

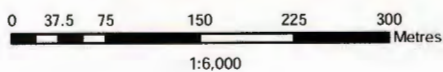


GREY ROAD 4

SIDEROAD 40

BOOT JACK RANCH ROAD

stop 9 11:31pm



Date: May 14, 2012  
Projection: NAD 1983 UTM Zone 17N  
Sources: Imagery from NextEra  
Parcel data edited by CanACRE

May 24 2012 AHF Field Notes

Extracted from Trimble Outdoors on Iphone 4S

**POI 1stop 1**

Location: 17T 0527824E 4897467N

**POI 2**

Location: 17T 0528108E 4897348N

no frogs heard at this livation

**POI 3**

Location: 17T 0527400E 4897527N

stop 2

**POI 4**

Location: 17T 0527312E 4897607N

stop 3

**POI 5**

Location: 17T 0527068E 4897321N

stop 4

**POI 6**

Location: 17T 0527338E 4898034N

stop 5

**POI 7**

Location: 17T 0527557E 4893968N

driveway access

**POI 8**

Location: 17T 0527713E 4893158N

stop 6

**POI 9**

Location: 17T 0527533E 4893712N

leopard frog vid obs. chimneys crayfish

**Photo 1**

Location: 17T 0527533E 4893712N

**POI 10**

Location: 17T 0525728E 4894290N

stop 8

**POI 11**

Location: 17T 0525860E 4894285N

stop 7

**POI 12**

Location: 17T 0525530E 4893170N

stop 10 edge of willow thicket

**POI 13**

Location: 17T 0525589E 4892992N

sto p 11

**POI 14**

Location: 17T 0525760E 4893017N

sto 12

# Water Body Assessment Renewable Energy Projects



environmental research associates

General Information										
Project #: 8119			Project Description:					Date: JUNE 14/12		
Position of Water Body in relation to Project Component <input type="radio"/> within 30m <input checked="" type="radio"/> within 120m <input type="radio"/> project component crosses water body										
Is a new crossing of a water body required? <input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown										
Collectors: AHE LKR EB		Weather Conditions: CLEAR 25°C			Time Started: 10:00		Time Finished: 10:30			
Photos (#, details): 211-215 u/s 216-222 D/S 223 - GRAVEL BEDS D/S										
Location										
Water Body Name:			Watershed: SAUGETA				Station #: W21			
GPS Coordinates: (4946) 3838, 7770					Surrounding Land Use: FOREST / AGRICULTURE					
Type: <input type="radio"/> Lake <input type="radio"/> Intermittent Stream <input checked="" type="radio"/> Permanent Stream <input type="radio"/> Seepage Area <input type="radio"/> Other										
Other: temporary drainage channel, roadside ditch, dugout pond, rock chutes/spillway, artificial										
Channel Characteristics										
Direction of Flow: EAST TO WEST										
Morphology	Run (% of area)	Pool (% of area)		Riffle (% of area)		Flats (% of area)				
Upstream	50			50						
Downstream				5		95				
Dimensions	Mean Wetted Width (m)	Mean Bankfull Width (m)		Mean Wetted Depth (m)		Mean Bankfull Depth (m)				
Upstream	16m	18m		1m		2m				
Downstream	17m	18m		1m		< 2m				
Substrate Type (% of Area)	Bedrock		Boulder	Detritus	Cobble	Gravel	Muck	Sand	Clay	Silt
	US		20		80					
	DS		20		80					
Habitat Description										
Bank Stability		Upstream Left		Upstream Right		Downstream Left		Downstream Right		
Stable		<input checked="" type="radio"/>		<input checked="" type="radio"/> RIPRAP @ BRIDGE		<input checked="" type="radio"/>		<input checked="" type="radio"/>		
Moderately Stable		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>		
Unstable		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>		
In-Stream Cover Available (%) <i>of total habitat</i>	Undercut Banks		Boulders	Cobble	Woody Debris	Organic	Macrophytes			
	US		70	80	5		none			
	DS		none	10	80	5		none		

GABBIAN ON BOTH SIDES w/ (2m) DS

GRASSY EDGES; TREES / SHRUB

Riparian Cover	US	None <input type="radio"/>	1-30 % <input type="radio"/>	31-60 % <input type="radio"/>	61-90 % <input type="radio"/>	91-100 % <input checked="" type="radio"/>
	DS	None <input type="radio"/>	1-30 % <input type="radio"/>	31-60 % <input type="radio"/>	61-90 % <input type="radio"/>	91-100 % <input checked="" type="radio"/>
In-Stream Vegetation (% Cover)			Submergent	Floating	Emergent	None
	US				10	90%
	DS					100%

ELDERBERRY  
GRASSY EDGES  
GRASS ISLAND

Water Chemistry				
Location	Water Temperature (°C)	pH	Dissolved Oxygen (mg/L)	Conductivity (µs/cm)
US	17			
DS	17			

Water Colour:  Colourless     Yellow/Brown     Blue/Green     Turbid     Other \_\_\_\_\_

Fish Observed in Water Body:  Yes     No    SUCKER    PIN HEAD FRY    ALONG BANK

**Additional Information:**

GRAVEL BEDS / NESTS ? ON DS SIDE OF BRIDGE

FR } BLACK NOSE DRACE  
     } SUCKER  
DP } AMMOCET FRY

GREEN FROG    ON BANK  
YELLOW SWALLOWTAIL

Legend									
10d	Depth	⇒	Run	■	Fine Substrate	**	Debris	W	Watercress
6w	Width	○	Pool	##	Gravel Substrate	CT	Cattail	Fe	Iron Staining
→	Riffle	⚡	Island/Bar	OoO	Cobble/Boulder	SV/FV/EV	Veg	///	Eroded Bank
Xx	Rip Rap	⊖	I.S. wood	^^	Dam/Wier	Ⓜ	Rip Tree	└▶	Seep/Spring
---	U/C Bank	—	Barrier	-S-	Seasonal Barrier	-x-x-	Fence	└┘	Culvert

# Water Body Assessment Renewable Energy Projects

AIR TEMP 21.5°C



General Information										
Project #: 8119		Project Description: EAST DURHAM					Date: JUNE 14/12			
Position of Water Body in relation to Project Component <input type="radio"/> within 30m <input type="radio"/> within 120m <input checked="" type="checkbox"/> project component crosses water body										
Is a new crossing of a water body required? <input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> Unknown										
Collectors: LKR DB		Weather Conditions: E			Time Started: 10:30		Time Finished: 11:00			
Photos (#, details): 224 from truck to bridge (227 looking W to bridge) 233 rock face on WEST 225 228 looking ES 229-232 looking US.										
Location										
Water Body Name: SAUGEEN RIVER			Watershed: SAUGEEN				Station #: W 5			
GPS Coordinates: 17T 0524371, 4897947					Surrounding Land Use: RURAL RESIDENTIAL / AGRIC.					
Type: <input type="radio"/> Lake <input type="radio"/> Intermittent Stream <input checked="" type="radio"/> Permanent Stream <input type="radio"/> Seepage Area <input type="radio"/> Other _____										
Other: temporary drainage channel, roadside ditch, dugout pond, rock chutes/spillway, artificial										
Channel Characteristics										
Direction of Flow: SE to NW										
Morphology	Run (% of area)		Pool (% of area)		Riffle (% of area)		Flats (% of area)			
Upstream					100					
Downstream	20				10		70			
Dimensions	Mean Wetted Width (m)		Mean Bankfull Width (m)		Mean Wetted Depth (m)		Mean Bankfull Depth (m)			
Upstream	16		17		0.5		1m			
Downstream	15		16		0.75		1.5m			
Substrate Type (% of Area)	US	Bedrock	Boulder	Detritus	Cobble	Gravel	Muck	Sand	Clay	Silt
	DS		20		80					
			30		70					
Habitat Description										
Bank Stability		Upstream Left		Upstream Right		Downstream Left		Downstream Right		
Stable		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
Moderately Stable		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
Unstable		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
In-Stream Cover Available (%)	Undercut Banks		Boulders	Cobble	Woody Debris	Organic	Macrophytes			
	US		70	30						
DS		70	50			10				

Riparian Cover	US	None <input type="radio"/>	1-30 % <input type="radio"/>	31-60 % <input checked="" type="radio"/>	61-90 % <input type="radio"/>	91-100 % <input type="radio"/>
	DS	None <input type="radio"/>	1-30 % <input checked="" type="radio"/>	31-60 % <input type="radio"/>	61-90 % <input type="radio"/>	91-100 % <input type="radio"/>
In-Stream Vegetation (% Cover)			Submergent	Floating	Emergent	None
	US					100%
	DS				10	90%

**Water Chemistry**

Location	Water Temperature (°C)	pH	Dissolved Oxygen (mg/L)	Conductivity (µs/cm)
D/S	17°C			

Water Colour:  Colourless     Yellow/Brown     Blue/Green     Turbid     Other \_\_\_\_\_

Fish Observed in Water Body:     Yes     No

**Additional Information:**



YELLOW SWALLOW TAIL  
 OVERHEAD TRANSMISSION ENDS ON WEST SIDE OF RIVER  
 NO EXISTING TRANSMISSION CROSSING

**Legend**

10d	Depth		Run		Fine Substrate	**	Debris	W	Watercress
6w	Width		Pool	##	Gravel Substrate	CT	Cattail	Fe	Iron Staining
	Riffle		Island/Bar	OoO	Cobble/Boulder	SV/FV/EV	Veg	///	Eroded Bank
Xx	Rip Rap		I.S. wood	^^	Dam/Wier		Rip Tree		Seep/Spring
---	U/C Bank		Barrier	-S-	Seasonal Barrier	-x-x-	Fence		Culvert



WATERCOURSES

JUNE 14, 2012

LKR

No. EAST DURHAM

Date JUNE 14 / 12

Page

11am Clear, 22°C

W#4 GPS GREEN FROG

WP48 TT0525603 4898068

1 DRY TADPOLES IN CHANNEL  
FROM POND ON S SIDE OF ROAD  
TO MARCH ON N SIDE

WATER TEMP 18°C

LILY PADS IN POND

CULVERT PERCHED A BIT

PHOTOS 234 <sup>237</sup> DS CULVERT  
238 TLNE - 243 (VS SIDE)

TRANSMISSION EXISTS ON  
NORTH SIDE OF ROAD

SNAAPPING TURTLE REPORTED IN POND

BY RESIDENT

PRINTED(?) TURTLE OBSERVED AT VISIT

PHOTO 21 (GPS) POND (B)

GRFR LEFR

PH 244-245

POND  
(C)

WETLAND POCKET - GRASSES INDICATE

- DOGWOOD NO WATER

DRY AT TIME OF VISIT