SUNCOR ENERGY CEDAR POINT WIND POWER PROJECT

WATER ASSESSMENT AND WATER BODY REPORT

Appendix C

Electrofishing Results

CEDAR POINT WIND ENERGY PROJECT

WATER ASSESSMENT AND WATER BODY REPORT

Appendix C - Electrofishing Surveys

Watershed / Creek ID	Date	Station	Effort (seconds)	Station Length (m)	Fish Captured	Number of Fish Captured	Water Quality (Temperature, Dissolved Oxygen)	Comments
Bonnie Doon Creek								
Bonnie Doon Creek	5/9/2012	27-3	320	75	Creek Chub	36	14.10°C, 8.42 mg/L	
					White Sucker	1		
					Brook Stickleback	1		
					Bluegill	2		
					Northern Redbelly Dace	2		
					Johnny Darter	1		
					Common Shiner	2		
					Fathead Minnow	5		
					Blackside Darter	2		
Bonnie Doon Creek	5/9/2012	27-4	100	20	Creek Chub	13	15.36°C, 9.25 mg/L	shocked shoreline only (for safety)
					White Sucker	2		
					Common Shiner	2		
					Johnny Darter	1		
Jardine Drain	5/9/2012	27-1	395	100	Creek Chub	5	17.88°C, 7.06 mg/L	Lots of tadpoles
					White Sucker	5		
					Brook Stickleback	5		
Greendees Drain	5/10/2012	25-2	70	50	No Catch	_	9.85°C, 4.85 mg/L	Thick with cattails, mainly standing wat
0 Creek Drain	0/10/2012	20 2	7.0		110 Calcii			
30 Creek Drain	5/10/2012	23-1	200	70	No Catch	_	18.17°C	Recently dredged
berarder Creek	1			.,				, ,
Aberarder Creek	5/10/2012	33-1	60	30	Creek Chub	52	14.63°C, 10.74 mg/L	Fished ROW & under bridge
7.5514.451 51551			- 55	33	Bluntnose Minnow	17	, ,	
				1	Common Shiner	1		
					White Sucker	5		
					Fathead Minnow	6		
				1	Rainbow Darter	14		
			1	†	Johnny Darter	22		
Aberarder Creek	5/10/2012	32-1	395	75	Creek Chub	53	13.88°C, 11.44 mg/L	Some Creek Chub in spawning colou
7.5514.451 51551				1	White Sucker	23	, ,	, ,
				1	Trinic Guerre.	20		Some Common Shiners in spawning
					Common Shiner	12		colours
					Bluntnose Minnow	5		
					Rainbow Darter	9		
					Johnny Darter	17		
Aberarder Creek	5/10/2012	22-1	400	80	Creek Chub	42	14.48°C, 11.04 mg/L	
					White Sucker	11		
					Bluntnose Minnow	1		

CEDAR POINT WIND ENERGY PROJECT

WATER ASSESSMENT AND WATER BODY REPORT

Appendix C - Electrofishing Surveys

Watershed / Creek ID	Date	Station	Effort (seconds)	Station Length (m)	Fish Captured	Number of Fish Captured	Water Quality (Temperature, Dissolved Oxygen)	Comments
					Common Shiner	2		Minor black spot on Common Shin
					Rainbow Darter	27		
					Brook Stickleback	1		
					Johnny Darter	5		
Watson Drain	5/10/2012	34-1	30	5	No Catch	-	9.46°C, 7.07 mg/L	ROW access only
Watson Drain	5/10/2012	26-1	310	75	White Sucker	1	9.81°C, 8.16 mg/L	
					Creek Chub	13		
					Brook Stickleback	1		
								Fathead Minnows displaying spaw
Bannister Drain	5/10/2012	34-2	490	70	Fathead Minnow	2	10.03°C, 7.79 mg/L	colours
					Brook Stickleback	2		
					Creek Chub	6		
Bannister Drain	5/10/2012	24-1	400	80	Creek Chub	39	15.97°C, 11.97 mg/L	
					White Sucker	15		
					Common Shiner	2		Some Common Shiners with minor spot
						3		эрог
					Brook Stickleback	5		
					Rainbow Darter	6		
					Johnny Darter			
Dumas Cutton Dusin	0/7/0040	45.0	400	60	Fathead Minnow	1	44 4490 0 72//	
Byrnes-Sutton Drain	6/7/2012	45-2	198	60	Creek Chub	92	14.41°C, 9.73 mg/L	
					Fathead Minnow			
					Johnny Darter	9		
					White Sucker	12		
					Common Shiner	10		
D 0" D: 4	0/7/0040	45.0	450	70	Bluntnose Minnow	1	14 0000 40 04 *** **/	Conneiro Tuello in abound
Byrnes-Sutton Drain - 1	6/7/2012	45-3	150	70	Creek Chub	6	14.93°C, 10.61 mg/L 16.58°C, 9.77 mg/L	Snapping Turtle in channel
Unknown Drain	5/10/2012	22-2	250	80	No Catch	-	16.58°C, 9.77 mg/L	
land Creek Highland Creek	5/10/2012	31-3	70	16	Johnny Darter	15	17.20°C, 11.83 mg/L	
r ngmana orcek	0/10/2012	010	70	10	Creek Chub	12	g.	
					Rainbow Darter	2		
Highland Creek	5/11/2012	21-1	310	16	Rainbow Darter	19	11.28°C, 8.38 mg/L	ROW access only
	3/11/2012		0.0	'	Johnny Darter	12		
				 	Creek Chub	5		Some with moderate black spo
					Common Shiner	1		
			1		White Sucker	1		
					Bluntnose Minnow	2		
James-Wilkonson Drain	5/10/2012	31-2	60	15	Creek Chub	11	15.45°C, 9.81 mg/L	ROW access only

CEDAR POINT WIND ENERGY PROJECT

WATER ASSESSMENT AND WATER BODY REPORT

Appendix C - Electrofishing Surveys

Watershed / Creek ID	Date	Station	Effort (seconds)	Station Length (m)	Fish Captured	Number of Fish Captured	Water Quality (Temperature, Dissolved Oxygen)	Comments
					Brook Stickleback	4		
Hartley Drain	5/10/2012	32-2	270	80	No Catch	-	10.93°C, 9.82 mg/L	Watercress present; heavy filamentou green algae
Hartley Drain	5/10/2012	31-1	60	4	No Catch	-	14.63°C, 9.87 mg/L	ROW access only
Kernohan-O'Donnell Drain	10/3/2012	60-1	19 hours	5	Creek Chub	64	15.4°C, 7.32 mg/L	ROW access only
ouglas Drain								
Douglas Drain	5/10/2012	18-1	80	18	Creek Chub	1	8.11°C, 8.15 mg/L	Displaying mating colours
ickory Creek								
Hickory Creek	6/6/2012	20-1	305	100	White Sucker	8	15.84°C, 8.62 mg/L	
					Creek Chub	31		
					Common Shiner	41		Minor black spot on Common Shine
					Rock Bass	8		
					Rainbow Darter	11		
					Blackside Darter	1		
					Bluntnose Minnow	10		
					Johnny Darter	7		
					Rainbow Trout	2		Trout photos: 567-573
Hickory Creek	5/10/2012	19-2	510	80	White Sucker	26	11.86°C, 9.15 mg/L	12 adult males
					Creek Chub	54		Mod. black spot on Creek Chub
					Common Shiner	25		Mod. black spot on Common Shine
					Rock Bass	10		
					Bluntnose Minnow	8		
					Rainbow Darter	8		
					Johnny Darter	18		
					Iowa Darter	1		
					Blackside Darter	1		
					Rainbow Trout	3		Juveniles, see pictures; Note: could r find original channel
Hickory Creek	6/4/2012	17-1	225	40	Brown Trout	1	16.61°C, 11.93 mg/L	photos taken: 469-480
·					Rainbow Darter	14		Only upstream fishing allowed
					Creek Chub	21		
					Common Shiner	11		
					Blackside Darter	1		
					White Sucker	2		
					Rock Bass	3		
					Bluntnose Minnow	4		
					Johnny Darter	5		
McKinley Drain	5/10/2012	19-1	300	60	Creek Chub	44	10.65°C, 9.82 mg/L	
,					Common Shiner	1		

CEDAR POINT WIND ENERGY PROJECT

WATER ASSESSMENT AND WATER BODY REPORT

Appendix C - Electrofishing Surveys

Watershed / Creek ID	Date	Station	Effort (seconds)	Station Length (m)	Fish Captured	Number of Fish Captured	Water Quality (Temperature, Dissolved Oxygen)	Comments
					Rainbow Darter	1		
					White Sucker	1		
Elliot Drain								
Elliot Drain	5/10/2012	16-1	30	4	No Catch	-	13.07°C, 9.04 mg/L	ROW access only
Elliot Drain	6/4/2012	16-2	80	100	No Catch	-	23.69°C, 12.79 mg/L	
North Street Drain				•				
North Street Drain	6/4/2012	16-3	60	6	Brook Stickleback	2	18.07°C, 10.93 mg/L	ROW access only
Woods Creek						<u> </u>		
								**Dip net used for 10 mins; juvenile 8
Woods Creek	7/4/2012	10-1	-	-	Creek Chub**	30+	24.04°C, 8.2 mg/L	YOY Creek Chub
Woods Creek	6/5/2012	11-1	270	100	Creek Chub	22	18.42°C, 10.52 mg/L	
					Fathead Minnow	14		
					Brook Stickleback	6		
					Common Shiner	6		
					Common Carp	1		
Woods Creek	6/5/2012	14-2	229	150	Creek Chub	10	16.28°C, 13.64 mg/L	Hundreds of Brook Stickleback & Cree Chub YOY observed
					Brook Stickleback	2		
					White Sucker	1		Juvenile White Sucker
					Blacknose Dace	4		
					Rainbow Darter	1		
					Common Shiner	1		
Haney Drain	6/4/2012	15-1	210	120	Brook Stickleback	3	17.74°C, 9.95 mg/L	Watercress present
					Creek Chub	6		
					Blacknose Dace	1		
Brush Drain	6/5/2012	12-2	100	40	Brook Stickleback	Many YOY observed	13.36°C, 7.74 mg/L	Thick aquatic veg., incl. Watercress
Brush Drain	6/5/2012	12-1	220	150	Brook Stickleback	2	12.65°C, 8.12 mg/L	Schools of YOY Brook Stickleback observed; channel thick with veg.
								**3 Dip net hauls used; juvenile Fathea
Brush Drain	7/4/2012	14-3	-	-	Fathead Minnow**	35		Minnow **3 Dip net hauls used; juvenile & YO
					Brook Stickleback**	100s; possibly 1000s		Brook Stickleback
					Creek Chub**	35		**3 Dip net hauls used
James Creek Drain								
James Creek Drain	6/4/2012	13-1	60	8	Brook Stickleback	6	16.89°C, 10.83 mg/L	ROW access only; many YOY
James Creek Drain	6/5/2012	14-1	111	60	Brook Stickleback	Many YOY observed	13.22°C, 10.06 mg/L	YOY observed at culvert openings; channel thick with veg.
Beith Creek			•					
Frayne Drain	6/7/2012	5-4	60	4	Creek Chub	5	16.89°C, 9.28 mg/L	ROW access only
·					Brook Stickleback	4		·

CEDAR POINT WIND ENERGY PROJECT

WATER ASSESSMENT AND WATER BODY REPORT

Appendix C - Electrofishing Surveys

Table C.1: Summary of 2012 S			Effort	Station Length			Water Quality (Temperature,	
Watershed / Creek ID	Date	Station	(seconds)	(m)	Fish Captured	Number of Fish Captured	Dissolved Oxygen)	Comments
								Could not fish because channel was shallow & thick with cattails; fish were
Frayne Drain	6/5/2012	4-3	-	-	Brook Stickleback	4	15.53°C, 8.73 mg/L	observed at culvert openings
Wadsworth Drain	6/5/2012	6-1	100	15	No Catch	_	14.11°C, 10.12 mg/L	Channel thick with cattails & Watercress could only fish under bridge/road
Wadsworth Drain	6/5/2012	6-2	80	15	Brook Stickleback	10 YOY	13.77°C, 6.59 mg/L	YOY observed under bridge; channel thick with cattails & aquatic veg.
Beith Creek Drain	6/7/2012	5-3	100	14	Creek Chub	7	18.08°C, 6.21 mg/L	Fished in ROW & 10m in culvert
					Fathead Minnow	15		
					Brook Stickleback	10		
					White Sucker	1		
Shashawandah Creek								
Shashawandah Creek	6/6/2012	9-2	286	100	Creek Chub	2	17.58°C, 10.84 mg/L	Many Brook Stickleback YOY & Cyprinidae observed
					Johnny Darter	1		
Shashawandah Creek	6/5/2012	3-1	330	100	Creek Chub	23	16.05°C, 10.74 mg/L	
					Common Shiner	32		
					Bluntnose Minnow	33		
					Pumpkinseed	3		
					Blackside Darter	13		Minor black spot on Blackside Darter
					White Sucker	7		
					Northern Pike	1		Juvenile Northern Pike
					Johnny Darter	4		
Shashawandah Creek	6/7/2012	2-6	160	40	Pumpkinseed	1	20.56°C, 10.38 mg/L	100s of YOY Cyprinidae observed
					Creek Chub	1		
Russel Drain	6/6/2012	9-1	239	70	Northern Pike	1	15.52°C, 10.31 mg/L	Juvenile Northern Pike
		-			Creek Chub	6		
					White Sucker	4		
					Pumpkinseed	3		
Ross Drain	6/5/2012	4-1	239	100	No Catch	-	16.59°C, 10.87 mg/L	Many crayfish, toads & frogs observed
Stewardson Drain	6/5/2012	4-2	60	4	No Catch	-	14.41°C, 10.03 mg/L	ROW access only