


 土木工程拓展署
 Civil Engineering and
 Development Department

Environmental Monitoring and Audit for Contaminated Mud Pit at Sha Chau (2009-2013) – Investigation Agreement No. CE 4/2009(EP)

Baseline Monitoring Report

2 September 2009

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Environmental Monitoring and Audit for Contaminated Mud Pit at Sha Chau (2009-2013) – Investigation

Baseline Monitoring Report

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Client: Civil Engineering and Development Department (CEDD)		Proposal No: 0103262			
Summary: This document presents the methodology and findings of the baseline monitoring for dredging activities for construction of CMP V at Sha Chau.		Date: 2 September 2009			
		Approved by:  <i>Dr Robin Kennish</i> Environmental Team Leader			
0	Baseline Monitoring Report	JT	CAR	RK	02/09/09
Revision	Description	By	Checked	Approved	Date
<p>This report has been prepared by Environmental Resources Management the trading name of 'ERM Hong-Kong, Limited', with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client.</p> <p>We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.</p> <p>This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.</p>		<p>Distribution</p> <p><input checked="" type="checkbox"/> Internal</p> <p><input checked="" type="checkbox"/> Public</p> <p><input type="checkbox"/> Confidential</p>			
		  			



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EXECUTIVE SUMMARY

The Hong Kong Civil Engineering and Development Department (CEDD) have commissioned ERM-Hong Kong, Ltd (ERM) to undertake baseline water quality monitoring for dredging activities prior to the commencement of construction works for Contaminated Mud Pit V (CMP V) at East of Sha Chau.

This Baseline Monitoring Report has been prepared in compliance with the Environmental Permit (EP-312/2008A) and the Environmental Monitoring and Audit Manual for the Disposal of Contaminated Sediment – Dredging, Management and Capping of Sediment Disposal Facility at Sha Chau.

Baseline water quality monitoring was conducted between 28 July and 23 August 2009 at eighteen designated monitoring stations established for the Project. The monitoring was carried out 3 days per week, at mid-flood and mid-ebb tides, at three depths (surface, middle and bottom), for 4 weeks prior to the commencement of dredging works. No major activities were noted during baseline monitoring. Water quality monitoring results are, therefore, representative of the baseline conditions for the Project.

Results have been used to determine Action and Limit Levels for the dissolved oxygen, suspended solids and turbidity for impact monitoring to be conducted during dredging activities for the Project.

The Hong Kong **Civil Engineering and Development Department** (CEDD) have commissioned **ERM-Hong Kong, Ltd** (ERM) supported by Mr Peter Whiteside (Independent Consultant), Halcrow China Ltd (HCL) and Professor Wen-Xiong Wang (Independent Auditor) of the Hong Kong University of Science and Technology (HKUST), to undertake the **Environmental Monitoring and Audit for Contaminated Mud Pit at Sha Chau (2009-2013) - Investigation** (hereafter referred as “the Study”). This Study, awarded under Agreement No. CE 4/2009 (EP), commenced on 8th July 2009.

1.1

BACKGROUND

Since December 1992, the East of Sha Chau area has been the site of a series of dredged contaminated mud pits (CMPs) designed to provide confined marine disposal capacity for contaminated mud arising from the HKSAR’s dredging and reclamation projects. The latest group of pits, CMP IVa, b & c began receiving contaminated mud from construction projects on 1 December 1997. CMP IVa was full by March 2000 (7.0 Mm³ of contaminated mud), CMP IVb was full by May 2002 (12.5 Mm³ of contaminated mud). CMP IVc is presently in operation for backfilling by contaminated sediments.

As required by the Environment Protection Department (EPD), an environmental monitoring and audit programme was carried out to monitor the operation of the CMP IV under the Project “Management and Capping of Contaminated Mud Pit IV at East of Sha Chau”. In this connection, an environmental monitoring and audit programme which encompassed water and sediment chemistry, fisheries assessment, tissue and whole body analysis, sediment toxicity and benthic recolonisation studies have been continuously carried out since the operation of CMP IV. A review of the collection and analysis of such environmental data from the monitoring programme demonstrated that there had not been any adverse environmental impacts resulting from disposal activities ⁽¹⁾.

Capacity to dispose of contaminated mud is currently predicted to be exhausted by 2010 with the completion of backfilling of CMP IVc at East of Sha Chau. When CMP IVc is full, a new environmentally acceptable disposal capacity for essential arisings will be required. A capacity of 8 Mm³ has been estimated as being needed to provide disposal capacity up to 2015. The assignment *Strategic Assessment and Site Selection Study for Contaminated Mud Disposal (Agreement CE 105/98)* recommended a Contained Aquatic Disposal facility (CAD - capped seabed pit such as those already used at East of Sha

(1) ERM - Hong Kong, Ltd (2002) Environmental Monitoring and Audit for Contaminated Mud Pit IV at East of Sha Chau. Final Report. For the Civil Engineering Department, Hong Kong SAR Government.

Chau) at Airport East ⁽¹⁾. The results and recommendations of CE 105/98 were presented to the Advisory Council on the Environment (ACE) on 23 July 2001 (ACE Paper 4/2001). The study recommended that an EIA be carried out.

The results of the EIA indicated that a series of four seabed pits be constructed at East of Sha Chau to meet continuing contaminated sediment demands ⁽²⁾ (*Figure 1.1*). This recommendation and the EIA supporting it were endorsed by ACE on 11 July 2005 and the EIA was subsequently approved by the Director of Environmental Protection (DEP) without conditions on 1 September 2005 (AEIAR-089/2005).

An Environmental Permit (EP-312/2008) for the Disposal of Contaminated Sediment – Dredging, Management and Capping of Sediment Disposal Facility at Sha Chau (hereafter referred as “the Project”) was issued by the Environmental Protection Department (EPD) to the CEDD, the Permit Holder, on 9 September 2008 and varied on 28 November 2008 (EP-312/2008/A).

Under the requirements of *Condition 3* of the EP (EP-312/2008), an EM&A programme as set out in the *Environmental Monitoring and Audit Manual (EM&A Manual)* is required to be implemented during construction and operational phases of the Project. In accordance with the *EM&A Manual*, baseline monitoring of water quality for dredging activities to form the new contaminated mud disposal facility (CMP V) is required for the Project.

1.2 **PURPOSE OF THE REPORT**

The purpose of this *Baseline Monitoring Report* is to present baseline marine water quality at the designated monitoring locations in the Project and reference areas prior to the commencement of marine dredging works. These levels will be used as the basis for compliance monitoring during dredging of four seabed pits for the new facility at Sha Chau. This report presents the monitoring requirements, methodologies and results of the baseline marine water quality measurements in accordance with the *EM&A Manual*.

1.3 **STRUCTURE OF THE REPORT**

The structure of the report is as follows:

Section 1 : Introduction

Details the background, purpose and structure of the report.

(1) ERM - Hong Kong, Ltd (1999) Strategic Assessment and Site Selection Study for Contaminated Mud Disposal. Final Report. For the Civil Engineering Department, Hong Kong SAR Government.

(2) ERM (2005) New Contaminated Mud Marine Disposal Facility at Airport East / East Sha Chau Area: EIA Report.(AEIAR-089/2005). Approved without conditions on 1 Sep 2005



KEY

 CAD PIT

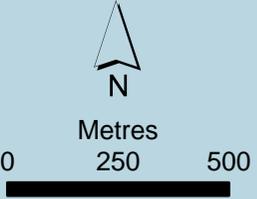


Figure 1.1

Layout for a Multi-Pit Contained Aquatic Disposal (CAD)
Facility in the East of Sha Chau Area

File: 0103262_layout.mxd
Date: 26/08/09

*Section 2 : **Baseline Water Quality Monitoring for Dredging Activities***

Summarises the water quality monitoring parameters, monitoring programme, monitoring methodology, monitoring frequency and monitoring locations.

*Section 3 : **Baseline Water Quality Monitoring Results***

Presents the monitoring results and establishes the Action and Limit Levels in accordance with the *EM&A Manual*.

*Section 4 : **Conclusions***

Concludes the representativeness of the baseline monitoring results and observations for the Project.

2 **BASELINE WATER QUALITY MONITORING FOR DREDGING ACTIVITIES**

The following Section provides details of methodology used in the baseline monitoring of water quality prior to the commencement of marine dredging works for the Project.

2.1 **MONITORING LOCATIONS**

In accordance with the *EM&A Manual*, water quality sampling was undertaken at monitoring stations in the vicinity of the new facility at Sha Chau and in reference areas (EPD Water Quality Monitoring Stations NM1, 2, 3, 5 and 6) prior to the commencement of marine dredging works. Locations of the baseline monitoring stations are shown in *Figure 2.1*. Co-ordinates of these monitoring stations are listed in *Table 2.1*.

Table 2.1 *Coordinates of Water Quality Monitoring Stations for Baseline Water Quality Monitoring for Dredging Activities*

Monitoring Stations	Eastings	Northings
Far Field Stations		
ESC-WFA	805787	827951
ESC-WFB	806066	816537
MW1	823604	823654
Near Field Stations		
ESC-WNAA	811830	822706
ESC-WNAB	810833	822965
ESC-WNAC	810235	822756
ESC-WNAD	809557	822527
ESC-WNBA	812767	821889
ESC-WNBB	811651	822278
ESC-WNBC	811043	822178
ESC-WNBD	810514	821919
Mid Field Stations		
ESC-WMB	814033	821082
ESC-WMA	809577	823922
Reference Stations		
NM1	820256	823214
NM2	816015	823686
NM3	812527	824049
NM5	807707	827244
NM6	807584	820286

2.2 **MONITORING PARAMETERS AND FREQUENCY**

Baseline water quality monitoring was conducted in accordance with the requirements stated in the *EM&A Manual*, which are presented below.

2.2.1 **Monitoring Parameters**

Parameters measured *in situ* were:

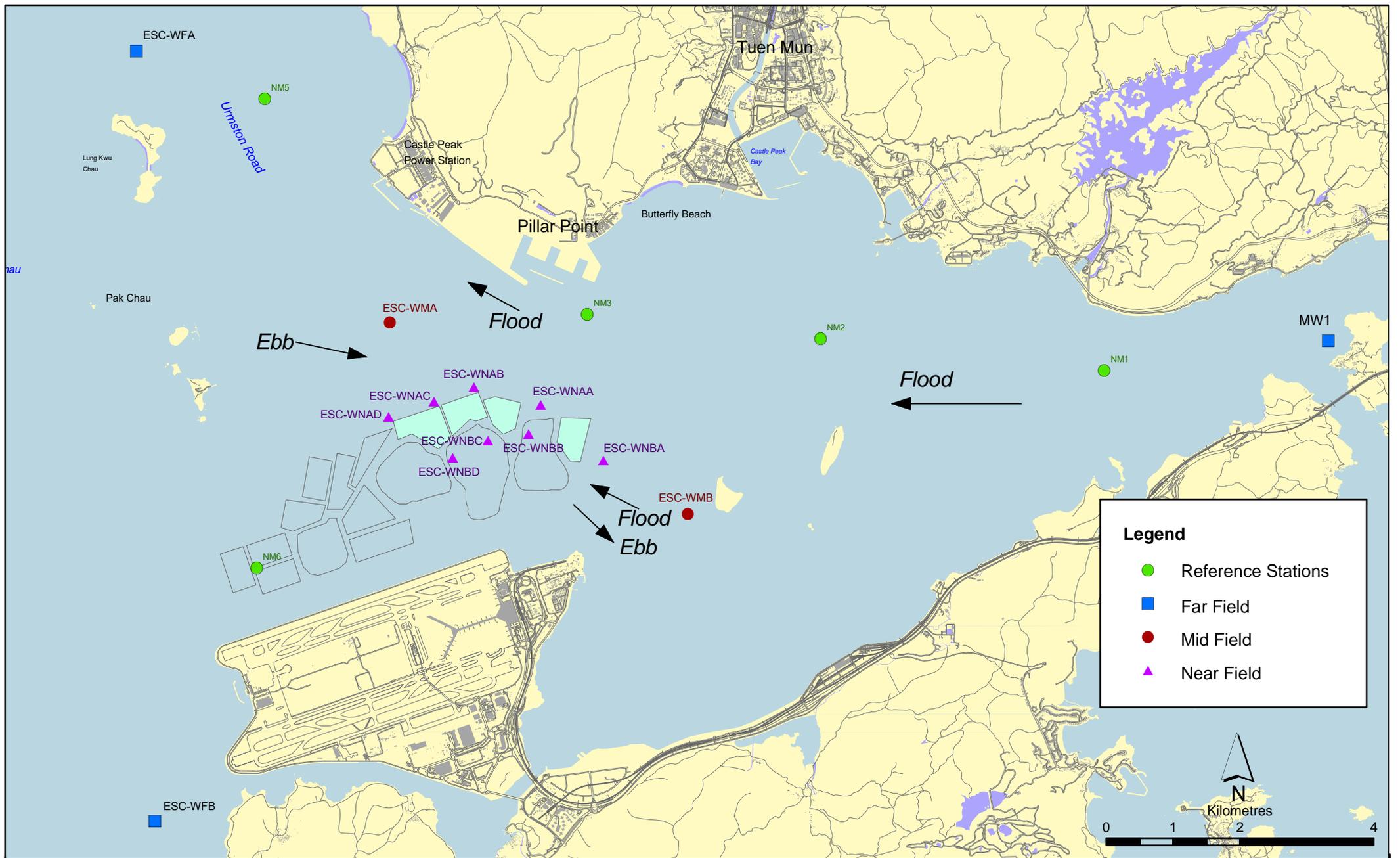


Figure 2.1

Baseline Water Quality Monitoring Stations for Dredging Activities

File: 0103262_Baseline WQMS.mxd
Date: 14/07/2009

Environmental
Resources
Management



- Dissolved Oxygen (mg L^{-1});
- Salinity (‰);
- pH;
- Turbidity (NTU);
- Temperature ($^{\circ}\text{C}$); and
- Current Velocity and Direction (ms^{-1}).

Parameters measured in the laboratory were:

- Suspended Solids (SS) (mg L^{-1});
- Ammonia (mg L^{-1});
- Nutrients (TIN mg L^{-1});
- 5-Day Biochemical Oxygen Demand (BOD_5);
- Cadmium (mg L^{-1});
- Chromium (mg L^{-1});
- Copper (mg L^{-1});
- Lead (mg L^{-1});
- Mercury (mg L^{-1});
- Nickel (mg L^{-1});
- Silver (mg L^{-1});
- Zinc (mg L^{-1}); and
- Arsenic (mg L^{-1}).

In addition to the water quality parameters, other relevant data were measured and recorded in field logs, including the location of the sampling stations, water depth, time, weather conditions, sea conditions, tidal state, special phenomena and work activities undertaken around the monitoring and works area that may influence the monitoring results.

2.2.2 *Monitoring Frequency*

Baseline water quality monitoring was carried out for four weeks, with the frequency of three days per week. The interval between two sets of monitoring was not less than 36 hours. *In situ* measurements and water samples were taken during mid-flood and mid-ebb tidal state on each sampling occasion.

2.3 MONITORING EQUIPMENT AND METHODOLOGY

2.3.1 Monitoring Equipment

Positioning Device

A Global Positioning System (GPS) was used (C-Nav globally corrected DGPS, GPS 84 datum) during monitoring to ensure the accurate recording of the position of the monitoring vessel before taking measurements. The instrument calibration was checked by recording a measured position at a previously coordinated location on shore.

Electronic data logging device

A data logging device capable of storing *in situ* measurement data was used. The device was able to read and store the output from all electronic meters used for this project and recorded time and location as measured by the GPS.

In situ Measurement Equipment

The instrument was a portable, weatherproof multi-parameter measuring instrument (YSI 6820) complete with cables, multi-probe sensor, comprehensive operation manuals, and was operable from a DC power source. It was capable of measuring:

- turbidity levels between 0-1000 NTU (response of the sensor was checked with certified standard turbidity solutions before the start of measurement);
- pH of 0 to 14 units with a resolution of 0.01 unit;
- dissolved oxygen levels in the range of 0 – 50 mg L⁻¹; and 0-500% saturation;
- temperature of -5 to 45 °C; and,
- salinity in the range of 0-40 ppt (checked with 30 ppt Salinity solutions before the start of the measurement).

Water Depth Gauge

An echo sounder mounted to the hull of the survey vessel was used to measure water depth.

Current Velocity

Sea water current velocity was measured using a Workhorse Acoustic Doppler Current Profiler (ADCP) manufactured by Teledyne RD Instruments. This instrument measured current speed and direction in 1 m vertical increments below the survey vessel, from just below the sea surface to just above the seabed.

Water Sampling Equipment

Water samples for suspended solids measurement were collected by the use of a multi-bottle water sampling system (General Oceanics Inc., Rosette Sampler ROS02), consisting of PVC bottles of more than two litres, which could be effectively sealed with cups at both ends. The water sampler had a positive latching system to keep it open and prevent premature closure until released by a messenger when the sampler was at the selected water depth.

2.3.2 Monitoring Methodology

Timing & Frequency

Water quality sampling was undertaken within a 3 hour window of 1.5 hours before and 1.5 hours after mid-flood and mid-ebb tides. Tidal range for flood and ebb tides was not be less than 0.5 m for capturing representative tides.

Reference were made to the predicted tides at Lok On Pai, which is the tidal station nearest to the Project site, published on the website of Hong Kong Observatory ⁽¹⁾. Based on the predicted water levels at Lok On Pai, the baseline water quality monitoring was conducted between 28 July and 23 August 2009, following the schedule presented in *Annex A*. It should be noted that on 4 August 2009, monitoring was completed for the mid-flood but not for the mid-ebb tidal window as the survey was suspended due to adverse weather conditions caused by the severe tropical storm Goni which led to issue of Strong Wind Signal No. 3 by the Hong Kong Observatory in the morning of the survey.

Duplicate samples were collected from each of the monitoring events for *in situ* measurements and laboratory analysis.

Depths

Each station was sampled and measurements were taken at three depths, 1 m below the sea surface, mid depth and 1 m above the sea bed. For stations that were less than 3 m in depth, only the mid depth sample was taken.

⁽¹⁾ Hong Kong Observatory (2009) <http://www.hko.gov.hk/tide/eWAGtide.htm>

Protocols

The multi-parameter measuring instruments (YSI 6820) were checked and calibrated by an HOKLAS accredited laboratory before use (see calibration reports in *Annex B*). Onsite calibration was also carried out to check the responses of sensors and electrodes using certified standard solutions before each use. Sufficient stocks of spare parts were maintained for replacements when necessary, and backup monitoring equipment was made available.

Water samples were collected in high density polythene bottles, packed in ice (cooled to 4° C without being frozen), and delivered to HOKLAS accredited laboratory as soon as possible after collection for immediate analysis.

Laboratory Analysis

All laboratory work was carried out by HOKLAS accredited laboratory. Water samples were collected at the monitoring and reference stations for carrying out the laboratory determinations. The determination work started within the next working day after collection of the water samples.

For SS analysis, the Quality Assurance / Quality Control (QA/QC) details were in accordance with requirements of HOKLAS or another internationally accredited scheme (details refer to *Annex C*).

3 **BASELINE WATER QUALITY MONITORING RESULTS**

3.1 **INTRODUCTION**

This Section presents the results of the baseline monitoring of water quality for dredging activities for the Project.

3.2 **WATER QUALITY MONITORING RESULTS**

Monitoring data and graphical presentations are summarised in *Annex D*. It should be noted that the laboratory analysis results for ammonia, nutrients (TIN), BOD₅, cadmium, chromium, copper, lead, mercury, nickel, silver, zinc and arsenic will be provided once the data are available.

No major activities influencing the water quality were identified during the monitoring period.

The Action and Limit Levels for DO, turbidity and SS were set in the *EM&A Manual* and the proposed Action and Limit Levels were determined as shown in *Table 3.1*.

The Action and Limit Levels of DO, turbidity and suspended solids are derived from the baseline monitoring data for all stations, and the results are presented in *Table 3.2*.

Table 3.1 *Determination of Action and Limit Level of Water Quality for Dredging Activities*

Parameter	Action Level	Limit Level
Dissolved Oxygen		
Surface and Middle Depth Averaged	The depth average of the impact station readings are <5%ile of baseline data	The average of the impact station readings are <4mg/L
	and	and
	Significantly less than the reference stations mean DO (at the same tide of the same day)	Significantly less than the reference stations mean DO (at the same tide of the same day)
Bottom	The average of the impact station readings are <5%ile of baseline data	The average of the impact station readings are <2mg/L
	and	and
	Significantly less than the reference stations mean DO (at the same tide of the same day)	Significantly less than the reference stations mean DO (at the same tide of the same day)
Suspended Solids		
Depth Averaged	The depth average of the impact station readings are >95%ile of baseline data	The depth average of the impact station readings are >99%ile of baseline data
	and	and
	120% or more of the reference stations SS (at the same tide of the same day)	130% or more of the reference stations SS (at the same tide of the same day)
Turbidity		
Depth Averaged	The depth average of the impact station readings are >95%ile of baseline data	The depth average of the impact station readings are >99% of baseline data
	and	and
	120% or more of the reference stations turbidity (at the same tide of the same day)	130% or more of the reference stations turbidity (at the same tide of the same day)

Table 3.2 Proposed Action and Limit Levels of Water Quality for Dredging Activities

Parameter	Action Level	Limit Level
Dissolved Oxygen (DO) ⁽¹⁾	<u>Surface and Mid-depth</u> ⁽²⁾ 5%-ile of baseline data for surface and middle layer = 3.76 mg L ⁻¹	<u>Surface and Mid-depth</u> ⁽²⁾ 1%-ile of baseline data for surface and middle layer = 3.11 mg L ⁻¹ ⁽³⁾
	and	and
	Significantly less than the reference stations mean DO (at the same tide of the same day)	Significantly less than the reference stations mean DO (at the same tide of the same day)
	<u>Bottom</u> 5%-ile of baseline data for bottom layers = 2.96 mg L ⁻¹	<u>Bottom</u> The average of the impact station readings are <2 mg/L
	and	and
	Significantly less than the reference stations mean DO (at the same tide of the same day)	Significantly less than the reference stations mean DO (at the same tide of the same day)
Depth-averaged Suspended Solids (SS) ^{(4) (5)}	95%-ile of baseline data for depth average = 37.88 mg L ⁻¹	99%-ile of baseline data for depth average = 61.92 mg L ⁻¹
	and	and
	120% of control station's SS at the same tide of the same day	130% of control station's SS at the same tide of the same day
Depth-averaged Turbidity (Tby) ^{(4) (5)}	95%-ile of baseline data = 28.14 NTU	99%-ile of baseline data = 38.32 NTU
	and	and
	120% of control station's Tby at the same tide of the same day	130% of control station's Tby at the same tide of the same day

Notes:

- (1) For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
- (2) The Action and Limit Levels for DO for Surface & Middle layers were calculated from the combined pool of baseline surface layer data and baseline middle layer data.
- (3) Given the Action Level for DO for Surface & Middle layers has already been lower than 4 mg L⁻¹, it is proposed to set the Limit Level at 3.11 mg L⁻¹ which is the first percentile of the baseline data.
- (4) "Depth-averaged" is calculated by taking the arithmetic means of reading of all three depths.
- (5) For turbidity and SS, non-compliance of the water quality limits occurs when monitoring result is higher than the limits.

CONCLUSION

Baseline water quality monitoring was conducted between 28 July and 23 August 2009 at eighteen designated monitoring stations established for the Project. The monitoring was carried out 3 days per week, at mid-flood and mid-ebb tides, at three depths (surface, middle and bottom), for 4 weeks prior to the commencement of dredging works. No major activities were noted during baseline monitoring. Water quality monitoring results are, therefore, representative of the baseline conditions for the Project.

Results have been used to determine Action and Limit Levels for the dissolved oxygen, suspended solids and turbidity for impact monitoring to be conducted during dredging of four seabed pits for the new facility at Sha Chau.

Annex A

Baseline Monitoring Schedule

**Environmental Monitoring and Audit for Contaminated Mud Pit at Sha Chau (2009-2013) - Investigation
Water Quality Baseline Monitoring Schedule - July 2009**

Reference Tidal Station: Lok On Pai (source: HK Observatory Department)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			01-Jul	02-Jul	03-Jul	04-Jul
05-Jul	06-Jul	07-Jul	08-Jul	09-Jul	10-Jul	11-Jul
12-Jul	13-Jul	14-Jul	15-Jul	16-Jul	17-Jul	18-Jul
19-Jul	20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul
26-Jul	27-Jul	28-Jul	29-Jul	30-Jul	31-Jul	
		Mid-Flood 11:34 Mid-Ebb 17:30		Mid-Flood 15:06 Mid-Ebb 19:43		
		Baseline Monitoring		Baseline Monitoring		

**Environmental Monitoring and Audit for Contaminated Mud Pit at Sha Chau (2009-2013) - Investigation
Water Quality Baseline Monitoring Schedule - August 2009**

Reference Tidal Station: Lok On Pai (source: HK Observatory Department)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						01-Aug
						Mid-Ebb 10:10 Mid-Flood 22:37
						Baseline Monitoring
02-Aug	03-Aug	04-Aug	05-Aug	06-Aug	07-Aug	08-Aug
		Mid-Flood 05:00 Mid-Ebb 12:17 (cancelled due to Strong Wind Signal No. 3)		Mid-Flood 06:28 Mid-Ebb 13:26		Mid-Flood 07:46 Mid-Ebb 14:25
		Baseline Monitoring		Baseline Monitoring		Baseline Monitoring
09-Aug	10-Aug	11-Aug	12-Aug	13-Aug	14-Aug	15-Aug
			Mid-Flood 10:41 Mid-Ebb 16:28		Mid-Flood 13:28 Mid-Ebb 18:21	
			Baseline Monitoring		Baseline Monitoring	
16-Aug	17-Aug	18-Aug	19-Aug	20-Aug	21-Aug	22-Aug
Mid-Ebb 09:10 Mid-Flood 21:48		Mid-Ebb 11:14 Mid-Flood 18:36			Mid-Flood 06:55 Mid-Ebb 13:41	
Baseline Monitoring		Baseline Monitoring			Baseline Monitoring	
23-Aug	24-Aug	25-Aug	26-Aug	27-Aug	28-Aug	29-Aug
Mid-Flood 08:35 Mid-Ebb 15:00						
Baseline Monitoring						
30-Aug	31-Aug					

Annex B

Calibration Reports of Multi-parameter Sensor



Form Name : **Temperature/Salinity Calibration Record**

Procedure Type **Calibration**
 Form No/Rev **En10R / 2**
 Date **19th September 2006**
 Approved by **REH**

CALIBRATION RECORD FOR TEMPERATURE/SALINITY SENSOR

Instrument model: **YSI** Calibration date **08 Jun 2009**
 Serial Number **02J0058-AC** EGS Instrument No **MPP17** Calibration Engineer **Ricky Wong**

Cal Thermometers	0-15 °C	15-30 °C	30-45 °C	Cal Salinometer	Ref A	Ref B	Cal A	Cal B
Thermoschneider	916265	919402	991335	ORTASAL 69470	0	0	0	0

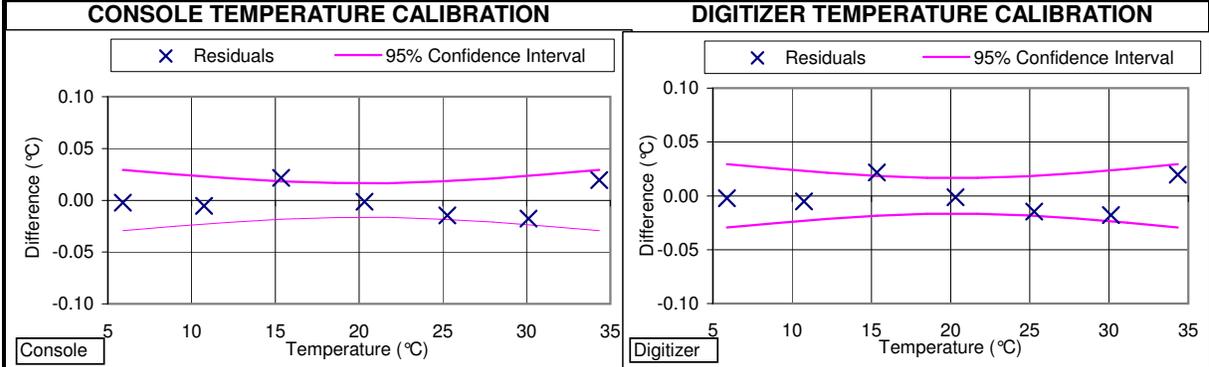
TEMPERATURE CALIBRATION

Console temperature calibration record (°C)

Reference	Console	Calculated	Residual				
5.89	10.74	15.34	20.32	25.27	30.11	34.33	
5.79	10.64	15.21	20.21	25.17	30.01	34.19	
5.892	10.745	15.318	20.321	25.285	30.128	34.310	
-0.002	-0.005	0.022	-0.001	-0.015	-0.018	0.020	

Digitizer temperature calibration record (°C)

Digitizer	Calculated	Residual				
5.79	10.64	15.21	20.21	25.17	30.01	34.19
5.892	10.745	15.318	20.321	25.285	30.128	34.310
-0.002	-0.005	0.022	-0.001	-0.015	-0.018	0.020



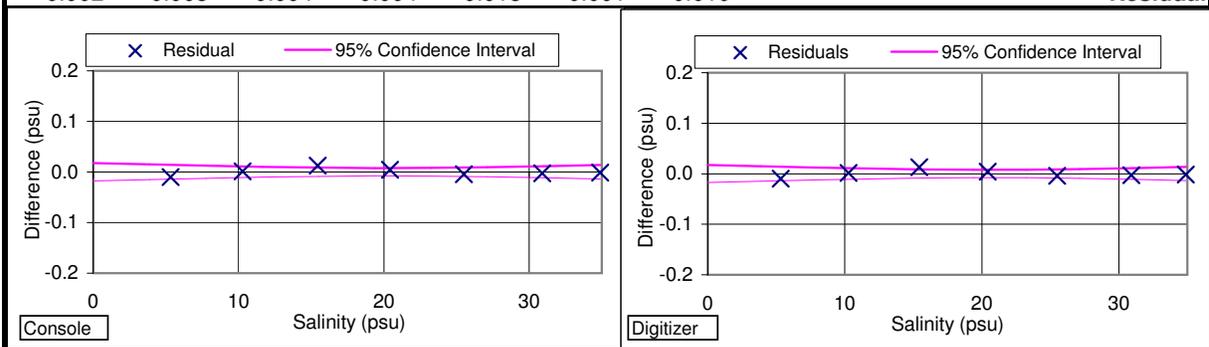
SALINITY CALIBRATION

Console salinity calibration record (psu)

Reference	Console	Calculated	Residual			
34.89	30.9	25.5	20.42	15.44	10.27	5.33
34.87	30.88	25.48	20.39	15.4	10.24	5.31
34.892	30.903	25.504	20.416	15.427	10.269	5.340
-0.002	-0.003	-0.004	0.004	0.013	0.001	-0.010

Digitizer salinity calibration record (psu)

Digitizer	Calculated	Residual				
34.87	30.88	25.48	20.39	15.4	10.24	5.31
34.892	30.903	25.504	20.416	15.427	10.269	5.340
-0.002	-0.003	-0.004	0.004	0.013	0.001	-0.010



CALIBRATION SUMMARY

	Temperature console	digitizer	Salinity console	Salinity digitizer
Calibration gradient, m	1.0006 ±0.0003	1.0006 ±0.0003	0.9997 ±0.0001	0.9997 ±0.0001
Calibration intercept, c	0.10 ±0.00	0.10 ±0.00	0.03 ±0.00	0.03 ±0.00
95% Confidence interval	0.029 °C	0.029 °C	0.017 psu	0.017 psu
PASS/FAIL CRITERION	0.1 PASS	0.1 PASS	0.2 PASS	0.2 PASS

Calibration Engineer: Ricky Wong (Geoscientist), Margie Chen (Senior Engineer), Anderson Leung (Senior Engineer)

EGS (ASIA) LIMITED

CALIBRATION RECORD FOR YSI SILTMETER

Job No : L13909	Pre-cal. X	Post-cal.	12Mth cal.
EGS No : MPP17	Model : YSI 6820-C-M	S/N :	02J0058-AC

SILTMETER CALIBRATION

Formazin Concentration (NTU)	Console Voltage (Volts)	Console Formazin Conc. (NTU)	Ratio=NTU/Console Reading
100		99.90	Not Used
90		89.50	1.006
80		79.00	1.013
70		69.10	1.013
60		59.30	1.012
50		48.70	1.027
40		38.80	Not Used
30		28.70	Not Used
20		19.00	Not Used
10		9.30	Not Used
0		0.00	Not Used

Mean Ratio, M : **1.014**
Standard Deviation of Ratio : **0.008**

Acceptance Criteria :

- i) $0.75 < \text{Mean Ratio} < 1.25$
- ii) $\text{Standard Deviation of Ratio} < 0.05$
- iii) $-2.5 \text{ NTU} < \text{Console Reading in Distilled Water} < 2.5 \text{ NTU}$

Calibration Equation : $M \times \text{Console Reading} + C$

$M = 1.014$ $C = 0.000$

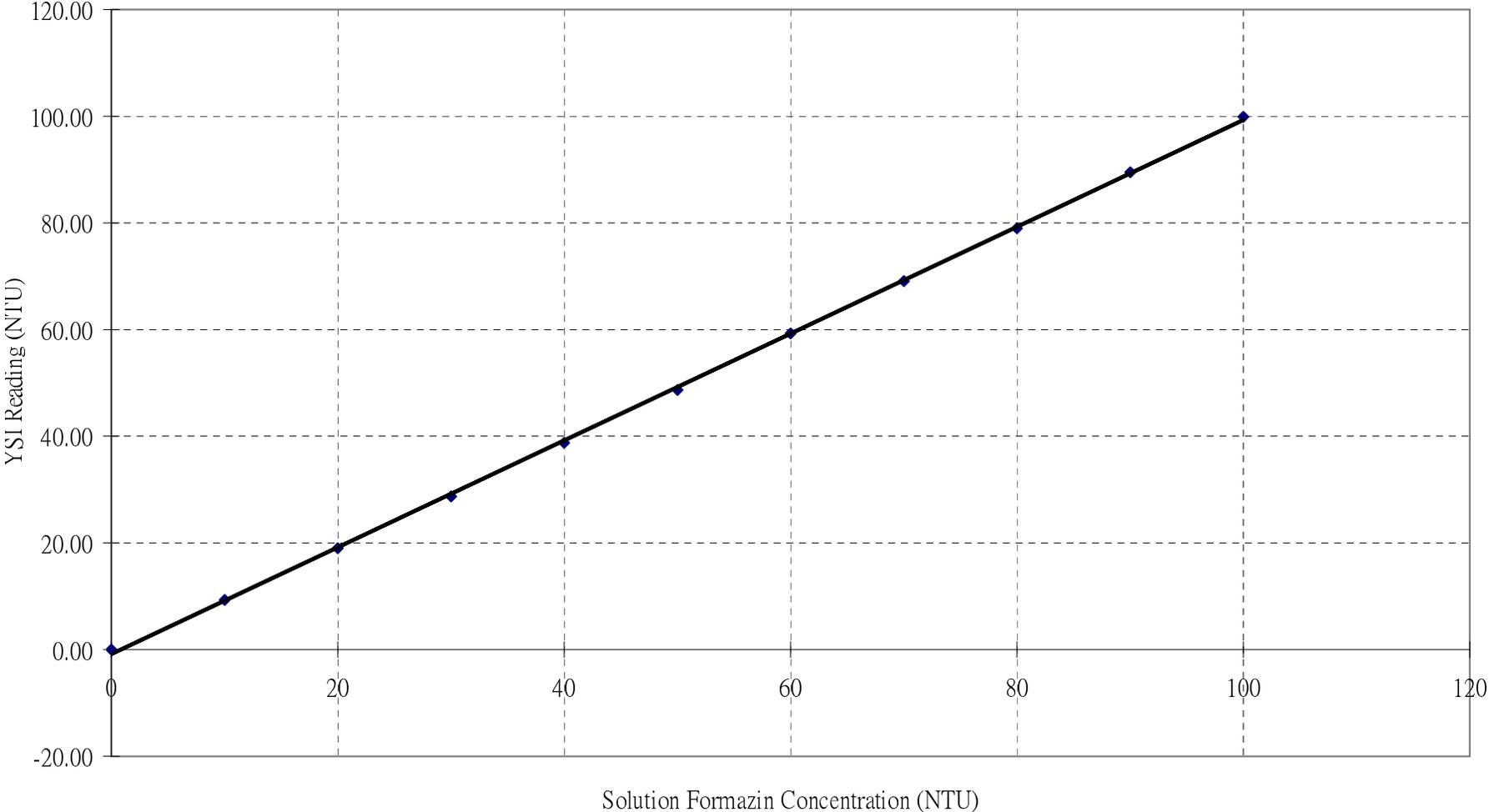
CALIBRATING ENGINEER : **Ricky Wong** Date : **8-Jun-09**

PLOT ACCEPTED BY GEOSCIENTIST : **Margie Chen** Date : **10-Jun-09**

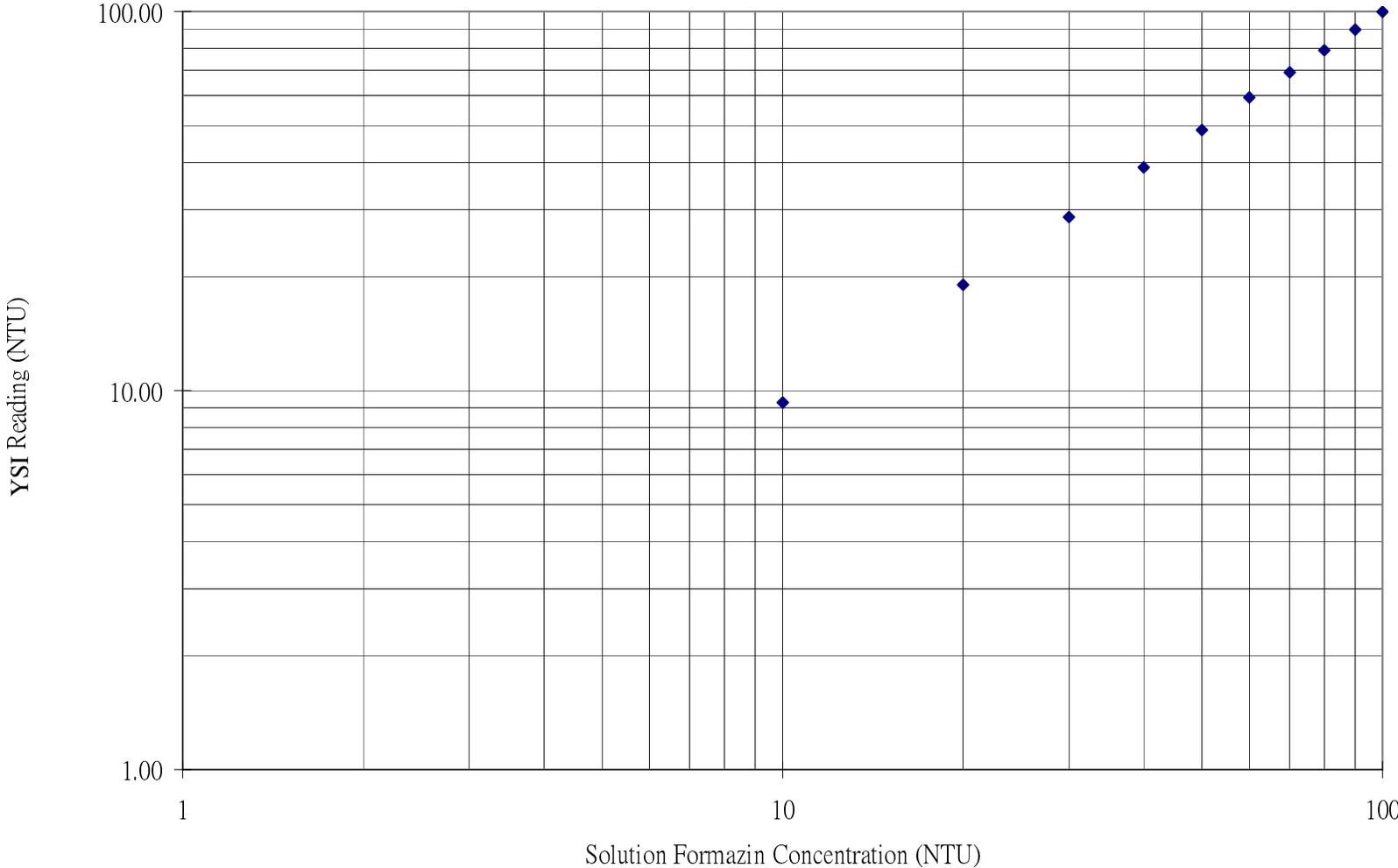
ACCEPTED BY SENIOR ENGINEER : **Anderson Leung** Date : **10-Jun-09**

CALIBRATION SCHEDULE UPDATED

Calibration Plot for YSI Siltmeter, EGS No:MPP17, 8-Jun-09



Calibration Plot for YSI Siltmeter, EGS No:MPP17, 8-Jun-09



YSI Siltmeter Regression Statistics

EGS No: MPP17
Date: 8-Jun-09

<i>Regression Statistics</i>	
Multiple R	0.99983197
R Square	0.99966397
Adjusted R Square	0.99962663
Standard Error	0.62244224
Observations	11

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	10373.19309	10373.193	26774.067	6.04727E-17
Residual	9	3.486909091	0.3874343		
Total	10	10376.68			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	1.14545455	0.351104776	3.2624294	0.0098006	0.351199756	1.939709335
X Variable 1	0.97109091	0.005934754	163.62783	6.047E-17	0.957665553	0.984516265



Form Name :
**Temperature/Salinity
 Calibration Record**

Procedure Type **Calibration**
 Form No/Rev **En10R / 2**
 Date **19th September 2006**
 Approved by **REH**

CALIBRATION RECORD FOR TEMPERATURE/SALINITY SENSOR

Instrument model: **YSI** Calibration date **08 Jun 2009**
 Serial Number **02J0998** EGS Instrument No **MPP19** Calibration Engineer **Ricky Wong**

Cal Thermometers	0-15 °C	15-30 °C	30-45 °C	Cal Salinometer	Ref A	Ref B	Cal A	Cal B
Thermoschneider	916265	909402	991335	ORTASAL 69470	0	0	0	0

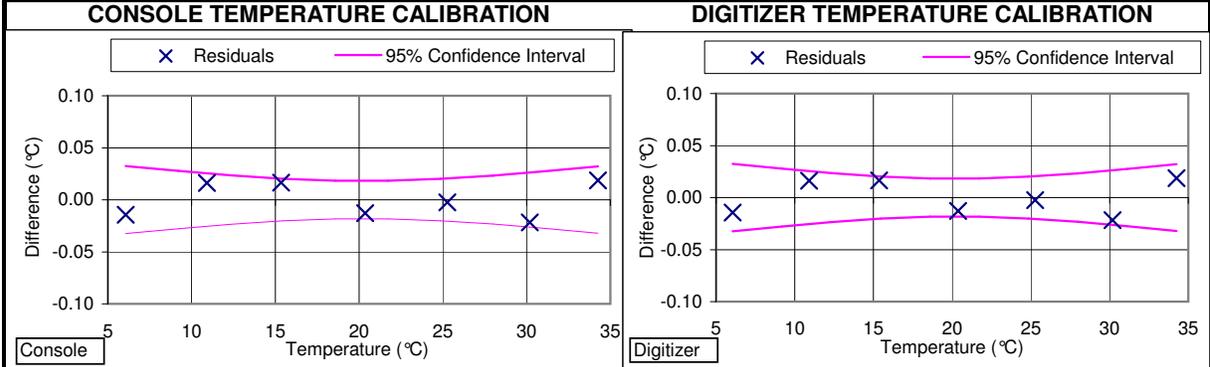
TEMPERATURE CALIBRATION

Console temperature calibration record (°C)

Reference	Console	Calculated	Residual				
6.06	10.91	15.35	20.37	25.27	30.19	34.25	
5.97	10.79	15.23	20.28	25.17	30.11	34.13	
6.074	10.894	15.333	20.383	25.272	30.212	34.231	
-0.014	0.016	0.017	-0.013	-0.002	-0.022	0.019	

Digitizer temperature calibration record (°C)

Digitizer	Calculated	Residual					
5.97	10.79	15.23	20.28	25.17	30.11	34.13	
6.074	10.894	15.333	20.383	25.272	30.212	34.231	
-0.014	0.016	0.017	-0.013	-0.002	-0.022	0.019	



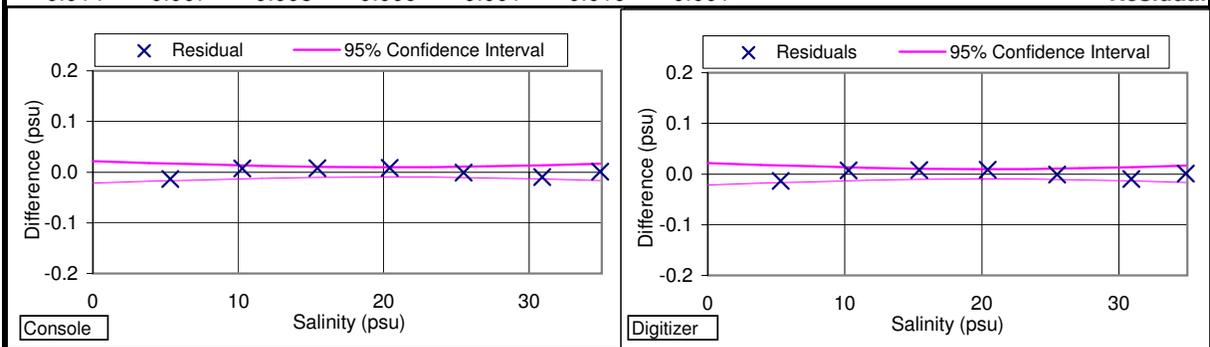
SALINITY CALIBRATION

Console salinity calibration record (psu)

Reference	Console	Calculated	Residual				
5.33	10.28	15.44	20.42	25.5	30.9	34.89	
5.33	10.26	15.42	20.4	25.49	30.9	34.88	
5.344	10.273	15.432	20.411	25.501	30.910	34.889	
-0.014	0.007	0.008	0.009	-0.001	-0.010	0.001	

Digitizer salinity calibration record (psu)

Digitizer	Calculated	Residual					
5.33	10.26	15.42	20.4	25.49	30.9	34.88	
5.344	10.273	15.432	20.411	25.501	30.910	34.889	
-0.014	0.007	0.008	0.009	-0.001	-0.010	0.001	



CALIBRATION SUMMARY

	Temperature console	digitizer	Salinity console	Salinity digitizer
Calibration gradient, m	0.9999 ±0.0003	0.9999 ±0.0003	0.9998 ±0.0002	0.9998 ±0.0002
Calibration intercept, c	0.10 ±0.00	0.10 ±0.00	0.01 ±0.00	0.01 ±0.00
95% Confidence interval	0.033 °C	0.033 °C	0.021 psu	0.021 psu
PASS/FAIL CRITERION	0.1 PASS	0.1 PASS	0.2 PASS	0.2 PASS

Calibration Engineer	Ricky Wong	Geoscientist	R E Hale	Senior Engineer	Anderson Leung
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EGS (ASIA) LIMITED

CALIBRATION RECORD FOR YSI SILTMETER

Job No : L13909	Pre-cal. X	Post-cal.	12Mth cal.
EGS No : MPP19	Model : YSI 6820-C-M	S/N :	02J0998

SILTMETER CALIBRATION

Formazin Concentration (NTU)	Console Voltage (Volts)	Console Formazin Conc. (NTU)	Ratio=NTU/Console Reading
100		100.00	Not Used
90		89.00	1.011
80		79.20	1.010
70		69.20	1.012
60		59.10	1.015
50		49.00	1.020
40		39.00	Not Used
30		28.60	Not Used
20		18.90	Not Used
10		9.50	Not Used
0		0.10	Not Used

Mean Ratio, M : **1.014**
Standard Deviation of Ratio : **0.004**

Acceptance Criteria :

- i) $0.75 < \text{Mean Ratio} < 1.25$
- ii) $\text{Standard Deviation of Ratio} < 0.05$
- iii) $-2.5 \text{ NTU} < \text{Console Reading in Distilled Water} < 2.5 \text{ NTU}$

Calibration Equation : $M \times \text{Console Reading} + C$

$M = \mathbf{1.014}$ $C = \mathbf{-0.100}$

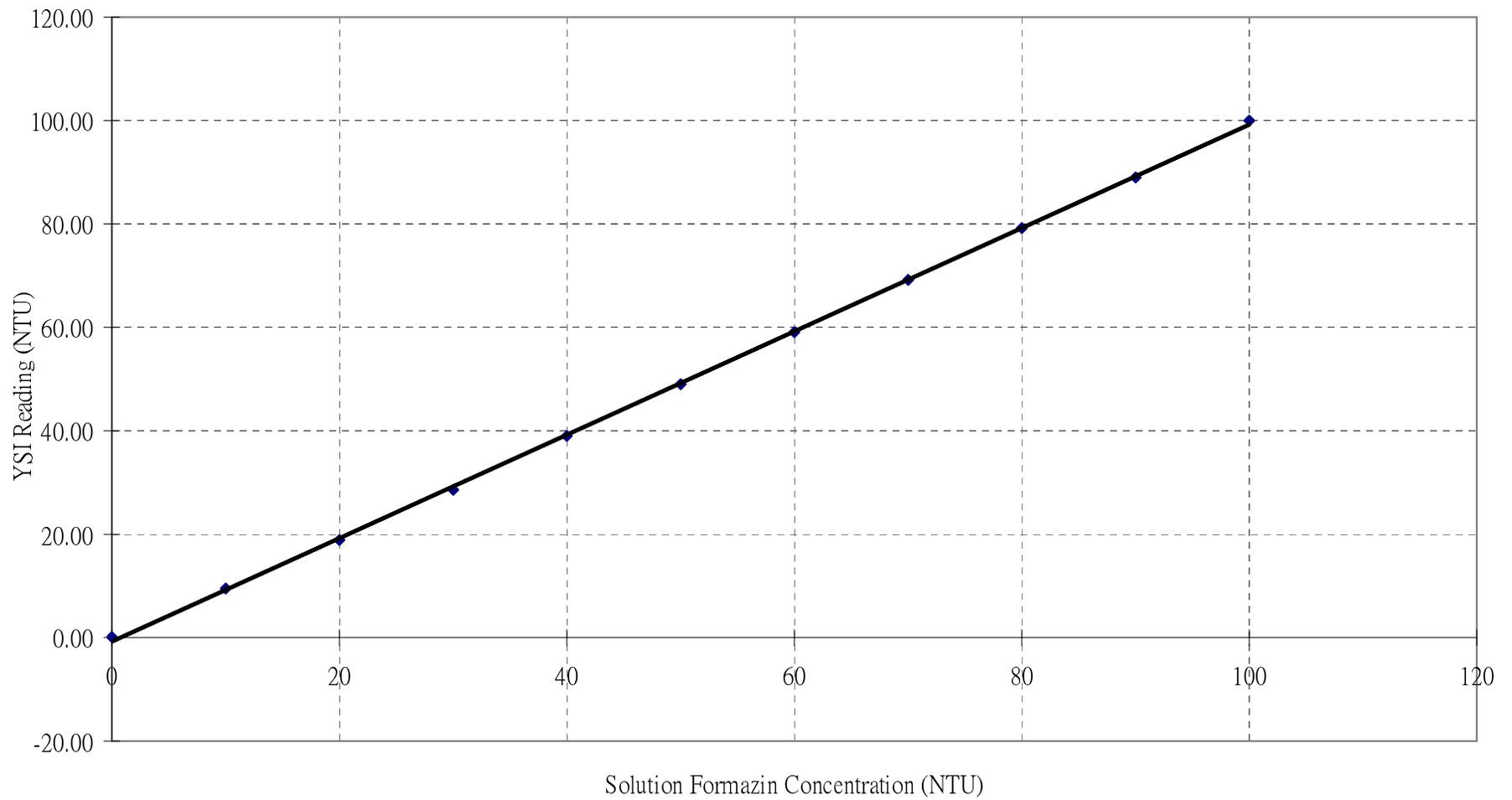
CALIBRATING ENGINEER : Ricky Wong Date : 9 June, 2009

PLOT ACCEPTED BY GEOSCIENTIST : R E Hale Date : 17 June, 2009

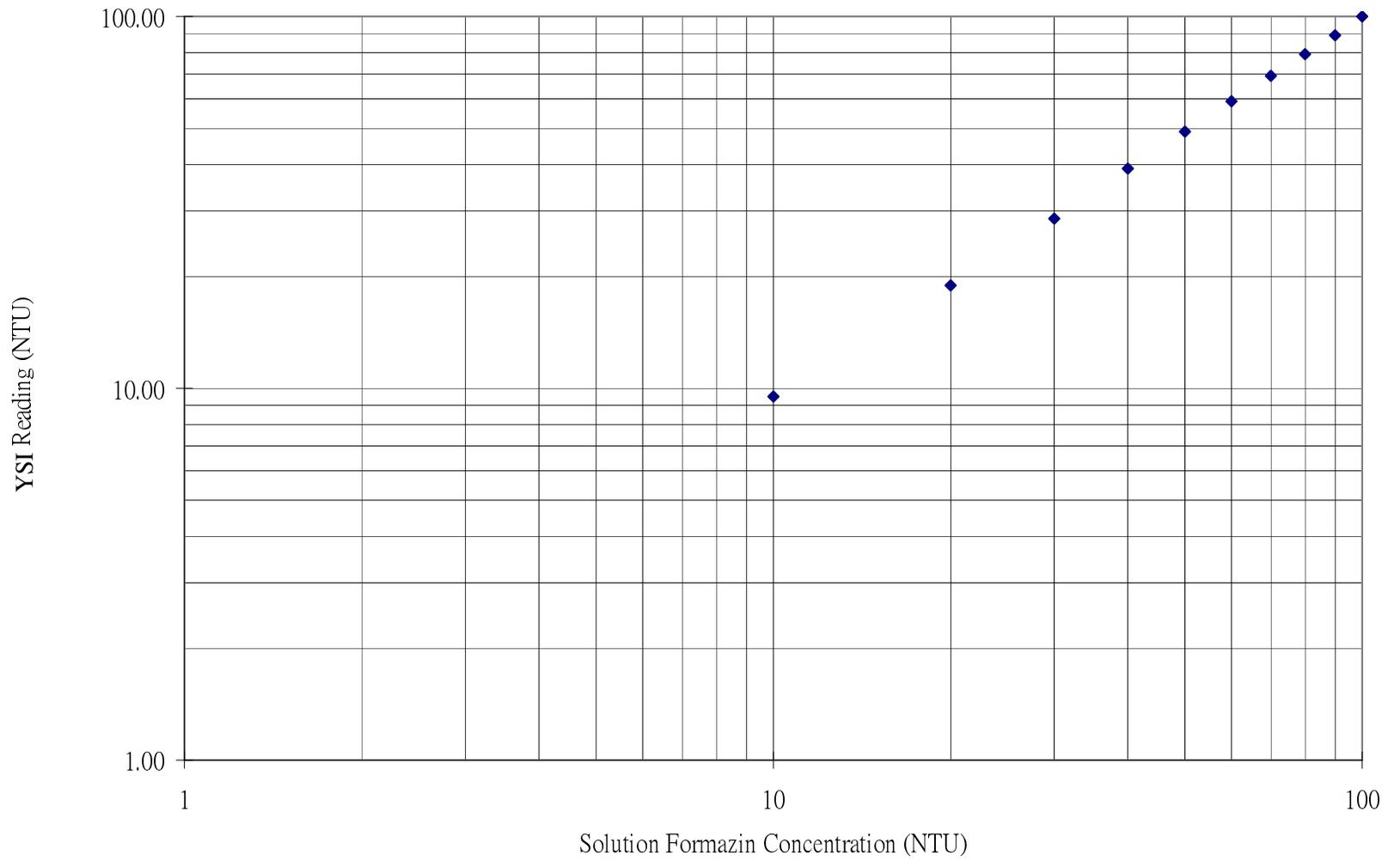
ACCEPTED BY SENIOR ENGINEER : Anderson Leung Date : 17 June, 2009

CALIBRATION SCHEDULE UPDATED

Calibration Plot for YSI Siltmeter, EGS No:MPP19, 9-Jun-09



Calibration Plot for YSI Siltmeter, EGS No:MPP19, 9-Jun-09



YSI Siltmeter Regression Statistics

EGS No: MPP19
Date: 9-Jun-09

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.99983197
R Square	0.99966397
Adjusted R Square	0.99962663
Standard Error	0.62244224
Observations	11

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	10373.19309	10373.193	26774.067	6.04727E-17
Residual	9	3.486909091	0.3874343		
Total	10	10376.68			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	1.14545455	0.351104776	3.2624294	0.0098006	0.351199756	1.939709335
X Variable 1	0.97109091	0.005934754	163.62783	6.047E-17	0.957665553	0.984516265

Annex C

QA/QC Results



Laboratory Duplicate (DUP) Report

Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 1059804)								
HK0915274-001	MW1/ ME / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	5	5	0.0
HK0915274-014	NM1/ ME /R2 /M	EA025: Suspended Solids (SS)	----	2	mg/L	7	7	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1059805)								
HK0915274-030	ESC-WMB/ ME / R1 / S	EA025: Suspended Solids (SS)	----	2	mg/L	8	7	0.0
HK0915274-046	ESC-WNAA/ ME / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	10	11	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1059807)								
HK0915274-059	ESC-WNBB/ ME /R2 /M	EA025: Suspended Solids (SS)	----	2	mg/L	6	6	0.0
HK0915274-075	ESC-WNBD/ ME / R1 / S	EA025: Suspended Solids (SS)	----	2	mg/L	8	8	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1059808)								
HK0915274-091	ESC-WNBC/ MF / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	9	9	0.0
HK0915274-104	ESC-WNBB/ MF /R2 /M	EA025: Suspended Solids (SS)	----	2	mg/L	11	11	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1059809)								
HK0915274-120	ESC-WNBA/ MF / R1 / S	EA025: Suspended Solids (SS)	----	2	mg/L	8	8	0.0
HK0915274-136	NM2/ MF / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	20	19	5.9
EA/ED: Physical and Aggregate Properties (QC Lot: 1059810)								
HK0915274-149	NM1/ MF /R2 /M	EA025: Suspended Solids (SS)	----	2	mg/L	4	4	0.0
HK0915274-165	NM3/ ME / R1 / S	EA025: Suspended Solids (SS)	----	2	mg/L	3	3	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1059811)								
HK0915274-181	ESC-WNAC/ ME / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	4	5	0.0
HK0915274-194	ESC-WNAD/ ME /R2 /M	EA025: Suspended Solids (SS)	----	2	mg/L	3	3	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1059812)								
HK0915274-210	NM5/ ME / R1 / S	EA025: Suspended Solids (SS)	----	2	mg/L	6	6	0.0
HK0915274-226	NM6/ ME / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	14	14	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1059813)								
HK0915274-239	ESC-WFB/ ME /R2 /M	EA025: Suspended Solids (SS)	----	2	mg/L	8	7	14.7
HK0915274-255	NM6/ MF / R1 / S	EA025: Suspended Solids (SS)	----	2	mg/L	4	4	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1059815)								
HK0915274-271	NM5/ MF / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	9	10	0.0
HK0915274-284	ESC-WMA/ MF /R2 /M	EA025: Suspended Solids (SS)	----	2	mg/L	7	7	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1059816)								
HK0915274-300	ESC-WNAC/ MF / R1 / S	EA025: Suspended Solids (SS)	----	2	mg/L	3	3	0.0
HK0915274-316	NM3/ MF / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	18	18	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062437)								
HK0915274-014	NM1/ ME /R2 /M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
HK0915274-029	ESC-WMB/ ME / R1 / M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062438)								
HK0915274-059	ESC-WNBB/ ME /R2 /M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.06	0.06	0.0
HK0915274-060	ESC-WNBB/ ME / R2 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0



Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062439)								
HK0915274-075	ESC-WNBD/ ME / R1 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
HK0915274-040	ESC-WNBA/ ME / R2 / B	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062440)								
HK0915274-101	ESC-WNBB/ MF / R1 / M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.13	0.13	0.0
HK0915274-120	ESC-WNBA/ MF / R1 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062441)								
HK0915274-137	NM2/ MF / R1 / M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.04	0.04	0.0
HK0915274-150	NM1/ MF / R2 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062442)								
HK0915274-303	ESC-WNAC/ MF / R2 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
HK0915274-166	NM3/ ME / R2 / B	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.02	0.02	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062443)								
HK0915274-182	ESC-WNAC/ ME / R1 / M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
HK0915274-195	ESC-WNAD/ ME / R2 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062444)								
HK0915274-211	NM5/ ME / R2 / B	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.06	0.06	0.0
HK0915274-227	NM6/ ME / R1 / M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.04	0.04	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062445)								
HK0915274-240	ESC-WFB/ ME / R2 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
HK0915274-253	NM6/ MF / R1 / B	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.02	0.02	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062446)								
HK0915274-267	ESC-WFA/ MF / R2 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.01	0.01	0.0
HK0915274-280	ESC-WMA/ MF / R1 / B	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.05	0.05	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062447)								
HK0915274-309	ESC-WNAB/ MF / R1 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
HK0915274-310	ESC-WNAB/ MF / R2 / B	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.02	0.02	0.0
EG: Metals and Major Cations (QC Lot: 1065072)								
HK0915274-002	MW1/ ME / R1 / M	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	5	6	17.1
		EG020: Lead	7439-92-1	1	µg/L	1	1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	4	4	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	2	2	0.0
EG020: Zinc	7440-66-6	4	µg/L	8	9	0.0		
EG: Metals and Major Cations (QC Lot: 1065077)								
HK0915274-022	NM2/ ME / R2 / B	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	<1	<1	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0



Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EG: Metals and Major Cations (QC Lot: 1065077) - Continued								
HK0915274-022	NM2/ ME / R2 / B	EG020: Nickel	7440-02-0	1	µg/L	<1	<1	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	<2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	<4	<4	0.0
EG: Metals and Major Cations (QC Lot: 1065082)								
HK0915274-042	ESC-WNBA/ ME / R2 / S	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	6	6	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	2	2	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Zinc	7440-66-6	4	µg/L	5	<4	0.0
EG: Metals and Major Cations (QC Lot: 1065083)								
HK0915274-062	ESC-WNBB/ ME /R3 /M	EG020: Zinc	7440-66-6	4	µg/L	9	9	0.0
EG: Metals and Major Cations (QC Lot: 1065093)								
HK0915274-082	ESC-WNBD/ MF / R1 / B	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	1.0	1.0	0.0
		EG020: Copper	7440-50-8	1	µg/L	<1	1	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	1	1	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Zinc	7440-66-6	4	µg/L	4	4	0.0
EG: Metals and Major Cations (QC Lot: 1065094)								
HK0915274-102	ESC-WNBB/ MF / R1 / S	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	33	35	5.9
		EG020: Lead	7439-92-1	1	µg/L	2	2	0.0
		EG020: Nickel	7440-02-0	1	µg/L	2	2	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	3	0.0
		EG020: Zinc	7440-66-6	4	µg/L	14	15	9.2
EG: Metals and Major Cations (QC Lot: 1065098)								
HK0915274-122	ESC-WNBA/ MF /R2 /M	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	4	5	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	2	2	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0



Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EG: Metals and Major Cations (QC Lot: 1065098) - Continued								
HK0915274-122	ESC-WNBA/ MF /R2 /M	EG020: Arsenic	7440-38-2	2	µg/L	<2	2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	4	5	0.0
EG: Metals and Major Cations (QC Lot: 1065099)								
HK0915274-142	NM2/ MF / R3 / B	EG020: Zinc	7440-66-6	4	µg/L	6	7	15.4
EG: Metals and Major Cations (QC Lot: 1065105)								
HK0915274-162	MW1/ MF / R3 / S	EG020: Zinc	7440-66-6	4	µg/L	10	12	18.2
EG: Metals and Major Cations (QC Lot: 1065106)								
HK0915274-182	ESC-WNAC/ ME / R1 / M	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	3	3	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	2	2	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	<2	0.0
EG020: Zinc	7440-66-6	4	µg/L	<4	<4	0.0		
EG: Metals and Major Cations (QC Lot: 1065107)								
HK0915274-202	ESC-WMA/ ME / R2 / B	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	2	2	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	1	1	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	<2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	4	4	0.0
EG: Metals and Major Cations (QC Lot: 1065108)								
HK0915274-222	ESC-WFA/ ME / R2 / S	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	3	3	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	4	4	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	2	2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	<4	<4	0.0
EG: Metals and Major Cations (QC Lot: 1065115)								
HK0915274-242	ESC-WFB/ ME /R3 /M	EG020: Zinc	7440-66-6	4	µg/L	7	7	0.0
EG: Metals and Major Cations (QC Lot: 1065116)								
HK0915274-262	ESC-WFA/ MF / R1 / B	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	4	4	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0



Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EG: Metals and Major Cations (QC Lot: 1065116) - Continued								
HK0915274-262	ESC-WFA/ MF / R1 / B	EG020: Nickel	7440-02-0	1	µg/L	3	3	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	<2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	7	7	0.0
EG: Metals and Major Cations (QC Lot: 1065118)								
HK0915274-282	ESC-WMA/ MF / R1 / S	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	2	2	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	3	3	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	<2	0.0
EG020: Zinc	7440-66-6	4	µg/L	<4	<4	0.0		
EG: Metals and Major Cations (QC Lot: 1065119)								
HK0915274-302	ESC-WNAC/ MF /R2 /M	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	14	15	0.0
		EG020: Lead	7439-92-1	1	µg/L	3	3	0.0
		EG020: Nickel	7440-02-0	1	µg/L	4	4	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	<2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	12	14	10.7
EG: Metals and Major Cations (QC Lot: 1065126)								
HK0915274-322	NM3/ MF / R3 / B	EG020: Zinc	7440-66-6	4	µg/L	16	16	0.0

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: WATER				Method Blank (MB) Report		Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report					
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentratio	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
						LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QC Lot: 1059804)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	108	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1059805)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	96.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1059807)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	105	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1059808)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	95.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1059809)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	99.0	----	85	115	----	----



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration n	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
						LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QC Lot: 1059810)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	106	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1059811)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	98.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1059812)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	102	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1059813)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	102	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1059815)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	108	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1059816)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	103	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062437)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	98.6	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062438)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	99.5	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062439)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	99.9	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062440)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	97.8	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062441)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	99.6	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062442)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	99.6	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062443)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	99.7	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062444)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	99.9	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062445)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	99.0	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062446)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	99.0	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062447)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	97.0	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1065072)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	96.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	91.6	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	92.0	----	85	115	----	----



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration n	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
						LCS	DCS	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1065072) - Continued											
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	88.0	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	94.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	87.0	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	87.5	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	85.0	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1065077)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	88.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	88.0	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	112	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	87.0	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	100	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	87.0	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	91.6	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	89.0	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1065082)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	88.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	88.0	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	88.0	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	88.0	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	100	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	95.0	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	95.6	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	89.0	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1065083)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	100	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	85.0	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	89.0	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	88.0	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	95.0	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	89.0	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	94.7	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	105	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1065093)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	98.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	88.0	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	87.0	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	89.0	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	95.0	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	89.0	----	85	115	----	----



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration <i>n</i>	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
						LCS	DCS	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1065093) - Continued											
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	94.6	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	89.0	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1065094)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	113	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	88.0	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	86.0	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	89.0	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	100	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	91.0	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	87.8	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	89.0	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1065098)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	105	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	98.1	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	100	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	104	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	94.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	97.0	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	88.4	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	104	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1065099)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	88.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	98.0	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	100	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	104	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	100	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	97.0	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	86.5	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	90.0	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1065105)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	88.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	98.0	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	100	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	104	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	99.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	97.0	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	89.7	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	100	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1065106)											



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration n	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
						LCS	DCS	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1065106) - Continued											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	89.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	98.0	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	110	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	90.0	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	95.0	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	110	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	87.3	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	110	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1065107)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	85.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	98.0	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	110	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	90.0	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	100	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	110	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	89.9	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	90.0	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1065108)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	89.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	98.0	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	110	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	90.0	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	99.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	110	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	94.3	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	90.0	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1065115)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	89.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	99.0	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	106	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	106	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	95.0	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	110	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	91.2	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	110	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1065116)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	105	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	103	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	106	----	85	115	----	----



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration n	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
						LCS	DCS	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1065116) - Continued											
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	106	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	100	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	114	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	86.7	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	110	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1065118)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	88.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	103	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	106	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	110	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	100	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	89.0	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	85.6	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	110	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1065119)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	89.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	99.0	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	102	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	110	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	90.0	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	107	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	91.6	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	110	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1065126)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	91.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	105	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	102	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	110	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	90.0	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	107	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	93.4	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	110	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060734)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	88.4	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060735)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	85.8	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060736)											



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration n	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
						LCS	DCS	Low	High	Value	Control Limit
EP: Aggregate Organics (QC Lot: 1060736) - Continued											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	88.4	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060737)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	87.9	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060738)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	86.4	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060739)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	89.9	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060740)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	87.9	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060741)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	89.9	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060742)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	89.9	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060743)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	90.9	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060744)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	88.4	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060745)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	90.4	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060746)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	95.4	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060747)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	86.4	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060748)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	90.4	----	85	115	----	----



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
						LCS	DCS	Low	High	Value	Control Limit
EP: Aggregate Organics (QC Lot: 1060749)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	90.4	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060750)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	89.9	----	85	115	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

Matrix: WATER					Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)		
					MS	MSD	Low	High	Value	Control Limit	
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062437)											
HK0915274-031	ESC-WMB/ ME / R2 / B	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	122	----	75	125	----	----	
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062438)											
HK0915274-060	ESC-WNBB/ ME / R2 / S	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	94.0	----	75	125	----	----	
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062439)											
HK0915274-075	ESC-WNBD/ ME / R1 / S	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	114	----	75	125	----	----	
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062440)											
HK0915274-109	ESC-WNAA/ MF / R1 / B	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	118	----	75	125	----	----	
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062441)											
HK0915274-122	ESC-WNBA/ MF /R2 /M	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	114	----	75	125	----	----	
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062442)											
HK0915274-138	NM2/ MF / R1 / S	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	124	----	75	125	----	----	
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062443)											
HK0915274-244	ESC-WFB/ MF / R1 / B	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	120	----	75	125	----	----	
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062444)											
HK0915274-167	NM3/ ME /R2 /M	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	118	----	75	125	----	----	
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062445)											
HK0915274-183	ESC-WNAC/ ME / R1 / S	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	104	----	75	125	----	----	
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062446)											
HK0915274-254	NM6/ MF / R1 / M	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	104	----	75	125	----	----	
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062447)											
HK0915274-281	ESC-WMA/ MF / R1 / M	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	118	----	75	125	----	----	
EG: Metals and Major Cations (QC Lot: 1065072)											
HK0915274-001	MW1/ ME / R1 / B	EG020: Arsenic	7440-38-2	10 µg/L	78.0	----	75	125	----	----	
		EG020: Cadmium	7440-43-9	10 µg/L	87.0	----	75	125	----	----	
		EG020: Copper	7440-50-8	10 µg/L	76.7	----	75	125	----	----	



Matrix: WATER				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1065072) - Continued										
HK0915274-001	MW1/ ME / R1 / B	EG020: Lead	7439-92-1	10 µg/L	77.0	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	97.5	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	87.0	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	89.6	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	87.0	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1065077)										
HK0915274-021	NM2/ ME / R1 / S	EG020: Arsenic	7440-38-2	10 µg/L	82.0	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	80.0	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	100	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	81.0	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	98.2	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	79.0	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	92.4	----	75	125	----	----
EG020: Zinc	7440-66-6	10 µg/L	79.0	----	75	125	----	----		
EG: Metals and Major Cations (QC Lot: 1065082)										
HK0915274-041	ESC-WNBA/ ME /R2 /M	EG020: Arsenic	7440-38-2	10 µg/L	83.8	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	80.0	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	92.0	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	89.0	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	95.4	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	77.0	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	94.2	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	81.1	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1065083)										
HK0915274-061	ESC-WNBB/ ME / R3 / B	EG020: Arsenic	7440-38-2	10 µg/L	80.0	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	80.0	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	105	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	80.0	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	98.5	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	98.0	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	93.8	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	115	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1065093)										
HK0915274-081	ESC-WNBD/ ME / R3 / S	EG020: Arsenic	7440-38-2	10 µg/L	80.0	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	80.0	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	99.0	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	80.0	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	100	----	75	125	----	----



Matrix: WATER				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1065093) - Continued										
HK0915274-081	ESC-WNBD/ ME / R3 / S	EG020: Nickel	7440-02-0	10 µg/L	98.0	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	87.1	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	100	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1065094)										
HK0915274-101	ESC-WNBB/ MF / R1 / M	EG020: Arsenic	7440-38-2	10 µg/L	106	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	87.0	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	99.0	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	99.0	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	95.0	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	88.6	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	83.6	----	75	125	----	----
EG020: Zinc	7440-66-6	10 µg/L	101	----	75	125	----	----		
EG: Metals and Major Cations (QC Lot: 1065098)										
HK0915274-121	ESC-WNBA/ MF / R2 / B	EG020: Arsenic	7440-38-2	10 µg/L	99.2	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	91.0	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	102	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	104	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	100	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	83.8	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	82.4	----	75	125	----	----
EG020: Zinc	7440-66-6	10 µg/L	104	----	75	125	----	----		
EG: Metals and Major Cations (QC Lot: 1065099)										
HK0915274-141	NM2/ MF / R2 / S	EG020: Arsenic	7440-38-2	10 µg/L	96.5	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	99.0	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	89.0	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	110	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	95.0	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	89.8	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	87.6	----	75	125	----	----
EG020: Zinc	7440-66-6	10 µg/L	111	----	75	125	----	----		
EG: Metals and Major Cations (QC Lot: 1065105)										
HK0915274-161	MW1/ MF /R3 /M	EG020: Arsenic	7440-38-2	10 µg/L	80.0	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	106	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	102	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	106	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	100	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	94.4	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	84.8	----	75	125	----	----



Matrix: WATER				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1065105) - Continued										
HK0915274-161	MW1/ MF /R3 /M	EG020: Zinc	7440-66-6	10 µg/L	114	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1065106)										
HK0915274-181	ESC-WNAC/ ME / R1 / B	EG020: Arsenic	7440-38-2	10 µg/L	84.5	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	99.0	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	108	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	110	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	95.0	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	100	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	81.4	----	75	125	----	----
EG020: Zinc	7440-66-6	10 µg/L	100	----	75	125	----	----		
EG: Metals and Major Cations (QC Lot: 1065107)										
HK0915274-201	ESC-WMA/ ME / R1 / S	EG020: Arsenic	7440-38-2	10 µg/L	92.5	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	108	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	101	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	120	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	95.0	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	99.0	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	91.5	----	75	125	----	----
EG020: Zinc	7440-66-6	10 µg/L	109	----	75	125	----	----		
EG: Metals and Major Cations (QC Lot: 1065108)										
HK0915274-221	ESC-WFA/ ME /R2 /M	EG020: Arsenic	7440-38-2	10 µg/L	85.3	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	120	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	103	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	120	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	95.0	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	83.1	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	91.8	----	75	125	----	----
EG020: Zinc	7440-66-6	10 µg/L	101	----	75	125	----	----		
EG: Metals and Major Cations (QC Lot: 1065115)										
HK0915274-241	ESC-WFB/ ME / R3 / B	EG020: Arsenic	7440-38-2	10 µg/L	100	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	103	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	83.4	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	99.0	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	100	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	98.0	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	90.5	----	75	125	----	----
EG020: Zinc	7440-66-6	10 µg/L	109	----	75	125	----	----		
EG: Metals and Major Cations (QC Lot: 1065116)										



Matrix: WATER				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1065116) - Continued										
HK0915274-261	NM6/ MF / R3 / S	EG020: Arsenic	7440-38-2	10 µg/L	90.0	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	106	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	85.0	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	100	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	100	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	113	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	84.6	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	86.0	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1065118)										
HK0915274-281	ESC-WMA/ MF / R1 / M	EG020: Arsenic	7440-38-2	10 µg/L	102	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	111	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	94.0	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	116	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	90.0	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	98.0	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	84.7	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	124	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1065119)										
HK0915274-301	ESC-WNAC/ MF / R2 / B	EG020: Arsenic	7440-38-2	10 µg/L	103	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	105	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	103	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	110	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	85.0	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	95.0	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	92.7	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	110	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1065126)										
HK0915274-321	NM3/ MF / R2 / S	EG020: Arsenic	7440-38-2	10 µg/L	93.4	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	111	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	100	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	113	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	100	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	100	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	89.7	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	120	----	75	125	----	----



Laboratory Duplicate (DUP) Report

Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 1058562)								
HK0915111-001	MW1/ ME / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	8	7	0.0
HK0915111-016	NM2/ ME / R1 / M	EA025: Suspended Solids (SS)	----	2	mg/L	6	6	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1058563)								
HK0915111-031	ESC-WNBA/ ME / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	7	7	0.0
HK0915111-046	ESC-WMB/ ME / R1 / S	EA025: Suspended Solids (SS)	----	2	mg/L	4	4	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1058564)								
HK0915111-061	ESC-WNBD/ ME / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	7	7	0.0
HK0915111-076	ESC-WNBC/ ME / R1 / S	EA025: Suspended Solids (SS)	----	2	mg/L	3	4	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1058565)								
HK0915111-091	ESC-WNBD/ MF / R1 / M	EA025: Suspended Solids (SS)	----	2	mg/L	8	9	0.0
HK0915111-106	ESC-WNBB/ MF / R1 / S	EA025: Suspended Solids (SS)	----	2	mg/L	6	6	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1058566)								
HK0915111-121	ESC-WNBA/ MF / R1 / M	EA025: Suspended Solids (SS)	----	2	mg/L	5	5	0.0
HK0915111-136	NM2/ MF / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	32	31	4.3
EA/ED: Physical and Aggregate Properties (QC Lot: 1058567)								
HK0915111-151	MW1/ MF / R1 / M	EA025: Suspended Solids (SS)	----	2	mg/L	5	5	0.0
HK0915111-166	ESC-WNAB/ ME / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	6	7	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1058568)								
HK0915111-181	NM3/ ME / R1 / S	EA025: Suspended Solids (SS)	----	2	mg/L	5	6	0.0
HK0915111-196	NM5/ ME / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	23	25	9.1
EA/ED: Physical and Aggregate Properties (QC Lot: 1058570)								
HK0915111-211	ESC-WMA/ ME / R1 / S	EA025: Suspended Solids (SS)	----	2	mg/L	6	6	0.0
HK0915111-226	ESC-WFA/ ME/ R1 /M	EA025: Suspended Solids (SS)	----	2	mg/L	10	9	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1058571)								
HK0915111-241	ESC-WFB/ ME / R1 / S	EA025: Suspended Solids (SS)	----	2	mg/L	7	7	0.0
HK0915111-256	NM6/ MF / R1 / M	EA025: Suspended Solids (SS)	----	2	mg/L	10	11	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1058574)								
HK0915111-271	NM5/ MF / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	14	13	0.0
HK0915111-286	ESC-WNAD/ MF / R1 / M	EA025: Suspended Solids (SS)	----	2	mg/L	8	8	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1058575)								
HK0915111-301	ESC-WNAB/ MF / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	18	18	0.0
HK0915111-316	ESC-WNAC/ MF / R1 / S	EA025: Suspended Solids (SS)	----	2	mg/L	6	6	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058843)								
HK0915111-010	MW1/ ME / R1 / M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.02	0.02	0.0
HK0915111-040	ESC-WNBA/ ME /R1 /M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.01	0.01	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058844)								
HK0915111-020	MW1/ ME / R2 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
HK0915111-050	ESC-WNBA/ ME / R2 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0



Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058845)								
HK0915111-070	ESC-WNBD/ ME /R1 /M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.02	0.02	0.0
HK0915111-080	ESC-WNBD/ ME / R2 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058846)								
HK0915111-100	ESC-WNBD/ MF / R1 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
HK0915111-110	ESC-WNAA/ MF / R2 / B	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.05	0.05	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058847)								
HK0915111-230	NM6/ ME / R2 / M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
HK0915111-140	NM1/ MF / R2 / B	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.04	0.04	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058848)								
HK0915111-160	MW1/ MF / R1 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.03	0.03	0.0
HK0915111-170	ESC-WNAC/ ME / R2 / B	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.05	0.05	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058849)								
HK0915111-190	ESC-WNAD/ ME / R1 / B	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.04	0.04	0.0
HK0915111-200	ESC-WNAD/ ME / R2 / M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.02	0.02	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058850)								
HK0915111-220	NM6/ ME / R1 / B	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
HK0915111-250	ESC-WFA/ MF / R1 / B	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.07	0.07	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058851)								
HK0915111-260	ESC-WFA/ MF/ R2 / M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.03	0.03	0.0
HK0915111-130	ESC-WNBA/ MF / R1 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.02	0.02	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058852)								
HK0915111-280	NM5/ MF / R1 / M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.03	0.03	0.0
HK0915111-290	NM5/ MF / R2 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.03	0.03	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058853)								
HK0915111-310	ESC-WNAB/ MF / R1 / M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.04	0.04	0.0
HK0915111-320	ESC-WNAB/ MF / R2 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
EG: Metals and Major Cations (QC Lot: 1062449)								
HK0915111-002	MW1/ ME / R2 / B	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	<1	<1	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	2	2	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	2	2	0.0
EG020: Zinc	7440-66-6	4	µg/L	38	38	0.0		
EG: Metals and Major Cations (QC Lot: 1062450)								
HK0915111-022	NM1/ ME / R1 / S	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	32	30	6.4
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0



Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EG: Metals and Major Cations (QC Lot: 1062450) - Continued								
HK0915111-022	NM1/ ME / R1 / S	EG020: Nickel	7440-02-0	1	µg/L	2	2	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	2	2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	36	36	0.0
EG: Metals and Major Cations (QC Lot: 1062451)								
HK0915111-042	ESC-WNBA/ ME/ R3 /M	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	12	9	24.8
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	2	2	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	<2	0.0
EG020: Zinc	7440-66-6	4	µg/L	13	14	8.5		
EG: Metals and Major Cations (QC Lot: 1062452)								
HK0915111-062	ESC-WNBD/ ME / R2 / B	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	<1	1	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	2	2	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	<2	0.0
EG020: Zinc	7440-66-6	4	µg/L	30	33	9.5		
EG: Metals and Major Cations (QC Lot: 1062455)								
HK0915111-082	ESC-WNBD/ MF / R1 / B	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	2	1	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	2	2	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	<2	0.0
EG020: Zinc	7440-66-6	4	µg/L	23	19	19.0		
EG: Metals and Major Cations (QC Lot: 1062456)								
HK0915111-102	ESC-WNBD/ MF / R3 / S	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	2	1	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	3	3	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	<2	0.0
EG020: Zinc	7440-66-6	4	µg/L	22	26	16.7		



Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EG: Metals and Major Cations (QC Lot: 1062457)								
HK0915111-122	ESC-WNBA/ MF /R2 /M	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	1	1	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	3	3	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	2	2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	30	28	7.2
EG: Metals and Major Cations (QC Lot: 1062458)								
HK0915111-142	MW1/ MF / R1 / B	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	<1	<1	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	2	2	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	<2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	24	26	8.0
EG: Metals and Major Cations (QC Lot: 1062460)								
HK0915111-162	MW1/ MF / R3 / S	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	2	1	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	3	3	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	<2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	18	18	0.0
EG: Metals and Major Cations (QC Lot: 1062461)								
HK0915111-182	NM3/ ME / R2 / S	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	2	2	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	3	3	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	<2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	36	37	2.7
EG: Metals and Major Cations (QC Lot: 1062465)								
HK0915111-202	ESC-WMA/ ME/ R1 /M	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	3	3	0.0
		EG020: Lead	7439-92-1	1	µg/L	3	3	0.0



Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EG: Metals and Major Cations (QC Lot: 1062465) - Continued								
HK0915111-202	ESC-WMA/ ME/ R1 /M	EG020: Nickel	7440-02-0	1	µg/L	3	3	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	2	2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	42	42	0.0
EG: Metals and Major Cations (QC Lot: 1062466)								
HK0915111-222	NM6/ ME / R3 / B	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	2	2	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	2	2	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	<2	0.0
EG020: Zinc	7440-66-6	4	µg/L	30	31	3.3		
EG: Metals and Major Cations (QC Lot: 1062467)								
HK0915111-242	ESC-WFB/ ME / R2 / S	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	3	2	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	2	2	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	2	0.0
EG020: Zinc	7440-66-6	4	µg/L	29	27	7.1		
EG: Metals and Major Cations (QC Lot: 1062468)								
HK0915111-262	ESC-WFB/ MF / R1 / S	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	2	2	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	2	2	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	<2	0.0
EG020: Zinc	7440-66-6	4	µg/L	24	20	18.2		
EG: Metals and Major Cations (QC Lot: 1062469)								
HK0915111-282	NM5/ MF / R3 / M	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	8	9	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	4	4	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	<2	0.0
EG020: Zinc	7440-66-6	4	µg/L	48	48	0.0		



Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EG: Metals and Major Cations (QC Lot: 1062471)								
HK0915111-302	ESC-WNAB/ MF / R2 / B	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	3	3	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	3	3	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	33	29	12.9
EG: Metals and Major Cations (QC Lot: 1062473)								
HK0915111-322	NM3/ MF / R1 / S	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	4	4	0.0
		EG020: Lead	7439-92-1	1	µg/L	1	1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	3	3	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	2	<2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	20	18	10.5

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentratio	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
						LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QC Lot: 1058562)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	102	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1058563)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	94.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1058564)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	90.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1058565)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	91.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1058566)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	102	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1058567)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	97.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1058568)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	104	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1058570)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	106	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1058571)											



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration n	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
						LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QC Lot: 1058571) - Continued											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	94.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1058574)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	102	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1058575)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	94.0	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058843)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	94.2	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058844)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	98.6	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058845)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	98.4	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058846)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	93.0	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058847)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	95.0	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058848)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	98.8	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058849)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	102	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058850)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	106	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058851)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	102	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058852)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	102	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058853)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	97.0	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1062449)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	87.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	99.9	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	100	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	99.8	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	105	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	98.8	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	95.4	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	99.7	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1062450)											



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration <i>n</i>	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
						LCS	DCS	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1062450) - Continued											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	89.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	97.4	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	92.3	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	97.4	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	86.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	94.4	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	93.4	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	100	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1062451)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	89.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	102	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	101	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	103	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	91.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	103	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	90.4	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	100	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1062452)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	87.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	98.0	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	91.0	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	103	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	91.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	97.0	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	87.5	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	108	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1062455)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	87.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	90.0	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	91.0	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	95.4	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	91.0	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	95.0	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	91.3	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	87.0	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1062456)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	87.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	89.0	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	87.0	----	85	115	----	----



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
		LOR	Unit	Result	Spike Concentration n	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
Method: Compound	CAS Number					LCS	DCS	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1062456) - Continued											
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	95.0	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	91.0	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	86.0	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	90.5	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	110	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1062457)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	97.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	98.0	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	105	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	108	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	85.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	88.5	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	94.3	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	110	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1062458)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	102	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	98.0	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	96.3	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	111	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	85.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	95.4	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	88.7	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	100	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1062460)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	98.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	93.1	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	95.4	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	98.1	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	85.0	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	90.3	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	91.8	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	97.0	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1062461)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	98.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	94.5	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	88.0	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	98.1	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	85.0	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	100	----	85	115	----	----



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
		LOR	Unit	Result	Spike Concentration <i>n</i>	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
Method: Compound	CAS Number					LCS	DCS	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1062461) - Continued											
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	91.2	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	110	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1062465)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	88.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	94.5	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	100	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	102	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	87.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	90.2	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	93.4	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	88.0	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1062466)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	98.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	106	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	114	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	87.9	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	85.0	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	108	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	90.7	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	92.0	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1062467)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	88.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	106	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	114	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	111	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	85.0	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	108	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	87.4	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	95.1	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1062468)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	88.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	99.0	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	99.0	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	102	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	85.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	97.0	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	88.9	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	110	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1062469)											



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration n	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
						LCS	DCS	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1062469) - Continued											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	102	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	89.6	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	94.0	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	93.0	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	85.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	99.0	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	89.5	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	100	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1062471)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	102	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	114	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	88.9	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	114	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	87.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	109	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	89.7	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	110	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1062473)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	102	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	114	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	111	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	104	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	85.0	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	105	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	88.9	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	90.0	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060717)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	102	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060718)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	95.4	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060719)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	86.4	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060720)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	88.4	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060721)											



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration n	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
						LCS	DCS	Low	High	Value	Control Limit
EP: Aggregate Organics (QC Lot: 1060721) - Continued											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	94.4	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060722)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	88.4	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060723)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	88.9	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060724)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	86.9	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060725)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	89.4	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060726)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	91.4	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060727)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	88.9	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060728)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	89.9	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060729)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	100	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060730)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	87.9	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060731)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	91.9	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060732)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	96.5	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1060733)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	92.4	----	85	115	----	----



Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

Matrix: WATER

				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058843)										
HK0915111-001	MW1/ ME / R1 / B	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	88.0	----	75	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058844)										
HK0915111-011	MW1/ ME /R2 /M	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	102	----	75	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058845)										
HK0915111-031	ESC-WNBA/ ME / R1 / B	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	92.4	----	75	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058846)										
HK0915111-041	ESC-WNBA/ ME / R2 / M	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	86.7	----	75	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058847)										
HK0915111-091	ESC-WNBD/ MF / R1 / M	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	78.0	----	75	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058848)										
HK0915111-131	ESC-WNBA/ MF / R2 / S	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	88.0	----	75	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058849)										
HK0915111-151	MW1/ MF / R1 / M	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	86.0	----	75	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058850)										
HK0915111-181	NM3/ ME / R1 / S	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	98.0	----	75	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058851)										
HK0915111-191	ESC-WNAD/ ME / R2 / B	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	108	----	75	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058852)										
HK0915111-251	ESC-WFA/ MF / R2 / B	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	108	----	75	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1058853)										
HK0915111-281	NM5/ MF /R2 / M	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	92.9	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1062449)										
HK0915111-001	MW1/ ME / R1 / B	EG020: Arsenic	7440-38-2	10 µg/L	80.4	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	100	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	98.7	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	100	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	87.0	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	99.4	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	91.2	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	99.0	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1062450)										
HK0915111-021	MW1/ ME / R3 / S	EG020: Arsenic	7440-38-2	10 µg/L	81.1	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	96.2	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	118	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	90.7	----	75	125	----	----



Matrix: WATER				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1062450) - Continued										
HK0915111-021	MW1/ ME / R3 / S	EG020: Mercury	7439-97-6	2 µg/L	88.3	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	118	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	94.1	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	92.4	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1062451)										
HK0915111-041	ESC-WNBA/ ME / R2 / M	EG020: Arsenic	7440-38-2	10 µg/L	76.5	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	94.4	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	111	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	99.8	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	92.7	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	95.3	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	87.1	----	75	125	----	----
EG020: Zinc	7440-66-6	10 µg/L	106	----	75	125	----	----		
EG: Metals and Major Cations (QC Lot: 1062452)										
HK0915111-061	ESC-WNBD/ ME / R1 / B	EG020: Arsenic	7440-38-2	10 µg/L	88.0	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	88.0	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	96.0	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	101	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	91.0	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	84.4	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	84.1	----	75	125	----	----
EG020: Zinc	7440-66-6	10 µg/L	90.0	----	75	125	----	----		
EG: Metals and Major Cations (QC Lot: 1062455)										
HK0915111-081	ESC-WNBD/ ME / R3 / S	EG020: Arsenic	7440-38-2	10 µg/L	81.0	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	82.0	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	90.0	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	101	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	92.4	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	88.5	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	88.2	----	75	125	----	----
EG020: Zinc	7440-66-6	10 µg/L	80.0	----	75	125	----	----		
EG: Metals and Major Cations (QC Lot: 1062456)										
HK0915111-101	ESC-WNBD/ MF / R2 / S	EG020: Arsenic	7440-38-2	10 µg/L	75.1	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	85.0	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	81.1	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	88.0	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	86.0	----	75	125	----	----
EG020: Nickel	7440-02-0	10 µg/L	86.6	----	75	125	----	----		



Matrix: WATER				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1062456) - Continued										
HK0915111-101	ESC-WNBD/ MF / R2 / S	EG020: Silver	7440-22-4	100 µg/L	83.6	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	102	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1062457)										
HK0915111-121	ESC-WNBA/ MF / R1 / M	EG020: Arsenic	7440-38-2	10 µg/L	77.0	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	94.0	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	85.1	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	103	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	86.6	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	79.8	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	89.5	----	75	125	----	----
EG020: Zinc	7440-66-6	10 µg/L	106	----	75	125	----	----		
EG: Metals and Major Cations (QC Lot: 1062458)										
HK0915111-141	NM1/ MF / R3 / B	EG020: Arsenic	7440-38-2	10 µg/L	100	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	88.0	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	102	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	102	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	88.4	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	83.9	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	84.2	----	75	125	----	----
EG020: Zinc	7440-66-6	10 µg/L	110	----	75	125	----	----		
EG: Metals and Major Cations (QC Lot: 1062460)										
HK0915111-161	MW1/ MF / R2 / S	EG020: Arsenic	7440-38-2	10 µg/L	86.1	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	84.3	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	86.9	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	92.0	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	92.8	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	75.1	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	90.5	----	75	125	----	----
EG020: Zinc	7440-66-6	10 µg/L	# Not Determined	----	75	125	----	----		
EG: Metals and Major Cations (QC Lot: 1062461)										
HK0915111-181	NM3/ ME / R1 / S	EG020: Arsenic	7440-38-2	10 µg/L	79.8	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	98.0	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	82.7	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	98.8	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	85.0	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	79.8	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	90.7	----	75	125	----	----



Matrix: WATER				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1062461) - Continued										
HK0915111-181	NM3/ ME / R1 / S	EG020: Zinc	7440-66-6	10 µg/L	80.0	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1062465)										
HK0915111-201	ESC-WNAD/ ME/ R3 /M	EG020: Zinc	7440-66-6	10 µg/L	90.0	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1062466)										
HK0915111-221	NM6/ ME / R2 / B	EG020: Arsenic	7440-38-2	10 µg/L	95.3	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	103	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	108	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	114	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	84.8	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	88.4	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	90.1	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	# Not Determined	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1062467)										
HK0915111-241	ESC-WFB/ ME / R1 / S	EG020: Arsenic	7440-38-2	10 µg/L	76.1	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	100	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	100	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	105	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	85.0	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	89.0	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	84.6	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	100	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1062468)										
HK0915111-261	ESC-WFA/ MF / R3 / M	EG020: Zinc	7440-66-6	10 µg/L	110	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1062469)										
HK0915111-281	NM5/ MF /R2 / M	EG020: Arsenic	7440-38-2	10 µg/L	98.5	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	84.1	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	84.2	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	111	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	86.2	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	98.9	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	87.2	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	110	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1062471)										
HK0915111-301	ESC-WNAB/ MF / R1 / B	EG020: Arsenic	7440-38-2	10 µg/L	103	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	101	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	88.1	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	109	----	75	125	----	----



Matrix: WATER				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1062471) - Continued										
HK0915111-301	ESC-WNAB/ MF / R1 / B	EG020: Mercury	7439-97-6	2 µg/L	86.7	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	83.0	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	91.2	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	80.0	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1062473)										
HK0915111-321	ESC-WNAB/ MF / R3 / S	EG020: Zinc	7440-66-6	10 µg/L	80.0	----	75	125	----	----



Laboratory Duplicate (DUP) Report

Matrix: WATER				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 1063267)								
HK0915410-001	MW1/ ME / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	7	7	0.0
HK0915410-014	NM1/ ME /R2 /M	EA025: Suspended Solids (SS)	----	2	mg/L	5	5	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1063268)								
HK0915410-030	ESC-WMB/ ME / R1 / S	EA025: Suspended Solids (SS)	----	2	mg/L	4	4	0.0
HK0915410-046	ESC-WNAA/ ME / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	11	10	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1063269)								
HK0915410-059	ESC-WNBB/ ME /R2 /M	EA025: Suspended Solids (SS)	----	2	mg/L	11	12	0.0
HK0915410-075	ESC-WNBD/ ME / R1 / S	EA025: Suspended Solids (SS)	----	2	mg/L	4	5	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1063270)								
HK0915410-091	ESC-WNBC/ MF / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	14	15	11.5
HK0915410-104	ESC-WNBB/ MF /R2 /M	EA025: Suspended Solids (SS)	----	2	mg/L	14	14	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1063271)								
HK0915410-120	ESC-WNBA/ MF / R1 / S	EA025: Suspended Solids (SS)	----	2	mg/L	6	5	0.0
HK0915410-136	NM2/ MF / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	7	7	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1063272)								
HK0915410-149	NM1/ MF /R2 /M	EA025: Suspended Solids (SS)	----	2	mg/L	4	4	0.0
HK0915410-165	NM3/ ME / R1 / S	EA025: Suspended Solids (SS)	----	2	mg/L	2	2	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1063273)								
HK0915410-181	ESC-WNAC/ ME / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	14	15	0.0
HK0915410-194	ESC-WNAD/ ME /R2 /M	EA025: Suspended Solids (SS)	----	2	mg/L	12	13	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1063274)								
HK0915410-210	NM5/ ME / R1 / S	EA025: Suspended Solids (SS)	----	2	mg/L	5	6	0.0
HK0915410-226	NM6/ ME / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	3	2	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1063275)								
HK0915410-239	ESC-WFB/ ME /R2 /M	EA025: Suspended Solids (SS)	----	2	mg/L	5	4	0.0
HK0915410-255	NM6/ MF / R1 / S	EA025: Suspended Solids (SS)	----	2	mg/L	7	7	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1063276)								
HK0915410-271	NM5/ MF / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	9	10	0.0
HK0915410-284	ESC-WMA/ MF /R2 /M	EA025: Suspended Solids (SS)	----	2	mg/L	9	10	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 1063277)								
HK0915410-300	ESC-WNAC/ MF / R1 / S	EA025: Suspended Solids (SS)	----	2	mg/L	3	4	0.0
HK0915410-316	NM3/ MF / R1 / B	EA025: Suspended Solids (SS)	----	2	mg/L	14	12	10.4
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062386)								
HK0915410-013	NM1/ ME / R2 / B	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
HK0915410-029	ESC-WMB/ ME / R1 / M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.04	0.04	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062387)								
HK0915410-042	ESC-WNBA/ ME / R2 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
HK0915410-058	ESC-WNBB/ ME / R2 / B	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.09	0.09	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062388)								
HK0915410-074	ESC-WNBD/ ME / R1 / M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.01	0.01	0.0



Matrix: WATER					Laboratory Duplicate (DUP) Report			
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062388) - Continued								
HK0915410-103	ESC-WNBB/ MF / R2 / B	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.13	0.13	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062389)								
HK0915410-087	ESC-WNBD/ MF / R2 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.04	0.04	0.0
HK0915410-119	ESC-WNBA/ MF / R1 / M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062390)								
HK0915410-132	ESC-WMB/ MF / R2 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
HK0915410-148	NM1/ MF / R2 / B	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062391)								
HK0915410-164	NM3/ ME / R1 / M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.02	0.02	0.0
HK0915410-193	ESC-WNAD/ ME / R2 / B	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.02	0.02	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062392)								
HK0915410-209	NM5/ ME / R1 / M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.03	0.03	0.0
HK0915410-222	ESC-WFA/ ME / R2 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.02	0.02	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062393)								
HK0915410-177	ESC-WNAB/ ME / R2 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
HK0915410-238	ESC-WFB/ ME / R2 / B	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.02	0.02	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062394)								
HK0915410-267	ESC-WFA/ MF / R2 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.02	0.02	0.0
HK0915410-254	NM6/ MF / R1 / M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.02	0.02	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062395)								
HK0915410-299	ESC-WNAC/ MF / R1 / M	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.01	0.01	0.0
HK0915410-283	ESC-WMA/ MF / R2 / B	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.03	0.03	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062396)								
HK0915410-328	ESC-WFA/ MF / R2 / S FIELD DUPLICATE	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.01	0.01	0.0
HK0915410-312	ESC-WNAB/ MF / R2 / S	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0
EG: Metals and Major Cations (QC Lot: 1069753)								
HK0915410-002	MW1/ ME / R1 / M	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	9	11	20.0
		EG020: Lead	7439-92-1	1	µg/L	1	1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	2	2	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	<2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	12	12	0.0
EG: Metals and Major Cations (QC Lot: 1069754)								
HK0915410-022	NM2/ ME / R2 / B	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	1	1	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	1	2	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0



Matrix: WATER					Laboratory Duplicate (DUP) Report			
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EG: Metals and Major Cations (QC Lot: 1069754) - Continued								
HK0915410-022	NM2/ ME / R2 / B	EG020: Arsenic	7440-38-2	2	µg/L	<2	<2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	<4	5	24.0
EG: Metals and Major Cations (QC Lot: 1069755)								
HK0915410-042	ESC-WNBA/ ME / R2 / S	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	7	6	0.0
		EG020: Lead	7439-92-1	1	µg/L	1	1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	3	3	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	2	3	0.0
		EG020: Zinc	7440-66-6	4	µg/L	5	5	0.0
EG: Metals and Major Cations (QC Lot: 1069756)								
HK0915410-062	ESC-WNBB/ ME /R3 /M	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Lead	7439-92-1	1	µg/L	1	1	0.0
		EG020: Zinc	7440-66-6	4	µg/L	8	8	0.0
EG: Metals and Major Cations (QC Lot: 1069757)								
HK0915410-082	ESC-WNBD/ MF / R1 / B	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	1	1	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	2	2	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	2	2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	21	21	0.0
EG: Metals and Major Cations (QC Lot: 1069758)								
HK0915410-102	ESC-WNBB/ MF / R1 / S	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	6	6	0.0
		EG020: Lead	7439-92-1	1	µg/L	2	2	0.0
		EG020: Nickel	7440-02-0	1	µg/L	3	3	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	2	2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	7	6	15.4
EG: Metals and Major Cations (QC Lot: 1069759)								
HK0915410-122	ESC-WNBA/ MF /R2 /M	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	3	3	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	2	2	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	2	2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	6	7	0.0
EG: Metals and Major Cations (QC Lot: 1069760)								



Matrix: WATER					Laboratory Duplicate (DUP) Report			
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EG: Metals and Major Cations (QC Lot: 1069760) - Continued								
HK0915410-142	NM2/ MF / R3 / B	EG020: Zinc	7440-66-6	4	µg/L	<4	4	0.0
EG: Metals and Major Cations (QC Lot: 1069761)								
HK0915410-162	MW1/ MF / R3 / S	EG020: Zinc	7440-66-6	4	µg/L	10	10	0.0
EG: Metals and Major Cations (QC Lot: 1069762)								
HK0915410-182	ESC-WNAC/ ME / R1 / M	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	6	6	0.0
		EG020: Lead	7439-92-1	1	µg/L	1	2	0.0
		EG020: Nickel	7440-02-0	1	µg/L	2	2	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	6	7	0.0
EG: Metals and Major Cations (QC Lot: 1069763)								
HK0915410-202	ESC-WMA/ ME / R2 / B	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	2	2	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	1	1	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	2	2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	<4	<4	0.0
EG: Metals and Major Cations (QC Lot: 1069764)								
HK0915410-222	ESC-WFA/ ME / R2 / S	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	2	2	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	3	3	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	2	2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	<4	<4	0.0
EG: Metals and Major Cations (QC Lot: 1069765)								
HK0915410-242	ESC-WFB/ ME /R3 /M	EG020: Zinc	7440-66-6	4	µg/L	<4	<4	0.0
EG: Metals and Major Cations (QC Lot: 1069766)								
HK0915410-262	ESC-WFA/ MF / R1 / B	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	5	4	0.0
		EG020: Lead	7439-92-1	1	µg/L	3	3	0.0
		EG020: Nickel	7440-02-0	1	µg/L	5	4	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	2	2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	8	8	0.0
EG: Metals and Major Cations (QC Lot: 1069767)								
HK0915410-282	ESC-WMA/ MF / R1 / S	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0



Matrix: WATER					Laboratory Duplicate (DUP) Report			
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EG: Metals and Major Cations (QC Lot: 1069767) - Continued								
HK0915410-282	ESC-WMA/ MF / R1 / S	EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	2	2	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	3	3	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	2	3	0.0
		EG020: Zinc	7440-66-6	4	µg/L	<4	<4	0.0
EG: Metals and Major Cations (QC Lot: 1069768)								
HK0915410-302	ESC-WNAC/ MF /R2 /M	EG020: Mercury	7439-97-6	0.1	µg/L	<0.1	<0.1	0.0
		EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	0.0
		EG020: Copper	7440-50-8	1	µg/L	2	2	0.0
		EG020: Lead	7439-92-1	1	µg/L	<1	<1	0.0
		EG020: Nickel	7440-02-0	1	µg/L	2	2	0.0
		EG020: Silver	7440-22-4	1	µg/L	<1	<1	0.0
		EG020: Arsenic	7440-38-2	2	µg/L	<2	<2	0.0
		EG020: Zinc	7440-66-6	4	µg/L	<4	<4	0.0
EG: Metals and Major Cations (QC Lot: 1069769)								
HK0915410-322	NM3/ MF / R3 / B	EG020: Zinc	7440-66-6	4	µg/L	<4	<4	0.0

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
						LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QC Lot: 1063267)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	85.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1063268)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	87.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1063269)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	86.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1063270)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	95.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1063271)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	108	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1063272)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	100	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1063273)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	96.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1063274)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	108	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1063275)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	95.0	----	85	115	----	----



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
						LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QC Lot: 1063276)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	86.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QC Lot: 1063277)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	97.0	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062386)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	98.8	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062387)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	89.0	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062388)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	99.8	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062389)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	99.8	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062390)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	99.8	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062391)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	91.4	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062392)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	89.4	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062393)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	98.7	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062394)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	98.2	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062395)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	98.5	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062396)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	98.0	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1069753)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	91.6	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	100	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	112	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	111	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	105	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	107	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	98.0	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	109	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1069754)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	102	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	100	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	112	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	111	----	85	115	----	----



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
		CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)
Method: Compound						LCS	DCS	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1069754) - Continued											
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	102	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	107	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	95.0	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	109	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1069755)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	91.6	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	100	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	112	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	111	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	100	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	107	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	100 µg/L	89.0	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	109	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1069756)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	91.6	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	112	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	106	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	108	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	110	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	101	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	10 µg/L	95.0	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	104	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1069757)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	102	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	112	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	95.0	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	112	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	100	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	101	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	10 µg/L	98.0	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	104	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1069758)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	85.5	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	112	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	101	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	112	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	88.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	101	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	10 µg/L	90.0	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	106	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1069759)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	91.6	----	85	115	----	----



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
		LOR	Unit	Result	Spike	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
Method: Compound	CAS Number				Concentration	LCS	DCS	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1069759) - Continued											
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	100	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	100	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	105	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	88.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	112	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	10 µg/L	100	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	112	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1069760)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	91.6	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	105	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	104	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	107	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	89.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	109	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	10 µg/L	98.5	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	112	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1069761)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	102	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	89.7	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	88.0	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	88.0	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	92.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	87.0	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	10 µg/L	89.5	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	89.0	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1069762)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	91.6	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	89.7	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	88.0	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	88.0	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	88.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	87.0	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	10 µg/L	89.4	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	89.0	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1069763)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	102	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	89.7	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	105	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	88.0	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	89.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	102	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	10 µg/L	93.2	----	85	115	----	----



Matrix: WATER		Method Blank (MB) Report				Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report					
		CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	LCS	DCS	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1069763) - Continued											
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	89.0	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1069764)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	91.6	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	98.2	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	96.0	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	102	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	92.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	92.0	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	10 µg/L	94.1	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	101	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1069765)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	95.0	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	89.7	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	89.0	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	88.0	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	88.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	102	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	10 µg/L	94.0	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	101	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1069766)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	91.1	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	89.7	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	92.0	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	86.0	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	89.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	92.0	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	10 µg/L	92.0	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	98.0	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1069767)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	105	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	90.8	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	91.0	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	94.0	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	92.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	98.0	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	10 µg/L	91.0	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	107	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1069768)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	105	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	94.6	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	94.0	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	95.0	----	85	115	----	----



Matrix: WATER		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
						LCS	DCS	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1069768) - Continued											
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	90.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	98.0	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	10 µg/L	94.0	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	112	----	85	115	----	----
EG: Metals and Major Cations (QC Lot: 1069769)											
EG020: Arsenic	7440-38-2	10	µg/L	<2	10 µg/L	100	----	85	115	----	----
EG020: Cadmium	7440-43-9	0.2	µg/L	<0.2	10 µg/L	101	----	85	115	----	----
EG020: Copper	7440-50-8	1	µg/L	<1	10 µg/L	101	----	85	115	----	----
EG020: Lead	7439-92-1	1	µg/L	<1	10 µg/L	98.0	----	85	115	----	----
EG020: Mercury	7439-97-6	0.5	µg/L	<0.1	2 µg/L	90.5	----	85	115	----	----
EG020: Nickel	7440-02-0	1	µg/L	<1	10 µg/L	101	----	85	115	----	----
EG020: Silver	7440-22-4	1	µg/L	<1	10 µg/L	91.0	----	85	115	----	----
EG020: Zinc	7440-66-6	10	µg/L	<4	10 µg/L	109	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1063367)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	97.0	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1063368)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	96.0	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1063369)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	97.0	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1063370)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	86.9	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1063371)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	91.9	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1063372)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	88.9	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1063373)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	91.9	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1063374)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	89.4	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1063375)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	104	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1063376)											



Matrix: WATER		Method Blank (MB) Report				Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report					
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
						LCS	DCS	Low	High	Value	Control Limit
EP: Aggregate Organics (QC Lot: 1063376) - Continued											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	94.2	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1063377)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	97.9	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1063378)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	90.9	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1063379)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	108	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1063380)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	100	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1063381)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	108	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1063382)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	90.3	----	85	115	----	----
EP: Aggregate Organics (QC Lot: 1063383)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	107	----	85	115	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

Matrix: WATER				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062386)										
HK0915410-030	ESC-WMB/ ME / R1 / S	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	102	----	75	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062387)										
HK0915410-046	ESC-WNAA/ ME / R1 / B	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	106	----	75	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062388)										
HK0915410-059	ESC-WNBB/ ME /R2 /M	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	94.0	----	75	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062389)										
HK0915410-091	ESC-WNBC/ MF / R1 / B	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	120	----	75	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062390)										
HK0915410-120	ESC-WNBA/ MF / R1 / S	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	84.0	----	75	125	----	----



Matrix: WATER

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
				Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062391)										
HK0915410-136	NM2/ MF / R1 / B	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	116	----	75	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062392)										
HK0915410-181	ESC-WNAC/ ME / R1 / B	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	78.0	----	75	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062393)										
HK0915410-194	ESC-WNAD/ ME /R2 /M	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	88.0	----	75	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062394)										
HK0915410-239	ESC-WFB/ ME /R2 /M	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	92.0	----	75	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062395)										
HK0915410-271	NM5/ MF / R1 / B	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	96.0	----	75	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 1062396)										
HK0915410-316	NM3/ MF / R1 / B	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	120	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1069753)										
HK0915410-001	MW1/ ME / R1 / B	EG020: Arsenic	7440-38-2	10 µg/L	86.3	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	102	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	111	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	109	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	100	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	110	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	83.0	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	103	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1069754)										
HK0915410-021	NM2/ ME / R1 / S	EG020: Arsenic	7440-38-2	10 µg/L	99.1	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	106	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	109	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	110	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	103	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	83.0	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	84.0	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	84.5	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1069755)										
HK0915410-041	ESC-WNBA/ ME /R2 /M	EG020: Arsenic	7440-38-2	10 µg/L	82.4	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	114	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	103	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	110	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	97.5	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	87.8	----	75	125	----	----
		EG020: Silver	7440-22-4	100 µg/L	85.0	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	104	----	75	125	----	----



Matrix: WATER

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	Matrix Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1069756)										
HK0915410-061	ESC-WNBB/ ME / R3 / B	EG020: Arsenic	7440-38-2	10 µg/L	105	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	100	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	88.4	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	97.5	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	99.0	----	75	125	----	----
		EG020: Silver	7440-22-4	10 µg/L	95.0	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	114	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1069757)										
HK0915410-081	ESC-WNBD/ ME / R3 / S	EG020: Arsenic	7440-38-2	10 µg/L	100	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	100	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	100	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	84.0	----	75	125	----	----
		EG020: Silver	7440-22-4	10 µg/L	89.0	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	92.0	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1069758)										
HK0915410-101	ESC-WNBB/ MF / R1 / M	EG020: Arsenic	7440-38-2	10 µg/L	92.7	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	113	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	98.7	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	108	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	100	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	86.2	----	75	125	----	----
		EG020: Silver	7440-22-4	10 µg/L	85.0	----	75	125	----	----
EG020: Zinc	7440-66-6	10 µg/L	106	----	75	125	----	----		
EG: Metals and Major Cations (QC Lot: 1069759)										
HK0915410-121	ESC-WNBA/ MF / R2 / B	EG020: Arsenic	7440-38-2	10 µg/L	82.1	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	100	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	115	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	108	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	91.0	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	103	----	75	125	----	----
		EG020: Silver	7440-22-4	10 µg/L	110	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	113	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1069760)										
HK0915410-141	NM2/ MF / R2 / S	EG020: Arsenic	7440-38-2	10 µg/L	84.9	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	84.3	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	83.0	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	99.0	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	94.5	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	91.0	----	75	125	----	----
		EG020: Silver	7440-22-4	10 µg/L	106	----	75	125	----	----



Matrix: WATER

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report					
					Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1069760) - Continued										
HK0915410-141	NM2/ MF / R2 / S	EG020: Zinc	7440-66-6	10 µg/L	104	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1069761)										
HK0915410-161	MW1/ MF /R3 /M	EG020: Arsenic	7440-38-2	10 µg/L	98.0	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	83.7	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	77.0	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	109	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	100	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	93.0	----	75	125	----	----
		EG020: Silver	7440-22-4	10 µg/L	81.4	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	100	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1069762)										
HK0915410-181	ESC-WNAC/ ME / R1 / B	EG020: Arsenic	7440-38-2	10 µg/L	84.4	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	93.2	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	115	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	88.4	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	92.5	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	93.0	----	75	125	----	----
		EG020: Silver	7440-22-4	10 µg/L	91.2	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	108	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1069763)										
HK0915410-201	ESC-WMA/ ME / R1 / S	EG020: Arsenic	7440-38-2	10 µg/L	88.8	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	91.4	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	111	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	95.0	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	93.5	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	96.0	----	75	125	----	----
		EG020: Silver	7440-22-4	10 µg/L	88.1	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	104	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1069764)										
HK0915410-221	ESC-WFA/ ME /R2 /M	EG020: Arsenic	7440-38-2	10 µg/L	90.3	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	83.8	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	116	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	83.0	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	93.0	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	100	----	75	125	----	----
		EG020: Silver	7440-22-4	10 µg/L	90.6	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	101	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1069765)										
HK0915410-241	ESC-WFB/ ME / R3 / B	EG020: Arsenic	7440-38-2	10 µg/L	110	----	75	125	----	----



Matrix: WATER

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPD (%)	
					MS	MSD	Low	High	Value	Control Limit
EG: Metals and Major Cations (QC Lot: 1069765) - Continued										
HK0915410-241	ESC-WFB/ ME / R3 / B	EG020: Cadmium	7440-43-9	10 µg/L	83.8	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	77.0	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	97.0	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	105	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	90.0	----	75	125	----	----
		EG020: Silver	7440-22-4	10 µg/L	89.0	----	75	125	----	----
		EG020: Zinc	7440-66-6	10 µg/L	94.0	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1069766)										
HK0915410-261	NM6/ MF / R3 / S	EG020: Zinc	7440-66-6	10 µg/L	88.0	----	75	125	----	----
EG: Metals and Major Cations (QC Lot: 1069767)										
HK0915410-281	ESC-WMA/ MF / R1 / M	EG020: Arsenic	7440-38-2	10 µg/L	100	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	84.3	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	85.0	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	97.0	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	90.0	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	79.0	----	75	125	----	----
		EG020: Silver	7440-22-4	10 µg/L	88.0	----	75	125	----	----
EG020: Zinc	7440-66-6	10 µg/L	86.0	----	75	125	----	----		
EG: Metals and Major Cations (QC Lot: 1069768)										
HK0915410-301	ESC-WNAC/ MF / R2 / B	EG020: Arsenic	7440-38-2	10 µg/L	93.0	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	85.5	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	84.0	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	92.0	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	88.5	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	82.0	----	75	125	----	----
		EG020: Silver	7440-22-4	10 µg/L	89.0	----	75	125	----	----
EG020: Zinc	7440-66-6	10 µg/L	87.0	----	75	125	----	----		
EG: Metals and Major Cations (QC Lot: 1069769)										
HK0915410-321	NM3/ MF / R2 / S	EG020: Arsenic	7440-38-2	10 µg/L	98.0	----	75	125	----	----
		EG020: Cadmium	7440-43-9	10 µg/L	97.8	----	75	125	----	----
		EG020: Copper	7440-50-8	10 µg/L	98.0	----	75	125	----	----
		EG020: Lead	7439-92-1	10 µg/L	96.0	----	75	125	----	----
		EG020: Mercury	7439-97-6	2 µg/L	88.5	----	75	125	----	----
		EG020: Nickel	7440-02-0	10 µg/L	89.0	----	75	125	----	----
		EG020: Silver	7440-22-4	10 µg/L	90.0	----	75	125	----	----
EG020: Zinc	7440-66-6	10 µg/L	101	----	75	125	----	----		



ALS Technichem

BATCH QUALITY CONTROL - LABORATORY CONTROL SAMPLE

OUR REF. : ATHQ/45550EV/2009(1)

Date of Digestion : -

Batch : INW090826(1)

Date of Analysis : 22, 25-26 Aug 09

Matrix : Water

COMPOUND	Blank Conc.	Spike Conc.	QC SPIKE RESULTS				Control Limits		
			SCS Conc	DCS Conc	Ave Rec.	RPD	% Recovery		RPD
	µg/L	µg/L	µg/L	µg/L	%	%	Low	High	%
Total Chromium QC1	<LOR	5.0	5.1	5.2	103	2	80	120	20
Total Chromium QC2	<LOR	5.0	4.3	4.7	90	9	80	120	20
Total Chromium QC3	<LOR	5.0	4.7	4.8	95	2	80	120	20
Total Chromium QC4	<LOR	5.0	4.9	4.8	97	2	80	120	20
Total Chromium QC5	<LOR	5.0	4.4	4.4	88	0	80	120	20
Total Chromium QC6	<LOR	5.0	4.8	4.5	93	6	80	120	20
Total Chromium QC7	<LOR	5.0	4.7	5.0	97	6	80	120	20
Total Chromium QC8	<LOR	5.0	4.9	4.8	97	2	80	120	20
Total Chromium QC9	<LOR	5.0	4.4	4.3	87	2	80	120	20
Total Chromium QC10	<LOR	5.0	5.1	4.9	100	4	80	120	20
Total Chromium QC11	<LOR	5.0	4.9	5.0	99	2	80	120	20

COMMENTS :

- 1) LOR: level of reporting
- 2) The control limits are based on ALS laboratory statistical data.
- 3) * : Recovery or RPD falls outside of the recommended control limits.

BATCH QUALITY CONTROL - MATRIX SPIKE SAMPLE

OUR REF. : ATHQ/45550EV/2009(1)

Batch : INW090826(1)
Matrix : Water

Date of Digestion : -

Date of Analysis : 22, 25-26 Aug 09

Spiked Sample : Refer table

COMPOUND	Sample Results	Spike Conc.	QC SPIKE RESULTS				Control Limits
			MS Conc	MSD Conc	Ave Rec.	RPD	RPD
	µg/L	µg/L	µg/L	µg/L	%	%	%
Total Chromium - 46073	<LOR	10	11	11	110	0	20
Total Chromium - 45550	<LOR	10	11	10	105	10	20
Total Chromium - 45580	<LOR	10	10	10	100	0	20
Total Chromium - 45600	<LOR	10	10	9	95	11	20
Total Chromium - 45630	<LOR	10	9	8	85	12	20
Total Chromium - 45650	<LOR	10	10	11	105	10	20
Total Chromium - 45680	<LOR	10	9	10	95	11	20
Total Chromium - 45710	<LOR	10	10	10	100	0	20
Total Chromium - 45740	<LOR	10	11	10	105	10	20
Total Chromium - 45770	<LOR	10	9	9	90	0	20
Total Chromium - 45800	<LOR	10	11	12	115	9	20

COMMENTS :

- 1) LOR: level of reporting
- 2) The control limits are based on ALS laboratory statistical data.
- 3) * : Recovery or RPD falls outside of the recommended control limits.



ALS Technichem

BATCH QUALITY CONTROL - DUPLICATE SAMPLE

OUR REF. : ATHQ/45550EV/2009(1)

Batch : INW090826(1)
Matrix : Water

Date of Digestion : -

Date of Analysis : 22, 25-26 Aug 09

Duplicate sample: Refer table

COMPOUND	QC DUPLICATE RESULTS		
	Sample Conc	Check Sample Conc	RPD
	µg/L	µg/L	%
Total Chromium - 46081	<LOR	<LOR	-
Total Chromium - 46090	<LOR	<LOR	-
Total Chromium - 45569	<LOR	<LOR	-
Total Chromium - 45599	<LOR	<LOR	-
Total Chromium - 45619	<LOR	<LOR	-
Total Chromium - 45656	<LOR	<LOR	-
Total Chromium - 45669	<LOR	<LOR	-
Total Chromium - 45674	2	2	0
Total Chromium - 45699	<LOR	<LOR	-
Total Chromium - 45730	<LOR	<LOR	-
Total Chromium - 45759	<LOR	<LOR	-

Annex D

Baseline Water Quality Monitoring Results

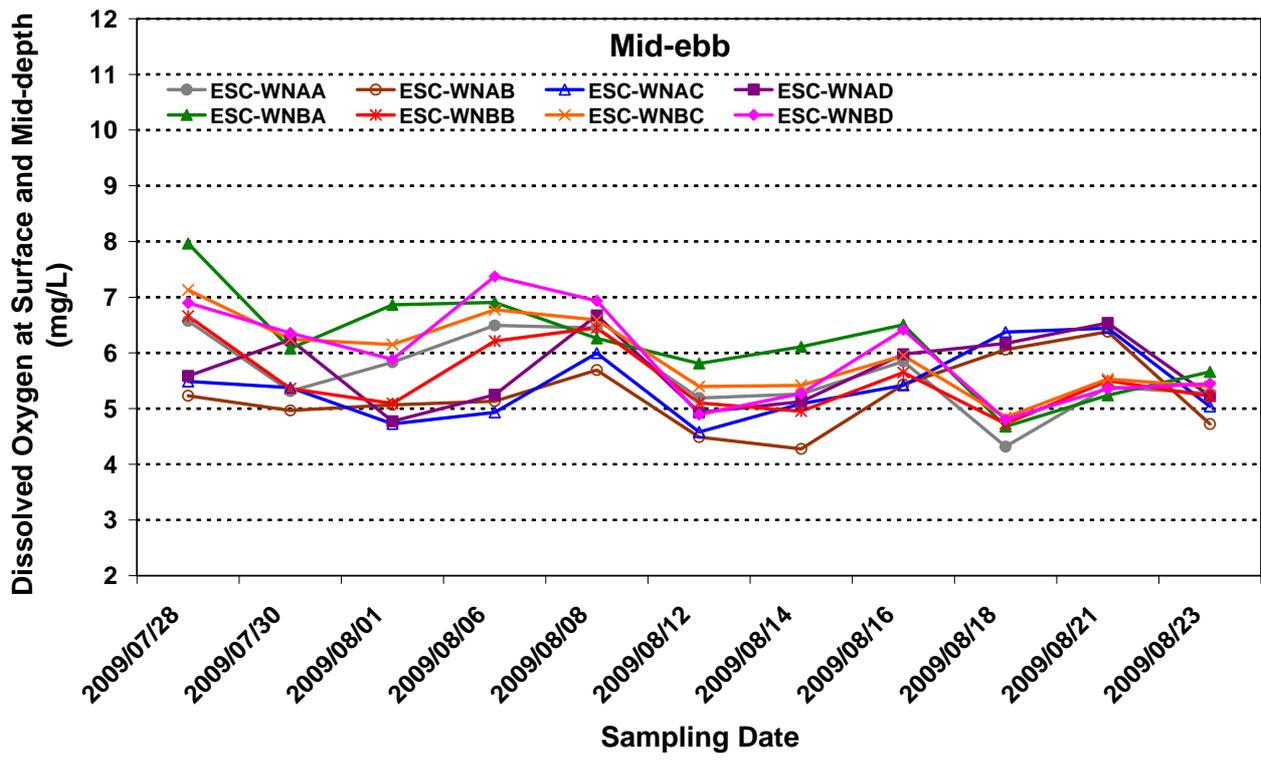


Figure D1 Dissolved Oxygen (mg/L) at the surface and mid-depth of the water column measured at Near Field stations during mid-ebb tide for the baseline monitoring period from 28 July to 23 August 2009.

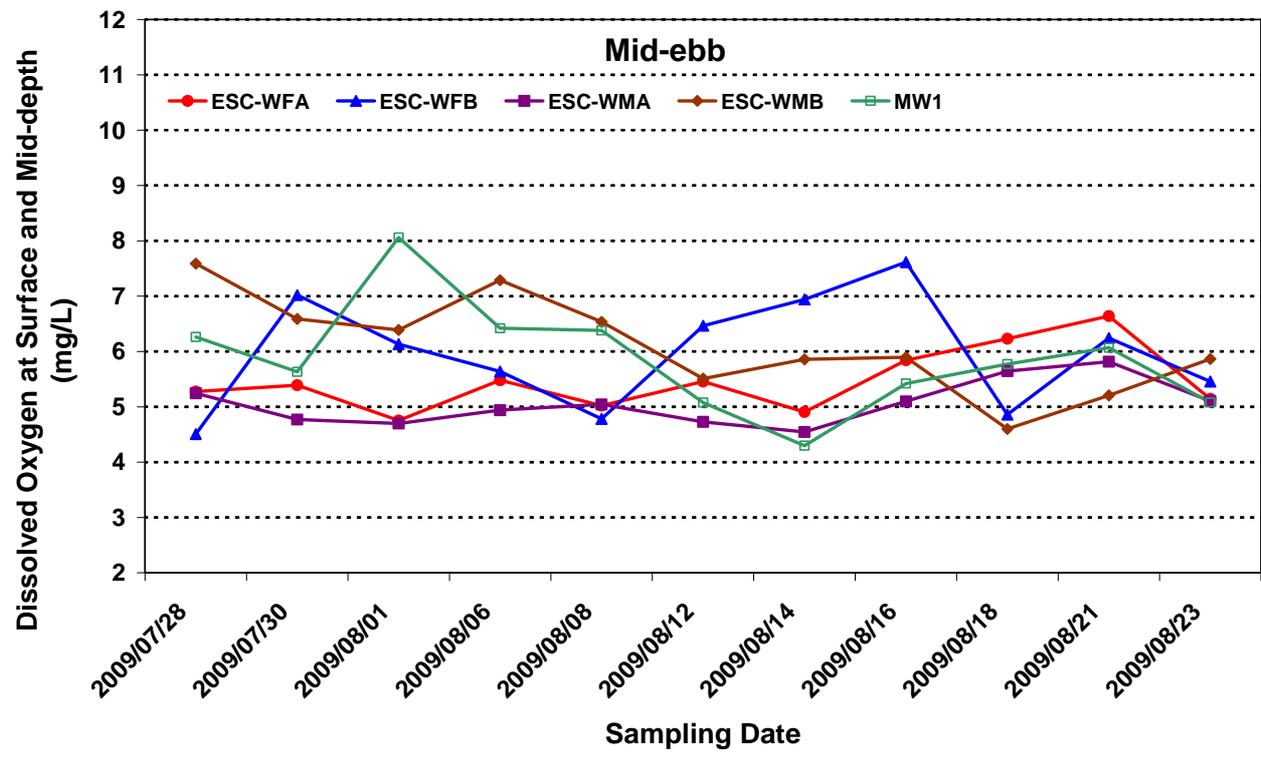


Figure D2 Dissolved Oxygen (mg/L) at the surface and mid-depth of the water column measured at Mid and Far Field stations during mid-ebb tide for the baseline monitoring period from 28 July to 23 August 2009.



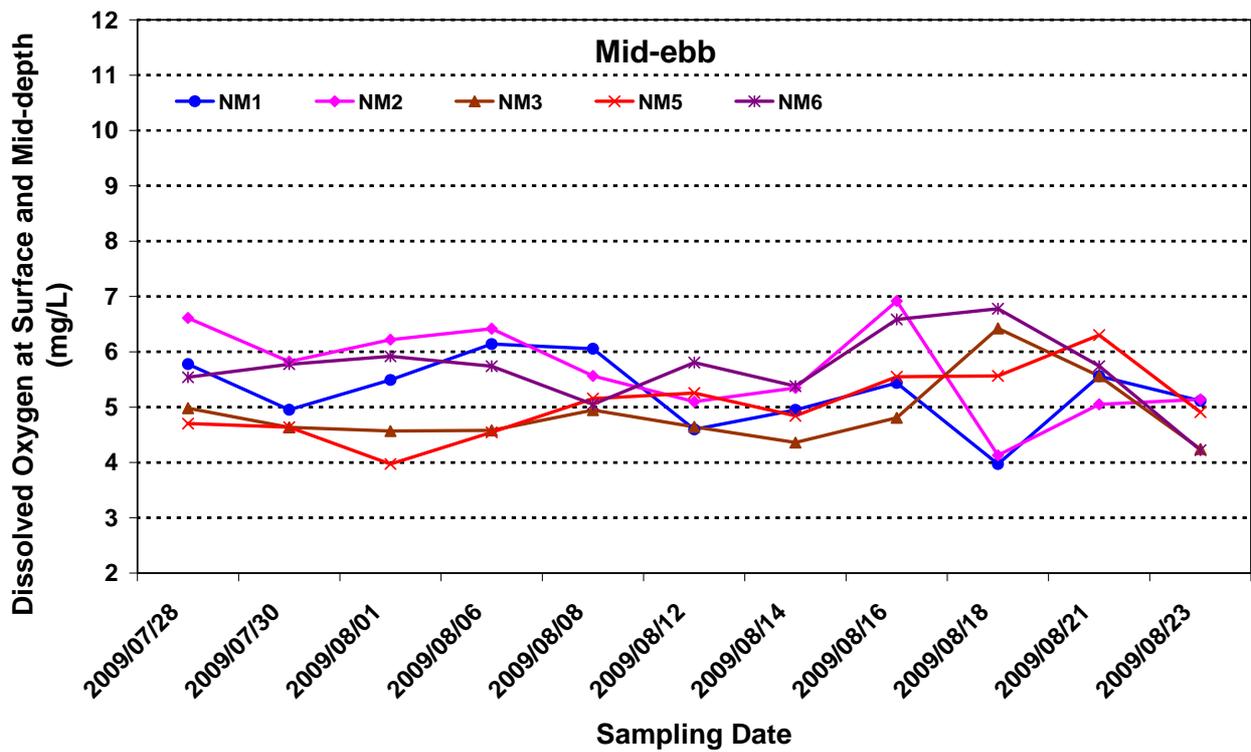


Figure D3 Dissolved Oxygen (mg/L) at the surface and mid-depth of the water column measured at Reference stations during mid-ebb tide for the baseline monitoring period from 28 July to 23 August 2009.

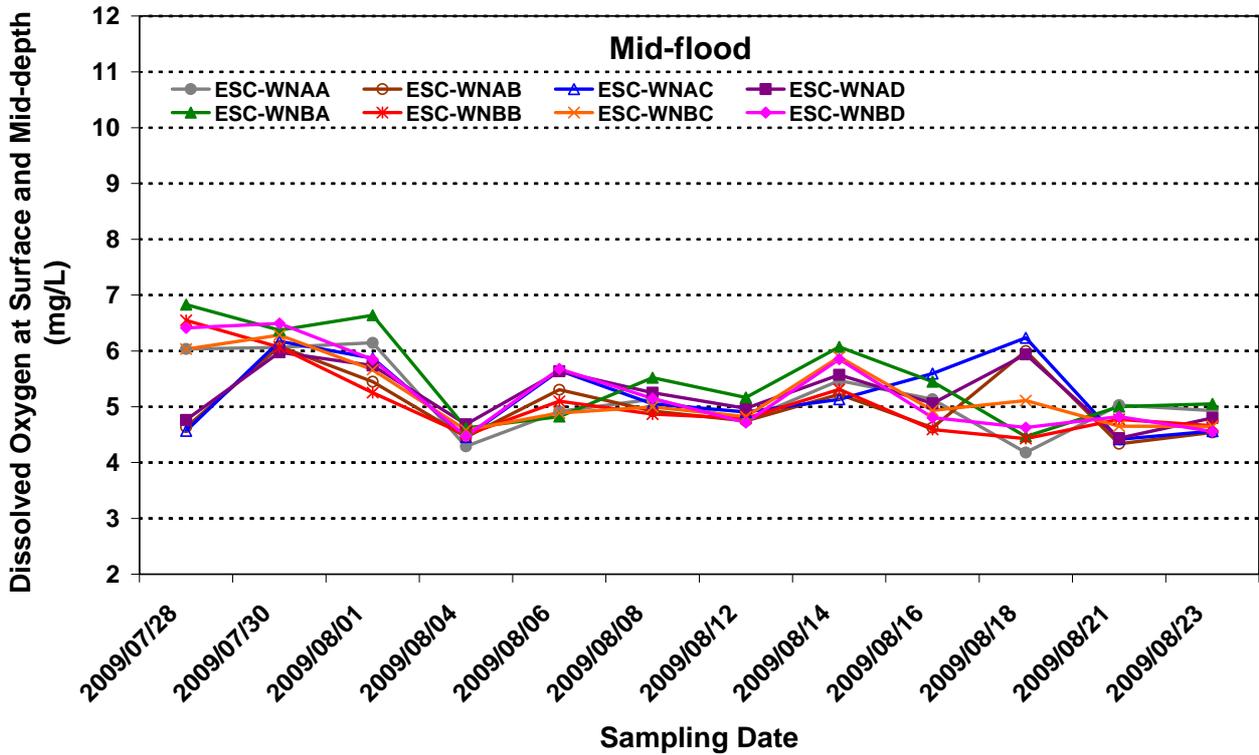


Figure D4 Dissolved Oxygen (mg/L) at the surface and mid-depth of the water column measured at Near Field stations during mid-flood tide for the baseline monitoring period from 28 July to 23 August 2009.

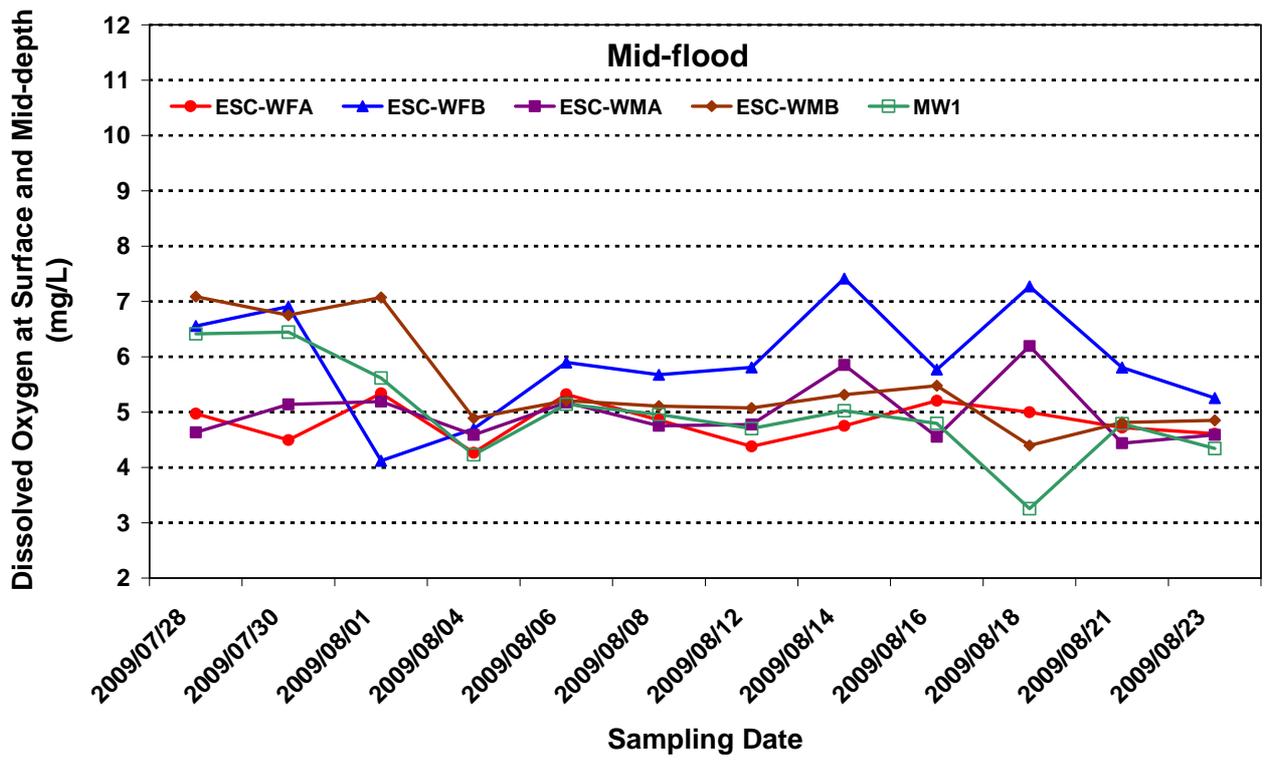


Figure D5 Dissolved Oxygen (mg/L) at the surface and mid-depth of the water column measured at Mid and Far Field stations during mid-flood tide for the baseline monitoring period from 28 July to 23 August 2009

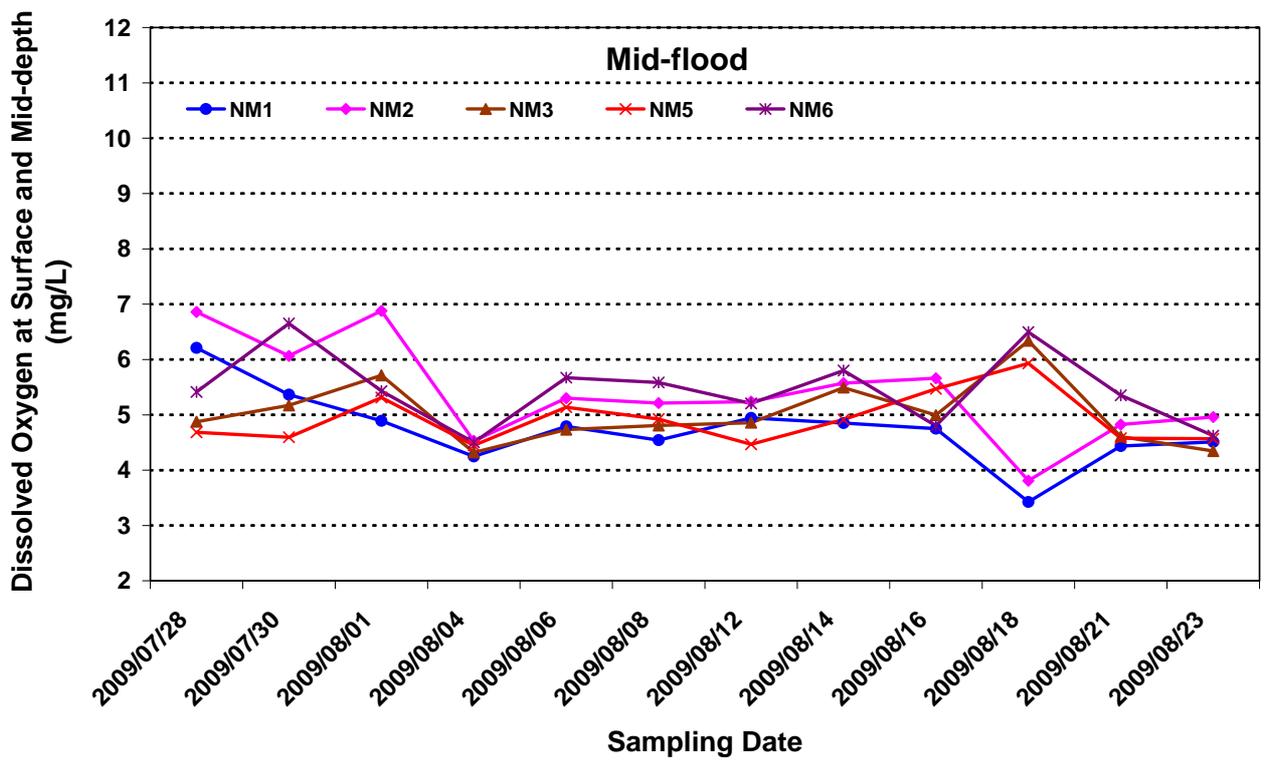


Figure D6 Dissolved Oxygen (mg/L) at the surface and mid-depth of the water column measured at Reference stations during mid-flood tide for the baseline monitoring period from 28 July to 23 August 2009.

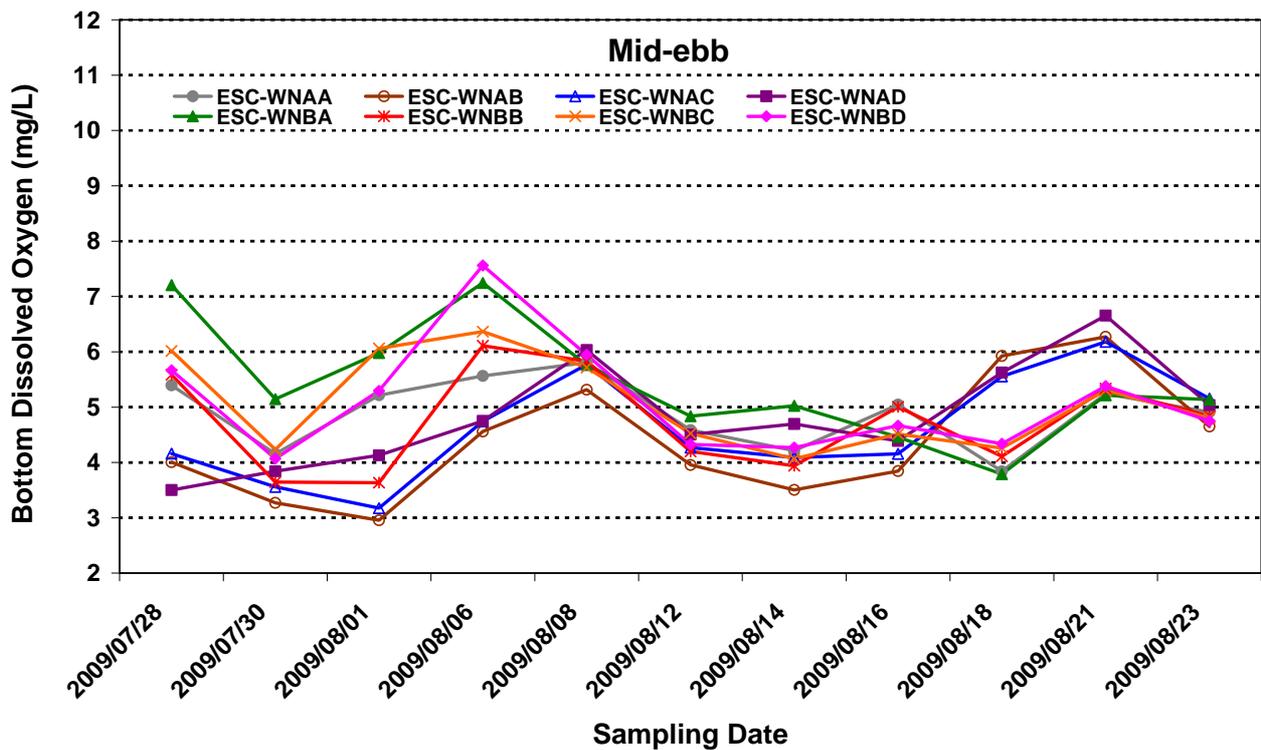


Figure D7 Dissolved Oxygen (mg/L) near the bottom of the water column measured at Near Field stations during mid-ebb tide for the baseline monitoring period from 28 July to 23 August 2009.

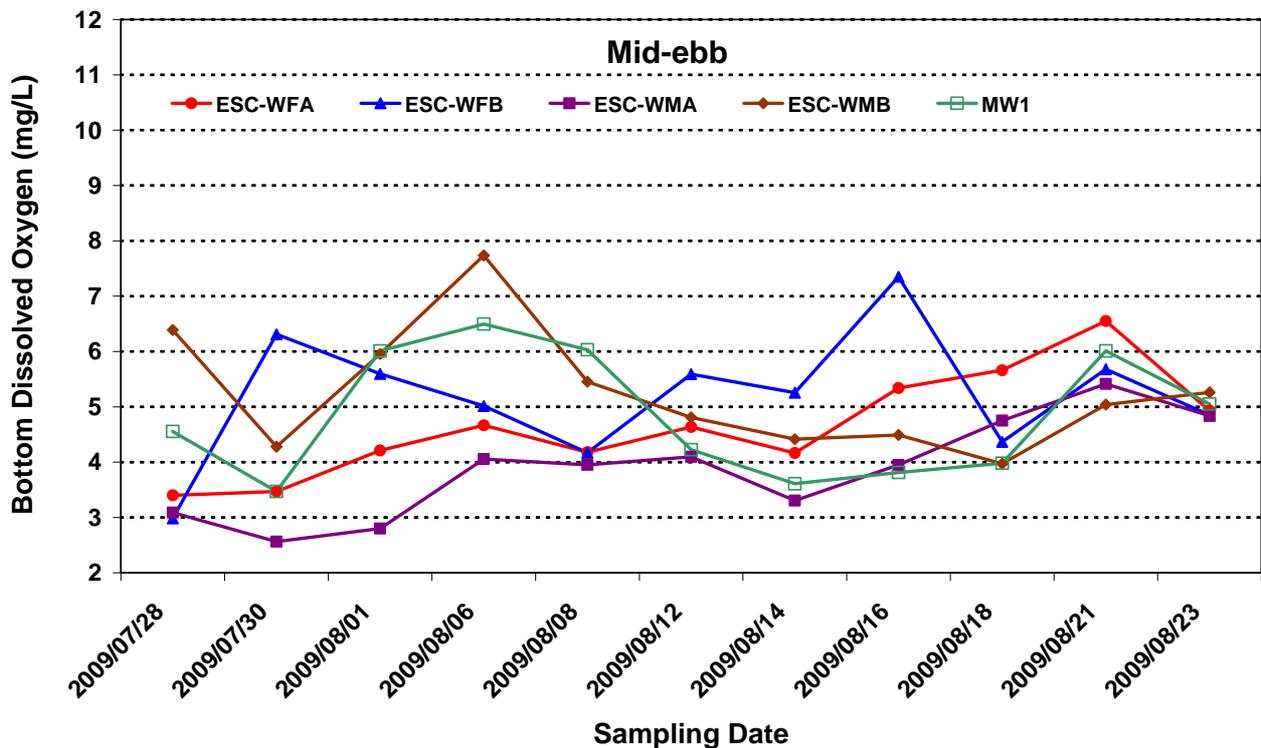


Figure D8 Dissolved Oxygen (mg/L) near the bottom of the water column measured at Mid and Far Field stations during mid-ebb tide for the baseline monitoring period from 28 July to 23 August 2009.

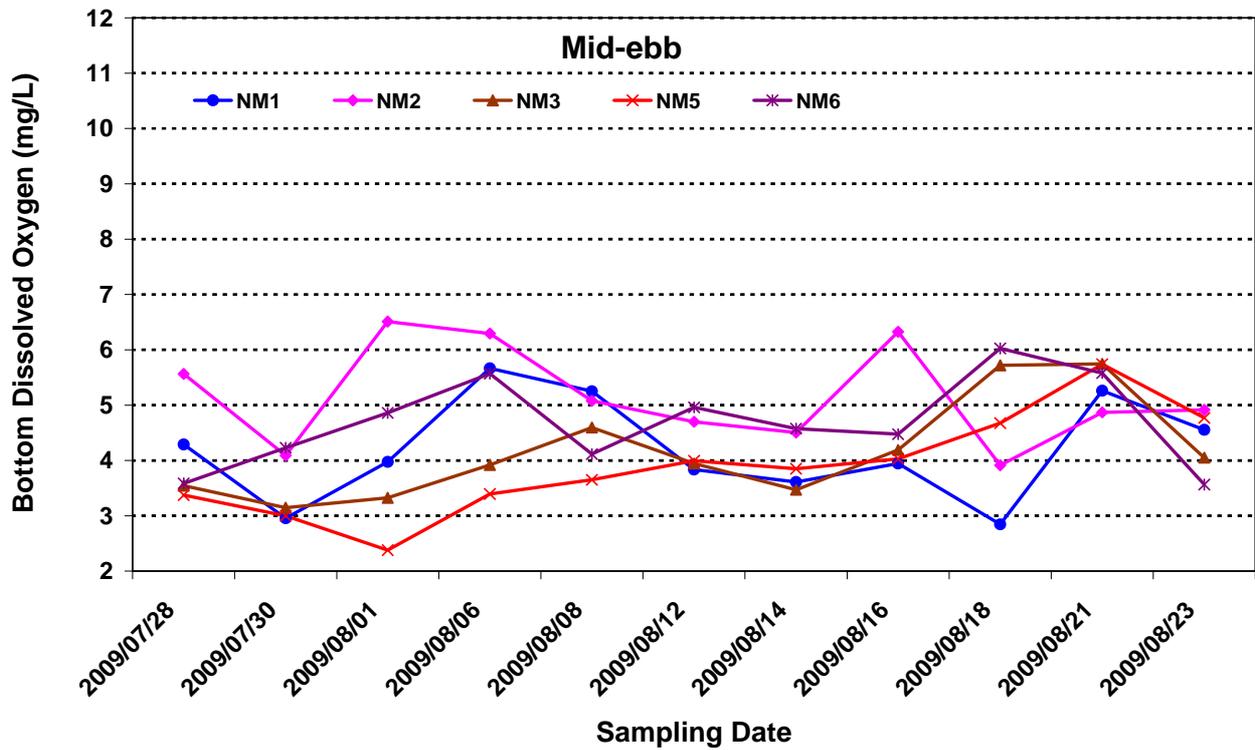


Figure D9 Dissolved Oxygen (mg/L) near the bottom of the water column measured at Reference stations during mid-ebb tide for the baseline monitoring period from 28 July to 23 August 2009.

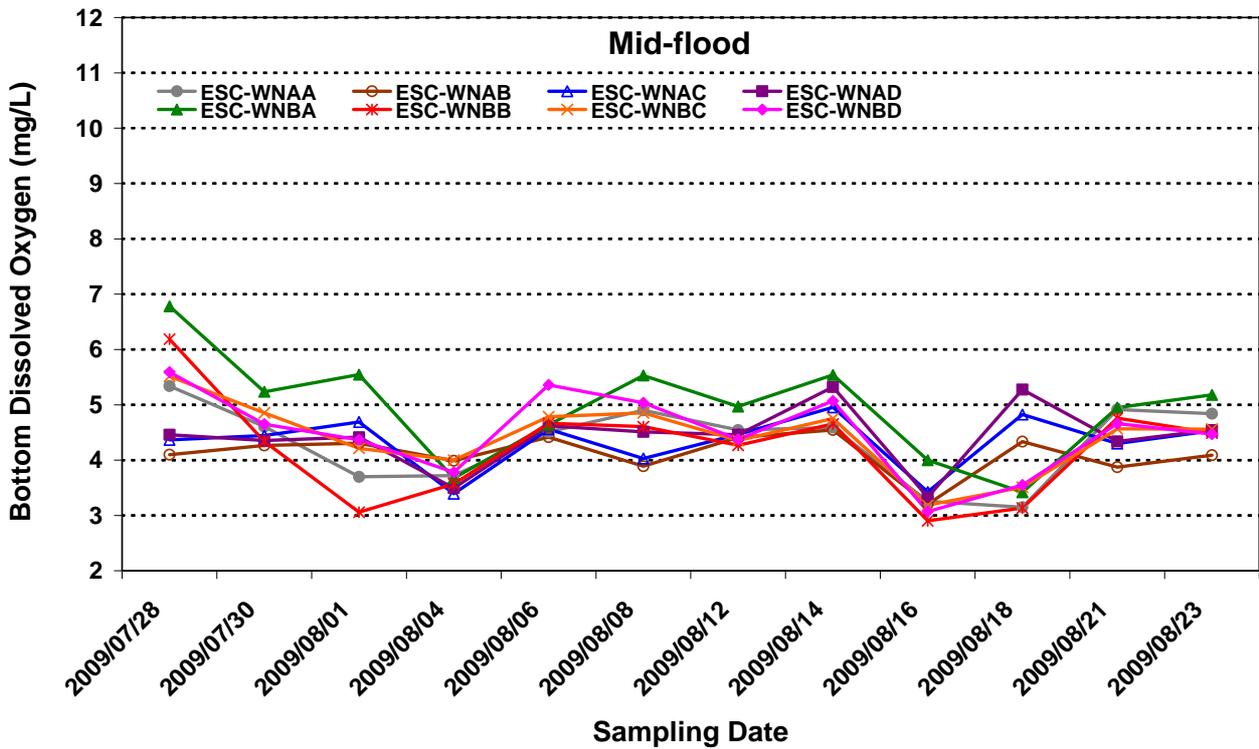


Figure D10 Dissolved Oxygen (mg/L) near the bottom of the water column measured at Near Field stations during mid-flood tide for the baseline monitoring period from 28 July to 23 August 2009.

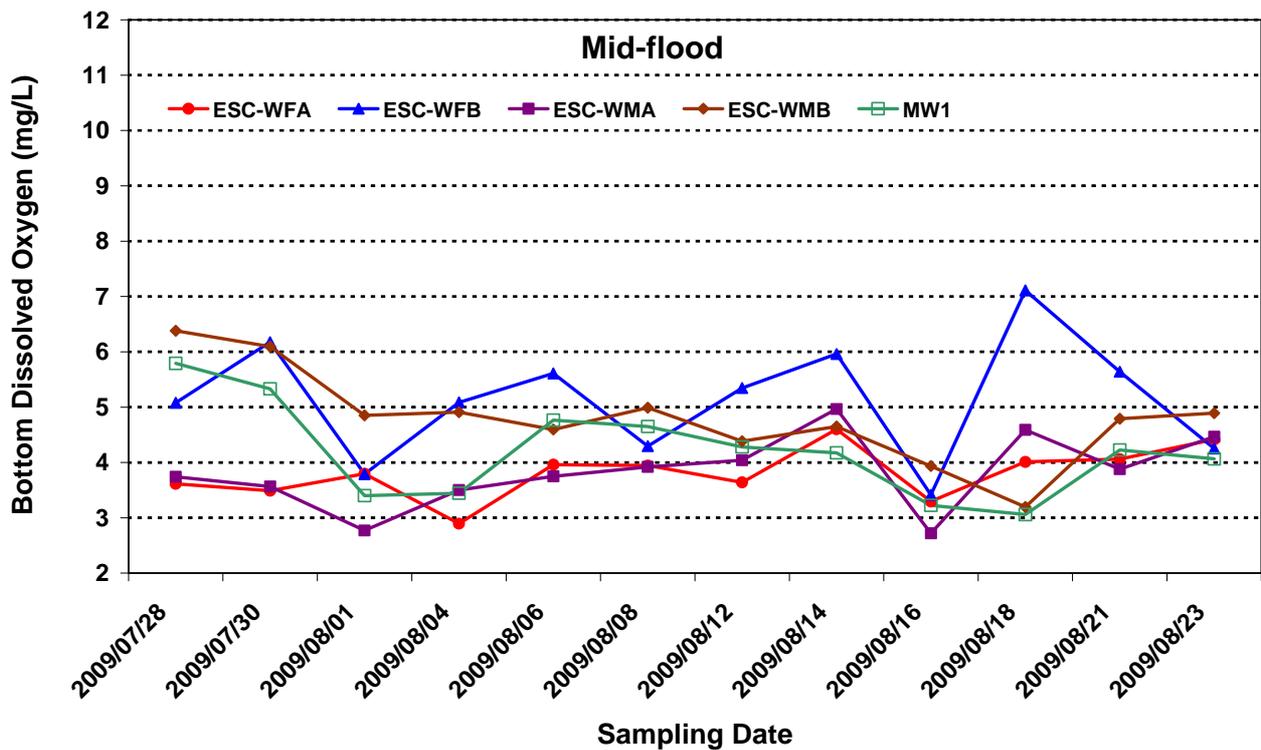


Figure D11 Dissolved Oxygen (mg/L) near the bottom of the water column measured at Mid and Far Field stations during mid-flood tide for the baseline monitoring period from 28 July to 23 August 2009

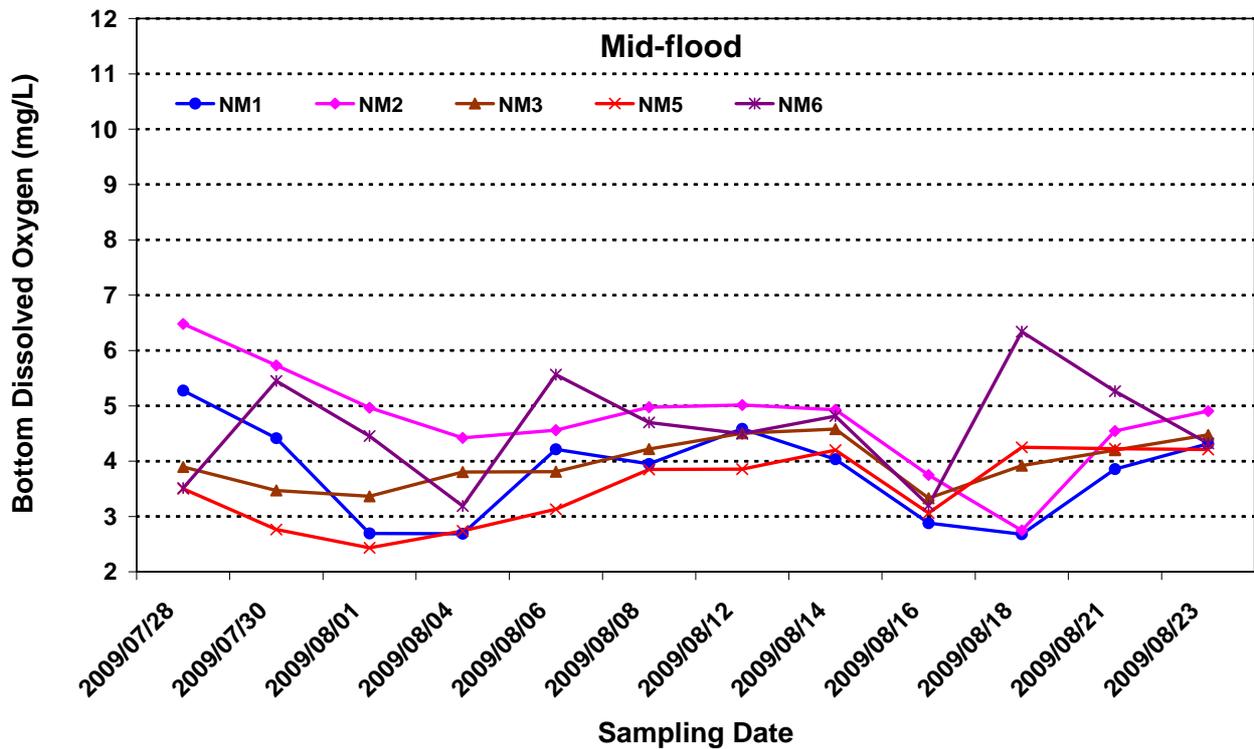


Figure D12 Dissolved Oxygen (mg/L) near the bottom of the water column measured at Reference stations during mid-flood tide for the baseline monitoring period from 28 July to 23 August 2009.

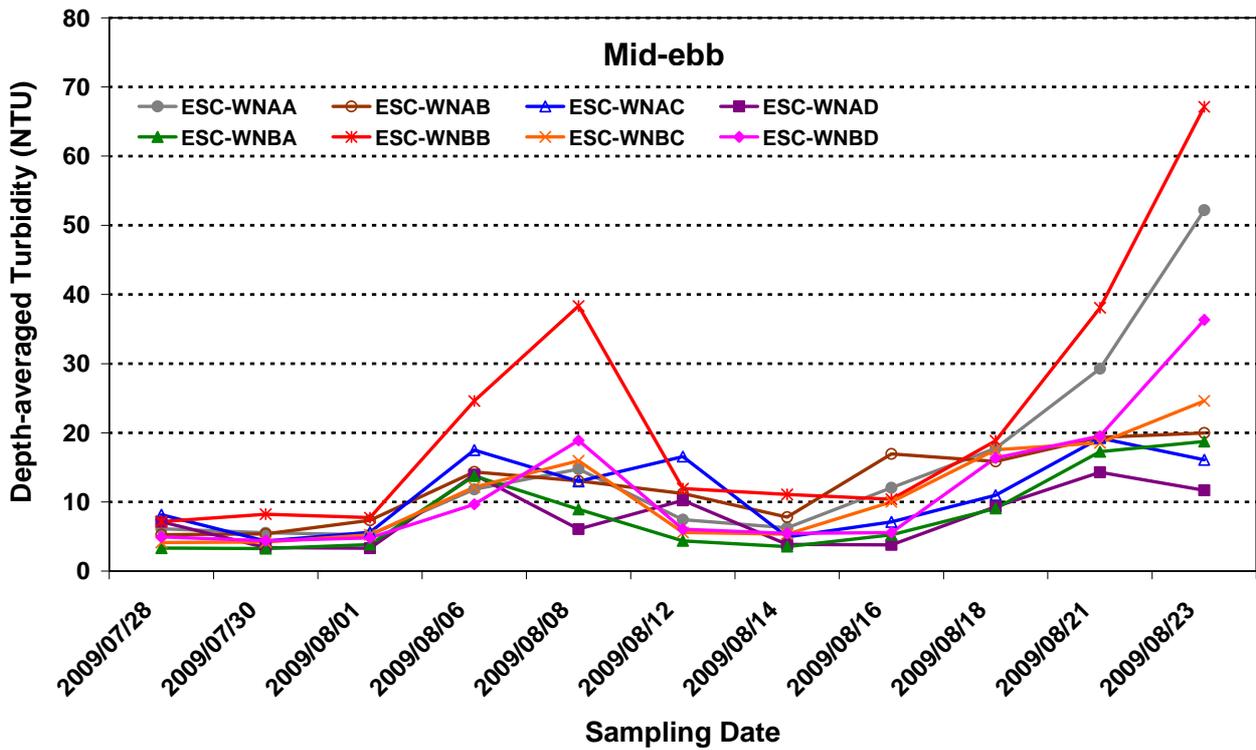


Figure D13 Depth-averaged turbidity (NTU) of water samples measured at Near Field stations during mid-ebb tide for the baseline monitoring period from 28 July to 23 August 2009

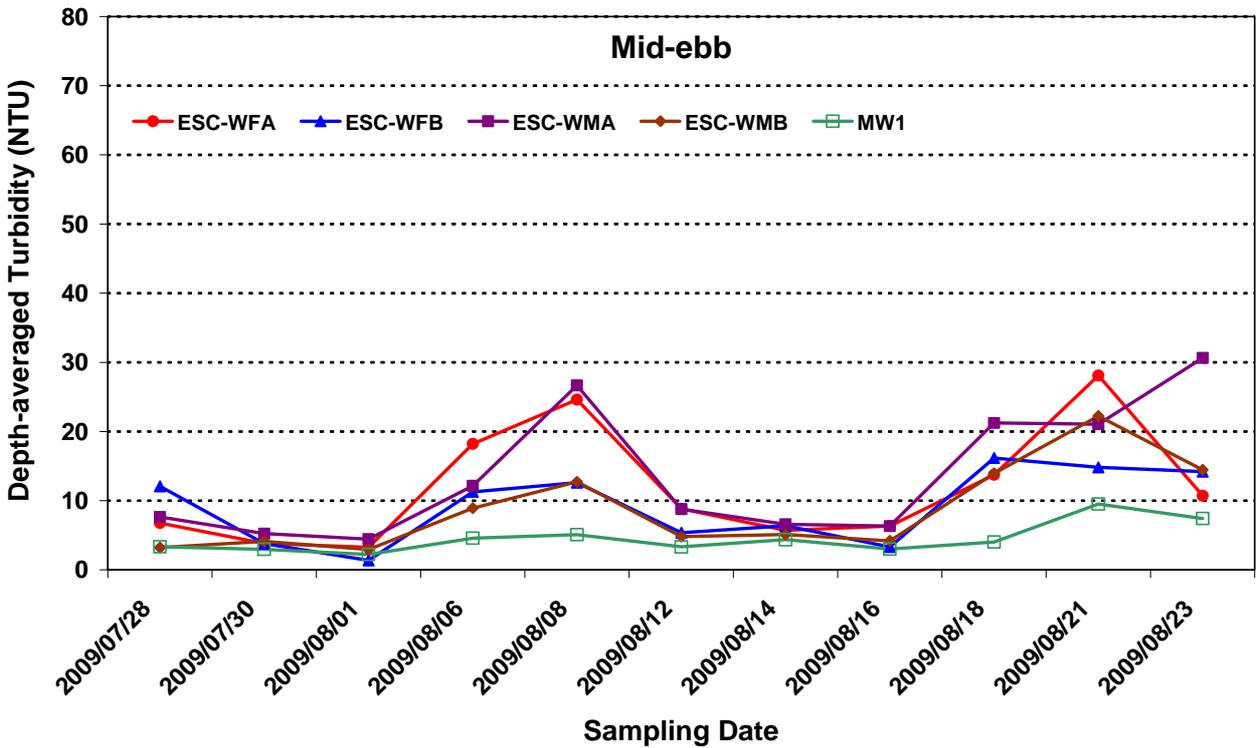


Figure D14 Depth-averaged turbidity (NTU) of water samples measured at Mid and Far Field stations during mid-ebb tide for the baseline monitoring period from 28 July to 23 August 2009.

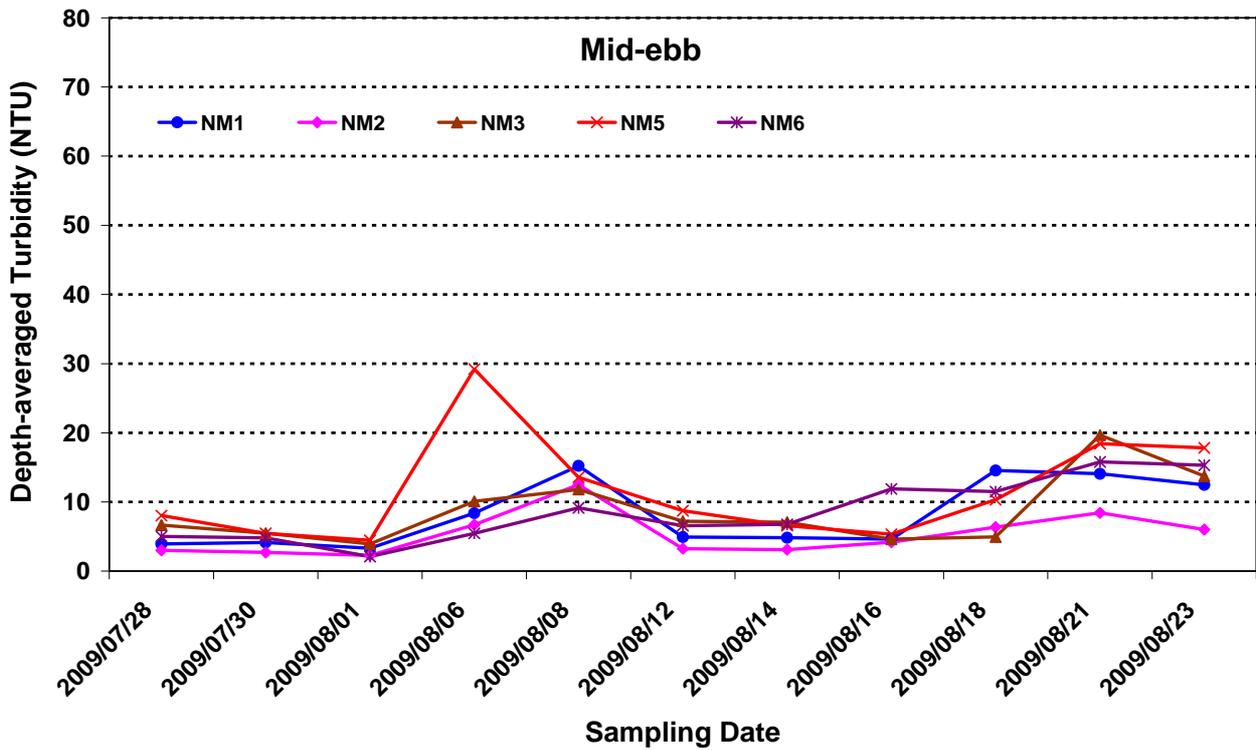


Figure D15 Depth-averaged turbidity (NTU) of water samples measured at Reference stations during mid-ebb tide for the baseline monitoring period from 28 July to 23 August 2009.

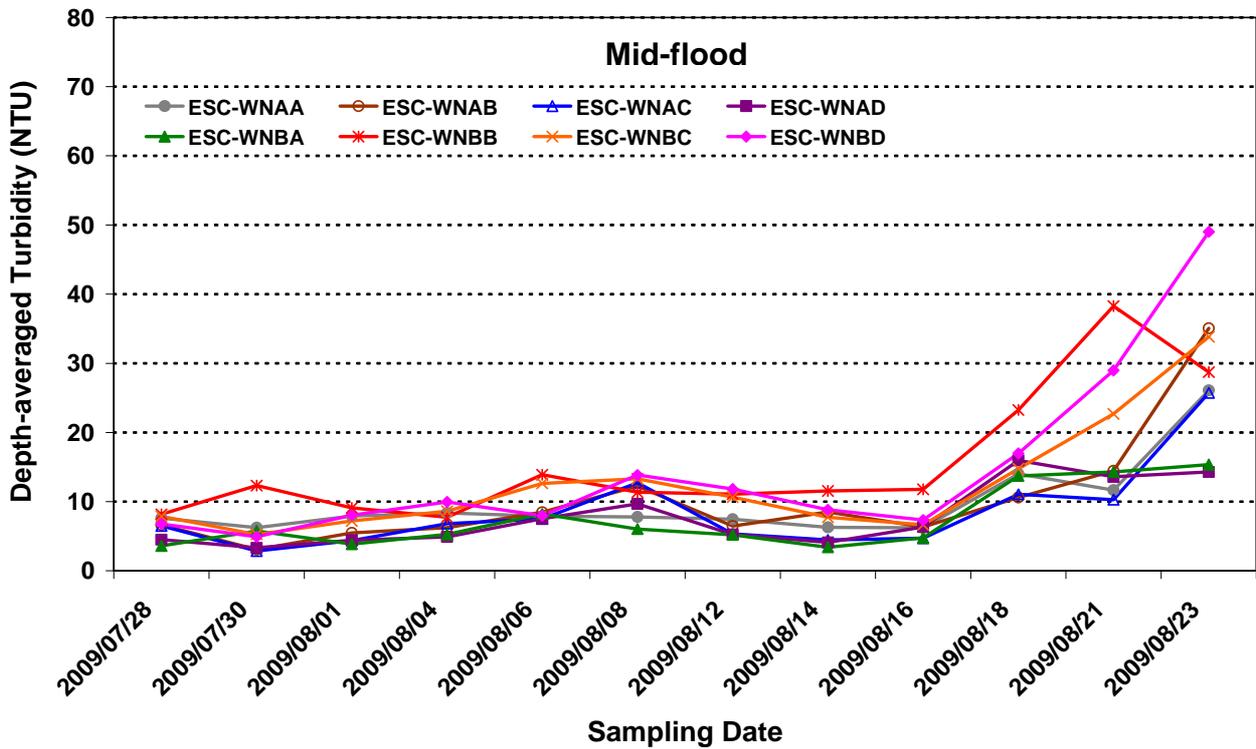


Figure D16 Depth-averaged turbidity (NTU) of water samples measured at Near Field stations during mid-flood tide for the baseline monitoring period from 28 July to 23 August 2009

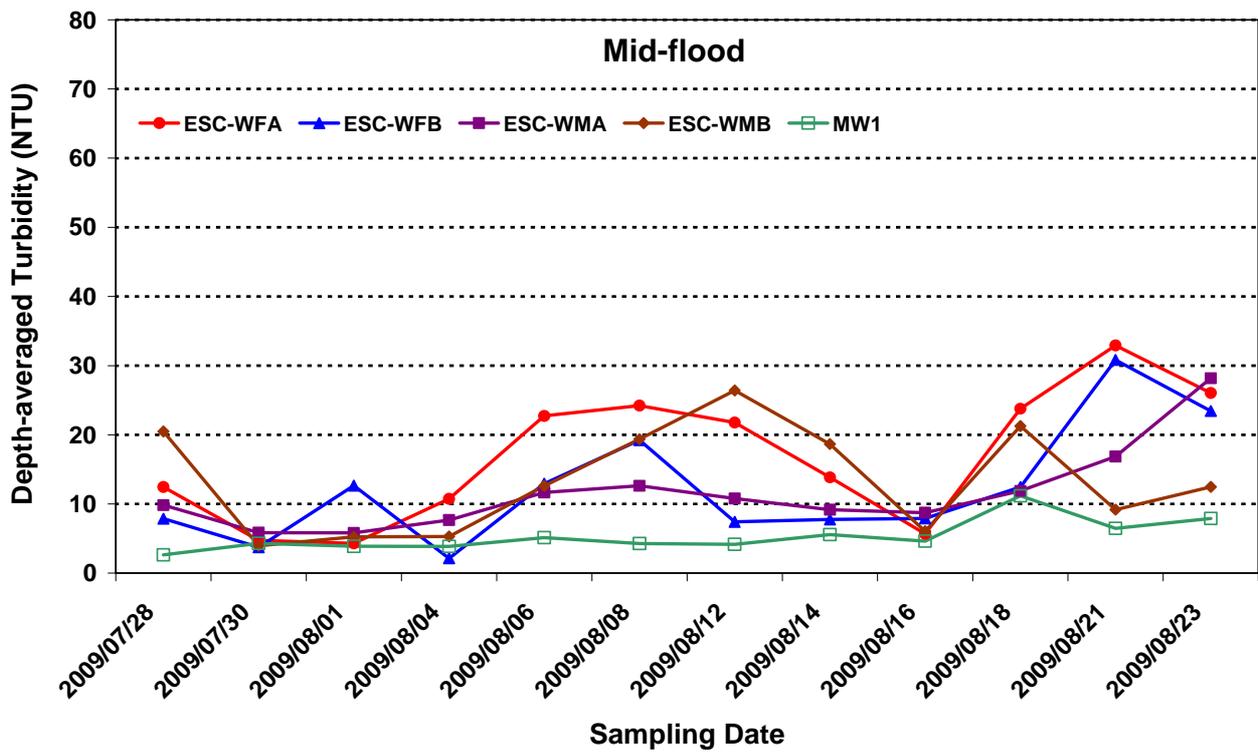


Figure D17 Depth-averaged turbidity (NTU) of water samples measured at Mid and Far Field stations during mid-flood tide for the baseline monitoring period from 28 July to 23 August 2009.

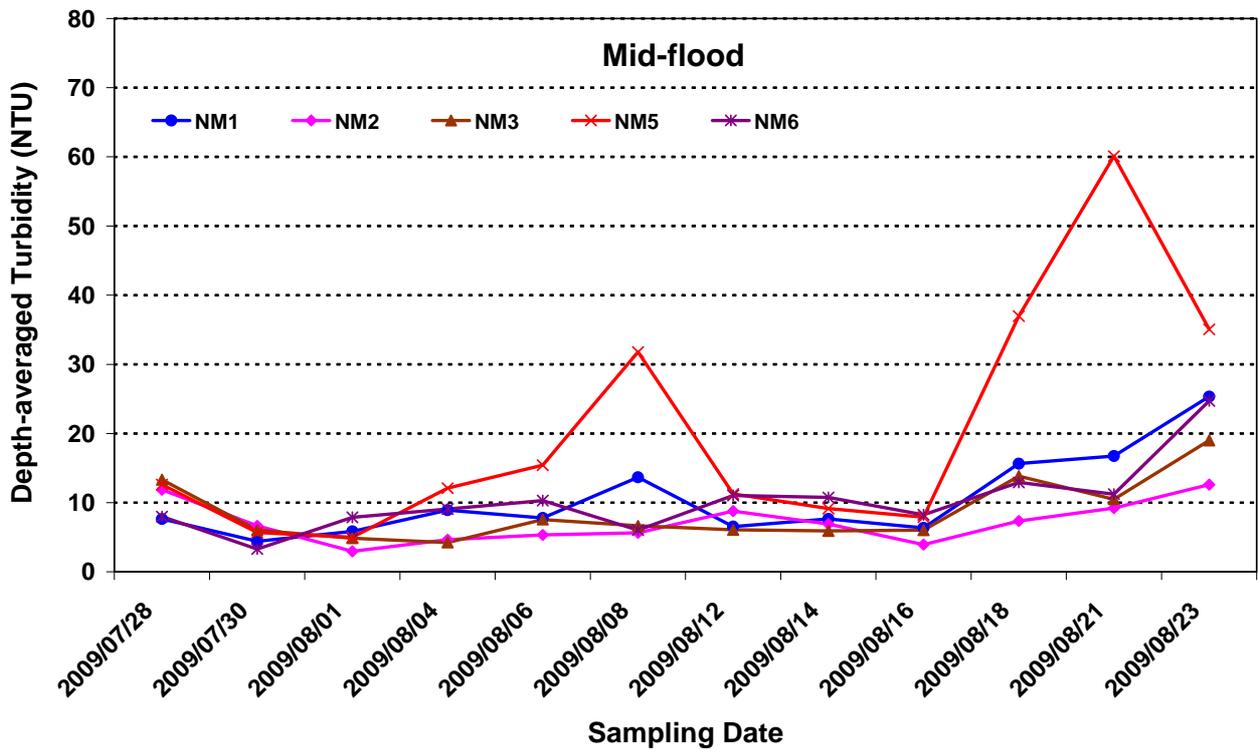


Figure D18 Depth-averaged turbidity (NTU) of water samples measured at Reference stations during mid-flood tide for the baseline monitoring period from 28 July to 23 August 2009.

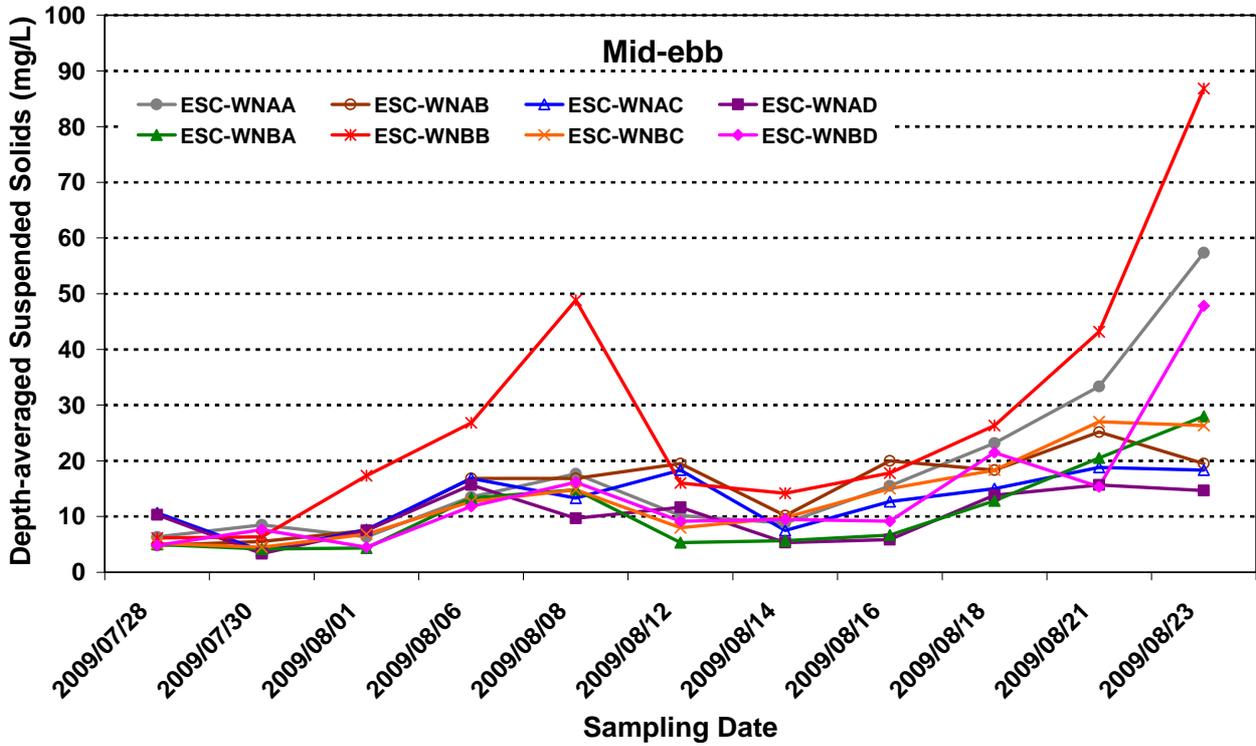


Figure D19 Depth-averaged Suspended Solids (mg/L) of water samples measured at Near Field stations during mid-ebb tide for the baseline monitoring period from 28 July to 23 August 2009

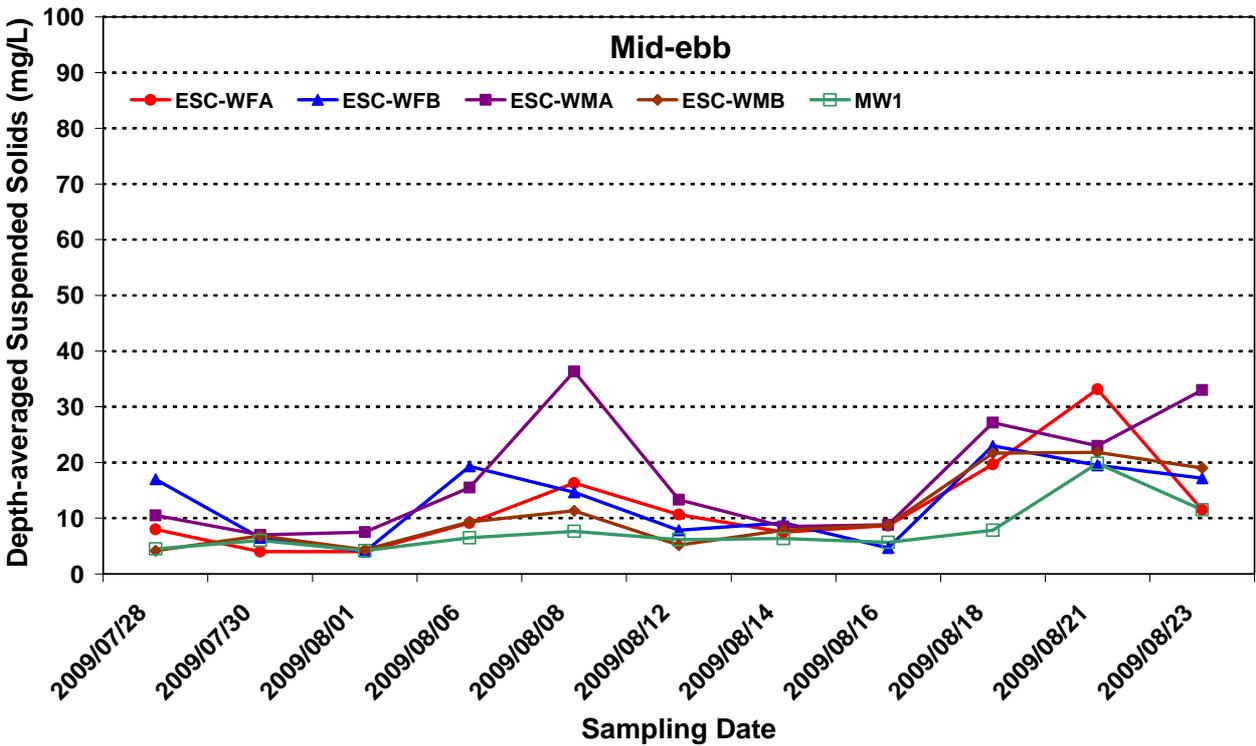


Figure D20 Depth-averaged Suspended Solids (mg/L) of water samples measured at Mid and Far Field stations during mid-ebb tide for the baseline monitoring period from 28 July to 23 August 2009

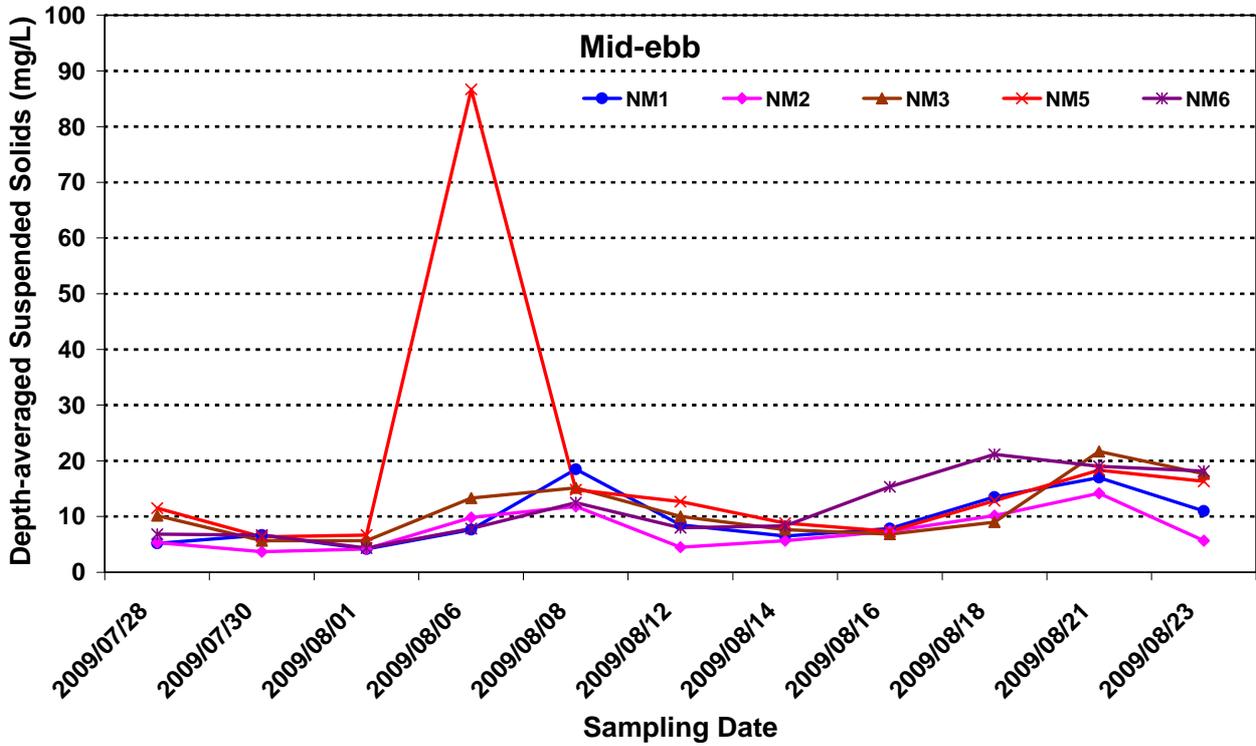


Figure D21 Depth-averaged Suspended Solids (mg/L) of water samples measured at Reference stations during mid-ebb tide for the baseline monitoring period from 28 July to 23 August 2009.

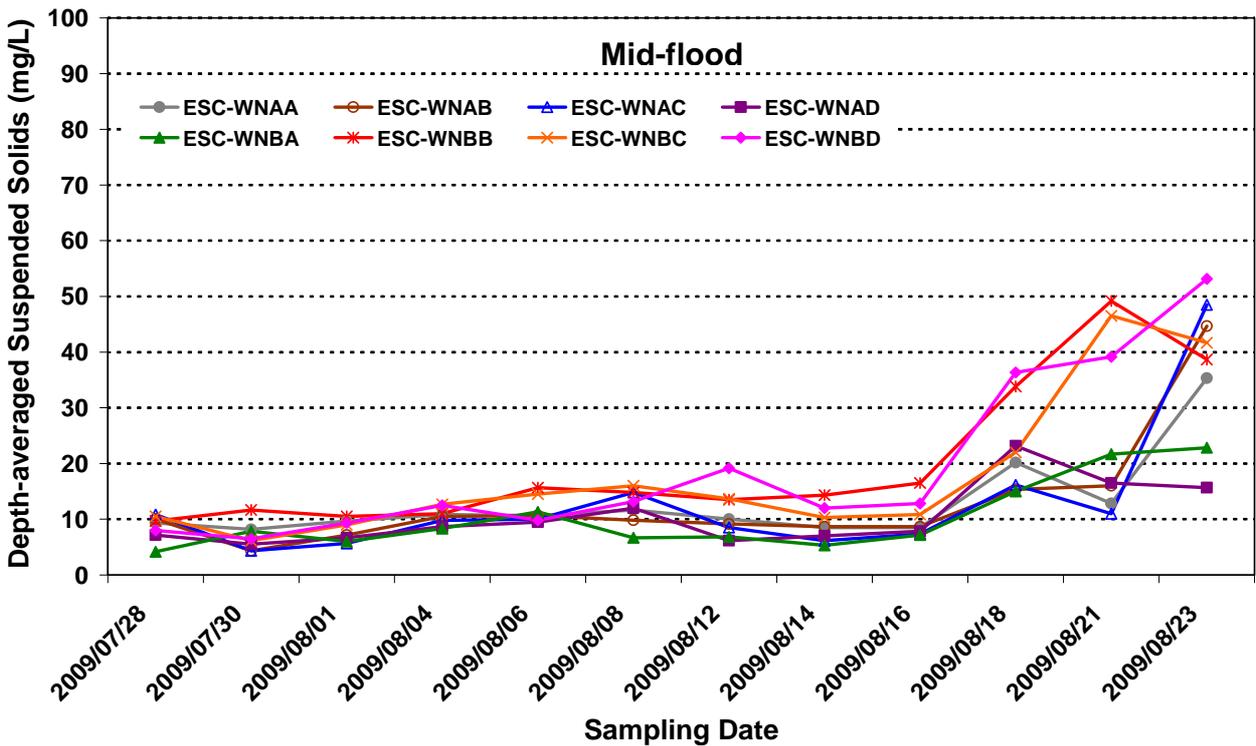


Figure D22 Depth-averaged Suspended Solids (mg/L) of water samples measured at Near Field stations during mid-flood tide for the baseline monitoring period from 28 July to 23 August 2009

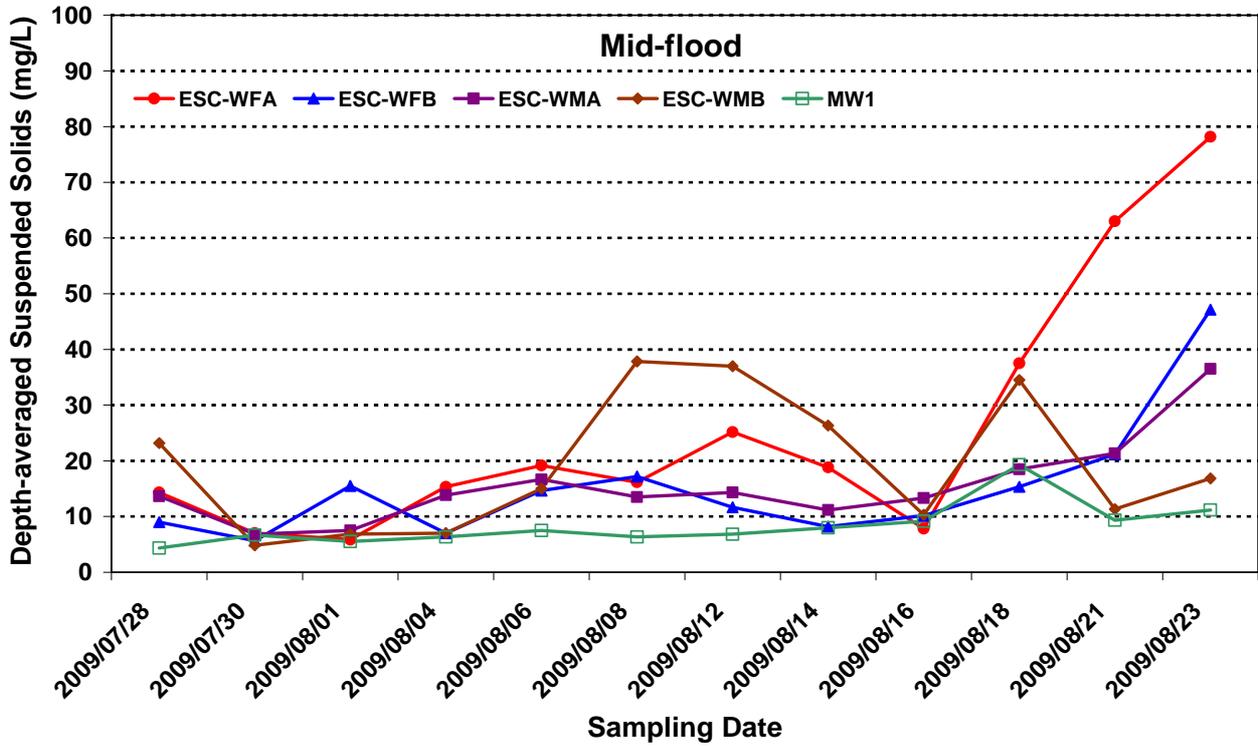


Figure D23 Depth-averaged Suspended Solids (mg/L) of water samples measured at Mid and Far Field stations during mid-flood tide for the baseline monitoring period from 28 July to 23 August 2009.

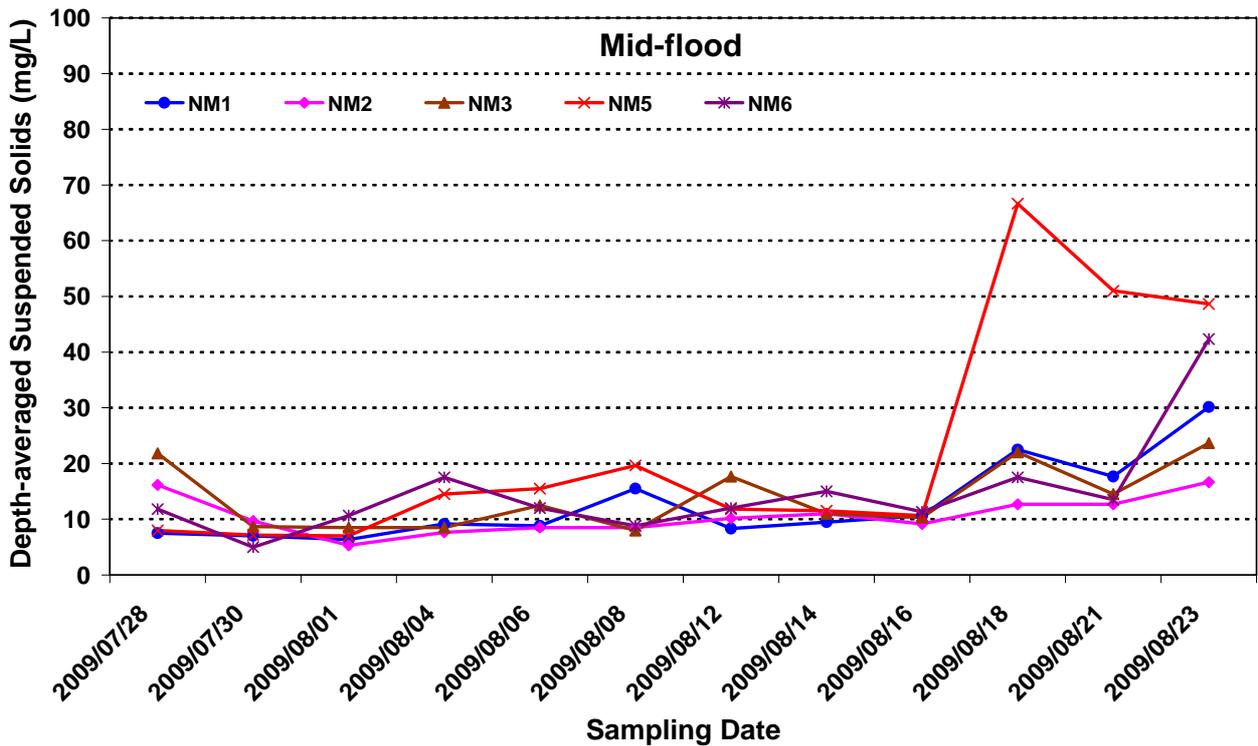


Figure D24 Depth-averaged Suspended Solids (mg/L) of water samples measured at Reference stations during mid-flood tide for the baseline monitoring period from 28 July to 23 August 2009.

Annex D1 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WFA

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/07/28	Cloudy and Rainy	Mid-ebb	Surface	5:19:13 PM	1.1	30.17	10.8	170.2	0.35	7.39	87.86	6.24	4.51	5.28	6.78
				5:21:54 PM	1	30.19	10.66	164.7	0.66	7.42	76.22	5.42	4.51		
			Middle	5:18:24 PM	4.7	28.99	16.71	203.5	0.37	7.18	66.99	4.7	5.21		
		Mid-flood	Surface	5:21:05 PM	4.6	28.95	17.41	160.4	0.5	7.2	67.79	4.74	4.31	3.40	12.46
				Bottom	5:17:15 PM	8.9	27.67	23.05	168	0.24	7.1	50.17	3.47		
			Middle	5:20:12 PM	9	27.43	24.01	168	0.24	7.13	48.15	3.33	10.42		
		Mid-flood	Surface	11:51:21 AM	1.1	29.36	12.55	35.7	0.14	7.38	73.62	5.25	4.91	4.97	12.46
				11:55:50 AM	0.9	29.36	12.6	38.3	0.14	7.38	76.56	5.46	8.72		
			Middle	11:50:35 AM	4.9	28.95	17.91	14	0.2	7.35	65.66	4.58	4.51		
Mid-flood	Surface	11:54:53 AM	4.7	29.03	17.57	6.4	0.12	7.35	65.88	4.6	8.72	3.62	12.46		
		Bottom	11:49:21 AM	8.9	27.28	24.61	332.3	0.49	7.38	54.78	3.78			21.85	
	Middle	11:53:49 AM	8.8	27.3	24.52	335.1	0.54	7.38	49.96	3.45	26.06				
2009/07/30	Cloudy and Rainy	Mid-ebb	Surface	7:34:43 PM	1.1	29.77	9.57	160.1	0.24	7.47	81.24	5.85	4.71	5.39	3.83
				7:38:35 PM	1.2	29.57	13.24	343.6	0.29	7.51	79.35	5.62	4.41		
			Middle	7:34:01 PM	4.8	28.8	18.98	205.4	0.06	7.47	74.77	5.19	2.81		
		Mid-flood	Surface	7:37:52 PM	4.7	28.64	19.42	312.4	0.14	7.48	70.55	4.9	3.01	3.47	4.74
				Bottom	7:33:24 PM	7.9	27.27	24.74	252	0.04	7.29	50.72	3.5		
			Middle	7:37:13 PM	8.1	27.15	25.24	252	0.04	7.37	49.83	3.44	3.91		
		Mid-flood	Surface	3:46:02 PM	1	29.7	11.13	314.3	0.11	7.43	73.92	5.28	4.81	4.50	4.74
				3:50:32 PM	1	29.8	10.73	3.1	0.13	7.44	75.19	5.38	4.71		
			Middle	3:45:07 PM	4.6	28.27	20.31	327.6	0.08	7.34	54.37	3.78	5.81		
Mid-flood	Surface	3:49:41 PM	4.7	28.21	20.58	342.4	0.08	7.34	50.89	3.54	4.91	3.49	4.74		
		Bottom	3:44:28 PM	7.8	27.22	24.88	336.2	0.3	7.33	54.28	3.75			4.31	
	Middle	3:48:57 PM	7.9	27.3	24.46	315.1	0.29	7.34	46.73	3.23	3.91				
2009/08/01	Sunny	Mid-ebb	Surface	9:57:29 AM	1.2	29.4	12.29	186.9	0.62	7.58	73.42	5.24	4.51	4.75	3.26
				9:59:39 AM	1.3	29.39	12.41	186.9	0.62	7.58	72.32	5.16	4.61		
			Middle	9:56:46 AM	5	28.42	19.56	161.9	0.42	7.56	61.82	4.31	2.41		
		Mid-flood	Surface	9:58:57 AM	4.9	28.37	19.52	183	0.37	7.55	61.65	4.3	2.61	4.21	4.31
				Bottom	9:56:10 AM	8	27.59	24.21	171.1	0.36	7.57	63.47	4.37		
			Middle	9:58:17 AM	7.9	27.48	24.54	168.4	0.38	7.58	58.75	4.05	3.31		
		Mid-flood	Surface	10:24:47 PM	0.9	29.62	12.6	193.4	0.13	7.48	82.51	5.86	4.01	5.34	4.31
				10:28:52 PM	1.1	29.61	12.65	221.5	0.24	7.49	83.03	5.89	4.11		
			Middle	10:23:47 PM	5	28.49	20.6	226.3	0.12	7.48	71.53	4.95	3.41		
Mid-flood	Surface	10:27:50 PM	4.9	28.16	21.96	223.4	0.1	7.47	67.41	4.66	4.01	3.80	4.31		
		Bottom	10:22:50 PM	8	26.92	26.4	190.1	0.15	7.37	55.61	3.83			5.21	
	Middle	10:26:58 PM	7.9	26.89	26.5	200.1	0.16	7.39	54.61	3.76	5.11				
2009/08/04	Rainy (Typhoon Signal No. 1 in the morning ; Signal No. 3 in the afternoon)	Mid-flood	Surface	5:21:49 AM	1.2	28.62	20.47	310.9	0.46	7.57	79.81	5.52	2.61	4.27	10.74
				5:24:53 AM	1.1	28.61	20.46	310.9	0.46	7.57	81.55	5.64	2.01		
			Middle	5:20:45 AM	5.9	26.58	28.05	325.8	0.5	7.37	43.39	2.98	7.92		
		Mid-flood	Surface	5:23:53 AM	6	26.58	28.01	338.4	0.5	7.38	42.79	2.93	7.22	2.90	10.74
				Bottom	5:19:38 AM	9.9	26.36	28.57	346.9	0.35	7.35	42.57	2.92		
			Middle	5:22:40 AM	9.1	26.42	28.42	348.2	0.43	7.38	41.88	2.87	21.05		

Annex D1 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged		
														DO (mg/L)	Turbidity (NTU)	
2009/08/06	Cloudy and Rainy	Mid-ebb	Surface	1:42:04 PM	1.1	28.28	16.78	191.6	1.07	7.29	76.49	5.43	7.92	5.48	18.22	
				1:47:28 PM	1.1	28.29	16.62	145.4	1.16	7.31	76.93	5.46	7.42			
			Middle	1:41:12 PM	4.1	28	18.84	181.3	0.94	7.31	78.88	5.56	6.52			
					1:46:45 PM	4.2	28.1	18.41	169.3	0.95	7.32	77.53	5.47	6.92		
				Bottom	1:40:10 PM	8.1	27.88	20.2	170.6	0.78	7.26	65.86	4.62	40.38	4.67	
					1:45:50 PM	7.9	27.9	19.98	178.1	0.81	7.28	67.12	4.71	40.18		
		Mid-flood	Surface	6:40:44 AM	1	28.08	16.34	328.5	328.5	0.46	7.32	81.24	5.8	8.62	5.32	22.73
				6:45:22 AM	1.1	28.03	16.5	327.6	327.6	0.29	7.34	82.25	5.87	9.22		
			Middle	6:39:53 AM	5	27.94	19.78	339.5	339.5	0.42	7.3	67.81	4.76	8.22		
			6:44:38 AM	4.9	27.85	20.44	333.6	0.42	7.33	69.42	4.86	10.42				
		Bottom	6:38:59 AM	9.1	27.76	22.31	357.4	0.36	7.31	59.5	4.13	41.89	3.96			
			6:43:49 AM	9.2	27.49	24.55	345.9	0.45	7.32	55	3.79	58.02				
2009/08/08	Cloudy	Mid-ebb	Surface	2:25:34 PM	1	29.65	14.73	163	0.53	7.41	85.3	5.98	4.27	5.02	24.62	
				2:32:16 PM	1	29.69	14.8	151.9	0.71	7.52	68.27	4.78	4.47			
			Middle	2:24:54 PM	6.1	28.65	19.83	156.8	0.45	7.25	67.25	4.66	5.69			
					2:31:33 PM	5.9	28.67	19.61	147.1	0.52	7.35	67.36	4.67	5.48		
				Bottom	2:23:51 PM	8.6	28.29	22.02	155.3	0.42	7.22	60.84	4.19	57.6	4.18	
					2:30:38 PM	8.2	28.26	22.17	149	0.85	7.32	60.55	4.17	70.18		
		Mid-flood	Surface	8:06:36 AM	1	28.82	15.09	27.7	27.7	0.39	7.44	72.87	5.17	7.82	4.86	24.23
				8:11:29 AM	1	28.85	14.71	21.9	21.9	0.38	7.45	73.08	5.2	7.61		
			Middle	8:05:54 AM	5.9	28.35	20	331.1	0.55	7.45	65.26	4.54	11.47			
					8:10:43 AM	6.1	28.31	20.58	332	0.55	7.47	65.16	4.52	12.48		
				Bottom	8:04:56 AM	9.4	27.72	24.55	328.9	0.76	7.45	57.84	3.97	39.25	3.95	
					8:09:15 AM	9.5	27.7	24.72	324.4	0.69	7.46	57.24	3.92	66.73		
2009/08/12	Cloudy and Rainy	Mid-ebb	Surface	4:11:35 PM	1.2	28.56	12.32	93.4	0.39	7.58	93.52	6.77	4.57	5.46	8.83	
				4:18:56 PM	1	29	13.28	158.6	0.52	7.46	81.98	5.86	4.77			
			Middle	4:10:52 PM	5.9	28.86	22.43	157.6	0.29	7.53	67.99	4.63	9.84			
					4:18:03 PM	5.9	28.81	22.74	141.3	0.33	7.52	67.15	4.57	13.9		
				Bottom	4:10:08 PM	9	28.61	25.1	162.3	0.27	7.57	69.48	4.68	8.32	4.64	
					4:14:30 PM	9	28.57	25.33	161.1	0.25	7.57	68.17	4.59	11.57		
		Mid-flood	Surface	10:54:54 AM	1.1	29.07	12.54	279.4	279.4	0.2	7.44	70.94	5.08	6.09	4.38	21.78
				10:58:32 AM	1	29.19	14.4	307.3	307.3	0.17	7.42	63.92	4.53	6.19		
			Middle	10:54:09 AM	5.9	28.49	25.92	340.5	0.52	7.58	58.37	3.92	11.97			
			10:57:46 AM	5.9	28.68	24.19	338.8	0.51	7.56	59	3.99	9.95				
		Bottom	10:53:13 AM	9	27.97	28.04	352.6	0.54	7.57	54.8	3.67	44.93	3.64			
			10:56:56 AM	9	27.99	27.98	336.6	0.45	7.56	53.88	3.61	51.52				
2009/08/14	Cloudy	Mid-ebb	Surface	5:53:05 PM	0.9	29.75	13.88	254.4	0.13	7.38	77.55	5.45	4.67	4.91	5.70	
				5:55:59 PM	1	29.3	16.95	315	0.21	7.37	74.86	5.22	4.98			
			Middle	5:52:27 PM	4.9	28.43	22.9	72.1	0.07	7.33	64.23	4.39	5.99			
					5:55:23 PM	4.9	28.47	22.72	279.1	0.03	7.36	66.81	4.57	4.88		
				Bottom	5:51:53 PM	8.2	27.98	26.73	161.6	0.16	7.33	60.06	4.05	7.61	4.17	
					5:54:35 PM	7.7	28.22	24.92	272.7	0.17	7.35	63.03	4.28	6.09		
		Mid-flood	Surface	1:31:53 PM	1.2	29.01	14.02	57.1	57.1	0.13	7.36	70.31	5	7	4.75	13.85
				1:34:33 PM	1.2	29.01	14.06	359.2	359.2	0.07	7.37	64.96	4.62	6.9		
			Middle	1:30:53 PM	4.9	28.52	21.4	26.7	26.7	0.16	7.47	71.57	4.93	18.16		
			1:33:46 PM	4.8	28.51	21.66	27.2	0.16	7.47	64.8	4.46	20.9				
		Bottom	1:29:49 PM	7.9	28.05	26.57	329.1	0.5	7.5	73.49	4.96	17.96	4.60			
			1:32:55 PM	8.2	28.18	25.76	346	0.31	7.48	62.77	4.24	12.18				

Annex D1 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/16	Cloudy	Mid-ebb	Surface	9:56:17 AM	1.2	29.52	14.6	155	0.78	7.67	92.94	6.54	3.56	5.84	6.35
				10:01:19 AM	1.2	29.53	14.61	166.6	0.74	7.67	94.8	6.67	3.46		
			Middle	9:55:42 AM	5.1	28.77	20.57	165.5	0.66	7.47	70.45	4.85	3.86		
		10:00:44 AM		5.2	29.02	19.14	159.2	0.67	7.48	76.73	5.31	3.66			
		Bottom	9:54:59 AM	8.1	28.5	22.59	143	0.51	7.56	77.62	5.31	10.86	5.34		
			10:00:05 AM	8	28.5	22.44	146.8	0.48	7.56	78.36	5.37	12.68			
		Mid-flood	Surface	9:23:43 PM	1.1	29.93	14.96	212.4	0.16	7.48	80.8	5.63	5.28	5.21	5.69
				9:25:45 PM	0.9	29.9	15.07	317.7	0.26	7.49	80.69	5.62	5.28		
			Middle	9:23:08 PM	5	28.98	21.77	312.5	0.13	7.5	66.09	4.51	4.47		
9:25:09 PM	5	29.18		21.35	324.7	0.19	7.5	74.23	5.06	4.57					
Bottom	9:22:32 PM	8	27.6	27.09	152.5	0.2	7.41	46.02	3.12	7.61	3.30				
	9:24:34 PM	8	27.7	26.82	129.6	0.14	7.41	51.18	3.47	6.9					
2009/08/18	Cloudy	Mid-ebb	Surface	11:57:09 AM	1	29.82	17.13	167.1	1.32	7.96	99.75	6.88	4.06	6.23	13.75
				12:03:27 PM	1	30.41	16.58	169.8	1.06	7.95	101.61	6.96	4.17		
			Middle	11:56:21 AM	6	28.5	23.11	166.1	0.67	7.78	74.45	5.08	13.8		
		12:02:49 PM		5.9	28.84	20.83	156.6	0.74	7.8	87.37	6	8.83			
		Bottom	11:55:22 AM	8.7	28.33	23.83	117.3	0.6	7.78	79.06	5.39	26.17	5.66		
			12:02:04 PM	8.3	28.42	23.5	158.5	0.82	7.8	86.99	5.93	25.46			
		Mid-flood	Surface	6:20:49 PM	1	29.71	16.19	353.7	0.25	7.34	75.69	5.26	11.47	5.00	23.77
				6:23:49 PM	1.1	29.71	15.41	347.6	0.39	7.35	79.03	5.52	12.18		
			Middle	6:19:52 PM	5	29.09	18.74	14.1	0.21	7.33	63.68	4.41	14.51		
6:23:03 PM	5.1	28.66		21.08	358.2	0.26	7.36	69.83	4.81	21.81					
Bottom	6:18:58 PM	8.1	27.84	25.55	333.3	0.52	7.39	56.8	3.87	38.03	4.01				
	6:21:44 PM	8.1	27.82	25.64	330.1	0.55	7.39	61.03	4.15	44.62					
2009/08/21	Sunny	Mid-ebb	Surface	1:44:16 PM	1.1	30.79	20.23	158.4	1.05	7.66	103.71	6.92	9.54	6.64	28.11
				1:39:09 PM	1	30.04	20.52	172	0.87	7.61	101.53	6.85	10.04		
			Middle	1:38:21 PM	6.1	29.13	21.73	179.6	0.76	7.55	94.36	6.42	13.15		
		1:43:39 PM		6.1	29.08	21.99	175.2	0.7	7.57	93.7	6.37	17.97			
		Bottom	1:37:33 PM	8.8	28.98	22.37	202.1	0.56	7.57	95.16	6.47	58.94	6.55		
			1:42:55 PM	9	28.98	22.42	157.1	0.91	7.57	97.54	6.63	59.04			
		Mid-flood	Surface	7:01:50 AM	1	29.25	18.85	16	0.62	7.41	71.56	4.94	9.84	4.72	32.92
				7:07:40 AM	1.1	29.27	18.79	31.6	0.59	7.42	70.83	4.89	11.05		
			Middle	7:00:59 AM	6.1	28.68	23.02	350.7	0.63	7.49	65.26	4.44	18.27		
7:07:07 AM	6.1	28.85		22.11	345	0.61	7.47	67.51	4.61	19.28					
Bottom	7:00:00 AM	9.1	27.65	26.78	329.7	0.76	7.51	58.58	3.97	70	4.06				
	7:06:06 AM	9.1	27.82	26.39	327.8	0.75	7.52	61.23	4.15	69.08					
2009/08/23	Sunny	Mid-ebb	Surface	2:45:57 PM	1	30.7	18.79	178.1	0.59	7.23	74.81	5.04	8.84	5.14	10.73
				2:53:45 PM	1.1	30.78	19.64	160.2	1	7.27	81.16	5.44	8.54		
			Middle	2:45:04 PM	5.1	30.28	21.98	144.5	0.48	7.28	73.1	4.87	8.34		
		2:53:04 PM		4.9	30.14	21.7	161	0.54	7.27	77.94	5.22	9.04			
		Bottom	2:44:17 PM	8.3	29.8	22.29	132	0.49	7.25	70.69	4.74	9.84	4.93		
			2:52:04 PM	8.2	29.73	22.12	153.8	0.56	7.25	76.13	5.12	19.78			
		Mid-flood	Surface	8:55:22 AM	1.1	29.7	18.16	349.4	0.63	7.37	68.14	4.69	11.55	4.61	26.06
				9:00:41 AM	1	29.72	18.11	15.9	0.55	7.37	68.62	4.72	11.25		
			Middle	8:54:10 AM	5	28.9	22.5	356.6	0.48	7.43	66.5	4.52	30.72		
8:59:42 AM	5.1	28.95		22.26	357.7	0.49	7.43	66.23	4.51	30.02					
Bottom	8:53:05 AM	8.1	28.48	24.59	321.1	0.73	7.46	65.23	4.42	39.76	4.42				
	8:58:57 AM	8.2	28.5	24.54	327	0.71	7.46	65.14	4.41	33.03					

Annex D2 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WFB

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/07/28	Cloudy and Rainy	Mid-ebb	Surface	4:03:17 PM	1.2	28.66	16.41	277.3	0.09	7.21	78.24	5.53	6.12	4.51	12.08
				4:06:05 PM	0.9	28.63	17.29	329.7	0.12	7.24	78.12	5.49	6.32		
			Middle	4:02:30 PM	2.9	26.2	29.27	128.6	0.15	7.03	45.16	3.1	10.62		
				4:05:13 PM	2.9	27.31	24.42	10.9	0.22	7.13	56.5	3.91	13.03		
			Bottom	4:01:31 PM	4.6	26.07	29.69	133.8	0.17	6.97	46.35	3.18	16.74		
				4:04:16 PM	4.7	26.09	29.64	20.1	0.06	7.04	40.65	2.79	19.64		
		Mid-flood	Surface	1:13:05 PM	1	29.44	10.83	10.2	0.18	7.6	94.19	6.77	4.31	6.56	7.87
				1:15:41 PM	1	29.47	10.79	14.5	0.18	7.61	94.51	6.79	4.31		
			Middle	1:12:26 PM	3	29.05	12.79	335.3	0.1	7.51	88.72	6.35	3.51		
				1:14:52 PM	3	29.05	13.21	10.8	0.15	7.54	88.53	6.32	3.91		
			Bottom	1:11:33 PM	4.8	28.23	19.27	25.1	0.3	7.49	79.61	5.58	7.22		
				1:14:03 PM	4.9	27.29	24.9	24.9	0.25	7.44	66.47	4.58	23.95		
2009/07/30	Cloudy and Rainy	Mid-ebb	Surface	6:17:33 PM	1	29.59	13.14	138.8	0.05	7.62	105.01	7.44	3.91	7.02	3.79
				6:19:55 PM	1.1	29.59	13.23	92.6	0.09	7.63	104.54	7.4	3.81		
			Middle	6:16:53 PM	3	28.91	17.54	99.8	0.07	7.52	90.47	6.32	3.71		
				6:19:14 PM	2.9	29.43	14.46	119.6	0.14	7.58	98.21	6.92	3.41		
			Bottom	6:15:36 PM	3.9	28.17	21.68	67.5	0.2	7.43	88.66	6.13	4.21		
				6:18:27 PM	3.7	28.92	17.54	60.5	0.21	7.56	92.8	6.49	3.71		
		Mid-flood	Surface	5:12:51 PM	0	29.69	12.65	5.1	0.08	7.74	104.09	7.38	3.81	6.91	3.74
				5:16:14 PM	0.9	29.67	12.86	58.5	0.17	7.73	96.17	6.81	3.81		
			Middle	5:12:06 PM	2.8	29.47	14.13	5.1	0.08	7.69	97.77	6.9	4.01		
				5:15:37 PM	2.7	29.49	14.08	65.9	0.17	7.68	92.61	6.54	3.61		
			Bottom	5:10:55 PM	3.7	28.73	18.32	38.5	0.21	7.59	85.42	5.96	3.61		
				5:14:21 PM	3.7	28.85	17.98	60.1	0.28	7.63	91.53	6.39	3.61		
2009/08/01	Sunny	Mid-ebb	Surface	11:04:56 AM	1.2	29.3	14.57	194.8	0.44	7.76	94.47	6.67	2.21	6.13	1.38
				11:10:35 AM	3.9	28.36	23.06	214.1	0.37	7.85	82.27	5.63	1.01		
			Middle	11:04:19 AM	3	28.54	20.09	206.6	0.4	7.71	78.85	5.47	1.31		
				11:09:36 AM	1.2	29.22	14.68	215.1	0.42	7.76	95.65	6.76	2.11		
			Bottom	11:03:40 AM	3.8	28.43	24.21	138	0.29	7.91	85.16	5.78	0.5		
				11:08:36 AM	3	28.43	21.61	206	0.38	7.74	78.52	5.41	1.11		
		Mid-flood	Surface	9:06:23 PM	1	29.26	16.62	328.1	0.17	7.41	77.85	5.44	7.32	4.12	12.66
				9:08:15 PM	1	29.51	15.78	328.1	0.17	7.46	58.09	4.06	11.33		
			Middle	9:05:50 PM	3	27.22	26.76	101.3	0.05	7.29	51.66	3.53	14.53		
				9:07:41 PM	3	27.22	26.77	27.8	0.06	7.35	50.67	3.46	14.43		
			Bottom	9:05:12 PM	4	27.21	26.88	60.1	0.17	7.24	59.19	4.04	13.43		
				9:07:05 PM	3.9	27.19	26.88	71.8	0.17	7.35	51.77	3.54	14.93		
2009/08/04	Rainy (Typhoon Signal No. 1 in the morning ; Signal No. 3 in the afternoon)	Mid-flood	Surface	6:43:58 AM	1.1	28.04	23.77	45	0.13	7.57	70.12	4.8	1.41	4.70	2.14
				6:46:58 AM	1	28.04	23.77	89.6	0.13	7.57	70.44	4.83	1.31		
			Middle	6:42:55 AM	4	27.91	24.75	39.3	0.21	7.56	66.66	4.55	2.21		
				6:45:59 AM	4.1	27.97	24.41	43.4	0.23	7.57	67.59	4.62	1.81		
			Bottom	6:41:51 AM	5.9	27.46	27.23	28	0.3	7.51	94.46	6.41	2.01		
				6:44:55 AM	5.7	27.43	27.23	34	0.33	7.51	55.41	3.76	4.11		

Annex D2 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/06	Cloudy and Rainy	Mid-ebb	Surface	12:19:09 PM	1	27.99	23.16	202.5	0.4	7.44	82.36	5.67	3.91	5.64	11.28
				12:21:31 PM	1.1	27.96	23.18	200.7	0.38	7.46	82.16	5.66	3.91		
			Middle	12:18:27 PM	3	27.95	23.18	202.5	0.37	7.42	81.83	5.63	4.71		
		12:20:52 PM		3	27.92	23.24	200	0.33	7.45	81.12	5.59	4.81			
		Bottom	12:17:38 PM	5	27.73	24.58	193.5	0.44	7.38	73.31	5.03	23.95	5.02		
			12:20:02 PM	5.1	27.73	24.57	198	0.46	7.42	72.9	5	26.36			
		Mid-flood	Surface	8:05:35 AM	1.1	27.69	23.02	20.4	0.44	7.64	86.95	6.02	5.91	5.90	12.95
				8:10:38 AM	0.9	27.7	23.03	38.7	0.37	7.66	86.36	5.98	6.02		
			Middle	8:04:49 AM	2.9	27.7	23.18	31.3	0.33	7.64	85.95	5.94	6.02		
8:09:55 AM	3	27.7		24.22	40.9	0.42	7.68	82.14	5.65	6.62					
Bottom	8:04:04 AM	6	27.7	25.02	19.4	0.27	7.68	82.74	5.66	19.74	5.61				
	8:09:02 AM	5.9	27.7	24.97	29.6	0.26	7.7	81.24	5.56	33.37					
2009/08/08	Cloudy	Mid-ebb	Surface	12:55:15 PM	1	28.81	22.01	180.5	0.11	7.48	76.33	5.21	8.12	4.78	12.62
				12:59:29 PM	0.9	29.15	18.15	199.8	0.22	7.53	79.24	5.5	5.79		
			Middle	12:54:20 PM	3	28.12	29.08	203.9	0.22	7.4	63.52	4.22	14		
		12:58:36 PM		2.9	28.11	29.09	190.5	0.22	7.51	63.13	4.2	12.58			
		Bottom	12:53:24 PM	4.9	28.11	29.06	206.1	0.22	7.36	63.12	4.2	16.74	4.17		
			12:57:49 PM	4.9	28.1	29.1	206.1	0.22	7.5	62.23	4.14	18.46			
		Mid-flood	Surface	9:33:53 AM	1.1	28.98	9.9	33.6	0.26	7.6	79.91	5.82	7	5.68	19.22
				9:37:52 AM	1	29.02	10.13	31.2	0.33	7.62	87.45	6.36	5.18		
			Middle	9:33:15 AM	3.1	28.54	21.74	41.1	0.55	7.64	74.89	5.15	8.53		
		9:37:16 AM		3	28.62	20.68	49.7	0.62	7.66	77.81	5.37	8.12			
		Bottom	9:32:21 AM	5.1	28.11	28.83	39.7	0.52	7.64	64.35	4.28	48.38	4.30		
			9:36:20 AM	5	28.12	28.83	35.7	0.44	7.65	64.75	4.31	38.13			
2009/08/12	Cloudy and Rainy	Mid-ebb	Surface	2:54:08 PM	0.9	28.92	14.15	194	0.11	7.46	95.26	6.79	3.86	6.47	5.36
				2:58:25 PM	1	28.86	15.28	252.9	0.11	7.51	92.93	6.58	4.67		
			Middle	2:53:14 PM	1.9	28.89	18.34	225.4	0.11	7.48	89.79	6.25	5.38		
		2:57:22 PM		2	28.88	17.95	252.9	0.11	7.54	89.35	6.24	5.48			
		Bottom	2:52:31 PM	4	28.32	27.55	66.9	0.19	7.61	82.61	5.52	6.29	5.59		
			2:56:39 PM	4	28.48	27.72	45.6	0.13	7.65	85.07	5.66	6.5			
		Mid-flood	Surface	12:12:41 PM	1.1	28.92	14.51	356.5	0.35	7.56	82.84	5.89	3.35	5.81	7.41
				12:16:35 PM	1	28.9	12.99	27.3	0.24	7.57	82.78	5.94	3.46		
			Middle	12:11:45 PM	2	28.95	16.17	356.5	0.35	7.56	81.52	5.74	3.66		
		12:15:58 PM		2	28.98	16.34	15.1	0.28	7.56	80.5	5.66	3.66			
		Bottom	12:11:01 PM	4	28.86	22.38	36	0.24	7.64	78.3	5.33	10.66	5.35		
			12:15:08 PM	4	28.78	23.04	4.7	0.26	7.65	78.8	5.36	19.68			
2009/08/14	Cloudy	Mid-ebb	Surface	4:45:57 PM	0.9	28.26	16.31	47.1	0.2	7.34	98.34	7	5.89	6.94	6.38
				4:48:21 PM	1.1	28.55	13.07	91.9	0.09	7.43	101.12	7.29	5.18		
			Middle	4:45:21 PM	2.2	28.22	18.61	13.1	0.13	7.33	96.05	6.75	6.29		
		4:47:46 PM		1.9	28.27	16.18	355.7	0.05	7.35	94.44	6.72	5.99			
		Bottom	4:44:40 PM	3.9	28.01	26.55	69.7	0.25	7.29	79.68	5.38	8.12	5.26		
			4:47:00 PM	3.8	28.09	25.46	68.6	0.18	7.34	75.67	5.13	6.8			
		Mid-flood	Surface	2:43:24 PM	0.9	28.25	11.95	16.6	0.27	7.56	105.97	7.73	4.37	7.42	7.77
				2:48:15 PM	0.9	28.68	10.62	22.2	0.34	7.6	97.78	7.13	3.76		
			Middle	2:42:47 PM	2.1	28.45	11.88	9	0.27	7.57	107.26	7.8	4.47		
2:47:15 PM	2	28.05		12.97	22.2	0.34	7.56	96.13	7	5.48					
Bottom	2:41:51 PM	4.1	28.21	23.7	13.9	0.25	7.51	97.59	6.67	16.54	5.96				
	2:46:21 PM	3.9	28.24	24.04	7.2	0.26	7.51	77.03	5.25	11.97					

Annex D2 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged		
														DO (mg/L)	Turbidity (NTU)	
2009/08/16	Cloudy	Mid-ebb	Surface	11:04:19 AM	1.1	29.69	11.74	195.4	0.47	7.65	107.28	7.64	2.85	7.62	3.30	
				11:01:20 AM	1.1	29.98	12.04	169.1	0.55	7.6	105.4	7.46	3.05			
			Middle	11:00:44 AM	2	29.72	12.34	169.1	0.55	7.65	108.97	7.73	3.25			
		Bottom	11:03:44 AM	2.1	29.62	12.01	192.7	0.38	7.66	107.11	7.63	3.35	7.35			
			11:00:11 AM	4.3	29.26	15.54	236.4	0.39	7.62	104.5	7.34	3.76				
			11:03:09 AM	4.2	29.22	15.82	187.3	0.37	7.64	104.88	7.36	3.56				
		Mid-flood	Surface	8:14:40 PM	1.1	29.98	14.89	25.9	45	0.15	7.54	102.19	7.12	5.38	5.77	7.92
				8:16:32 PM	1	29.64	16.8	45	0.22	7.5	92.2	6.39	6.5			
			Middle	8:14:02 PM	2	29.39	17.85	25.9	0.15	7.4	72.95	5.05	6.9			
8:15:58 PM	2.1			28.81	21.18	48.6	0.2	7.33	65.86	4.52	7.92					
Bottom	8:13:22 PM		4.1	27.73	27.96	45.5	0.27	7.19	46.01	3.1	10.15					
	8:15:23 PM		4	27.75	26.02	58.7	0.26	7.26	54.79	3.73	10.66					
2009/08/18	Cloudy	Mid-ebb	Surface	1:02:51 PM	1	28.19	26.05	192.8	0.68	7.83	75.4	5.09	11.87	4.86	16.18	
				1:07:10 PM	1	28.3	25.83	229.9	0.47	7.85	74.87	5.05	12.38			
			Middle	1:01:56 PM	2	27.75	27.71	192.8	0.68	7.77	68.64	4.62	15.22			
Bottom	1:06:36 PM	2.1	28.08	26.3	222.3	0.45	7.83	69.37	4.68	13.7	4.37					
	1:01:03 PM	4	27.37	28.95	220.1	0.52	7.73	65.84	4.43	22.11						
	1:05:53 PM	4.1	27.36	28.95	195	0.51	7.76	63.86	4.3	21.81						
Mid-flood	Surface	5:02:01 PM	1.1	29.67	19.98	75.5	68.9	0.2	7.49	109.8	7.48	9.84	7.27	12.47		
		5:04:20 PM	1	29.62	20.21	68.9	0.18	7.5	104.08	7.08	10.05					
	Middle	5:01:03 PM	2.1	29.52	20.53	30.3	0.15	7.48	108.94	7.41	11.47					
		5:03:34 PM	1.9	29.5	20.67	54.3	0.21	7.49	104.7	7.12	11.47					
	Bottom	5:00:07 PM	4	29.01	23	72.4	0.23	7.46	106.68	7.22	16.94					
		5:02:50 PM	4	29.08	22.62	72.7	0.2	7.47	103.33	7	15.02					
2009/08/21	Sunny	Mid-ebb	Surface	12:06:00 PM	1	28.66	23.83	217.1	0.35	7.5	95.71	6.49	11.15	6.24	14.81	
				12:17:49 PM	1.1	28.56	24.55	208.5	0.32	7.71	91.28	6.17	10.64			
			Middle	12:05:19 PM	3.1	28.14	25.87	226.1	0.21	7.47	92.14	6.23	10.85			
		Bottom	12:17:04 PM	2.9	28.21	25.88	207.7	0.3	7.7	89.99	6.08	10.85	5.68			
			12:04:34 PM	5	26.96	28.85	191.6	0.35	7.31	82.58	5.6	23.7				
			12:16:22 PM	5	26.91	29.12	196.7	0.38	7.62	85.03	5.76	21.69				
		Mid-flood	Surface	8:26:14 AM	1	28.83	20.4	28.9	32.7	0.51	7.48	88.41	6.09	8.94	5.81	30.83
				8:31:13 AM	1	28.8	20.71	32.7	0.4	7.48	86.5	5.95	9.54			
			Middle	8:25:33 AM	2.9	28.7	23.42	39.2	0.4	7.49	83.79	5.69	24.8			
8:30:25 AM	3			28.55	24.22	33.9	0.41	7.49	80.96	5.49	31.83					
Bottom	8:24:53 AM		5	28.66	24.13	41.2	0.43	7.5	84.27	5.7	38.46					
	8:29:41 AM		4.9	28.52	24.8	43.1	0.4	7.48	82.56	5.58	71.39					
2009/08/23	Sunny	Mid-ebb	Surface	1:26:04 PM	1.1	29.12	22.39	181.7	0.24	7.29	85.98	5.83	9.04	5.46	14.19	
				1:30:49 PM	0.9	29.64	21.87	208.9	0.22	7.36	89.2	6.01	8.54			
			Middle	1:25:19 PM	3.1	27.29	27.23	203.7	0.18	7.19	71.66	4.88	13.66			
		Bottom	1:30:05 PM	3	27.1	27.74	196.8	0.34	7.25	75.08	5.11	12.15	4.85			
			1:24:27 PM	5.1	26.62	28.89	186.3	0.31	7.17	65.95	4.5	20.68				
			1:29:22 PM	4.9	26.63	28.9	202.4	0.23	7.25	76.28	5.2	21.09				
		Mid-flood	Surface	10:23:06 AM	1	29.28	20.39	356.2	38.1	0.48	7.44	79.61	5.44	11.95	5.26	23.45
				10:28:41 AM	1.2	28.96	21.53	38.1	0.5	7.46	78.34	5.35	15.36			
			Middle	10:22:18 AM	3.1	28.75	22.18	26.4	0.47	7.42	74.45	5.09	20.18			
10:27:52 AM	3			28.64	22.78	38.7	0.55	7.44	75.33	5.14	20.89					
Bottom	10:21:26 AM		4.9	27.29	27.53	28.2	0.28	7.37	59.89	4.07	33.94					
	10:27:04 AM		4.9	27.03	28.23	47.2	0.33	7.41	65.36	4.44	38.35					

Annex D3 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WMA

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/07/28	Cloudy and Rainy	Mid-ebb	Surface	6:01:02 PM	0.9	29.67	14.33	140.1	0.59	7.39	82.64	5.81	3.61	5.24	7.65
				6:05:33 PM	0.7	30.24	10.52	125.1	0.43	7.58	95.35	6.78	4.41		
			Middle	6:00:16 PM	6.6	28.09	21.57	127.4	0.43	7.25	60.59	4.2	3.71		
				6:04:44 PM	6.5	28.06	21.68	132.8	0.38	7.26	60.38	4.18	3.71		
			Bottom	5:59:04 PM	13.8	26.18	28.02	121.3	0.28	7.2	44.66	3.08	14.63		
				6:03:44 PM	14.1	26.19	28	97.8	0.24	7.21	44.84	3.1	15.83		
		Mid-flood	Surface	11:02:28 AM	1	28.89	17.78	236.9	0.74	7.44	72.12	5.04	3.41	4.64	9.84
				11:08:21 AM	1	28.97	17.37	298.7	0.54	7.44	76.56	5.35	3.61		
			Middle	11:01:30 AM	6.7	28.15	21.33	270.7	0.35	7.38	59.76	4.14	4.51		
				11:07:24 AM	6.7	28.11	21.56	322.5	0.28	7.37	57.87	4.01	5.21		
			Bottom	11:00:20 AM	12.7	27.32	24.33	263.3	0.54	7.37	52.93	3.66	18.34		
				11:06:13 AM	12.7	27.36	23.4	305.4	0.46	7.37	54.95	3.82	23.95		
2009/07/30	Cloudy and Rainy	Mid-ebb	Surface	8:20:02 PM	1.1	29.26	17.99	345	0.12	7.69	89.87	6.23	2.31	4.77	5.23
				8:23:45 PM	1.3	29.26	17.78	322.5	0.15	7.72	90.62	6.29	2.61		
			Middle	8:19:19 PM	8	27.27	24.63	237.9	0.08	7.42	47.11	3.25	6.92		
				8:23:04 PM	8.1	27.24	24.7	234.9	0.09	7.44	47.95	3.31	6.72		
			Bottom	8:18:34 PM	13	25.82	29.08	121.8	0.14	7.36	37.87	2.62	6.72		
				8:22:21 PM	12.8	25.69	29.45	121.8	0.14	7.4	36.36	2.51	6.12		
		Mid-flood	Surface	2:57:39 PM	1	29.96	14.4	261.7	0.44	7.65	77.25	5.4	3.21	5.14	5.85
				3:04:40 PM	0.9	29.94	14.46	261.7	0.44	7.67	97.4	6.81	3.21		
			Middle	2:56:51 PM	7.8	27.82	22.77	272.9	0.26	7.41	61.15	4.23	4.01		
				3:03:29 PM	7.7	27.82	22.74	311.6	0.26	7.42	59.54	4.12	3.61		
			Bottom	2:56:05 PM	12	26.96	25.73	316.6	0.08	7.32	57.67	3.98	11.13		
				3:02:09 PM	12.7	26.77	26.24	292.3	0.21	7.35	45.63	3.15	9.92		
2009/08/01	Sunny	Mid-ebb	Surface	9:06:03 AM	1	28.96	18.01	173.2	0.55	7.79	76.43	5.32	2.21	4.70	4.45
				9:09:26 AM	1.2	28.91	17.7	131.1	0.4	7.75	72.12	5.04	2.41		
			Middle	9:05:21 AM	7.9	27.1	26.54	115.2	0.13	7.77	60.42	4.14	3.91		
				9:08:53 AM	7.9	27.04	26.35	137.6	0.11	7.76	62.62	4.3	3.21		
			Bottom	9:04:45 AM	13	25.44	30.28	103.9	0.26	7.55	41.06	2.83	6.52		
				9:08:10 AM	12.6	25.49	30.14	101.6	0.26	7.56	40.07	2.77	8.42		
		Mid-flood	Surface	11:06:49 PM	1	29.59	15.17	137.4	0.28	7.61	87.54	6.13	3.81	5.19	5.82
				11:11:12 PM	1	29.44	15.98	62.5	0.17	7.56	82.21	5.75	3.11		
			Middle	11:05:53 PM	8	27.29	25.64	281.3	0.09	7.56	66.23	4.55	6.22		
				11:10:09 PM	7.9	27.34	25.34	295.2	0.12	7.54	63.02	4.33	6.12		
			Bottom	11:04:41 PM	14.1	25.61	30.09	279.9	0.09	7.38	38.97	2.69	8.02		
				11:09:07 PM	13.9	25.64	30.02	272.1	0.06	7.39	41.3	2.85	7.62		
2009/08/04	Rainy (Typhoon Signal No. 1 in the morning ; Signal No. 3 in the afternoon)	Mid-flood	Surface	4:39:07 AM	1	28.6	22.17	283	0.31	7.58	82.6	5.66	2.11	4.59	7.67
				4:43:35 AM	1	28.51	21.87	311	0.23	7.59	84.34	5.79	2.41		
			Middle	4:38:00 AM	8.1	27.62	26.84	336	0.45	7.43	46.48	3.15	9.62		
		4:42:32 AM		8	26.62	28.29	324.7	0.4	7.43	54.74	3.75	6.42			
		Bottom	4:36:56 AM	14	26.11	29.34	307.3	0.49	7.37	49.19	3.38	14.23			
			4:41:44 AM	13.9	26.14	29.3	304.1	0.5	7.4	52.73	3.62	11.23			

Annex D3 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged		
														DO (mg/L)	Turbidity (NTU)	
2009/08/06	Cloudy and Rainy	Mid-ebb	Surface	2:33:02 PM	1	28.42	17.52	153.6	1.06	7.49	79.34	5.59	6.42	4.94	12.16	
				2:38:24 PM	1	28.3	17.89	105.3	0.9	7.48	78.05	5.5	5.31			
			Middle	2:32:13 PM	7.2	27.75	22.42	138.1	0.82	7.45	63.01	4.37	10.22			
					2:37:39 PM	7.2	27.73	22.47	148.5	0.84	7.45	62	4.3	6.92		
				Bottom	2:30:52 PM	12.2	27.58	24.49	118.1	0.7	7.48	59.38	4.08	19.84	4.06	
					2:36:43 PM	13.8	27.56	24.63	108.9	0.63	7.47	58.59	4.03	24.25		
		Mid-flood	Surface	5:56:58 AM	1	27.95	18.07	151.1	0.11	7.2	81.99	5.81	7.02	5.18	11.68	
				6:01:37 AM	0.9	27.95	18.08	223	0.1	7.21	82.09	5.82	7.02			
			Middle	5:56:05 AM	7	27.55	25	313.3	0.31	7.2	66.07	4.53	5.41			
			6:00:46 AM	6.9	27.57	24.9	307.5	0.31	7.22	66.18	4.54	5.61				
		Bottom	5:55:03 AM	13.9	27.26	26.8	295.8	0.42	7.2	55.36	3.78	19.94	3.75			
			5:59:52 AM	14	27.25	26.82	296.1	0.56	7.21	54.46	3.72	25.05				
2009/08/08	Cloudy	Mid-ebb	Surface	3:10:12 PM	0.7	30.02	14.58	129.9	1.1	7.64	85.38	5.96	5.08	5.04	26.68	
				3:17:59 PM	1	30.15	14.9	125.7	1.11	7.67	85.89	5.97	4.98			
			Middle	3:09:25 PM	7.2	27.89	24.41	116.2	0.7	7.51	59.99	4.11	9.34			
					3:17:10 PM	7.2	27.91	24.36	113	0.67	7.56	60.31	4.13	12.18		
				Bottom	3:08:22 PM	12.4	27.78	24.99	113.7	0.5	7.52	57.49	3.93	66.32	3.95	
					3:15:53 PM	12.7	27.79	24.92	106.5	0.43	7.55	58	3.97	62.17		
		Mid-flood	Surface	7:17:05 AM	1	28.77	17.63	313.8	0.34	7.41	74.01	5.18	6.4	4.76	12.63	
				7:20:34 AM	1	28.77	17.62	313.6	0.41	7.42	74.62	5.23	6.09			
			Middle	7:16:19 AM	7.9	27.76	24.36	284.9	0.65	7.41	61.69	4.23	6.8			
			7:19:32 AM	8	27.92	23.55	291.7	0.69	7.43	63.7	4.38	6.9				
		Bottom	7:15:12 AM	14.1	27.54	25.58	285	0.63	7.4	57.89	3.96	21.71	3.92			
			7:18:33 AM	13.9	27.48	25.91	290.3	0.63	7.42	56.79	3.88	27.89				
2009/08/12	Cloudy and Rainy	Mid-ebb	Surface	4:56:41 PM	0.9	29.08	17.76	80.5	0.39	7.54	76.74	5.34	4.47	4.73	8.80	
				5:00:42 PM	1.4	28.93	20.54	113.2	0.33	7.57	73.66	5.06	4.06			
			Middle	4:55:52 PM	8.2	28.22	27.21	130.5	0.36	7.6	63.15	4.23	7.11			
					4:59:57 PM	8.1	28.3	26.67	136.2	0.38	7.61	63.82	4.28	6.6		
				Bottom	4:55:00 PM	14	27.9	28.15	130.5	0.33	7.59	60.5	4.06	14.91	4.10	
					4:59:13 PM	13.8	27.89	28.17	123.5	0.33	7.59	61.56	4.13	15.62		
		Mid-flood	Surface	10:13:33 AM	1.1	29.02	19.26	295.4	0.49	7.54	76.44	5.28	4.67	4.78	10.79	
				10:16:24 AM	0.9	29.04	18.45	292.8	0.46	7.52	75.81	5.26	4.37			
			Middle	10:12:45 AM	7.9	28.58	25.82	294.8	0.54	7.6	64.84	4.35	6.8			
			10:15:34 AM	7.9	28.55	25.92	295.1	0.52	7.6	62.85	4.22	7				
		Bottom	10:11:58 AM	13.9	28.07	27.94	301.3	0.56	7.4	61.43	4.11	20.59	4.04			
			10:14:40 AM	13.7	28.11	27.83	294	0.57	7.59	59.35	3.97	21.3				
2009/08/14	Cloudy	Mid-ebb	Surface	6:30:32 PM	1.1	29.4	16.71	90.5	0.13	7.49	73.8	5.14	4.27	4.55	6.58	
				6:33:01 PM	1	29.34	17.08	90.5	0.13	7.49	73.3	5.1	4.17			
			Middle	6:29:56 PM	6.9	28.17	25.37	151.7	0.23	7.5	59.42	4.03	7			
					6:32:16 PM	6.9	28.14	25.58	154.3	0.26	7.49	57.73	3.91	7.41		
				Bottom	6:29:03 PM	12.8	27.41	28.51	175.8	0.08	7.44	48.91	3.3	8.53	3.31	
					6:31:30 PM	13	27.41	28.53	145.2	0.12	7.44	49.1	3.31	8.12		
		Mid-flood	Surface	12:50:22 PM	1.1	28.46	22.79	283	0.77	7.57	90.66	6.2	3.46	5.85	9.19	
				12:54:12 PM	1.1	28.54	22.81	285.1	0.65	7.58	87.01	5.94	3.86			
			Middle	12:49:33 PM	8	28.14	24.36	303	0.37	7.56	82.64	5.64	4.37			
			12:53:30 PM	8	28.15	24.46	306.1	0.33	7.57	82.64	5.63	5.28				
		Bottom	12:48:40 PM	13.1	27.76	27.71	271	0.28	7.53	73.93	4.98	18.26	4.97			
			12:52:38 PM	12.9	27.49	28.44	282	0.37	7.53	73.47	4.95	19.88				

Annex D3 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/16	Cloudy	Mid-ebb	Surface	8:52:33 AM	1.1	29.32	14.66	146.3	0.8	7.74	84.34	5.95	3.56	5.10	6.33
				8:57:35 AM	1.1	29.3	15.64	123.1	0.67	7.73	87.81	6.16	3.46		
			Middle	8:51:58 AM	7	27.2	28.18	110.7	0.37	7.59	58.05	3.94	5.18		
				8:57:00 AM	6.9	27.1	28.24	113.5	0.26	7.6	63.88	4.34	4.47		
			Bottom	8:51:11 AM	12.9	26.86	29.5	164.8	0.42	7.54	51.07	3.46	13.29		
				8:56:15 AM	12.9	26.91	29.13	118.5	0.43	7.57	65.54	4.44	8.02		
		Mid-flood	Surface	10:02:55 PM	1.2	29.99	16.11	135.1	0.29	7.68	84.18	5.83	4.17	4.56	8.75
				10:07:05 PM	1	29.99	15.56	37.9	0.11	7.74	88.02	6.11	3.76		
			Middle	10:02:05 PM	8.1	28.11	25.26	3.1	0.04	7.47	47.99	3.26	10.86		
				10:06:19 PM	8.1	27.99	25.44	94.7	0.06	7.47	44.51	3.02	10.86		
			Bottom	10:01:04 PM	14	26.7	29.46	137.9	0.03	7.42	38.28	2.6	12.28		
				10:05:21 PM	14	26.7	29.49	137.9	0.03	7.43	41.83	2.84	10.55		
2009/08/18	Cloudy	Mid-ebb	Surface	10:55:36 AM	0.9	29.46	19.81	124.3	0.79	7.97	94.42	6.46	3.25	5.65	21.23
				11:01:04 AM	0.9	29.26	20.44	118.7	0.73	7.99	96.02	6.57	3.35		
			Middle	10:54:46 AM	8.1	27.27	27.93	119.8	0.55	7.83	64.47	4.37	9.54		
				11:00:19 AM	8.2	27	28.4	132.9	0.63	7.88	76.23	5.18	11.77		
			Bottom	10:53:52 AM	13.9	26.66	29.2	122.6	0.48	7.8	64.77	4.41	45.74		
				10:59:28 AM	13.9	26.64	29.24	105.3	0.47	7.81	74.76	5.09	53.75		
		Mid-flood	Surface	7:12:14 PM	1	29.94	17.77	337.6	0.63	7.69	100.48	6.9	4.88	6.20	11.89
				7:16:41 PM	1	29.87	17.93	3.4	0.34	7.66	97.49	6.69	5.69		
			Middle	7:11:25 PM	8	28.82	23.88	290	0.83	7.69	81.26	5.49	6.6		
				7:15:54 PM	7.9	28.78	24.04	296.1	0.77	7.68	84.32	5.7	7.11		
			Bottom	7:10:36 PM	14.1	27.81	26.46	315.9	0.76	7.6	64.91	4.4	22.32		
				7:14:58 PM	14	27.81	26.42	312.1	0.68	7.6	70.57	4.78	24.75		
2009/08/21	Sunny	Mid-ebb	Surface	2:19:33 PM	1.2	30.21	19.78	142	1.34	7.68	88.05	5.95	8.44	5.82	21.05
				2:27:01 PM	1.1	30.38	19.39	96.3	0.88	7.71	96.45	6.51	9.64		
			Middle	2:18:44 PM	7.1	28.74	23.57	142.5	1.02	7.68	76.14	5.16	15.76		
				2:26:11 PM	7.1	28.71	23.68	139.7	0.91	7.7	83.18	5.64	13.36		
			Bottom	2:17:55 PM	13	28.39	24.91	120	0.66	7.7	76.15	5.15	34.74		
				2:25:13 PM	12.7	28.27	25.28	116.2	0.67	7.73	83.88	5.68	44.38		
		Mid-flood	Surface	6:15:29 AM	1.1	29.39	19.77	303.2	0.23	7.43	66.34	4.54	8.34	4.44	16.86
				6:17:42 AM	1	29.38	19.76	296.8	0.3	7.44	65.99	4.52	8.34		
			Middle	6:14:55 AM	7.1	28.79	24.02	303.8	0.56	7.52	64.79	4.38	9.34		
				6:17:06 AM	7.2	28.76	24.08	311.5	0.62	7.52	63.87	4.32	10.54		
			Bottom	6:14:01 AM	13	27.44	27.31	290	0.76	7.51	56.64	3.84	33.54		
				6:16:18 AM	13.1	27.42	27.37	302.3	0.72	7.54	57.76	3.92	31.03		
2009/08/23	Sunny	Mid-ebb	Surface	3:30:49 PM	1.1	30.54	21.49	149.2	0.99	7.31	84.7	5.64	8.13	5.11	30.62
				3:36:50 PM	1	30.34	21.64	131.5	0.71	7.33	82.61	5.51	8.74		
			Middle	3:30:04 PM	8.1	28.39	24.9	113.7	0.69	7.25	68.61	4.64	22.49		
				3:36:04 PM	8.1	28.25	25.29	114.8	0.62	7.29	68.42	4.63	31.63		
			Bottom	3:29:04 PM	13	27.74	26.55	135.7	0.52	7.26	68	4.61	66.97		
				3:34:58 PM	13.1	28.11	25.67	111.7	0.51	7.32	74.66	5.06	45.78		
		Mid-flood	Surface	8:07:01 AM	1.1	29.43	20.64	271.6	0.7	7.4	69.76	4.75	8.84	4.59	28.18
				8:12:04 AM	1	29.58	19.64	320.3	0.7	7.4	72.82	4.98	8.84		
			Middle	8:06:07 AM	8	28	25.87	291.5	1.05	7.46	63.2	4.28	13.05		
				8:11:11 AM	7.9	28.33	25.08	306.7	1.09	7.46	64.09	4.34	14.56		
			Bottom	8:05:10 AM	13	27.49	27.07	313.7	0.81	7.48	63.9	4.34	59.34		
				8:10:15 AM	13.1	27.53	26.97	313.7	0.81	7.49	67.65	4.59	64.46		

Annex D4 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WMB

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/07/28	Cloudy and Rainy	Mid-ebb	Surface	5:35:11 PM	1.2	29.52	14.5	134.7	0.56	7.45	115	8.09	3.45	7.59	3.21
				5:38:11 PM	1.2	29.55	14.45	136.7	0.57	7.46	109.56	7.71	3.45		
			Middle	5:33:53 PM	4.1	29.04	17.21	117.7	0.35	7.35	108.27	7.57	2.64		
		Bottom	5:37:07 PM	4.2	28.9	18.27	134.8	0.36	7.36	100.17	6.98	2.64	6.39		
			5:32:46 PM	6.7	27.97	22.05	163.8	0.19	7.24	95.63	6.62	3.55			
			5:36:08 PM	7.2	27.62	23.29	84.1	0.16	7.28	89.06	6.16	3.55			
		Mid-flood	Surface	11:24:11 AM	1	29.3	14.74	122.3	0.06	7.39	107.94	7.61	3.76	7.09	20.47
				11:28:31 AM	1.2	29.25	15.16	180	0.04	7.39	101.12	7.12	3.76		
			Middle	11:23:17 AM	4.2	28.14	20.68	286.8	0.31	7.33	101.24	7.05	16.74		
Bottom	11:27:11 AM	4.1	28.28	20.08	304.6	0.24	7.34	94.33	6.57	11.77	6.38				
	11:21:36 AM	7	27.41	23.72	300.5	0.28	7.28	97.48	6.75	40.77					
	11:25:39 AM	6.9	27.31	24.08	303.4	0.25	7.3	86.77	6.01	46.04					
2009/07/30	Cloudy and Rainy	Mid-ebb	Surface	7:19:10 PM	1	29.53	17.2	357.2	0.17	7.75	103.26	7.16	4.67	6.59	4.13
				7:22:46 PM	1.2	29.53	17.21	282.7	0.14	7.74	103.56	7.18	4.67		
			Middle	7:17:58 PM	4.2	29.04	20.06	193.1	0.47	7.6	86.25	5.93	2.13		
		Bottom	7:21:33 PM	3.9	29.09	19.85	317.4	0.17	7.61	88.35	6.08	2.23	4.28		
			7:16:53 PM	7	27.12	25.33	257.5	0.13	7.39	60.83	4.2	6.19			
			7:20:22 PM	7	27.26	24.72	278.6	0.24	7.41	63.14	4.36	4.87			
		Mid-flood	Surface	2:48:42 PM	1.1	29.54	17.69	316.5	0.26	7.63	112.36	7.77	2.54	6.75	3.96
				2:51:52 PM	1.3	29.55	17.69	310.8	0.31	7.64	105.9	7.32	2.54		
			Middle	2:47:20 PM	4	28.17	21.66	283.6	0.21	7.44	88.41	6.12	3.86		
Bottom	2:50:53 PM	3.9	28	22.41	289.4	0.28	7.41	83.88	5.8	5.58	6.10				
	2:46:12 PM	5.6	27.66	23.52	310.2	0.31	7.38	90.68	6.26	4.16					
	2:49:36 PM	5.9	27.6	23.79	273.8	0.21	7.4	85.87	5.93	5.07					
2009/08/01	Sunny	Mid-ebb	Surface	10:01:03 AM	1	29.1	14.24	123.9	0.47	7.66	105.33	7.48	2.54	6.39	2.95
				10:05:12 AM	1	29.4	14.6	120.2	0.22	7.67	100.18	7.06	2.44		
			Middle	9:59:50 AM	4.1	28.18	22.81	130.7	0.37	7.6	81.17	5.58	2.23		
		Bottom	10:04:16 AM	4	28.26	22.48	143.1	0.49	7.62	79.16	5.44	2.03	5.96		
			9:58:52 AM	6.7	28.04	23.39	128.4	0.38	7.51	90.29	6.2	3.86			
			10:03:12 AM	7	28.05	23.32	153.7	0.33	7.52	83.18	5.71	4.57			
		Mid-flood	Surface	9:55:00 PM	1.2	30.1	13.52	9.5	0.26	7.59	102.21	7.16	4.26	7.07	5.26
				9:58:01 PM	1.1	29.92	15.57	178.7	0.09	7.67	103.11	7.17	3.96		
			Middle	9:53:47 PM	3.7	29.03	19.47	51.2	0.07	7.59	101.3	6.99	2.74		
Bottom	9:57:00 PM	3.9	29.38	18.77	266	0.17	7.63	101.11	6.97	3.05	4.85				
	9:52:37 PM	7.1	26.99	26.89	298	0.22	7.41	71.67	4.91	8.62					
	9:56:02 PM	7.1	27.03	26.77	228.7	0.24	7.41	69.87	4.79	8.93					
2009/08/04	Rainy (Typhoon Signal No. 1 in the morning ; Signal No. 3 in the afternoon)	Mid-flood	Surface	4:51:07 AM	1	28.02	23.27	314.1	0.39	7.67	78.97	5.43	3.25	4.89	5.31
				4:54:43 AM	1	28.05	23.05	308.2	0.57	7.66	77.27	5.32	3.35		
			Middle	4:50:04 AM	4	27.45	26.45	302.8	0.39	7.62	66.24	4.52	5.99		
		Bottom	4:53:48 AM	4.1	27.49	26.36	310.5	0.4	7.61	63.03	4.3	6.29	4.91		
			4:48:53 AM	7.1	26.78	28.47	332.9	0.4	7.63	74.71	5.09	4.97			
4:52:39 AM	7.1	26.66	28.9	313.6	0.39	7.61	69.38	4.73	8						

Annex D4 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged		
														DO (mg/L)	Turbidity (NTU)	
2009/08/06	Cloudy and Rainy	Mid-ebb	Surface	1:25:27 PM	1.2	28.09	20.82	126.7	0.82	7.47	107.79	7.5	5.28	7.29	8.93	
				1:28:29 PM	1.1	28.09	20.89	107	0.63	7.45	97.57	6.79	5.99			
			Middle	1:24:30 PM	4.1	27.93	22.07	125.2	0.79	7.5	111.37	7.72	6.49			
		Bottom	1:27:28 PM	4.1	27.91	22.01	125.2	0.75	7.49	102.92	7.14	6.8	7.74			
			1:23:26 PM	7.1	27.78	23.55	138.3	0.88	7.52	119	8.2	15.92				
			1:26:27 PM	6.9	27.82	23.01	138.1	0.58	7.51	105.21	7.27	13.08				
		Mid-flood	Surface	6:25:46 AM	1.2	27.83	21.28	298.8	317.4	0.32	7.52	76.82	5.36	5.38	5.21	12.61
				6:29:03 AM	1	27.81	21.72	318.7	0.3	7.52	74.92	5.21	5.68			
			Middle	6:24:40 AM	3.7	27.72	23.24	318	0.25	7.54	74.06	5.12	5.89			
Bottom	6:28:10 AM	3.9	27.7	23.16	316.5	0.52	7.54	74.43	5.15	6.09	4.60					
	6:23:32 AM	6.9	27.53	26.65	317.6	0.17	7.58	67.83	4.61	23.83						
	6:26:56 AM	7	27.53	26.67	318.7	0.28	7.58	67.31	4.58	28.8						
2009/08/08	Cloudy	Mid-ebb	Surface	2:22:10 PM	1.3	29.81	14.05	118.6	0.91	7.56	101.47	7.12	4.16	6.54	12.71	
				2:24:45 PM	1	29.72	14.78	121.3	0.89	7.55	96.14	6.73	4.47			
			Middle	2:21:21 PM	4.3	28.61	20.7	116.4	0.64	7.41	90.86	6.27	5.58			
		Bottom	2:24:04 PM	3.8	28.9	18.73	117.1	0.64	7.43	86.67	6.02	6.8	5.46			
			2:20:26 PM	7.1	28.15	23.14	129.5	0.49	7.39	80.62	5.53	26.47				
			2:23:04 PM	7.1	28.15	23.29	118.6	0.42	7.39	78.42	5.38	28.8				
		Mid-flood	Surface	7:37:41 AM	1.2	28.9	16.52	289.5	297	0.62	7.46	77.88	5.48	5.68	5.11	19.36
				7:39:51 AM	1.3	28.9	16.31	297	0.6	7.47	75.88	5.34	6.6			
			Middle	7:36:57 AM	4	28.54	20.18	298.8	0.58	7.45	72.34	5.02	16.23			
Bottom	7:39:05 AM	4	28.26	22.1	314.4	0.53	7.45	66.61	4.59	24.14	4.99					
	7:35:50 AM	6.3	27.92	23.94	307.9	0.45	7.44	74.45	5.11	28.7						
	7:38:26 AM	7	27.88	24.18	318.6	0.37	7.45	71.04	4.87	34.78						
2009/08/12	Cloudy and Rainy	Mid-ebb	Surface	4:20:21 PM	1.2	28.81	14.59	103.6	0.71	7.51	89.49	6.37	3.55	5.51	4.80	
				4:23:31 PM	1.2	28.88	15.08	103.6	0.71	7.51	85.09	6.03	3.55			
			Middle	4:19:16 PM	4.1	28.61	23.83	139.5	0.35	7.53	72.38	4.91	4.87			
		Bottom	4:22:35 PM	4	28.57	24.07	127.6	0.34	7.54	69.78	4.73	5.07	4.81			
			4:18:11 PM	6.9	28.52	24.51	149.1	0.24	7.52	73.08	4.95	5.89				
			4:21:32 PM	7.1	28.51	24.62	163.4	0.21	7.54	69.07	4.67	5.89				
		Mid-flood	Surface	10:37:14 AM	1.3	28.74	22.73	276	276	0.63	7.52	78.17	5.33	4.97	5.08	26.42
				10:45:25 AM	1.1	28.79	22.16	299.9	0.23	7.49	78.63	5.37	6.19			
			Middle	10:34:14 AM	4.4	28.51	24.52	289.6	0.52	7.5	73.47	4.98	27.79			
Bottom	10:44:15 AM	4.2	28.44	25.29	301.7	0.53	7.48	68.5	4.62	23.22	4.39					
	10:32:02 AM	7	27.99	27.25	308.1	0.35	7.46	67.87	4.57	45.94						
	10:38:35 AM	7.1	28	27.23	314.9	0.36	7.48	62.48	4.2	50.4						
2009/08/14	Cloudy	Mid-ebb	Surface	5:55:24 PM	1	28.99	16.36	142.5	0.19	7.33	91.24	6.41	3.15	5.86	5.11	
				5:58:28 PM	1.3	29	17.43	156.8	0.18	7.35	89.27	6.24	3.35			
			Middle	5:54:14 PM	4	28.56	21.5	162.5	0.1	7.31	79.76	5.49	4.36			
		Bottom	5:57:27 PM	4	28.58	21.5	148.6	0.05	7.31	76.96	5.29	4.47	4.42			
			5:56:23 PM	7.1	27.71	27.08	244.7	0.02	7.27	64.77	4.38	7.1				
			5:52:54 PM	7	27.69	26.99	272.1	0.08	7.26	65.73	4.45	8.22				
		Mid-flood	Surface	1:14:28 PM	1.4	28.74	19.06	272.4	272.4	0.14	7.44	89.48	6.22	4.97	5.32	18.66
				1:17:51 PM	1.3	28.81	18.62	272.4	0.14	7.44	84.01	5.85	5.28			
			Middle	1:13:13 PM	3.8	27.84	25.91	273.3	0.32	7.39	69.82	4.74	20.79			
Bottom	1:16:47 PM	4.1	27.79	26.16	298.5	0.48	7.38	65.53	4.45	20.39	4.65					
	1:12:14 PM	7.1	27.64	27.01	295.3	0.32	7.38	71.61	4.85	27.99						
	1:15:47 PM	7	27.6	27.12	302.7	0.24	7.38	65.64	4.45	32.55						

Annex D4 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/16	Cloudy	Mid-ebb	Surface	9:20:03 AM	1.5	29.53	16.29	126	0.54	7.41	96.92	6.75	3.15	5.90	4.19
				9:23:10 AM	1.2	29.5	16.33	114.3	0.86	7.42	90.38	6.3	2.84		
			Middle	9:19:03 AM	3.9	28.53	22.79	119.3	0.35	7.35	79.07	5.4	2.23		
		9:22:11 AM		3.8	28.65	22.2	101	0.72	7.36	75	5.13	2.34			
		Bottom	9:18:08 AM	6.6	28.05	26.2	146	0.41	7.31	70.19	4.74	7.3	4.49		
			9:21:12 AM	6.9	28.03	26.27	155.7	0.37	7.32	62.67	4.24	7.3			
		Mid-flood	Surface	9:19:12 PM	1.3	30.21	15.49	122.3	0.22	7.48	91.15	6.31	4.26	5.48	6.05
				9:22:01 PM	1	30.29	14.48	149.1	0.19	7.48	92.01	6.39	4.26		
			Middle	9:18:16 PM	4.3	29.01	20.87	162.3	0.19	7.34	68.9	4.72	4.67		
9:21:02 PM	4.6	27.99		26.24	320.3	0.05	7.32	66.43	4.49	5.68					
Bottom	9:17:25 PM	6.6	27.13	28.3	302.9	0.23	7.22	56.88	3.86	8.72	3.94				
	9:20:05 PM	6.9	27.16	28.26	302.9	0.23	7.28	59.07	4.01	8.72					
2009/08/18	Cloudy	Mid-ebb	Surface	11:39:22 AM	1.7	29.43	20.8	116.7	0.9	7.62	79.99	5.44	2.44	4.60	13.95
				11:42:49 AM	1.1	30.31	19.03	108.3	0.87	7.68	80.22	5.43	2.34		
			Middle	11:38:09 AM	3.7	28.32	25.22	122	0.8	7.47	55.63	3.76	8.83		
		11:41:46 AM		3.6	28.64	23.74	108	0.71	7.51	55.5	3.77	6.9			
		Bottom	11:37:05 AM	6.8	27.94	26.76	121.3	0.44	7.47	59.93	4.05	28.29	3.97		
			11:40:41 AM	7	27.91	26.85	129.9	0.39	7.46	57.59	3.89	34.89			
		Mid-flood	Surface	6:30:14 PM	1.4	29.66	21.44	300.4	0.49	7.66	72.73	4.91	6.6	4.40	21.27
				6:32:52 PM	1.4	29.69	21.23	310	0.54	7.67	70.7	4.78	4.47		
			Middle	6:29:17 PM	4	28.78	23.86	299.1	0.44	7.51	57.92	3.92	11.26		
6:32:04 PM	3.9	28.87		23.51	307.7	0.43	7.54	58.82	3.98	9.03					
Bottom	6:28:14 PM	7	27.85	26.51	309.1	0.26	7.43	47.06	3.19	48.98	3.20				
	6:31:08 PM	6.8	27.83	26.58	309.1	0.26	7.46	47.29	3.2	47.26					
2009/08/21	Sunny	Mid-ebb	Surface	1:34:51 PM	1.3	29.85	22.11	117.7	0.81	7.48	85.17	5.72	5.18	5.21	22.23
				1:38:22 PM	1.1	29.6	22.54	120.6	0.92	7.46	73.92	4.97	6.29		
			Middle	1:33:40 PM	4.2	28.99	23.53	113	0.77	7.46	77.6	5.24	11.16		
		1:37:15 PM		3.7	28.95	23.7	114.1	0.85	7.45	72.48	4.89	11.06			
		Bottom	1:32:08 PM	7.3	28.53	25.18	128.7	0.58	7.46	77.14	5.2	43.1	5.04		
			1:36:02 PM	7.1	28.56	25.09	129.5	0.54	7.46	72.4	4.88	56.59			
		Mid-flood	Surface	7:00:00 AM	1	29.22	22.43	308.2	0.8	7.47	73	4.94	5.58	4.81	9.18
				7:03:31 AM	1.3	29.18	22.41	277.6	0.56	7.47	72.37	4.9	5.28		
			Middle	6:58:40 AM	4.2	29.21	22.82	308.3	0.74	7.46	70.66	4.77	7.3		
7:02:25 AM	4	29.18		22.86	307.6	0.75	7.47	68.65	4.64	7.3					
Bottom	6:57:18 AM	6.9	29.08	23.42	306.2	0.66	7.46	72.54	4.9	10.25	4.79				
	7:01:14 AM	7.1	28.97	23.89	313.6	0.59	7.48	69.35	4.68	19.37					
2009/08/23	Sunny	Mid-ebb	Surface	2:45:27 PM	1.3	30.35	22.1	113.1	0.79	7.36	88.62	5.9	5.68	5.87	14.45
				2:42:28 PM	1	30.2	21.91	116.8	0.85	7.39	97.83	6.54	5.48		
			Middle	2:41:41 PM	4.2	29.18	23.7	111.1	0.78	7.29	87.55	5.89	7.1		
		2:44:43 PM		4.1	28.98	24.22	113.7	0.69	7.28	76.25	5.13	12.07			
		Bottom	2:40:47 PM	6.8	28.36	25.69	125.2	0.39	7.26	80.61	5.44	31.24	5.26		
			2:43:34 PM	6.7	28.42	25.53	122.1	0.43	7.27	75.34	5.08	25.15			
		Mid-flood	Surface	8:16:09 AM	1.2	29.35	22.77	321.5	0.72	7.37	73.76	4.97	6.19	4.85	12.48
				8:19:27 AM	1.2	29.42	22.75	287	0.68	7.37	70.96	4.78	6.09		
			Middle	8:15:19 AM	3.8	29.11	23.62	315.5	0.68	7.37	72.7	4.9	11.67		
8:18:45 AM	4	29.11		23.65	303.3	0.69	7.38	70.49	4.75	10.25					
Bottom	8:14:32 AM	7	29.04	23.85	319.4	0.59	7.36	74.18	5	21.3	4.89				
	8:18:06 AM	7	29.03	23.88	304.3	0.56	7.37	70.99	4.78	19.37					

Annex D5 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WNAA

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/07/28	Cloudy and Rainy	Mid-ebb	Surface	4:59:45 PM	1.2	29.68	13.34	120.1	0.59	7.44	110.05	7.77	3.76	6.57	6.14
				5:02:57 PM	1.1	29.67	13.75	126.6	0.66	7.41	102.3	7.21	3.65		
			Middle	4:58:25 PM	6	28.09	21.62	109.3	0.38	7.21	83.31	5.77	4.26		
				5:02:03 PM	5.9	28.04	21.78	110.1	0.37	7.24	79.91	5.54	4.36		
			Bottom	4:57:10 PM	9.9	27.38	24.21	62.1	0.11	7.16	80.36	5.55	10.75		
				5:00:55 PM	9.8	27.39	24.18	56.4	0.19	7.22	75.74	5.24	10.04		
		Mid-flood	Surface	12:00:28 PM	1.3	28.88	17.43	321.3	0.35	7.36	93.03	6.51	2.94	6.04	7.63
				12:04:10 PM	1.5	28.92	17.21	323.6	0.36	7.37	89.38	6.26	3.05		
			Middle	11:59:03 AM	6.8	27.84	22.36	276.8	0.63	7.3	81.37	5.64	3.86		
				12:03:11 PM	5.9	28.13	21.05	287.8	0.63	7.34	82.55	5.73	3.25		
			Bottom	11:57:48 AM	10	27.31	24.8	283.4	0.38	7.27	79.56	5.49	19.68		
				12:01:48 PM	10.1	27.3	24.77	295.7	0.3	7.3	75.23	5.19	12.98		
2009/07/30	Cloudy and Rainy	Mid-ebb	Surface	6:49:09 PM	1.1	29.34	18.44	292.5	0.06	7.64	95.74	6.61	2.23	5.31	5.55
				6:52:13 PM	1.1	29.26	18.7	240.2	0.25	7.63	92.14	6.36	2.23		
			Middle	6:48:03 PM	6	27.55	23.82	53.6	0.02	7.36	59.42	4.1	6.19		
				6:51:13 PM	5.9	27.71	23.31	231	0.09	7.39	60.52	4.18	4.57		
			Bottom	6:46:59 PM	10	27.25	24.85	105.5	0.28	7.35	60.22	4.16	8.83		
				6:50:15 PM	10.1	27.22	24.94	107.4	0.14	7.36	60.12	4.15	9.23		
		Mid-flood	Surface	3:22:55 PM	0.9	29.02	18.9	299	0.18	7.6	101.5	7.03	3.76	6.06	6.24
				3:26:06 PM	1	29.4	17.76	309	0.2	7.69	96.16	6.66	3.65		
			Middle	3:21:40 PM	6	28.27	21.27	303.5	0.16	7.46	77.65	5.38	3.86		
				3:25:10 PM	6.1	28.28	21.25	260.8	0.1	7.48	74.78	5.18	3.45		
			Bottom	3:20:14 PM	10	26.89	25.97	356.5	0.46	7.36	69.76	4.81	12.48		
				3:24:04 PM	9.6	26.82	26.17	62.5	0.2	7.38	63.78	4.4	10.25		
2009/08/01	Sunny	Mid-ebb	Surface	10:33:36 AM	1.1	29.47	16.85	102	0.52	7.6	98.77	6.87	2.84	5.83	5.26
				10:37:13 AM	1.2	29.28	18.11	120.9	0.54	7.54	96.92	6.71	3.05		
			Middle	10:32:13 AM	5.8	27.62	24.35	119.4	0.55	7.36	66.74	4.59	5.99		
				10:36:19 AM	5.8	27.72	24.16	102.2	0.51	7.45	75.11	5.16	5.48		
			Bottom	10:31:12 AM	9.5	26.3	28.39	5.7	0.01	7.27	66.48	4.57	7.91		
				10:35:20 AM	10	26.38	28.46	354.7	0.09	7.33	85.33	5.86	6.29		
		Mid-flood	Surface	9:28:54 PM	1	29.94	13.62	230.1	0.13	7.52	94.17	6.61	4.16	6.15	7.93
				9:32:26 PM	1.2	29.93	14.72	192.3	0.17	7.59	99.68	6.96	4.16		
			Middle	9:27:41 PM	5.8	28.38	22.3	49.1	0.15	7.48	80.36	5.52	4.16		
				9:31:29 PM	6	28.31	22.58	22.6	0.32	7.48	79.96	5.49	4.26		
			Bottom	9:26:30 PM	10.2	26.82	26.95	30	0.43	7.27	51.94	3.57	16.33		
				9:30:29 PM	9.8	26.92	26.74	39.2	0.39	7.31	55.74	3.83	14.5		
2009/08/04	Rainy (Typhoon Signal No. 1 in the morning ; Signal No. 3 in the afternoon)	Mid-flood	Surface	5:21:55 AM	1.2	28.48	22.11	294.2	0.32	7.66	75.44	5.18	2.94	4.29	8.37
				5:25:32 AM	0.8	28.51	21.58	288.8	0.38	7.66	75.87	5.22	2.74		
			Middle	5:20:52 AM	5.9	27.63	26.54	309.5	0.41	7.55	49.82	3.38	8.22		
				5:24:23 AM	5.9	27.61	26.54	290	0.54	7.55	49.73	3.38	8.32		
			Bottom	5:19:34 AM	10.1	26.19	29.58	297.9	0.45	7.49	55.58	3.8	12.98		
				5:23:11 AM	9.5	26.13	29.71	292	0.59	7.49	53.17	3.64	15		

Annex D5 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/06	Cloudy and Rainy	Mid-ebb	Surface	12:56:30 PM	1.3	28.14	20.2	130.1	0.83	7.46	99.65	6.95	5.18	6.49	11.82
				12:59:45 PM	1.2	28.07	20.35	131.2	0.78	7.45	93.57	6.53	5.18		
			Middle	12:55:27 PM	6.3	27.86	22.35	118.9	0.65	7.43	95.19	6.6	5.07		
				12:58:50 PM	6.2	27.83	22.68	114.9	0.49	7.43	85.14	5.89	6.8		
			Bottom	12:54:10 PM	9.8	27.53	25.76	110.6	0.58	7.43	85.38	5.84	22.41		
				12:57:38 PM	10	27.51	25.86	120.2	0.48	7.44	77.41	5.29	26.27		
		Mid-flood	Surface	6:56:05 AM	1	27.77	24.3	318.4	0.43	7.54	73.24	5.03	5.48	4.92	7.90
				6:59:08 AM	1.1	27.77	24.4	312	0.44	7.54	71.35	4.89	5.18		
			Middle	6:55:04 AM	6.1	27.73	24.82	309.3	0.51	7.54	72.17	4.94	5.28		
				6:58:16 AM	6.2	27.74	24.96	307	0.53	7.55	70.37	4.81	5.07		
			Bottom	6:53:56 AM	10	27.31	27.33	291.5	0.71	7.56	67.73	4.61	12.68		
				6:57:08 AM	10.4	27.3	27.35	306	0.18	7.55	64.85	4.41	13.69		
2009/08/08	Cloudy	Mid-ebb	Surface	1:51:28 PM	0.9	29.81	15.94	126.5	0.62	7.5	102.74	7.14	4.16	6.45	14.76
				1:54:11 PM	1.4	29.7	15.81	124.1	0.66	7.5	97.2	6.77	4.77		
			Middle	1:50:42 PM	5.9	28.53	21.99	110.8	0.55	7.46	88.09	6.05	11.87		
				1:53:30 PM	5.7	28.55	21.81	119.2	0.54	7.47	84.87	5.83	8.12		
			Bottom	1:50:01 PM	9.9	28.3	24.21	86.1	0.31	7.47	87.06	5.93	30.73		
				1:52:32 PM	10.2	28.37	24.13	86	0.31	7.49	83.58	5.68	28.9		
		Mid-flood	Surface	8:02:13 AM	1.1	28.95	17.35	321.9	0.48	7.47	77.92	5.45	4.97	5.14	7.79
				8:04:28 AM	1	28.93	17.86	313.9	0.54	7.47	74.8	5.22	4.97		
			Middle	8:00:59 AM	6	28.52	20.46	296.4	0.85	7.46	71.66	4.96	5.48		
				8:03:48 AM	5.4	28.76	18.86	299.9	0.66	7.46	70.56	4.91	6.09		
			Bottom	8:00:17 AM	10	27.81	24.63	282.5	0.12	7.46	74.98	5.13	13.08		
				8:03:07 AM	10.2	27.83	24.53	282.5	0.12	7.46	68.13	4.67	12.17		
2009/08/12	Cloudy and Rainy	Mid-ebb	Surface	3:50:16 PM	1.1	28.93	16.78	99	0.59	7.48	84.26	5.91	3.45	5.19	7.44
				3:53:59 PM	1.4	28.98	17.1	104.7	0.64	7.48	81.16	5.68	3.65		
			Middle	3:49:07 PM	6	28.54	25.37	115.2	0.31	7.52	69.45	4.68	6.8		
				3:52:56 PM	6	28.54	25.34	100.8	0.35	7.54	66.65	4.49	7		
			Bottom	3:48:08 PM	9.9	28.41	26	69.8	0.26	7.51	70.25	4.73	11.77		
				3:51:56 PM	10	28.41	26	87.3	0.21	7.53	65.95	4.44	11.97		
		Mid-flood	Surface	11:15:00 AM	1.1	28.86	23.09	322.1	0.39	7.47	74.01	5.02	4.36	4.76	7.46
				11:18:01 AM	1.1	28.8	23.41	322.1	0.39	7.48	71.65	4.86	4.26		
			Middle	11:13:44 AM	5.5	28.47	25.26	279.9	0.26	7.46	68.77	4.64	5.07		
				11:16:55 AM	6	28.44	25.35	289.1	0.83	7.48	67.15	4.53	5.18		
			Bottom	11:12:47 AM	9.9	28.09	27.43	325.7	0.05	7.46	70.34	4.72	12.88		
				11:16:00 AM	10.1	28.09	27.42	345	0.11	7.47	65.11	4.37	12.98		
2009/08/14	Cloudy	Mid-ebb	Surface	5:28:22 PM	1.3	29.21	17.4	172	0.14	7.34	88.77	6.18	3.35	5.26	6.28
				5:31:05 PM	1.4	29.16	17.41	172	0.14	7.34	85.58	5.96	3.45		
			Middle	5:27:10 PM	6.1	28.04	25.37	122.9	0.11	7.27	65.39	4.44	6.8		
				5:30:14 PM	5.9	28.1	24.81	79.7	0.12	7.28	65.65	4.47	5.89		
			Bottom	5:26:11 PM	10.1	27.88	26.76	41.8	0.15	7.25	62.53	4.23	10.04		
				5:29:19 PM	10	27.91	26.24	58.2	0.17	7.27	61.97	4.2	8.12		
		Mid-flood	Surface	1:44:16 PM	0.9	28.59	19.81	308.8	0.46	7.44	87.67	6.09	3.45	5.47	6.29
				1:47:29 PM	1.2	28.58	19.79	308.8	0.46	7.44	83.7	5.81	3.55		
			Middle	1:43:06 PM	6	28.21	24.41	295.6	0.47	7.42	73.4	5	3.96		
				1:46:26 PM	6.2	28.17	23.65	292.6	0.48	7.42	72.68	4.97	3.65		
			Bottom	1:42:07 PM	10	27.86	27.37	293.6	0.4	7.41	71.04	4.79	11.77		
				1:45:24 PM	9.8	27.86	27.33	2	0.17	7.41	65.2	4.39	11.36		

Annex D5 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/16	Cloudy	Mid-ebb	Surface	9:57:30 AM	1.2	29.02	18.71	128	0.59	7.4	92.46	6.41	3.45	5.85	12.05
				9:53:07 AM	1.2	29.61	14.44	128	0.59	7.44	107.94	7.59	3.96		
			Middle	9:51:56 AM	5.9	27.84	27.6	105.3	0.47	7.31	73.22	4.93	12.27		
				9:58:26 AM	6	27.88	27.35	112.2	0.48	7.33	66.09	4.45	9.23		
			Bottom	9:50:55 AM	10	27.72	28.09	88.7	0.39	7.31	80.9	5.44	21.91		
				9:55:25 AM	9.8	27.64	28.2	97.8	0.09	7.32	69.16	4.65	21.5		
		Mid-flood	Surface	8:52:29 PM	1.3	30.32	15.41	96.1	0.08	7.47	93.3	6.45	3.76	5.14	6.23
				8:55:22 PM	1.2	30.13	14.28	96.1	0.08	7.41	90.55	6.31	3.96		
			Middle	8:51:34 PM	6.1	28.27	24.15	194.1	0.14	7.24	56.85	3.87	3.96		
				8:54:35 PM	6.2	28.17	24.56	191.9	0.08	7.25	57.48	3.91	3.96		
			Bottom	8:50:39 PM	10.3	27.35	27.94	34.7	0.1	7.17	47.15	3.19	11.67		
				8:53:33 PM	10.1	27.5	27.44	30.1	0.16	7.19	48.93	3.32	10.04		
2009/08/18	Cloudy	Mid-ebb	Surface	12:11:39 PM	1.4	28.93	23.54	125.7	0.78	7.46	72.43	4.9	5.38	4.32	17.75
				12:15:15 PM	1.2	29.15	23.24	125.7	0.78	7.49	77.06	5.2	5.48		
			Middle	12:10:21 PM	5.9	27.7	27.46	115.4	0.58	7.37	53.09	3.58	17.24		
				12:14:02 PM	6.1	27.67	27.45	105	0.54	7.37	53.17	3.59	19.98		
			Bottom	12:09:14 PM	9.7	27.63	27.87	103.2	0.2	7.39	57.24	3.86	28.8		
				12:12:53 PM	10.1	27.63	27.83	76.7	0.24	7.39	56.69	3.82	29.61		
		Mid-flood	Surface	5:51:22 PM	1.1	28.93	23.11	316	0.65	7.51	61.64	4.18	7.1	4.18	14.02
				5:55:18 PM	1.3	29.06	22.7	313.1	0.52	7.54	68.53	4.64	6.39		
			Middle	5:50:12 PM	5.7	28.53	24.55	295.6	0.96	7.47	55.97	3.79	7.41		
				5:54:10 PM	6.2	28.62	24.43	284.3	0.96	7.49	60.72	4.11	6.6		
			Bottom	5:49:11 PM	10.2	27.33	27.83	295.7	0.72	7.37	43.77	2.97	26.98		
				5:53:01 PM	10.1	27.39	27.69	295.7	0.72	7.38	49.1	3.33	29.61		
2009/08/21	Sunny	Mid-ebb	Surface	1:01:57 PM	1.2	29.74	21.77	110.8	0.91	7.47	87.03	5.86	5.28	5.39	29.28
				1:08:08 PM	1.4	29.54	22.14	114.9	0.91	7.46	83.38	5.62	5.78		
			Middle	1:00:21 PM	6.2	28.51	24.97	112.6	0.65	7.43	74.8	5.05	32.05		
				1:06:57 PM	6.1	28.47	25.08	116.1	0.65	7.43	74.48	5.03	41.78		
			Bottom	12:59:08 PM	9.6	28.29	25.63	127.1	0.53	7.43	77.18	5.21	39.85		
				1:05:34 PM	10.2	28.14	25.95	121.8	0.52	7.43	78.04	5.27	50.91		
		Mid-flood	Surface	7:30:11 AM	1.4	29.14	22.27	330.4	0.19	7.43	75.68	5.13	5.58	5.03	11.66
				7:33:26 AM	1.2	29.15	22.18	330.4	0.19	7.43	73.2	4.97	5.78		
			Middle	7:29:05 AM	6.1	28.94	23.17	293.8	1	7.44	75.79	5.13	7.2		
				7:32:30 AM	6.2	28.83	23.91	297.3	0.85	7.45	72.33	4.89	8.62		
			Bottom	7:27:38 AM	9.8	27.75	26.99	316.9	0.3	7.43	74.83	5.06	22.31		
				7:31:23 AM	9.5	27.79	26.89	294.1	0.45	7.44	70.49	4.77	20.49		
2009/08/23	Sunny	Mid-ebb	Surface	2:09:47 PM	1.2	30.18	22.39	106.6	1.02	7.3	87.25	5.81	5.07	5.27	52.19
				2:12:39 PM	0.8	30.22	22.74	106.6	1.02	7.32	84.11	5.59	6.29		
			Middle	2:08:51 PM	6	28.53	25.16	104.9	0.68	7.22	73	4.92	36.31		
				2:11:46 PM	5.4	28.64	24.84	93	0.61	7.23	70.56	4.76	22.41		
			Bottom	2:07:51 PM	9.6	28.43	25.44	81.5	0.59	7.21	74.79	5.04	128.98		
				2:11:02 PM	9.9	28.46	25.36	91.4	0.55	7.23	70.88	4.78	114.08		
		Mid-flood	Surface	8:42:04 AM	1.4	29.16	23.89	293.1	1.19	7.39	77.05	5.18	6.39	4.93	26.10
				8:45:59 AM	1.5	29.35	23.41	306.7	0.52	7.39	74.17	4.98	5.89		
			Middle	8:41:14 AM	6.2	28.2	26.13	288	1	7.37	71.95	4.85	19.57		
				8:45:13 AM	5.7	28.78	24.56	310.5	0.56	7.37	70.03	4.72	13.49		
			Bottom	8:39:57 AM	9.3	28.04	26.48	302.8	0.79	7.37	74.4	5.02	54.66		
				8:44:29 AM	10.2	28.03	26.5	289	0.48	7.36	69.08	4.66	56.59		

Annex D6 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WNAB

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/07/28	Cloudy and Rainy	Mid-ebb	Surface	6:34:54 PM	1	30.21	11.51	128.1	0.63	7.62	94.52	6.68	4.01	5.23	5.27
				6:37:18 PM	0.9	30.18	11.32	87.5	0.64	7.63	81.46	5.77	4.21		
			Middle	6:34:12 PM	4.7	28.3	20.58	109.3	0.5	7.36	64.07	4.45	3.21		
				6:36:34 PM	4.6	28.27	20.69	89.5	0.6	7.37	57.93	4.02	6.02		
			Bottom	6:33:22 PM	9	27.37	24.4	95.2	0.42	7.35	57.32	3.96	7.22		
				6:35:50 PM	9.2	27.53	24.28	83	0.25	7.37	58.76	4.05	6.92		
		Mid-flood	Surface	10:23:12 AM	0.7	28.94	16.79	218.1	0.24	7.34	73.67	5.17	4.41	4.64	6.63
				10:27:45 AM	0.7	28.62	18.63	299.8	0.3	7.34	68.97	4.82	5.21		
			Middle	10:22:14 AM	4.6	28.32	20.34	254.8	0.26	7.3	61.54	4.28	5.51		
				10:26:38 AM	4.7	28.26	20.64	301.2	0.26	7.31	61.45	4.27	6.02		
			Bottom	10:21:17 AM	8.7	27.91	22.15	294	0.45	7.3	60.23	4.17	9.22		
				10:25:45 AM	8.4	27.62	23.17	294	0.45	7.33	58.24	4.03	9.42		
2009/07/30	Cloudy and Rainy	Mid-ebb	Surface	8:52:55 PM	1.2	29.06	17.84	140	0.05	7.71	87.75	6.11	2.51	4.97	5.38
				9:01:22 PM	1.2	29.14	16.97	348.7	0.03	7.75	92.01	6.43	2.31		
			Middle	8:51:59 PM	5.9	27.45	23.85	151.7	0.14	7.51	55.84	3.86	5.61		
				9:00:40 PM	5.8	27.54	23.57	165	0.07	7.51	49.98	3.46	6.12		
			Bottom	8:51:22 PM	9	26.98	25.54	137.7	0.09	7.46	46.67	3.22	9.02		
				9:00:06 PM	9	27.04	25.32	90	0.03	7.48	48.04	3.32	6.72		
		Mid-flood	Surface	2:15:39 PM	0.8	29.69	15.24	302.2	0.41	7.57	94.72	6.62	3.21	6.08	3.08
				2:20:53 PM	0.9	29.71	15.57	326.7	0.29	7.59	94.5	6.59	2.81		
			Middle	2:14:42 PM	5.5	28.37	20.79	274.3	0.43	7.43	80.68	5.59	2.71		
				2:19:50 PM	5.5	28.66	19.35	301.1	0.45	7.47	79.47	5.52	2.71		
			Bottom	2:13:31 PM	8.8	27.81	22.75	336.8	0.16	7.35	62.26	4.31	3.41		
				2:18:57 PM	8.8	27.79	22.81	310.6	0.21	7.36	60.95	4.22	3.61		
2009/08/01	Sunny	Mid-ebb	Surface	8:34:58 AM	1	29.22	16.52	100.9	0.42	7.84	83.96	5.87	5.41	5.07	7.33
				8:37:03 AM	1.2	29.28	16.27	100.9	0.42	7.82	82.39	5.76	5.61		
			Middle	8:34:22 AM	5.7	27.87	23.33	87.6	0.36	7.72	63.54	4.38	5.91		
				8:36:28 AM	5.7	27.84	23.54	87.6	0.36	7.7	61.86	4.26	6.32		
			Bottom	8:33:34 AM	10	25.86	29.24	124.2	0.26	7.56	42.72	2.95	11.93		
				8:35:40 AM	10	26.17	28.23	124.1	0.23	7.55	42.95	2.96	8.82		
		Mid-flood	Surface	11:43:38 PM	1	29.73	14.42	101.7	0.2	7.66	92.07	6.46	3.11	5.45	5.48
				11:47:35 PM	0.9	29.54	15.21	71.4	0.54	7.6	85	5.96	2.91		
			Middle	11:42:32 PM	6	27.7	24.15	99.5	0.13	7.58	67.88	4.67	6.32		
				11:46:42 PM	6.1	27.71	24.14	148.5	0.15	7.59	68.51	4.71	5.71		
			Bottom	11:41:29 PM	8.7	27.3	25.46	72.5	0.12	7.56	63.12	4.34	7.02		
				11:45:34 PM	8.9	27.27	25.54	66	0.11	7.56	62.13	4.27	7.82		
2009/08/04	Rainy (Typhoon Signal No. 1 in the morning ; Signal No. 3 in the afternoon)	Mid-flood	Surface	3:48:22 AM	0.9	28.4	21.77	19.4	0.06	7.53	82.72	5.7	2.11	4.46	6.25
				3:53:46 AM	1	28.38	22.13	19.4	0.06	7.54	79.54	5.47	2.11		
			Middle	3:47:25 AM	5.8	27.7	26.24	320.8	0.18	7.39	49.63	3.37	10.02		
				3:52:39 AM	5.9	27.7	26.37	336.5	0.23	7.42	48.24	3.28	11.63		
			Bottom	3:46:28 AM	9.8	26.17	29.17	282.6	0.34	7.32	51.83	3.56	6.42		
				3:51:43 AM	10	26.18	29.19	273	0.35	7.38	64.48	4.42	5.21		

Annex D6 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/06	Cloudy and Rainy	Mid-ebb	Surface	3:09:52 PM	1	28.25	19.14	109.1	0.97	7.5	81.8	5.73	5.21	5.13	14.35
				3:14:04 PM	1	28.26	18.19	109.1	0.69	7.51	81.66	5.75			
			Middle	3:09:05 PM	5	27.69	23.34	114.2	0.57	7.49	65.23	4.51	16.44		
		Bottom	3:13:18 PM	5	27.68	23.3	113.4	0.49	7.5	65.72	4.54	16.84	4.56		
			3:08:17 PM	9	27.68	23.38	116.6	0.43	7.49	65.87	4.55	20.94			
		3:12:30 PM	8.9	27.68	23.37	124.7	0.46	7.5	66.14	4.57	19.94				
Mid-flood	Surface	5:22:52 AM	1.1	27.91	18.91	135	0.15	7.1	81.95	5.78	7.22	5.31	8.47		
		5:25:37 AM	1	27.9	18.8	135	0.15	7.11	81.35	5.74	8.22				
	Middle	5:21:56 AM	5	27.7	23.87	134.4	0.06	7.1	70.04	4.82	6.82				
Bottom	5:24:52 AM	4.9	27.71	23.18	317.4	0.05	7.11	70.55	4.88	7.02	4.42				
	5:21:00 AM	9.8	27.44	25.94	266.5	0.26	7.1	64.54	4.41	11.73					
5:23:59 AM	9.9	27.44	25.97	283.5	0.26	7.11	64.64	4.42	9.82						
2009/08/08	Cloudy	Mid-ebb	Surface	4:47:52 PM	1.1	30.13	14.35	124.5	0.77	7.61	91.9	6.41	3.46	5.69	13.05
				4:53:22 PM	1.1	29.72	15.92	121.4	0.74	7.58	87.12	6.06	4.57		
			Middle	4:46:54 PM	5.1	28.22	23.03	105.8	0.48	7.52	74.88	5.14	14.2		
		Bottom	4:52:36 PM	4.9	28.22	22.82	101.9	0.41	7.52	75.12	5.16	12.58	5.32		
			4:45:51 PM	7.9	28.17	23.63	95.5	0.33	7.52	77.36	5.29	22.92			
		4:51:42 PM	8.1	28.17	23.64	75.9	0.32	7.54	77.98	5.34	20.59				
Mid-flood	Surface	6:35:59 AM	1	28.91	16.37	265.9	0.24	7.34	76.76	5.4	6.29	4.92	12.24		
		6:42:56 AM	1.1	28.82	18.09	294.8	0.25	7.37	74.17	5.18	6.5				
	Middle	6:34:44 AM	6	28.42	22.51	294.1	0.47	7.39	66.15	4.54	11.57				
Bottom	6:41:45 AM	6	28.47	22.05	290.4	0.47	7.42	66.56	4.57	10.15	3.89				
	6:33:38 AM	9.8	27.44	26.07	280.3	0.56	7.32	56.74	3.88	20.39					
6:40:49 AM	9.8	27.46	25.92	282.8	0.58	7.35	57.05	3.9	18.56						
2009/08/12	Cloudy and Rainy	Mid-ebb	Surface	5:33:21 PM	1.1	28.94	21.34	116	0.46	7.56	69.1	4.73	3.76	4.49	11.23
				5:38:27 PM	1.3	29.1	18.57	99.1	0.72	7.52	72.2	5	3.86		
			Middle	5:32:43 PM	5.1	28.35	26.68	114.2	0.42	7.59	61.94	4.15	8.32		
		Bottom	5:37:45 PM	5.2	28.49	26.35	106.5	0.38	7.6	60.73	4.07	7.71	3.96		
			5:31:51 PM	7.9	28.38	27.15	115.9	0.26	7.58	60.08	4.02	24.45			
		5:36:54 PM	8.2	28.37	27.14	96.5	0.3	7.59	58.08	3.89	19.27				
Mid-flood	Surface	9:38:46 AM	0.8	29.08	22.11	262.7	0.27	7.58	74.75	5.08	4.57	4.75	6.48		
		9:41:19 AM	1	29.1	21.54	262.7	0.27	7.56	76.58	5.22	4.47				
	Middle	9:38:01 AM	5.7	28.71	24.98	289.7	0.41	7.61	65.02	4.38	5.48				
Bottom	9:40:36 AM	5.7	28.71	25.19	289.7	0.41	7.6	64.01	4.3	5.99	4.41				
	9:37:17 AM	8.4	28.62	26.28	292.5	0.38	7.65	65.82	4.41	9.44					
9:39:55 AM	8.8	28.6	26.5	289.2	0.44	7.63	65.98	4.41	8.93						
2009/08/14	Cloudy	Mid-ebb	Surface	7:11:16 PM	1.2	29.32	17.9	106.8	0.21	7.49	70.06	4.85	4.06	4.28	7.82
				7:13:37 PM	1.3	29.24	18.71	103.9	0.49	7.48	67.67	4.67	4.27		
			Middle	7:10:33 PM	6	28.22	25.18	106.3	0.25	7.5	55.12	3.74	9.34		
		Bottom	7:13:04 PM	5.9	28.16	25	112.3	0.28	7.5	56.59	3.84	7.71	3.51		
			7:09:49 PM	9	28	26.49	117.4	0.16	7.49	51.46	3.48	10.96			
		7:12:12 PM	9.1	28	26.52	123.7	0.22	7.48	52.24	3.53	10.55				
Mid-flood	Surface	12:17:47 PM	1.4	28.53	20.99	325.4	0.21	7.54	78.44	5.41	4.37	5.22	8.51		
		12:20:21 PM	1.2	28.56	20.89	325.4	0.21	7.54	74.9	5.17	4.77				
	Middle	12:17:13 PM	5.9	28.3	24.06	282.2	0.35	7.56	77.88	5.31	4.77				
Bottom	12:19:37 PM	5.8	28.26	24.4	302.5	0.14	7.56	73.56	5	4.57	4.55				
	12:16:16 PM	9.2	28.07	26.75	287	0.34	7.56	70.47	4.75	17.04					
12:18:52 PM	9	28.06	26.83	287	0.34	7.56	64.49	4.34	15.52						

Annex D6 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/16	Cloudy	Mid-ebb	Surface	8:02:22 AM	1.1	29.31	13.25	123.8	0.49	7.78	96.61	6.87	3.15	5.43	16.94
				8:06:51 AM	1	29.3	13.31	108.2	0.46	7.8	92.45	6.57	3.35		
			Middle	8:01:16 AM	6.2	28.1	26.29	99.8	0.58	7.66	61.37	4.14	5.79		
				8:06:12 AM	6	28.06	26.54	107.7	0.54	7.68	61.38	4.14	4.88		
			Bottom	8:00:29 AM	9.2	27.88	28.35	84	0.33	7.66	55.87	3.74	38.44		
				8:05:17 AM	9.2	27.87	28.38	106	0.39	7.66	58.94	3.95	46.04		
		Mid-flood	Surface	10:36:32 PM	1.1	29.98	15.95	85.6	0.07	7.66	79.65	5.52	4.17	4.63	6.35
				10:38:42 PM	1.1	30	15.66	100	0.36	7.67	85.97	5.96	3.96		
			Middle	10:35:55 PM	6	27.91	25.58	30.1	0.1	7.48	49.38	3.36	5.18		
				10:37:59 PM	5.9	28.21	24.32	96.3	0.2	7.49	53.72	3.66	5.59		
			Bottom	10:35:11 PM	9.1	27.62	26.77	71.6	0.06	7.46	45.02	3.06	11.06		
				10:37:22 PM	9.2	27.67	26.57	7.9	0.17	7.45	49.37	3.35	8.12		
2009/08/18	Cloudy	Mid-ebb	Surface	10:10:11 AM	1	29.07	21.66	123	0.78	7.86	101.88	6.94	3.86	6.06	15.88
				10:15:14 AM	1	28.85	22.29	122.2	0.78	7.89	96.65	6.59	4.67		
			Middle	10:09:26 AM	5	27.79	27.18	107.5	0.57	7.74	79.77	5.39	14.51		
				10:14:32 AM	5.2	27.8	27.12	112	0.63	7.78	78.72	5.32	14		
			Bottom	10:08:27 AM	9	27.75	27.47	58.7	0.42	7.75	87.62	5.91	26.68		
				10:13:44 AM	9.1	27.75	27.37	99.1	0.4	7.82	87.95	5.94	31.54		
		Mid-flood	Surface	7:51:28 PM	1	29.69	19.63	352.5	0.49	7.79	104.06	7.1	3.76	6.00	10.60
				7:57:21 PM	1	29.77	19.9	292.7	0.29	7.8	106.26	7.23	3.96		
			Middle	7:50:44 PM	6	28.32	25.01	292.1	0.32	7.63	69.23	4.69	11.16		
				7:56:29 PM	6	28.35	25.04	293.4	0.28	7.64	73.38	4.97	12.18		
			Bottom	7:49:53 PM	8.9	27.57	27.15	277.9	0.35	7.56	59.68	4.05	17.14		
				7:55:47 PM	9	27.56	27.21	285.5	0.35	7.6	68.1	4.62	15.42		
2009/08/21	Sunny	Mid-ebb	Surface	3:06:45 PM	0.9	30.59	19.53	125.2	1.25	7.73	102.61	6.9	10.24	6.38	19.35
				3:14:02 PM	1.1	30.13	20.23	111.7	0.83	7.73	98.92	6.68	7.83		
			Middle	3:05:58 PM	6.1	28.65	23.96	116.6	0.78	7.71	88.74	6.01	21.09		
				3:13:08 PM	6.1	28.68	23.87	116	0.77	7.71	87.59	5.93	19.98		
			Bottom	3:05:08 PM	8.9	28.6	24.15	138	0.74	7.73	92.44	6.26	29.92		
				3:12:22 PM	8.8	28.61	24.12	106.9	0.61	7.72	92.64	6.28	27.01		
		Mid-flood	Surface	5:40:00 AM	1	29.43	20.21	239.4	0.29	7.39	64.15	4.38	8.64	4.34	14.46
				5:44:25 AM	1	29.3	19.86	300.3	0.19	7.41	65.12	4.46	8.23		
			Middle	5:39:15 AM	6.2	28.8	23.92	296.1	0.4	7.46	62.29	4.21	15.76		
				5:43:40 AM	5.9	28.85	23.77	291.4	0.4	7.49	63.47	4.29	11.75		
			Bottom	5:38:34 AM	9	27.42	27.39	344.3	0.61	7.45	55.01	3.73	26.11		
				5:42:48 AM	8.9	27.71	26.71	289.7	0.54	7.49	59.26	4.02	16.27		
2009/08/23	Sunny	Mid-ebb	Surface	4:14:41 PM	1	29.92	22.09	126.8	1.02	7.33	74.17	4.97	8.74	4.72	19.98
				4:21:34 PM	1	30.16	21.91	86.4	0.88	7.33	74.7	4.99	14.86		
			Middle	4:13:50 PM	6	29	23.33	119.1	0.87	7.31	67.52	4.56	11.85		
				4:20:29 PM	6	28.73	24.03	117	0.76	7.33	64.61	4.37	23.29		
			Bottom	4:13:01 PM	9.1	28.44	24.79	76.2	0.27	7.34	68.73	4.65	27.71		
				4:19:40 PM	9	28.43	24.84	98.6	0.64	7.35	68.64	4.65	33.44		
		Mid-flood	Surface	7:24:21 AM	1	29.37	20.29	292.1	0.62	7.41	68.62	4.69	9.14	4.54	35.07
				7:31:28 AM	1	29.37	20.48	305.6	0.69	7.42	70.32	4.8	9.84		
			Middle	7:23:31 AM	6	28.75	24.01	296.1	0.7	7.45	62.41	4.22	15.97		
				7:30:47 AM	5.9	28.9	23.62	297.2	0.69	7.46	65.87	4.45	17.67		
			Bottom	7:22:32 AM	9.1	27.52	26.95	281.9	0.68	7.46	58.15	3.95	78.82		
				7:29:45 AM	9.1	27.45	27.1	282.5	0.01	7.48	62.31	4.23	79		

Annex D7 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WNAC

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/07/28	Cloudy and Rainy	Mid-ebb	Surface	6:26:18 PM	0.9	30.23	11.36	123.7	0.57	7.61	81.64	5.78	3.91	5.49	8.15
				6:28:44 PM	0.9	30.19	11.4	123.7	0.57	7.61	94.51	6.69			
			Middle	6:25:27 PM	3.8	28.57	19.1	126.8	0.55	7.34	70.34	4.9	3.11		
				6:28:02 PM	3.7	28.46	19.6	126.8	0.55	7.35	65.83	4.58	3.11		
			Bottom	6:24:38 PM	7.9	27.42	23.98	94.7	0.4	7.32	65	4.5	18.14		
				6:27:14 PM	7.8	27.43	23.95	98.7	0.42	7.33	55.16	3.82	16.64		
		Mid-flood	Surface	10:38:25 AM	0.9	28.63	18.66	298.6	0.19	7.36	67.31	4.7	4.61	4.57	6.50
				10:41:01 AM	1	28.59	18.77	298.6	0.19	7.37	66.21	4.62	4.91		
			Middle	10:37:33 AM	3.7	28.5	19.22	307.2	0.24	7.35	65.1	4.54	5.11		
				10:40:12 AM	3.8	28.43	19.75	292	0.23	7.36	63.4	4.41	4.81		
			Bottom	10:36:33 AM	6.9	28.07	21.55	276.8	0.26	7.34	63.79	4.42	13.53		
				10:39:22 AM	6.6	28.32	20.39	276.5	0.33	7.36	61.99	4.31	6.02		
2009/07/30	Cloudy and Rainy	Mid-ebb	Surface	8:43:40 PM	1.1	29.33	16.2	302.8	0.04	7.75	95.4	6.67	2.71	5.38	4.35
				8:46:13 PM	1.1	29.33	15.87	302.8	0.04	7.74	94.51	6.62	2.51		
			Middle	8:43:01 PM	4.9	27.59	23.47	227.7	0.07	7.52	58.94	4.08	4.11		
				8:45:25 PM	4.8	27.91	22.21	256.2	0.16	7.53	59.57	4.13	3.91		
			Bottom	8:42:13 PM	7.1	27.44	24.06	166	0.08	7.46	52.02	3.59	6.32		
				8:44:43 PM	7.1	27.44	24.05	166	0.08	7.47	51.11	3.53	6.52		
		Mid-flood	Surface	2:28:45 PM	0.9	29.83	14.58	46.4	0.12	7.59	96.06	6.72	3.21	6.17	2.88
				2:33:16 PM	0.8	29.78	14.74	46.4	0.12	7.59	95.35	6.67	3.21		
			Middle	2:27:53 PM	4.7	28.81	18.74	312	0.05	7.52	82.62	5.75	2.71		
				2:32:30 PM	4.6	28.6	19.75	312	0.05	7.5	79.92	5.55	2.51		
			Bottom	2:26:55 PM	6.7	28.04	21.88	345.7	0.22	7.4	66.4	4.6	2.61		
				2:31:14 PM	6.7	27.98	21.85	345.7	0.22	7.38	61.91	4.29	3.01		
2009/08/01	Sunny	Mid-ebb	Surface	8:43:22 AM	1.2	29.23	16.04	94.9	0.41	7.84	81.11	5.69	2.21	4.73	5.62
				8:45:25 AM	1.1	29.3	15.23	94.9	0.41	7.84	81.26	5.72	2.71		
			Middle	8:42:35 AM	4.8	27.73	23.73	96.4	0.35	7.77	53.25	3.67	6.12		
				8:44:52 AM	4.8	27.76	23.67	97	0.3	7.81	55.52	3.82	4.51		
			Bottom	8:42:00 AM	8	27.23	24.96	100.1	0.32	7.55	44.74	3.09	10.32		
				8:44:17 AM	7.9	27.41	24.43	93.5	0.33	7.62	47.2	3.26	7.82		
		Mid-flood	Surface	11:33:01 PM	1.1	29.66	14.36	124.8	0.16	7.65	90.6	6.36	3.31	5.87	4.38
				11:37:23 PM	1	29.46	15.83	124.8	0.16	7.61	84.55	5.91	2.81		
			Middle	11:32:02 PM	5	28.26	22.49	103.1	0.06	7.63	80.08	5.51	3.11		
				11:36:35 PM	5	28.29	22.45	86.3	0.12	7.64	82.93	5.7	3.31		
			Bottom	11:30:54 PM	7	27.55	24.64	96.3	0.17	7.56	67.13	4.62	6.72		
				11:35:41 PM	7	27.7	24.15	98	0.19	7.57	69.17	4.76	7.02		
2009/08/04	Rainy (Typhoon Signal No. 1 in the morning ; Signal No. 3 in the afternoon)	Mid-flood	Surface	3:59:50 AM	0.9	28.49	21.23	310	0.04	7.53	79.17	5.46	2.01	4.46	6.83
				4:04:02 AM	1	28.48	21.13	310	0.04	7.53	79.69	5.5	1.91		
			Middle	3:59:00 AM	5	27.7	26.28	330	0.17	7.42	49.77	3.38	8.72		
				4:03:01 AM	4.9	27.71	25.95	357.7	0.18	7.43	51.28	3.49	7.12		
			Bottom	3:58:04 AM	8.1	26.94	27.8	331.2	0.23	7.37	49.36	3.37	10.92		
				4:02:00 AM	8.1	26.57	28.29	328.7	0.24	7.39	49.88	3.42	10.32		

Annex D7 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged			
														DO (mg/L)	Turbidity (NTU)		
2009/08/06	Cloudy and Rainy	Mid-ebb	Surface	2:59:41 PM	1	27.92	20.48	159.2	0.82	7.47	72.71	5.09	6.62	4.93	17.51		
				3:03:24 PM	1	27.97	20.36	109.1	0.97	7.49	73.86	5.16				7.72	
			Middle	2:58:56 PM	4	27.74	22.41	129.8	0.65	7.48	69.15	4.8	14.63				
			3:02:41 PM	4	27.71	22.84	129.4	0.67	7.49	67.42	4.67	13.43	4.75				
		Bottom	2:58:15 PM	7	27.69	22.95	122.2	0.47	7.48	69.13	4.79	39.48					
			3:01:52 PM	7.1	27.69	23.01	122.2	0.47	7.49	67.83	4.7	23.15					
		Mid-flood	Surface	5:32:50 AM	1	27.89	18.8	146.8	0.13	7.13	81.96	5.79	7.72			5.65	7.50
				5:36:35 AM	1.1	27.95	18.59	146.8	0.13	7.14	80.16	5.66	8.02				
			Middle	5:31:54 AM	4	27.92	18.91	183.5	0.11	7.13	80.66	5.69	7.72				
	5:35:48 AM		3.9	27.98	19.54	246.4	0.1	7.14	77.76	5.46	7.42	4.56					
Bottom	5:30:44 AM		8	27.63	24.4	294.7	0.13	7.13	67.05	4.61	7.12						
	5:34:58 AM		8.1	27.6	24.52	283	0.27	7.14	65.65	4.51	7						
2009/08/08	Cloudy	Mid-ebb	Surface	4:25:38 PM	1.1	29.71	15.62	137.8	0.78	7.54	94.11	6.56	3.96	6.00	12.97		
				4:31:37 PM	1	29.69	15.63	134.3	0.71	7.56	91.25	6.36	4.98				
			Middle	4:24:47 PM	4.9	28.26	23.11	99.2	0.33	7.46	82.09	5.63	14	5.77			
			4:30:46 PM	5	28.26	23.06	110.3	0.34	7.5	79.15	5.43	14.61					
		Bottom	4:23:47 PM	7	28.24	23.79	109.6	0.39	7.47	85.97	5.87	20.09	5.05				
			4:29:47 PM	6.8	28.24	23.64	67.5	0.39	7.5	82.93	5.67	20.19					
		Mid-flood	Surface	6:51:30 AM	1.1	28.85	17.78	271.9	0.18	7.39	73.78	5.16	6.09	5.05	12.74		
				6:54:22 AM	1	28.85	14.96	280.4	0.22	7.39	79.39	5.64	5.59				
			Middle	6:50:28 AM	4.9	28.53	21.24	303	0.38	7.42	67.77	4.67	9.54	4.03			
	6:53:39 AM		5	28.59	20.65	312.6	0.34	7.42	68.48	4.73	8.63						
Bottom	6:49:34 AM		7.9	27.68	24.9	282.5	0.31	7.38	58.76	4.03	24.04						
	6:52:41 AM		7.8	27.71	24.76	303.9	0.38	7.38	58.87	4.03	22.52						
2009/08/12	Cloudy and Rainy	Mid-ebb	Surface	5:22:15 PM	1.1	29.03	18.37	125.7	0.51	7.52	73.99	5.14	4.57	4.58	16.57		
				5:26:38 PM	1.4	29.04	18.12	108.7	0.41	7.52	73.27	5.09	4.57				
			Middle	5:21:21 PM	5	28.52	26.66	111.8	0.33	7.6	61.12	4.09	21.2	4.27			
			5:25:54 PM	5	28.51	26.7	116.2	0.28	7.59	59.82	4	19.58					
		Bottom	5:20:25 PM	7	28.53	26.7	97.1	0.31	7.63	64.57	4.32	24.04	4.91				
			5:25:05 PM	7.1	28.52	26.76	97.1	0.31	7.62	63.16	4.22	25.46					
		Mid-flood	Surface	9:48:39 AM	1	29.04	19.83	250.2	0.32	7.56	78.13	5.38	4.37	4.91	5.33		
				9:51:11 AM	1	29.04	19.92	250.2	0.32	7.55	77.01	5.3	3.96				
			Middle	9:47:56 AM	4.8	28.76	24.68	292.9	0.39	7.6	67.34	4.54	5.48	4.47			
	9:50:24 AM		4.7	28.76	24.61	284.1	0.41	7.59	65.24	4.4	5.08						
Bottom	9:47:15 AM		7	28.68	25.37	300.7	0.36	7.62	67.74	4.55	6.9						
	9:49:42 AM		6.7	28.73	25.01	287.3	0.42	7.6	65.06	4.38	6.19						
2009/08/14	Cloudy	Mid-ebb	Surface	7:01:54 PM	1.3	29.68	15.16	121.6	0.18	7.51	78.91	5.52	3.86	5.09	4.94		
				7:04:30 PM	1.2	29.62	14.86	113.9	0.27	7.52	78.4	5.5	3.86				
			Middle	7:01:12 PM	3	28.51	20.86	121.4	0.15	7.51	70.99	4.91	3.56	4.09			
			7:03:52 PM	3.9	28.22	23.82	138.8	0.11	7.5	64.55	4.41	4.06					
		Bottom	7:00:24 PM	5	28.15	24.38	108.2	0.15	7.48	61.29	4.18	6.4	5.13				
			7:02:54 PM	5.9	28.16	24.91	120.5	0.24	7.48	58.81	4	7.92					
		Mid-flood	Surface	12:27:15 PM	1.2	28.54	21.24	344.3	0.13	7.55	77.99	5.38	4.27	5.13	4.45		
				12:29:37 PM	1.3	28.58	20.98	344.3	0.13	7.55	76.13	5.25	4.27				
			Middle	12:26:34 PM	5	28.34	23.52	278	0.14	7.56	74.81	5.11	4.47	4.96			
	12:28:56 PM		4.9	28.37	23.2	302.9	0.19	7.55	70.04	4.79	4.67						
Bottom	12:25:46 PM		7	28.34	24.27	280.6	0.15	7.57	76.02	5.17	4.57						
	12:28:18 PM		6.8	28.34	24.27	311.4	0.14	7.56	69.77	4.74	4.47						

Annex D7 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/16	Cloudy	Mid-ebb	Surface	8:15:51 AM	1.1	29.39	12.71	126.9	0.48	7.82	95.25	6.78	3.25	5.42	7.11
				8:20:09 AM	1.1	29.43	13.24	121.9	0.49	7.81	92.29	6.55	3.46		
			Middle	8:15:02 AM	5.1	28.15	25.77	98.8	0.5	7.66	59.65	4.04	4.37		
				8:19:34 AM	5.1	28.12	26.15	113.5	0.47	7.68	63.69	4.3	4.98		
			Bottom	8:14:07 AM	7	27.81	28.73	87.1	0.37	7.68	60.45	4.05	14.2		
				8:18:56 AM	7	27.85	28.25	90	0.4	7.68	63.51	4.26	12.38		
		Mid-flood	Surface	10:26:42 PM	1	30.07	14.76	117.3	0.19	7.74	91.98	6.4	3.66	5.60	4.71
				10:29:57 PM	1.1	30.02	14.78	117.3	0.19	7.75	94.43	6.58	3.56		
			Middle	10:26:09 PM	5.1	28.83	21.86	104.5	0.15	7.56	66.04	4.51	3.56		
				10:29:16 PM	5	29.31	18.07	64	0.1	7.61	70.68	4.89	3.66		
			Bottom	10:25:26 PM	7.1	27.97	25.64	83.1	0.32	7.46	47.82	3.25	7.31		
				10:28:41 PM	7	28.07	25.29	18.1	0.1	7.47	52.96	3.6	6.5		
2009/08/18	Cloudy	Mid-ebb	Surface	10:23:33 AM	1	29.37	20.79	122.2	0.78	7.99	107.92	7.35	3.15	6.38	10.98
				10:28:51 AM	1	29.13	21.6	136.6	0.73	7.99	103.49	7.05	3.46		
			Middle	10:22:41 AM	5	27.85	26.82	107.7	0.58	7.86	82.69	5.59	12.68		
				10:27:59 AM	5.1	27.78	27.16	105.2	0.51	7.89	81.63	5.51	12.99		
			Bottom	10:21:52 AM	7.3	27.67	27.71	89.4	0.49	7.84	81.51	5.5	16.43		
				10:27:12 AM	7.2	27.66	27.76	80.2	0.47	7.88	83.13	5.61	17.14		
		Mid-flood	Surface	7:40:06 PM	1.1	29.84	17.27	329.1	0.47	7.59	94.6	6.52	5.48	6.24	11.06
				7:43:27 PM	0.9	29.83	17.31	329.1	0.47	7.59	89.49	6.17	5.59		
			Middle	7:39:32 PM	5	29.35	22.09	315.4	0.46	7.73	93.85	6.35	5.79		
				7:42:44 PM	4.9	29.35	21.93	307.1	0.51	7.74	87.13	5.9	7.31		
			Bottom	7:38:40 PM	7	28.23	25.25	301.6	0.4	7.6	67.27	4.56	19.27		
				7:41:54 PM	7	28.11	25.62	303.1	0.33	7.59	75.19	5.09	22.92		
2009/08/21	Sunny	Mid-ebb	Surface	2:50:13 PM	0.9	30.92	19.21	150.7	1.03	7.77	104.41	7	13.46	6.45	19.25
				2:57:18 PM	1	30.53	19.67	127	1.17	7.76	102.17	6.87	11.85		
			Middle	2:49:15 PM	5	28.68	23.91	133.5	0.72	7.73	86.91	5.89	20.78		
				2:56:26 PM	5.1	28.81	23.56	129.7	0.77	7.72	88.96	6.02	17.37		
			Bottom	2:48:22 PM	7	28.66	24.01	124.7	0.61	7.74	91	6.16	24.4		
				2:55:37 PM	6.8	28.62	24.15	162.6	0.73	7.74	91.5	6.2	27.61		
		Mid-flood	Surface	5:52:03 AM	1	29.29	19.59	273.8	0.17	7.41	65.73	4.51	7.93	4.42	10.29
				5:54:00 AM	1.1	29.28	19.63	273.8	0.17	7.42	65.19	4.48	7.93		
			Middle	5:51:13 AM	5.2	28.93	23.4	298.7	0.45	7.49	64.27	4.35	10.14		
				5:53:24 AM	5.1	28.99	23.11	288.2	0.46	7.49	64.03	4.33	9.74		
			Bottom	5:50:32 AM	7	28.81	23.91	295.7	0.46	7.49	63.7	4.31	12.95		
				5:52:47 AM	7.1	28.84	23.74	293	0.53	7.5	63.45	4.29	13.05		
2009/08/23	Sunny	Mid-ebb	Surface	3:57:27 PM	1.1	30.45	21.47	145.6	0.97	7.38	84.39	5.63	7.43	5.04	16.10
				4:09:22 PM	1.1	30.3	21.75	128.2	0.97	7.34	78.89	5.27	8.74		
			Middle	3:56:35 PM	5	28.57	24.41	114.3	0.59	7.32	67.87	4.59	17.67		
				4:08:39 PM	5.1	28.88	23.6	120.1	0.64	7.31	68.92	4.66	13.96		
			Bottom	3:55:44 PM	7	28.31	25.14	91.7	0.56	7.35	78.65	5.32	23.19		
				4:07:58 PM	7	28.47	24.72	98.8	0.52	7.33	73.75	4.99	25.6		
		Mid-flood	Surface	7:38:09 AM	1	29.4	20.94	305.6	0.69	7.44	69.12	4.7	9.54	4.56	25.74
				7:42:41 AM	1.1	29.34	21.27	301.3	0.49	7.44	69.06	4.69	10.24		
			Middle	7:37:17 AM	5.1	29	23.29	314.5	0.54	7.47	65.08	4.4	25.5		
				7:41:54 AM	5.1	29	23.31	305.4	0.53	7.47	65.99	4.46	26.91		
			Bottom	7:40:59 AM	7	28.87	23.68	301.8	0.48	7.48	69.21	4.68	39.66		
				7:36:21 AM	7.1	28.86	23.69	302.3	0.47	7.47	64.82	4.38	42.57		

Annex D8 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WNAD

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/07/28	Cloudy and Rainy	Mid-ebb	Surface	6:17:09 PM	1.2	29.83	14.2	141.9	0.44	7.47	88.67	6.22	3.51	5.59	7.15
				6:19:33 PM	1	29.94	13.98	141.9	0.44	7.5	91.2	6.39	3.51		
			Middle	6:16:25 PM	2.8	28.93	17.61	133.6	0.35	7.32	69.98	4.89	4.01		
				6:18:51 PM	2.9	28.92	17.61	141.8	0.47	7.32	69.31	4.84	3.01		
			Bottom	6:15:36 PM	5.9	27.6	23.55	110.6	0.43	7.26	51.09	3.53	13.63		
				6:18:04 PM	5.8	27.59	23.62	110.6	0.43	7.28	50.19	3.47	15.23		
		Mid-flood	Surface	10:48:31 AM	1	28.85	17.06	283.5	0.53	7.39	69.85	4.9	4.41	4.77	4.49
				10:51:12 AM	1	28.95	16.6	283.5	0.53	7.41	71.27	5	4.31		
			Middle	10:47:41 AM	2.9	28.58	18.91	281.5	0.32	7.37	65.84	4.59	4.61		
				10:50:17 AM	2.9	28.58	18.84	278.4	0.26	7.39	65.55	4.57	4.61		
			Bottom	10:46:46 AM	5.8	28.39	20.1	284.3	0.19	7.36	64.03	4.45	4.51		
				10:49:26 AM	5.7	28.47	19.62	318.5	0.32	7.37	64.14	4.47	4.51		
2009/07/30	Cloudy and Rainy	Mid-ebb	Surface	8:34:04 PM	1.1	29.45	15.32	285.4	0.16	7.8	102.21	7.17	2.51	6.24	3.39
				8:36:36 PM	1.2	29.45	15.35	285.4	0.16	7.81	102.24	7.17	2.51		
			Middle	8:33:17 PM	3.9	29.28	18.17	290.9	0.04	7.71	92.24	6.39	2.11		
				8:35:52 PM	3.9	29.2	18.45	290.9	0.04	7.72	60.83	4.21	3.81		
			Bottom	8:32:40 PM	5.9	27.68	23.22	183.2	0.11	7.47	56.03	3.87	4.61		
				8:35:03 PM	5.9	27.69	23.18	165.4	0.1	7.49	55.13	3.81	4.81		
		Mid-flood	Surface	2:41:03 PM	0.8	29.89	14.28	190.1	0.09	7.62	97.3	6.81	3.11	5.98	3.33
				2:46:08 PM	0.9	29.87	14.35	299.4	0.39	7.62	96.69	6.77	3.11		
			Middle	2:40:04 PM	3.5	29.18	15.93	182.1	0.11	7.48	77.61	5.45	3.21		
				2:45:27 PM	3.6	28.61	19.17	292.9	0.54	7.42	69.93	4.87	3.21		
			Bottom	2:39:21 PM	5.6	27.79	22.75	294.2	0.17	7.36	55.92	3.87	3.61		
				2:44:26 PM	5.7	28.25	20.7	292.2	0.46	7.4	69.63	4.84	3.71		
2009/08/01	Sunny	Mid-ebb	Surface	8:51:50 AM	1.1	29.25	16.07	133.2	0.4	7.85	81.51	5.71	2.31	4.77	3.31
				8:53:50 AM	1.1	29.23	16.05	133.2	0.4	7.85	78.71	5.52	2.41		
			Middle	8:51:13 AM	3.8	28.17	21.2	106.4	0.36	7.7	58.05	4.03	2.91		
				8:53:15 AM	3.9	27.99	22.13	111.8	0.32	7.69	55.14	3.82	2.31		
			Bottom	8:50:39 AM	5.6	27.68	24.15	82.7	0.25	7.86	61.59	4.24	4.41		
				8:52:41 AM	5.8	27.66	24.22	82.5	0.31	7.88	58.38	4.02	5.51		
		Mid-flood	Surface	11:22:19 PM	1	29.33	16.48	131	0.21	7.62	82.66	5.77	3.01	5.74	4.43
				11:26:30 PM	1	29.24	17.06	131	0.21	7.61	81.77	5.7	2.91		
			Middle	11:21:24 PM	4	28.56	21.35	66.5	0.18	7.64	83.37	5.74	2.81		
				11:25:34 PM	4	28.55	21.29	83.1	0.12	7.64	83.29	5.74	2.91		
			Bottom	11:20:24 PM	6.1	27.64	24.27	67	0.19	7.54	63.96	4.4	7.82		
				11:24:43 PM	6	27.67	24.14	86.1	0.15	7.55	64.38	4.43	7.12		
2009/08/04	Rainy (Typhoon Signal No. 1 in the morning ; Signal No. 3 in the afternoon)	Mid-flood	Surface	4:10:44 AM	1	28.5	20.54	147.4	0.1	7.53	80.83	5.6	1.91	4.69	4.91
				4:14:54 AM	1	28.51	20.59	284.9	0.1	7.53	80.25	5.55	2.01		
			Middle	4:09:44 AM	4	27.8	25.06	315	0.08	7.44	55.53	3.79	5.51		
				4:13:55 AM	4	27.82	24.8	296.6	0.02	7.44	55.54	3.8	5.21		
			Bottom	4:08:46 AM	6.1	27.71	25.95	353.9	0.22	7.43	50.9	3.47	7.12		
				4:12:52 AM	6	27.69	26.26	324.9	0.24	7.44	51.72	3.52	7.72		

Annex D8 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/06	Cloudy and Rainy	Mid-ebb	Surface	2:46:47 PM	1.1	28.33	18.24	105.3	0.9	7.5	81.38	5.72	4.91	5.25	13.95
				2:51:06 PM	1	28.41	17.36	147.1	0.89	7.48	79.39	5.6	7.32		
			Middle	2:46:01 PM	4	27.73	22.18	151.9	0.64	7.49	70.51	4.9	12.73		
				2:50:28 PM	3.9	27.71	22.49	152.6	0.65	7.49	68.71	4.77	12.13		
			Bottom	2:45:05 PM	6	27.68	22.82	150.4	0.51	7.48	69.16	4.79	24.95		
				2:49:40 PM	5.9	27.68	22.9	133.7	0.55	7.49	68.02	4.71	21.65		
		Mid-flood	Surface	5:43:47 AM	0.9	27.91	18.46	181	0.12	7.16	82.57	5.84	9.12	5.64	7.54
				5:46:33 AM	0.9	27.92	18.41	181	0.12	7.17	81.78	5.79	9.12		
			Middle	5:43:01 AM	4	27.98	20	203.2	0.14	7.16	77.87	5.45	6.32		
				5:45:40 AM	3.9	27.98	19.91	202.3	0.14	7.17	77.87	5.46	6.42		
			Bottom	5:41:52 AM	6.5	27.7	23.92	272.3	0.25	7.16	67.36	4.64	7.32		
				5:44:50 AM	6.6	27.7	23.94	309.9	0.32	7.17	66.76	4.6	6.92		
2009/08/08	Cloudy	Mid-ebb	Surface	4:10:51 PM	0.9	30.41	13.16	148	0.83	7.47	105.74	7.38	2.24	6.67	6.08
				4:16:56 PM	1	30.41	13.07	151.8	0.84	7.57	104.12	7.28	2.85		
			Middle	4:10:03 PM	3.9	28.53	21.24	130.7	0.41	7.25	87.29	6.02	4.57		
				4:16:14 PM	4	28.47	21.56	130.7	0.41	7.37	87.3	6.01	5.48		
			Bottom	4:09:09 PM	5.8	28.31	23.51	131.3	0.47	7.24	87.72	5.99	10.45		
				4:15:27 PM	5.9	28.31	23.5	139.7	0.4	7.37	88.91	6.07	10.86		
		Mid-flood	Surface	7:02:17 AM	1.1	28.81	14.74	284.7	0.16	7.43	79.9	5.68	5.69	5.25	9.68
				7:05:11 AM	1	28.82	14.66	273.3	0.19	7.43	79.81	5.68	5.48		
			Middle	7:01:37 AM	4	28.68	20.02	299.6	0.32	7.42	69.49	4.81	7.31		
				7:04:34 AM	3.9	28.7	19.8	314.7	0.25	7.41	69.89	4.84	6.5		
			Bottom	7:00:41 AM	5.9	28.48	21.94	289.2	0.29	7.45	65.78	4.52	15.62		
				7:03:13 AM	5.9	28.46	22.12	335.1	0.54	7.45	65.48	4.5	17.45		
2009/08/12	Cloudy and Rainy	Mid-ebb	Surface	5:10:39 PM	1.1	28.89	16.18	75.5	0.41	7.55	81.16	5.72	4.06	4.93	10.23
				5:14:58 PM	1	28.87	15.86	131.9	0.36	7.55	80.53	5.69	3.66		
			Middle	5:09:57 PM	3.9	28.55	26.44	124.5	0.34	7.61	62.87	4.21	11.36		
				5:14:11 PM	4	28.53	26.61	130.8	0.32	7.61	61.27	4.1	14.1		
			Bottom	5:09:03 PM	6.1	28.51	27.06	111.2	0.31	7.65	67.59	4.51	14.41		
				5:13:09 PM	5.8	28.52	26.85	126.4	0.33	7.65	67.27	4.5	13.8		
		Mid-flood	Surface	9:58:14 AM	1	29	19.03	259.7	0.36	7.55	79.24	5.49	3.76	4.97	5.26
				10:00:39 AM	0.9	28.99	19.06	259.7	0.36	7.54	78.12	5.41	3.66		
			Middle	9:57:30 AM	3.9	28.79	24.34	297.1	0.38	7.59	67.3	4.54	5.18		
				10:00:00 AM	3.9	28.84	23.78	272.3	0.46	7.58	65.8	4.45	4.77		
			Bottom	9:56:48 AM	5.8	28.71	25.09	282.5	0.38	7.6	67.61	4.55	6.9		
				9:59:10 AM	5.9	28.73	25	313.2	0.56	7.59	64.93	4.37	7.31		
2009/08/14	Cloudy	Mid-ebb	Surface	6:43:00 PM	1	29.12	17.94	161	0.1	7.48	73.75	5.13	3.86	5.12	3.86
				6:45:08 PM	1.2	29.11	15.63	161	0.1	7.55	80.38	5.66	3.66		
			Middle	6:42:23 PM	3	28.41	21.74	142	0.13	7.51	70.38	4.85	4.27		
				6:44:21 PM	3.2	28.4	21.73	146.5	0.1	7.51	70.37	4.85	3.96		
			Bottom	6:41:37 PM	5	28.25	23.56	154.8	0.08	7.52	68.5	4.68	3.96		
				6:43:46 PM	4.9	28.3	23.4	184.3	0.09	7.51	68.89	4.71	3.46		
		Mid-flood	Surface	12:35:53 PM	1.4	28.86	18.35	277.8	0.46	7.52	84.08	5.86	3.96	5.57	4.12
				12:38:14 PM	1.2	28.92	17.49	277.8	0.46	7.51	80.19	5.61	4.06		
			Middle	12:35:08 PM	4.2	28.57	20.47	259	0.2	7.54	81.8	5.66	4.17		
				12:37:32 PM	4.2	28.57	20.43	310.8	0.11	7.52	74.61	5.16	4.06		
			Bottom	12:34:31 PM	5.8	28.41	23.26	125.3	0.05	7.57	81.92	5.6	4.27		
				12:36:50 PM	5.7	28.42	23.14	213.9	0.64	7.55	73.77	5.04	4.17		

Annex D8 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/16	Cloudy	Mid-ebb	Surface	8:28:52 AM	1.1	29.38	14.5	68.2	0.59	7.77	95.67	6.75	3.15	5.98	3.79
				8:40:27 AM	1.1	29.31	15.92	140.8	0.66	7.76	90.19	6.32	3.15		
			Middle	8:28:18 AM	4.1	28.58	22.12	95	0.33	7.68	80.15	5.49	2.95		
		8:39:53 AM		4.1	28.72	21.63	122.5	0.44	7.7	78.03	5.35	2.95			
		Bottom	8:27:34 AM	6	27.88	27.12	88.8	0.42	7.62	64.91	4.38	5.28	4.39		
			8:39:18 AM	6	27.84	27.16	100.1	0.45	7.63	65.28	4.4	5.28			
		Mid-flood	Surface	10:16:41 PM	1	30.12	13.43	162.5	0.24	7.81	94.41	6.62	3.66	5.06	6.33
				10:20:33 PM	1.1	29.73	16.4	154.6	0.07	7.7	81.12	5.63	3.76		
			Middle	10:16:06 PM	4	28.89	21.57	101.7	0.27	7.56	65.09	4.45	3.86		
10:19:55 PM	4.1	28.31		22.7	111.7	0.23	7.45	51.6	3.54	5.38					
Bottom	10:15:17 PM	6	28.14	25.22	100.1	0.19	7.47	45.77	3.11	10.86	3.33				
	10:19:05 PM	6.2	28.15	25.16	100.1	0.19	7.47	52.3	3.55	10.45					
2009/08/18	Cloudy	Mid-ebb	Surface	10:37:18 AM	1	29.16	20.73	133	0.77	8.02	107.91	7.38	3.56	6.17	9.32
				10:41:50 AM	1	29.84	18.78	128.7	0.77	8.12	106.75	7.3	2.75		
			Middle	10:36:31 AM	4	27.78	27.11	131.5	0.61	7.86	76	5.13	12.07		
		10:40:58 AM		4	27.77	27.03	135.2	0.76	7.85	72.1	4.87	9.95			
		Bottom	10:35:14 AM	6	27.64	27.72	117.6	0.44	7.88	82.74	5.58	13.19	5.63		
			10:40:07 AM	6.2	27.6	27.88	114	0.49	7.89	84.06	5.67	14.41			
		Mid-flood	Surface	7:29:37 PM	1.1	29.84	17.69	325.9	0.45	7.59	86.96	5.98	6.7	5.94	15.96
				7:31:43 PM	1.1	29.85	17.56	325.9	0.45	7.6	88.91	6.12	6.6		
			Middle	7:28:54 PM	4	29.51	19.71	326.2	0.38	7.66	85.55	5.85	10.55		
7:31:06 PM	3.8	29.23		21.68	339.3	0.5	7.68	85.4	5.8	13.7					
Bottom	7:28:00 PM	6	28.6	24.32	311.9	0.29	7.69	76.61	5.19	29.82	5.28				
	7:30:28 PM	6.1	28.54	24.54	307.8	0.46	7.64	79.23	5.36	28.4					
2009/08/21	Sunny	Mid-ebb	Surface	2:35:33 PM	1.1	29.85	20.39	96.3	0.88	7.69	100.04	6.78	9.14	6.54	14.31
				2:41:55 PM	1	30	20.31	150.7	1.03	7.72	97.13	6.57	9.74		
			Middle	2:34:43 PM	4	29.23	21.81	143.5	0.64	7.69	96.54	6.56	12.35		
		2:41:09 PM		4.2	28.86	23.41	140.5	0.63	7.73	92.07	6.24	14.66			
		Bottom	2:33:52 PM	5.9	28.55	24.49	134.1	0.41	7.71	97.43	6.59	20.28	6.66		
			2:40:13 PM	6	28.56	23.45	134.1	0.41	7.75	98.81	6.72	19.68			
		Mid-flood	Surface	6:02:12 AM	1	29.28	19.98	290.3	0.22	7.43	64.6	4.43	7.83	4.44	13.59
				6:04:14 AM	1.1	29.26	19.64	290.3	0.22	7.43	65.63	4.51	8.03		
			Middle	6:01:26 AM	4.1	29.15	22.43	290.9	0.4	7.49	65.21	4.42	9.54		
6:03:39 AM	3.9	29.13		22.61	293.5	0.47	7.5	64.77	4.39	9.44					
Bottom	6:00:45 AM	6.1	28.97	23.41	304	0.38	7.49	64.44	4.36	23.9	4.34				
	6:02:58 AM	6.1	28.97	23.4	288.7	0.4	7.51	63.9	4.32	22.79					
2009/08/23	Sunny	Mid-ebb	Surface	3:46:01 PM	1	30.63	21.27	141	0.79	7.36	86.17	5.74	7.53	5.22	11.70
				3:51:15 PM	1.1	30.43	21.53	145.5	0.76	7.36	82.06	5.47	7.83		
			Middle	3:45:13 PM	3.9	28.96	23.24	124.2	0.59	7.3	71.97	4.87	10.04		
		3:50:33 PM		4	28.77	23.81	131	0.65	7.32	71.08	4.81	11.95			
		Bottom	3:44:18 PM	5.9	28.43	24.79	106.5	0.55	7.32	71.87	4.86	17.57	5.04		
			3:49:51 PM	5.9	28.42	24.81	105.6	0.61	7.35	77.02	5.21	15.26			
		Mid-flood	Surface	7:48:55 AM	1.2	29.3	19.75	305.8	0.48	7.44	73.76	5.06	7.63	4.80	14.29
				7:51:13 AM	1.1	29.31	19.63	293.5	0.49	7.43	72.04	4.94	7.73		
			Middle	7:48:14 AM	4	29.28	21.8	311.5	0.44	7.45	69.25	4.7	11.15		
7:50:32 AM	4	29.2		22.32	298.8	0.54	7.46	66.38	4.5	11.15					
Bottom	7:47:40 AM	6	29.1	22.9	305.7	0.46	7.47	68.31	4.62	22.79	4.55				
	7:49:47 AM	6.1	29.11	22.85	304.2	0.47	7.47	66.02	4.47	25.3					

Annex D9 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WNBA

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/07/28	Cloudy and Rainy	Mid-ebb	Surface	5:16:58 PM	1	29.46	14.07	119	0.63	7.44	123.02	8.69	3.96	7.96	3.32
				5:20:12 PM	0.9	29.48	13.96	121.6	0.58	7.45	115.05	8.13	3.96		
			Middle	5:15:36 PM	3.9	28.9	17.53	135.1	0.51	7.3	112.24	7.85	2.74		
				5:19:17 PM	3.9	28.86	17.88	125	0.53	7.32	102.85	7.18	2.64		
			Bottom	5:14:31 PM	5.9	28.21	21.22	129.4	0.38	7.25	110.19	7.64	3.25		
				5:18:04 PM	6.3	28.2	21.23	112	0.4	7.27	97.66	6.77	3.35		
		Mid-flood	Surface	11:39:59 AM	0.9	29.1	16.21	316.4	0.36	7.37	99.1	6.96	3.15	6.83	3.61
				11:45:16 AM	1.1	28.89	17.47	301.3	0.31	7.36	98.01	6.86	3.35		
			Middle	11:39:07 AM	4.1	28.72	18.33	296.2	0.39	7.35	96.6	6.75	3.25		
				11:44:19 AM	4	28.69	18.37	287.2	0.37	7.36	96.68	6.75	3.25		
			Bottom	11:37:51 AM	6.2	28.41	19.74	279.5	0.65	7.34	100.71	7.01	3.76		
				11:43:20 AM	6	28.21	20.66	285.3	0.49	7.34	94.18	6.55	4.87		
2009/07/30	Cloudy and Rainy	Mid-ebb	Surface	7:03:36 PM	1	29.35	18.37	270	0.01	7.67	98.95	6.84	3.05	6.08	3.27
				7:06:40 PM	0.9	29.37	18.15	344.4	0.1	7.68	98.05	6.78	3.05		
			Middle	7:02:25 PM	4.1	28.32	21.3	136.8	0.09	7.49	74.83	5.18	2.74		
				7:05:41 PM	3.9	28.54	20.69	223.2	0.18	7.52	79.64	5.51	2.94		
			Bottom	7:01:22 PM	6	27.85	22.77	135	0.07	7.43	70.63	4.88	5.28		
				7:04:44 PM	6	28.23	21.66	212.1	0.12	7.51	78.24	5.41	2.54		
		Mid-flood	Surface	3:06:41 PM	1.2	29.48	17.45	261	0.28	7.68	109.6	7.59	2.94	6.37	5.75
				3:10:34 PM	1.1	29.62	17.12	256.7	0.24	7.7	102.24	7.08	2.84		
			Middle	3:05:20 PM	4.1	28.16	21.69	244	0.19	7.44	80.26	5.55	3.35		
				3:09:37 PM	3.8	28.26	21.34	253.3	0.18	7.46	76.14	5.27	2.74		
			Bottom	3:04:04 PM	5.9	27.49	24.1	310.6	0.29	7.41	79.92	5.52	14.5		
				3:08:36 PM	5.9	27.87	22.68	317.7	0.3	7.41	71.55	4.95	8.12		
2009/08/01	Sunny	Mid-ebb	Surface	10:17:38 AM	1	29.58	15.8	78.5	0.56	7.6	108.57	7.58	3.15	6.86	3.86
				10:22:15 AM	0.9	29.82	15.86	89.9	0.52	7.62	106	7.37	3.76		
			Middle	10:16:23 AM	4	28.4	21.95	96.7	0.62	7.64	94.26	6.49	1.73		
				10:21:14 AM	4.1	28.37	21.56	96.6	0.44	7.6	87.14	6.01	2.03		
			Bottom	10:15:16 AM	5.9	27.58	24.6	105.2	0.4	7.45	88.21	6.06	6.29		
				10:20:05 AM	6.2	27.66	24.35	107.5	0.38	7.44	85.81	5.9	6.19		
		Mid-flood	Surface	9:41:36 PM	1	30.11	12.38	152.4	0.17	7.52	90.98	6.41	4.97	6.64	3.87
				9:44:32 PM	1.2	30.05	12.75	56.4	0.23	7.53	92.29	6.5	4.67		
			Middle	9:40:28 PM	3.8	29.14	19.75	354.2	0.27	7.61	99.49	6.84	3.15		
				9:43:35 PM	3.7	29.14	19.73	39.4	0.15	7.61	98.99	6.81	3.65		
			Bottom	9:39:17 PM	5.9	27.81	24.43	290.4	0.18	7.49	80.47	5.52	3.45		
				9:42:31 PM	5.9	27.85	24.23	1.5	0.22	7.49	81.17	5.57	3.35		
2009/08/04	Rainy (Typhoon Signal No. 1 in the morning ; Signal No. 3 in the afternoon)	Mid-flood	Surface	5:07:29 AM	1.1	28.54	21.61	299	0.12	7.68	77.26	5.31	2.74	4.62	5.28
				5:10:35 AM	1	28.53	21.63	329.7	0.16	7.68	75.97	5.23	2.74		
			Middle	5:06:19 AM	3.9	28.25	24.12	298.8	0.27	7.63	57.84	3.94	4.47		
				5:09:33 AM	4	28.14	24.79	300.7	0.2	7.61	58.87	4	4.97		
			Bottom	5:05:05 AM	5.9	27.47	26.7	284.2	0.23	7.57	53.49	3.64	8.42		
				5:08:30 AM	5.9	27.75	26.29	283.6	0.26	7.59	54.61	3.71	8.32		

Annex D9 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/06	Cloudy and Rainy	Mid-ebb	Surface	1:10:56 PM	1.1	28.27	20.44	127.9	0.71	7.48	106.45	7.4	5.18	6.91	13.76
				1:14:13 PM	1.2	28.2	20.5	121.9	0.54	7.48	99.09	6.9	5.38		
			Middle	1:09:35 PM	4	27.81	22.36	100.4	0.57	7.45	100.82	6.99	12.37		
				1:13:11 PM	4.4	27.8	22.49	113.5	0.57	7.45	91.27	6.33	13.08		
			Bottom	1:08:24 PM	6.3	27.76	23.41	96.8	0.67	7.5	111.53	7.7	23.53		
				1:12:03 PM	6.6	27.75	23.58	92.5	0.44	7.5	98.51	6.79	23.02		
		Mid-flood	Surface	6:41:14 AM	1.2	27.81	23.69	270.9	0.49	7.54	71.17	4.9	4.97	4.83	8.22
				6:44:51 AM	1	27.83	23.21	288.8	0.36	7.53	71.84	4.96	5.07		
			Middle	6:40:09 AM	4.1	27.76	24.8	297.4	0.36	7.55	70.09	4.8	9.64		
				6:43:38 AM	4.1	27.7	25.19	304	0.45	7.55	67.8	4.64	10.14		
			Bottom	6:39:05 AM	5.9	27.71	25.2	263.6	0.46	7.55	71.68	4.9	9.94		
				6:42:33 AM	5.8	27.49	26.5	290.9	0.49	7.56	64.25	4.38	9.54		
2009/08/08	Cloudy	Mid-ebb	Surface	2:07:58 PM	1.3	29.27	16.79	111.6	0.8	7.49	97.66	6.81	4.06	6.26	8.94
				2:10:04 PM	1.2	29.36	16.93	113.4	0.75	7.48	91.55	6.37	4.26		
			Middle	2:07:12 PM	3.7	28.82	18.97	99.9	0.65	7.42	86.95	6.04	4.97		
				2:09:28 PM	3.5	28.77	19.48	106.3	0.68	7.43	84.08	5.83	9.13		
			Bottom	2:05:42 PM	6.2	28.49	22.94	91.6	0.63	7.47	86.26	5.89	13.59		
				2:08:52 PM	6.4	28.43	23.47	134.1	0.44	7.47	82.49	5.63	17.65		
		Mid-flood	Surface	7:50:51 AM	1.2	28.91	16.62	310.7	0.4	7.47	83.1	5.84	4.77	5.52	6.04
				7:52:48 AM	1.1	28.8	17.51	304.1	0.39	7.46	77.57	5.43	5.28		
			Middle	7:50:01 AM	4.1	28.79	18.04	276.8	0.32	7.46	80.07	5.59	5.58		
				7:52:11 AM	3.8	28.74	18.37	278.5	0.38	7.46	74.74	5.22	6.09		
			Bottom	7:49:26 AM	5.9	28.66	19.34	285.6	0.87	7.47	83.9	5.83	6.19		
				7:51:34 AM	6.1	28.22	22.46	285.6	0.87	7.47	76.05	5.23	8.32		
2009/08/12	Cloudy and Rainy	Mid-ebb	Surface	4:04:50 PM	1.1	28.85	16.05	113.5	0.61	7.51	89.68	6.33	3.45	5.81	4.38
				4:07:35 PM	1.2	28.86	16.65	117.8	0.52	7.5	86.68	6.1	3.25		
			Middle	4:03:43 PM	3.6	28.87	20.68	98.4	0.57	7.5	79.27	5.45	3.45		
				4:06:42 PM	4.1	28.83	21.51	97.1	0.58	7.51	78.27	5.36	3.55		
			Bottom	4:02:41 PM	6	28.35	25.96	85.1	0.32	7.51	72.96	4.91	6.39		
				4:05:49 PM	6.3	28.33	26.06	80.1	0.36	7.52	70.76	4.76	6.19		
		Mid-flood	Surface	11:00:01 AM	1.1	28.99	21.04	300.8	0.33	7.47	79.92	5.47	3.25	5.17	5.21
				11:03:28 AM	1.2	28.9	22.27	320.7	0.34	7.49	75.9	5.17	3.55		
			Middle	10:58:41 AM	3.8	28.84	23.12	289.8	0.34	7.49	74.28	5.04	4.26		
				11:02:32 AM	4	28.81	23.17	267.4	0.29	7.49	73.55	4.99	4.57		
			Bottom	10:57:22 AM	6.3	28.59	25.76	274.8	0.47	7.49	74.45	5	7.51		
				11:01:34 AM	6	28.54	25.51	291.6	0.64	7.5	73.41	4.94	8.12		
2009/08/14	Cloudy	Mid-ebb	Surface	5:41:23 PM	1.2	29.54	15.31	141.3	0.13	7.32	92.44	6.47	3.45	6.11	3.55
				5:44:07 PM	1.2	29.68	15.09	141.3	0.13	7.33	92.91	6.5	3.45		
			Middle	5:40:15 PM	4	28.49	21.83	145.1	0.23	7.32	83.65	5.75	3.15		
				5:43:08 PM	4	28.67	20.6	173.1	0.16	7.34	82.69	5.71	2.84		
			Bottom	5:38:56 PM	6	28.23	24	35.4	0.08	7.29	75.47	5.15	4.26		
				5:42:18 PM	6	28.15	24.49	62.4	0.05	7.29	71.87	4.9	4.16		
		Mid-flood	Surface	1:29:06 PM	1.1	29.18	15.65	302.5	0.28	7.49	96.03	6.75	2.74	6.07	3.42
				1:33:21 PM	1	28.77	17.77	309.6	0.46	7.48	92.92	6.5	2.64		
			Middle	1:27:40 PM	3.9	28.39	21.42	289.9	0.34	7.43	79.86	5.51	3.76		
				1:32:20 PM	4.3	28.44	21.19	288.6	0.29	7.43	80.11	5.53	3.96		
			Bottom	1:26:23 PM	6.2	28.19	23.07	289.3	0.44	7.43	82.83	5.68	3.45		
				1:31:20 PM	6	28.23	23.16	289.7	0.55	7.43	78.83	5.4	3.96		

Annex D9 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/16	Cloudy	Mid-ebb	Surface	9:36:23 AM	0.9	29.68	12.67	111.6	0.75	7.51	101.61	7.2	2.94	6.51	5.24
				9:41:10 AM	0.9	29.69	12.79	121.5	0.8	7.51	96.34	6.82	5.07		
			Middle	9:35:22 AM	4.3	29.13	17.57	98.3	0.68	7.39	86.44	6.02	2.94		
				9:40:06 AM	4.1	28.88	20.54	108.6	0.7	7.38	86.89	5.98	3.55		
			Bottom	9:34:20 AM	5.8	28.03	26.46	76.3	0.6	7.33	65.55	4.43	7.2		
				9:39:01 AM	6.1	27.9	27.25	96.6	0.38	7.33	66.7	4.49	9.74		
		Mid-flood	Surface	9:05:03 PM	1.2	30.3	14.45	279	0.05	7.41	88.24	6.13	4.06	5.45	4.75
				9:07:39 PM	1.2	30.34	14.72	279	0.05	7.44	88.95	6.17	4.06		
			Middle	9:04:18 PM	4	28.71	22.37	57.2	0.09	7.27	68.69	4.69	3.45		
				9:06:56 PM	4	28.8	22.04	77.7	0.2	7.31	70.44	4.81	3.86		
			Bottom	9:03:27 PM	6.1	27.55	27.35	20.3	0.11	7.22	55.53	3.76	7.51		
				9:06:07 PM	6.1	28.16	24.9	23.9	0.17	7.29	62.32	4.24	5.58		
2009/08/18	Cloudy	Mid-ebb	Surface	11:55:42 AM	1.6	29.62	21.25	103.4	0.87	7.64	83.33	5.64	2.23	4.68	9.06
				11:58:54 AM	1.2	29.51	20.78	118.4	0.85	7.59	79.5	5.4	2.64		
			Middle	11:54:38 AM	4.3	28.11	25.86	102	0.77	7.39	51.87	3.51	8.83		
				11:57:53 AM	4.1	28.04	26.19	100.9	0.79	7.41	61.44	4.15	7.51		
			Bottom	11:53:41 AM	5.9	27.84	27.13	105.4	0.65	7.42	57.17	3.86	18.56		
				11:56:54 AM	6.3	27.84	27.13	77.7	0.52	7.43	55.12	3.72	14.61		
		Mid-flood	Surface	6:06:12 PM	1.3	29.83	20.09	301.2	0.45	7.62	71.4	4.85	4.87	4.47	13.73
				6:11:27 PM	1.1	29.16	22.98	304.8	0.55	7.57	67.51	4.56	14.61		
			Middle	6:05:11 PM	3.9	29.24	22.75	293.5	0.46	7.58	62.34	4.21	8.32		
				6:09:58 PM	3.9	28.93	23.65	291.4	0.49	7.53	62.91	4.25	14.61		
			Bottom	6:04:19 PM	5.9	28.06	26	282.8	0.4	7.45	48.17	3.26	18.05		
				6:08:40 PM	5.9	28.1	25.9	300.9	0.46	7.46	52.85	3.58	21.91		
2009/08/21	Sunny	Mid-ebb	Surface	1:18:53 PM	1	29.91	21.92	118.8	0.9	7.48	81.11	5.44	5.78	5.24	17.26
				1:22:36 PM	1.2	29.79	21.94	121.4	0.81	7.49	82.5	5.55	5.48		
			Middle	1:17:41 PM	3.8	28.75	24.35	109.3	0.87	7.45	75.46	5.09	16.43		
				1:21:15 PM	4.2	28.68	24.55	107.8	0.81	7.45	72.07	4.87	17.75		
			Bottom	1:20:02 PM	6.1	28.54	25.03	96.1	0.67	7.47	74.54	5.03	32.76		
				1:16:21 PM	5.8	28.6	24.88	98.5	0.7	7.47	79.98	5.4	25.35		
		Mid-flood	Surface	7:15:24 AM	1.3	29.13	21.97	306.7	0.56	7.43	74.49	5.06	6.7	5.00	14.30
				7:19:04 AM	1.2	29.13	21.55	306.7	0.56	7.42	73.27	4.99	5.18		
			Middle	7:13:56 AM	4.2	28.91	23.19	295.4	0.53	7.43	75.39	5.11	10.04		
				7:18:08 AM	4	29.07	22.69	307.6	0.6	7.44	71.61	4.85	9.13		
			Bottom	7:12:30 AM	7.2	28.32	25.48	270	0.64	7.46	76.09	5.14	30.12		
				7:17:03 AM	6.2	28.49	24.89	278.1	0.62	7.45	70.35	4.76	24.64		
2009/08/23	Sunny	Mid-ebb	Surface	2:23:27 PM	0.9	30.26	22.73	111.1	1.08	7.33	90.78	6.03	5.99	5.66	18.75
				2:31:41 PM	1.4	30.59	22.51	113.9	0.76	7.36	87.52	5.79	4.57		
			Middle	2:22:28 PM	4.5	28.88	24.8	99.5	0.73	7.27	85.72	5.76	14		
				2:30:59 PM	4	28.9	24.33	101.9	0.96	7.27	75.15	5.06	18.66		
			Bottom	2:21:27 PM	6	28.21	26.07	83.5	0.54	7.24	80.74	5.45	32.96		
				2:30:17 PM	5.7	28.24	25.99	130	0.49	7.24	71.43	4.82	36.31		
		Mid-flood	Surface	8:30:10 AM	1.3	29.35	22.88	287.2	0.62	7.37	76.94	5.18	6.6	5.05	15.37
				8:32:19 AM	1.2	29.35	22.89	287.2	0.62	7.36	72.43	4.88	7.51		
			Middle	8:28:41 AM	4	29.12	23.47	298.7	0.64	7.37	78.13	5.27	15.72		
				8:31:38 AM	3.8	29.13	23.45	288.1	0.67	7.36	72.45	4.88	16.43		
			Bottom	8:27:59 AM	6.2	28.68	24.71	280.1	0.66	7.37	80.48	5.43	23.83		
				8:31:00 AM	6.2	28.77	24.41	281.1	0.58	7.37	73.04	4.93	22.11		

Annex D10 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WNBB

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/07/28	Cloudy and Rainy	Mid-ebb	Surface	4:44:57 PM	0.7	29.46	13.99	124.8	0.55	7.33	108	7.63	3.65	6.66	7.17
				4:48:13 PM	1.1	29.47	13.92	128.4	0.54	7.36	104.81	7.41	3.65		
			Middle	4:43:42 PM	8.2	27.75	22.65	55.8	0.22	7.11	85.65	5.94	6.7		
				4:47:13 PM	8	27.84	22.35	31.3	0.19	7.16	81.65	5.66	5.38		
			Bottom	4:42:34 PM	13.9	27.24	24.86	358.1	0.12	7.07	83.52	5.77	10.75		
				4:46:04 PM	14	27.24	24.85	4.7	0.17	7.13	78.21	5.4	12.88		
		Mid-flood	Surface	12:18:24 PM	0.9	28.77	18.16	279.3	0.36	7.36	100.54	7.02	3.25	6.55	8.17
				12:22:08 PM	1	28.8	17.97	299.8	0.41	7.37	94.98	6.64	3.25		
			Middle	12:17:01 PM	7	28.02	21.47	340.4	0.31	7.32	94.41	6.56	11.56		
				12:20:44 PM	7.2	27.95	21.78	319.5	0.25	7.33	86.06	5.97	10.75		
			Bottom	12:15:40 PM	14.3	27.49	23.91	177.1	0.1	7.3	95.02	6.57	10.45		
				12:19:44 PM	14.3	27.48	23.97	177.1	0.1	7.32	83.87	5.8	9.74		
2009/07/30	Cloudy and Rainy	Mid-ebb	Surface	6:38:01 PM	1.1	29.29	18.68	275.6	0.37	7.61	97.73	6.75	2.03	5.36	8.23
				6:41:03 PM	1	29.29	18.76	274.1	0.14	7.61	95.43	6.59	2.13		
			Middle	6:36:54 PM	7.8	27.28	24.75	19.4	0.11	7.31	59.62	4.12	7		
				6:40:02 PM	8.1	27.19	25.01	242.8	0.15	7.3	57.72	3.98	6.49		
			Bottom	6:35:31 PM	14.1	26.34	27.66	6.7	0.29	7.21	53.72	3.71	12.27		
				6:39:07 PM	14.1	26.26	27.91	179.6	0.15	7.23	51.82	3.58	19.47		
		Mid-flood	Surface	3:38:33 PM	1.1	29.79	17	305.2	0.41	7.76	111.99	7.74	4.47	6.07	12.32
				3:42:21 PM	1	29.62	17.46	293.6	0.38	7.73	101.53	7.02	3.45		
			Middle	3:35:19 PM	7.8	27.1	25.27	350.9	0.3	7.37	74.64	5.15	9.23		
				3:41:12 PM	8	27.09	25.32	34.5	0.14	7.38	63.13	4.36	10.14		
			Bottom	3:34:15 PM	14	26.29	27.85	35.9	0.23	7.31	67.25	4.64	27.38		
				3:40:03 PM	14	26.3	27.79	35.9	0.23	7.32	58.6	4.04	19.27		
2009/08/01	Sunny	Mid-ebb	Surface	10:45:27 AM	1.3	29.37	16.46	111.2	0.54	7.6	91.01	6.35	3.35	5.09	7.73
				10:48:55 AM	1.1	29.57	16.56	122.4	0.36	7.6	85.03	5.91	3.25		
			Middle	10:44:17 AM	8.3	27.39	25.01	57.3	0.05	7.37	59.24	4.08	11.26		
				10:47:52 AM	8.1	27.64	24.39	43.9	0.11	7.48	58.65	4.03	8.52		
			Bottom	10:43:25 AM	13.7	26.39	27.91	77	0.03	7.23	53.66	3.69	13		
				10:46:51 AM	13.5	26.35	27.95	3.3	0.16	7.28	51.95	3.58	7		
		Mid-flood	Surface	9:17:53 PM	0.7	29.95	10.94	229.5	0.13	7.46	90.46	6.44	4.97	5.25	9.10
				9:21:08 PM	1.3	29.89	15.62	191.6	0.05	7.56	95.26	6.62	4.16		
			Middle	9:16:43 PM	8.1	27.09	26.21	16.5	0.28	7.27	56.33	3.87	12.07		
				9:20:13 PM	7.9	27.18	26	39.4	0.35	7.31	59.44	4.08	10.55		
			Bottom	9:15:23 PM	14.1	26.3	28.17	16.9	0.06	7.11	42.02	2.89	11.77		
				9:18:56 PM	14	26.33	28.13	51.1	0.12	7.14	46.93	3.23	11.06		
2009/08/04	Rainy (Typhoon Signal No. 1 in the morning ; Signal No. 3 in the afternoon)	Mid-flood	Surface	5:35:10 AM	1.3	28.4	22.06	300.5	0.3	7.65	78.37	5.39	4.77	4.50	7.74
				5:38:33 AM	1.3	28.41	21.54	291.1	0.28	7.66	81.13	5.59	4.47		
			Middle	5:34:05 AM	8.1	26.84	28.06	7.6	0.13	7.51	53.32	3.64	9.84		
				5:37:24 AM	7.9	26.94	27.83	332.8	0.16	7.51	49.18	3.36	9.43		
			Bottom	5:33:03 AM	14	26.59	28.58	79.9	0.17	7.49	55.14	3.77	9.23		
				5:36:24 AM	13.9	26.58	28.58	246.8	0.02	7.49	49.28	3.37	8.72		

Annex D10 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/06	Cloudy and Rainy	Mid-ebb	Surface	12:44:29 PM	1.3	28.14	20.4	129.3	0.58	7.42	95.79	6.68	5.28	6.21	24.61
				12:48:12 PM	1.1	28.22	20.26	142	0.67	7.44	92.77	6.46	5.38		
			Middle	12:43:15 PM	7.9	27.8	22.51	151.4	0.35	7.4	86.56	6	22.62		
		12:47:00 PM		7.8	27.8	22.48	132.3	0.34	7.4	82.35	5.71	23.12			
		Bottom	12:41:53 PM	14.3	27.69	24.29	57.9	0.51	7.43	92.63	6.37	47.76	6.11		
			12:45:51 PM	14	27.7	24.11	92.5	0.23	7.44	85.05	5.85	43.5			
		Mid-flood	Surface	7:08:48 AM	1.5	27.9	21.3	321.1	0.26	7.53	77.79	5.42	5.68	5.10	13.90
				7:12:01 AM	1.3	27.89	21.47	7.6	0.18	7.53	78.06	5.43	5.58		
			Middle	7:07:36 AM	8.3	27.64	25.47	325.9	0.19	7.56	70.5	4.82	13.69		
7:11:01 AM	8.2	27.67		25.29	11.8	0.49	7.56	69.2	4.73	10.75					
Bottom	7:06:17 AM	14.2	27.52	26.31	306.4	0.34	7.56	69.62	4.75	25.66	4.67				
	7:09:51 AM	13.5	27.53	26.26	312.3	0.25	7.56	67.23	4.58	22.01					
2009/08/08	Cloudy	Mid-ebb	Surface	1:40:58 PM	1.3	29.55	16.1	128.6	0.73	7.49	104.92	7.31	5.07	6.45	38.33
				1:44:13 PM	0.8	29.65	16.02	130.1	0.62	7.49	98.55	6.86	6.19		
			Middle	1:39:37 PM	7.6	28.38	23.17	91.7	0.13	7.44	87.02	5.95	49.08		
		1:43:27 PM		8.1	28.46	22.51	103.4	0.13	7.43	82.87	5.68	44.42			
		Bottom	1:38:50 PM	13.8	28.1	24.75	121.7	0.09	7.42	88.32	6.01	62.16	5.83		
			1:42:44 PM	13.9	28.04	24.94	202.4	0.06	7.41	83	5.65	63.07			
		Mid-flood	Surface	8:13:34 AM	1.2	28.8	18.78	300.2	0.48	7.48	75.46	5.25	5.07	4.87	11.36
				8:16:06 AM	1.1	28.81	18.76	313.6	0.56	7.48	72.85	5.07	5.07		
			Middle	8:12:44 AM	8.2	28.15	22.6	316.7	0.19	7.46	67.27	4.63	13.29		
8:15:22 AM	7.9	28.16		22.55	298.9	0.18	7.46	65.77	4.53	12.58					
Bottom	8:11:59 AM	14.2	27.86	24.34	141.3	0.1	7.45	68.88	4.72	16.63	4.61				
	8:14:26 AM	13.9	27.86	24.35	141.3	0.1	7.46	65.46	4.49	15.52					
2009/08/12	Cloudy and Rainy	Mid-ebb	Surface	3:33:15 PM	1.4	28.91	14.53	118.4	0.59	7.44	82.95	5.9	3.96	5.10	11.94
				3:36:23 PM	1.2	28.82	15.15	123.3	0.55	7.5	85.05	6.03	3.45		
			Middle	3:31:47 PM	8	28.39	25.99	73.3	0.14	7.5	63.84	4.3	11.06		
		3:35:22 PM		7.9	28.38	25.99	95.9	0.23	7.51	61.94	4.17	9.84			
		Bottom	3:30:40 PM	14.1	28.2	26.98	25.9	0.08	7.49	64.64	4.34	22.51	4.20		
			3:34:22 PM	13.8	28.2	27	50.3	0.12	7.51	60.54	4.06	20.79			
		Mid-flood	Surface	11:27:23 AM	1.4	28.76	22.53	309.3	0.41	7.5	77.58	5.29	3.86	4.79	11.09
				11:30:34 AM	1.1	28.75	22.63	309.3	0.41	7.49	75.86	5.17	4.06		
			Middle	11:26:03 AM	8.2	28.44	25.95	282.3	0.22	7.48	64.94	4.37	11.56		
11:29:24 AM	8	28.42		25.87	274.8	0.14	7.48	64.28	4.33	10.65					
Bottom	11:25:01 AM	14.2	28.19	27.25	210.3	0.11	7.47	65.02	4.36	17.95	4.27				
	11:28:26 AM	13.9	28.16	27.38	195.7	0.13	7.48	62.33	4.18	18.46					
2009/08/14	Cloudy	Mid-ebb	Surface	5:17:20 PM	1.2	29.34	16.66	171.2	0.11	7.29	86.59	6.04	3.55	4.95	11.09
				5:20:26 PM	1.2	29.33	17.07	171.2	0.11	7.3	83.42	5.81	3.55		
			Middle	5:16:08 PM	8	27.89	26.25	78.5	0.13	7.23	60.24	4.08	8.93		
		5:19:28 PM		8	27.84	26.59	42.6	0.15	7.23	57.25	3.88	10.45			
		Bottom	5:15:02 PM	14	27.64	27.62	23.1	0.08	7.21	59.92	4.05	17.34	3.94		
			5:18:26 PM	14.3	27.64	27.62	45	0.09	7.22	56.73	3.83	22.72			
		Mid-flood	Surface	1:57:24 PM	1.1	28.69	19.9	308.2	0.43	7.46	88.41	6.12	3.45	5.31	11.55
				2:00:37 PM	1.3	28.77	19.27	308.2	0.43	7.47	84.34	5.85	4.47		
			Middle	1:56:10 PM	8.2	28.07	25.73	356.1	0.16	7.41	71.61	4.85	16.53		
1:59:36 PM	8	28.1		25.48	337.4	0.16	7.41	65.28	4.43	13.69					
Bottom	1:55:03 PM	14.1	27.8	27.49	141	0.11	7.4	73.29	4.94	15.52	4.66				
	1:58:33 PM	14	27.8	27.47	141	0.11	7.41	64.8	4.37	15.62					

Annex D10 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/16	Cloudy	Mid-ebb	Surface	10:07:55 AM	1.4	29.49	14.56	108.1	0.68	7.46	102.59	7.22	3.55	5.65	10.41
				10:12:33 AM	1.4	29.38	15.1	108.1	0.68	7.45	93.31	6.56	3.45		
			Middle	10:06:20 AM	8.1	27.91	27.26	112	0.32	7.35	69.87	4.71	12.68		
		10:11:14 AM	8.4	27.89	27.51	126.7	0.25	7.35	61	4.1	14.81				
		Bottom	10:05:17 AM	13.8	27	28.81	329.6	0.11	7.33	80.59	5.46	13.08			
			10:10:08 AM	13.9	27.06	28.79	40.4	0.12	7.33	67.2	4.55	14.91			
		Mid-flood	Surface	8:43:04 PM	1.4	30.21	15.3	173.5	0.34	7.4	86.19	5.97	4.16	4.59	11.78
				8:46:04 PM	1.1	30.19	15.45	173.5	0.34	7.41	90.58	6.27	4.16		
			Middle	8:42:04 PM	8.2	27.58	27.14	59.6	0.2	7.15	44.77	3.03	11.67		
8:45:11 PM	8.2	27.59	27.1	59.6	0.2	7.18	45.78	3.1	11.56						
Bottom	8:40:57 PM	13.8	27.29	28.16	33.7	0.19	7.13	42.89	2.9	20.18					
	8:44:16 PM	13.8	27.29	28.12	19.2	0.13	7.16	42.94	2.91	18.97					
2009/08/18	Cloudy	Mid-ebb	Surface	12:23:35 PM	1.3	29.47	21.24	130.8	0.72	7.59	87.27	5.92	3.15	4.73	18.85
				12:26:46 PM	1.3	29.19	22.31	130.8	0.72	7.57	81.12	5.5	3.55		
			Middle	12:22:26 PM	8	27.83	26.87	113.4	0.42	7.39	56.06	3.79	19.57		
		12:25:48 PM	8.3	27.82	26.9	110.7	0.41	7.39	54.96	3.71	19.88				
		Bottom	12:21:31 PM	14.1	27.71	27.59	46.2	0.24	7.4	58.95	3.98	29.31			
			12:24:35 PM	13.9	27.72	27.55	64.7	0.32	7.42	62.92	4.24	37.62			
		Mid-flood	Surface	5:38:46 PM	1.5	29.91	19.62	303	0.48	7.59	78.1	5.31	5.18	4.43	23.26
				5:42:03 PM	1.4	29.85	19.87	303	0.48	7.62	85.45	5.81	7.1		
			Middle	5:37:35 PM	8	27.86	26.12	255.8	0.29	7.31	47.55	3.23	12.68		
5:41:08 PM	8.1	27.88	26.06	239	0.17	7.32	49.68	3.37	13.79						
Bottom	5:36:15 PM	14	27.23	27.94	254.4	0.15	7.31	45.3	3.07	45.23					
	5:39:55 PM	13.8	27.21	28.02	254.4	0.15	7.31	47.22	3.2	55.57					
2009/08/21	Sunny	Mid-ebb	Surface	12:46:33 PM	1.2	29.92	21.38	156.8	0.96	7.44	85.49	5.75	5.99	5.50	38.08
				12:51:39 PM	1.3	29.77	21.59	138.1	0.8	7.45	87.65	5.91	5.68		
			Middle	12:45:31 PM	7.9	28.54	25.12	123.7	0.63	7.43	76.05	5.13	51.62		
		12:50:15 PM	8.1	28.67	24.57	117.8	0.6	7.42	77.05	5.2	34.18				
		Bottom	12:44:20 PM	13.7	28.43	25.48	58.3	0.29	7.44	78.34	5.28	75.65			
			12:49:15 PM	13.8	28.52	25.14	86.1	0.44	7.43	79.82	5.39	55.37			
		Mid-flood	Surface	7:43:29 AM	1.1	29.06	22.36	348.2	0.35	7.45	73.48	4.99	8.52	4.78	38.27
				7:52:08 AM	1.2	29.13	22.65	313.6	0.59	7.48	70.55	4.78	9.33		
			Middle	7:41:50 AM	7.8	28.67	24.19	273.2	0.33	7.45	70.76	4.79	40.77		
7:50:45 AM	8	28.79	23.65	307.8	0.09	7.47	67.06	4.54	32.25						
Bottom	7:40:07 AM	14.5	28.3	25.57	283.2	0.39	7.45	73.22	4.95	79.81					
	7:49:27 AM	13.9	28.35	25.32	262.7	0.27	7.47	67.66	4.57	58.92					
2009/08/23	Sunny	Mid-ebb	Surface	1:58:04 PM	1.3	30.06	22.95	127.1	0.62	7.25	83.87	5.58	6.9	5.22	67.13
				2:01:18 PM	1.2	30.15	22.74	127.1	0.62	7.27	81	5.39	5.28		
			Middle	1:56:58 PM	8.1	28.49	25.29	88.6	0.52	7.17	74.34	5.01	58.92		
		2:00:22 PM	8.2	28.55	25.24	92.3	0.61	7.2	72.84	4.91	52.73				
		Bottom	1:55:12 PM	14	28.13	26.26	49.7	0.31	7.15	75.58	5.1	146.12			
			1:59:21 PM	14.3	28.11	26.36	81.4	0.43	7.18	67.8	4.57	132.84			
		Mid-flood	Surface	8:57:35 AM	1.1	29.35	22.91	309.7	0.67	7.41	68.72	4.63	7.41	4.66	28.72
				8:54:08 AM	1.1	29.32	22.97	309.7	0.67	7.4	71.77	4.84	7.41		
			Middle	8:53:18 AM	8	28.93	23.97	335.2	0.39	7.39	69.67	4.7	25.05		
8:56:48 AM	8	29.07	23.6	329.1	0.43	7.4	66.33	4.47	13.39						
Bottom	8:52:18 AM	13.9	28.16	26.15	278.9	0.61	7.39	68.64	4.63	67.74					
	8:56:01 AM	14.2	28.27	25.84	271.5	0.53	7.4	64.52	4.35	51.31					

Annex D11 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WNBC

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged		
														DO (mg/L)	Turbidity (NTU)	
2009/07/28	Cloudy and Rainy	Mid-ebb	Surface	4:28:29 PM	0.9	29.43	14.07	131.5	0.53	7.23	109.95	7.77	3.96	7.13	4.14	
				4:33:09 PM	1.1	29.33	14.5	130.1	0.48	7.25	104.99	7.41				3.76
			Middle	4:27:21 PM	5.1	28.75	18.52	133.7	0.16	7.06	97.04	6.77	2.84			
			4:32:10 PM	5.3	28.69	18.91	113.1	0.1	7.12	94.28	6.57	2.74		6.02		
		Bottom	4:26:10 PM	8.3	27.8	22.46	70.7	0.1	6.98	87.45	6.06	6.49				
			4:31:01 PM	7.9	27.87	22.26	115.2	0.38	7.06	86.1	5.97	5.07				
		Mid-flood	Surface	12:33:48 PM	0.9	28.83	17.6	313.5	0.37	7.39	93.76	6.56	2.64	6.03		7.88
				12:37:26 PM	1	28.69	18.32	318.4	0.28	7.38	86.88	6.07	3.35			
			Middle	12:32:35 PM	4.7	28.17	20.88	311.6	0.45	7.34	84.01	5.84	7.71			
	12:36:10 PM	5	28.12	21.07	315.5	0.45	7.35	81.45	5.66	6.39		5.52				
Bottom	12:31:14 PM	8.1	27.65	23.23	225	0.04	7.32	82.4	5.7	13.49						
	12:35:04 PM	7.8	27.71	22.9	287.6	0.16	7.34	76.96	5.33	13.69						
2009/07/30	Cloudy and Rainy	Mid-ebb	Surface	6:25:27 PM	1.3	29.32	18.25	291.9	0.22	7.59	100.03	6.92	2.23	6.25	4.21	
				6:28:19 PM	1.1	29.32	18.31	284.8	0.15	7.6	99.63	6.89	2.23			
			Middle	6:24:30 PM	4.9	28.24	21.45	298.2	0.11	7.38	74.42	5.15	3.25			
			6:27:24 PM	4.5	29.22	19.36	289.3	0.2	7.53	87.43	6.02	2.74		4.24		
		Bottom	6:23:31 PM	8.1	27.3	24.72	295.7	0.24	7.25	60.92	4.2	7.71				
			6:26:31 PM	8.1	27.31	24.7	354.5	0.06	7.28	61.82	4.27	7.1				
		Mid-flood	Surface	3:52:39 PM	1.6	29.62	17.85	318	0.49	7.75	105.57	7.28	3.35	6.29	5.26	
				3:55:58 PM	1.2	29.6	17.79	323.6	0.48	7.76	100.36	6.93	3.25			
			Middle	3:51:10 PM	4.7	27.83	22.97	329.5	0.32	7.51	81.5	5.63	4.67			
	3:54:59 PM	4.6	28.03	22.3	324.4	0.35	7.53	76.75	5.3	4.16		4.86				
Bottom	3:50:00 PM	8	27.09	25.36	335.5	0.23	7.4	73.83	5.1	8.32						
	3:53:56 PM	7.9	27.2	24.99	114.3	0.14	7.43	66.81	4.61	7.81						
2009/08/01	Sunny	Mid-ebb	Surface	10:57:33 AM	1	29.55	15.7	130.2	0.58	7.59	93.39	6.53	3.15	6.15	5.26	
				11:02:18 AM	1.2	29.15	17.7	124.8	0.46	7.56	97.09	6.75	3.05			
			Middle	10:56:28 AM	4.8	28.32	21.47	128	0.25	7.49	80.19	5.54	2.94			
			11:01:23 AM	4.5	28.44	20.65	120.3	0.46	7.47	83.47	5.78	2.74		6.06		
		Bottom	10:55:24 AM	7.7	27.77	24.01	103	0.22	7.56	83.16	5.72	10.25				
			11:00:13 AM	7.9	27.76	23.99	112.1	0.26	7.55	93.02	6.4	9.43				
		Mid-flood	Surface	9:06:31 PM	1.1	29.83	13.57	256.8	0.08	7.44	88.84	6.25	4.87	5.67	7.20	
				9:09:33 PM	1.1	29.84	13.27	248	0.21	7.48	90.85	6.4	4.87			
			Middle	9:05:32 PM	5.3	27.82	24.5	354.1	0.3	7.36	73.13	5.01	4.87			
	9:08:36 PM	5.2	27.81	24.18	1.6	0.22	7.38	72.84	5	4.77		4.22				
Bottom	9:04:21 PM	8.2	27.26	25.73	318.6	0.1	7.27	60.23	4.14	12.58						
	9:07:35 PM	8.1	27.26	25.74	87.9	0.36	7.3	62.53	4.29	11.26						
2009/08/04	Rainy (Typhoon Signal No. 1 in the morning ; Signal No. 3 in the afternoon)	Mid-flood	Surface	5:48:35 AM	1.2	28.35	22.39	301.8	0.31	7.66	81.92	5.63	5.48	4.58	8.62	
				5:52:14 AM	1	28.4	22.06	312.7	0.3	7.66	78.39	5.39	5.18			
			Middle	5:47:33 AM	4	27.9	25.9	308.7	0.3	7.57	50.45	3.42	8.12			
				5:51:16 AM	3.9	28.02	24.84	302.4	0.28	7.58	57.06	3.89	6.39			
			Bottom	5:46:12 AM	8.2	26.76	28.25	337	0.27	7.53	58.86	4.02	15.92			
	5:50:10 AM	8.1	26.85	28.1	317.1	0.28	7.55	58.28	3.98	10.65						

Annex D11 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/06	Cloudy and Rainy	Mid-ebb	Surface	12:29:02 PM	1.2	28.22	19.91	139.9	0.78	7.38	101.2	7.06	5.07	6.78	12.14
				12:32:27 PM	1.2	28.17	19.97	138.7	0.68	7.38	95.2	6.65	5.18		
			Middle	12:27:56 PM	4.4	27.9	20.89	131.8	0.71	7.36	98.62	6.88	6.6		
		Bottom	12:31:32 PM	4	27.91	20.7	133.6	0.71	7.37	93.12	6.51	6.49	6.37		
			12:26:37 PM	8.1	27.76	22.96	102.4	0.39	7.36	96.55	6.68	25.86			
		Mid-flood	Surface	12:30:21 PM	8.1	27.76	22.91	134.3	0.34	7.37	87.46	6.05	23.63	4.89	
				7:21:48 AM	1.2	27.72	24.8	318.1	0.44	7.56	74.64	5.11	7		
			Middle	7:24:53 AM	1.1	27.72	24.77	318.4	0.4	7.56	71.96	4.93	7	4.79	
				7:20:43 AM	5	27.64	25.58	302.4	0.31	7.56	70.81	4.84	13.59		
Bottom	7:23:55 AM		5.1	27.63	25.65	339.8	0.24	7.56	68.32	4.67	13.08	4.79			
	7:19:32 AM		8	27.57	25.99	332.1	0.2	7.56	72.59	4.95	16.63				
7:22:52 AM	8.3	27.56	26.02	320.3	0.38	7.56	67.74	4.62	18.56	18.56					
2009/08/08	Cloudy	Mid-ebb	Surface	1:30:01 PM	1.6	29.25	16.56	131.7	0.63	7.47	99.09	6.93	4.47	6.59	15.96
				1:32:12 PM	1.1	29.96	15.24	139.1	0.64	7.5	99.65	6.93	3.86		
			Middle	1:29:21 PM	5.2	28.85	18.75	123.9	0.58	7.38	91.35	6.35	8.62		
		Bottom	1:31:32 PM	5.2	28.86	18.79	123.5	0.54	7.4	88.71	6.16	7.71	5.72		
			1:28:43 PM	8.3	28.36	25.15	59	0.17	7.46	86.62	5.86	32.15			
		Mid-flood	Surface	1:30:55 PM	8.2	28.35	25.45	59	0.17	7.47	82.42	5.57	38.94	5.00	
				8:23:52 AM	1.2	28.84	18.1	306.2	0.61	7.5	77.94	5.44	4.87		
			Middle	8:25:58 AM	1.1	28.8	18.41	298.6	0.6	7.49	73.6	5.13	5.18	4.86	
				8:23:06 AM	5.1	28.26	22.31	325	0.33	7.48	69.24	4.77	18.15		
Bottom	8:25:17 AM		5	28.19	22.55	311.9	0.45	7.48	67.54	4.65	17.24	4.86			
	8:22:26 AM		8.2	28.02	23.55	315.6	0.2	7.46	71.46	4.91	17.34				
8:24:38 AM	8	28.07	23.3	315.7	0.3	7.48	69.86	4.8	17.04	17.04					
2009/08/12	Cloudy and Rainy	Mid-ebb	Surface	3:16:21 PM	0.7	28.87	16.04	132.1	0.62	7.47	85.64	6.04	3.25	5.40	5.58
				3:19:55 PM	1.2	28.94	17.62	129.6	0.37	7.47	80.34	5.61	3.15		
			Middle	3:15:19 PM	4.9	28.88	20.74	117.7	0.32	7.47	78.23	5.38	4.16		
		Bottom	3:19:03 PM	5	28.59	24.79	109.7	0.21	7.51	67.53	4.56	4.47	4.53		
			3:14:16 PM	8.1	28.39	25.85	80.9	0.23	7.48	69.43	4.68	9.43			
		Mid-flood	Surface	3:17:58 PM	8	28.42	25.74	80.9	0.23	7.5	64.93	4.37	9.03	4.83	
				11:39:26 AM	1.3	28.76	22.63	314.8	0.51	7.49	78.06	5.32	3.76		
			Middle	11:42:15 AM	1.4	28.78	22.67	314.8	0.51	7.49	76	5.18	3.86	4.36	
				11:38:19 AM	5.1	28.52	25.52	309.8	0.27	7.48	65.47	4.41	12.58		
Bottom	11:41:18 AM		5	28.5	25.46	295.6	0.27	7.48	65.12	4.39	14	4.36			
	11:37:16 AM		8.1	28.44	26.78	346.2	0.12	7.48	66.62	4.46	14.71				
11:40:30 AM	8	28.46	26.71	355.1	0.13	7.5	63.49	4.25	15.01	15.01					
2009/08/14	Cloudy	Mid-ebb	Surface	5:05:57 PM	1.1	29.27	16.75	178.5	0.04	7.26	83.41	5.82	3.65	5.42	5.34
				5:08:59 PM	1.6	28.85	18.4	178.5	0.04	7.28	81.56	5.68	3.76		
			Middle	5:08:05 PM	5	28.4	22.3	68.4	0.11	7.25	71.84	4.93	3.55		
		Bottom	5:04:50 PM	5	28.67	20.11	235.7	0.17	7.26	75.61	5.23	3.55	4.07		
			5:03:53 PM	7.8	27.84	26.49	44.1	0.14	7.2	60.05	4.07	8.93			
		Mid-flood	Surface	5:06:59 PM	8	27.86	26.43	76.2	0.05	7.22	60	4.06	8.62	5.89	
				2:11:39 PM	1.1	29.21	15.42	312.2	0.38	7.5	97.29	6.85	5.07		
			Middle	2:14:43 PM	1.1	29.18	15.49	312.2	0.38	7.5	93.62	6.59	3.25	4.76	
				2:10:23 PM	5.2	28.38	23.45	302.7	0.43	7.42	74.91	5.11	6.39		
Bottom	2:13:41 PM		4.9	28.23	23.21	284.8	0.5	7.42	73.31	5.02	5.89	4.76			
	2:09:16 PM		7.9	27.99	26.94	317.6	0.15	7.43	74.63	5.03	12.48				
2:12:45 PM	7.9	27.99	26.68	297.6	0.1	7.43	66.35	4.48	13.39	13.39					

Annex D11 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/16	Cloudy	Mid-ebb	Surface	10:24:50 AM	1.9	29.42	13.93	127.1	0.58	7.47	97.62	6.9	3.65	5.95	10.01
				10:25:32 AM	1.5	29.4	14.15	127.1	0.58	7.48	97.32	6.88	3.76		
			Middle	10:20:09 AM	5.2	28.12	26.05	105.7	0.51	7.37	75.38	5.09	4.67		
		Mid-flood	Surface	10:23:40 AM	5.5	28.28	24.84	86.9	0.39	7.38	72.71	4.93	3.15	4.52	6.65
				10:19:07 AM	7.9	27.83	28.35	106.2	0.27	7.39	71.66	4.8	21.2		
			10:22:26 AM	8	27.82	28.41	106.2	0.27	7.39	63.1	4.23	23.63			
		Mid-flood	Surface	8:33:12 PM	1.4	30.11	15.87	174.6	0.08	7.37	84.51	5.84	4.26	4.94	6.65
				8:35:51 PM	1.3	30.18	16.38	174.6	0.08	7.45	91.26	6.29	3.96		
			Middle	8:32:10 PM	5.2	28.21	24.54	318.3	0.22	7.16	55	3.74	4.36		
Mid-flood	Surface	8:35:05 PM	5.1	28.27	24.22	330.1	0.14	7.21	56.88	3.87	3.86	3.19	6.65		
		8:31:19 PM	8	27.53	27.37	353.3	0.14	7.1	48.16	3.26	11.26				
	8:34:07 PM	8.1	27.5	27.44	353.3	0.14	7.15	45.97	3.11	12.17					
2009/08/18	Cloudy	Mid-ebb	Surface	12:35:46 PM	1.1	29.46	20.55	139.9	0.79	7.57	82.64	5.63	3.55	4.84	17.55
				12:40:03 PM	1.3	29.46	20.59	139.9	0.79	7.57	83.01	5.65	3.76		
			Middle	12:34:35 PM	4.7	27.94	26.36	122.8	0.62	7.41	59.4	4.02	21.3		
		Mid-flood	Surface	12:39:04 PM	5	27.93	26.32	132.6	0.57	7.41	60.06	4.07	23.43	4.26	14.76
				12:33:40 PM	8.2	27.85	26.8	109	0.49	7.41	64.14	4.34	24.75		
			12:38:04 PM	8.1	27.83	26.83	115.2	0.44	7.42	61.77	4.18	28.5			
		Mid-flood	Surface	5:26:28 PM	1.4	30.04	18.36	302.1	0.68	7.53	75.88	5.18	5.99	5.11	14.76
				5:30:21 PM	5.1	28.66	24.11	312.8	0.77	7.5	82.25	5.57	14.61		
			Middle	5:25:22 PM	5.1	28.51	24.44	309.2	0.7	7.45	62.53	4.24	21.2		
Mid-flood	Surface	5:29:33 PM	1.5	30.07	18.24	302.1	0.68	7.55	79.81	5.45	5.58	3.51	14.76		
		5:24:13 PM	8.1	27.83	26.36	300.6	0.17	7.31	50.04	3.39	21.5				
	5:27:33 PM	7.8	28.11	25.42	300.6	0.17	7.37	53.5	3.63	19.68					
2009/08/21	Sunny	Mid-ebb	Surface	12:32:51 PM	1	30.1	20.5	161.2	0.79	7.46	90.23	6.08	5.89	5.53	18.54
				12:36:31 PM	1.3	29.98	20.89	161.2	0.79	7.44	85.8	5.78	5.68		
			Middle	12:31:46 PM	4.5	29.08	23.29	150.4	0.72	7.4	77.6	5.24	10.04		
		Mid-flood	Surface	12:35:23 PM	5.1	28.73	24.34	125.5	0.79	7.43	74.27	5.02	13.59	5.30	22.69
				12:30:25 PM	8.1	28.49	25.34	96.5	0.57	7.44	80.59	5.43	39.14		
			12:33:58 PM	8.2	28.48	25.4	98	0.56	7.45	76.76	5.17	36.91			
		Mid-flood	Surface	8:01:04 AM	1.1	29.09	22.61	330.9	0.44	7.49	71.91	4.87	6.6	4.65	22.69
				8:05:18 AM	1.4	29.13	22.83	330.9	0.44	7.5	69.53	4.7	6.6		
			Middle	7:59:56 AM	5.1	28.66	24.32	296	0.47	7.48	68.03	4.6	18.66		
Mid-flood	Surface	8:04:05 AM	5.2	28.64	24.38	305.1	0.36	7.49	65.65	4.44	19.27	4.57	22.69		
		7:58:31 AM	8	28.42	25.17	286.3	0.28	7.47	69.31	4.68	49.59				
	8:02:43 AM	8.1	28.48	24.96	292.2	0.19	7.49	65.86	4.45	35.39					
2009/08/23	Sunny	Mid-ebb	Surface	1:45:45 PM	1.2	30.44	22.46	123.3	0.82	7.24	85.2	5.65	5.28	5.40	24.61
				1:48:53 PM	0.8	30.74	22.03	129.2	0.8	7.24	82.41	5.45	5.68		
			Middle	1:44:54 PM	4.9	29.78	23.09	110.7	0.83	7.19	80.61	5.39	8.22		
		Mid-flood	Surface	1:48:12 PM	5	29.53	23.35	116.2	0.84	7.19	76.15	5.1	9.33	4.81	33.84
				1:44:01 PM	7.9	28.35	25.78	92.4	0.55	7.12	71.59	4.83	65.31		
			1:47:26 PM	8.3	28.37	25.71	100.5	0.62	7.15	70.97	4.78	53.85			
		Mid-flood	Surface	9:06:01 AM	1.1	29.32	22.9	309.8	0.63	7.43	71.04	4.79	7.2	4.65	33.84
				9:08:31 AM	1.1	29.37	22.78	309.8	0.63	7.43	68.88	4.64	5.89		
			Middle	9:05:05 AM	5.1	28.9	24.08	312.3	0.61	7.42	69.43	4.68	29.92		
Mid-flood	Surface	9:07:45 AM	5.1	28.9	24.13	313.2	0.51	7.43	66.41	4.48	27.18	4.56	33.84		
		9:04:09 AM	7.8	28.39	25.46	288.9	0.26	7.41	69.36	4.68	65.1				
	9:06:56 AM	7.9	28.35	25.58	283.9	0.39	7.43	65.85	4.44	67.74					

Annex D12 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WNBD

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/07/28	Cloudy and Rainy	Mid-ebb	Surface	4:10:48 PM	0.9	29.73	12.32	118.2	0.43	7	109.57	7.78	4.26	6.90	4.94
				4:14:25 PM	1.3	29.56	13.07	116.5	0.47	7.05	104.8	7.43	4.26		
			Middle	4:09:43 PM	5.1	28.64	18.91	137.5	0.12	6.7	91.86	6.4	2.94		
				4:13:30 PM	5.1	28.35	20.2	293.1	0.31	6.81	85.98	5.98	3.55		
			Bottom	4:08:44 PM	8.1	27.84	22.29	60.3	0.13	6.57	85.32	5.92	6.09		
				4:12:12 PM	7.8	27.82	22.37	64.2	0.14	6.71	78.02	5.41	8.52		
		Mid-flood	Surface	12:50:11 PM	1.3	29.1	16.26	319.3	0.22	7.47	102.77	7.21	3.35	6.41	6.78
				12:53:41 PM	1.3	29.07	16.54	318.2	0.23	7.48	98.49	6.91	2.74		
			Middle	12:48:54 PM	5	27.99	21.62	313.6	0.42	7.35	84.94	5.9	7.3		
				12:52:42 PM	5	28.06	21.3	323.4	0.46	7.37	81.05	5.63	5.78		
			Bottom	12:47:37 PM	8	27.61	23.12	282.5	0.09	7.34	84.01	5.82	10.96		
				12:51:33 PM	7.9	27.63	23.06	334.7	0.08	7.35	77.34	5.36	10.55		
2009/07/30	Cloudy and Rainy	Mid-ebb	Surface	6:13:46 PM	1	29.63	16.36	307.7	0.2	7.62	105.92	7.36	3.05	6.36	4.40
				6:16:48 PM	0.9	29.62	16.65	279.6	0.35	7.63	103.02	7.15	2.94		
			Middle	6:12:40 PM	4.6	28.84	19.57	261	0.23	7.41	84.32	5.84	2.84		
				6:15:48 PM	4.9	28.36	21.07	302.6	0.24	7.36	73.22	5.07	3.25		
			Bottom	6:11:37 PM	8	27.28	24.75	275.7	0.02	7.16	57.41	3.96	7.61		
				6:14:50 PM	7.9	27.3	24.71	288.8	0.14	7.24	60.51	4.18	6.7		
		Mid-flood	Surface	4:05:42 PM	1.2	29.71	17.19	307.4	0.37	7.8	106.42	7.35	3.55	6.49	4.92
				4:08:38 PM	1	29.7	17.12	327.5	0.45	7.79	100.56	6.95	3.55		
			Middle	4:04:33 PM	4.9	28.53	20.69	297.6	0.12	7.59	88.54	6.12	3.55		
				4:07:41 PM	4.7	28.62	20.41	276	0.3	7.6	80.31	5.55	3.86		
			Bottom	4:03:29 PM	7.9	27.41	24.33	252.1	0.1	7.42	68.54	4.73	7.51		
				4:06:44 PM	7.9	27.41	24.36	192.2	0.2	7.43	66.16	4.57	7.51		
2009/08/01	Sunny	Mid-ebb	Surface	11:09:38 AM	1.4	29.86	14.46	123.2	0.46	7.61	90.72	6.35	4.06	5.88	4.80
				11:14:08 AM	1.1	29.77	14.8	119.5	0.34	7.59	90.33	6.32	3.35		
			Middle	11:08:36 AM	5.1	28.28	21.35	129.5	0.36	7.5	74.72	5.17	3.55		
				11:13:14 AM	5	28.86	19	114.6	0.32	7.51	81.93	5.69	2.23		
			Bottom	11:07:23 AM	8.5	27.84	23.75	88.5	0.33	7.56	75.07	5.16	9.03		
				11:12:12 AM	8.1	27.88	23.48	76.5	0.25	7.56	78.82	5.43	6.6		
		Mid-flood	Surface	8:55:49 PM	1	30.1	11.93	331.6	0.08	7.39	89.03	6.29	5.58	5.85	8.05
				8:58:54 PM	1	29.88	10.81	304.1	0.19	7.41	89.04	6.36	5.28		
			Middle	8:54:33 PM	4.9	28.33	22.3	308.8	0.24	7.34	77.53	5.33	5.58		
				8:57:55 PM	4.9	28.2	22.89	8.1	0.16	7.37	78.73	5.41	4.26		
			Bottom	8:53:29 PM	8.1	27.4	25.32	268.2	0.13	7.2	63.82	4.38	14.1		
				8:56:49 PM	8.2	27.37	25.39	306	0.13	7.26	63.32	4.35	13.49		
2009/08/04	Rainy (Typhoon Signal No. 1 in the morning ; Signal No. 3 in the afternoon)	Mid-flood	Surface	6:02:11 AM	0.8	28.41	22.31	306.1	0.3	7.68	80.6	5.53	5.78	4.47	9.98
				6:05:36 AM	1.5	28.28	23.12	303.7	0.34	7.64	74.32	5.09	5.78		
			Middle	6:01:03 AM	4.2	27.56	26.22	312.3	0.34	7.55	53.96	3.68	6.7		
				6:04:40 AM	4.1	27.43	26.68	316.1	0.32	7.55	52.66	3.59	7.1		
			Bottom	5:59:51 AM	8.2	26.79	28.15	306.3	0.11	7.51	55.18	3.77	18.26		
				6:03:26 AM	8.1	26.78	28.18	312.1	0.07	7.52	55.5	3.79	16.23		

Annex D12 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/06	Cloudy and Rainy	Mid-ebb	Surface	12:16:55 PM	1.1	28.05	20.83	143.9	0.39	7.32	108.69	7.57	5.48	7.37	9.67
				12:20:01 PM	1	28.06	20.63	137.2	0.5	7.33	101.49	7.08	5.38		
			Middle	12:15:52 PM	3.9	27.95	20.98	135.6	0.5	7.32	110.89	7.73	5.89		
				12:19:10 PM	4	27.98	20.65	152.9	0.43	7.32	101.79	7.11	5.89		
			Bottom	12:14:36 PM	8.1	27.77	23.08	102.2	0.39	7.35	116.68	8.06	17.44		
				12:18:01 PM	7.5	27.76	23.1	115.2	0.35	7.33	102.1	7.06	17.95		
		Mid-flood	Surface	7:38:27 AM	1.2	27.93	20.64	310.2	0.35	7.53	85.43	5.97	5.68	5.68	7.98
				7:41:30 AM	1.4	27.91	21.29	318.4	0.24	7.54	81.28	5.66	5.68		
			Middle	7:36:58 AM	5.1	27.69	24.28	313.8	0.42	7.56	82.2	5.65	7.71		
				7:40:28 AM	5.3	27.74	23.66	316.5	0.35	7.57	78.83	5.43	7.1		
			Bottom	7:35:45 AM	8.2	27.62	25.52	329.7	0.14	7.57	80.24	5.48	12.48		
				7:39:27 AM	8	27.68	25.01	335.1	0.12	7.57	76.48	5.24	9.23		
2009/08/08	Cloudy	Mid-ebb	Surface	1:17:24 PM	1.2	29.64	13.71	114.9	0.65	7.43	110.33	7.78	4.26	6.94	18.90
				1:20:02 PM	1.1	29.54	14.35	112.1	0.6	7.45	105.56	7.43	5.18		
			Middle	1:16:39 PM	5	28.56	21.87	88.8	0.53	7.34	92.15	6.33	11.46		
				1:19:19 PM	4.7	28.61	21.36	86.3	0.55	7.37	90.14	6.2	8.72		
			Bottom	1:15:45 PM	8.3	28.32	26.04	75.9	0.56	7.38	90.73	6.11	48.17		
				1:18:36 PM	7.5	28.32	26.05	82.4	0.58	7.41	85.87	5.78	35.6		
		Mid-flood	Surface	8:34:02 AM	1.4	28.78	18.65	313.3	0.75	7.5	79.41	5.53	5.07	5.15	13.85
				8:36:17 AM	0.9	28.82	18.32	324.6	0.74	7.51	75.38	5.26	5.89		
			Middle	8:33:13 AM	4.7	28.36	21.58	293.8	0.48	7.49	73.24	5.05	11.87		
				8:35:30 AM	4.8	28.24	22.31	303.8	0.51	7.49	69.1	4.76	16.53		
			Bottom	8:32:23 AM	8	28.18	22.78	302.6	0.31	7.48	74.95	5.15	20.99		
				8:34:51 AM	8	28.14	22.96	272.1	0.25	7.49	71.53	4.92	22.72		
2009/08/12	Cloudy and Rainy	Mid-ebb	Surface	3:03:24 PM	1.3	28.97	19.4	132	0.22	7.46	76.22	5.27	3.55	4.90	6.05
				3:06:14 PM	0.7	28.96	16.24	132	0.22	7.45	78.13	5.5	3.25		
			Middle	3:02:25 PM	5.1	28.81	23.84	81.6	0.12	7.46	64.52	4.36	6.9		
				3:05:16 PM	4.9	28.79	23.11	158.7	0.32	7.48	65.52	4.45	6.39		
			Bottom	3:01:26 PM	8	28.42	25.76	322.1	0.13	7.45	65.62	4.42	8.32		
				3:04:16 PM	7.9	28.42	25.74	79.2	0.14	7.49	62.82	4.23	7.91		
		Mid-flood	Surface	11:52:39 AM	1.2	28.82	22.48	308.4	0.45	7.49	74.59	5.08	6.19	4.72	11.82
				11:56:15 AM	1.2	28.82	22.38	311.6	0.52	7.49	74.16	5.05	6.09		
			Middle	11:51:15 AM	4.9	28.5	25.38	306.7	0.42	7.49	64.73	4.36	9.84		
				11:55:13 AM	5.2	28.5	25.45	294.8	0.34	7.49	64.83	4.37	7.71		
			Bottom	11:50:15 AM	8.1	28.4	26.41	355.1	0.13	7.48	67.18	4.51	22.72		
				11:54:09 AM	7.9	28.42	26.05	343.5	0.15	7.49	63.08	4.24	18.36		
2009/08/14	Cloudy	Mid-ebb	Surface	4:55:08 PM	1.1	29.56	15.38	54.2	0.05	7.22	81.47	5.7	3.55	5.27	5.46
				4:57:38 PM	1.2	29.06	16.97	184.5	0.05	7.2	77.69	5.43	3.76		
			Middle	4:54:06 PM	5.1	28.42	22.31	267.5	0.14	7.24	74.4	5.11	3.45		
				4:56:54 PM	5.2	28.35	22.81	263.7	0.05	7.23	70.62	4.84	3.76		
			Bottom	4:52:57 PM	7.9	27.94	26.16	26.9	0.08	7.21	64.71	4.38	9.43		
				4:56:04 PM	8.2	27.94	26.16	301.5	0.35	7.2	61.44	4.16	8.83		
		Mid-flood	Surface	2:25:20 PM	1.2	28.81	18.28	306	0.53	7.45	96.53	6.73	4.26	5.85	8.83
				2:28:12 PM	1.1	28.7	17.25	294.5	0.26	7.44	86.9	6.11	4.87		
			Middle	2:23:58 PM	4.9	28.24	23.6	283.1	0.44	7.41	80.96	5.54	6.29		
				2:27:12 PM	5	28.22	23.6	283	0.38	7.41	73.48	5.03	6.6		
			Bottom	2:22:59 PM	8	27.91	26.81	310.2	0.15	7.41	79.21	5.35	15.62		
				2:26:13 PM	8.1	27.89	26.78	319.4	0.14	7.42	70.85	4.79	15.32		

Annex D12 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/16	Cloudy	Mid-ebb	Surface	10:33:59 AM	1.1	29.83	12.6	139.2	0.6	7.48	103.02	7.29	3.65	6.42	5.58
				10:37:01 AM	1.4	29.72	13.14	135.5	0.53	7.49	97.02	6.86	3.55		
			Middle	10:32:42 AM	4.7	28.84	20.58	100.9	0.41	7.41	87.15	6	3.05		
				10:36:06 AM	5.7	28.64	22.51	101.5	0.41	7.41	80.85	5.52	2.84		
			Bottom	10:31:45 AM	8.2	27.88	27.9	108.7	0.35	7.38	72.06	4.84	10.85		
				10:35:11 AM	8	27.91	27.69	95.4	0.34	7.39	66.75	4.49	9.54		
		Mid-flood	Surface	8:23:01 PM	1.4	29.89	15.89	154.8	0.12	7.26	78.63	5.46	4.47	4.81	7.34
				8:25:57 PM	1.2	30.1	13.55	186.7	0.09	7.28	81.84	5.73	4.36		
			Middle	8:22:09 PM	4.9	28.7	22.4	336.6	0.38	7.16	60.28	4.12	4.97		
				8:25:10 PM	5	28.69	22.45	336.6	0.38	7.19	57.22	3.91	5.58		
			Bottom	8:21:12 PM	8	27.68	26.84	264.4	0.14	7	44.8	3.04	12.07		
				8:23:59 PM	8.1	27.66	26.94	324.8	0.08	7.08	45.78	3.1	12.58		
2009/08/18	Cloudy	Mid-ebb	Surface	12:48:14 PM	1.3	29.3	20.55	167.2	0.62	7.52	76.23	5.21	3.76	4.81	16.37
				12:52:30 PM	1.2	29.27	21.13	133.1	0.46	7.53	83.37	5.68	5.28		
			Middle	12:51:24 PM	5.1	27.88	26.48	116.1	0.35	7.42	64.54	4.37	23.63		
				12:47:09 PM	5	27.92	26.25	128.3	0.37	7.42	58.42	3.96	21.4		
			Bottom	12:46:08 PM	8.1	27.84	26.7	111	0.38	7.41	59.38	4.02	21.91		
				12:50:26 PM	8.1	27.86	26.63	110.2	0.29	7.43	68.88	4.66	22.21		
		Mid-flood	Surface	5:14:27 PM	1.3	29.97	18.3	332.6	0.29	7.46	83.28	5.7	6.09	4.63	16.97
				5:17:27 PM	1.4	29.84	18.39	332.6	0.29	7.44	76.26	5.22	5.89		
			Middle	5:13:21 PM	5.1	28.32	24.66	303.6	0.36	7.32	56.7	3.85	16.13		
				5:16:27 PM	5	28.21	25.08	319.7	0.64	7.32	55.09	3.74	21.1		
			Bottom	5:12:22 PM	8.1	28.03	25.62	285.8	0.16	7.29	51.11	3.47	27.38		
				5:15:23 PM	8.1	28.06	25.56	279.5	0.21	7.31	53.5	3.63	25.25		
2009/08/21	Sunny	Mid-ebb	Surface	12:19:24 PM	1.5	29.2	23.08	148	0.88	7.4	79.12	5.34	9.74	5.36	19.52
				12:23:04 PM	1.2	29.37	22.73	148	0.88	7.42	81.23	5.48	7.91		
			Middle	12:17:51 PM	5.1	28.77	24.29	119.6	0.62	7.42	79.95	5.4	12.58		
				12:22:02 PM	5.2	28.73	24.43	121.7	0.68	7.43	77.09	5.2	13.79		
			Bottom	12:16:42 PM	8.1	28.47	25.48	96.1	0.49	7.41	81.06	5.46	35.39		
				12:20:46 PM	7.9	28.48	25.43	102.8	0.48	7.44	78.7	5.3	37.72		
		Mid-flood	Surface	8:13:49 AM	1	29.2	22.73	328.6	0.56	7.53	74.68	5.05	7.2	4.83	28.97
				8:19:12 AM	1.1	29.2	22.53	306	0.57	7.53	73.16	4.95	6.29		
			Middle	8:12:41 AM	4.1	28.74	24.2	299.6	0.49	7.51	69.16	4.67	21.1		
				8:18:12 AM	5	28.8	24.16	308.9	0.4	7.53	68.61	4.63	16.84		
			Bottom	8:11:33 AM	7.8	28.49	24.94	319.4	0.22	7.5	69.37	4.69	65.71		
				8:16:52 AM	7.9	28.48	24.99	322.7	0.22	7.51	68.53	4.63	56.69		
2009/08/23	Sunny	Mid-ebb	Surface	1:34:02 PM	1.1	29.65	22.32	117.8	0.83	7.14	89	5.99	6.8	5.45	36.34
				1:36:43 PM	1.3	29.69	22.23	117.8	0.83	7.14	82.15	5.52	6.7		
			Middle	1:33:13 PM	4.9	29.26	23.6	98.9	0.67	7.07	75.07	5.05	14.81		
				1:36:00 PM	4.7	29.26	23.53	103.3	0.8	7.11	77.73	5.23	10.85		
			Bottom	1:32:24 PM	7.9	28.04	26.53	102.4	0.5	7.02	72.53	4.89	82.54		
				1:35:02 PM	8.1	28.03	26.59	94.2	0.49	7.04	68.37	4.61	96.33		
		Mid-flood	Surface	9:17:58 AM	1.2	29.24	23.21	294.6	0.61	7.45	70.41	4.74	9.64	4.56	49.02
				9:20:26 AM	1	29.2	23.37	292	0.61	7.45	67.5	4.55	11.06		
			Middle	9:17:08 AM	5.3	28.73	24.59	287.1	0.42	7.43	67.94	4.58	46.65		
				9:19:40 AM	4.9	28.72	24.62	299.9	0.47	7.44	64.65	4.36	49.79		
			Bottom	9:16:07 AM	7.6	28.59	24.92	299	0.23	7.42	68.44	4.62	83.96		
				9:18:57 AM	8	28.54	25.02	286.5	0.18	7.44	63.99	4.32	92.99		

Annex D13 - Baseline Water Quality Monitoring Results

Sampling Station : NM1

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged			
														DO (mg/L)	Turbidity (NTU)		
2009/07/28	Cloudy and Rainy	Mid-ebb	Surface	6:20:54 PM	1.5	29.88	14.76	89.4	0.65	7.53	102.05	7.13	3.45	5.78	3.92		
				6:24:55 PM	1.3	29.92	14.01	100.5	0.67	7.59	100.27	7.03	3.55				
			Middle	6:19:32 PM	19	25.68	29.46	136.8	0.39	7.22	66.18	4.57	2.94				
					6:23:39 PM	18.7	25.74	29.27	101.9	0.27	7.28	63.35	4.38	2.84			
				Bottom	6:18:11 PM	36.1	24.95	31.49	115.6	0.25	7.19	63.71	4.41	5.48	4.29		
					6:22:29 PM	36	24.95	31.48	99.3	0.28	7.26	60.26	4.17	5.28			
				Mid-flood	Surface	10:28:30 AM	1	28.94	17.09	276.8	0.28	7.41	105.01	7.36	2.94	6.21	7.64
						10:35:21 AM	1.2	28.56	19.21	268.4	0.35	7.36	95.48	6.65	2.54		
		Middle	10:26:32 AM		19.5	26	28.68	277.2	0.44	7.16	80.08	5.53	2.64				
			10:34:02 AM	19.3	25.72	29.41	273.4	0.61	7.24	76.69	5.3	4.06					
			Bottom	10:24:49 AM	36.2	25.32	30.59	264.9	0.5	7.1	76.85	5.31	16.63	5.28			
				10:32:41 AM	34.7	25.29	30.64	279	0.54	7.21	75.82	5.24	17.04				
2009/07/30	Cloudy and Rainy	Mid-ebb	Surface	8:12:11 PM	0.9	28.14	24.03	193.2	0.22	7.58	108.69	7.43	2.64	4.95	4.15		
				8:16:11 PM	1.3	28.08	23.64	220.5	0.25	7.57	96.88	6.64	2.34				
			Middle	8:10:46 PM	19.2	24.7	32.24	219.1	0.08	7.19	41.53	2.87	4.16				
					8:14:59 PM	19.1	24.69	32.24	117.4	0.09	7.15	41.43	2.87	3.86			
				Bottom	8:09:22 PM	36	24.45	32.89	238.4	0.13	7.26	40.33	2.79	5.48	2.96		
					8:13:32 PM	36.2	24.43	32.94	239.8	0.15	7.16	45.14	3.12	6.39			
				Mid-flood	Surface	1:59:47 PM	1	28.52	20.92	306.1	0.26	7.43	94.68	6.54	2.03	5.37	4.43
						2:03:57 PM	1.1	28.73	20.36	276.4	0.25	7.47	89.08	6.15	2.03		
		Middle	1:58:05 PM		19.6	25.28	30.72	258.2	0.47	7.2	67.09	4.63	3.55				
			2:02:41 PM	19	25.13	31.11	213.6	0.16	7.21	59.97	4.14	3.55					
			Bottom	1:56:35 PM	35.6	24.75	32.13	251.7	0.28	7.16	67.58	4.67	7.71	4.42			
				2:01:22 PM	36	24.75	32.13	265.9	0.35	7.19	60.15	4.16	7.71				
2009/08/01	Sunny	Mid-ebb	Surface	9:07:41 AM	1.7	28.92	19.38	91.4	0.56	7.58	100.99	6.99	1.63	5.49	3.30		
				9:11:30 AM	1.8	28.84	20	84	0.7	7.61	98.61	6.81	1.53				
			Middle	9:06:22 AM	18.9	25.37	30.97	85.3	0.32	7.28	61.04	4.2	2.84				
					9:10:13 AM	19.3	25.39	30.94	80	0.25	7.32	57.55	3.96	3.15			
				Bottom	9:05:05 AM	35.8	24.57	32.81	43.9	0.15	7.21	60.02	4.15	4.77	3.98		
					9:09:02 AM	36.1	24.54	32.84	63.1	0.09	7.22	55.03	3.8	5.89			
				Mid-flood	Surface	10:43:58 PM	1.4	29.16	19.23	126.3	0.26	7.68	102.77	7.09	1.53	4.89	5.85
						10:47:53 PM	1	29.17	19.3	123	0.42	7.67	99.47	6.86	1.63		
		Middle	10:42:36 PM		20.2	24.88	31.98	162.3	0.05	7.16	40.77	2.81	4.57				
			10:46:44 PM	20.2	24.91	31.91	57.6	0.13	7.2	40.67	2.81	4.77					
			Bottom	10:41:06 PM	36.8	24.59	32.67	300.2	0.11	7.15	38.76	2.68	10.45	2.70			
				10:45:32 PM	36.7	24.58	32.67	291.8	0.11	7.18	39.26	2.71	12.17				
2009/08/04	Rainy (Typhoon Signal No. 1 in the morning ; Signal No. 3 in the afternoon)	Mid-flood	Surface	3:58:43 AM	0.9	27.64	25.21	288.6	0.17	7.63	78.59	5.38	1.83	4.25	8.93		
				4:06:20 AM	1.3	27.64	25.16	248.4	0.1	7.65	75.83	5.19	1.83				
			Middle	3:57:23 AM	20.7	25.69	30.76	265.1	0.34	7.42	47.73	3.27	4.57				
				4:05:06 AM	20	25.67	30.76	277.2	0.4	7.44	45.95	3.15	4.97				
					Bottom	3:55:50 AM	37.2	25.14	32.01	259	0.21	7.35	38.78			2.67	17.85
		4:03:36 AM	36.1	25.19		31.92	268.5	0.34	7.38	39.51	2.71	22.51					

Annex D13 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/06	Cloudy and Rainy	Mid-ebb	Surface	2:12:54 PM	0.9	28.29	21.55	104.5	0.82	7.54	97.76	6.75	3.76	6.14	8.39
				2:18:22 PM	0.8	28.38	21.27	104.3	0.9	7.56	93.86	6.49	3.55		
			Middle	2:11:22 PM	18.9	27.42	26.31	76.9	0.59	7.51	85.84	5.86	6.19		
			2:17:01 PM	19.4	27.44	26.21	90.4	0.58	7.51	79.89	5.46	7	5.67		
		Bottom	2:10:04 PM	35.2	27.07	27.85	112.1	0.53	7.5	85.85	5.85	10.35			
			2:15:35 PM	36	27.09	27.73	69.2	0.45	7.5	80.49	5.48	19.47			
		Mid-flood	Surface	5:35:27 AM	1.3	27.72	23.57	302.8	0.16	7.52	74.41	5.13	4.47	4.79	7.80
				5:39:53 AM	1.3	27.74	23.18	280.6	0.36	7.52	76.87	5.31	4.26		
			Middle	5:34:13 AM	18.4	27.14	27.76	291.4	0.52	7.53	64.27	4.37	5		
	5:38:35 AM	19.2	27.14	27.76	263	0.39	7.53	64.15	4.36	5.48	4.22				
Bottom	5:32:58 AM	36	26.96	28.23	246.2	0.51	7.51	61.49	4.19	14					
	5:37:15 AM	36.5	26.97	28.19	245	0.53	7.52	62.27	4.24	13.59					
2009/08/08	Cloudy	Mid-ebb	Surface	3:14:46 PM	1.1	29.4	16.74	97.6	0.75	7.45	93.89	6.54	4.36	6.06	15.23
				3:21:21 PM	1.1	29.74	15.8	100.7	0.71	7.49	93.91	6.54	8.83		
			Middle	3:13:35 PM	18	28.45	22.05	99.7	0.76	7.36	82.51	5.67	5.68		
			3:20:12 PM	18.1	28.37	22.01	99.7	0.89	7.36	79.47	5.47	9.94	5.25		
		Bottom	3:12:25 PM	35.8	27.6	28.55	90.7	0.77	7.41	79.36	5.33	30.02			
			3:18:33 PM	36.2	27.63	28.28	86.9	0.86	7.41	76.89	5.17	32.55			
		Mid-flood	Surface	6:44:21 AM	1.2	28.77	19.18	297.8	0.34	7.4	70.86	4.92	4.57	4.54	13.68
				6:49:10 AM	1.2	28.85	18.31	292.5	0.29	7.41	72.09	5.02	4.57		
			Middle	6:42:54 AM	18.7	27.64	26.87	278.9	0.65	7.42	61.32	4.16	5.07		
	6:47:52 AM	19.3	27.61	26.96	269.8	0.7	7.42	60.04	4.07	4.87	3.95				
Bottom	6:41:45 AM	36.1	27.54	28.32	267.3	0.37	7.43	59.31	4	25.25					
	6:46:45 AM	36	27.54	28.33	269.9	0.46	7.44	57.93	3.9	37.72					
2009/08/12	Cloudy and Rainy	Mid-ebb	Surface	5:09:11 PM	1.3	28.65	24.06	90.6	0.58	7.61	75.82	5.13	2.54	4.60	4.92
				5:23:06 PM	1.2	28.75	23.67	93.2	0.53	7.61	73.12	4.95	2.34		
			Middle	5:07:30 PM	19.1	27.41	29.11	124	0.28	7.56	62.7	4.21	5.07		
			5:21:45 PM	19.4	27.47	28.84	81	0.31	7.57	60.9	4.1	3.86	3.84		
		Bottom	5:05:58 PM	36	26.75	31.14	41.3	0.22	7.54	58.49	3.93	7.71			
			5:20:30 PM	35.9	26.78	31.04	65.8	0.26	7.55	55.69	3.74	8.01			
		Mid-flood	Surface	9:42:07 AM	1.3	28.71	23.95	274.4	0.41	7.46	80.74	5.47	3.55	4.94	6.55
				9:46:48 AM	1.1	28.71	23.77	279.8	0.46	7.47	75.54	5.12	2.74		
			Middle	9:40:47 AM	19.3	27.36	29.7	263.9	0.62	7.43	71.26	4.78	4.57		
	9:45:37 AM	19	27.4	29.56	271.3	0.57	7.44	65.54	4.4	4.47	4.59				
Bottom	9:39:37 AM	35.5	27.12	30.5	260.9	0.54	7.42	72.97	4.89	12.07					
	9:44:14 AM	36.2	27.13	30.46	265	0.38	7.43	63.86	4.28	11.87					
2009/08/14	Cloudy	Mid-ebb	Surface	6:43:09 PM	0.9	28.96	19.43	73.1	0.31	7.44	91.57	6.33	2.03	4.95	4.84
				6:47:15 PM	1.3	28.94	20.54	66.2	0.38	7.43	88.87	6.11	2.34		
			Middle	6:41:33 PM	19.1	25.98	31.49	303	0.09	7.25	54.67	3.71	4.87		
			6:45:49 PM	19.1	25.98	31.47	330.6	0.15	7.27	53.69	3.65	4.77	3.61		
		Bottom	6:40:05 PM	36	25.55	32.51	281.6	0.09	7.24	53.51	3.64	7.2			
			6:44:39 PM	36.2	25.55	32.48	283.4	0.12	7.27	52.54	3.58	7.81			
		Mid-flood	Surface	12:22:38 PM	1.3	28.35	20.92	281.6	0.39	7.42	83.9	5.81	2.54	4.85	7.66
				12:27:59 PM	1	28.36	20.61	265.1	0.42	7.44	79.96	5.55	2.54		
			Middle	12:21:01 PM	19.4	26.3	30.98	268.8	0.65	7.34	62.21	4.22	7		
	12:26:28 PM	19	26.32	30.89	264	0.72	7.37	56.5	3.83	6.39	4.04				
Bottom	12:19:23 PM	36	26.04	31.73	269.8	0.48	7.32	63.82	4.33	12.88					
	12:25:04 PM	36.3	26.03	31.74	263.8	0.45	7.35	55.22	3.74	14.61					

Annex D13 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged		
														DO (mg/L)	Turbidity (NTU)	
2009/08/16	Cloudy	Mid-ebb	Surface	8:13:36 AM	1.3	29.19	17.89	93.8	0.89	7.39	95.05	6.6	2.64	5.44	4.64	
				8:23:20 AM	1.3	29.11	17.04	91.6	0.65	7.43	94.56	6.61	2.54			
			Middle	8:12:12 AM	19	26.12	30.85	96	0.45	7.2	65.16	4.43	3.35			
					8:20:58 AM	17.5	26.15	30.8	97.3	0.4	7.23	60.34	4.1	3.25	3.95	
		Bottom	8:10:52 AM	36	24.88	33.25	92.6	0.26	7.15	62.39	4.28	6.29				
			8:25:08 AM	36.2	24.98	33.09	72.4	0.3	7.23	52.78	3.61	9.74				
		Mid-flood	Surface	10:08:03 PM	1.2	29.92	18.76	103.5	0.27	7.57	97.7	6.67	2.94	4.75	6.36	
				10:12:37 PM	1.1	29.07	21.47	95.1	0.18	7.49	87.62	5.98	3.15			
			Middle	10:06:35 PM	18.3	25.66	31.61	264	0.07	7.2	45.86	3.13	5.78			
			10:10:58 PM	18	25.81	31.28	350.1	0.04	7.22	47.18	3.22	5.58	2.88			
Bottom	10:05:06 PM	35.7	25.13	32.62	248.5	0.04	7.18	41.52	2.84	10.04						
	10:09:36 PM	35.6	25.15	32.58	267.5	0.12	7.19	42.7	2.92	10.65						
2009/08/18	Cloudy	Mid-ebb	Surface	10:34:15 AM	1.2	28.94	21.87	91.7	0.87	7.57	68.64	4.68	2.03	3.97	14.54	
				10:41:47 AM	1.1	29.27	21.23	86.8	0.79	7.58	69.17	4.71	2.03			
			Middle	10:32:42 AM	19	26.56	29.34	98.5	0.69	7.32	47.31	3.22	5.48			
					10:40:29 AM	19.1	26.63	29.25	101.4	0.68	7.35	48.08	3.27	5.48	2.85	
		Bottom	10:31:21 AM	35.9	25.27	32.18	77.6	0.61	7.23	41.83	2.87	35.09				
			10:39:06 AM	35.6	25.29	32.1	81.4	0.62	7.25	41.15	2.82	37.12				
		Mid-flood	Surface	7:26:12 PM	1.3	27.24	28.21	245.3	1.11	7.55	58.66	3.97	8.72	3.43	15.65	
				7:33:54 PM	1.3	27.01	28.78	257.9	1.13	7.58	55.01	3.73	10.04			
			Middle	7:24:45 PM	19.2	25.95	30.73	253.1	0.69	7.4	43.33	2.96	14.81			
					7:32:35 PM	19.1	26.11	30.48	276.5	0.71	7.46	44.56	3.04	16.43	2.68	
		Bottom	7:23:16 PM	36.1	25.76	31.07	301.5	0.51	7.38	40.07	2.74	20.18				
			7:31:11 PM	35.7	25.78	31.05	273.3	0.63	7.43	38.28	2.62	23.73				
2009/08/21	Sunny	Mid-ebb	Surface	2:24:04 PM	1.1	29.44	23.11	89.2	1.01	7.46	89.27	6	5.99	5.56	14.08	
				2:32:22 PM	1.5	29.5	23.26	92	1	7.48	84.87	5.69	6.19			
			Middle	2:30:38 PM	19.1	28.14	25.86	93.9	0.73	7.39	76.07	5.14	12.17			
					2:22:17 PM	18.9	28.14	25.88	93.8	0.82	7.38	79.97	5.41	13.49	5.26	
		Bottom	2:21:01 PM	36.2	26.42	29.83	95.3	0.64	7.33	79.13	5.39	22.21				
			2:29:23 PM	35.5	26.48	29.67	122.1	0.49	7.34	75.32	5.13	24.44				
		Mid-flood	Surface	6:06:29 AM	1.2	29.05	23.69	281.1	0.58	7.41	68.17	4.6	5.78	4.44	16.75	
				6:15:16 AM	1	29.09	23.23	290.8	0.44	7.43	69.36	4.68	4.87			
			Middle	6:05:01 AM	18.9	27.2	28.31	255.2	1.01	7.38	62.04	4.2	7.2			
					6:14:00 AM	18.2	27.37	27.78	268.1	1.33	7.4	62.94	4.27	7.2	3.86	
		Bottom	6:03:28 AM	36	26.53	29.65	257.5	0.68	7.34	57.2	3.89	38.33				
			6:12:27 AM	36	26.29	30	265.2	0.82	7.34	56.03	3.82	37.12				
2009/08/23	Sunny	Mid-ebb	Surface	3:26:41 PM	1.3	29.56	23.6	96.1	1.04	7.33	82.88	5.54	5.58	5.11	12.48	
				3:33:21 PM	1.4	29.41	24	82.5	0.84	7.34	75.99	5.08	5.99			
			Middle	3:25:24 PM	19.2	28.23	26.6	104.6	0.61	7.24	75.26	5.06	5.89			
					3:32:13 PM	19.3	28.02	26.99	97.3	0.68	7.27	70.91	4.77	5.99	4.56	
		Bottom	3:24:19 PM	35.7	26.5	29.79	88.3	0.54	7.18	69.51	4.73	23.02				
			3:30:29 PM	36	26.5	29.76	84.3	0.49	7.19	64.44	4.38	28.4				
		Mid-flood	Surface	7:28:29 AM	1.3	28.89	24.3	275.4	0.81	7.3	70.48	4.75	6.8	4.51	25.34	
				7:34:18 AM	1.2	28.98	23.97	291.1	0.53	7.32	69.47	4.68	6.39			
			Middle	7:27:16 AM	19.1	27.26	28.3	265	1.05	7.26	65.17	4.41	21.5			
			7:33:07 AM	19.3	27.18	28.45	270.6	0.9	7.27	62	4.2	17.34	4.32			
Bottom	7:26:09 AM	35.9	27.01	28.85	271.9	0.61	7.25	64.6	4.38	57.5						
	7:31:58 AM	36.2	26.99	28.89	262.2	0.51	7.27	62.71	4.25	42.49						

Annex D14 - Baseline Water Quality Monitoring Results

Sampling Station : NM2

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/07/28	Cloudy and Rainy	Mid-ebb	Surface	5:56:16 PM	1.3	29.72	14.45	94.1	0.47	7.48	106.38	7.46	3.55	6.61	3.01
				5:59:18 PM	1.2	29.75	14.02	96.2	0.57	7.51	103.06	7.24	3.65		
			Middle	5:55:03 PM	6.5	28.2	21.07	89.4	0.36	7.3	87.58	6.08	3.05		
				5:58:19 PM	6.3	28.13	21.25	94.6	0.39	7.33	81.7	5.67	3.25		
			Bottom	5:53:56 PM	10.1	26.66	26.48	107.2	0.26	7.24	82.77	5.72	2.54		
				5:57:25 PM	10.4	26.85	25.69	114.7	0.28	7.3	78.21	5.41	2.03		
		Mid-flood	Surface	10:59:20 AM	1.1	29.05	17.73	292.9	0.47	7.36	106.41	7.41	3.15	6.86	11.87
				11:05:10 AM	1.1	29.03	17.6	296.1	0.44	7.38	105	7.32	2.84		
			Middle	10:57:56 AM	6	28	21.95	294.2	0.71	7.27	92.04	6.38	5.89		
				11:04:03 AM	6.1	27.42	23.99	273.6	0.42	7.3	91.52	6.33	3.96		
			Bottom	10:56:18 AM	10.3	27.02	25.35	279.2	0.51	7.22	93.54	6.46	31.03		
				11:03:11 AM	10.3	26.97	25.55	298.8	0.58	7.3	94.08	6.5	24.34		
2009/07/30	Cloudy and Rainy	Mid-ebb	Surface	7:41:07 PM	1.2	29.27	18.44	23.5	0.26	7.72	98.16	6.79	2.84	5.82	2.71
				7:44:11 PM	1.1	29.2	18.71	42.3	0.13	7.71	97.07	6.71	2.54		
			Middle	7:40:06 PM	5.9	27.23	25.21	359.1	0.13	7.47	67.94	4.68	2.23		
				7:43:10 PM	6	27.4	24.7	281.8	0.16	7.49	74.15	5.11	2.13		
			Bottom	7:38:59 PM	10.1	25.97	28.85	308.3	0.06	7.37	59.24	4.09	3.45		
				7:42:08 PM	10.4	25.93	28.93	160.6	0.43	7.39	59.24	4.09	3.05		
		Mid-flood	Surface	2:26:32 PM	0.9	29.22	17.99	267.6	0.07	7.59	106.07	7.36	2.44	6.07	6.65
				2:29:41 PM	1.1	28.96	18.73	282.5	0.13	7.54	94.63	6.57	2.64		
			Middle	2:25:03 PM	6	27.39	24.53	310.8	0.2	7.31	79.36	5.48	4.06		
				2:28:38 PM	6	27.41	24.54	305.7	0.31	7.32	70.34	4.85	3.45		
			Bottom	2:23:39 PM	9.9	26.64	26.92	240.8	0.12	7.36	87.03	6	12.07		
				2:27:33 PM	9.7	26.51	27.32	307.6	0.2	7.36	79.24	5.46	15.21		
2009/08/01	Sunny	Mid-ebb	Surface	9:37:53 AM	1.5	28.66	20.22	80.8	0.43	7.42	88.96	6.15	1.63	6.22	2.27
				9:40:44 AM	0.9	28.93	19.15	84.2	0.58	7.43	87.91	6.09	1.73		
			Middle	9:36:33 AM	5.6	27.96	23.88	114.7	0.26	7.48	93.34	6.4	2.44		
				9:39:51 AM	6.3	27.97	24.17	119.4	0.32	7.51	91.15	6.24	2.34		
			Bottom	9:35:29 AM	10.2	27.37	26.17	115.2	0.32	7.52	99.79	6.82	2.64		
				9:38:50 AM	10.2	27.33	26.18	102.5	0.27	7.48	90.64	6.2	2.84		
		Mid-flood	Surface	10:16:38 PM	1.1	29.71	16.85	50.9	0.21	7.68	106.14	7.35	2.34	6.88	2.96
				10:19:47 PM	1.3	29.58	17.84	76.5	0.07	7.68	106.64	7.36	2.03		
			Middle	10:15:37 PM	6	27.56	26.01	317.7	0.3	7.56	93.12	6.35	3.05		
				10:18:40 PM	6.1	28.08	24.43	316.5	0.22	7.62	94.52	6.45	2.54		
			Bottom	10:14:33 PM	10.2	26.16	29.33	331.8	0.26	7.39	73.79	5.06	4.06		
				10:17:43 PM	10.2	26.09	29.48	326.1	0.26	7.37	70.99	4.87	3.76		
2009/08/04	Rainy (Typhoon Signal No. 1 in the morning ; Signal No. 3 in the afternoon)	Mid-flood	Surface	4:29:04 AM	1.1	28.03	23.6	341.8	0.29	7.67	77.09	5.29	3.45	4.53	4.65
				4:32:14 AM	0.9	27.94	23.78	13.6	0.24	7.64	68.95	4.73	3.86		
			Middle	4:27:57 AM	6.1	27.22	26.95	345.1	0.15	7.58	59.25	4.04	5.78		
		4:31:15 AM		6.2	27.17	27.08	315	0.23	7.57	59.27	4.05	5.48			
		Bottom	4:26:45 AM	10.3	26.33	29.58	285.1	0.38	7.58	65.59	4.48	4.97			
			4:30:08 AM	10.4	26.44	29.26	291.5	0.47	7.58	63.8	4.36	4.36			

Annex D14 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/06	Cloudy and Rainy	Mid-ebb	Surface	1:46:22 PM	1.1	28.17	21.36	95.1	0.93	7.49	97.8	6.78	4.36	6.42	6.71
				1:51:36 PM	1.2	28	22.06	92	1.03	7.49	94.1	6.51			
			Middle	1:45:21 PM	6.1	27.96	25.26	87.6	0.59	7.5	90.8	6.18	6.19		
				1:50:41 PM	6.2	27.89	24.65	92.1	0.78	7.49	90.65	6.2	5.68		
			Bottom	1:44:12 PM	10	27.5	26.3	101.2	0.52	7.5	93.18	6.35	10.04		
				1:49:45 PM	10	27.62	26.14	101.2	0.52	7.5	91.65	6.24	9.43		
		Mid-flood	Surface	6:01:55 AM	1.3	27.82	22.04	262.9	0.36	7.53	78.99	5.49	4.97	5.30	5.33
				6:05:18 AM	1.4	27.82	22.12	294.2	0.46	7.53	78.46	5.45	4.97		
			Middle	6:00:51 AM	5.9	27.78	23.59	280.9	0.48	7.54	75.02	5.17	5.38		
				6:04:24 AM	6	27.79	23.54	284.1	0.57	7.53	73.91	5.09	6.09		
			Bottom	5:59:48 AM	10	27.47	26.49	290.8	0.36	7.56	69.57	4.74	5.07		
				6:03:29 AM	10.2	27.34	27.07	260.7	0.42	7.55	64.29	4.38	5.48		
2009/08/08	Cloudy	Mid-ebb	Surface	2:48:43 PM	1.3	29.12	19.76	90.4	0.95	7.42	88.97	6.12	4.26	5.57	12.51
				2:51:34 PM	1.3	29.07	20.63	87.6	0.93	7.42	84.19	5.77	4.67		
			Middle	2:47:57 PM	6.1	28.06	24.05	96.6	0.7	7.37	77.4	5.29	5.28		
				2:50:45 PM	6.3	28.05	24.12	99.1	0.67	7.38	74.31	5.08	4.87		
			Bottom	2:47:04 PM	10.6	27.85	25.46	96.2	0.59	7.38	76.04	5.18	29.41		
				2:49:45 PM	9.7	27.83	25.57	97.1	0.51	7.38	73.14	4.98	26.57		
		Mid-flood	Surface	7:10:58 AM	1.2	28.97	17.09	289.8	0.64	7.46	80.55	5.64	4.57	5.21	5.63
				7:14:27 AM	1.2	28.97	17.28	313.6	0.6	7.46	77.15	5.4	4.67		
			Middle	7:09:40 AM	6.2	28.54	21.11	269.2	0.42	7.42	71.59	4.94	5.89		
				7:13:42 AM	6.1	28.72	20.4	267.2	0.43	7.43	70.51	4.87	5.68		
			Bottom	7:09:01 AM	10.3	27.77	25.68	282.6	0.53	7.45	75.71	5.16	7.2		
				7:13:03 AM	10.2	27.82	25.15	283.3	0.58	7.45	70.2	4.79	5.78		
2009/08/12	Cloudy and Rainy	Mid-ebb	Surface	4:42:32 PM	1.1	28.8	21.89	78.5	0.46	7.58	82	5.61	2.44	5.10	3.25
				4:45:23 PM	1.3	28.79	21.96	107.5	0.37	7.57	80	5.47	2.34		
			Middle	4:41:19 PM	5.9	28.55	25.01	101.3	0.32	7.57	71.69	4.84	3.76		
				4:44:23 PM	6	28.45	25.5	83	0.4	7.57	66.29	4.47	4.77		
			Bottom	4:40:11 PM	9.9	28.15	26.7	101.6	0.25	7.56	71.19	4.79	3.05		
				4:43:26 PM	9.9	28.22	26.53	88.8	0.24	7.57	68.49	4.61	3.15		
		Mid-flood	Surface	10:08:00 AM	1	28.69	23.03	275.4	0.63	7.5	82.89	5.64	2.94	5.24	8.77
				10:12:34 AM	1.2	28.69	23.02	270.6	0.57	7.5	82.41	5.61	6.8		
			Middle	10:07:06 AM	6.1	28.54	25.59	286.1	0.39	7.49	73.23	4.93	6.39		
				10:11:28 AM	6.1	28.54	25.83	278.1	0.36	7.5	70.96	4.77	10.04		
			Bottom	10:06:16 AM	10	28.52	26.12	301.4	0.4	7.49	74.96	5.03	12.07		
				10:10:19 AM	10	28.52	26.17	301.4	0.4	7.5	74.56	5	14.4		
2009/08/14	Cloudy	Mid-ebb	Surface	6:19:33 PM	1.2	29.03	19.54	94	0.17	7.41	90.38	6.24	2.44	5.35	3.12
				6:16:30 PM	1.2	28.88	20.04	122.4	0.17	7.38	89.59	6.18	2.44		
			Middle	6:15:12 PM	6	27.4	27.28	329	0.02	7.29	67.45	4.58	3.05		
				6:18:33 PM	5.9	27.56	26.89	218.1	0.03	7.3	64.73	4.39	3.25		
			Bottom	6:14:06 PM	10	26.81	29.22	337.7	0.15	7.28	67.33	4.57	3.96		
				6:17:32 PM	10.1	26.86	29.03	337.7	0.15	7.3	65.43	4.44	3.55		
		Mid-flood	Surface	12:49:42 PM	1.3	28.61	19.05	291.7	0.44	7.45	95.41	6.65	2.64	5.57	6.92
				12:56:09 PM	1.1	28.49	20.16	283.7	0.5	7.44	86.71	6.02	2.84		
			Middle	12:48:33 PM	5.7	27.96	25.67	284.8	0.48	7.4	75.29	5.11	4.26		
				12:55:04 PM	5.9	27.91	25.91	270	0.45	7.4	66.51	4.51	5.38		
			Bottom	12:47:35 PM	10.2	27.58	27.35	276.9	0.42	7.4	77.68	5.26	11.36		
				12:50:58 PM	9.9	27.44	27.81	276.9	0.42	7.39	67.93	4.6	15.01		

Annex D14 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/16	Cloudy	Mid-ebb	Surface	8:55:11 AM	1.2	29.4	14.84	91	0.52	7.43	117.53	8.27	2.84	6.92	4.18
				8:57:56 AM	1	29.44	14.38	92.2	0.59	7.43	106.52	7.51	3.05		
			Middle	8:54:05 AM	6	27.81	25.85	109	0.51	7.3	93	6.32	3.55		
		Mid-flood	Surface	8:57:08 AM	6.2	27.82	25.95	107	0.49	7.29	81.9	5.57	3.15	6.33	3.94
				8:53:05 AM	10.4	27.07	28.41	97.8	0.38	7.31	103.7	7.04	6.9		
			8:56:17 AM	9.5	27.3	27.88	101.8	0.51	7.27	82.7	5.61	5.58			
		Mid-flood	Surface	9:40:44 PM	1.3	30.07	17.16	101.8	0.27	7.58	97.74	6.72	3.05	5.66	3.94
				9:43:41 PM	1.4	30.2	17.01	96.9	0.31	7.6	101.54	6.97	3.05		
			Middle	9:39:46 PM	6.1	27.72	26.34	3.4	0.17	7.36	71.81	4.88	3.35		
Mid-flood	Surface	9:42:45 PM	6.4	26.98	28.29	14.4	0.18	7.3	59.86	4.07	3.96	3.75	3.94		
		9:38:53 PM	9.9	26.15	30.52	301.6	0.14	7.24	55.35	3.77	4.87				
	9:41:49 PM	10	26.14	30.51	309.6	0.11	7.24	54.74	3.73	5.38					
2009/08/18	Cloudy	Mid-ebb	Surface	11:12:31 AM	1.5	29.03	22.98	92.2	0.9	7.53	72.59	4.91	2.64	4.13	6.36
				11:16:16 AM	1.3	29.3	22.22	97.3	0.85	7.54	70.3	4.76	2.94		
			Middle	11:11:22 AM	5.9	27.26	28.21	98.9	0.69	7.35	51.02	3.46	6.09		
		Mid-flood	Surface	11:15:29 AM	6.4	27.52	28.09	94.2	0.8	7.37	50.27	3.39	7.71	3.92	7.36
				11:10:23 AM	10.1	26.91	28.71	111	0.52	7.38	58.94	4	9.54		
			11:14:35 AM	10.4	26.97	28.71	108.5	0.53	7.37	56.43	3.83	9.23			
		Mid-flood	Surface	6:52:59 PM	1.4	29.45	23.06	278.1	0.51	7.71	71.7	4.82	3.55	3.81	7.36
				6:55:46 PM	1.5	29.27	23.44	280.2	0.48	7.69	72.43	4.87	4.06		
			Middle	6:51:52 PM	5.9	27.37	28.04	298.3	0.42	7.42	40.22	2.72	7.41		
Mid-flood	Surface	6:54:47 PM	5.8	27.34	28.09	296.5	0.38	7.42	41.88	2.83	7.61	2.75	7.36		
		6:50:55 PM	9.8	26.79	29.31	283.6	0.31	7.41	39.96	2.71	10.65				
	6:53:55 PM	9.8	26.81	29.24	294.8	0.35	7.41	41.18	2.79	10.85					
2009/08/21	Sunny	Mid-ebb	Surface	1:57:40 PM	1.4	29.3	23.38	83.3	1.04	7.5	79.77	5.36	5.07	5.05	8.43
				2:01:07 PM	1.3	29.29	23.33	91	1.01	7.49	76.51	5.15	5.07		
			Middle	1:56:21 PM	5.8	28.5	25.85	96.8	0.94	7.47	73.21	4.92	9.43		
		Mid-flood	Surface	2:00:01 PM	6.2	28.44	26.27	96.4	0.93	7.47	71.02	4.77	8.72	4.87	9.22
				1:55:11 PM	9.7	27.78	26.79	93.8	0.62	7.45	73.71	4.99	12.17		
			1:59:01 PM	9.9	27.69	27.24	101.1	0.69	7.45	70.26	4.75	10.14			
		Mid-flood	Surface	6:40:09 AM	1.5	29.08	23.28	285.3	0.78	7.44	72.73	4.91	4.67	4.83	9.22
				6:36:46 AM	1.4	29.04	23.1	281.8	0.79	7.45	74.15	5.02	4.47		
			Middle	6:35:41 AM	6	28.83	24.6	283.6	0.75	7.45	70.42	4.74	7.61		
Mid-flood	Surface	6:39:08 AM	6.2	28.84	24.55	276.4	0.69	7.44	68.71	4.63	8.12	4.55	9.22		
		6:34:26 AM	9.7	27.69	27.15	298.6	0.65	7.42	67.77	4.58	14.71				
	6:38:06 AM	10.2	27.45	27.61	294.8	0.57	7.42	66.55	4.51	15.72					
2009/08/23	Sunny	Mid-ebb	Surface	3:02:31 PM	1.4	29.62	22.96	92.8	0.83	7.34	83.32	5.59	6.19	5.14	6.01
				3:05:31 PM	1.3	29.63	22.97	89.8	0.82	7.33	79.51	5.33	6.09		
			Middle	3:01:43 PM	6.1	28.2	26.18	87.8	0.52	7.26	73.61	4.96	5.89		
		Mid-flood	Surface	3:04:41 PM	6.2	28.18	26.18	85.4	0.54	7.26	69.34	4.68	5.89	4.92	12.61
				3:00:56 PM	10.2	27.85	27.18	107.1	0.38	7.27	75.91	5.12	5.89		
			3:03:59 PM	10.2	27.82	27.22	93.7	0.33	7.25	69.84	4.71	6.09			
		Mid-flood	Surface	7:54:59 AM	1.3	29.06	23.75	283.6	0.89	7.34	77.26	5.21	6.19	4.96	12.61
				7:57:13 AM	1.3	29.09	23.64	279.9	0.84	7.34	73.79	4.97	6.39		
			Middle	7:54:04 AM	6.2	28.66	25.11	281.9	0.73	7.33	72.68	4.89	11.06		
Mid-flood	Surface	7:56:26 AM	6.2	28.62	25.18	276.7	0.67	7.34	70.87	4.77	12.17	4.91	12.61		
		7:53:16 AM	9.8	28.6	25.24	292.6	0.59	7.34	75.24	5.07	17.75				
	7:55:47 AM	9.8	28.47	25.56	292.6	0.59	7.34	70.29	4.74	22.11					

Annex D15 - Baseline Water Quality Monitoring Results

Sampling Station : NM3

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged			
														DO (mg/L)	Turbidity (NTU)		
2009/07/28	Cloudy and Rainy	Mid-ebb	Surface	6:48:56 PM	0.9	30.1	12.83	102.3	0.57	7.56	89.35	6.28	4.51	4.98	6.67		
				6:53:49 PM	1	30.31	13.05	88.4	0.58	7.58	80.38	5.63				4.31	
			Middle	6:48:06 PM	7.7	27.28	25.75	130.5	0.28	7.38	57.33	3.94	5.31				
					6:53:02 PM	7.9	27.44	26.01	87.3	0.32	7.39	59.49	4.07	6.72			
					Bottom	6:47:14 PM	14.2	25.7	29.4	80.2	0.18	7.34	48.3	3.34	9.12	3.55	
						6:52:03 PM	14.9	25.68	29.48	63.4	0.12	7.36	54.3	3.75	10.02		
				Mid-flood	Surface	10:02:40 AM	0.8	28.47	19.31	225.1	0.78	7.31	76.29	5.32	2.11	4.88	13.31
						10:09:00 AM	1	28.53	19.34	303.8	0.32	7.35	76.51	5.33	2.01		
					Middle	10:01:40 AM	8.2	27.8	22.34	251	0.64	7.25	63.57	4.41	3.71		
				10:08:01 AM	8.4	27.86	22.15	259.1	0.52	7.28	63.99	4.44	3.11				
			Bottom	10:00:35 AM	15.2	27.17	24.75	256	0.66	7.21	56.56	3.91	34.77	3.90			
					10:07:01 AM	15.7	27.3	24.29	246.7	0.66	7.25	56.08	3.88		34.17		
2009/07/30	Cloudy and Rainy	Mid-ebb	Surface	9:18:50 PM	1.2	28.83	19.06	123.7	0.04	7.69	78.29	5.43	3.11	4.64	5.48		
				9:23:38 PM	1.2	28.79	19.25	144	0.06	7.69	80.68	5.6	2.91				
			Middle	9:17:43 PM	8.8	27.06	25.33	53.9	0.17	7.53	53.55	3.7	5.71				
						9:22:44 PM	9.1	26.98	25.61	20.1	0.16	7.56	55.21	3.81	5.81		
					Bottom	9:17:05 PM	14.9	25.45	30.07	305.7	0.16	7.5	42.61	2.94	8.02	3.15	
							9:22:07 PM	14.7	25.5	30.02	281.2	0.12	7.54	48.57	3.35		7.32
				Mid-flood	Surface	1:52:25 PM	0.9	29.51	15.85	271.6	0.7	7.49	93.02	6.5	3.71	5.17	6.03
						1:59:27 PM	0.8	29.51	15.89	259.2	0.68	7.57	95.98	6.7	3.51		
					Middle	1:51:28 PM	8.8	27.47	24.06	302.5	0.47	7.18	53.84	3.72	2.81		
				1:58:18 PM	8.8	27.49	24.01	314.8	0.45	7.27	54.52	3.77	2.81				
			Bottom	1:50:02 PM	13.3	26.84	26.14	287.8	0.35	7.13	49.66	3.43	12.23	3.47			
					1:57:06 PM	14.5	26.86	26.11	272.4	0.31	7.23	50.94	3.51		11.13		
2009/08/01	Sunny	Mid-ebb	Surface	8:17:09 AM	1	28.31	20.68	90.5	0.65	7.5	69.77	4.84	2.31	4.57	3.93		
				8:20:36 AM	1	28.27	20.78	89.1	0.55	7.59	70.14	4.87	2.21				
			Middle	8:16:34 AM	8.7	27.22	25.97	77.5	0.19	7.55	64.73	4.44	3.81				
						8:20:03 AM	8.9	26.72	27.46	43.9	0.18	7.58	60.07	4.12	4.41		
					Bottom	8:15:53 AM	15.5	24.92	31.55	97.9	0.3	7.18	39.6	2.74	6.02	3.33	
							8:19:24 AM	15.4	25.03	31.47	93.7	0.2	7.45	56.63	3.91		4.81
				Mid-flood	Surface	12:05:01 AM	1.1	29.03	18.94	95.3	0.35	7.68	90.45	6.26	3.51	5.71	4.86
						11:59:52 PM	1	29.34	16.98	79.2	0.44	7.69	94.98	6.61	3.31		
					Middle	12:04:02 AM	8	26.87	27.19	332.1	0.11	7.64	72.42	4.97	4.21		
				11:58:50 PM	8	26.86	27.23	351.4	0.16	7.64	73.01	5.01	4.11				
			Bottom	12:02:49 AM	14.9	25.59	30.19	156.2	0.12	7.5	51.85	3.57	5.61	3.37			
					11:57:42 PM	15.1	25.43	30.54	175.5	0.06	7.46	45.87	3.16		8.42		
2009/08/04	Rainy (Typhoon Signal No. 1 in the morning ; Signal No. 3 in the afternoon)	Mid-flood	Surface	3:32:10 AM	0.9	27.76	25.12	225.4	0.11	7.37	69	4.72	2.71	4.32	4.25		
				3:35:23 AM	1	27.88	24.71	54.5	0.1	7.42	70.02	4.79	2.51				
			Middle	3:31:07 AM	8.9	26.57	28.35	246.1	0.24	7.29	58.18	3.98	3.71				
				3:34:23 AM	8.9	26.46	28.65	259.9	0.24	7.32	55.39	3.79	4.11				
				Bottom	3:30:03 AM	15	26.2	29.15	265.1	0.24	7.22	57.38	3.94	5.51		3.81	
		3:33:21 AM	14.9		26.15	29.28	254.4	0.27	7.29	53.48	3.67	6.92					

Annex D15 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/06	Cloudy and Rainy	Mid-ebb	Surface	3:27:38 PM	0.9	28.05	20.93	80.9	0.61	7.5	74.9	5.21	8.32	4.58	10.09
				3:32:17 PM	1	28.11	21.04	97.7	0.52	7.5	74.88	5.2	7.92		
			Middle	3:26:49 PM	8.1	27.35	26.42	96.8	0.35	7.49	56.49	3.86	10.32		
		3:31:27 PM	8.1	27.57	25.7	89.3	0.39	7.5	59.34	4.05	10.52				
		Bottom	3:25:56 PM	13.8	27.18	27.16	165.7	0.05	7.51	57.47	3.92	11.63	3.92		
			3:30:40 PM	13.9	27.19	27.08	115	0.06	7.51	57.51	3.92	11.83			
		Mid-flood	Surface	5:04:14 AM	1.2	27.88	19.84	272.6	0.13	7.05	78.03	5.48	6.42	4.73	7.57
				5:08:53 AM	1	27.87	19.46	132.3	0.25	7.06	83.94	5.91	6.72		
			Middle	5:03:15 AM	9	27.15	27.22	255.1	0.4	7.04	55.12	3.76	6.62		
Bottom	5:07:51 AM	9.2	27.16	27.15	249.1	0.51	7.06	55.32	3.78	6.42	3.81				
	5:02:10 AM	14.1	27.1	27.49	262.7	0.41	7.04	56.22	3.83	6.92					
5:06:49 AM	15.1	27.08	27.56	266.8	0.42	7.06	55.62	3.79	12.33						
2009/08/08	Cloudy	Mid-ebb	Surface	5:08:05 PM	1	29.18	20.58	153	0.18	7.54	79.28	5.43	7.21	4.95	11.81
				5:13:07 PM	1.1	29.46	18.77	145.2	0.12	7.55	78.94	5.43	7.92		
			Middle	5:07:15 PM	8.8	27.65	25.94	198.7	0.06	7.47	66.36	4.52	9.34		
		Bottom	5:12:17 PM	9.2	27.65	26.28	165.8	0.09	7.51	64.69	4.4	10.05	4.60		
			5:06:12 PM	14.8	27.59	27.64	187.5	0.12	7.5	69.5	4.7	22.01			
		5:11:31 PM	14.6	27.58	27.65	213.9	0.24	7.54	66.45	4.49	14.31				
		Mid-flood	Surface	6:13:53 AM	1.2	28.3	21.39	270.6	0.71	7.27	73.63	5.09	4.27	4.81	6.65
				6:19:08 AM	1	28.33	21.23	259.1	0.81	7.32	75.54	5.22	3.86		
			Middle	6:13:01 AM	8	27.91	24.58	255.7	0.81	7.25	65.03	4.45	4.57		
Bottom	6:18:16 AM	8.1	27.94	24.23	251.9	0.95	7.31	65.23	4.47	5.18	4.22				
	6:11:49 AM	14.2	27.62	25.52	249.9	0.83	7.2	61.33	4.19	12.28					
6:17:22 AM	14.6	27.7	25.23	249.8	0.9	7.29	62.23	4.25	9.74						
2009/08/12	Cloudy and Rainy	Mid-ebb	Surface	5:53:47 PM	1.2	29.09	21.07	138.8	0.76	7.61	78.85	5.39	3.76	4.64	7.23
				5:58:01 PM	1.2	29.28	22.39	94	0.71	7.6	74.7	5.05	4.98		
			Middle	5:53:00 PM	8	27.62	28.69	56.3	0.08	7.62	61.12	4.1	5.38		
		Bottom	5:57:13 PM	8.3	27.54	28.94	52.1	0.1	7.61	60.02	4.03	5.79	3.95		
			5:52:09 PM	15	27.26	29.92	304.5	0.02	7.6	58.39	3.92	11.77			
		5:56:23 PM	15.1	27.26	29.92	35.5	0.03	7.59	59.24	3.97	11.67				
		Mid-flood	Surface	9:19:52 AM	1	28.52	24.75	249.1	0.75	7.55	78.61	5.32	3.05	4.86	6.08
				9:24:59 AM	0.9	28.49	25.91	240.5	0.36	7.56	71.22	4.79	3.96		
			Middle	9:19:05 AM	8	28.23	26.29	247.3	0.78	7.54	70.82	4.77	4.17		
Bottom	9:24:04 AM	8.2	28.15	26.77	245	0.77	7.55	67.69	4.55	4.17	4.51				
	9:18:19 AM	14.8	27.9	27.82	252.9	0.34	7.53	68.76	4.62	8.53					
9:23:13 AM	14.9	27.94	28.01	255	0.66	7.54	65.43	4.39	12.58						
2009/08/14	Cloudy	Mid-ebb	Surface	7:25:37 PM	0.9	28.86	19.05	97.6	0.54	7.54	74.54	5.17	3.56	4.36	7.09
				7:29:29 PM	1.3	28.77	20.04	86.6	0.46	7.54	68.79	4.75	3.66		
			Middle	7:25:00 PM	6.7	27.76	26.16	79	0.15	7.51	56.45	3.84	6.4		
		Bottom	7:28:52 PM	7	27.67	26.67	65.4	0.12	7.51	54.17	3.68	6.29	3.47		
			7:24:08 PM	14.1	26.81	29.7	313.1	0.08	7.49	50.52	3.42	11.26			
		7:28:16 PM	13.9	26.86	29.55	300.8	0.07	7.49	51.99	3.52	11.36				
		Mid-flood	Surface	11:57:36 AM	1.2	28.21	22.25	218	0.83	7.51	87.14	6	3.05	5.49	5.92
				12:05:52 PM	1.4	28.31	21.97	287.8	0.72	7.56	78.22	5.39	2.95		
			Middle	11:56:51 AM	8.1	28.14	23.69	250.8	0.71	7.51	83.9	5.74	4.37		
Bottom	12:05:05 PM	8.3	28.16	23.65	275.5	0.35	7.54	70.76	4.84	4.67	4.58				
	11:56:05 AM	14.6	27.8	27.3	263.7	0.65	7.48	75.01	5.06	10.96					
12:04:28 PM	15	27.85	27.17	273.3	0.72	7.52	60.71	4.1	9.54						

Annex D15 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/16	Cloudy	Mid-ebb	Surface	7:36:27 AM	1.2	28.84	20.36	104.1	0.67	7.74	77	5.31	3.56	4.81	4.62
				7:41:33 AM	1.1	28.82	19.85	82.2	0.58	7.78	76.39	5.28	3.56		
			Middle	7:35:34 AM	8	26.85	28.71	76.7	0.28	7.67	61.83	4.21	4.17		
		7:40:59 AM	8.1	26.58	29.37	87.4	0.24	7.72	65.1	4.43	3.86	4.19			
		Bottom	7:34:43 AM	14.9	25.81	31.25	82	0.2	7.59	58.37	3.98		5.79		
			7:40:01 AM	15.1	25.75	31.4	82.3	0.21	7.67	64.43	4.4	6.8			
		Mid-flood	Surface	10:52:16 PM	1	29.95	16.49	95.4	0.45	7.72	89.76	6.2	3.56	5.00	6.03
				10:57:05 PM	1	29.77	18.03	83.8	0.46	7.69	86.27	5.93	3.56		
			Middle	10:51:26 PM	8.1	27.13	26.6	335.8	0.1	7.55	58.13	3.98	5.99		
10:56:10 PM	8.1	27.06	28.06	50	0.05	7.56	56.83	3.87	5.79	3.33					
Bottom	10:50:32 PM	14.9	26.17	30.27	210.2	0.09	7.49	47.45	3.24		9.13				
	10:55:13 PM	14.9	26.19	30.22	245.1	0.09	7.51	50.11	3.42		8.12				
2009/08/18	Cloudy	Mid-ebb	Surface	9:44:51 AM	0.9	28.93	22	89.7	0.84	7.54	107.73	7.35	3.15	6.42	4.94
				9:50:28 AM	1	28.68	22.97	87.3	0.81	7.68	100.88	6.87	2.95		
			Middle	9:44:03 AM	8	26.85	28.55	82.2	0.5	7.3	80.96	5.51	5.69		
		9:49:37 AM	7.9	26.76	28.73	75.6	0.47	7.49	87.46	5.96	5.99	5.72			
		Bottom	9:43:17 AM	15	25.81	30.86	65.7	0.18	7.15	81.17	5.55		6.09		
			9:48:40 AM	14.9	25.82	30.84	56.2	0.18	7.39	86.08	5.89	5.79			
		Mid-flood	Surface	8:10:05 PM	1.1	29.49	21.46	292.1	0.35	7.77	95.92	6.5	4.47	6.34	13.83
				8:14:01 PM	1	29.64	20.26	295.8	0.28	7.77	100.15	6.81	3.76		
			Middle	8:09:27 PM	8.1	29.01	23.36	242.9	0.31	7.75	89.81	6.07	5.48		
8:13:19 PM	8.1	28.94	23.45	265.3	0.31	7.74	88.21	5.97	5.08	3.92					
Bottom	8:08:36 PM	14.9	27.24	27.97	292.9	0.6	7.55	56.37	3.82		31.14				
	8:12:13 PM	15.1	27.2	28.08	296	0.64	7.56	59.23	4.02		33.06				
2009/08/21	Sunny	Mid-ebb	Surface	3:26:52 PM	1	28.88	24.08	49.9	0.69	7.67	85.48	5.77	18.78	5.56	19.67
				3:32:52 PM	1	28.85	24.08	90	0.71	7.66	82.12	5.54	19.18		
			Middle	3:25:58 PM	8.1	27.3	27.5	89	0.39	7.68	81.43	5.53	18.38		
		3:32:04 PM	7.9	27.49	27.09	82	0.51	7.68	79.62	5.4	19.98	5.75			
		Bottom	3:24:51 PM	13.9	26.74	28.62	102.5	0.09	7.7	85.02	5.8		20.78		
			3:31:14 PM	13.3	26.94	28.21	203.3	0.17	7.7	83.5	5.69	20.89			
		Mid-flood	Surface	5:24:38 AM	1.1	28.76	24.12	279.5	0.42	7.4	70.45	4.76	7.23	4.61	10.49
				5:26:57 AM	0.9	28.79	23.98	273.4	0.29	7.43	70.1	4.74	7.13		
			Middle	5:23:53 AM	8	28.02	25.92	252.7	0.73	7.4	65.52	4.44	7.63		
5:26:16 AM	7.9	28.14	25.62	253.3	0.77	7.44	66.35	4.49	7.33	4.20					
Bottom	5:23:01 AM	14.8	27.44	27.36	245.1	0.76	7.38	61.08	4.14		18.98				
	5:25:29 AM	14.9	27.53	27.18	244.4	0.79	7.43	62.8	4.26		14.66				
2009/08/23	Sunny	Mid-ebb	Surface	4:35:37 PM	1.1	29.17	24.11	71.9	0.87	7.34	65.87	4.42	13.36	4.24	13.74
				4:42:25 PM	1	29.66	22.83	81.3	0.73	7.35	69.11	4.63	11.25		
			Middle	4:34:29 PM	8.1	27.55	27.08	89.6	0.57	7.33	59	4	13.96		
		4:41:36 PM	8.1	27.46	27.17	83.7	0.47	7.35	57.71	3.92	12.95	4.05			
		Bottom	4:33:29 PM	14.7	26.72	28.66	79.3	0.09	7.35	58.9	4.02		15.26		
			4:40:47 PM	14.6	26.74	28.6	113.6	0.04	7.37	59.83	4.08	15.66			
		Mid-flood	Surface	7:04:33 AM	1	29.34	23.29	226.9	0.75	7.38	67.54	4.54	12.95	4.35	18.99
				7:08:47 AM	1	28.91	24.02	279.9	0.63	7.4	65.23	4.4	12.45		
			Middle	7:03:45 AM	8.1	27.91	26.27	256.1	0.8	7.41	62.34	4.22	14.46		
7:08:03 AM	8	27.86	26.36	254.3	0.91	7.43	62.5	4.23	15.46	4.48					
Bottom	7:02:49 AM	15	27.67	26.76	246.1	0.86	7.41	64.54	4.38		29.92				
	7:07:16 AM	14.9	27.71	26.69	241.6	0.88	7.45	67.44	4.57		28.72				

Annex D16 - Baseline Water Quality Monitoring Results

Sampling Station : NM5

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/07/28	Cloudy and Rainy	Mid-ebb	Surface	5:35:47 PM	1.2	30.52	12.98	167.5	0.71	7.4	87.37	6.1	4.11	4.70	8.03
				5:41:15 PM	0.9	30.46	13.31	164.7	0.74	7.42	69.25	4.83	4.21		
			Middle	5:34:40 PM	10.2	27.51	24.02	179.8	0.28	7.22	55.09	3.8	5.91		
				5:40:29 PM	10.1	27.61	23.62	154.7	0.29	7.25	59.09	4.08	5.61		
			Bottom	5:33:26 PM	19.9	26.31	27.59	146.9	0.14	7.16	43.39	3	14.83		
				5:39:34 PM	19.8	26.31	27.58	123.1	0.16	7.19	54.36	3.75	13.53		
		Mid-flood	Surface	11:30:35 AM	0.8	29.58	11.03	348	0.31	7.39	79.77	5.72	4.71	4.69	12.61
				11:36:32 AM	1.1	29.56	12.05	348	0.31	7.41	71.65	5.11	4.71		
			Middle	11:29:28 AM	9.5	27.82	22.82	352.9	0.89	7.36	58.34	4.03	3.91		
				11:35:43 AM	10.2	27.63	23.4	329.6	0.91	7.37	56.05	3.88	5.61		
			Bottom	11:28:10 AM	19.8	26.11	28.19	318.9	0.51	7.35	50.59	3.49	29.86		
				11:34:25 AM	20	26.11	28.19	323.8	0.54	7.36	50.81	3.51	26.86		
2009/07/30	Cloudy and Rainy	Mid-ebb	Surface	7:52:22 PM	1.2	29.7	17.89	308.3	0.32	7.63	85.55	5.89	4.51	4.64	5.45
				7:57:00 PM	1.2	29.68	17.53	348.6	0.28	7.67	91.87	6.34	4.11		
			Middle	7:51:43 PM	11.1	26.68	27.02	3	0.23	7.41	47.88	3.3	6.42		
				7:56:03 PM	11	26.38	27.55	343.4	0.23	7.41	43.96	3.03	6.52		
			Bottom	7:50:39 PM	19.1	25.66	29.52	330.5	0.22	7.38	45.45	3.14	5.61		
				7:55:21 PM	18.7	25.65	29.55	338.6	0.15	7.4	41.42	2.86	5.51		
		Mid-flood	Surface	3:25:45 PM	0.8	30.21	12.89	331.7	0.26	7.61	78.25	5.49	5.11	4.60	5.68
				3:31:50 PM	1	30.17	13.23	331.7	0.26	7.6	89.65	6.28	4.81		
			Middle	3:24:49 PM	9.9	27.13	25.28	333.3	0.3	7.32	50.35	3.47	3.81		
				3:31:07 PM	9.8	27.03	25.63	338.7	0.28	7.33	45.57	3.14	5.01		
			Bottom	3:23:42 PM	17.8	25.56	29.81	8.4	0.24	7.31	40.22	2.78	7.92		
				3:30:13 PM	17.8	25.51	29.92	325.1	0.22	7.32	39.81	2.75	7.42		
2009/08/01	Sunny	Mid-ebb	Surface	9:37:27 AM	1.1	29.15	14.69	126.1	0.76	7.54	68.78	4.87	3.41	3.97	4.46
				9:41:30 AM	1.2	29.13	15.61	153.7	0.79	7.57	67.53	4.75	3.81		
			Middle	9:36:53 AM	11.1	26.49	27.99	178.2	0.62	7.41	46.05	3.16	3.81		
				9:40:54 AM	11.1	26.54	27.77	155.1	0.54	7.44	45.18	3.11	3.61		
			Bottom	9:36:03 AM	18.8	25.4	30.32	96.1	0.21	7.31	35.36	2.44	5.91		
				9:40:15 AM	18.9	25.41	30.28	151.7	0.23	7.32	33.65	2.32	6.22		
		Mid-flood	Surface	10:41:27 PM	1	29.45	16.5	229.6	0.04	7.62	91.76	6.39	3.51	5.31	5.00
				10:45:57 PM	1	29.62	15.01	156.3	0.1	7.62	92.19	6.46	3.81		
			Middle	10:40:28 PM	11.2	27.06	26.38	64	0.05	7.5	61.91	4.25	4.91		
				10:45:03 PM	10.9	27.01	26.53	304.5	0.1	7.49	60.41	4.15	4.91		
			Bottom	10:39:34 PM	19	25.52	30.21	137	0.16	7.3	35.59	2.45	7.02		
				10:43:51 PM	19	25.58	30.06	134.5	0.09	7.32	35.1	2.42	5.81		
2009/08/04	Rainy (Typhoon Signal No. 1 in the morning ; Signal No. 3 in the afternoon)	Mid-flood	Surface	5:04:32 AM	1	28.57	21.4	345.7	0.43	7.56	81.94	5.64	5.71	4.45	12.09
				5:08:39 AM	1.1	28.56	21.43	345.7	0.43	7.57	81.56	5.61	2.31		
			Middle	5:03:30 AM	11.1	26.32	29.2	307.8	0.67	7.37	45.65	3.12	8.32		
				5:07:36 AM	11	26.22	29.17	326.7	0.7	7.41	49.9	3.42	4.61		
			Bottom	5:02:29 AM	20.1	25.79	29.93	304.9	0.57	7.31	39.3	2.7	26.76		
				5:06:34 AM	20.2	25.79	29.92	304.9	0.57	7.32	40.42	2.78	24.85		

Annex D16 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/16	Cloudy	Mid-ebb	Surface	9:31:34 AM	1.1	29.51	12.29	121.5	0.92	7.71	93.3	6.65	3.86	5.55	5.33
				9:36:50 AM	1.1	29.45	13.2	149.2	0.93	7.7	92.78	6.58	3.86		
			Middle	9:30:45 AM	10.2	27.57	27.33	149	0.57	7.6	65.67	4.45	3.56		
				9:35:59 AM	10.1	27.53	27.11	137.6	0.59	7.61	66.63	4.52	3.35		
			Bottom	9:29:56 AM	18.1	26.5	30.1	157.7	0.34	7.52	58.1	3.94	8.93		
				9:35:09 AM	18	26.52	30.07	145.9	0.39	7.55	60.7	4.12	8.42		
		Mid-flood	Surface	9:42:03 PM	1	30.22	15.31	351.3	0.1	7.69	99.07	6.86	4.37	4.83	7.90
				9:38:23 PM	11.1	26.89	28.79	339.1	0.14	7.42	45.48	3.09	9.44		
			Middle	9:39:11 PM	1.1	30.14	15.54	98.8	0.07	7.68	93.33	6.46	4.67		
				9:37:49 PM	19	26.61	29.63	159.1	0.07	7.4	42.6	2.89	9.95		
			Bottom	9:40:12 PM	19.2	26.62	29.61	205.6	0.03	7.4	45.47	3.09	9.74		
				9:41:01 PM	11	26.95	26.98	321.9	0.14	7.43	46.76	3.21	9.24		
2009/08/18	Cloudy	Mid-ebb	Surface	11:27:40 AM	1	30.06	17.7	117.3	1.09	7.94	91.54	6.27	3.86	5.57	10.34
				11:38:58 AM	1	30.04	17.75	143.8	0.96	7.95	95.01	6.51	4.27		
			Middle	11:27:04 AM	10	27.73	26.51	138.8	0.97	7.79	71.92	4.88	6.5		
				11:38:06 AM	10	27.69	26.68	142.9	1.03	7.82	67.89	4.6	4.88		
			Bottom	11:26:15 AM	18	26.63	28.99	154.7	0.39	7.76	71.54	4.88	17.85		
				11:37:00 AM	18.1	26.64	29.2	150.4	0.39	7.77	65.74	4.47	24.65		
		Mid-flood	Surface	6:41:49 PM	0.9	29.9	16.25	349.2	0.5	7.5	90.51	6.27	8.73	5.93	36.97
				6:47:42 PM	0.9	29.87	16.9	332.5	0.48	7.56	90.36	6.24	8.73		
			Middle	6:40:59 PM	11.1	27.45	28.22	318.9	0.82	7.59	74.41	5.02	21.1		
				6:46:41 PM	10.8	27.98	27.54	321.4	0.78	7.66	92.12	6.19	17.25		
			Bottom	6:39:28 PM	19.2	26.58	29.31	326.8	0.57	7.5	61.21	4.17	101.21		
				6:45:37 PM	19	26.58	29.3	325.6	0.62	7.52	63.62	4.33	64.8		
2009/08/21	Sunny	Mid-ebb	Surface	1:56:13 PM	1	30.65	19.07	154.3	1.21	7.68	99.71	6.72	8.54	6.30	18.43
				2:04:04 PM	0.9	30.57	19.15	152.5	1.13	7.69	99.41	6.7	7.73		
			Middle	1:55:24 PM	10.1	28.8	23.4	144.9	1.02	7.64	87.47	5.93	9.54		
				2:03:14 PM	10.1	28.89	23.06	157.1	1.04	7.65	86.39	5.86	11.05		
			Bottom	1:54:32 PM	19	27.77	26.53	134.1	0.51	7.64	85.03	5.76	28.11		
				2:02:22 PM	19.1	27.75	26.53	148	0.37	7.67	84.35	5.72	45.58		
		Mid-flood	Surface	6:39:28 AM	1.1	29.25	20.4	343.6	0.67	7.46	68.56	4.69	9.14	4.58	60.09
				6:46:36 AM	1	29.11	20.35	337.3	0.57	7.47	69.45	4.76	9.24		
			Middle	6:38:43 AM	9.9	28.44	25.47	328.6	0.89	7.53	66.07	4.46	16.47		
				6:45:46 AM	9.9	28.22	25.56	319.4	0.98	7.54	65.04	4.4	15.36		
			Bottom	6:37:30 AM	19.1	27.33	27.56	320.8	0.76	7.53	61.47	4.17	171.79		
				6:44:50 AM	19.5	27.3	27.64	324.8	0.79	7.54	63.04	4.28	138.55		
2009/08/23	Sunny	Mid-ebb	Surface	3:07:05 PM	1	30	20.5	159.6	1.09	7.21	73.47	4.96	12.35	4.91	17.83
				3:12:19 PM	1	29.99	20.24	166.8	1.01	7.21	72.98	4.94	11.45		
			Middle	3:05:59 PM	10.1	28.95	23.58	149.9	0.57	7.24	72.16	4.87	11.35		
				3:11:30 PM	10.1	28.82	24.07	147.9	0.5	7.27	72.07	4.87	11.05		
			Bottom	3:05:06 PM	19.3	28.02	26.01	175.4	0.51	7.24	69.54	4.71	24.7		
				3:10:23 PM	18.9	28.02	25.97	168.1	0.55	7.28	71.37	4.83	36.05		
		Mid-flood	Surface	8:33:37 AM	1.1	29.68	19.6	319.2	0.89	7.37	69.42	4.74	9.44	4.57	35.06
				8:39:14 AM	1	29.66	19.88	343.6	0.91	7.39	69.52	4.74	9.64		
			Middle	8:32:44 AM	10	28.47	24.69	329.2	1.34	7.44	65.5	4.43	16.37		
				8:38:22 AM	10.3	28.56	24.49	343.2	1.18	7.45	64.38	4.36	15.97		
			Bottom	8:31:28 AM	19.1	27.48	27.13	342.3	0.85	7.44	62.42	4.24	79		
				8:37:24 AM	19.2	27.45	27.16	331.1	0.89	7.46	61.49	4.18	79.92		

Annex D17 - Baseline Water Quality Monitoring Results

Sampling Station : NM6

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/07/28	Cloudy and Rainy	Mid-ebb	Surface	4:33:06 PM	0.9	29.91	12.63	258	0.18	7.38	90.22	6.37	3.81	5.54	5.03
				4:35:39 PM	1.1	29.87	13.12	239.8	0.08	7.33	87.15	6.14	3.51		
			Middle	4:32:23 PM	2.9	28.81	17.57	264.5	0.17	7.15	68.08	4.77	3.61		
				4:34:49 PM	2.9	28.82	17.52	230.9	0.13	7.17	69.67	4.88	3.21		
			Bottom	4:31:31 PM	5.5	27.3	24.72	111.8	0.06	7.12	52.68	3.64	8.12		
				4:34:03 PM	5.6	27.21	25.18	36.6	0.12	7.15	51.2	3.53	7.92		
		Mid-flood	Surface	12:39:01 PM	1	29.28	12.92	131.8	0.11	7.43	78.87	5.62	3.91	5.41	7.98
				12:41:41 PM	0.9	29.27	12.88	151	0.09	7.46	78.27	5.58	3.91		
			Middle	12:38:22 PM	3.7	28.91	15.72	92.5	0.14	7.41	74.32	5.25	4.51		
				12:40:59 PM	3.6	28.94	15.52	100.2	0.1	7.42	73.62	5.2	4.21		
			Bottom	12:37:25 PM	6.7	26.9	26.73	82.4	0.26	7.35	51.19	3.52	15.73		
				12:40:08 PM	6.7	26.94	26.56	65.9	0.22	7.39	51	3.51	15.63		
2009/07/30	Cloudy and Rainy	Mid-ebb	Surface	6:47:59 PM	1.1	29.6	14.38	103.7	0.11	7.63	100.33	7.05	3.01	5.78	4.80
				6:54:53 PM	1.2	29.53	14.46	61.1	0.09	7.62	99.2	6.98	3.21		
			Middle	6:47:20 PM	3.8	28.7	18.4	201.8	0.16	7.33	66.35	4.63	3.41		
				6:50:39 PM	3.9	28.91	17.45	190.1	0.18	7.36	63.45	4.44	4.71		
			Bottom	6:46:40 PM	5.7	28.06	21.43	171.6	0.21	7.29	60.21	4.18	8.22		
				6:50:06 PM	5.9	28.1	21.22	216.2	0.19	7.33	61.64	4.28	6.22		
		Mid-flood	Surface	4:33:08 PM	0.8	29.78	13.93	125.8	0.17	7.62	100.11	7.04	3.41	6.65	3.29
				4:40:51 PM	0.8	29.78	13.91	125.8	0.17	7.65	101.07	7.1	3.31		
			Middle	4:32:30 PM	3.6	29.36	15.53	148.1	0.21	7.47	82.39	5.78	3.21		
				4:40:05 PM	3.6	29.54	15.04	148.1	0.21	7.61	95.33	6.69	3.11		
			Bottom	4:31:10 PM	5.6	29.08	16.48	128.4	0.11	7.4	78.73	5.52	3.61		
				4:35:22 PM	5.7	29.07	16.57	150.9	0.12	7.43	76.73	5.38	3.11		
2009/08/01	Sunny	Mid-ebb	Surface	10:33:33 AM	1.1	29.35	14.8	189.5	0.3	7.69	91.31	6.43	2.41	5.92	2.11
				10:37:27 AM	1.1	29.55	13.35	201.8	0.32	7.69	91	6.44	2.81		
			Middle	10:32:59 AM	3.9	29.14	16.46	280	0.28	7.7	68	4.76	1.81		
				10:36:51 AM	3.8	29.2	16.69	211.2	0.3	7.7	86.38	6.04	1.81		
			Bottom	10:32:23 AM	5.6	27.91	23.67	217.6	0.17	7.73	69.45	4.77	1.81		
				10:36:17 AM	5.9	27.85	24.17	184.4	0.34	7.77	72.15	4.95	2.01		
		Mid-flood	Surface	9:40:44 PM	1	29.96	12.49	66.8	0.21	7.57	90.66	6.4	4.91	5.43	7.88
				9:43:27 PM	1	30.05	14	63.4	0.2	7.58	90.57	6.33	4.71		
			Middle	9:39:48 PM	4	28.25	22.34	74.4	0.13	7.52	65.53	4.51	9.02		
				9:42:36 PM	4	28.26	22.3	67.6	0.18	7.53	65.03	4.48	8.42		
			Bottom	9:39:00 PM	6	28.13	22.98	59.9	0.06	7.47	67.53	4.64	9.32		
				9:41:43 PM	6	28.14	23.06	83.2	0.12	7.52	62.22	4.27	10.92		
2009/08/04	Rainy (Typhoon Signal No. 1 in the morning ; Signal No. 3 in the afternoon)	Mid-flood	Surface	6:11:15 AM	1	28.23	22.27	31.9	0.23	7.52	71.99	4.96	2.81	4.50	9.07
				6:14:15 AM	0.9	28.2	22.45	31.9	0.23	7.52	70.89	4.88	2.91		
			Middle	6:10:10 AM	4.9	27.99	25.67	47.5	0.48	7.53	57.6	3.91	3.31		
				6:13:25 AM	5	28.07	24.28	51.6	0.44	7.52	62.38	4.26	3.11		
			Bottom	6:09:14 AM	7.1	27.4	27.8	33.9	0.56	7.45	48.29	3.27	23.65		
				6:12:20 AM	6.9	27.45	27.65	47.6	0.56	7.46	45.97	3.11	18.64		

Annex D17 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/06	Cloudy and Rainy	Mid-ebb	Surface	12:51:24 PM	1.1	27.97	21.42	202.5	0.3	7.42	82.44	5.73	4.91	5.74	5.46
				12:53:50 PM	1	28.04	21.35	196.1	0.31	7.43	83.78	5.82	4.41		
			Middle	12:50:42 PM	3.1	27.96	21.46	194.7	0.32	7.42	82.2	5.71	5.51		
				12:53:09 PM	2.9	27.93	21.41	198.2	0.27	7.41	81.9	5.7	5.11		
			Bottom	12:49:57 PM	6.1	27.86	21.87	213.3	0.22	7.41	81.14	5.64	6.12		
				12:52:20 PM	6.1	27.79	22.16	215.8	0.24	7.4	79.19	5.5	6.72		
		Mid-flood	Surface	7:31:45 AM	1	27.72	21.06	33.2	0.23	7.47	80.49	5.63	6.22	5.67	10.29
				7:35:06 AM	1.1	27.72	20.9	22.4	0.25	7.48	81.4	5.7	6.22		
			Middle	7:30:43 AM	4	27.66	22.09	36.5	0.23	7.49	81.4	5.67	7.22		
				7:34:24 AM	4	27.67	21.89	38.1	0.27	7.5	81.6	5.69	6.72		
			Bottom	7:29:51 AM	7	27.62	23.69	40.5	0.4	7.51	80.89	5.59	17.74		
				7:33:34 AM	7	27.62	23.72	46.2	0.41	7.53	80.2	5.54	17.64		
2009/08/08	Cloudy	Mid-ebb	Surface	1:28:36 PM	1	29.25	15.47	266.4	0.1	7.5	81.49	5.73	4.88	5.05	9.15
				1:33:30 PM	0.9	29.3	14.41	218.4	0.1	7.55	83.5	5.9	4.67		
			Middle	1:27:54 PM	3.9	28.25	27.69	43.3	0.1	7.51	64.17	4.29	8.63		
				1:32:47 PM	3.9	28.25	27.65	28	0.04	7.51	63.98	4.28	8.93		
			Bottom	1:27:10 PM	5.9	28.13	28.55	124.3	0.08	7.5	62.27	4.15	12.89		
				1:31:41 PM	6	28.12	28.59	129.1	0.08	7.49	61.27	4.08	14.91		
		Mid-flood	Surface	8:57:50 AM	1	28.99	15.08	346.6	0.16	7.51	81.37	5.76	4.47	5.59	6.04
				9:02:01 AM	1.1	29.04	15.26	20.3	0.1	7.52	80.87	5.71	4.17		
			Middle	8:57:13 AM	4	28.94	16.14	255.3	0.04	7.48	75.65	5.33	4.98		
				9:01:20 AM	3.9	28.96	15.52	304.2	0.06	7.5	78.36	5.54	4.37		
			Bottom	8:56:32 AM	6	28.23	26.94	56.1	0.28	7.64	65.51	4.4	12.38		
				9:00:37 AM	6.1	28.75	19.64	25.4	0.09	7.57	72.14	5	5.89		
2009/08/12	Cloudy and Rainy	Mid-ebb	Surface	3:26:27 PM	1.1	28.87	14.94	265.1	0.18	7.55	90.18	6.4	3.86	5.81	6.57
				3:28:58 PM	1	28.93	13.48	262.9	0.16	7.52	88.07	6.29	3.76		
			Middle	3:25:46 PM	3	28.89	22.65	268.5	0.08	7.57	77.85	5.29	6.19		
				3:28:05 PM	3	28.91	22.4	261.1	0.14	7.56	77.04	5.24	5.48		
			Bottom	3:25:04 PM	5	28.54	26.9	63.2	0.09	7.64	76.47	5.11	10.05		
				3:27:21 PM	4.9	28.49	27.47	87.5	0.07	7.63	72.17	4.81	10.05		
		Mid-flood	Surface	11:39:38 AM	1	29.02	18.9	73.9	0.2	7.56	77.85	5.39	3.35	5.21	11.05
				11:42:12 AM	1	29.01	18.9	108.8	0.11	7.56	76.56	5.3	3.46		
			Middle	11:38:50 AM	3.9	28.88	22.35	45.2	0.42	7.62	74.51	5.07	5.89		
				11:41:27 AM	3.9	28.83	22.63	75.1	0.2	7.63	74.28	5.06	6.4		
			Bottom	11:37:57 AM	5.9	28.42	28.16	59.3	0.34	7.68	68.29	4.54	24.45		
				11:40:33 AM	5.9	28.42	28.11	53.6	0.52	7.67	67.01	4.45	22.72		
2009/08/14	Cloudy	Mid-ebb	Surface	5:13:21 PM	1	29.27	14.96	261.7	0.11	7.41	84.82	5.98	4.57	5.38	6.77
				5:15:56 PM	1	29.51	14.39	294.2	0.11	7.44	83.81	5.9	4.47		
			Middle	5:12:45 PM	4	28.25	24.24	16.1	0.16	7.46	72.16	4.92	7.51		
				5:15:16 PM	3.8	28.24	23.75	15.5	0.08	7.47	69.16	4.72	7.51		
			Bottom	5:11:59 PM	6.1	28.14	26.45	161.6	0.02	7.47	69.78	4.7	8.42		
				5:14:32 PM	5.9	28.15	26.38	40.6	0.03	7.48	66.08	4.45	8.12		
		Mid-flood	Surface	2:11:05 PM	1.3	29.1	14.57	281.8	0.12	7.4	85.71	6.07	4.27	5.80	10.76
				2:15:31 PM	1.3	29.05	14.87	69.3	0.1	7.43	79.28	5.61	4.37		
			Middle	2:10:29 PM	4.3	28.7	16.52	30.2	0.21	7.4	85.47	6.03	5.18		
				2:14:54 PM	4.1	28.73	15.94	58.8	0.2	7.43	77.57	5.49	5.59		
			Bottom	2:09:31 PM	6	27.98	28.34	38.9	0.23	7.5	79.09	5.29	25.97		
				2:14:13 PM	6.1	27.99	27.94	63.4	0.25	7.52	64.79	4.34	19.17		

Annex D17 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/16	Cloudy	Mid-ebb	Surface	10:34:43 AM	1	29.56	14.53	230	0.7	7.66	97.22	6.84	3.66	6.59	11.89
				10:38:38 AM	1	29.67	14.33	207.1	0.65	7.66	98.53	6.92	3.25		
			Middle	10:34:03 AM	4	29.17	17.18	222.5	0.58	7.58	88	6.14	4.57		
				10:38:05 AM	4.1	29.27	15.75	210.7	0.61	7.6	91.76	6.44	4.77		
			Bottom	10:33:16 AM	6.1	27.85	27.52	240.3	0.49	7.53	62.26	4.19	30.12		
				10:37:23 AM	6.2	27.79	27.98	198.8	0.05	7.54	70.86	4.76	24.95		
		Mid-flood	Surface	8:43:25 PM	1	30.16	13.91	22.6	0.14	7.56	90.46	6.32	4.98	4.80	8.24
				8:45:35 PM	1.1	30.12	14.41	12.4	0.21	7.58	91.34	6.37	4.98		
			Middle	8:42:47 PM	4	28.15	24.39	60.6	0.29	7.38	47.72	3.25	8.83		
				8:44:56 PM	3.9	28.16	25.89	60.8	0.24	7.39	48.41	3.27	8.93		
			Bottom	8:42:09 PM	6.1	28.07	26.45	68.5	0.2	7.38	45.93	3.1	10.66		
				8:44:17 PM	6.1	28.06	26.55	46	0.2	7.38	48.91	3.3	11.06		
2009/08/18	Cloudy	Mid-ebb	Surface	12:34:22 PM	1.2	30.42	19.89	223.9	0.92	7.96	110.98	7.47	3.25	6.78	11.50
				12:39:19 PM	0.9	30.7	19.45	230.3	0.92	8.02	110.52	7.42	3.25		
			Middle	12:33:36 PM	4	28.89	23.05	231.7	0.86	7.83	88.16	5.98	5.89		
				12:38:43 PM	4	28.88	23.2	241.7	0.82	7.85	92.07	6.24	8.22		
			Bottom	12:32:42 PM	5.8	28.42	24.53	250	0.94	7.79	85.74	5.81	20.9		
				12:37:56 PM	5.8	28.52	24.27	240	0.79	7.83	91.99	6.24	27.49		
		Mid-flood	Surface	5:34:28 PM	1	29.76	16.78	260.2	0.06	7.4	95.84	6.63	10.96	6.50	12.94
				5:37:04 PM	1	29.78	16.74	163.8	0.07	7.4	95.08	6.58	9.84		
			Middle	5:33:30 PM	3	29.72	16.98	243.4	0.09	7.4	92.03	6.37	12.28		
				5:36:10 PM	3	29.75	16.85	243.4	0.09	7.4	92.45	6.4	11.26		
			Bottom	5:32:25 PM	4.9	29.52	17.74	268.7	0.09	7.39	88.91	6.15	17.04		
				5:35:23 PM	4.9	29.53	17.72	278.5	0.1	7.38	94.44	6.53	16.23		
2009/08/21	Sunny	Mid-ebb	Surface	12:46:17 PM	1.1	28.65	25.09	135.2	0.2	7.74	86.45	5.82	14.46	5.74	15.80
				12:48:21 PM	1	28.72	24.97	121.7	0.15	7.73	82.56	5.56	14.26		
			Middle	12:45:35 PM	4	28.29	25.7	170.1	0.25	7.76	88.84	6	13.25		
				12:47:43 PM	4	28.39	25.47	150.3	0.17	7.74	82.87	5.59	14.06		
			Bottom	12:44:53 PM	5.9	27.89	26.98	102.5	0.09	7.76	87.66	5.91	16.27		
				12:47:04 PM	5.9	27.66	27.56	157.5	0.13	7.72	77.83	5.25	22.49		
		Mid-flood	Surface	7:50:09 AM	1.2	29.22	20.15	147.7	0.41	7.45	77.68	5.32	7.93	5.35	11.23
				7:54:47 AM	1	29.23	19.92	115.8	0.14	7.43	78.49	5.39	7.63		
			Middle	7:49:21 AM	4	28.92	22.01	82.8	0.2	7.49	77.99	5.32	10.85		
				7:54:07 AM	4.1	29.09	20.76	74.9	0.25	7.45	78.51	5.38	9.74		
			Bottom	7:48:27 AM	6	28.88	22.25	52.4	0.42	7.5	79.7	5.43	11.15		
				7:53:21 AM	6.1	28.61	23.45	50.4	0.22	7.5	74.96	5.1	20.08		
2009/08/23	Sunny	Mid-ebb	Surface	2:00:17 PM	1	29.65	22.6	69.7	0.12	7.27	68.66	4.61	9.44	4.22	15.31
				2:02:32 PM	1	29.42	22.41	101.5	0.24	7.27	68.36	4.61	9.74		
			Middle	1:59:28 PM	4	27.37	27.4	115.9	0.19	7.25	56.93	3.87	12.65		
				2:01:46 PM	4	27.35	27.37	117.5	0.33	7.26	55.93	3.8	13.05		
			Bottom	1:58:35 PM	6.2	26.76	28.81	124.6	0.24	7.25	52.62	3.58	25.1		
				2:01:05 PM	6	26.81	28.68	107.8	0.19	7.24	52.22	3.55	21.89		
		Mid-flood	Surface	9:47:37 AM	1.1	29.48	21.21	53.7	0.34	7.37	70.66	4.79	10.64	4.63	24.72
				9:50:09 AM	1	29.5	21.06	52.5	0.38	7.38	68.3	4.64	9.24		
			Middle	9:46:49 AM	4.1	28.76	23.64	47.1	0.52	7.39	67.77	4.59	23.5		
				9:49:21 AM	4	28.86	23.34	55.8	0.54	7.39	66.06	4.48	20.78		
			Bottom	9:45:40 AM	6	28.17	25.82	55.8	0.45	7.4	64.62	4.37	44.58		
				9:48:21 AM	6	28.23	25.61	64.6	0.47	7.41	63.18	4.27	39.56		

Annex D18 - Baseline Water Quality Monitoring Results

Sampling Station : MW1

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/07/28	Cloudy and Rainy	Mid-ebb	Surface	6:42:59 PM	1.4	29.34	18.2	104.4	0.46	7.59	96.22	6.65	2.13	6.26	3.33
				6:46:12 PM	1.5	29.27	18.3	107.8	0.55	7.6	92.98	6.43	2.03		
			Middle	6:41:41 PM	9.9	28.81	20	350.6	0.12	7.51	88.29	6.1	2.13		
				6:45:07 PM	10.2	28.78	20.05	66.3	0.07	7.53	84.94	5.87	2.13		
			Bottom	6:40:18 PM	19.4	26.19	28	74.4	0.18	7.34	65.46	4.52	5.99		
				6:44:05 PM	18.5	26.22	27.88	78.6	0.21	7.4	66.42	4.59	5.58		
		Mid-flood	Surface	10:02:01 AM	1.1	28.75	17.53	241.5	0.13	7.25	99.41	6.97	2.13	6.42	2.64
				10:06:07 AM	1	28.72	17.57	256.7	0.08	7.26	93.36	6.55	1.93		
			Middle	10:00:51 AM	9.9	27.66	23.12	252.6	0.14	7.19	91.79	6.35	1.53		
				10:05:02 AM	10.3	27.02	25.26	103.5	0.03	7.21	83.76	5.79	2.44		
			Bottom	9:59:27 AM	18	26.36	27.49	98.6	0.18	7.11	86.45	5.97	4.16		
				10:04:00 AM	18.1	26.43	27.22	98.6	0.18	7.19	81.2	5.61	3.65		
2009/07/30	Cloudy and Rainy	Mid-ebb	Surface	8:36:20 PM	0.9	28.2	24.18	151.6	0.14	7.99	114.61	7.82	2.54	5.63	2.98
				8:40:08 PM	1	28.17	24.19	170.8	0.04	7.98	109.61	7.48	2.44		
			Middle	8:35:14 PM	10.3	25.77	29.58	190.8	0.02	7.51	53.95	3.72	2.94		
				8:39:09 PM	9.8	25.69	29.76	120.3	0.06	7.5	50.85	3.51	3.05		
			Bottom	8:34:11 PM	18.2	24.73	32.24	349.9	0.06	7.44	49.25	3.4	3.55		
				8:37:49 PM	18.2	24.73	32.2	260.4	0.06	7.45	51.25	3.54	3.35		
		Mid-flood	Surface	1:36:16 PM	1.2	28.68	20.09	235.1	0.27	7.41	109.98	7.61	1.93	6.45	4.31
				1:39:54 PM	1.4	28.37	20.97	220.8	0.16	7.4	100.25	6.94	2.13		
			Middle	1:34:51 PM	10.9	26.17	28.28	42.3	0.07	7.2	83.22	5.74	3.65		
				1:38:52 PM	11.2	26.24	28.11	12	0.21	7.25	79.56	5.49	3.65		
			Bottom	1:33:39 PM	19.8	25.18	31.02	303.4	0.41	7.15	81.29	5.61	6.7		
				1:37:34 PM	19.9	25.08	31.33	247.8	0.07	7.16	73.18	5.05	7.81		
2009/08/01	Sunny	Mid-ebb	Surface	8:41:18 AM	1.2	28.63	21.39	60.1	0.13	7.52	120.51	8.29	1.53	8.06	2.24
				8:44:25 AM	1.4	28.66	21.32	84.1	0.32	7.52	114.97	7.9	1.93		
			Middle	8:40:10 AM	8.9	28.24	23.21	27.9	0.27	7.57	120.61	8.26	1.53		
				8:43:28 AM	9.1	28.23	23.27	241.8	0.08	7.6	113.67	7.79	1.93		
			Bottom	8:39:02 AM	18	25.53	30.73	87.2	0.16	7.19	88.77	6.1	3.65		
				8:42:33 AM	18	25.36	31.08	65.9	0.26	7.2	86.02	5.92	2.84		
		Mid-flood	Surface	11:06:09 PM	1.1	28.62	22.1	348.3	0.06	7.74	103.79	7.11	2.64	5.62	3.88
				11:09:18 PM	1.5	28.71	21.8	5.2	0.22	7.74	101.59	6.96	2.44		
			Middle	11:04:17 PM	9.3	26.57	28.45	120.6	0.23	7.5	60.11	4.11	3.76		
				11:08:24 PM	9	26.65	28.23	73.9	0.18	7.51	62.62	4.28	3.86		
			Bottom	11:03:07 PM	18	24.89	32.01	98.9	0.23	7.3	51.8	3.57	5.28		
				11:07:26 PM	18.9	24.83	32.11	42.1	0.03	7.29	46.79	3.23	5.28		
2009/08/04	Rainy (Typhoon Signal No. 1 in the morning ; Signal No. 3 in the afternoon)	Mid-flood	Surface	3:34:58 AM	1	27.18	26.91	338.6	0.15	7.53	69.29	4.73	2.94	4.23	3.87
				3:37:58 AM	1.3	27.33	26.49	283.1	0.29	7.56	69.21	4.73	2.64		
			Middle	3:33:51 AM	9	26.56	28.79	184.9	0.12	7.46	57.96	3.96	3.65		
				3:36:59 AM	9	26.51	28.75	201.4	0.2	7.45	51.15	3.5	4.16		
			Bottom	3:32:34 AM	18.3	25.42	31.33	286.3	0.22	7.32	47.72	3.28	4.87		
				3:36:00 AM	18	25.47	31.26	286.3	0.22	7.36	52.55	3.61	4.97		

Annex D18 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/06	Cloudy and Rainy	Mid-ebb	Surface	2:35:08 PM	1.1	28.09	22.92	82.2	0.54	7.57	96.37	6.63	3.25	6.42	4.58
				2:38:05 PM	1.3	28.22	22.68	84.4	0.85	7.58	92.71	6.37	3.15		
			Middle	2:33:59 PM	9.8	27.76	24.16	66.3	0.45	7.56	95.3	6.55	4.16		
		2:37:10 PM	9.7	27.79	24.1	66.4	0.6	7.56	89.18	6.13	4.77				
		Bottom	2:32:58 PM	18.5	27.75	24.66	39	0.22	7.57	98.75	6.77	6.39			
			2:36:13 PM	18.3	27.76	24.48	81.9	0.15	7.56	90.76	6.22	5.78			
		Mid-flood	Surface	5:03:00 AM	1	27.68	23.72	273.2	0.22	7.46	79.24	5.46	4.67	5.14	5.14
				5:07:34 AM	1.3	27.68	23.53	306	0.13	7.48	78.9	5.45	4		
			Middle	5:01:58 AM	9	27.26	27.24	156	0.04	7.48	71.46	4.87	5.18		
5:06:26 AM	9.2	27.23	27.4	180	0.13	7.5	70.33	4.79	5						
Bottom	5:00:53 AM	18.3	27.1	27.81	200	0.3	7.45	70.07	4.77	5.99					
	5:05:14 AM	18	27.06	27.94	160.4	0.11	7.48	69.94	4.76	6					
2009/08/08	Cloudy	Mid-ebb	Surface	3:38:26 PM	1.1	29.41	18.73	77.4	0.69	7.44	95.64	6.59	4.67	6.38	5.09
				3:41:12 PM	1.5	29.43	18.52	75.2	0.8	7.43	91.44	6.3	4.57		
			Middle	3:37:23 PM	10.7	29.07	20.2	57.3	0.38	7.43	94.16	6.47	5.07		
		3:40:23 PM	8.5	29.24	19.67	22.3	0.24	7.42	89.67	6.16	5.48				
		Bottom	3:36:27 PM	17.7	28.74	21.71	61.3	0.26	7.42	92.58	6.34	5.18			
			3:39:29 PM	18.3	28.43	23.19	68.5	0.19	7.4	83.67	5.72	5.58			
		Mid-flood	Surface	6:18:44 AM	1.2	28.9	17.61	251.9	0.05	7.34	76.14	5.32	4.36	4.96	4.30
				6:21:22 AM	1.2	28.9	17.6	237.3	0.12	7.35	74.96	5.24	4.16		
			Middle	6:17:47 AM	10.1	28.23	22.84	104.8	0.09	7.33	67.92	4.66	4.36		
6:20:32 AM	10.1	28.13	23.56	284.8	0.07	7.36	67.24	4.61	3.96						
Bottom	6:16:56 AM	18	27.83	25.18	35.3	0.19	7.32	68.72	4.69	4.67					
	6:19:43 AM	18.1	27.9	24.88	84.5	0.16	7.36	67.53	4.61	4.26					
2009/08/12	Cloudy and Rainy	Mid-ebb	Surface	5:42:34 PM	1.3	28.58	23.99	111.5	0.32	7.62	75.74	5.14	2.23	5.08	3.32
				5:47:13 PM	1.1	28.72	23.63	89	0.41	7.62	77.65	5.27	1.93		
			Middle	5:41:12 PM	9.9	28.43	24.67	26.7	0.16	7.61	74.14	5.02	2.44		
		5:46:12 PM	10	28.4	24.89	266.8	0.09	7.61	72.04	4.88	3.15				
		Bottom	5:40:01 PM	18.2	27.61	28.44	197.8	0.11	7.57	62.01	4.17	5.68			
			5:45:09 PM	18.2	27.67	28.22	282.6	0.07	7.58	63.62	4.28	4.47			
		Mid-flood	Surface	9:16:45 AM	1.2	28.76	23.21	200	0.17	7.43	74.89	5.09	2.84	4.70	4.16
				9:20:33 AM	0.9	28.72	23.72	229.6	0.17	7.44	71.64	4.86	2.94		
			Middle	9:15:41 AM	10	28.21	26.24	182.5	0.16	7.4	64.9	4.37	3.86		
9:19:19 AM	10.1	28.29	25.55	168	0.12	7.42	66.52	4.49	3.86						
Bottom	9:14:40 AM	17.8	27.63	28.62	68.3	0.21	7.38	64.37	4.32	6.29					
	9:18:09 AM	17.9	27.75	28.14	68.3	0.21	7.42	63.03	4.24	5.18					
2009/08/14	Cloudy	Mid-ebb	Surface	7:04:57 PM	1.3	28.06	24.81	99.6	0.33	7.38	74.7	5.09	2.94	4.30	4.36
				7:08:13 PM	1.1	27.99	25.11	96.8	0.2	7.39	70.7	4.81	3.15		
			Middle	7:03:31 PM	9.9	26.36	30.58	24.9	0.06	7.29	54.16	3.67	4.36		
		7:07:11 PM	10.1	26.33	30.66	337.6	0.02	7.3	53.37	3.62	4.36				
		Bottom	7:02:28 PM	18.2	25.82	31.85	82.3	0.11	7.3	53.52	3.64	5.89			
			7:06:20 PM	17.9	25.85	31.8	58.9	0.08	7.3	52.63	3.58	5.48			
		Mid-flood	Surface	11:59:19 AM	1.2	28.38	21.05	285.6	0.2	7.4	81.95	5.67	2.34	5.03	5.58
				12:02:42 PM	1	28.51	20.81	213.3	0.13	7.41	81.72	5.65	2.23		
			Middle	11:58:00 AM	9.8	27.46	26.7	177.1	0.02	7.36	64.29	4.38	4.36		
12:01:47 PM	9.9	27.54	26.59	155.4	0.08	7.37	64.66	4.4	3.96						
Bottom	11:56:49 AM	17.9	26.7	29.92	202.1	0.06	7.35	62.31	4.22	9.03					
	12:00:36 PM	17.6	26.64	30.14	111.3	0.04	7.35	60.98	4.13	11.56					

Annex D18 - Baseline Water Quality Monitoring Results

Sampling Date	Weather Condition	Tide	Depth	Time	Depth (m)	Temp (°C)	Salinity (ppt)	Current Direction (deg)	Current Velocity (m/s)	pH	DO Saturation (%)	DO (mg/L)	Turbidity (NTU)	Depth-averaged	
														DO (mg/L)	Turbidity (NTU)
2009/08/16	Cloudy	Mid-ebb	Surface	7:44:44 AM	1.1	29.26	17.51	42.3	0.36	7.31	84.75	5.89	2.74	5.42	3.01
				7:47:58 AM	1.2	29.27	17.44	42.3	0.36	7.33	84.33	5.86	2.64		
			Middle	7:43:37 AM	10.2	28.03	24.41	27.5	0.24	7.26	69.92	4.78	2.34		
				7:46:57 AM	10	28.24	23.38	96.5	0.19	7.29	75.17	5.15	2.23		
			Bottom	7:42:35 AM	18.2	25.84	31.45	63.4	0.34	7.15	56.98	3.88	3.96		
				7:45:53 AM	18.1	25.84	31.48	17.8	0.34	7.17	55.07	3.75	4.16		
		Mid-flood	Surface	10:31:49 PM	1.1	28.74	22.47	66	0.19	7.53	86.7	5.91	2.94	4.80	4.63
				10:35:35 PM	1.4	28.82	22.2	103.5	0.44	7.54	88.71	6.05	2.74		
			Middle	10:30:45 PM	10	27.53	27.52	208.4	0.08	7.36	58	3.93	4.06		
				10:34:30 PM	10.6	25.78	31.34	135	0.09	7.27	48.34	3.3	5.38		
			Bottom	10:29:38 PM	17.7	25.44	32	307	0.11	7.24	45.85	3.13	6.49		
				10:33:33 PM	18.4	25.54	31.83	107.9	0.03	7.27	48.53	3.32	6.19		
2009/08/18	Cloudy	Mid-ebb	Surface	10:02:24 AM	1	28.77	22.14	94.2	0.41	7.45	94.65	6.47	2.23	5.77	4.04
				10:06:53 AM	1.3	29.07	21.47	95.4	0.27	7.49	83.22	5.68	3.15		
			Middle	10:01:00 AM	9.6	28.12	24.17	41.7	0.09	7.36	84.04	5.74	2.84		
				10:05:47 AM	9.9	28.18	23.95	331.6	0.07	7.4	76.07	5.2	2.94		
			Bottom	9:59:56 AM	18.2	26.28	29.88	78.4	0.3	7.17	63.51	4.33	5.78		
				10:04:43 AM	18.1	25.97	30.69	63.3	0.38	7.19	53.16	3.63	7.3		
		Mid-flood	Surface	7:57:16 PM	1.5	27.42	27.82	330.6	0.02	7.59	47.68	3.23	5.78	3.26	11.18
				8:00:24 PM	1.2	27.41	27.86	264.3	0.05	7.58	50.9	3.45	6.29		
			Middle	7:56:12 PM	9.9	26.84	29.26	354.8	0.13	7.57	45.4	3.08	12.48		
				7:59:21 PM	10.1	26.66	29.47	32	0.13	7.53	48.01	3.26	12.48		
			Bottom	7:54:59 PM	18	26.17	30.34	124.2	0.12	7.52	42.17	2.87	15.11		
				7:58:20 PM	17.8	26.14	30.38	140.9	0.09	7.51	47.73	3.25	14.91		
2009/08/21	Sunny	Mid-ebb	Surface	2:48:52 PM	1.2	29.74	23.39	59.7	0.77	7.56	94.86	6.33	6.9	6.07	9.52
				2:53:53 PM	0.9	29.91	23.29	109.6	0.85	7.56	91.98	6.13	6.7		
			Middle	2:47:43 PM	9.8	29.08	24.25	60.5	0.25	7.52	91.83	6.17	9.13		
				2:52:53 PM	9.1	29	24.24	70.9	0.4	7.49	83.88	5.64	8.62		
			Bottom	2:46:41 PM	18.9	28.63	25.06	76.6	0.43	7.5	94.15	6.34	12.78		
				2:51:56 PM	18.1	28.51	25.27	30.1	0.31	7.47	84.19	5.68	12.98		
		Mid-flood	Surface	5:37:57 AM	1.3	29.05	23.35	215.1	0.25	7.37	74.35	5.02	4.26	4.79	6.48
				5:41:02 AM	1.2	28.98	23.65	191.5	0.28	7.39	73.42	4.96	4.47		
			Middle	5:36:53 AM	9.9	28.19	25.98	218.9	0.28	7.33	68.19	4.6	5.68		
				5:40:02 AM	10	28.1	26.18	192.7	0.27	7.37	67.86	4.58	5.78		
			Bottom	5:35:42 AM	18.1	26.95	28.83	50.1	0.34	7.27	62.63	4.25	9.03		
				5:39:03 AM	18.1	26.81	29.11	60.5	0.35	7.33	61.9	4.2	9.64		
2009/08/23	Sunny	Mid-ebb	Surface	3:48:52 PM	1.1	29.68	23.93	74.2	0.84	7.43	79.48	5.3	5.18	5.08	7.41
				3:53:23 PM	1.2	29.72	23.85	77.6	0.79	7.44	77.46	5.16	5.18		
			Middle	3:47:55 PM	10	28.83	25.61	52	0.64	7.39	73.87	4.95	8.42		
				3:52:30 PM	10.3	29.06	25.18	56	0.43	7.41	73.52	4.91	8.12		
			Bottom	3:47:01 PM	17.9	28.78	25.78	50.1	0.32	7.4	76.59	5.13	8.83		
				3:51:28 PM	17.5	29.02	25.32	23	0.15	7.4	74.3	4.97	8.72		
		Mid-flood	Surface	7:02:34 AM	1.2	29.06	23.54	210.7	0.2	7.29	68.55	4.62	5.78	4.34	7.90
				7:05:28 AM	1.3	28.99	23.76	209.7	0.23	7.3	66.2	4.47	5.99		
			Middle	7:01:37 AM	10	28.18	26.11	218.7	0.28	7.28	62	4.18	7.61		
				7:04:38 AM	9.9	28.24	25.94	212.1	0.24	7.28	60.75	4.1	7.81		
			Bottom	7:00:44 AM	18	27.34	28.11	354.7	0.15	7.27	61.52	4.16	9.33		
				7:03:43 AM	17.9	27.29	28.21	107.9	0.28	7.27	58.58	3.97	10.85		

Annex D19 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WFA

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/07/28	Mid-ebb	Surface	5	<0.01	1.31	<2	<0.2	2	<1	<0.1	3	<1	30	1	<1
			4	<0.01	1.31	<2	<0.2	2	<1	<0.1	3	<1	45	1	<1
			--	--	--	--	--	--	--	--	--	--	40	1.1	<1
		Middle	10	0.01	1.08	2	<0.2	3	<1	<0.1	3	<1	35	0.8	<1
			7	<0.01	1.08	2	<0.2	3	<1	<0.1	3	<1	30	0.8	<1
			--	--	--	--	--	--	--	--	--	--	34	1	<1
	Bottom	11	0.04	0.77	<2	<0.2	3	3	<0.1	3	<1	19	0.9	<1	
		11	0.04	0.77	<2	<0.2	2	2	<0.1	3	<1	19	0.9	<1	
		--	--	--	--	--	--	--	--	--	--	26	0.8	<1	
	Mid-flood	Surface	6	<0.01	1.3	2	<0.2	2	<1	<0.1	4	<1	46	1.1	--
			7	<0.01	1.31	2	<0.2	3	<1	<0.1	4	<1	49	1.2	--
			--	--	--	--	--	--	--	--	--	--	31	1.1	--
Middle		7	0.04	1.03	<2	<0.2	7	2	<0.1	5	<1	48	0.9	--	
		7	0.03	1.01	<2	<0.2	7	2	<0.1	5	<1	41	0.8	--	
		--	--	--	--	--	--	--	--	--	--	39	1.5	--	
Bottom	30	0.07	0.65	2	<0.2	14	6	<0.1	5	<1	34	0.8	--		
	29	0.07	0.65	2	<0.2	15	6	<0.1	5	<1	29	0.9	--		
	--	--	--	--	--	--	--	--	--	--	41	0.9	--		
2009/07/30	Mid-ebb	Surface	4	<0.01	1.61	2	<0.2	2	<1	<0.1	2	<1	5	0.7	<1
			5	<0.01	1.62	2	<0.2	3	<1	<0.1	4	<1	<4	0.7	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.6	--
		Middle	4	0.01	1.02	2	<0.2	5	<1	<0.1	3	<1	5	0.8	<1
			3	0.01	1.01	2	<0.2	3	<1	<0.1	4	<1	8	0.9	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.7	--
	Bottom	3	0.05	0.75	<2	<0.2	3	<1	<0.1	2	<1	8	1.1	<1	
		5	0.04	0.73	2	<0.2	3	<1	<0.1	3	<1	5	1	<1	
		--	--	--	--	--	--	--	--	--	--	5	0.9	--	
	Mid-flood	Surface	6	0.01	1.44	2	<0.2	3	<1	<0.1	4	<1	5	0.8	<1
			6	0.01	1.46	<2	<0.2	3	<1	<0.1	4	<1	<4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	4	0.6	--
Middle		6	0.05	0.92	<2	<0.2	4	<1	<0.1	3	<1	6	0.6	1	
		10	0.05	0.87	<2	<0.2	5	2	<0.1	4	<1	7	0.8	<1	
		--	--	--	--	--	--	--	--	--	--	6	0.5	--	
Bottom	8	0.04	0.67	<2	<0.2	4	<1	<0.1	3	<1	7	<0.5	<1		
	6	0.04	0.64	<2	<0.2	3	<1	<0.1	2	<1	5	0.9	<1		
	--	--	--	--	--	--	--	--	--	--	8	0.6	--		
2009/08/01	Mid-ebb	Surface	4	0.02	1.55	3	<0.2	2	<1	<0.1	3	<1	<4	1.1	<1
			5	0.02	1.55	2	<0.2	2	<1	<0.1	3	<1	<4	1.7	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.8	--
		Middle	2	0.04	1.04	2	<0.2	4	1	<0.1	3	<1	4	2	<1
			2	0.03	1.04	2	<0.2	2	<1	<0.1	2	<1	<4	1.5	<1
			--	--	--	--	--	--	--	--	--	--	4	1.2	--
		Bottom	6	0.03	0.75	2	<0.2	2	<1	<0.1	2	<1	<4	1.2	<1
			5	0.03	0.74	2	<0.2	2	<1	<0.1	2	<1	<4	1.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.4	--

Annex D19 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/01	Mid-flood	Surface	4	0.02	1.48	3	<0.2	2	<1	<0.1	2	<1	<4	1.4	<1	
			4	0.02	1.49	2	<0.2	2	<1	<0.1	2	<1	<4	1.2	<1	
			--	--	--	--	--	--	--	--	--	--	<4	1.4	--	
		Middle	5	0.04	0.88	3	<0.2	3	1	<0.1	3	<1	5	1.5	<1	
			6	0.03	0.88	2	<0.2	2	1	<0.1	2	<1	<4	1.1	<1	
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Bottom	9	0.05	0.6	2	<0.2	5	3	<0.1	5	<1	8	<0.5	<1		
		7	0.06	0.62	2	<0.2	3	2	<0.1	3	<1	6	0.7	<1		
		--	--	--	--	--	--	--	--	--	--	7	<0.5	--		
2009/08/04	Mid-ebb	Surface	--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--		
			--	--	--	--	--	--	--	--	--	--	--	--		
		Middle	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	
	Bottom	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--		
	Mid-flood	Surface	4	0.06	0.83	3	<0.2	2	<1	<0.1	2	<1	<4	0.6	<1	
			4	0.05	0.83	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
Middle		9	0.08	0.48	3	<0.2	3	1	<0.1	1	<1	<4	<0.5	1		
		10	0.08	0.46	2	<0.2	2	1	<0.1	1	<1	<4	<0.5	<1		
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
Bottom	29	0.08	0.42	3	<0.2	3	2	<0.1	2	<1	6	<0.5	1			
	36	0.08	0.43	3	<0.2	3	3	<0.1	2	<1	7	<0.5	1			
	--	--	--	--	--	--	--	--	--	--	6	<0.5	--			
2009/08/06	Mid-ebb	Surface	8	<0.01	1.16	3	<0.2	4	<1	<0.1	3	<1	<4	1	<1	
			10	<0.01	1.14	3	<0.2	2	<1	<0.1	3	<1	<4	0.9	<1	
			--	--	--	--	--	--	--	--	--	--	<4	1	--	
		Middle	8	0.08	1.07	2	<0.2	3	<1	<0.1	3	<1	5	1.2	<1	
			9	0.09	1.06	2	<0.2	4	1	<0.1	4	<1	5	1.2	<1	
			--	--	--	--	--	--	--	--	--	--	<4	0.9	--	
		Bottom	9	0.07	1.19	3	<0.2	6	2	<0.1	4	<1	7	1	<1	
			11	0.07	1.18	3	<0.2	5	2	<0.1	4	<1	8	1	<1	
			--	--	--	--	--	--	--	--	--	--	7	1.2	--	
	Mid-flood	Surface	9	0.01	1.2	3	<0.2	2	<1	<0.1	4	<1	<4	<0.5	<1	
			9	<0.01	1.19	2	<0.2	2	<1	<0.1	3	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
		Middle	10	0.09	1.04	2	<0.2	4	<1	<0.1	4	<1	5	<0.5	<1	
			11	0.08	1.03	2	<0.2	3	<1	<0.1	4	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
Bottom	37	0.1	0.88	2	<0.2	4	2	<0.1	6	<1	6	<0.5	1			
	39	0.12	0.92	3	<0.2	4	2	<0.1	6	<1	6	0.5	1			
	--	--	--	--	--	--	--	--	--	--	6	<0.5	--			

Annex D19 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)		
2009/08/08	Mid-ebb	Surface	7	<0.01	1.2	2	<0.2	3	2	<0.1	2	<1	5	1.6	<1		
			5	<0.01	1.17	2	<0.2	3	2	<0.1	2	<1	4	1.1	<1		
			--	--	--	--	--	--	--	--	--	--	--	<4	0.9	--	
		Middle	8	0.06	0.98	2	<0.2	6	2	<0.1	2	<1	2	<1	5	1	<1
			8	0.05	0.97	2	<0.2	4	1	<0.1	2	<1	2	<1	6	0.9	<1
			--	--	--	--	--	--	--	--	--	--	--	--	6	0.5	--
	Bottom	36	0.06	0.92	2	<0.2	7	4	<0.1	4	<1	4	<1	12	1.3	1	
		34	0.06	0.91	3	<0.2	6	4	<0.1	4	<1	4	<1	11	1	1	
		--	--	--	--	--	--	--	--	--	--	--	--	10	1.8	--	
	Mid-flood	Surface	7	<0.01	1.19	2	<0.2	2	<1	<0.1	<0.1	2	<1	<4	0.5	<1	
			8	0.01	1.2	2	<0.2	2	<1	<0.1	<0.1	2	<1	<4	0.6	<1	
			--	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
Middle		17	0.06	0.95	2	<0.2	2	<1	<0.1	<0.1	2	<1	<1	<4	0.7	<1	
		17	0.06	0.96	2	<0.2	2	<1	<0.1	<0.1	2	<1	<1	<4	0.6	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	4	<0.5	--	
Bottom	23	0.1	0.68	2	<0.2	2	<1	<0.1	<0.1	2	<1	<1	4	<0.5	<1		
	25	0.11	0.68	2	<0.2	3	1	<0.1	<0.1	2	<1	<1	5	<0.5	<1		
--	--	--	--	--	--	--	--	--	--	--	--	--	5	<0.5	--		
2009/08/12	Mid-ebb	Surface	4	0.07	1.44	<2	<0.2	2	<1	<0.1	4	<1	<4	0.6	<1		
			4	0.07	1.45	2	<0.2	2	<1	<0.1	<0.1	4	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
		Middle	16	0.07	0.89	2	<0.2	3	<1	<0.1	<0.1	2	<1	<1	4	<0.5	<1
			18	0.07	0.87	3	<0.2	4	<1	<0.1	<0.1	2	<1	<1	5	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Bottom	10	0.04	0.7	<2	<0.2	2	<1	<0.1	<0.1	2	<1	<1	<4	<0.5	<1	
		12	0.04	0.71	<2	<0.2	2	<1	<0.1	<0.1	2	<1	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Mid-flood	Surface	6	0.12	1.58	<2	<0.2	2	<1	<0.1	<0.1	4	<1	<4	<0.5	<1	
			6	0.12	1.57	2	<0.2	2	<1	<0.1	<0.1	4	<1	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
Middle		17	0.06	0.64	2	<0.2	2	<1	<0.1	<0.1	2	<1	<1	<4	<0.5	<1	
		18	0.06	0.62	2	<0.2	2	<1	<0.1	<0.1	2	<1	<1	<4	<0.5	1	
		--	--	--	--	--	--	--	--	--	--	--	--	4	<0.5	--	
Bottom	52	0.11	0.55	3	<0.2	5	2	<0.1	<0.1	2	<1	<1	7	<0.5	1		
	52	0.11	0.55	3	<0.2	7	5	<0.1	<0.1	2	<1	<1	10	0.6	2		
--	--	--	--	--	--	--	--	--	--	--	--	--	14	<0.5	--		
2009/08/14	Mid-ebb	Surface	6	0.09	1.39	3	<0.2	3	<1	<0.1	4	<1	<1	7	0.6	<1	
			5	0.09	1.39	3	<0.2	2	<1	<0.1	<0.1	4	<1	<1	4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	--	--	4	0.5	--
		Middle	8	0.1	0.84	2	<0.2	7	2	<0.1	<0.1	2	<1	<1	6	0.8	<1
			9	0.1	0.84	2	<0.2	4	<1	<0.1	<0.1	2	<1	<1	8	1.1	<1
			--	--	--	--	--	--	--	--	--	--	--	--	5	0.7	--
Bottom	9	0.09	0.64	2	<0.2	2	<1	<0.1	<0.1	2	<1	<1	4	0.6	<1		
	8	0.08	0.62	2	<0.2	2	<1	<0.1	<0.1	2	<1	<1	5	0.6	<1		
	--	--	--	--	--	--	--	--	--	--	--	--	4	<0.5	--		

Annex D19 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)		
2009/08/14	Mid-flood	Surface	6	0.17	1.63	3	<0.2	3	<1	<0.1	6	<1	<4	0.8	<1		
			7	0.17	1.63	2	<0.2	3	<1	<0.1	6	<1	<4	0.7	<1		
			--	--	--	--	--	--	--	--	--	--	--	<4	0.7	--	
	Middle	19	0.1	1.84	2	<0.2	3	1	<0.1	3	<1	3	<1	4	0.9	1	
		21	0.1	0.85	2	<0.2	3	1	<0.1	3	<1	3	<1	4	0.8	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	5	0.9	--	
	Bottom	28	0.08	0.55	<2	<0.2	3	1	<0.1	2	<1	2	<1	<4	0.7	1	
		32	0.08	0.55	2	<0.2	3	2	<0.1	2	<1	2	<1	5	0.6	1	
		--	--	--	--	--	--	--	--	--	--	--	--	5	<0.5	--	
2009/08/16	Mid-ebb	Surface	4	<0.01	1.27	3	<0.2	1	<1	<0.1	3	<1	<4	<0.5	<1		
			4	<0.01	1.23	<2	<0.2	1	<1	<0.1	3	<1	3	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Middle	6	0.19	1.04	3	<0.2	2	<1	<0.1	2	<1	2	<1	<4	<0.5	<1	
		6	0.2	1.05	3	<0.2	2	<1	<0.1	3	<1	3	<1	4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Bottom	17	0.04	0.72	3	<0.2	2	<1	<0.1	2	<1	2	<1	<4	<0.5	<1	
		15	0.05	0.73	4	<0.2	1	<1	<0.1	2	<1	2	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Mid-flood	Surface	5	0.07	1.37	3	<0.2	3	<1	<0.1	4	<1	<4	1.1	<1		
			6	0.05	1.34	2	<0.2	2	<1	<0.1	3	<1	<4	1.3	<1		
			--	--	--	--	--	--	--	--	--	--	--	<4	1.1	--	
Middle		6	0.05	0.75	<2	<0.2	2	<1	<0.1	2	<1	2	<1	<4	<0.5	<1	
		5	0.05	0.76	<2	<0.2	7	<1	<0.1	4	<1	4	<1	<4	0.6	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	10	<0.5	--	
Bottom	12	0.07	0.52	2	<0.2	2	1	<0.1	2	<1	2	<1	<4	<0.5	<1		
	13	0.07	0.51	<2	<0.2	4	3	<0.1	2	<1	2	<1	8	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
2009/08/18	Mid-ebb	Surface	4	0.03	1.23	2	<0.2	2	<1	<0.1	3	<1	<4	1.7	<1		
			5	0.04	1.22	2	<0.2	2	<1	<0.1	3	<1	<4	1.2	<1		
			--	--	--	--	--	--	--	--	--	--	--	<4	1.5	--	
		Middle	14	0.05	0.89	2	<0.2	2	<1	<0.1	2	<1	2	<1	9	0.8	<1
			19	0.05	0.86	2	<0.2	3	<1	<0.1	2	<1	2	<1	<4	1.4	1
			--	--	--	--	--	--	--	--	--	--	--	--	6	1.3	--
	Bottom	39	0.05	0.83	2	<0.2	2	1	<0.1	2	<1	2	<1	5	1.2	<1	
		37	0.05	0.82	3	<0.2	3	2	<0.1	2	<1	2	<1	6	1.1	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	6	1.1	--	
	Mid-flood	Surface	15	<0.01	1.79	3	<0.2	2	<1	<0.1	<0.1	4	<1	<4	0.9	<1	
			15	<0.01	1.82	3	<0.2	2	<1	<0.1	<0.1	4	<1	<4	1.1	<1	
			--	--	--	--	--	--	--	--	--	--	--	--	<4	1.7	--
Middle		23	0.08	1.34	2	<0.2	2	<1	<0.1	2	<1	2	<1	<4	1.5	1	
		23	0.08	1.36	3	<0.2	3	<1	<0.1	2	<1	2	<1	<4	1.7	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	4	1.8	--	
Bottom	74	0.09	0.87	2	<0.2	5	2	<0.1	2	<1	2	<1	7	1.4	2		
	75	0.08	0.87	3	<0.2	7	5	<0.1	2	<1	2	<1	11	1.5	2		
	--	--	--	--	--	--	--	--	--	--	--	--	14	1.7	--		

Annex D19 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/21	Mid-ebb	Surface	8	0.02	0.99	<2	<0.2	2	<1	<0.1	2	<1	7	1.3	<1
			9	0.02	1	2	<0.2	2	<1	<0.1	2	<1	<4	1.3	<1
			--	--	--	--	--	--	--	--	--	--	5	1.2	--
		Middle	13	0.05	0.97	2	<0.2	3	<1	<0.1	3	<1	4	1.3	<1
			14	0.05	0.97	2	<0.2	2	<1	<0.1	2	<1	5	1.4	<1
			--	--	--	--	--	--	--	--	--	--	4	1.2	--
	Bottom	72	0.05	0.91	2	<0.2	2	<1	<0.1	2	<1	5	1.6	2	
		83	0.05	0.9	2	<0.2	2	<1	<0.1	3	<1	5	1.6	2	
		--	--	--	--	--	--	--	--	--	--	4	1.8	--	
	Mid-flood	Surface	9	0.02	1.31	2	<0.2	2	<1	<0.1	4	<1	11	1.1	<1
			10	0.03	1.3	2	<0.2	3	<1	<0.1	4	<1	10	1.3	<1
			--	--	--	--	--	--	--	--	--	--	13	1.2	--
Middle		21	0.07	0.88	2	<0.2	3	1	<0.1	2	<1	9	1.1	<1	
		21	0.09	0.9	2	<0.2	4	2	<0.1	3	<1	9	1.2	<1	
		--	--	--	--	--	--	--	--	--	--	12	1.2	--	
Bottom	163	0.11	0.68	2	<0.2	1	<1	<0.1	2	<1	6	2.2	3		
	154	0.11	0.67	4	<0.2	9	8	<0.1	4	<1	20	2.1	4		
	--	--	--	--	--	--	--	--	--	--	22	2.2	--		
2009/08/23	Mid-ebb	Surface	9	<0.01	1.3	2	<0.2	2	<1	<0.1	4	<1	5	0.6	<1
			10	<0.01	1.32	2	<0.2	<1	<1	<0.1	4	<1	<4	0.9	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.1	--
		Middle	10	0.02	0.98	2	<0.2	2	<1	<0.1	2	<1	<4	1	<1
			9	0.01	0.96	2	<0.2	2	<1	<0.1	2	<1	<4	1.1	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.1	--
	Bottom	15	0.03	0.98	2	<0.2	2	<1	<0.1	2	<1	4	0.8	<1	
		16	0.04	0.98	2	0.4	2	<1	<0.1	2	<1	19	1.4	<1	
		--	--	--	--	--	--	--	--	--	--	7	0.8	--	
	Mid-flood	Surface	10	<0.01	1.38	2	<0.2	2	<1	<0.1	4	<1	<4	0.8	<1
			10	<0.01	1.38	2	<0.2	2	<1	<0.1	4	<1	4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.7	--
Middle		34	0.05	0.94	2	<0.2	4	<1	<0.1	3	<1	4	1	1	
		34	0.04	0.94	3	<0.2	6	2	<0.1	3	<1	5	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	6	0.6	--	
Bottom	188	0.07	0.75	4	<0.2	11	8	<0.1	5	<1	20	0.9	4		
	193	0.08	0.75	4	<0.2	10	8	<0.1	5	<1	20	0.9	4		
	--	--	--	--	--	--	--	--	--	--	17	0.8	--		

Annex D20 - Baseline Water Quality Monitoring Results

Sampling Station ESC-WFB

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/07/28	Mid-ebb	Surface	7	<0.01	1.11	<2	<0.2	2	<1	<0.1	2	<1	39	1	--
			9	<0.01	1.11	<2	<0.2	3	<1	<0.1	2	<1	29	1	--
			--	--	--	--	--	--	--	--	--	--	43	0.9	--
		Middle	19	<0.01	0.32	<2	<0.2	2	1	<0.1	1	<1	35	0.8	--
			19	<0.01	0.31	<2	<0.2	2	1	<0.1	1	<1	27	0.7	--
			--	--	--	--	--	--	--	--	--	--	32	0.9	--
	Bottom	25	<0.01	0.3	2	<0.2	2	1	<0.1	1	<1	22	0.7	--	
		23	<0.01	0.31	2	<0.2	2	1	<0.1	1	<1	32	0.7	--	
		--	--	--	--	--	--	--	--	--	--	41	0.7	--	
	Mid-flood	Surface	4	<0.01	1.15	<2	<0.2	2	<1	<0.1	2	<1	24	1.1	<1
			6	0.01	1.16	2	<0.2	2	<1	<0.1	2	<1	44	1.4	<1
			--	--	--	--	--	--	--	--	--	--	48	1.1	<1
Middle		4	<0.01	1.12	<2	<0.2	2	<1	<0.1	3	<1	28	0.7	<1	
		4	<0.01	1.13	<2	<0.2	2	<1	<0.1	3	<1	40	0.6	<1	
		--	--	--	--	--	--	--	--	--	--	48	0.7	<1	
Bottom	18	0.01	0.8	2	<0.2	3	<1	<0.1	3	<1	30	0.7	<1		
	18	0.01	0.81	2	<0.2	3	<1	<0.1	2	<1	17	0.7	<1		
	--	--	--	--	--	--	--	--	--	--	20	0.6	<1		
2009/07/30	Mid-ebb	Surface	3	<0.01	1.18	2	<0.2	2	1	<0.1	3	<1	<4	0.8	<1
			6	<0.01	1.16	<2	<0.2	3	2	<0.1	3	<1	<4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	4	0.7	--
		Middle	5	<0.01	0.94	<2	<0.2	5	2	<0.1	2	<1	6	0.8	<1
			8	0.02	0.94	<2	<0.2	5	2	<0.1	2	<1	6	0.8	<1
			--	--	--	--	--	--	--	--	--	--	7	<0.5	--
	Bottom	9	0.01	0.6	<2	<0.2	2	<1	<0.1	2	<1	7	0.6	<1	
		8	0.02	0.57	<2	<0.2	2	<1	<0.1	2	<1	7	1	<1	
		--	--	--	--	--	--	--	--	--	--	8	0.7	--	
	Mid-flood	Surface	4	<0.01	1.14	2	<0.2	2	<1	<0.1	3	<1	<4	<0.5	<1
			4	<0.01	1.2	<2	<0.2	2	<1	<0.1	3	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
Middle		4	<0.01	1.02	2	<0.2	2	1	<0.1	3	<1	6	0.6	<1	
		5	<0.01	1.08	<2	<0.2	2	<1	<0.1	2	<1	<4	0.5	<1	
		--	--	--	--	--	--	--	--	--	--	5	0.6	--	
Bottom	8	0.01	0.74	<2	<0.2	3	<1	<0.1	2	<1	6	0.6	<1		
	9	0.02	0.73	<2	<0.2	3	<1	<0.1	2	<1	7	0.6	<1		
	--	--	--	--	--	--	--	--	--	--	8	<0.5	--		
2009/08/01	Mid-ebb	Surface	3	<0.01	1.4	3	<0.2	2	<1	<0.1	3	<1	<4	1.6	<1
			3	<0.01	1.42	2	<0.2	2	1	<0.1	3	<1	<4	1.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.4	--
		Middle	5	0.02	0.63	2	<0.2	2	<1	<0.1	2	<1	<4	0.9	<1
			5	0.02	0.61	<2	0.5	2	<1	<0.1	2	<1	<4	1.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	1	--
	Bottom	3	0.02	0.45	2	<0.2	2	<1	<0.1	2	<1	<4	1.2	<1	
		5	0.02	0.44	2	<0.2	2	2	<0.1	1	<1	<4	0.7	<1	
		--	--	--	--	--	--	--	--	--	--	<4	1.7	--	

Annex D20 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/01	Mid-flood	Surface	8	<0.01	1.16	<2	<0.2	6	3	<0.1	4	<1	7	1.8	<1
			8	<0.01	1.14	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.8	--
		Middle	18	0.03	0.42	2	<0.2	8	2	<0.1	2	<1	11	0.5	<1
			21	0.04	0.43	<2	<0.2	4	3	<0.1	2	<1	11	0.9	1
			--	--	--	--	--	--	--	--	--	--	8	<0.5	--
	Bottom	20	0.05	0.44	2	<0.2	3	2	<0.1	4	<1	17	0.7	<1	
		18	0.04	0.41	<2	<0.2	4	3	<0.1	3	<1	12	0.7	1	
		--	--	--	--	--	--	--	--	--	--	14	<0.5	--	
2009/08/04	Mid-ebb	Surface	4	0.02	0.49	2	0.2	2	2	<0.1	2	<1	5	1.1	<1
			3	0.02	0.51	2	<0.2	2	2	<0.1	2	<1	4	0.9	<1
			--	--	--	--	--	--	--	--	--	--	7	0.8	--
		Middle	7	0.03	0.39	2	<0.2	2	<1	<0.1	2	<1	<4	0.6	<1
			7	0.02	0.38	2	<0.2	2	1	<0.1	2	<1	5	1.1	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.7	--
	Bottom	15	0.02	0.31	3	<0.2	4	<1	<0.1	2	<1	5	<0.5	<1	
		14	0.02	0.3	2	<0.2	3	<1	<0.1	2	<1	5	0.6	<1	
		--	--	--	--	--	--	--	--	--	--	5	<0.5	--	
	Mid-flood	Surface	2	0.03	0.59	2	<0.2	2	1	<0.1	2	<1	<4	0.7	<1
			2	0.03	0.59	2	<0.2	2	1	<0.1	2	<1	<4	0.9	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
Middle		7	0.03	0.51	2	<0.2	4	2	<0.1	2	<1	5	<0.5	<1	
		8	0.03	0.51	2	<0.2	2	1	<0.1	2	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
Bottom	10	0.03	0.39	2	<0.2	2	1	<0.1	2	<1	<4	<0.5	<1		
	13	0.03	0.39	2	<0.2	2	2	<0.1	2	<1	4	1.1	3		
	--	--	--	--	--	--	--	--	--	--	4	<0.5	--		
2009/08/06	Mid-ebb	Surface	5	0.04	0.69	2	<0.2	2	<1	<0.1	2	<1	<4	1.2	<1
			6	0.04	0.66	2	<0.2	2	<1	<0.1	2	<1	<4	1	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.7	--
		Middle	10	0.04	0.68	2	<0.2	4	1	<0.1	2	<1	<4	1	<1
			10	0.05	0.66	2	<0.2	3	<1	<0.1	4	<1	5	1.1	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.1	--
	Bottom	41	0.05	0.59	3	<0.2	4	4	<0.1	2	<1	10	1.1	<1	
		44	0.05	0.58	2	<0.2	4	3	<0.1	2	<1	9	0.8	1	
		--	--	--	--	--	--	--	--	--	--	8	0.7	--	
	Mid-flood	Surface	8	0.06	0.72	2	<0.2	2	<1	<0.1	2	<1	<4	0.5	<1
			9	0.06	0.72	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.5	--
Middle		6	0.06	0.7	2	<0.2	2	<1	<0.1	2	<1	<4	0.8	<1	
		7	0.06	0.7	2	<0.2	2	<1	<0.1	2	<1	<4	0.6	<1	
		--	--	--	--	--	--	--	--	--	--	<4	0.8	--	
Bottom	30	0.04	0.53	3	<0.2	3	1	<0.1	2	<1	5	0.7	<1		
	28	0.05	0.53	2	<0.2	3	1	<0.1	3	<1	4	0.6	<1		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		

Annex D20 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/08	Mid-ebb	Surface	5	<0.01	1.19	2	<0.2	2	1	<0.1	2	<1	<4	0.7	<1	
			4	<0.01	1.17	2	<0.2	3	1	<0.1	2	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	0.6	--
		Middle	14	0.03	0.4	2	<0.2	3	2	<0.1	1	<1	5	<0.5	<0.5	<1
			16	0.04	0.45	2	<0.2	4	2	<0.1	1	<1	5	<0.5	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	4	<0.5	<0.5	--
	Bottom	23	0.03	0.23	<2	<0.2	4	2	<0.1	1	<1	5	<0.5	<0.5	<1	
		26	0.03	0.23	2	<0.2	4	2	<0.1	1	<1	6	<0.5	<0.5	1	
		--	--	--	--	--	--	--	--	--	--	5	<0.5	<0.5	--	
	Mid-flood	Surface	4	<0.01	1.25	2	<0.2	1	<1	<0.1	2	<1	<4	0.6	<1	
			3	<0.01	1.27	2	<0.2	1	<1	<0.1	2	<1	<4	0.6	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	0.6	--
Middle		11	0.03	0.44	<2	<0.2	2	<1	<0.1	<1	<1	<4	<0.5	<0.5	<1	
		12	0.02	0.43	2	<0.2	2	<1	<0.1	<1	<1	<4	<0.5	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
Bottom	37	0.03	0.26	<2	<0.2	2	1	<0.1	<1	<1	4	<0.5	<0.5	1		
	36	0.03	0.26	2	<0.2	2	1	<0.1	<1	<1	4	<0.5	<0.5	1		
	--	--	--	--	--	--	--	--	--	--	5	<0.5	<0.5	--		
2009/08/12	Mid-ebb	Surface	4	0.01	1.38	2	<0.2	1	<1	<0.1	3	<1	<4	<0.5	<1	
			4	0.02	1.36	3	<0.2	2	<1	<0.1	3	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
		Middle	8	0.07	1.13	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<0.5	<1
			7	0.06	1.1	2	<0.2	3	<1	<0.1	3	<1	6	<0.5	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	4	<0.5	<0.5	--
	Bottom	11	0.01	0.34	3	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<0.5	<1	
		13	<0.01	0.34	<2	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Mid-flood	Surface	4	0.01	1.45	2	<0.2	2	<1	<0.1	3	<1	<4	<0.5	<1	
			5	<0.01	1.45	2	<0.2	2	1	<0.1	3	<1	<4	0.6	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
Middle		3	0.06	1.3	3	<0.2	2	<1	<0.1	3	<1	<4	<0.5	<0.5	<1	
		4	0.06	1.3	2	<0.2	2	<1	<0.1	3	<1	<4	<0.5	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
Bottom	28	0.04	0.8	3	<0.2	2	1	<0.1	2	<1	4	<0.5	<0.5	<1		
	26	0.04	0.79	3	<0.2	2	1	<0.1	2	<1	5	<0.5	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	10	<0.5	<0.5	--		
2009/08/14	Mid-ebb	Surface	4	<0.01	1.33	3	<0.2	1	<1	<0.1	2	<1	<4	0.9	<1	
			3	<0.01	1.31	3	<0.2	2	<1	<0.1	3	<1	<4	1.1	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.1	--
		Middle	7	0.03	1.06	3	<0.2	3	<1	<0.1	3	<1	<4	0.7	<1	
			7	0.03	1.04	3	<0.2	2	<1	<0.1	3	<1	<4	0.7	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	0.8	--
	Bottom	18	<0.01	0.31	2	<0.2	4	1	<0.1	1	<1	6	0.8	<1		
		16	<0.01	0.31	3	<0.2	3	1	<0.1	1	<1	6	0.6	<1		
		--	--	--	--	--	--	--	--	--	--	5	0.9	<1		

Annex D20 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/14	Mid-flood	Surface	3	<0.01	1.38	3	<0.2	2	<1	<0.1	3	<1	<4	1	<1
			3	<0.01	1.39	2	<0.2	2	<1	<0.1	3	<1	<4	0.9	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	0.9
		Middle	4	<0.01	1.27	2	<0.2	6	<1	<0.1	3	<1	<4	1.8	<1
			4	<0.01	1.26	2	<0.2	7	<1	<0.1	3	<1	4	0.9	<1
			--	--	--	--	--	--	--	--	--	--	--	4	1.2
	Bottom	18	0.02	0.8	2	<0.2	2	<1	<0.1	3	<1	<4	0.7	<1	
		17	0.02	0.81	2	<0.2	3	<1	<0.1	3	<1	4	0.7	<1	
		--	--	--	--	--	--	--	--	--	--	--	<4	0.6	--
2009/08/16	Mid-ebb	Surface	3	<0.01	1.32	3	<0.2	1	<1	<0.1	3	<1	<4	0.9	<1
			3	<0.01	1.28	3	<0.2	1	<1	<0.1	3	<1	<4	0.8	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	0.7
		Middle	4	<0.01	1.28	2	<0.2	2	<1	<0.1	3	<1	<4	0.8	<1
			5	<0.01	1.24	3	<0.2	2	<1	<0.1	3	<1	<4	0.9	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5
		Bottom	7	<0.01	1.1	3	<0.2	2	<1	<0.1	3	<1	<4	0.7	<1
			6	<0.01	1.1	2	<0.2	2	<1	<0.1	3	<1	<4	1	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	0.7
	Mid-flood	Surface	8	<0.01	0.91	3	<0.2	2	<1	<0.1	3	<1	<4	1	<1
			8	<0.01	0.93	4	<0.2	3	<1	<0.1	3	<1	<4	1	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	1.6
		Middle	9	<0.01	0.73	3	<0.2	3	1	<0.1	2	<1	6	<0.5	<1
			8	0.01	0.75	<2	<0.2	3	1	<0.1	3	<1	<4	0.9	<1
			--	--	--	--	--	--	--	--	--	--	--	5	0.8
Bottom	15	0.05	0.44	<2	<0.2	2	2	<0.1	2	<1	6	<0.5	<1		
	13	0.04	0.43	2	<0.2	3	2	<0.1	2	<1	9	1	<1		
	--	--	--	--	--	--	--	--	--	--	--	<4	1.1	--	
2009/08/18	Mid-ebb	Surface	8	<0.01	0.91	2	<0.2	2	<1	<0.1	3	<1	<4	1.9	<1
			8	0.02	0.96	2	<0.2	3	<1	<0.1	3	<1	4	1.8	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	1.1
		Middle	20	0.03	0.47	2	<0.2	4	1	<0.1	1	<1	5	1.5	<1
			20	0.03	0.49	2	<0.2	3	1	<0.1	1	<1	<4	1.6	<1
			--	--	--	--	--	--	--	--	--	--	--	4	1.4
		Bottom	42	0.02	0.4	2	<0.2	2	1	<0.1	1	<1	<4	1.4	1
			40	0.02	0.41	3	<0.2	2	3	<0.1	4	<1	15	1.8	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	1
	Mid-flood	Surface	9	<0.01	1.17	2	<0.2	2	<1	<0.1	3	<1	<4	1.6	<1
			9	<0.01	1.2	2	<0.2	2	1	<0.1	3	<1	<4	1.5	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	1.4
Middle		14	<0.01	1.04	3	<0.2	2	<1	<0.1	3	<1	<4	1.6	<1	
		14	<0.01	1.08	2	<0.2	2	<1	<0.1	3	<1	<4	1.8	<1	
		--	--	--	--	--	--	--	--	--	--	--	<4	1.8	--
Bottom	24	0.02	0.88	3	<0.2	2	1	<0.1	2	<1	4	1.2	<1		
	22	0.02	0.87	3	<0.2	2	1	<0.1	2	<1	5	1.2	<1		
	--	--	--	--	--	--	--	--	--	--	10	1.3	--		

Annex D20 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/21	Mid-ebb	Surface	6	<0.01	0.92	2	<0.2	2	<1	<0.1	2	<1	7	1.4	<1
			7	<0.01	0.92	2	<0.2	2	<1	<0.1	2	<1	<4	1.2	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	1.2
		Middle	15	<0.01	0.48	<2	<0.2	3	<1	<0.1	2	<1	5	1.1	<1
			17	<0.01	0.48	<2	<0.2	2	<1	<0.1	1	<1	7	1	<1
			--	--	--	--	--	--	--	--	--	--	5	1.1	--
	Bottom	35	0.02	0.37	<2	<0.2	1	<1	<0.1	1	<1	<4	1.3	<1	
		37	0.03	0.38	<2	<0.2	1	<1	<0.1	1	<1	5	1.3	<1	
		--	--	--	--	--	--	--	--	--	--	<4	1	--	
	Mid-flood	Surface	7	<0.01	0.92	2	<0.2	3	<1	<0.1	2	<1	<4	1.1	<1
			8	<0.01	0.92	2	<0.2	4	<1	<0.1	2	<1	<4	1	<1
			--	--	--	--	--	--	--	--	--	--	6	1.2	--
Middle		15	0.01	0.85	2	<0.2	2	<1	<0.1	2	<1	<4	1.1	<1	
		14	0.01	0.86	2	<0.2	2	<1	<0.1	2	<1	9	1.1	<1	
		--	--	--	--	--	--	--	--	--	--	<4	1	--	
Bottom	40	0.02	0.7	2	<0.2	1	<1	<0.1	2	<1	<4	1	1		
	43	0.02	0.7	2	<0.2	1	<1	<0.1	2	<1	4	1.1	<1		
	--	--	--	--	--	--	--	--	--	--	<4	0.9	--		
2009/08/23	Mid-ebb	Surface	7	<0.01	0.96	2	<0.2	2	1	<0.1	2	<1	<4	0.6	<1
			6	<0.01	0.94	<2	<0.2	2	<1	<0.1	2	<1	<4	0.7	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
		Middle	21	0.02	0.45	3	<0.2	3	<1	<0.1	1	<1	4	<0.5	<1
			19	0.03	0.45	2	<0.2	2	<1	<0.1	1	<1	5	1	1
			--	--	--	--	--	--	--	--	--	--	<4	0.6	--
	Bottom	25	0.02	0.39	2	<0.2	<1	<1	<0.1	1	<1	4	<0.5	<1	
		25	0.02	0.4	<2	<0.2	<1	<1	<0.1	1	<1	4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Mid-flood	Surface	5	<0.01	1.02	2	<0.2	2	<1	<0.1	2	<1	<4	0.5	<1
			5	<0.01	1.02	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
Middle		25	0.02	0.77	2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1	
		28	0.01	0.76	2	<0.2	2	<1	<0.1	3	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
Bottom	109	0.02	0.42	2	<0.2	<1	<1	<0.1	1	<1	<4	<0.5	2		
	111	0.03	0.44	<2	<0.2	<1	<1	<0.1	1	<1	<4	0.7	2		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		

Annex D21 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WMA

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/07/28	Mid-ebb	Surface	6	<0.01	1.29	<2	<0.2	2	2	<0.1	3	<1	38	0.8	<1
			5	<0.01	1.29	<2	<0.2	2	2	<0.1	3	<1	25	0.8	<1
			--	--	--	--	--	--	--	--	--	--	23	0.9	<1
		Middle	7	0.02	0.81	2	<0.2	3	3	<0.1	3	<1	42	1.3	<1
			6	0.01	0.81	2	<0.2	4	4	<0.1	3	<1	38	1.8	<1
			--	--	--	--	--	--	--	--	--	--	37	1.4	<1
	Bottom	18	0.09	0.55	<2	<0.2	3	1	<0.1	2	<1	26	0.7	<1	
		21	0.09	0.55	<2	<0.2	2	1	<0.1	2	<1	49	0.7	<1	
		--	--	--	--	--	--	--	--	--	--	22	0.6	<1	
	Mid-flood	Surface	7	<0.01	1.23	2	<0.2	8	<1	<0.1	4	<1	46	<0.5	<1
			5	<0.01	1.23	2	<0.2	9	<1	<0.1	4	<1	44	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	49	<0.5	<1
Middle		8	0.03	0.9	<2	<0.2	16	1	<0.1	4	<1	32	<0.5	<1	
		8	0.03	0.9	2	<0.2	13	<1	<0.1	4	<1	19	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	42	0.5	<1	
Bottom	26	0.05	0.75	2	<0.2	6	2	<0.1	3	<1	42	0.8	<1		
	28	0.05	0.74	2	<0.2	7	2	<0.1	3	<1	42	0.9	<1		
	--	--	--	--	--	--	--	--	--	--	38	0.8	<1		
2009/07/30	Mid-ebb	Surface	4	<0.01	1.02	<2	<0.2	2	<1	<0.1	3	<1	<4	0.7	<1
			3	<0.01	1.01	<2	<0.2	3	<1	<0.1	2	<1	<4	0.8	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.7	--
		Middle	7	0.03	0.66	<2	<0.2	2	1	<0.1	2	<1	5	0.6	<1
			10	0.03	0.67	<2	<0.2	2	<1	<0.1	4	<1	5	0.6	<1
			--	--	--	--	--	--	--	--	--	--	7	0.6	--
	Bottom	10	0.12	0.47	<2	<0.2	2	1	<0.1	1	<1	5	0.6	<1	
		8	0.12	0.46	<2	<0.2	2	<1	<0.1	1	<1	4	0.8	<1	
		--	--	--	--	--	--	--	--	--	--	<4	0.7	--	
	Mid-flood	Surface	3	<0.01	1.12	<2	<0.2	2	<1	<0.1	3	<1	<4	1	<1
			<2	<0.01	1.09	<2	<0.2	2	<1	<0.1	2	<1	<4	0.7	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.7	--
Middle		5	0.02	0.73	<2	<0.2	3	<1	<0.1	2	<1	5	0.7	7	
		7	0.03	0.74	<2	<0.2	6	<1	<0.1	2	<1	14	0.8	<1	
		--	--	--	--	--	--	--	--	--	--	<4	0.9	--	
Bottom	12	0.05	0.56	<2	<0.2	6	3	<0.1	4	<1	10	0.7	<1		
	13	0.05	0.57	<2	<0.2	6	<1	<0.1	3	<1	9	0.8	1		
	--	--	--	--	--	--	--	--	--	--	8	0.7	--		
2009/08/01	Mid-ebb	Surface	5	<0.01	1.34	3	<0.2	3	<1	<0.1	3	<1	<4	1.4	<1
			3	<0.01	1.34	3	<0.2	3	<1	<0.1	3	<1	<4	1.7	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.7	--
		Middle	5	0.02	0.53	2	<0.2	2	2	<0.1	2	<1	4	0.6	<1
			6	0.02	0.53	2	<0.2	3	2	<0.1	2	<1	23	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	16	<0.5	--
Bottom	14	0.06	0.45	2	<0.2	1	<1	<0.1	1	<1	15	<0.5	<1		
	12	0.07	0.44	2	<0.2	2	<1	<0.1	1	<1	<4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		

Annex D21 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/01	Mid-flood	Surface	3	<0.01	1.37	2	<0.2	2	<1	<0.1	3	<1	<4	1.4	<1	
			3	<0.01	1.39	2	<0.2	2	<1	<0.1	3	<1	<4	1.4	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.7	--
	Middle	8	0.03	0.61	2	<0.2	2	<1	<0.1	2	<1	<4	1.4	<1		
			9	0.03	0.62	2	<0.2	2	<1	<0.1	2	<1	<4	0.9	<1	
			--	--	--	--	--	--	--	--	--	--	4	0.8	--	
	Bottom	10	0.03	0.39	2	<0.2	2	2	<0.1	2	<1	<4	1.3	<1		
			12	0.03	0.39	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	5	<0.5	--	
2009/08/04	Mid-ebb	Surface	--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--	--	
	Middle	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Bottom	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Mid-flood	Surface	3	0.04	0.7	<2	<0.2	2	1	<0.1	2	<1	<4	<0.5	<1	
			5	0.04	0.7	2	<0.2	2	1	<0.1	2	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
Middle		16	0.04	0.43	2	<0.2	3	2	<0.1	2	<1	5	<0.5	1		
			11	0.04	0.43	2	<0.2	3	2	<0.1	2	<1	8	<0.5	1	
			--	--	--	--	--	--	--	--	--	--	4	<0.5	--	
Bottom	22	0.1	0.38	3	<0.2	4	2	<0.1	2	<1	5	<0.5	1			
		26	0.1	0.38	<2	<0.2	3	1	<0.1	1	<1	4	<0.5	2		
		--	--	--	--	--	--	--	--	--	--	4	<0.5	--		
2009/08/06	Mid-ebb	Surface	8	0.06	1.1	2	<0.2	2	<1	<0.1	3	<1	<4	1.5	<1	
			9	0.05	1.09	2	<0.2	2	<1	<0.1	3	<1	<4	1.7	<1	
			--	--	--	--	--	--	--	--	--	--	<4	1.8	--	
		Middle	14	0.1	0.86	2	<0.2	3	<1	<0.1	3	<1	5	1.6	<1	
				12	0.1	0.89	2	<0.2	2	<1	<0.1	3	<1	4	1.6	<1
				--	--	--	--	--	--	--	--	--	--	4	1.6	--
	Bottom	25	0.1	0.66	2	<0.2	3	<1	<0.1	2	<1	8	1.8	1		
			25	0.1	0.66	2	<0.2	3	1	<0.1	3	<1	6	1.7	<1	
			--	--	--	--	--	--	--	--	--	--	5	1.5	--	
	Mid-flood	Surface	8	0.06	1.09	<2	<0.2	2	<1	<0.1	3	<1	<4	1	<1	
			7	0.06	1.1	2	<0.2	2	<1	<0.1	3	<1	<4	1.4	<1	
			--	--	--	--	--	--	--	--	--	--	<4	1.5	--	
Middle		10	0.13	0.7	2	<0.2	2	<1	<0.1	2	<1	<4	0.6	<1		
			10	0.11	0.67	2	<0.2	2	<1	<0.1	2	<1	<4	1.7	<1	
			--	--	--	--	--	--	--	--	--	--	<4	1.5	--	
Bottom	31	0.11	0.53	2	<0.2	3	7	<0.1	4	<1	6	0.8	1			
		34	0.11	0.53	3	<0.2	3	7	<0.1	4	<1	6	1.2	1		
		--	--	--	--	--	--	--	--	--	--	5	1.5	--		

Annex D21 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/08	Mid-ebb	Surface	5	<0.01	1.17	3	<0.2	2	<1	<0.1	2	<1	<4	1.2	<1	
			4	<0.01	1.16	3	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.2	--
		Middle	12	0.08	0.8	3	<0.2	5	<1	<0.1	2	<1	4	<0.5	<0.5	<1
			13	0.08	0.79	3	<0.2	4	<1	<0.1	2	<1	10	<0.5	<0.5	1
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Bottom	92	0.1	0.66	5	<0.2	11	4	<0.1	5	<1	13	0.9	0.9	2	
		92	0.1	0.66	4	<0.2	10	4	<0.1	6	<1	12	0.6	0.6	2	
		--	--	--	--	--	--	--	--	--	--	--	13	0.6	--	
	Mid-flood	Surface	6	0.01	1.13	2	<0.2	2	<1	<0.1	3	<1	<4	0.8	<1	
			7	0.02	1.12	2	<0.2	2	<1	<0.1	2	<1	<4	1	1	
			--	--	--	--	--	--	--	--	--	--	--	<4	0.7	--
Middle		8	0.09	1.01	2	<0.2	7	1	<0.1	2	<1	5	<0.5	<0.5	1	
		8	0.11	1.03	2	<0.2	5	1	<0.1	2	<1	4	0.8	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
Bottom	24	0.12	0.61	2	<0.2	2	1	<0.1	2	<1	5	<0.5	<0.5	2		
	28	0.12	0.61	3	<0.2	2	1	<0.1	2	<1	5	<0.5	<0.5	1		
	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
2009/08/12	Mid-ebb	Surface	6	0.16	1.38	<2	<0.2	2	1	<0.1	2	<1	<4	<0.5	<1	
			7	0.15	1.36	<2	<0.2	2	1	<0.1	2	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
		Middle	11	0.03	0.53	<2	<0.2	2	<1	<0.1	1	<1	<4	<0.5	<0.5	<1
			9	0.03	0.54	<2	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Bottom	23	0.06	0.51	<2	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<0.5	<1	
		24	0.06	0.5	<2	<0.2	2	<1	<0.1	1	<1	<4	<0.5	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Mid-flood	Surface	6	0.4	1.42	3	<0.2	2	1	<0.1	3	<1	4	<0.5	<1	
			5	0.38	1.39	2	<0.2	2	1	<0.1	3	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
Middle		7	0.05	0.63	2	<0.2	3	<1	<0.1	2	<1	<4	<0.5	<0.5	<1	
		8	0.04	0.62	2	<0.2	3	<1	<0.1	2	<1	<4	<0.5	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
Bottom	30	0.06	0.5	2	<0.2	4	1	<0.1	2	<1	5	<0.5	<0.5	<1		
	30	0.06	0.52	2	<0.2	3	1	<0.1	2	<1	6	<0.5	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	--	6	<0.5	--		
2009/08/14	Mid-ebb	Surface	6	0.12	1.3	3	<0.2	1	<1	<0.1	3	<1	<4	0.8	<1	
			4	0.12	1.3	2	<0.2	2	<1	<0.1	3	<1	<4	0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	0.5	--
	Middle	8	0.04	0.64	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<0.5	<1	
		9	0.04	0.64	2	<0.2	3	<1	<0.1	2	<1	<4	<0.5	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
Bottom	14	0.11	0.53	2	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<0.5	<1		
	10	0.11	0.52	3	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		

Annex D21 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/14	Mid-flood	Surface	5	0.07	0.81	2	<0.2	1	<1	<0.1	2	<1	<4	0.7	<1	
			5	0.08	0.82	2	<0.2	1	<1	<0.1	2	<1	<4	0.6	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	0.7	--
	Middle	7	0.07	0.68	2	<0.2	2	<1	<0.1	2	<1	<4	0.9	<1		
			7	0.07	0.68	2	<0.2	6	<1	<0.1	2	<1	<4	0.7	<1	
			--	--	--	--	--	--	--	--	--	--	--	4	1	--
	Bottom	21	0.07	0.5	<2	<0.2	3	<1	<0.1	2	<1	<4	0.9	<1		
			22	0.07	0.5	2	<0.2	12	1	<0.1	2	<1	<4	0.8	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	0.6	--
2009/08/16	Mid-ebb	Surface	6	0.03	1.17	<2	<0.2	2	<1	<0.1	3	<1	<4	1.7	<1	
			4	0.02	1.13	3	<0.2	2	<1	<0.1	2	<1	<4	1.3	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Middle	6	0.04	0.47	3	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1		
			6	0.04	0.47	2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Bottom	16	0.07	0.44	2	<0.2	3	2	<0.1	1	<1	<4	0.6	<1		
			15	0.09	0.46	2	<0.2	3	<1	<0.1	1	<1	<4	0.6	<1	
			--	--	--	--	--	--	--	--	--	--	--	4	<0.5	--
	Mid-flood	Surface	4	<0.01	1.24	<2	<0.2	2	<1	<0.1	2	<1	<4	1.4	<1	
				5	<0.01	1.25	2	<0.2	2	<1	<0.1	3	<1	<4	1.3	<1
				--	--	--	--	--	--	--	--	--	--	--	<4	1.1
		Middle	15	0.04	0.66	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
				16	0.06	0.69	2	<0.2	3	1	<0.1	1	<1	<4	1.1	<1
				--	--	--	--	--	--	--	--	--	--	--	5	<0.5
Bottom	18	0.07	0.38	<2	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<1			
		22	0.05	0.37	3	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<1		
		--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
2009/08/18	Mid-ebb	Surface	5	0.03	1.1	2	<0.2	2	<1	<0.1	3	<1	<4	1.4	<1	
			6	0.04	1.12	2	<0.2	2	<1	<0.1	3	<1	<4	1.6	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.6	--
		Middle	16	0.05	0.52	2	<0.2	5	1	<0.1	3	<1	6	1.4	<1	
				15	0.05	0.51	2	<0.2	2	<1	<0.1	2	<1	5	1.7	<1
				--	--	--	--	--	--	--	--	--	--	--	4	1.5
	Bottom	59	0.06	0.47	3	<0.2	4	4	<0.1	3	<1	7	0.8	1		
			62	0.06	0.46	2	<0.2	4	3	<0.1	2	<1	7	1.4	2	
			--	--	--	--	--	--	--	--	--	--	5	1.4	--	
	Mid-flood	Surface	7	0.01	1.15	2	<0.2	2	1	<0.1	3	<1	4	1.7	<1	
				8	0.01	1.13	2	<0.2	2	1	<0.1	3	<1	<4	1.4	<1
				--	--	--	--	--	--	--	--	--	--	--	<4	1.6
Middle		6	<0.01	0.71	2	<0.2	3	<1	<0.1	2	<1	<4	1.8	<1		
			6	0.01	0.71	2	<0.2	3	<1	<0.1	2	<1	<4	1.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.6	--
Bottom	41	0.03	0.57	3	<0.2	4	1	<0.1	2	<1	5	1.3	1			
		43	0.03	0.58	3	<0.2	3	2	<0.1	2	<1	6	1.3	1		
		--	--	--	--	--	--	--	--	--	--	6	1.4	--		

Annex D21 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/21	Mid-ebb	Surface	7	0.04	1.14	2	<0.2	2	<1	<0.1	3	<1	8	1.2	<1	
			8	0.04	1.13	2	<0.2	2	<1	<0.1	3	<1	6	1.2	<1	
			--	--	--	--	--	--	--	--	--	--	--	5	1	--
		Middle	16	0.08	0.84	2	<0.2	3	2	<1	<0.1	2	<1	6	1.6	<1
			15	0.09	0.85	2	<0.2	2	<1	<0.1	2	<1	5	1.4	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	0.9	--
	Bottom	45	0.06	0.72	2	<0.2	2	<1	<0.1	<0.1	2	<1	4	1.2	1	
		47	0.06	0.72	2	<0.2	2	<1	<0.1	<0.1	2	<1	7	1.6	1	
		--	--	--	--	--	--	--	--	--	--	--	4	1.8	--	
	Mid-flood	Surface	9	0.09	1.16	2	<0.2	2	<1	<0.1	3	<1	8	1.1	<1	
			8	0.09	1.16	2	<0.2	4	<1	<0.1	3	<1	6	1	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1	--
Middle		15	0.1	0.82	2	<0.2	3	<1	<0.1	2	<1	9	1.3	<1		
		13	0.08	0.8	2	<0.2	3	<1	<0.1	2	<1	7	1.1	<1		
		--	--	--	--	--	--	--	--	--	--	--	12	1.2	--	
Bottom	42	0.09	0.58	2	<0.2	3	2	<0.1	2	<1	2	<1	6	0.9	1	
	41	0.09	0.58	2	<0.2	3	2	<0.1	2	<1	2	<1	17	1	1	
	--	--	--	--	--	--	--	--	--	--	--	--	13	1	--	
2009/08/23	Mid-ebb	Surface	8	0.05	1.05	2	<0.2	2	<1	<0.1	3	<1	5	<0.5	<1	
			9	0.04	1.06	2	<0.2	2	<1	<0.1	3	<1	<4	0.8	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
		Middle	24	0.05	0.74	2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1	
			24	0.07	0.76	2	<0.2	2	<1	<0.1	2	<1	<4	0.9	<1	
			--	--	--	--	--	--	--	--	--	--	--	5	<0.5	--
	Bottom	68	0.06	0.62	2	<0.2	2	<1	<0.1	2	<1	2	<1	14	0.6	2
		65	0.06	0.62	2	<0.2	<1	<1	<0.1	2	<1	2	<1	<4	0.6	2
		--	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Mid-flood	Surface	8	0.06	1.28	2	<0.2	2	<1	<0.1	4	<1	<4	0.8	<1	
			8	0.05	1.27	3	<0.2	3	<1	<0.1	4	<1	6	0.7	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	0.8	--
Middle		17	0.06	0.79	2	<0.2	3	1	<0.1	2	<1	8	1.3	<1		
		19	0.06	0.76	2	<0.2	3	1	<0.1	2	<1	8	0.8	<1		
		--	--	--	--	--	--	--	--	--	--	--	<4	0.7	--	
Bottom	82	0.1	0.6	3	<0.2	6	4	<0.1	3	<1	3	<1	10	1.4	2	
	85	0.08	0.59	3	<0.2	3	3	<0.1	2	<1	2	<1	8	0.7	2	
	--	--	--	--	--	--	--	--	--	--	--	--	9	0.8	--	

Annex D22 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WMB

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/07/28	Mid-ebb	Surface	4	<0.01	1.28	2	<0.2	14	<1	<0.1	3	<1	33	0.8	<1
			5	<0.01	1.3	2	<0.2	23	<1	<0.1	3	<1	30	0.7	<1
			--	--	--	--	--	--	--	--	--	--	29	0.6	<1
		Middle	4	<0.01	1.11	<2	<0.2	10	<1	<0.1	2	<1	19	1.1	<1
			4	<0.01	1.11	<2	<0.2	3	<1	<0.1	3	<1	22	0.5	<1
			--	--	--	--	--	--	--	--	--	--	23	0.9	<1
	Bottom	4	0.04	0.8	<2	<0.2	1	<1	<0.1	1	<1	37	<0.5	<1	
		4	0.04	0.81	<2	<0.2	<1	<1	<0.1	1	<1	36	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	42	<0.5	<1	
	Mid-flood	Surface	5	0.02	1.31	<2	<0.2	2	<1	<0.1	4	<1	24	0.8	--
			4	0.02	1.29	<2	<0.2	2	<1	<0.1	4	<1	26	0.7	--
			--	--	--	--	--	--	--	--	--	--	17	<0.5	--
Middle		17	0.03	0.99	2	<0.2	2	<1	<0.1	3	<1	17	<0.5	--	
		16	0.03	1	2	<0.2	2	<1	<0.1	3	<1	26	<0.5	--	
		--	--	--	--	--	--	--	--	--	--	23	<0.5	--	
Bottom	52	0.05	0.76	<2	<0.2	2	1	<0.1	3	<1	27	<0.5	--		
	45	0.05	0.77	<2	<0.2	2	1	<0.1	3	<1	23	<0.5	--		
	--	--	--	--	--	--	--	--	--	--	32	<0.5	--		
2009/07/30	Mid-ebb	Surface	8	<0.01	1.06	<2	<0.2	9	<1	<0.1	2	<1	6	1.2	<1
			8	<0.01	1.08	<2	<0.2	10	1	<0.1	3	<1	7	1.4	<1
			--	--	--	--	--	--	--	--	--	--	6	1.3	--
		Middle	6	<0.01	0.93	<2	<0.2	5	<1	<0.1	2	<1	5	1.6	<1
			6	<0.01	0.93	<2	<0.2	4	<1	<0.1	2	<1	5	1.1	<1
			--	--	--	--	--	--	--	--	--	--	6	1.2	--
	Bottom	7	0.05	0.65	<2	<0.2	<1	<1	<0.1	1	<1	<4	0.7	<1	
		6	0.04	0.67	<2	<0.2	<1	<1	<0.1	1	<1	<4	0.6	<1	
		--	--	--	--	--	--	--	--	--	--	<4	0.6	--	
	Mid-flood	Surface	3	<0.01	1.08	<2	<0.2	10	<1	<0.1	4	<1	6	<0.5	<1
			4	<0.01	1.08	<2	<0.2	8	<1	<0.1	3	<1	6	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	5	<0.5	--
Middle		6	0.03	0.86	<2	<0.2	5	<1	<0.1	2	<1	5	<0.5	<1	
		6	0.03	0.85	<2	<0.2	8	<1	<0.1	2	<1	5	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	8	<0.5	--	
Bottom	5	0.02	0.79	<2	<0.2	<1	<1	<0.1	2	<1	<4	<0.5	<1		
	5	0.01	0.79	<2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
2009/08/01	Mid-ebb	Surface	4	<0.01	1.26	3	<0.2	16	<1	<0.1	3	<1	8	0.6	<1
			3	<0.01	1.25	3	<0.2	24	<1	<0.1	3	<1	9	0.8	<1
			--	--	--	--	--	--	--	--	--	--	7	0.8	--
		Middle	4	0.04	0.69	2	<0.2	14	<1	<0.1	2	<1	12	0.7	<1
			6	0.03	0.68	2	<0.2	17	1	<0.1	2	<1	16	0.7	<1
			--	--	--	--	--	--	--	--	--	--	8	0.7	--
		Bottom	4	0.01	0.71	2	<0.2	1	<1	<0.1	2	<1	<4	0.6	<1
			5	0.01	0.68	2	<0.2	<1	<1	<0.1	2	<1	<4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.6	--

Annex D22 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)		
2009/08/01	Mid-flood	Surface	4	<0.01	1.36	3	<0.2	8	1	<0.1	4	<1	7	0.8	<1		
			5	<0.01	1.27	2	<0.2	7	1	<0.1	7	<1	6	0.9	<1		
			--	--	--	--	--	--	--	--	--	--	6	1	--		
	Middle	5	<0.01	0.89	2	<0.2	10	1	<0.1	3	<1	7	0.7	<1			
			4	<0.01	0.89	2	<0.2	<1	<1	<0.1	7	<1	6	0.7	<1		
			--	--	--	--	--	--	--	--	--	8	1	--			
	Bottom	11	0.02	0.49	2	<0.2	2	<1	<0.1	2	<1	2	<1	5	<0.5	<1	
			12	0.02	0.49	2	<0.2	1	<1	<0.1	2	<1	2	<1	<4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	--	--	<4	0.6	--
2009/08/04	Mid-ebb	Surface	--	--	--	--	--	--	--	--	--	--	--	--	--		
			--	--	--	--	--	--	--	--	--	--	--	--	--		
			--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Middle	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Bottom	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Mid-flood	Surface	5	0.05	0.64	2	<0.2	8	<1	<0.1	2	<1	4	1.1	<1			
			6	0.05	0.66	2	<0.2	8	<1	<0.1	2	<1	4	0.9	<1		
			--	--	--	--	--	--	--	--	--	--	6	0.9	--		
	Middle	8	0.06	0.5	2	<0.2	4	1	<0.1	1	<1	6	1.2	<1			
			8	0.06	0.51	2	<0.2	2	<1	<0.1	1	<1	5	1.4	<1		
			--	--	--	--	--	--	--	--	--	5	0.9	--			
Bottom	7	0.04	0.37	2	<0.2	<1	<1	<0.1	1	<1	<4	0.7	<1				
		8	0.05	0.36	2	<0.2	<1	<1	<0.1	1	<1	<4	1.1	<1			
		--	--	--	--	--	--	--	--	--	<4	0.7	--				
2009/08/06	Mid-ebb	Surface	7	0.08	0.83	2	<0.2	2	<1	<0.1	2	<1	4	1.6	<1		
			6	0.08	0.84	2	<0.2	3	<1	<0.1	3	<1	8	1.6	<1		
			--	--	--	--	--	--	--	--	--	4	1.1	--			
	Middle	7	0.07	0.78	2	<0.2	2	<1	<0.1	2	<1	<4	1.5	<1			
			8	0.07	0.77	2	<0.2	2	<1	<0.1	4	<1	<4	1.3	<1		
			--	--	--	--	--	--	--	--	--	<4	1	--			
	Bottom	15	0.06	0.69	<2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1			
			13	0.06	0.67	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1		
			--	--	--	--	--	--	--	--	--	<4	<0.5	--			
Mid-flood	Surface	12	0.09	0.94	2	<0.2	3	<1	<0.1	2	<1	4	0.9	<1			
			14	0.1	0.98	2	<0.2	4	<1	<0.1	2	<1	5	<0.5	<1		
			--	--	--	--	--	--	--	--	--	4	0.8	--			
	Middle	8	0.08	0.79	2	<0.2	2	<1	<0.1	2	<1	4	<0.5	<1			
			6	0.08	0.79	2	<0.2	2	<1	<0.1	2	<1	4	<0.5	<1		
			--	--	--	--	--	--	--	--	--	5	<0.5	--			
Bottom	24	0.07	0.56	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1				
		26	0.07	0.52	2	<0.2	2	<1	<0.1	2	<1	4	<0.5	<1			
		--	--	--	--	--	--	--	--	--	<4	<0.5	--				

Annex D22 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/08	Mid-ebb	Surface	5	<0.01	1.1	3	<0.2	2	<1	<0.1	2	<1	5	1.3	<1
			5	<0.01	1.11	4	<0.2	2	<1	<0.1	2	<1	5	1.1	<1
			--	--	--	--	--	--	--	--	--	--	4	1.2	--
		Middle	6	0.04	1.14	3	<0.2	5	<1	<0.1	2	<1	7	1.7	<1
			7	0.05	1.04	3	<0.2	4	<1	<0.1	2	<1	10	1.1	<1
			--	--	--	--	--	--	--	--	--	--	7	1	--
	Bottom	23	0.07	0.74	3	<0.2	8	2	<0.1	2	<1	10	0.6	<1	
		22	0.07	0.73	3	<0.2	4	2	<0.1	2	<1	8	0.6	<1	
		--	--	--	--	--	--	--	--	--	--	13	0.5	--	
	Mid-flood	Surface	9	0.03	1.32	3	<0.2	4	<1	<0.1	<1	<1	<4	<0.5	<1
			8	0.02	1.3	2	<0.2	4	<1	<0.1	3	<1	5	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	8	<0.5	--
Middle		30	0.14	1.11	2	<0.2	13	<1	<0.1	<1	<1	<4	<0.5	1	
		30	0.14	1.14	3	<0.2	12	3	<0.1	4	<1	18	<0.5	1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
Bottom	79	0.08	0.98	4	<0.2	21	6	<0.1	3	<1	18	<0.5	2		
	71	0.08	0.99	3	<0.2	11	4	<0.1	3	<1	17	<0.5	2		
	--	--	--	--	--	--	--	--	--	--	14	<0.5	--		
2009/08/12	Mid-ebb	Surface	3	0.13	1.47	3	<0.2	5	<1	<0.1	4	<1	8	0.8	<1
			4	0.13	1.47	3	<0.2	8	1	<0.1	3	<1	10	1	<1
			--	--	--	--	--	--	--	--	--	--	4	0.7	--
		Middle	4	0.04	0.87	2	<0.2	2	<1	<0.1	1	<1	<4	<0.5	<1
			5	0.04	0.87	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Bottom	8	0.05	0.79	2	<0.2	1	<1	<0.1	3	<1	<4	<0.5	<1	
		7	0.06	0.78	2	<0.2	5	<1	<0.1	4	<1	<4	0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	0.5	--	
	Mid-flood	Surface	8	0.05	0.87	3	<0.2	3	<1	<0.1	2	<1	7	0.6	<1
			9	0.06	0.88	2	<0.2	4	<1	<0.1	2	<1	5	0.7	<1
			--	--	--	--	--	--	--	--	--	--	8	0.6	--
Middle		24	0.05	0.79	2	<0.2	2	1	<0.1	2	<1	5	<0.5	<1	
		26	0.05	0.77	2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	4	<0.5	--	
Bottom	80	0.06	0.56	3	<0.2	9	3	<0.1	2	<1	10	0.6	2		
	75	0.06	0.57	2	<0.2	5	3	<0.1	2	<1	10	0.8	1		
	--	--	--	--	--	--	--	--	--	--	8	<0.5	--		
2009/08/14	Mid-ebb	Surface	5	0.06	1.08	2	<0.2	3	<1	<0.1	2	<1	4	1.7	<1
			6	0.08	1.1	2	<0.2	2	<1	<0.1	2	<1	<4	1.6	<1
			--	--	--	--	--	--	--	--	--	--	4	1.8	--
		Middle	7	0.06	0.88	2	<0.2	2	<1	<0.1	2	<1	<4	1.8	<1
			6	0.06	0.88	2	<0.2	2	<1	<0.1	2	<1	<4	2	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.6	--
	Bottom	11	0.08	0.65	2	<0.2	22	1	<0.1	2	<1	16	1.2	<1	
		12	0.1	0.68	<2	<0.2	22	1	<0.1	2	<1	16	1.2	<1	
		--	--	--	--	--	--	--	--	--	--	18	1.7	--	

Annex D22 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/14	Mid-flood	Surface	10	0.07	0.94	2	<0.2	3	<1	<0.1	2	<1	<4	1.7	<1	
			9	0.07	0.94	2	<0.2	2	<1	<0.1	2	<1	<4	1.7	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.7	--
	Middle	27	0.07	0.65	2	<0.2	2	1	<0.1	2	<1	<4	1.3	<1		
			30	0.07	0.64	3	<0.2	2	1	<0.1	2	<1	<4	1.5	<1	
			--	--	--	--	--	--	--	--	--	--	4	1.4	--	
	Bottom	41	0.07	0.57	4	<0.2	2	1	<0.1	2	<1	7	1.4	<1		
			41	0.07	0.57	2	<0.2	2	1	<0.1	2	<1	<4	1.4	<1	
			--	--	--	--	--	--	--	--	--	--	4	1.4	--	
2009/08/16	Mid-ebb	Surface	5	0.03	1.31	3	<0.2	7	2	<0.1	3	<1	9	1.5	<1	
			7	0.03	1.32	2	<0.2	3	<1	<0.1	3	<1	8	1.8	<1	
			--	--	--	--	--	--	--	--	--	--	8	1.3	--	
	Middle	4	0.06	0.81	2	<0.2	4	1	<0.1	2	<1	8	1.2	<1		
			4	0.05	0.8	2	<0.2	4	1	<0.1	2	<1	6	1.7	<1	
			--	--	--	--	--	--	--	--	--	--	7	1.8	--	
	Bottom	17	0.1	0.75	2	<0.2	11	2	<0.1	2	<1	12	1.3	<1		
			16	0.08	0.7	2	<0.2	12	2	<0.1	2	<1	13	1.1	<1	
			--	--	--	--	--	--	--	--	--	--	22	0.9	--	
	Mid-flood	Surface	6	0.03	1.29	3	<0.2	4	<1	<0.1	4	<1	4	1.7	<1	
				6	0.03	1.26	2	<0.2	6	1	<0.1	3	<1	<4	1.7	<1
				--	--	--	--	--	--	--	--	--	--	4	1.6	--
Middle		11	0.03	0.72	2	<0.2	4	1	<0.1	2	<1	5	1.3	<1		
			12	0.02	0.73	2	<0.2	4	<1	<0.1	2	<1	6	1.1	<1	
			--	--	--	--	--	--	--	--	--	--	8	0.8	--	
Bottom	13	0.03	0.48	<2	<0.2	1	<1	<0.1	2	<1	<4	0.6	<1			
		14	0.03	0.53	<2	<0.2	1	1	<0.1	1	<1	6	0.6	<1		
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
2009/08/18	Mid-ebb	Surface	7	0.02	1.06	2	<0.2	2	<1	<0.1	3	<1	<4	1.6	<1	
			6	0.01	1.05	2	<0.2	2	<1	<0.1	3	<1	6	1.4	<1	
			--	--	--	--	--	--	--	--	--	--	4	1.5	--	
		Middle	13	0.01	0.59	2	<0.2	14	1	<0.1	2	<1	7	0.6	<1	
				13	0.01	0.59	2	<0.2	14	1	<0.1	2	<1	8	0.7	<1
				--	--	--	--	--	--	--	--	--	--	10	0.8	--
	Bottom	43	0.01	0.54	3	<0.2	2	2	<0.1	5	<1	6	1.1	<1		
			48	<0.01	0.51	3	<0.2	2	2	<0.1	2	<1	5	0.7	<1	
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Mid-flood	Surface	14	<0.01	0.79	2	<0.2	6	<1	<0.1	3	<1	5	1.2	<1	
				16	<0.01	0.77	2	<0.2	7	<1	<0.1	3	<1	8	1.2	<1
				--	--	--	--	--	--	--	--	--	--	<4	1.3	--
Middle		17	0.03	0.67	2	<0.2	4	1	<0.1	2	<1	14	1.1	<1		
			19	0.03	0.67	3	<0.2	4	1	<0.1	2	<1	16	0.9	<1	
			--	--	--	--	--	--	--	--	--	--	8	1.1	--	
Bottom	72	0.04	0.55	3	<0.2	3	2	<0.1	2	<1	6	1	1			
		69	0.04	0.54	3	<0.2	3	3	<0.1	3	<1	8	1.1	1		
		--	--	--	--	--	--	--	--	--	--	8	0.9	--		

Annex D22 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/21	Mid-ebb	Surface	7	0.04	0.98	2	<0.2	<1	<1	<0.1	2	<1	<4	1.4	<1	
			6	0.04	1	2	<0.2	2	<1	<1	<0.1	3	<1	7	1.1	<1
			--	--	--	--	--	--	--	--	--	--	--	--	8	1.3
		Middle	18	0.03	0.82	2	<0.2	3	<1	<1	<0.1	3	<1	4	1.1	<1
			18	0.03	0.81	2	<0.2	<1	<1	<1	<0.1	2	<1	<4	0.9	<1
			--	--	--	--	--	--	--	--	--	--	--	5	0.8	--
	Bottom	38	0.02	0.72	2	<0.2	<1	1	<1	<0.1	2	<1	5	0.9	1	
		44	0.03	0.72	2	<0.2	2	2	2	<0.1	3	<1	7	0.7	<1	
		--	--	--	--	--	--	--	--	--	--	--	5	0.6	--	
	Mid-flood	Surface	10	0.06	0.95	2	<0.2	3	<1	<1	<0.1	2	<1	<4	0.9	<1
			9	0.06	0.95	2	<0.2	4	<1	<1	<0.1	2	<1	<4	1.2	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	1	--
Middle		12	0.06	0.88	2	<0.2	2	<1	<1	<0.1	2	<1	<4	1	<1	
		11	0.05	0.87	2	<0.2	2	<1	<1	<0.1	2	<1	<4	1	<1	
		--	--	--	--	--	--	--	--	--	--	--	<4	0.9	--	
Bottom	13	0.05	0.85	2	<0.2	1	<1	<1	<0.1	2	<1	<4	0.8	<1		
	13	0.05	0.84	2	<0.2	1	<1	<1	<0.1	2	<1	<4	0.6	<1		
	--	--	--	--	--	--	--	--	--	--	--	5	0.7	--		
2009/08/23	Mid-ebb	Surface	8	<0.01	0.82	2	<0.2	7	<1	<0.1	2	<1	6	0.9	<1	
			9	<0.01	0.83	2	<0.2	4	<1	<1	<0.1	2	<1	22	0.7	<1
			--	--	--	--	--	--	--	--	--	--	--	6	1	--
		Middle	12	0.03	0.81	2	<0.2	2	<1	<1	<0.1	2	<1	<4	0.6	<1
			12	0.03	0.75	2	<0.2	2	<1	<1	<0.1	2	<1	4	0.5	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Bottom	37	0.05	0.66	2	<0.2	2	1	<1	<0.1	2	<1	5	<0.5	<1	
		36	0.04	0.63	3	<0.2	2	2	2	<0.1	2	<1	6	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	7	<0.5	--	
	Mid-flood	Surface	9	0.04	0.92	2	<0.2	5	<1	<1	<0.1	3	<1	5	0.6	<1
			9	0.04	0.92	2	<0.2	9	<1	<1	<0.1	3	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	0.6	--
Middle		15	0.04	0.86	2	<0.2	2	<1	<1	<0.1	2	<1	4	<0.5	<1	
		16	0.05	0.89	2	<0.2	2	<1	<1	<0.1	2	<1	<4	0.7	<1	
		--	--	--	--	--	--	--	--	--	--	--	<4	0.6	--	
Bottom	26	0.05	0.87	2	<0.2	1	<1	<1	<0.1	2	<1	<4	<0.5	<1		
	26	0.05	0.86	2	<0.2	1	<1	<1	<0.1	2	<1	<4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	--	5	0.5	--		

Annex D23 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WNAA

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/07/28	Mid-ebb	Surface	4	<0.01	1.32	2	<0.2	19	1	<0.1	4	<1	18	1.2	--
			5	<0.01	1.32	2	<0.2	13	1	<0.1	4	<1	20	0.9	--
			--	--	--	--	--	--	--	--	--	--	14	1.1	--
		Middle	8	0.03	0.85	3	<0.2	3	1	<0.1	3	<1	19	<0.5	--
			7	0.03	0.85	2	<0.2	2	<1	<0.1	3	<1	31	<0.5	--
			--	--	--	--	--	--	--	--	--	--	36	<0.5	--
	Bottom	7	0.05	0.75	<2	<0.2	1	<1	<0.1	3	<1	41	<0.5	--	
		7	0.05	0.78	<2	<0.2	1	<1	<0.1	3	<1	32	<0.5	--	
		--	--	--	--	--	--	--	--	--	--	38	<0.5	--	
	Mid-flood	Surface	5	0.02	1.15	2	<0.2	1	<1	<0.1	3	<1	27	0.5	<1
			3	0.02	1.15	<2	<0.2	2	<1	<0.1	3	<1	21	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	47	0.9	<1
Middle		4	0.04	0.88	<2	<0.2	1	<1	<0.1	3	<1	10	<0.5	<1	
		4	0.04	0.86	<2	<0.2	1	<1	<0.1	2	<1	12	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	22	<0.5	<1	
Bottom	22	0.05	0.71	<2	<0.2	1	<1	<0.1	2	<1	29	<0.5	<1		
	18	0.05	0.71	<2	<0.2	1	<1	<0.1	2	<1	42	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	20	<0.5	<1		
2009/07/30	Mid-ebb	Surface	7	<0.01	1	<2	<0.2	7	<1	<0.1	2	<1	5	1.1	<1
			6	<0.01	1.02	<2	<0.2	6	<1	<0.1	2	<1	4	1	<1
			--	--	--	--	--	--	--	--	--	--	6	0.9	--
		Middle	8	0.02	0.71	<2	<0.2	4	<1	<0.1	1	<1	<4	0.8	<1
			11	0.03	0.71	<2	<0.2	3	<1	<0.1	1	<1	<4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Bottom	10	0.03	0.68	<2	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<1	
		9	0.03	0.68	<2	<0.2	<1	<1	<0.1	1	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Mid-flood	Surface	5	<0.01	1.08	<2	<0.2	12	<1	<0.1	2	<1	6	1.6	<1
			4	<0.01	1.08	2	<0.2	13	<1	<0.1	2	<1	6	1.8	<1
			--	--	--	--	--	--	--	--	--	--	6	1.4	--
Middle		8	0.03	0.79	<2	<0.2	3	<1	<0.1	2	<1	4	0.9	<1	
		10	0.04	0.78	<2	<0.2	3	<1	<0.1	2	<1	<4	0.9	<1	
		--	--	--	--	--	--	--	--	--	--	<4	1.1	--	
Bottom	10	0.04	0.65	<2	<0.2	1	<1	<0.1	2	<1	4	0.6	<1		
	12	0.05	0.65	<2	<0.2	1	<1	<0.1	1	<1	<4	0.6	<1		
	--	--	--	--	--	--	--	--	--	--	<4	1	--		
2009/08/01	Mid-ebb	Surface	3	<0.01	1.26	2	<0.2	11	<1	<0.1	3	<1	7	0.7	<1
			3	<0.01	1.08	5	<0.2	13	<1	<0.1	3	<1	6	0.8	<1
			--	--	--	--	--	--	--	--	--	--	7	<0.5	--
		Middle	7	0.05	0.64	2	<0.2	2	<1	<0.1	1	<1	5	0.7	<1
			6	0.05	0.64	<2	<0.2	5	<1	<0.1	2	<1	6	0.7	<1
			--	--	--	--	--	--	--	--	--	--	6	<0.5	--
	Bottom	11	0.06	0.46	2	<0.2	1	<1	<0.1	1	<1	4	0.6	<1	
		8	0.04	0.44	<2	<0.2	1	<1	<0.1	1	<1	<4	0.8	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	

Annex D23 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/01	Mid-flood	Surface	4	<0.01	1.39	2	<0.2	8	2	<0.1	3	<1	9	0.8	<1
			5	<0.01	1.34	2	<0.2	6	<1	<0.1	3	<1	7	0.7	<1
			--	--	--	--	--	--	--	--	--	--	8	0.7	--
	Middle	8	0.02	0.74	<2	<0.2	9	2	<0.1	2	<1	10	0.5	<1	
		6	0.01	0.71	2	<0.2	9	1	<0.1	2	<1	8	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	12	<0.5	--	
Bottom	19	0.07	0.55	2	<0.2	2	1	<0.1	2	<1	6	0.6	<1		
	16	0.07	0.56	2	<0.2	2	1	<0.1	2	<1	4	0.6	<1		
	--	--	--	--	--	--	--	--	--	--	5	0.5	--		
2009/08/04	Mid-ebb	Surface	4	0.03	0.69	3	<0.2	7	2	<0.1	2	<1	12	1.1	1
			5	0.03	0.69	3	<0.2	6	1	<0.1	2	<1	11	1.5	2
			--	--	--	--	--	--	--	--	--	--	18	1.1	--
		Middle	15	0.04	0.44	3	<0.2	7	<1	<0.1	1	<1	8	0.7	<1
			12	0.04	0.44	3	<0.2	8	<1	<0.1	2	<1	13	0.8	<1
			--	--	--	--	--	--	--	--	--	--	10	0.6	--
	Bottom	20	0.03	0.41	3	<0.2	1	<1	<0.1	1	<1	<4	1	<1	
		24	0.03	0.39	2	<0.2	1	1	<0.1	2	<1	11	0.5	<1	
		--	--	--	--	--	--	--	--	--	--	10	<0.5	--	
	Mid-flood	Surface	5	0.04	0.79	3	<0.2	4	<1	<0.1	1	<1	<4	0.9	<1
			6	0.04	0.74	3	<0.2	7	<1	<0.1	2	<1	5	0.5	<1
			--	--	--	--	--	--	--	--	--	--	6	0.8	--
Middle		12	0.05	0.49	3	<0.2	3	<1	<0.1	2	<1	6	0.9	<1	
		10	0.05	0.49	3	<0.2	2	1	<0.1	2	<1	5	0.8	<1	
		--	--	--	--	--	--	--	--	--	--	4	1	--	
Bottom	17	0.06	0.35	2	<0.2	2	<1	<0.1	2	<1	4	<0.5	<1		
	15	0.06	0.37	3	<0.2	2	1	<0.1	2	<1	<4	0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
2009/08/06	Mid-ebb	Surface	6	0.08	0.86	2	<0.2	6	<1	<0.1	2	<1	5	1.3	<1
			7	0.08	0.87	2	<0.2	6	<1	<0.1	2	<1	5	1.5	<1
			--	--	--	--	--	--	--	--	--	--	5	1.5	--
		Middle	7	0.09	0.81	2	<0.2	2	<1	<0.1	2	<1	4	1.4	<1
			5	0.09	0.81	2	<0.2	3	1	<0.1	2	<1	5	1.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.1	--
	Bottom	30	0.1	0.55	2	<0.2	2	1	<0.1	2	<1	<4	<0.5	<1	
		26	0.09	0.52	2	<0.2	2	1	<0.1	2	<1	<4	0.9	<1	
		--	--	--	--	--	--	--	--	--	--	5	<0.5	--	
	Mid-flood	Surface	8	0.09	0.79	2	<0.2	3	<1	<0.1	2	<1	6	1.8	<1
			9	0.08	0.77	2	<0.2	4	<1	<0.1	2	<1	4	1.2	<1
			--	--	--	--	--	--	--	--	--	--	8	1.4	--
Middle		7	0.08	0.7	2	<0.2	3	<1	<0.1	2	<1	4	1	<1	
		8	0.08	0.7	2	<0.2	3	<1	<0.1	2	<1	4	1.2	<1	
		--	--	--	--	--	--	--	--	--	--	4	0.9	--	
Bottom	15	0.06	0.49	2	<0.2	2	<1	<0.1	2	<1	5	0.5	<1		
	17	0.06	0.48	<2	<0.2	2	<1	<0.1	1	<1	<4	0.5	<1		
	--	--	--	--	--	--	--	--	--	--	9	<0.5	--		

Annex D23 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/8	Mid-ebb	Surface	6	<0.01	1.05	2	<0.2	2	<1	<0.1	2	<1	6	1	<1
			4	<0.01	1.06	2	<0.2	2	<1	<0.1	2	<1	4	1.1	<1
			--	--	--	--	--	--	--	--	--	--	5	1.1	--
		Middle	13	0.04	0.73	4	<0.2	6	<1	<0.1	2	<1	8	<0.5	<1
			13	0.04	0.74	3	<0.2	3	1	<0.1	2	<1	8	1	<1
			--	--	--	--	--	--	--	--	--	--	6	1.1	--
	Bottom	35	0.07	0.63	3	<0.2	13	3	<0.1	2	<1	12	0.6	1	
		35	0.07	0.62	3	<0.2	17	3	<0.1	2	<1	18	0.7	1	
		--	--	--	--	--	--	--	--	--	--	14	0.5	--	
	Mid-flood	Surface	8	0.04	1.25	2	<0.2	5	<1	<0.1	2	<1	4	<0.5	<1
			9	0.06	1.3	4	<0.2	3	<1	<0.1	2	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
Middle		6	0.06	1.04	4	<0.2	12	1	<0.1	2	<1	10	<0.5	<1	
		6	0.08	1.12	3	<0.2	13	1	<0.1	2	<1	7	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	4	<0.5	--	
Bottom	22	0.11	0.84	3	<0.2	22	2	<0.1	4	<1	17	<0.5	<1		
	19	0.13	0.85	2	<0.2	10	2	<0.1	2	<1	8	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
2009/08/12	Mid-ebb	Surface	4	0.18	1.36	2	<0.2	6	<1	<0.1	<1	<1	5	0.8	<1
			5	0.18	1.36	3	<0.2	6	<1	<0.1	3	<1	8	0.7	<1
			--	--	--	--	--	--	--	--	--	--	9	0.8	--
		Middle	9	0.03	0.69	3	<0.2	2	<1	<0.1	<1	<1	<4	0.6	<1
			10	0.03	0.69	2	<0.2	3	<1	<0.1	2	<1	12	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	4	1.1	--
	Bottom	17	0.04	0.64	3	<0.2	1	<1	<0.1	<1	<1	<4	0.5	<1	
		16	0.04	0.65	2	<0.2	1	<1	<0.1	2	<1	26	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Mid-flood	Surface	6	0.04	0.82	2	<0.2	7	<1	<0.1	2	<1	<4	0.7	<1
			7	0.04	0.83	2	<0.2	6	<1	<0.1	2	<1	4	0.7	<1
			--	--	--	--	--	--	--	--	--	--	4	0.6	--
Middle		7	0.04	0.68	3	<0.2	5	<1	<0.1	1	<1	4	<0.5	<1	
		7	0.04	0.68	2	<0.2	6	<1	<0.1	1	<1	4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	6	0.5	--	
Bottom	16	0.04	0.55	2	<0.2	1	<1	<0.1	1	<1	<4	0.6	<1		
	17	0.04	0.54	2	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	0.5	--		
2009/08/14	Mid-ebb	Surface	5	0.08	1.08	2	<0.2	2	<1	<0.1	3	<1	4	1	<1
			4	0.08	1.09	2	<0.2	4	<1	<0.1	3	<1	6	0.9	<1
			--	--	--	--	--	--	--	--	--	--	6	0.9	--
		Middle	8	0.06	0.7	3	<0.2	2	<1	<0.1	2	<1	<4	1	<1
			8	0.06	0.7	<2	<0.2	2	<1	<0.1	2	<1	4	0.8	<1
			--	--	--	--	--	--	--	--	--	--	5	1	--
Bottom	14	0.08	0.64	2	<0.2	23	2	<0.1	2	<1	14	1.6	<1		
	14	0.09	0.64	3	<0.2	21	2	<0.1	2	<1	17	1.9	<1		
	--	--	--	--	--	--	--	--	--	--	16	1.9	--		

Annex D23 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/14	Mid-flood	Surface	4	0.06	0.97	2	<0.2	6	<1	<0.1	2	<1	8	1.1	<1
			6	0.06	0.97	2	<0.2	7	<1	<0.1	2	<1	8	0.8	<1
			--	--	--	--	--	--	--	--	--	--	12	1	--
	Middle	6	0.06	0.75	2	<0.2	2	<1	<0.1	2	<1	<4	1	<1	
		6	0.06	0.75	2	<0.2	2	<1	<0.1	2	<1	<4	0.7	<1	
		--	--	--	--	--	--	--	--	--	--	<4	1.1	--	
Bottom	14	0.04	0.54	2	<0.2	<1	<1	<0.1	1	<1	<4	1	<1		
	15	0.04	0.55	2	<0.2	1	<1	<0.1	1	<1	<4	0.9	<1		
--	--	--	--	--	--	--	--	--	--	--	--	<4	1.3	--	
2009/08/16	Mid-ebb	Surface	4	0.02	1.33	3	<0.2	11	1	<0.1	3	<1	9	1.8	<1
			4	0.02	1.33	2	<0.2	4	1	<0.1	4	<1	7	1.6	<1
			--	--	--	--	--	--	--	--	--	--	7	1.7	--
		Middle	16	0.04	0.57	2	<0.2	4	2	<0.1	2	<1	6	1.2	<1
			15	0.05	0.58	2	<0.2	4	2	<0.1	2	<1	8	1.3	<1
			--	--	--	--	--	--	--	--	--	--	10	1.6	--
	Bottom	28	0.07	0.41	3	<0.2	2	2	<0.1	1	<1	6	0.7	<1	
		26	0.06	0.41	<2	<0.2	2	1	<0.1	1	<1	4	0.9	<1	
		--	--	--	--	--	--	--	--	--	--	<4	0.6	--	
	Mid-flood	Surface	4	<0.01	1.03	<2	<0.2	2	<1	<0.1	2	<1	<4	1.8	<1
			6	<0.01	0.91	<2	<0.2	2	<1	<0.1	2	<1	11	1.7	<1
			--	--	--	--	--	--	--	--	--	--	4	1.2	--
Middle		6	0.02	0.72	2	<0.2	1	<1	<0.1	1	<1	<4	1.7	<1	
		6	0.02	0.7	2	<0.2	2	<1	<0.1	2	<1	<4	1.4	<1	
		--	--	--	--	--	--	--	--	--	--	14	1.5	--	
Bottom	14	0.06	0.61	2	<0.2	8	<1	<0.1	1	<1	8	1.7	<1		
	15	0.06	0.62	3	<0.2	7	<1	<0.1	1	<1	19	1.7	<1		
	--	--	--	--	--	--	--	--	--	--	14	1.4	--		
2009/08/18	Mid-ebb	Surface	6	0.04	0.86	2	<0.2	3	<1	<0.1	2	<1	5	1.3	<1
			7	0.05	0.86	2	<0.2	2	<1	<0.1	2	<1	5	1.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.8	--
		Middle	26	0.02	0.53	2	<0.2	3	1	<0.1	2	<1	7	1.2	<1
			27	0.02	0.52	3	<0.2	3	1	<0.1	4	<1	10	1.6	<1
			--	--	--	--	--	--	--	--	--	--	6	1.5	--
	Bottom	36	0.03	0.53	3	<0.2	14	4	<0.1	7	<1	17	2.1	1	
		37	0.02	0.53	3	<0.2	12	3	<0.1	3	<1	19	2.3	1	
		--	--	--	--	--	--	--	--	--	--	14	2.1	--	
	Mid-flood	Surface	12	0.03	0.74	2	<0.2	4	<1	<0.1	2	<1	4	1.4	<1
			10	0.02	0.74	2	<0.2	3	3	<0.1	2	<1	6	1.3	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.3	--
Middle		10	0.03	0.65	2	<0.2	3	<1	<0.1	2	<1	6	1.2	<1	
		11	0.03	0.65	2	<0.2	3	1	<0.1	2	<1	<4	1.2	<1	
		--	--	--	--	--	--	--	--	--	--	5	1.1	--	
Bottom	42	0.08	0.55	2	<0.2	20	2	<0.1	2	<1	13	1.1	1		
	36	0.07	0.53	2	<0.2	18	2	<0.1	3	<1	14	1.2	1		
	--	--	--	--	--	--	--	--	--	--	16	1.4	--		

Annex D23 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/21	Mid-ebb	Surface	10	0.05	0.65	2	<0.2	<1	<1	<0.1	2	<1	<4	1	2
			11	0.05	0.68	2	<0.2	3	<1	<0.1	3	<1	<4	0.9	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	0.9
		Middle	46	0.05	0.93	3	<0.2	4	2	<0.1	3	<1	8	0.9	1
			46	0.05	0.93	3	<0.2	<1	2	<0.1	2	<1	6	0.9	1
			--	--	--	--	--	--	--	--	--	--	7	0.7	--
	Bottom	42	0.07	0.77	3	<0.2	<1	1	<0.1	2	<1	5	0.6	<1	
		45	0.05	0.75	3	<0.2	3	2	<0.1	3	<1	7	0.6	<1	
		--	--	--	--	--	--	--	--	--	--	4	<0.5	--	
	Mid-flood	Surface	21	0.06	0.64	2	<0.2	5	1	<0.1	2	<1	5	0.7	<1
			22	0.05	0.6	2	<0.2	2	<1	<0.1	2	<1	<4	0.7	<1
			--	--	--	--	--	--	--	--	--	--	5	0.6	--
Middle		9	0.06	0.88	2	<0.2	3	3	<0.1	2	<1	<4	1.1	<1	
		10	0.06	0.88	2	<0.2	6	<1	<0.1	3	<1	4	1	<1	
		--	--	--	--	--	--	--	--	--	--	<4	0.9	--	
Bottom	8	0.06	0.97	2	<0.2	2	<1	<0.1	3	<1	9	1.2	<1		
	7	0.06	0.96	2	<0.2	5	<1	<0.1	3	<1	<4	1.2	<1		
	--	--	--	--	--	--	--	--	--	--	7	1.2	--		
2009/08/23	Mid-ebb	Surface	28	0.03	0.78	2	<0.2	8	1	<0.1	3	<1	7	0.9	<1
			31	0.05	0.79	3	<0.2	8	1	<0.1	2	<1	8	1	<1
			--	--	--	--	--	--	--	--	--	--	7	1	--
		Middle	48	0.03	0.66	3	<0.2	8	2	<0.1	3	<1	14	1	1
			47	0.02	0.64	3	<0.2	12	2	<0.1	3	<1	19	0.6	1
			--	--	--	--	--	--	--	--	--	--	8	0.8	--
	Bottom	82	0.04	0.73	3	<0.2	12	4	<0.1	3	<1	14	1.6	2	
		108	0.03	0.64	3	<0.2	18	3	<0.1	3	<1	15	1.1	2	
		--	--	--	--	--	--	--	--	--	--	13	1.5	--	
	Mid-flood	Surface	10	0.04	0.84	2	<0.2	5	<1	<0.1	2	<1	6	0.9	<1
			10	0.05	0.86	2	<0.2	2	<1	<0.1	2	<1	<4	0.8	<1
			--	--	--	--	--	--	--	--	--	--	5	0.9	--
Middle		31	0.05	0.69	3	<0.2	2	1	<0.1	2	<1	5	0.7	<1	
		28	0.05	64	2	<0.2	2	<1	<0.1	2	<1	6	0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	0.6	--	
Bottom	65	0.05	0.66	3	<0.2	3	2	<0.1	3	<1	8	<0.5	1		
	68	0.05	0.65	3	<0.2	2	2	<0.1	2	<1	7	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		

Annex D24 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WNAB

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/07/28	Mid-ebb	Surface	3	<0.01	1.26	<2	<0.2	2	<1	<0.1	3	<1	12	1.1	<1
			4	<0.01	1.26	<2	<0.2	2	<1	<0.1	3	<1	15	1	<1
			--	--	--	--	--	--	--	--	--	--	42	1.1	<1
		Middle	6	0.04	0.93	2	<0.2	3	<1	<0.1	3	<1	8	0.6	<1
			4	0.04	0.94	<2	<0.2	5	<1	<0.1	3	<1	7	0.7	<1
			--	--	--	--	--	--	--	--	--	--	9	0.5	<1
		Bottom	6	0.04	0.73	<2	<0.2	4	<1	<0.1	3	<1	18	0.6	<1
			6	0.05	0.75	<2	<0.2	4	<1	<0.1	3	<1	11	0.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.7	<1
	Mid-flood	Surface	5	<0.01	1.38	2	<0.2	2	<1	<0.1	3	<1	48	<0.5	<1
			4	<0.01	1.39	2	<0.2	2	<1	<0.1	3	<1	21	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	26	0.5	<1
		Middle	7	0.04	0.98	<2	<0.2	3	<1	<0.1	3	<1	27	<0.5	<1
			8	0.03	0.95	2	<0.2	3	<1	<0.1	3	<1	16	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	21	<0.5	<1
Bottom	18	0.05	0.84	<2	<0.2	4	1	<0.1	3	<1	34	<0.5	<1		
	18	0.06	0.8	<2	<0.2	3	<1	<0.1	3	<1	33	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	29	<0.5	<1		
2009/07/30	Mid-ebb	Surface	<2	<0.01	1.06	<2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1
			<2	<0.01	1.06	<2	<0.2	2	<1	<0.1	2	<1	<4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.6	--
		Middle	7	0.03	0.73	<2	<0.2	3	<1	<0.1	2	<1	<4	0.7	<1
			8	0.03	0.74	<2	<0.2	3	1	<0.1	2	<1	21	0.8	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.1	--
		Bottom	8	0.03	0.67	<2	<0.2	2	<1	<0.1	2	<1	<4	0.7	<1
			8	0.03	0.67	<2	<0.2	3	1	<0.1	2	<1	<4	0.8	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.8	--
	Mid-flood	Surface	3	<0.01	1.15	2	<0.2	2	<1	<0.1	3	<1	5	0.9	<1
			4	<0.01	1.14	<2	<0.2	3	<1	<0.1	4	<1	<4	0.9	<1
			--	--	--	--	--	--	--	--	--	--	4	0.6	--
		Middle	4	0.02	0.77	<2	<0.2	4	<1	<0.1	3	<1	8	0.8	<1
			4	0.02	0.79	<2	<0.2	7	1	<0.1	3	<1	10	0.8	2
			--	--	--	--	--	--	--	--	--	--	10	0.6	--
Bottom	4	0.02	0.73	<2	<0.2	2	<1	<0.1	2	<1	7	0.7	<1		
	7	0.02	0.74	<2	<0.2	2	<1	<0.1	2	<1	7	0.7	<1		
	--	--	--	--	--	--	--	--	--	--	15	0.6	--		
2009/08/01	Mid-ebb	Surface	8	<0.01	1.27	2	<0.2	4	<1	<0.1	3	<1	20	1.3	<1
			8	<0.01	1.26	2	<0.2	4	<1	<0.1	3	<1	4	1.4	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.4	--
		Middle	3	0.03	0.71	2	<0.2	4	2	<0.1	2	<1	11	1.5	<1
			3	0.02	0.72	3	<0.2	7	2	<0.1	2	<1	20	0.9	<1
			--	--	--	--	--	--	--	--	--	--	21	1.3	--
		Bottom	11	0.04	0.48	2	<0.2	5	1	<0.1	2	<1	9	<0.5	<1
			12	0.04	0.48	2	<0.2	5	2	<0.1	3	<1	6	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	8	0.6	--

Annex D24 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/01	Mid-flood	Surface	4	<0.01	1.45	<2	<0.2	2	<1	<0.1	3	<1	<4	1.2	<1
			3	<0.01	1.47	2	<0.2	2	<1	<0.1	3	<1	<4	1.1	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	1.2
	Middle	7	0.03	0.64	3	<0.2	3	1	<0.1	2	<1	5	<0.5	<1	
		8	0.03	0.64	3	<0.2	3	1	<0.1	2	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	0.9	--	
	Bottom	11	0.04	0.57	2	<0.2	2	<1	<0.1	2	<1	<4	0.7	<1	
		10	0.04	0.57	2	<0.2	2	1	<0.1	2	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
2009/08/04	Mid-ebb	Surface	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--	
	Middle	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	
	Bottom	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	
Mid-flood	Surface	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	
Middle	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	--	--	--	--	--	--	--	--	--	--	--	--	--		
Bottom	11	0.09	0.38	<2	<0.2	3	2	<0.1	1	<1	6	0.7	<1		
	10	0.09	0.36	2	<0.2	3	2	<0.1	1	<1	5	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	5	<0.5	--		
2009/08/06	Mid-ebb	Surface	7	0.05	1.13	2	<0.2	2	<1	<0.1	3	<1	<4	3.5	<1
			7	0.06	1.15	2	0.3	2	<1	<0.1	3	<1	<4	2.3	<1
			--	--	--	--	--	--	--	--	--	--	4	3.8	--
	Middle	18	0.1	0.83	2	<0.2	3	1	<0.1	2	<1	4	3.2	<1	
		18	0.1	0.81	2	<0.2	3	1	<0.1	3	<1	4	1.2	<1	
		--	--	--	--	--	--	--	--	--	--	<4	2.4	--	
	Bottom	27	0.1	0.81	2	<0.2	3	1	<0.1	2	<1	4	2.9	<1	
		24	0.1	0.78	3	<0.2	5	1	<0.1	5	<1	13	2.4	<1	
		--	--	--	--	--	--	--	--	--	--	5	2.3	--	
Mid-flood	Surface	11	0.08	1.04	3	<0.2	3	<1	<0.1	3	<1	<4	1.7	<1	
		10	0.07	1.04	2	<0.2	3	<1	<0.1	3	<1	<4	1.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	1.3	--	
Middle	7	0.12	0.68	3	<0.2	3	1	<0.1	2	<1	<4	1.2	<1		
	6	0.1	0.65	2	<0.2	3	3	<0.1	2	<1	<4	1.6	1		
	--	--	--	--	--	--	--	--	--	--	<4	1.7	--		
Bottom	14	0.11	0.61	2	<0.2	4	5	<0.1	2	<1	7	1.7	1		
	16	0.1	0.6	2	<0.2	5	5	<0.1	2	<1	8	1.6	1		
	--	--	--	--	--	--	--	--	--	--	7	1.8	--		

Annex D24 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/08	Mid-ebb	Surface	6	0.04	1.17	2	<0.2	2	<1	<0.1	2	<1	<4	0.7	<1	
			7	0.04	1.18	3	<0.2	2	<1	<0.1	2	<1	<4	0.9	<1	
			--	--	--	--	--	--	--	--	--	--	--	4	1.1	--
		Middle	19	0.07	0.78	2	<0.2	3	<1	<0.1	2	<1	<4	<0.5	<1	
			18	0.08	0.79	4	<0.2	4	<1	<0.1	2	<1	6	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Bottom	23	0.07	0.76	2	<0.2	5	3	<0.1	2	<1	2	<1	7	<0.5	1
		28	0.07	0.75	3	<0.2	3	2	<0.1	2	<1	2	<1	5	<0.5	1
		--	--	--	--	--	--	--	--	--	--	--	--	5	<0.5	--
	Mid-flood	Surface	9	0.05	1.07	3	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
			7	0.04	1.06	3	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
Middle		9	0.07	0.83	3	<0.2	3	<1	<0.1	2	<1	<4	0.8	<1		
		10	0.06	0.83	3	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1		
		--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
Bottom	13	0.12	0.61	3	<0.2	2	<1	<0.1	1	<1	<4	<0.5	<1			
	11	0.12	0.6	2	<0.2	2	<1	<0.1	1	<1	<4	<0.5	<1			
	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
2009/08/12	Mid-ebb	Surface	6	0.13	1.17	<2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1	
			7	0.13	1.16	<2	<0.2	1	<1	<0.1	4	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
		Middle	12	0.02	0.58	<2	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<1	
			11	0.03	0.58	<2	<0.2	2	<1	<0.1	1	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Bottom	40	0.03	0.55	<2	<0.2	2	1	<0.1	2	<1	5	<0.5	<1		
		41	0.02	0.54	3	<0.2	2	2	<0.1	2	<1	5	<0.5	1		
		--	--	--	--	--	--	--	--	--	--	6	<0.5	--		
	Mid-flood	Surface	6	0.11	0.97	3	<0.2	2	3	<0.1	2	<1	5	<0.5	<1	
			6	0.12	0.97	3	<0.2	3	3	<0.1	3	<1	6	0.6	<1	
			--	--	--	--	--	--	--	--	--	--	7	<0.5	--	
Middle		7	0.05	0.68	2	<0.2	3	1	<0.1	2	<1	5	<0.5	<1		
		8	0.05	0.67	2	<0.2	2	<1	<0.1	2	<1	7	0.6	<1		
		--	--	--	--	--	--	--	--	--	--	4	<0.5	--		
Bottom	13	0.05	0.55	2	<0.2	5	2	<0.1	2	<1	7	0.6	<1			
	15	0.07	0.58	2	<0.2	5	2	<0.1	2	<1	6	1	<1			
	--	--	--	--	--	--	--	--	--	--	7	<0.5	--			
2009/08/14	Mid-ebb	Surface	5	0.13	1.26	3	<0.2	2	<1	<0.1	3	<1	<4	1.1	<1	
			5	0.13	1.25	3	<0.2	2	<1	<0.1	3	<1	<4	1.3	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.2	--
		Middle	10	0.04	0.62	2	<0.2	5	1	<0.1	2	<1	<4	0.6	<1	
			11	0.04	0.62	2	<0.2	3	<1	<0.1	2	<1	<4	1.2	<1	
			--	--	--	--	--	--	--	--	--	--	<4	1	--	
	Bottom	15	0.05	0.54	2	<0.2	2	<1	<0.1	1	<1	<4	1	<1		
		15	0.05	0.54	2	<0.2	2	<1	<0.1	1	<1	<4	1.2	<1		
		--	--	--	--	--	--	--	--	--	--	<4	1.4	--		

Annex D24 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/14	Mid-flood	Surface	5	0.1	1.13	2	<0.2	2	<1	<0.1	3	<1	11	<0.5	<1	
			6	0.11	1.13	2	<0.2	2	1	<0.1	3	<1	5	0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Middle	7	7	0.12	0.93	2	<0.2	7	<1	<0.1	2	<1	6	1.2	<1	
			7	0.13	0.92	2	<0.2	8	1	<0.1	2	<1	6	1.3	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	0.6	--
	Bottom	14	14	0.05	0.63	2	<0.2	3	1	<0.1	2	<1	4	0.6	<1	
			13	0.06	0.66	2	<0.2	3	1	<0.1	2	<1	4	0.9	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	0.9	--
2009/08/16	Mid-ebb	Surface	4	<0.01	1.27	3	<0.2	3	<1	<0.1	3	<1	9	1.8	<1	
			5	<0.01	1.25	2	<0.2	3	<1	<0.1	3	<1	<4	1.8	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.9	--
	Middle	7	7	0.01	0.55	2	<0.2	1	<1	<0.1	3	<1	<4	1.4	<1	
			8	0.01	0.57	2	<0.2	2	1	<0.1	1	<1	10	1.4	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.7	--
	Bottom	48	48	<0.01	0.44	<2	<0.2	4	3	<0.1	3	<1	7	1.4	1	
			48	<0.01	0.43	3	<0.2	3	2	<0.1	2	<1	7	1.4	1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.7	--
	Mid-flood	Surface	6	6	0.02	1.22	2	<0.2	2	<1	<0.1	3	<1	<4	1	<1
				5	0.02	1.22	2	<0.2	2	<1	<0.1	3	<1	<4	1	<1
				--	--	--	--	--	--	--	--	--	--	--	<4	1.2
Middle		7	7	0.04	0.68	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
			9	0.05	0.69	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
Bottom	13	13	0.06	0.66	2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1		
		12	0.07	0.67	2	<0.2	2	<1	<0.1	2	<1	8	<0.5	<1		
		--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
2009/08/18	Mid-ebb	Surface	5	0.03	1	2	<0.2	2	<1	<0.1	3	<1	<4	1.1	<1	
			6	0.03	0.99	2	<0.2	2	<1	<0.1	3	<1	<4	0.8	<1	
			--	--	--	--	--	--	--	--	--	--	--	6	1.3	--
	Middle	18	18	0.02	0.58	2	<0.2	3	1	<0.1	2	<1	5	0.7	<1	
			16	0.02	0.58	2	<0.2	3	<1	<0.1	2	<1	5	0.7	<1	
			--	--	--	--	--	--	--	--	--	--	--	5	0.8	--
	Bottom	32	32	<0.01	0.49	3	<0.2	3	2	<0.1	2	<1	6	0.7	1	
			33	<0.01	0.49	2	<0.2	3	2	<0.1	2	<1	6	0.6	1	
			--	--	--	--	--	--	--	--	--	--	--	5	0.7	--
	Mid-flood	Surface	6	6	<0.01	0.92	2	<0.2	2	3	<0.1	2	<1	5	1.3	<1
				6	<0.01	0.92	2	<0.2	3	3	<0.1	3	<1	6	1.3	<1
				--	--	--	--	--	--	--	--	--	--	--	7	1.6
Middle		16	16	0.04	0.62	2	<0.2	3	1	<0.1	2	<1	5	1	<1	
			17	0.04	0.62	2	<0.2	3	1	<0.1	2	<1	7	1.4	<1	
			--	--	--	--	--	--	--	--	--	--	--	4	1.2	--
Bottom	24	24	0.04	0.56	2	<0.2	5	2	<0.1	2	<1	7	0.5	<1		
		23	0.03	0.55	2	<0.2	5	2	<0.1	2	<1	6	1	<1		
		--	--	--	--	--	--	--	--	--	--	--	7	1.3	--	

Annex D24 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/21	Mid-ebb	Surface	10	0.04	1.06	3	<0.2	2	1	<0.1	2	<1	<4	1.8	<1	
			11	0.04	1.06	2	<0.2	2	1	<0.1	2	<1	<4	1.6	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.8	--
	Middle	19	0.08	0.86	2	<0.2	2	<1	<0.1	2	<1	<4	1.9	<1		
		19	0.08	0.84	2	<0.2	3	1	<0.1	2	<1	<4	1.7	<1		
		--	--	--	--	--	--	--	--	--	--	--	<4	1.5	--	
	Bottom	46	0.08	0.81	3	<0.2	3	2	<0.1	2	<1	2	<1	7	1.4	<1
		46	0.08	0.8	3	<0.2	2	2	<0.1	2	<1	2	<1	5	1.8	1
		--	--	--	--	--	--	--	--	--	--	--	--	4	1.6	--
	Mid-flood	Surface	8	0.08	1.18	2	<0.2	2	3	<0.1	3	<1	<4	0.9	<1	
			8	0.08	1.18	2	<0.2	3	2	<0.1	3	<1	10	0.9	<1	
			--	--	--	--	--	--	--	--	--	--	--	6	1.2	--
Middle	16	0.09	0.82	2	<0.2	6	1	<0.1	2	<1	2	<1	6	1.1	<1	
	16	0.08	0.81	2	<0.2	6	1	<0.1	2	<1	2	<1	11	1	<1	
	--	--	--	--	--	--	--	--	--	--	--	--	6	1.3	--	
Bottom	25	0.1	0.66	2	<0.2	2	1	<0.1	2	<1	2	<1	8	1.1	1	
	23	0.08	0.64	2	<0.2	2	<1	<0.1	2	<1	2	<1	5	0.7	2	
	--	--	--	--	--	--	--	--	--	--	--	--	6	0.9	--	
2009/08/23	Mid-ebb	Surface	8	0.05	1.01	2	<0.2	1	<1	<0.1	3	<1	<4	0.6	<1	
			8	0.05	1.01	2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Middle	14	0.07	0.9	2	<0.2	2	<1	<0.1	2	<1	2	<1	5	<0.5	<1
		13	0.05	0.86	2	<0.2	2	<1	<0.1	2	<1	2	<1	<4	<0.5	<1
		--	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Bottom	38	0.04	0.75	2	<0.2	1	<1	<0.1	2	<1	2	<1	<4	<0.5	<1
		36	0.04	0.74	2	<0.2	1	<1	<0.1	5	<1	5	<1	<4	<0.5	<1
		--	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Mid-flood	Surface	9	0.06	1.14	<2	<0.2	2	<1	<0.1	3	<1	<4	1	<1	
			8	0.06	1.14	2	<0.2	3	2	<0.1	4	<1	6	0.9	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	0.5	--
Middle	16	0.09	0.88	2	<0.2	2	<1	<0.1	2	<1	2	<1	<4	1.1	<1	
	15	0.07	0.84	2	<0.2	5	<1	<0.1	2	<1	2	<1	6	0.8	<1	
	--	--	--	--	--	--	--	--	--	--	--	--	<4	0.7	--	
Bottom	108	0.1	0.62	4	<0.2	5	5	<0.1	3	<1	3	<1	11	1.8	3	
	112	0.12	0.64	<2	<0.2	5	5	<0.1	3	<1	3	<1	10	1.8	3	
	--	--	--	--	--	--	--	--	--	--	--	--	11	1.5	--	

Annex D25 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WNAC

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/07/28	Mid-ebb	Surface	3	<0.01	1.26	<2	<0.2	2	<1	<0.1	3	<1	30	1	--
			3	<0.01	1.25	<2	<0.2	4	1	<0.1	4	<1	38	1	--
			--	--	--	--	--	--	--	--	--	--	43	1	--
		Middle	6	0.03	0.92	<2	<0.2	2	<1	<0.1	3	<1	39	0.6	--
			4	0.03	0.93	<2	<0.2	2	<1	<0.1	3	<1	10	0.6	--
			--	--	--	--	--	--	--	--	--	--	8	0.7	--
	Bottom	24	0.05	0.74	<2	<0.2	3	1	<0.1	3	<1	10	0.6	--	
		24	0.05	0.75	2	<0.2	3	2	<0.1	3	<1	17	0.6	--	
		--	--	--	--	--	--	--	--	--	--	10	0.6	--	
	Mid-flood	Surface	6	<0.01	1.29	2	<0.2	4	1	<0.1	4	<1	44	<0.5	<1
			5	<0.01	1.3	<2	<0.2	3	1	<0.1	4	<1	30	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	28	<0.5	<1
Middle		8	0.03	1.01	2	<0.2	5	<1	<0.1	3	<1	49	<0.5	<1	
		7	0.03	1.01	<2	<0.2	4	<1	<0.1	3	<1	35	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	33	<0.5	<1	
Bottom	19	0.04	0.9	2	<0.2	11	1	<0.1	3	<1	45	<0.5	<1		
	20	0.04	0.89	2	<0.2	11	1	<0.1	3	<1	47	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	44	<0.5	<1		
2009/07/30	Mid-ebb	Surface	2	<0.01	1.1	<2	<0.2	2	<1	<0.1	2	<1	4	0.7	<1
			<2	<0.01	1.11	<2	<0.2	1	3	<0.1	2	<1	<4	0.7	<1
			--	--	--	--	--	--	--	--	--	--	6	0.5	--
		Middle	6	<0.01	0.82	<2	<0.2	3	<1	<0.1	2	<1	<4	0.7	<1
			5	<0.01	0.8	<2	<0.2	4	1	<0.1	2	<1	<4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	5	<0.5	--
	Bottom	4	0.02	0.74	<2	<0.2	2	<1	<0.1	2	<1	<4	0.6	<1	
		5	0.03	0.71	<2	<0.2	3	1	<0.1	2	<1	7	0.6	<1	
		--	--	--	--	--	--	--	--	--	--	<4	0.6	--	
	Mid-flood	Surface	3	<0.01	1.23	<2	<0.2	3	<1	<0.1	3	<1	<4	0.6	<1
			4	<0.01	1.18	<2	<0.2	3	<1	<0.1	4	<1	<4	0.9	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.6	--
Middle		6	<0.01	0.83	<2	<0.2	11	2	<0.1	4	<1	11	0.7	<1	
		3	<0.01	0.85	<2	<0.2	14	3	<0.1	4	<1	12	0.9	2	
		--	--	--	--	--	--	--	--	--	--	6	0.5	--	
Bottom	4	0.02	0.77	<2	<0.2	4	<1	<0.1	2	<1	6	0.5	<1		
	6	0.02	0.77	<2	<0.2	4	2	<0.1	4	<1	12	0.8	<1		
	--	--	--	--	--	--	--	--	--	--	10	1	--		
2009/08/01	Mid-ebb	Surface	3	<0.01	1.39	3	<0.2	3	<1	<0.1	3	<1	<4	1.4	<1
			4	<0.01	1.39	3	<0.2	4	<1	<0.1	3	<1	4	1.4	<1
			--	--	--	--	--	--	--	--	--	--	4	1.4	--
		Middle	7	0.02	0.54	<2	<0.2	6	1	<0.1	2	<1	6	1.2	<1
			6	0.02	0.57	2	<0.2	7	4	<0.1	2	<1	8	1.2	2
			--	--	--	--	--	--	--	--	--	--	6	0.6	--
	Bottom	14	0.05	0.66	2	<0.2	2	1	<0.1	2	<1	5	1.2	<1	
		12	0.05	0.68	3	<0.2	3	<1	<0.1	2	<1	5	1.3	<1	
		--	--	--	--	--	--	--	--	--	--	<4	1.3	--	

Annex D25 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/01	Mid-flood	Surface	3	0.02	1.23	3	<0.2	2	<1	<0.1	3	<1	<4	1.3	<1	
			3	0.02	1.23	2	<0.2	4	<1	<0.1	3	<1	<4	1.2	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	0.7	--
		Middle	6	0.01	0.71	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
			5	0.02	0.73	<2	<0.2	2	<1	<0.1	2	<1	<4	0.8	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	0.6	--
	Bottom	9	0.03	0.63	<2	<0.2	4	1	<0.1	2	<1	4	<0.5	<1		
		8	0.02	0.62	<2	<0.2	5	2	<0.1	2	<1	5	<0.5	<1		
		--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
2009/08/04	Mid-ebb	Surface	--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
		Middle	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
		Bottom	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Mid-flood	Surface	4	0.05	0.76	2	<0.2	4	2	<0.1	2	<1	<4	<0.5	<1	
			5	0.04	0.67	<2	<0.2	2	1	<0.1	2	<1	<4	<0.5	<1	
			5	0.04	0.76	2	<0.2	3	1	<0.1	2	<1	<4	<0.5	<1	
			4	0.04	0.7	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
		Middle	14	0.05	0.45	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
			15	0.04	0.41	2	<0.2	4	3	<0.1	2	<1	4	<0.5	1	
			12	0.05	0.47	<2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1	
Bottom	16	0.05	0.39	2	<0.2	3	2	<0.1	2	<1	5	<0.5	2			
	--	--	--	--	--	--	--	--	--	--	--	7	<0.5	--		
	--	--	--	--	--	--	--	--	--	--	--	4	<0.5	--		
Mid-flood	12	0.04	0.46	<2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	1			
	11	0.04	0.45	<2	<0.2	4	1	<0.1	2	<1	<4	<0.5	1			
	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
2009/08/06	Mid-ebb	Surface	8	0.04	1.14	2	0.5	4	1	<0.1	3	<1	4	2.1	<1	
			7	0.04	1.15	2	0.4	3	<1	<0.1	3	<1	<4	3	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.8	--
		Middle	16	0.1	0.86	<2	<0.2	4	1	<0.1	3	<1	<4	2.4	<1	
			18	0.1	0.87	2	<0.2	2	<1	<0.1	2	<1	<4	3.4	<1	
			--	--	--	--	--	--	--	--	--	--	--	4	2	--
	Bottom	28	0.09	0.81	2	<0.2	2	<1	<0.1	2	<1	4	2.4	<1		
		24	0.1	0.81	3	<0.2	3	1	<0.1	3	<1	5	3	<1		
		--	--	--	--	--	--	--	--	--	--	6	1.8	--		

Annex D25 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/06	Mid-flood	Surface	11	0.06	1.04	<2	<0.2	3	<1	<0.1	2	<1	<4	1.3	<1
			12	0.06	1.05	<2	<0.2	3	<1	<0.1	3	<1	<4	1.1	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	1.2
		Middle	8	0.11	0.92	3	<0.2	2	<1	<0.1	2	<1	<4	1.3	<1
			7	0.1	0.92	2	<0.2	2	1	<0.1	2	<1	<4	1.1	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	1.3
Bottom	11	0.11	0.7	2	<0.2	2	6	<0.1	2	<1	8	1.2	1		
	11	0.12	0.7	2	<0.2	2	4	<0.1	2	<1	4	1.2	1		
	--	--	--	--	--	--	--	--	--	--	--	4	1.2	--	
2009/08/08	Mid-ebb	Surface	5	<0.01	1.2	4	<0.2	2	<1	<0.1	2	<1	4	1.6	<1
			5	<0.01	1.18	3	<0.2	2	1	<0.1	2	<1	6	1	<1
			--	--	--	--	--	--	--	--	--	--	7	1	--
		Middle	12	0.07	0.85	3	<0.2	5	1	<0.1	2	<1	5	0.6	<1
			10	0.07	0.84	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Bottom	23	0.06	0.73	3	<0.2	3	1	<0.1	2	<1	6	<0.5	<1	
		25	0.06	0.73	2	<0.2	3	2	<0.1	2	<1	18	0.6	1	
		--	--	--	--	--	--	--	--	--	--	5	<0.5	--	
	Mid-flood	Surface	8	<0.01	1.13	2	<0.2	2	<1	<0.1	2	<1	<4	1.1	<1
			6	0.01	1.13	3	<0.2	2	<1	<0.1	2	<1	<4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
Middle		10	0.06	0.88	3	<0.2	2	<1	<0.1	2	<1	7	<0.5	<1	
		11	0.05	0.83	3	<0.2	2	2	<0.1	2	<1	8	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
Bottom	26	0.08	0.7	3	<0.2	2	<1	<0.1	1	<1	<4	<0.5	<1		
	28	0.09	0.68	3	<0.2	2	1	<0.1	2	<1	<4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
2009/08/12	Mid-ebb	Surface	5	0.15	1.15	2	<0.2	2	<1	<0.1	3	<1	<4	0.6	<1
			4	0.14	1.16	<2	<0.2	2	<1	<0.1	3	<1	<4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.6	--
		Middle	27	0.01	0.56	<2	<0.2	3	2	<0.1	2	<1	<4	<0.5	<1
			27	0.02	0.57	<2	<0.2	2	1	<0.1	2	<1	<4	0.5	<1
			--	--	--	--	--	--	--	--	--	--	5	<0.5	--
	Bottom	22	0.01	0.55	<2	<0.2	2	1	<0.1	2	<1	4	0.5	<1	
		25	0.02	0.57	<2	<0.2	2	1	<0.1	2	<1	4	0.5	<1	
		--	--	--	--	--	--	--	--	--	--	6	0.5	--	
	Mid-flood	Surface	8	0.19	1.16	2	<0.2	2	<1	<0.1	3	<1	<4	<0.5	<1
			7	0.19	1.15	2	<0.2	5	1	<0.1	3	<1	4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.5	--
Middle		10	0.05	0.71	2	<0.2	3	<1	<0.1	3	<1	<4	<0.5	<1	
		10	0.05	0.71	2	<0.2	3	<1	<0.1	2	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
Bottom	8	0.05	0.65	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1		
	8	0.04	0.64	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		

Annex D25 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/14	Mid-ebb	Surface	5	0.05	1.22	3	<0.2	5	1	<0.1	3	<1	<4	1.6	<1
			4	0.05	1.22	3	<0.2	1	<1	<0.1	3	<1	<4	1.4	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	1.5
	Middle	6	0.06	0.71	2	<0.2	3	<1	<0.1	2	<1	<1	<4	1.3	<1
		6	0.07	0.71	2	<0.2	2	<1	<0.1	2	<1	<1	<4	1.2	<1
		--	--	--	--	--	--	--	--	--	--	--	<4	1.6	--
	Bottom	11	0.05	0.65	2	<0.2	2	<1	<0.1	2	<1	<1	<4	1.2	<1
		13	0.06	0.65	2	<0.2	1	<1	<0.1	2	<1	<1	<4	0.5	<1
		--	--	--	--	--	--	--	--	--	--	--	<4	0.5	--
	Mid-flood	Surface	8	0.12	1.11	2	<0.2	5	1	<0.1	7	<1	9	0.8	<1
			9	0.11	1.11	2	<0.2	2	<1	<0.1	3	<1	<4	0.9	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.7	--
Middle	5	0.08	0.78	2	<0.2	5	<1	<0.1	2	<1	<1	<4	0.9	<1	
	5	0.08	0.79	2	<0.2	4	<1	<0.1	2	<1	<1	<4	0.5	<1	
	--	--	--	--	--	--	--	--	--	--	--	8	0.6	--	
Bottom	5	0.08	0.75	2	<0.2	3	<1	<0.1	2	<1	<1	<4	0.6	<1	
	5	0.07	0.74	2	<0.2	3	<1	<0.1	2	<1	<1	4	0.8	<1	
	--	--	--	--	--	--	--	--	--	--	--	4	0.8	--	
2009/08/16	Mid-ebb	Surface	5	0.01	1.14	3	<0.2	2	<1	<0.1	3	<1	<4	1.7	<1
			6	0.01	1.13	<2	<0.2	3	<1	<0.1	3	<1	<4	1.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.3	--
	Middle	7	0.03	0.6	3	<0.2	3	<1	<0.1	2	<1	<1	<4	0.8	<1
		9	0.02	0.57	3	<0.2	2	1	<0.1	2	<1	8	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Bottom	23	<0.01	0.4	2	<0.2	2	1	<0.1	1	<1	<1	5	0.8	<1
		26	<0.01	0.4	3	<0.2	2	2	<0.1	2	<1	<1	<4	0.9	<1
		--	--	--	--	--	--	--	--	--	--	--	5	<0.5	--
	Mid-flood	Surface	5	0.01	1.34	2	<0.2	5	<1	<0.1	3	<1	6	1.6	<1
			5	<0.01	1.33	2	<0.2	1	<1	<0.1	3	<1	<4	1.3	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.2	--
Middle	6	0.03	0.92	2	<0.2	2	<1	<0.1	2	<1	<1	<4	<0.5	<1	
	6	0.03	0.91	2	<0.2	2	<1	<0.1	2	<1	<1	<4	<0.5	<1	
	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
Bottom	11	0.08	0.73	2	<0.2	2	<1	<0.1	2	<1	<1	<4	0.8	<1	
	11	0.08	0.72	2	<0.2	1	<1	<0.1	2	<1	<1	<4	0.9	<1	
	--	--	--	--	--	--	--	--	--	--	--	<4	1.1	--	
2009/08/18	Mid-ebb	Surface	6	0.02	1.09	2	<0.2	2	1	<0.1	3	<1	<4	1.2	<1
			6	0.02	1.09	2	<0.2	2	<1	<0.1	3	<1	7	1.1	<1
			--	--	--	--	--	--	--	--	--	--	<4	1	--
	Middle	16	<0.01	0.51	2	<0.2	2	<1	<0.1	2	<1	<1	<4	0.6	<1
		16	0.01	0.52	2	<0.2	2	<1	<0.1	2	<1	<1	<4	0.7	<1
		--	--	--	--	--	--	--	--	--	--	--	<4	0.6	--
Bottom	23	0.01	0.51	2	<0.2	2	1	<0.1	2	<1	<1	<4	0.9	<1	
	23	<0.01	0.5	2	<0.2	2	<1	<0.1	1	<1	<1	<4	0.9	<1	
	--	--	--	--	--	--	--	--	--	--	--	<4	0.7	--	

Annex D25 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/18	Mid-flood	Surface	10	0.08	1.21	2	<0.2	2	<1	<0.1	3	<1	<4	1	<1
			9	0.08	1.21	2	<0.2	6	1	<0.1	3	<1	4	0.9	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	0.8
	Middle	10	0.02	0.75	2	<0.2	3	<1	<0.1	3	<1	<4	1	<1	
		11	0.02	0.74	2	<0.2	4	<1	<0.1	2	<1	<4	1	<1	
		--	--	--	--	--	--	--	--	--	--	--	<4	0.9	--
	Bottom	27	0.03	0.66	2	<0.2	2	<1	<0.1	2	<1	<4	0.7	<1	
		30	0.04	0.65	2	<0.2	2	<1	<0.1	2	<1	<4	0.9	<1	
		--	--	--	--	--	--	--	--	--	--	--	<4	1	--
2009/08/21	Mid-ebb	Surface	7	0.02	1.08	2	<0.2	2	<1	<0.1	2	<1	<4	1.3	<1
			7	0.02	1.08	2	<0.2	2	<1	<0.1	3	<1	<4	1.3	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	1.4
	Middle	23	0.07	0.83	2	<0.2	2	1	<0.1	2	<1	4	1.3	<1	
		21	0.07	0.82	2	<0.2	4	2	<0.1	2	<1	4	1.3	<1	
		--	--	--	--	--	--	--	--	--	--	--	5	1.2	--
	Bottom	28	0.1	0.83	2	<0.2	3	2	<0.1	2	<1	5	1.6	<1	
		27	0.08	0.82	2	<0.2	3	2	<0.1	3	<1	6	1.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	<4	1.6	--
	Mid-flood	Surface	7	0.08	1.19	2	<0.2	3	2	<0.1	4	<1	5	1.2	<1
			7	0.07	1.17	2	<0.2	2	<1	<0.1	4	<1	8	0.8	<1
			--	--	--	--	--	--	--	--	--	--	--	10	1
	Middle	13	0.11	0.88	2	<0.2	3	<1	<0.1	2	<1	5	1.3	<1	
		12	0.12	0.9	2	<0.2	5	1	<0.1	3	<1	4	1.1	<1	
		--	--	--	--	--	--	--	--	--	--	--	12	1.4	--
Bottom	14	0.1	0.84	2	<0.2	3	1	<0.1	3	<1	5	1	<1		
	13	0.09	0.84	2	<0.2	6	1	<0.1	2	<1	6	1.4	<1		
	--	--	--	--	--	--	--	--	--	--	--	14	1.2	--	
2009/08/23	Mid-ebb	Surface	7	0.04	1.04	3	<0.2	2	<1	<0.1	3	<1	<4	0.7	<1
			8	0.04	1.04	2	<0.2	2	<1	<0.1	3	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5
	Middle	20	0.06	0.83	2	<0.2	3	<1	<0.1	3	<1	<4	<0.5	<1	
		18	0.06	0.83	2	<0.2	1	<1	<0.1	2	<1	6	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Bottom	28	0.04	0.7	2	<0.2	1	<1	<0.1	2	<1	4	1	<1	
		29	0.05	0.73	2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	2	
		--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Mid-flood	Surface	9	0.04	1.11	2	<0.2	1	<1	<0.1	3	<1	<4	0.8	<1
			8	0.05	1.13	2	<0.2	2	<1	<0.1	4	<1	<4	0.9	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	0.6
	Middle	37	0.09	0.87	2	<0.2	2	1	<0.1	3	<1	4	1.5	<1	
		35	0.09	0.89	3	<0.2	5	2	<0.1	3	<1	6	0.8	1	
		--	--	--	--	--	--	--	--	--	--	--	8	<0.5	--
Bottom	97	0.06	0.65	4	<0.2	5	6	<0.1	4	<1	12	0.8	3		
	105	0.06	0.68	4	<0.2	5	5	<0.1	3	<1	12	1.3	3		
	--	--	--	--	--	--	--	--	--	--	--	13	1.7	--	

Annex D26 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WNAD

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/07/28	Mid-ebb	Surface	4	<0.01	1.26	<2	<0.2	2	2	<0.1	4	<1	45	0.8	<1
			5	<0.01	1.25	<2	<0.2	2	2	<0.1	4	<1	39	0.9	<1
			--	--	--	--	--	--	--	--	--	--	31	1	<1
		Middle	2	0.02	0.93	<2	<0.2	2	<1	<0.1	3	<1	22	0.6	<1
			3	0.02	0.94	<2	<0.2	2	<1	<0.1	3	<1	19	0.8	<1
			--	--	--	--	--	--	--	--	--	--	25	0.8	<1
	Bottom	24	0.04	0.72	<2	<0.2	4	1	<0.1	8	<1	12	0.8	<1	
		24	0.05	0.74	<2	<0.2	4	1	<0.1	8	<1	26	0.8	<1	
		--	--	--	--	--	--	--	--	--	--	16	0.5	<1	
	Mid-flood	Surface	6	<0.01	1.31	2	<0.2	4	1	<0.1	4	<1	57	<0.5	--
			5	<0.01	1.3	2	<0.2	4	1	<0.1	4	<1	30	<0.5	--
			--	--	--	--	--	--	--	--	--	--	46	0.6	--
Middle		8	0.03	1.09	2	<0.2	4	<1	<0.1	3	<1	47	<0.5	--	
		7	0.04	1.11	<2	<0.2	4	<1	<0.1	3	<1	42	<0.5	--	
		--	--	--	--	--	--	--	--	--	--	55	<0.5	--	
Bottom	8	0.04	1.08	2	<0.2	12	1	<0.1	3	<1	40	0.9	--		
	9	0.05	1.09	<2	<0.2	16	1	<0.1	3	<1	43	1.1	--		
	--	--	--	--	--	--	--	--	--	--	11	0.6	--		
2009/07/30	Mid-ebb	Surface	4	<0.01	1.17	<2	<0.2	5	<1	<0.1	3	<1	6	0.8	<1
			3	<0.01	1.16	2	<0.2	6	<1	<0.1	3	<1	<4	0.7	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
		Middle	4	<0.01	1.01	<2	<0.2	2	<1	<0.1	6	<1	<4	0.6	<1
			3	<0.01	1	<2	<0.2	5	<1	<0.1	4	<1	4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.5	--
	Bottom	3	<0.01	0.88	<2	<0.2	2	<1	<0.1	2	<1	5	<0.5	<1	
		3	<0.01	0.87	<2	<0.2	2	<1	<0.1	2	<1	<4	0.6	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Mid-flood	Surface	3	<0.01	1.25	2	<0.2	2	<1	<0.1	3	<1	<4	0.9	<1
			7	<0.01	1.2	2	<0.2	2	<1	<0.1	3	<1	<4	0.9	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.8	--
Middle		4	0.02	0.98	2	<0.2	6	<1	<0.1	3	<1	7	0.7	<1	
		4	0.02	0.96	2	<0.2	4	<1	<0.1	2	<1	6	0.8	<1	
		--	--	--	--	--	--	--	--	--	--	7	0.7	--	
Bottom	8	0.02	0.8	2	<0.2	3	<1	<0.1	2	<1	5	0.7	<1		
	7	0.03	0.85	2	<0.2	5	<1	<0.1	2	<1	7	0.7	<1		
	--	--	--	--	--	--	--	--	--	--	7	0.9	--		
2009/08/01	Mid-ebb	Surface	3	<0.01	1.44	2	<0.2	4	1	<0.1	2	<1	5	1.4	<1
			3	<0.01	1.43	2	<0.2	7	2	<0.1	2	<1	6	1.4	<1
			--	--	--	--	--	--	--	--	--	--	4	1.6	--
		Middle	13	0.04	0.63	3	<0.2	3	<1	<0.1	4	<1	<4	2.2	<1
			12	0.03	0.59	3	<0.2	3	<1	<0.1	4	<1	<4	2.3	<1
			--	--	--	--	--	--	--	--	--	--	<4	2.2	--
Bottom	7	0.02	0.58	2	<0.2	3	<1	<0.1	2	<1	<4	1.2	<1		
	7	0.02	0.62	2	<0.2	3	<1	<0.1	2	<1	<4	1.2	<1		
	--	--	--	--	--	--	--	--	--	--	<4	1.1	--		

Annex D26 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/01	Mid-flood	Surface	4	<0.01	1.21	3	<0.2	2	<1	<0.1	3	<1	<4	1.2	<1	
			5	<0.01	1.2	2	<0.2	2	<1	<0.1	3	<1	<4	1.2	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1	--
		Middle	6	<0.01	0.81	<2	<0.2	1	<1	<0.1	2	<1	<4	1.2	<1	
			4	<0.01	0.81	2	<0.2	2	<1	<0.1	2	<1	<4	0.8	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Bottom	11	0.02	0.64	2	<0.2	1	<1	<0.1	2	<1	<4	1	<1		
		10	0.03	0.64	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	--	--	<4	1.1	--	
2009/08/04	Mid-ebb	Surface	--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
		Middle	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Bottom	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Mid-flood	Surface	7	0.05	0.72	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
			6	0.05	0.72	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	5	<0.5	--
Middle		10	0.05	0.53	<2	<0.2	2	1	<0.1	2	<1	<4	<0.5	<1		
		10	0.06	0.55	<2	<0.2	3	1	<0.1	2	<1	<4	<0.5	<1		
		--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
Bottom	9	0.05	0.5	2	<0.2	2	<1	<0.1	2	<1	4	<0.5	1			
	10	0.05	0.51	2	0.2	2	<1	<0.1	1	<1	<4	<0.5	<1			
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--			
2009/08/06	Mid-ebb	Surface	8	0.1	1.11	2	0.2	2	<1	<0.1	3	<1	<4	2	<1	
			10	0.09	1.08	2	<0.2	2	<1	<0.1	3	<1	<4	1.8	<1	
			--	--	--	--	--	--	--	--	--	--	6	1.8	--	
		Middle	12	0.08	0.88	2	<0.2	2	<1	<0.1	2	<1	<4	1.8	<1	
			14	0.08	0.86	2	<0.2	2	<1	<0.1	2	<1	<4	1.7	<1	
			--	--	--	--	--	--	--	--	--	--	4	1.6	--	
		Bottom	25	0.09	0.82	2	<0.2	3	1	<0.1	2	<1	<4	1.6	<1	
			25	0.09	0.81	3	<0.2	2	<1	<0.1	2	<1	<4	2.2	<1	
			--	--	--	--	--	--	--	--	--	--	5	1.7	--	
	Mid-flood	Surface	10	0.06	1.08	2	<0.2	2	<1	<0.1	2	<1	<4	1.2	<1	
			11	0.05	1.06	2	<0.2	2	<1	<0.1	2	<1	<4	1.2	<1	
			--	--	--	--	--	--	--	--	--	--	<4	1.2	--	
		Middle	9	0.13	0.92	2	<0.2	2	<1	<0.1	2	<1	<4	1.3	<1	
			8	0.11	0.89	2	<0.2	2	<1	<0.1	2	<1	<4	1.2	<1	
			--	--	--	--	--	--	--	--	--	--	<4	1.1	--	
Bottom	9	0.11	0.74	<2	<0.2	2	2	<0.1	2	<1	<4	1.4	<1			
	10	0.11	0.74	3	<0.2	2	4	<0.1	2	<1	<4	1.2	<1			
--	--	--	--	--	--	--	--	--	--	<4	1.4	--				

Annex D26 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/08	Mid-ebb	Surface	4	<0.01	1.14	3	<0.2	2	<1	<0.1	2	<1	<4	1.2	<1
			4	<0.01	1.15	4	<0.2	2	<1	<0.1	2	<1	6	1.1	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	0.8
		Middle	9	0.05	0.9	3	<0.2	3	<1	<0.1	2	<1	<4	<0.5	<1
			8	0.05	0.9	3	<0.2	2	<1	<0.1	2	<1	<4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5
	Bottom	15	0.06	0.7	4	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
		18	0.06	0.7	3	<0.2	3	<1	<0.1	2	<1	5	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	4	<0.5	--	
	Mid-flood	Surface	7	<0.01	1.17	2	<0.2	2	<1	<0.1	2	<1	<4	1.1	<1
			8	<0.01	1.21	3	<0.2	2	<1	<0.1	2	<1	<4	0.9	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5
Middle		14	0.08	0.92	2	<0.2	2	<1	<0.1	2	<1	<4	0.8	<1	
		10	0.06	0.91	2	<0.2	2	<1	<0.1	2	<1	<4	0.5	<1	
		--	--	--	--	--	--	--	--	--	--	8	<0.5	--	
Bottom	17	0.04	0.78	2	<0.2	2	<1	<0.1	2	<1	<4	0.7	<1		
	16	0.05	0.8	2	<0.2	3	2	<0.1	2	<1	<4	0.7	<1		
	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
2009/08/12	Mid-ebb	Surface	4	0.14	1.35	<2	<0.2	2	<1	<0.1	3	<1	<4	0.9	<1
			4	0.13	1.32	<2	<0.2	2	<1	<0.1	3	<1	<4	0.5	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5
		Middle	14	0.02	0.61	<2	<0.2	2	<1	<0.1	1	<1	4	<0.5	<1
			16	0.02	0.6	<2	<0.2	2	<1	<0.1	1	<1	<4	0.5	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5
	Bottom	17	0.01	0.56	<2	<0.2	1	<1	<0.1	3	<1	<4	0.5	<1	
		15	<0.01	0.55	<2	<0.2	1	<1	<0.1	1	<1	<4	0.7	<1	
		--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Mid-flood	Surface	4	0.17	1.09	<2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1
			5	0.17	1.09	3	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5
Middle		6	0.06	0.75	<2	<0.2	3	<1	<0.1	2	<1	<4	<0.5	<1	
		6	0.06	0.73	2	<0.2	5	<1	<0.1	2	<1	4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
Bottom	8	0.05	0.7	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1		
	8	0.06	0.72	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
2009/08/14	Mid-ebb	Surface	4	0.04	1.16	2	<0.2	1	<1	<0.1	3	<1	<4	1.2	<1
			4	0.04	1.23	2	<0.2	2	<1	<0.1	3	<1	<4	0.5	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5
		Middle	6	0.06	0.82	2	<0.2	4	<1	<0.1	2	<1	<4	1	<1
			5	0.06	0.88	2	<0.2	3	<1	<0.1	2	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5
Bottom	6	0.05	0.71	2	<0.2	1	<1	<0.1	3	<1	<4	0.8	<1		
	7	0.05	0.69	2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	

Annex D26 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/14	Mid-flood	Surface	6	0.21	1.27	2	<0.2	2	<1	<0.1	3	<1	<4	1.1	<1
			6	0.19	1.25	2	<0.2	2	<1	<0.1	3	<1	<4	0.7	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	0.9
	Middle	5	0.13	0.97	2	<0.2	4	<1	<0.1	2	<1	<4	0.8	<1	
			5	0.13	0.96	3	<0.2	2	<1	<0.1	2	<1	<4	0.7	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	0.6
	Bottom	10	0.08	0.78	2	<0.2	3	<1	<0.1	2	<1	<4	0.9	<1	
			10	0.08	0.76	2	<0.2	3	<1	<0.1	2	<1	<4	0.8	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	0.6
2009/08/16	Mid-ebb	Surface	3	<0.01	1.21	3	<0.2	3	3	<0.1	3	<1	<4	1.4	<1
			3	<0.01	1.21	2	<0.2	2	<1	<0.1	3	<1	<4	1.5	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	1.3
	Middle	6	0.04	0.71	2	<0.2	2	<1	<0.1	2	<1	<4	1.2	<1	
			8	0.04	0.7	2	<0.2	2	1	<0.1	2	<1	<4	1.2	<1
			--	--	--	--	--	--	--	--	--	--	5	1	--
	Bottom	7	0.04	0.56	2	<0.2	2	<1	<0.1	2	<1	<4	1.2	<1	
			8	0.05	0.57	<2	<0.2	1	<1	<0.1	1	<1	<4	1.2	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.2	--
	Mid-flood	Surface	5	0.01	1.34	2	<0.2	3	<1	<0.1	3	<1	4	1.4	<1
			5	0.02	1.35	2	<0.2	6	2	<0.1	3	<1	10	1.4	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.4	--
Middle		6	0.09	0.94	2	<0.2	2	<1	<0.1	2	<1	5	<0.5	<1	
			7	0.09	0.94	2	<0.2	2	<1	<0.1	2	<1	4	0.7	<1
			--	--	--	--	--	--	--	--	--	--	6	<0.5	--
Bottom	12	0.05	0.74	3	<0.2	2	<1	<0.1	2	<1	4	0.7	<1		
		12	0.05	0.74	2	<0.2	2	<1	<0.1	2	<1	5	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
2009/08/18	Mid-ebb	Surface	6	0.07	1.07	2	<0.2	4	<1	<0.1	3	<1	<4	1.6	<1
			6	0.05	1.05	2	<0.2	6	1	<0.1	3	<1	<4	1.4	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.2	--
	Middle	15	0.04	0.6	2	<0.2	2	<1	<0.1	2	<1	4	1.6	<1	
			16	0.03	0.57	2	<0.2	4	<1	<0.1	2	<1	16	1	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.2	--
	Bottom	20	0.03	0.5	2	<0.2	2	1	<0.1	2	<1	6	1.4	<1	
			20	0.02	0.49	3	<0.2	2	1	<0.1	2	<1	5	1.2	<1
			--	--	--	--	--	--	--	--	--	--	5	1.2	--
	Mid-flood	Surface	8	0.1	1.25	3	<0.2	2	<1	<0.1	2	<1	<4	1	<1
			9	0.1	1.24	2	<0.2	1	<1	<0.1	2	<1	<4	1.4	<1
			--	--	--	--	--	--	--	--	--	--	<4	1	--
Middle		13	0.05	1.02	3	<0.2	3	<1	<0.1	2	<1	<4	0.9	<1	
			14	0.05	1.01	2	<0.2	5	<1	<0.1	2	<1	5	1.2	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.8	--
Bottom	48	0.02	0.69	2	<0.2	2	<1	<0.1	2	<1	<4	1.1	1		
		47	0.02	0.67	3	<0.2	2	<1	<0.1	2	<1	<4	0.9	1	
		--	--	--	--	--	--	--	--	--	--	<4	1.1	--	

Annex D26 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/21	Mid-ebb	Surface	6	0.03	1.11	2	<0.2	2	<1	<0.1	3	<1	<4	1.2	<1
			6	0.03	1.1	2	<0.2	2	<1	<0.1	3	<1	6	0.9	<1
			--	--	--	--	--	--	--	--	--	--	4	1.1	--
		Middle	15	0.06	0.9	2	<0.2	2	<1	<0.1	2	<1	<4	1.4	<1
			16	0.06	0.89	2	<0.2	2	1	<0.1	3	<1	<4	1.2	<1
			--	--	--	--	--	--	--	--	--	--	5	1.4	--
	Bottom	25	0.05	0.71	2	<0.2	2	1	<0.1	2	<1	7	1.2	<1	
		26	0.04	0.69	2	<0.2	2	1	<0.1	2	<1	<4	1.7	<1	
		--	--	--	--	--	--	--	--	--	--	6	0.9	--	
	Mid-flood	Surface	7	0.07	1.17	2	<0.2	2	<1	<0.1	3	<1	<4	1.1	<1
			7	0.07	1.18	2	<0.2	2	<1	<0.1	3	<1	<4	1.1	<1
			--	--	--	--	--	--	--	--	--	--	5	0.9	--
Middle		10	0.08	0.88	2	<0.2	4	2	<0.1	3	<1	8	1	<1	
		10	0.09	0.89	2	<0.2	2	<1	<0.1	2	<1	6	1.1	<1	
		--	--	--	--	--	--	--	--	--	--	4	1	--	
Bottom	33	0.07	0.83	3	<0.2	3	2	<0.1	3	<1	11	1	1		
	32	0.09	0.86	3	<0.2	3	2	<0.1	3	<1	10	1.3	<1		
	--	--	--	--	--	--	--	--	--	--	9	1	--		
2009/08/23	Mid-ebb	Surface	7	0.03	1.05	2	<0.2	1	<1	<0.1	3	<1	<4	<0.5	<1
			8	0.03	1.03	2	<0.2	1	<1	<0.1	3	<1	9	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.6	--
		Middle	12	0.05	0.88	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1
			11	0.05	0.87	3	<0.2	2	<1	<0.1	2	<1	<4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Bottom	24	0.03	0.69	2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1	
		26	0.04	0.71	2	<0.2	1	<1	<0.1	2	<1	5	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	6	<0.5	--	
	Mid-flood	Surface	8	0.02	1.19	2	<0.2	2	<1	<0.1	3	<1	<4	0.6	<1
			6	0.02	1.19	2	<0.2	2	<1	<0.1	3	<1	<4	1	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.5	--
Middle		12	0.07	0.95	2	<0.2	3	<1	<0.1	2	<1	<4	0.9	<1	
		11	0.06	0.95	2	<0.2	2	<1	<0.1	2	<1	<4	0.8	<1	
		--	--	--	--	--	--	--	--	--	--	<4	0.8	--	
Bottom	27	0.11	0.95	2	<0.2	5	<1	<0.1	3	<1	6	1.1	<1		
	30	0.13	0.96	2	<0.2	5	1	<0.1	3	<1	6	1.9	1		
	--	--	--	--	--	--	--	--	--	--	6	1.8	--		

Annex D27 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WNBA

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/07/28	Mid-ebb	Surface	4	<0.01	1.29	2	<0.2	3	<1	<0.1	3	<1	22	<0.5	<1
			4	<0.01	1.28	2	<0.2	3	<1	<0.1	3	<1	42	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	16	1.1	<1
		Middle	4	0.01	1.1	<2	<0.2	16	<1	<0.1	3	<1	28	<0.5	<1
			3	0.02	1.1	2	<0.2	7	<1	<0.1	2	<1	23	0.7	<1
			--	--	--	--	--	--	--	--	--	--	13	<0.5	<1
	Bottom	7	0.02	1.02	<2	<0.2	<1	<1	<0.1	2	<1	32	<0.5	<1	
		8	0.02	0.98	<2	<0.2	<1	<1	<0.1	2	<1	40	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	42	0.8	<1	
	Mid-flood	Surface	4	0.02	1.14	<2	<0.2	2	<1	<0.1	3	<1	48	0.5	<1
			4	0.02	1.16	<2	<0.2	2	<1	<0.1	3	<1	43	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	34	0.5	<1
Middle		5	0.03	1.12	<2	<0.2	1	<1	<0.1	3	<1	19	<0.5	<1	
		4	0.03	1.12	2	<0.2	1	<1	<0.1	3	<1	30	0.8	<1	
		--	--	--	--	--	--	--	--	--	--	10	0.7	<1	
Bottom	5	0.03	1.03	<2	<0.2	<1	<1	<0.1	3	<1	10	0.6	<1		
	3	0.03	1.08	<2	<0.2	1	<1	<0.1	3	<1	41	0.7	<1		
	--	--	--	--	--	--	--	--	--	--	33	<0.5	<1		
2009/07/30	Mid-ebb	Surface	4	<0.01	1.03	<2	<0.2	7	<1	<0.1	2	<1	6	1	<1
			5	<0.01	1.02	<2	<0.2	6	<1	<0.1	2	<1	5	1.2	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.9	--
		Middle	4	<0.01	0.87	<2	<0.2	3	<1	<0.1	2	<1	4	0.9	<1
			4	<0.01	0.88	<2	<0.2	3	<1	<0.1	2	<1	<4	0.8	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.1	--
	Bottom	4	<0.01	0.82	<2	<0.2	<1	<1	<0.1	2	<1	<4	0.8	<1	
		4	<0.01	0.81	<2	<0.2	<1	<1	<0.1	2	<1	<4	0.7	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Mid-flood	Surface	8	<0.01	1.11	2	<0.2	7	<1	<0.1	2	<1	6	1.8	<1
			8	<0.01	1.1	2	<0.2	11	<1	<0.1	3	<1	13	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	7	<0.5	--
Middle		9	0.01	0.86	2	<0.2	3	<1	<0.1	2	<1	<4	1.1	<1	
		9	<0.01	0.86	<2	<0.2	4	<1	<0.1	2	<1	4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
Bottom	7	<0.01	0.84	<2	<0.2	2	<1	<0.1	2	<1	<4	0.6	<1		
	6	0.03	0.86	2	<0.2	1	<1	<0.1	2	<1	4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
2009/08/01	Mid-ebb	Surface	4	<0.01	1.24	3	<0.2	8	<1	<0.1	3	<1	5	0.9	<1
			3	<0.01	1.24	2	<0.2	7	1	<0.1	3	<1	5	0.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.9	--
		Middle	2	0.02	0.69	2	<0.2	4	<1	<0.1	2	<1	10	0.6	<1
			2	0.02	0.69	2	<0.2	5	<1	<0.1	2	<1	<4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.6	--
Bottom	8	0.03	0.61	2	<0.2	2	<1	<0.1	2	<1	<4	0.7	<1		
	7	0.02	0.61	2	<0.2	1	<1	<0.1	2	<1	<4	0.6	<1		
	--	--	--	--	--	--	--	--	--	--	<4	0.6	--		

Annex D27 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/01	Mid-flood	Surface	6	<0.01	1.49	2	<0.2	23	1	<0.1	3	<1	10	0.7	<1	
			5	<0.01	1.51	2	<0.2	16	2	<0.1	4	<1	10	0.8	<1	
			--	--	--	--	--	--	--	--	--	--	--	9	<0.5	--
	Middle	5	5	<0.01	0.85	2	<0.2	3	<1	<0.1	2	<1	8	0.6	<1	
			6	<0.01	0.89	2	<0.2	3	<1	<0.1	2	<1	6	0.6	<1	
			--	--	--	--	--	--	--	--	--	--	--	8	0.5	--
	Bottom	6	6	0.01	0.62	2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1	
			8	0.01	0.64	<2	<0.2	<1	<1	<0.1	2	<1	<4	0.6	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	0.5	--
2009/08/04	Mid-ebb	Surface	--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Middle	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Bottom	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mid-flood	Surface	3	0.04	0.77	3	<0.2	3	<1	<0.1	2	<1	<4	1.1	<1		
		3	0.04	0.77	2	<0.2	7	2	<0.1	2	<1	6	1.2	<1		
		--	--	--	--	--	--	--	--	--	--	--	6	1.1	--	
	Middle	5	5	0.05	0.57	2	<0.2	2	<1	<0.1	2	<1	<4	1.2	<1	
			4	0.04	0.55	2	<0.2	2	<1	<0.1	2	<1	5	1	<1	
			--	--	--	--	--	--	--	--	--	--	5	1.6	--	
Bottom	19	19	0.05	0.49	2	<0.2	1	<1	<0.1	2	<1	5	0.7	<1		
		16	0.05	0.47	3	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1		
		--	--	--	--	--	--	--	--	--	--	<4	0.5	--		
2009/08/06	Mid-ebb	Surface	7	0.08	0.85	2	<0.2	3	<1	<0.1	3	<1	<4	1.7	<1	
			6	0.09	0.85	<2	<0.2	3	<1	<0.1	2	<1	<4	1.8	<1	
			--	--	--	--	--	--	--	--	--	--	<4	1.6	--	
	Middle	14	14	0.09	0.77	2	<0.2	4	<1	<0.1	3	<1	4	0.6	<1	
			15	0.08	0.76	3	<0.2	4	<1	<0.1	2	<1	7	1	<1	
			--	--	--	--	--	--	--	--	--	--	5	0.6	--	
	Bottom	20	20	0.07	0.68	<2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
			18	0.07	0.69	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
Mid-flood	Surface	7	0.1	0.76	2	<0.2	5	<1	<0.1	2	<1	7	<0.5	<1		
		6	0.09	0.77	2	0.3	9	<1	<0.1	2	<1	24	<0.5	<1		
		--	--	--	--	--	--	--	--	--	--	5	<0.5	--		
	Middle	12	12	0.08	0.69	2	<0.2	2	<1	<0.1	2	<1	5	<0.5	<1	
			14	0.08	0.71	2	<0.2	3	<1	<0.1	2	<1	4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	5	<0.5	--	
Bottom	15	15	0.08	0.66	<2	<0.2	2	<1	<0.1	2	<1	7	<0.5	<1		
		14	0.08	0.66	2	<0.2	2	<1	<0.1	2	<1	7	<0.5	<1		
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		

Annex D27 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/08	Mid-ebb	Surface	6	<0.01	1	3	<0.2	4	<1	<0.1	2	<1	5	1.3	<1
			5	<0.01	1	3	<0.2	2	<1	<0.1	2	<1	4	1.2	<1
			--	--	--	--	--	--	--	--	--	--	5	1.1	--
		Middle	6	0.04	0.94	3	<0.2	9	1	<0.1	2	<1	6	1.3	<1
			6	0.04	0.94	3	<0.2	7	<1	<0.1	2	<1	7	1	<1
			--	--	--	--	--	--	--	--	--	--	6	0.9	--
	Bottom	32	0.06	0.73	3	<0.2	8	2	<0.1	2	<1	12	1.1	1	
		34	0.06	0.73	3	<0.2	10	2	<0.1	2	<1	15	0.9	1	
		--	--	--	--	--	--	--	--	--	--	11	0.9	--	
	Mid-flood	Surface	5	0.03	1.29	3	<0.2	3	<1	<0.1	<1	<1	<4	0.6	<1
			6	0.04	1.33	2	<0.2	2	<1	<0.1	<1	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	4	<0.5	--
Middle		6	0.1	1.26	4	<0.2	4	<1	<0.1	<1	<1	<4	<0.5	<1	
		7	0.08	1.28	3	<0.2	3	<1	<0.1	<1	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	8	0.6	--	
Bottom	8	0.11	1.22	3	<0.2	7	<1	<0.1	<1	<1	<4	<0.5	<1		
	8	0.1	1.18	4	<0.2	6	<1	<0.1	<1	<1	<4	0.6	<1		
	--	--	--	--	--	--	--	--	--	--	7	<0.5	--		
2009/08/12	Mid-ebb	Surface	4	0.13	1.41	2	<0.2	3	<1	<0.1	2	<1	<4	0.7	<1
			3	0.13	1.42	3	<0.2	4	<1	<0.1	<1	<1	<4	0.9	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.9	--
		Middle	5	0.04	0.75	2	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<1
			6	0.05	0.76	2	<0.2	7	<1	<0.1	<1	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Bottom	7	0.05	0.7	3	<0.2	3	<1	<0.1	1	<1	<4	0.5	<1	
		7	0.04	0.66	3	<0.2	2	<1	<0.1	<1	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	0.7	--	
	Mid-flood	Surface	5	0.06	0.97	2	<0.2	2	<1	<0.1	2	<1	<4	0.7	<1
			5	0.06	0.96	3	<0.2	3	1	<0.1	2	<1	<4	0.5	<1
			--	--	--	--	--	--	--	--	--	--	5	<0.5	--
Middle		9	0.05	0.85	2	<0.2	2	<1	<0.1	2	<1	<4	0.6	<1	
		9	0.05	0.83	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	4	<0.5	--	
Bottom	6	0.04	0.77	2	<0.2	<1	<1	<0.1	2	<1	<4	0.6	<1		
	7	0.04	0.76	2	<0.2	1	<1	<0.1	2	<1	14	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
2009/08/14	Mid-ebb	Surface	4	0.11	1.22	3	<0.2	4	<1	<0.1	3	<1	<4	1.1	<1
			5	0.11	1.22	2	<0.2	3	<1	<0.1	3	<1	5	1	<1
			--	--	--	--	--	--	--	--	--	--	6	0.8	--
	Middle	6	0.06	0.87	2	<0.2	2	<1	<0.1	2	<1	13	0.8	<1	
		5	0.06	0.87	2	<0.2	2	<1	<0.1	2	<1	5	0.8	<1	
		--	--	--	--	--	--	--	--	--	--	10	0.8	--	
	Bottom	7	0.1	0.81	2	<0.2	16	1	<0.1	2	<1	12	1.9	<1	
		7	0.08	0.79	3	<0.2	16	1	<0.1	2	<1	14	1.9	<1	
		--	--	--	--	--	--	--	--	--	--	12	1.9	--	

Annex D27 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/14	Mid-flood	Surface	5	0.06	1	<2	<0.2	2	<1	<0.1	2	<1	<4	1.9	<1	
			5	0.07	1	2	<0.2	2	<1	<0.1	2	<1	<4	1.6	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.6	--
	Middle	6	0.07	0.9	2	<0.2	1	<1	<0.1	2	<1	<4	1.9	<1		
			7	0.07	0.9	2	<0.2	1	<1	<0.1	2	<1	<4	1.7	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.7	--
	Bottom	5	0.06	0.87	2	<0.2	<1	<1	<0.1	2	<1	<4	1.8	<1		
			4	0.06	0.86	2	<0.2	<1	<1	<0.1	2	<1	<4	1.6	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.2	--
2009/08/16	Mid-ebb	Surface	4	0.01	1.33	3	<0.2	4	1	<0.1	3	<1	10	1.6	<1	
			3	<0.01	1.31	2	<0.2	4	1	<0.1	3	<1	7	1.7	<1	
			--	--	--	--	--	--	--	--	--	--	--	7	1.7	--
	Middle	4	0.05	0.9	<2	<0.2	4	1	<0.1	2	<1	7	1.1	<1		
			5	0.05	0.94	2	<0.2	3	<1	<0.1	2	<1	5	1.3	<1	
			--	--	--	--	--	--	--	--	--	--	--	6	1.1	--
	Bottom	13	0.02	0.56	<2	<0.2	1	<1	<0.1	1	<1	<4	1	<1		
			11	0.02	0.62	<2	<0.2	1	<1	<0.1	1	<1	<4	0.8	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	0.6	--
	Mid-flood	Surface	4	0.02	1.18	4	<0.2	4	<1	<0.1	3	<1	<4	1.9	<1	
				3	0.02	1.22	2	<0.2	3	<1	<0.1	3	<1	6	1.2	<1
				--	--	--	--	--	--	--	--	--	--	--	6	1.3
Middle		7	0.04	0.75	2	<0.2	3	<1	<0.1	2	<1	5	1.1	<1		
			7	0.04	0.75	<2	<0.2	3	<1	<0.1	1	<1	5	1	<1	
			--	--	--	--	--	--	--	--	--	--	--	6	1.2	--
Bottom	11	0.06	0.6	2	<0.2	15	2	<0.1	2	<1	4	1.7	<1			
		11	0.05	0.63	2	<0.2	16	<1	<0.1	2	<1	13	1.1	<1		
		--	--	--	--	--	--	--	--	--	--	--	10	1	--	
2009/08/18	Mid-ebb	Surface	4	0.02	1.06	2	<0.2	4	<1	<0.1	3	<1	6	1.4	<1	
			5	0.02	1.07	2	<0.2	4	<1	<0.1	3	<1	5	1.6	<1	
			--	--	--	--	--	--	--	--	--	--	--	6	1.4	--
		Middle	10	0.03	0.67	2	<0.2	4	<1	<0.1	2	<1	<4	1.1	<1	
				12	0.02	0.66	2	<0.2	4	<1	<0.1	1	<1	<4	1.3	<1
				--	--	--	--	--	--	--	--	--	--	--	5	1.1
	Bottom	22	0.01	0.56	2	<0.2	2	<1	<0.1	2	<1	6	1.3	<1		
			24	0.01	0.55	3	<0.2	1	<1	<0.1	3	<1	<4	1	<1	
			--	--	--	--	--	--	--	--	--	--	--	7	1.1	--
	Mid-flood	Surface	7	<0.01	0.92	2	<0.2	3	<1	<0.1	4	<1	9	1.5	<1	
				<0.01	0.91	2	<0.2	2	<1	<0.1	3	<1	<4	1.4	<1	
				--	--	--	--	--	--	--	--	--	--	--	5	1.2
Middle		13	0.02	0.76	2	<0.2	2	<1	<0.1	2	<1	5	1.4	<1		
			11	0.02	0.75	2	<0.2	2	<1	<0.1	2	<1	<4	1.3	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.2	--
Bottom	26	0.03	0.58	2	<0.2	2	1	<0.1	2	<1	13	1	<1			
		26	0.03	0.55	3	<0.2	2	1	<0.1	2	<1	6	0.8	<1		
		--	--	--	--	--	--	--	--	--	--	--	4	0.9	--	

Annex D27 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/21	Mid-ebb	Surface	11	0.05	0.89	<2	<0.2	3	<1	<0.1	3	<1	5	1	<1
			12	0.05	0.88	2	<0.2	<1	<1	<0.1	2	<1	<4	1	<1
			--	--	--	--	--	--	--	--	--	--	6	0.9	--
		Middle	22	0.04	0.78	2	<0.2	<1	1	<0.1	3	<1	5	0.7	<1
			23	0.04	0.78	2	<0.2	3	1	<0.1	3	<1	7	0.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.7	--
	Bottom	27	0.03	0.75	2	<0.2	2	1	<0.1	3	<1	5	<0.5	<1	
		28	0.03	0.76	2	<0.2	<1	1	<0.1	2	<1	7	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	5	<0.5	--	
	Mid-flood	Surface	11	0.06	0.97	3	<0.2	3	<1	<0.1	3	<1	6	1.1	<1
			10	0.06	0.98	2	<0.2	3	<1	<0.1	2	<1	<4	0.8	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.2	--
Middle		20	0.06	0.87	2	<0.2	3	1	<0.1	3	<1	6	1.1	<1	
		22	0.07	0.87	2	<0.2	3	1	<0.1	2	<1	<4	0.8	<1	
		--	--	--	--	--	--	--	--	--	--	<4	1.1	--	
Bottom	33	0.06	0.75	3	<0.2	2	1	<0.1	2	<1	4	0.8	1		
	34	0.05	0.73	2	<0.2	2	1	<0.1	2	<1	<4	0.5	1		
	--	--	--	--	--	--	--	--	--	--	5	1	--		
2009/08/23	Mid-ebb	Surface	15	0.03	0.72	2	<0.2	4	<1	<0.1	2	<1	4	<0.5	<1
			14	0.03	0.69	2	<0.2	4	1	<0.1	2	<1	5	0.7	<1
			--	--	--	--	--	--	--	--	--	--	5	0.5	--
		Middle	6	0.02	0.82	2	<0.2	5	<1	<0.1	2	<1	5	0.8	<1
			6	0.02	0.83	2	<0.2	4	<1	<0.1	2	<1	4	1	<1
			--	--	--	--	--	--	--	--	--	--	5	0.9	--
	Bottom	67	0.08	0.66	2	<0.2	10	2	<0.1	3	<1	15	1.8	1	
		60	0.09	0.69	2	<0.2	11	2	<0.1	2	<1	16	1.6	1	
		--	--	--	--	--	--	--	--	--	--	12	1.8	--	
	Mid-flood	Surface	12	0.05	0.93	3	<0.2	2	<1	<0.1	2	<1	<4	0.6	<1
			10	0.05	0.94	2	<0.2	2	<1	<0.1	3	<1	<4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.7	--
Middle		21	0.05	0.91	2	<0.2	1	<1	<0.1	2	<1	4	0.9	<1	
		20	0.05	0.89	2	<0.2	1	<1	<0.1	3	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
Bottom	42	0.05	0.78	2	<0.2	2	<1	<0.1	2	<1	<4	0.8	<1		
	32	0.05	0.81	2	<0.2	1	<1	<0.1	2	<1	5	<0.5	1		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		

Annex D28 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WNBB

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/07/28	Mid-ebb	Surface	4	<0.01	1.29	2	<0.2	16	<1	<0.1	3	<1	13	0.6	<1
			4	<0.01	1.29	2	<0.2	20	1	<0.1	3	<1	8	0.9	<1
			--	--	--	--	--	--	--	--	--	--	19	0.8	<1
		Middle	7	0.05	1.04	<2	<0.2	17	1	<0.1	4	<1	16	1.4	<1
			8	0.05	1.03	<2	<0.2	11	<1	<0.1	3	<1	19	1.5	<1
			--	--	--	--	--	--	--	--	--	--	15	1.9	<1
		Bottom	7	0.07	0.72	2	<0.2	1	<1	<0.1	3	<1	6	<0.5	<1
			7	0.07	0.73	2	<0.2	1	<1	<0.1	2	<1	5	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	8	0.9	<1
	Mid-flood	Surface	6	0.02	1.1	2	<0.2	1	<1	<0.1	3	<1	28	<0.5	--
			5	0.02	1.11	2	<0.2	1	<1	<0.1	3	<1	32	0.6	--
			--	--	--	--	--	--	--	--	--	--	35	1.3	--
		Middle	12	0.04	0.92	2	<0.2	2	<1	<0.1	3	<1	22	<0.5	--
			12	0.04	0.91	2	<0.2	1	<1	<0.1	3	<1	7	<0.5	--
			--	--	--	--	--	--	--	--	--	--	31	<0.5	--
Bottom	11	0.06	0.78	<2	<0.2	2	<1	<0.1	2	<1	13	<0.5	--		
	12	0.05	0.77	<2	<0.2	2	<1	<0.1	2	<1	11	<0.5	--		
	--	--	--	--	--	--	--	--	--	--	10	<0.5	--		
2009/07/30	Mid-ebb	Surface	4	<0.01	1.01	<2	<0.2	14	<1	<0.1	2	<1	7	1.3	<1
			2	<0.01	1	<2	<0.2	17	<1	<0.1	2	<1	10	1.2	<1
			--	--	--	--	--	--	--	--	--	--	11	1.2	--
		Middle	6	0.06	0.7	<2	<0.2	10	1	<0.1	2	<1	11	1.2	<1
			6	0.06	0.69	<2	<0.2	10	<1	<0.1	2	<1	10	1.5	<1
			--	--	--	--	--	--	--	--	--	--	9	1.3	--
		Bottom	10	0.09	0.58	<2	<0.2	<1	<1	<0.1	1	<1	<4	<0.5	<1
			10	0.08	0.58	<2	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Mid-flood	Surface	3	0.06	1.06	<2	<0.2	33	2	<0.1	2	<1	14	1.2	<1
			3	0.06	1.06	<2	<0.2	34	2	<0.1	2	<1	12	1.4	<1
			--	--	--	--	--	--	--	--	--	--	12	1.7	--
		Middle	10	0.13	0.72	<2	<0.2	9	1	<0.1	2	<1	7	0.8	<1
			11	0.01	0.59	<2	<0.2	20	1	<0.1	2	<1	6	0.8	<1
			--	--	--	--	--	--	--	--	--	--	5	1.3	--
Bottom	22	<0.01	0.48	2	<0.2	2	1	<0.1	1	<1	19	0.6	<1		
	21	<0.01	0.48	2	<0.2	2	1	<0.1	1	<1	4	0.6	<1		
	--	--	--	--	--	--	--	--	--	--	4	0.7	--		
2009/08/01	Mid-ebb	Surface	3	0.02	1.29	3	<0.2	4	<1	<0.1	3	<1	6	0.7	<1
			4	<0.01	1.25	2	<0.2	3	<1	<0.1	3	<1	4	0.7	<1
			--	--	--	--	--	--	--	--	--	--	6	0.7	--
		Middle	14	0.05	0.63	2	<0.2	5	1	<0.1	2	<1	7	<0.5	<1
			11	0.07	0.62	2	<0.2	4	<1	<0.1	2	<1	7	0.5	<1
			--	--	--	--	--	--	--	--	--	--	8	<0.5	--
		Bottom	38	0.1	0.55	3	<0.2	2	2	<0.1	2	<1	6	0.6	<1
			34	0.09	0.54	3	<0.2	2	2	<0.1	2	<1	6	0.6	<1
			--	--	--	--	--	--	--	--	--	--	6	<0.5	--

Annex D28 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/01	Mid-flood	Surface	4	0.01	1.25	2	<0.2	6	2	<0.1	3	<1	7	0.8	<1	
			5	0.02	1.33	2	<0.2	6	3	<0.1	3	<1	9	0.9	<1	
			--	--	--	--	--	--	--	--	--	--	15	0.6	--	
	Middle	12	0.05	0.56	2	<0.2	4	2	<0.1	2	<1	9	0.5	<1		
			14	0.06	0.57	<2	<0.2	4	2	<0.1	2	<1	14	0.6	<1	
			--	--	--	--	--	--	--	--	--	--	7	<0.5	--	
	Bottom	16	0.14	0.57	2	<0.2	1	<1	<0.1	1	<1	6	0.6	<1		
			12	0.13	0.56	2	<0.2	1	<1	<0.1	1	<1	6	0.7	<1	
			--	--	--	--	--	--	--	--	--	--	5	0.6	--	
2009/08/04	Mid-ebb	Surface	3	0.03	0.63	2	<0.2	4	<1	<0.1	2	<1	12	0.9	<1	
			5	0.02	0.6	2	<0.2	4	<1	<0.1	2	<1	11	0.7	<1	
			--	--	--	--	--	--	--	--	--	--	4	<0.5	--	
	Middle	25	0.04	0.42	2	<0.2	2	1	<0.1	2	<1	11	0.6	<1		
			23	0.04	0.41	2	<0.2	2	1	<0.1	2	<1	10	0.8	<1	
			--	--	--	--	--	--	--	--	--	--	9	0.7	--	
	Bottom	23	0.06	0.4	3	<0.2	2	1	<0.1	2	<1	6	0.5	<1		
			24	0.05	0.4	2	<0.2	1	<1	<0.1	2	<1	8	0.6	<1	
			--	--	--	--	--	--	--	--	--	--	14	<0.5	--	
	Mid-flood	Surface	5	0.04	0.77	2	<0.2	6	1	<0.1	2	<1	4	0.7	<1	
				7	0.04	0.75	2	<0.2	6	1	<0.1	2	<1	7	1.3	<1
				--	--	--	--	--	--	--	--	--	--	11	0.9	--
Middle		17	0.06	0.42	3	<0.2	2	<1	<0.1	1	<1	<4	0.8	<1		
			14	0.07	0.42	3	<0.2	2	<1	<0.1	2	<1	6	0.8	<1	
			--	--	--	--	--	--	--	--	--	--	5	1	--	
Bottom	11	0.07	0.42	3	<0.2	<1	<1	<0.1	1	<1	<4	0.5	<1			
		12	0.06	0.41	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1		
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
2009/08/06	Mid-ebb	Surface	7	0.08	0.85	2	<0.2	5	<1	<0.1	2	<1	6	1.9	<1	
			9	0.08	0.89	2	<0.2	2	<1	<0.1	2	<1	<4	1.9	<1	
			--	--	--	--	--	--	--	--	--	--	10	1.8	--	
		Middle	31	0.09	0.75	2	<0.2	3	2	<0.1	2	<1	7	0.8	<1	
				30	0.09	0.79	2	<0.2	3	2	<0.1	2	<1	6	<0.5	<1
				--	--	--	--	--	--	--	--	--	--	8	0.7	--
	Bottom	39	0.07	0.62	2	<0.2	3	2	<0.1	2	<1	6	0.7	<1		
			45	0.07	0.6	2	<0.2	2	1	<0.1	2	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	6	<0.5	--	
	Mid-flood	Surface	7	0.09	0.87	<2	<0.2	2	<1	<0.1	2	<1	4	1.2	<1	
				6	0.09	0.82	2	<0.2	3	1	<0.1	2	<1	7	1.1	<1
				--	--	--	--	--	--	--	--	--	--	11	1.3	--
Middle		20	0.08	0.65	2	<0.2	3	<1	<0.1	2	<1	9	0.8	<1		
			17	0.08	0.63	2	<0.2	3	<1	<0.1	2	<1	8	1.3	<1	
			--	--	--	--	--	--	--	--	--	--	6	1.4	--	
Bottom	20	0.08	0.59	2	<0.2	2	<1	<0.1	2	<1	5	0.7	1			
		24	0.08	0.58	2	<0.2	2	<1	<0.1	2	<1	9	0.7	<1		
		--	--	--	--	--	--	--	--	--	--	6	0.6	--		

Annex D28 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/08	Mid-ebb	Surface	5	<0.01	1.04	2	<0.2	3	<1	<0.1	2	<1	4	0.8	<1
			5	0.01	1.01	2	<0.2	3	<1	<0.1	2	<1	<4	1.4	<1
			--	--	--	--	--	--	--	--	--	--	--	5	0.8
		Middle	59	0.05	0.69	3	<0.2	16	3	<0.1	2	<1	15	1.1	2
			57	0.05	0.68	2	<0.2	13	3	<0.1	2	<1	15	1.1	2
			--	--	--	--	--	--	--	--	--	--	15	1.1	--
	Bottom	84	0.07	0.61	3	<0.2	24	10	<0.1	3	<1	27	0.6	3	
		83	0.07	0.61	3	<0.2	23	5	<0.1	3	<1	24	0.8	2	
		--	--	--	--	--	--	--	--	--	--	26	0.6	--	
	Mid-flood	Surface	6	0.06	0.95	4	<0.2	7	<1	<0.1	2	<1	6	<0.5	<1
			7	0.07	0.95	4	<0.2	8	<1	<0.1	2	<1	5	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	4	0.7	--
Middle		16	0.11	0.73	4	<0.2	11	2	<0.1	2	<1	13	<0.5	<1	
		17	0.13	0.78	4	<0.2	13	2	<0.1	2	<1	17	0.9	<1	
		--	--	--	--	--	--	--	--	--	--	10	<0.5	--	
Bottom	23	0.12	0.68	3	<0.2	24	3	<0.1	2	<1	21	<0.5	<1		
	20	0.13	0.69	3	<0.2	23	4	<0.1	2	<1	20	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	20	<0.5	--		
2009/08/12	Mid-ebb	Surface	6	0.1	1.4	3	<0.2	3	<1	<0.1	3	<1	5	0.9	<1
			5	0.1	1.41	2	<0.2	3	<1	<0.1	3	<1	5	0.9	<1
			--	--	--	--	--	--	--	--	--	--	6	0.7	--
		Middle	14	0.04	0.64	2	<0.2	2	<1	<0.1	2	<1	4	<0.5	<1
			16	0.05	0.65	3	<0.2	6	<1	<0.1	2	<1	5	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	4	<0.5	--
	Bottom	28	0.05	0.58	3	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
		27	0.05	0.6	3	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	5	<0.5	--	
	Mid-flood	Surface	4	0.04	0.87	2	<0.2	2	<1	<0.1	2	<1	<4	0.8	<1
			4	0.03	0.87	2	<0.2	2	<1	<0.1	2	<1	4	0.8	<1
			--	--	--	--	--	--	--	--	--	--	4	0.7	--
Middle		14	0.04	0.63	2	<0.2	2	<1	<0.1	2	<1	5	0.7	<1	
		16	0.04	0.63	2	<0.2	2	<1	<0.1	2	<1	4	0.8	<1	
		--	--	--	--	--	--	--	--	--	--	5	<0.5	--	
Bottom	21	0.04	0.55	3	<0.2	1	<1	<0.1	1	<1	4	<0.5	<1		
	22	0.04	0.58	2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	6	<0.5	--		
2009/08/14	Mid-ebb	Surface	6	0.15	1.29	2	<0.2	4	<1	<0.1	3	<1	7	1.8	<1
			5	0.15	1.29	2	<0.2	4	<1	<0.1	3	<1	6	1.2	<1
			--	--	--	--	--	--	--	--	--	--	5	1.9	--
		Middle	13	0.06	0.61	2	<0.2	4	<1	<0.1	2	<1	5	1.6	<1
			15	0.07	0.62	2	<0.2	3	<1	<0.1	2	<1	5	1.8	<1
			--	--	--	--	--	--	--	--	--	--	5	1.8	--
	Bottom	23	0.08	0.57	2	<0.2	29	2	<0.1	2	<1	21	1.7	<1	
		23	0.08	0.57	3	<0.2	13	1	<0.1	2	<1	11	1.8	<1	
		--	--	--	--	--	--	--	--	--	--	19	1.7	--	

Annex D28 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)		
2009/08/14	Mid-flood	Surface	5	0.06	0.97	2	<0.2	2	<1	<0.1	2	<1	<4	1.1	<1		
			5	0.06	0.97	2	<0.2	2	<1	<0.1	2	<1	<4	1.2	<1		
			--	--	--	--	--	--	--	--	--	--	--	<4	1	--	
	Middle	20	0.06	0.66	2	<0.2	2	<1	<0.1	2	<1	2	<1	4	0.9	<1	
		20	0.06	0.65	2	<0.2	1	<1	<0.1	2	<1	2	<1	<4	1.1	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	5	1	--	
	Bottom	18	0.06	0.55	2	<0.2	1	<1	<0.1	1	<1	1	<1	<4	0.6	<1	
		18	0.06	0.55	2	<0.2	1	<1	<0.1	1	<1	1	<1	<4	1.2	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	<4	0.8	--	
2009/08/16	Mid-ebb	Surface	5	0.02	1.33	3	<0.2	5	1	<0.1	4	<1	11	1.4	<1		
			6	0.02	1.34	<2	<0.2	5	<1	<0.1	3	<1	8	1.8	<1		
			--	--	--	--	--	--	--	--	--	--	--	12	1.3	--	
	Middle	20	0.04	0.58	3	<0.2	12	2	<0.1	2	<1	2	<1	16	1.2	<1	
		23	0.05	0.59	2	<0.2	10	2	<0.1	2	<1	2	<1	13	1.3	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	16	0.9	--	
	Bottom	27	0.09	0.52	3	<0.2	12	3	<0.1	2	<1	2	<1	11	1	<1	
		26	0.09	0.52	2	<0.2	16	2	<0.1	2	<1	2	<1	20	1.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	13	1.5	--	
	Mid-flood	Surface	5	0.02	1.51	<2	<0.2	3	<1	<0.1	2	<1	<1	<4	1.7	<1	
			5	0.01	1.32	3	<0.2	3	<1	<0.1	3	<1	3	<1	4	1.8	<1
			--	--	--	--	--	--	--	--	--	--	--	--	<4	1.8	--
Middle	18	0.05	0.59	<2	<0.2	2	<1	<0.1	1	<1	1	<1	<4	0.9	<1		
	17	0.05	0.58	<2	<0.2	3	<1	<0.1	<1	<1	<1	<1	<4	1.1	<1		
	--	--	--	--	--	--	--	--	--	--	--	--	<4	0.9	--		
Bottom	26	0.08	0.57	2	<0.2	2	<1	<0.1	<1	<1	<1	<1	<4	1.5	<1		
	28	0.08	0.56	<2	<0.2	6	<1	<0.1	<1	<1	1	<1	4	2	<1		
	--	--	--	--	--	--	--	--	--	--	--	--	<4	2	--		
2009/08/18	Mid-ebb	Surface	9	0.03	0.85	2	<0.2	4	<1	<0.1	2	<1	8	1.7	<1		
			9	0.03	0.83	2	<0.2	4	<1	<0.1	3	<1	6	2	<1		
			--	--	--	--	--	--	--	--	--	--	--	7	2	--	
	Middle	27	0.03	0.57	2	<0.2	10	1	<0.1	4	<1	4	<1	8	1.8	<1	
		27	0.03	0.57	2	<0.2	8	1	<0.1	2	<1	2	<1	10	1.7	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	5	1.4	--	
	Bottom	41	0.03	0.53	3	<0.2	15	3	<0.1	3	<1	3	<1	17	2	1	
		45	0.03	0.53	3	<0.2	10	2	<0.1	6	<1	6	<1	9	2.1	1	
		--	--	--	--	--	--	--	--	--	--	--	--	16	2.1	--	
	Mid-flood	Surface	9	0.03	0.99	2	<0.2	3	<1	<0.1	3	<1	<1	4	1.4	<1	
			10	0.03	0.98	2	<0.2	3	<1	<0.1	3	<1	3	<1	<4	1.5	<1
			--	--	--	--	--	--	--	--	--	--	--	--	6	1.5	--
Middle	16	0.06	0.65	3	<0.2	4	2	<0.1	2	<1	2	<1	4	1.3	<1		
	21	0.06	0.63	2	<0.2	4	2	<0.1	3	<1	3	<1	6	1.3	<1		
	--	--	--	--	--	--	--	--	--	--	--	--	5	1.1	--		
Bottom	73	0.11	0.58	3	<0.2	20	4	<0.1	10	<1	10	<1	13	2.2	3		
	74	0.12	0.59	3	<0.2	16	4	<0.1	4	<1	4	<1	11	2.3	3		
	--	--	--	--	--	--	--	--	--	--	--	--	5	1.9	--		

Annex D28 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/21	Mid-ebb	Surface	10	0.05	1	2	<0.2	3	<1	<0.1	3	<1	5	0.9	<1
			9	0.04	0.99	2	<0.2	<1	<1	<0.1	3	<1	4	1.1	<1
			--	--	--	--	--	--	--	--	--	--	4	0.9	--
		Middle	56	0.03	0.73	2	<0.2	<1	3	<0.1	3	<1	14	0.5	1
			56	0.04	0.72	3	<0.2	2	4	<0.1	3	<1	11	0.6	1
			--	--	--	--	--	--	--	--	--	--	11	0.8	--
	Bottom	66	0.03	0.66	3	<0.2	8	3	<0.1	3	<1	8	<0.5	1	
		62	0.03	0.67	3	<0.2	<1	3	<0.1	3	<1	8	0.5	1	
		--	--	--	--	--	--	--	--	--	--	8	0.7	--	
	Mid-flood	Surface	10	0.05	0.95	3	<0.2	3	<1	<0.1	2	<1	<4	1.2	<1
			11	0.06	0.96	3	<0.2	6	<1	<0.1	3	<1	7	1	<1
			--	--	--	--	--	--	--	--	--	--	5	1.2	--
Middle		68	0.07	0.81	3	<0.2	12	4	<0.1	4	<1	17	1.3	2	
		71	0.06	0.79	3	<0.2	10	3	<0.1	4	<1	13	1	2	
		--	--	--	--	--	--	--	--	--	--	17	1.3	--	
Bottom	63	0.05	0.72	3	<0.2	3	2	<0.1	3	<1	7	0.6	1		
	72	0.07	0.74	3	<0.2	4	3	<0.1	3	<1	9	0.9	1		
	--	--	--	--	--	--	--	--	--	--	6	<0.5	--		
2009/08/23	Mid-ebb	Surface	9	0.03	0.81	2	<0.2	5	1	<0.1	6	<1	13	1.1	<1
			10	0.02	0.8	2	<0.2	5	<1	<0.1	2	<1	4	0.9	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.6	--
		Middle	74	0.03	0.62	3	<0.2	5	4	<0.1	3	<1	10	0.8	2
			75	0.03	0.62	3	<0.2	6	4	<0.1	3	<1	11	<0.5	2
			--	--	--	--	--	--	--	--	--	--	11	0.6	--
	Bottom	179	0.05	0.61	4	<0.2	14	8	<0.1	4	<1	19	1.8	4	
		174	0.06	0.62	4	<0.2	14	8	<0.1	4	<1	21	1.8	3	
		--	--	--	--	--	--	--	--	--	--	18	1.4	--	
	Mid-flood	Surface	9	0.05	0.95	2	<0.2	4	<1	<0.1	3	<1	5	0.8	<1
			9	0.05	0.95	2	<0.2	3	<1	<0.1	3	<1	6	0.8	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.6	--
Middle		34	0.06	0.86	3	<0.2	3	2	<0.1	3	<1	8	<0.5	<1	
		36	0.05	0.83	3	<0.2	3	2	<0.1	3	<1	6	0.8	<1	
		--	--	--	--	--	--	--	--	--	--	8	0.6	--	
Bottom	63	0.05	0.7	3	<0.2	3	2	<0.1	6	<1	8	<0.5	2		
	81	0.06	0.7	3	<0.2	3	2	<0.1	3	<1	9	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	9	<0.5	--		

Annex D29 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WNBC

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/07/28	Mid-ebb	Surface	3	<0.01	1.27	2	<0.2	23	<1	<0.1	3	<1	34	0.6	<1
			4	<0.01	1.28	2	<0.2	23	1	<0.1	3	<1	24	0.6	<1
			--	--	--	--	--	--	--	--	--	--	25	0.8	<1
		Middle	3	0.02	1.05	<2	<0.2	4	<1	<0.1	3	<1	6	0.7	<1
			4	0.03	1.07	<2	<0.2	4	<1	<0.1	3	<1	8	1.1	<1
			--	--	--	--	--	--	--	--	--	--	25	0.6	<1
	Bottom	10	0.05	0.82	<2	<0.2	1	<1	<0.1	3	<1	8	<0.5	<1	
		7	0.04	0.82	<2	<0.2	1	<1	<0.1	3	<1	6	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	5	<0.5	<1	
	Mid-flood	Surface	3	0.02	1.16	<2	<0.2	1	<1	<0.1	3	<1	22	1.1	<1
			3	0.02	1.15	2	<0.2	1	<1	<0.1	3	<1	24	0.7	<1
			--	--	--	--	--	--	--	--	--	--	24	0.7	<1
Middle		13	0.05	0.91	2	<0.2	2	<1	<0.1	3	<1	19	<0.5	<1	
		10	0.04	0.93	2	<0.2	1	<1	<0.1	3	<1	13	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	16	<0.5	<1	
Bottom	18	0.05	0.81	<2	<0.2	1	<1	<0.1	2	<1	12	<0.5	<1		
	16	0.05	0.83	<2	<0.2	2	<1	<0.1	3	<1	18	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	16	<0.5	<1		
2009/07/30	Mid-ebb	Surface	2	<0.01	1.01	<2	<0.2	2	<1	<0.1	2	<1	5	1.2	<1
			<2	<0.01	1.01	2	<0.2	<1	<1	<0.1	<1	<1	<4	1.1	<1
			--	--	--	--	--	--	--	--	--	--	16	1.4	--
		Middle	3	<0.01	0.86	<2	<0.2	8	<1	<0.1	2	<1	9	0.7	<1
			4	0.01	0.86	<2	<0.2	14	<1	<0.1	2	<1	5	0.8	<1
			--	--	--	--	--	--	--	--	--	--	5	0.8	--
	Bottom	9	0.04	0.7	<2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1	
		8	0.04	0.68	<2	<0.2	<1	<1	<0.1	2	<1	6	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	6	<0.5	--	
	Mid-flood	Surface	5	0.02	1.07	<2	<0.2	18	1	<0.1	2	<1	13	1.4	<1
			5	0.03	1.08	2	<0.2	25	3	<0.1	2	<1	8	1.3	<1
			--	--	--	--	--	--	--	--	--	--	10	1.2	--
Middle		6	0.03	0.85	<2	<0.2	4	<1	<0.1	2	<1	4	1.1	<1	
		5	0.03	0.83	2	<0.2	6	<1	<0.1	2	<1	4	1.5	<1	
		--	--	--	--	--	--	--	--	--	--	5	0.8	--	
Bottom	9	<0.01	0.67	<2	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<1		
	7	<0.01	0.69	2	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
2009/08/01	Mid-ebb	Surface	4	0.04	1.38	2	<0.2	6	<1	<0.1	3	<1	12	<0.5	<1
			5	0.03	1.35	2	<0.2	5	<1	<0.1	3	<1	6	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	6	<0.5	--
		Middle	4	0.02	0.88	2	<0.2	3	<1	<0.1	2	<1	6	<0.5	<1
			3	0.03	0.94	2	<0.2	4	<1	<0.1	2	<1	6	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	9	<0.5	--
Bottom	13	0.02	0.57	2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1		
	12	0.02	0.59	2	<0.2	1	<1	<0.1	2	<1	4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		

Annex D29 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/01	Mid-flood	Surface	6	0.02	1.33	2	<0.2	3	<1	<0.1	3	<1	5	0.7	<1	
			6	0.02	1.34	3	<0.2	15	3	<0.1	4	<1	14	0.7	<1	
			--	--	--	--	--	--	--	--	--	--	12	0.6	--	
	Middle	6	0.01	0.64	<2	<0.2	6	2	<0.1	2	<1	10	0.5	<1		
			7	0.02	0.68	2	<0.2	7	3	<0.1	2	<1	7	<0.5	<1	
			--	--	--	--	--	--	--	--	--	9	<0.5	--		
	Bottom	14	0.05	0.57	<2	<0.2	1	<1	<0.1	1	<1	5	0.6	<1		
			15	0.05	0.6	2	<0.2	1	<1	<0.1	1	<1	4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	6	<0.5	--		
2009/08/04	Mid-ebb	Surface	6	0.03	0.64	2	<0.2	5	<1	<0.1	2	<1	19	0.7	<1	
			4	0.02	0.54	3	<0.2	4	<1	<0.1	2	<1	10	1.1	<1	
			--	--	--	--	--	--	--	--	--	6	1.2	--		
	Middle	7	0.02	0.61	2	<0.2	4	<1	<0.1	2	<1	10	0.7	<1		
			5	0.02	0.6	2	<0.2	4	<1	<0.1	2	<1	18	1	<1	
			--	--	--	--	--	--	--	--	--	10	1.4	--		
	Bottom	34	0.03	0.38	2	<0.2	2	1	<0.1	2	<1	8	1.2	<1		
			29	0.02	0.38	3	<0.2	2	1	<0.1	2	<1	9	<0.5	<1	
			--	--	--	--	--	--	--	--	--	11	0.8	--		
	Mid-flood	Surface	8	0.04	0.76	3	<0.2	6	<1	<0.1	2	<1	6	0.8	<1	
				10	0.05	0.81	3	<0.2	6	<1	<0.1	2	<1	9	0.8	<1
				--	--	--	--	--	--	--	--	--	7	1.1	--	
Middle		13	0.05	0.51	3	<0.2	3	<1	<0.1	<1	<1	<4	1.1	<1		
			12	0.05	0.5	3	<0.2	5	1	<0.1	2	<1	<4	1.2	<1	
			--	--	--	--	--	--	--	--	--	7	1	--		
Bottom	18	0.07	0.41	2	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<1			
		15	0.06	0.42	3	<0.2	1	<1	<0.1	1	<1	10	0.9	<1		
		--	--	--	--	--	--	--	--	--	4	<0.5	--			
2009/08/06	Mid-ebb	Surface	7	0.09	0.93	2	<0.2	10	1	<0.1	2	<1	12	1.4	<1	
			6	0.08	0.91	2	<0.2	9	<1	<0.1	2	<1	14	1.9	<1	
			--	--	--	--	--	--	--	--	--	13	1.8	--		
		Middle	8	0.07	0.87	2	<0.2	3	<1	<0.1	2	<1	8	1.4	<1	
				7	0.08	0.87	2	<0.2	3	<1	<0.1	2	<1	8	1.6	<1
				--	--	--	--	--	--	--	--	--	10	1.2	--	
	Bottom	22	0.08	0.73	2	<0.2	2	1	<0.1	2	<1	7	<0.5	<1		
			26	0.08	0.73	3	<0.2	3	2	<0.1	3	<1	8	<0.5	<1	
			--	--	--	--	--	--	--	--	--	6	<0.5	--		
	Mid-flood	Surface	10	0.09	0.69	2	<0.2	5	<1	<0.1	2	<1	6	1.8	<1	
				9	0.08	0.7	2	<0.2	6	<1	<0.1	2	<1	8	1.7	<1
				--	--	--	--	--	--	--	--	--	5	0.9	--	
Middle		16	0.07	0.6	2	<0.2	2	<1	<0.1	2	<1	9	0.8	<1		
			18	0.08	0.57	2	<0.2	2	<1	<0.1	2	<1	14	1.4	<1	
			--	--	--	--	--	--	--	--	--	7	0.7	--		
Bottom	17	0.08	0.59	2	<0.2	2	<1	<0.1	2	<1	4	1	<1			
		17	0.08	0.59	2	<0.2	2	<1	<0.1	2	<1	6	0.9	<1		
		--	--	--	--	--	--	--	--	--	5	0.6	--			

Annex D29 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/08	Mid-ebb	Surface	5	<0.01	1.02	3	<0.2	2	<1	<0.1	2	<1	5	1	<1
			7	<0.01	1.03	3	<0.2	13	<1	<0.1	2	<1	4	1	<1
			--	--	--	--	--	--	--	--	--	--	--	5	1.1
		Middle	7	0.04	0.94	3	<0.2	4	<1	<0.1	2	<1	14	1	<1
			5	0.04	0.95	3	<0.2	8	2	<0.1	2	<1	13	1.3	<1
			--	--	--	--	--	--	--	--	--	--	14	1	--
	Bottom	34	0.03	0.51	3	<0.2	6	2	<0.1	2	<1	9	<0.5	1	
		31	0.04	0.54	4	<0.2	7	2	<0.1	2	<1	10	0.8	1	
		--	--	--	--	--	--	--	--	--	--	24	<0.5	--	
	Mid-flood	Surface	7	0.05	0.97	3	<0.2	3	<1	<0.1	2	<1	<4	<0.5	<1
			6	0.06	0.98	4	<0.2	4	<1	<0.1	2	<1	<4	0.5	<1
			--	--	--	--	--	--	--	--	--	--	5	<0.5	--
Middle		20	0.09	0.76	3	<0.2	11	2	<0.1	2	<1	12	<0.5	1	
		22	0.1	0.75	2	<0.2	7	2	<0.1	2	<1	8	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	10	<0.5	--	
Bottom	20	0.11	0.72	3	<0.2	18	3	<0.1	2	<1	15	<0.5	1		
	21	0.1	0.7	4	<0.2	17	2	<0.1	2	<1	15	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	9	<0.5	--		
2009/08/12	Mid-ebb	Surface	4	0.1	1.31	3	<0.2	5	<1	<0.1	3	<1	6	0.8	<1
			5	0.1	1.33	3	<0.2	7	<1	<0.1	3	<1	7	0.7	<1
			--	--	--	--	--	--	--	--	--	--	9	0.8	--
		Middle	7	0.09	0.98	2	<0.2	2	<1	<0.1	2	<1	<4	0.6	<1
			8	0.09	0.98	2	<0.2	2	<1	<0.1	2	<1	4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	5	<0.5	--
	Bottom	11	0.05	0.67	2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1	
		13	0.05	0.7	2	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Mid-flood	Surface	6	0.04	0.87	2	<0.2	4	<1	<0.1	2	<1	4	0.5	<1
			5	0.04	0.86	2	<0.2	4	<1	<0.1	2	<1	5	0.6	<1
			--	--	--	--	--	--	--	--	--	--	4	<0.5	--
Middle		18	0.04	0.63	2	<0.2	2	<1	<0.1	2	<1	4	0.6	<1	
		17	0.04	0.63	2	<0.2	2	<1	<0.1	<1	<1	<4	0.6	<1	
		--	--	--	--	--	--	--	--	--	--	4	<0.5	--	
Bottom	18	0.03	0.55	2	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<1		
	18	0.04	0.57	2	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
2009/08/14	Mid-ebb	Surface	6	0.15	1.29	2	<0.2	4	<1	<0.1	4	<1	6	1.7	<1
			6	0.14	1.28	2	<0.2	4	<1	<0.1	3	<1	7	1.9	<1
			--	--	--	--	--	--	--	--	--	--	5	1.8	--
		Middle	8	0.06	0.77	2	<0.2	4	<1	<0.1	2	<1	4	1.7	<1
			9	0.06	0.77	2	<0.2	3	<1	<0.1	2	<1	4	1.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.7	--
	Bottom	16	0.1	0.66	3	<0.2	28	3	<0.1	2	<1	17	1.7	<1	
		14	0.08	0.64	<2	<0.2	24	2	<0.1	2	<1	13	1.8	<1	
		--	--	--	--	--	--	--	--	--	--	17	1.9	--	

Annex D29 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/14	Mid-flood	Surface	6	0.06	1.06	2	<0.2	7	<1	<0.1	3	<1	<4	1.1	<1	
			7	0.06	1.05	2	<0.2	3	<1	<0.1	2	<1	4	1	<1	
			--	--	--	--	--	--	--	--	--	--	--	4	1.1	--
	Middle	10	9	0.07	0.77	2	<0.2	2	<1	<0.1	2	<1	<4	0.9	<1	
			9	0.09	0.79	2	<0.2	2	<1	<0.1	2	<1	<4	1	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.3	--
	Bottom	14	16	0.05	0.57	2	<0.2	3	<1	<0.1	1	<1	<4	0.8	<1	
			16	0.05	0.57	2	<0.2	<1	<1	<0.1	1	<1	<4	1.1	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	0.9	--
2009/08/16	Mid-ebb	Surface	5	<0.01	1.4	2	<0.2	9	1	<0.1	5	<1	9	1.6	<1	
			5	0.01	1.4	2	<0.2	6	1	<0.1	2	<1	8	1.7	<1	
			--	--	--	--	--	--	--	--	--	--	10	1.6	--	
		Middle	8	8	0.07	0.84	<2	<0.2	6	1	<0.1	4	<1	7	1.9	<1
				8	0.08	0.86	3	<0.2	7	1	<0.1	2	<1	10	1.4	<1
				--	--	--	--	--	--	--	--	--	--	8	1.2	--
	Bottom	29	35	0.02	0.49	3	<0.2	10	3	<0.1	2	<1	12	0.8	<1	
			35	0.03	0.52	2	<0.2	8	2	<0.1	2	<1	10	1.2	<1	
			--	--	--	--	--	--	--	--	--	--	<4	1.3	--	
	Mid-flood	Surface	6	<0.01	1.14	2	<0.2	2	<1	<0.1	3	<1	5	1.6	<1	
			7	<0.01	1.14	2	<0.2	4	1	<0.1	2	<1	9	1.5	<1	
			--	--	--	--	--	--	--	--	--	--	<4	1.4	--	
Middle		9	8	0.03	0.68	3	<0.2	3	1	<0.1	2	<1	8	1.3	<1	
			8	0.05	0.71	<2	<0.2	4	<1	<0.1	2	<1	8	1.7	<1	
			--	--	--	--	--	--	--	--	--	--	7	1.2	--	
Bottom	16	19	0.07	0.6	3	<0.2	15	1	<0.1	2	<1	19	1.1	<1		
		19	0.07	0.61	2	<0.2	15	2	<0.1	2	<1	28	0.9	<1		
		--	--	--	--	--	--	--	--	--	--	17	1.2	--		
2009/08/18	Mid-ebb	Surface	4	0.03	0.89	2	<0.2	5	<1	<0.1	3	<1	5	1.6	<1	
			4	0.03	0.89	2	<0.2	4	<1	<0.1	3	<1	10	1.5	<1	
			--	--	--	--	--	--	--	--	--	--	<4	1.6	--	
		Middle	23	23	0.04	0.61	2	<0.2	2	1	<0.1	2	<1	6	1.6	<1
				23	0.04	0.61	2	<0.2	5	3	<0.1	5	<1	11	1.9	<1
				--	--	--	--	--	--	--	--	--	--	6	1.2	--
	Bottom	27	29	0.03	0.59	3	<0.2	10	3	<0.1	6	<1	9	2.1	<1	
			29	0.03	0.58	2	<0.2	9	2	<0.1	3	<1	11	1.8	<1	
			--	--	--	--	--	--	--	--	--	--	10	2	--	
	Mid-flood	Surface	10	0.06	1.11	2	<0.2	3	<1	<0.1	3	<1	5	1.7	<1	
			11	0.05	1.1	2	<0.2	18	6	<0.1	4	<1	8	1.9	<1	
			--	--	--	--	--	--	--	--	--	--	<4	1.6	--	
Middle		27	29	0.04	0.68	2	<0.2	4	2	<0.1	4	<1	6	1.8	<1	
			29	0.05	0.68	2	<0.2	6	1	<0.1	2	<1	6	1.7	<1	
			--	--	--	--	--	--	--	--	--	--	5	1.4	--	
Bottom	27	28	0.08	0.65	2	<0.2	9	2	<0.1	2	<1	12	1.9	<1		
		28	0.09	0.68	3	<0.2	19	2	<0.1	4	<1	17	1.7	<1		
		--	--	--	--	--	--	--	--	--	--	11	1.5	--		

Annex D29 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/21	Mid-ebb	Surface	9	0.03	1.07	2	<0.2	<1	<1	<0.1	3	<1	5	1.3	<1
			8	0.04	1.08	2	<0.2	5	<1	<0.1	3	<1	<4	1.2	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.2	--
		Middle	12	0.05	0.91	2	<0.2	9	1	<0.1	3	<1	6	0.7	<1
			12	0.04	0.9	2	<0.2	<1	1	<0.1	2	<1	8	0.6	<1
			--	--	--	--	--	--	--	--	--	--	6	1	--
	Bottom	59	0.02	0.68	3	<0.2	<1	2	<0.1	2	<1	<4	<0.5	1	
		62	0.02	0.67	2	<0.2	2	1	<0.1	2	<1	6	0.6	1	
		--	--	--	--	--	--	--	--	--	--	5	<0.5	--	
	Mid-flood	Surface	10	0.05	0.9	<2	<0.2	9	<1	<0.1	3	<1	6	0.8	<1
			10	0.05	0.9	<2	<0.2	4	<1	<0.1	2	<1	<4	0.9	<1
			--	--	--	--	--	--	--	--	--	--	6	0.8	--
Middle		33	0.07	0.79	2	<0.2	8	2	<0.1	3	<1	11	0.8	1	
		33	0.07	0.79	2	<0.2	8	3	<0.1	4	<1	13	0.7	1	
		--	--	--	--	--	--	--	--	--	--	10	0.6	--	
Bottom	104	0.08	0.73	3	<0.2	9	4	<0.1	4	<1	25	0.6	2		
	89	0.08	0.74	3	<0.2	8	4	<0.1	4	<1	19	0.8	2		
	--	--	--	--	--	--	--	--	--	--	14	0.6	--		
2009/08/23	Mid-ebb	Surface	8	0.02	0.86	2	<0.2	6	<1	<0.1	3	<1	4	1.2	<1
			7	0.03	0.86	2	<0.2	4	<1	<0.1	3	<1	6	0.8	<1
			--	--	--	--	--	--	--	--	--	--	5	1.2	--
		Middle	11	0.03	0.83	2	<0.2	4	<1	<0.1	3	<1	5	1	<1
			10	0.03	0.83	2	<0.2	4	1	<0.1	3	<1	5	0.9	<1
			--	--	--	--	--	--	--	--	--	--	6	1.2	--
	Bottom	60	0.03	0.62	3	<0.2	17	4	<0.1	3	<1	14	0.8	2	
		62	0.04	0.64	3	<0.2	14	4	<0.1	3	<1	14	1.5	2	
		--	--	--	--	--	--	--	--	--	--	19	1.6	--	
	Mid-flood	Surface	11	0.05	0.95	3	<0.2	9	1	<0.1	3	<1	10	0.8	<1
			10	0.05	0.96	2	<0.2	5	<1	<0.1	3	<1	7	0.8	<1
			--	--	--	--	--	--	--	--	--	--	8	0.8	--
Middle		43	0.05	0.86	3	<0.2	4	2	<0.1	3	<1	8	0.9	<1	
		40	0.05	0.85	3	<0.2	3	2	<0.1	3	<1	8	0.9	<1	
		--	--	--	--	--	--	--	--	--	--	10	<0.5	--	
Bottom	78	0.06	0.75	3	<0.2	4	3	<0.1	3	<1	11	<0.5	1		
	68	0.05	0.78	3	<0.2	4	3	<0.1	3	<1	9	<0.5	1		
	--	--	--	--	--	--	--	--	--	--	10	<0.5	--		

Annex D30 - Baseline Water Quality Monitoring Results

Sampling Station : ESC-WNBD

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/07/28	Mid-ebb	Surface	5	<0.01	1.31	2	<0.2	7	1	<0.1	3	<1	33	1	--
			3	<0.01	1.32	<2	<0.2	6	2	<0.1	3	<1	25	1	--
			--	--	--	--	--	--	--	--	--	--	29	0.9	--
		Middle	3	0.02	1.03	<2	<0.2	6	<1	<0.1	3	<1	28	0.8	--
			3	0.02	1.05	2	<0.2	5	<1	<0.1	3	<1	20	0.8	--
			--	--	--	--	--	--	--	--	--	--	17	0.8	--
		Bottom	7	0.06	0.92	<2	<0.2	<1	<1	<0.1	2	<1	13	1.1	--
			8	0.05	0.92	<2	<0.2	<1	<1	<0.1	2	<1	30	0.9	--
			--	--	--	--	--	--	--	--	--	--	18	1.6	--
	Mid-flood	Surface	4	<0.01	1.14	2	<0.2	1	<1	<0.1	3	<1	12	<0.5	<1
			3	<0.01	1.16	2	<0.2	1	<1	<0.1	3	<1	21	0.9	<1
			--	--	--	--	--	--	--	--	--	--	22	1.6	<1
		Middle	8	0.04	0.92	<2	<0.2	1	<1	<0.1	3	<1	13	<0.5	<1
			8	0.04	0.91	2	<0.2	1	<1	<0.1	3	<1	28	0.6	<1
			--	--	--	--	--	--	--	--	--	--	20	<0.5	<1
Bottom	13	0.05	0.81	<2	<0.2	2	<1	<0.1	2	<1	23	<0.5	<1		
	12	0.05	0.8	<2	<0.2	1	<1	<0.1	2	<1	22	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	10	<0.5	<1		
2009/07/30	Mid-ebb	Surface	8	<0.01	1.02	2	<0.2	7	1	<0.1	3	<1	7	1.8	<1
			7	<0.01	1.02	<2	<0.2	8	1	<0.1	3	<1	8	1.5	<1
			--	--	--	--	--	--	--	--	--	--	10	2.4	--
		Middle	8	<0.01	0.94	2	<0.2	6	<1	<0.1	2	<1	6	1.2	<1
			8	<0.01	0.92	2	<0.2	6	<1	<0.1	2	<1	5	1	<1
			--	--	--	--	--	--	--	--	--	--	6	1.1	--
		Bottom	8	0.03	0.7	<2	<0.2	<1	<1	<0.1	2	<1	<4	<0.5	<1
			7	0.03	0.69	2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Mid-flood	Surface	6	<0.01	1.07	<2	<0.2	15	1	<0.1	3	<1	8	1.8	<1
			6	0.02	1.1	<2	<0.2	14	1	<0.1	2	<1	8	1.4	<1
			--	--	--	--	--	--	--	--	--	--	6	1.4	--
		Middle	7	<0.01	0.92	<2	<0.2	5	<1	<0.1	2	<1	4	1.3	<1
			5	0.01	0.93	<2	<0.2	7	<1	<0.1	2	<1	4	1.2	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.1	--
Bottom	8	0.04	0.71	2	1	<1	<1	<0.1	1	<1	4	0.7	<1		
	7	0.05	0.71	<2	<0.2	<1	<1	<0.1	2	<1	<4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
2009/08/01	Mid-ebb	Surface	4	0.03	1.3	2	<0.2	5	<1	<0.1	3	<1	6	0.6	<1
			4	0.03	1.29	3	<0.2	6	<1	<0.1	3	<1	6	0.5	<1
			--	--	--	--	--	--	--	--	--	--	8	0.8	--
		Middle	3	0.01	1.09	<2	<0.2	6	<1	<0.1	2	<1	7	0.6	<1
			3	0.01	1.05	2	<0.2	6	<1	<0.1	2	<1	6	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	7	0.5	--
		Bottom	6	0.02	0.66	<2	<0.2	1	<1	<0.1	2	<1	<4	0.6	<1
			7	0.02	0.66	<2	<0.2	1	<1	<0.1	2	<1	6	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--

Annex D30 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/01	Mid-flood	Surface	7	0.05	1.53	2	<0.2	7	4	<0.1	4	<1	16	0.8	<1
			6	0.04	1.48	2	<0.2	4	<1	4	<1	17	1	<1	
			--	--	--	--	--	--	--	--	--	22	0.7	--	
	Middle	8	8	0.02	0.77	2	<0.2	3	3	<0.1	2	<1	15	0.6	<1
			8	0.02	0.75	2	<0.2	4	5	<0.1	2	<1	17	0.8	<1
			--	--	--	--	--	--	--	--	--	14	0.5	--	
	Bottom	13	13	0.04	0.6	2	<0.2	1	<1	<0.1	2	<1	21	0.6	<1
			14	0.04	0.61	<2	<0.2	1	<1	<0.1	2	<1	15	0.6	<1
			--	--	--	--	--	--	--	--	--	17	0.5	--	
2009/08/04	Mid-ebb	Surface	5	0.02	0.63	2	<0.2	5	1	<0.1	2	<1	6	1.6	<1
			3	0.02	0.62	2	<0.2	7	<1	<0.1	2	<1	17	1.5	<1
			--	--	--	--	--	--	--	--	--	7	1.6	--	
	Middle	4	4	0.02	0.61	3	<0.2	6	<1	<0.1	2	<1	16	1.4	<1
			6	0.02	0.62	2	<0.2	7	4	<0.1	2	<1	13	1.2	<1
			--	--	--	--	--	--	--	--	--	8	1.3	--	
	Bottom	22	22	0.03	0.4	3	<0.2	3	1	<0.1	2	<1	8	1.3	<1
			18	0.03	0.39	2	<0.2	4	1	<0.1	2	<1	10	1.4	<1
			--	--	--	--	--	--	--	--	--	5	1.3	--	
Mid-flood	Surface	9	0.06	0.74	3	<0.2	7	<1	<0.1	2	<1	11	1	<1	
		8	0.05	0.72	2	<0.2	4	2	<0.1	2	<1	10	1.4	<1	
		--	--	--	--	--	--	--	--	--	8	0.6	--		
Middle	10	10	0.07	0.51	3	<0.2	5	<1	<0.1	2	<1	9	1	<1	
		10	0.07	0.51	3	<0.2	3	<1	<0.1	2	<1	7	0.6	<1	
		--	--	--	--	--	--	--	--	--	7	<0.5	--		
Bottom	18	18	0.07	0.44	2	<0.2	2	1	<0.1	2	<1	<4	0.6	<1	
		20	0.07	0.44	3	<0.2	2	1	<0.1	2	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	9	<0.5	--		
2009/08/06	Mid-ebb	Surface	8	0.08	1	2	<0.2	5	<1	<0.1	2	<1	13	1.4	<1
			8	0.08	1	2	<0.2	5	<1	<0.1	2	<1	12	1.9	<1
			--	--	--	--	--	--	--	--	--	16	1.3	--	
	Middle	7	7	0.08	1	<2	<0.2	5	<1	<0.1	2	<1	9	0.6	<1
			7	0.08	1.01	2	<0.2	6	<1	<0.1	2	<1	16	0.6	<1
			--	--	--	--	--	--	--	--	--	10	0.8	--	
	Bottom	22	22	0.08	0.84	2	<0.2	2	1	<0.1	2	<1	7	0.6	<1
			19	0.07	0.84	2	<0.2	2	1	<0.1	2	<1	8	<0.5	<1
			--	--	--	--	--	--	--	--	--	16	<0.5	--	
Mid-flood	Surface	8	0.09	1.04	2	<0.2	3	<1	<0.1	2	<1	6	1.7	<1	
		9	0.09	1.03	2	<0.2	7	<1	<0.1	2	<1	6	1.2	<1	
		--	--	--	--	--	--	--	--	--	6	1.6	--		
Middle	9	9	0.07	0.73	2	<0.2	2	<1	<0.1	2	<1	11	1.4	<1	
		8	0.08	0.73	2	<0.2	2	<1	<0.1	2	<1	5	0.8	<1	
		--	--	--	--	--	--	--	--	--	7	1.2	--		
Bottom	12	12	0.07	0.65	2	<0.2	1	<1	<0.1	2	<1	5	1.1	<1	
		13	0.07	0.61	2	<0.2	2	<1	<0.1	2	<1	6	1.1	<1	
		--	--	--	--	--	--	--	--	--	<4	1.2	--		

Annex D30 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/08	Mid-ebb	Surface	6	<0.01	1.08	3	<0.2	5	<1	<0.1	2	<1	16	1.2	<1
			5	<0.01	1.09	3	<0.2	6	<1	<0.1	2	<1	18	1.4	<1
			--	--	--	--	--	--	--	--	--	--	13	1.4	--
		Middle	13	0.03	0.68	3	<0.2	3	<1	<0.1	2	<1	7	<0.5	<1
			12	0.04	0.69	3	<0.2	2	<1	<0.1	2	<1	7	0.7	<1
			--	--	--	--	--	--	--	--	--	--	7	<0.5	--
	Bottom	31	0.02	0.48	3	<0.2	14	3	<0.1	2	<1	15	0.7	1	
		30	0.02	0.48	3	<0.2	13	3	<0.1	2	<1	13	<0.5	1	
		--	--	--	--	--	--	--	--	--	--	11	<0.5	--	
	Mid-flood	Surface	7	0.06	1	2	<0.2	2	<1	<0.1	2	<1	<4	0.6	<1
			5	0.06	0.99	4	<0.2	2	<1	<0.1	2	<1	7	0.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
Middle		13	0.13	0.87	3	<0.2	8	1	<0.1	2	<1	10	0.8	<1	
		15	0.12	0.85	2	<0.2	18	2	<0.1	2	<1	12	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	12	<0.5	--	
Bottom	21	0.09	0.77	3	<0.2	8	2	<0.1	3	<1	9	<0.5	1		
	18	0.08	0.76	3	<0.2	19	2	<0.1	4	<1	16	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	13	<0.5	--		
2009/08/12	Mid-ebb	Surface	6	0.12	1.25	2	<0.2	3	<1	<0.1	3	<1	4	0.6	<1
			7	0.1	1.23	2	<0.2	3	<1	<0.1	3	<1	5	0.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.6	--
		Middle	10	0.04	0.74	2	<0.2	3	<1	<0.1	2	<1	7	0.6	<1
			9	0.05	0.76	3	<0.2	3	<1	<0.1	2	<1	6	0.6	<1
			--	--	--	--	--	--	--	--	--	--	8	0.6	--
	Bottom	11	0.04	0.66	2	<0.2	1	<1	<0.1	2	<1	<4	0.8	<1	
		12	0.05	0.67	2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Mid-flood	Surface	32	0.04	0.62	3	<0.2	2	1	<0.1	2	<1	4	<0.5	<1
			29	0.04	0.62	2	<0.2	2	1	<0.1	2	<1	4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	5	<0.5	--
Middle		18	0.05	0.65	2	<0.2	3	1	<0.1	2	<1	5	0.5	<1	
		18	0.04	0.64	3	<0.2	3	1	<0.1	2	<1	5	0.5	<1	
		--	--	--	--	--	--	--	--	--	--	7	<0.5	--	
Bottom	9	0.03	0.85	2	<0.2	4	<1	<0.1	2	<1	5	0.5	<1		
	9	0.03	0.86	3	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
2009/08/14	Mid-ebb	Surface	8	0.12	1.21	2	<0.2	2	<1	<0.1	2	<1	<4	1.9	<1
			7	0.12	1.2	2	<0.2	4	<1	<0.1	3	<1	<4	1.6	<1
			--	--	--	--	--	--	--	--	--	--	4	1.5	--
		Middle	7	0.06	0.81	2	<0.2	2	<1	<0.1	2	<1	5	1.6	<1
			6	0.06	0.81	2	<0.2	2	<1	<0.1	2	<1	<4	1.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.7	--
	Bottom	14	0.08	0.67	3	<0.2	28	3	<0.1	2	<1	16	1	<1	
		15	0.1	0.69	2	<0.2	17	2	<0.1	2	<1	14	1.7	<1	
		--	--	--	--	--	--	--	--	--	--	13	1.4	--	

Annex D30 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/14	Mid-flood	Surface	6	0.08	1.18	2	<0.2	2	<1	<0.1	3	<1	<4	1.3	<1	
			6	0.08	1.2	2	<0.2	6	<1	<0.1	3	<1	5	1.1	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.3	--
	Middle	9	9	0.07	0.76	2	<0.2	2	<1	<0.1	1	<1	<4	1	<1	
			9	0.07	0.75	2	<0.2	2	<1	<0.1	2	<1	<4	0.9	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	0.9	--
	Bottom	20	20	0.06	0.59	2	<0.2	1	<1	<0.1	2	<1	<4	0.8	<1	
			22	0.06	0.62	<2	<0.2	1	<1	<0.1	1	<1	<4	0.7	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.9	--
2009/08/16	Mid-ebb	Surface	6	<0.01	1.36	<2	<0.2	3	<1	<0.1	2	<1	5	1.2	<1	
			6	<0.01	1.37	2	<0.2	4	<1	<0.1	3	<1	8	1.3	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	0.9	--
	Middle	6	6	0.05	0.85	2	<0.2	5	1	<0.1	2	<1	9	1.5	<1	
			6	0.05	0.83	3	<0.2	6	1	<0.1	2	<1	10	1.3	<1	
			--	--	--	--	--	--	--	--	--	--	--	8	1.1	--
	Bottom	16	16	0.02	0.52	<2	<0.2	<1	<1	<0.1	1	<1	4	<0.5	<1	
			15	0.01	0.49	3	<0.2	1	<1	<0.1	1	<1	6	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	4	0.6	--
	Mid-flood	Surface	5	5	0.02	1.3	3	<0.2	2	1	<0.1	3	<1	20	1.7	<1
				6	0.02	1.25	<2	<0.2	14	2	<0.1	2	<1	15	1.8	<1
				--	--	--	--	--	--	--	--	--	--	--	10	1.6
Middle		16	16	0.03	0.64	3	<0.2	5	2	<0.1	3	<1	9	1.6	<1	
			15	0.02	0.64	3	<0.2	5	2	<0.1	2	<1	13	1.2	<1	
			--	--	--	--	--	--	--	--	--	--	--	8	1.8	--
Bottom	18	18	0.08	0.68	3	<0.2	11	2	<0.1	2	<1	14	1.3	<1		
		17	0.06	0.64	<2	<0.2	15	2	<0.1	2	<1	15	0.7	<1		
		--	--	--	--	--	--	--	--	--	--	--	21	1.4	--	
2009/08/18	Mid-ebb	Surface	7	0.03	0.94	2	<0.2	2	<1	<0.1	3	<1	5	1.3	<1	
			8	0.03	0.93	2	<0.2	4	<1	<0.1	3	<1	5	1.3	<1	
			--	--	--	--	--	--	--	--	--	--	--	5	1.2	--
		Middle	27	27	0.04	0.62	2	<0.2	3	2	<0.1	4	<1	6	1.1	<1
				27	0.04	0.6	3	<0.2	5	2	<0.1	2	<1	7	1.3	<1
				--	--	--	--	--	--	--	--	--	--	--	5	1.2
	Bottom	28	28	0.03	0.59	2	<0.2	18	3	<0.1	3	<1	13	1.3	<1	
			32	0.03	0.59	2	<0.2	14	3	<0.1	5	<1	14	1.8	<1	
			--	--	--	--	--	--	--	--	--	--	--	16	1.8	--
	Mid-flood	Surface	9	9	0.07	1.13	2	<0.2	3	<1	<0.1	4	<1	<4	1.4	<1
				10	0.06	1.12	2	<0.2	4	<1	<0.1	3	<1	5	1.7	<1
				--	--	--	--	--	--	--	--	--	--	--	<4	1.8
Middle		22	22	0.07	0.73	2	<0.2	4	2	<0.1	2	<1	5	1.1	<1	
			23	0.07	0.73	3	<0.2	4	1	<0.1	4	<1	6	1.2	<1	
			--	--	--	--	--	--	--	--	--	--	--	6	1.8	--
Bottom	59	59	0.07	0.7	3	<0.2	17	7	<0.1	11	<1	20	1.4	2		
		95	0.09	0.72	3	<0.2	15	5	<0.1	4	<1	18	2.3	2		
		--	--	--	--	--	--	--	--	--	--	--	20	2.4	--	

Annex D30 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/21	Mid-ebb	Surface	11	0.03	0.88	2	<0.2	11	<1	<0.1	2	<1	5	0.6	<1
			12	0.03	0.92	2	<0.2	<1	<1	<0.1	2	<1	5	0.8	<1
			--	--	--	--	--	--	--	--	--	--	--	6	0.9
		Middle	14	0.05	0.81	2	<0.2	<1	1	<0.1	2	<1	<4	0.8	<1
			15	0.05	0.82	2	<0.2	4	2	<0.1	3	<1	6	1	<1
			--	--	--	--	--	--	--	--	--	--	6	0.8	--
	Bottom	20	0.02	0.73	2	<0.2	1	<1	<0.1	2	<1	5	<0.5	<1	
		20	0.02	0.72	2	<0.2	<1	<1	<0.1	2	<1	4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	4	<0.5	--	
	Mid-flood	Surface	11	0.04	0.9	2	<0.2	6	<1	<0.1	2	<1	6	0.9	<1
			11	0.05	0.91	2	<0.2	3	<1	<0.1	3	<1	<4	1	<1
			--	--	--	--	--	--	--	--	--	--	5	0.8	--
Middle		29	0.06	0.82	3	<0.2	8	2	<0.1	10	<1	8	0.9	<1	
		31	0.06	0.82	3	<0.2	11	2	<0.1	3	<1	6	0.8	<1	
		--	--	--	--	--	--	--	--	--	--	7	0.7	--	
Bottom	76	0.07	0.79	2	<0.2	44	5	<0.1	3	<1	19	1.2	2		
	77	0.06	0.77	2	<0.2	52	5	<0.1	4	<1	20	1.1	2		
	--	--	--	--	--	--	--	--	--	--	26	0.8	--		
2009/08/23	Mid-ebb	Surface	10	<0.01	0.88	2	<0.2	7	<1	<0.1	2	<1	9	<0.5	<1
			10	<0.01	0.9	2	<0.2	8	<1	<0.1	2	<1	8	1.3	<1
			--	--	--	--	--	--	--	--	--	--	7	1.2	--
		Middle	21	0.02	0.67	2	<0.2	6	1	<0.1	2	<1	8	0.7	<1
			20	0.03	0.68	2	<0.2	6	1	<0.1	2	<1	7	0.9	<1
			--	--	--	--	--	--	--	--	--	--	7	0.9	--
	Bottom	108	0.09	0.63	4	<0.2	18	5	<0.1	3	<1	16	2.6	2	
		118	0.09	0.64	4	<0.2	22	7	<0.1	3	<1	21	2.5	2	
		--	--	--	--	--	--	--	--	--	--	21	2.2	--	
	Mid-flood	Surface	12	0.04	0.9	3	<0.2	3	<1	<0.1	3	<1	<4	0.6	<1
			12	0.04	0.89	2	<0.2	3	<1	<0.1	2	<1	5	0.9	<1
			--	--	--	--	--	--	--	--	--	--	5	1	--
Middle		47	0.05	0.85	2	<0.2	3	2	<0.1	3	<1	6	1.3	1	
		66	0.05	0.82	3	<0.2	3	2	<0.1	3	<1	6	1.1	<1	
		--	--	--	--	--	--	--	--	--	--	6	1.1	--	
Bottom	100	0.06	0.81	3	<0.2	4	4	<0.1	4	<1	10	0.8	2		
	82	0.06	0.8	3	<0.2	4	4	<0.1	3	<1	11	0.6	2		
	--	--	--	--	--	--	--	--	--	--	10	0.7	--		

Annex D31 - Baseline Water Quality Monitoring Results

Sampling Station : MW1

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/07/28	Mid-ebb	Surface	4	<0.01	1.07	<2	<0.2	24	2	<0.1	6	<1	24	<0.5	<1
			4	<0.01	1.07	2	<0.2	22	2	<0.1	6	<1	39	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	37	<0.5	<1
		Middle	4	0.02	0.94	<2	<0.2	6	1	<0.1	4	<1	43	0.5	<1
			<2	0.02	0.92	<2	<0.2	4	<1	<0.1	5	<1	44	1.5	<1
			--	--	--	--	--	--	--	--	--	--	37	1.6	<1
	Bottom	8	0.04	0.51	2	<0.2	<1	<1	<0.1	2	<1	30	<0.5	<1	
		6	0.04	0.5	2	<0.2	<1	<1	<0.1	2	<1	38	0.6	<1	
		--	--	--	--	--	--	--	--	--	--	43	<0.5	<1	
	Mid-flood	Surface	3	0.03	1.07	2	<0.2	2	<1	<0.1	3	<1	23	0.8	--
			4	0.04	1.08	2	<0.2	1	<1	<0.1	2	<1	47	<0.5	--
			--	--	--	--	--	--	--	--	--	--	18	0.7	--
Middle		5	0.05	0.75	2	<0.2	1	<1	<0.1	2	<1	15	<0.5	--	
		3	0.05	0.74	2	<0.2	1	<1	<0.1	2	<1	18	<0.5	--	
		--	--	--	--	--	--	--	--	--	--	9	<0.5	--	
Bottom	4	0.06	0.55	<2	<0.2	<1	<1	<0.1	2	<1	24	<0.5	--		
	7	0.06	0.55	<2	<0.2	<1	<1	<0.1	2	<1	38	<0.5	--		
	--	--	--	--	--	--	--	--	--	--	14	<0.5	--		
2009/07/30	Mid-ebb	Surface	6	<0.01	0.47	2	<0.2	8	1	<0.1	3	<1	8	1.9	<1
			8	<0.01	0.48	2	<0.2	8	<1	<0.1	3	<1	5	2.1	<1
			--	--	--	--	--	--	--	--	--	--	5	2.6	--
		Middle	6	0.01	0.35	2	<0.2	5	1	<0.1	4	<1	8	1	1
			5	0.01	0.35	2	<0.2	5	1	<0.1	4	<1	7	0.9	<1
			--	--	--	--	--	--	--	--	--	--	7	1	--
	Bottom	5	<0.01	0.23	2	<0.2	<1	<1	<0.1	1	<1	6	<0.5	<1	
		6	<0.01	0.23	2	<0.2	<1	<1	<0.1	<1	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	0.9	--	
	Mid-flood	Surface	6	<0.01	0.97	<2	<0.2	15	1	<0.1	2	<1	12	<0.5	<1
			4	<0.01	0.96	<2	<0.2	11	1	<0.1	3	<1	13	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	10	0.5	--
Middle		6	0.02	0.48	<2	<0.2	5	1	<0.1	2	<1	14	<0.5	<1	
		7	0.02	0.47	<2	<0.2	7	1	<0.1	2	<1	14	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	18	<0.5	--	
Bottom	9	0.02	0.35	<2	<0.2	1	<1	<0.1	<1	<1	4	<0.5	<1		
	8	0.02	0.34	<2	<0.2	1	<1	<0.1	<1	<1	5	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	5	<0.5	--		
2009/08/01	Mid-ebb	Surface	<2	<0.01	0.94	<2	<0.2	7	<1	<0.1	2	<1	8	0.7	<1
			<2	<0.01	0.97	<2	<0.2	7	<1	<0.1	2	<1	7	0.6	<1
			--	--	--	--	--	--	--	--	--	--	8	0.6	--
		Middle	5	<0.01	0.61	<2	<0.2	9	1	<0.1	2	<1	12	0.9	<1
			4	<0.01	0.61	<2	<0.2	12	1	<0.1	2	<1	12	0.9	<1
			--	--	--	--	--	--	--	--	--	--	11	0.9	--
	Bottom	7	<0.01	0.25	<2	<0.2	<1	<1	<0.1	<1	<1	5	0.8	<1	
		7	<0.01	0.27	<2	<0.2	<1	<1	<0.1	<1	<1	6	0.8	<1	
		--	--	--	--	--	--	--	--	--	--	7	0.7	--	

Annex D31 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/01	Mid-flood	Surface	5	0.01	0.75	<2	<0.2	13	2	<0.1	3	<1	17	0.6	<1	
			4	<0.01	0.7	<2	<0.2	4	<1	<0.1	2	<1	5	0.7	1	
			--	--	--	--	--	--	--	--	--	--	--	10	1.4	--
		Middle	6	0.04	0.46	<2	<0.2	10	2	<0.1	3	<1	11	0.8	<1	
			7	0.03	0.45	<2	<0.2	8	<1	<0.1	3	<1	12	0.9	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.5	--
	Bottom	6	0.01	0.25	<2	<0.2	<1	<1	<0.1	<1	<1	<1	5	0.6	<1	
		5	<0.01	0.4	<2	<0.2	<1	<1	<0.1	<1	<1	<1	<4	0.6	<1	
		--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
2009/08/04	Mid-ebb	Surface	--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--	--	
		Middle	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Bottom	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Mid-flood	Surface	6	0.05	0.48	2	<0.2	3	1	<0.1	2	<1	11	1.4	<1	
			5	0.05	0.47	2	<0.2	3	1	<0.1	2	<1	12	1.2	<1	
			--	--	--	--	--	--	--	--	--	--	--	10	1	--
Middle		6	0.05	0.36	2	<0.2	3	1	<0.1	2	<1	13	0.7	<1		
		8	0.05	0.36	2	<0.2	5	2	<0.1	2	<1	14	0.9	<1		
		--	--	--	--	--	--	--	--	--	--	--	13	1.1	--	
Bottom	7	0.04	0.26	2	<0.2	<1	<1	<0.1	1	<1	5	<0.5	<1			
	6	0.04	0.28	2	<0.2	<1	<1	<0.1	1	<1	5	<0.5	<1			
	--	--	--	--	--	--	--	--	--	--	--	6	<0.5	--		
2009/08/06	Mid-ebb	Surface	4	0.08	0.79	<2	<0.2	3	1	<0.1	2	<1	6	1.9	<1	
			5	0.08	0.76	2	<0.2	2	<1	<0.1	2	<1	6	1.8	<1	
			--	--	--	--	--	--	--	--	--	--	--	5	2	--
		Middle	6	0.08	0.69	2	<0.2	2	<1	<0.1	2	<1	<4	1.4	<1	
			6	0.08	0.68	2	<0.2	2	<1	<0.1	2	<1	4	1.8	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.6	--
		Bottom	9	0.07	0.64	<2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1	
			9	0.08	0.65	2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Mid-flood	Surface	6	0.09	0.75	2	<0.2	5	1	<0.1	2	<1	9	1.6	<1	
			7	0.09	0.78	<2	<0.2	7	<1	<0.1	3	<1	9	1.4	<1	
			--	--	--	--	--	--	--	--	--	--	--	8	1.3	--
		Middle	8	0.08	0.48	<2	<0.2	4	<1	<0.1	2	<1	10	<0.5	<1	
			7	0.07	0.48	<2	<0.2	4	<1	<0.1	2	<1	23	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	10	1.5	--
Bottom	8	0.11	0.47	2	<0.2	1	<1	<0.1	1	<1	6	<0.5	<1			
	9	0.11	0.46	2	<0.2	1	<1	<0.1	1	<1	6	<0.5	<1			
	--	--	--	--	--	--	--	--	--	--	--	7	<0.5	--		

Annex D31 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/08	Mid-ebb	Surface	6	0.04	0.99	3	<0.2	3	1	<0.1	4	<1	4	0.9	2
			8	0.04	1.01	3	<0.2	3	1	<0.1	3	<1	4	1.1	2
			--	--	--	--	--	--	--	--	--	--	--	6	1
		Middle	7	0.05	0.91	3	<0.2	3	1	<0.1	2	<1	6	0.7	<1
			6	0.05	0.92	3	<0.2	3	<1	<0.1	2	<1	5	0.8	1
			--	--	--	--	--	--	--	--	--	--	6	0.8	--
	Bottom	10	0.07	0.77	3	<0.2	19	3	<0.1	4	<1	26	0.7	<1	
		9	0.07	0.77	3	<0.2	15	2	<0.1	3	<1	14	0.6	<1	
		--	--	--	--	--	--	--	--	--	--	19	0.6	--	
	Mid-flood	Surface	7	0.05	1.1	3	<0.2	2	<1	<0.1	2	<1	6	<0.5	<1
			5	0.06	1.1	3	<0.2	2	<1	<0.1	2	<1	6	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	7	<0.5	--
Middle		6	0.13	0.8	<2	<0.2	7	1	<0.1	2	<1	14	<0.5	<1	
		6	0.11	0.79	2	<0.2	7	1	<0.1	2	<1	17	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	13	<0.5	--	
Bottom	8	0.14	0.7	2	<0.2	17	2	<0.1	2	<1	16	<0.5	<1		
	6	0.15	0.71	<2	<0.2	16	2	<0.1	2	<1	15	<0.5	1		
	--	--	--	--	--	--	--	--	--	--	16	<0.5	--		
2009/08/12	Mid-ebb	Surface	6	0.04	0.77	3	<0.2	4	<1	<0.1	3	<1	5	<0.5	<1
			5	0.04	0.77	2	<0.2	5	<1	<0.1	2	<1	16	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	5	<0.5	--
		Middle	5	0.04	0.72	3	<0.2	1	<1	<0.1	2	<1	<4	0.5	<1
			4	0.04	0.73	2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Bottom	9	0.04	0.49	2	<0.2	2	<1	<0.1	1	<1	<4	0.6	<1	
		8	0.04	0.49	2	<0.2	3	<1	<0.1	1	<1	6	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Mid-flood	Surface	6	0.04	0.82	2	<0.2	3	<1	<0.1	2	<1	7	<0.5	<1
			5	0.04	0.82	<2	<0.2	2	<1	<0.1	2	<1	8	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	6	0.5	--
Middle		6	0.04	0.63	2	<0.2	2	<1	<0.1	2	<1	7	<0.5	<1	
		7	0.04	0.63	2	<0.2	2	<1	<0.1	1	<1	6	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	6	<0.5	--	
Bottom	9	0.05	0.48	<2	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<1		
	8	0.05	0.5	<2	<0.2	2	<1	<0.1	1	<1	5	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
2009/08/14	Mid-ebb	Surface	5	0.07	0.73	2	<0.2	6	<1	<0.1	2	<1	6	1.4	<1
			4	0.07	0.74	2	<0.2	6	2	<0.1	2	<1	8	1.4	<1
			--	--	--	--	--	--	--	--	--	--	8	1.4	--
		Middle	6	0.04	0.32	2	<0.2	2	<1	<0.1	<1	<1	<4	1.2	<1
			7	0.04	0.33	2	<0.2	2	<1	<0.1	1	<1	<4	1.7	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.9	--
	Bottom	7	0.03	0.29	<2	<0.2	2	<1	<0.1	<1	<1	4	1.5	<1	
		9	0.03	0.29	2	<0.2	2	<1	<0.1	<1	<1	<4	1.6	<1	
		--	--	--	--	--	--	--	--	--	--	<4	1.1	--	

Annex D31 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/14	Mid-flood	Surface	6	0.08	0.87	2	<0.2	4	<1	<0.1	2	<1	6	1.6	<1	
			5	0.07	0.86	<2	<0.2	3	<1	<0.1	2	<1	5	1.4	<1	
			--	--	--	--	--	--	--	--	--	--	4	1.6	--	
	Middle	4	0.06	0.54	2	<0.2	1	<1	<0.1	1	<1	4	1.2	<1		
			6	0.06	0.52	<2	<0.2	2	<1	<0.1	1	<1	5	1.2	<1	
			--	--	--	--	--	--	--	--	--	--	<4	1.1	--	
	Bottom	13	0.04	0.36	<2	<0.2	<1	<1	<0.1	1	<1	<4	1	<1		
			14	0.05	0.37	<2	<0.2	<1	<1	<0.1	1	<1	5	1.7	<1	
			--	--	--	--	--	--	--	--	--	--	6	0.6	--	
2009/08/16	Mid-ebb	Surface	4	0.04	1.21	<2	<0.2	4	<1	<0.1	3	<1	9	1.5	<1	
			5	0.04	1.2	2	<0.2	4	<1	<0.1	3	<1	8	1.5	<1	
			--	--	--	--	--	--	--	--	--	--	10	1.6	--	
	Middle	4	0.05	0.62	2	<0.2	11	<1	<0.1	2	<1	17	1.8	<1		
			4	0.05	0.63	2	<0.2	15	<1	<0.1	2	<1	23	1.7	<1	
			--	--	--	--	--	--	--	--	--	--	15	1.5	--	
	Bottom	8	0.04	0.34	<2	<0.2	<1	<1	<0.1	<1	<1	5	0.7	<1		
			9	0.04	0.34	2	<0.2	<1	<1	<0.1	<1	<1	9	0.7	<1	
			--	--	--	--	--	--	--	--	--	--	7	1.1	--	
	Mid-flood	Surface	7	0.02	0.65	2	<0.2	4	1	<0.1	1	<1	10	1.4	<1	
				7	0.02	0.63	2	<0.2	5	<1	<0.1	3	<1	5	1.5	<1
				--	--	--	--	--	--	--	--	--	--	5	2.1	--
		Middle	8	0.04	0.3	<2	<0.2	4	<1	<0.1	2	<1	4	1.2	<1	
				9	0.03	0.3	2	<0.2	7	1	<0.1	<1	<1	10	1.2	<1
				--	--	--	--	--	--	--	--	--	--	10	1.2	--
Bottom	13	0.02	0.26	<2	<0.2	8	1	<0.1	<1	<1	8	1	<1			
		11	0.03	0.27	3	<0.2	6	<1	<0.1	1	<1	6	1.1	<1		
		--	--	--	--	--	--	--	--	--	--	8	1.2	--		
2009/08/18	Mid-ebb	Surface	6	0.03	0.88	2	<0.2	3	<1	<0.1	2	<1	10	1.5	<1	
			5	0.03	0.88	2	<0.2	2	<1	<0.1	2	<1	9	1.4	<1	
			--	--	--	--	--	--	--	--	--	--	5	1.8	--	
		Middle	7	0.03	0.58	2	<0.2	3	<1	<0.1	2	<1	5	0.9	<1	
				7	0.02	0.57	2	<0.2	2	<1	<0.1	2	<1	6	0.9	<1
				--	--	--	--	--	--	--	--	--	--	5	0.9	--
	Bottom	12	0.03	0.38	2	<0.2	<1	<1	<0.1	2	<1	8	1.1	<1		
			10	0.02	0.38	<2	<0.2	<1	<1	<0.1	1	<1	7	0.9	<1	
			--	--	--	--	--	--	--	--	--	--	9	0.9	--	
	Mid-flood	Surface	10	0.04	0.52	2	<0.2	5	<1	<0.1	2	<1	8	0.6	<1	
				12	0.05	0.53	<2	<0.2	4	<1	<0.1	2	<1	5	1	<1
				--	--	--	--	--	--	--	--	--	--	4	0.9	--
Middle		21	0.03	0.42	2	<0.2	2	<1	<0.1	1	<1	<4	<0.5	<1		
			23	0.03	0.42	2	<0.2	2	<1	<0.1	2	<1	8	0.6	<1	
			--	--	--	--	--	--	--	--	--	--	5	0.6	--	
Bottom	24	0.02	0.37	2	<0.2	15	2	<0.1	4	<1	15	<0.5	1			
		26	0.02	0.37	2	<0.2	15	2	<0.1	3	<1	13	0.6	2		
		--	--	--	--	--	--	--	--	--	--	20	<0.5	--		

Annex D31 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)		
2009/08/21	Mid-ebb	Surface	9	0.02	0.86	2	<0.2	4	1	<0.1	3	<1	5	1.2	<1		
			9	0.02	0.85	2	<0.2	4	<1	<0.1	3	<1	5	1.2	<1		
			--	--	--	--	--	--	--	--	--	--	--	7	1.2	--	
		Middle	12	0.03	0.78	2	<0.2	4	1	<0.1	2	<1	8	1	<1		
			13	0.03	0.79	2	<0.2	3	<1	<0.1	2	<1	4	1	<1		
			--	--	--	--	--	--	--	--	--	--	--	<4	1.2	--	
	Bottom	36	0.06	0.79	3	<0.2	9	4	<0.1	4	<0.1	6	<1	13	2.2	1	
		40	0.04	0.75	2	<0.2	8	4	<0.1	4	<0.1	5	<1	13	2	2	
		--	--	--	--	--	--	--	--	--	--	--	--	10	1.8	--	
	Mid-flood	Surface	12	0.05	0.48	2	<0.2	1	<1	<0.1	<0.1	1	<1	6	0.7	<1	
			13	0.05	0.48	2	<0.2	<1	<1	<0.1	<0.1	1	<1	<4	0.6	<1	
			--	--	--	--	--	--	--	--	--	--	--	--	8	1	--
Middle		8	0.04	0.64	2	<0.2	3	1	<0.1	2	<1	2	<1	5	1.2	<1	
		9	0.04	0.64	2	<0.2	2	<1	<0.1	2	<1	2	<1	6	1.2	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	5	1.6	--	
Bottom	7	0.04	0.83	2	<0.2	2	<1	<0.1	<1	<0.1	2	<1	8	1.1	<1		
	7	0.04	0.83	2	<0.2	2	<1	<0.1	<1	<0.1	2	<1	4	1.3	<1		
	--	--	--	--	--	--	--	--	--	--	--	--	5	1.1	--		
2009/08/23	Mid-ebb	Surface	8	0.04	0.77	2	<0.2	2	<1	<0.1	2	<1	7	1	<1		
			9	0.03	0.77	2	<0.2	2	<1	<0.1	2	<1	8	1.2	<1		
			--	--	--	--	--	--	--	--	--	--	--	8	1.1	--	
		Middle	13	0.05	0.66	2	<0.2	2	<1	<0.1	2	<1	2	<1	16	0.9	<1
			12	0.05	0.66	2	<0.2	3	<1	<0.1	2	<1	2	<1	6	1	<1
			--	--	--	--	--	--	--	--	--	--	--	--	5	0.9	--
	Bottom	14	0.04	0.65	2	<0.2	3	<1	<0.1	<1	<0.1	3	<1	8	1	<1	
		13	0.04	0.65	2	<0.2	4	<1	<0.1	<1	<0.1	4	<1	10	1.2	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	7	0.9	--	
	Mid-flood	Surface	9	0.06	0.9	2	<0.2	4	<1	<0.1	<0.1	3	<1	<4	<0.5	<1	
			8	0.05	0.88	2	<0.2	3	<1	<0.1	3	<1	3	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	--	--	5	0.5	--
Middle		12	0.07	0.69	2	<0.2	2	<1	<0.1	2	<1	2	<1	7	<0.5	<1	
		12	0.06	0.68	2	<0.2	2	<1	<0.1	2	<1	2	<1	5	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	5	0.5	--	
Bottom	14	0.06	0.55	2	<0.2	1	<1	<0.1	<1	<0.1	2	<1	<4	<0.5	<1		
	12	0.07	0.57	2	<0.2	<1	<1	<0.1	<1	<0.1	2	<1	<4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	--	--	7	<0.5	--		

Annex D32 - Baseline Water Quality Monitoring Results

Sampling Station : NM1

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/07/28	Mid-ebb	Surface	4	<0.01	1.3	2	<0.2	32	<1	<0.1	2	<1	36	0.6	<1
			4	<0.01	1.28	2	<0.2	43	1	<0.1	2	<1	36	0.6	<1
			--	--	--	--	--	--	--	--	--	--	30	<0.5	<1
		Middle	4	0.03	0.4	<2	<0.2	<1	<1	<0.1	2	<1	20	<0.5	<1
			5	0.03	0.4	<2	<0.2	1	<1	<0.1	2	<1	18	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	32	<0.5	<1
		Bottom	7	0.02	0.28	<2	<0.2	<1	<1	<0.1	2	<1	47	<0.5	<1
			7	0.02	0.29	<2	<0.2	<1	<1	<0.1	2	<1	40	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	31	<0.5	<1
	Mid-flood	Surface	4	0.01	1.07	<2	<0.2	1	<1	<0.1	3	<1	47	0.5	<1
			4	0.01	1.08	<2	<0.2	1	<1	<0.1	3	<1	37	0.8	<1
			--	--	--	--	--	--	--	--	--	--	43	0.6	<1
		Middle	5	0.06	0.47	<2	<0.2	<1	<1	<0.1	2	<1	11	<0.5	<1
			4	0.06	0.47	<2	<0.2	<1	<1	<0.1	2	<1	10	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	13	<0.5	<1
Bottom	12	0.04	0.34	<2	<0.2	1	<1	<0.1	1	<1	12	<0.5	<1		
	16	0.04	0.34	<2	<0.2	1	<1	<0.1	1	<1	10	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	4	<0.5	<1		
2009/07/30	Mid-ebb	Surface	6	<0.01	0.41	3	<0.2	7	<1	<0.1	2	<1	4	1.8	<1
			6	<0.01	0.43	<2	<0.2	7	<1	<0.1	2	<1	4	1.7	<1
			--	--	--	--	--	--	--	--	--	--	5	2.2	--
		Middle	7	<0.01	0.23	2	<0.2	16	2	<0.1	1	<1	20	<0.5	<1
			7	<0.01	0.23	<2	<0.2	18	2	<0.1	1	<1	23	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	31	0.6	--
		Bottom	7	<0.01	0.19	2	<0.2	<1	<1	<0.1	<1	<1	<4	<0.5	<1
			7	<0.01	0.19	2	<0.2	<1	<1	<0.1	<1	<1	<4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Mid-flood	Surface	7	0.01	0.88	<2	<0.2	22	1	<0.1	2	<1	14	<0.5	<1
			7	<0.01	0.86	<2	<0.2	24	<1	<0.1	2	<1	12	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	12	<0.5	--
		Middle	5	0.02	0.36	<2	<0.2	3	<1	<0.1	1	<1	5	<0.5	<1
			4	0.02	0.36	<2	<0.2	<1	<1	<0.1	<1	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	5	<0.5	--
Bottom	11	<0.01	0.24	<2	<0.2	<1	<1	<0.1	<1	<1	<4	<0.5	<1		
	8	<0.01	0.24	<2	<0.2	1	<1	<0.1	<1	<1	<4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
2009/08/01	Mid-ebb	Surface	<2	<0.01	1.01	<2	<0.2	5	<1	<0.1	3	<1	5	0.7	<1
			<2	<0.01	1.02	<2	<0.2	4	<1	<0.1	2	<1	5	0.7	<1
			--	--	--	--	--	--	--	--	--	--	6	0.6	--
		Middle	5	0.01	0.29	<2	<0.2	10	1	<0.1	1	<1	12	0.8	<1
			5	0.01	0.29	<2	<0.2	12	1	<0.1	1	<1	13	0.8	<1
			--	--	--	--	--	--	--	--	--	--	12	0.8	--
		Bottom	6	<0.01	0.21	<2	<0.2	<1	<1	<0.1	<1	<1	<4	0.6	<1
			7	<0.01	0.2	<2	<0.2	<1	<1	<0.1	<1	<1	<4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	4	0.6	--

Annex D32 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/01	Mid-flood	Surface	3	<0.01	0.92	2	<0.2	6	<1	<0.1	2	<1	5	0.8	<1	
			3	<0.01	0.97	2	<0.2	6	1	<0.1	2	<1	5	0.6	<1	
			--	--	--	--	--	--	--	--	--	--	--	9	0.6	--
	Middle	5	<0.01	0.27	2	<0.2	5	1	<0.1	<1	<1	<1	6	0.9	<1	
			4	<0.01	0.26	2	<0.2	3	<1	<0.1	<1	<1	6	0.6	<1	
			--	--	--	--	--	--	--	--	--	--	4	0.6	--	
	Bottom	13	<0.01	0.2	2	<0.2	<1	<1	<0.1	<1	<1	<1	<1	<4	0.6	<1
			10	<0.01	0.2	2	<0.2	<1	<1	<0.1	<1	<1	<1	<4	0.5	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	0.5	--
2009/08/04	Mid-ebb	Surface	--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Middle	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Bottom	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mid-flood	Surface	3	0.04	0.55	2	<0.2	8	<1	<0.1	1	<1	7	0.8	<1		
			3	0.03	0.54	2	<0.2	6	<1	<0.1	2	<1	7	0.6	<1	
			--	--	--	--	--	--	--	--	--	--	11	0.9	--	
	Middle	8	0.04	0.28	2	<0.2	4	2	<0.1	1	<1	8	0.6	<1		
			7	0.04	0.28	2	<0.2	2	<1	<0.1	1	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	7	0.6	--	
Bottom	16	0.04	0.23	2	<0.2	2	<1	<0.1	1	<1	5	<0.5	<1			
		18	0.04	0.24	3	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<1		
		--	--	--	--	--	--	--	--	--	--	5	<0.5	--		
2009/08/6	Mid-ebb	Surface	3	0.08	0.84	<2	<0.2	5	<1	<0.1	3	<1	4	1.8	<1	
			4	0.08	0.82	2	<0.2	7	<1	<0.1	2	<1	6	1.7	<1	
			--	--	--	--	--	--	--	--	--	--	4	2	--	
	Middle	9	0.08	0.53	2	<0.2	2	<1	<0.1	2	<1	<1	<4	<0.5	<1	
			8	0.1	0.53	<2	<0.2	2	<1	<0.1	2	<1	5	0.6	<1	
			--	--	--	--	--	--	--	--	--	--	4	<0.5	--	
	Bottom	10	0.08	0.43	2	<0.2	1	<1	<0.1	1	<1	<1	<4	<0.5	<1	
			12	0.08	0.44	2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
Mid-flood	Surface	6	0.09	0.84	2	<0.2	4	<1	<0.1	2	<1	7	0.6	<1		
			6	0.08	0.79	2	<0.2	6	<1	<0.1	2	<1	10	0.6	<1	
			--	--	--	--	--	--	--	--	--	--	7	0.6	--	
	Middle	10	0.08	0.48	2	<0.2	4	<1	<0.1	2	<1	<1	14	<0.5	<1	
			9	0.08	0.44	2	<0.2	4	<1	<0.1	2	<1	8	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	8	<0.5	--	
Bottom	10	0.09	0.45	<2	<0.2	4	<1	<0.1	2	<1	<1	8	<0.5	<1		
		12	0.1	0.46	<2	<0.2	1	<1	<0.1	1	<1	4	<0.5	<1		
		--	--	--	--	--	--	--	--	--	--	<4	1	--		

Annex D32 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/08	Mid-ebb	Surface	6	0.02	1.02	3	<0.2	3	1	<0.1	2	<1	4	0.7	<1
			6	0.02	1.01	4	<0.2	2	<1	<0.1	2	<1	7	1.2	<1
			--	--	--	--	--	--	--	--	--	--	6	0.6	--
		Middle	7	0.06	0.73	3	<0.2	3	1	<0.1	2	<1	5	<0.5	<1
			8	0.07	0.73	3	<0.2	5	<1	<0.1	2	<1	18	0.6	<1
			--	--	--	--	--	--	--	--	--	--	5	<0.5	--
	Bottom	41	0.08	0.4	2	<0.2	9	3	<0.1	2	<1	11	0.5	2	
		43	0.08	0.39	2	<0.2	9	2	<0.1	2	<1	9	<0.5	2	
		--	--	--	--	--	--	--	--	--	--	8	0.5	--	
	Mid-flood	Surface	6	0.06	1.02	4	<0.2	3	<1	<0.1	2	<1	<4	0.6	<1
			5	0.07	1	2	<0.2	4	<1	<0.1	2	<1	4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
Middle		10	0.17	0.64	3	<0.2	6	<1	<0.1	1	<1	8	<0.5	<1	
		13	0.15	0.61	3	<0.2	3	<1	<0.1	2	<1	7	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	7	<0.5	--	
Bottom	29	0.14	0.46	4	<0.2	9	2	<0.1	2	<1	10	<0.5	1		
	30	0.15	0.47	2	<0.2	8	2	<0.1	2	<1	9	0.5	1		
	--	--	--	--	--	--	--	--	--	--	8	<0.5	--		
2009/08/12	Mid-ebb	Surface	5	0.04	0.72	2	<0.2	3	<1	<0.1	2	<1	4	<0.5	<1
			4	0.04	0.72	2	<0.2	4	<1	<0.1	2	<1	4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	5	<0.5	--
		Middle	13	0.03	0.43	2	<0.2	2	<1	<0.1	1	<1	<4	<0.5	<1
			12	0.03	0.43	2	<0.2	1	<1	<0.1	<1	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Bottom	8	0.03	0.32	2	<0.2	2	<1	<0.1	<1	<1	<4	<0.5	<1	
		9	0.02	0.31	2	<0.2	<1	<1	<0.1	1	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Mid-flood	Surface	4	0.04	0.79	<2	<0.2	3	<1	<0.1	2	<1	5	<0.5	<1
			5	0.04	0.78	2	<0.2	3	<1	<0.1	2	<1	5	0.6	<1
			--	--	--	--	--	--	--	--	--	--	4	<0.5	--
Middle		6	0.05	0.4	<2	<0.2	2	<1	<0.1	1	<1	5	0.6	<1	
		6	0.05	0.4	3	<0.2	2	<1	<0.1	1	<1	6	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	6	<0.5	--	
Bottom	15	0.05	0.35	<2	<0.2	<1	<1	<0.1	<1	<1	<4	<0.5	<1		
	14	0.05	0.35	<2	<0.2	<1	<1	<0.1	<1	<1	<4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
2009/08/14	Mid-ebb	Surface	3	0.05	0.97	2	<0.2	18	1	<0.1	2	<1	17	1.1	<1
			3	0.06	0.97	2	<0.2	22	<1	<0.1	2	<1	19	1	<1
			--	--	--	--	--	--	--	--	--	--	8	1.2	--
		Middle	8	0.03	0.29	2	<0.2	1	<1	<0.1	1	<1	<4	1.1	<1
			8	0.03	0.29	2	<0.2	1	<1	<0.1	<1	<1	<4	1.2	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.1	--
	Bottom	9	0.06	0.31	4	<0.2	11	2	<0.1	1	<1	11	1.8	<1	
		8	0.05	0.31	2	<0.2	10	<1	<0.1	1	<1	8	1.5	<1	
		--	--	--	--	--	--	--	--	--	--	8	1.8	--	

Annex D32 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/14	Mid-flood	Surface	4	0.07	0.89	2	<0.2	5	<1	<0.1	2	<1	5	1.4	<1	
			4	0.07	0.88	2	<0.2	11	<1	<0.1	2	<1	11	1.3	<1	
			--	--	--	--	--	--	--	--	--	--	--	9	1.5	--
	Middle	10	0.03	0.3	2	<0.2	2	<1	<0.1	<1	<1	<1	<4	1.2	<1	
			0.04	0.3	<2	<0.2	8	1	<0.1	1	<1	<1	12	1.3	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.2	--
	Bottom	15	0.03	0.26	<2	<0.2	<1	<1	<0.1	<1	<0.1	<1	<1	<4	0.9	<1
			0.03	0.26	<2	<0.2	<1	<1	<0.1	<1	<0.1	<1	<1	<4	0.8	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	1.1	--
2009/08/16	Mid-ebb	Surface	4	0.03	1.16	3	<0.2	5	<1	<0.1	3	<1	9	1.8	<1	
			4	0.03	1.17	<2	<0.2	4	<1	<0.1	3	<1	7	1.6	<1	
			--	--	--	--	--	--	--	--	--	--	--	9	1.5	--
	Middle	8	0.05	0.35	<2	<0.2	4	1	<0.1	<1	<1	<1	7	1.7	<1	
			0.05	0.36	2	<0.2	6	1	<0.1	1	<1	<1	8	1.4	<1	
			--	--	--	--	--	--	--	--	--	--	--	8	1.5	--
	Bottom	11	0.02	0.23	2	<0.2	1	<1	<0.1	<1	<1	<1	7	1.1	<1	
			0.02	0.21	2	<0.2	1	<1	<0.1	<1	<1	<1	4	0.8	<1	
			--	--	--	--	--	--	--	--	--	--	--	6	0.6	--
	Mid-flood	Surface	5	<0.01	0.94	<2	<0.2	5	2	<0.1	2	<1	6	1.9	<1	
			5	<0.01	0.92	2	<0.2	3	<1	<0.1	2	<1	7	1.8	<1	
			--	--	--	--	--	--	--	--	--	--	--	11	1.8	--
Middle	10	0.04	0.29	<2	<0.2	2	2	<0.1	<1	<1	<1	7	1.1	<1		
		0.04	0.28	<2	<0.2	3	1	<0.1	1	<1	<1	7	1	<1		
		--	--	--	--	--	--	--	--	--	--	--	8	0.9	--	
Bottom	17	0.02	0.22	<2	<0.2	<1	<1	<0.1	1	<1	<1	<4	0.5	<1		
		0.02	0.22	2	<0.2	2	1	<0.1	1	<1	<1	<4	0.6	<1		
		--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
2009/08/18	Mid-ebb	Surface	5	0.02	0.81	2	<0.2	3	<1	<0.1	2	<1	4	1.6	<1	
			6	0.02	0.8	2	<0.2	4	<1	<0.1	2	<1	4	1.9	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.9	--
	Middle	9	0.03	0.41	2	<0.2	3	<1	<0.1	<1	<0.1	1	<1	4	1.4	<1
			0.03	0.4	2	<0.2	3	<1	<0.1	2	<1	<1	5	1.3	<1	
			--	--	--	--	--	--	--	--	--	--	--	5	1.3	--
	Bottom	25	0.02	0.28	2	<0.2	1	1	<0.1	2	<1	<1	4	1.3	<1	
			0.02	0.28	<2	<0.2	1	<1	<0.1	3	<1	<1	6	1.4	<1	
			--	--	--	--	--	--	--	--	--	--	--	5	1.3	--
	Mid-flood	Surface	17	0.03	0.44	2	<0.2	6	1	<0.1	2	<1	6	1	<1	
			17	0.04	0.45	2	<0.2	4	<1	<0.1	2	<1	6	0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	7	0.6	--
Middle	23	0.02	0.3	2	<0.2	2	1	<0.1	1	<1	<1	4	0.6	<1		
		0.03	0.34	2	<0.2	2	1	<0.1	1	<1	<1	4	<0.5	<1		
		--	--	--	--	--	--	--	--	--	--	--	5	<0.5	--	
Bottom	26	0.02	0.28	2	<0.2	1	<1	<0.1	1	<1	<1	<4	0.8	<1		
		0.02	0.28	<2	<0.2	1	<1	<0.1	1	<1	<1	5	0.7	<1		
		--	--	--	--	--	--	--	--	--	--	--	<4	1.1	--	

Annex D32 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/21	Mid-ebb	Surface	9	0.03	0.87	2	<0.2	4	<1	<0.1	2	<1	5	1.3	<1
			9	0.03	0.85	2	<0.2	4	<1	<0.1	2	<1	5	1.5	<1
			--	--	--	--	--	--	--	--	--	--	--	5	1.4
		Middle	16	0.04	0.69	2	<0.2	2	1	<0.1	2	<1	6	0.8	<1
			17	0.04	0.67	2	<0.2	2	<1	<0.1	2	<1	4	1	<1
			--	--	--	--	--	--	--	--	--	--	11	1.1	--
	Bottom	27	0.04	0.4	<2	<0.2	2	<1	<0.1	1	<1	<4	0.6	<1	
		24	0.04	0.41	<2	<0.2	2	<1	<0.1	2	<1	<4	0.6	<1	
		--	--	--	--	--	--	--	--	--	--	5	0.7	--	
	Mid-flood	Surface	7	0.05	0.83	2	<0.2	2	<1	<0.1	2	<1	<4	1.3	<1
			8	0.05	0.83	2	<0.2	2	<1	<0.1	2	<1	5	1.2	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.1	--
Middle		14	0.05	0.52	2	<0.2	2	2	<0.1	2	<1	5	1	<1	
		11	0.06	0.53	2	<0.2	2	2	<0.1	2	<1	<4	1	<1	
		--	--	--	--	--	--	--	--	--	--	5	1	--	
Bottom	38	0.05	0.41	2	<0.2	2	1	<0.1	1	<1	5	0.5	<1		
	28	0.05	0.45	2	<0.2	2	1	<0.1	1	<1	7	0.9	<1		
	--	--	--	--	--	--	--	--	--	--	6	0.7	--		
2009/08/23	Mid-ebb	Surface	8	0.02	0.76	2	<0.2	3	<1	<0.1	2	<1	8	0.9	<1
			4	0.03	0.77	2	<0.2	2	<1	<0.1	2	<1	11	1	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.8	--
		Middle	6	0.05	0.61	2	<0.2	1	<1	<0.1	2	<1	8	0.6	<1
			4	0.05	0.61	<2	<0.2	1	<1	<0.1	2	<1	5	0.7	<1
			--	--	--	--	--	--	--	--	--	--	8	0.5	--
	Bottom	21	0.05	0.4	2	<0.2	1	<1	<0.1	1	<1	6	0.5	<1	
		23	0.05	0.41	2	<0.2	1	<1	<0.1	1	<1	7	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	6	<0.5	--	
	Mid-flood	Surface	8	0.05	0.68	3	<0.2	10	<1	<0.1	3	<1	8	1	<1
			7	0.05	0.67	2	<0.2	14	<1	<0.1	2	<1	8	1.1	<1
			--	--	--	--	--	--	--	--	--	--	8	<0.5	--
Middle		30	0.06	0.57	2	<0.2	2	<1	<0.1	2	<1	4	1.1	<1	
		32	0.08	0.57	2	<0.2	1	<1	<0.1	2	<1	<4	1.1	<1	
		--	--	--	--	--	--	--	--	--	--	17	0.8	--	
Bottom	53	0.06	0.51	2	<0.2	2	<1	<0.1	3	<1	5	<0.5	<1		
	51	0.06	0.51	2	<0.2	2	<1	<0.1	2	<1	4	0.6	1		
	--	--	--	--	--	--	--	--	--	--	4	<0.5	--		

Annex D33 - Baseline Water Quality Monitoring Results

Sampling Station : NM2

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/07/28	Mid-ebb	Surface	5	<0.01	1.34	2	<0.2	9	<1	<0.1	2	<1	22	0.9	--
			4	<0.01	1.33	2	<0.2	9	<1	<0.1	2	<1	34	1.1	--
			--	--	--	--	--	--	--	--	--	--	46	1.6	--
		Middle	6	0.03	0.95	<2	<0.2	5	<1	<0.1	3	<1	47	<0.5	--
			5	0.03	0.95	<2	<0.2	3	<1	<0.1	3	<1	31	0.8	--
			--	--	--	--	--	--	--	--	--	--	46	<0.5	--
	Bottom	6	0.04	0.61	<2	<0.2	2	<1	<0.1	2	<1	21	<0.5	--	
		6	0.04	0.58	<2	<0.2	<1	<1	<0.1	2	<1	39	<0.5	--	
		--	--	--	--	--	--	--	--	--	--	45	<0.5	--	
	Mid-flood	Surface	5	0.04	1.13	2	<0.2	2	<1	<0.1	3	<1	14	<0.5	<1
			8	0.03	1.11	2	<0.2	1	<1	<0.1	3	<1	22	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	20	<0.5	<1
Middle		5	0.04	0.84	2	<0.2	1	<1	<0.1	2	<1	18	<0.5	<1	
		7	0.04	0.84	2	<0.2	1	<1	<0.1	2	<1	21	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	20	<0.5	<1	
Bottom	32	0.06	0.67	<2	<0.2	6	2	<0.1	2	<1	15	<0.5	<1		
	40	0.06	0.66	<2	<0.2	2	2	<0.1	2	<1	26	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	18	<0.5	<1		
2009/07/30	Mid-ebb	Surface	3	<0.01	1.01	<2	<0.2	<1	<1	<0.1	<1	<1	<4	1.2	<1
			4	<0.01	1	<2	<0.2	8	<1	<0.1	2	<1	4	1.2	<1
			--	--	--	--	--	--	--	--	--	--	7	1.3	--
		Middle	3	0.01	0.65	<2	<0.2	5	1	<0.1	2	<1	8	0.8	<1
			3	0.01	0.68	<2	<0.2	2	<1	<0.1	1	<1	4	1	<1
			--	--	--	--	--	--	--	--	--	--	7	1.2	--
	Bottom	3	0.01	0.51	<2	<0.2	<1	<1	<0.1	1	<1	<4	<0.5	<1	
		6	0.01	0.48	<2	<0.2	<1	<1	<0.1	<1	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	0.7	--	
	Mid-flood	Surface	3	<0.01	1.07	<2	<0.2	14	1	<0.1	3	<1	9	<0.5	<1
			3	<0.01	1.06	<2	<0.2	13	<1	<0.1	3	<1	9	0.5	<1
			--	--	--	--	--	--	--	--	--	--	8	<0.5	--
Middle		7	0.04	0.68	<2	<0.2	4	1	<0.1	2	<1	8	0.6	<1	
		7	0.05	0.7	<2	<0.2	4	1	<0.1	2	<1	7	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	6	0.6	--	
Bottom	20	0.02	0.55	<2	<0.2	2	<1	<0.1	2	<1	4	<0.5	<1		
	18	0.02	0.55	<2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	6	<0.5	--		
2009/08/01	Mid-ebb	Surface	3	0.01	0.92	<2	<0.2	10	<1	<0.1	2	<1	6	0.9	<1
			3	0.01	0.94	<2	<0.2	12	<1	<0.1	3	<1	10	0.7	<1
			--	--	--	--	--	--	--	--	--	--	6	0.5	--
		Middle	4	0.01	0.62	<2	<0.2	7	<1	<0.1	2	<1	8	0.8	<1
			5	<0.01	0.61	<2	<0.2	6	<1	<0.1	2	<1	7	0.8	<1
			--	--	--	--	--	--	--	--	--	--	19	0.6	--
Bottom	6	<0.01	0.46	<2	<0.2	<1	<1	<0.1	1	<1	<4	0.8	<1		
	4	<0.01	0.45	<2	<0.2	1	<1	<0.1	1	<1	<4	0.8	<1		
	--	--	--	--	--	--	--	--	--	--	4	0.9	--		

Annex D33 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/01	Mid-flood	Surface	3	<0.01	1.1	2	<0.2	6	1	<0.1	9	<1	6	0.7	<1	
			3	<0.01	1.11	2	<0.2	10	<1	<0.1	3	<1	6	0.8	<1	
			--	--	--	--	--	--	--	--	--	--	6	0.6	--	
		Middle	6	<0.01	0.54	2	<0.2	1	1	<0.1	6	<1	9	0.8	<1	
			7	<0.01	0.54	<2	<0.2	1	<1	<0.1	7	<1	9	1.2	<1	
			--	--	--	--	--	--	--	--	--	--	7	0.7	--	
	Bottom	7	<0.01	0.34	<2	<0.2	7	<1	<0.1	1	<1	<4	0.6	<1		
		6	<0.01	0.32	<2	<0.2	9	<1	<0.1	1	<1	<4	0.5	<1		
		--	--	--	--	--	--	--	--	--	--	<4	0.6	--		
2009/08/04	Mid-ebb	Surface	--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--		
			--	--	--	--	--	--	--	--	--	--	--	--		
		Middle	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	
	Bottom	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--		
	Mid-flood	Surface	5	0.05	0.66	3	<0.2	1	<1	<0.1	1	<1	<4	0.8	<1	
			6	0.06	0.71	3	<0.2	2	<1	<0.1	2	<1	5	0.8	<1	
			--	--	--	--	--	--	--	--	--	--	14	1.5	--	
Middle		9	0.06	0.45	2	<0.2	6	<1	<0.1	2	<1	8	1	<1		
		10	0.06	0.45	3	<0.2	4	<1	<0.1	2	<1	11	1.1	<1		
		--	--	--	--	--	--	--	--	--	--	9	1	--		
Bottom	8	0.05	0.32	3	<0.2	<1	<1	<0.1	1	<1	<4	0.7	<1			
	8	0.05	0.33	3	<0.2	<1	<1	<0.1	1	<1	<4	0.6	<1			
	--	--	--	--	--	--	--	--	--	--	<4	0.7	--			
2009/08/06	Mid-ebb	Surface	7	0.09	0.82	2	<0.2	5	<1	<0.1	2	<1	6	1.6	<1	
			6	0.1	0.82	2	<0.2	5	<1	<0.1	3	<1	6	1.8	<1	
			--	--	--	--	--	--	--	--	--	--	7	2	--	
		Middle	9	0.08	0.6	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
			10	0.08	0.6	<2	<0.2	2	<1	<0.1	2	<1	<4	1.3	<1	
			--	--	--	--	--	--	--	--	--	--	<4	0.6	--	
		Bottom	14	0.08	0.5	<2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1	
			13	0.08	0.52	<2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Mid-flood	Surface	8	0.09	0.97	<2	<0.2	4	<1	<0.1	2	<1	6	1.6	<1	
			8	0.09	0.97	2	<0.2	3	<1	<0.1	2	<1	8	1.3	<1	
			--	--	--	--	--	--	--	--	--	--	7	1.2	--	
		Middle	10	0.08	0.76	<2	<0.2	2	<1	<0.1	2	<1	5	1.2	<1	
			8	0.08	0.8	2	<0.2	8	<1	<0.1	3	<1	10	0.9	<1	
			--	--	--	--	--	--	--	--	--	--	6	<0.5	--	
Bottom	8	0.06	0.51	<2	<0.2	2	<1	<0.1	2	<1	<4	0.6	<1			
	9	0.06	0.52	<2	<0.2	2	<1	<0.1	1	<1	5	0.9	<1			
	--	--	--	--	--	--	--	--	--	--	7	<0.5	--			

Annex D33 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/08	Mid-ebb	Surface	6	0.05	0.88	4	<0.2	2	<1	<0.1	2	<1	4	0.8	<1
			6	0.05	0.87	3	<0.2	2	<1	<0.1	2	<1	<4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	0.7
		Middle	9	0.09	0.65	4	<0.2	3	1	<0.1	2	<1	6	0.6	<1
			10	0.09	0.64	2	<0.2	3	<1	<0.1	2	<1	5	0.6	<1
			--	--	--	--	--	--	--	--	--	--	5	0.6	--
	Bottom	21	0.1	0.62	3	<0.2	8	2	<0.1	2	<1	11	<0.5	<1	
		19	0.1	0.63	4	<0.2	9	2	<0.1	2	<1	10	0.6	<1	
		--	--	--	--	--	--	--	--	--	--	9	0.6	--	
	Mid-flood	Surface	10	0.11	0.69	<2	<0.2	9	1	<0.1	2	<1	9	<0.5	<1
			11	0.1	0.67	3	<0.2	10	1	<0.1	2	<1	10	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	11	<0.5	--
Middle		9	0.11	0.94	2	<0.2	26	5	<0.1	3	<1	26	<0.5	<1	
		8	0.09	0.95	<2	<0.2	20	4	<0.1	3	<1	17	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	19	<0.5	--	
Bottom	6	0.05	1.13	3	<0.2	8	<1	<0.1	3	<1	6	<0.5	<1		
	7	0.05	1.12	<2	<0.2	8	<1	<0.1	4	<1	7	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	5	<0.5	--		
2009/08/12	Mid-ebb	Surface	4	0.1	0.96	2	<0.2	9	<1	<0.1	3	<1	9	<0.5	<1
			3	0.1	0.98	2	<0.2	8	<1	<0.1	2	<1	11	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	8	<0.5	--
		Middle	5	0.03	0.68	2	<0.2	2	<1	<0.1	1	<1	<4	<0.5	<1
			5	0.03	0.68	2	<0.2	2	<1	<0.1	1	<1	<4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	14	<0.5	--
	Bottom	5	0.04	0.59	2	<0.2	<1	<1	<0.1	1	<1	<4	<0.5	<1	
		5	0.04	0.6	2	<0.2	<1	<1	<0.1	1	<1	<4	0.6	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Mid-flood	Surface	6	0.04	0.84	2	<0.2	5	<1	<0.1	2	<1	8	0.7	<1
			5	0.05	0.84	<2	<0.2	5	<1	<0.1	2	<1	<4	0.7	<1
			--	--	--	--	--	--	--	--	--	--	9	0.7	--
Middle		8	0.03	0.65	2	<0.2	5	<1	<0.1	2	<1	6	<0.5	<1	
		9	0.03	0.65	2	<0.2	2	<1	<0.1	2	<1	5	0.6	<1	
		--	--	--	--	--	--	--	--	--	--	6	<0.5	--	
Bottom	17	0.03	0.61	<2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1		
	16	0.03	0.62	<2	<0.2	1	<1	<0.1	1	<1	<4	0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
2009/08/14	Mid-ebb	Surface	4	0.06	0.95	3	<0.2	3	<1	<0.1	2	<1	<4	1.9	<1
			5	0.06	0.95	2	<0.2	2	<1	<0.1	2	<1	<4	1.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.9	--
		Middle	6	0.05	0.49	2	<0.2	2	<1	<0.1	1	<1	<4	1	<1
			5	0.05	0.49	<2	<0.2	3	<1	<0.1	2	<1	<4	1	<1
			--	--	--	--	--	--	--	--	--	--	<4	1	--
	Bottom	6	0.06	0.46	2	<0.2	9	<1	<0.1	1	<1	7	1.2	<1	
		8	0.05	0.45	2	<0.2	13	<1	<0.1	2	<1	10	1.2	<1	
		--	--	--	--	--	--	--	--	--	--	9	1.5	--	

Annex D33 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/14	Mid-flood	Surface	4	0.07	0.97	2	<0.2	2	<1	<0.1	2	<1	6	1.6	<1
			5	0.08	0.99	2	<0.2	3	<1	<0.1	2	<1	4	1.5	<1
			--	--	--	--	--	--	--	--	--	--	5	1.7	--
	Middle	9	0.06	0.63	2	<0.2	2	<1	<0.1	2	<1	<4	1.3	<1	
			8	0.06	0.62	2	<0.2	2	<1	<0.1	2	<1	<4	1.4	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.3	--
	Bottom	22	0.05	0.51	2	<0.2	1	<1	<0.1	1	<1	<4	1.4	<1	
			18	0.05	0.53	2	<0.2	1	<1	<0.1	1	<1	<4	1.3	<1
			--	--	--	--	--	--	--	--	--	--	<4	1	--
2009/08/16	Mid-ebb	Surface	4	0.04	1.32	<2	<0.2	3	<1	<0.1	3	<1	8	1.5	<1
			5	0.05	1.35	2	<0.2	4	<1	<0.1	3	<1	6	1.3	<1
			--	--	--	--	--	--	--	--	--	--	6	1.9	--
	Middle	6	0.04	0.63	2	<0.2	1	<1	<0.1	1	<1	5	1.2	<1	
			8	0.04	0.62	<2	<0.2	1	<1	<0.1	1	<1	<4	1.1	<1
			--	--	--	--	--	--	--	--	--	--	5	1.1	--
	Bottom	11	0.05	0.54	<2	<0.2	<1	<1	<0.1	<1	<1	<4	1.5	<1	
			10	0.05	0.53	<2	<0.2	4	<1	<0.1	1	<1	6	1.4	<1
			--	--	--	--	--	--	--	--	--	--	7	1	--
	Mid-flood	Surface	6	<0.01	1.04	3	<0.2	3	1	<0.1	2	<1	5	1.8	<1
			6	<0.01	1.04	3	<0.2	3	<1	<0.1	<1	<1	6	1.8	<1
			--	--	--	--	--	--	--	--	--	--	7	1.9	--
Middle	10	0.02	0.5	2	<0.2	2	<1	<0.1	1	<1	4	1.3	<1		
		9	0.02	0.49	2	<0.2	3	1	<0.1	1	<1	<4	1.2	<1	
		--	--	--	--	--	--	--	--	--	--	<4	1.1	--	
Bottom	13	0.03	0.37	3	<0.2	1	<1	<0.1	<1	<1	<4	<0.5	<1		
		11	0.02	0.38	<2	<0.2	<1	<1	<0.1	1	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	5	0.6	--	
2009/08/18	Mid-ebb	Surface	7	0.02	0.77	2	<0.2	2	<1	<0.1	2	<1	4	1.5	<1
			5	0.02	0.77	2	<0.2	2	<1	<0.1	2	<1	5	1.3	<1
			--	--	--	--	--	--	--	--	--	--	4	1.1	--
	Middle	10	0.03	0.49	2	<0.2	3	1	<0.1	2	<1	5	1.5	<1	
			11	0.03	0.5	2	<0.2	2	<1	<0.1	2	<1	<4	1.2	<1
			--	--	--	--	--	--	--	--	--	--	5	1	--
	Bottom	15	0.04	0.47	2	<0.2	1	<1	<0.1	2	<1	<4	1.8	<1	
			13	0.03	0.48	2	<0.2	<1	<1	<0.1	2	<1	<4	1.2	<1
			--	--	--	--	--	--	--	--	--	--	5	1.3	--
	Mid-flood	Surface	10	0.01	0.67	2	<0.2	4	<1	<0.1	2	<1	5	1.4	<1
			9	<0.01	0.64	3	<0.2	4	<1	<0.1	2	<1	<4	1.4	<1
			--	--	--	--	--	--	--	--	--	--	8	1.5	--
Middle	12	0.03	0.45	2	<0.2	10	1	<0.1	1	<1	8	1	<1		
		14	0.03	0.45	2	<0.2	3	1	<0.1	2	<1	7	0.9	<1	
		--	--	--	--	--	--	--	--	--	--	6	0.9	--	
Bottom	16	0.03	0.4	2	<0.2	1	<1	<0.1	1	<1	<4	0.8	<1		
		15	0.03	0.42	2	<0.2	<1	<1	<0.1	1	<1	<4	0.8	<1	
		--	--	--	--	--	--	--	--	--	--	<4	0.7	--	

Annex D33 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/21	Mid-ebb	Surface	8	0.04	0.87	<2	<0.2	2	<1	<0.1	3	<1	<4	1	<1
			9	0.05	0.88	2	<0.2	<1	<1	<0.1	2	<1	6	1.2	<1
			--	--	--	--	--	--	--	--	--	--	6	1.1	--
		Middle	20	0.05	0.69	<2	<0.2	<1	<1	<0.1	2	<1	<4	1.1	<1
			15	0.05	0.69	2	<0.2	2	<1	<0.1	2	<1	4	0.8	<1
			--	--	--	--	--	--	--	--	--	--	9	0.7	--
	Bottom	16	0.04	0.62	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
		17	0.04	0.65	2	<0.2	<1	<1	<0.1	2	<1	<4	0.8	<1	
		--	--	--	--	--	--	--	--	--	--	<4	0.6	--	
	Mid-flood	Surface	8	0.06	0.87	2	<0.2	4	<1	<0.1	2	<1	5	1.2	<1
			8	0.05	0.86	2	<0.2	4	<1	<0.1	2	<1	5	1	<1
			--	--	--	--	--	--	--	--	--	--	5	1	--
Middle		12	0.05	0.75	2	<0.2	3	<1	<0.1	2	<1	<4	1.2	<1	
		11	0.04	0.74	2	<0.2	2	1	<0.1	2	<1	4	0.9	<1	
		--	--	--	--	--	--	--	--	--	--	<4	1	--	
Bottom	19	0.06	0.57	2	<0.2	1	<1	<0.1	2	<1	<4	0.7	<1		
	18	0.05	0.56	2	<0.2	1	<1	<0.1	1	<1	<4	0.5	<1		
	--	--	--	--	--	--	--	--	--	--	5	0.6	--		
2009/08/23	Mid-ebb	Surface	7	0.02	0.83	2	<0.2	3	<1	<0.1	2	<1	5	1	<1
			6	0.02	0.82	2	<0.2	2	<1	<0.1	2	<1	<4	1.1	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.8	--
		Middle	6	0.05	0.63	2	<0.2	<1	<1	<0.1	2	<1	4	<0.5	<1
			5	0.05	0.63	2	<0.2	4	2	<0.1	2	<1	5	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	6	<0.5	--
	Bottom	5	0.05	0.58	2	<0.2	<1	<1	<0.1	2	<1	<4	<0.5	<1	
		5	0.05	0.57	2	<0.2	<1	<1	<0.1	2	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Mid-flood	Surface	11	0.05	0.89	2	<0.2	3	<1	<0.1	2	<1	<4	1.1	<1
			10	0.05	0.89	2	<0.2	5	<1	<0.1	2	<1	4	0.8	<1
			--	--	--	--	--	--	--	--	--	--	4	1.2	--
Middle		14	0.05	0.76	2	<0.2	2	<1	<0.1	2	<1	<4	0.7	<1	
		15	0.04	0.77	2	<0.2	1	<1	<0.1	2	<1	<4	0.7	<1	
		--	--	--	--	--	--	--	--	--	--	<4	0.5	--	
Bottom	25	0.05	0.75	3	<0.2	<1	<1	<0.1	1	<1	<4	<0.5	<1		
	25	0.04	0.75	2	<0.2	<1	<1	<0.1	2	<1	<4	0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		

Annex D34 - Baseline Water Quality Monitoring Results

Sampling Station : NM3

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/07/28	Mid-ebb	Surface	5	<0.01	1.3	<2	<0.2	2	<1	<0.1	3	<1	14	1.6	<1
			5	0.01	1.32	<2	<0.2	2	<1	<0.1	3	<1	36	1.4	<1
			--	--	--	--	--	--	--	--	--	--	--	17	1
		Middle	8	0.06	0.59	<2	<0.2	2	<1	<0.1	2	<1	9	0.6	<1
			9	0.08	0.63	<2	<0.2	2	<1	<0.1	2	<1	6	0.8	<1
			--	--	--	--	--	--	--	--	--	--	--	9	<0.5
	Bottom	16	0.06	0.4	2	<0.2	8	2	<0.1	4	<1	36	1	<1	
		18	0.07	0.43	<2	<0.2	6	1	<0.1	2	<1	16	0.7	<1	
		--	--	--	--	--	--	--	--	--	--	--	32	0.9	<1
	Mid-flood	Surface	4	0.03	1.01	2	<0.2	4	1	<0.1	3	<1	20	<0.5	--
			4	0.03	1	<2	<0.2	3	1	<0.1	3	<1	45	<0.5	--
			--	--	--	--	--	--	--	--	--	--	--	49	0.6
Middle		5	0.04	0.86	<2	<0.2	5	4	<0.1	4	<1	33	<0.5	--	
		5	0.04	0.86	2	<0.2	2	1	<0.1	3	<1	27	<0.5	--	
		--	--	--	--	--	--	--	--	--	--	--	30	<0.5	--
Bottom	54	0.05	0.72	2	<0.2	4	3	<0.1	3	<1	45	<0.5	--		
	59	0.05	0.73	2	<0.2	4	4	<0.1	3	<1	43	<0.5	--		
	--	--	--	--	--	--	--	--	--	--	--	31	<0.5	--	
2009/07/30	Mid-ebb	Surface	3	<0.01	1.01	<2	<0.2	2	<1	<0.1	3	<1	<4	<0.5	<1
			3	<0.01	1	<2	<0.2	2	<1	<0.1	2	<1	<4	0.5	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	0.6
		Middle	4	0.03	0.73	<2	<0.2	4	2	<0.1	2	<1	8	0.5	<1
			5	0.03	0.72	<2	<0.2	2	<1	<0.1	2	<1	<4	0.7	<1
			--	--	--	--	--	--	--	--	--	--	--	5	0.6
	Bottom	10	0.02	0.38	<2	<0.2	2	<1	<0.1	1	<1	5	0.5	<1	
		9	0.02	0.38	<2	<0.2	2	1	<0.1	1	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	<4	0.6	--
	Mid-flood	Surface	3	<0.01	1.08	<2	<0.2	2	<1	<0.1	3	<1	4	0.6	<1
			2	<0.01	1.08	<2	<0.2	2	<1	<0.1	3	<1	4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	--	4	0.5
Middle		4	0.04	0.64	<2	<0.2	3	<1	<0.1	2	<1	16	0.7	<1	
		5	0.04	0.64	<2	<0.2	4	1	<0.1	2	<1	14	0.8	<1	
		--	--	--	--	--	--	--	--	--	--	--	17	0.7	--
Bottom	18	0.05	0.58	<2	<0.2	3	2	<0.1	3	<1	18	0.7	1		
	20	0.05	0.58	<2	<0.2	3	2	<0.1	2	<1	17	0.7	<1		
	--	--	--	--	--	--	--	--	--	--	--	16	0.7	--	
2009/08/01	Mid-ebb	Surface	2	<0.01	1.15	3	<0.2	4	1	<0.1	5	<1	6	0.8	<1
			3	<0.01	1.13	3	<0.2	5	<1	<0.1	3	<1	6	0.9	<1
			--	--	--	--	--	--	--	--	--	--	--	6	1
		Middle	5	0.02	0.46	2	<0.2	6	3	<0.1	2	<1	12	1.3	<1
			5	0.03	0.46	2	<0.2	7	6	<0.1	2	<1	24	1.6	<1
			--	--	--	--	--	--	--	--	--	--	--	27	1.5
	Bottom	10	0.01	0.3	<2	<0.2	4	<1	<0.1	1	<1	9	<0.5	<1	
		9	0.01	0.29	2	<0.2	4	<1	<0.1	2	<1	17	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	16	<0.5	--

Annex D34 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/01	Mid-flood	Surface	4	<0.01	1.22	3	<0.2	2	<1	<0.1	3	<1	<4	1.2	<1	
			5	<0.01	1.33	2	<0.2	3	<1	<0.1	3	<1	<4	1.2	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.4	--
		Middle	8	0.02	0.44	<2	<0.2	4	<1	<0.1	2	<1	<4	<0.5	<1	
			7	0.02	0.44	3	<0.2	3	1	<0.1	2	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Bottom	14	0.02	0.33	2	<0.2	2	<1	<0.1	1	<1	<4	<0.5	<1		
		13	0.02	0.34	<2	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<1		
		--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
2009/08/04	Mid-ebb	Surface	--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--	--	
		Middle	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
			--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Bottom	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Mid-flood	Surface	6	0.1	0.69	<2	<0.2	2	<1	<0.1	2	<1	4	<0.5	<1	
			7	0.08	0.65	<2	<0.2	3	1	<0.1	2	<1	4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	5	<0.5	--
Middle		7	0.06	0.42	<2	<0.2	5	2	<0.1	2	<1	7	<0.5	<1		
		7	0.06	0.43	<2	<0.2	4	1	<0.1	2	<1	7	<0.5	<1		
		--	--	--	--	--	--	--	--	--	--	--	7	<0.5	--	
Bottom	12	0.06	0.38	<2	<0.2	4	2	<0.1	2	<1	10	<0.5	<1			
	12	0.06	0.38	<2	<0.2	4	2	<0.1	2	<1	9	<0.5	<1			
	--	--	--	--	--	--	--	--	--	--	9	0.6	--			
2009/08/06	Mid-ebb	Surface	7	0.11	1.03	2	<0.2	2	<1	<0.1	3	<1	6	2.7	<1	
			6	0.12	1.07	2	<0.2	2	<1	<0.1	2	<1	<4	3.4	<1	
			--	--	--	--	--	--	--	--	--	--	<4	2.8	--	
		Middle	18	0.11	0.68	2	<0.2	4	1	<0.1	2	<1	5	2.4	<1	
			17	0.1	0.64	3	<0.2	4	<1	<0.1	2	<1	<4	2.3	<1	
			--	--	--	--	--	--	--	--	--	--	14	0.7	--	
		Bottom	15	0.12	0.56	2	<0.2	2	1	<0.1	2	<1	5	2.7	<1	
			17	0.11	0.53	2	<0.2	3	<1	<0.1	2	<1	6	1.2	<1	
			--	--	--	--	--	--	--	--	--	--	4	0.7	--	
	Mid-flood	Surface	8	0.11	1.01	2	<0.2	4	<1	<0.1	4	<1	7	1.9	<1	
			9	0.09	1	3	<0.2	4	1	<0.1	3	<1	4	1.7	<1	
			--	--	--	--	--	--	--	--	--	--	5	1.9	--	
		Middle	9	0.12	0.52	2	<0.2	3	1	<0.1	2	<1	5	1.5	<1	
			7	0.11	0.51	<2	<0.2	4	1	<0.1	2	<1	5	1.6	1	
			--	--	--	--	--	--	--	--	--	--	5	1.7	--	
Bottom	23	0.13	0.57	3	<0.2	6	2	<0.1	3	<1	29	1.7	2			
	19	0.14	0.59	3	<0.2	6	14	<0.1	3	<1	33	1.7	4			
	--	--	--	--	--	--	--	--	--	--	26	1.3	--			

Annex D34 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)		
2009/08/08	Mid-ebb	Surface	13	0.08	0.87	3	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1		
			10	0.05	0.88	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1		
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
		Middle	15	0.12	0.62	2	<0.2	2	<1	<0.1	1	<1	<1	<4	<0.5	<1	
			12	0.14	0.64	2	<0.2	2	<1	<0.1	1	<1	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Bottom	20	0.12	0.52	3	<0.2	3	1	<0.1	1	<1	1	<1	4	<0.5	<1	
		21	0.12	0.53	3	<0.2	3	1	<0.1	1	<1	1	<1	5	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	4	<0.5	--	
	Mid-flood	Surface	5	0.08	0.8	2	<0.2	3	<1	<0.1	<0.1	2	<1	<4	<0.5	<1	
			7	0.1	0.81	2	<0.2	2	<1	<0.1	<0.1	2	<1	<4	0.9	<1	
			--	--	--	--	--	--	--	--	--	--	--	9	0.6	--	
Middle		9	0.09	0.64	2	<0.2	4	<1	<0.1	<0.1	2	<1	<1	<4	<0.5	<1	
		7	0.1	0.64	3	<0.2	3	<1	<0.1	<0.1	2	<1	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	5	<0.5	--	
Bottom	10	0.09	0.58	3	<0.2	3	1	<0.1	1	<0.1	2	<1	7	<0.5	1		
	10	0.09	0.59	3	<0.2	4	2	<0.1	2	<0.1	2	<1	7	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	--	--	7	<0.5	--		
2009/08/12	Mid-ebb	Surface	7	0.12	1.02	<2	<0.2	2	<1	<0.1	2	<1	<4	0.6	<1		
			6	0.12	1.02	<2	<0.2	1	<1	<0.1	2	<1	<1	<4	0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
		Middle	8	0.05	0.48	<2	<0.2	2	<1	<0.1	1	<1	<1	<1	<4	0.6	<1
			8	0.04	0.46	<2	<0.2	2	1	<0.1	1	<1	<1	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Bottom	15	0.05	0.41	<2	<0.2	1	<1	<0.1	1	<0.1	1	<1	<4	0.5	<1	
		16	0.04	0.39	<2	<0.2	1	<1	<0.1	1	<0.1	1	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Mid-flood	Surface	6	0.04	0.65	2	<0.2	2	<1	<0.1	<0.1	2	<1	<4	<0.5	<1	
			5	0.04	0.65	2	<0.2	2	1	<0.1	2	<1	<1	5	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	5	<0.5	--	
Middle		9	0.05	0.58	2	<0.2	4	<1	<0.1	<0.1	2	<1	<1	4	<0.5	<1	
		6	0.05	0.57	2	<0.2	6	<1	<0.1	<0.1	2	<1	<1	6	<0.5	1	
		--	--	--	--	--	--	--	--	--	--	--	--	5	<0.5	--	
Bottom	37	0.06	0.46	2	<0.2	3	2	<0.1	2	<0.1	2	<1	7	<0.5	1		
	43	0.05	0.45	3	<0.2	3	1	<0.1	2	<0.1	2	<1	7	<0.5	1		
	--	--	--	--	--	--	--	--	--	--	--	--	9	<0.5	--		
2009/08/14	Mid-ebb	Surface	3	0.1	1.04	2	<0.2	2	<1	<0.1	3	<1	<4	1.2	<1		
			3	0.1	1.04	2	<0.2	1	<1	<0.1	2	<1	<1	<4	1.3	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.2	--	
		Middle	7	0.05	0.54	2	<0.2	6	1	<0.1	2	<1	<1	14	1.1	<1	
			8	0.06	0.54	<2	<0.2	6	<1	<0.1	1	<1	<1	5	1.4	<1	
			--	--	--	--	--	--	--	--	--	--	--	4	1	--	
	Bottom	12	0.05	0.38	<2	<0.2	2	<1	<0.1	1	<0.1	1	<1	<4	1.3	<1	
		13	0.04	0.37	<2	<0.2	1	<1	<0.1	1	<0.1	1	<1	<4	1.2	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	<4	1.3	--	

Annex D34 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/14	Mid-flood	Surface	5	0.08	0.91	2	<0.2	2	1	<0.1	2	<1	5	0.5	<1
			5	0.1	0.93	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	4	<0.5	--
		Middle	7	0.09	0.84	2	<0.2	18	1	<0.1	3	<1	11	0.6	1
			6	0.1	0.84	2	<0.2	17	1	<0.1	2	<1	10	0.9	<1
			--	--	--	--	--	--	--	--	--	--	9	<0.5	--
		Bottom	24	0.07	0.61	<2	<0.2	4	2	<0.1	2	<1	8	<0.5	<1
			19	0.06	0.61	2	<0.2	4	1	<0.1	2	<1	6	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	7	<0.5	--
2009/08/16	Mid-ebb	Surface	5	0.04	0.9	3	<0.2	5	2	<0.1	2	<1	6	1.2	<1
			4	0.05	0.91	2	<0.2	4	2	<0.1	2	<1	<4	1	<1
			--	--	--	--	--	--	--	--	--	--	6	1.6	--
		Middle	7	0.04	0.42	2	<0.2	2	<1	<0.1	<1	<1	6	1	<1
			8	0.04	0.42	<2	<0.2	2	1	<0.1	1	<1	5	0.7	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.7	--
		Bottom	8	0.03	0.29	2	<0.2	2	1	<0.1	2	<1	<4	0.8	<1
			9	0.04	0.3	2	<0.2	2	1	<0.1	1	<1	6	1.1	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.2	--
	Mid-flood	Surface	5	0.03	1.15	2	<0.2	2	<1	<0.1	3	<1	<4	1.1	<1
			6	0.03	1.16	2	<0.2	2	<1	<0.1	3	<1	<4	0.8	<1
			--	--	--	--	--	--	--	--	--	--	9	0.9	--
		Middle	12	0.03	0.57	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1
			11	0.03	0.55	2	<0.2	2	<1	<0.1	1	<1	<4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
Bottom	15	0.04	0.4	2	<0.2	2	2	<0.1	2	<1	6	<0.5	<1		
	13	0.04	0.4	2	<0.2	2	1	<0.1	1	<1	<4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	0.7	--		
2009/08/18	Mid-ebb	Surface	6	0.04	0.95	2	<0.2	2	1	<0.1	2	<1	5	0.9	<1
			6	0.03	0.94	2	<0.2	2	1	<0.1	3	<1	6	1	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
		Middle	10	0.04	0.46	2	<0.2	9	2	<0.1	2	<1	12	0.7	<1
			9	0.04	0.46	2	<0.2	3	2	<0.1	2	<1	8	0.5	1
			--	--	--	--	--	--	--	--	--	--	13	<0.5	--
		Bottom	11	0.05	0.36	<2	<0.2	6	2	<0.1	2	<1	8	<0.5	<1
			12	0.04	0.35	<2	<0.2	6	2	<0.1	3	<1	10	<0.5	2
			--	--	--	--	--	--	--	--	--	--	6	1	--
	Mid-flood	Surface	7	<0.01	0.91	2	<0.2	2	<1	<0.1	2	<1	<4	1.4	<1
			7	<0.01	0.9	2	<0.2	2	1	<0.1	2	<1	5	1.8	<1
			--	--	--	--	--	--	--	--	--	--	5	1.1	--
Middle	5	<0.01	0.69	2	<0.2	4	<1	<0.1	2	<1	5	1.1	<1		
	5	0.01	0.7	2	<0.2	8	<1	<0.1	2	<1	6	1.7	<1		
	--	--	--	--	--	--	--	--	--	--	5	1.4	--		
Bottom	52	0.04	0.48	2	<0.2	3	2	<0.1	2	<1	7	1.3	1		
	56	0.03	0.47	2	<0.2	3	2	<0.1	2	<1	8	0.9	1		
	--	--	--	--	--	--	--	--	--	--	9	1.1	--		

Annex D34 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/21	Mid-ebb	Surface	15	0.06	0.92	2	<0.2	2	1	<0.1	2	<1	<4	1.2	<1
			13	0.08	0.95	2	<0.2	3	2	<0.1	3	<1	6	1.8	<1
			--	--	--	--	--	--	--	--	--	--	4	1.4	--
		Middle	25	0.12	0.61	2	<0.2	4	2	<0.1	2	<1	6	1.2	<1
			24	0.12	0.6	2	<0.2	3	1	<0.1	2	<1	4	1.8	<1
			--	--	--	--	--	--	--	--	--	--	7	1.2	--
		Bottom	27	0.07	0.5	2	<0.2	2	2	<0.1	2	<1	4	1.3	<1
			26	0.08	0.51	2	<0.2	2	2	<0.1	2	<1	6	1.2	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.2	--
	Mid-flood	Surface	9	0.09	0.87	2	<0.2	2	1	<0.1	3	<1	8	1	<1
			8	0.1	0.89	2	<0.2	2	1	<0.1	3	<1	10	1.2	<1
			--	--	--	--	--	--	--	--	--	--	7	1.2	--
		Middle	9	0.08	0.67	2	<0.2	2	<1	<0.1	2	<1	8	0.8	<1
			8	0.09	0.71	2	<0.2	2	<1	<0.1	2	<1	8	1.5	<1
			--	--	--	--	--	--	--	--	--	--	16	1.7	--
Bottom	27	0.07	0.55	2	<0.2	5	2	<0.1	3	<1	13	1.2	<1		
	26	0.07	0.55	2	<0.2	5	2	<0.1	2	<1	14	0.9	1		
	--	--	--	--	--	--	--	--	--	--	17	1.1	--		
2009/08/23	Mid-ebb	Surface	12	0.05	0.92	2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1
			11	0.05	0.93	2	<0.2	4	<1	<0.1	2	<1	6	0.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
		Middle	22	0.07	0.59	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1
			20	0.08	0.61	2	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
		Bottom	19	0.07	0.5	2	<0.2	<1	<1	<0.1	1	<1	<4	<0.5	<1
			22	0.09	0.52	2	<0.2	1	<1	<0.1	1	<1	<4	0.8	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Mid-flood	Surface	13	0.07	0.88	3	<0.2	3	2	<0.1	3	<1	5	0.8	2
			14	0.09	0.91	2	<0.2	3	2	<0.1	4	<1	7	0.8	<1
			--	--	--	--	--	--	--	--	--	--	8	1.3	--
		Middle	16	0.11	0.68	2	<0.2	2	2	<0.1	3	<1	6	0.9	<1
			15	0.12	0.7	2	<0.2	2	<1	<0.1	2	<1	<4	1.4	1
			--	--	--	--	--	--	--	--	--	--	7	0.9	--
Bottom	43	0.08	0.61	2	<0.2	4	3	<0.1	4	<1	15	0.7	3		
	41	0.07	0.6	2	<0.2	4	3	<0.1	2	<1	13	1.2	2		
	--	--	--	--	--	--	--	--	--	--	12	0.8	--		

Annex D35 - Baseline Water Quality Monitoring Results

Sampling Station : NM5

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/07/28	Mid-ebb	Surface	4	<0.01	1.33	<2	<0.2	2	2	<0.1	4	<1	21	1	--
			6	<0.01	1.33	<2	<0.2	3	3	<0.1	4	<1	50	1.3	--
			--	--	--	--	--	--	--	--	--	--	32	1.4	--
		Middle	8	0.02	0.68	<2	<0.2	4	4	<0.1	3	<1	27	1	--
			9	0.02	0.68	<2	<0.2	4	4	<0.1	3	<1	31	0.9	--
			--	--	--	--	--	--	--	--	--	--	42	1	--
		Bottom	23	0.11	0.57	<2	<0.2	3	1	<0.1	3	<1	26	0.6	--
			19	0.11	0.57	<2	<0.2	3	1	<0.1	3	<1	17	0.5	--
			--	--	--	--	--	--	--	--	--	--	24	0.6	--
	Mid-flood	Surface	7	0.03	1.49	<2	<0.2	3	1	<0.1	4	<1	32	0.6	<1
			6	0.03	1.5	<2	<0.2	2	<1	<0.1	4	<1	21	0.8	<1
			--	--	--	--	--	--	--	--	--	--	25	0.8	<1
		Middle	7	0.03	1.02	<2	<0.2	8	<1	<0.1	5	<1	39	2.2	<1
			5	0.03	1.01	<2	<0.2	7	<1	<0.1	4	<1	34	0.6	<1
			--	--	--	--	--	--	--	--	--	--	48	<0.5	<1
Bottom	14	0.03	0.86	2	<0.2	8	1	<0.1	4	<1	44	1.5	<1		
	9	0.03	0.87	2	<0.2	9	<1	<0.1	4	<1	31	1.2	<1		
	--	--	--	--	--	--	--	--	--	--	16	1.7	<1		
2009/07/30	Mid-ebb	Surface	6	<0.01	1.07	<2	<0.2	2	1	<0.1	3	<1	<4	0.7	<1
			3	<0.01	1.05	<2	<0.2	2	<1	<0.1	3	<1	4	0.8	<1
			--	--	--	--	--	--	--	--	--	--	5	1	--
		Middle	7	0.04	0.53	<2	<0.2	2	<1	<0.1	2	<1	5	0.8	<1
			7	0.06	0.53	3	<0.2	2	<1	<0.1	1	<1	5	0.8	<1
			--	--	--	--	--	--	--	--	--	--	4	0.8	--
		Bottom	8	0.06	0.43	<2	<0.2	10	1	<0.1	1	<1	<4	0.8	<1
			7	0.06	0.43	<2	<0.2	2	<1	<0.1	1	<1	6	0.7	<1
			--	--	--	--	--	--	--	--	--	--	4	0.9	--
	Mid-flood	Surface	4	0.02	1.29	2	<0.2	2	<1	<0.1	5	<1	16	0.8	<1
			6	0.02	1.35	2	<0.2	3	1	<0.1	4	<1	18	0.7	<1
			--	--	--	--	--	--	--	--	--	--	4	0.8	--
		Middle	5	0.05	0.64	2	<0.2	2	<1	<0.1	3	<1	6	0.7	<1
			4	0.05	0.72	<2	<0.2	2	<1	<0.1	2	<1	6	0.7	<1
			--	--	--	--	--	--	--	--	--	--	7	0.7	--
Bottom	9	0.1	0.45	<2	<0.2	7	2	<0.1	7	<1	12	<0.5	<1		
	15	0.1	0.45	<2	<0.2	4	<1	<0.1	3	<1	13	0.9	<1		
	--	--	--	--	--	--	--	--	--	--	11	1	--		
2009/08/01	Mid-ebb	Surface	5	0.06	1.53	2	<0.2	3	<1	<0.1	4	<1	4	0.6	<1
			4	0.06	1.52	3	<0.2	3	<1	<0.1	3	<1	<4	1.8	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.6	--
		Middle	6	0.03	0.52	<2	<0.2	3	<1	<0.1	2	<1	<4	<0.5	<1
			7	0.02	0.51	<2	<0.2	3	<1	<0.1	2	<1	7	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	4	<0.5	--
		Bottom	10	0.08	0.43	2	<0.2	2	<1	<0.1	1	<1	<4	<0.5	<1
			8	0.07	0.42	<2	<0.2	2	<1	<0.1	1	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--

Annex D35 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/01	Mid-flood	Surface	4	0.01	1.32	2	<0.2	3	<1	<0.1	3	<1	<4	1.1	<1	
			5	0.01	1.32	2	<0.2	2	<1	<0.1	2	<1	<4	1.3	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	1.1	--
	Middle	8	0.02	0.51	2	<0.2	3	<1	<0.1	3	<1	<4	<0.5	<1		
			7	0.03	0.53	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	5	<0.5	--	
	Bottom	9	0.06	0.41	<2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1		
			9	0.06	0.41	2	<0.2	2	<1	<0.1	2	<1	4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
2009/08/04	Mid-ebb	Surface	--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--		
			--	--	--	--	--	--	--	--	--	--	--	--		
	Middle	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--		
			--	--	--	--	--	--	--	--	--	--	--	--		
	Bottom	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
			--	--	--	--	--	--	--	--	--	--	--	--		
			--	--	--	--	--	--	--	--	--	--	--	--		
	Mid-flood	Surface	5	0.04	0.76	2	<0.2	3	1	<0.1	2	<1	<4	<0.5	<1	
			4	0.05	0.77	2	<0.2	3	1	<0.1	2	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
Middle		8	0.05	0.38	2	<0.2	2	3	<0.1	2	<1	6	<0.5	<1		
			8	0.05	0.38	2	<0.2	2	2	<0.1	1	<1	7	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	5	<0.5	--	
Bottom	32	0.07	0.35	2	<0.2	3	2	<0.1	2	<1	6	<0.5	1			
		30	0.07	0.35	2	<0.2	4	2	<0.1	2	<1	6	<0.5	1		
		--	--	--	--	--	--	--	--	--	--	6	<0.5	--		
2009/08/06	Mid-ebb	Surface	7	0.18	1.14	3	<0.2	2	<1	<0.1	3	<1	<4	1.7	<1	
			7	0.18	1.19	3	<0.2	2	<1	<0.1	3	<1	<4	0.8	<1	
			--	--	--	--	--	--	--	--	--	--	<4	0.8	--	
		Middle	15	0.13	1.06	2	<0.2	3	1	<0.1	3	<1	5	1.5	<1	
				17	0.12	1.09	3	<0.2	4	2	<0.1	4	<1	7	0.9	<1
				--	--	--	--	--	--	--	--	--	--	5	0.7	--
	Bottom	230	0.14	0.67	4	<0.2	12	9	<0.1	6	<1	23	2.4	4		
			244	0.12	0.83	5	<0.2	15	7	<0.1	8	<1	31	2.4	4	
			--	--	--	--	--	--	--	--	--	--	24	2.2	--	
	Mid-flood	Surface	9	<0.01	1.18	3	<0.2	2	<1	<0.1	3	<1	<4	<0.5	<1	
			11	0.01	1.21	2	<0.2	2	<1	<0.1	3	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	<4	0.6	--	
Middle		10	0.13	0.68	2	<0.2	4	11	<0.1	3	<1	6	<0.5	<1		
			9	0.11	0.66	2	<0.2	4	10	<0.1	2	<1	7	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	4	<0.5	--	
Bottom	28	0.13	0.56	2	<0.2	3	2	<0.1	5	<1	5	<0.5	1			
		26	0.15	0.58	2	<0.2	2	1	<0.1	4	<1	5	<0.5	1		
		--	--	--	--	--	--	--	--	--	--	5	<0.5	--		

Annex D35 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/08	Mid-ebb	Surface	5	<0.01	1.21	3	<0.2	2	<1	<0.1	2	<1	<4	0.9	<1
			5	<0.01	1.23	3	<0.2	2	<1	<0.1	2	<1	<4	1	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	0.8
		Middle	7	0.07	0.81	3	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1
			8	0.06	0.8	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	--	<4	<0.5
	Bottom	31	0.11	0.6	4	<0.2	4	2	<0.1	2	<1	6	<0.5	1	
		33	0.11	0.61	2	<0.2	5	2	<0.1	2	<1	6	<0.5	1	
		--	--	--	--	--	--	--	--	--	--	7	<0.5	--	
	Mid-flood	Surface	6	0.01	1.29	2	<0.2	3	<1	<0.1	4	<1	5	0.6	<1
			6	0.01	1.31	2	<0.2	2	<1	<0.1	3	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	1	--
Middle		10	0.1	0.78	2	<0.2	3	<1	<0.1	2	<1	<4	1	<1	
		8	0.09	0.77	2	<0.2	3	1	<0.1	2	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	4	<0.5	--	
Bottom	48	0.11	0.52	2	<0.2	4	2	<0.1	2	<1	7	<0.5	2		
	40	0.12	0.53	2	<0.2	5	2	<0.1	2	<1	7	<0.5	2		
	--	--	--	--	--	--	--	--	--	--	7	<0.5	--		
2009/08/12	Mid-ebb	Surface	5	0.11	1.45	<2	<0.2	2	<1	<0.1	4	<1	4	0.6	<1
			6	0.13	1.5	<2	<0.2	2	<1	<0.1	4	<1	<4	0.7	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.6	--
		Middle	10	0.03	0.62	<2	<0.2	2	<1	<0.1	1	<1	<4	<0.5	<1
			9	0.03	0.63	<2	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
	Bottom	24	0.07	0.48	<2	<0.2	2	1	<0.1	1	<1	<4	<0.5	<1	
		22	0.06	0.47	<2	<0.2	2	1	<0.1	1	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	4	<0.5	--	
	Mid-flood	Surface	5	0.22	1.47	3	<0.2	2	<1	<0.1	4	<1	<4	<0.5	<1
			5	0.22	1.48	2	<0.2	2	<1	<0.1	4	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
Middle		8	0.08	0.65	2	<0.2	2	<1	<0.1	1	<1	<4	<0.5	<1	
		9	0.08	0.6	2	<0.2	5	<1	<0.1	1	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
Bottom	23	0.08	0.46	2	<0.2	2	<1	<0.1	1	<1	<4	<0.5	<1		
	21	0.08	0.45	3	<0.2	3	1	<0.1	1	<1	4	0.5	<1		
	--	--	--	--	--	--	--	--	--	--	4	<0.5	--		
2009/08/14	Mid-ebb	Surface	5	0.13	1.14	2	<0.2	2	<1	<0.1	3	<1	4	0.5	<1
			6	0.13	1.15	3	<0.2	2	<1	<0.1	3	<1	<4	0.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.5	--
		Middle	10	0.06	0.58	2	<0.2	2	<1	<0.1	1	<1	<4	<0.5	<1
			10	0.05	0.57	2	<0.2	2	<1	<0.1	1	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.6	--
Bottom	12	0.15	0.54	2	<0.2	1	<1	<0.1	1	<1	<4	<0.5	<1		
	10	0.14	0.54	2	<0.2	16	<1	<0.1	1	<1	<4	<0.5	<1		
	--	--	--	--	--	--	--	--	--	--	<4	0.6	--		

Annex D35 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)		
2009/08/14	Mid-flood	Surface	7	0.27	1.49	3	<0.2	2	<1	<0.1	4	<1	<4	0.8	<1		
			7	0.27	1.49	2	<0.2	2	<1	<0.1	5	<1	<4	0.8	<1		
			--	--	--	--	--	--	--	--	--	--	--	<4	0.8	--	
	Middle	12	0.07	0.57	2	<0.2	2	<1	<0.1	2	<1	5	<1	<4	<0.5	<1	
			13	0.07	0.58	2	<0.2	2	<1	<0.1	2	<1	<4	1	<1		
			--	--	--	--	--	--	--	--	--	--	<4	0.5	--		
	Bottom	15	0.06	0.47	<2	<0.2	3	<1	<0.1	<1	<1	5	<1	<4	0.7	<1	
			15	0.06	0.46	2	<0.2	6	1	<0.1	4	<1	7	<1	0.6	<1	
			--	--	--	--	--	--	--	--	--	--	<4	0.6	--		
2009/08/16	Mid-ebb	Surface	5	<0.01	1.27	3	<0.2	2	<1	<0.1	3	<1	<4	<0.5	<1		
			6	<0.01	1.28	3	<0.2	1	<1	<0.1	3	<1	<4	<0.5	<1		
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
	Middle	6	0.03	0.57	2	<0.2	2	<1	<0.1	2	<1	<4	<1	<4	<0.5	<1	
			6	0.03	0.57	<2	<0.2	<1	<1	<0.1	6	<1	<4	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<1	<4	<0.5	--
	Bottom	10	0.07	0.4	2	<0.2	<1	<1	<0.1	<1	<1	1	<1	<4	<0.5	<1	
			11	0.05	0.41	<2	<0.2	1	<1	<0.1	1	<1	<4	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<1	<4	<0.5	--
	Mid-flood	Surface	5	0.06	1.21	2	<0.2	3	<1	<0.1	4	<1	<4	1.4	<1		
				6	0.07	1.22	4	<0.2	8	1	<0.1	3	<1	<4	1.4	<1	
				--	--	--	--	--	--	--	--	--	--	<4	1.4	--	
Middle		14	0.03	0.44	<2	<0.2	3	<1	<0.1	2	<1	<4	<1	<4	<0.5	<1	
			13	0.03	0.45	<2	<0.2	2	<1	<0.1	2	<1	5	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<1	<4	<0.5	--
Bottom	13	0.04	0.37	3	<0.2	1	<1	<0.1	1	<1	<4	<1	<4	<0.5	<1		
		13	0.05	0.37	5	<0.2	2	1	<0.1	1	<1	<4	<1	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<1	<4	<0.5	--	
2009/08/18	Mid-ebb	Surface	6	0.01	1.22	2	<0.2	4	1	<0.1	3	<1	5	1.2	<1		
			4	<0.01	1.23	2	<0.2	2	<1	<0.1	3	<1	<4	1.3	<1		
			--	--	--	--	--	--	--	--	--	--	5	1.2	--		
	Middle	8	0.03	0.64	2	<0.2	2	<1	<0.1	2	<1	<4	<1	<4	0.8	<1	
			9	0.04	0.63	2	<0.2	3	2	<0.1	2	<1	6	<1	<4	0.7	<1
			--	--	--	--	--	--	--	--	--	--	<4	<1	<4	1	--
	Bottom	24	0.05	0.47	2	<0.2	2	1	<0.1	2	<1	9	<1	<4	1	<1	
			26	0.06	0.47	2	<0.2	2	1	<0.1	2	<1	<4	<1	<4	1.3	<1
			--	--	--	--	--	--	--	--	--	--	<4	<1	<4	1	--
	Mid-flood	Surface	12	0.09	1.41	2	<0.2	2	<1	<0.1	4	<1	<4	1.4	<1		
				12	0.1	1.42	2	<0.2	2	<1	<0.1	4	<1	<4	1.8	<1	
				--	--	--	--	--	--	--	--	--	--	<4	1.5	--	
Middle		15	0.03	0.7	2	<0.2	2	<1	<0.1	2	<1	<4	<1	<4	1.7	<1	
			16	0.02	0.7	4	<0.2	6	<1	<0.1	1	<1	<4	<1	<4	1.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	<1	<4	1.5	--
Bottom	157	0.09	0.48	2	<0.2	5	<1	<0.1	1	<1	17	<1	<4	1.7	3		
		188	0.07	0.46	3	<0.2	3	1	<0.1	1	<1	17	<1	<4	1.6	3	
		--	--	--	--	--	--	--	--	--	--	4	<1	<4	2.1	--	

Annex D35 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)
2009/08/21	Mid-ebb	Surface	8	0.03	1.06	2	<0.2	2	<1	<0.1	3	<1	5	1.3	<1
			9	0.02	1.06	2	<0.2	2	<1	<0.1	2	<1	<4	1	<1
			--	--	--	--	--	--	--	--	--	--	--	6	1.1
		Middle	10	0.07	0.85	2	<0.2	3	<1	<0.1	2	<1	4	1	<1
			9	0.07	0.85	2	<0.2	2	<1	<0.1	2	<1	5	1.1	<1
			--	--	--	--	--	--	--	--	--	--	9	1.3	--
	Bottom	36	0.07	0.61	2	<0.2	2	<1	<0.1	2	<1	<4	1.2	<1	
		38	0.07	0.61	2	<0.2	1	<1	<0.1	2	<1	6	1.6	<1	
		--	--	--	--	--	--	--	--	--	--	6	1.2	--	
	Mid-flood	Surface	8	0.04	1.25	2	<0.2	2	<1	<0.1	3	<1	10	1.1	<1
			7	0.04	1.24	2	<0.2	2	<1	<0.1	4	<1	<4	1.1	<1
			--	--	--	--	--	--	--	--	--	--	4	1.2	--
Middle		14	0.08	0.7	2	<0.2	4	1	<0.1	2	<1	6	1.2	<1	
		14	0.09	0.71	2	<0.2	2	<1	<0.1	2	<1	6	1.3	<1	
		--	--	--	--	--	--	--	--	--	--	<4	1.2	--	
Bottom	127	0.06	0.54	3	<0.2	7	6	<0.1	3	<1	21	2.1	3		
	136	0.07	0.54	3	<0.2	8	6	<0.1	4	<1	19	2.1	3		
	--	--	--	--	--	--	--	--	--	--	16	2	--		
2009/08/23	Mid-ebb	Surface	12	0.04	1.15	3	<0.2	2	<1	<0.1	3	<1	<4	<0.5	<1
			10	0.04	1.16	2	<0.2	2	<1	<0.1	3	<1	7	0.6	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.6	--
		Middle	12	0.06	0.89	2	<0.2	4	<1	<0.1	2	<1	6	<0.5	<1
			10	0.04	0.86	3	<0.2	3	1	<0.1	2	<1	5	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	0.8	--
	Bottom	25	0.07	0.7	2	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
		29	0.06	0.69	2	<0.2	2	<1	<0.1	2	<1	5	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Mid-flood	Surface	9	0.07	1.29	3	<0.2	2	<1	<0.1	7	<1	<4	0.6	<1
			9	0.05	1.27	3	<0.2	2	<1	<0.1	4	<1	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	1.3	--
Middle		22	0.06	0.69	2	<0.2	2	<1	<0.1	2	<1	4	0.7	<1	
		20	0.08	0.68	2	<0.2	2	<1	<0.1	2	<1	<4	1.6	<1	
		--	--	--	--	--	--	--	--	--	--	4	1.5	--	
Bottom	114	0.07	0.57	3	<0.2	5	4	<0.1	3	<1	12	<0.5	2		
	118	0.07	0.58	3	<0.2	5	4	<0.1	3	<1	11	<0.5	3		
	--	--	--	--	--	--	--	--	--	--	16	0.6	--		

Annex D36 - Baseline Water Quality Monitoring Results

Sampling Station : NM6

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)		
2009/07/28	Mid-ebb	Surface	4	<0.01	1.19	<2	<0.2	3	<1	<0.1	3	<1	47	1.2	<1		
			3	<0.01	1.19	<2	<0.2	3	<1	<0.1	3	<1	48	1.1	<1		
			--	--	--	--	--	--	--	--	--	--	46	1.3	<1		
		Middle	6	<0.01	0.94	<2	<0.2	2	<1	<0.1	3	<1	20	0.9	<1		
			8	<0.01	0.93	2	<0.2	2	<1	<0.1	2	<1	33	0.6	<1		
			--	--	--	--	--	--	--	--	--	--	36	0.8	<1		
		Bottom	10	<0.01	0.53	<2	<0.2	2	2	<0.1	2	<1	2	<1	44	0.7	<1
			10	<0.01	0.55	2	<0.2	2	<1	<0.1	2	<1	2	<1	52	0.6	<1
			--	--	--	--	--	--	--	--	--	--	--	--	30	0.7	<1
	Mid-flood	Surface	6	<0.01	1.19	2	<0.2	2	<1	<0.1	3	<1	30	1.1	<1		
			5	<0.01	1.2	2	<0.2	2	<1	<0.1	3	<1	27	1.1	<1		
			--	--	--	--	--	--	--	--	--	--	18	1	<1		
		Middle	10	0.01	0.95	<2	<0.2	5	<1	<0.1	3	<1	26	1.2	<1		
			9	<0.01	0.93	<2	<0.2	5	<1	<0.1	4	<1	26	1	<1		
			--	--	--	--	--	--	--	--	--	--	47	1.1	<1		
Bottom	21	0.02	0.47	2	<0.2	10	2	<0.1	4	<1	29	1.1	<1				
	20	0.01	0.46	2	<0.2	10	2	<0.1	4	<1	22	1	2				
	--	--	--	--	--	--	--	--	--	--	20	0.9	2				
2009/07/30	Mid-ebb	Surface	4	<0.01	1.25	2	<0.2	2	<1	<0.1	3	<1	<4	0.8	<1		
			3	<0.01	1.26	2	<0.2	2	<1	<0.1	3	<1	<4	0.7	<1		
			--	--	--	--	--	--	--	--	--	--	<4	0.7	--		
		Middle	5	0.04	1.12	<2	<0.2	4	1	<0.1	3	<1	6	0.8	<1		
			2	0.04	1.11	2	<0.2	4	2	<0.1	3	<1	6	0.7	<1		
			--	--	--	--	--	--	--	--	--	--	7	1	--		
		Bottom	14	0.02	0.85	<2	<0.2	4	2	<0.1	2	<1	9	0.8	<1		
			12	0.02	0.83	<2	<0.2	3	3	<0.1	2	<1	8	0.8	<1		
			--	--	--	--	--	--	--	--	--	--	11	0.7	--		
	Mid-flood	Surface	4	<0.01	1.24	2	<0.2	2	<1	<0.1	4	<1	<4	0.7	<1		
			4	<0.01	1.31	2	0.3	13	4	<0.1	6	<1	19	<0.5	<1		
			--	--	--	--	--	--	--	--	--	--	12	0.8	--		
		Middle	3	0.03	1.21	2	<0.2	3	<1	<0.1	4	<1	8	0.7	<1		
			4	0.03	1.21	<2	<0.2	4	<1	<0.1	4	<1	8	0.6	<1		
			--	--	--	--	--	--	--	--	--	--	8	0.5	--		
Bottom	7	0.02	0.72	2	<0.2	2	<1	<0.1	2	<1	5	0.6	<1				
	8	0.02	0.7	<2	<0.2	3	1	<0.1	2	<1	8	0.6	<1				
	--	--	--	--	--	--	--	--	--	--	10	<0.5	--				
2009/08/01	Mid-ebb	Surface	3	<0.01	1.48	2	<0.2	2	<1	<0.1	3	<1	<4	1.5	<1		
			4	<0.01	1.51	2	<0.2	2	<1	<0.1	4	<1	<4	1.5	<1		
			--	--	--	--	--	--	--	--	--	--	<4	1.8	--		
		Middle	5	0.02	0.99	<2	<0.2	3	<1	<0.1	2	<1	<4	<0.5	<1		
			4	0.01	1.08	<2	<0.2	3	1	<0.1	3	<1	4	1.7	<1		
			--	--	--	--	--	--	--	--	--	--	<4	0.8	--		
		Bottom	3	0.02	0.56	<2	<0.2	3	<1	<0.1	2	<1	<4	<0.5	<1		
			7	0.02	0.56	<2	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1		
			--	--	--	--	--	--	--	--	--	--	4	<0.5	--		

Annex D36 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/01	Mid-flood	Surface	7	0.02	1.29	3	<0.2	4	<1	<0.1	3	<1	<4	0.9	<1	
			6	0.01	1.29	2	<0.2	4	<1	<0.1	4	<1	<4	1.3	<1	
			--	--	--	--	--	--	--	--	--	--	--	6	1.3	--
	Middle	9	0.02	0.72	3	<0.2	6	2	<0.1	2	<1	5	1.2	<1		
			10	0.02	0.72	3	<0.2	4	1	<0.1	2	<1	5	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	5	0.8	--	
	Bottom	15	0.03	0.65	3	<0.2	4	2	<0.1	3	<1	8	<0.5	<1		
			17	0.04	0.64	3	<0.2	4	2	<0.1	2	<1	9	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	6	<0.5	--	
2009/08/04	Mid-ebb	Surface	4	0.02	0.59	2	<0.2	2	1	<0.1	2	<1	<4	0.9	<1	
			3	0.01	0.57	2	<0.2	2	1	<0.1	2	<1	<4	0.6	<1	
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Middle	4	0.02	0.46	2	<0.2	1	<1	<0.1	2	<1	<4	1.2	<1		
			5	0.02	0.46	3	<0.2	2	<1	<0.1	2	<1	<4	1.1	<1	
			--	--	--	--	--	--	--	--	--	--	<4	0.8	--	
	Bottom	10	0.02	0.29	2	<0.2	1	<1	<0.1	1	<1	<4	1	<1		
			8	0.02	0.29	3	<0.2	2	<1	<0.1	1	<1	<4	1	<1	
			--	--	--	--	--	--	--	--	--	--	<4	0.7	--	
	Mid-flood	Surface	6	0.04	0.72	3	<0.2	2	<1	<0.1	2	<1	<4	<0.5	<1	
				8	0.04	0.72	3	<0.2	<1	<1	<0.1	<1	<1	<4	<0.5	<1
				--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
Middle		5	0.04	0.6	2	<0.2	4	1	<0.1	2	<1	<4	<0.5	<1		
			6	0.04	0.6	3	<0.2	<1	<1	<0.1	<1	<1	<4	0.6	<1	
			--	--	--	--	--	--	--	--	--	--	11	<0.5	--	
Bottom	36	0.02	0.35	3	<0.2	2	4	<0.1	2	<1	10	<0.5	1			
		44	0.03	0.36	3	<0.2	1	2	<0.1	2	<1	8	<0.5	1		
		--	--	--	--	--	--	--	--	--	--	<4	<0.5	--		
2009/08/06	Mid-ebb	Surface	7	0.05	0.86	2	<0.2	2	<1	<0.1	2	<1	<4	1.3	<1	
			6	0.04	0.84	2	<0.2	2	<1	<0.1	2	<1	7	0.8	<1	
			--	--	--	--	--	--	--	--	--	--	<4	1	--	
		Middle	8	0.06	0.87	3	<0.2	2	1	<0.1	2	<1	6	1.1	<1	
				9	0.05	0.85	3	<0.2	3	3	<0.1	3	<1	7	1	<1
				--	--	--	--	--	--	--	--	--	--	7	0.9	--
	Bottom	9	0.05	0.83	3	<0.2	2	<1	<0.1	2	<1	4	1.2	<1		
			8	0.05	0.94	2	<0.2	3	<1	<0.1	3	<1	4	1.1	<1	
			--	--	--	--	--	--	--	--	--	--	<4	1.1	--	
	Mid-flood	Surface	8	0.08	0.92	2	<0.2	2	<1	<0.1	2	<1	<4	0.9	<1	
				7	0.07	0.92	3	<0.2	2	<1	<0.1	3	<1	<4	0.6	<1
				--	--	--	--	--	--	--	--	--	--	5	<0.5	--
Middle		9	0.07	0.77	2	<0.2	3	1	<0.1	2	<1	5	0.6	<1		
			10	0.08	0.79	3	<0.2	3	<1	<0.1	7	<1	4	0.7	<1	
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
Bottom	18	0.06	0.67	3	<0.2	6	2	<0.1	2	<1	6	0.6	<1			
		20	0.05	0.67	3	<0.2	4	1	<0.1	2	<1	6	0.5	<1		
		--	--	--	--	--	--	--	--	--	--	7	0.9	--		

Annex D36 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/08	Mid-ebb	Surface	4	<0.01	1.11	2	<0.2	5	2	<0.1	2	<1	6	0.7	<1	
			5	<0.01	1.12	2	<0.2	5	<1	3	<1	5	0.9	<1		
			--	--	--	--	--	--	--	--	--	--	6	<0.5	--	
	Middle	14	0.02	0.32	2	<0.2	3	1	<0.1	1	<1	<4	<4	<0.5	<1	
		12	0.02	0.31	2	<0.2	3	1	<0.1	1	<1	<4	<4	<0.5	<1	
		--	--	--	--	--	--	--	--	--	--	5	<0.5	--		
	Bottom	21	0.03	0.59	2	<0.2	6	3	<0.1	2	<1	8	<1	8	<0.5	<1
		19	0.03	0.6	<2	<0.2	6	2	<0.1	2	<1	8	<1	8	<0.5	<1
		--	--	--	--	--	--	--	--	--	--	11	<1	11	<0.5	--
	Mid-flood	Surface	7	0.02	1.54	2	<0.2	2	<1	<0.1	2	<1	<4	<4	0.6	<1
			6	0.03	1.47	2	<0.2	2	<1	<0.1	2	<1	<4	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<4	<0.5	--
Middle	5	0.04	1.12	2	<0.2	2	<1	<0.1	2	<1	<4	<4	0.9	<1		
	5	0.03	1.17	2	<0.2	3	1	<0.1	2	<1	8	<1	8	<0.5	<1	
	--	--	--	--	--	--	--	--	--	--	6	<1	6	<0.5	--	
Bottom	14	0.02	0.45	2	<0.2	2	<1	<0.1	1	<1	<4	<4	<4	<0.5	<1	
	16	0.02	0.45	2	<0.2	1	<1	<0.1	1	<1	<4	<4	<4	<0.5	<1	
	--	--	--	--	--	--	--	--	--	--	<4	<4	<4	<0.5	--	
2009/08/12	Mid-ebb	Surface	5	0.03	1.29	3	<0.2	2	1	<0.1	3	<1	<4	<4	<0.5	<1
			5	0.03	1.28	2	<0.2	1	<1	<0.1	3	<1	<4	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<4	<0.5	--
	Middle	7	0.06	0.95	2	<0.2	2	<1	<0.1	2	<1	<4	<4	<4	<0.5	<1
		6	0.06	0.96	2	<0.2	1	<1	<0.1	2	<1	<4	<4	<4	<0.5	<1
		--	--	--	--	--	--	--	--	--	--	<4	<4	<4	<0.5	--
	Bottom	13	0.01	0.53	2	<0.2	1	<1	<0.1	2	<1	<4	<4	<4	<0.5	<1
		12	<0.01	0.48	2	<0.2	1	<1	<0.1	1	<1	<4	<4	<4	<0.5	<1
		--	--	--	--	--	--	--	--	--	--	<4	<4	<4	<0.5	--
	Mid-flood	Surface	6	0.12	1.07	2	<0.2	2	<1	<0.1	3	<1	<4	<4	<0.5	<1
			6	0.11	1.07	2	<0.2	2	<1	<0.1	3	<1	<4	<4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	<4	<4	<0.5	--
Middle	7	0.06	0.85	<2	<0.2	2	<1	<0.1	2	<1	<4	<4	<4	<0.5	<1	
	7	0.06	0.86	2	<0.2	2	<1	<0.1	2	<1	<4	<4	<4	<0.5	<1	
	--	--	--	--	--	--	--	--	--	--	<4	<4	<4	<0.5	--	
Bottom	23	<0.01	0.42	2	<0.2	2	<1	<0.1	1	<1	4	<1	4	<0.5	<1	
	23	0.01	0.44	3	<0.2	2	1	<0.1	2	<1	5	<1	5	<0.5	<1	
	--	--	--	--	--	--	--	--	--	--	<4	<4	<4	<0.5	--	
2009/08/14	Mid-ebb	Surface	4	0.18	1.45	3	<0.2	2	<1	<0.1	4	<1	4	0.9	<1	
			3	0.19	1.48	3	<0.2	2	<1	<0.1	4	<1	4	0.7	<1	
			--	--	--	--	--	--	--	--	--	--	13	0.8	--	
	Middle	9	0.05	0.75	2	<0.2	4	<1	<0.1	2	<1	5	<1	5	0.6	<1
		10	0.06	0.76	2	<0.2	4	<1	<0.1	3	<1	4	<1	4	1.2	<1
		--	--	--	--	--	--	--	--	--	--	<4	<4	1.1	--	
Bottom	13	0.03	0.55	3	<0.2	2	1	<0.1	2	<1	5	<1	5	1.2	<1	
	11	0.02	0.53	3	<0.2	2	<1	<0.1	2	<1	13	<1	13	0.6	<1	
	--	--	--	--	--	--	--	--	--	--	5	<1	5	0.6	--	

Annex D36 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)	
2009/08/14	Mid-flood	Surface	5	0.19	1.51	3	<0.2	2	<1	<0.1	5	<1	<4	0.7	<1	
			6	0.18	1.51	2	<0.2	2	<1	<0.1	5	<1	<4	0.8	<1	
			--	--	--	--	--	--	--	--	--	--	--	<4	0.6	--
	Middle	6	6	0.11	1.15	2	<0.2	2	<1	<0.1	3	<1	<4	1	<1	
			6	0.13	1.19	2	<0.2	6	<1	<0.1	4	<1	6	1.6	<1	
			--	--	--	--	--	--	--	--	--	--	6	0.8	--	
	Bottom	30	30	<0.01	0.54	3	<0.2	2	1	<0.1	3	<1	5	0.7	1	
			37	0.01	0.54	2	<0.2	2	2	<0.1	2	<1	6	0.7	<1	
			--	--	--	--	--	--	--	--	--	--	6	0.7	--	
2009/08/16	Mid-ebb	Surface	3	<0.01	1.14	2	<0.2	1	<1	<0.1	3	<1	<4	<0.5	<1	
			4	<0.01	1.14	3	<0.2	2	<1	<0.1	3	<1	<4	0.9	<1	
			--	--	--	--	--	--	--	--	--	--	<4	1	--	
	Middle	4	4	0.04	1.02	<2	<0.2	1	<1	<0.1	3	<1	<4	<0.5	<1	
			4	0.04	1.02	3	<0.2	1	<1	<0.1	2	<1	<4	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	<4	0.7	--	
	Bottom	37	37	<0.01	0.45	3	<0.2	2	2	<0.1	2	<1	<4	<0.5	<1	
			40	<0.01	0.45	2	<0.2	2	2	<0.1	2	<1	5	<0.5	<1	
			--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Mid-flood	Surface	6	6	0.06	1.16	2	<0.2	3	<1	<0.1	3	<1	4	1.3	<1
				8	0.08	1.18	3	<0.2	3	1	<0.1	4	<1	<4	1.6	<1
				--	--	--	--	--	--	--	--	--	--	5	1.1	--
Middle		12	12	0.02	0.54	3	<0.2	4	5	<0.1	2	<1	7	<0.5	<1	
			12	0.02	0.55	2	<0.2	2	1	<0.1	2	<1	5	0.7	<1	
			--	--	--	--	--	--	--	--	--	--	6	<0.5	--	
Bottom	14	14	0.02	0.51	3	<0.2	2	<1	<0.1	2	<1	4	<0.5	<1		
		16	0.03	0.52	4	<0.2	3	1	<0.1	2	<1	<4	<0.5	<1		
		--	--	--	--	--	--	--	--	--	--	6	0.8	--		
2009/08/18	Mid-ebb	Surface	5	0.01	1.01	2	<0.2	2	<1	<0.1	3	<1	5	1.3	<1	
			5	0.01	1.04	2	<0.2	2	<1	<0.1	3	<1	<4	1.8	<1	
			--	--	--	--	--	--	--	--	--	--	6	1.9	--	
		Middle	9	9	0.02	0.8	2	<0.2	5	<1	<0.1	2	<1	<4	1.3	<1
				8	0.02	0.79	2	<0.2	4	<1	<0.1	2	<1	7	1.3	<1
				--	--	--	--	--	--	--	--	--	--	<4	1.7	--
	Bottom	50	50	0.02	0.68	2	<0.2	3	3	<0.1	2	<1	8	1.3	1	
			50	0.02	0.68	3	<0.2	2	2	<0.1	2	<1	6	1.7	1	
			--	--	--	--	--	--	--	--	--	--	7	1.3	--	
	Mid-flood	Surface	11	11	0.07	1.51	2	<0.2	2	<1	<0.1	3	<1	<4	1.2	<1
				12	0.07	1.52	2	<0.2	2	<1	<0.1	3	<1	<4	1.1	<1
				--	--	--	--	--	--	--	--	--	--	<4	1.3	--
Middle		17	17	0.09	1.4	2	<0.2	2	<1	<0.1	2	<1	<4	1.8	<1	
			18	0.09	1.45	2	<0.2	2	<1	<0.1	2	<1	4	1.8	<1	
			--	--	--	--	--	--	--	--	--	--	<4	1.3	--	
Bottom	24	24	0.09	1.25	2	<0.2	2	<1	<0.1	2	<1	4	1.4	<1		
		23	0.09	1.27	3	<0.2	2	1	<0.1	2	<1	5	1.3	<1		
		--	--	--	--	--	--	--	--	--	--	<4	1.2	--		

Annex D36 - Baseline Water Quality Monitoring Results

Sampling Date	Tide	Depth	Suspended Solids (mg/L)	Ammonia as N (mg/L)	Inorganic Nitrogen as N (mg/L)	Arsenic (µg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Mercury (µg/L)	Nickel (µg/L)	Silver (µg/L)	Zinc (µg/L)	Biochemical Oxygen Demand (mg/L)	Total Chromium (µg/L)		
2009/08/21	Mid-ebb	Surface	9	0.03	0.81	2	<0.2	2	<1	<0.1	2	<1	5	1.4	<1		
			10	0.02	0.8	2	<0.2	2	<1	<0.1	2	<1	5	1.3	<1		
			--	--	--	--	--	--	--	--	--	--	--	<4	1.2	--	
		Middle	16	0.01	0.58	2	<0.2	2	<1	<0.1	1	<1	4	<1	4	1.4	<1
			16	0.01	0.58	<2	<0.2	2	<1	<0.1	2	<1	5	<1	5	1.1	<1
			--	--	--	--	--	--	--	--	--	--	--	--	<4	1	--
	Bottom	31	0.02	0.44	2	<0.2	1	<1	<0.1	1	<1	1	<1	<4	1.1	<1	
		32	0.02	0.45	2	<0.2	1	<1	<0.1	1	<1	1	<1	<4	1.1	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	<4	1	--	
	Mid-flood	Surface	7	0.05	1.16	2	<0.2	1	<1	<0.1	<0.1	3	<1	5	1	<1	
			7	0.07	1.19	2	<0.2	2	<1	<0.1	<0.1	3	<1	5	1.1	<1	
			--	--	--	--	--	--	--	--	--	--	--	--	14	1.2	--
Middle		13	0.05	0.96	2	<0.2	2	<1	<0.1	<0.1	2	<1	<1	<4	1.2	<1	
		12	0.05	0.96	2	<0.2	2	<1	<0.1	<0.1	2	<1	<1	7	1.2	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	<4	1.2	--	
Bottom	20	0.03	0.8	2	<0.2	2	<1	<0.1	<0.1	2	<1	<1	6	1.1	<1		
	22	0.04	0.81	2	<0.2	1	<1	<0.1	<0.1	2	<1	<1	<4	1.3	<1		
	--	--	--	--	--	--	--	--	--	--	--	--	8	1	--		
2009/08/23	Mid-ebb	Surface	7	0.02	0.98	3	<0.2	3	<1	<0.1	3	<1	4	<0.5	<1		
			8	0.02	0.97	2	<0.2	3	<1	<0.1	3	<1	<4	<0.5	<1		
			--	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--
		Middle	15	0.02	0.48	<2	<0.2	2	<1	<0.1	<0.1	1	<1	<1	<4	0.6	<1
			14	0.02	0.48	2	<0.2	2	<1	<0.1	<0.1	1	<1	<1	4	<0.5	<1
			--	--	--	--	--	--	--	--	--	--	--	--	5	1.2	--
	Bottom	32	0.02	0.4	2	0.2	<1	<1	<0.1	<0.1	1	<1	<1	<4	<0.5	<1	
		33	0.03	0.41	2	<0.2	<1	<1	<0.1	<0.1	1	<1	<1	<4	0.6	<1	
		--	--	--	--	--	--	--	--	--	--	--	--	<4	<0.5	--	
	Mid-flood	Surface	8	0.03	1.19	2	<0.2	2	<1	<0.1	<0.1	3	<1	<4	0.9	<1	
			7	0.03	1.19	2	<0.2	<1	<1	<0.1	<0.1	3	<1	<4	0.8	<1	
			--	--	--	--	--	--	--	--	--	--	--	--	<4	0.8	--
Middle		48	0.04	0.68	2	<0.2	2	<1	<0.1	<0.1	2	<1	<1	<4	0.8	1	
		49	0.04	0.67	2	<0.2	1	<1	<0.1	<0.1	2	<1	<1	<4	1.4	1	
		--	--	--	--	--	--	--	--	--	--	--	--	<4	0.8	--	
Bottom	71	0.03	0.62	2	<0.2	1	<1	<0.1	<0.1	1	<1	<1	7	1	2		
	71	0.04	0.62	3	<0.2	1	<1	<0.1	<0.1	1	<1	<1	<4	1.1	2		
	--	--	--	--	--	--	--	--	--	--	--	--	<4	0.9	--		