stability none observed					
Substrate (% cover)						
	obble Sand 303 cit 502 stude					
Boulder Gr	Obble Sand 30 ? Silt 5e? Muck ravel 20 ? Clay Marl Detritus					
In-water Cover Cover Types Present (circle): Un Overhanging Vegetation Woody De	ndercut Banks Deep Pool Watercress Aquatic Veg ebris Boulder Other					
Riparian Cover (% of watercourse shade	ed, dominant vegetation, mature or early successional)					
Adjacent Land Use	y grass willow sp.					
Houses, Ids						
1700322, 123						
Fish Habitat Potential Critical Habitat (spawning or nursery are	as, groundwater upwellings)					
Spawn, norsen, forage.						
Migratory Obstructions (seasonal, perma	inent)					
Note any fish observations						
Waterbody Notes Natural Watercourse Trapezoida	Channel Grassed Swale Rurind Tile					
During Diamage (i.e. lullows)D	ugout Pond Dominated by Aquatic Veg Dry					
Other Habitat Notes, Incidental Wildlife	Observations, etc.					
Cladd Name A. March						
Field Notes Authored by	Field Notes QA/QCed by WEE					

29120-10-51. Rd. Rivers Side

REA



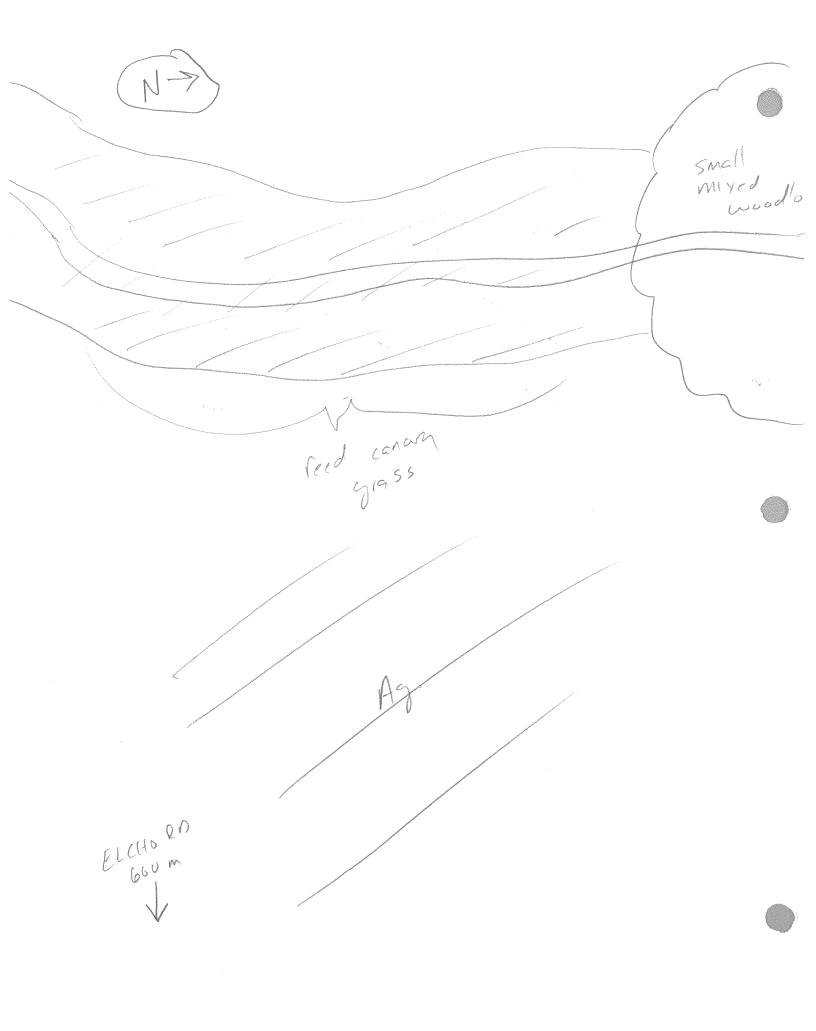
Station # 36-1		Project Name	Nigag	$\alpha(a)$	ind	
Watercourse Name	<u> </u>	Project #//	0950	269	1/	
		Field Staff				
Photos See photo 104. Date 2087 66 18		Time				
Weather conditions in previous						
GPS Coordinates (Zone)	7 E 062		N 47636	-2<	Datun	NAD8
Descriptive Location	ELLO OLL	arm west	P Des (MILDO-
		WELL STATE OF THE		200 6 7		
Water Quality						
Dissolved Oxygen (mg/L)	13 pH	7.98 Condu	ictivity (uS/ci	m) 45	2 \	
Water Temperature (°C) 23		Air Temperatur	re (°C):	0 0 0	<u> </u>	
Time in situ measurements take		7 iii Tomporatai	J (J)	0 -		
Watercourse Dimensions & M	orphology					
Mean Watercourse Width 4 0		Maximum Pool	Depth ~	80	(cm)	
Mean Bankfull Width 53	(m) [.]	Mean Water De				
	100 % Po					
Evidence of eroding banks, Con						
	; /			****		
Substrate (% cover)					2	
Bedrock		Sand			30	
Boulder	Gravel	<u>პ</u> ⊘ Clay		Mart		_Detritus
Cover Types Present (circle): Overhanging Vegetation We					Aqua	atic Veg
Riparian Zone Riparian Cover (% of watercours						
Adjacent Land Use	7(2)		\			
Adjacent Land Ose	,					
Fish Habitat Potential						
Critical Habitat (spawning or nur	contares around	twater unwellings	1			
	sory arous, ground	anator apholings	,			
Migratory Obstructions (seasona	l nermanent)					
					•	
Note any fish observations	170.					
Waterbody Notes						
	pezoidal Channel	Grass	ed Swale	Ru	ried Ti	le
Surficial Drainage (i.e. furrows)	Dugget Pon	d Dominat	ed by Aquati	c Vea)rv
Carrolla Diamago (rarrows)	Dugout i on		ica by Aquati	U 109	<u>~</u> '	J. y
Other Habitat Notes, Incidental	Wildlife Observa	itions, etc. $_\mathcal{B}_{=}$	un Swall	OW		
-		-				
				<u> </u>		
			·			
205/			•			
Field Notes Authored by	Field Notes	QA/QCed by				



REA



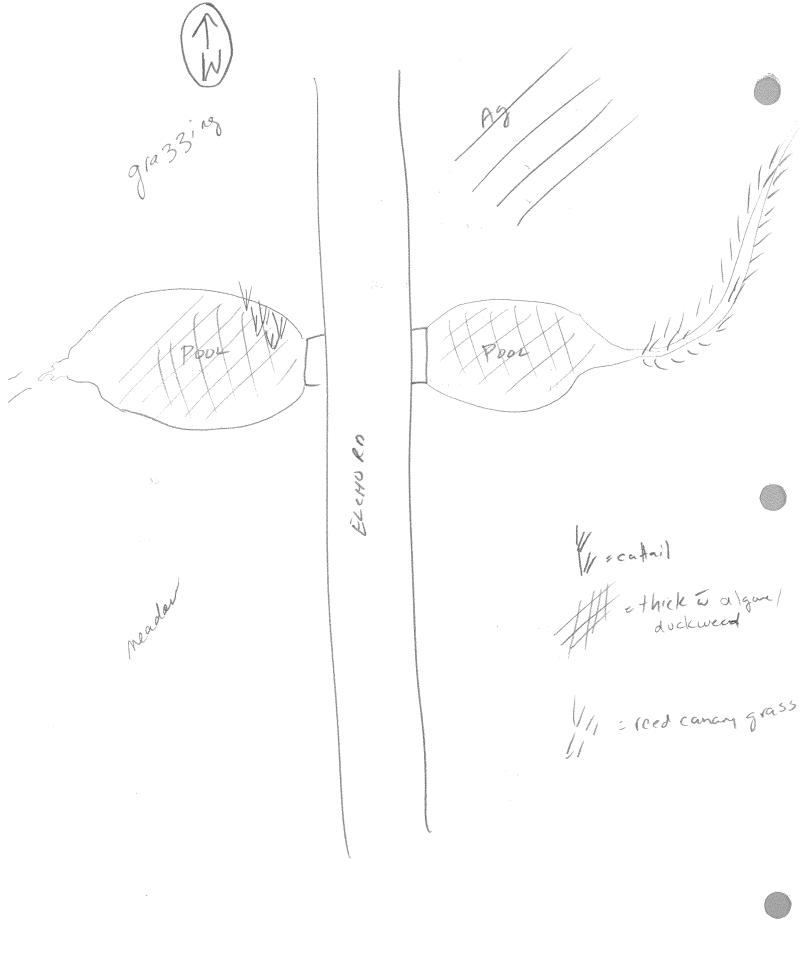
Water Quality Dissolved Oxygen (mg/L) pH_ Water Temperature (°C) Time in situ measurements taken Watercourse Dimensions & Morphology Mean Watercourse Width (m) Mean Bankfull Width (m)% Riffle % P Evidence of eroding banks, Comments on banks	Air Temperature Maximum Pool D Mean Water Dep	epthN		Da
Mean Watercourse Width 2 0 (m) Mean Bankfull Width 3 0 (m) % Riffle% P	Mean Water Dep			
Evidence of electing burner, comments on burner			(cr (cr	n) \bigcirc \wedge
O. L. A. A. A. (0)				
Substrate (% cover)BedrockCobble	Sand	30 9	Silt 7	○ Muc
BoulderGravel	Clay	<u> </u>	/larl	Det
Riparian Zone Riparian Cover (% of watercourse shaded, domin 30% (ecd canon a cass)	ant vegetation, matu	•		al)
Adjacent Land Use				,
Fish Habitat Potential Critical Habitat (spawning or nursery areas, groun	dwater upwellings)			
Migratory Obstructions (seasonal, permanent)				•
Note any fish observations None - Dry				
Waterbody Notes Natural Watercourse Trapezoidal Channe Surficial Drainage (i.e. furrows) Dugout Por	nd Dominated	d by Aquatic \	/eg	Dry_
Other Habitat Notes, Incidental Wildlife Observ	ations, etc. <u>IV 0 h</u>	<u> </u>		



REA



Station # 36-3		Project	ot Nama	N1 A	(1:- 1	
Watercourse Name	000		ct Name _ ct #// ₀	0950		UMA	
Photos See photo		Field		WE WE	2009		
Date 2012 97 06-1	1	Time		46		****	
Weather conditions in previous		100 200		7.0			
GPS Coordinates (Zone)		101 000	-	1/1-1/2	. بر		
Descriptive Location On E		3KM			2766	Datur	n MAD&S
	LRU NA 3	JEIY\	NEST O'	K. K.	- 2 t		
Water Quality							
Dissolved Oxygen (mg/L) 7.1	a9 nH	0 109	Conduc	dissibata Ca		100	
Water Temperature (°C)	1.65	Air To	Conduc	uvity (µ3/0	;m)	6 T D	
Time in situ measurements take	9n13:49	All 16	mperature	(-0)	502		
Watercourse Dimensions & M	lombology		. *	< %			
Mean Watercourse Width / D	/m)	Mavim	um Pool F	lanth	7 -	()	
Mean Watercourse Width /.D Mean Bankfull Width / D	(m) Flood pla	Mean!	Mater Dor	ebui	TU_	_(cm)	
% Riffle	% Po		water Det	% Ri		_(cm)	0/ Et
Evidence of eroding banks, Con	nments on bank s	oui tahilih	105 m 6				% Fla
			TONE (DI SUVCE	7		
Substrate (% cover)							5
Bedrock	Cobble		Sand	40	Silt	40	Muck
Boulder	Gravel	70	Clay	70	Siit Marl	/ -	_wuck Detritus
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use	oody Debris se shaded, domina	Boulde	r Ot	her	rcress / succes:		atic Veg
Fish Habitat Potential							
Critical Habitat (spawning or nurs		dwater up	wellings)				
<u>Σραψη</u> Migratory Obstructions (seasonal	I, permanent)						
lack of water.	-					•	
Note any fish observations	ne						
Waterbody Notes Natural Watercourse Trap Burficial Drainage (i.e. furrows) Other Habitat Notes, Incidental	pezoidal Channel Dugout Pond	d	Grassed Dominated	Swale_ I by Aquati	B c Veg	uried Til	e)ry
							·····
ield Notes Authored by	Field Notes (QA/QCed by	NATA				

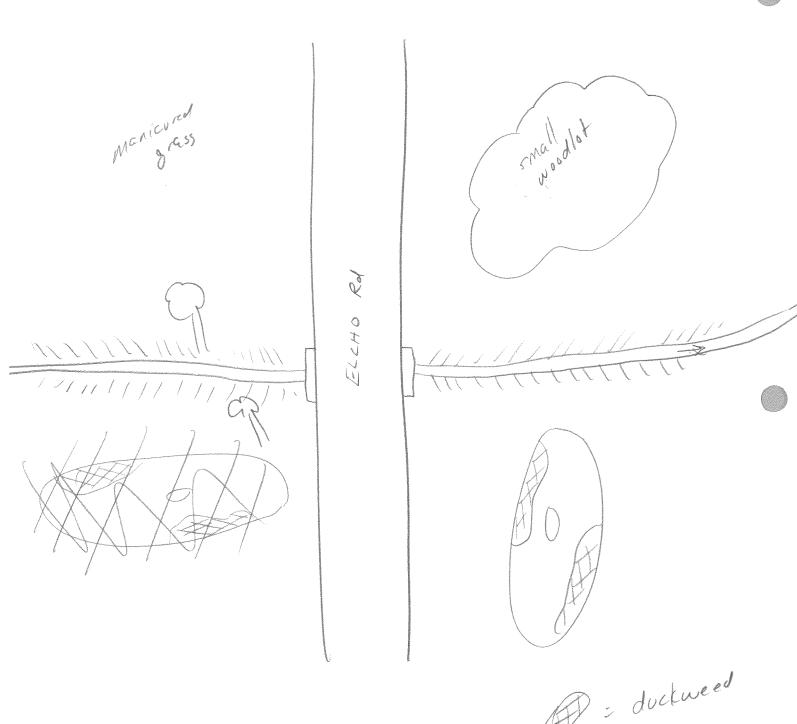






Station # 39-	Project Name Niagara Wind
Watercourse Name Unknown	Project # 160950269
Photos See photo 100	Field Staff F
Photos Sec 20040 109 Date 2012 06 18	Time 12:40
Weather conditions in previous 24 hrs	ninor orccioitation
GPS Coordinates (Zone) 177 E	0622 571 N 4763682 Datum NAD83
Descriptive Location 60 m west	of Regional Rd 27 on Elcho Rd.
Crosses under Elcho Rd.	
Water Quality	
Dissolved Oxygen (mg/L) 3.73	pH <u> 7.57</u> Conductivity (μS/cm)/534
Water Temperature (°C) 2180	Air Temperature (°C)
Time in situ measurements taken	:45
Watercourse Dimensions & Morphology	у
Mean Watercourse Width / / O (m)	Maximum Pool Depth ~ 70 (cm)
Mean Bankfull Width 3.0(m)	Maximum Pool Depth 70 (cm) Mean Water Depth 30 (cm) Mean Water Depth 70 % Run 70 % Fla
% Riffle	% Pool% Run 7 0% Fla
Evidence of eroding banks, Comments on	bank stability none, well vegtion
Substrate (% cover)	
	olo Cond //> Out by said
Boulder Graye	el <u>20</u> Clay Silt & Muck
Adjacent Land Use	dominant vegetation, mature or early successional)
Fish Habitat Potential Critical Habitat (spawning or nursery areas,	groundwater upwellings)
Spawn, Waxim Invisery	
Migratory Obstructions (seasonal, permane	int)
Note any fish observations Fish 30	
Waterbody Notes Natural Watercourse Trapezoidal C	hannel Grassed Swale Buried Tile
Surficial Drainage (i.e. furrows) Dugo	out Pond Dominated by Aquatic Veg Dry
	bservations, etc.
Frog ap.	
0 01	
Field Notes Authored by Fie	eld Notes QA/QCed by





duckweed

| duckweed

| red canangeras



		oware, plants	Nh 1/1-	REA ROST
WIND FARM W	ATERBODY F	RAPID ASSESSM	ENT FORM	Side of Rou
\circ				Non PEA UN

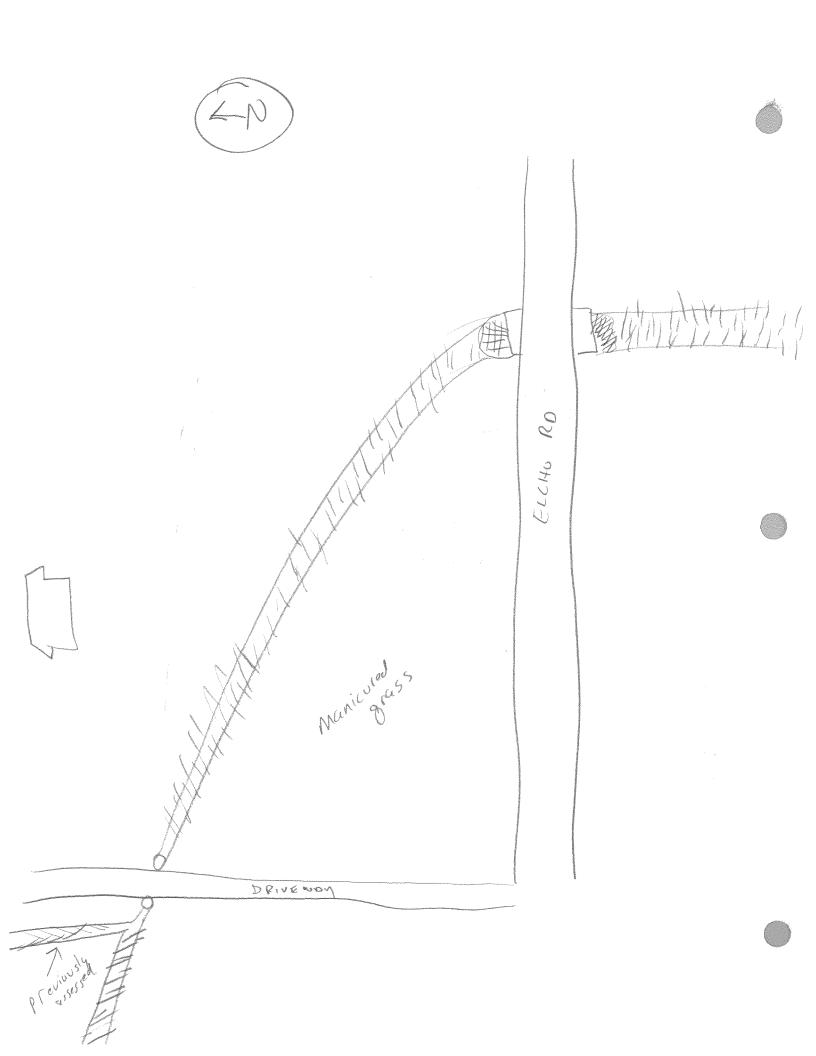
W Pr Da W GI De Wa Tir	ration #	1 hrs	Proje Field Time	N 47	18269 MF -64173	Ninc	
W Pr Da W GI De Wa Tir	atercourse Name unknown ater Quality solved Oxygen (mg/L)	1 hrs	Proje Field Time	ct #1609S Staff	18269 MF -64173		<u> </u>
W Pr Da W GI De Wa Tir	atercourse Name unknown ater Quality solved Oxygen (mg/L)	1 hrs	Proje Field Time	ct #1609S Staff	18269 MF -64173		
Pr Da W GI De W Wa Tir	eather conditions in previous 24 PS Coordinates (Zone) 171 escriptive Location 0 ater Quality escolved Oxygen (mg/L)	1 hrs	Proje Field Time	ct #1609S Staff	18269 MF -64173		
Da W GI De W Wa Tir	eather conditions in previous 24 PS Coordinates (Zone) 171 escriptive Location ater Quality ssolved Oxygen (mg/L)	1 hrs	Field Time	Staff <u>ME 17</u> 11 2 2 3	m F -64173	Datus	
W GI De W Wi Di: Wi Tir	eather conditions in previous 24 PS Coordinates (Zone) 171 escriptive Location 2 ater Quality ssolved Oxygen (mg/L)	E 062	recipital 12266	N 47	-64173 F Elcha 6	Datus	
GI De W W Dis Tir	PS Coordinates (Zone) 171 escriptive Location 0 ater Quality ssolved Oxygen (mg/L)	E 062	12266	N 43	-64173 F Eliha 6	Datus	
De Wa Dis Va Tir	ater Quality ssolved Oxygen (mg/L)				-64173 FELLAR	Datus	
Wa Wa Dis Wa Wa	ater Quality ssolved Oxygen (mg/L)	K.K. at	~ 600 i	m north o	P Elcha G	<u> </u>	n Nad8
Value Dis Wa Tir Wa	ssolved Oxygen (mg/L)				. — (Sear to 60 P	Rd.	
Wa Tir W a	ssolved Oxygen (mg/L)						
Wa Tir W a		рН		Conductivity (uS/cm)	and the same of th	
Tir W a	ater Temperature (°C)	<u> </u>		emperature (°C)		0 2	600 Carino Charles Carino Company
Wa	me in situ measurements taken		7.11. 10				
	atercourse Dimensions & Mor	phology		\wedge			p1@
Me	ean Watercourse Width 0,40		Maxin	num Pool Depth_	20	_(cm) \	/ lvert
Me	ean Bankfull Width/,©	(m)	Mean	Water Depth	70	(cm)	Donn
	% Riffle	% F	Pool		% Run	\\/	% Flat
Ev	idence of eroding banks, Comm	nents on bank	stability	minor under			
Su	bstrate (% cover)						
	Bedrock	Cobble		Sand 40	Silt	30	Muck
	Boulder	Gravel	30	Clay	Siit Marl		_iviuck Detritus
				@ cu)0			_Detritus
	water Cover						
00	ver Types Present (circle):	Undercut B	`		Natercress	Aqu	atic Veg
Ov	erhanging Vegetation Woo	dy Debris	Boulde	er Other		.~	
Rip	oarian Zone						
Rip	parian Cover (% of watercourse	shaded, domi	nant vege	tation, mature or	early succes	sional)	
$\overline{\Delta}$	acent Land Use						
Auj	oc Abld						
	V () ()						
Fis	h Habitat Potential						
	tical Habitat (spawning or nurse	rv areas arou	ındwatar u	nwollings)			
N	15N	iy arcas, grou	iliuwatei u	pweiiirigs)			
Mig	gratory Obstructions (seasonal, p	permanent)	h lo: 1				
Not							
	terbody Notes				/		
Nat	ural Watercourse Trape	zoidal Chann	el	Grassed Swal	le 🗸 📑	Buried T	ile /
Sur	ficial Drainage (i.e. furrows)	Dugout Po	ond	Dominated by A	quatic Veg_		Dry
	er Habitat Notes, Incidental W						-
	The state of the s	maine Obser	vations, e	ic. respector 1	0) 2 2 (con	Y1055	

Field Notes QA/QCed by ______

ス.ス.ロナ MONA Row Row Med Los

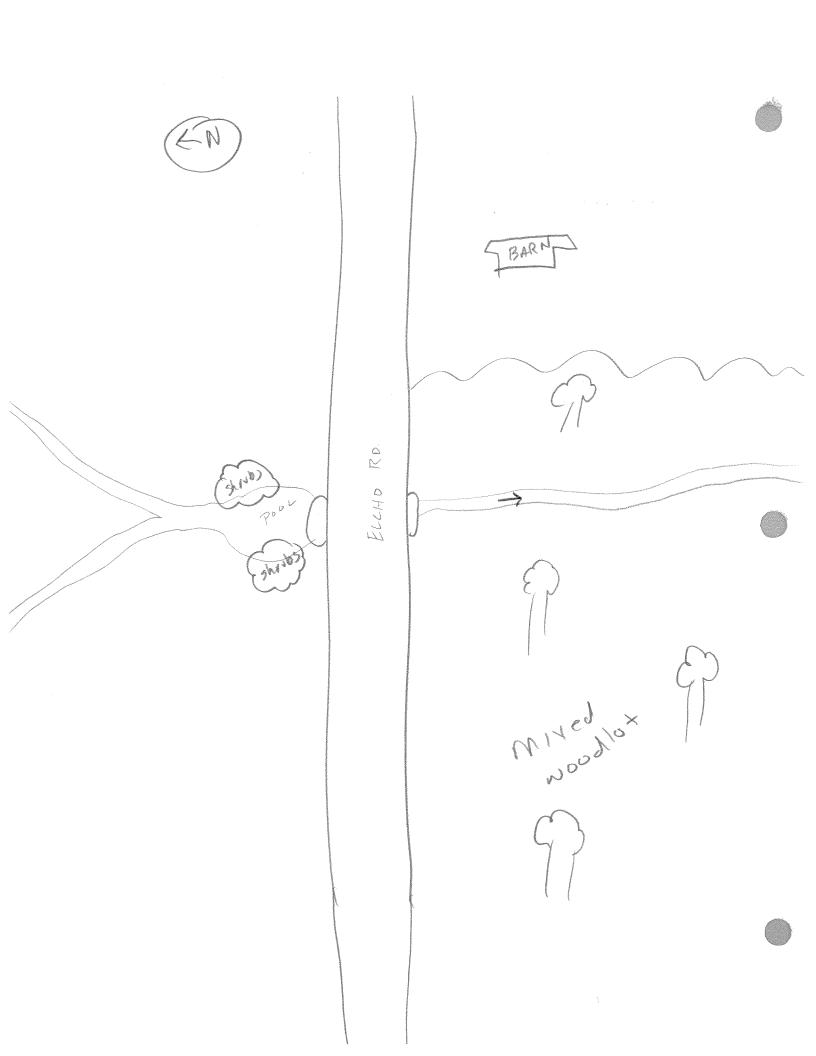


Station #38-	Project Name Nice Car and Nice of
Watercourse Name unknown	Project Name Nagara Wind Project # 160950269
	Field Staff ME ME
Photos See photo logo Date 2012 06 18	Time 14:32
Weather conditions in previous 24 hrs	
GPS Coordinates (Zone) 131 E	0623441 N 4763744 Datum NAD 8
Descriptive Location On Elcho R	d ~400 m east of RR #27
Water Quality	
Dissolved Oxygen (mg/L) 83	pH 8 1/6 Conductivity (uS/cm) 292 h
Water Temperature (°C) 22.43	pH 8 // b Conductivity (μS/cm) 292 b Air Temperature (°C) 30° c
Time in situ measurements taken	:45
Watercourse Dimensions & Morphology	
Mean Watercourse Width / (m)	Maximum Pool Depth (cm)
Mean Bankfull Width 3.0 (m)	Maximum Pool Depth(cm) Mean Water Depth(cm)
% Riffle	_% Pool% Run% Fla
Evidence of eroding banks, Comments on b	pank stability minor under cut
Code Amada (O)	
Substrate (% cover)	• !! .m. • !! .m.
BedrockCobble	Sand 40 Silt 40 Muck Clay Marl Detritus
BoulderGravel	2DClayMarlDetritus
Overhanging Vegetation Woody Debris Riparian Zone Riparian Cover (% of watercourse shaded, of	dominant vegetation, mature or early successional)
Adjacent land land	
Adjacent Land Use	
Fish Habitat Potential	
Critical Habitat (spawning or nursery areas, o	groundwater upwellings)
foraging	
Migratory Obstructions (seasonal, permanen	ıt)
Note any fish observations Fish so	
*	
Waterbody Notes	
Natural Watercourse Trapezoidal Ch	annel Grassed Swale Buried Tile
Surficial Drainage (i.e. furrows) Dugou	t Pond Dominated by Aquatic Veg Dry
Other Habitat Notes, incidental Wildlife Ob	oservations, etc
Prog 50	
Ø *	
	•
Field Notes Authored by Field	d Notes QA/QCed by
	,





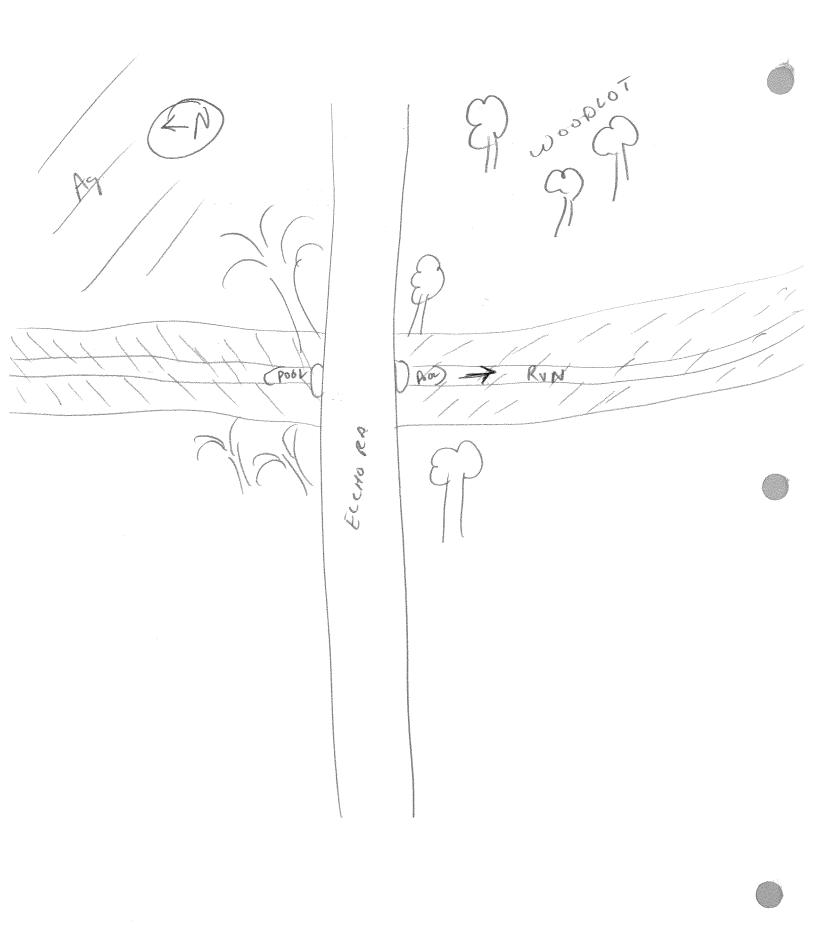
Station # 58-4	Project Name Niagara Wind
Watercourse Name unknown	Project # <u>16095</u> 0269
Photos See photo log	Field Staff ME, ME
Date 2012 06 48	Time 14:49
Weather conditions in previous 24 hrs	Nimor precip
Weather conditions in previous 24 hrs GPS Coordinates (Zone) E	624926 N 4763786 Datum NAD83
Descriptive Location On Elcho Rd -	650m east of Collver Rd
Water Quality	
	Conductivity (Class) (2.60
Water Temperature (°C) 14.59	DH 9.13 Conductivity (μS/cm) 1798
Time in situ measurements taken 4.55	Air Temperature (°C) 3002
Time III Situ measurements taken	
Watercourse Dimensions & Morphology	
Mean Watercourse Width 10 (m)	Maximum Pool Depth3 (cm)
Mean Bankfull Width 2.0 (m)	Mean Water Depth /5 (cm)
% Riffle% 9	
Evidence of eroding banks, Comments on ba	nk stability none observed
_	
Substrate (% cover)	
Bedrock Cobble	(1) Cond 70 014 7 14 1
Boulder Gravel	- Ont On Widon
	30 Clay Marl Detritus
30% matur + Immatur Ga	minant vegetation, mature or early successional)
Adjacent Land Use	
ag land	
0	
Fish Habitat Potential	
Critical Habitat (spawning or nursery areas, gr	oundwater upwellings)
Migratory Obstructions (seasonal, permanent)	
Migratory Obstructions (seasonal, permanent)	,
maydin up	•
Note any fish observations Species ob sur	ved
Vaterbody Notes	
Valural Watercourse Transposidal Char	and Cressed Courts B. 14 J. 79
Surficial Drainage (i.e. furroug)	nnel Grassed Swale Buried Tile Pond Dominated by Aquatic Veg Dry
bufficial Drainage (i.e. fullows) Dugout	Pond Dominated by Aquatic Veg_ V Dry
Other Hahitat Notes Incidental Wildlife Ohe	envetione etc
The resident roles, including Triluing ODS	ervations, etc.
eld Notes Authored by MF Field N	Dies 04/00rd hv. MA 575







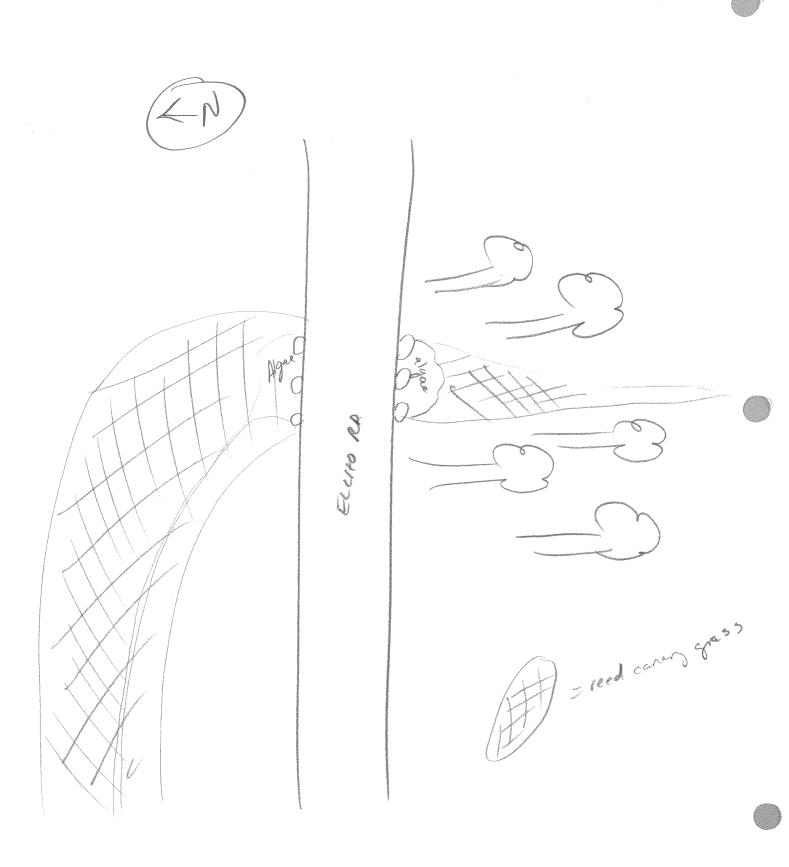
Watercourse Name
PhotosQe
Time
Weather conditions in previous 24 hrs GPS Coordinates (Zone) Descriptive Location Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken Watercourse Dimensions & Morphology Mean Watercourse Width Mean Water Depth Mea
GPS Coordinates (Zone) The E Coordinates (Zon
Water Quality Dissolved Oxygen (mg/L)
Water Quality Dissolved Oxygen (mg/L)
Dissolved Oxygen (mg/L)
Mean Watercourse Width 3.5 (m) Maximum Pool Depth (cm) Mean Bankfull Width 3.0 (m) Mean Water Depth / 0 (cm) Mean Water Depth / 0 (cm)
Mean Watercourse Width 3.5 (m) Maximum Pool Depth (cm) Mean Bankfull Width 3.0 (m) Mean Water Depth / 0 (cm) Mean Water Depth / 0 (cm)
Mean Bankfull Width 3.0 (m) Mean Water Depth 70 (cm) % Pun %0 % Fla
V/ Dima // // // // // // // // // // // // //
Evidence of eroding banks, Comments on bank stability Minor 32007.
Substrate (% cover) Bedrock Cobble Sand 30 Silt 40 Muck
Boulder Gravel 30 Clay Marl Detritus
In-water Cover Cover Types Present (circle): Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional)
5% red canny cyrass
Adjacent Land Use
ag fields
Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings)
Migratory Obstructions (seasonal, permanent)
Note any fish observations
Note any fish observations
Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Other Habitat Notes, Incidental Wildlife Observations, etc
Field Notes Authored by MF Field Notes QA/QCed by MFE







Station #		Project Name N	a 0 a = 1)c	
Watercourse Name	n	Project #_/(o)	agara Coli	<u> </u>
Photos sa mate 105		Field Staff ME, o	130209	
Date 2012 NO 18		Time 15:22	/1 P	
Weather conditions in previous 2	4 hrs	precip.	5.	
GPS Coordinates (Zone)	F 10621	- V - M / I	21-70-6	
Descriptive Location Do	Icho Rd ~	DOM West	F. Gee Rd	atum NAO3
	· ·			
Water Quality				
Dissolved Oxygen (mg/L)		0		
Water Temperature (°C)	P''	Conductivity	(μS/cm)	
Time in situ measurements taken		Air Temperature (°C)	30°_	
<u>-</u>				
Watercourse Dimensions & Mor	phology			
Mean Watercourse Width / O	(m)	Maximum Pool Depth	(cr	n)
Mean Bankfull Width 2.5	(m) ⁻	Mean Water Depth	<u> </u>	
% Riffle	<u> 100</u> % Poo		% Run	% Fla
Evidence of eroding banks, Comm	ients on bank sta	bility none or	orge week.	/ 7 7 10
Substrate (% cover)				
Bedrock	Cobble	Sand3	Silt 40	Muck
Boulder	Gravel3	Clay	Marl	Muck Detritus
Overhanging Vegetation Wood Riparian Zone Riparian Cover (% of waters				The second secon
Riparian Cover (% of watercourse s	snaded, dominan	t vegetation, mature or	early successiona	ni)
Adjacent Land Use	minature / v	natur Mixed	woodlot.	
woodlot, rdiag.				
,				
Fish Habitat Potential				
Critical Habitat (spawning or nurser	y areas, groundw	ater upwellings)		
JAWA 1		<u> </u>		
Migratory Obstructions (seasonal, p				
Note any fish observations	uf comp	VAUL	•	
140te any list observations	V. 1	/		
Waterbody Notes				
Natural Watercourse Trapez	oidal Channel	Grassed Swale	Ruried	Tila
Surficial Drainage (i.e. furrows)	_ Dugout Pond_	Dominated by Ac	uatic Veg	Dry
			, —	DI y
Other Habitat Notes, Incidental Wil	dlife Observation	ns, etc. <u>4004</u> 5	0.	
		· ·		
ield Notes Authored by		-conferen	,	
City Holes Additioned by	Field Notes QA/	QCed byMEE	-	





/ 1 0 1	
Station #	Project Name Niagara Wind
Watercourse Name UNCADWN	Project #_160950269
Photos <u>see photo log</u>	Field Staff ME, MF
Date 1012 00 19	Time 15:34
Weather conditions in previous 24 hrs	NY764069 Datum NAD83
GPS Coordinates (Zone) 177 E 6293/	
Descriptive Location On Browne Rd ~ 20	m South or Condocaugh Ra
Channel pro west side.	
Water Quality	
Dissolved Oxygen (mg/L) 6.83 pH 9	637 Conductivity (µS/cm) 819
Water Temperature (°C) 24.04	Air Temperature (°C) 30°c
Time in situ measurements taken	
Watercourse Dimensions & Morphology	Maximum Pool Depth(cm)
Mean Watercourse Width (m)	Mean Water Depth (cm)
Mean Bankfull Width (m)	0/ 51-4
% Riffle% Poo	70 1 (31)
Evidence of eroding banks, Comments on bank sta	ability Manage 3000
Substrate (% cover)	
Bedrock Cobble	20 Sand 30 Silt 20 Muck
Boulder Gravel	20 Sand 30 Silt 20 Muck 30 Clay Marl Detritus
BoulderCravor	
In-water Cover Cover Types Present (circle): Undercut Bar Overhanging Vegetation Woody Debris	
Riparian Zone Riparian Cover (% of watercourse shaded, domina 37. Yerd Covery State State Adjacent Land Use DASTUCE MOUSES (ds)	ant vegetation, mature or early successional)
Mastoret Mouses, to	
Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground	dwater upwellings)
Migratory Obstructions (seasonal, permanent)	
mande	
Note any fish observations	
Waterbody Notes Natural Watercourse Trapezoidal Channel Surficial Drainage (i.e. furrows) Dugout Pon	Grassed Swale Buried Tile Dominated by Aquatic Veg Dry
Other Habitat Notes, Incidental Wildlife Observa	ations, etc
	3
Field Notes Authored by Field Notes	
	s\Stantec\Form 02 Wind Farm Waterbody Rapid Assessment Form.doc
W:\resource\internal info and Teams\Aquatic Resources\rield Sheets	

Concession Boyle Rd seed canary grass.



Stantec				
Station # 43-\ Watercourse Name unknown Photos Date June 1/2. Weather conditions in previous 24 hrs GPS Coordinates (Zone) 171 E Co Descriptive Location 04-04 Vaugho	Project Field STIME LANGE	Staff 1606 Staff 560 NU	one, Kidayt	nd ntum Nad 8 =
Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken	pHAir Te	_ Conductivity	/(μS/cm) <u>44</u> 2) <u>30°</u> C	
Watercourse Dimensions & Morphology Mean Watercourse Width (m) Mean Bankfull Width (m) ———————————————————————————————————	Mean ' % Pool	water Depth_ Vege fate	0.45 (cr	•
Substrate (% cover)BedrockCobbleBoulderGravel		_Sand	∫ Silt Marl	Muck
In-water Cover Cover Types Present (circle): Undercu Overhanging Vegetation Woody Debris	ut Banks Boulde		Watercress (Aquatic Veg
Riparian Zone Riparian Cover (% of watercourse shaded, do Adjacent Land Use Crapland		ration, mature		al)
Fish Habitat Potential Critical Habitat (spawning or nursery areas, g	M. formain	owellings)		,
Migratory Obstructions (seasonal, permanent Note any fish observations	:)	~		
Waterbody Notes Natural Watercourse Trapezoidal Cha Surficial Drainage (i.e. furrows) Dugou	annel t Pond	Grassed Sv Dominated by	vale Burie / Aquatic Veg	ed Tile
Other Habitat Notes, Incidental Wildlife Ob	turbid we			ae Norths & Sarth
Field Notes Authored by Kayfar Field	i Notes QA/QCed b	by ME		

Vauchn Road

Comment of the second





	1.1.200
Station # 44 -	Project Name Niagara Wind Project # 160950269
Watercourse Name_unknawn	Project # 160958269
Photos	Field Staff O. Voon Q. V. Cluyton
Date June 20/12	Time
Troutier outlantions in provides = 1	621 N 4765373 Datum Nad 83
GPS Coordinates (Zone) 17T E 622	
	Regional Rd 27, Nathof
	TRI CA
Water Quality \ - no water	
Dissolved Oxygen (mg/L) pH	Conductivity (μS/cm)
Water Temperature (°C)	Air Temperature (°C)
Time in situ measurements taken	
Watercourse Dimensions & Morphology	
Mean Watercourse Width(m)	Maximum Pool Depth(cm)
Mean Bankfull Width 2.5 (m)	Mean Water Depth (cm)
% Riffle % Poo	
Evidence of eroding banks, Comments on bank sta	ability
ZVICESTICS OF STOCKING STATES, ST	
Cub strate (9/ cover)	
Substrate (% cover) Bedrock Cobble	40 Sand 10 Silt Muck
Boulder Gravel	Clay Marl Detritus
In-water Cover Cover Types Present (circle): Undercut Bar Overhanging Vegetation Woody Debris	nks Deep Pool Watercress Aquatic Veg Boulder Other
Riparian Zone Riparian Cover (% of watercourse shaded, domina	ant vegetation, mature or early successional)
Adjacent Land Use	
Adjacent Land Ose	
Fish Habitat Potential	
Critical Habitat (spawning or nursery areas, ground	dwater upwellings)

Migratory Obstructions (seasonal, permanent)	
Note any fish observations	
Note any fish observations	
Waterbody Notes	Grassed Swale Buried Tile
Natural Watercourse Trapezoidal Channe	
Surficial Drainage (i.e. furrows) Dugout Por	id Dominated by Aquatic veg bry
Other Habitat Notes, Incidental Wildlife Observ	ations, etc.
Field Notes Authored by Carry Field Notes	s QA/QCed by





Station #	Project Name <u>Niagara</u> Wind
Watercourse Name unknown	Project # 160958269
Photos	Field Staff J. Keens, C. Clayton
Date June 20/12	Time 10:30
	a humid
GPS Coordinates (Zone) 17T E 622 0	
	ana Ra 27 (East side),
	hn Pd.
Water Quality and	
	Conductivity (μS/cm)
Water Temperature (°C)	Air Temperature (°C)
Time in situ measurements taken	
Watercourse Dimensions & Morphology	
Mean Watercourse Width (m)	Maximum Pool Depth(cm)
Mean Bankfull Width(m) \	Mean Water Depth(cm)
% Riffle% Po	ool% Run% Flat
Evidence of eroding banks, Comments on bank st	tability
Substrate (% course)	
Substrate (% cover)	U⊘_Sand/OSiltMuck
Boulder Gravel	90 Sand 10 Silt Muck 50 Clay Marl Detritus
Graver	So Clay Marl Detritus
In-water Cover	
Cover Types Present (circle): Undercut Ba	nks Deep Pool Watercress Aquatic Veg
Overhanging Vegetation Woody Debris	Boulder Other
Riparian Zone	
Riparian Cover (% of watercourse shaded, domina	ant vegetation, mature or early successional)
X57. avasces en vi	U
Adjacent Land Use	<u> </u>
CVOX- Alfafa Cax	
Fish Habitat Potential	
Critical Habitat (spawning or nursery areas, ground	dwater upwellings)
Migratory Obstructions (seasonal, permanent)	in Spring.
Migratory Obstructions (seasonal, permanent)	. J
dv	
Migratory Obstructions (seasonal, permanent) Note any fish observations	
Waterbody Notes	
Natural Watercourse Trapezoidal Channel	Grassed Swale Buried Tile
Surficial Drainage (i.e. furrows) Dugout Pon	nd Dominated by Aquatic Veg Dry_/
Other Habitat Notes, Incidental Wildlife Observ	ations, etc
Field Notes Authored by K Clauten Field Notes	
Field Notes	s QA/QCed by

Central Wellard Kiver Lunnamed Creek



WIND FARM WATERBODY RAPID ASSESSMENT FORM

NON

Station #45-		Project Name Nico	MA COLLAN	
Watercourse Name (Lin) You	Y	Project # (60		1
Photos 9123 - 912	35			227
Date June 20/12		Time (0:45		
Weather conditions in previous 24	thrs hat a	humid		
GPS Coordinates (Zone) 62402	7 E 4765			atum Nad
Descriptive LocationEart	Of Turby	076 Offe	- O Variot	atum Nad
			3 = Vaugr	
Water Quality				
Dissolved Oxygen (mg/L)	pH	Conductivity	(uS/cm)	
Water Temperature (°C)		Air Temperature (°C)	3 ~	
Time in situ measurements taken_				
Watercourse Dimensions & Mor	phology			
Mean Watercourse Width	. (m) /	Maximum Pool Depth	(c	m)
Mean Bankfull Width	(m)	Mean Water Denth	(C	m)
% Riffle	(/_% Pool		% Run(c	, % Flat
Evidence of eroding banks, Comm	ents on bank stal	bility		
Substrate (% cover)				
Bedrock	Cobble	Sand	Silt	Muck
Boulder	Gravel	Clay	Mari	Detritus
Cover Types Present (circle): Overhanging Vegetation Wood	Undercut Bank dy Debris	s Deep Pool Boulder Other_	Watercress	Aquatic Veg
Riparian Zone Riparian Cover (% of watercourse s	shaded, dominan	t vegetation, mature or	early succession	ıal)
Adjacent Land Use	- Gras	ses, early		
+avmand		*		
- Tavrijano				
Fish Habitat Potential				
Critical Habitat (spawning or nurser	v areas aroundu	rator upwallings)		
	y areas, groundw	ater upweilings)		
Migratory Obstructions (seasonal, p	ermanent)			
Note any fish observations				
Waterbody Notes				
Natural Watercourse Trape	zoidal Channel	Granad Swa	la Divisi	1 -7 -9 -
Surficial Drainage (i.e. furrows)	Dugout Pond	Dominated by A	ie Burie Aquatic Veg	ea lile
Other Habitat Notes, Incidental W	iidiite Observati	ons, etc.		
s de l				
Field Notes Authored by	Field Notes OA	AOCod by T		



Uh	nan	red	Cr	-eet
	40	CW	2	_

Station # 45-2	Project Name	agara Wi	
Watercourse Name	Project #	1950269	
Photos 9126-9128	Field Staff	WARD I VA	7 84
Date June 20/2	Time		
Weather conditions in previous 24 hrs	a humid		
GPS Coordinates (Zone) 624331 E 4765	169 N	Da	itum / 7
Descriptive Location Fact of 4	s-1, off of	VaughnRa	
Water Quality			
Disposit and One of the	and the same of th		
Water Temperature (°C) pH	Conductivity	(μS/cm)	
Time in situ measurements taken	Air Temperature (°C)	32	
Watercourse Dimensions & Morphology			
Mean Watercourse Width (m)	Maximum Pool Depth) /am	
Mean Bankfull Width(m)	Mean Water Depth		•
% Riffle % P00		(crr _% Run	,
Evidence of eroding banks, Comments on bank sta	hility	_/o rturi	% Fla
Substrate (% cover)			
BedrockCobble			
BoulderGravel	Sand Clay	Silt Marl	Muck
In-water Cover Cover Types Present (circle): Undercut Bank Overhanging Vegetation Woody Debris	s Deep Pool Boulder Other	Watercress A	Detritus Tupin quatic Veg
Riparian Zone Riparian Cover (% of watercourse shaded, dominant	t vegetation, mature or	early successiona	1)
Agricultural Jano			
Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundw	ater upwellings)		
Migratory Obstructions (seasonal, permanent)			
Note any fish observations			
Waterbody Notes Natural Watercourse Trapezoidal Channel Surficial Drainage (i.e. furrows) Dugout Pond_ Other Habitat Notes, Incidental Wildlife Observation	Grassed Swal	le Buried	Tile
ield Notes Authored by K. Claydo Field Notes QA			





Stantec

Station # $4(a-1)$	
Watercourse Name unkn	Project Name Niagara Wind
Photos Photos	Project # 1/ 296 200
Date Olivor Octo	Field Staff
Photos Date June 20/12 Weather conditions in any	Project # 160950269 Field Staff Coord
- 1 Jan Ci Conditions in heaviou	10 0 1 h h h h
GPS Coordinates (Zone)	TT E 626828 N 4765319 Potential
Descriptive Location	of Vaughn Rd, West of Greenad
Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements tak	pH Conductivity (µS/cm)
Watercourse Dimensions & Mean Watercourse Minus	Morphology
THOUSE DAIRNING VIOLEN	, , \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Fyidona - Mariffle	(m) Mean Water Depth (cm)
% Riffle Evidence of eroding banks, Cor	mments on bank stability — — % Run — — % Flat
	- Colonity
Substrate (% cover)	
	Calli
Boulder	CobbleO SandO SiltMuck GravelO ClayMarl Date:
	GravelGlayMarlDetritus
In-water Cover	- Ctritus
Cover Types Present (circle):	Undercut Banks Deep Pool Watercress Aquatic Ved
Overnanging Vegetation Wo	Ondercut Banks Deep Pool Watercress Aquatic Veg
Riparian Zone	Boulder Other
Riparian Cover (% of waters	
- watercours	e shaded, dominant vegetation, mature or early successional)
Adjacent Land Use	ariaded, dominant vegetation, mature or early successional)
- Corn &	Call
	500
Fish Habitat Potential	
Critical Habitat (spawning or nurs	ery areas, groundwater upwellings)
- Patent	ery areas, groundwater upwellings)
Migratory Obstructions (seasonal,	permanent)
(**************************************	Jin d - Coo Co
Note any fish observations	- Star ora
	dry-Seasona
Waterbody Notes	
Natural Watersource	
Surficial Drainage (i.e. fram	ezoidal Channel Grassed Swale Buried Tile
	ezoidal Channel Grassed Swale Buried Tile Dugout Pond Dominated by Aquatic Veg Dry
Other Habitat Notes Incident	Dry Dry
	Vildlife Observations, etc.
ield Notes Authored by K clayton	
/:\resource\Internal Info and Tooms\A	Field Notes QA/QCed by M E
ON VOUCHUREUMENTAL INTO ANA T	

W:\resource\Internal Info and Teams\Aquatic Resources\Field Sheets\Stantec\Form 02 Wind Farm Waterbody Rapid Assessment Form.doc





Station #	Project Name No Project # 1609 Field Staff	58269	4
Date June 2/12 Weather conditions in previous 24 hrs GPS Coordinates (Zone) 17T E 62196 Descriptive Location 644 64 CONEY		766657 al Rd 2	Datum Nad 83
•	Conductivity Air Temperature (°C)	(μ S/cm) 32°C	
Watercourse Dimensions & Morphology Mean Watercourse Width		_% Run	_(cm) _(cm) % Flat
Evidence of eroding banks, Comments on bank sta	bility <u>stable</u>	banks-	Annual contract of the contrac
Substrate (% cover)BedrockCobble BoulderGravel	Sand Clay	Silt_ Marl	Muck Detritus
In-water Cover Cover Types Present (circle): Undercut Bank Overhanging Vegetation Woody Debris	s Deep Pool	Watercress	Aquatic Veg
Riparian Zone Riparian Cover (% of watercourse shaded, dominant	it vegetation, mature o	or early success	sional)
Aujacent Land Use	typha, early		
Fish Habitat Potential Critical Habitat (spawning or nursery areas, grounds	vater upwellings)		
Migratory Obstructions (seasonal, permanent)			***************************************
Note any fish observations			
Waterbody Notes Natural Watercourse Trapezoidal Channel _ Surficial Drainage (i.e. furrows) Dugout Pond Other Habitat Notes, Incidental Wildlife Observat	Dominated by	Aquatic Veg_	d dominated
Field Notes Authored by K Clay Field Notes Q	A/QCed by ME		



REA

Station #47-		Project Name	iagara Wi	nd
Watercourse Name unkna	M.	Project #	950269	
Photos Date June 31/12		Field Staff	eeno V. Cu	utan.
		Time	S	
Weather conditions in previous	24 hrs	numid		
GPS Coordinates (Zone)	T E 62-265	N 2	1766473 D	atum Nad 83
Descriptive Location	tot kegiano	1 Rd20, E	0+47-1	
Water Quality - dnu				
Dissolved Oxygen (mg/L)	He	Conductivi	ty (μS/cm)	
Water Temperature (°C)		Air Temperature (°C	C)_ <u>32°C</u>	
Time in situ measurements tak	en	romporataro (c	7)	
Watercourse Dimensions & M				
Mean Watercourse Width		Maximum Pool Dep	th(cr	m)
Mean Bankfull Width % Riffle	(pri) N	Mean Water Depth	(Cr	m)
	% Pool	*3*,	% Run`	% Flat
Evidence of eroding banks, Con	Timents on bank stabi	llity		
Substrate (% cover)				
Bedrock	Cobble	Sand	Silt	Muck
Boulder	Gravel	Clay		Nuck Detritus
In-water Cover		,		Typha
	Undergut Dayles	5. 5.		
Cover Types Present (circle): Overhanging Vegetation W	Ondercut Banks	Deep Pool	Watercress (Aquatic Veg
The second control of	cody Debils D	oulder Other		
Riparian Zone				
Riparian Cover (% of watercours	se shaded, dominant	vegetation, mature	or early succession	al)
Adjacent Land Use	G, early			
Adjacent Land Ose	tral, Road	1		
- Carron	TO T	1501		
Fish Habitat Potential		1		
Critical Habitat (spawning or nur	sery areas, groundwa	iter upwellings)		
Migratory Obstructions (seasona				
	, permanent)			
Note any fish observations				
Waterbody Notes				
Natural Watercourse Tro	nozoidal Channel	•		
Natural Watercourse Tra	ipezoidai Channei	Grassed S	wale Burie	d Tile
Surficial Drainage (i.e. furrows)_	Dugout Fond	Dominated by	y Aquatic Veg	Dry
Other Habitat Notes, Incidental	Wildlife Observatio	ns. etc.		
		,		
Field Notes Authored by K Clayton		WATE		
	Field Notes QA/0		The state of the s	
W:\resource\Internal Info and Teams\Aquatic	Resources\Field Sheets\Stant	tec\Form 02 Wind Farm W	aterbody Rapid Assessmer	nt Form.doc





1112	
Station #	Project Name Niagara Wind
Watercourse Name unknown	Project # 160950269
Photos Date June 2/12	Field Staff J. Yeen O. K. Clarkon
Date June 27/2.	Time\S : 30
Weather conditions in previous 24 hrs	
GPS Coordinates (Zone) TE (0)	3014 N 4766498 Datum Nad 83
Descriptive Location _6++ of Regre	scal Road 20 East of 47-2
Water Quality	-Dvu
Dissolved Oxygen (mg/L) p	H Conductivity (μS/cm)
Water Temperature (°C)	Air Temperature (°C)
Time in situ measurements taken	/ in Temperature (C)
Watercourse Dimensions & Morphology	
Mean Watercourse Width (m)	Maximum Pool Depth(cm)
Mean Bankfull Width (m)	Mean Water Depth (cm)
% Riffle	- Pool
Evidence of eroding banks, Comments on ban	ık stability
Substrate (% cover)	
	SandSiltMuck
BoulderGravel	SandSiltMuck ClayMarl Detritus
In-water Cover	ClayMarlDetritus
Cover Types Present (circle): Undercut	Hanks Deen Pool Wetersteen
Overhanging Vegetation Woody Debris	Boulder Othersed
Riparian Zone	
Riparian Cover (% of watercourse shaded, don	ninant vegetation, mature or early successional)
- We, Hora town	
- tarmland, Roa	$\frac{d}{d}$
Figh Makitas Burnary	
Fish Habitat Potential	
Critical Habitat (spawning or nursery areas, gro	undwater upwellings)
Migratory Obstructions (seasonal, permanent)	
Note any fish observations	
Waterbody Notes on such sale	
Natural Watercourse Transpoidal Chan	nel Grassed Swale Buried Tile
Surficial Drainage (i.e. furrows)	Grassed Swale Buried Tile
Dugout P	Pond Dominated by Aquatic Veg Dry
Other Habitat Notes, Incidental Wildlife Obse	ervations, etc
,	
/ /	
Field Notes Authored by Kaytar Field No	otes QA/QCed by ME

W:\resource\Internal Info and Teams\Aquatic Resources\Field Sheets\Stantec\Form 02 Wind Farm Waterbody Rapid Assessment Form.doc



Field Notes Authored by _

WIND FARM WATERBODY RAPID ASSESSMENT FORM

61

WIND FARM WATERBO	DDY RAPID ASSESSMENT FORM	REF
Stantec	Defined on	50046
Station # 48-1	Project Name Niagara Wine	d E
Watercourse Name_unknawn	Project # 160958269	
Photos Su prote 167	Field Staff ME, MF	
Weather conditions in previous 24 hrs	Time 10:3)	
GPS Coordinates (Zone) 177 F Db		ım Nac
GPS Coordinates (Zone) 17T E 06 Descriptive Location 00 R.R.20 ~	Km east of R,R,27	iii Nac
Water Quality		
Dissolved Oxygen (mg/L)pH	Conductivity (µS/cm)	
Water Temperature (%)	Air Temperature (°C) 28°	
Time in situ measurements taken		
Watercourse Dimensions & Morphology	Maximum Baal Banth (2002)	
Mean Watercourse Width 10 (m) Mean Bankfull Width 20 (m)	Maximum Pool Depth(cm) Mean Water Depth(cm)	
	Mean Water Depth (cm)	% F
Evidence of eroding banks, Comments on bank		/01
Substrate (% cover)		
	/D Sand 232 Silt 2 D	Muck
BedrockCobble	<u> </u>	ividek Detritu
	Jay Wan	Denic
In-water Cover		
Cover Types Present (circle): Undercut B	Banks Deep Pool Watercress Ac	uatic Ve
Overhanging Vegetation Woody Debris	Boulder Other	
Riparian Zone		
Riparian Cover (% of watercourse shaded, domi	inant vegetation, mature or early successional)
Adjacent Land Use house, roads, boy fields.		
, V		
Fish Habitat Potential		
Critical Habitat (spawning or nursery areas, grou	undwater upwellings)	
Dossible Spawn Migratory Obstructions (seasonal, permanent)		
Note any fish observations		
Mataulandu Matan	1	
Mahaubadu Naha	nel Grassed Swale Buried	L∕Tile
Mahaubadu Naha	nel Grassed Swale Buried ond Dominated by Aquatic Veg	Tile Dry
Waterbody Notes Natural Watercourse Trapezoidal Chann Surficial Drainage (i.e. furrows) Dugout Po		
Mahaubadu Naha		

W:\resource\Internal Info and Teams\Aquatic Resources\Field Sheets\Stantec\Form 02 Wind Farm Waterbody Rapid Assessment Form.doc

Field Notes QA/QCed by ______

frattail/reed careins Modern feed caree grass 02 R. D. D.O.



R	$\in A$
N INH	+ imps
W/1 6	de Fines

Station #		
	Project Name Nia aara Min	d
Watercourse Name unkna	Project Name Niagara Win Project # 160950269 Field Staff WE WA	
Photos See Oh NO DX	Field Staff ME ME	
Photos Suphoto lox Date June 22/12	Time Oa : 52	
	s 24 hrs minut pricip	
GPS Coordinates (Zone)		um Nad
Descriptive Location Ok S		
Water Quality		\
Dissolved Oxygen (mg/L)	pH Conductivity (μS/cm)	
Water Temperature (°C)		
Time in situ measurements tak		
Watercourse Dimensions &		We of
Mean Watercourse Width 2		•
Mean Bankfull Width	· · · · · · · · · · · · · · · · · · ·	") % F
% Riffle Evidence of eroding banks, Co		/0 1
Evidence of eroding banks, oc	Offinerts of bank stability	
Substrate (% cover)	Oakhia Cand 40 Cill 3	
Bedrock	CobbleSand/~_Siit	IVIUCK
Boulder	Gravel 30 Clay Marl	Detritu
Overhanging Vegetation \	Woody Debris Boulder Other	
Riparian Zone	urse shaded, dominant vegetation, mature or early succession	al)
Riparian Zone Riparian Coyer (% of watercou	urse shaded, dominant vegetation, mature or early succession	al)
Riparian Zone Riparian Cover (% of watercount Mutur Free Real Adjacent Land Use	w My	al)
Riparian Zone Riparian Cover (% of watercount Muture Free readd) Adjacent Land Use	w My	al)
Riparian Zone Riparian Cover (% of watercount Muture Free New Adjacent Land Use Gritical Habitat Potential Critical Habitat (spawning or new Adjacent Habitat (spawning or new Adjacent Land Use)	nursery areas, groundwater upwellings)	al)
Riparian Zone Riparian Cover (% of watercount watercount water harms have harms here Adjacent Land Use ac Wadds house harms Fish Habitat Potential Critical Habitat (spawning or named to the source)	nursery areas, groundwater upwellings)	al)
Riparian Zone Riparian Cover (% of watercount of watercoun	nursery areas, groundwater upwellings)	al)
Riparian Zone Riparian Cover (% of watercount of watercoun	nursery areas, groundwater upwellings)	al)

Field Notes QA/QCed by MEE



Station # 50 -	Project Name	laara hin	1	
Watercourse Name_W/V/A/M Photos	Project #			
Date Owne 20/12	Field Staff	HON J.V	2010	
	Time(0:075			
Weather conditions in previous 24 hrs	<u>ahumid</u>			
GPS Coordinates (Zone) 62 1891 E 470	07594 N	D	atum ///	
Descriptive Location Runs north	E of 50-2 19	Legional G	2 d a b c	
Water Quality				
Dissolved Oxygen (mg/L) pH	Conductivity (μS/cm)		
Water Temperature (°C)	Air Temperature (°C)	33		
Time in situ measurements taken				
Watercourse Dimensions & Morphology				
Mean Watercourse Width (m)	Maximum Pool Depth_	(cı	m)	
Mean Bankfull Width(m)	Mean Water Depth	(CI		
% Riffle%	² 00l o	% Run	, % Fla	
Evidence of eroding banks, Comments on bank	stability		70 1 IQ	
Substrate (% cover)				
BedrockCobble				
Boulder Gravel		Silt	Muck	
Graver	Clay	Mari	Detritus	
In-water Cover				
Cover Types Present (circle): Undercut B	anks Deep Pool W	/atercress	Acuatia Man	
Overhanging Vegetation Woody Debris	Boulder Other	ratercress /	Aquatic Veg	
Riparian Zone Riparian Cover (% of watercourse shaded, dominated Adjacent Land Use	nant vegetation, mature or e	early succession	al)	
Road farmlan				
Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground	ndwater upwellings)	,		
Migratory Obstructions (seasonal, permanent)				
Note any fish observations	my			
Total any high observations	· ·			
Waterbody Notes Natural Watercourse Trapezoidal Channe Surficial Drainage (i.e. furrows) Dugout Po	el Grassed Swale	Burie	d Tile	
Other Habitat Notes, Incidental Wildlife Observ			,	
Field Notes Authored by Kalauta Field Notes	a QA/QCed by			
3:\01609\resource\Internal Info and Teams\Aquatic Resources\Field	Sheets\Stantec\Form 02 WInd Farm V	– Vaterbody Rapid Asses	ssment Form.doc	



Un	nanto	red	C+-	eek
	40	Cu	IR	

Station # 50-2				1	~
Watercourse Name Whyna		Project Name ///	deaca wind	⁷	
Photos	W,	Project #			****
Date		Field Staff 12.01	auton J. K	eme	
Weather conditions in previous 24		Time			
GPS Coordinates (7ans) (3a		+ a humid			
GPS Coordinates (Zone) 62206	5 E 4767	860 N		Datum	Nad
Descriptive Location E of	Tono	41 Pd 20, C	‡ 50·1 , c	OFFOR	
Water Quality		- 5.001			
Dissolved Oxygen (mg/L)		0			
Water Temperature (°C)	 рп	Conductivi	ty (μS/cm)		
Time in situ measurements taken		Air Temperature (°C			
Watercourse Dimensions & Mor	phology	,			
Mean Watercourse Width	(m)	Maximum Bool Dam	11_		
Mean Watercourse Width	(m)	Maximum Pool Dep	tn	(cm)	
% HITTLE	% P 6	Mean Water Depth_	~ ~	(cm)	
Evidence of eroding banks, Comm	ents on bank sta	olability	% Run		% Fla
Cosh at all 101					
Substrate (% cover)	The same of the sa				
Bedrock	Cobble	Sand	Silt	Mud	ماد
Boulder	_Gravel	Clay	Om Marl		tritus
In-water Cover Cover Types Present (circle): Overhanging Vocatation	Undercut Ban	ks Deen Pool	Watercress	A	
Overhanging Vegetation Wood	dy Debris		Watercress	Aquatic \	veg
Riparian Zone		· · •			
Riparian Cover (% of watercourse s	shaded, dominar	nt vegetation, mature	or early success	sional)	
Adjacent Land Use				sioriai)	
farr	mla ad				
Fish Habitat Potential					
Critical Habitat (spawning or nursen	v areas, groundy	vater unwellings)			
تــــــــــــــــــــــــــــــــــــ		rator apwellings)	,		
maratory obstructions (seasonal, p	ermanent)	4			
Note any fish observations	AM CNA X	1450			
Vaterbody Notes					
latural Watercourse Transa	roidal Channol	. 0			
latural Watercourse Trapez surficial Drainage (i.e. furrows)	Dugout Pond_	Grassed Swa Dominated by	aleB Aquatic Veg	uried Tile	
Other Habitat Notes, Incidental Wi	ldlife Observati	ons. etc.	, 		
old Notes Authored by K. Clautan					

G:\01609\resource\internal Info and Teams\Aquatic Resources\Field Sheets\Stantec\Form 02 Wind Farm Waterbody Rapid Assessment Form.doc



THE PARTY WATER	ENDOUT RAPID ASSESSMENT FORM	Λ
Stantec		
Station # 51-51 n.l.		4
	Project Name Niagara Li	lind
Watercourse Name unknown Photos	Trolect # 1/ 59cW 7/- a	
Date June 21/12.	Field Staff J. Ceens K cla	1 4 1 1 1 1
Weather conditions	Time5 : 52	
Weather conditions in previous 24 hrs		
GPS Coordinates (Zone) 171 E (Conceptive Location Conference Confe		Datum Nad
	+ Regional Road	
Water Quality	nowater	
Dissolved Oxygen (mg/L)	pH Conductivity (0)	
water remperature (°C)	pH Conductivity (μS/cm) Air Temperature (°C) 3 ② *ℂ	
Time in situ measurements taken	All reinperature (°C) 3 3 °C	
Watercourse Dimensions & Morphology		
Mean Watercourse Width (m) Mean Bankfull Width 나 (m)		
Mean Bankfull Width 나 (m)	Maximum Pool Depth((cm)
% Riffle	Weatryvater Depth(cm)
Evidence of eroding banks, Comments on I	% Pool% Run	% Fla
o s, seminomo om		
Substrate (% cover)		
BedrockCobble	a Cond	
Boulder Grave	SiltSilt	Muck
In-water Cover	ClayMarl	Detritus
O		TV
Cover Types Present (circle): Under	cut Banks Deep Pool Watercress	
Overhanging Vegetation Woody Debris	Boulder Other_	Aquatic Veg
Riparian Zone		
Riparian Cover (% of watercourse shaded of	lominant vegetation, mature or early successio	
Adjacent Land Use Typha, Typha, T	ar ha	nal)
- Jane 2.11 Edita OGC		
Soy, Roa	d forest	
ish Habitat Potential		
Critical Habitat (spawning or nursery areas, o	managed at the second at the s	
	roundwater upwellings)	
ligratory Obstructions (seasonal, permanen	()	
ard	,	
ote any fish observations		
aterbody Notes		
atural Watercourse Trapezoidal Cha	annel Grassed Swale Buri	
urficial Drainage (i.e. furrows) Dugou	Pond Dominated by Aquatic Veg	ed Tile
		_ Dry
Manual Parlick of Sec.	MV nodocateki	J
ther Habitat Notes, Incidental Wildlife Ob	servations ato	1 Chancel





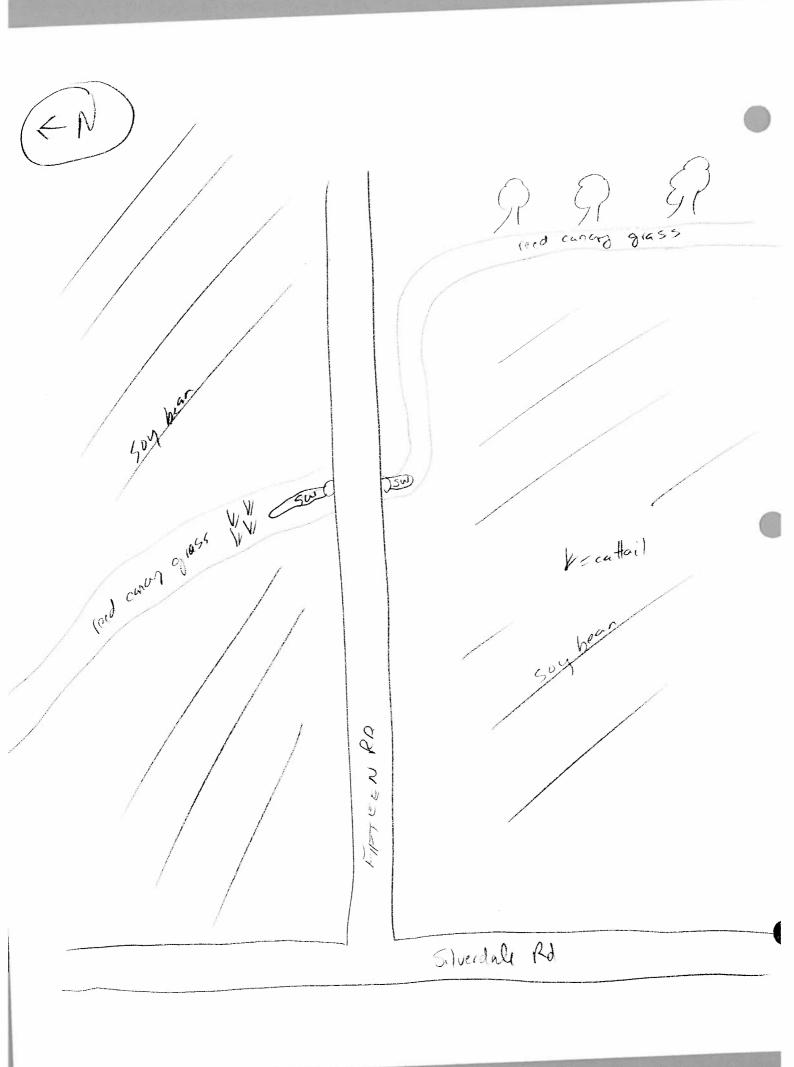
Stanted

Station # 52-1	Project Name Niagara Wind
Watercourse Name unknown Photos	Project # 160958269
Date June 2/12	ried Star 1. 1/00 he by Clarite
Weather conditions in any in a state of the	Time(6:03
Weather conditions in previous 24 hrs	ofthumid.
GPS Coordinates (Zone)	2011 N 4769771 Datum Nad 8=
Descriptive Location of Pegio	nal Rd 569, near intersection of
Water Quality	
Dissolved Oxygen (mg/L) DH	823 Conductivity (u.S/cm) 1/65
Time in situ measurements taken 16:0	823 Conductivity (µS/cm) 1165 Air Temperature (°C) 32°C+
watercourse Dimensions & Morphology	
Mean Watercourse Width $Q_{ij} \sim (m)$	Maximum Pool Depth 0.15 (cm)
0/ 10/11	Mean Water Depth (cm)
	Pool 100 % Bun % Flat
Evidence of eroding banks, Comments on bank	stability stable - regelated
Substrate (% cover)	
BedrockCobble	/SandSiltMuck
BoulderGravel	Class
In-water Cover	
Cover Types Present (circle):	anks Deep Pool Watercress Aquatic Voq
Cover Types Present (circle): Undercut Ba Overhanging Vegetation Woody Debris	Boulder Other age Aquatic Veg
Riparian Zone	
Riparian Cover (% of watercourse shaded domin	ant vegetation, mature or early successional)
Adjacent Land Llee	arry
farmland	
Fish Habitat Potential	
Critical Habitat (spawning or nursery areas, groun	dwater upwellings)
	reen, foraging
3 mary about dottoris (seasonal, permanent)	1 almost
Note any fish observations	- Call be any by end of rummi
Vaterbody Notes	
Natural Watercourse Trapezoidal Channel	Granded Courts
Surficial Drainage (i.e. furrows) Dugout Pon	Grassed Swale Buried Tile d Dominated by Aquatic Veg Dry
Other Habitat Notes, Incidental Wildlife Observa	ations, etc. Turbid water
V 00 1	
ield Notes Authored by K. Clayton Field Notes	QA/QCed by VATE

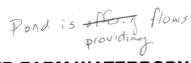


non	REA	South	~
/FNT E		# RT	A

,	Station # 54-1	on 4,
1	Station # 54~	Project Name N \ m = m 1 \ m = m
	Watercourse Name unknown	Project Name Viagara Wind
	Photos Su photo log	Project #_ 160958269 Field Staff MEUNE
	Date _ OUT CE ZZ//Z	Time
١	Weather conditions in previous 24 hrs	Time 69:34
•	GF3 Coordinates (Zone)	0601011
[Dogorindia a la sali na seconda de la second	~ 300 m east of Silverdale Rd
1	Water Quality	
2 [Dissolved Oxygen (mg/L)	nH / Complexity (c)
٧	Water Temperature (°C)	pH Conductivity (μS/cm) Air Temperature (°C) 2 4 2
7	and moderations taken	Air Temperature (°C)
V	Watercourse Dimensions & Morphology Mean Watercourse Width O.6 (m)	
Ň		Maximum Pool Depth 0.20 (cm)
•		Mean Water Depth 6.10 (cm)
Ē	Evidence of eroding banks, Comments on bar	% P001
_	banks, Comments on banks,	nk stability mod defin, minor scour
S	Substrate (% cover)	
	BedrockCobble_	Sand 40 Silt 30 Man
C	Boulder Gravel	t Banks Deep Pool Watercress Aquatic V
O	Boulder Gravel	30 Clay Mari Detr
CO	Boulder Gravel Gravel ————————————————————————————————————	t Banks Deep Pool Watercress Aquatic V
CO RI Ri	Boulder Gravel G	t Banks Deep Pool Watercress Aquatic V
CO RI RI AC	Boulder Gravel G	t Banks Deep Pool Watercress Aquatic V
CO RI RI AC	Boulder Gravel G	t Banks Deep Pool Watercress Aquatic V
Ri Ri Ac	Boulder Gravel Gravel Mater Cover Cover Types Present (circle): Undercute Everhanging Vegetation Woody Debris Iparian Zone iparian Cover (% of watercourse shaded, dor Start Concompany Start C	t Banks Deep Pool Watercress Aquatic V
RI RI Ac	Boulder Gravel Gravel Mater Cover Fover Types Present (circle): Undercut Everhanging Vegetation Woody Debris Iparian Zone iparian Cover (% of watercourse shaded, dor Material Cover (% of watercourse shaded) All Material Cover (% of watercourse shaded, dor Material Cover (% of watercourse shaded) All Material Cover (% of watercourse shaded) All Material Cover (% of watercourse shaded) All Material Cover (% of watercourse shaded)	Clay Marl Detr t Banks Deep Pool Watercress Aquatic V Boulder Other minant vegetation, mature or early successional)
CO RI RI Z	Boulder Gravel G	Clay Marl Detr t Banks Deep Pool Watercress Aquatic V Boulder Other minant vegetation, mature or early successional)
CO RI RI Z	Boulder Gravel G	Clay Marl Detr t Banks Deep Pool Watercress Aquatic V Boulder Other minant vegetation, mature or early successional)
RI RI Ac	Boulder Gravel G	Clay Marl Detr t Banks Deep Pool Watercress Aquatic V Boulder Other minant vegetation, mature or early successional)
RI RI AC	Boulder Gravel Gravel Mater Cover Fover Types Present (circle): Undercut Everhanging Vegetation Woody Debris Iparian Zone iparian Cover (% of watercourse shaded, dor Material Cover (% of watercourse shaded) All Material Cover (% of watercourse shaded, dor Material Cover (% of watercourse shaded) All Material Cover (% of watercourse shaded) All Material Cover (% of watercourse shaded) All Material Cover (% of watercourse shaded)	Clay Marl Detr t Banks Deep Pool Watercress Aquatic V Boulder Other minant vegetation, mature or early successional)







REA

Station # Watercourse Nar	ne unknavo		Projed	ct # <u> </u>	Niago	69		
PhotosSee of DateUne	hoto lox -22/12.		Time	08:				
Weather condition GPS Coordinates	ns in previous 24	hrs Minor	amour ^s	10 0	1 /2010	151	Datur	110
Descriptive Loca	tion On Con	cession 4	~ 800	m eas	tof Be	arry 8	d.	<u> </u>
Water Quality				مادينيون.	and the second s			
Dissolved Oxyge	n_(mg/L)	pH_	- Marie Carlo Carl	Condu	ctivity (µS/c	cm)	CALCULATION CO.	
Water Temperati	ure (°C)		Air Te	emperatur	e (°C)	300		
	surements taken							
Watercourse Di			Movin	mum Dool	Dooth	The state of the s	(cm)	
Mean Watercour Mean Bankfull W							(cm) (cm)	
	Riffle		ivicai i 'Ool	Walei De	% R	un	(CIII)	9
Evidence of eroo					/011			′
	or new ro							
Substrate (% co	over)					_	SUIL =	
B	edrock oulder	Cobble		Sand	40	Silt	10	Mu
Bo	oulder	Gravel	40	_Clay		Marl		_Det
In-water Cover Cover Types Pre Overhanging Ve	esent (circle):	Undercut B	anks	Deep Po		ercress		uatic '
In-water Cover Cover Types Pre Overhanging Ver Riparian Zone	esent (circle): getation Woo	Undercut Body Debris	anks Bould	Deep Poler (ool Wat Otherature or ear	lv succe	Aqı Ssional)	
In-water Cover Cover Types Pre Overhanging Ver Riparian Zone Riparian Cover (esent (circle): getation Woo % of watercourse	Undercut Body Debris	anks Bould	Deep Poler (ool Wat Otherature or ear	lv succe	Aqı Ssional)	
In-water Cover Cover Types Pre Overhanging Ver Riparian Zone Riparian Cover (70% max	esent (circle): getation Woo % of watercourse	Undercut Body Debris	anks Bould nant vege	Deep Poler (ool Wate Otherature or ear	ly succes	Aqı Ssional)	
In-water Cover Cover Types Pre Overhanging Ver Riparian Zone Riparian Cover (70% max	esent (circle): getation Woo % of watercourse	Undercut Body Debris	anks Bould nant vege	Deep Poler (ool Wate Otherature or ear	ly succes	Aqı Ssional)	
In-water Cover Cover Types Pre Overhanging Ver Riparian Zone Riparian Cover (70% max Adjacent Land U House, a	esent (circle): getation Woo % of watercourse two timmets se & fields	Undercut Body Debris e shaded, domi	anks Bould nant vege	Deep Poler (ool Wat Otherature or ear	ly succes	Aqı Ssional)	
In-water Cover Cover Types Pre Overhanging Ver Riparian Zone Riparian Cover (70% max Adjacent Land U House, a Fish Habitat Por Critical Habitat (s	esent (circle): getation Woo % of watercourse two timmets se fillds tential spawning or nurse	Undercut Body Debris e shaded, dominate free body ery areas, grou	anks Bould nant vege	Deep Poler (ool Wat Otherature or ear	ly succes	Aqı Ssional)	
In-water Cover Cover Types Pre Overhanging Ver Riparian Zone Riparian Cover (70% max Adjacent Land U House, a Fish Habitat Por Critical Habitat (s Migratory Obstru	esent (circle): getation Woo % of watercourse by the himment se fields tential spawning or nurse occurrences	Undercut Body Debris e shaded, domi	anks Bould nant vege shrub	Deep Poler (ool Wate Otherature or ear	rly succes	ssional)	
In-water Cover Cover Types Pre Overhanging Ver Riparian Zone Riparian Cover (70% max Adjacent Land U House, a Fish Habitat Por Critical Habitat (s Migratory Obstru	esent (circle): getation Woo % of watercourse by the himment se fields tential spawning or nurse occurrences	Undercut Body Debris e shaded, domi	anks Bould nant vege shrub	Deep Poler (ool Wate Otherature or ear	rly succes	ssional)	
In-water Cover Cover Types Pre Overhanging Ver Riparian Zone Riparian Cover (70% max Adjacent Land U House, a Fish Habitat Por Critical Habitat (s	esent (circle): getation Woo % of watercourse by the himment se fields tential spawning or nurse occurrences	Undercut Body Debris e shaded, domi	anks Bould nant vege shrub	Deep Poler (ool Wate Otherature or ear	rly succes	ssional)	
In-water Cover Cover Types Pre Overhanging Ver Riparian Zone Riparian Cover (TO // Max Adjacent Land U House, a Fish Habitat Por Critical Habitat (s Migratory Obstrue Note any fish obs Waterbody Note	esent (circle): getation Woo % of watercourse two timmet se folds tential spawning or nurse citions (seasonal, servations No	Undercut Body Debris e shaded, dominate of the shaded and the shaded areas, ground permanent)	anks Bould nant vege shrub	Deep Poler (ool Wate Otherature or ear	rly succe	ssional) an KS	
In-water Cover Cover Types Pre Overhanging Ver Riparian Zone Riparian Cover (TO // Max Adjacent Land U House, a Fish Habitat Por Critical Habitat (s Migratory Obstrue Note any fish obs Waterbody Note	esent (circle): getation Woo % of watercourse two timmet se folds tential spawning or nurse citions (seasonal, servations No	Undercut Body Debris e shaded, dominate of the shaded and the shaded areas, ground permanent)	anks Bould nant vege shrub	Deep Poler (ool Wate Otherature or ear	rly succe	ssional) an KS	
In-water Cover Cover Types Pre Overhanging Ver Riparian Zone Riparian Cover (70% Max Adjacent Land U House, a Fish Habitat Por Critical Habitat (s Migratory Obstrue Note any fish obs	esent (circle): getation Woo % of watercourse two timmet se folds tential spawning or nurse citions (seasonal, servations No	Undercut Body Debris e shaded, dominate of the shaded and the shaded areas, ground permanent)	anks Bould nant vege shrub	Deep Poler (ool Wate Otherature or ear	rly succe	ssional) an KS	
In-water Cover Cover Types Pre Overhanging Ver Overhanging Ver Riparian Zone Riparian Cover (70% Max Adjacent Land U House, a Fish Habitat Por Critical Habitat (s Migratory Obstrue Note any fish obs Waterbody Note Natural Watercor Surficial Drainag Other Habitat N	esent (circle): getation Woo % of watercourse two timests se fields tential spawning or nurse ctions (seasonal, servations	ery areas, groupermanent) Dezoidal Chann Dugout Po	anks Bould nant vege shrub	Deep Poler (sed Swale_ated by Aqu	rly succes	ssional) an KS	Tile_
In-water Cover Cover Types Pre Overhanging Ver Overhanging Ver Riparian Zone Riparian Cover (70% Max Adjacent Land U House, a Fish Habitat Por Critical Habitat (s Migratory Obstrue Note any fish obs Waterbody Note Natural Watercor Surficial Drainag Other Habitat N	esent (circle): getation Woo % of watercourse by a tential spawning or nurse actions (seasonal, servations	ery areas, groupermanent) Dezoidal Chann Dugout Po	anks Bould nant vege shrub	Deep Poler (sed Swale_ated by Aqu	rly succes	ssional) an KS	Tile_Dry

Vicatta. 1 /read careng 3 Beamer Rd ~ 800~ WOODOT FLOND 0 HEDGERON MODDLOT



Station #55-2	Project Name Niagara Wind
Watercourse Name unknown	Project # 160950269
	Field Staff ME, ME
Photos Soo Photo 15g Date June 22/12.	Time
Weather conditions in previous 24 hrs	INDE PREIP.
GPS Coordinates (Zone) 17T E	0625497 N 4768055 Datum Nad 8
Descriptive Location On Con4 ~ (00 m west of Beamer Road
Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken	pHConductivity (μS/cm) Air Temperature (°C)3 ° ω
Watercourse Dimensions & Morphology Mean Watercourse Width (m)	Maximum Pool Depth(cm)
Mean Bankfull Width(m)	Mean Water Depth(cm)% Pool% Run% Flat
Evidence of eroding banks, Comments on	bank stability MMOC SCOUR.
50% north side 0% 50 th	side be matrictices:
Substrate (% cover)	
Bedrock Cobbl	e Sand 50 Silt /6 Muck
Boulder Grave	e Sand SD Silt /6 Muck
Overhanging Vegetation Woody Debris Riparian Zone	dominant vegetation, mature or early successional)
Adjacent Land Lles	0% South side through freld
Adjacent Land Use	
Fish Habitat Potential Critical Habitat (spawning or nursery areas,	, , ,
Migratory Obstructions (seasonal, permane	ent)
Note any fish observations	
Waterbody Notes Natural Watercourse Trapezoidal C Surficial Drainage (i.e. furrows) Dugo	Channel Grassed Swale Buried Tile but Pond Dominated by Aquatic Veg Dry
Other Habitat Notes, Incidental Wildlife C	Observations, etc
Field Notes Authored by F	ield Notes QA/QCed by

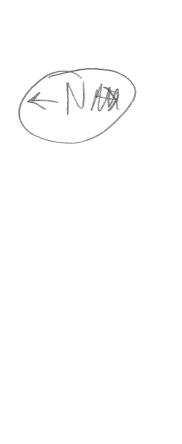
myedodor Reed carry glass Silve idule Rd Beamy



WIND FARM WATERBODY RAPID ASSESSMENT FORM

Tellestimate No defin @ either culturate end.

Station # 56-1	Project Name Niago	ina lalina	\mathcal{A}
Watercourse Name UnVno.	Project #1609505	069	1
Photos See photo los Date June 21/12.	Field Staff MEA	OF.	
Date June 21/12.	Time 15:14		
Weather conditions in previous 24 hrs No 10	in - hot + humid		
GPS Coordinates (Zone) 17T E 0623	2139 N 476	2199 Datu	m Nad 83
Descriptive Location <u>On Concession 4</u>	n 500 m east o	f Hodgking	Rd.
Water Quality			
	Conductivity (μS/c	rm)	
Water Temperature (°C)	Air Temperature (°C)	····)	
Time in situ measurements taken	7 iii Tomporatare (O)	// 🐷	
Watercourse Dimensions & Morphology			
Mean Watercourse Width (m)	Maximum Pool Depth	(cm)	
Mean Bankfull Width (m)	Mean Water Depth	(cm)	
% Riffle % Poo	%R	un`	% Flat
Evidence of eroding banks, Comments on bank sta	bility		
Substrate (% cover)			
	Sand	Silt	Maria
Boulder Gravel	Sand	Siit Marl	_Muck Detritus
In-water Cover	Ciay	iviari	_permus
Cover Types Present (circle): Undercut Ban Overhanging Vegetation Woody Debris Riparian Zone	Boulder Other	-	uatic Veg
Riparian Cover (% of watercourse shaded, dominar	nt vegetation, mature or earl	y successional)	
Adjacent Land Use			
Fish Habitat Potential			
Critical Habitat (spawning or nursery areas, ground	water upwellings)		
Migratory Obstructions (seasonal, permanent)			
ote any fish observations			
Waterbody Notes			
Natural Watercourse Transfoldal Channel	Connected Occurs		
Natural Watercourse Trapezoidal Channel _ Surficial Drainage (i.e. furrows) Dugout Pond	Grassed Swale	Buried	
Dugout Fond	Dominated by Aqua	itic Veg	Dry <u>y</u>
Other Habitat Notes, Incidental Wildlife Observat	ions, etc. bubolinic		
Field Notes Authored by Field Notes C	A/QCed by		





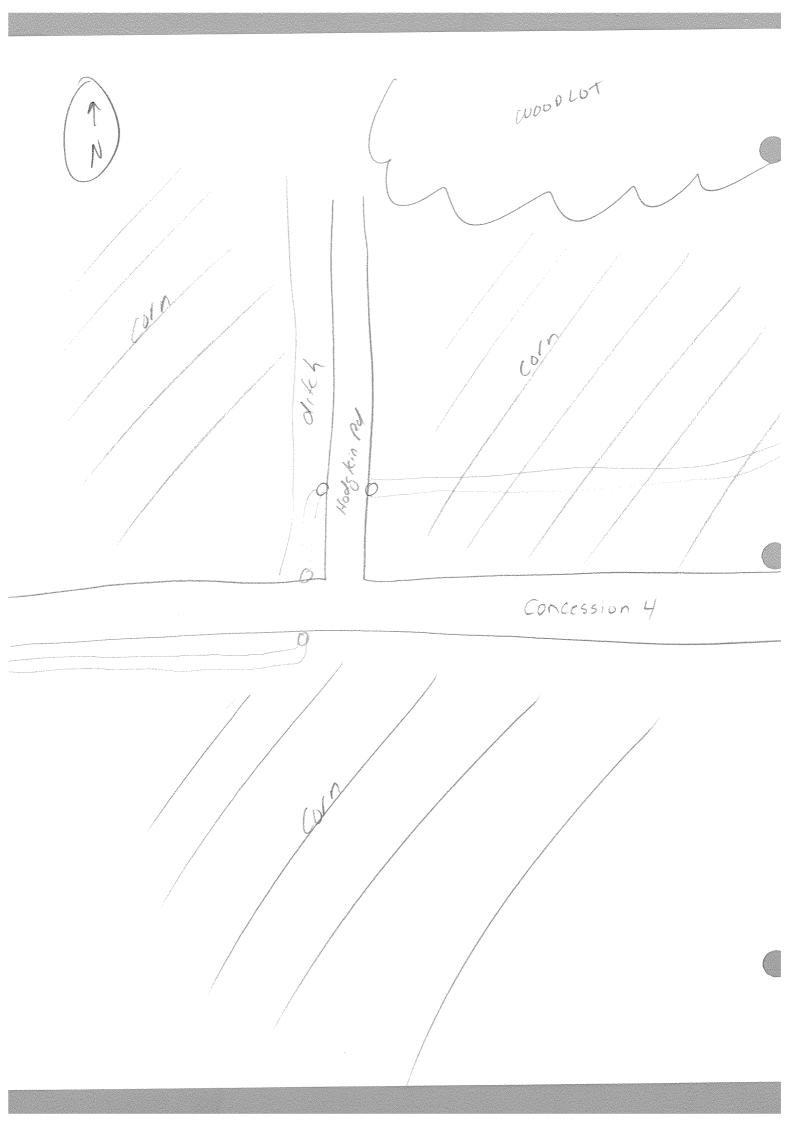
manifed s

R

Hodgkins L1 ~ 500



WIND FARM WATERBODY RAPID	
Date	Name Niagara Wind DRI #_ 160950269 aff MEIME 15:23 N 4768237 Datum Nad 83
Water Quality Dissolved Oxygen (mg/L) pH Water Temperature (°C) Air Tem Time in situ measurements taken	Conductivity (µS/cm)perature (°C)
Mean Bankfull Width(m) Mean W	m Pool Depth(cm) /ater Depth(cm)% Run% Flat
Boulder Gravel Gravel In-water Cover Cover Types Present (circle): Undercut Banks Overhanging Vegetation Woody Debris Boulder	Sand Silt Muck Clay Mari Detritus Deep Pool Watercress Aquatic Veg Other
Fish Habitat Potential	
Oritical Habitat (spawning or nursery areas, groundwater up digratory Obstructions (seasonal, permanent) Note any fish observations	wellings)
Waterbody Notes Natural Watercourse Trapezoidal Channel Surficial Drainage (i.e. furrows) Dugout Pond Other Habitat Notes, Incidental Wildlife Observations, et	
Field Notes Authored by Field Notes QA/QCed by	, met



* Check To Katie + Joe notes.



WIND FARM WATERBODY RAPID ASSESSMENT FORM

NON-RET DRY

Station # 56- % 3	Project Name Niagara Wind
Watercourse Name unknow	Project # 160950269
Photos See Man 100	Field Staff ME, ME
Date June 21/12.	Time 13:40
Weather conditions in previous 24 hrs N อ เฉเ	<u> </u>
GPS Coordinates (Zone) 17T E 062つ	1688 N47688178 Datum Nad8
Descriptive Location On Concession 4 ~ 70,	n east of Hodgkins Rd.
Water Quality	
	Conductivity (v.S/cm)
Water Temperature (°C)	Air Temperature (°C)
Time in situ measurements taken	Air Temperature (°C)
Watercourse Dimensions & Morphology	
Mean Watercourse Width(m)	Maximum Pool Depth(cm)
Mean Bankfull Width (m)	Mean Water Depth (cm)
% Poo	% Run % Flat
Evidence of eroding banks, Comments on bank sta	bility
Substrate (% cover)	
BedrockCobble	SandSilt Muck
Boulder Gravel	Clay Marl Detritus
In-water Cover	
Cover Types Present (circle): Undercut Bank	CO Door Book Waters A N
Overhanging Vegetation Woody Debris	ks Deep Pool Watercress Aquatic Veg Boulder Other
	Other
Riparian Zone	
Riparian Cover (% of watercourse shaded, dominar	nt vegetation, mature or early successional)
Adjacent Land Use	
_ 05 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
Fish Habitat Potential	
Critical Habitat (spawning or nursery areas, grounds	vater upwellings)
1300-L	
Migratory Obstructions (seasonal, permanent)	
Note any fish observations	
vi o 4	
More	
Waterbody Notes	
Natural Watercourse Trapezoidal Channel	Grassed Swale Ruried Tile
Surficial Drainage (i.e. furrows) V Dugout Pond	Grassed Swale Buried Tile Dominated by Aquatic Veg Dry
	ions, etc. Bobolink
Field Notes Authored by YV E	
Field Notes Authored by MF	
W:\resource\Internal Info and Teams\Aquatic Resources\Field Sheets\Si	tantec\Form 02 Wind Farm Waterbody Rapid Assessment Form.doc

56-3 NOW PEA REA- Previously sensed Con 4 Ted veg. Minimal defin

CRINN: Well mix of Aquatic veg + Terr veg. Defined through dredging. Hormes: Ag Rold, Danka + havesked, drives through it



WIND FARM WATERBODY RAPID ASSESSMENT FORM

REAS	D
------	---

Station # See Watercourse Name Wixaur Project Name Nagara Wind Watercourse Name Wixaur Project # 16,095 269 Field Staff ME ME Time Weather conditions in previous 24 hrs See Project # 16,095 269 Weather conditions in previous 24 hrs See Project # 16,095 269 Weather conditions in previous 24 hrs See Project # 16,095 269 Water August Project Name Name Name Name Name Name Name Name		WIND FARIN	WATERBOD	I NAPID ASSI	-33WILIAT	1 OTTIVI	DR
Photos 300 Proh 160 P	Stantec						
Photos 30 Phone With Provided	Station #	36-4		Project Name	Nigga	ra Wind	. /
Photos 30 Phone With Provided	Station #s	Jame UNV NOUS		Project # 1/c	095020	09	
Date United Stricts Time United Stricts United St	Photos	or ohaha bo	<u>,</u>	Field Staff	MEIME		
Water Counting in previous 24 hrs Paragraph Paragr	Date Jur	e 21/12:		Time 16:	10		
GPS Coordinates (Zone) TT E DOAD ON 1178048 Datum NAC Descriptive Location	Moother cond	itiane in provious 2/	1 hre lie valu				
Descriptive Location Immediate South of Conductivity (µS/cm)	GPS Coording	ites (Zone) 177	" E	- 760 N	4768	<u>098 Datu</u>	<u>m Nad</u>
Water Quality Dissolved Oxygen (mg/L)	Descriptive Lo	cation Immedi	ath south	OP CONCESSIO	on 4 +	- west of	
Dissolved Oxygen (mg/L) Water Temperature (°C) Air Temperature (°C) Are Autor (cm)	Hodakin	Rd. on the are	SMY beober	44			·
Dissolved Oxygen (mg/L) pH Conductivity (µS/cm) Water/Temperature (°C) Air Temperature (°C) 31° 2 Trime in situ measurements taken Watercourse Dimensions & Morphology Mean Watercourse Width 2	Water Quality						
Water Temperature (°C) Time in situ measurements taken Watercourse Dimensions & Morphology Mean Watercourse Width			pH	Conduc	ctivity (µS/cn	n)	
Watercourse Dimensions & Morphology Mean Watercourse Width	Water Temper	rature (°C)		Air Temperature	e (°C) = 31	٥ د	
Watercourse Dimensions & Morphology Mean Watercourse Width	Time <i>in situ</i> m	easurements taken		•	` /		
Mean Watercourse Width (m)	11/-1	Dimensions & Mo	rnhology				
Mean Bankfull Width	Watercourse	Dimensions a Mo	(m)	Maximum Pool	Deoth /	(cm)	
Substrate (% cover) Bedrock Cobble Sand 40 Silt 30 Muck Boulder Gravel Clay Marl Detrite In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Very Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Adjacent Land Use Silt 30 Muck Deep Pool Watercress Aquatic Very Overhanging Vegetation Woody Debris Boulder Other Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Other Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Advantage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Advantage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Advantage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Advantage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Advantage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Advantage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Advantage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Advantage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Advantage (i.e. furrows)	Mean Rankful	Juise Width 2.5	(m)	Mean Water De	pth /	(cm)	
Substrate (% cover) Bedrock Cobble Sand 40 Silt 30 Muck Boulder Gravel 30 Clay Marl Detrite In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Very Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Adjacent Land Use Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Migratory Obstructions (seasonal, permanent) Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry Advanced Dominated by Aquatic Veg Dry Advanced Dominated Domin	Market Control of the	% Riffle	// % Poo	ol	<u>~</u> % Ru		
Substrate (% cover) Bedrock Cobble Sand 40 Silt 30 Muck Boulder Gravel 30 Clay Marl Detritt In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Ve Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Mote any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry	Evidence of e	roding banks, Comr	ments on bank sta	ability <u>mine</u>	or under	cotting.	
Bedrock Gravel Sand Warl Detritude Boulder Gravel Sand Warl Detritude Boulder Gravel Sand Warl Detritude Boulder Gravel Some Clay Marl Detritude Boulder Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Ve Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Adjacent Land Use Adjacent Land Use Adjacent Land Use Migratory Obstructions (seasonal, permanent) Migratory Obstructions (seasonal, permanent) Advantable Waterbody Notes Natural Watercourse Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Dominated by Aquatic Veg Dry Dry Dry Dry Dry Dry Dry							
Bedrock Gravel Gravel Gravel Marl Detritude In-water Cover Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Very Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Officer	Substrate (%	cover)			/ 5		
In-water Cover Cover Types Present (circle):		_Bedrock	Cobble	Sand	40	Silt <i>3¤</i>	
In-water Cover Cover Types Present (circle):		_Boulder	Gravel	<u> 3 DClay</u>		Marl	Detritus
Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Very Overhanging Vegetation Woody Debris Boulder Other Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Adjacent Land Use Critical Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry							
Overhanging Vegetation Woody Debris Boulder Other	Cover Types	Present (circle):	Undercut Bar	nks Deep Po	ool Wate	rcress Ad	quatic Veg
Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry_v	Overhanging '	Vegetation Wo	ody Debris	Boulder C	Other		•
Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional) Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry_v		_	•				
Adjacent Land Use Adjacent Land	Riparian Zon	e (%) of watersours	a ahadad damini	ent vegetation ma	ature or early	, successiona	n
Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile_ Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry_V	Hiparian Cove	r (% or watercourse	e Snaueu, uomina	ini vegetation, me	ature or carry	y 3uccessiona	''
Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile_ Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry_V	Adjacent Land	1 Use					
Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry/	as field,	house					
Critical Habitat (spawning or nursery areas, groundwater upwellings) Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry/	,						
Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry/							
Migratory Obstructions (seasonal, permanent) Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry/		it (spawning or nurs	ery areas, ground	awater upweilings	5)		
Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry/	Migratony Obs	tructione (caseonal	nermanent)				
Note any fish observations Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry/	•	•					
Waterbody Notes Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry_/		observations					
Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry/	•						
Natural Watercourse Trapezoidal Channel Grassed Swale Buried Tile Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry/	344 - 4 1 Al			/			
Surficial Drainage (i.e. furrows) Dugout Pond Dominated by Aquatic Veg Dry	Waterbody N	otes mource Tra	nozoidal Channe	Grass	ed Swale	Burie	d Tile
	Surficial Drain	vago (i o furrowe)	pezuluai Crianne Dugout Por	nd Domina	ited by Aqua	atic Vea	Dry \
Other Habitat Notes, Incidental Wildlife Observations, etc. 500 ke 50	Suriiciai Diaii	lage (i.e. lullows)	Dagoat i oi	<u> </u>	itou by rique		· <i>J</i>
	Other Habita	t Notes, Incidental	Wildlife Observ	ations, etc. ടഹ	Ke 50.		
	Julio Habita						

W:\resource\Internal Info and Teams\Aquatic Resources\Field Sheets\Stantec\Form 02 Wind Farm Waterbody Rapid Assessment Form.doc

Field Notes Authored by ______

Color Hodo Kin Road Concession 4 子咖啡 Posside Non? NON-REA HOLMES PROP. CROWN PROP planted + horrested : swale

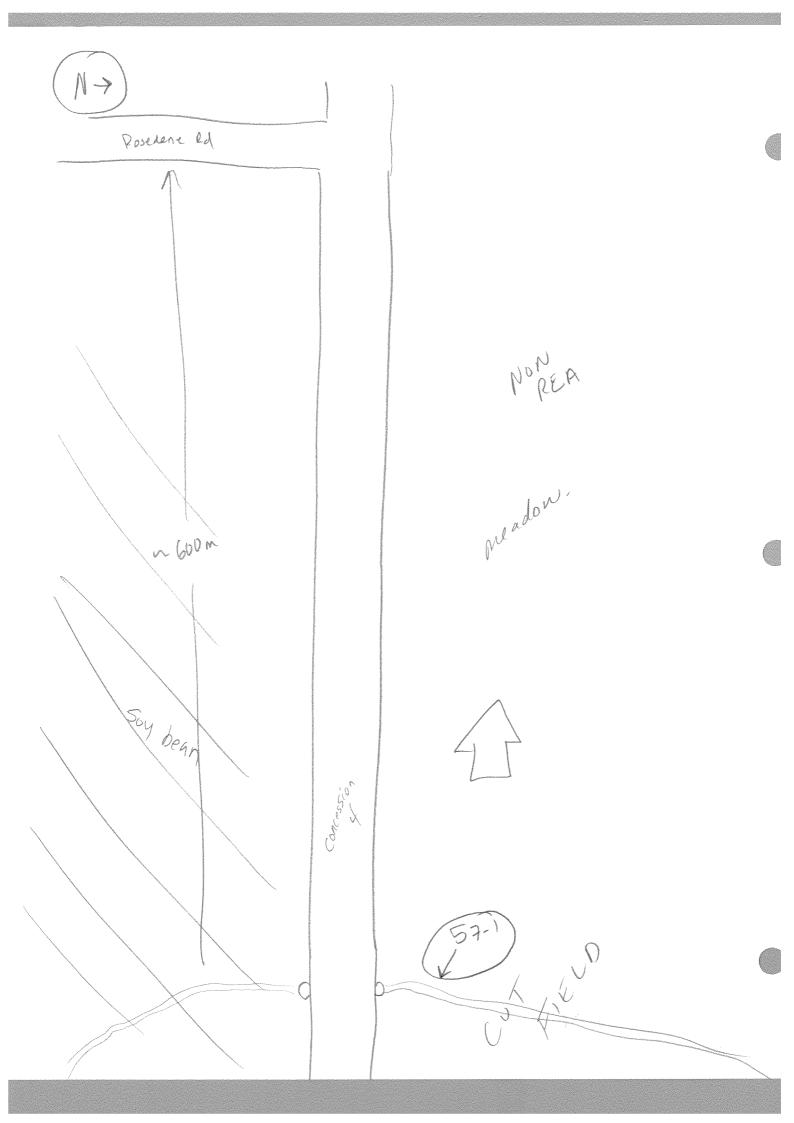




	WIND FARM	WATERBOI	DY RAPID ASSESS	SWENT FORW	
Stantec					ı
Photos Date Weather condi	tions in previous 24	hrs 10 (a)	Project Name Project # 1600 Field Staff ME Time 14 : 0 c	7 6 82 85 Da	atum Nad 83
Water Temper	gen (mg/L) ature (°C) easurements taken		Conductivi Air Temperature (°0	ty (μS/cm) C)3) °∠	
Mean Waterco Mean Bankfull	\Width /	(m) (m) % F	2001	oth(c (c %Run	m) m) % Flat
Substrate (%	cover) Bedrock Boulder	Cobble Gravel	SandClay	Silt_ Marl	Muck Detritus
In-water Cover Cover Types F Overhanging	e r Present (circle): Vegetation Woo	Undercut E ody Debris	Banks Deep Pool Boulder Oth	Watercress er	Aquatic Veg
Riparian Zone Riparian Cove	er (% of watercourse	e shaded, dom	inant vegetation, matur	re or early succession	onal)
Adjacent Land	1 1				
Fish Habitat Critical Habita	Potential t (spawning or nurs	sery areas, gro	undwater upwellings)		
Migratory Obs	structions (seasonal	I, permanent)			
Note ony fich	observations				

Other Habitat Notes, Incidental Wildlife Observations, etc.

Field Notes QA/QCed by ______ Field Notes Authored by





REA

~-	
V 3	ntec
~~~	

Station # 57 3  Watercourse Name unknown  Photos Date June 1/2  Weather conditions in previous 24 hrs No (accordinates (Zone) 171 E D629  Descriptive Location On Concession 4	477 N 4768259 Datum Nad 8
Water Temperature (°C) <u>84.30</u>	Conductivity (μS/cm) 15/7  Air Temperature (°C) 31°C
Watercourse Dimensions & Morphology Mean Watercourse Width 35 (m) Mean Bankfull Width 60 (m)% Riffle% Pool Evidence of eroding banks, Comments on bank states	Mean Water Depth/
Substrate (% cover)  Bedrock Cobble Boulder Gravel	Sand 50 Silt 30 Muck 20 Clay Marl Detritus
In-water Cover Cover Types Present (circle): Undercut Bank Overhanging Vegetation Woody Debris	
Riparian Zone Riparian Cover (% of watercourse shaded, dominar  2% (eld cancer yeass), make the Adjacent Land Use  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nursery areas, grounds)	
Migratory Obstructions (seasonal, permanent)  AGE FINES.  Note any fish observations	
	Grassed Swale Buried Tile Dominated by Aquatic Veg Dry tions, etc fro se
Field Notes Authored by MF Field Notes C	

Rosedine FL Standinowaki Concession y reed carry geist reed consequen

rend carridges has he was a series of the se

* = voisus agratic ved feed canary grass reed con grass



NT FORM	1	E	A	
Standing we openings on	ter	Q	<i>(</i> 0	luc/
openings on	19.			

-12	- Linguis allind
Station # 57.3	Project Name Niagara Wind
Waler Course Maine Voi Lea Vaz	Project # 160958269
Photos So okoto los Date June 2/12:	Field Staff ME, MF Time 14:24
Date Oune 2/12	
Weather conditions in previous 24 nrs	029268 N 4767882 Datum Nad 83
GPS Coordinates (Zone) 1 1 E	of n 300m south of Concession 4
Descriptive Location Do Roseway I	
Water Quality Dissolved Oxygen (mg/L) 8.46 Water Temperature (°C) 23.18 Time in situ measurements taken 14	pH 6.02 Conductivity (μS/cm) 1674 Air Temperature (°C) 32°C
Watercourse Dimensions & Morphology Mean Watercourse Width (m) Mean Bankfull Width (m)  % Riffle (m)	Maximum Pool Depth / (cm) Mean Water Depth / (cm) % Pool % Run % Flat ank stability
Evidence of eroding banks, comments on so	
Substrate (% cover) BedrockCobble	Sand 40 Silt 30 Muck  30 Clay Marl Detritus
BoulderGravel	Clay Iviali Detinus
Cover Types Present (circle): Undercoverhanging Vegetation Woody Debris  Riparian Zone Riparian Cover (% of watercourse shaded, of the county and the county	dominant vegetation, mature or early successional)
house off-line pond, ag.	
Fish Habitat Potential Critical Habitat (spawning or nursery areas,	groundwater upwellings)
Migratory Obstructions (seasonal, permane	
Note any fish observations	V .
	Channel Grassed Swale Burjed Tile  Dut Pond Dominated by Aquatic Veg Dry  Observations, etc Green frags
MY	Field Notes OA/OCed by MEE

DRY Ruse dence Red off Lind Conc. 4

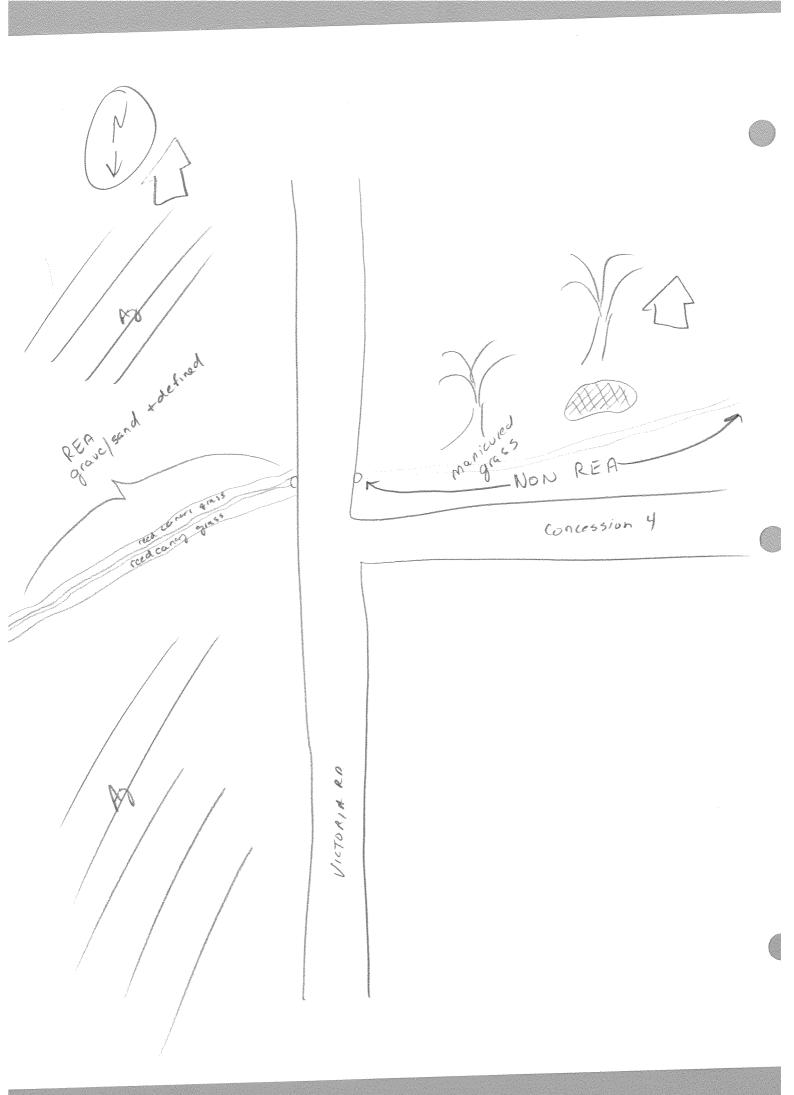


defined banks on

DRY

REA on ea side only.

40.	
Station # 9%-\	Project Name Niagara Wind
Watercourse Name UNV na. 200	Project # 14 - 26-12/ G
Photos See obate les	Project # 160958269
Photos See photo los Date June 2//12.	Field Staff MEIMF
Date	Time 13:30
Weather conditions in previous 24 hrs	precipitation
GPS Coordinates (Zone) 17T E 063	
Descriptive Location On Victoria Rd	~ Om south of Concession 4
Water Quality	
Dissolved Oxygen (mg/L)	
Water Temperature (°C)	Air Temperature (°C) 31°C
Time in situ measurements taken	
Watercourse Dimensions & Morphology	
Mean Watercourse Width 0.5 (m)	
Mean Bankfull Width $I \cdot O$ (m)	Maximum Pool Depth(cm)
	Mean Water Depth (cm)
% Riffle %	Pool% Run% Flat
Evidence of eroding banks, Comments on bank	estability minor under cut banks - define
Substrate (% cover)	
BedrockCobble	10 0 1 77
	70 Sand 20 Silt 20 Muck 20 Clay Marl /0 Detritus
Boulder2oGravel	20 Clay Marl /O Detritus
In-water Cover	- red ca
Cover Types Present (circle): Undercut E	
Overhanging Vegetation Woody Debris	Boulder Other
Riparian Zone	
Binarian Cover /% of watercourse sheded dem	In and the selection of
Riparian Cover (% of watercourse shaded, dom	mant vegetation, mature or early successional)
Adjacent Land Use	
Adjacent Land Ose	
as folds, id, house.	
Fish Habitat Potential	
Critical Habitat (spawning or nursery areas, grou	ındwater upwellings)
Minde	
Migratory Obstructions (seasonal, permanent)	
Moto duction of a second	
Note any fish observations	
Waterbody Notes /	
Natural Watercourse	
Surficial Projects (is 1	el Grassed Swale Burjed Tile
Surficial Drainage (i.e. furrows) Dugout Po	ond Dominated by Aquatic Veg V Dry V
Outron Halifact M. A.	Grassed Swale Burjed Tile ond Dominated by Aquatic Veg Dry
Other Habitat Notes, Incidental Wildlife Obser	vations, etc
100 K	
ield Notes Authored by Field Not	es QA/QCed by



FSEM - IS MILE CHERC



#### WIND FARM WATERBODY RAPID ASSESSMENT FORM

NON

Station # <u>59 -  </u>		Project Name	agara Wir	~d
Watercourse Name unkna		Project # 1600	SO SULE A	
Photos Date June 20/10		Field Staff Move	Eniella VI.	TENETAL
		Time (0:30		
Weather conditions in previous 2	24 hrs	numa		
GPS Coordinates (Zone) 63 116	9 E 47700	90 N	ח	atum 77
Descriptive Location	of Victoria	x Avenue, N	of Kima	
Water Quality		) -		7 1000
Dissolved Oxygen (mg/L)	nH	Condinativity	( O (	
Water Temperature (°C)	PII	Conductivity	(μS/cm)	
Time in situ measurements taker		Air Temperature (°C)	_5_2	
Watercourse Dimensions & Mo	prphology			<del></del>
Mean Watercourse Width	(m) /	Maximum Pool Depth	(0)	m)
Mean Bankfull Width	(m)	Mean Water Depth_	(C)	m)
	% Poo	l	_% Run(Ci	''') % Flat
Evidence of eroding banks, Comi	ments on bank sta	hiliby		% Fiai
Substrate (% cover)		and the second s		
Bedrock	Cobble	Sand	Silt	Muck
Boulder	Gravel	Clay	Mari	Detritus
In-water Cover				200
	I Indones A Deal			
Cover Types Present (circle):	Undercut Bank	(S Deep Pool	Watercress (	Aquatic Veg
Overhanging Vegetation Woo	ouy Debns	Boulder Other_		
Riparian Zone				
Riparian Cover (% of watercourse	shaded, dominar	nt vegetation, mature o	r early succession	al)
	a arasce	s, early		,
Adjacent Land Use	1 0			
Irans	mission	ine, farmly	and	
and . 1 . 1 . 1 . 1				
Fish Habitat Potential				
Critical Habitat (spawning or nurse	ery areas, groundy	vater upwellings)		
Migratory Obstructions (seasonal,	normanont)			
Note any fish observations				
	-			
Waterbody Notes				
	ozoidal Channel	0		
Natural Watercourse Trap	Purcha Donal	Grassed Swa	ale Burie	ed Tile
Surficial Drainage (i.e. furrows)	Dugout Pona_	Dominated by	Aquatic Veg	_ Dry
Other Habitat Notes Incidental V	Nildlifa Obsanisti	iono ete		
Other Habitat Notes, Incidental \	Wilding Observati	ons, etc.		
Field Notes Authored by M. Faiella	Elald Notes C	Manual M		
THE TOUR PROPERTY AND THE PARTY OF THE PARTY	_ rieid Notes Q/	•vuced by	-	



Non

Station #59-2		Project Name	1	
Watercourse Name unknown		Project Name/		lica
Photos		Field Staff	160950	The state of the s
Date			6:39	lend
Weather conditions in previous 24 h	rs	t dhum		
GPS Coordinates (Zone) 631185				Datum 17T
Descriptive Location Off of	- Victoria	Arence, 1	Neit OF VIII	an Rodo
	South Of	59-		LCODO
Water Quality	ál.			
Dissolved Oxygen (mg/L)	pH	Conducti		
Water Temperature (°C)	pri	Air Tomporeture (6	ity (μS/cm)	
Time in situ measurements taken		on remperature (*	c) <u>35</u>	
Watercourse Dimensions & Morph	ology			
Mean Watercourse Width_		Manufus m m.		
Mean Bankfull Width		Maximum Pool Dep	oth(c	m)
— % Riffle	ו יייא פאר 9/ Dool	viean water Depth	(CI	m)
Evidence of eroding banks, Commen	ts on bank stah	ility	% Run`	% Flat
		y		
Substrate (% cover)				
	Cobble	0		
	Gravel	Sand		Muck
		Clay	Marl	Detritus
In-water Cover				190
Cover Types Present (circle): ( Overhanging Vegetation Woody I	Jndercut Banks	Deep Pool	Watercress	Aquatic Veg
Woody	Debris B	oulder Other		iqualic veg
Riparian Zone		,		
Riparian Cover (% of watercourse sha	ided, dominant	/egetation mature	or oanh	
75%	QUARTE E	Postation, mature	or early successiona	al)
Adjacent Land Jase	J	ŧ		
- tarmland				
Fish Habitat Potential				
Critical Habitat (spawning or nursery a	room around			
		er upwellings)		
Migratory Obstructions (seasonal, pern	nanent)			
	/ N 3 - A			
Note any fish observations				
Waterbody Notes				
Natural Watercourse Transposic	lal Channol	0		
Natural Watercourse Trapezoid Surficial Drainage (i.e. furrows)	Jugout Pond	Grassed Sw	/ale Buried	d Tile
	- ugoder ond	Dominated by	Aquatic Veg	Drv
Other Habitat Notes, Incidental Wildli	fe Observation	s. etc.		
Field Notes Authored by M. Faiella		Cod by TE		
	Field Notes QA/Q	2001 DA	- Allendaria	
G:\01609\resource\Internal Info and Teams\Aquatic Res	sources\Field Sheets\	Stantec\Form 02 Wind Fac	m Waterhody Danid A	
		Va TTIIIG Fal	**aterbody Hapid Asses:	sment Form.doc



Field Notes Authored by _

### WIND FARM WATERBODY RAPID ASSESSMENT FORM WATERBODY RAPID ASSESSMENT FORM

	KEA on
	South side
A	Grassed swe

	DRY
GPS Coordinates (Zone) 17 E D	Project Name Niagara Wind Project # 160950269 Field Staff MF, MF Time 13:36  N 4769308 Datum Nad8  ~ 500 m west of Victoria Rd
Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken	Conductivity (μS/cm) Air Temperature (°C) 3/ ° c
Watercourse Dimensions & Morphology Mean Watercourse Width 0.36 (m) Mean Bankfull Width / 0 (m)  ———————————————————————————————————	Maximum Pool Depth (cm)  Mean Water Depth (cm)  6 Pool 8 Run 8 Flanch Stability (cm)
Substrate (% cover) BedrockCobbleBoulder/OGravel _  In-water Cover Cover Types Present (circle): Undercut Overhanging Vegetation Woody Debris	Banks Deep Pool Watercress Aquatic Veg
Riparian Zone	Boulder Other
Fish Habitat Potential	
Critical Habitat (spawning or nursery areas, gro いるか ^を Migratory Obstructions (seasonal, permanent)	oundwater upwellings)

Dry MN7 mariored grass (100 Comes James Con good Conussion 4 VICTORIA RD



See back

Station # 58-3		Project Name <u>Via</u>	90010000	<del>- \</del>
Watercourse Name unknow	$\sim$	Project # 16095	<b>9</b> 269	
Photos See shots 100 Date June 21/12.		Field StaffME	MF	
Date June 21/12.		Time 13:51	)	
Weather conditions in previous 2	24 hrs/o	pacipilation		
GPS Coordinates (Zone) 17	T E 063	10494 N 47	-68306 Date	ım Mc
Descriptive Location Dn Cor	ocession 4	~ 700m wist of	Victoria Rd	-,
Water Quality				
Dissolved Oxygen (mg/L)	pH_	Conductivity (	(C/om)	
Water Temperature (°C)			uS/cm)	
Time in situ measurements take	n	Air Temperature (°C) _	>/ C	
Watercourse Dimensions & Mo	orphology	/		
Mean Watercourse Width	/ (m)	Maximum Pool Depth_	(cm)	١
Mean Bankfull Width	(m)	Mean Water Depth	(cm)	
% Riffle	. ,	Mean Water Depth	% Run	%
Evidence of eroding banks, com		stability	/ idii	
		<u> </u>	W	
Substrate (% cover)				<i>y</i>
Substrate (% cover)	Cabble	County /	211	
Bedrock	Cobble	Sand/	Silt	Muc
Boulder	Gravel	Clay_/	Mari /	Detr
/		/		
In-water Cover/	/		/	
In-water Cover	/		/	
Cover Types Present (circle):	Undercut B		Vatercress Ac	quatic \
Cover Types Present (circle):	Undercut B oody Debris	Banks Deep Pool V Boulder Other	Vatercress A	quatic \
Cover Types Present (circle): Overhanging Vegetation Wo			Vatercress Ad	quatic \
Cover Types Present (circle): Overhanging Vegetation WC Riparian Zone	oody Debris	Boulder Other	/	
Cover Types Present (circle): Overhanging Vegetation Wo	oody Debris	Boulder Other	/	
Cover Types Present (circle): Overhanging Vegetation W  Riparian Zone Riparian Cover (% of watercours	oody Debris	Boulder Other	/	
Cover Types Present (circle): Overhanging Vegetation WC Riparian Zone	oody Debris	Boulder Other	/	
Cover Types Present (circle): Overhanging Vegetation W  Riparian Zone Riparian Cover (% of watercours	oody Debris	Boulder Other	/	
Cover Types Present (circle): Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use	oody Debris	Boulder Other	/	
Cover Types Present (circle): Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use  Fish Habitat Potential	oody Debris se shaded, domi	Boulder Other nant vegetation, mature of	/	
Cover Types Present (circle): Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use	oody Debris se shaded, domi	Boulder Other nant vegetation, mature of	/	
Cover Types Present (circle): Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs	body Debris se shaded, domi	Boulder Other nant vegetation, mature of	/	
Cover Types Present (circle): Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use  Fish Habitat Potential	body Debris se shaded, domi	Boulder Other nant vegetation, mature of	/	
Cover Types Present (circle): Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs  Migratory Obstructions (seasona	sery areas, grou	Boulder Other nant vegetation, mature of	/	
Cover Types Present (circle): Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs	sery areas, grou	Boulder Other nant vegetation, mature of	/	
Cover Types Present (circle): Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs  Migratory Obstructions (seasona  Note any fish observations	sery areas, grou	Boulder Other nant vegetation, mature of	/	
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs Migratory Obstructions (seasona Note any fish observations  Waterbody Notes	sery areas, grou	nant vegetation, mature of indwater upwellings)	early successional	)
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs Migratory Obstructions (seasona Note any fish observations  Waterbody Notes Natural Watercourse Tra	se shaded, domi sery areas, grou I, permanent)	Boulder Other nant vegetation, mature of undwater upwellings)  el Grassed Swa	early successional	d Tile
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs Migratory Obstructions (seasona Note any fish observations  Waterbody Notes Natural Watercourse Tra	se shaded, domi sery areas, grou I, permanent)	Boulder Other nant vegetation, mature of undwater upwellings)  el Grassed Swa	early successional	d Tile
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs Migratory Obstructions (seasona Note any fish observations  Waterbody Notes	se shaded, domi sery areas, grou I, permanent)	Boulder Other nant vegetation, mature of undwater upwellings)  el Grassed Swa	early successional	d Tile
Cover Types Present (circle): Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs  Migratory Obstructions (seasona  Note any fish observations  Waterbody Notes  Natural Watercourse Tra Surficial Drainage (i.e. furrows)	sery areas, grou	nant vegetation, mature of mant vegetation, mature of ma	early successional	d Tile_ Dry_
Cover Types Present (circle): Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs  Migratory Obstructions (seasona  Note any fish observations  Waterbody Notes  Natural Watercourse Tra Surficial Drainage (i.e. furrows)	sery areas, ground pezoidal Channon Dugout Po	nant vegetation, mature of mant vegetation, mature of ma	early successional	d Tile Dry_
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs Migratory Obstructions (seasona Note any fish observations  Waterbody Notes Natural Watercourse Tra Surficial Drainage (i.e. furrows) Other Habitat Notes, Incidental	sery areas, ground pezoidal Channon Dugout Po	nant vegetation, mature of mant vegetation, mature of ma	early successional	d Tile
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs Migratory Obstructions (seasona Note any fish observations  Waterbody Notes Natural Watercourse Tra Surficial Drainage (i.e. furrows) Other Habitat Notes, Incidental	sery areas, ground pezoidal Channon Dugout Po	nant vegetation, mature of mant vegetation, mature of ma	early successional	d Tile

gaze Non-SEB NON-REA Mariov 2 grass Mariov 2 grass 18-3 readow TORK TON-REA 58-2 Concession 4 VILLORIA RO



RFA

Stantec	Major watercou. Remement	14
Station # (60-)	remonent	<b>J</b>
Watercourse Name UnVng.	Project Name Niagara Wind	<u> </u>
Photos Secondo los	Project #	
Date Own Con Jo	Time	
Weather conditions in previous 24 hrs	giong of	
	0631123' N 4771392 Datus	m Nad
Water Quality Dissolved Oxygen (mg/L) _ 3.44	pH_ <del>7.83</del> Conductivity (μS/cm)610	
Vater Temperature (°C) <u> </u>	Air Temperature (°C)32°2	
Watercourse Dimensions & Morphology		
Mean Watercourse Width 30 (m) Mean Bankfull Width 90 (m)	Maximum Pool Depth 7/05 (cm)	
% Riffle	Mean Water Depth ~>/OO (cm)	% Fla
vidence of eroding banks, Comments on b	pank stability minur undercut.	/8 1 Ia
ubstrate (% cover)		
Bedrock Cobble	SandSilt	Muck
BoulderGravel		Muck Detritus
n-water Cover		
	cut Banks Deep Pool Watercress Aqu	intia Va
Overhanging Vegetation Woody Debris	Boulder Other	latic Veg
Riparian Zone	<u> </u>	
Riparian Cover (% of watercourse shaded of	dominant vegetation, mature or early successional)	
2% shows shows on east +	west side, Some trees on mest si	ide
Adjacent Land Use	100 July 100	
ish Habitat Potential		
Critical Habitat (spawning or nursery areas,	groundwater unwellings)	
Spawn, brace, nuisery.	groundwater apwenings)	
Spawn, blage, nyisery.  Aligratory Obstructions (seasonal, permaner	it)	
non objected		
ote any fish observations <u>Cαρ</u>		
Vaterbody Notes /		
latural Watercourse V Trapezoidal Ch	nannel Grassed Swale Buried	Tilo
urficial Drainage (i.e. furrows) Dugou	ut Pond Dominated by Aquatic Veg	Dry
ther Habitat Notes, Incidental Wildlife Ol	oservations, etc. Corp (many), han smalle	1415
,	- Cap (many) , 1211 521710	
eld Notes Authored by MF		
Fiel	d Notes QA/QCed by NEE	

MM = RCG meadow VICTORIA R

RC6= Peed rang grass



WIND FARM WATERBODY RAPID ASSESSMENT FORM

0-	^
Kr	1

		1,00			w with	
Station #61		Project Name				i
Watercourse Name On Ynow o	$\sim$	Project #//	195	23/20	2017 \ C	
Photos See Ohato 168		Field Staff		1000	-4.1	
	0	Time				
Weather conditions in previous	24 hrs No po	cuip.				
GPS Coordinates (Zone) 17			N_477		Datu	m ki
Descriptive Location On V	ictoris ~ Boc	2m South	of two	nty M	ic Rd	
Water Quality						
Dissolved Oxygen (mg/L)	pH	Condu	ctivity (யூS	/cm)		
Water Temperature (°C)		Air Temperatur	e 19CT			-
Time in situ measurements take	en		- ( <del>-                                 </del>			
Watercourse Dimensions & M	lorphology					
Mean Watercourse Width 2.5	• , , , , , ,	Maximum Pool	Denth		(cm)	
Mean Bankfull Width > 20.0	(m) Flood Pl	Mean Water De			(cm)	
% Riffle	% Po	ol	% F	ในท	_(0,14	
Evidence of eroding banks, Con	nments on bank st	ability none				
Substrate (% cover)		MT			·	-
Bedrock	Cobble	Sand	40	Silt	30	Μι
Boulder	Gravel	30 Clay		Marl		_De
In-water Cover			•			
Cover Types Present (circle): Overhanging Vegetation Wo	Undercut Bar pody Debris		ol Wat other	ercress	Aqu	uatic
Cover Types Present (circle): Overhanging Vegetation Wo	oody Debris	Boulder C	Other	· · · · · · · · · · · · · · · · · · ·		uatic
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use	oody Debris	Boulder C	Other	· · · · · · · · · · · · · · · · · · ·		uatic
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours	oody Debris	Boulder C	Other	· · · · · · · · · · · · · · · · · · ·		uatic
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use	oody Debris	Boulder C	Other	· · · · · · · · · · · · · · · · · · ·		uatic
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or nurs	oody Debris se shaded, domina	Boulder C	other ture or ear	· · · · · · · · · · · · · · · · · · ·		uatic
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs  Wand Migratory Obstructions (seasonal	se shaded, domina sery areas, ground	Boulder Cont vegetation, ma	otherture or ear	ly succes		uatic
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use  Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs  Your  Migratory Obstructions (seasonal	se shaded, domina sery areas, ground	Boulder Control of the second	otherture or ear	ly succes	ssional)	vatic
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs  Wand Migratory Obstructions (seasonal	se shaded, domina sery areas, ground	Boulder Control of the second	otherture or ear	ly succes	ssional)	vatic
Cover Types Present (circle): Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use  Adjacent Land Use  Critical Habitat Potential  Critical Habitat (spawning or nurs  Yww  Migratory Obstructions (seasonal  ATT  Note any fish observations	se shaded, domina sery areas, ground	Boulder Control of the second	otherture or ear	ly succes	ssional)	uatic
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use  Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs  YWW Migratory Obstructions (seasonal  ATT) Note any fish observations  Materbody Notes	se shaded, domina sery areas, ground	Boulder Cont vegetation, ma	ture or ear	ly succes	ssional)	
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use  Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs  YWW Migratory Obstructions (seasonal  ATT) Note any fish observations  Materbody Notes	se shaded, domina sery areas, ground	Boulder Cont vegetation, ma	ture or ear	ly succes	ssional)	
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use  Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs  YWW Migratory Obstructions (seasonal  ATT) Note any fish observations  Materbody Notes	se shaded, domina sery areas, ground	Boulder Cont vegetation, ma	ture or ear	ly succes	ssional)	
Cover Types Present (circle): Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use  Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs  Wand  Migratory Obstructions (seasonal  Arry  Note any fish observations  Materbody Notes  Natural Watercourse  Trap Surficial Drainage (i.e. furrows)	se shaded, domina sery areas, ground l, permanent)  pezoidal Channel Dugout Pond	Boulder Continued to the second secon	ture or ear d Swale_	tic Veg_	ssional)	
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use  Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs  YWW Migratory Obstructions (seasonal  ATT) Note any fish observations  Materbody Notes	se shaded, domina sery areas, ground l, permanent)  pezoidal Channel Dugout Pond	Boulder Continued to the second secon	ture or ear d Swale_	tic Veg_	ssional)	
Cover Types Present (circle): Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use  Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs  Wand  Migratory Obstructions (seasonal  Arry  Note any fish observations  Materbody Notes  Natural Watercourse  Trap Surficial Drainage (i.e. furrows)	se shaded, domina sery areas, ground l, permanent)  pezoidal Channel Dugout Pond	Boulder Continued to the second secon	ture or ear d Swale_	tic Veg_	ssional)	
Cover Types Present (circle): Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use  Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs  Wand  Migratory Obstructions (seasonal  Arry  Note any fish observations  Materbody Notes  Natural Watercourse  Trap Surficial Drainage (i.e. furrows)	se shaded, domina sery areas, ground l, permanent)  pezoidal Channel Dugout Pond	Boulder Continued to the second secon	ture or ear d Swale_	tic Veg_	ssional)	
Cover Types Present (circle): Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use  Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nurs  Wand  Migratory Obstructions (seasonal  Arry  Note any fish observations  Materbody Notes  Natural Watercourse  Trap Surficial Drainage (i.e. furrows)	se shaded, domina sery areas, ground l, permanent)  pezoidal Channel Dugout Pond Wildlife Observat	Boulder Continued the second s	d Swale_ed by Aqua	tic Veg_	ssional)	

BANK meadow SP BAK VICTURIA ROAD X4 Substate Meadow Sp

FSEM Ismile Creek



### WIND FARM WATERBODY RAPID ASSESSMENT FORM

1	Jon	
0	FΛ	

Station #(02-)		Project Name	Minor			
Watercourse Name S mil	e treet	1100001# 1122	A PUE PARTY I PO			
Priotos		Field Staff M				
Photos  Date		Time	X	1 Comment		
	24 Dre	& humid	···			
GPS Coordinates (Zone) 6243 Descriptive Location	89 E 4760	0813 N		Datum 177		
Descriptive Location		gional Pd	20 PON	Datam		
	R ROLLER	He Road				
Water Quality						
Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements take	OH	Conductive	its to Otal			
Water Temperature (°C)	Samuel Marian Control of the Control	Air Temperature (%	ιτλ (πονcm) ———			
w. 34 P		- · ···· · · · · · · · · · · · · · · ·	0)			
Watercourse Dimensions & M Mean Watercourse Width	Ornhology					
		Masters a post				
Mean Bankfull Width% Riffle	(m)	Maximum Pool Dep	oth	(cm)		
% Riffle	·····(''')	wiedii water Depth		(cm)		
Evidence of eroding banks, Com	ments on bank s	etability	% Run	% Fla		
Substrate (% cover)	and the same of th					
Bedrock	Cobble	Comel				
Boulder	Gravel	Sand_ Clay	Silt	Muck		
In-water Cover		Olay	Marl	Detritus		
Cover Types Present ( )	· ·					
Cover Types Present (circle): Overhanging Vegetation Woo	Undercut Ba	nks Deep Pool Boulder Other	Watercress	Aquatic Veg		
Riparian Zone Riparian Cover (% of watercourse Adjacent Land Use		ant vegetation, mature	or early successio	onal)		
Fish Habitat Potential						
Critical Habitat (spawning or nurse	ery areas, ground	lwater upwellings)				
Migratory Obstructions (seasonal,	permanent)					
Note any fish observations						
Waterbody Notes						
Natural Watercourse Trans						
Natural Watercourse Trape Surficial Drainage (i.e. furrows)	220Idai Channel	Grassed Sw	ale Buri	ed Tile		
		Dominated by	Aquatic Veg	Drv v		
Other Habitat Notes, Incidental W	/ildlife Observat	ilono eta	<del>,</del>			
Other Habitat Notes, Incidental W	MANUE ODSEIVAL	ions, etc.				
ield Notes Authored by M. Faiella	Field Notes Q					
Notice of The Party of The Part	Field Notes Q	A/QCed by				
:\01609\resource\Internal Info and Teams\Aqua	tic Resources\Field She	ets\Stantec\Form 02 Wind Far	m Waterbook Bastala			
		25 THING I GI	··· · · · · · · · · · · · · · · · · ·	essment Form.doc		





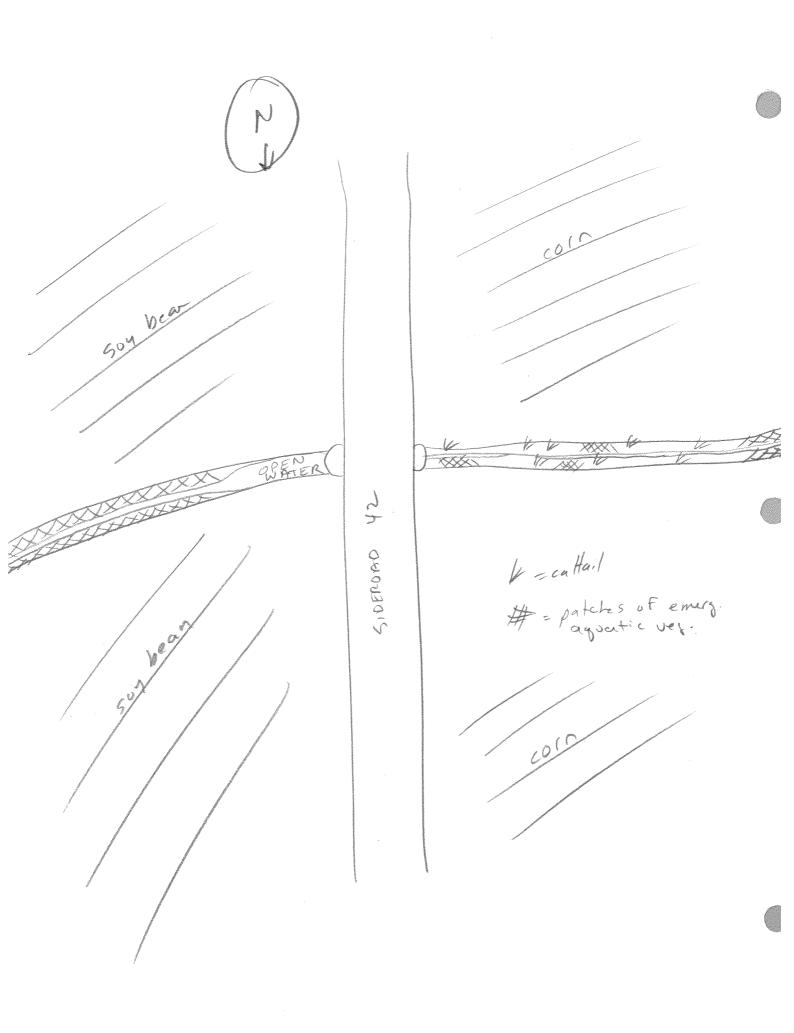
	WIND CAD	184 18/A TERRA	NOV MARIN AGGET		ATOR
Stantec	WIND PAR	OM WAIERBC	DDY RAPID ASSES	SMENT FORM	RE
-	2 1				1
Station #			Project Name N	agara Wi	nd
Photos	- photo los	7011	Project #/	950269	
Date 2012	06 19.	)	Time 10:27	, VNC	****
Weather conditi	ions in previous	24 hrs Man	Diccipitation.		
GPS Coordinate Descriptive Loca	es (Zone) 177	E 063		1760378 C	Datum N A
on ince	st side of	road 42	~ 300 m north	of Concessi	onb.
Water Quality					
Dissolved Oxyg	en (mg/L)	pH	Conductivity	(uS/cm)	
Water Temperat	ture (°C)		Air Temperature (°C	) (μονοιή)	
Time in situ mea	asurements take	en			
Watercourse D	imensions & M	lorphology			~ 1
Mean Watercoul	rse/Width	(m)	Maximum Pool Dept	h	m) 🚺 1
Mean Bankfull V		(m)·	Mean Water Depth		m)
	Riffle	% P	ool	_% Run\	%
		nments on bank s			
Substrate (% co	over)				
	edrock	Cobble	Sand	Silt	Muck
B	oulder	Gravel	Clay	Marl	Detriti
	•	•	•		•
In-water Cover					
In-water Cover Cover Types Pre	sent (circle):	Undercut Ba	anks Deen Pool	Matarara	A
In-water Cover Cover Types Pre Overhanging Vec		Undercut Ba		Watercress	Aquatic Ve
Cover Types Pre Overhanging Vec		Undercut Ba oody Debris	anks Deep Pool Boulder Other_	Watercress	Aquatic Ve
Cover Types Pre Overhanging Vec Riparian Zone	getation Wo	oody Debris	Boulder Other_		
Cover Types Pre Overhanging Vec Riparian Zone	getation Wo	oody Debris			
Cover Types Pre Overhanging Vec Riparian Zone Riparian Cover (9 Adjacent Land Us	getation Wo	oody Debris e shaded, domin	Boulder Other_ ant vegetation, mature of	r early succession	
Cover Types Pre Overhanging Vec Riparian Zone Riparian Cover (9	getation Wo	oody Debris e shaded, domin	Boulder Other_ ant vegetation, mature of	r early succession	ai)
Cover Types Pre Overhanging Vec Riparian Zone Riparian Cover (9 Adjacent Land Us	getation Wo	oody Debris e shaded, domin	Boulder Other_	r early succession	ai)
Cover Types Pre Overhanging Veg Riparian Zone Riparian Cover (9 Adjacent Land Us Fish Habitat Pote	getation Wo	e shaded, domin	ant vegetation, mature of	r early succession	ai)
Cover Types Pre Overhanging Vec Riparian Zone Riparian Cover (9 Adjacent Land Us Adjacent Land Us Fish Habitat Pot Critical Habitat (s	getation Wo	e shaded, domin	Boulder Other_ ant vegetation, mature of	r early succession	ai)
Cover Types Pre Overhanging Veg Riparian Zone Riparian Cover (9 Adjacent Land Us Fish Habitat Pote	getation Wo	e shaded, domin	ant vegetation, mature of	r early succession	ai)
Cover Types Pre Overhanging Vec Riparian Zone Riparian Cover (9 Adjacent Land Us  Fish Habitat Pote Critical Habitat (se	getation Wo	e shaded, domin	Boulder Other_ ant vegetation, mature of the control of the contro	rearly succession	ai)
Cover Types Pre Overhanging Veg Riparian Zone Riparian Cover (9 Adjacent Land Us Adjacent Land Us Fish Habitat Pot Critical Habitat (sp Migratory Obstruct Note any fish obse	getation Wo	e shaded, domin	ant vegetation, mature of	rearly succession	ai)
Cover Types Pre Overhanging Veg Riparian Zone Riparian Cover (9 Adjacent Land Us Adjacent Land Us Fish Habitat Pot Critical Habitat (sp Migratory Obstruct Note any fish obse Naterbody Notes	getation Wo	e shaded, domin	Boulder Other_ ant vegetation, mature of the spot of t	rearry succession  Sufface	ai)
Cover Types Pre Overhanging Vec Riparian Zone Riparian Cover (9 Adjacent Land Us Adjacent Land Us Fish Habitat Pot Critical Habitat (s Migratory Obstruct Note any fish observatory Notes Vaterbody Notes Vaterbody Notes	getation Wo	e shaded, domin	Boulder Other_ ant vegetation, mature of the spot of t	r early succession  S of Caltai	ai)
Cover Types Pre Overhanging Veg Riparian Zone Riparian Cover (9 Adjacent Land Us Adjacent Land Us Fish Habitat Pot Critical Habitat (sp Migratory Obstruct Note any fish obse Naterbody Notes	getation Wo	e shaded, domin	Boulder Other_ ant vegetation, mature of the spot of t	r early succession  S of Caltai	al)
Cover Types Pre Overhanging Veg Riparian Zone Riparian Cover (9 Adjacent Land Us Adjacent Land Us Fish Habitat Pot Critical Habitat (s) Migratory Obstruct Note any fish obse Naterbody Notes Surficial Drainage	getation Wo	e shaded, domin	Boulder Other_ ant vegetation, mature of the spot of t	r early succession  S of Caffai  Burie  Aquatic Veg	d Tile
Cover Types Pre Overhanging Veg Riparian Zone Riparian Cover (9 Adjacent Land Us Adjacent Land Us Fish Habitat Pot Critical Habitat (s) Migratory Obstruct Note any fish obse Naterbody Notes Surficial Drainage	getation Wo	e shaded, domin	Boulder Other_ ant vegetation, mature of the spot of t	r early succession  S of Caffai  Burie  Aquatic Veg	d Tile
Cover Types Pre Overhanging Veg Riparian Zone Riparian Cover (9 Adjacent Land Us Adjacent Land Us Fish Habitat Pot Critical Habitat (s) Migratory Obstruct Note any fish obse Naterbody Notes Surficial Drainage	getation Wo	e shaded, domin	Boulder Other_ ant vegetation, mature of the spot of t	r early succession  S of Caffai  Burie  Aquatic Veg	d Tile
Cover Types Pre Overhanging Veg Riparian Zone Riparian Cover (9 Adjacent Land Us Adjacent Land Us Fish Habitat Pot Critical Habitat (s) Migratory Obstruct Note any fish obse Naterbody Notes Surficial Drainage	getation Wo	e shaded, domin	Boulder Other_ ant vegetation, mature of the spot of t	r early succession  S of Caffai  Burie  Aquatic Veg	d Tile

REA

## Stantor

#### WIND FARM WATERBODY RAPID ASSESSMENT FORM

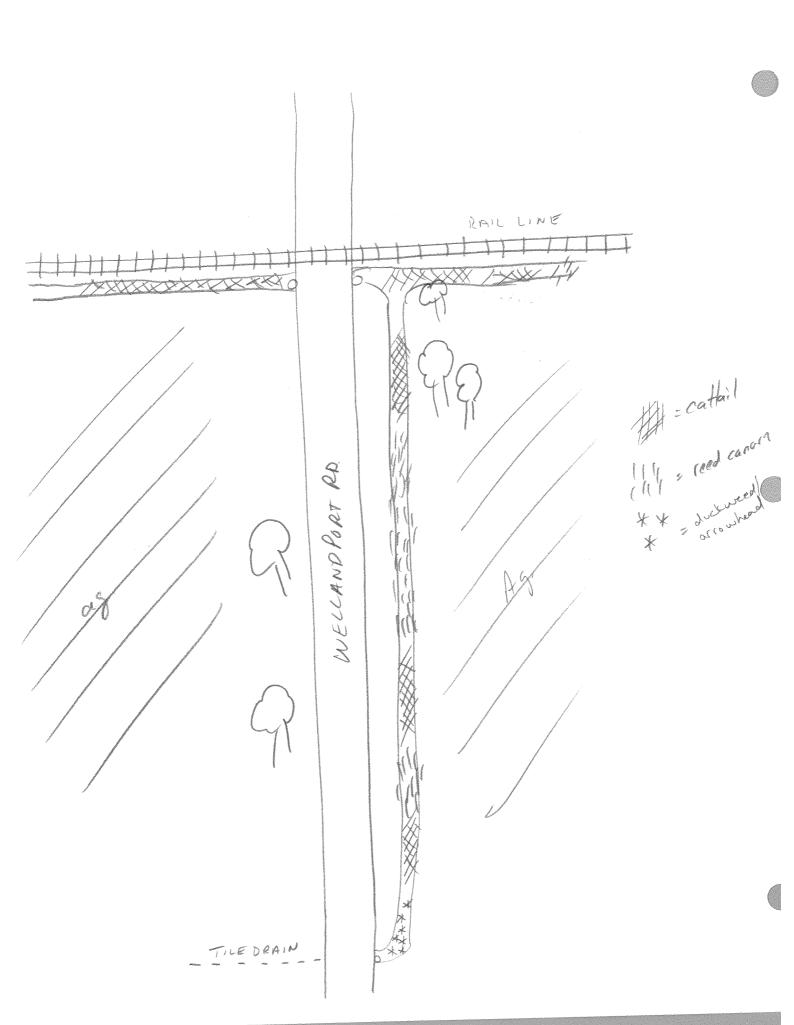
Station #63-2	Proie	ct Name Niaga	a wood	
Watercourse Name Polynomen	Proje	ct # 160950		
Photos See photo leg Date 2012 bb 19	Field	Staff ME ME	78(1)	
Date 2012 by 19	Time	10:40		
Weather conditions in previous 24 hrs	Minor pa	54D		
GPS Coordinates (Zone) 1955 E	0623141		ੇ ਤੇ ਉਂ Patum	NAD 8
Descriptive Location On Side (		on north	of Conces	
Water Quality				
Dissolved Oxygen (mg/L) 10.20	pH 9 37	Conductivity (uS/c	m) 676	
Dissolved Oxygen (mg/L) 10.20 Water Temperature (°C) 23.27	Air Te	emperature (°C)	30%	
Time in situ measurements taken	10:50			
Watercourse Dimensions & Morpho	logy			
Mean Watercourse Width 2.5 (r	n) Maxir	num Pool Depth	용. 🥴 (cm)	
Mean Watercourse Width 2.5 (r Mean Bankfull Width 5.0 (r	n) Mean	Water Depth 2	(cm)	
% Riffle /00	% Pool	% Ru		% Fla
Evidence of eroding banks, Comments	on bank stability	rushe observed		
Cultural (st. a.u.)			V	
Substrate (% cover)				
Bedrock C Boulder G	opple	_Sand <i>40</i>	Silt <i></i>	Muck
BoulderG	ravel <i>  0</i>	_Clay	<u>Mari</u>	Detritus
Overhanging Vegetation Woody D  Riparian Zone Riparian Cover (% of watercourse shad		***************************************	successional)	
Adjacent Land Use				
ag rd house	•			
Fish Habitat Potential Critical Habitat (spawning or nursery are		pwellings)		
Migratory Obstructions (seasonal, perm	anent)		•	
Note any fish observations never				
Waterbody Notes				
Natural Watercourse Trapezoid	al Channel	Grassed Swale	Buried Tile	8
Surficial Drainage (i.e. furrows)D	lugout Pond	Dominated by Aquation	c Veg / D	ry
Other Habitat Notes, Incidental Wildli	e Observations, e	tc. gold Finch		
		٧		
field Notes Authored by	Field Notes OA/OCad b	·		
		7		







Station #65-1		Proi	ect Name	Niagara	ار ان	1
Watercourse Name vnkno	พท	Proi	ect # //a	095026	20179	
Photos See shato 105		Field	Staff D		7	
Photos See phato 105  Date 2012 06 19  Weather conditions in marine		Time	13:11	ne, me		
Weather conditions in previous	us 24 hrs Wilno	( 000				
Weather conditions in previous GPS Coordinates (Zone)	77 E 662	7 737	N	4758121	Dotu	m ALMS
Descriptive Location No.	is Wellandood	Rd.	- 400 m	South	f Conc	M NAD
	<u> </u>				×1	
Water Quality Dissolved Oxygen (mg/l ) //	2./	710	- No. 1	2		
Dissolved Oxygen (mg/L) 4 Water Temperature (°C) 2	)0 =	7.68	Conduct	ivity (μS/cm)	3592	) \
Time in situ measurements ta	ken	AIF I	emperature (	(°C)		
Watercourse Dimensions &	Morphology					
Mean Watercourse Width	<u>.5(m)</u>	Maxii	num Pool De	epth 25	(cm)	
Medil Dalikiuli Aakiili 🔫	(I)	1/00-	18/alaa Daal	L	(cm)	
% Riffle	<u> </u>	)OI		% Run	(•)	% F
Evidence of eroding banks, Co	omments on bank s	tability	None	observed.		
Substrate (% cover)						
Bedrock Boulder	Cobble	10	Sand	40 Siit	2 -	Musela
Boulder	Gravel	2.0	_Clay	Sin_ Marl		_Muck Detritus
Riparian Zone Riparian Cover (% of watercould be a constant of the constant of	rse shaded, domina	int vege	tation, matur	e or early succe	ssional)	
10% mature / immate	JA TIUS + SI	uoo	<del>~~</del>			
cg, rds, houses.	•					
Fish Habitat Potential Critical Habitat (spawning or nu Spawn? Migratory Obstructions (season	al. permanent)			·		
Note any fish observations	M27					
Vaterbody Notes		/				
latural Watercourse Tra	apezoidal Channel	$\checkmark$	Grassed S	wale	Buried Til	<b>.</b>
Surficial Drainage (i.e. furrows)_	Dugout Pond			y Aquatic Veg_		)LA 
						/
other Habitat Notes, Incidenta	i Wildlife Observat	ions, et	c			
	· · · · · · · · · · · · · · · · · · ·					
old Notes Authors to 100 C				,		
eld Notes Authored by	Field Notes Q	_				
:\resource\internal Info and Teams\Aquatic	Resources\Field Sheets\Si	antec\Form	1 02 Wind Farm V	Valerhorty Panid Assa	esmant Fa-	daa
•						

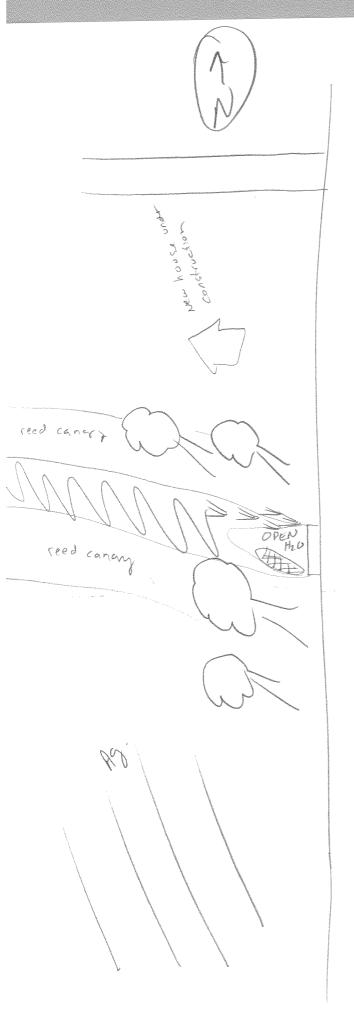




REA

<b>MAINE</b>
--------------

Station #	Project Name Niagara Wind
Watercourse Name unknown	Project # 1/00950269
Photos See photo 105.	Field Staff ME, ME
	Time 13:38
Weather conditions in previous 24 hrs wind (	(teip.
GPS Coordinates (Zone) 19つ E 0623	859 N 4757235 Datum NAD 93
Descriptive Location On Wellandpult Rd	- 500 m south of Conc. 5
Water Quality	
Dissolved Oxygen (mg/L) 4.24 pH 7	99 Conductivity (::Slom) 913
Water Temperature (°C) 22.96	Air Temperature (°C) 30 -
Time in situ measurements taken /3:50	All Temperature ( C)
Watercourse Dimensions & Morphology	
Mean Watercourse Width $20$ (m)	Maximum Pool Depth 75 (cm)
Mean Watercourse Width 20 (m) Mean Bankfull Width 10.0 (m)	Maximum Pool Depth (cm)
% Riffle% Poo	Mean Water Depth/ <i>O</i> (cm) I% Run% Flat
Evidence of eroding banks, Comments on bank sta	bility Apple Mossiand
	Sind Division of the state of t
Substrate (% cover)	
	Sand 30 Silt 30 Muck
Bedrock Cobble / Boulder /O Gravel	Sand 30 Silt 30 Muck Clay Marl Detritus
•	Clay Marl Detritus
In-water Cover	900000
Cover Types Present (circle): Undercut Bank	s Deep Pool Watercress Aquatic Veg
Overhanging Vegetation Woody Debris	Boulder Other
Riparian Zone	
Riparian Cover (% of watercourse shaded, dominan	t vegetation, mature or early evenesional
10% immature mature loss	
10% immature/mature tree - Adjacent Land Use	570 S.F V.
Ag fields new house	
0	
Fish Habitat Potential	
Critical Habitat (spawning or nursery areas, groundw	vater upwellings)
Spann, toland, nulsery	
Migratory Obstructions (seasonal, permanent)	
Note any fish observations Nove:	
Note any fish observations	
Waterbody Notes /	
Natural Watercourse Trapezoidal Channel	Grassed Swale Ruried Tile
Surficial Drainage (i.e. furrows)  Dugout Pond	Grassed Swale Buried Tile Dominated by Aquatic Veg Dry
Other Habitat <u>N</u> otes, Incidental Wiidlife Observati	ons, etc.
gieen tiogs	
V	
ME	
Field Notes Authored by Field Notes QA	vQCed by



WALLAND PORT RD.

OLD RAIL BED C open WATER V = catail

D = duckweed / ponduced.

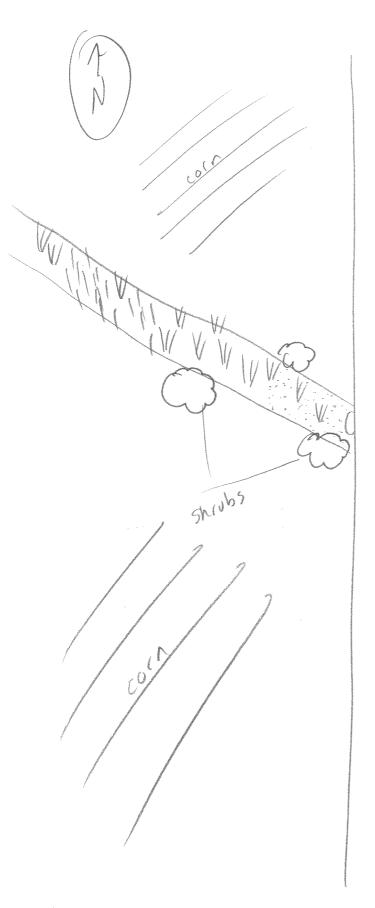
S = Sedge 9 p.



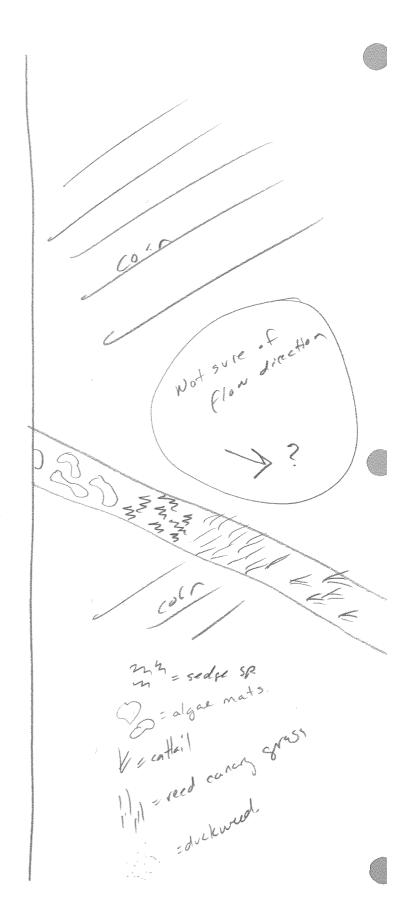


Station #65-3	Project Name Niagara Wind
Watercourse Name UNKNOWN	Project # 160950369
Photos Se North Inc.	Field Staff ME ME
Photos Se photo leg Date 2012 06 19	Time 14:09
Weather conditions in previous 24 hrs	03.60
Weather conditions in previous 24 hrs MINOC GPS Coordinates (Zone) 17T E 0623	3013 N 4757840 Datum NAD 83
Descriptive Location	I rd of Shaffy Rd - 250 m noft
Of Con. 5	sharing to a 30 m ron
Water Quality	
_	Conductivity (μS/cm)
Water Temperature (°C)	Air Temperature (°C)
Time in situ measurements taken	7.11 TOMPORALIE ( 0)
Watercourse Dimensions & Morphology	
Mean Watercourse Width $25$ (m)	Maximum Pool Depth 30 (cm)
Mean Bankfull Width 6 0 (m)	Mean Water Depth / 5 (cm)
% Riffle / / // % Poo	ol% Run% Fla
Evidence of eroding banks, Comments on bank sta	ability none
Culturate (9/ passar)	
Substrate (% cover)	/D Cond 2 D City # March
Bedrock Cobble	/OSand3.0Silt40Muck20ClayMarlDetritus
BoulderGraver	20 Clay Marl Detritus
Overhanging Vegetation Woody Debris  Riparian Zone  Riparian Cover (% of watercourse shaded domina	nt vegetation, mature or early successional)
10% matur Irees / shrubs re	ed canes orans
10% matur frees / shrubs rea	7 6
ac,	V
Fish Habitat Potential Critical Habitat (spawning or nursery areas, ground	water upwellings)
Migratory Obstructions (seasonal, permanent)	•
Note any fish observations	
Waterbody Notes /	
	Grassed Swale Buried Tile
Surficial Drainage (i.e. furrows) Dugout Pond	Dominated by Aquatic Veg Dry
Jugoutt one	Dominated by Addated Vog Dry
Other Habitat Notes, Incidental Wildlife Observa	tions, etc.
	**************************************
	_
	,
Field Notes Authored by Field Notes 0	DAVQCed by MEE

W:\resource\Internal Info and Teams\Aquatic Resources\Field Sheets\Stantec\Form 02 Wind Farm Waterbody Rapid Assessment Form.doc









REA

ntec No Flow

Station #	Project Name Niagara Wind
Watercourse Name VNENDWN	Project # 160950269
Photos Se photo log	Field Staff ME ME
Date	Time 14:24
Weather conditions in previous 24 hrswho	( presip
GPS Coordinates (Zone) 197 E 062	3036 N 4757316 Datum NAD88
Descriptive Location On Shafley R	d ~ Zoom south of Con 5
within ROW	
Water Quality	
	1 7.89 Conductivity (uS/cm) 7.33
Water Temperature (°C) 23.41	7.89 Conductivity (μS/cm) 733   Air Temperature (°C) 30°c
Water Temperature (°C) 23.41 Time in situ measurements taken 14.3	35
Time in site measurements taken	<u></u>
Watercourse Dimensions & Morphology	~ ·
Mean Watercourse Width 3.0 (m) Mean Bankfull Width 7.0 (m)	Maximum Pool Depth3  (cm)
Mean Bankfull Width 7.0 (m)	Mean Water Depth(cm)
% Riffle%	Pool% Run% Flat
Evidence of eroding banks, Comments on bank	stability non observed.
Substrate (% cover)	
BedrockCobble	Sand 30 Silt 40 Muck Clay Marl 10 Detritus
BoulderGravel	Clay Marl / Detritus
In-water Cover  Cover Types Present (circle): Undercut & Overhanging Vegetation Woody Debris	
Riparian Zone Riparian Cover (% of watercourse shaded, dom  40% ash se clm se shaded, dom  Adjacent Land Use  Nouse, MIV + (ails + v.ds - ,ac)	65
~	
Fish Habitat Potential	in .
Critical Habitat (spawning or nursery areas, grounds	undwater upwellings)
Spawn, nursen, Polage.	
Migratory Obstructions (seasonal, permanent)	
Note any fish observations	
	/ * *
Waterbody Notes	
Natural Watercourse Trapezoidal Chani	
Surficial Drainage (i.e. furrows) Dugout P	Pond Dominated by Aquatic Veg Dry
Other Habitat Notes, Incidental Wildlife Obse	mustions atc. could had 2 . Charles Grant
Other Habitat 140tes, incluental Wilding Obse	rvations, etc. <u>raidinals</u> Green flogs
	,
Field Notes Authored by Field No	otes QA/QCed by

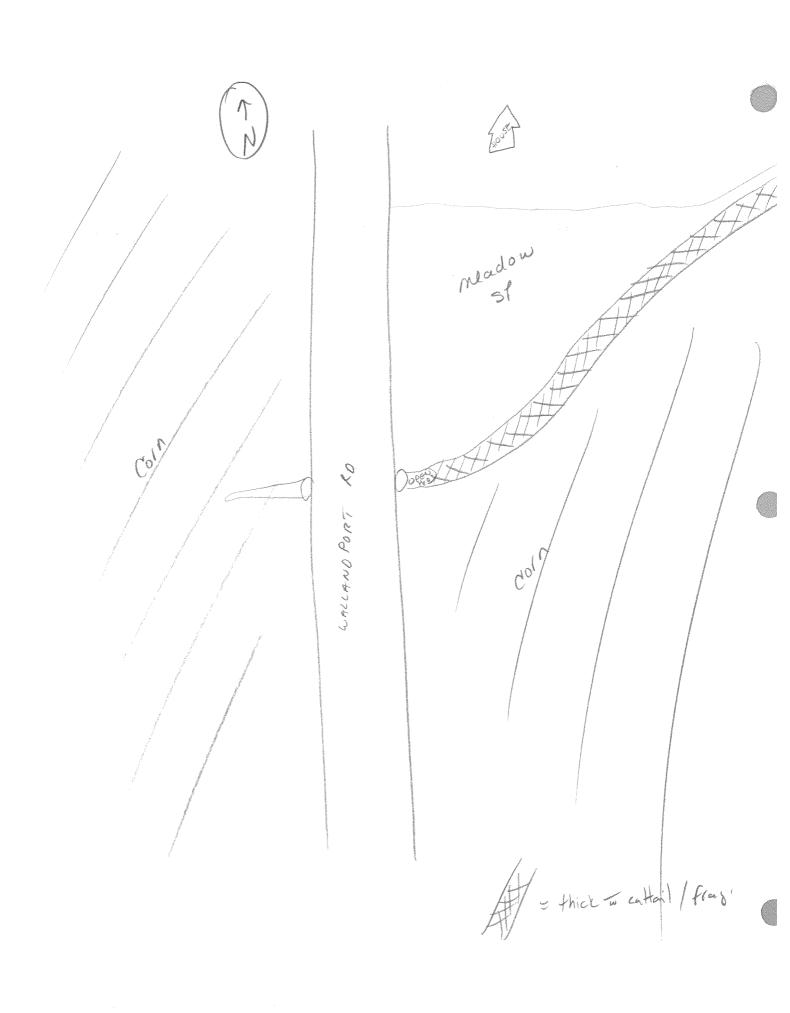
2 Tryklom アルシスロセン meadow TRAIL AIL



REA on E

Water Course Name	12:18		
Water Course Name	#	000-01	Nead
Photos	aff <u>M</u> 2	1502/09	VIV.CI
Weather conditions in previous 24 hrs GPS Coordinates (Zone) Descriptive Location  Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken  Watercourse Dimensions & Morphology Mean Watercourse Width Wean Bankfull Width Wean Watercourse Width Wean Bankfull Width Wean Watercourse Width Wean Bankfull Width Wean Bankfull Width Wean Watercourse of eroding banks, Comments on bank stability  Wean Watercourse Bedrock Woody Debris Boulder  Cover Types Present (circle):	12:18		
Weather conditions in previous 24 hrs GPS Coordinates (Zone) Descriptive Location  Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken  Watercourse Dimensions & Morphology Mean Watercourse Width Mean Watercourse of eroding banks, Comments on bank stability  Substrate (% cover) Bedrock Gravel Gravel  Boulder Cover Types Present (circle): Undercut Banks Description Woody Debris Boulder  Cover Types Present (circle): Undercut Banks Description  Watercourse Staded, dominant vegetation  Woody Debris Boulder  Cover Types Present (circle): Undercut Banks Description  Watercourse Shaded, dominant vegetation  Watercourse Trapezoidal Channel		- + 1 / 1 /	
GPS Coordinates (Zone)  Descriptive Location  Water Quality  Dissolved Oxygen (mg/L)  Water Temperature (°C)  Time in situ measurements taken  Watercourse Dimensions & Morphology  Mean Watercourse Width  Wean Bankfull Width  Wean Watercourse of eroding banks, Comments on bank stability  Wean Bankfull Width  Wean Watercourse  Bedrock  Boulder  Cobble  Sale Banker  Maximum  Mean Watercourse  Cobble  Sale Banker  Maximum  Mean W	j.		
Water Quality Dissolved Oxygen (mg/L)	N A	4756468	Datum AIA
Dissolved Oxygen (mg/L) pH Air Temperature (°C) Mean Watercourse Width (m) Mean Water Course (% Riffle (% Cobble (% Cover	~ 800 m	1 1	
Dissolved Oxygen (mg/L) pH Air Temperature (°C) Mean Watercourse Width (m) Mean Water Course (% Riffle (% Cobble (% Cover			
Water Temperature (°C)	Conductivity	VC/a>	
Watercourse Dimensions & Morphology Mean Watercourse Width	Conductivity	(Hovem)	
Mean Watercourse Width	rerature (°C)	- X   C	
Mean Watercourse Width			
Mean Bankfull Width 3.5 (m) Mean Walder Riffle 90 % Pool Evidence of eroding banks, Comments on bank stability 1.5 Substrate (% cover)	n Pool Depth	30	(cm)
Riffle	ater Depth	10	(cm)
Bedrock Gravel Cobble Salabstrate (% cover) Boulder Gravel Cover Gravel Cover Gravel Cover Gravel	60	% Run	(0.11)
Bedrock Gravel G	vone obs		
Bedrock Gravel G			
Boulder Gravel 30 C n-water Cover Cover Types Present (circle): Undercut Banks De Diverhanging Vegetation Woody Debris Boulder Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation  Adjacent Land Use  Ish Habitat Potential  Initical Habitat (spawning or nursery areas, groundwater upwer  Initical Habitat (spawning or nursery areas, groundwater upwer  Initial Habitat (spawning or nursery areas, groundwater upwer  Initial Habitat (spawning or nursery areas, groundwater upwer  Initial Habitat Potential  Initial	and 4	() O:14	Z
Cover Types Present (circle): Undercut Banks De Dverhanging Vegetation Woody Debris Boulder  Riparian Zone Riparian Cover (% of watercourse shaded, dominant vegetation)  djacent Land Use  ish Habitat Potential  critical Habitat (spawning or nursery areas, groundwater upwerligratory Obstructions (seasonal, permanent)  act of watercourse determined on the process of the part of		Silt Marl	<u> </u>
ish Habitat Potential ritical Habitat (spawning or nursery areas, groundwater upwer possible spawn ligratory Obstructions (seasonal, permanent) ligratory Obstructions (seasonal, permanent) lote any fish observations  atterbody Notes laterbody Notes later	Other_		Aquatic Ve
ish Habitat Potential initical Habitat (spawning or nursery areas, groundwater upwer igratory Obstructions (seasonal, permanent) igratory Obstructions (seasonal, permanent) ote any fish observations atterbody Notes attural Watercourse Trapezoidal Channel (unficial Drainage (i.e. furrows) Dugout Pond Do	on, mature o	early succes	sional)
ish Habitat Potential ritical Habitat (spawning or nursery areas, groundwater upwer possible spawn ligratory Obstructions (seasonal, permanent) act of water ote any fish observations raterbody Notes atural Watercourse Trapezoidal Channel (urficial Drainage (i.e. furrows) Dugout Pond Do			
ritical Habitat (spawning or nursery areas, groundwater upwer process for spawn ligratory Obstructions (seasonal, permanent)  ote any fish observations			
ritical Habitat (spawning or nursery areas, groundwater upwer process for spawn ligratory Obstructions (seasonal, permanent)  ote any fish observations			
ligratory Obstructions (seasonal, permanent)    act of water   ote any fish observations	-ilinas)		
ligratory Obstructions (seasonal, permanent)  ote any fish observations	• ,		
ote any fish observations			
aterbody Notes atural Watercourse Trapezoidal Channel Curficial Drainage (i.e. furrows) Dugout Pond Do			•
atural Watercourse Trapezoidal Channel ( urficial Drainage (i.e. furrows) Dugout Pond Do			
atural Watercourse Trapezoidal Channel ( urficial Drainage (i.e. furrows) Dugout Pond Do			
Inicial Drainage (i.e. furrows) Dugout Pond Do			
		le B	luried Tile
har Habitat Natas Insidental Williams - OL	Grassed Swa	\quatic Veg	<u> </u>
imi palitat motos ippipantai Wilalita (1884-4414-4-14-	Grassed Swa minated by A		
ther Habitat Notes, Incidental Wildlife Observations, etc.	minated by A		•
	minated by A		
	minated by A		

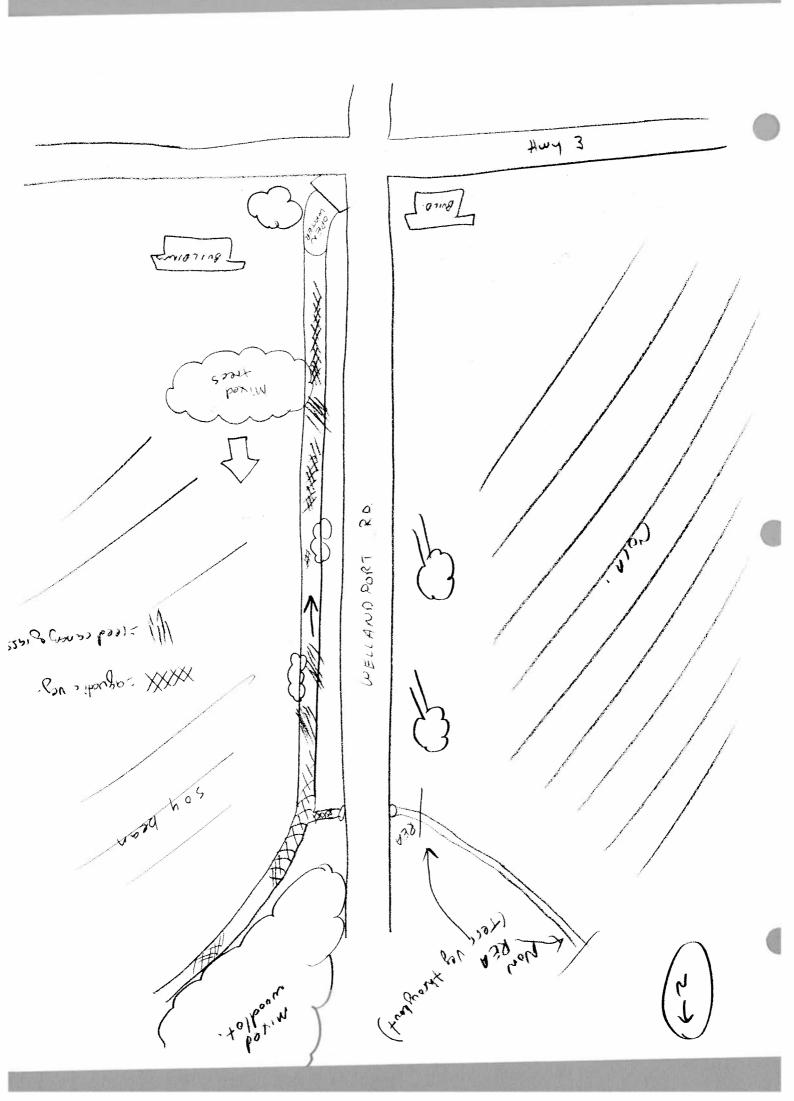
Field Notes QA/QCed by ______





R	€	A
	_	-

Station # 66-2		Project Name	Niga	ara Wi	NO
Watercourse Name UNKNOU	wn	Project #//	0950	2269	
Photos <u>50e photo 105</u> Date <u>2012 010 110</u>		Field Staff	WE W		
Date 2012 on 17		Time	2.45		
Weather conditions in previous	24 hrs None				
GPS Coordinates (Zone) 17	T E 062	3924	N 475	5835	Datum NAD
Descriptive Location	west side o	t Wellandpor	t RJ Cp	crallel) to	= Highu
Water Quality	a./	-1 A +			
Dissolved Oxygen (mg/L) 3.2	<u> </u>	<u> 7.75</u> Condu	ctivity (µS/	cm) <u>7/ 7</u>	7
water Temperature (°C)&_	<u> 19</u>	Air Temperatur	e (°C)	30°c	
Time in situ measurements take	en 12:57				
Watercourse Dimensions & M Mean Watercourse Width3 0	(m)	Maximum Pool	Donth	7.7. /	
Mean Bankfull Width 50	(m)	Maximum Pool Mean Water De	Debai		
% Riffle	100 % Pc	ol		un(	cm)
Evidence of eroding banks, Con					%
			v · voet	west'd	
Substrate (% cover)					
•	Cabbla		11 -		
Bedrock	Cobble	SandSand	40	Silt <u> </u>	<u>ତ</u> Mucl
Boulder	Gravel	<i>Q</i> ○ Clay		Mart	Detri
Cover Types Present (circle):	Undercut Ba		Ol Wate	ercress (	Áquatic V
Cover Types Present (circle): Overhanging Vegetation Wo	Undercut Bar pody Debris			ercress (	Áquatic V
Cover Types Present (circle): Overhanging Vegetation Wo	oody Debris	Boulder C	ther		
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours	oody Debris	Boulder C	ther		
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Edjacent Land Use	oody Debris se shaded, domina	Boulder C	ther		
Cover Types Present (circle): Overhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours	oody Debris se shaded, domina	Boulder C	ther		
Cover Types Present (circle): Dverhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Idjacent Land Use	oody Debris se shaded, domina	Boulder C	ther		
Cover Types Present (circle): Dverhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Edjacent Land Use  Riparian Land Use  Riparian Cover (% of watercours)  Riparian Cover (% of watercours)	e shaded, domina	Boulder C	ther		
Cover Types Present (circle): Dverhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use  Riparian Land Use  Riparian Cover (% of watercours  Adjacent Land Use  Riparian Cover (% of watercours	se shaded, domina	Boulder C	ther		
Cover Types Present (circle): Dverhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use  Riparian Land Use  Riparian Cover (% of watercours  Adjacent Land Use  Riparian Cover (% of watercours	se shaded, domina	Boulder C	ther		
Cover Types Present (circle): Dverhanging Vegetation Wookiparian Zone Riparian Cover (% of watercours Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours  Edjacent Land Use  Riparian Cover (% of watercours)  Riparian Co	se shaded, dominations are shaded, dominations are services are servic	Boulder Country vegetation, ma	ture or earl	y successio	
Cover Types Present (circle): Dverhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours  Idjacent Land Use  Riparian Cover (% of watercours)  Riparian	se shaded, dominations are shaded, dominations are served areas, ground l, permanent)	Boulder C	ture or earl	y successio	
Cover Types Present (circle): Dverhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours  Idjacent Land Use  Riparian Cover (% of watercours)  Riparian	se shaded, dominations are shaded, dominations are served areas, ground l, permanent)	Boulder Country vegetation, ma	ture or earl	y successio	
Cover Types Present (circle): Dverhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours  Idjacent Land Use  Riparian Cover (% of watercours)  Riparian	se shaded, dominations are shaded, dominations are server areas, ground l, permanent)	Boulder Country vegetation, ma	ture or earl	y successio	
Cover Types Present (circle): Dverhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours  Idjacent Land Use  Riparian Cover (% of watercours)  Idjacent Land Use  Riparian Cover (% of watercours)  Rip	se shaded, dominations are shaded, dominations are server areas, ground l, permanent)	Boulder Country vegetation, ma	ture or earl	y successio	
Cover Types Present (circle): Dverhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours  dijacent Land Use  Riparian Cover (% of watercours)  dijacent Land	se shaded, dominatings sery areas, ground permanent)	Boulder Cant vegetation, manual vegetation, vegeta	ture or earl	y successio	nal)
ish Habitat Potential critical Habitat (spawning or nurs Spawn not see the local ligratory Obstructions (seasonal lack of water ote any fish observations	se shaded, dominating	Boulder Country was a second of the second o	ture or earl	y succession	nal)
Cover Types Present (circle): Dverhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use Riparian Cover (% of watercours Signatural Watercourse Adjacent Land Use Riparian Cover (% of watercourse Adjacent Land Use Riparian Cover (% of watercourse Adjacent Land Use Riparian Cover (% of watercourse Riparian Cover (% of watercourse) R	se shaded, dominating of the shaded of t	Boulder Cant vegetation, manual vegetation, vegeta	ture or earl	y succession Buri	nal)  ed Tile Dry
Cover Types Present (circle): Dverhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use Riparian Cover (% of watercours Signatural Watercourse Adjacent Land Use Riparian Cover (% of watercourse Adjacent Land Use Riparian Cover (% of watercourse Adjacent Land Use Riparian Cover (% of watercourse Riparian Cover (% of watercourse) R	se shaded, dominating of the shaded of t	Boulder Cant vegetation, manual vegetation, vegeta	ture or earl	y succession Buri	nal)  ed Tile Dry
Cover Types Present (circle): Dverhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use Riparian Cover (% of watercourse Adjacent Land Use Riparian Zone Riparian Zone Riparian Zone Riparian Zone Riparian Cover (% of watercours Adjacent Land Use Riparian Cover (% of watercourse) R	se shaded, dominating of the shaded of t	Boulder Cant vegetation, manual vegetation, vegeta	ture or earl	y succession Buri	nal)  ed Tile Dry
Cover Types Present (circle): Dverhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use Riparian Cover (% of watercours Signatural Watercourse Adjacent Land Use Riparian Cover (% of watercourse Adjacent Land Use Riparian Cover (% of watercourse Adjacent Land Use Riparian Cover (% of watercourse Riparian Cover (% of watercourse) R	se shaded, dominating of the shaded of t	Boulder Cant vegetation, manual vegetation, vegeta	ture or earl	y succession Buri	nal)  ed Tile Dry
Cover Types Present (circle): Dverhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use Riparian Cover (% of watercours Signatural Watercourse Adjacent Land Use Riparian Cover (% of watercourse Adjacent Land Use Riparian Cover (% of watercourse Adjacent Land Use Riparian Cover (% of watercourse Riparian Cover (% of watercourse) R	se shaded, dominating of the shaded of t	Boulder Cant vegetation, manual vegetation, vegeta	ture or earl	y succession Buri	ed Tile
Cover Types Present (circle): Dverhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use Riparian Zone	se shaded, dominative shaded, dominative shaded, dominative sery areas, ground shape areas, ground shape shaded channel bugout Pond Wildlife Observa	Boulder  ant vegetation, manual vegetation, vegeta	ture or earl	y succession Buri	nal)  ed Tile Dry
Cover Types Present (circle): Dverhanging Vegetation Wo Riparian Zone Riparian Cover (% of watercours Adjacent Land Use Riparian Zone	se shaded, dominating of the shaded of t	Boulder  ant vegetation, manual vegetation, vegeta	ture or earl	y succession Buri	nal)  ed Tile Dry

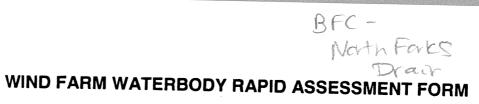




BFC-North Fores Drain Non PEA

			Process Control Control
Stantec			
Station # (67-)	<b>m</b> : t	No. 1	i
Watercourse Name Linknam	Project Name	liagara Winc	
Photos —	Project #	10069	
Photos Date June 20/12	Field Staff M. Fo	iella, M. Flic	7 A
Weather conditions in previous 24 hrs hot	Time 14:47		
GPS Coordinates (Zone) 617552 E 475			
Descriptive Location off of Huly		Thurs (Eymh	Datum 177
			1, 0, 10,
Water Quality	and the same of th		
Dissolved Oxygen (mg/L) pH_	Conductiv	ity (μ <u>S</u> /cm)	
Water Temperature (°C)	Air Temperature (°	C) (32)	
Time in situ measurements taken		9 38	
Watercourse Dimensions & Morphology			
Mean Watercourse Width (m)	Maximum Pool Dep	oth	(cm)
wear bankfull width (m)	Mean Water Depth		(cm)
% Riffle % Po	<b>^</b>	9/ Dun	(6.11) % Fla
Evidence of eroding banks, Comments on bank s	stability		
Substrate (% cover)			
BoulderGravel	Sand	Silt	Muck
Glavel	Clay	Marl	Detritus
In-water Cover			
Cover Types Present (circle): Undercut Ba	inks Deep Pool	Watercress	Aquatic Veg
Overhanging Vegetation Woody Debris	Boulder Othe		Aqualic Veg
Riparian Zone			
Riparian Cover (% of watercourse shaded, domina	ant vagatation —		
	ant vegetation, mature	or early succession	onal)
Adjacent Land Use			
farmland			
Fish Habitat Potential			
Critical Habitat (spawning or nursery areas, ground	dwater upwellings)		
Migratory Obstructions (seasonal, permanent)			
11/1			
lote any fish observations			
John M. A. A.			
Vaterbody Notes	•		
latural Watercourse Trapezoidal Channel	Grassed Sv	waleBur	ied Tile
urficial Drainage (i.e. furrows) Dugout Pond	d Dominated by	y Aquatic Veg	_ Dry
ther Habitat Notes, Incidental Wildlife Observa			
,			
N = 11			
eld Notes Authored by Faifla Field Notes of	QA/QCed by TIC		



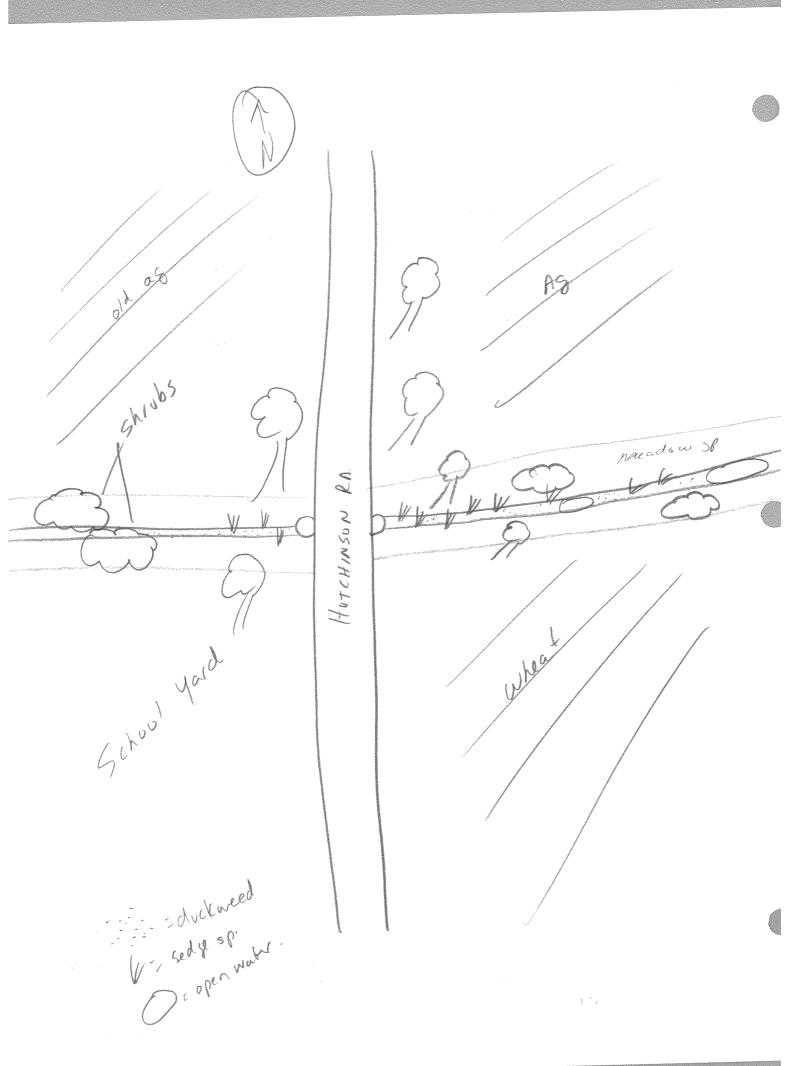


Station #	Project	Name Niaga	a shad	
Watercourse Name unknown	Project	# 1009 772	<u> </u>	
Photos Date June 20/12	Field St		Hielan	
Date June 20/12	Time _		TIFF IVE VI	
Weather conditions in previous 24 hrs	hot & hum			
GPS Coordinates (Zone) 617802 E	4752897	N	Datu	m 17+
Descriptive Location Nof Hu	NB. Pasto	6607-1	Datu	111 / / 1
	ŧ /			
Water Quality	and the state of t			
Dissolved Oxygen (mg/L)	nН	Conductivity ( 01)		
Water Temperature (°C)	Air Tom	Conductivity (µS/ci	m)	
Time in situ measurements taken	All rem	perature (°C) <u>3</u>	ferman,	
Watercourse Dimensions & Morpholo				
Mean Watercourse Width (m		m Pool Depth	(cm)	
Mean Bankfull Width(m % Riffle	<i>)</i> wean w	ater Depth	(cm)	
	" % POOL	% Ru	n	% Flat
Evidence of eroding banks, Comments	on bank stability _			
Substanta (0/)				
Substrate (% cover)	· · · · · · · · · · · · · · · · · · ·			
	bbles	and	_Silt	_Muck
BoulderGra	avelC	lay	Marl	 Detritus
In-water Cover				
Cover Types Present (circle): Und	dorout Pontre			
Overhanging Vegetation Woody Del	bric Danks D	eep Pool Water	cress Aqu	atic Veg
	oris boulder	Other		
Riparian Zone				
Riparian Cover (% of watercourse shade	d, dominant vegetati	on, mature or early	Successional	
	3		successional)	
Adjacent Land Use				
tarmand				
Fich Habitat Datametal				
Fish Habitat Potential				
Critical Habitat (spawning or nursery area	is, groundwater upw	ellings)		
Migratory Obstructions (seasonal, permai	Mandannian Company			
	ierit)			
Note any fish observations				
Waterbody Notes				
Natural Watercourse Transmitted	<b>O</b> 1 .			
Natural Watercourse Trapezoidal	Channel	Grassed Swale	Buried Ti	ile
Surficial Drainage (i.e. furrows) Du	gout Pond Do	ominated by Aquation	: Veg r	Dry
Other Habitat Notes, Incidental Wildlife	Onservations, etc.			
eld Notes Authored by M. Faicla	Field Notes QA/QCed by	76		
	rieid Notes QA/QCed by	Λ		





Staritet	DER		
Station # 68-1	K 0	Project Name   h   i   a	· 1
Watercourse Name or	Known	Project Name Niagara L	uing
Photos Se Make I	04	Project # 160950269	
Photos See photo 1 Date 2012 06 19		Field Staff ME, ME Time 14:55	
Weather conditions in pre			
GPS Coordinates (Zone)	171 E 062		
Descriptive Location	a Hukthisaa Pd		Datum NAD 8
	A POTENIEDY RA	~ 300m north of Humy 3	
Water Quality			
Dissolved Oxygen (mg/L)	9.61	9.07 Conductive (0) 0	1 -
Dissolved Oxygen (mg/L) Water Temperature (°C)	1311 PM_	4.07 Conductivity (μS/cm) 90	90
Time in situ measuremen	ts taken 1501	Air Temperature (°C) 30°2	***************************************
Watercourse Dimension Mean Watercourse Width Mean Bankfull Width	S & Morphology  3.0 (m)	Maximum Pool Depth 20 Mean Water Depth 15	_(cm)
% Riffle		Mean water Depth 15	_(cm)
Evidence of eroding banks	s Comments on bank of	ool% Run stability none obsurved w	% Fla
	o, comments on pank s	MONE OBSULUZA. W	Jell vertid
Substrate (% cover)			
	Cabble	15 Cont 7/2 ou	
Boulder	Coppie	/	<u>40</u> Muck
	Qiavei	<u>/ ▽                                    </u>	Detritus
In-water Cover Cover Types Present (circ Overhanging Vegetation	le): Undercut Ba ⊃ Woody Debris	nks Deep Pool Watercress Boulder Other	Aquatic Veg
Adjacent Land Lies	canan grass	ant vegetation, mature or early success	sional)
school (d)	fields.		
Fish Habitat Potential	,		
Critical Habitat (spawning o	or nursery areas, group	dwater unwellinge)	
Spawn, Poloner nulse	A.	owator upwennigs)	
Migratory Obstructions (sea	asonal, permanent)		
Note any fish observations	K E Ves		•
tote any lish observations	-Nov.		
		Grassed Swale B d Dominated by Aquatic Veg	
nner Habitat Notes, Incid	ental Wildlife Observa	ations, etc.	
<b>ه</b> ۸			
eld Notes Authored by	Field Notes	QA/QCed by	





REA

Station # 69-1		Proi	ect Name	Niana	- A 1	read	
Watercourse Name "SY sour	n	Proje	ect #//_	1050	2/00	OI/\C	
Photos See photo lo	<u> </u>		Staff		$\alpha \omega$		
Date 2012 no 19	<del>0</del>		15:11	IP-, VVIP		·····	
Weather conditions in previous	24 hrs Mrs	we po			~		
GPS Coordinates (Zone) i テ		0, 91	N N	4754	-119	Detail	- 1100
Descriptive Location On	tutchinson Q		300 m	2001 July	FIL	<u>Datui</u>	MNA08
			Joon .	700+1	3 · P+ 0	<u> </u>	
Water Quality						3,73	L.
Dissolved Oxygen (mg/L) 3	87 pH	7.69	Conduct	ivity (uS/c	m) 7	54	
Water Temperature (°C) 29	4.97	Air T	emperature	(ο <b>C</b> ) 3	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		
Time in situ measurements take		,	omporataro :	(0)			
Watercourse Dimensions & N	Morphology						
Mean Watercourse Width 20	O (m)	Maxir	num Pool D	enth a	20	(cm)	The same of
Mean Bankfull Width 7.0		Mean	Water Dep	b /	<del>\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ </del>	(cm)	
% Riffle	100 %P		· · · · · · · · · · · · · · · · · · ·	% Ru	in .	(0111)	% Fla
Evidence of eroding banks, Cor			none c				/0 1 la
	ì		20.70				
Substrate (% cover)	× 105.						
Bedrock	Cobble	10	Sand	40	_Silt	20	_Muck
Boulder	Gravel	20	_Clay		Marl		Detritus
Cover Types Present (circle): Overhanging Vegetation W  Riparian Zone	oody Debris	Bould		ner			atic Veg
Riparian Cover (% of watercours	se shaded, domin	ant vege	tation, matu	re or early	succes	sional)	
3% sparce shrubs	red cundy						
Adjacent Land Use							
ag rds,	•						
Fish Habitat Potential Critical Habitat (spawning or nur	rsery areas, groun	idwater u	pwellings)				
Migratory Obstructions (seasons	al, permanent)						
Note any fish observations w	~						
Manager 1 A A							
Waterbody Notes		. /					
Natural Watercourse Tra	apezoidal Channe	<u> </u>	Grassed	Swale	8	luried T	ile
Surficial Drainage (i.e. furrows)	Dugout Por	nd	Dominated	by Aquati	c Veg		Dry
Other Habitat Notes, Incidental	l Wildlife Observ	ations, e	tc				
Field Notes Authored by	Field Notes	QA/QCed b	y_NEE	,			

W:\resource\Internal Info and Teams\Aquatic Resources\Field Sheets\Stantec\Form 02 Wind Farm Waterbody Rapid Assessment Form.doc

meadousp. HUTCHINSON RR. meadow sp Shorb 6010 = thick duckweed = sed 8 3 P.

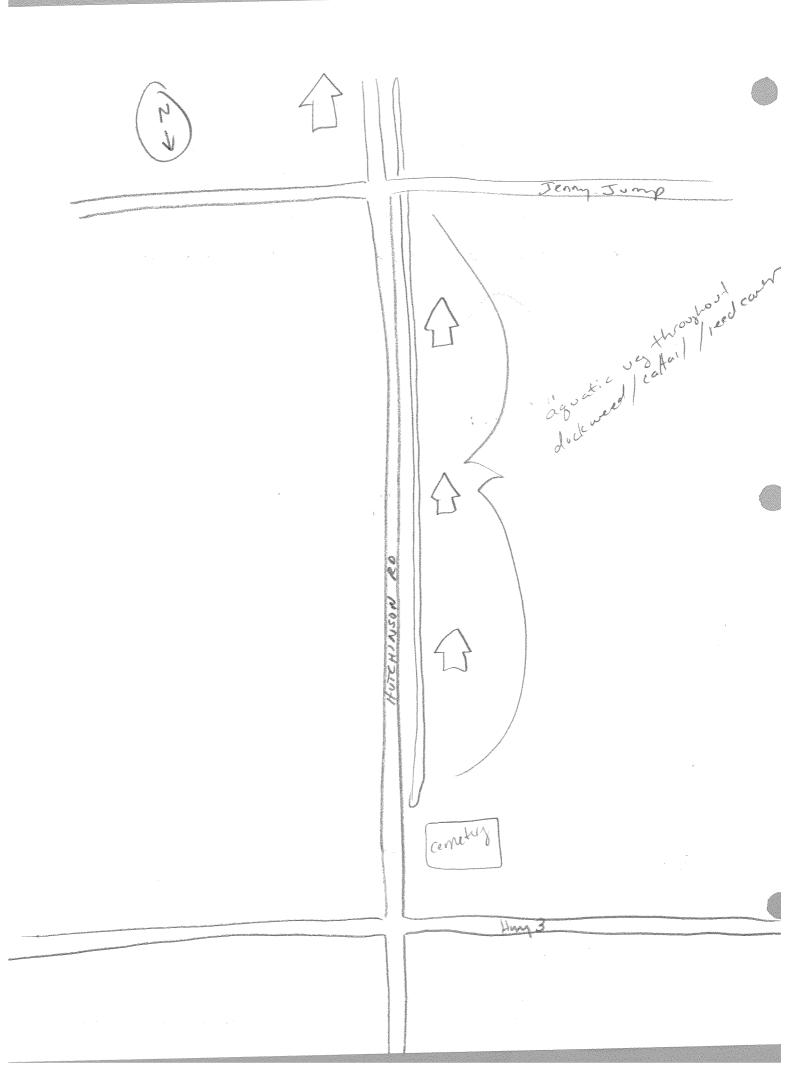


Field Notes Authored by

## WIND FARM WATERBODY RAPID ASSESSMENT FORM

REA

Stantec	
Station #69. 2	Project Name Niagara Wind
Watercourse Name Volknown	Project #_//0950269
Photos Soo Direto los.	Field Staff ME, ME
Date 2012'06 19	Time Sizz
Weather conditions in previous 24 hrs	NU DRUP
GPS Coordinates (Zone) 177 E O	1621122 N 4753920 Detumble
Descriptive LocationAlone Hutchin	SON Rd Flom - 50 South of 11, 2
to w 100 m southout Jennu	of Tump Rd on West Side Rons Polal
Water Quality	•
	ĎΗ Conductivity (μS/cm)
Water Temperature (°C)	Air Temperature (°C) 30°c
Time in situ measurements taken	
Watercourse Dimensions & Morphology	
Mean Watercourse Width $\frac{\partial \cdot \partial}{\partial \cdot}$ (m)	Maximum Pool Depth/ cm)
Mean Bankfull Width 4. (m)	Mean Water Depth 5 (cm)
	6 Pool % Run % I
Evidence of eroding banks, Comments on bar	nk stability No flow. No observed eros
Substrate (% cover) BedrockCobbleBoulderGravel  In-water Cover Cover Types Present (circle): Undercut Overhanging Vegetation Woody Debris	Clay Marl Detritu
Adjacent Land Use	minant vegetation, mature or early successional)
houses, sd, ag.	
Fish Habitat Potential Critical Habitat (spawning or nursery areas, gro  Spawn for a nursery areas, gro  Migratory Obstructions (seasonal, permanent)  Act of water  Note any fish observations	
Note any fish observations	
Vaterbody Notes latural Watercourse Trapezoidal Chan Surficial Drainage (i.e. furrows) Dugout F Other Habitat Notes, Incidental Wildlife Obse	Pond Dominated by Aquatic Veg Dry
latural Watercourse Trapezoidal Chan Surficial Drainage (i.e. furrows) Dugout F	





REA

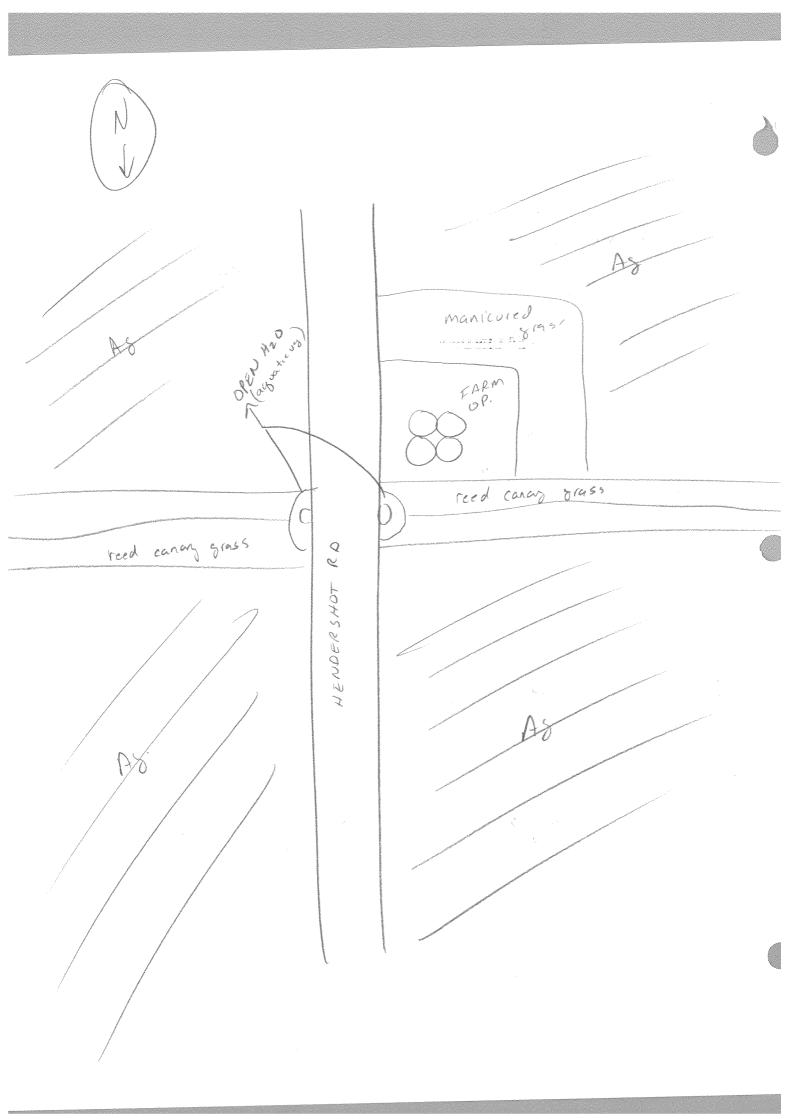
Watercourse Name_ V Nknown			1110000	161 1	wind	
	_ Projec	xt #//_c	1950	2600	}	
Photos see photo in	_ Field	StaffN	IE MF			
Date AGID DE 19	Time	15:56				
Weather conditions in previous 24 hrs	of thumid	vous	precip			
GPS Coordinates (Zone) 137 E 0	022 993	N N	4755	428	Datu	MNAD8
Descriptive Location On Twoline D.	innuille/Noti	nfleet s	d - 81	00m	South	, of
Bickney Rd						
Water Quality						
Dissolved Oxygen (mg/L) 3.98	pH_ 7.93	_ Conducti	ivity (μS/c	m)	579	
Water Temperature (°C) 23.21		mperature (				
Time in situ measurements taken 16:0	3		· /			
Watercourse Dimensions & Morphology						
Mean Watercourse Width 3.0 (m)	Maxim	um Pool De	enth S	0	(cm)	
Mean Bankfull Width 6.8 (m)	Mean	Water Dept	h 2	30	(cm)	
% Riffle	% Pool		% Ru	ın	(0)	% Fk
Evidence of eroding banks, Comments on b		Noho			604	
recent diedging on south ba		-/		*		
Substrate (% cover)						
BedrockCobble	1	_Sand	40	Silt	40	Muck
Boulder Gravel	20	Clay		Marl		Detritus
Overhanging Vegetation Woody Debris	Boulde	r Oth			Aqu	uatic Veg
Riparian Zone Riparian Cover (% of watercourse shaded, d	Boulde	r Oth	er re or early			
Overhanging Vegetation Woody Debris  Riparian Zone  Riparian Cover (% of watercourse shaded, description of the shaded of the sh	Boulde	r Oth	er re or early			lauc veg
Overhanging Vegetation Woody Debris  Riparian Zone  Riparian Cover (% of watercourse shaded, do not not not not not not not not not no	Boulde	r Oth	er re or early			
Riparian Zone Riparian Cover (% of watercourse shaded, of Soly Mature I mature true and Use  Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nursery areas, of Soly Migratory Obstructions (seasonal, permanen Migratory Obstructions (seasonal, permanen Obstructions)	Boulde ominant veget	r Oth ation, matur	er re or early			
Note any fish observation  Noody Debris  Woody Debris  Woody Debris  Woody Debris  Watercourse shaded, of the s	Boulde cominant veget cominant veget groundwater up	r Oth ation, matur אפינינייייייייייייייייייייייייייייייייי	re or early	succes	ssional)	
Note any fish observations  Noody Debris  Riparian Zone  Riparian Cover (% of watercourse shaded, of Sold Matura I matur	Boulde dominant veget relycub	r Oth ation, matur うないとう owellings)	re or early	' succes	ssional)	ile
Note any fish observations  Noody Debris  Riparian Zone  Riparian Cover (% of watercourse shaded, of Sold Matura I matur	Boulde dominant veget relycub	r Oth ation, matur אפינינייייייייייייייייייייייייייייייייי	re or early	' succes	ssional)	
Riparian Zone Riparian Cover (% of watercourse shaded, of watercourse water w	Boulde cominant veget groundwater up t) annel t Pond	r Oth ation, matur کوددیک owellings) Grassed Dominated	re or early Swale_ by Aquati	c Veg_	ssional)	ile
Overhanging Vegetation Woody Debris  Riparian Zone Riparian Cover (% of watercourse shaded, of Sold Mature I ma	Boulde cominant veget groundwater up t) annel t Pond	r Oth ation, matur کوددیک owellings) Grassed Dominated	re or early Swale_ by Aquati	c Veg_	ssional)	ile
Riparian Zone Riparian Cover (% of watercourse shaded, of watercourse water w	Boulde cominant veget groundwater up t) annel t Pond	r Oth ation, matur کوددیک owellings) Grassed Dominated	re or early Swale_ by Aquati	c Veg_	ssional)	ile
Riparian Zone Riparian Cover (% of watercourse shaded, of Solow Material Cover (% of watercourse shaded, of Solow Material Use  Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nursery areas, of Solow No. 1975 (Seasonal, permanen Most Obstructions (seasonal, permanen Most Obstructions (Seasonal, permanen Material Watercourse Trapezoidal Chesurficial Drainage (i.e. furrows) Dugou Other Habitat Notes, Incidental Wildlife Obstructions	Boulde cominant veget groundwater up t) annel t Pond	r Oth ation, maturation, maturation, maturation, maturation, maturation, maturation with the second	swale_by Aquati	c Veg_	ssional)	ile

DONVILLE / WAINFLORT Shrubs/tres Scour Greenhoops XXX = Nuckureed.



REA

Station #		Proie	ect Name	Niagara L	wind	
Watercourse Name vnkhown		Proje	ect # 1/0/	1950269	1	
Photos See photo log			Staff 7			
Date 2012 06 19"			16 22			
Weather conditions in previous 2		pacif	1.			
GPS Coordinates (Zone) 131	E 0623	5948	N	4755150	Datun	NAD83
Descriptive Location Dn	endershot R	dmi	100m so	oth of Huma	3. Nec	<u> </u>
turn silvs		ă.		T.		
Water Quality						
Dissolved Oxygen (mg/L)	<u></u>		Conduct	ivity (μS/cm)		
Water Temperature (°C)		Air Te	emperature (	(°C)2'8°c		<del></del>
Time in situ measurements taken			•			
Watercourse Dimensions & Mo	rphology					
Mean Watercourse Width 2 0	(m)	Maxir	num Pool [*] De	epth	(cm)	
Mean Bankfull Width 5 p	(m)	Mean	Water Dept	h 50	(cm)	
	100 % Po	ol	Trailer Bop.	% Run	(CIII)	% Fla
Evidence of eroding banks, Comm	nents on bank st	ability	Moré.			/0 1 10
			\			
Substrate (% cover)			,			
Bedrock	Cobble	10	_Sand	40 Silt	30	Muck
Boulder_	Gravel 2	0	_Clay	Mart		Detritus
Riparian Zone Riparian Cover (% of watercourse  3/2 100 000000000000000000000000000000000					ssional)	
as helds, id.	•		ļ			
Eigh Habitat Batantial						
Fish Habitat Potential Critical Habitat (spawning or nurse	ry areas, ground	water u	pwellings)			
Migratory Obstructions (seasonal,	permanent)	178				
lack of water thick	= reed ranc	n ax	2.55		•	
Note any fish observations note	2 ·	9 9				
Waterbody Notes						
Natural Watercourse Trape	ezoidal Channel	$\vee$	Grassed :	Swale	Buried Til	۵
Surficial Drainage (i.e. furrows)	Dugout Pond	j.	Dominated	by Aquatic Veg	/	)ry
		ri U		-		" <u>y</u>
Other Habitat Notes, Incidental W	Viidlife Observat	tions, e	tc			
				,	·	
Teld Notes Authored by	. Field Notes Q	WQCed b	MEE MEE			



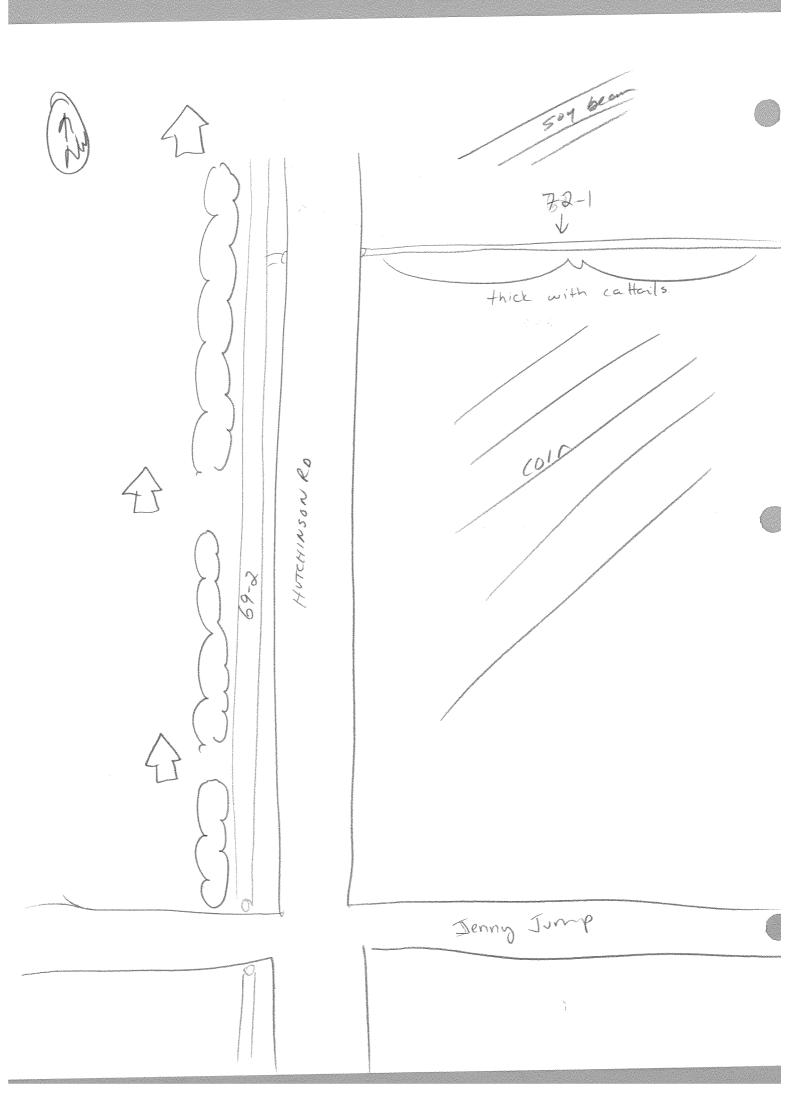
Defined ne'
REA



# WIND FARM WATERBODY RAPID ASSESSMENT FORM

Station #	Pr	oject Name <u>N</u>	iadara	Jind
Watercourse Name บุกหกอเพก	Pr	oject #//_00	950269	
Photos Su Mato 105	Fi	eld StaffM	EMP	
Date 2012 06 19	Ti	ne <u>15:37</u>		
Weather conditions in previous 24	thrs Minor pre	ci O.		
GPS Coordinates (Zone) 171	E 0621115		4753895	Datum N
Descriptive Location On Huko	thinson Rd ~ 2	50m north	of Jenny	Jump Ro
Wațer Quality	/			
Dissolved Oxygen (mg/L)	pH	Conductivit	y (μS/cpr)	
Water Temperature (°C)	Air	Temperature (°C	)"//	
Time in situ measurements taken				
Watercourse Dimensions & Mor	. ••		1.	
Mean Watercourse Width 20		ximum Pool Dept	h <u>~/A</u>	_(cm)
Mean Bankfull Width 5.0	(m) Me	an Water Depth_	NA	_(cm)
<u> </u>	% Pool		% Run	
Evidence of eroding banks, Comm	ients on Dank Stadilit	/		
Substrate (% cover)				
Bedrock	Cobble	Sand	Silt	Mu
Boulder	Gravel	Clay	Marl	Del
In-water Cover Cover Types Present (circle):	Undercut Banks	Deen Pool	Watereree	A mumble 1
Cover Types Present (circle):	Undercut Banks dy Debris Boo	Deep Pool Ilder Other	Watercress	Aquatic '
Cover Types Present (circle): Overhanging Vegetation Wood Riparian Zone	dy Debris Bou	ılder Other		• •
Cover Types Present (circle): Overhanging Vegetation Wood Riparian Zone Riparian Cover (% of watercourse):	dy Debris Boo shaded, dominant ve	ılder Other		· · · · · · · · · · · · · · · · · · ·
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse:	dy Debris Boo shaded, dominant ve	older Other		• •
Cover Types Present (circle): Overhanging Vegetation Wood Riparian Zone Riparian Cover (% of watercourse :  \( \frac{\frac{1}{2}}{2} \) Adjacent Land Use	dy Debris Boo shaded, dominant ve	older Other		• •
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse:	dy Debris Boo shaded, dominant ve	older Other		· · · · · · · · · · · · · · · · · · ·
Cover Types Present (circle): Overhanging Vegetation Wood Riparian Zone Riparian Cover (% of watercourse: Adjacent Land Use	dy Debris Boo shaded, dominant ve	older Other		• •
Cover Types Present (circle): Overhanging Vegetation Wood Riparian Zone Riparian Cover (% of watercourse: Adjacent Land Use Fish Habitat Potential	dy Debris Boo shaded, dominant ve うりべる ちんい	llder Other getation, mature ∈		• •
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse and Cove	dy Debris Boo shaded, dominant ve うりべる ちんい	llder Other getation, mature ∈		• •
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse (%)  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurser	dy Debris Bou shaded, dominant ve うりべる ちんい ry areas, groundwate	llder Other getation, mature ∈		• •
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse:  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurser  Doby Ok Down  Migratory Obstructions (seasonal, p	shaded, dominant ve シャイション・シャン ry areas, groundwate	llder Other getation, mature ∈		· · · · · · · · · · · · · · · · · · ·
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse:  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurser  Doss Die Spawn  Migratory Obstructions (seasonal, park of wake in the	shaded, dominant ve シャイション・シャン・シャン・シャン・シャン・シャン・シャン・シャン・シャン・シャン・シャ	llder Other getation, mature ∈		· · · · · · · · · · · · · · · · · · ·
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse:  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurser  Doby Ok Down  Migratory Obstructions (seasonal, p	shaded, dominant ve シャイション・シャン・シャン・シャン・シャン・シャン・シャン・シャン・シャン・シャン・シャ	llder Other getation, mature ∈		• •
Cover Types Present (circle):  Overhanging Vegetation Wood  Riparian Zone  Riparian Cover (% of watercourse:  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurser  DOSSIDE SPAWN  Migratory Obstructions (seasonal, p	shaded, dominant ve シャイション・シャン・シャン・シャン・シャン・シャン・シャン・シャン・シャン・シャン・シャ	llder Other getation, mature ∈		• •
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse:  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurser  DOSTIDLE DAWN  Migratory Obstructions (seasonal, posting of the posting	shaded, dominant ve シャイション・シャン・シャン・シャン・シャン・シャン・シャン・シャン・シャン・シャン・シャ	getation, mature	or early success	sional)
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse:  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurser  Dost Ole Spawn  Migratory Obstructions (seasonal, part of water p	shaded, dominant ve	getation, mature of the state o	valeB	sional)
Cover Types Present (circle):  Overhanging Vegetation Wood  Riparian Zone  Riparian Cover (% of watercourse:  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurser  DOSSIDE SPAWN  Migratory Obstructions (seasonal, p	shaded, dominant ve	getation, mature of the state o	or early success	sional)
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurser Dossi Dic Spawn  Migratory Obstructions (seasonal, part of water Adjacent Land Use  Waterbody Notes  Natural Watercourse Trape  Surficial Drainage (i.e. furrows)	shaded, dominant ve  Shaded, dominant ve  Shaded, dominant ve  Shaded, dominant ve  The shaded of th	getation, mature of the second	valeB	sional)  uried Tile_ Dry_
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse:  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurser  Dost Ole Spawn  Migratory Obstructions (seasonal, part of water p	shaded, dominant ve  Shaded, dominant ve  Shaded, dominant ve  Shaded, dominant ve  The shaded of th	getation, mature of the second	valeB	sional)  uried Tile
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurser Dossi Dic Spawn  Migratory Obstructions (seasonal, part of water Adjacent Land Use  Waterbody Notes  Natural Watercourse Trape  Surficial Drainage (i.e. furrows)	shaded, dominant ve  Shaded, dominant ve  Shaded, dominant ve  Shaded, dominant ve  The shaded of th	getation, mature of the second	valeB	sional)  uried Tile

W:\resource\Internal Info and Teams\Aquatic Resources\Field Sheets\Stantec\Form 02 Wind Farm Waterbody Rapid Assessment Form.doc

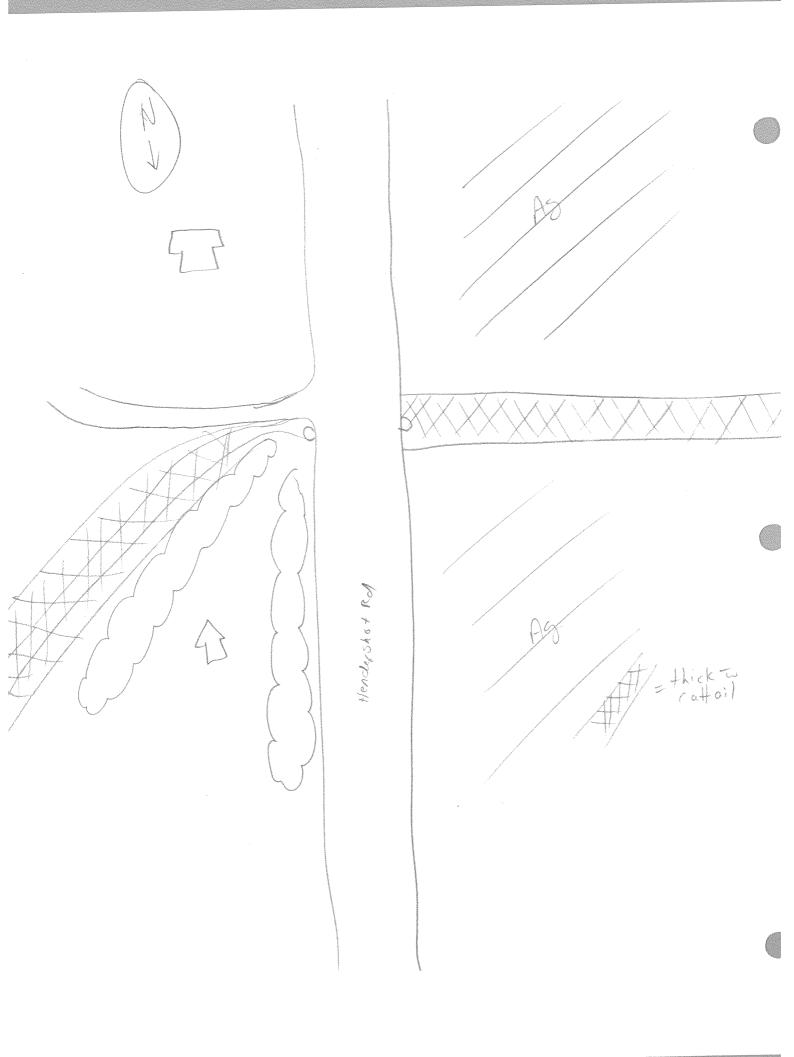




REA DRY

Station # 73-		Duningt Name	lana a mi	bair
Watercourse Name unkno		Project Name	Jagara L	011 (01
Photos _ See photo 105.		Project # (o) Field Staff		
Date June 20/12		Time		
Weather conditions in previous	24 hrs No Dr	(i D		
GPS Coordinates (Zone)			4754257	Datum Na
Descriptive Location Dn		- 400 m noct)		Dunville/
Water Quality	***************************************			
Dissolved Oxygen (mg/L)	pH	Conducti	vity (μS/cm)	
Water Temperature (°C)		Air Temperature (		
Time in situ measurements tak	en			
Watercourse Dimensions & M	Morphology			
Mean Watercourse Width 2. Mean Bankfull Width 4.0	<u>▷(m)</u>	Maximum Pool De		(cm)
% Riffle			n % Ru <b>n</b>	(cm)
Evidence of eroding banks, Co	% Po	tability	% Hun	%
Substrate (% cover)			B	
Bedrock		Sand		
Boulder	Gravel	<u> </u>	Marl	Detrit
Overhanging Vegetation W Riparian Zone	voody Deblis	Boulder Oth	let	
Riparian Cover (% of watercould the caret Land Use	rse shaded, domin	ant vegetation, matu	re or early succe	ssional)
Adjacent Land Use				
as fields, houses.				
Clab Uabitat Datautial				
<b>Fish Habitat Potential</b> Critical Habitat (spawning or nu	irsem areas arour	idwater unwellings)		
nossible snawn				
Migratory Obstructions (season	ial, permanent)			
Note any fish observations	none dry			
	<i>}</i>			
<b>Waterbody Notes</b> Natural Watercourse Ti	rono-raidal Channe		Overda	D 1 1 7 1
Surficial Drainage (i.e. furrows)	Puggut Po	drassed	Swale	Buried Tile
Surnola: Drainage (i.e. lullows)	Dugout Pol	iu Dominated	by Aquatic veg	Dry
Other Habitat Notes, Incident	al Wildlife Obsen	ations. etc.		
,				
Field Notes Authored by			part -	

W:\resource\Internal Info and Teams\Aquatic Resources\Field Sheets\Stantec\Form 02 Wind Farm Waterbody Rapid Assessment Form.doc



BFC- East Kelly Drain Non R





Station #	hrs	in me Dunnuil	L-Way	atum / T
Water Quality Dissolved Oxygen (mg/L)	pH_	Conductivity (μS	arth of	<u> </u>
Water Temperature (°C) Time in situ measurements taken_		Air Temperature (°C)	a°C	
Watercourse Dimensions & Mor Mean Watercourse Width Mean Bankfull Width % Riffle Evidence of eroding banks, Comm	(m) (m) % Po	Maximum Pool Depth Mean Water Depth ool% stability	(CI	m) m) % Flat
Substrate (% cover) BedrockBoulder	Cobble	Sand Clay	Silt Marl	Muck Detritus
In-water Cover Cover Types Present (circle): Overhanging Vegetation Wood	Undercut Ba dy Debris	nks Deep Pool Wa Boulder Other	tercress	Aquatic Veg
Riparian Zone Riparian Cover (% of watercourse:	shaded, domina	ant vegetation, mature or ea	rly succession	al)
Adjacent Land Use	~ 4			
<b>Fish Habitat Potential</b> Critical Habitat (spawning or nurser	y areas, ground	dwater upwellings)		
Migratory Obstructions (seasonal, p	permanent)			
Note any fish observations				
Waterbody Notes Natural Watercourse Trape. Surficial Drainage (i.e. furrows) Other Habitat Notes, Incidental W				
ield Notes Authored by M. Faiella	Field Notes			



REA

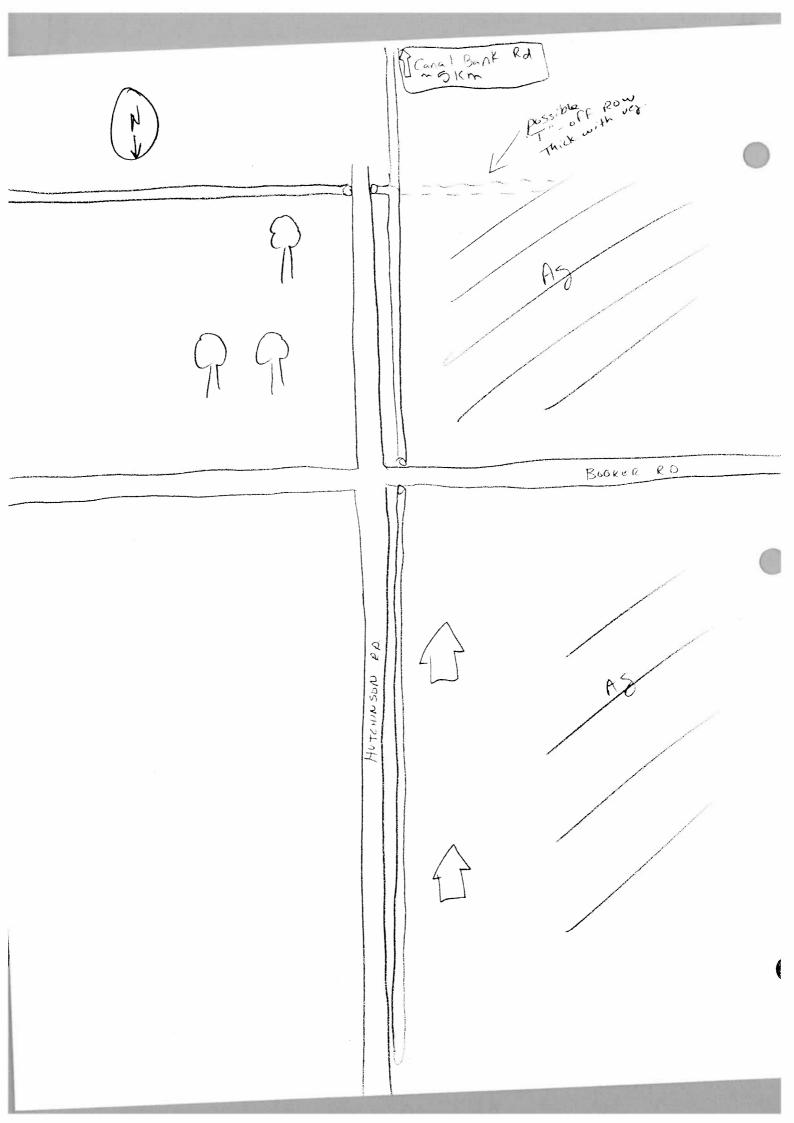
Stantec  Station #	DDY RAPID ASSESSMENT FORM  ENDS  Bender
Watercourse Name UNV na.	
Watercourse Name UNV na.	
Watercourse Name Why Main	Project Name Niagara Wind
Photos San al I	Project #1/009(%) 2 (69
Photos See Dhoto log Date June 20/12.	rield Staff MEIME
Weather conditions in provious 241	Ti
Weather conditions in previous 24 hrs hot GPS Coordinates (Zone) 171 E	
Descriptive Location Do 1/1/1/2017	N Datum N
From ~ boom porthag & V.	don west side of road (perallel)
Start: 17T 0621757, 4752809 ENDS	= 17T Obs Mary Transfer
Water Quality	9 4 4 4 4 4 4 9 4
g Dissolved Oxygen (mg/L) pH_	Conductivity (µS/cm)
Water Temperature (°C)	Air Temperature (°C)
Time in situ measurements taken	vai remperature ( C)
Watercourse Dimensions & Morphology	
mean watercourse Width 3.0 (m)	Maximum Pool Depth(cm)
Mean Bankfull Width 6.0 (m)	Mann Mater Devil
% Riffle IDD % Pc	0.0
Evidence of eroding banks, Comments on bank s	stability <u>some dredging @ northern</u> end
·cucy	ON THE MAN TO BE
Substrate (% cover)	
BedrockCobble_	
BoulderGravel	1D Class
In-water Cover	70 Clay Marl Detr
Cover Types Present (circle): Undercut Bar	
Overhanging Vegetation Woody Debris	
	Boulder Other
Riparian Zone	
Riparian Cover (% of watercourse shaded, domina	ant vegetation, mature or early avecage is
20% Sumac, other shrubs, reed canan	grass, cathail, pockets of mature trees
Adjacent Land Use	10 mater trees
Rds, nouses, as fillds	5
Fish Habitat Potential	
Critical Habitat (commission as assessed	
Critical Habitat (spawning or nursery areas, ground	lwater upwellings)
Migratory Obstructions (seasonal, permanent)	
Note any fish observations _ none	<b>5</b> .
The day non observations Appreh	
Matanha da Na	
Waterbody Notes	
Natural Watercourse Transpoidal Channel	Grassed Swale
Natural Watercourse Transpoidal Channel	Grassed Swale Buried Tile
Natural Watercourse Trapezoidal Channel _ Surficial Drainage (i.e. furrows) Dugout Pond	Dominated by Aquatic Veg Dry
Natural Watercourse Transpoidal Channel	Dominated by Aquatic Veg Dry

W:\resource\Internal Info and Teams\Aquatic Resources\Field Sheets\Stantec\Form 02 Wind Farm Waterbody Rapid Assessment Form.doc

Field Notes QA/QCed by ________

MV

Field Notes Authored by _





NON	
REA	,

SI	an	tec

Station # 73~2	Project Name Allena (1)
Watercourse Name unknown	Project Name Niagara Wind
Photos 913, 914, 91506	Project # 160958269
Date June 1/2.	Field Staff MEME Time 09:40
Weather conditions in previous 24 hrs no occ	11111e
GPS Coordinates (Zone) 17 E	
	N Datum Nad
	Located South of REA (73-1)
0	lyd on west property as well
Water Quality	
Dissolved Oxygen (mg/L) pH_	Conductivity (µS/cm)
vvater remperature (°C)	Air Temperature (°C)
Time in situ measurements taken	portution ( of
Watercourse Dimensions & Morphology	
Mean Watercourse Width(m)	
	Maximum Pool Depth (cm)
0/ 0//	Mean Water Depth (cm)
Fyidence of eroding banks from the % Po	
Evidence of eroding banks, Comments on bank st	ability 4
Substrate (% cover)	
BedrockCobble /	Muck Silt Muck
BoulderGravel	IVIUCK
	Ctay Marl Detritus
In-water Cover	
Cover Types Present (circle): Undercut Bar	nks Deep Pool Watercress Aquatic Veg
Overhanging Vegetation Woody Debris	Boulder Other
Riparian Zone	
Riparian Cover (% of watersource about 1	
Riparian Cover (% of watercourse shaded, domina	int vegetation, mature or early successional)
Adjacent Land Llos	and is dominated
Adjacent Land use by young terres	trial veg
	V
Fish Habitat Potential	
Critical Habitat (spawning or nursery areas, ground	Nator upwollings)
	water upweilings)
Migratory Obstructions (seasonal, permanent)	
Note any fish observations	
Matarhadu Natar	
Waterbody Notes	
Natural Watercourse Trapezoidal Channel	Grassed Swale Buried Tile
Surficial Drainage (i.e. furrows) Dugout Pond	Dominated by Aquatic Veg Dry
	July Diy
Other Habitat Notes, Incidental Wildlife Observat	tions, etc.
·····/································	
ield Notes Authored by / / /   Field Notes Q	DA/QCed by MEE
V:\resource\Internal Info and Teams\Aquatic Resources\Field Sheets\Si	tarried Form 02 Wind Farm Waterbody Rapid Assessment Form.doc

23 TREP Tell Je within Dred & d Terrestrial vo within Townshire Pal 73-2 contid non REA



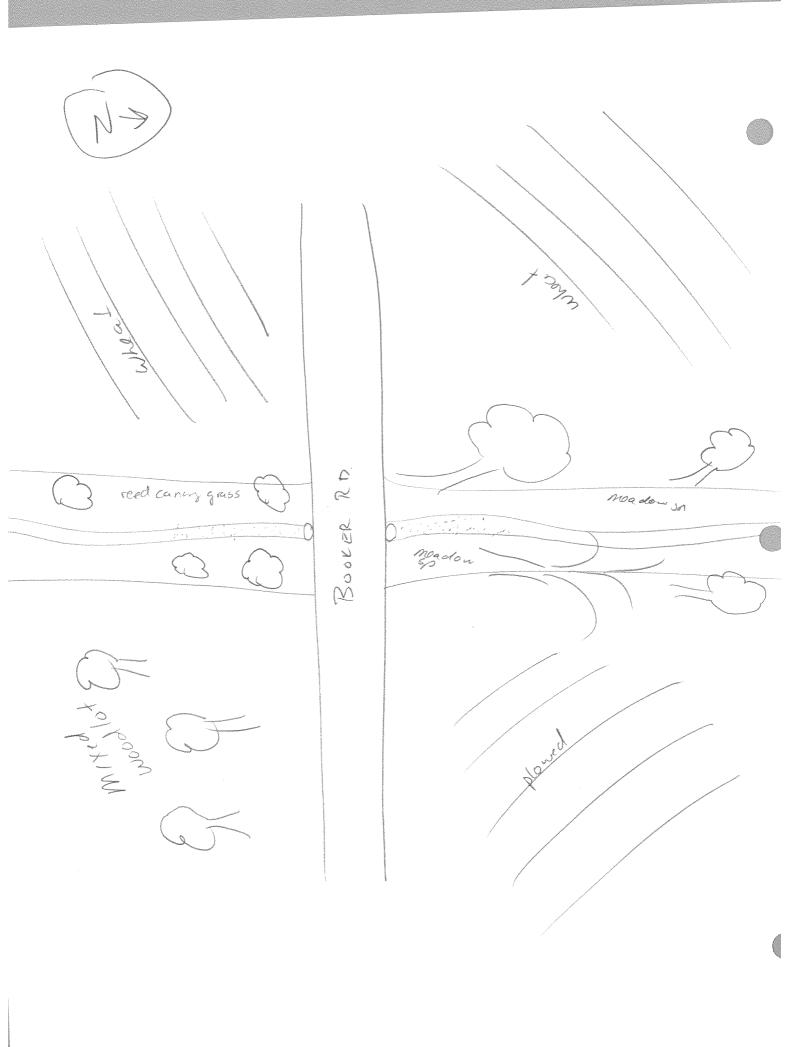
HON MI
REA

			DT RAPID ASSESS	MILLAL L'OUM	REA
)	Stantec				DR
,	Station #75-		Project Name 11	a o a i . ) . v	
1	Natercourse Name UnVna.5	$\overline{\gamma}$	Project Name	agara WII	(0)
	Photos Sy photo low Date June 20/12.		Project # <u>  1609</u> Field Staff	78964	
ł	Date June 20/12.		Time 09:53	17/17	
١	Veather conditions in previous 24	4 hrs None	111116 <u>- 6-6 - 7-7-7</u>		
(	GPS Coordinates (Zone) コプナ	F 5062	-3721 N4	757029 D	
l	Descriptive Location On Bo	oker Rd w	800m west of -	752879 Da	e Wainfle
- ۱ ه	Vater Quality				,
	Dissolved Oxygen (mg/L)	рН	Conductivity	dia Clares	
١	Vater Temperature (%)	Pri		(μS/cm)	
7	ime in situ measurements taken		Air Temperature (°C)		
	•			· · · · · · · · · · · · · · · · · · ·	
V	Vatercourse Dimensions & Mo	rphology			
	lean Watercourse Width	(m)	Maximum Pool Depth	n(cm	1
٨	lean Bankfull Width	(m)	Mean Water Depth_	(cm	,
_	% Riffle	% <b>F</b> C	ool -	_% Run	, % FI
Ė	vidence of eroding banks, Comm	nents on bank st	tability		/071
_					
S	ubstrate (% cover)				
Ī	Bedrock	Cobble	0 1		
	Boulder	Cobble Gravel	Sand		Muck
		Graver	Clay	<u>Marl</u>	Detritus
	-water Cover				
C	Cover Types Present (circle): Undercut Banks Deep Pool Watercress Aquatic Veg				
O	verhanging Vegetation Woo	dy Debris	Boulder Other	Walerciess A	quatic Veg
			outer_		
ח	parian Zone				
	Riparian Cover (% of watercourse shaded, dominant vegetation, mature or early successional)  Shannel with dogwoodsp, poplar sp, summe, sed pine, other meadow sp.				
H			an vogetation, mature o	i earry successiona	1)
<u> </u>	- 100 W W W W W W W W W W W W W W W W W W	p, poplar sp,	Sumar, red Dive	. other meadou	ا) د ج۵۰
<del></del>	ljacent Land Use	p, poplar sp,	sumar, red pine	, other meado c	1) 3 sp
	- 100 W W W W W W W W W W W W W W W W W W	p, poplar sp,	sumar, sod pine	, other meado c	1) 
Ā	ljacent Land Use	p, poplarsp,	sumar, red pine	, other meado c	l) s sp
Fi	ijacent Land Use	p, poplar sp,	sumar, scopine	, other meado c	l) မ <u>နှစ</u>
Fi	ljacent Land Use	p, poplar sp,	sumar, scopine	other meado	1) 2 sp
FI	sh Habitat Potential itical Habitat (spawning or nurse)	ry areas, ground	sumar, scopine	other meadou	1) 
FIC	ijacent Land Use	ry areas, ground	sumar, scopine	other meadou	1) 2 5p
FI CI	diacent Land Use  sh Habitat Potential itical Habitat (spawning or nursel	ry areas, ground	sumar, scopine	other meado	1) 3 sp
FI C	sh Habitat Potential itical Habitat (spawning or nurse)	ry areas, ground	sumar, scopine	other meado	1) 3 sp
FI CI	diacent Land Use  sh Habitat Potential itical Habitat (spawning or nursel	ry areas, ground	sumar, scopine	other meadou	) 
Fi Ci Mi	diacent Land Use  sh Habitat Potential itical Habitat (spawning or nurse) gratory Obstructions (seasonal, particular of the any fish observations	ry areas, ground	dwater upwellings)	other meado	) S SP
FI CI	diacent Land Use  sh Habitat Potential itical Habitat (spawning or nurse) gratory Obstructions (seasonal, particular of the any fish observations	ry areas, ground	dwater upwellings)	, other meadou	υ sρ
Fi Ci Mi	diacent Land Use  sh Habitat Potential itical Habitat (spawning or nurse) gratory Obstructions (seasonal, pute any fish observations  atterbody Notes tural Watercourse  Trape	ry areas, ground	dwater upwellings)  Grassed Swa	ale Buried	Σ Sρ
Fi Ci Mi	diacent Land Use  sh Habitat Potential itical Habitat (spawning or nurse) gratory Obstructions (seasonal, particular of the any fish observations	ry areas, ground	dwater upwellings)  Grassed Swa	, other meadou	Σ Sρ
FI CI MI No	diacent Land Use  sh Habitat Potential itical Habitat (spawning or nurse) gratory Obstructions (seasonal, particular of the any fish observations  aterbody Notes tural Watercourse Traperficial Drainage (i.e. furrows)	ezoidal Channel	dwater upwellings)  Grassed Swatch Dominated by	ale Buried	Tile
Fi Ci Mi	diacent Land Use  sh Habitat Potential itical Habitat (spawning or nurse) gratory Obstructions (seasonal, pute any fish observations  atterbody Notes tural Watercourse  Trape	ezoidal Channel Dugout Pond	dwater upwellings)  Grassed Swatch Dominated by	ale Buried	Tile

W:\resource\Internal Info and Teams\Aquatic Resources\Field Sheets\Stantec\Form 02 Wind Farm Waterbody Rapid Assessment Form.doc

MY

Field Notes Authored by _







		1 TOJOOL Haino _	Niagaral	UINU
Watercourse Name UNKNOW	UN	Project #/(o	0950269	
Photos See Mato lay		Field Staff <u>M</u>	E, ME	
		Time 13.00	1	
Weather conditions in previous 2				
GPS Coordinates (Zone)	1 E 060	124	14749592	Datum N F
Descriptive Location On B	perallel)	100 m north o	Canal Bay	<u> </u>
Water Quality	,			
Dissolved Oxygen (mg/L)	pH <u>_</u>	Conduc	tivity (µS/em)	<u> </u>
Water Temperature (°C)		Air Temperature	(°C)	
Time in situ measurements take	n			
Watercourse Dimensions & Mo	orphology			
Mean Watercourse Width 1.5	(m)	Maximum Pool (	Depth	(cm)
Mean Bankfull Width 3.0	(m) [·]	Mean Water De	oth	(cm)
% Riffle	% P	ool	% Run	triangue 0
Evidence of eroding banks, Com	ments on bank	stability <u>nove</u>		
Substrate (% cover)				
	Cobble	Sand	<u> </u>	40 Mu
Boulder	Gravel	20 Clay	Mart	Det
In-water Cover Cover Types Present (circle): Overhanging Vegetation Wo	Undercut Ba	anks Deep Poo Boulder O	ol Watercress ther	Aquatic '
Cover Types Present (circle): Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours	oody Debris e shaded, domir	Boulder O nant vegetation, mat	therure or early succes	ssional)
Cover Types Present (circle): Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours	oody Debris e shaded, domir	Boulder O nant vegetation, mat	therure or early succes	ssional)
Cover Types Present (circle):  Overhanging Vegetation Wo  Riparian Zone  Riparian Cover (% of watercours  10% Matter trees & Sha  Adjacent Land Use	oody Debris e shaded, domir	Boulder O nant vegetation, mat	therure or early succes	ssional)
Cover Types Present (circle): Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours	oody Debris e shaded, domir	Boulder O nant vegetation, mat	therure or early succes	ssional)
Cover Types Present (circle):  Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours    O	oody Debris e shaded, domir	Boulder O nant vegetation, mat	therure or early succes	ssional)
Cover Types Present (circle):  Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours  Of Matter Present (circle):  Wo  Riparian Zone Riparian Use  Adjacent Land Use  Fish Habitat Potential	e shaded, domir	Boulder O	therure or early succes	ssional)
Cover Types Present (circle):  Overhanging Vegetation Wo  Riparian Zone  Riparian Cover (% of watercours  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurs	e shaded, domir	Boulder O nant vegetation, mat	therure or early succes	ssional)
Cover Types Present (circle):  Overhanging Vegetation  Riparian Zone  Riparian Cover (% of watercours  /// Matter Present (circle):  Overhanging Vegetation  Wo  Riparian Zone  Riparian Zone  Riparian Cover (% of watercours  /// Matter Present (circle):  Overhanging Vegetation  Wo  Riparian Zone  Riparian Zone  Riparian Cover (% of watercours  /// Adjacent Land Use  // Adj	e shaded, domir	Boulder O  nant vegetation, mat  i pur lan 3 and  ndwater upwellings)	ure or early succes	ssional)
Cover Types Present (circle):  Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours  / **D/** **MATTICLE** ** Share  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurs	e shaded, domir	Boulder O  nant vegetation, mat  i pur lan 3 and  ndwater upwellings)	ure or early succes	ssional)
Cover Types Present (circle):  Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercours  / **D** **D** **D** **D** **D**  Adjacent Land Use  Adjacent Land Use  Critical Habitat Potential  Critical Habitat (spawning or nurs  Migratory Obstructions (seasonal  And Mark  Note any fish observations **D**  **	e shaded, domir	Boulder O  nant vegetation, mat  i pur lan 3 and  ndwater upwellings)	ure or early succes	ssional)
Cover Types Present (circle):  Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours  /// Matter Potential  Critical Habitat Potential  Critical Habitat (spawning or nurs  Migratory Obstructions (seasonal  Migratory Obstructions (seasonal  Migratory Obstructions (seasonal  Migratory Obstructions (seasonal	e shaded, domir	Boulder O	ure or early succes	ssional)
Cover Types Present (circle):  Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurs  Migratory Obstructions (seasonal  Migratory Obstructions (seasonal  Waterbody Notes  Natural Watercourse Trap	e shaded, domir	Boulder O  nant vegetation, mat  To be the contact of the contact	therure or early succes	ssional)  Buried Tile_
Cover Types Present (circle):  Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours  /// Matter Potential  Critical Habitat Potential  Critical Habitat (spawning or nurs  Migratory Obstructions (seasonal  Migratory Obstructions (seasonal  Migratory Obstructions (seasonal  Migratory Obstructions (seasonal	e shaded, domir	Boulder O  nant vegetation, mat  To be the contact of the contact	ure or early succes	ssional)  Buried Tile_
Cover Types Present (circle):  Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurs  Migratory Obstructions (seasonal  Migratory Obstructions (seasonal  Waterbody Notes  Natural Watercourse  Surficial Drainage (i.e. furrows)	e shaded, domir	Boulder O  nant vegetation, mat  Total John  ndwater upwellings)  else Cara Grasse  nd Dominate	ther ure or early succes described succes described succes described succes described succes described succes described succes described succes described succes	Buried Tile
Cover Types Present (circle):  Overhanging Vegetation Wo  Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurs  Migratory Obstructions (seasonal  Migratory Obstructions (seasonal  Waterbody Notes  Natural Watercourse Trap	e shaded, domir	Boulder O  nant vegetation, mat  Total John  ndwater upwellings)  else Cara Grasse  nd Dominate	ther ure or early succes described succes described succes described succes described succes described succes described succes described succes described succes	Buried Tile
Cover Types Present (circle):  Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercours  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurs  Migratory Obstructions (seasonal  Migratory Obstructions (seasonal  Waterbody Notes  Natural Watercourse  Surficial Drainage (i.e. furrows)	e shaded, domir	Boulder O  nant vegetation, mat  Total John  ndwater upwellings)  else Cara Grasse  nd Dominate	ther ure or early succes described succes described succes described succes described succes described succes described succes described succes described succes	Buried Tile

HE06600 N Coll of the sp. OLD PAIL BED B1R0 CANAL BANK RN

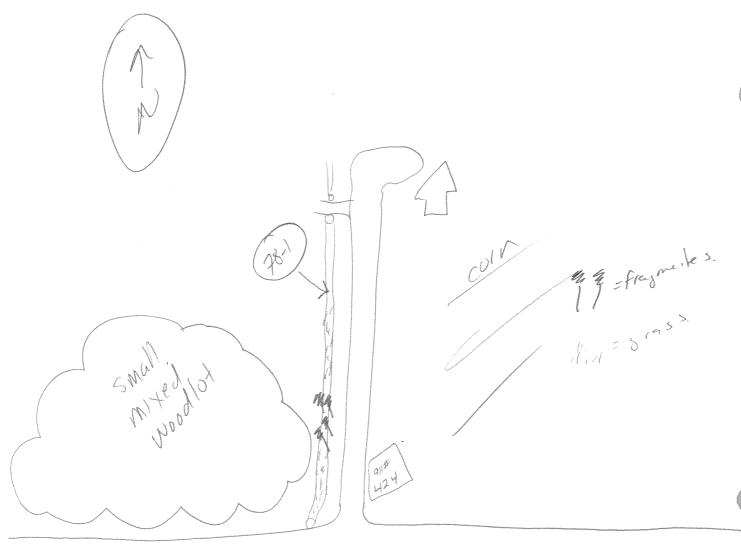
CORN SW EWI gw! Manicotto



OSS Row. Could not properly assess. Water object ved. Has been dradged but considered RBA westrouds. REA

#### WIND FARM WATERBODY RAPID ASSESSMENT FORM

	$\wedge$	Project # //^/)	950269	nd
Watercourse Name unknow Photos See photo Vo		Field Staff M		
Date 200-06 20		Гіте <u>із 38   </u>		
Weather conditions in previous				
GPS Coordinates (Zone)	E 06224	Q) N	4749465 [	Datum ⋈A
Descriptive Location On Con	al Banked - IK	m rast of Bi	rd Rd	
Water Quality	pH	Conductivi	ty (μS/cm)	
Dissolved Oxygen (mg/L)		Air Temperature (°C		
Water Temperature (°C)		All Temperature (		
Time in situ measurements take	en			
Watercourse Dimensions & N	<b>Norphology</b>		. ) .	
Mean Watercourse Width	<u> </u>	Maximum Pool Dep		cm)
Mean Bankfull Width	\ ``; \	Mean Water Depth		cm)
% Riffle	100 % Pool		% Run ′	
Evidence of eroding banks, Con	mments on bank stat	ility <u>nome o</u>	bouved but	rccent
Substrate (% cover)		<b>04</b>	Silt	Me
Bedrock	Cobble	Sand	Siit Marl	Ne
Boulder	Gravel	Clay	iviali .	
In-water Cover Cover Types Present (circle): Overhanging Vegetation	Undercut Bank Voody Debris	s Deep Pool Boulder Othe		Aquatic
Cover Types Present (circle): Overhanging Vegetation  W	Voody Debris	Boulder Othe	)r	
Cover Types Present (circle):	Voody Debris	Boulder Othe	)r	
Cover Types Present (circle): Overhanging Vegetation  W  Riparian Zone Riparian Cover (% of watercound)	Voody Debris	Boulder Othe	)r	
Cover Types Present (circle): Overhanging Vegetation  W	Voody Debris	Boulder Othe	)r	
Cover Types Present (circle): Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercount Adjacent Land Use	Voody Debris	Boulder Othe	)r	
Cover Types Present (circle): Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercount) Adjacent Land Use Fish Habitat Potential	Voody Debris rse shaded, dominan	Boulder Other	)r	
Cover Types Present (circle): Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercount Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or no	Voody Debris rse shaded, dominan	Boulder Other t vegetation, mature	)r	
Cover Types Present (circle): Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercount) Adjacent Land Use Fish Habitat Potential	rse shaded, dominan ursery areas, groundy	Boulder Other t vegetation, mature	)r	
Cover Types Present (circle): Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercount) Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or numbers)	rse shaded, dominan ursery areas, groundwal, ded to keep the	Boulder Other t vegetation, mature	)r	
Cover Types Present (circle): Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercount)  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or number of the content of t	rse shaded, dominan ursery areas, groundwal, ded to keep the	Boulder Other t vegetation, mature	)r	
Cover Types Present (circle): Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercount Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or number of the content of the	rse shaded, dominan ursery areas, groundwal, ded to keep the	Boulder Other t vegetation, mature vater upwellings)	e or early succession	onal)
Cover Types Present (circle): Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercount Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or number of the content of the	ursery areas, groundy hal, permanent)	Boulder Other t vegetation, mature vater upwellings)	ere or early succession	onal)
Cover Types Present (circle): Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercount Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or number of the content of the	ursery areas, groundy hal, permanent)	Boulder Other t vegetation, mature  vater upwellings)  Grassed	e or early succession	onal)
Cover Types Present (circle): Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercount Original Land Use Adjacent Land Use Fish Habitat Potential Critical Habitat (spawning or number of the count Migratory Obstructions (season Note any fish observations  Waterbody Notes Natural Watercourse  T	rse shaded, dominan  ursery areas, groundw  al, permanent)  rapezoidal Channel  Dugout Pond	Boulder Other t vegetation, mature  vater upwellings)  Grassed  Dominated	SwaleBu	onal)  uried Tile_ Dry
Cover Types Present (circle): Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercounty)  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or number of the county)  Migratory Obstructions (season  Note any fish observations  Waterbody Notes  Natural Watercourse  T Surficial Drainage (i.e. furrows)	rse shaded, dominan  ursery areas, groundw  al, permanent)  rapezoidal Channel  Dugout Pond	Boulder Other t vegetation, mature  vater upwellings)  Grassed  Dominated	SwaleBu	onal)  uried Tile_ Dry



CANAL RO.

FEEDER CANAL



REA

Station #	Rd. Canal runs alom rd. Canal
Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken  Watercourse Dimensions & Morphology Macon Watercourse Width	Conductivity (µS/cm)  Air Temperature (°C)  Maximum Pool Depth (cm)  Mean Water Depth (cm)  Pool % Run % Flat
% Riffle% Evidence of eroding banks, Comments on bank	R stability None observed.
In-water Cover Cover Types Present (circle): Undercut Overhanging Vegetation Woody Debris  Riparian Zone Riparian Cover (% of watercourse shaded, don	Sand 30 Silt 45 Muck  20 Clay Marl 5 Detritus  Banks Deep Pool Watercress Aquatic Veg  Boulder Other  minant vegetation, mature or early successional)
Fish Habitat Potential Critical Habitat (spawning or nursery areas, gro	oundwater upwellings)
Migratory Obstructions (seasonal, permanent)	
Note any fish observations Note	
	nnel Grassed Swale Buried Tile Pond Dominated by Aquatic Veg Dry servations, etc
Field Notes Authored by Field	Notes QA/QCed by



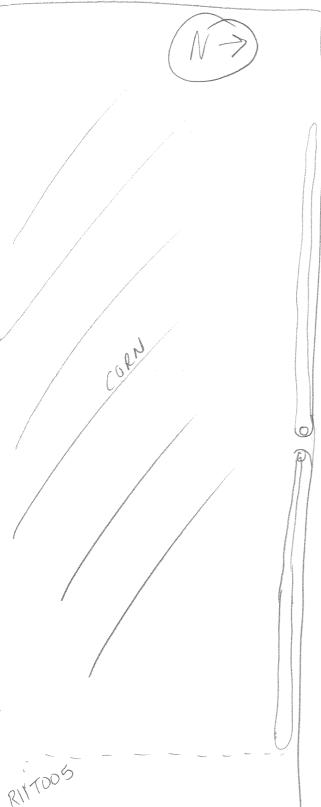
しならなり

Christ BANK RO

Has been dredged recently but ciparian full of cattails. Channel would have been full of cattails and will again WIND FARM WATERBODY RAPID ASSESSMENT FORM



	Project Name Niagara Wind Project # 160950269 Field Staff ME MF
Station #	Project Name Niagara Wing
Watercourse Name Unknown	Project # 160950269
Photos Sue photo ley  Date 2012 06 20	Field Staff ME MF
Date 3018 00 20	Time 14-1)
Weather conditions in previous 24 h	E 0621309 N 4747055 Datum NAD8
GPS Coordinates (Zone)	ner Road - 200 m west of Dickhout Rd
Puns parallel with room	ad on south sid.
Water Quality	
Dissolved Oxygen (mg/L)	pH Conductivity (μS/cm)
Water Temperature (°C)	Air Temperature (°C)
Time in situ measurements taken_	
Watercourse Dimensions & Morp	hology
Mean Watercourse Width 0.3	(m) Maximum Pool Depth(cm)
Mean Bankfull Width 3.0	_(m) Mean Water Depth(cm)
% Riffle	700 % Pool % Run% F
Evidence of eroding banks, Comme	ents on bank stability has been dradged recently
Substrate (% cover)	
Bedrock	_CobbleSand40_Silt_40_Muck
Boulder	Gravel 20 Clay Marl Detrito
In-water Cover Cover Types Present (circle):	Undercut Banks Deep Pool Watercress Aquatic Ve
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone  Riparian Cover (% of watercourse s	shaded, dominant vegetation, mature or early successional)
Cover Types Present (circle): Overhanging Vegetation Wood Riparian Zone	shaded, dominant vegetation, mature or early successional)
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse s	shaded, dominant vegetation, mature or early successional)
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse s	shaded, dominant vegetation, mature or early successional)
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse s  10% From tree Side muta  Adjacent Land Use	shaded, dominant vegetation, mature or early successional)
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse s  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurser	shaded, dominant vegetation, mature or early successional)
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse s  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurser  Migratory Obstructions (seasonal, p	shaded, dominant vegetation, mature or early successional)
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse s  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurser	shaded, dominant vegetation, mature or early successional)  y areas, groundwater upwellings)  permanent)
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse s  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurser  Migratory Obstructions (seasonal, p	shaded, dominant vegetation, mature or early successional)  y areas, groundwater upwellings)  permanent)
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse s  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurser  Migratory Obstructions (seasonal, p  And Princes  Note any fish observations	shaded, dominant vegetation, mature or early successional)  y areas, groundwater upwellings)  permanent)
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse s  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurser  Migratory Obstructions (seasonal, p  Note any fish observations  Waterbody Notes  Natural Watercourse  Trape	shaded, dominant vegetation, mature or early successional)  y areas, groundwater upwellings)  permanent)  provided Channel
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse s  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurser  Migratory Obstructions (seasonal, p  And Princes  Note any fish observations	shaded, dominant vegetation, mature or early successional)  y areas, groundwater upwellings)  permanent)  provided Channel
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse s  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurser  Migratory Obstructions (seasonal, p  Note any fish observations  Waterbody Notes  Natural Watercourse Trape  Surficial Drainage (i.e. furrows)	shaded, dominant vegetation, mature or early successional)  y areas, groundwater upwellings)  permanent)  grassed Swale Buried Tile Dugout Pond Dominated by Aquatic Veg Dry  fildlife Observations, etc.
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse s  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurser  Migratory Obstructions (seasonal, p  Note any fish observations  Waterbody Notes  Natural Watercourse  Surficial Drainage (i.e. furrows)  Other Habitat Notes, Incidental W	shaded, dominant vegetation, mature or early successional)  y areas, groundwater upwellings)  permanent)  Szoidal Channel Grassed Swale Buried Tile Dugout Pond Dominated by Aquatic Veg Dry Y
Cover Types Present (circle): Overhanging Vegetation Wood  Riparian Zone Riparian Cover (% of watercourse s  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or nurser  Migratory Obstructions (seasonal, p  Note any fish observations  Waterbody Notes  Natural Watercourse Trape  Surficial Drainage (i.e. furrows)	shaded, dominant vegetation, mature or early successional)  y areas, groundwater upwellings)  permanent)  szoidal Channel Grassed Swale Buried Tile Dugout Pond Dominated by Aquatic Veg Dry Y



RYMER RO



J = tuibine



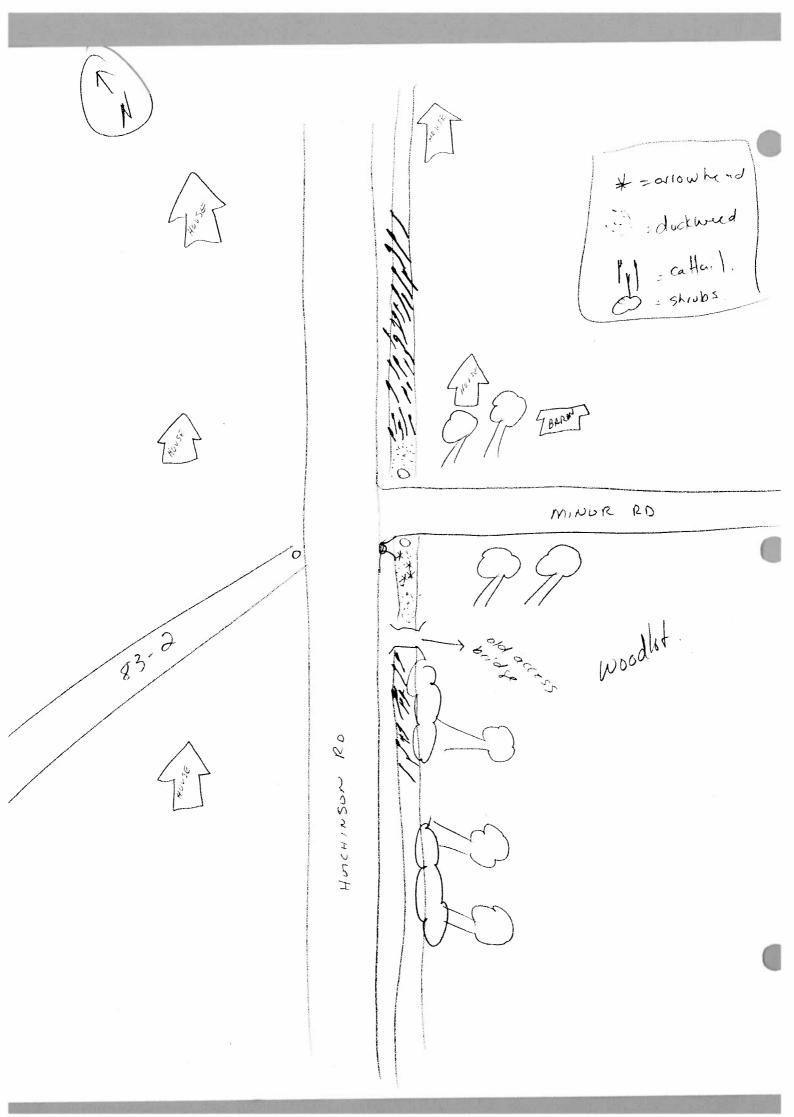
REA	
-----	--

	Project Name Niagara Wind Project #_/60950269
Photos See photo log Date 2012 06 20	Field Staff ME MF
Date 2012 06 20	Time(>;5 ∂
Weather conditions in previous 24 hrs No	
GPS Coordinates (Zone) 7 E	
Descriptive Location Do Bud Rd ~	- 800m south of Canal Bank Rd
Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken	
Watercourse Dimensions & Morphology	Maximum Pool Depth 10 (cm)
Mean Watercourse Width 3.0 (m)	Maximum Pool Depth /o (cm)
Mean Bankfull Width 5.0 (m)	Mean Water Depth 2 (cm)
% Riffle	% Pool% Run % F
Evidence of eroding banks, Comments on ba	ank stability None 6064 ved
Substrate (% cover)	
BedrockCobble_	
BoulderGravel _	೨೦ Clay <u>Marl</u> Detritus
	Boulder Other
Riparian Zone Riparian Cover (% of watercourse shaded, do	Boulder Other  ominant vegetation, mature or early successional)  o ⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨⟨
Riparian Zone Riparian Cover (% of watercourse shaded, do	ominant vegetation, mature or early successional)
Riparian Zone Riparian Cover (% of watercourse shaded, do  Adjacent Land Use  Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nursery areas, go	ominant vegetation, mature or early successional)
Riparian Zone Riparian Cover (% of watercourse shaded, do  Adjacent Land Use  As falls, (d  Fish Habitat Potential  Critical Habitat (spawning or nursery areas, go	ominant vegetation, mature or early successional)
Riparian Zone Riparian Cover (% of watercourse shaded, do 2/6 Cathol & meadow & Cho Adjacent Land Use  Adjacent Land Use  As Ands , (d)  Fish Habitat Potential  Critical Habitat (spawning or nursery areas, go 2005 1000 Spawn  Migratory Obstructions (seasonal, permanent)	ominant vegetation, mature or early successional)
Riparian Zone Riparian Cover (% of watercourse shaded, do  Adjacent Land Use  Adjacent La	ominant vegetation, mature or early successional)
Riparian Zone Riparian Cover (% of watercourse shaded, do  Adjacent Land Use  Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nursery areas, go  Ossible Spawn  Migratory Obstructions (seasonal, permanent)  And Charas  Note any fish observations  Waterbody Notes  Natural Watercourse  Trapezoidal Cha	ominant vegetation, mature or early successional)  proundwater upwellings)  annel Grassed Swale Buried Tile
Riparian Zone Riparian Cover (% of watercourse shaded, do  Adjacent Land Use  Adjacent Land Use  Fish Habitat Potential Critical Habitat (spawning or nursery areas, go  Ossible Spawn  Migratory Obstructions (seasonal, permanent)  And Charas  Note any fish observations  Waterbody Notes  Natural Watercourse  Trapezoidal Cha	ominant vegetation, mature or early successional)
Adjacent Land Use  Adjacent Land	ominant vegetation, mature or early successional)  proundwater upwellings)  annel Grassed Swale Buried Tile t Pond Dominated by Aquatic Veg Dry
Riparian Zone Riparian Cover (% of watercourse shaded, do  Adjacent Land Use  Adjacent La	ominant vegetation, mature or early successional)  proundwater upwellings)  annel Grassed Swale Buried Tile
Riparian Zone Riparian Cover (% of watercourse shaded, do  Adjacent Land Use  Adjacent La	ominant vegetation, mature or early successional)  proundwater upwellings)  annel Grassed Swale Buried Tile t Pond Dominated by Aquatic Veg Dry

out out Previously 1 = cathail CHANNEL BIRD RO CANAL BANK RD



Watercourse Name Web					)ind	
Watercourse Name <u>Unkn</u>		Project #/_				
Photos See photo logo  Date 2012 06 26	· · · · · · · · · · · · · · · · · · ·		NEIME			
		Time	8			
Weather conditions in previou			47492	103	D-4	t. 1/1
GPS Coordinates (Zone)						n NA
Descriptive Location On	ITTINOP ROLA	16 m no1th	of Av	tchins	<u> </u>	₹ <u>८</u> १:
Water Quality			and the same of th			
Dissolved Oxygen (mg/L)	pH	Conduc	ctivity (uS/cn	n)	and the second s	
Water Temperature (°C)		Conduction Conduction	· (°C)	3002		
Time in situ measurements tal						
Watercourse Dimensions &						Ve/1
Mean Watercourse Width 2		Maximum Pool I		8	_(cm)	10/1
***************************************	<u>.o(m)</u>	Mean Water De		-	_(cm)	
% Riffle	%P		% Rui	n		%
Evidence of eroding banks, Co	omments on bank s	tability				
none observed.					***************************************	
Substrate (% cover)			11.5			
Bedrock	Cobble	Sand	40	_Silt	30	_Muc
Boulder	Gravel	<u> </u>		Marl		Detr
In-water Cover Cover Types Present (circle): Overhanging Vegetation		•	ol Water other	cress	Aqu	ıatic V
Cover Types Present (circle): Overhanging Vegetation  Riparian Zone	Woody Debris	Boulder O	ther			iatic V
Cover Types Present (circle): Overhanging Vegetation  Riparian Zone  Riparian Cover (% of watercount)	Woody Debris urse shaded, domin	Boulder O	therture or early	succes	sional)	ıatic V
Cover Types Present (circle):  Overhanging Vegetation  Riparian Zone  Riparian Cover (% of watercound and water	Woody Debris urse shaded, domin	Boulder O	therture or early	succes	sional)	ıatic V
Cover Types Present (circle):  Overhanging Vegetation  Riparian Zone  Riparian Cover (% of watercound and water	Woody Debris urse shaded, domin	Boulder O	therture or early	succes	sional)	iatic V
Cover Types Present (circle):  Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercound	Woody Debris urse shaded, domin	Boulder O	therture or early	succes	sional)	atic V
Cover Types Present (circle):  Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercounts)  Adjacent Land Use  Fish Habitat Potential	Woody Debris  urse shaded, domin  e shoub the	Boulder O	ture or early	succes	sional)	uatic V
Cover Types Present (circle):  Overhanging Vegetation  Riparian Zone  Riparian Cover (% of watercounts)  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or present circle)	Woody Debris  urse shaded, domin  adot, ay fixe  ursery areas, groun	Boulder O	ture or early	succes	sional)	uatic V
Cover Types Present (circle):  Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercound	Woody Debris  urse shaded, domin  a shab + t  adlot, ay fice  ursery areas, groun	Boulder O	ture or early	succes	sional)	uatic V
Cover Types Present (circle):  Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercound	wrse shaded, doming and of a ground and a ground a ground and a ground a ground and a ground a ground a ground and a ground a gr	Boulder O	ture or early	succes	sional)	uatic V
Cover Types Present (circle):  Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercounts)  Adjacent Land Use  The Walsh was  Fish Habitat Potential  Critical Habitat (spawning or put spawn (possible)  Migratory Obstructions (season and particle)	woody Debris  urse shaded, domin  adot, ay fix  ursery areas, groun  (a)  (a)  (b)  (c)  (c)  (c)  (c)  (d)  (d)  (d)  (d	Boulder O	ture or early	succes	sional)	uatic V
Cover Types Present (circle):  Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercound	woody Debris  urse shaded, domin  adot, ay fix  ursery areas, groun  (a)  (a)  (b)  (c)  (c)  (c)  (c)  (d)  (d)  (d)  (d	Boulder O	ture or early	succes	sional)	uatic V
Cover Types Present (circle):  Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercounts)  Adjacent Land Use  Adjacent Land Use  Fish Habitat Potential  Critical Habitat (spawning or not present to the possible)  Migratory Obstructions (season to the possible)  Note any fish observations	woody Debris  urse shaded, domin  adot, ay fix  ursery areas, groun  (a)  (a)  (b)  (c)  (c)  (c)  (c)  (d)  (d)  (d)  (d	Boulder O	ture or early	succes	sional)	uatic V
Cover Types Present (circle):  Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercound	woody Debris  urse shaded, domin  a shab the  adlot, ay fine  ursery areas, groun  (ay  nal, permanent)  (the of shan	Boulder O	ture or early	succes	sional)	
Cover Types Present (circle):  Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercound of the content of the con	woody Debris  urse shaded, domin  added, ag fix  ursery areas, groun  lagu  nal, permanent)  the of shane  Trapezoidal Channe	Boulder O  ant vegetation, man  ce Species.  Ids  ding water upwellings)  Grasse	ture or early	succes	sional)	Tile
Cover Types Present (circle):  Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercound	woody Debris  urse shaded, domin  added, ag fix  ursery areas, groun  lagu  nal, permanent)  the of shane  Trapezoidal Channe	Boulder O  ant vegetation, man  ce Species.  Ids  ding water upwellings)  Grasse	ture or early	succes	sional)	
Cover Types Present (circle):  Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercound of the content of the con	wrse shaded, doming a shaded, a shad	Boulder O  ant vegetation, man  ce Species.  Ids  ding walk  Grasse  nd Dominate	ture or early  d Swale_ d by Aquati	succes	sional)	File
Cover Types Present (circle):  Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercound of the content of the con	wrse shaded, doming a shaded, a shad	Boulder O  ant vegetation, man  ce Species.  Ids  ding walk  Grasse  nd Dominate	ture or early  d Swale_ d by Aquati	succes	sional)	File
Cover Types Present (circle):  Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercound of the content of the con	wrse shaded, doming a shaded, a shaded, a shaded	Boulder O  ant vegetation, man  ce Species.  Ids  ding walk  Grasse  nd Dominate	ture or early  d Swale_ d by Aquati	succes	sional)	File
Cover Types Present (circle):  Overhanging Vegetation  Riparian Zone Riparian Cover (% of watercound of the content of the con	wrse shaded, doming a shaded, a shaded, a shaded	Boulder O  ant vegetation, man  ce Species.  Ids  ding walk  Grasse  nd Dominate	ture or early  d Swale_ d by Aquati	succes	sional)	Dry_





REP

Station #93-2		Project Name	Mian	ara (a)ir	$\sim d$
	N	Project #/(	095	269	
Photos See Mato lox		Field Staff	NE ME		
Photos 20 Malo 100 Date 10 10 10 10 10 10 10 10 10 10 10 10 10	3	Time 19:10			
vveather conditions in previous	124 Nrs 🗥 🔿 🛚	occiditation -	hot the	amid	
GPS Coordinates (Zone)	T E PROPERTY		N2/22	7/2 D	atum NADRS
Descriptive Location Copye	15 to 93-1 c	and continues	500	HAWLETO	<u> </u>
Hurchinson Rd.				1	
Water Quality	, -	99 N			
Dissolved Oxygen (mg/L) 3,0	)4_ pH	7.90 Condu Air Temperature	ctivity (uS/	cm) $50$	0
Water Temperature (°C)	7.34	Air Temperatur	e (°C)	30°2	
Time in situ measurements take	en	· ··· · · · · · · · · · · · · · · · ·	<u> </u>	200	
Watercourse Dimensions & M	forphology				
Mean Watercourse Width	.5 (m)	Maximum Pool	Denth	10 760 Pla	m)
Mean Watercourse Width 2. Mean Bankfull Width /o.d	(m).	Maximum Pool Mean Water De	onth	300 (0	m)
% Riffle	700 % F	Pool	% R	in (C	, % Fla
Evidence of eroding banks, Cor	mments on bank	stability none	- obskue	d.	/0 1 18
Substrate (% cover)	0-5-5-		~ ~	<b>-</b> /.	
Bedrock Boulder	Cobble Gravel	Sand 3 <i>o</i> Clay		Silt <i>40</i> Marl	Muck Detritus
Riparian Zone Riparian Cover (% of watercours  15% wild scape places  Adjacent Land Use	se shaded, domir Sharbs	nant vegetation, ma	ture or ear	ly succession	nal)
Fish Habitat Potential Critical Habitat (spawning or num	al, permanent)				
Note any fish observations	1574				
Waterbody Notes Natural Watercourse Tra Surficial Drainage (i.e. furrows)_ Other Habitat Notes, Incidental	Dugout Por	nd Dominate	ed by Aqua		ed Tile Dry
Field Notes Authored by	Field Note:	s QA/QCed by	nament.		

83-1

* = aronhea!

HUTCHINSON RO



Station # R11 1082	Decided Name Alogana III of Taxan
Watercourse Name 2	Project Name Niagora Wind Farm Project # 160960269
Photos 8059 - 8067	Field Staff Trevor Chandler, Hamish Aubrey
Date 19 Sept 2012	Time 12:45 am
Weather conditions in previous 24 hrs E E E E	e: Rain day prior
GPS Coordinates (Zone) E 061	3 22.57 N 4754 360 Datum Nad 8
Descriptive Location, Gon Keld with W	atercouse 2 correcting downstream
North of Hwy 3 by approx 70	om, 600 m East of Crown 2d
Water Quality NA - no Surface wa	
	DH Conductivity (μS/cm)
Water Temperature (°C)	Air Temperature (°C) 17°C
Time in situ measurements taken	
Watercourse Dimensions & Morphology	No neals - dry
Mean Watercourse Width 0 (m)	Maximum Pool Depth No pools of (cm)
Mean Bankfull Width  (m)	Mean Water Depth DQ (cm)
% Riffle	6 Pool % Bito % Flot
Evidence of eroding banks, Comments on bar	nk stability. No ovidence of their ecosion
- Hajacent Hind	s are ploughed to top of bank
Substrate (% cover) -> 501	
BedrockCobble	Yes-10 Sand Yes -70 Silt × Muck
BoulderGravel	yes 10 Clay Marl Detritus
In-water Cover	
Cover Types Present (circle): Undercut	Banks Deep Pool Watercress Aquatic Veg
Overhanging Vegetation Woody Debris	Boulder Other DCI -
Riparian Zone	
Riparian Cover (% of watercourse shaded do	minant vegetation, mature or early successional)
Assis	when weeds - 60% shaded - herbacious
Adjacent Land Use	0: /:
- Gen field, agriculture	VI
Figh Habitat Retartion	
Critical Habitat (spawning or pursent areas or	unlikely to bear fish
Critical Habitat (spawning or nursery areas, gro	oundwater upweilings)
Migratory Obstructions (seasonal, permanent)	G
	LOW-NO HOW
Note any fish observationsNo	
Waterbody Notes	
Natural Watercourse No Trapezoidal Char	
Surficial Drainage (i.e. furrows) No Dugout I	Pond No Dominated by Aquatic Veg No Dry 165
Other Habitat Notes, Incidental Wildlife Obs	ervations, etc. Straight travezodial channel.
	incel bed does not appeared to be almost ad
I but channel is us	
	hannel. No advatic plants
T. 1.10 - 11 - 12	
	lotes QA/QCed by



Station # <u>©L - SGR 3</u>	Project Name Magara Wind Farm
Watercourse Name Spring Creek Tributary 1	Project #
Photos 3133 3139 840	Field Staff Trever + Hamish
Date 19 Sept 2012	Time Si35 pm
Weather conditions in previous 24 hrs Fine	Rain 15°C
GPS Coordinates (Zone) E 062000	5 N 4775198 Datum Nad8
Descriptive Location South Grindy Rd 3 2	00 m north of Younge St
Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken	Conductivity (µS/cm)Air Temperature (°C)
Watercourse Dimensions & Morphology	
Mean Watercourse Width Ord (m)	Maximum Pool Depth(cm)
mean Bankfull Width(m)	Mean Water Depth(cm)
% Riffle% Pool	% Run % Fla
Evidence of eroding banks, Comments on bank sta	.Dility
Substrate (% cover)  Bedrock  Boulder  Gravel	<u> </u>
	ClayMarlDetritus
In-water Cover Occurred Cover Types Present (circle): Undercut Bank Overhanging Vegetation Woody Debris	ks Deep Pool Watercress Aquatic Veg Boulder Other
Riparian Zone Riparian Cover (% of watercourse shaded, dominar	nt vegetation, mature or early successional)
Adjacent Land Use	nt vegetation, mature or early successional)
- Marie Carlos at	
Fish Habitat Potential Critical Habitat (spawning or nursery areas, groundy	vater upwellings)
Migratory Obstructions (seasonal, permanent)	0-low flow
Note and finds the second in	0
Waterbody Notes  Natural Watercourse	Grassed Swale Buried Tile Dominated by Aquatic Veg N Dry
Other Habitat Notes, Incidental Wildlife Observation	
whest, otherwise che	annel is dry pended water under
	J
ield Notes Authored by Hawish Field Notes O	A/OCad by



Station # CL SGR	32/A	Project Name	Magara	Wad.
Watercourse Name Trin to Photos 8141-5	Spring Creor	Project # //a/	Class of Almost	
Photos 819195		Field Staff 1V	exter (nandi	Ord Hand
Date 19/12		IIMe 📐 🖫		A F & DUNION
Weather conditions in previous	24 hrs (2	ain.		
GPS Coordinates (Zone) 17	T E (Yal	I/Siat N	477/2015	Datum Nada
Descriptive Location	In Grimst	4 Rd 3, 40	ondoff	
Water Quality Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements take	pH_	Conduc	tivity (µS/cm) (°C) 7 °C	
Watercourse Dimensions & M				
Mean Watercourse Width	iorbiiology	Manufacture on the		
Mean Bankfull Width	(''')	Maximum Pool D	epth	_(cm)
% Riffle	(''') % Po		th	_(cm)
Evidence of eroding banks, Con	nments on bank s	tability <u>Stabl</u>	% Run	% Flat
Substrate (0/ second)				
Substrate (% cover)	•			
Bedrock	Cobble	Sand	100% Silt	Muck
Boulder	Gravel	Clay	Mari	Detritus
In-water Cover Cover Types Present (circle): Overhanging Vegetation Wo	Undercut Bar oody Debris	nks Deep Pool Boulder Ott	Watercress ner	Aquatic Veg
Riparian Zone Riparian Cover (% of watercours ) 0 70 a grace Adjacent Land Use			re or early success	ional)
Adiana Alana de la compansión de la comp	posture/e	matter ea	or land	ionai)
Adjacent Land Use	asture		7	
Fish Habitat Potential				
Critical Habitat (angular angular				
Critical Habitat (spawning or nurs		water upwellings)		
Migratory Obstructions (seasonal Deಟ				
ਹਿਟਪ੍ਰ Note any fish observations	NOTRE			
Waterbody Notes Natural Watercourse Trap Burficial Drainage (i.e. furrows)	Dugout Pond	Dominated	by Aquatic Veg	uried Tile
Other Habitat Notes, Incidental	Wildlife Observat	lons, etc. <u>POO</u>	dydefine	1 Channel
eld Notes Authored by Trever (nd.	Fleid Notes O	A/OCed by		



Station #CL-SGR 3 3	Proje	act Nama	1/222	10	4_
Photos 8146 304 8149  Field Staff Towns 160 9 60 2 69					t tarm
Date 19 Soci 2015		1 Otan <u>77€0</u>	or + Ham	154	
Weather conditions in previous 24 hrs	- 1/1	6.05, a.a.a.15	the state of the s		
GPS Coordinates (Zone)	062.0237	- NI	(D) 2 (Sa)		
GPS Coordinates (Zone) TE  Descriptive Location South Grasley	Road 3 - Et	## 20	E 5 #	Datur	n, Na
	j	For 10 m	Homen Jouth	of the R	ď
Water Quality NA Dry at Cultert Dissolved Oxygen (mg/L) Water Temperature (°C) Time in situ measurements taken	pH	Conductive	rity (μS/cm)		
Time in situ measurements taken		emperature (	(c)	<u></u>	
Watercourse Dimensions & Morpholog	TV				
Mean Watercourse Width 3 (m)	Mayin	num Pool De	oth $\sim 30$	(	
			50 m		
% Diff.		Trator Depth	% Run	,	0/ 51-
Evidence of eroding banks, Comments or	bank stability	Stable	/8 / tull _		% Fla
Substrate (% cover)			X		
Bedrock Cobb	)le	_Sand/00	Sill	t	_Muck
BoulderGrav	el	_Clay	Ma	id	_Muck _Detritus
Riparian Zone Riparian Cover (% of watercourse shaded,	, dominant vege	tation, mature	Or early succ	2000ional)	
Adjacent Land Use	y grasses +	trees - ag	valic Weg	Jessionai)	
Adjacent Land Use  Rural residential	wood wooded	orea agr	icultural for	old	
Fish Habitat Potential		1		O.O.	
Critical Habitat (spawning or nursery areas	. aroundwater	awellings)			
		unli	kely		
digratory Obstructions (seasonal, permane	int)			1 / 1	
lote any fish observations	<u>no - lo.s</u>	flower	eavily rege	tated	
			<i>J</i> "-		
Vaterbody Notes					
latural Watercourse Transzoidal C	bannal V		. 1		,
latural Watercourse Trapezoidal C Surficial Drainage (i.e. furrows)\ Dugo	out Pond N	Grassed St	wale_ <u>N</u>	Buried Til	e_ <u>//</u>
			y Aquatic veg	<u> </u>	)ry <u>¼</u>
ther Habitat Notes, Incidental Wildilfe O	bservations, et	c			
Wolch the poison by!	concrete be	* culvert - a	approx 4-5	<u></u>	
eld Notes Authored by Hawd Fie		ومسد			
	eld Notes QA/QCed by		····		
\01609\resource\Internal Info and Teams\Aquatic Resource	s\Field Sheets\Stante	c\Form 02 Wind F	arm Waterbody Ra	apid Assessmer	t Form.doc
			-		