

**ADDENDUM
ENVIRONMENTAL IMPACT ASSESSMENT
FOR THE PROPOSED HYDROPOWER ENERGY PROJECT MAGGOTTY ST.
ELIZABETH IN JAMAICA
April 2011**

1.0 Potential Impacts – Biological Impacts

Diversion of water for the Hydropower Plant

Section 14.3 (1) of the EIA describes the “Diversion of water for hydropower plant”. It explains that the existing ecology has been there for the last 60 years since the construction of the hydropower plant in the late 1950’s.

The weir that is in existence extends right across the river. In order to channel more water into the penstock for the hydropower plant, the new section of the weir will be extended perpendicular to the existing weir by approximately 20-30% of the existing length of the weir. The height of the weir will not be altered. At all times at least 1.5m³ will be left in the river and if less than that amount is flowing in the river, no water will be taken for the hydropower plant.

The flowrate in the Black River at Maggotty was reviewed for the period 2001-2009. For each month the potential power output based on the existing head was computed. For the period 2006-2009 the actual MW output by the existing plant and the potential output from the new plant making allowance for a spill overflow of 1.5m³ was determined for each month. It has been determined from the analyses that there are a number of operating scenarios either running both the new and the old plant or the new plant alone that will improve overall power generating efficiency while allowing water to remain in the Black River.

Since the ecology will not be altered and the design of the intake works is such as to always ensure that a minimum flow of water in the river, a detailed flora and fauna survey of the river was not undertaken.

2.0 Potential Impacts – Physical Impacts

Meteorological data

A general description of the climate including temperature and rainfall is included at Section 5.0 of the EIA.

The nearest meteorological station to the project site is situated at Appleton Estates. Meteorological data from Appleton Estates provides more specific climate data for the Maggotty area and this is presented at Appendix 1 for the period November 2010 to February 2011.

Ambient Water Quality

Ambient water quality is routinely monitored by Appleton Estate at a number of locations in the Nassau Valley. Two such points of interest are at Maggotty and Casa Marantha. The water quality

monitoring points (WQMPs) are shown on Figure 1 as Maggoty WQMP near the top of the figure and Casa WQMP near the bottom of the figure.

Water quality data at Maggoty and Casa Marantha, upstream of the intake works and downstream of the tailrace respectively are presented in the Tables below. The data was obtained courtesy of Appleton Estate.

Table 1 - Heavy Metals in the Black River at Maggoty and Casa Marantha

23-Aug-10	Arsenic mg/L	Chromium mg/L	Copper mg/L	Lead mg/L	Potassium mg/L	Zinc mg/L	Sodium mg/L	Manganese mg/L	pH Unit	Cond ΦS/cm
Maggotty	<0.013	<0.001	<0.001	<0.001	0.469	0.001	2.35	<0.002	7.99	345
Casa	<0.013	<0.001	<0.001	<0.009	0.458	0.001	2.32	<0.002	8.23	339

Appleton Estates 2010

The concentration of heavy metals in the Black River remains constant before the intake works and after the discharge of water from the HPP as is expected since the HPP does not alter the physical composition of the water.

The physico chemical properties of the ambient water show little or no variation between the monitoring points upstream and downstream of the HPP.

Table 2 – Ambient water quality results at Maggoty April 2010 – January 2011

	BOD mg/L	Nitrate mg/L	Phosphate mg/L	pH Units	Conductivity ΦS/cm	TDS mg/L	TSS mg/L
Ambient Freshwater Standard	0.8 – 1.7	0.0 – 7.5	0.01 – 0.8	7 – 8.4	150 - 600	120 - 300	-
14-Apr-10	<3	0.3	0.09	7.93	349	-	--
28-Apr-10	<6.00	0.5	0.19	7.86	386	-	-
31-May-10	1	0.5	0.09	7.95	323	-	-
10-Jun-10	<0.10	2.64	0.04	7.8	348	-	-
12-Aug-10	1	2.2	0.05	8.02	338	61 +/- 4	36 +/- 2
26-Aug-10	-	<0.30	0.1	7.84	348	178.4	29.5
9-Sep-10	1.3	0.88	0.03	8.33	299	97 +/- 5	52 +/- 3
23-Sep-10	4	6.2	0.07	8.16	340	163.3	25.2
12-Oct-10	0.1	<0.30	0.04	8.18	344	177.8	25.8
25-Oct-10	0.8	0.88	0.07	8.08	342	47 +/- 4	26 +/- 2
11-Nov-10	1	1.76	0.05	7.85	355	142 +/- 8	33 +/- 2
24-Nov-10	0.6	<0.30	0.12	8.07	356	177	21
Dec 2, 201	0.6	0.5	0.05	7.82	356	151 +/- 8	19 +/- 1
17-Dec-10	3	<0.30	<0.02	7.74	351	164.3	24
6-Jan-11	0.4	0.5	0.04	7.83	386	150 +/- 10	3.7 +/- .2
17-Jan-11	0.4	<3	0.09	7.41	377	152.4	16

Appleton Estates 2010 – 2011

Table 3 - Ambient water quality results at Casa Marantha April 2010 – January 2011

	BOD mg/L	Nitrate mg/L	Phosphate mg/L	pH Units	Conductivity ΦS/cm	TDS mg/L	TSS mg/L
Ambient Freshwater Standard	0.8 – 1.7	0.0 – 7.5	0.01 – 0.8	7 – 8.4	150 - 600	120 - 300	-
14-Apr-10	2.2	0.6	0.14	8.05	338	-	-
28-Apr-10	1.7	0.5	0.08	8.06	377	-	-
31-May-10	2	0.5	0.09	7.95	350	-	-
10-Jun-10	0.7	2.2	0.05	8.25	303	-	-
12-Aug-10	1.4	1.76	0.06	8.29	322	-	35 +/- 2
26-Aug-10	-	<0.30	0.06	8.28	337	172	21.5
9-Sep-10	2.2	<0.44	0.05	8.5	315	138 +/- 7	106 +/- 7
23-Sep-10	0	0.9	0.03	8.21	339	167.8	33.6
12-Oct-10	0.3	<0.30	0.03	8.6	333	165.1	46.2
25-Oct-10	1.1	0.44	0.21	8.52	334	270 +/- 20	22 +/- 1
11-Nov-10	1.6	1.76	0.3	7.7	347	63 +/- 4	48 +/- 3
24-Nov-10	2.4	<0.30	0.17	8.13	354	171	22.4
Dec 2, 201	1.1	0.4	0.04	8	349	430 +/- 20	35 +/- 2
17-Dec-10	0.2	<0.30	0.02	8.09	348	162.6	15
6-Jan-11	1.2	0.6	0.02	7.85	350	250 +/- 20	26.4 +/- 2
17-Jan-11	2	<0.30	0.09	7.73	359	169.5	16.7

Appleton Estates 2010 – 2011

Daily readings for dissolved oxygen, pH and conductivity at Maggotty and Casa Marantha for a period of one (1) year from February 2010 to February 2011 are presented at Appendix 2. These values are generally in compliance with the national ambient water quality standards for freshwater. The low dissolved oxygen at Maggotty on some occasions is likely due to upstream activities.

Air Quality

Only a general qualitative description of the air quality is provided in the EIA. This project should have minimal adverse impact on air quality during the construction phase and no impact at all during the operation phase.

3.0 Potential Impacts – Social, cultural and Economic

There is no commercial fishing in the Black River between Maggotty and Casa Marantha and there is no intention to run the river dry. As explained in Section 1.0 above, at least 1.5m³ will be left in the river at all times. Therefore no adverse impact on the livelihoods of the communities is expected.

The fish farm operated by Jamaica Broilers at Barton Isle uses water from the Black River. This farm is situated downstream of the discharge point from the Maggotty HPP. This farm has not been adversely impacted in the past due to the operation of the HPP and it will not be in the future.

4.0 EHS Management and Monitoring Plan

The Environmental Monitoring and Management Plan is presented at Table 29 in Section 18.0 of the EIA.

The proposed water quality monitoring programme during the construction phase of the project is included at Appendix 3 of this Addendum.

5.0 River Flooding Upstream of the HPP Intake Works

At the Public Meeting held on March 24, 2011, concerns were raised about the river flooding the town of Maggotty when it was in spate and that JPS needed to clean the river channel upstream of the intake works. JPS indicated at the meeting that it regularly cleans the river channel at the intake works and that the company does not have the responsibility to clean the river upstream of their intake. Additionally it is likely that the increased flows to the HPP for the proposed project especially in times of high river flows will help to reduce flooding in the town.

6.0 Land to be used as staging areas

Permission has been obtained from the following landowners to temporarily use their land which is situated adjacent to the existing penstock for the storage of equipment and material associated with the project.

1. Mr. Mark Lee for Staging Area #1 (Permission and title attached at Appendix 4)
2. Mrs. Cowan for Staging Area # 4 (Permission and title attached at Appendix 4)

JPS is still in negotiations with the land owner for Staging Area #3 and NEPA will be advised of the outcome in due course. JPS owns the land where Staging Area #2 is situated.

Staging Areas # 1, 2, 3 and 4 are shown on Figures 2 and 3.

7.0 Construction Schedule

The construction period is shown in detail at Appendix 5.

The contract for the EPC contractor should be signed by mid July 2011 and construction is estimated to commence by mid September 2011. Construction should be completed by July 2013 and the plant should be commissioned by December 2013.

Figure 1 - Google Map Showing Water Quality Monitoring Points

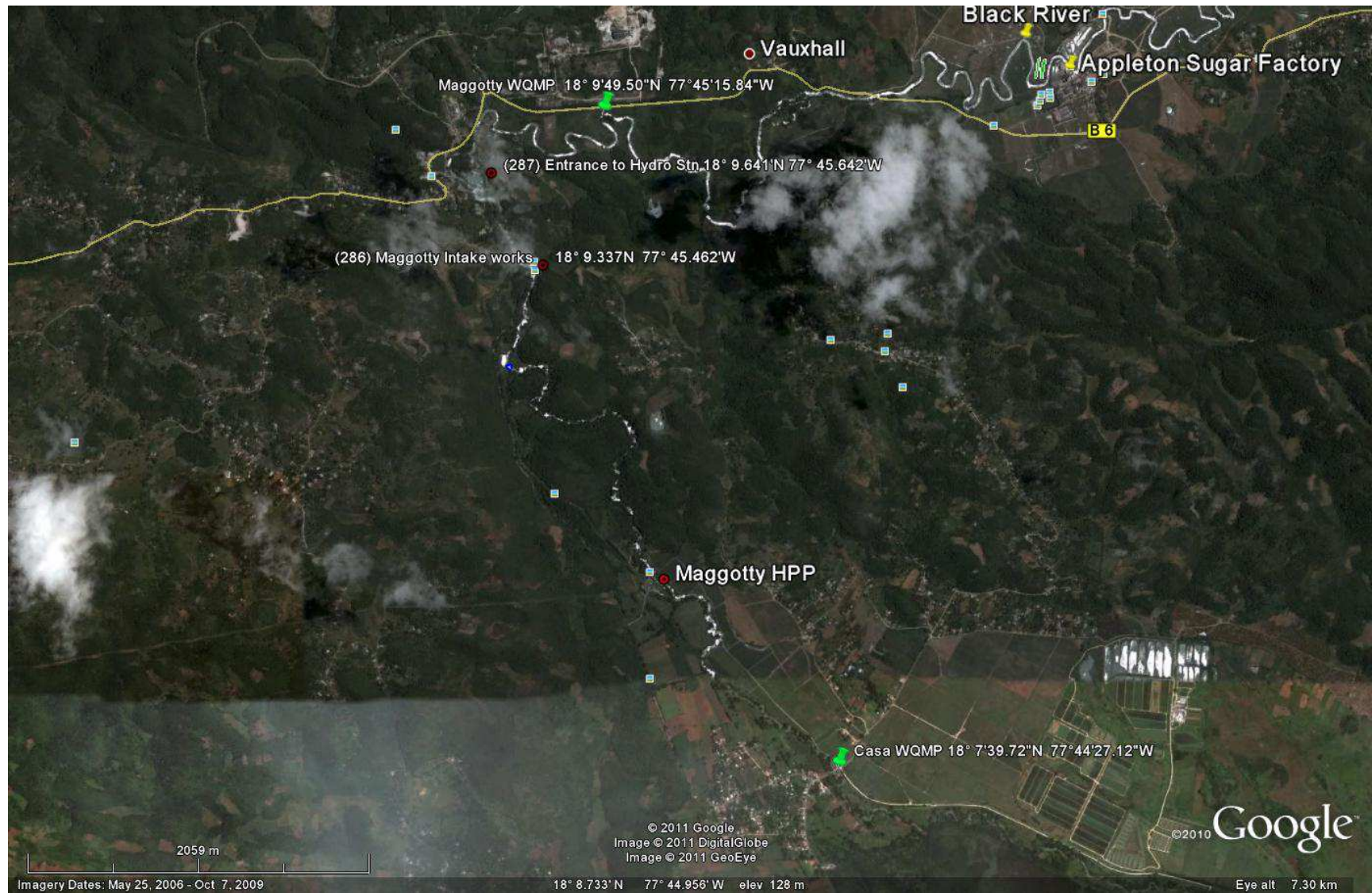


Figure 2 - Google Map showing Staging Areas #1 & 2

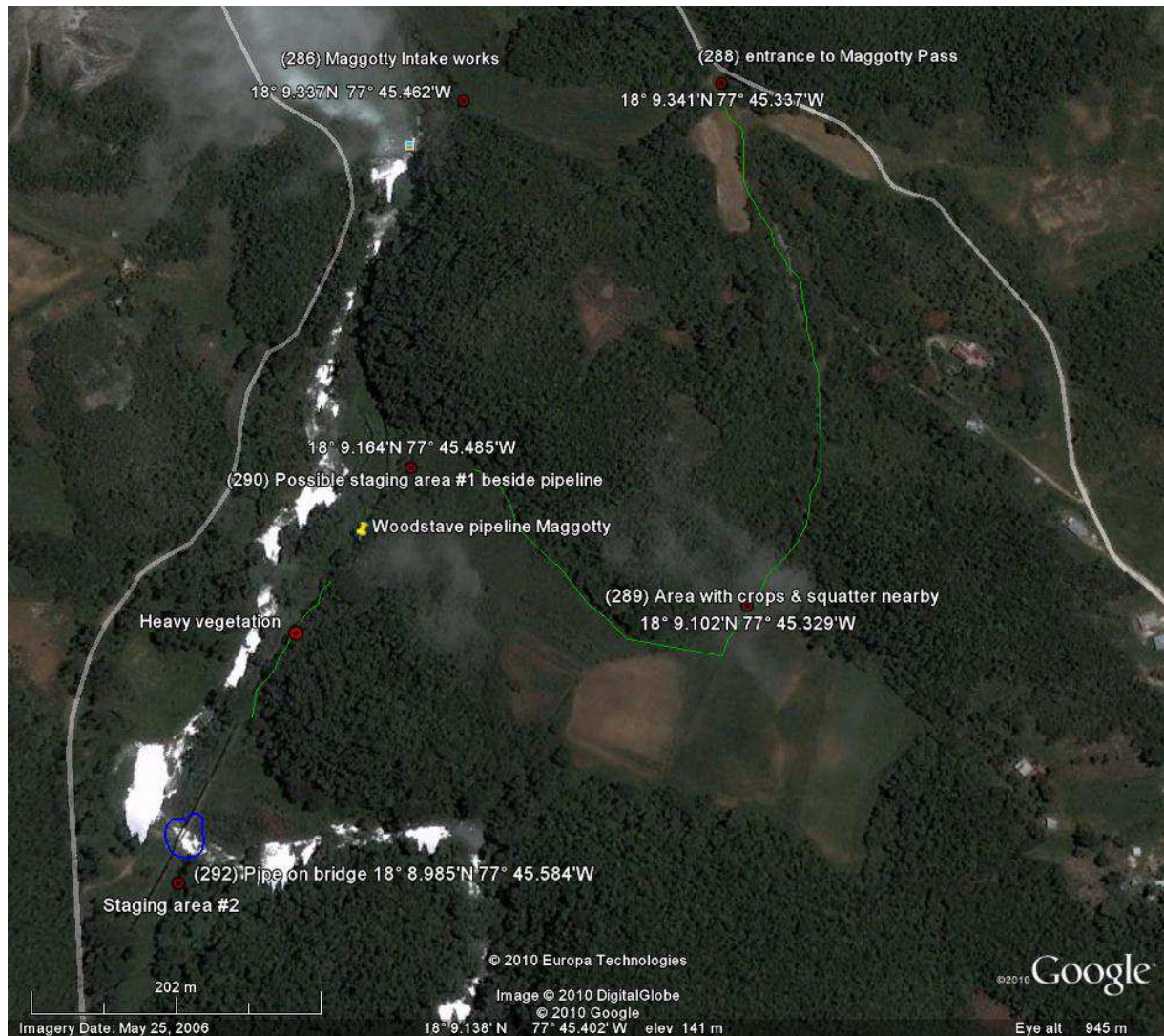
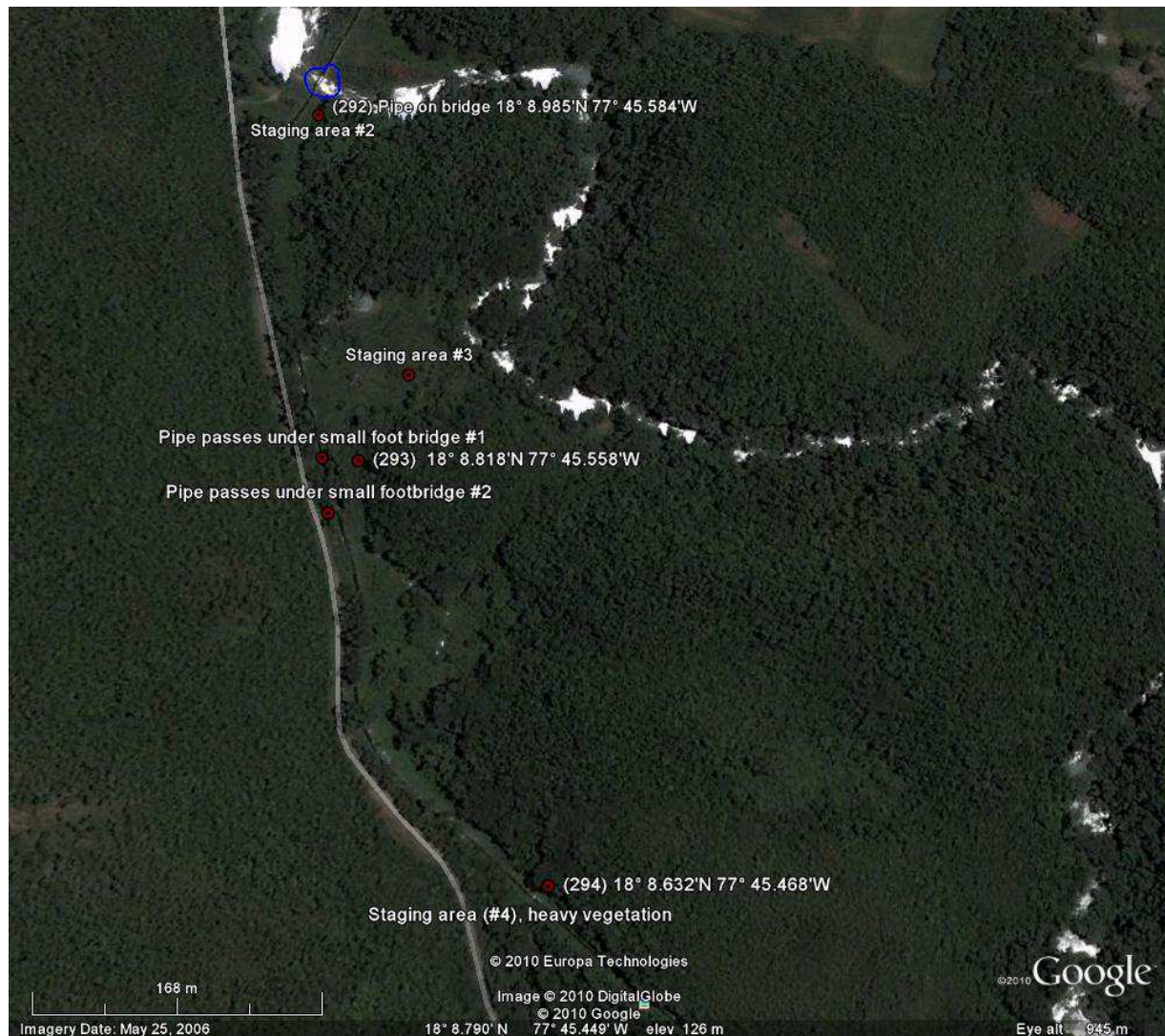


Figure 3 - Google Map showing Staging Areas #3 & 4



APPENDIX 1
METEOROLOGICAL DATA FOR APPLETON
November 2010 – February 2011

DAILY OBSERVATION FORM

STATION...APPLETON ESTATE...

NOVEMBER 2010...

Observation at.....7:00.....am
Air Temperatures

Observation at.....1:00.....pm
Air Temperatures etc.

Date	Rainfall	Dry	Wet	Max	Min	Dry	Wet	Water	Reset	Cup	Remarks
	mm	Bulb	Bulb			Bulb	Bulb	Level		Counter (km)	
1	23.0			33.00							
2	1.8	22.00	21.90	32.00	17.00	26.00	24.50		90	3,479.60	overflow
3	16.4	22.00	21.50	32.00	16.00	25.60	24.30	88.83		3,516.85	
4	1.6	21.70	21.40	32.00	16.00	31.00	26.50		90	3,587.39	overflow
5	4.6	24.50	23.50	28.20	19.00	25.00	23.60	90.00		3,567.88	
6		23.60	22.00	28.00	18.40				90	3,612.86	overflow
7		22.50	20.00	28.10	17.00			77.53		3,912.52	
8		22.20	20.00	28.00	17.00			75.34			
9		18.50	18.00	29.50	12.70	27.60	22.00	72.34		4,009.89	
10		21.00	20.10	31.00	15.50	28.00	23.24.5	69.02		4,054.80	
11		24.90	22.50	31.00	19.50	31.00		66.82		4,093.21	
12		22.90	21.50		17.50			60.00		4,166.90	
13											
14				30.50							
15	7.1	22.00	20.50	31.50	16.00			48.16		4,302.19	
16		22.00	21.50	30.00	16.00				90	4,318.48	overflow
17		24.00	23.50	24.50	18.00				90	4,328.35	overflow
18		19.50	19.00		13.50				90	4,332.48	overflow
19				30.00							
20		24.20	22.00	30.50	19.00			82.41		4,426.18	
21		19.50	19.00	30.50	14.00	30.50	30.00	79.46		4,471.95	
22	2.5	24.00	23.50	31.00	18.50			73.76		4,547.01	
23		23.00	22.50	22.00	17.00	30.00	29.90	70.63		4,652.70	
24	2.1		22.50	32.00	17.00	30.50	31.00	65.36		4,725.84	

25		19.00	18.50	31.50	13.00	29.40	28.10	65.72		4,763.19	
26		17.50	17.00	31.50	11.00	30.20	30.40	62.18		4,779.98	
27		20.00	19.50	31.00	14.00			59.98		4,799.69	
28		16.00	15.50	31.50	10.00	32.00	31.50	53.40		4,838.59	
29		21.40	21.00	31.40	15.50	31.00	30.50	51.58	90	4,855.35	
30		18.00	17.50	32.30	12.30			87.38		4,903.91	
31											
Dec. 1st		17.40	17.00		11.90	29.00	23.40	81.44		4,938.15	

DAILY OBSERVATION FORM											
STATION...APPLETON ESTATE...						DECEMBER 2010...					
Observation at.....7:00.....am						Observation at.....1:00.....pm					
Air Temperatures						Air Temperatures etc.					
Date	Rainfall mm	Dry Bulb	Wet Bulb	Max	Min	Dry Bulb	Wet Bulb	Water Level	Reset	Cup Counter (km)	Remarks
1		17.40	17.00	29.60	11.90	29.00	23.40	81.44		4,938.15	
2		19.00	18.40	31.00	13.40	29.40	24.50	78.92		5,002.70	
3		19.10	18.90	30.60	13.30	30.20	24.30	75.96		5,027.54	
4		22.50	21.00	30.50	17.00	29.00	24.00	70.76		5,089.72	
5		18.00	17.50	31.90	12.30	30.00	23.00	67.14		5,147.36	
6		17.50	17.10	30.10	12.00	30.00	22.40	63.58		5,171.38	
7		16.40	15.90	26.40	10.40	26.30	21.40	58.36		5,221.21	
8		16.40	15.90	29.50	10.50	28.00	22.00	54.60		5,314.38	
9		21.00	20.40	28.80	15.40	27.60	24.00	51.46		5,348.91	
10		22.20	20.50	28.60	16.50	28.50	23.00	48.14	90	5,380.73	
11		22.00	21.00	32.00	16.40	30.00	24.00	84.02		5,463.60	
12	4.0	20.00	19.50	31.60	14.40	30.00	24.90	82.64		5,502.55	
13		20.50	19.50	28.50	15.00	27.50	21.50	83.90		5,539.40	
14		18.90	16.90	24.50	13.00	24.30	18.40	76.68		5,649.84	
15		17.00	15.70	24.80	11.30	24.40	11.90	74.84		5,766.42	
16	0.6	16.50	16.10	29.00	10.90	27.90	22.00	68.86		5,836.47	
17	7.1	21.00	20.60	28.70	15.40	26.50	23.00	68.62		5,892.56	
18		21.00	20.40	30.50	15.20	25.20	21.60	75.54		5,906.98	
19		18.50	18.20	30.50	12.60	29.50	22.00	70.62		5,943.09	
20		17.00	16.60	27.00	11.00	27.00	21.00	65.48		5,977.15	
21		14.10	13.90	30.40	8.30	28.80	21.50	62.84		6,056.58	
22		15.00	14.50	30.40	9.00	28.90	23.30	59.74		6,099.01	
23		15.50	15.00	28.40	9.50	27.00	21.50	56.60		6,131.59	
24		13.40	13.00	29.60	7.50	25.60	20.20	50.10	90	6,203.84	
25		21.00	19.00	30.50	15.40	25.30	21.50	83.14		6,247.54	
26		23.00	20.90	29.90	18.00	26.00	21.70	82.30		6,274.15	
27		20.40	18.60	23.10	14.80	22.00	20.00	78.74		6,321.45	
28		20.50	19.00	27.00	14.60	1.00	21.20	73.66		6,478.96	

29		20.60	18.70	28.80	15.00	26.40	22.40	68.46		6,632.20	
30		18.50	18.10	32.10	13.00	28.40	20.70	63.36		6,728.19	
31		16.90	16.40	32.40	11.00	30.40	20.40	60.66		6,761.49	
Jan. 1st		19.30	18.10		14.00	30.10		55.82		6,804.27	

DAILY OBSERVATION FORM

STATION...APPLETON ESTATE...

JANUARY 2011...

Observation at.....7:00.....am
Air Temperatures

Observation at.....1:00.....pm
Air Temperatures etc.

Date	Rainfall mm	Dry Bulb	Wet Bulb	Max	Min	Dry Bulb	Wet Bulb	Water Level	Reset	Cup Counter (km)	Remarks
1		19.30	18.10		14.00			55.82		6,804.27	
2				28.50		25.70	20.40				
3		19.80	18.90	29.50	14.30	28.90	22.50	90.00	90	6,883.47	Reset
4		17.20	16.60	30.50	11.40	30.50	21.00	85.14		6,981.94	
5		15.90	15.50	31.00	10.00	30.30	20.40	80.58		7,049.43	
6		15.20	14.90	22.60	9.50	30.10	20.60	76.08		7,080.46	
7		18.40	18.00	32.00	12.80	24.20	21.10	70.66		7,113.25	
8		17.50	17.00	31.40	11.60			67.50		7,145.86	
9		16.60	16.40	32.10	11.00			61.78		7,178.15	
10		19.40	19.00	31.70	13.60	31.00	24.50	59.38		7,195.65	
11		20.00	19.50	30.30	14.50	30.00	24.50	56.92		7,221.09	
12		20.90	20.00	31.60	15.20			53.12		7,260.76	
13		22.00	21.00	31.10	17.50	30.70	23.30	50.86	90	7,320.52	Reset
14		22.90	21.00	29.50	17.20	20.70	20.40	82.36		7,422.62	
15		22.90	21.90	30.50	17.40			78.54		7,536.70	
16	75.4	20.00	19.50	32.40	14.10	30.10	20.90	75.54		7,578.31	
17		19.30	19.00	31.40	13.60	31.00	24.00	overflow	90	7,597.91	Reset
18		18.90	18.50	31.00	13.40	25.90	20.80	85.12		7,626.88	
19		19.50	19.10	32.40	14.00	30.90	24.90	84.54		7,643.05	
20		21.40	21.00	32.00	15.90	32.30	24.60	77.52		7,686.13	
21		18.60	18.50	31.30	13.00	30.30	20.80	73.08		7,715.73	
22	10.9	17.90	17.90	29.10	12.10			70.68		7,740.84	
23		21.00	20.60	31.40	15.40	30.30	20.80	80.98		7,755.57	
24		20.00	19.60	32.00	14.40	31.00	23.50	77.84		7,784.56	
25		21.40	21.00	32.00	15.90	31.00	23.30	72.96		7,821.29	
26		20.00	19.50	32.90	14.50	31.50	23.90	68.08		7,852.59	
27		15.90	15.60	32.50	10.10	31.60	23.50	63.14		7,884.96	
28	1.3	19.00	18.80	33.50	13.40	33.00	24.60	58.54		7,922.47	

29		20.40	20.00	30.00	14.90			55.96		7,952.01	
30		20.10	15.90	28.40	15.10	25.00	20.50	51.56	90	7,980.24	Reset
31		18.00	17.90	30.10	12.40	29.50	24.00	90.00		8,000.12	
Feb. 1st		17.40	17.00	30.40	11.50	30.00	24.10	88.08		8,025.67	

DAILY OBSERVATION FORM

STATION...APPLETON ESTATE...

FEBRUARY 2011...

Observation at.....7:00.....am

Observation at.....1:00.....pm

Air Temperatures

Air Temperatures etc.

Date	Rainfall mm	Dry Bulb	Wet Bulb	Max	Min	Dry Bulb	Wet Bulb	Water Level	Reset	Cup Counter (km)	Remarks
1		17.40	17.00	30.40	11.50	30.00	24.10	88.08		8,025.67	
2		16.40	16.00	31.00	10.90	30.00	22.90	84.22		8,052.13	
3		17.50	17.30	31.90	12.00	29.50	24.00	84.84		8,071.49	
4		18.10	17.90	30.70	12.40	28.50	24.00	80.14		8,098.50	
5		17.90	17.50	30.40	12.00			76.34		8,130.62	
6		20.90	25.90	31.00	10.90	15.50	15.40	72.40		8,417.89	
7	1.19	18.30	18.00	31.10	12.50	26.00	24.20	69.78		8,174.26	
8	3.09	18.90	18.50	29.40	13.00	25.50	20.80	68.30		8,199.83	
9		18.50	18.40	31.60	12.90			71.64		8,208.75	
10		17.40	17.00	31.60	11.60			66.50		8,246.33	
11		16.50	16.30	33.50	10.90	33.40	23.40	62.48		8,269.96	
12		16.50	16.20	32.00	10.90	32.10	23.60	57.38		8,315.33	
13		17.60	17.40	30.30	12.10	30.40	23.10	52.96	90	8,353.53	
14		20.50	20.00	31.50	15.00	31.20	23.90	87.96		8,408.49	
15		21.10	20.60	25.80	15.50	26.90	23.00	83.90		8,465.05	
16		20.80	20.40	31.20	20.20			80.50		8,522.92	
17		20.70	20.20	31.60	15.20	29.90	24.00	78.98		8,579.34	
18		23.90	21.10	30.90	18.40	30.60	23.00	73.84		8,682.54	
19	12.3	20.50	19.10	31.40	15.00			66.90		8,795.35	
20		20.50	19.60	30.00	15.00			77.40		8,846.74	
21		19.50	19.00	31.90	14.00	30.30	20.70	71.74		8,898.55	
22		18.00	17.40	33.00	12.10	31.00	22.30	68.96		8,930.91	
23		18.50	17.90	32.50	12.90	32.20	23.00	62.70		8,972.78	
24		15.40	15.00	32.90	9.00	33.00	23.50	57.42		9,017.82	
25		18.00	17.50	31.90	12.60	30.10	22.70	52.14		9,056.48	
26		17.10	16.50	32.30	11.40	32.30	23.00	49.12	90	9,103.50	
27		16.90	16.40	31.40	11.30	30.10	22.30	84.56		9,168.73	
28		17.50	17.00	32.00	12.40	30.40	22.50	80.34		9,207.97	

29											
30											
31											
Mar. 1st		16.90	16.40	32.00	11.00	28.90	22.40	75.66		9,244.19	

APPENDIX 2
Ambient Water Quality Monitoring Data
February 2010 - February 2011

Maggotty

	DO mg/L	pH	Conductivity ΦS/cm
Ambient Freshwater Quality Standard 2009	>5	7.0 - 8.4	150 - 600
Feb-10			
1	6.81	7.9	381
2	5.54	7.6	394
3	4.93	7.6	391
4	5.01	7.7	280
5	5.61	7.8	212
6	6.09	7.7	382
7	5.68	7.8	385
8	6.57	7.8	382
9	5.88	7.8	385
10	5.75	7.4	382
11	6.40	7.9	387
12	6.33	7.8	440
13	6.38	7.9	396
14	6.60	7.6	384
15	6.66	8.0	389
16	6.17	7.9	390
17	2.56	7.7	410
18	3.35	7.7	365
19	4.15	8.0	388
20	4.96	7.7	348
21	5.56	7.9	382
22	5.42	7.8	347
23	5.39	7.8	388
24	6.08	7.6	381
25	5.66	7.8	372
26	6.43	7.8	370
27	6.75	7.9	386
28	6.43	7.9	387

Casa Marantha

DO mg/L	pH	Conductivity ΦS/cm
>5	7.0 - 8.4	150 - 600
7.88	8.0	380
6.89	7.6	380
6.10	7.6	384
6.30	7.6	380
6.62	7.7	375
7.09	7.8	386
6.60	7.8	361
7.24	7.8	384
6.69	8.0	381
6.47	7.8	358
7.14	7.8	388
7.05	7.8	383
7.47	8.0	383
7.58	8.0	374
7.28	7.9	383
7.54	8.0	374
5.93	7.7	396
4.21	7.8	396
5.66	7.8	390
6.34	7.8	377
6.78	7.7	346
6.38	7.9	382
6.52	7.5	381
6.94	7.9	383
6.54	7.9	380
7.34	7.9	378
7.65	8.0	391
7.33	7.9	378

	DO mg/L	pH	Conductivity ΦS/cm
March 2010			
1	6.61	7.6	355
2	7.11	7.7	379
3	5.19	7.8	390
4	5.58	7.8	386
5	5.01	7.8	396

DO mg/L	pH	Conductivity ΦS/cm
7.49	7.9	380
7.68	7.9	352
6.48	7.7	378
7.28	7.9	383
7.28	7.9	347

	DO mg/L	pH	Conductivity ΦS/cm
Ambient Freshwater Quality Standard 2009	>5	7.0 - 8.4	150 - 600
6	4.38	7.8	386
7	5.37	7.7	390
8	5.98	7.6	385
9	6.01	7.8	393
10	5.29	7.7	384
11	5.55	7.7	378
12	5.32	7.8	391
13	5.56	7.8	388
14	5.75	7.7	409
15	6.31	7.8	396
16	6.75	7.8	392
17	6.01	7.9	397
18	4.34	7.7	400
19	4.04	7.7	400
20	4.92	7.7	377
21	4.48	7.67	394
22	4.48	7.67	394
23	5.33	7.74	392
24	4.92	7.68	398
25	5.52	7.81	400
26	4.95	7.60	394
27	5.21	7.68	389
28	4.83	7.61	398
29	5.36	7.68	395
30	5.32	7.63	396
31	5.47	7.62	366

DO mg/L	pH	Conductivity ΦS/cm
>5	7.0 - 8.4	150 - 600
7.23	7.8	388
7.42	7.9	381
7.52	7.9	378
7.36	7.9	392
7.46	7.5	350
7.21	7.9	390
6.92	7.9	323
7.43	7.9	381
7.43	7.9	398
8.00	7.9	398
7.97	7.9	397
7.21	7.9	396
6.82	7.8	380
6.42	7.7	387
6.74	7.7	395
6.54	7.68	399
6.54	7.68	399
7.79	8.10	373
7.07	7.84	358
7.89	8.12	375
7.24	8.00	380
6.15	8.04	375
7.14	7.61	375
7.30	7.76	374
5.89	7.52	349
6.90	7.55	361

	DO mg/L	pH	Conductivity ΦS/cm
Apr-10			
1	2.10	7.37	366
2	3.83		
3	5.76	7.47	408
4	4.38	7.23	349
5	4.58	7.64	391
6	4.11	7.53	389
7	4.52	7.41	418
8	4.60	7.67	388
9	4.78	7.67	382
10	4.35	7.72	391
11	4.97	7.80	387
12			
13			
14			

DO mg/L	pH	Conductivity ΦS/cm
6.83	7.82	313
6.07		
6.27	7.43	367
6.64	7.44	352
5.72	7.64	387
5.70	7.40	382
6.60	7.40	382
7.05	7.99	377
6.45	7.74	347
6.89	7.70	389
7.28	8.03	359

	DO mg/L	pH	Conductivity ΦS/cm
Ambient Freshwater Quality Standard 2009	>5	7.0 - 8.4	150 - 600
15			
16			
17			
18			
19	7.31	7.95	359
20	6.57	7.81	359
21	7.03	7.87	365
22	6.83	7.92	374
23	6.45	7.91	372
24	7.09	7.91	378
25	7.32	7.79	376
26	7.32	7.79	376
27	6.90	7.70	308
28	5.26	7.70	386
29	4.09	7.62	372
30	4.58	7.80	383

DO mg/L	pH	Conductivity ΦS/cm
>5	7.0 - 8.4	150 - 600
7.35	7.83	339
7.22	7.59	346
7.38	7.76	360
7.76	7.90	356
7.10	7.76	323
7.54	7.92	364
7.73	8.01	373
7.73	8.01	373
8.21	8.11	374
6.75	7.53	377
7.12	7.90	383
6.30	7.51	327

	DO mg/L	pH	Conductivity ΦS/cm
May-10			
1	4.86	7.65	388
2	4.81	7.77	385
3	4.52	7.56	354
4	3.50	7.63	370
5	3.43	7.75	383
6	4.87	7.80	355
7	5.17	7.76	339
8	5.62	7.52	325
9	4.40	7.65	355
10	5.25	7.49	311
11	5.20	7.65	362
12	5.46	7.60	357
13	6.04	7.58	320
14	6.16	7.67	360
15	6.31	7.60	365
16	6.54	7.73	356
17	6.04	7.72	369
18	6.09	7.91	378
19	5.91	7.63	328
20	7.09	7.88	378
21	7.17	7.85	378
22	6.21	7.26	438
23	5.96	7.60	318

DO mg/L	pH	Conductivity ΦS/cm
6.84	7.74	366
6.80	7.80	356
6.27	7.76	372
6.90	7.60	333
6.49	7.61	365
6.49	7.81	335
6.73	7.81	334
6.74	7.75	318
6.23	7.72	338
6.71	7.63	333
6.62	7.38	334
6.77	7.48	367
6.44	7.86	366
6.57	7.87	362
6.91	7.56	329
7.00	8.01	363
6.79	7.75	362
7.13	7.88	351
6.87	7.88	371
7.92	7.54	332
7.95	7.93	399
6.94	7.47	324
6.38	7.78	312

	DO mg/L	pH	Conductivity ΦS/cm
Ambient Freshwater Quality Standard 2009	>5	7.0 - 8.4	150 - 600
24	6.74	7.16	327
25	6.82	7.87	357
26	6.41	7.85	293
27	6.48	7.80	318
28			
29	5.96	7.76	293
30	6.52	7.96	311

	DO mg/L	pH	Conductivity ΦS/cm
Jun-10			
1	7.47	7.81	338
2	6.57	7.89	317
3	6.31	7.92	343
4	8.01	7.93	307
5	7.01	7.99	330
6	7.04	8.08	333
7	7.14	8.01	336
8	7.18	8.14	311
9	7.45	8.01	348
10	7.23	8.15	348
11	7.59	7.87	349
12	6.69	8.37	350
13	8.08	8.25	324
14	7.61	8.11	361
15	7.51	8.13	324
16	8.20	8.14	353
17	7.24	8.19	351
18	7.91	7.97	325
19	7.37	8.16	325
20	7.12	8.20	339
21	7.24	7.97	318
22	6.64	8.09	255
23	7.05	8.17	324
24	7.97	7.97	369
25	7.16	8.21	348
26	7.01	8.09	343
27	6.74	8.16	342
28	7.19	8.38	345
29	7.91	8.21	355
30	8.08	8.30	355

DO mg/L	pH	Conductivity ΦS/cm
>5	7.0 - 8.4	150 - 600
7.73	7.93	324
6.97	8.36	320
7.43	8.05	254
7.05	8.12	322
7.37	8.08	281
7.48	8.15	307

DO mg/L	pH	Conductivity ΦS/cm
8.41	8.16	323
7.05	8.03	310
7.27	7.99	325
8.44	8.25	332
7.40	8.26	337
7.37	8.11	278
7.08	8.20	323
7.50	8.36	308
7.85	8.32	329
7.79	8.33	303
7.91	8.18	316
7.80	7.96	386
8.38	8.33	358
7.95	8.30	345
7.99	8.61	311
8.56	8.32	350
8.06	8.25	347
8.49	8.21	308
7.96	8.37	316
8.04	8.48	327
7.34	8.13	299
7.45	8.39	272
7.79	8.50	308
8.49	8.41	328
7.56	8.65	331
7.76	8.38	322
5.16	7.82	393
7.59	8.59	338
8.20	8.30	349
8.42	8.42	351

	DO mg/L	pH	Conductivity ΦS/cm
Ambient Freshwater Quality Standard 2009	>5	7.0 - 8.4	150 - 600
Jul-10	DO mg/L	pH	Conductivity ΦS/cm
1			
2			
3			
4			
5			
6			
7	7.76	8.10	364
8	8.03	8.28	357
9	8.21	8.25	362
10	8.12	8.24	361
11	8.08	8.27	368
12	6.41	8.11	359
13	8.03	8.48	363
14	8.02	8.31	360
15	7.41	7.91	339
16	8.14	8.24	366
17	6.97	8.33	362
18	7.15	8.22	366
19	8.11	8.35	360
20	7.96	8.20	338
21	7.96	8.15	366
22	7.56	8.22	349
23	7.88	8.07	304
24	8.41	8.22	335
25	7.84	7.99	362
26	8.46	8.17	348
27	8.44	8.21	348
28	8.13	8.25	348
29	8.27	8.02	351
30	7.64	8.31	356
31	7.79	8.34	319

Aug-10	DO mg/L	pH	Conductivity ΦS/cm
1	7.84	8.19	350
2	8.13	8.13	359
3	8.59	8.07	348
4	5.76	7.97	282
5	8.08	8.02	326
6	8.27	8.19	352

DO mg/L	pH	Conductivity ΦS/cm
>5	7.0 - 8.4	150 - 600
DO mg/L	pH	Conductivity ΦS/cm
7.86	8.42	369
8.23	8.27	357
8.51	8.38	352
7.82	8.39	350
8.20	8.43	350
8.61	8.26	350
8.16	8.29	351
8.14	8.39	352
8.07	8.24	356
8.35	8.39	323
7.26	8.42	351
7.37	8.31	322
8.02	8.37	346
8.18	8.39	324
8.12	8.45	339
8.13	8.38	335
8.26	8.33	293
8.75	8.40	320
8.16	8.02	401
8.86	8.33	338
8.94	8.42	336
8.49	8.25	343
9.17	8.19	338
9.08	8.46	346
8.04	8.48	280

DO mg/L	pH	Conductivity ΦS/cm
8.35	8.38	332
8.14	8.36	300
8.53	8.27	344
7.86	8.19	260
8.28	8.13	311
9.27	8.38	345

	DO mg/L	pH	Conductivity ΦS/cm
Ambient Freshwater Quality Standard 2009	>5	7.0 - 8.4	150 - 600
7	8.31	8.10	351
8			
9			
10			
11			
12			
13			
14			
15	7.73	8.23	345
16	7.54	8.09	359
17	7.71	8.17	333
18	6.73	8.22	316
19	7.35	8.42	300
20	7.29	8.11	326
21	7.14	8.04	299
22	7.82	8.23	345
23	8.09	7.99	345
24	7.21	8.09	343
25	8.03	7.94	370
26	6.88	7.84	348
27	6.80	7.52	330
28	7.35	8.14	351
29	7.32	8.16	353
30	6.74	8.19	317
31	7.25	8.24	340

DO mg/L	pH	Conductivity ΦS/cm
>5	7.0 - 8.4	150 - 600
9.30	8.21	342
8.14	8.44	326
8.23	8.38	359
8.07	8.38	324
7.35	8.44	324
8.10	8.49	300
8.21	7.96	380
7.47	7.80	335
8.18	8.47	333
8.43	8.23	339
7.66	8.34	341
8.72	8.16	354
8.06	8.28	337
7.22	8.19	337
7.96	8.32	333
7.83	8.31	336
7.36	8.22	309
7.57	8.41	332

Sep-10	DO mg/L	pH	Conductivity ΦS/cm
1	7.56	7.82	336
2	7.82	8.18	351
3	8.58	8.19	340
4	7.16	8.24	348
5	6.04	8.22	300
6	7.88	8.19	338
7	6.33	8.29	384
8	8.10	8.60	347
9	7.20	8.33	299
10	7.48	8.15	331
11	7.87	8.24	331
12	7.39	8.15	323
13	7.62	8.28	329
14	7.09	8.18	330

DO mg/L	pH	Conductivity ΦS/cm
7.72	8.30	337
8.29	8.23	337
8.77	8.28	336
7.41	8.33	338
7.20	8.34	310
8.26	8.12	350
8.16	8.36	339
7.90	8.22	318
7.98	8.50	315
8.01	8.17	314
8.26	8.26	330
7.94	8.36	316
7.98	8.46	319
7.93	8.25	328

	DO mg/L	pH	Conductivity ΦS/cm
Ambient Freshwater Quality Standard 2009	>5	7.0 - 8.4	150 - 600
15	7.68	8.10	350
16	7.46	7.99	338
17	7.33	8.00	349
18	7.44	8.03	344
19	7.83	8.15	333
20	7.92	8.06	334
21	7.06	8.07	271
22	7.12	8.11	311
23	7.17	8.16	340
24	7.30	8.31	349
25	7.82	8.06	350
26	6.94	8.18	340
27	7.45	8.71	334
28	7.63	8.12	298

	DO mg/L	pH	Conductivity ΦS/cm
Oct-10			
1			
2	6.61	8.50	240
3	6.22	8.10	289
4	6.52	8.23	312
5	6.21	8.08	322
6	-	-	-
7	6.64	7.88	337
8	6.53	8.33	342
9	6.21	8.00	325
10	6.87	8.22	313
11	6.15	8.04	336
12	6.29	8.18	344
13	7.63	7.73	340
14	7.16	8.14	350
15	6.77	8.12	316
16	6.61	8.05	327
17	5.79	8.04	301
18	6.49	7.98	317
19	6.89	8.07	336
20	6.18	8.20	323
21	6.77	8.23	338
22	7.05	8.21	352
23	7.56	8.09	358
24	7.03	8.16	364
25	6.23	8.08	342

DO mg/L	pH	Conductivity ΦS/cm
>5	7.0 - 8.4	150 - 600
8.20	7.79	340
7.88	8.20	350
7.75	8.40	366
8.07	7.99	367
8.16	8.23	335
8.28	8.36	326
8.23	8.33	267
7.26	9.29	300
7.76	8.21	339
7.43	8.45	341
8.19	8.24	345
7.34	8.41	331
7.64	8.94	329
8.04	8.11	307

DO mg/L	pH	Conductivity ΦS/cm
-	-	-
-	-	-
8.56	8.25	308
8.17	8.12	302
-	-	-
8.04	8.36	323
7.90	8.52	332
8.28	8.39	311
8.25	8.00	306
7.80	8.38	325
7.90	8.60	333
8.86	7.89	345
8.44	8.52	336
8.44	8.47	302
8.22	8.50	312
7.63	8.52	289
7.61	8.60	324
7.76	8.52	325
7.29	8.59	311
7.93	8.69	320
8.41	8.50	337
8.83	8.64	338
8.08	8.51	346
7.15	8.52	334

	DO mg/L	pH	Conductivity ΦS/cm
Ambient Freshwater Quality Standard 2009	>5	7.0 - 8.4	150 - 600
26	7.17	8.15	359
27	6.97	8.09	366
28	7.42	8.33	349
29	6.82	7.69	342
30	7.11	8.01	369
31	6.82	7.90	330

	DO mg/L	pH	Conductivity ΦS/cm
Nov-10			
1	7.72	7.63	326
2	8.04	7.77	299
3	7.59	7.89	359
4	6.88	7.91	357
5	8.03	7.98	304
6	7.06	8.11	297
7	7.53	7.80	340
8	7.14	7.86	352
9	7.95	7.96	355
10	7.79	7.78	356
11	7.11	7.85	355
12	8.08	7.90	358
13	7.64	7.89	355
14	7.72	7.93	359
15			
16			
17			
18			
19			
20			
21			
22	7.82	8.09	359
23	8.29	8.00	356
24	7.39	8.07	356
25	7.82	8.10	365
26	8.07	8.10	363
27	7.98	7.98	369
28	7.92	8.00	363
29	7.83	8.10	370
30	8.07	7.99	351

DO mg/L	pH	Conductivity ΦS/cm
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DO mg/L	pH	Conductivity ΦS/cm
>5	7.0 - 8.4	150 - 600
8.46	8.45	340
7.92	8.44	341
8.23	8.64	346
8.56	8.29	323
8.39	7.85	300
8.29	8.42	325

DO mg/L	pH	Conductivity ΦS/cm
8.73	8.23	314
8.33	8.17	323
8.32	8.17	328
7.74	8.26	349
8.39	8.32	344
7.81	8.08	292
8.44	8.34	328
8.07	8.25	351
8.27	8.34	349
8.24	8.25	344
7.83	7.70	347
8.86	8.13	362
7.83	8.16	353
8.11	7.83	382
8.54	8.32	350
9.07	7.99	346
8.18	8.13	354
8.24	7.99	409
8.53	8.03	354
8.46	8.19	347
8.06	7.94	350
8.46	8.01	359
8.36	8.12	350

DO mg/L	pH	Conductivity ΦS/cm
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	DO mg/L	pH	Conductivity ΦS/cm
Ambient Freshwater Quality Standard 2009	>5	7.0 - 8.4	150 - 600
Dec-10			
1	8.02	8.00	358
2	8.78	7.82	356
3	9.58	7.87	364
4			
5			
6	8.02	7.99	348
7	8.57	7.84	348
8	9.15	7.86	358
9	8.67	8.01	360
10	8.42	7.75	362
11	8.06	7.76	350
12	8.80	7.98	354
13			
14	7.72	7.77	358
15	7.88	7.89	332
16	8.03	7.86	355
17		7.74	351
18		7.70	339
19		7.64	380
20	7.42	7.92	363
21	8.12	7.83	348
22	7.47	7.86	336
23	8.29	7.66	348
24	7.87	7.88	365
25	-	-	-
26	-	-	-
27	8.31	7.83	360
28	8.74	8.01	365
29	8.57	7.99	360
30	8.76	7.89	355
31	8.48	7.85	360

	DO mg/L	pH	Conductivity ΦS/cm
Jan-11			
1	8.13	8.18	359
2	8.80	7.94	359
3	8.53	8.13	360
4	8.68	8.02	361
5	8.21	7.98	364
6	7.61	7.95	363
7	8.14	7.92	369

DO mg/L	pH	Conductivity ΦS/cm
>5	7.0 - 8.4	150 - 600
8.47	8.00	349
8.78	8.00	349
9.40	8.02	371
8.39	8.04	352
8.89	7.98	346
9.46	8.18	339
9.21	7.74	346
8.96	7.90	347
8.77	8.14	394
9.12	7.42	325
7.98	7.98	343
8.14	8.13	347
8.44	8.08	407
	8.09	348
	8.11	374
	7.94	390
7.31	8.14	347
8.47	7.82	330
8.03	7.82	349
8.86	8.30	350
8.14	7.88	355
-	-	-
-	-	-
8.87	8.02	347
9.17	8.23	347
9.03	8.05	345
9.14	7.99	350
7.91	7.62	414

DO mg/L	pH	Conductivity ΦS/cm
8.48	8.24	343
8.81	7.99	374
9.02	7.90	361
9.07	8.35	363
8.77	8.21	329
8.01	8.38	350
8.35	7.99	350

	DO mg/L	pH	Conductivity ΦS/cm
Ambient Freshwater Quality Standard 2009	>5	7.0 - 8.4	150 - 600
8	8.14	7.88	359
9	8.47	7.93	372
10	8.04	7.84	371
11	7.86	7.98	368
12	7.96	7.69	345
13	7.63	7.56	369
14	7.45	7.81	367
15	7.59	7.66	341
16	7.92	7.65	352
17	6.37	7.41	377
18	6.07	7.90	369
19	6.23	7.65	359
20	6.17	7.77	367
21	6.63	7.79	368
22	7.26	7.97	376
23	7.01	7.68	369
24			
25			
26			
27			
28			
29			
30			
31			

DO mg/L	pH	Conductivity ΦS/cm
>5	7.0 - 8.4	150 - 600
8.37	8.04	342
9.14	8.23	358
8.73	7.79	358
8.27	7.96	356
8.17	7.69	401
8.47	7.99	348
8.14	7.52	344
8.13	7.68	369
8.57	7.69	357
7.18	7.73	359
7.21	8.03	358
7.58	8.01	370
7.79	7.77	351
7.70	8.03	371
8.28	8.03	360
8.41	7.95	394

	DO mg/L	pH	Conductivity ΦS/cm
Feb-11			
1	5.88	7.74	372
2	5.33	8.04	380
3	5.07	7.97	375
4	6.11	7.85	376
5	6.17	7.78	378
6	5.27	7.64	376
7	5.41	7.45	376
8	6.87	7.74	374
9	6.02	7.80	375
10	6.02	7.94	380
11	5.98	7.60	378
12	5.49	7.60	363
13	5.81	7.68	388
14			
15			

DO mg/L	pH	Conductivity ΦS/cm
7.19	7.73	377
6.20	7.95	372
6.26	7.96	368
7.58	8.01	362
7.23	7.84	371
7.10	7.63	359
6.72	7.75	376
7.04	7.94	368
7.29	7.81	394
7.44	8.00	372
6.72	7.84	375
6.79	7.68	377
6.84	7.53	375

	DO mg/L	pH	Conductivity ΦS/cm
Ambient Freshwater Quality Standard 2009	>5	7.0 - 8.4	150 - 600
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			

DO mg/L	pH	Conductivity ΦS/cm
>5	7.0 - 8.4	150 - 600

APPENDIX 3

WATER QUALITY MONITORING PROGRAMME

Objective:

To monitor the water quality in the Black River during the construction activities for the modification of the intake at the Maggoty HPP and the replacement of the pentstock.

Scope:

1. Spatial

- 100 m above the intake works
- 100-200 m below the intake works
- The point at which the pipeline crosses the bridge (290)
- 100-200m below the tailrace

2. Frequency & Duration

Samples will be taken once every 2 weeks for the duration of construction.

3. Parameters

- pH
- Dissolved oxygen
- BOD
- TSS
- TDS
- Conductivity
- Temperature

Reporting:

Monthly reports will be submitted to NEPA three weeks after the end of the month that is the subject of the report.

APPENDIX 4

1. Letter granting permission to use land for staging area and title – Mr. Lee
2. Letter granting permission to use land for staging area and title – Mrs Cowan



6 Knutsford Boulevard, Kingston Jamaica, W.I.
Telephone: (876) 926-3150-9
Fax: (876) 511-2167
Website: www.jpco.com

May 10, 2011

Sweet Bakery Co. Ltd
P.O.Box 17
Maggotty P.O.
St. Elizabeth

Atten: Mr. Mark Lee

Dear Mr. Lee:

RE: Land Usage - 6.3MW Maggotty Hydro Project
Certificate of Title registered at Volume 1092 Folio 893

This serves to formally advise that Jamaica Public Service Company Limited (JPS) will be constructing a new hydro unit on the existing Maggotty Hydro Plant. The existing woodstave pipeline will be replaced with a new pipeline using the existing 'right of way'. At present, it is our intention to commence work in the first quarter of 2012.

We anticipate we will need access through your lands comprised in Certificate of Title registered at Volume 1092 Folio 893 to undertake the works on the construction of the pipeline and also small areas for the laying of equipment and material. Based on our current projections, we anticipate that we will be using approximately 10,000 square feet of your property over a period of approximately 14 months. Compensation for use of this area and any other additional areas will be negotiated and agreed on prior to start of construction. Consequently, we are formally seeking your permission to access the said works through your property and to temporarily lay down equipment and material necessary for construction. No material disruption in our use of your property is expected as the access will be largely to accommodate vehicular traffic and persons traversing the site, and the placement of equipment and material in an unutilized area.

At this time, we expect that we may have to undertake works to upgrade the existing access route which we intend to use. Any such works shall be at our cost. Upon completion of the works, we shall restore the areas of the property used by us to the condition it was in prior to our use of such lands should this be necessary.

DIRECTORS: HISATSUGU HIRAI (Chairman), CHRISTOPHER BERRY, RUSSELL HADEED, HON. CHARLES JOHNSTON, SEIJI KAWAMURA, HON. BEVERLEY LOPEZ, MASAYUKI OMOTO, JOHN RACHFORD, GLENFORD WATSON

Kindly indicate your agreement to the foregoing by signing and returning the copy letter enclosed herewith. Please also submit a copy of your duplicate Certificate of Title registered at Volume 1092 Folio 893.

Should you require any clarification, kindly contact the undersigned.

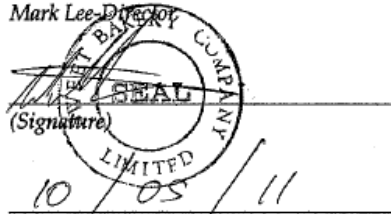
Yours truly
JAMAICA PUBLIC SERVICE COMPANY LIMITED



Clava Mantock
G. M., Business Support & Administration

PERMISSION GRANTED BY:

Mark Lee, Director



(Signature)

10 / 05 / 11
(Date)

Patrick Lee, Director



(Signature)

10 / 05 / 11
(Date)

DIRECTORS: HISATSUGU HIRAI (Chairman), CHRISTOPHER BERRY, RUSSELL HADEED, HON. CHARLES JOHNSTON, SEIJI KAWAMURA, HON. BEVERLEY LOPEZ, MASAYUKI OMOTO, JOHN RACHFORD, GLENFORD WATSON

REGISTER BOOK	FOLD
VOLUME	893
1092	



JAMAICA

A. 67925

Certificate of Title under the Registration of Titles Law, Chapter 340

REVVERS JAMAICA ALUMINA LIMITED

a Corporation existing under and by virtue of the Laws of the State of Maryland in the United States of America and having its place of business at Vauxhall, Maggotty in the Parish of Saint Elizabeth

is now the proprietor of an estate in fee simple subject to the incumbrances notified hereunder in ALL THOSE four Parcels of land parts of MAGGOTTY PEN in the Parish of SAINT ELIZABETH together containing by Survey Four Hundred and Eighteen Acres One Rood Thirty-six Perches and Seven-tenths of a Perch of the shapes and dimensions and butting as appear by the Sections numbered "1" to "4" on the Plan thereof hereto annexed.

DATED this eight day of February One Thousand Nine Hundred and Seventy-two.

Incumbrances above referred to:-

Transfer No. 471837 registered 9th of July 1968 to SWEET BAKERY COMPANY LIMITED at Maggotty, Maggotty Post Office, Saint Elizabeth consideration money Two Hundred and Seventy Five Thousand Dollars.

for Registrar of Titles.

Mortgage No. 489147 registered in duplicate 8th December, 1968 to THE BANK OF NOVA SCOTIA JAMAICA LIMITED at Scotiabank Centre, Duke and Port Royal Streets, Kingston, to secure the monies mentioned in the Mortgage, stamped to cover Two Hundred and Fifty Thousand Dollars with interest.

for Registrar of Titles.

Mortgage No. 645986 registered in duplicate on the 26th day of November, 1990 to THE BANK OF NOVA SCOTIA JAMAICA LIMITED at Scotiabank Centre, Duke and Port Royal Streets, Kingston to secure the monies mentioned in the Mortgage stamped to cover Two Hundred and Fifty Thousand Dollars with interest.

Discharge No. 849680 entered on 14th day of January, 1995 of Mortgages Nos. 489147 and 645986.

for Registrar of Titles.



6 Knutsford Boulevard, Kingston Jamaica, W.I.
Telephone: (876) 925-3150-9
Fax: (876) 511-2187
Website: www.jpco.com

May 10, 2011

Mrs. Evelyn E. Cowan
Breadnut Valley Farm
Cameron Hall District
Maggotty P.O.
St. Elizabeth

Dear Mrs. Cowan:

**RE: Land Usage - 6.3MW Maggotty Hydro Project-
Certificate of Title registered at Volume 1185 Folio 935**

This serves to formally advise that Jamaica Public Service Company Limited (JPS) will be constructing a new hydro unit on the existing Maggotty Hydro Plant. The existing woodstave pipeline will be replaced with a new pipeline using the existing 'right of way'. At present, it is our intention to commence work in the first quarter of 2012.

We anticipate that we will need access through your lands known as Breadnut Valley Farms comprised in Certificate of Title registered at Volume 1185 Folio 935 in the parish of Saint Elizabeth to undertake the works on the construction of the pipeline and also small areas for the laying of equipment and material. Based on our current projections, we anticipate that we will be using approximately 10,000 square feet of your property over a period of approximately 14 months. Compensation for use of this area and any other additional areas will be negotiated and agreed on prior to start of construction. Consequently, we are formally seeking your permission to access the said works through your property and to temporarily lay down equipment and material necessary for construction. No material disruption in the use of your property by the current occupants is expected as the access will be largely to accommodate vehicular traffic and persons traversing the site, and the placement of equipment and material in an unutilized area.

Upon completion of the works, we shall restore the areas of the property used by us to the condition it was in prior to our use of such lands should this be necessary.

DIRECTORS: HISATSUGU HIRAI (Chairman), CHRISTOPHER BERRY, RUSSELL HADEED, HON. CHARLES JOHNSTON, SEIJI KAWAMURA, HON. BEVERLEY LOPEZ, MASAYUKI OMOTO, JOHN RACHFORD, GLENFORD WATSON

Kindly indicate your agreement to the foregoing by signing and returning the copy letter enclosed herewith. Please also submit a copy of the duplicate Certificate of Title evidencing your proof of ownership of this property.

Should you require any clarification, kindly contact the undersigned.

Yours truly
JAMAICA PUBLIC SERVICE COMPANY LIMITED



Clava Mantock
G. M., Business Support & Administration

PERMISSION GRANTED BY:

EVELYN E. CORIAN
(Name)


(Signature)

10/5/2011
(Date)

DIRECTORS: HISATSUGU HIRAI (Chairman), CHRISTOPHER BERRY, RUSSELL HADEED, HON. CHARLES JOHNSTON, SEIJI KAWAMURA, HON. BEVERLEY LOPEZ, MASAYUKI OMOTO, JOHN RACHFORD, GLENFORD WATSON

VOLUME 1185 FOLIO 934

ERROL JOHN COWAN & EVELYN EUNICE COWAN



JAMAICA

Certificate of Title under the Registration of Titles Act

ERROL JOHN COWAN of Newton, Maggotty Post Office, in the parish of Saint Elizabeth, Civil servant and EVELYN EUNICE his wife are now the proprietors of an estate as Joint Tenants in fee simple subject to the incumbrances notified hereunder in ALL THOSE parcels of land parts of BREADNUT VALLEY in the parish of SAINT ELIZABETH together containing by survey seventy-nine Acres Eight Perches and Eight-tenths of a Perch of the shapes and dimensions putting as appear by the plan thereof hereunto annexed.

DATED this 26th day of September

One Thousand Nine Hundred and Eighty-eight

incumbrances above referred to:-

Actg

Dep. Registrar



Mortgage No. 438797 registered 5th of July 1985 to THE JAMAICA AGRICULTURAL DEVELOPMENT FOUNDATION at 43 Barlagosa, New Kingston.

APPENDIX 5 PROJECT SCHEDULE

