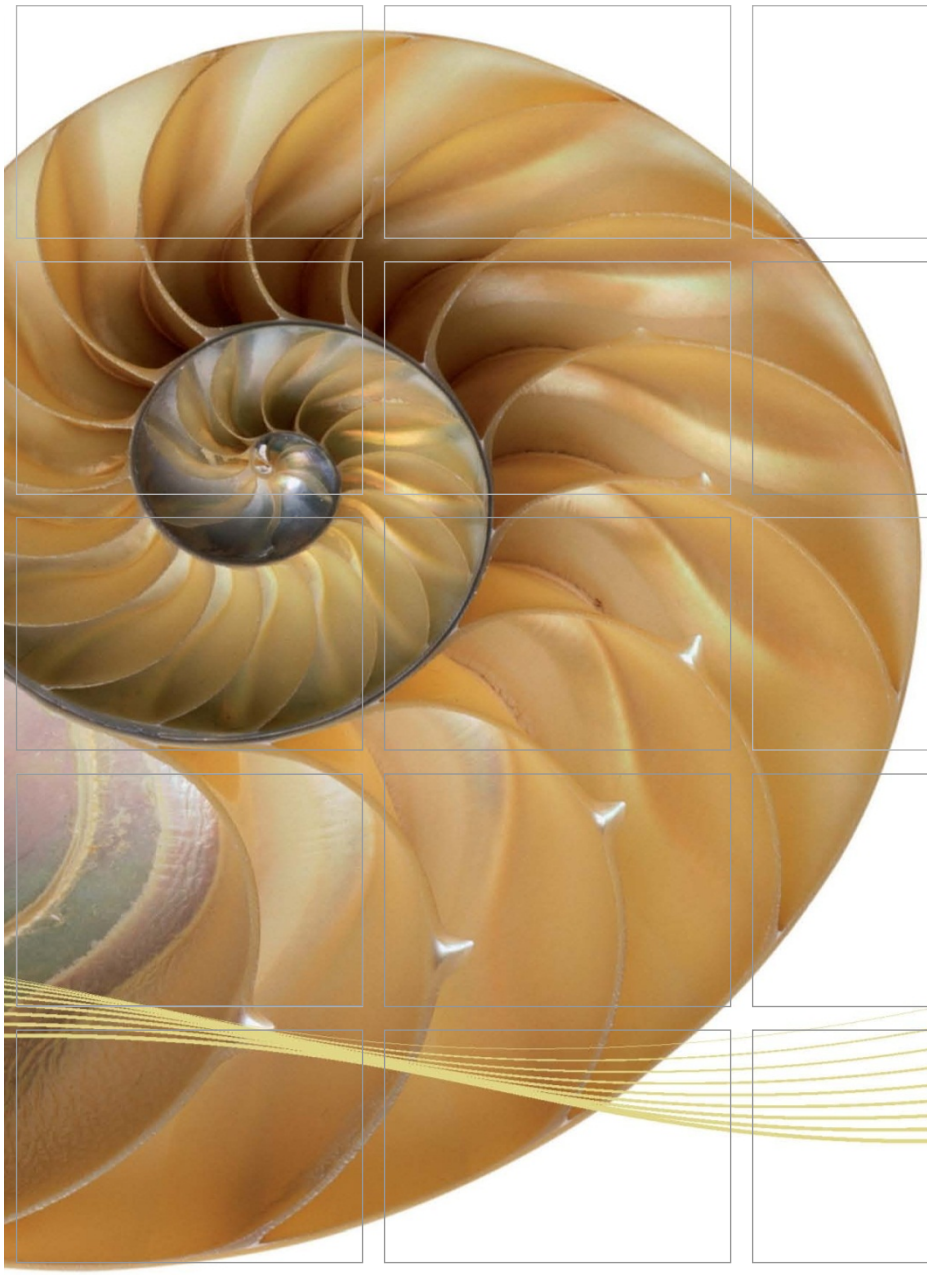
POST PROJECT REPORT



Asia Submarine-cable Express (ASE) – Tseung Kwan O

Post Project Water Quality Monitoring Report

27 February 2013

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Client:	GMS No:
NTT Com Asia Ltd	0171870
Summary:	Date: 27 February 2013
This report presents the monitoring requirements, methodologies and results of the post project ambient marine water quality measurements at the monitoring locations near Tseung Kwan O in accordance with the EM&A Manual.	Approved by: *Terence Fong* *Project Director*

Revision	Description	By	Checked	Approved	Date
0	Post Project Water Quality Monitoring Report	YL	GYANG	TFONG	27 Feb 13

Distribution

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Asia Submarine-cable Express (ASE) – Tseung Kwan O
Environmental Certification Sheet
EP-433/2011

Reference Document/Plan

Document/~~Plan~~ to be ~~Certified~~/ Verified:	Post Project Water Quality Monitoring Report
Date of Report:	27 February 2013
Date prepared by ET:	ERM-Hong Kong Ltd
Date received by IEC:	Ecosystem Ltd

Reference EM&A Manual/ EP Requirement

EM&A Manual Requirement: Section 2

Content: *Water Quality Monitoring*

2.5 "The Post Project Monitoring Report to review the environmental status after the cable installation and compare with the results as presented in the Baseline Monitoring Report shall be provided within one month after completion of the marine works."

"The Post Project Monitoring Report shall include the following details: brief project background information; drawings showing locations of the monitoring stations; full construction programme with milestones of environmental protection/mitigation activities annotated; monitoring results and compare with the results as presented in the Baseline monitoring Report; and comments and conclusions."

EP Condition: Condition No. 2.4

Content: *Post Project Monitoring Report on Water Quality*

(ii)(c) To monitor the environmental impacts and timely implementation of the recommended mitigation measures, the Permit Holder shall submit to the Director four hard copies and one electronic copy of the post project monitoring report on water quality within one month after completion of the marine works, as defined in the approved EM&A Manual.

ET Certification

I hereby certify that the above referenced document/~~plan~~ complies with the above referenced condition of EP-433/2011.

Terence Fong, Environmental Team Leader: Date: 27 February 2013

IEC Verification

I hereby verify that the above referenced document/~~plan~~ complies with the above referenced condition of EP-433/2011.

Vincent Lai, Independent Environmental Checker:

Date: 27 February 2013

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The submarine-cable installation works for the Asia Submarine-cable Express (ASE) cable system commenced in October 2012 and were completed in January 2013. This is the **Post Project Water Quality Monitoring Report** presenting the post-project water quality monitoring conducted during the period from **4 February 2013** to **20 February 2013** in accordance with the *Monitoring and Audit Manual* (*EM&A Manual*).

Water Quality

Nine monitoring events (days) were scheduled between 4 February 2013 and 20 February 2013, with three days for each of Zone A, Zone B and Zone C. Monitoring events at all designated monitoring stations in the three zones were performed on schedule.

In general, the dissolved oxygen levels recorded during the Post Project Monitoring period were mostly higher to the results obtained during the baseline monitoring period. Turbidity and suspended solid levels in Post Project Monitoring period were also slightly increased at all designated stations including the control stations. After detailed analysis, it is considered that the overall changes in turbidity and SS were driven by natural fluctuations rather than the marine works of the Project.

Conclusion

Upon completion of the Project, overall water quality at the impact stations in Zone A, Zone B and Zone C was found to be similar to that at control stations, which was higher in dissolved oxygen, turbidity and suspended solids when compared with the baseline data. Given the fact that control stations are sufficiently far away from the cable alignment and water quality at these stations could not be affected by the Project, it is concluded that the overall variations in turbidity and SS reflected a natural phenomenon. Hence, no deterioration of water quality was observed other than natural fluctuation. The impact of the marine works of the Project on water quality is considered to be negligible.

1 INTRODUCTION

ERM-Hong Kong, Limited (ERM) was appointed by NTT Com Asia (NTTCA) as the Environmental Team (ET) to implement the Environmental Monitoring and Audit (EM&A) programme for the installation of a telecommunication cable (Asia-Submarine-cable Express (ASE)) of approximately 7,200 km in length, connecting Japan and Singapore with branches to the Philippines, Hong Kong SAR (HKSAR) and Malaysia (thereinafter called the Project).

1.1 PURPOSE OF THE REPORT

This is the **Post Project Water Quality Monitoring Report**, which summarises the results of post-project water quality monitoring finding as part of the EM&A programme during the reporting period from 4 February 2013 to 20 February 2013. The Post Project Monitoring results are used to compare with the baseline monitoring results in order to investigate the impact of the project works on water quality in the vicinity of the project site from Tseung Kwan O eastward to the boundary of HKSAR waters.

1.2 STRUCTURE OF THE REPORT

The structure of the Report is as follows:

Section 1 : ***Introduction***
Provides details of the background, purpose and report structure.

Section 2 : ***Project Information***
Summarises background and scope of the project, the construction works undertaken and the status of Environmental Permits/Licenses during the reporting period.

Section 3 : ***Water Quality Monitoring Requirements***
Summarises the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequency, and monitoring locations.

Section 4 : ***Implementation Status of Environmental Mitigation Measures***
Summarises the implementation of environmental protection measures during the reporting period.

Section 5 : ***Post Project Monitoring Results***
Summarises the monitoring results obtained in the reporting period for Zone A, Zone B and Zone C.

Section 6 : ***Conclusions***
Presents the key findings of the Post Project Monitoring results.

2 PROJECT INFORMATION

2.1 BACKGROUND

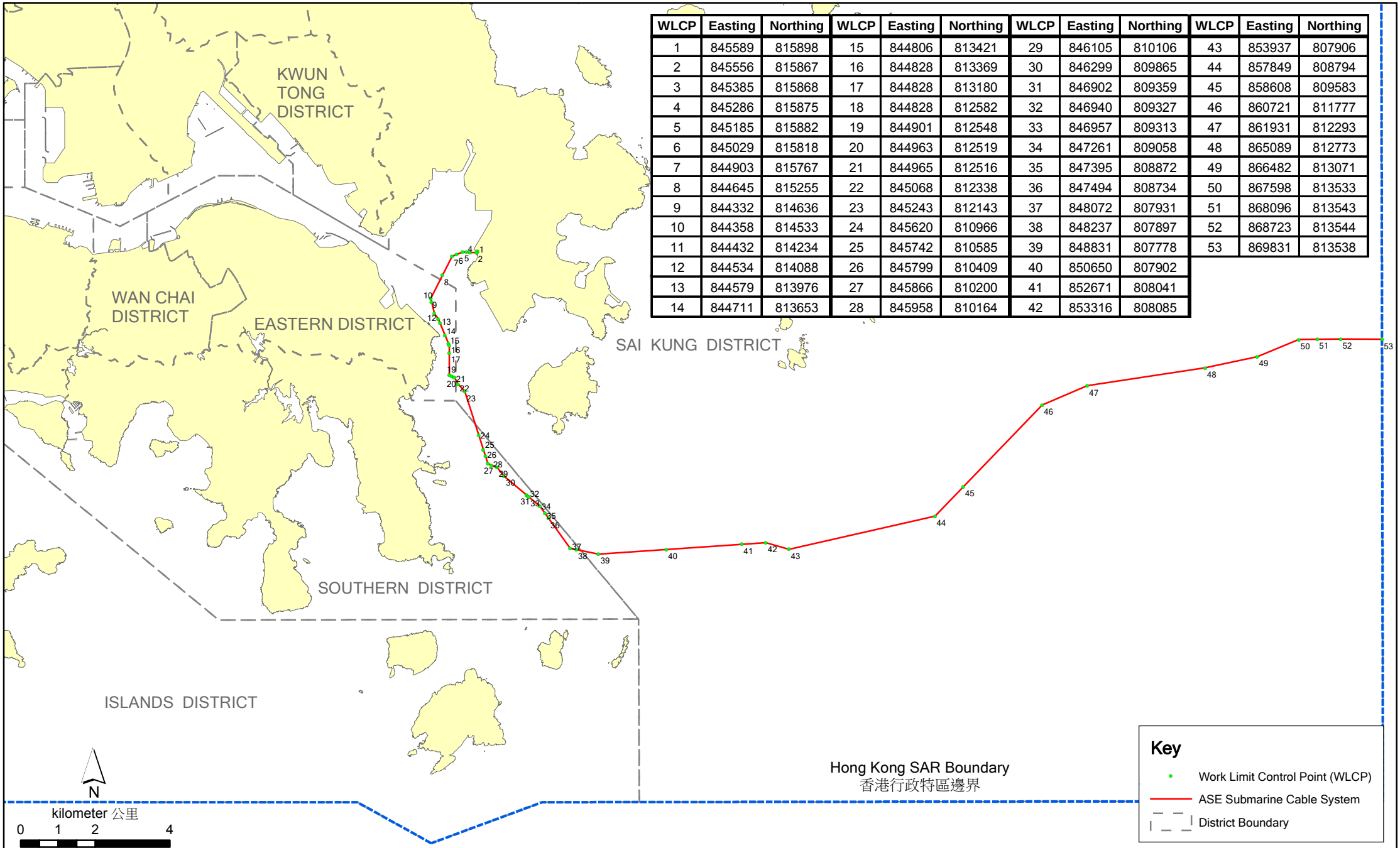
NTT Com Asia (NTTCA) proposed to install a telecommunication cable (Asia Submarine-cable Express (ASE) cable) of approximately 7,200 km in length, connecting Japan and Singapore with branches to the Philippines, Hong Kong SAR (HKSAR) and Malaysia. NTTCA is responsible for securing the approval to land the ASE cable in Tseung Kwan O, Hong Kong SAR (HKSAR). The landing site is at a new Beach Manhole (BMH) and the cable is ultimately connected with a Data Centre in Tseung Kwan O (TKO) Industrial Estate. From Tseung Kwan O, the cable extends westward approaching the Tathong Channel. Near to Cape Collinson, the cable is approximately parallel to the Tathong Channel until north of Waglan Island where the cable travels eastward to the boundary of HKSAR waters where it enters the South China Sea. The total length of cable in Hong Kong SAR waters is approximately 33.5 km. A map of the cable route is presented in *Figure 2.1.*

A Project Profile (PP-452/2011) which includes an assessment of the potential environmental impacts associated with the installation of the submarine telecommunications cable system was prepared and submitted to the Environmental Protection Department (EPD) under section 5. (1)(b) and 5.(11) of the Environmental Impact Assessment Ordinance (EIAO) for the application for Permission to apply directly for Environmental Permit (EP). The Environmental Protection Department, subsequently issued an Environmental Permit (EP- 433/2011).

Pursuant to Condition 2.4 of the EP, an environmental monitoring and audit programme as set out in the *Environmental Monitoring and Audit Manual* (*EM&A Manual*) is required to be implemented. In accordance with Section 2.3 of the *EM&A Manual*, Post Project Monitoring of marine water quality should be undertaken after completion of the cable installation works at the same stations as baseline monitoring in Zone A, Zone B and Zone C, during mid-flood and mid-ebb tides.

Baseline Monitoring was conducted in Zone A between 29 August 2012 and 3 September 2012 and the results were presented in *Baseline Water Quality Monitoring Report (Zone A)*. Baseline monitoring for Zone B was undertaken from 17 September 2012 to 21 September 2012 and *Baseline Water Quality Monitoring Report (Zone B)* presented the results of the monitoring data in Zone B. Baseline monitoring was as well as carried out in Zone C between 24 September 2012 and 28 September 2012 and the results were presented in *Baseline Water Quality Monitoring Report (Zone C).*

Impact Monitoring in Zone A, Zone B and Zone C commenced on 8 October 2012 when the cable installation barge started to work in Zone A. The cable



WLCP	Easting	Northing	WLCP	Easting	Northing	WLCP	Easting	Northing	WLCP	Easting	Northing
1	845589	815898	15	844806	813421	29	846105	810106	43	853937	807906
2	845556	815867	16	844828	813369	30	846299	809865	44	857849	808794
3	845385	815868	17	844828	813180	31	846902	809359	45	858608	809583
4	845286	815875	18	844828	812582	32	846940	809327	46	860721	811777
5	845185	815882	19	844901	812548	33	846957	809313	47	861931	812293
6	845029	815818	20	844963	812519	34	847261	809058	48	865089	812773
7	844903	815767	21	844965	812516	35	847395	808872	49	866482	813071
8	844645	815255	22	845068	812338	36	847494	808734	50	867598	813533
9	844332	814636	23	845243	812143	37	848072	807931	51	868096	813543
10	844358	814533	24	845620	810966	38	848237	807897	52	868723	813544
11	844432	814234	25	845742	810585	39	848831	807778	53	869831	813538
12	844534	814088	26	845799	810409	40	850650	807902			
13	844579	813976	27	845866	810200	41	852671	808041			
14	844711	813653	28	845958	810164	42	853316	808085			

Figure 2.1

Proposed ASE Submarine Cable System (Layout Plan)

File: 0171870_Landing_Overview_20110815.mxd
Date: 17/09/2012

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installation works were completed on 29 December 2012 and the impact water quality monitoring ceased subsequently.

All marine works for the cable installation was completed in January 2013. In accordance with the *EM&A Manual* , Post Project Water Quality Monitoring Report should be conducted within one month after completion of the marine works in Zone A, Zone B and Zone C. This report presents the data obtained from Zone A (*Figure 2.2*), Zone B (*Figure 2.3*) and Zone C (*Figure 2.4*). Results of the Post Project Monitoring data have been compared against the results of the baseline water quality monitoring in each zone.

2.2 SITE DESCRIPTION

The cable installation ran from Tseung Kwan O, and extended eastward approaching the Tathong Channel. Near to Cape Collinson, the cable is approximately parallel to the Tathong Channel until north of Waglan Island where the cable travels eastward to the boundary of HKSAR waters where it enters the South China Sea. The alignment of the cable is illustrated in *Figure 2.1*.

2.3 STATUS OF ENVIRONMENTAL APPROVAL DOCUMENTS

A summary of the relevant permits, licences and reports on marine water quality for this Project is presented in *Table 2.1*.

Table 2.1 Summary of Environmental Licensing, Notification, Permit and Reporting Status

Permit / Licence / Notification / Report	Reference	Validity Period	Remarks
Environmental Permit	EP 433/2011	Throughout the construction and operation stages	Granted on 20 December 2011
EM&A Manual	-	Throughout the construction stage	Revised EM&A Manual submitted on 18 September 2012
Baseline Water Quality Monitoring Report (Zone A)	-	Throughout the construction period for Zone A	Submitted on 19 September 2012
Baseline Water Quality Monitoring Report (Zone B)	-	Throughout the construction period for Zone B	Submitted on 25 September 2012
Baseline Water Quality Monitoring Report (Zone C)		Throughout the construction period for Zone C	Submitted on 1 October 2012
First Weekly Impact Water Quality Monitoring Report		Throughout the construction stage	Submitted on 19 October 2012
Second Weekly Impact Water Quality Monitoring Report		Throughout the construction stage	Submitted on 24 October 2012
Third Weekly Impact Water Quality Monitoring Report		Throughout the construction stage	Submitted on 24 December 2012

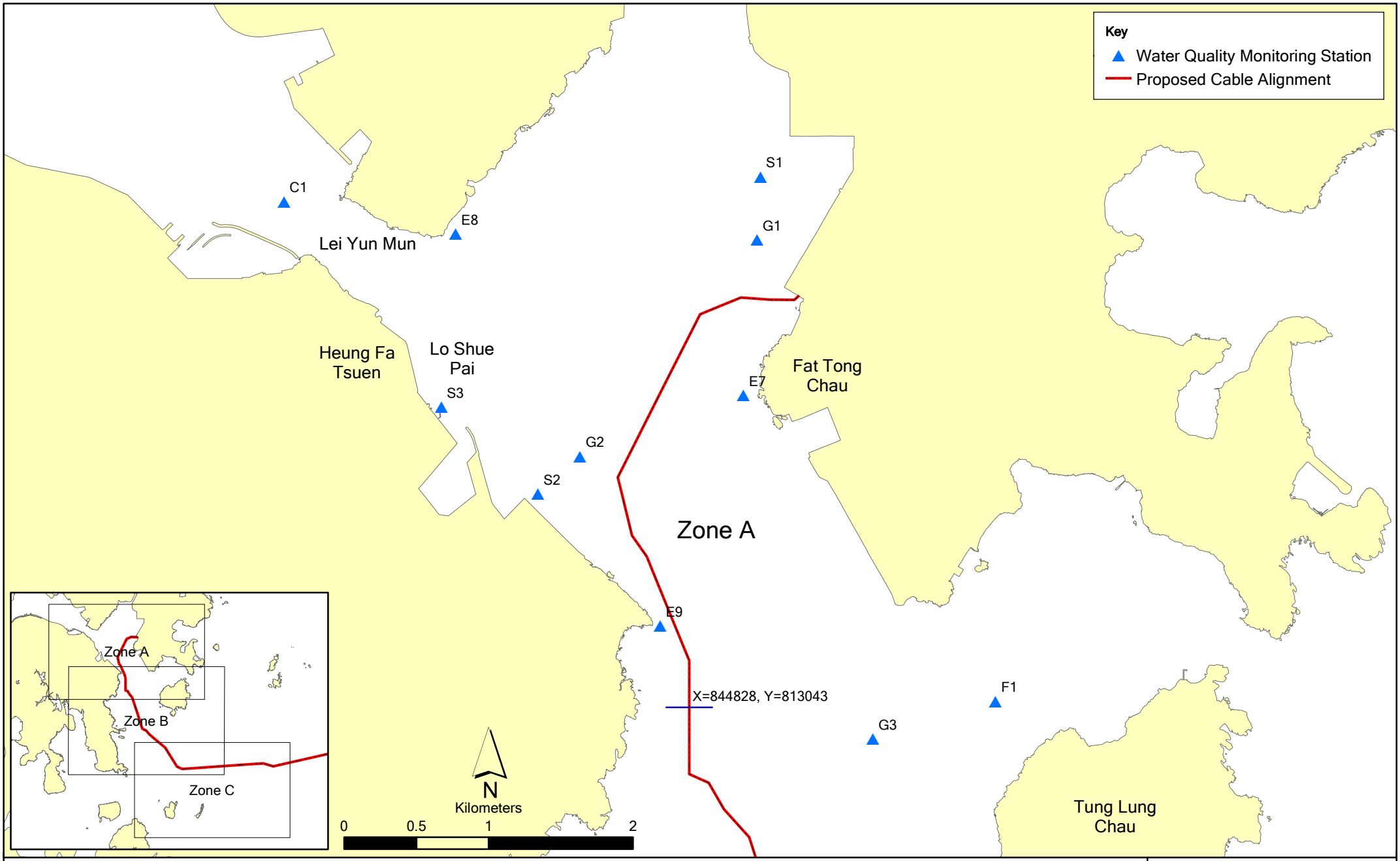

Figure 2.2

Water Quality Monitoring Station (Zone A)

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Date: 17/09/2012

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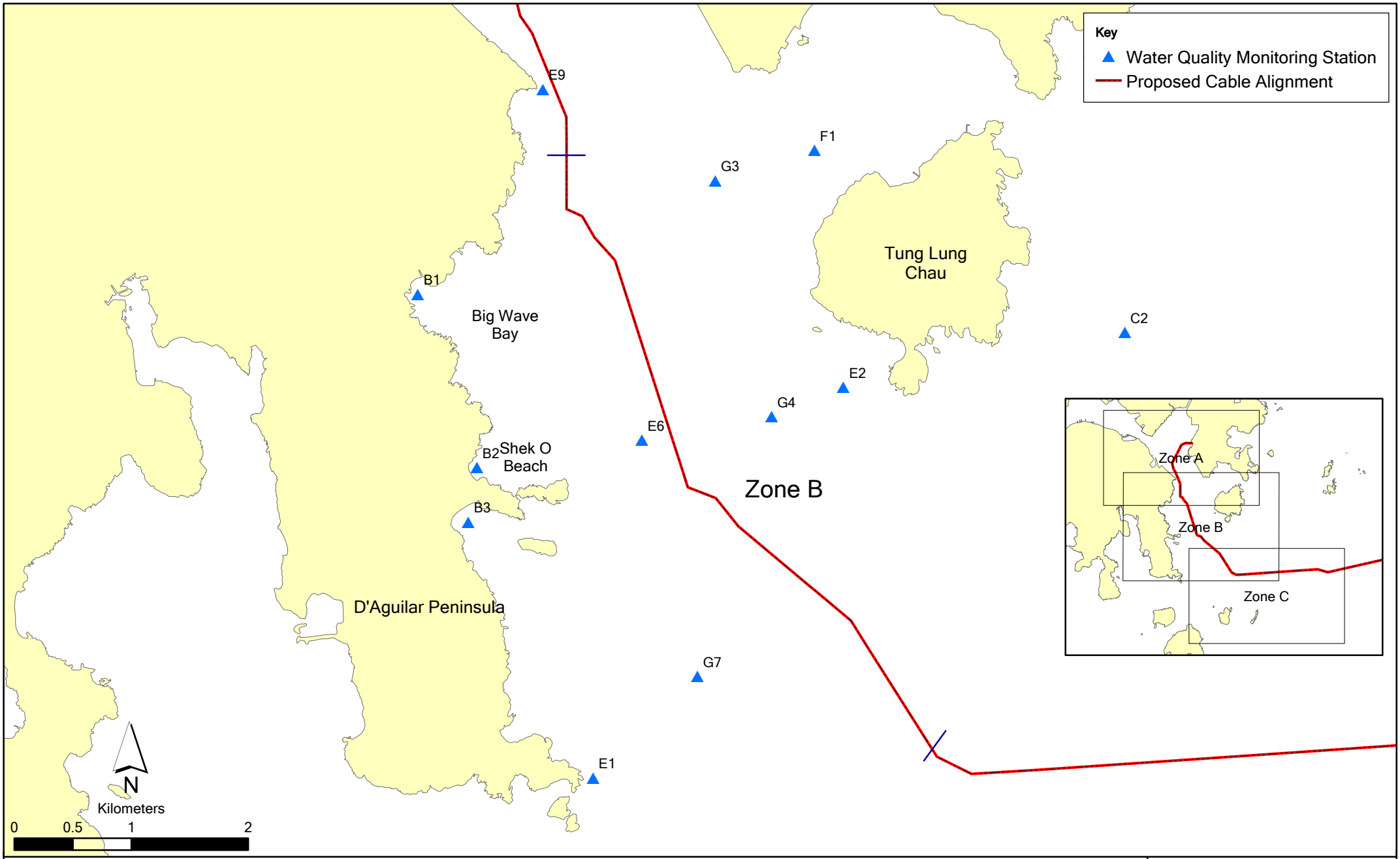

Figure 2.3

Water Quality Monitoring Station (Zone B)

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Date: 20/09/2012

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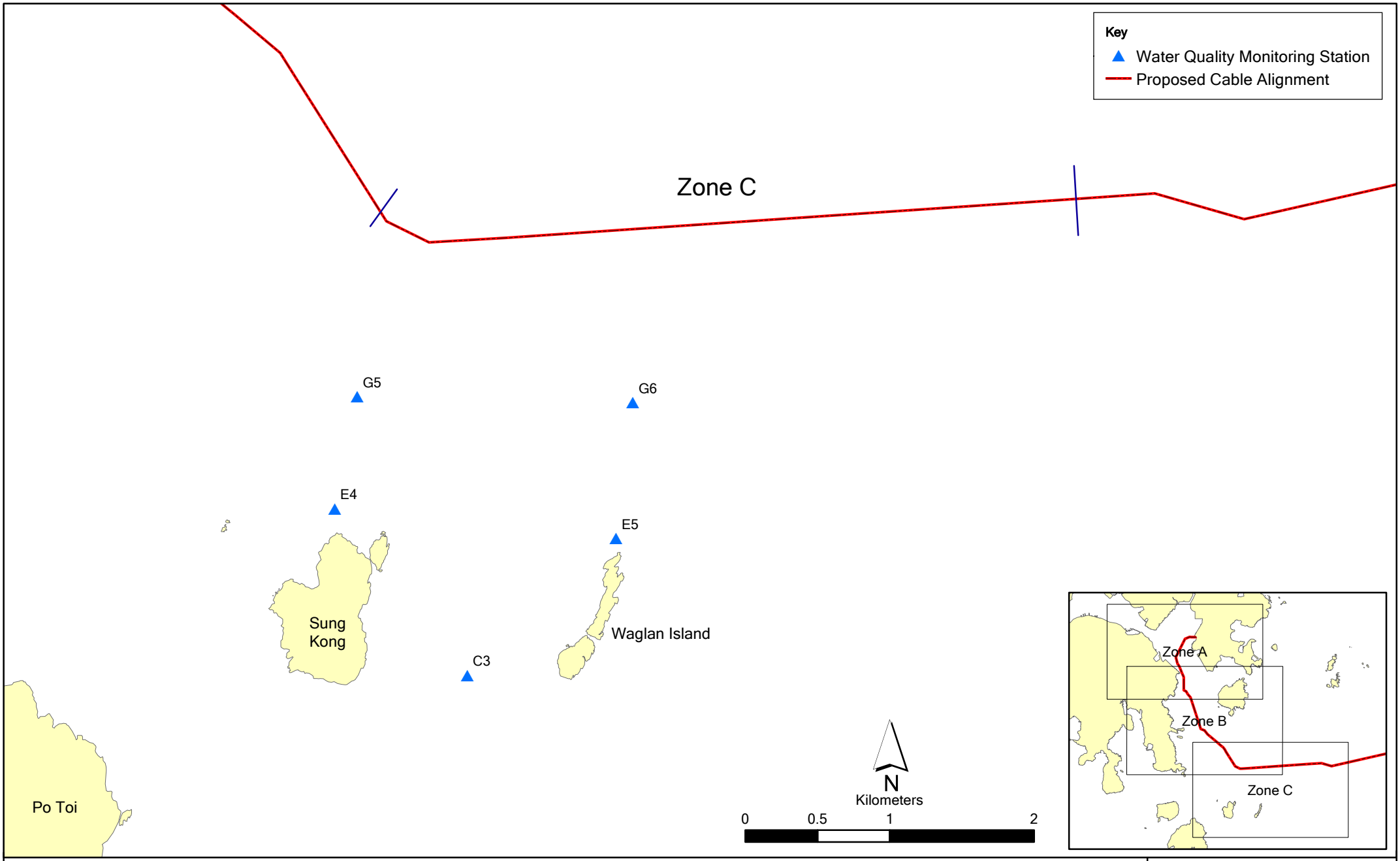

Figure 2.4

Water Quality Monitoring Station (Zone C)

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Date: 20/09/2012

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Permit / Licence / Notification / Report	Reference	Validity Period	Remarks
Forth Weekly Impact Water Quality Monitoring Report		Throughout the construction stage	Submitted on 8 January 2013

3 WATER QUALITY MONITORING REQUIREMENTS

3.1 MONITORING LOCATIONS

In accordance with the *EM&A Manual,* marine water samples for Post Project Monitoring were collected at the same stations as baseline monitoring situated around the submarine cable works in Zone A, Zone B and Zone C. The locations of the sampling stations are shown in *Figure 2.2 – Figure 2.4.*

Zone A area:

- C1 is a Control Station (approximately 3 km from the proposed cable alignment) for Zone A. It is not supposed to be influenced by the cable laying works due to its remoteness to the construction works;
- E7 is the Impact Station located at Fat Tong Chau to monitor the impacts of cable installation works on the coral communities in the proximity;
- E8 is an Impact Station to monitor the impacts of cable installation works on the coral communities along Junk Bay – South West;
- E9 is an Impact Station to monitor the impacts of cable installation works on the coral communities at Cape Collison (the Gradient Station is not set due to the short distance of this Impact Station to nearby proposed cable works which may affect the cable laying works);
- F1 is an Impact Station to monitor the impacts of cable installation works on the Tung Lung Chau Fish Culture Zone;
- S1 is an Impact Station situated at the WSD Seawater Intake Point in Junk Bay. It is located within 500 m north of the cable alignment at Junk Bay and set up to monitor the effect of cable laying works in the area;
- S2 is an Impact Station to monitor the impacts of cable installation works on the WSD Seawater Intake at Siu Sai Wan;
- S3 is an Impact Station to monitor the impacts of cable installation works on the Pamela Youde Nethersole Eastern Hospital Cooling Water Intake at Heng Fa Chuen;
- G1 is a Gradient Station between S1 and the cable alignment;
- G2 is a Gradient Station between S2 and the cable alignment; and
- G3 is a Gradient Station between F1 and the cable alignment.

Zone B area:

- C2 is a Control Station (approximately 3.4 km from the proposed cable alignment) for Zone B. It is not supposed to be influenced by the cable laying works due to its remoteness to the construction works;

- B1 is an Impact Station to monitor the impacts of cable installation works on the Big Wave Bay Beach;

- B2 is an Impact Station to monitor the impacts of cable installation works on the Rocky Bay Beach;

- B3 is an Impact Station to monitor the impacts of cable installation works on the Shek O Beach;

- E1 is an Impact Station to monitor impacts of cable installation works on Cape d'Aguilar Marine Reserve;

- E2 is an Impact Station to monitor the impacts of cable installation works on the coral communities at Tung Lung Chau;

- E6 is an Impact Station to monitor the impacts of cable installation works on the coral communities at Tai Long Pai (the Gradient Station is not set due to the short distance of this Impact Station to nearby proposed cable works which may affect the cable laying works);

- E9 is an Impact Station to monitor the impacts of cable installation works on the coral communities at Cape Collison (the Gradient Station is not set due to the short distance of this Impact Station to nearby proposed cable works which may affect the cable laying works);

- F1 is an Impact Station to monitor the impacts of cable installation works on the Tung Lung Chau Fish Culture Zone;

- G3 is a Gradient Station between F1 and the cable alignment;

- G4 is a Gradient Station between E2 and the cable alignment; and

- G7 is a Gradient Station between E1 and the cable alignment.

Zone C area:

- C3 is a Control Station (approximately 3 km from the proposed cable alignment) for Zone C. It is not supposed to be influenced by the cable laying works due to its remoteness to the construction works;

- E4 is the Impact Station to monitor the impacts of cable installation works on the coral communities at the coast of Sung Kong;

- E5 is the Impact Station to monitor the impacts of cable installation works on the coral communities at the coast of Waglan Island;

- G5 is the Gradient Station between E4 and the alignment; and

- G6 is the Gradient Station between E5 and the alignment.

The co-ordinates of the above monitoring stations in Zone A, Zone B and Zone C are listed in *Table 3.1*.

Table 3.1 ***Co-ordinates of Water Quality Impact Monitoring Stations in Zone A, Zone B and Zone C***

Monitoring Station	Nature	Easting	Northing
Zone A			
E7	Impact Station (Coral Community)	843779	814520
E8	Impact Station (Coral Community)	843111	815126
E9	Impact Station (Coral Community)	843557	811853
F1	Impact Station (Fish Culture Zone)	847196	811056
S1	Impact Station (Seawater Intakes)	847639	805900
S2	Impact Station (Seawater Intakes)	849587	805696
S3	Impact Station (Seawater Intakes)	845474	810605
G1	Gradient Station	845297	816282
G2	Gradient Station	844071	814784
G3	Gradient Station	846099	812826
C1	Control Station	842022	816547
Zone B			
B1	Impact Station (Beach)	843557	811853
B2	Impact Station (Beach)	844062	810369
B3	Impact Station (Beach)	843988	809902
E1	Impact Station (Marine Reserve)	845474	810605
E2	Impact Station (Coral Communities)	845203	815205
E6	Impact Station (Coral Communities)	845321	816718
E9	Impact Station (Coral Communities)	843557	811853
F1	Impact Station (Fish Culture Zone)	847196	811056
G3	Gradient Station	846099	812826
G4	Gradient Station	846583	810809
G7	Gradient Station	845946	808583
C2	Control Station	849603	811528
Zone C			
E4	Impact Station (Coral Communities)	843210	816322
E5	Impact Station (Coral Communities)	844627	813609
G5	Gradient Station	847795	806678
G6	Gradient Station	849703	806636
C3	Control Station	848556	804750

3.2 *MONITORING PARAMETERS*

The impact water quality monitoring was conducted in accordance with the requirements stated in the *EM&A Manual*. Monitoring parameters are presented as below.

Parameters measured *in situ* were:

- dissolved oxygen (DO) (% saturation and mg L^{-1});
- temperature (°C);
- turbidity (NTU); and
- salinity (‰).

The only parameter measured in the laboratory was:

- suspended solids (SS) (mgL^{-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, special phenomena and work activities undertaken around the monitoring and works area that may influence the monitoring results.

3.3 MONITORING EQUIPMENT AND METHODOLOGY

3.3.1 Monitoring Equipment

Table 3.2 summaries the equipment used for the post project water quality monitoring.

Table 3.2 Equipment Used during the Post Project Water Quality Monitoring

Equipment	Model
Global Positioning Device	Garmin etrex 10
Water Depth Gauge	Speedtech Instrument SM-5A
Water Sampling Equipment	1510 Kemmerer Water Sampler
Salinity, DO, Temperature Measuring Meter	YSI Pro 2030
Current Velocity and Direction	Flow Probe FP11
Turbidity Meter	HACH Model 2100Q Turbid Meter

3.3.2 Monitoring Methodology

Timing & Frequency

The water monitoring was carried out on nine occasions (days), with three occasions (days) for each zone (*Annex A*). The intervals between two sets of monitoring were not less than 36 hours. The water quality sampling was undertaken within a 4 hour window of 2 hour before and 2 hour after mid flood and mid-ebb tides. The tidal range selected for the Post Project Monitoring was at least 0.5 m for both flood and ebb tides as far as practicable.

Reference were made to the predicted tides at Tai Miu Wan, which is the tidal station nearest to the Project Site, published on the website of the Hong Kong Observatory [1]. Based on the predicted tidal levels at Tai Miu Wan, the post-project water quality monitoring was conducted between 4 February 2013 and 20 February 2013, following the schedule presented in *Annex A*. Schedule for Post Project Monitoring has been submitted to the Contractor, Independent Environmental Checker (IEC), Engineer Representative (ER) and Environmental Protection Department (EPD) one week prior to the commencement of the monitoring works.

[1] Hong Kong Observatory (2013) http://www.hko.gov.hk/tide/eQUBtide.htm [Accessed in February 2013]

Sampling Depths & Replication

Each station was sampled and measurements/ water samples were taken at three depths, namely, 1 m below water surface, mid-depth and 1 m above sea bed, except where the water depth less than 6 m, the mid-depth station may be omitted. For stations that are less than 3 m in depth, only the mid-depth sample was taken.

For *in situ* measurements, duplicate readings were made at each water depth at each station. Duplicate water samples were collected at each water depth at each station.

Sampling/ Testing Protocols

All *in situ* monitoring instruments were checked, calibrated and certified by a laboratory accredited under HOKLAS or any other international accreditation scheme before use, and subsequently re-calibrated at monthly intervals throughout all stages of the water quality monitoring. Responses of sensors and electrodes were checked with certified standard solutions before each use.

For the on-site calibration of field equipment, the *BS 1427: 1993, Guide to Field and On-Site Test Methods for the Analysis of Waters* was observed. Sufficient stocks of spare parts were maintained for replacements when necessary. Backup monitoring equipment was made available.

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

Two replicate samples were collected from each of the monitoring events for *in situ* measurement and lab analysis.

Laboratory Analysis

All laboratory work was carried out in a HOKLAS accredited laboratory. Water samples of about 1,000 mL were collected at the monitoring and control stations for carrying out the laboratory determinations. The determination work started within the next working day after collection of the water samples. The SS laboratory measurements were provided within 2 days of the sampling event (48 hours). The analyses followed the standard methods as described in APHA Standard Methods for the *Examination of Water and Wastewater*, *19th Edition*, unless otherwise specified (APHA 2540D for SS).

The QA/QC details were in accordance with requirements of HOKLAS or another internationally accredited scheme (*Annex B*).

4 IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

Mitigation measures for water quality control were recommended in the Project Profile (PP-452/2011) and Environmental Permit (EP- 433/2011). The Contractor implemented the following measures during cable installation:

- A silt curtain around the shore-end works site were employed in order to reduce the dispersion of sediments during the cable laying works;
- The crane barge used for the transport of excavated materials was fitted with tight bottom seals in order to prevent leakage of material during loading and transport;
- The crane barge was filled to a level, which ensures that material did not spill over during loading and transport to the disposal site and that adequate freeboard was maintained to ensure that the decks were not washed by wave actions;
- The forward speed of the installation barge will be limited to a maximum of 1 km/ hour;
- Water quality monitoring was carried out to verify that the project works will not result in any impacts to water quality, marine ecology and fisheries; and
- Prevention of leakage from construction equipment to reduce the runoff entering the marine waters was incorporated as part of good working practices.

A total of nine monitoring occasions (days) were scheduled in the reporting period in February 2013 (*Annex A*). Monitoring occasions at all designated monitoring stations within Zone A (conducted on 4, 6 and 8 February 2013), Zone B (conducted on 15, 18 and 20 February 2013) and Zone C (conducted on 14, 16 and 19 February 2013) were performed on schedule. No major activities influencing the water quality were identified during the reporting period.

The Post Project Monitoring data are presented in *Annex C* and compared with baseline monitoring results in *Figures C1-C18.* As shown in *Figures C1-C18*, post project monitoring results in Zone A, Zone B and Zone C have similar trends in all measured parameters in particular the level of dissolved oxygen, level of turbidity and suspended solids. Therefore, monitoring results of these three parameters are discussed together as follows.

The levels of dissolved oxygen measured during the post-project reporting period in all of the three zones at different sampling depths were higher than those obtained during the baseline monitoring periods. Elevation of dissolved oxygen concentration was detected at all the impact and control stations during the Post Project Monitoring period. DO levels recorded at the impact stations were of similar magnitude to those measured at the control stations (*Figures C1, C2, C4* and *C5* for Zone A, *Figures C7, C8, C10* and *C11* for Zone B, and *Figures C13, C14, C16* and *C17* for Zone C).

Levels of turbidity and suspended solids measured during the post-project reporting period showed similar trends (*Figures C3* and *C6* for Zone A, *Figures C9* and *C12* for Zone B, and *Figures C15* and *C18* for Zone C). Both of them in the three zones were elevated compared to those measured during the baseline monitoring periods. This occurred to all the monitoring stations including control stations C1, C2 and C3, which are situated at a long distance from the submarine cable alignment and are not likely to be affected by the Project works. Turbidity and suspended solids levels recorded at all the impact stations were of similar magnitude to those measured at the control stations during Post Project Monitoring period. Actually this overall elevation in the level of turbidity and SS has been discussed in the *Fourth Weekly Impact Water Quality Monitoring Report*, which concluded the situation as a natural phenomenon and an overall elevation in the background turbidity and Depth-averaged SS levels in nearby marine water rather than related to the marine works of the Project.

Given this information, the overall changes in turbidity and suspended solids levels during the post-project reporting period in all designated stations including control stations compared to baseline are likely to represent a natural phenomenon rather than due to the marine works of the Project. It is considered that all these measurements were due to natural variations.

6 CONCLUSIONS

This *Post Project Monitoring Report* presents the EM&A work undertaken during the period from 4 February 2013 to 20 February 2013 in accordance with the *EM&A Manual* and the requirements under Environmental Permit (EP- 433/2011).

DO levels, turbidity and suspended solids in Zone A, Zone B and Zone C conducted within one month of the completion of the Project was found to be generally elevated compared to that before the commencement of Project works (i.e. baseline data). After detailed analysis and comparison between the impaction stations and control stations, such overall variations in all sampling stations are considered to have been driven by natural fluctuations.

It is concluded that no deterioration of water quality was observed and hence the effect of the Project works on water quality at the Project site is considered to be negligible.

Annex A

Post Project Water Quality Monitoring Schedule

ASE Submarine Cable System - Tseung Kwan O
Post Project Water Quality Monitoring Schedule

as of 31 January 2013

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
3-Feb	4-Feb	5-Feb	6-Feb	7-Feb	8-Feb	9-Feb
	Mid-flood: 10:30 -14:30 Mid-ebb: 16:00-20:00 **(Zone A, 11 stations)** *Post Monitoring*		Mid-ebb: 07:33 -10:10 Mid-flood: 12:00-16:00 **(Zone A, 11 stations)** *Post Monitoring*		Mid-ebb: 09:15 -12:45 Mid-flood: 14:15-18:15 **(Zone A, 11 stations)** *Post Monitoring*	
10-Feb	11-Feb	12-Feb	13-Feb	14-Feb	15-Feb	16-Feb
				Mid-flood: 09:00 -10:30 Mid-ebb: 14:00-15:30 **(Zone C, 5 stations)** *Post Monitoring*	Mid-flood: 08:30 -12:30 Mid-ebb: 14:00-18:00 **(Zone B, 12 stations)** *Post Monitoring*	Mid-flood: 09:30 -11:00 Mid-ebb: 15:00-16:30 **(Zone C, 5 stations)** *Post Monitoring*
17-Feb	18-Feb	19-Feb	20-Feb	21-Feb	22-Feb	23-Feb
	Mid-flood: 10:00 -14:00 Mid-ebb: 15:30-19:30 **(Zone B, 12 stations)** *Post Monitoring*	Mid-flood: 09:30 -11:00 Mid-ebb: 17:00-18:30 **(Zone C, 5 stations)** *Post Monitoring*	Mid-flood: 09:00 -13:00 Mid-ebb: 17:30-21:30 **(Zone B, 12 stations)** *Post Monitoring*			
24-Feb	25-Feb	26-Feb	27-Feb	28-Feb	1-Mar	2-Mar
3-Mar	4-Mar	5-Mar	6-Mar	7-Mar	8-Mar	9-Mar

Annex B

QA/QC Results for Suspended Solids Testing

Annex B1 QA/QC Results of Laboratory Analysis of Total Suspended Solids (Zone A)

Sampling Date	QC Sample	Sample Duplicate		Sample Spike	
	% Recovery *	Sample ID	% Error #	Sample ID	% Recovery @
2/4/2013	92	FC1S-1	3.28	FG1S-2	98.0
	93.1	FG1M-1	0.0	FG3M-2	102.9
	100.8	FG3B-1	5.9	FG2B-2	93.1
	106.3	FS3S-1	2.74	FS3B-2	97.0
	94.8	EC1S-1	3.3	EG1S-2	97.1
	99.4	EG1M-1	0.0	EG3M-2	102.0
	94.5	EG3B-1	2.99	EG2B-2	98.0
	105.2	ES3S-1	2.53	ES3B-2	101.0

Note: (*) % Recovery of QC sample should be between 80% to 120%.
(#) % Error of Sample Duplicate should be between 0% to 10%.
(@) % Recovery of Sample Spike should be between 80% to 120%.
(**) % Error of Sample Duplicate >10% but invalid due to sample results less

Sampling Date	QC Sample	Sample Duplicate		Sample Spike	
	% Recovery *	Sample ID	% Error #	Sample ID	% Recovery @
2/6/2013	98.4	FC1S-1	0.00	FG1S-2	100.9
	99.8	FG1M-1	3.28	FG3M-2	106.9
	102.6	FG3B-1	2.90	FG2B-2	93.2
	103.8	FS3S-1	2.82	FS3B-2	98.2
	106.5	EC1S-1	6.67	EG1S-2	100.0
	94.1	EG1M-1	3.39	EG3M-2	99.1
	92.6	EG3B-1	0.00	EG2B-2	95.2
	107.0	ES3S-1	5.56	ES3B-2	98.1

Note: (*) % Recovery of QC sample should be between 80% to 120%.
(#) % Error of Sample Duplicate should be between 0% to 10%.
(@) % Recovery of Sample Spike should be between 80% to 120%.
(**) % Error of Sample Duplicate >10% but invalid due to sample results

Sampling Date	QC Sample	Sample Duplicate		Sample Spike	
	% Recovery *	Sample ID	% Error #	Sample ID	% Recovery @
2/8/2013	106	FC1S-1	3.39	FG1S-2	106.8
	100.2	FG1M-1	0.00	FG3M-2	93.1
	104.5	FG3B-1	6.25	FG2B-2	96.2
	99.2	FS3S-1	2.82	FS3B-2	92.6
	101.5	EC1S-1	3.28	EG1S-2	99.1
	100.2	EG1M-1	0.00	EG3M-2	105.8
	105.4	EG3B-1	3.39	EG2B-2	91.8
	97.3	ES3S-1	2.82	ES3B-2	104.0

Note: (*) % Recovery of QC sample should be between 80% to 120%.
(#) % Error of Sample Duplicate should be between 0% to 10%.
(@) % Recovery of Sample Spike should be between 80% to 120%.
(**) % Error of Sample Duplicate >10% but invalid due to sample results

Annex B2 QA/QC Results of Laboratory Analysis of Total Suspended Solids (Zone B)

Sampling Date	QC Sample	Sample Duplicate		Sample Spike	
	% Recovery *	Sample ID	% Error #	Sample ID	% Recovery @
2/15/2013	106.3	FE1-S1	0.00	FB2-S2	93.4
	95.1	FB2-M1	4.65	FG4-M2	105.9
	100.0	FG4-B1	4.26	FF1-B2	102.9
	94.1	FG3-S1	3.92	FE9-B2	100.0
	105.1	EE1-S1	4.44	EB2-S2	95.3
	107.5	EB2-M1	4.88	EG4-M2	107.8
	93.9	EG4-B1	8.00	EF1-B2	100.0
	106.1	EG3-S1	3.77	EE9-B2	100.0

Note:
(*) % Recovery of QC sample should be between 80% to 120%.
(#) % Error of Sample Duplicate should be between 0% to 10%.
(@) % Recovery of Sample Spike should be between 80% to 120%.
(**) % Error of Sample Duplicate >10% but invalid due to sample results less than MDL.

Sampling Date	QC Sample	Sample Duplicate		Sample Spike	
	% Recovery *	Sample ID	% Error #	Sample ID	% Recovery @
2/18/2013	96.9	FE1-S1	5.71	FB2-S2	94.0
	103.8	FB2-M1	0.00	FG4-M2	106.1
	105.1	FG4-B1	0.00	FF1-B2	96.1
	107.2	FG3-S1	0.00	FE9-B2	103.7
	97.0	EE1-S1	5.71	EB2-S2	96.0
	104.5	EB2-M1	0.00	EG4-M2	95.2
	96.5	EG4-B1	8.33	EF1-B2	100.0
	104.5	EG3-S1	0.00	EE9-B2	106.9

Note:
(*) % Recovery of QC sample should be between 80% to 120%.
(#) % Error of Sample Duplicate should be between 0% to 10%.
(@) % Recovery of Sample Spike should be between 80% to 120%.
(**) % Error of Sample Duplicate >10% but invalid due to sample results less than MDL.

Sampling Date	QC Sample	Sample Duplicate		Sample Spike	
	% Recovery *	Sample ID	% Error #	Sample ID	% Recovery @
2/20/2013	97.6	FE1-S1	5.41	FB2-S2	97.1
	94.0	FB2-M1	4.65	FG4-M2	100.0
	104.0	FG4-B1	0.00	FF1-B2	94.2
	98.9	FG3-S1	4.08	FE9-B2	106.1
	105.0	EE1-S1	4.88	EB2-S2	101.9
	106.6	EB2-M1	0.00	EG4-M2	104.0
	102.7	EG4-B1	4.26	EF1-B2	105.8
	102.7	EG3-S1	3.92	EE9-B2	93.2

Note:
(*) % Recovery of QC sample should be between 80% to 120%.
(#) % Error of Sample Duplicate should be between 0% to 10%.
(@) % Recovery of Sample Spike should be between 80% to 120%.
(**) % Error of Sample Duplicate >10% but invalid due to sample results less than MDL.

Annex B3 QA/QC Results of Laboratory Analysis of Total Suspended Solids (Zone C)

Sampling Date	QC Sample	Sample Duplicate		Sample Spike	
	% Recovery *	Sample ID	% Error #	Sample ID	% Recovery @
2/14/2013	95.9	FE4-S1	4.26	FG6-S2	94.9
	104.9	FG6-M1	3.92	FG5-B2	101.0
	92.1	EE4-S1	0.00	EG6-S2	96.1
	102	EG6-M1	4.08	EG5-B2	96.1

Note:
(*) % Recovery of QC sample should be between 80% to 120%.
(#) % Error of Sample Duplicate should be between 0% to 10%.
(@) % Recovery of Sample Spike should be between 80% to 120%.
(**) % Error of Sample Duplicate >10% but invalid due to sample results less than MDL.

Sampling Date	QC Sample	Sample Duplicate		Sample Spike	
	% Recovery *	Sample ID	% Error #	Sample ID	% Recovery @
2/16/2013	99.4	FE4-S1	4.44	FG6-S2	102.1
	102	FG6-M1	4.65	FG5-B2	95.0
	93.6	EE4-S1	0.00	EG6-S2	94.2
	93.6	EG6-M1	4.26	EG5-B2	103.0

Note:
(*) % Recovery of QC sample should be between 80% to 120%.
(#) % Error of Sample Duplicate should be between 0% to 10%.
(@) % Recovery of Sample Spike should be between 80% to 120%.
(**) % Error of Sample Duplicate >10% but invalid due to sample results less than MDL.

Sampling Date	QC Sample	Sample Duplicate		Sample Spike	
	% Recovery *	Sample ID	% Error #	Sample ID	% Recovery @
2/19/2013	95.6	FE4-S1	0.00	FG6-S2	95.3
	92.5	FG6-M1	4.88	FG5-B2	98.0
	107.9	EE4-S1	4.44	EG6-S2	96.1
	95.1	EG6-M1	8.70	EG5-B2	102.0

Note:
(*) % Recovery of QC sample should be between 80% to 120%.
(#) % Error of Sample Duplicate should be between 0% to 10%.
(@) % Recovery of Sample Spike should be between 80% to 120%.
(**) % Error of Sample Duplicate >10% but invalid due to sample results less than MDL.

Annex C

Post Project Water Quality Monitoring Results

Annex C1 Post Project Water Quality Monitoring Results during Mid-flood on 4 February 2013

Date:	4-Feb-13
Tide:	Mid-Flood
Weather:	Cloudy
Sea Conditions:	Small Wave
Zone	A

Location	Sampling Time	Water Depth (m)	Current direction	Current speed (ms^{-1})	Monitoring Depth	Temperature (°C)			Salinity (ppt)			DO (mg/l)			DO Saturation (%)			Turbidity (NTU)				Suspended Solids (mg/l)			
						1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	D.A.**	1	2	Ave.*	D.A.**
C1	1030-1038	36.4	W	0.5	*Surface*	17.9	17.9	17.9	27.0	27.0	27.0	7.6	7.5	7.5	92.9	92.5	92.7	3.3	3.3	3.3		6.2	6.0	6.1	
					Middle	17.9	17.9	17.9	27.2	27.2	27.2	7.4	7.4	7.4	90.8	90.3	90.6	3.6	3.7	3.6	3.6	6.6	6.7	6.7	6.6
					Bottom	18.0	18.1	18.1	27.3	27.4	27.4	7.2	7.2	7.2	88.7	88.3	88.5	3.8	3.7	3.7		7.2	6.9	7.1	
E8	1045-1102	21.2	W	0.3	*Surface*	17.9	17.9	17.9	27.1	27.1	27.1	7.6	7.6	7.6	93.6	93.1	93.4	3.5	3.4	3.4		6.5	6.3	6.4	
					Middle	18.0	18.0	18.0	27.3	27.3	27.3	7.4	7.4	7.4	91.4	90.9	91.2	3.7	3.7	3.7	3.6	6.7	6.6	6.7	6.5
					Bottom	18.0	18.0	18.0	27.4	27.4	27.4	7.2	7.2	7.2	88.4	87.8	88.1	3.7	3.6	3.6		6.6	6.5	6.6	
S1	1110-1125	10.2	W	0.4	*Surface*	17.9	17.9	17.9	27.1	27.2	27.2	7.6	7.5	7.6	93.2	92.6	92.9	3.6	3.5	3.6		6.5	6.5	6.5	
					Middle	18.0	18.1	18.1	27.3	27.3	27.3	7.4	7.3	7.4	90.5	90.2	90.4	3.4	3.3	3.3	3.5	6.0	6.1	6.1	6.4
					Bottom	18.0	18.1	18.1	27.3	27.4	27.4	7.2	7.2	7.2	88.3	88.0	88.2	3.5	3.4	3.5		6.5	6.5	6.5	
G1	1132-1147	12.6	W	0.4	*Surface*	17.9	17.9	17.9	27.1	27.1	27.1	7.5	7.5	7.5	92.0	91.6	91.8	3.4	3.5	3.5		6.4	6.6	6.5	
					Middle	18.0	18.0	18.0	27.3	27.3	27.3	7.3	7.3	7.3	90.2	89.7	90.0	3.3	3.3	3.3	3.5	6.2	6.4	6.3	6.5
					Bottom	18.0	18.1	18.1	27.4	27.4	27.4	7.3	7.3	7.3	89.5	89.1	89.3	3.7	3.6	3.6		6.5	6.7	6.6	
E7	1153-1205	13.8	W	0.4	*Surface*	17.8	17.9	17.9	27.1	27.2	27.2	7.6	7.5	7.6	93.0	92.5	92.8	3.4	3.4	3.4		6.0	6.1	6.1	
					Middle	17.9	18.0	18.0	27.3	27.2	27.3	7.4	7.4	7.4	90.9	91.4	91.2	3.6	3.5	3.6	3.6	6.7	6.3	6.5	6.4
					Bottom	18.0	18.0	18.0	27.3	27.3	27.3	7.4	7.3	7.4	90.5	90.2	90.4	3.8	3.8	3.8		6.9	6.6	6.8	
F1	1213-1227	12.4	W	0.5	*Surface*	17.9	17.9	17.9	27.2	27.2	27.2	7.6	7.6	7.6	93.6	93.0	93.3	3.6	3.7	3.6		6.4	6.8	6.6	
					Middle	18.0	18.0	18.0	27.2	27.3	27.3	7.5	7.6	7.5	92.2	92.7	92.5	3.5	3.5	3.5	3.6	6.2	6.3	6.3	6.5
					Bottom	18.1	18.0	18.1	27.4	27.4	27.4	7.4	7.4	7.4	90.9	90.4	90.7	3.8	3.7	3.8		6.8	6.6	6.7	
G3	1234-1249	15.8	W	0.3	*Surface*	17.9	17.9	17.9	27.2	27.1	27.2	7.6	7.5	7.6	93.1	92.6	92.9	3.5	3.5	3.5		6.3	6.4	6.4	
					Middle	18.0	17.9	18.0	27.3	27.3	27.3	7.4	7.3	7.4	90.5	90.2	90.4	3.6	3.5	3.6	3.6	6.5	6.4	6.5	6.6
					Bottom	18.0	18.0	18.0	27.4	27.3	27.4	7.3	7.3	7.3	89.5	89.1	89.3	3.7	3.6	3.6		7.0	6.7	6.9	
E9	1255-1310	20.2	W	0.7	*Surface*	17.9	17.8	17.9	27.2	27.2	27.2	7.5	7.5	7.5	92.6	92.1	92.4	3.6	3.5	3.5		6.3	6.0	6.2	
					Middle	18.0	18.0	18.0	27.3	27.3	27.3	7.4	7.3	7.3	90.5	89.9	90.2	3.8	3.9	3.8	3.7	6.9	6.9	6.9	6.6
					Bottom	18.1	18.1	18.1	27.4	27.4	27.4	7.2	7.3	7.2	88.7	89.1	88.9	3.8	3.7	3.8		6.8	6.6	6.7	
S2	1316-1330	11.6	W	0.5	*Surface*	17.9	17.9	17.9	27.2	27.2	27.2	7.5	7.4	7.5	91.8	91.4	91.6	3.7	3.8	3.7		6.4	6.5	6.5	
					Middle	17.9	18.0	18.0	27.2	27.1	27.2	7.3	7.3	7.3	89.1	89.4	89.3	3.8	3.8	3.8	3.8	7.0	6.9	7.0	6.8
					Bottom	18.0	17.9	18.0	27.4	27.4	27.4	7.1	7.1	7.1	87.6	87.1	87.4	3.9	4.0	3.9		6.9	7.0	7.0	
G2	1338-1353	13.8	W	0.4	*Surface*	18.0	17.9	18.0	27.2	27.2	27.2	7.3	7.3	7.3	89.5	89.1	89.3	4.1	4.0	4.0		7.0	6.7	6.9	
					Middle	18.0	18.0	18.0	27.3	27.3	27.3	7.1	7.1	7.1	87.4	86.9	87.2	3.9	3.8	3.8	3.9	6.6	6.9	6.8	6.8
					Bottom	18.0	18.1	18.1	27.4	27.4	27.4	7.0	6.9	7.0	85.5	84.8	85.2	4.0	3.9	3.9		7.0	6.8	6.9	
S3	1400-1415	10.6	W	0.6	*Surface*	18.0	18.0	18.0	27.2	27.2	27.2	7.4	7.3	7.4	90.5	90.2	90.4	4.2	4.3	4.3		7.4	7.6	7.5	
					Middle	18.0	18.0	18.0	27.3	27.3	27.3	7.0	7.0	7.0	86.4	86.0	86.2	3.8	3.8	3.8	4.0	6.9	6.8	6.9	7.2
					Bottom	18.1	18.1	18.1	27.4	27.4	27.4	7.0	7.0	7.0	86.0	86.4	86.2	4.1	4.0	4.0		7.3	7.2	7.3	

Remark or Obsevation:

Note: * Average ** Depth Average

Annex C2 Post Project Water Quality Monitoring Results during Mid-ebb on 4 February 2013

Date:	4-Feb-13
Tide:	Mid-Ebb
Weather:	Cloudy
Sea Conditions:	Small Wave
Zone	A

Location	Sampling Time	Water Depth (m)	Current direction	Current speed (ms^{-1})	Monitoring Depth	Temperature (°C)			Salinity (ppt)			DO (mg/l)			DO Saturation (%)			Turbidity (NTU)				Suspended Solids (mg/l)			
						1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	D.A.**	1	2	Ave.*	D.A.**
C1	1600-1618	35.8	W	0.5	*Surface*	17.9	17.9	17.9	26.9	27.0	27.0	7.6	7.6	7.6	93.5	93.1	93.3	3.4	3.4	3.4		6.2	6.2	6.2	
					Middle	17.9	17.9	17.9	27.1	27.2	27.2	7.5	7.4	7.4	92.0	91.1	91.6	3.6	3.6	3.6	3.6	6.4	6.3	6.4	6.4
					Bottom	17.9	18.0	18.0	27.3	27.4	27.4	7.2	7.1	7.2	88.4	87.7	88.1	3.7	3.7	3.7		6.7	6.7	6.7	
E8	1621-1639	20.6	W	0.4	*Surface*	17.9	18.0	18.0	26.9	27.0	27.0	7.6	7.6	7.6	93.4	93.6	93.5	3.4	3.4	3.4		6.2	6.1	6.2	
					Middle	17.9	17.8	17.9	27.2	27.3	27.3	7.5	7.4	7.5	92.3	91.4	91.9	3.7	3.7	3.7	3.6	6.6	6.4	6.5	6.4
					Bottom	17.8	17.9	17.9	27.3	27.2	27.3	7.2	7.2	7.2	89.1	88.6	88.9	3.5	3.6	3.6		6.4	6.6	6.5	
S1	1642-1700	9.6	W	0.4	*Surface*	18.0	18.0	18.0	27.0	27.0	27.0	7.5	7.6	7.6	92.7	92.9	92.8	3.6	3.6	3.6		6.4	6.2	6.3	
					Middle	17.9	17.9	17.9	27.2	27.2	27.2	7.4	7.4	7.4	90.5	91.0	90.8	3.8	3.9	3.9	3.8	6.8	7.0	6.9	6.8
					Bottom	17.9	17.9	17.9	27.2	27.3	27.3	7.4	7.4	7.4	91.0	91.5	91.3	3.9	3.9	3.9		7.3	7.1	7.2	
G1	1703-1721	11.8	W	0.5	*Surface*	17.9	17.9	17.9	27.1	27.2	27.2	7.5	7.5	7.5	91.9	92.1	92.0	3.5	3.6	3.5		6.3	6.4	6.4	
					Middle	17.8	17.7	17.8	27.3	27.4	27.4	7.2	7.3	7.3	89.1	89.3	89.2	3.7	3.8	3.7	3.7	6.6	6.7	6.7	6.7
					Bottom	17.7	17.8	17.8	27.2	27.3	27.3	7.3	7.4	7.3	89.8	90.5	90.2	3.8	3.9	3.8		7.0	7.0	7.0	
E7	1724-1742	13.0	W	0.6	*Surface*	17.8	17.9	17.9	27.0	27.1	27.1	7.6	7.6	7.6	93.7	93.9	93.8	3.6	3.7	3.6		6.3	6.6	6.5	
					Middle	17.8	17.8	17.8	27.1	27.2	27.2	7.4	7.5	7.5	91.1	92.1	91.6	3.8	3.9	3.8	3.8	7.1	6.9	7.0	6.9
					Bottom	17.9	17.9	17.9	27.3	27.3	27.3	7.3	7.3	7.3	89.3	89.9	89.6	3.9	3.9	3.9		7.2	7.1	7.2	
F1	1745-1803	12.6	W	0.5	*Surface*	17.8	17.9	17.9	26.9	27.0	27.0	7.6	7.6	7.6	93.4	93.7	93.6	3.5	3.5	3.5		6.2	6.5	6.4	
					Middle	17.9	17.9	17.9	27.2	27.1	27.2	7.3	7.3	7.3	89.3	89.8	89.6	3.6	3.6	3.6	3.6	6.7	6.5	6.6	6.5
					Bottom	17.9	17.8	17.9	27.4	27.3	27.4	7.2	7.1	7.2	88.2	87.7	88.0	3.7	3.8	3.8		6.6	6.7	6.7	
G3	1806-1824	15.2	W	0.4	*Surface*	17.8	17.7	17.8	27.0	27.1	27.1	7.4	7.5	7.4	91.4	91.6	91.5	3.3	3.4	3.4		6.0	6.3	6.2	
					Middle	17.8	17.7	17.8	27.3	27.4	27.4	7.3	7.3	7.3	89.8	89.4	89.6	3.4	3.4	3.4	3.5	6.4	6.6	6.5	6.5
					Bottom	17.9	17.8	17.9	27.3	27.3	27.3	7.2	7.3	7.3	89.1	89.3	89.2	3.7	3.7	3.7		6.6	6.8	6.7	
E9	1827-1845	19.8	W	0.4	*Surface*	17.8	17.9	17.9	27.0	27.1	27.1	7.6	7.5	7.6	93.4	92.7	93.1	3.4	3.5	3.4		6.0	6.2	6.1	
					Middle	17.9	17.8	17.9	27.1	27.2	27.2	7.4	7.4	7.4	90.5	91.0	90.8	3.7	3.7	3.7	3.6	6.7	6.6	6.7	6.6
					Bottom	18.0	17.9	18.0	27.2	27.3	27.3	7.2	7.3	7.2	88.6	88.8	88.7	3.8	3.8	3.8		7.2	6.9	7.1	
S2	1848-1906	11.0	W	0.3	*Surface*	17.9	17.9	17.9	27.1	27.2	27.2	7.4	7.5	7.5	90.6	91.1	90.9	3.6	3.6	3.6		6.6	6.4	6.5	
					Middle	17.9	17.8	17.9	27.2	27.3	27.3	7.2	7.3	7.3	88.3	88.8	88.6	3.5	3.4	3.5	3.6	6.3	6.6	6.5	6.6
					Bottom	17.9	17.9	17.9	27.3	27.4	27.4	7.3	7.3	7.3	88.8	89.8	89.3	3.7	3.8	3.8		6.8	7.0	6.9	
G2	1914-1929	13.2	W	0.4	*Surface*	17.9	17.9	17.9	27.1	27.2	27.2	7.2	7.3	7.3	89.1	89.5	89.3	4.1	4.2	4.1		7.5	7.2	7.4	
					Middle	17.9	17.8	17.9	27.3	27.2	27.3	7.2	7.2	7.2	88.3	88.6	88.5	4.0	4.1	4.1	4.0	7.2	7.0	7.1	7.2
					Bottom	17.9	17.8	17.9	27.2	27.3	27.3	7.1	7.1	7.1	87.2	87.6	87.4	4.0	3.9	4.0		7.1	7.2	7.2	
S3	1938-1957	9.8	W	0.5	*Surface*	17.8	17.7	17.8	27.2	27.3	27.3	7.4	7.4	7.4	90.5	91.2	90.9	4.4	4.4	4.4		7.8	7.6	7.7	
					Middle	17.9	17.8	17.9	27.2	27.2	27.2	7.2	7.3	7.3	89.1	89.7	89.4	3.6	3.7	3.7	3.9	6.8	6.8	6.8	7.0
					Bottom	18.0	18.0	18.0	27.3	27.4	27.4	7.1	7.2	7.2	87.6	88.3	88.0	3.6	3.6	3.6		6.7	6.4	6.6	

Remark or Obsevation:

Note: * Average ** Depth Average

Annex C3 Post Project Water Quality Monitoring Results during Mid-flood on 6 February 2013

Date:	6-Feb-13
Tide:	Mid-Flood
Weather:	Cloudy
Sea Conditions:	Small Wave
Zone	A

Location	Sampling Time	Water Depth (m)	Current direction	Current speed (ms^{-1})	Monitoring Depth	Temperature (°C)			Salinity (ppt)			DO (mg/l)			DO Saturation (%)			Turbidity (NTU)				Suspended Solids (mg/l)			
						1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	D.A.**	1	2	Ave.*	D.A.**
C1	1200-1217	36.6	E	0.5	*Surface*	18.1	18.1	18.1	27.1	27.1	27.1	7.5	7.5	7.5	92.4	92.7	92.6	3.3	3.4	3.4		6.0	6.1	6.1	
					Middle	18.0	18.1	18.1	27.2	27.3	27.3	7.4	7.3	7.3	90.5	90.0	90.3	3.6	3.7	3.7	3.6	6.6	6.4	6.5	6.5
					Bottom	18.1	18.2	18.2	27.4	27.5	27.5	7.2	7.2	7.2	88.4	87.9	88.2	3.8	3.8	3.8		6.9	6.8	6.9	
E8	1224-1240	21.3	E	0.4	*Surface*	18.0	18.0	18.0	27.1	27.0	27.1	7.6	7.6	7.6	93.6	93.1	93.4	3.5	3.5	3.5		6.3	6.4	6.4	
					Middle	17.9	18.0	18.0	27.2	27.2	27.2	7.4	7.4	7.4	91.4	90.9	91.2	3.8	3.8	3.8	3.7	6.8	6.8	6.8	6.7
					Bottom	18.1	18.1	18.1	27.4	27.4	27.4	7.2	7.2	7.2	89.1	88.6	88.9	3.9	3.9	3.9		6.9	7.0	7.0	
S1	1248-1304	9.9	E	0.4	*Surface*	17.9	18.0	18.0	27.1	27.2	27.2	7.5	7.6	7.5	92.3	93.0	92.7	3.6	3.7	3.6		6.3	6.6	6.5	
					Middle	18.1	18.0	18.1	27.2	27.2	27.2	7.3	7.3	7.3	90.2	89.8	90.0	3.5	3.5	3.5	3.6	6.4	6.2	6.3	6.4
					Bottom	18.2	18.1	18.2	27.3	27.4	27.4	7.2	7.1	7.2	88.2	87.7	88.0	3.7	3.7	3.7		6.6	6.4	6.5	
G1	1310-1327	12.8	E	0.5	*Surface*	18.1	18.1	18.1	27.1	27.1	27.1	7.6	7.6	7.6	94.0	93.6	93.8	3.4	3.4	3.4		6.2	6.4	6.3	
					Middle	18.0	18.0	18.0	27.3	27.4	27.4	7.4	7.5	7.4	91.4	91.8	91.6	3.4	3.5	3.4	3.5	6.2	6.3	6.3	6.4
					Bottom	18.2	18.1	18.2	27.5	27.4	27.5	7.4	7.3	7.4	90.8	90.3	90.6	3.6	3.6	3.6		6.6	6.6	6.6	
E7	1333-1350	13.8	E	0.5	*Surface*	18.2	18.1	18.2	27.0	27.1	27.1	7.6	7.6	7.6	93.5	94.0	93.8	3.3	3.3	3.3		5.8	6.0	5.9	
					Middle	18.1	18.1	18.1	27.2	27.3	27.3	7.6	7.5	7.5	92.9	92.4	92.7	3.5	3.5	3.5	3.5	6.3	6.5	6.4	6.4
					Bottom	18.2	18.1	18.2	27.4	27.4	27.4	7.4	7.4	7.4	91.4	90.9	91.2	3.7	3.7	3.7		6.9	6.6	6.8	
F1	1358-1413	12.8	E	0.4	*Surface*	18.2	18.2	18.2	27.1	27.1	27.1	7.7	7.7	7.7	94.2	94.8	94.5	3.5	3.5	3.5		6.4	6.4	6.4	
					Middle	18.1	18.0	18.1	27.2	27.3	27.3	7.6	7.6	7.6	94.0	93.5	93.8	3.4	3.5	3.4	3.5	6.1	6.3	6.2	6.4
					Bottom	18.1	18.1	18.1	27.4	27.4	27.4	7.5	7.5	7.5	92.5	92.0	92.3	3.6	3.7	3.7		6.6	6.8	6.7	
G3	1420-1436	16.2	E	0.5	*Surface*	18.2	18.1	18.2	27.1	27.1	27.1	7.6	7.6	7.6	93.1	93.6	93.4	3.4	3.4	3.4		6.1	6.4	6.3	
					Middle	18.1	18.1	18.1	27.2	27.3	27.3	7.5	7.5	7.5	92.3	91.9	92.1	3.5	3.6	3.6	3.6	6.5	6.6	6.6	6.6
					Bottom	18.2	18.1	18.2	27.4	27.5	27.5	7.4	7.3	7.3	90.5	90.0	90.3	3.7	3.7	3.7		7.0	6.8	6.9	
E9	1443-1500	20.4	E	0.4	*Surface*	18.1	18.2	18.2	27.1	27.1	27.1	7.7	7.6	7.6	94.2	93.8	94.0	3.4	3.5	3.5		6.2	6.3	6.3	
					Middle	18.0	18.1	18.1	27.3	27.4	27.4	7.5	7.5	7.5	92.4	91.9	92.2	3.7	3.7	3.7	3.6	6.6	6.9	6.8	6.5
					Bottom	18.2	18.2	18.2	27.4	27.4	27.4	7.4	7.3	7.3	90.5	89.8	90.2	3.7	3.7	3.7		6.7	6.5	6.6	
S2	1506-1521	12.0	E	0.4	*Surface*	18.1	18.2	18.2	27.2	27.2	27.2	7.6	7.6	7.6	93.2	93.5	93.4	3.6	3.6	3.6		6.6	6.5	6.6	
					Middle	18.0	18.0	18.0	27.3	27.3	27.3	7.4	7.4	7.4	91.4	90.8	91.1	3.7	3.8	3.8	3.7	7.1	6.9	7.0	6.9
					Bottom	18.1	18.1	18.1	27.5	27.4	27.5	7.2	7.2	7.2	89.1	88.6	88.9	3.9	3.9	3.9		7.1	7.4	7.3	
G2	1527-1542	14.2	E	0.5	*Surface*	18.2	18.1	18.2	27.1	27.2	27.2	7.4	7.4	7.4	91.0	91.4	91.2	3.9	4.0	3.9		7.0	7.1	7.1	
					Middle	18.0	18.1	18.1	27.3	27.3	27.3	7.3	7.2	7.3	89.5	89.1	89.3	3.8	3.8	3.8	3.9	6.8	6.8	6.8	7.0
					Bottom	18.2	18.2	18.2	27.4	27.4	27.4	7.1	7.1	7.1	87.5	87.0	87.3	4.0	4.0	4.0		7.1	7.4	7.3	
S3	1547-1604	10.6	E	0.4	*Surface*	18.1	18.2	18.2	27.2	27.1	27.2	7.5	7.5	7.5	92.4	91.9	92.2	4.1	4.2	4.1		7.2	7.0	7.1	
					Middle	18.1	18.0	18.1	27.2	27.3	27.3	7.3	7.4	7.3	90.0	90.4	90.2	3.8	3.8	3.8	4.0	6.8	6.7	6.8	6.9
					Bottom	18.2	18.1	18.2	27.4	27.4	27.4	7.2	7.2	7.2	88.7	88.3	88.5	3.9	4.0	3.9		6.7	7.0	6.9	

Remark or Obsevation:

Note: * Average ** Depth Average

Annex C4 Post Project Water Quality Monitoring Results during Mid-ebb on 6 February 2013

Date:	6-Feb-13
Tide:	Mid-Ebb
Weather:	Cloudy
Sea Conditions:	Small Wave
Zone	A

Location	Sampling Time	Water Depth (m)	Current direction	Current speed (ms^{-1})	Monitoring Depth	Temperature (°C)			Salinity (ppt)			DO (mg/l)			DO Saturation (%)			Turbidity (NTU)				Suspended Solids (mg/l)			
						1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	D.A.**	1	2	Ave.*	D.A.**
C1	0733-0741	36.0	W	0.6	*Surface*	18.0	17.9	18.0	27.1	27.2	27.2	7.5	7.4	7.5	91.9	91.2	91.6	3.4	3.4	3.4		6.2	6.2	6.2	
					Middle	18.0	18.1	18.1	27.2	27.3	27.3	7.3	7.3	7.3	89.8	89.3	89.6	3.7	3.7	3.7	3.7	6.4	6.6	6.5	6.6
					Bottom	18.1	18.1	18.1	27.3	27.4	27.4	7.1	7.1	7.1	87.8	87.4	87.6	3.9	3.9	3.9		6.8	7.1	7.0	
E8	0747-0755	20.8	W	0.4	*Surface*	17.9	17.9	17.9	27.1	27.1	27.1	7.5	7.5	7.5	92.7	92.2	92.5	3.5	3.6	3.6		6.6	6.3	6.5	
					Middle	17.9	18.0	18.0	27.2	27.3	27.3	7.4	7.4	7.4	90.5	90.9	90.7	3.8	3.9	3.9	3.7	6.8	7.0	6.9	6.7
					Bottom	18.0	18.1	18.1	27.3	27.4	27.4	7.1	7.2	7.1	87.5	88.1	87.8	3.8	3.8	3.8		6.5	6.8	6.7	
S1	0801-0809	9.4	W	0.4	*Surface*	17.9	18.0	18.0	27.1	27.2	27.2	7.5	7.5	7.5	92.3	91.9	92.1	3.7	3.7	3.7		6.7	6.4	6.6	
					Middle	18.0	18.1	18.1	27.2	27.3	27.3	7.3	7.3	7.3	89.6	89.1	89.4	3.5	3.5	3.5	3.6	6.2	6.3	6.3	6.4
					Bottom	18.1	18.2	18.2	27.4	27.4	27.4	7.1	7.1	7.1	87.4	87.8	87.6	3.6	3.6	3.6		6.5	6.2	6.4	
G1	0815-0823	12.2	W	0.5	*Surface*	17.9	17.8	17.9	27.1	27.2	27.2	7.6	7.5	7.6	93.0	92.7	92.9	3.4	3.4	3.4		5.9	6.2	6.1	
					Middle	17.9	18.0	18.0	27.3	27.4	27.4	7.4	7.4	7.4	91.2	90.7	91.0	3.2	3.2	3.2	3.4	5.8	6.0	5.9	6.2
					Bottom	18.0	18.1	18.1	27.4	27.4	27.4	7.4	7.3	7.4	90.6	90.1	90.4	3.6	3.6	3.6		6.5	6.6	6.6	
E7	0829-0837	13.4	W	0.4	*Surface*	17.9	17.9	17.9	27.1	27.1	27.1	7.7	7.6	7.6	94.0	93.5	93.8	3.3	3.4	3.3		6.1	6.1	6.1	
					Middle	18.0	18.1	18.1	27.2	27.3	27.3	7.5	7.5	7.5	91.9	92.4	92.2	3.5	3.5	3.5	3.5	6.2	6.4	6.3	6.4
					Bottom	18.1	18.1	18.1	27.3	27.4	27.4	7.5	7.4	7.4	91.6	91.2	91.4	3.8	3.7	3.7		6.7	6.6	6.7	
F1	0843-0851	12.0	W	0.6	*Surface*	17.9	17.8	17.9	27.1	27.2	27.2	7.7	7.7	7.7	94.6	94.0	94.3	3.6	3.6	3.6		6.5	6.6	6.6	
					Middle	17.9	18.0	18.0	27.3	27.3	27.3	7.6	7.6	7.6	93.3	93.8	93.6	3.4	3.5	3.4	3.6	6.2	6.2	6.2	6.5
					Bottom	18.0	18.1	18.1	27.4	27.4	27.4	7.5	7.4	7.5	91.9	91.4	91.7	3.7	3.7	3.7		6.6	6.7	6.7	
G3	0858-0906	15.4	W	0.3	*Surface*	17.9	18.0	18.0	27.0	27.1	27.1	7.7	7.6	7.6	94.1	93.6	93.9	3.4	3.5	3.5		6.0	6.3	6.2	
					Middle	18.0	18.1	18.1	27.2	27.3	27.3	7.5	7.4	7.4	91.6	91.2	91.4	3.5	3.5	3.5	3.5	6.4	6.4	6.4	6.3
					Bottom	18.1	18.2	18.2	27.3	27.4	27.4	7.4	7.3	7.4	90.6	90.2	90.4	3.6	3.6	3.6		6.6	6.3	6.5	
E9	0912-0920	19.8	W	0.7	*Surface*	17.9	17.8	17.9	27.1	27.2	27.2	7.6	7.6	7.6	93.6	93.2	93.4	3.5	3.5	3.5		6.0	6.2	6.1	
					Middle	17.9	18.0	18.0	27.3	27.3	27.3	7.5	7.4	7.4	91.6	90.9	91.3	3.8	3.8	3.8	3.7	6.7	6.6	6.7	6.4
					Bottom	18.0	18.1	18.1	27.3	27.4	27.4	7.3	7.3	7.3	89.7	90.1	89.9	3.7	3.7	3.7		6.4	6.2	6.3	
S2	0926-0934	11.4	W	0.4	*Surface*	17.9	17.9	17.9	27.2	27.2	27.2	7.6	7.5	7.5	92.8	92.4	92.6	3.7	3.7	3.7		6.8	6.7	6.8	
					Middle	18.0	18.1	18.1	27.3	27.4	27.4	7.3	7.4	7.3	90.1	90.5	90.3	3.8	3.8	3.8	3.8	7.2	6.8	7.0	7.0
					Bottom	18.1	18.2	18.2	27.4	27.5	27.5	7.2	7.2	7.2	88.7	88.2	88.5	3.9	3.9	3.9		7.0	7.4	7.2	
G2	0940-0948	13.6	W	0.3	*Surface*	18.0	17.9	18.0	27.1	27.2	27.2	7.4	7.3	7.4	90.6	90.1	90.4	4.0	4.0	4.0		7.3	7.3	7.3	
					Middle	18.0	18.0	18.0	27.3	27.3	27.3	7.2	7.2	7.2	88.5	88.0	88.3	3.8	3.8	3.8	3.9	6.8	6.4	6.6	7.0
					Bottom	18.1	18.1	18.1	27.4	27.4	27.4	7.1	7.0	7.0	86.6	86.3	86.5	3.9	3.9	3.9		7.1	7.2	7.2	
S3	0955-1010	10.2	W	0.5	*Surface*	18.0	18.0	18.0	27.1	27.2	27.2	7.5	7.4	7.4	91.6	91.2	91.4	4.2	4.2	4.2		7.0	7.4	7.2	
					Middle	18.0	18.1	18.1	27.2	27.3	27.3	7.1	7.1	7.1	87.5	86.9	87.2	3.7	3.7	3.7	4.0	6.5	6.6	6.6	6.9
					Bottom	18.1	18.1	18.1	27.3	27.4	27.4	7.1	7.1	7.1	87.3	87.8	87.6	4.0	4.0	4.0		6.9	7.0	7.0	

Remark or Obsevation:

Note: * Average ** Depth Average

Annex C5 Post Project Water Quality Monitoring Results during Mid-flood on 8 February 2013

Date:	8-Feb-13
Tide:	Mid-Flood
Weather:	Drizzle
Sea Conditions:	Great Wave
Zone	A

Location	Sampling Time	Water Depth (m)	Current direction	Current speed (ms^{-1})	Monitoring Depth	Temperature (°C)			Salinity (ppt)			DO (mg/l)			DO Saturation (%)			Turbidity (NTU)				Suspended Solids (mg/l)			
						1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	D.A.**	1	2	Ave.*	D.A.**
C1	1415-1431	36.0	W	0.8	*Surface*	17.8	17.9	17.9	27.0	26.9	27.0	7.7	7.7	7.7	93.7	94.1	93.9	3.3	3.2	3.3		6.0	5.9	6.0	
					Middle	17.7	17.7	17.7	27.3	27.2	27.3	7.3	7.3	7.3	89.4	89.2	89.3	3.5	3.5	3.5	3.6	6.4	6.5	6.5	6.5
					Bottom	17.6	17.5	17.6	27.5	27.5	27.5	7.1	7.2	7.2	87.5	87.7	87.6	3.9	3.9	3.9		7.1	6.9	7.0	
E8	1436-1452	20.8	W	0.6	*Surface*	17.0	17.8	17.4	27.0	27.0	27.0	7.7	7.7	7.7	94.6	94.2	94.4	3.3	3.3	3.3		5.9	6.0	6.0	
					Middle	17.9	18.0	18.0	27.1	27.2	27.2	7.5	7.5	7.5	91.8	92.0	91.9	3.7	3.7	3.7	3.6	6.8	6.4	6.6	6.4
					Bottom	17.8	17.7	17.8	27.3	27.3	27.3	7.4	7.4	7.4	90.2	90.0	90.1	3.9	3.9	3.9		6.7	6.7	6.7	
S1	1457-1515	9.8	W	0.9	*Surface*	17.8	17.8	17.8	26.9	26.9	26.9	7.7	7.7	7.7	94.8	94.3	94.6	3.4	3.5	3.4		6.0	6.2	6.1	
					Middle	18.0	18.0	18.0	27.0	26.9	27.0	7.6	7.6	7.6	92.9	93.2	93.1	3.7	3.7	3.7	3.6	6.2	6.3	6.3	6.3
					Bottom	17.9	17.9	17.9	27.4	27.3	27.4	7.4	7.5	7.4	90.9	91.3	91.1	3.8	3.8	3.8		6.6	6.7	6.7	
G1	1520-1536	13.0	W	0.4	*Surface*	17.8	17.8	17.8	27.0	27.0	27.0	7.8	7.7	7.7	95.1	94.6	94.9	3.4	3.4	3.4		6.0	5.8	5.9	
					Middle	17.9	18.0	18.0	27.2	27.2	27.2	7.5	7.5	7.5	91.5	91.9	91.7	3.6	3.6	3.6	3.5	6.4	6.6	6.5	6.3
					Bottom	17.7	17.7	17.7	27.3	27.4	27.4	7.3	7.3	7.3	89.7	89.9	89.8	3.7	3.6	3.6		6.5	6.7	6.6	
E7	1541-1557	13.4	W	0.6	*Surface*	17.9	17.8	17.9	26.9	27.0	27.0	7.9	7.9	7.9	96.2	96.4	96.3	3.4	3.5	3.4		6.3	6.4	6.4	
					Middle	17.9	17.9	17.9	27.2	27.1	27.2	7.5	7.6	7.5	92.2	92.6	92.4	3.6	3.6	3.6	3.6	6.2	6.5	6.4	6.4
					Bottom	17.8	17.7	17.8	27.4	27.3	27.4	7.4	7.3	7.3	90.0	89.7	89.9	3.7	3.7	3.7		6.3	6.4	6.4	
F1	1602-1618	12.6	W	0.6	*Surface*	17.8	17.8	17.8	27.0	26.9	27.0	7.7	7.8	7.7	94.7	95.1	94.9	3.2	3.2	3.2		6.0	5.9	6.0	
					Middle	18.0	18.0	18.0	27.2	27.1	27.2	7.6	7.6	7.6	93.2	92.7	93.0	3.4	3.5	3.4	3.4	6.3	6.3	6.3	6.3
					Bottom	17.8	17.8	17.8	27.3	27.2	27.3	7.4	7.4	7.4	91.1	90.7	90.9	3.6	3.6	3.6		6.6	6.6	6.6	
G3	1623-1639	16.0	W	0.5	*Surface*	17.9	17.9	17.9	26.9	27.0	27.0	7.8	7.7	7.7	93.3	93.8	93.6	3.1	3.2	3.1		5.6	5.7	5.7	
					Middle	17.8	17.9	17.9	27.2	27.3	27.3	7.5	7.5	7.5	91.6	91.5	91.6	3.4	3.4	3.4	3.3	6.1	5.8	6.0	6.0
					Bottom	17.7	17.8	17.8	27.3	27.4	27.4	7.4	7.4	7.4	90.5	90.2	90.4	3.5	3.5	3.5		6.2	6.3	6.3	
E9	1645-1701	20.0	W	0.5	*Surface*	17.9	18.0	18.0	27.0	27.0	27.0	7.8	7.8	7.8	95.1	95.2	95.2	3.3	3.3	3.3		5.9	5.8	5.9	
					Middle	17.9	17.9	17.9	27.2	27.1	27.2	7.5	7.5	7.5	92.2	92.4	92.3	3.5	3.6	3.6	3.5	6.3	6.2	6.3	6.2
					Bottom	17.8	17.8	17.8	27.4	27.4	27.4	7.4	7.3	7.4	90.3	89.9	90.1	3.7	3.7	3.7		6.4	6.7	6.6	
S2	1706-1722	12.4	W	0.6	*Surface*	17.9	17.9	17.9	27.0	26.9	27.0	7.7	7.7	7.7	94.6	94.2	94.4	3.3	3.3	3.3		5.9	6.0	6.0	
					Middle	18.0	17.9	18.0	27.2	27.1	27.2	7.5	7.5	7.5	91.6	91.3	91.5	3.4	3.4	3.4	3.4	6.0	6.3	6.2	6.2
					Bottom	17.7	17.8	17.8	27.3	27.4	27.4	7.3	7.4	7.3	89.8	90.2	90.0	3.6	3.6	3.6		6.5	6.5	6.5	
G2	1727-1743	13.8	W	0.5	*Surface*	18.0	18.0	18.0	27.0	27.0	27.0	7.7	7.7	7.7	94.1	93.7	93.9	3.8	3.8	3.8		6.6	6.5	6.6	
					Middle	17.9	18.0	18.0	27.1	27.1	27.1	7.5	7.5	7.5	91.5	91.8	91.7	3.9	3.8	3.8	3.9	7.0	6.7	6.9	6.8
					Bottom	17.8	17.8	17.8	27.4	27.4	27.4	7.3	7.3	7.3	89.4	89.3	89.4	4.0	4.0	4.0		7.1	7.0	7.1	
S3	1750-1805	10.6	W	0.5	*Surface*	17.9	17.9	17.9	27.0	26.9	27.0	7.5	7.6	7.6	92.4	92.6	92.5	4.1	4.0	4.0		7.2	7.3	7.3	
					Middle	18.0	18.0	18.0	27.1	27.0	27.1	7.4	7.4	7.4	90.2	90.4	90.3	4.1	4.1	4.1	4.0	7.1	7.1	7.1	7.1
					Bottom	17.7	17.8	17.8	27.3	27.4	27.4	7.2	7.2	7.2	88.7	88.4	88.6	3.9	3.9	3.9		6.9	7.0	7.0	

Remark or Obsevation:

Note: * Average ** Depth Average

Annex C6 Post Project Water Quality Monitoring Results during Mid-ebb on 8 February 2013

Date:	8-Feb-13
Tide:	Mid-Ebb
Weather:	Drizzle
Sea Conditions:	Great Wave
Zone	A

Location	Sampling Time	Water Depth (m)	Current direction	Current speed (ms^{-1})	Monitoring Depth	Temperature (°C)			Salinity (ppt)			DO (mg/l)			DO Saturation (%)			Turbidity (NTU)				Suspended Solids (mg/l)			
						1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	D.A.**	1	2	Ave.*	D.A.**
C1	0915-0933	35.4	E	0.9	*Surface*	17.9	17.9	17.9	26.9	26.8	26.9	7.7	7.6	7.7	93.9	93.4	93.7	3.4	3.3	3.4		6.0	6.1	6.1	
					Middle	17.9	18.0	18.0	27.0	27.0	27.0	7.4	7.4	7.4	90.6	91.0	90.8	3.5	3.5	3.5	3.5	6.4	6.2	6.3	6.3
					Bottom	18.1	18.0	18.1	27.1	27.2	27.2	7.2	7.2	7.2	88.4	88.7	88.6	3.7	3.7	3.7		6.4	6.5	6.5	
E8	0938-0955	20.2	E	0.8	*Surface*	17.9	17.8	17.9	26.9	26.9	26.9	7.7	7.7	7.7	94.8	94.3	94.6	3.4	3.5	3.4		5.9	6.1	6.0	
					Middle	17.9	17.9	17.9	26.9	27.0	27.0	7.6	7.6	7.6	93.3	93.0	93.2	3.5	3.6	3.5	3.6	6.4	6.2	6.3	6.3
					Bottom	17.9	18.0	18.0	27.0	27.1	27.1	7.4	7.4	7.4	91.2	90.6	90.9	3.7	3.7	3.7		6.4	6.7	6.6	
S1	1001-1015	9.0	E	0.8	*Surface*	17.9	17.8	17.9	26.9	26.9	26.9	7.6	7.6	7.6	92.6	93.0	92.8	3.6	3.6	3.6		6.0	6.3	6.2	
					Middle	17.9	17.8	17.9	26.9	26.9	26.9	7.5	7.5	7.5	91.9	91.3	91.6	3.7	3.8	3.7	3.7	6.5	6.8	6.7	6.6
					Bottom	17.9	17.9	17.9	26.9	27.0	27.0	7.4	7.3	7.4	90.4	89.9	90.2	3.9	3.8	3.8		7.2	6.8	7.0	
G1	1018-1031	12.2	E	0.8	*Surface*	17.9	17.9	17.9	26.8	26.9	26.9	7.7	7.8	7.8	94.7	95.3	95.0	3.5	3.5	3.5		6.4	6.2	6.3	
					Middle	17.9	17.9	17.9	26.9	27.0	27.0	7.6	7.6	7.6	93.6	93.1	93.4	3.6	3.7	3.7	3.6	6.6	6.6	6.6	6.6
					Bottom	18.0	17.9	18.0	27.0	27.0	27.0	7.5	7.6	7.6	92.3	92.8	92.6	3.8	3.8	3.8		6.9	7.0	7.0	
E7	1035-1048	13.0	E	0.8	*Surface*	17.9	17.8	17.9	26.9	26.9	26.9	7.8	7.8	7.8	94.9	95.5	95.2	3.5	3.5	3.5		6.5	6.4	6.5	
					Middle	17.9	17.9	17.9	26.9	27.0	27.0	7.6	7.6	7.6	93.2	92.9	93.1	3.7	3.7	3.7	3.7	6.6	6.5	6.6	6.6
					Bottom	18.0	17.9	18.0	27.0	27.0	27.0	7.5	7.4	7.5	91.7	91.1	91.4	3.8	3.8	3.8		6.7	6.7	6.7	
F1	1055-1107	12.0	E	0.8	*Surface*	17.9	18.0	18.0	26.9	26.9	26.9	7.7	7.7	7.7	94.0	94.4	94.2	3.2	3.1	3.2		5.8	5.6	5.7	
					Middle	18.0	17.9	18.0	26.9	27.0	27.0	7.6	7.5	7.6	93.0	92.4	92.7	3.3	3.4	3.4	3.4	6.1	6.2	6.2	6.1
					Bottom	18.0	18.0	18.0	27.0	27.0	27.0	7.4	7.4	7.4	90.2	90.6	90.4	3.6	3.5	3.5		6.4	6.4	6.4	
G3	1110-1123	15.2	E	0.9	*Surface*	17.9	18.0	18.0	26.9	27.0	27.0	7.5	7.6	7.6	92.3	92.9	92.6	3.1	3.2	3.1		5.8	5.9	5.9	
					Middle	18.0	18.0	18.0	27.0	27.0	27.0	7.4	7.4	7.4	90.9	90.4	90.7	3.2	3.3	3.3	3.3	6.0	6.4	6.2	6.1
					Bottom	18.1	18.0	18.1	27.1	27.1	27.1	7.3	7.3	7.3	89.6	89.1	89.4	3.4	3.4	3.4		6.2	6.3	6.3	
E9	1129-1146	19.6	E	0.8	*Surface*	18.0	18.0	18.0	26.9	26.9	26.9	7.8	7.7	7.7	95.0	94.5	94.8	3.4	3.4	3.4		5.9	5.8	5.9	
					Middle	18.1	18.1	18.1	27.0	27.0	27.0	7.7	7.6	7.6	93.7	93.1	93.4	3.4	3.6	3.5	3.5	6.3	6.2	6.3	6.2
					Bottom	18.2	18.2	18.2	27.1	27.2	27.2	7.5	7.5	7.5	92.0	91.4	91.7	3.7	3.7	3.7		6.4	6.7	6.6	
S2	1151-1203	11.6	E	0.9	*Surface*	18.0	18.1	18.1	26.9	27.0	27.0	7.7	7.6	7.6	93.7	93.2	93.5	3.5	3.5	3.5		5.9	6.0	6.0	
					Middle	18.0	18.1	18.1	27.0	27.0	27.0	7.5	7.5	7.5	91.9	91.5	91.7	3.7	3.8	3.7	3.7	6.0	6.3	6.2	6.2
					Bottom	18.1	18.2	18.2	27.1	27.0	27.1	7.4	7.3	7.3	90.2	89.7	90.0	3.8	3.9	3.9		6.5	6.5	6.5	
G2	1206-1221	13.4	E	0.8	*18*	18.0	18.0	18.0	26.9	27.0	27.0	7.5	7.6	7.5	92.1	92.4	92.3	3.9	3.9	3.9		6.6	6.5	6.6	
					18.1	18.1	18.0	18.1	27.0	27.1	27.1	7.4	7.4	7.4	91.1	90.7	90.9	4.0	4.1	4.0	4.0	7.0	6.7	6.9	6.8
					18.1	18.1	18.2	18.2	27.1	27.2	27.2	7.3	7.3	7.3	89.6	89.2	89.4	4.2	4.1	4.1		7.1	7.0	7.1	
S3	1227-1245	9.8	E	0.9	*Surface*	18.1	18.0	18.1	26.9	27.0	27.0	7.5	7.5	7.5	91.8	91.5	91.7	4.2	4.2	4.2		7.2	7.3	7.3	
					Middle	18.1	18.0	18.1	27.0	27.0	27.0	7.4	7.4	7.4	90.3	90.7	90.5	4.3	4.2	4.3	4.3	7.1	7.1	7.1	7.1
					Bottom	18.1	18.1	18.1	27.0	27.1	27.1	7.3	7.3	7.3	89.4	88.9	89.2	4.3	4.4	4.3		6.9	7.0	7.0	

Remark or Obsevation:

Note: * Average ** Depth Average

Annex C7 Post Project Water Quality Monitoring Results during Mid-flood on 15 February 2013

Date:	15-Feb-13
Tide:	Mid-Flood
Weather:	Cloudy
Sea Conditions:	Small Wave
Zone	B

Location	Sampling Time	Water Depth (m)	Current direction	Current speed (ms^{-1})	Monitoring Depth	Temperrature (°C)			Salinity (ppt)			DO (mg/l)			DO Saturation (%)			Turbidity (NTU)				Suspended Solids (mg/l)			
						1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	D.A.**	1	2	Ave.*	D.A.**
E1	0830-0846	45.8	W	0.7	*Surface*	18.0	17.9	18.0	27.0	27.0	27.0	7.3	7.3	7.3	89.3	90.0	89.7	2.1	2.1	2.1		3.8	3.8	3.8	
					Middle	18.0	18.1	18.1	27.1	27.1	27.1	7.1	7.2	7.1	87.3	87.7	87.5	2.3	2.2	2.3	2.3	4.0	3.9	4.0	4.0
					Bottom	18.1	18.1	18.1	27.2	27.1	27.2	7.0	7.0	7.0	86.0	85.5	85.8	2.5	2.5	2.5		4.2	4.4	4.3	
G7	0851-0907	32.0	W	0.8	*Surface*	17.9	18.0	18.0	27.0	27.0	27.0	7.3	7.2	7.2	88.8	88.5	88.7	2.2	2.2	2.2		3.8	3.7	3.8	
					Middle	18.0	18.1	18.1	27.1	27.2	27.2	7.1	7.1	7.1	87.0	86.7	86.9	2.4	2.4	2.4	2.4	4.3	4.2	4.3	4.2
					Bottom	18.1	18.1	18.1	27.2	27.2	27.2	7.0	6.9	6.9	85.3	84.9	85.1	2.6	2.6	2.6		4.6	4.4	4.5	
B3	0914-0929	13.2	W	0.7	*Surface*	17.9	17.9	17.9	27.1	27.0	27.1	7.2	7.2	7.2	88.1	87.8	88.0	2.1	2.1	2.1		3.8	3.7	3.8	
					Middle	17.9	18.0	18.0	27.1	27.1	27.1	7.0	7.0	7.0	86.2	85.7	86.0	2.3	2.3	2.3	2.3	3.9	4.0	4.0	4.0
					Bottom	18.0	18.0	18.0	27.2	27.1	27.2	6.9	6.9	6.9	84.8	84.4	84.6	2.4	2.5	2.4		4.2	4.2	4.2	
B2	0935-0949	15.8	W	0.6	*Surface*	18.0	17.9	18.0	27.1	27.0	27.1	7.2	7.2	7.2	87.9	88.3	88.1	2.4	2.3	2.3		3.8	4.0	3.9	
					Middle	18.0	18.0	18.0	27.1	27.1	27.1	7.1	7.1	7.1	86.8	86.4	86.6	2.5	2.5	2.5	2.5	4.4	4.2	4.3	4.2
					Bottom	18.1	18.1	18.1	27.2	27.1	27.2	6.9	7.0	7.0	85.1	85.6	85.4	2.6	2.6	2.6		4.5	4.3	4.4	
E6	1014-1030	26.6	W	0.7	*Surface*	18.0	18.0	18.0	27.1	27.0	27.1	7.1	7.2	7.1	87.2	87.8	87.5	2.3	2.2	2.2		4.1	4.0	4.1	
					Middle	18.1	18.1	18.1	27.1	27.1	27.1	7.0	7.0	7.0	85.2	85.5	85.4	2.3	2.4	2.4	2.4	4.0	4.2	4.1	4.3
					Bottom	18.1	18.2	18.2	27.1	27.2	27.2	6.8	6.8	6.8	83.4	83.9	83.7	2.6	2.6	2.6		4.7	4.7	4.7	
B1	0955-1009	11.4	W	0.6	*Surface*	18.0	18.0	18.0	27.1	27.0	27.1	7.1	7.1	7.1	87.5	87.1	87.3	2.0	2.1	2.1		3.7	3.7	3.7	
					Middle	18.1	18.0	18.1	27.1	27.0	27.1	7.1	7.0	7.0	86.5	85.9	86.2	2.1	2.2	2.1	2.2	3.6	3.5	3.6	3.8
					Bottom	18.1	18.0	18.1	27.1	27.1	27.1	7.0	7.0	7.0	85.8	85.3	85.6	2.3	2.4	2.3		4.2	4.0	4.1	
G4	1030-1047	25.0	W	0.7	*Surface*	18.0	18.0	18.0	27.0	27.0	27.0	7.2	7.2	7.2	88.0	88.6	88.3	2.5	2.5	2.5		4.3	4.2	4.3	
					Middle	18.1	18.1	18.1	27.1	27.0	27.1	7.0	7.1	7.1	86.3	86.8	86.6	2.6	2.6	2.6	2.6	4.7	4.6	4.7	4.6
					Bottom	18.1	18.2	18.2	27.1	27.2	27.2	7.0	6.9	7.0	85.6	85.0	85.3	2.7	2.8	2.7		4.6	4.9	4.8	
E2	1051-1104	10.8	W	0.6	*Surface*	18.0	17.9	18.0	27.1	27.0	27.1	7.1	7.1	7.1	86.9	87.3	87.1	2.5	2.6	2.6		4.6	4.6	4.6	
					Middle	18.0	18.0	18.0	27.1	27.0	27.1	7.0	6.9	6.9	85.3	84.9	85.1	2.8	2.8	2.8	2.7	5.1	4.9	5.0	4.9
					Bottom	18.0	18.1	18.1	27.1	27.1	27.1	6.9	6.8	6.8	84.3	83.7	84.0	2.9	2.9	2.9		5.1	5.3	5.2	
C2	1111-1128	30.6	W	0.6	*Surface*	18.0	18.0	18.0	27.1	27.1	27.1	7.3	7.3	7.3	89.4	89.8	89.6	2.2	2.2	2.2		3.8	4.0	3.9	
					Middle	18.1	18.1	18.1	27.1	27.2	27.2	7.2	7.1	7.2	88.0	87.4	87.7	2.3	2.3	2.3	2.3	4.0	3.9	4.0	4.1
					Bottom	18.1	18.2	18.2	27.2	27.2	27.2	7.0	7.0	7.0	86.1	85.8	86.0	2.4	2.5	2.5		4.3	4.3	4.3	
F1	1135-1148	9.2	W	0.6	*Surface*	18.0	18.0	18.0	27.0	27.0	27.0	7.2	7.2	7.2	87.6	88.1	87.9	2.8	2.8	2.8		4.7	5.1	4.9	
					Middle	18.0	18.0	18.0	27.0	27.0	27.0	7.0	7.1	7.0	86.2	86.6	86.4	3.0	3.0	3.0	3.0	5.4	5.4	5.4	5.3
					Bottom	18.1	18.0	18.1	27.1	27.1	27.1	6.9	6.9	6.9	84.3	84.7	84.5	3.2	3.1	3.2		5.5	5.8	5.7	
G3	1152-1206	13.8	W	0.6	*Surface*	18.1	18.0	18.1	27.1	27.0	27.1	7.1	7.1	7.1	86.8	87.4	87.1	3.0	2.9	2.9		5.2	5.3	5.3	
					Middle	18.1	18.1	18.1	27.1	27.1	27.1	7.0	7.0	7.0	85.9	85.3	85.6	3.1	3.1	3.1	3.1	5.4	5.2	5.3	5.5
					Bottom	18.1	18.2	18.2	27.1	27.2	27.2	6.8	6.8	6.8	83.5	83.9	83.7	3.2	3.3	3.2		5.8	5.8	5.8	
E9	1210-1226	20.2	W	0.5	*Surface*	18.0	18.1	18.1	27.1	27.0	27.1	7.0	7.1	7.0	86.0	86.5	86.3	3.1	3.1	3.1		5.4	5.4	5.4	
					Middle	18.1	18.2	18.2	27.1	27.2	27.2	6.9	6.9	6.9	85.1	84.6	84.9	3.2	3.3	3.3	3.2	5.8	5.9	5.9	5.7
					Bottom	18.2	18.2	18.2	27.2	27.2	27.2	6.8	6.8	6.8	83.8	83.3	83.6	3.4	3.4	3.4		5.7	6.0	5.9	

Remark or Obsevation:

Note: * Average ** Depth Average

Annex C8 Post Project Water Quality Monitoring Results during Mid-ebb on 15 February 2013

Date:	15-Feb-13
Tide:	Mid-Ebb
Weather:	Sunny
Sea Conditions:	Small Wave
Zone	B

Location	Sampling Time	Water Depth (m)	Current direction	Current speed (ms^{-1})	Monitoring Depth	Temperrature (°C)			Salinity (ppt)			DO (mg/l)			DO Saturation (%)			Turbidity (NTU)				Suspended Solids (mg/l)			
						1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	D.A.**	1	2	Ave.*	D.A.**
E1	1400-1414	45.2	E	0.8	*Surface*	18.1	18.0	18.1	27.0	27.0	27.0	7.3	7.3	7.3	89.3	89.4	89.4	2.4	2.4	2.4		4.4	4.4	4.4	
					Middle	18.0	18.0	18.0	27.2	27.1	27.2	7.1	7.0	7.0	86.4	86.1	86.3	2.3	2.4	2.4	2.4	4.0	4.1	4.1	4.4
					Bottom	17.9	18.0	18.0	27.3	27.3	27.3	6.9	7.0	7.0	85.0	85.3	85.2	2.6	2.6	2.6		4.7	4.5	4.6	
G7	1420-1435	31.6	E	0.7	*Surface*	18.1	18.0	18.1	27.1	27.0	27.1	7.2	7.2	7.2	88.8	88.5	88.7	2.3	2.2	2.3		4.2	4.0	4.1	
					Middle	18.0	18.0	18.0	27.2	27.1	27.2	7.2	7.2	7.2	88.1	87.7	87.9	2.4	2.5	2.5	2.5	4.4	4.5	4.5	4.4
					Bottom	18.0	18.0	18.0	27.2	27.1	27.2	6.9	6.9	6.9	84.8	84.3	84.6	2.7	2.7	2.7		4.8	4.6	4.7	
B3	1440-1455	13.2	E	0.8	*Surface*	18.0	18.0	18.0	27.1	27.1	27.1	7.3	7.3	7.3	89.0	89.3	89.2	2.3	2.3	2.3		4.2	4.3	4.3	
					Middle	17.9	17.9	17.9	27.2	27.2	27.2	7.2	7.2	7.2	88.6	88.8	88.7	2.5	2.5	2.5	2.5	4.2	4.4	4.3	4.4
					Bottom	17.9	18.0	18.0	27.2	27.2	27.2	7.2	7.1	7.1	87.7	87.2	87.5	2.7	2.7	2.7		4.6	4.7	4.7	
B2	1500-1513	15.6	E	0.6	*Surface*	18.1	18.1	18.1	27.1	27.1	27.1	7.1	7.1	7.1	87.4	87.0	87.2	2.3	2.3	2.3		4.1	4.0	4.1	
					Middle	17.9	18.0	18.0	27.1	27.2	27.2	7.0	7.0	7.0	86.3	86.1	86.2	2.2	2.3	2.2	2.4	4.0	4.0	4.0	4.3
					Bottom	17.9	17.9	17.9	27.1	27.1	27.1	7.0	7.1	7.0	86.2	86.4	86.3	2.6	2.7	2.6		4.8	4.7	4.8	
E6	1540-1553	26.4	E	0.6	*Surface*	18.1	18.1	18.1	27.0	27.1	27.1	7.1	7.2	7.2	87.5	87.8	87.7	2.4	2.4	2.4		4.0	4.1	4.1	
					Middle	17.9	17.9	17.9	27.1	27.2	27.2	7.1	7.0	7.1	86.6	86.3	86.5	2.4	2.4	2.4	2.5	4.2	4.3	4.3	4.3
					Bottom	18.0	17.9	18.0	27.3	27.3	27.3	7.0	7.0	7.0	85.5	85.2	85.4	2.7	2.7	2.7		4.7	4.6	4.7	
B1	1520-1534	11.0	E	0.5	*Surface*	18.0	18.1	18.1	27.1	27.1	27.1	7.2	7.1	7.1	87.8	87.4	87.6	2.1	2.2	2.2		3.7	3.8	3.8	
					Middle	18.0	18.0	18.0	27.0	27.1	27.1	7.1	7.1	7.1	87.0	86.9	87.0	2.3	2.3	2.3	2.3	4.0	4.0	4.0	4.0
					Bottom	17.9	18.0	18.0	27.1	27.2	27.2	7.1	7.1	7.1	86.4	86.8	86.6	2.4	2.4	2.4		4.1	4.2	4.2	
G4	1558-1613	25.2	E	0.8	*Surface*	18.1	18.0	18.1	27.1	27.0	27.1	7.3	7.3	7.3	89.0	89.3	89.2	2.5	2.5	2.5		4.3	4.4	4.4	
					Middle	17.9	18.0	18.0	27.1	27.1	27.1	7.2	7.1	7.1	87.8	87.4	87.6	2.6	2.6	2.6	2.7	4.7	4.6	4.7	4.7
					Bottom	18.0	18.0	18.0	27.2	27.2	27.2	7.1	7.1	7.1	86.9	86.7	86.8	2.9	2.8	2.9		5.2	5.0	5.1	
E2	1620-1635	10.4	E	0.6	*Surface*	18.0	18.0	18.0	27.0	27.0	27.0	7.3	7.3	7.3	89.1	89.5	89.3	2.5	2.6	2.5		4.6	4.3	4.5	
					Middle	18.0	18.1	18.1	27.1	27.0	27.1	7.2	7.2	7.2	88.6	88.4	88.5	2.6	2.6	2.6	2.6	4.6	4.7	4.7	4.7
					Bottom	17.9	17.9	17.9	27.1	27.1	27.1	7.2	7.2	7.2	87.9	88.1	88.0	2.7	2.7	2.7		5.0	4.9	5.0	
C2	1640-1654	29.2	E	0.6	*Surface*	18.1	18.1	18.1	27.1	27.1	27.1	7.4	7.4	7.4	90.1	90.5	90.3	2.4	2.4	2.4		4.2	4.1	4.2	
					Middle	17.9	18.0	18.0	27.2	27.1	27.2	7.2	7.3	7.2	88.8	88.9	88.9	2.4	2.4	2.4	2.5	4.3	4.3	4.3	4.4
					Bottom	18.0	18.0	18.0	27.2	27.2	27.2	7.1	7.1	7.1	87.4	87.2	87.3	2.6	2.7	2.6		4.8	4.7	4.8	
F1	1700-1714	8.6	E	0.6	*Surface*	18.1	18.2	18.2	27.1	27.0	27.1	7.2	7.2	7.2	88.0	88.4	88.2	2.8	2.9	2.9		5.2	5.2	5.2	
					Middle	18.1	18.1	18.1	27.1	27.1	27.1	7.2	7.2	7.2	87.7	88.0	87.9	2.8	2.8	2.8	2.9	5.0	4.8	4.9	5.1
					Bottom	18.0	17.9	18.0	27.1	27.1	27.1	7.1	7.0	7.1	86.7	86.3	86.5	2.9	3.0	2.9		5.2	5.4	5.3	
G3	1719-1734	13.6	E	0.7	*Surface*	18.1	18.1	18.1	27.0	27.0	27.0	7.2	7.2	7.2	88.8	88.6	88.7	2.9	2.9	2.9		5.4	5.2	5.3	
					Middle	18.0	17.9	18.0	27.1	27.1	27.1	7.2	7.2	7.2	89.3	89.0	89.2	3.0	3.1	3.0	3.0	5.3	5.3	5.3	5.3
					Bottom	17.9	17.9	17.9	27.2	27.1	27.2	7.1	7.1	7.1	86.4	86.8	86.6	3.1	3.1	3.1		5.4	5.3	5.4	
E9	1739-1752	19.8	E	0.5	*Surface*	18.2	18.1	18.2	27.1	27.0	27.1	7.1	7.0	7.0	86.6	86.1	86.4	3.2	3.1	3.1		5.6	5.4	5.5	
					Middle	17.9	18.0	18.0	27.1	27.2	27.2	6.9	7.0	7.0	85.1	85.6	85.4	3.2	3.2	3.2	3.2	5.5	5.7	5.6	5.6
					Bottom	17.8	17.9	17.9	27.2	27.2	27.2	6.9	6.9	6.9	84.2	84.6	84.4	3.3	3.3	3.3		5.6	5.6	5.6	

Remark or Obsevation:

Note: * Average ** Depth Average

Annex C9 Post Project Water Quality Monitoring Results during Mid-flood on 18 February 2013

Date:	18-Feb-13
Tide:	Mid-Flood
Weather:	Cloudy
Sea Conditions:	Small Wave
Zone	B

Location	Sampling Time	Water Depth (m)	Current direction	Current speed (ms^{-1})	Monitoring Depth	Temperrature (°C)			Salinity (ppt)			DO (mg/l)			DO Saturation (%)			Turbidity (NTU)				Suspended Solids (mg/l)			
						1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	D.A.**	1	2	Ave.*	D.A.**
E1	1000-1016	46.0	W	0.6	*Surface*	17.8	17.8	17.8	27.1	27.2	27.2	7.4	7.4	7.4	90.2	90.8	90.5	2.1	2.1	2.1		3.4	3.7	3.6	
					Middle	17.9	17.8	17.9	27.2	27.3	27.3	7.2	7.2	7.2	88.1	88.5	88.3	2.2	2.2	2.2	2.2	3.8	3.9	3.9	3.8
					Bottom	17.9	18.0	18.0	27.3	27.4	27.4	7.1	7.1	7.1	86.8	86.3	86.6	2.4	2.5	2.4		4.0	4.0	4.0	
G7	1021-1037	32.2	W	0.7	*Surface*	17.8	17.9	17.9	27.0	27.1	27.1	7.3	7.3	7.3	89.7	89.4	89.6	2.2	2.1	2.2		3.6	3.7	3.7	
					Middle	17.9	17.9	17.9	27.1	27.2	27.2	7.2	7.2	7.2	87.9	87.5	87.7	2.3	2.4	2.3	2.3	4.0	4.1	4.1	4.0
					Bottom	18.0	18.1	18.1	27.2	27.3	27.3	7.0	7.0	7.0	86.0	85.8	85.9	2.5	2.5	2.5		4.2	4.5	4.4	
B3	1044-1059	13.4	W	0.8	*Surface*	17.8	17.9	17.9	27.1	27.2	27.2	7.3	7.2	7.3	89.0	88.6	88.8	2.0	2.1	2.1		3.5	3.5	3.5	
					Middle	17.8	17.9	17.9	27.3	27.4	27.4	7.1	7.1	7.1	87.0	86.5	86.8	2.2	2.3	2.2	2.2	3.7	3.9	3.8	3.8
					Bottom	17.9	18.0	18.0	27.4	27.4	27.4	7.0	7.0	7.0	85.6	85.2	85.4	2.4	2.4	2.4		4.0	4.3	4.2	
B2	1105-1119	16.2	W	0.6	*Surface*	17.8	17.9	17.9	27.0	27.1	27.1	7.3	7.3	7.3	88.7	89.1	88.9	2.3	2.3	2.3		3.8	4.0	3.9	
					Middle	17.9	18.0	18.0	27.2	27.2	27.2	7.2	7.1	7.1	87.6	87.3	87.5	2.5	2.4	2.4	2.4	4.2	4.3	4.3	4.2
					Bottom	18.0	18.1	18.1	27.2	27.3	27.3	7.0	7.1	7.0	85.9	86.4	86.2	2.6	2.5	2.6		4.5	4.4	4.5	
E6	1144-1200	26.8	W	0.6	*Surface*	17.8	17.7	17.8	27.1	27.1	27.1	7.2	7.2	7.2	88.1	88.6	88.4	2.2	2.2	2.2		3.6	3.6	3.6	
					Middle	17.8	17.9	17.9	27.1	27.2	27.2	7.0	7.1	7.0	86.0	86.4	86.2	2.3	2.3	2.3	2.3	4.1	4.1	4.1	4.0
					Bottom	17.9	17.9	17.9	27.3	27.3	27.3	6.9	6.9	6.9	84.2	84.7	84.5	2.5	2.6	2.5		4.1	4.3	4.2	
B1	1125-1139	11.8	W	0.5	*Surface*	17.8	17.8	17.8	27.1	27.2	27.2	7.2	7.2	7.2	88.4	88.0	88.2	2.1	2.1	2.1		3.6	3.9	3.8	
					Middle	17.8	17.9	17.9	27.2	27.3	27.3	7.1	7.2	7.2	87.4	86.8	87.1	2.2	2.2	2.2	2.2	3.7	3.8	3.8	3.8
					Bottom	17.9	18.0	18.0	27.3	27.4	27.4	7.1	7.0	7.1	86.5	86.0	86.3	2.3	2.3	2.3		3.8	4.0	3.9	
G4	1204-1221	25.2	W	0.7	*Surface*	17.8	17.8	17.8	27.1	27.2	27.2	7.3	7.3	7.3	88.9	89.5	89.2	2.4	2.4	2.4		4.1	4.1	4.1	
					Middle	17.8	17.9	17.9	27.2	27.3	27.3	7.1	7.2	7.1	87.1	87.6	87.4	2.6	2.5	2.5	2.6	4.3	4.4	4.4	4.4
					Bottom	17.9	18.0	18.0	27.3	27.4	27.4	7.1	7.0	7.0	86.4	85.8	86.1	2.7	2.7	2.7		5.0	4.6	4.8	
E2	1225-1238	10.8	W	0.6	*Surface*	17.8	17.9	17.9	27.0	27.1	27.1	7.2	7.2	7.2	87.8	88.1	88.0	2.5	2.6	2.5		4.0	3.9	4.0	
					Middle	17.9	17.9	17.9	27.1	27.2	27.2	7.0	7.0	7.0	86.2	85.8	86.0	2.8	2.7	2.7	2.7	4.5	4.6	4.6	4.4
					Bottom	18.0	18.0	18.0	27.2	27.3	27.3	7.0	6.9	6.9	85.1	84.5	84.8	2.8	2.9	2.8		4.8	4.8	4.8	
C2	1244-1300	30.8	W	0.5	*Surface*	17.8	17.7	17.8	27.1	27.1	27.1	7.4	7.4	7.4	90.2	90.7	90.5	2.1	2.2	2.1		3.7	3.9	3.8	
					Middle	17.8	17.9	17.9	27.2	27.3	27.3	7.3	7.2	7.2	88.9	88.3	88.6	2.2	2.3	2.2	2.3	4.0	4.2	4.1	4.1
					Bottom	17.9	18.0	18.0	27.3	27.4	27.4	7.1	7.1	7.1	86.9	86.5	86.7	2.4	2.4	2.4		4.4	4.2	4.3	
F1	1305-1322	9.6	W	0.5	*Surface*	17.9	17.8	17.9	27.1	27.1	27.1	7.2	7.3	7.3	88.5	89.0	88.8	2.8	2.7	2.7		4.5	4.6	4.6	
					Middle	17.9	17.9	17.9	27.2	27.3	27.3	7.1	7.1	7.1	87.0	87.4	87.2	2.9	3.0	2.9	2.9	4.8	4.9	4.9	4.8
					Bottom	17.9	18.0	18.0	27.3	27.4	27.4	7.0	7.0	7.0	85.1	85.4	85.3	3.1	3.1	3.1		5.0	5.0	5.0	
G3	1326-1339	14.2	W	0.6	*Surface*	17.8	17.9	17.9	27.0	27.1	27.1	7.2	7.2	7.2	87.6	88.3	88.0	2.9	2.9	2.9		5.0	4.9	5.0	
					Middle	17.9	17.9	17.9	27.1	27.2	27.2	7.1	7.0	7.1	86.8	86.2	86.5	3.1	3.0	3.0	3.0	5.1	5.2	5.2	5.2
					Bottom	18.0	18.0	18.0	27.2	27.3	27.3	7.9	7.9	7.9	96.6	96.9	96.8	3.2	3.2	3.2		5.3	5.5	5.4	
E9	1345-1400	20.6	W	0.4	*Surface*	17.9	17.8	17.9	27.1	27.2	27.2	7.1	7.1	7.1	86.9	87.4	87.2	3.1	3.0	3.0		5.0	5.1	5.1	
					Middle	17.9	18.0	18.0	27.3	27.4	27.4	7.0	7.0	7.0	85.9	85.4	85.7	3.2	3.2	3.2	3.2	5.3	5.3	5.3	5.4
					Bottom	18.0	18.1	18.1	27.4	27.4	27.4	6.9	6.9	6.9	84.6	84.1	84.4	3.3	3.4	3.3		5.6	5.8	5.7	

Remark or Obsevation:

Note: * Average ** Depth Average

Annex C10 Post Project Water Quality Monitoring Results during Mid-ebb on 18 February 2013

Date:	18-Feb-13
Tide:	Mid-Ebb
Weather:	Cloudy
Sea Conditions:	Small Wave
Zone	B

Location	Sampling Time	Water Depth (m)	Current direction	Current speed (ms^{-1})	Monitoring Depth	Temperrature (°C)			Salinity (ppt)			DO (mg/l)			DO Saturation (%)			Turbidity (NTU)				Suspended Solids (mg/l)			
						1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	D.A.**	1	2	Ave.*	D.A.**
E1	1530-1545	44.9	E	0.5	*Surface*	17.8	17.9	17.9	27.1	27.1	27.1	7.3	7.4	7.3	89.2	90.0	89.6	2.1	2.1	2.1		3.4	3.7	3.6	
					Middle	17.9	17.9	17.9	27.2	27.3	27.3	7.2	7.1	7.2	87.8	87.3	87.6	2.3	2.3	2.3	2.3	3.7	3.6	3.7	3.7
					Bottom	18.0	18.0	18.0	27.4	27.4	27.4	7.0	7.0	7.0	85.7	86.1	85.9	2.4	2.4	2.4		3.9	3.9	3.9	
G7	1551-1607	31.8	E	0.6	*Surface*	17.8	17.9	17.9	27.0	27.0	27.0	7.3	7.3	7.3	88.9	89.4	89.2	2.2	2.2	2.2		3.7	3.5	3.6	
					Middle	17.9	18.0	18.0	27.1	27.2	27.2	7.2	7.1	7.1	87.6	87.0	87.3	2.3	2.4	2.4	2.4	3.9	3.9	3.9	3.9
					Bottom	18.1	18.0	18.1	27.3	27.3	27.3	7.0	7.0	7.0	85.6	85.2	85.4	2.5	2.6	2.6		4.0	4.2	4.1	
B3	1614-1629	12.8	E	0.8	*Surface*	17.8	17.8	17.8	27.1	27.1	27.1	7.2	7.3	7.2	88.3	88.7	88.5	2.1	2.2	2.1		3.4	3.4	3.4	
					Middle	17.8	17.9	17.9	27.3	27.3	27.3	7.1	7.1	7.1	87.2	86.7	87.0	2.2	2.3	2.3	2.3	3.6	3.7	3.7	3.7
					Bottom	18.0	17.9	18.0	27.4	27.3	27.4	7.0	7.0	7.0	85.9	85.4	85.7	2.4	2.5	2.4		4.0	4.2	4.1	
B2	1635-1650	15.9	E	0.6	*Surface*	17.8	17.8	17.8	27.0	27.1	27.1	7.3	7.3	7.3	89.3	88.9	89.1	2.3	2.4	2.4		3.8	4.0	3.9	
					Middle	17.8	17.9	17.9	27.2	27.2	27.2	7.2	7.1	7.2	87.9	87.3	87.6	2.5	2.5	2.5	2.5	4.2	4.3	4.3	4.0
					Bottom	18.0	17.9	18.0	27.3	27.3	27.3	7.1	7.0	7.0	86.3	85.9	86.1	2.6	2.7	2.7		3.8	3.9	3.9	
E6	1714-1730	26.2	E	0.6	*Surface*	17.9	17.8	17.9	27.0	27.1	27.1	7.2	7.2	7.2	87.7	88.2	88.0	2.2	2.2	2.2		3.6	3.5	3.6	
					Middle	17.9	17.9	17.9	27.2	27.2	27.2	7.0	7.0	7.0	86.1	85.6	85.9	2.3	2.4	2.3	2.4	3.8	3.8	3.8	3.9
					Bottom	18.0	17.9	18.0	27.3	27.4	27.4	6.9	6.9	6.9	84.3	83.8	84.1	2.5	2.5	2.5		4.2	4.2	4.2	
B1	1655-1709	10.9	E	0.6	*Surface*	17.8	17.9	17.9	27.1	27.2	27.2	7.2	7.2	7.2	88.5	88.1	88.3	2.1	2.2	2.1		3.4	3.4	3.4	
					Middle	17.9	17.9	17.9	27.2	27.2	27.2	7.1	7.1	7.1	87.3	86.7	87.0	2.3	2.3	2.3	2.3	3.6	3.7	3.7	3.6
					Bottom	17.9	18.0	18.0	27.3	27.4	27.4	7.0	7.0	7.0	85.6	85.2	85.4	2.3	2.4	2.4		3.7	3.9	3.8	
G4	1734-1751	24.7	E	0.6	*Surface*	17.7	17.8	17.8	27.2	27.2	27.2	7.2	7.3	7.3	88.9	89.2	89.1	2.4	2.5	2.4		3.9	4.0	4.0	
					Middle	17.9	17.9	17.9	27.3	27.3	27.3	7.1	7.1	7.1	86.7	86.3	86.5	2.5	2.6	2.6	2.6	4.1	4.2	4.2	4.2
					Bottom	18.0	18.0	18.0	27.4	27.5	27.5	6.9	6.9	6.9	84.9	84.4	84.7	2.7	2.7	2.7		4.4	4.6	4.5	
E2	1755-1804	10.2	E	0.7	*Surface*	17.8	17.8	17.8	27.1	27.0	27.1	7.3	7.2	7.2	88.8	88.2	88.5	2.4	2.5	2.4		4.0	4.2	4.1	
					Middle	17.8	17.9	17.9	27.2	27.1	27.2	7.1	7.1	7.1	87.3	86.8	87.1	2.7	2.7	2.7	2.7	4.6	4.4	4.5	4.4
					Bottom	17.9	18.0	18.0	27.3	27.3	27.3	7.0	7.0	7.0	85.7	85.0	85.4	2.8	2.9	2.8		4.5	4.7	4.6	
C2	1810-1825	30.2	E	0.5	*Surface*	17.8	17.7	17.8	27.1	27.1	27.1	7.3	7.4	7.3	89.5	89.9	89.7	2.2	2.3	2.2		3.5	3.5	3.5	
					Middle	17.9	17.9	17.9	27.2	27.3	27.3	7.2	7.2	7.2	88.1	87.7	87.9	2.4	2.4	2.4	2.4	3.6	3.8	3.7	3.7
					Bottom	18.0	18.1	18.1	27.4	27.5	27.5	7.0	7.0	7.0	85.4	85.7	85.6	2.5	2.5	2.5		3.9	3.9	3.9	
F1	1830-1847	9.2	E	0.5	*Surface*	17.7	17.8	17.8	27.1	27.1	27.1	7.2	7.2	7.2	87.8	88.3	88.1	2.7	2.7	2.7		4.4	4.5	4.5	
					Middle	17.8	17.8	17.8	27.3	27.2	27.3	7.1	7.1	7.1	86.8	86.5	86.7	2.9	2.9	2.9	2.9	4.8	4.9	4.9	4.8
					Bottom	17.9	18.0	18.0	27.4	27.4	27.4	7.0	6.9	7.0	85.4	84.9	85.2	3.0	3.1	3.1		5.1	5.0	5.1	
G3	1851-1906	13.7	E	0.5	*Surface*	17.8	17.8	17.8	27.0	27.1	27.1	7.2	7.3	7.2	88.1	88.7	88.4	3.0	3.0	3.0		4.8	4.8	4.8	
					Middle	17.8	17.9	17.9	27.1	27.2	27.2	7.1	7.1	7.1	87.1	86.6	86.9	3.1	3.2	3.1	3.1	4.8	5.1	5.0	5.0
					Bottom	17.9	18.0	18.0	27.3	27.3	27.3	7.0	6.9	6.9	85.0	84.5	84.8	3.2	3.3	3.2		5.3	5.2	5.3	
E9	1912-1930	20.1	E	0.4	*Surface*	17.7	17.8	17.8	27.1	27.2	27.2	7.2	7.2	7.2	88.3	87.7	88.0	3.0	3.1	3.1		5.0	4.9	5.0	
					Middle	17.8	17.8	17.8	27.4	27.4	27.4	7.0	7.0	7.0	86.1	85.6	85.9	3.2	3.3	3.2	3.2	5.3	5.3	5.3	5.3
					Bottom	17.9	18.0	18.0	27.4	27.5	27.5	6.9	6.9	6.9	84.5	84.1	84.3	3.3	3.4	3.4		5.4	5.6	5.5	

Remark or Obsevation:

Note: * Average ** Depth Average

Annex C11 Post Project Water Quality Monitoring Results during Mid-flood on 20 February 2013

Date:	20-Feb-13
Tide:	Mid-Flood
Weather:	Cloudy
Sea Conditions:	Small Wave
Zone	B

Location	Sampling Time	Water Depth (m)	Current direction	Current speed (ms^{-1})	Monitoring Depth	Temperrature (°C)			Salinity (ppt)			DO (mg/l)			DO Saturation (%)			Turbidity (NTU)				Suspended Solids (mg/l)			
						1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	D.A.**	1	2	Ave.*	D.A.**
E1	0900-0915	45.6	W	0.7	*Surface*	18.1	18.0	18.1	27.0	27.1	27.1	7.4	7.4	7.4	90.4	90.7	90.6	2.2	2.2	2.2		3.6	3.7	3.7	
					Middle	18.1	18.1	18.1	27.2	27.1	27.2	7.2	7.2	7.2	88.7	88.3	88.5	2.4	2.4	2.4	2.4	3.9	3.9	3.9	3.9
					Bottom	17.9	18.0	18.0	27.3	27.2	27.3	7.1	7.1	7.1	86.7	86.9	86.8	2.5	2.5	2.5		4.3	4.2	4.3	
G7	0921-0936	31.8	W	0.6	*Surface*	18.0	18.0	18.0	27.1	27.0	27.1	7.3	7.3	7.3	88.9	89.5	89.2	2.2	2.2	2.2		3.8	3.6	3.7	
					Middle	18.1	18.0	18.1	27.2	27.2	27.2	7.4	7.3	7.4	90.4	89.7	90.1	2.2	2.2	2.2	2.3	3.7	3.9	3.8	3.9
					Bottom	17.9	18.0	18.0	27.2	27.2	27.2	7.2	7.2	7.2	87.7	88.3	88.0	2.4	2.4	2.4		4.1	4.0	4.1	
B3	0941-0956	13.8	W	0.5	*Surface*	18.0	18.1	18.1	27.1	27.1	27.1	7.3	7.4	7.3	89.5	90.3	89.9	2.3	2.2	2.3		3.8	3.8	3.8	
					Middle	18.1	18.1	18.1	27.1	27.2	27.2	7.2	7.3	7.2	88.2	89.1	88.7	2.3	2.4	2.4	2.3	4.1	4.2	4.2	4.1
					Bottom	17.9	17.9	17.9	27.2	27.3	27.3	7.1	7.1	7.1	86.9	86.6	86.8	2.4	2.4	2.4		4.3	4.2	4.3	
B2	1001-1014	16.0	W	0.4	*Surface*	18.1	18.1	18.1	27.0	27.1	27.1	7.3	7.3	7.3	88.9	89.2	89.1	2.4	2.4	2.4		4.0	4.2	4.1	
					Middle	18.0	18.1	18.1	27.1	27.2	27.2	7.1	7.1	7.1	87.2	86.7	87.0	2.4	2.3	2.4	2.4	4.2	3.9	4.1	4.1
					Bottom	18.0	17.9	18.0	27.3	27.2	27.3	7.1	7.0	7.1	86.6	86.1	86.4	2.5	2.4	2.5		4.2	4.2	4.2	
E6	1041-1054	26.8	W	0.5	*Surface*	18.1	18.2	18.2	27.1	27.1	27.1	7.2	7.2	7.2	88.1	88.3	88.2	2.3	2.2	2.2		3.8	3.7	3.8	
					Middle	18.1	18.1	18.1	27.1	27.2	27.2	7.0	7.0	7.0	86.2	85.8	86.0	2.4	2.4	2.4	2.3	3.9	4.0	4.0	3.9
					Bottom	18.1	18.0	18.1	27.2	27.3	27.3	6.9	7.0	7.0	85.0	85.3	85.2	2.3	2.4	2.4		3.9	4.0	4.0	
B1	1021-1035	11.4	W	0.5	*Surface*	18.2	18.1	18.2	27.1	27.1	27.1	7.2	7.3	7.3	88.7	89.3	89.0	2.3	2.3	2.3		4.2	3.9	4.1	
					Middle	18.1	18.0	18.1	27.1	27.2	27.2	7.2	7.2	7.2	87.9	88.2	88.1	2.2	2.3	2.3	2.3	3.9	4.1	4.0	4.0
					Bottom	18.0	17.9	18.0	27.2	27.3	27.3	7.0	7.0	7.0	86.2	85.9	86.1	2.3	2.2	2.3		3.8	3.8	3.8	
G4	1059-1114	25.8	W	0.7	*Surface*	18.1	18.1	18.1	27.1	27.1	27.1	7.3	7.2	7.3	89.2	88.4	88.8	2.6	2.6	2.6		4.3	4.4	4.4	
					Middle	18.0	18.0	18.0	27.2	27.2	27.2	7.1	7.2	7.2	87.5	87.9	87.7	2.8	2.7	2.8	2.8	4.6	4.6	4.6	4.7
					Bottom	18.2	18.1	18.2	27.3	27.2	27.3	7.0	7.1	7.0	85.9	86.5	86.2	3.0	2.9	2.9		5.0	5.0	5.0	
E2	1121-1136	10.8	W	0.7	*Surface*	18.2	18.1	18.2	27.0	27.1	27.1	7.2	7.2	7.2	88.1	88.3	88.2	2.6	2.6	2.6		4.4	4.4	4.4	
					Middle	18.0	18.1	18.1	27.1	27.2	27.2	7.0	7.1	7.0	85.9	86.6	86.3	2.9	2.8	2.9	2.8	4.9	5.3	5.1	4.8
					Bottom	18.1	18.0	18.1	27.2	27.3	27.3	7.0	6.9	7.0	85.6	84.8	85.2	3.0	3.0	3.0		4.9	5.0	5.0	
C2	1141-1155	29.8	W	0.8	*Surface*	18.1	18.1	18.1	27.1	27.1	27.1	7.3	7.3	7.3	89.9	89.4	89.7	2.3	2.2	2.3		3.8	3.7	3.8	
					Middle	18.0	18.0	18.0	27.2	27.3	27.3	7.2	7.3	7.2	88.4	88.8	88.6	2.4	2.3	2.3	2.4	4.1	3.9	4.0	4.0
					Bottom	18.2	18.1	18.2	27.3	27.2	27.3	7.1	7.2	7.2	87.5	87.7	87.6	2.6	2.6	2.6		4.3	4.4	4.4	
F1	1201-1215	8.8	W	0.7	*Surface*	18.1	18.1	18.1	27.1	27.2	27.2	7.2	7.2	7.2	88.3	88.7	88.5	2.7	2.8	2.8		4.5	4.6	4.6	
					Middle	18.0	18.0	18.0	27.2	27.2	27.2	7.2	7.2	7.2	87.7	87.8	87.8	3.0	3.1	3.0	3.0	5.1	5.1	5.1	5.0
					Bottom	18.0	18.0	18.0	27.3	27.2	27.3	6.9	7.0	6.9	84.8	85.4	85.1	3.1	3.2	3.2		5.3	5.2	5.3	
G3	1220-1235	14.0	W	0.8	*Surface*	18.2	18.1	18.2	27.0	27.1	27.1	7.1	7.2	7.1	87.2	87.7	87.5	2.9	2.9	2.9		4.8	4.9	4.9	
					Middle	18.1	18.0	18.1	27.1	27.2	27.2	7.1	7.1	7.1	86.9	87.5	87.2	2.9	3.0	3.0	3.0	5.0	5.2	5.1	5.1
					Bottom	17.9	17.9	17.9	27.2	27.3	27.3	7.0	7.0	7.0	85.5	85.1	85.3	3.1	3.1	3.1		5.2	5.3	5.3	
E9	1240-1253	20.2	W	0.6	*Surface*	18.1	18.1	18.1	27.1	27.0	27.1	7.3	7.2	7.3	89.2	88.7	89.0	2.9	3.0	3.0		5.0	5.0	5.0	
					Middle	18.2	18.1	18.2	27.2	27.3	27.3	7.1	7.0	7.0	86.5	85.9	86.2	3.2	3.1	3.1	3.1	5.2	5.3	5.3	5.2
					Bottom	17.9	18.0	18.0	27.3	27.3	27.3	7.0	7.0	7.0	85.1	85.9	85.5	3.2	3.2	3.2		5.3	5.4	5.4	

Remark or Obsevation:

Note: * Average ** Depth Average

Annex C12 Post Project Water Quality Monitoring Results during Mid-ebb on 20 February 2013

Date:	20-Feb-13
Tide:	Mid-Ebb
Weather:	Cloudy
Sea Conditions:	Small Wave
Zone	B

Location	Sampling Time	Water Depth (m)	Current direction	Current speed (ms^{-1})	Monitoring Depth	Temperrature (°C)			Salinity (ppt)			DO (mg/l)			DO Saturation (%)			Turbidity (NTU)				Suspended Solids (mg/l)			
						1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	D.A.**	1	2	Ave.*	D.A.**
E1	1730-1745	45.6	E	0.7	*Surface*	18.2	18.1	18.2	27.0	27.0	27.0	7.3	7.3	7.3	89.9	89.7	89.8	2.4	2.4	2.4		4.2	4.0	4.1	
					Middle	18.1	18.0	18.1	27.1	27.0	27.1	7.1	7.1	7.1	87.3	87.0	87.2	2.3	2.3	2.3	2.4	3.9	4.0	4.0	4.1
					Bottom	17.8	17.9	17.9	27.2	27.3	27.3	6.8	6.9	6.9	84.1	84.3	84.2	2.5	2.5	2.5		4.2	4.2	4.2	
G7	1750-1805	31.0	E	0.8	*Surface*	18.1	18.2	18.2	27.0	27.1	27.1	7.3	7.4	7.4	90.1	90.5	90.3	2.3	2.3	2.3		3.9	3.8	3.9	
					Middle	18.0	17.9	18.0	27.2	27.1	27.2	7.2	7.2	7.2	88.5	89.4	89.0	2.3	2.3	2.3	2.4	4.1	4.0	4.1	4.1
					Bottom	17.9	17.8	17.9	27.3	27.2	27.3	6.9	6.9	6.9	84.8	85.3	85.1	2.5	2.6	2.6		4.3	4.4	4.4	
B3	1811-1826	13.6	E	0.8	*Surface*	18.0	18.1	18.1	27.1	27.0	27.1	7.3	7.3	7.3	89.1	89.4	89.3	2.2	2.2	2.2		3.7	3.7	3.7	
					Middle	18.0	18.0	18.0	27.2	27.2	27.2	7.1	7.2	7.1	87.6	87.8	87.7	2.4	2.4	2.4	2.4	4.0	4.0	4.0	4.0
					Bottom	17.8	17.8	17.8	27.2	27.3	27.3	6.9	7.0	7.0	85.0	85.8	85.4	2.5	2.6	2.5		4.3	4.3	4.3	
B2	1831-1845	15.2	E	0.6	*Surface*	18.1	18.0	18.1	27.0	27.1	27.1	7.2	7.2	7.2	88.5	88.2	88.4	2.2	2.2	2.2		3.8	3.8	3.8	
					Middle	18.0	17.9	18.0	27.2	27.2	27.2	7.1	7.1	7.1	87.0	87.3	87.2	2.3	2.4	2.4	2.4	4.2	4.0	4.1	4.0
					Bottom	17.9	17.8	17.9	27.1	27.0	27.1	7.0	7.1	7.0	86.3	86.6	86.5	2.5	2.5	2.5		4.2	4.2	4.2	
E6	1911-1925	26.8	E	0.5	*Surface*	18.0	18.0	18.0	27.1	27.0	27.1	7.1	7.2	7.2	87.8	88.2	88.0	2.2	2.2	2.2		3.8	3.7	3.8	
					Middle	17.9	18.0	18.0	27.2	27.1	27.2	7.1	7.1	7.1	87.5	87.3	87.4	2.4	2.4	2.4	2.4	4.2	4.1	4.2	4.1
					Bottom	17.9	17.8	17.9	27.1	27.2	27.2	7.0	7.0	7.0	86.2	85.9	86.1	2.7	2.6	2.7		4.5	4.5	4.5	
B1	1852-1906	11.4	E	0.6	*Surface*	18.1	18.0	18.1	27.0	27.1	27.1	7.2	7.2	7.2	87.9	87.9	87.9	2.3	2.3	2.3		3.8	4.0	3.9	
					Middle	18.0	17.9	18.0	27.1	27.2	27.2	7.1	7.1	7.1	86.6	86.9	86.8	2.4	2.3	2.4	2.4	4.1	3.9	4.0	4.1
					Bottom	17.8	17.8	17.8	27.2	27.3	27.3	7.1	7.1	7.1	86.8	87.0	86.9	2.5	2.6	2.5		4.3	4.5	4.4	
G4	1930-1944	25.2	E	0.8	*Surface*	18.0	18.0	18.0	27.1	27.0	27.1	7.3	7.3	7.3	89.7	89.9	89.8	2.4	2.5	2.4		4.1	4.1	4.1	
					Middle	18.0	17.9	18.0	27.1	27.1	27.1	7.2	7.2	7.2	88.4	88.9	88.7	2.5	2.6	2.5	2.6	4.3	4.4	4.4	4.4
					Bottom	17.9	17.8	17.9	27.2	27.3	27.3	7.1	7.1	7.1	87.4	87.6	87.5	2.8	2.8	2.8		4.8	4.7	4.8	
E2	1959-2015	10.4	E	0.7	*Surface*	18.1	18.0	18.1	27.0	27.1	27.1	7.3	7.3	7.3	89.2	89.3	89.3	2.5	2.5	2.5		4.2	4.2	4.2	
					Middle	18.0	18.0	18.0	27.1	27.1	27.1	7.2	7.2	7.2	88.2	88.1	88.2	2.6	2.6	2.6	2.6	4.5	4.4	4.5	4.5
					Bottom	17.8	17.8	17.8	27.3	27.2	27.3	7.1	7.1	7.1	87.3	87.5	87.4	2.8	2.8	2.8		4.7	4.9	4.8	
C2	2020-2035	29.2	E	0.6	*Surface*	18.0	18.1	18.1	27.0	27.1	27.1	7.3	7.3	7.3	89.5	89.1	89.3	2.5	2.4	2.4		4.0	4.2	4.1	
					Middle	18.1	18.0	18.1	27.1	27.0	27.1	7.2	7.2	7.2	88.7	88.9	88.8	2.5	2.5	2.5	2.5	4.2	4.3	4.3	4.3
					Bottom	17.9	17.8	17.9	27.2	27.2	27.2	7.2	7.2	7.2	88.2	87.9	88.1	2.6	2.7	2.6		4.4	4.5	4.5	
F1	2040-2053	8.8	E	0.6	*Surface*	18.0	18.0	18.0	27.1	27.1	27.1	7.3	7.3	7.3	89.5	89.7	89.6	2.7	2.7	2.7		4.7	4.6	4.7	
					Middle	18.0	17.9	18.0	27.2	27.1	27.2	7.2	7.2	7.2	88.4	88.1	88.3	2.8	2.8	2.8	2.8	4.8	4.7	4.8	4.8
					Bottom	17.8	17.8	17.8	27.1	27.2	27.2	7.1	7.0	7.1	86.9	86.4	86.7	2.9	2.9	2.9		4.9	5.2	5.1	
G3	2058-2113	13.2	E	0.6	*Surface*	18.0	18.1	18.1	27.0	27.1	27.1	7.3	7.3	7.3	89.8	89.6	89.7	3.0	3.0	3.0		5.0	5.0	5.0	
					Middle	18.0	17.9	18.0	27.2	27.2	27.2	7.2	7.1	7.1	87.9	87.6	87.8	3.1	3.1	3.1	3.1	5.2	5.3	5.3	5.2
					Bottom	17.8	17.9	17.9	27.2	27.2	27.2	7.1	7.1	7.1	87.1	86.6	86.9	3.1	3.1	3.1		5.4	5.3	5.4	
E9	2118-2130	19.3	W	0.5	*Surface*	18.0	18.0	18.0	27.1	27.1	27.1	7.1	7.1	7.1	87.4	87.6	87.5	2.9	3.0	2.9		5.1	5.0	5.1	
					Middle	18.0	18.0	18.0	27.1	27.1	27.1	7.0	7.0	7.0	85.5	85.8	85.7	3.1	3.1	3.1	3.1	5.1	5.3	5.2	5.3
					Bottom	17.9	17.8	17.9	27.3	27.2	27.3	7.0	7.0	7.0	86.2	85.8	86.0	3.2	3.3	3.3		5.6	5.6	5.6	

Remark or Obsevation:

Note: * Average ** Depth Average

Annex C13 Post Project Water Quality Monitoring Results during Mid-flood on 14 February 2013

Date:	14-Feb-13
Tide:	mid-Flood
Weather:	Fine
Sea Conditions:	Small Wave
Zone	C

Location	Sampling Time	Water Depth (m)	Current direction	Current speed (ms^{-1})	Monitoring Depth	Temperrature (°C)			Salinity (ppt)			DO (mg/l)			DO Saturation (%)			Turbidity (NTU)				Suspended Solids (mg/l)			
						1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	D.A.**	1	2	Ave.*	D.A.**
E4	0900-0915	23.0	W	0.6	*Surface*	17.9	17.9	17.9	27.0	27.1	27.1	7.5	7.5	7.5	92.3	92.7	92.5	2.7	2.6	2.7		4.8	4.4	4.6	
					Middle	17.7	17.8	17.8	27.1	27.2	27.2	7.4	7.4	7.4	90.5	91.0	90.8	2.4	2.5	2.4	2.6	4.3	4.3	4.3	4.6
					Bottom	17.6	17.7	17.7	27.4	27.3	27.4	7.4	7.4	7.4	90.9	90.5	90.7	2.7	2.7	2.7		4.8	4.8	4.8	
C3	0918-0933	31.2	W	0.7	*Surface*	17.9	17.9	17.9	27.1	27.2	27.2	7.6	7.7	7.6	93.7	94.2	94.0	2.5	2.5	2.5		4.7	4.5	4.6	
					Middle	17.8	17.8	17.8	27.2	27.1	27.2	7.5	7.5	7.5	92.1	92.0	92.1	3.1	3.1	3.1	2.9	5.4	5.7	5.6	5.1
					Bottom	17.7	17.6	17.7	27.3	27.4	27.4	7.4	7.4	7.4	90.5	90.8	90.7	3.0	3.1	3.0		5.2	5.3	5.3	
E5	0936-0951	40.4	W	0.5	*Surface*	18.0	18.1	18.1	27.0	27.1	27.1	7.8	7.8	7.8	96.2	95.8	96.0	3.0	3.0	3.0		5.4	5.2	5.3	
					Middle	17.9	18.0	18.0	27.1	27.2	27.2	8.0	7.9	7.9	98.2	97.2	97.7	3.0	2.9	2.9	2.8	5.3	5.1	5.2	5.0
					Bottom	17.8	17.7	17.8	27.4	27.4	27.4	7.6	7.6	7.6	93.7	93.5	93.6	2.5	2.5	2.5		4.3	4.4	4.4	
G6	0954-1009	32.2	W	0.3	*Surface*	18.0	18.1	18.1	27.1	27.2	27.2	7.6	7.7	7.7	93.7	94.7	94.2	2.4	2.5	2.4		4.5	4.6	4.6	
					Middle	17.8	17.9	17.9	27.3	27.2	27.3	7.8	7.8	7.8	96.1	96.4	96.3	2.6	2.7	2.6	2.7	5.0	4.8	4.9	4.9
					Bottom	17.6	17.5	17.6	27.4	27.5	27.5	7.5	7.4	7.5	91.9	91.5	91.7	2.9	3.0	2.9		5.3	5.4	5.4	
G5	1012-1030	30.2	W	0.4	*Surface*	18.0	17.9	18.0	27.1	27.1	27.1	7.7	7.7	7.7	94.4	94.8	94.6	2.3	2.4	2.3		4.2	4.4	4.3	
					Middle	17.9	17.8	17.9	27.2	27.3	27.3	7.7	7.6	7.6	94.2	93.6	93.9	2.7	2.7	2.7	2.6	4.9	5.0	5.0	4.8
					Bottom	17.7	17.8	17.8	27.3	27.4	27.4	7.5	7.6	7.5	92.5	92.9	92.7	2.8	2.8	2.8		5.0	5.0	5.0	

Remark or Obsevation:

Note: * Average ** Depth Average

Annex C14 Post Project Water Quality Monitoring Results during Mid-ebb on 14 February 2013

Date:	14-Feb-13
Tide:	mid-Ebb
Weather:	Fine
Sea Conditions:	Small Wave
Zone	C

Location	Sampling Time	Water Depth (m)	Current direction	Current speed (ms^{-1})	Monitoring Depth	Temperrature (°C)			Salinity (ppt)			DO (mg/l)			DO Saturation (%)			Turbidity (NTU)				Suspended Solids (mg/l)			
						1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	D.A.**	1	2	Ave.*	D.A.**
E4	1400-1415	22.2	E	0.5	*Surface*	18.0	18.1	18.1	27.0	27.1	27.1	7.7	7.7	7.7	94.9	94.6	94.8	2.8	2.7	2.8		5.0	4.9	5.0	
					Middle	17.9	17.9	17.9	27.3	27.2	27.3	7.6	7.6	7.6	92.9	93.4	93.2	2.6	2.6	2.6	2.8	4.5	4.6	4.6	4.9
					Bottom	17.8	17.7	17.8	27.4	27.4	27.4	7.3	7.3	7.3	89.3	89.5	89.4	3.0	2.9	3.0		5.1	5.1	5.1	
C3	1419-1434	30.8	E	0.6	*Surface*	18.1	18.1	18.1	27.0	27.0	27.0	7.5	7.6	7.6	92.7	93.4	93.1	2.7	2.7	2.7		4.9	4.9	4.9	
					Middle	17.8	17.8	17.8	27.2	27.3	27.3	7.4	7.4	7.4	90.7	91.0	90.9	3.1	3.2	3.1	3.0	5.7	5.6	5.7	5.4
					Bottom	17.7	17.6	17.7	27.3	27.3	27.3	7.2	7.2	7.2	88.1	88.8	88.5	3.1	3.1	3.1		5.6	5.6	5.6	
E5	1437-1452	39.6	E	0.4	*Surface*	18.0	18.1	18.1	27.1	27.2	27.2	7.7	7.7	7.7	95.1	95.0	95.1	3.0	2.9	2.9		5.3	5.1	5.2	
					Middle	17.9	17.8	17.9	27.2	27.2	27.2	7.8	7.8	7.8	95.6	95.4	95.5	3.1	3.0	3.1	2.9	5.4	5.4	5.4	5.1
					Bottom	17.8	17.7	17.8	27.2	27.3	27.3	7.4	7.3	7.4	90.5	90.3	90.4	2.7	2.7	2.7		4.6	4.7	4.7	
G6	1456-1512	33.0	E	0.4	*Surface*	18.1	18.0	18.1	27.2	27.1	27.2	7.5	7.5	7.5	92.7	92.1	92.4	2.6	2.6	2.6		4.3	4.4	4.4	
					Middle	17.8	17.7	17.8	27.3	27.2	27.3	7.4	7.4	7.4	90.8	91.2	91.0	2.7	2.7	2.7	2.8	4.8	5.0	4.9	4.9
					Bottom	17.7	17.8	17.8	27.4	27.4	27.4	7.3	7.2	7.2	89.3	88.9	89.1	3.1	3.0	3.1		5.4	5.2	5.3	
G5	1514-1530	31.0	E	0.4	*Surface*	18.0	18.0	18.0	27.0	27.1	27.1	7.6	7.6	7.6	93.6	93.2	93.4	2.5	2.5	2.5		4.5	4.4	4.5	
					Middle	17.7	17.8	17.8	27.2	27.2	27.2	7.2	7.3	7.2	88.6	89.7	89.2	2.9	2.9	2.9	2.8	5.1	5.2	5.2	4.9
					Bottom	17.9	17.8	17.9	27.4	27.3	27.4	7.4	7.5	7.4	91.1	91.8	91.5	2.9	3.0	3.0		5.1	5.2	5.2	

Remark or Obsevation:

Note: * Average ** Depth Average

Annex C15 Post Project Water Quality Monitoring Results during Mid-flood on 16 February 2013

Date:	16-Feb-13
Tide:	Mid-Flood
Weather:	Cloudy
Sea Conditions:	Great Wave
Zone	C

Location	Sampling Time	Water Depth (m)	Current direction	Current speed (ms^{-1})	Monitoring Depth	Temperrature (°C)			Salinity (ppt)			DO (mg/l)			DO Saturation (%)			Turbidity (NTU)				Suspended Solids (mg/l)			
						1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	D.A.**	1	2	Ave.*	D.A.**
E4	0930-0945	23.2	W	0.5	*Surface*	17.9	17.9	17.9	27.0	27.1	27.1	7.6	7.6	7.6	93.4	93.8	93.6	2.6	2.6	2.6		4.4	4.3	4.4	
					Middle	17.9	17.8	17.9	27.1	27.2	27.2	7.5	7.5	7.5	91.6	92.1	91.9	2.4	2.4	2.4	2.6	4.0	4.1	4.1	4.3
					Bottom	17.8	17.7	17.8	27.2	27.3	27.3	7.5	7.5	7.5	92.0	91.8	91.9	2.7	2.7	2.7		4.3	4.5	4.4	
C3	0948-1003	31.4	W	0.6	*Surface*	17.9	17.8	17.9	27.0	27.1	27.1	7.7	7.8	7.7	94.8	95.3	95.1	2.5	2.5	2.5		4.0	4.1	4.1	
					Middle	17.8	17.9	17.9	27.2	27.3	27.3	7.6	7.6	7.6	93.2	93.1	93.2	3.0	3.0	3.0	2.8	5.1	5.2	5.2	4.7
					Bottom	17.8	17.8	17.8	27.3	27.4	27.4	7.5	7.5	7.5	91.6	91.9	91.8	3.0	3.0	3.0		4.9	5.0	5.0	
E5	1006-1021	40.6	W	0.4	*Surface*	17.8	17.9	17.9	27.1	27.1	27.1	7.9	7.9	7.9	97.3	96.9	97.1	3.0	2.9	2.9		4.9	4.8	4.9	
					Middle	17.8	17.7	17.8	27.2	27.3	27.3	8.0	7.9	7.9	97.8	97.2	97.5	2.9	2.9	2.9	2.8	4.8	4.9	4.9	4.7
					Bottom	17.7	17.6	17.7	27.4	27.4	27.4	7.7	7.7	7.7	95.0	94.6	94.8	2.5	2.5	2.5		4.3	4.2	4.3	
G6	1024-1039	32.4	W	0.2	*Surface*	17.9	18.0	18.0	27.1	27.2	27.2	7.7	7.8	7.8	94.8	95.8	95.3	2.4	2.4	2.4		4.0	4.0	4.0	
					Middle	17.9	17.8	17.9	27.2	27.3	27.3	7.9	7.9	7.9	97.3	97.5	97.4	2.6	2.6	2.6	2.6	4.4	4.3	4.4	4.4
					Bottom	17.7	17.6	17.7	27.3	27.4	27.4	7.6	7.5	7.5	93.0	92.6	92.8	2.9	2.9	2.9		4.9	4.9	4.9	
G5	1042-1100	30.2	W	0.4	*Surface*	18.0	17.9	18.0	27.1	27.2	27.2	7.8	7.8	7.8	95.6	96.1	95.9	2.3	2.3	2.3		3.7	3.8	3.8	
					Middle	17.8	17.7	17.8	27.3	27.4	27.4	7.8	7.7	7.7	95.3	94.7	95.0	2.7	2.7	2.7	2.6	4.6	4.5	4.6	4.3
					Bottom	17.6	17.5	17.6	27.4	27.4	27.4	7.6	7.7	7.6	93.6	94.1	93.9	2.8	2.7	2.7		4.7	4.6	4.7	

Remark or Obsevation:

Note: * Average ** Depth Average

Annex C16 Post Project Water Quality Monitoring Results during Mid-ebb on 16 February 2013

Date:	16-Feb-13
Tide:	Mid-Ebb
Weather:	Cloudy
Sea Conditions:	Great Wave
Zone	C

Location	Sampling Time	Water Depth (m)	Current direction	Current speed (ms^{-1})	Monitoring Depth	Temperrature (°C)			Salinity (ppt)			DO (mg/l)			DO Saturation (%)			Turbidity (NTU)				Suspended Solids (mg/l)			
						1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	D.A.**	1	2	Ave.*	D.A.**
E4	1500-1515	22.8	E	0.4	*Surface*	18.0	18.1	18.1	27.0	27.1	27.1	7.5	7.6	7.6	92.7	93.2	93.0	2.7	2.7	2.7		4.6	4.3	4.5	
					Middle	18.0	17.9	18.0	27.2	27.3	27.3	7.4	7.4	7.4	91.0	91.5	91.3	2.5	2.5	2.5	2.6	4.0	4.1	4.1	4.4
					Bottom	17.9	17.8	17.9	27.3	27.4	27.4	7.4	7.4	7.4	91.4	91.1	91.3	2.7	2.8	2.8		4.6	4.6	4.6	
C3	1518-1533	30.2	E	0.5	*Surface*	18.1	18.0	18.1	27.1	27.2	27.2	7.7	7.7	7.7	94.2	94.7	94.5	2.6	2.6	2.6		4.2	4.2	4.2	
					Middle	18.0	17.9	18.0	27.3	27.4	27.4	7.5	7.5	7.5	92.6	92.5	92.6	3.1	3.1	3.1	2.9	5.1	5.1	5.1	4.8
					Bottom	17.8	17.7	17.8	27.4	27.4	27.4	7.4	7.4	7.4	91.0	91.3	91.2	3.1	3.1	3.1		5.0	5.0	5.0	
E5	1536-1551	39.4	E	0.6	*Surface*	18.0	18.0	18.0	27.1	27.1	27.1	7.9	7.8	7.8	96.7	96.3	96.5	3.0	3.0	3.0		5.0	5.0	5.0	
					Middle	17.9	17.8	17.9	27.2	27.3	27.3	7.9	7.9	7.9	97.2	96.6	96.9	3.0	3.0	3.0	2.9	5.0	4.9	5.0	4.8
					Bottom	17.7	17.7	17.7	27.3	27.4	27.4	7.7	7.6	7.7	94.3	94.0	94.2	2.6	2.5	2.6		4.3	4.3	4.3	
G6	1554-1609	32.0	E	0.3	*Surface*	17.9	18.0	18.0	27.0	27.1	27.1	7.7	7.7	7.7	94.2	95.2	94.7	2.5	2.5	2.5		4.2	4.4	4.3	
					Middle	17.9	17.9	17.9	27.2	27.3	27.3	7.9	7.9	7.9	96.7	96.9	96.8	2.7	2.7	2.7	2.7	4.6	4.5	4.6	4.6
					Bottom	17.8	17.7	17.8	27.4	27.4	27.4	7.5	7.5	7.5	92.4	92.0	92.2	3.0	3.0	3.0		5.0	4.9	5.0	
G5	1612-1630	29.8	E	0.4	*Surface*	18.0	17.9	18.0	27.1	27.2	27.2	7.7	7.8	7.7	95.0	95.4	95.2	2.3	2.4	2.4		4.0	4.1	4.1	
					Middle	17.9	17.8	17.9	27.2	27.3	27.3	7.7	7.7	7.7	94.7	94.1	94.4	2.8	2.8	2.8	2.7	4.7	4.8	4.8	4.5
					Bottom	17.7	17.6	17.7	27.3	27.4	27.4	7.6	7.6	7.6	93.0	93.5	93.3	2.8	2.8	2.8		4.8	4.8	4.8	

Remark or Obsevation:

Note: * Average ** Depth Average

Annex C17 Post Project Water Quality Monitoring Results during Mid-flood on 19 February 2013

Date:	19-Feb-13
Tide:	Mid-Flood
Weather:	Cloudy
Sea Conditions:	Small Wave
Zone	C

Location	Sampling Time	Water Depth (m)	Current direction	Current speed (ms^{-1})	Monitoring Depth	Temperrature (°C)			Salinity (ppt)			DO (mg/l)			DO Saturation (%)			Turbidity (NTU)				Suspended Solids (mg/l)			
						1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	D.A.**	1	2	Ave.*	D.A.**
E4	0930-0947	22.8	W	0.6	*Surface*	18.0	17.9	18.0	27.1	27.2	27.2	7.7	7.7	7.7	93.9	94.4	94.2	2.5	2.5	2.5		4.2	4.2	4.2	
					Middle	17.9	17.8	17.9	27.2	27.3	27.3	7.5	7.5	7.5	92.0	91.6	91.8	2.6	2.7	2.6	2.6	4.5	4.5	4.5	4.5
					Bottom	17.7	17.7	17.7	27.3	27.3	27.3	7.4	7.4	7.4	90.5	90.9	90.7	2.7	2.8	2.8		4.7	4.7	4.7	
C3	0951-1008	30.8	W	0.6	*Surface*	18.0	17.9	18.0	27.2	27.1	27.2	7.6	7.6	7.6	93.1	93.5	93.3	2.7	2.8	2.7		4.6	4.7	4.7	
					Middle	17.8	17.8	17.8	27.2	27.3	27.3	7.5	7.5	7.5	92.2	91.9	92.1	2.9	3.0	3.0	2.9	4.9	5.0	5.0	5.0
					Bottom	17.8	17.7	17.8	27.3	27.4	27.4	7.4	7.4	7.4	91.1	90.7	90.9	3.1	3.1	3.1		5.2	5.4	5.3	
E5	1011-1028	40.0	W	0.5	*Surface*	18.0	18.0	18.0	27.2	27.1	27.2	7.8	7.9	7.8	95.8	96.2	96.0	2.9	3.0	2.9		4.9	4.9	4.9	
					Middle	17.9	17.8	17.9	27.3	27.3	27.3	7.7	7.7	7.7	94.6	94.1	94.4	3.0	3.1	3.1	3.1	5.2	5.2	5.2	5.2
					Bottom	17.7	17.7	17.7	27.4	27.3	27.4	7.6	7.5	7.5	92.4	92.0	92.2	3.2	3.2	3.2		5.4	5.5	5.5	
G6	1031-1045	32.2	W	0.4	*Surface*	18.1	18.0	18.1	27.2	27.2	27.2	7.8	7.8	7.8	96.0	95.6	95.8	2.3	2.4	2.3		3.9	4.0	4.0	
					Middle	18.0	17.9	18.0	27.3	27.2	27.3	7.8	7.7	7.7	95.1	94.7	94.9	2.4	2.5	2.5	2.5	4.0	4.2	4.1	4.2
					Bottom	17.8	17.8	17.8	27.3	27.4	27.4	7.6	7.6	7.6	92.8	93.2	93.0	2.7	2.7	2.7		4.6	4.5	4.6	
G5	1048-1100	30.4	W	0.5	*Surface*	18.0	18.1	18.1	27.2	27.2	27.2	7.8	7.8	7.8	95.3	95.9	95.6	2.2	2.3	2.3		3.7	3.9	3.8	
					Middle	17.9	18.0	18.0	27.2	27.3	27.3	7.7	7.6	7.7	94.2	93.6	93.9	2.5	2.5	2.5	2.5	4.2	4.1	4.2	4.2
					Bottom	17.8	17.9	17.9	27.4	27.3	27.4	7.5	7.6	7.5	92.1	92.7	92.4	2.6	2.7	2.7		4.4	4.6	4.5	

Remark or Obsevation:

Note: * Average ** Depth Average

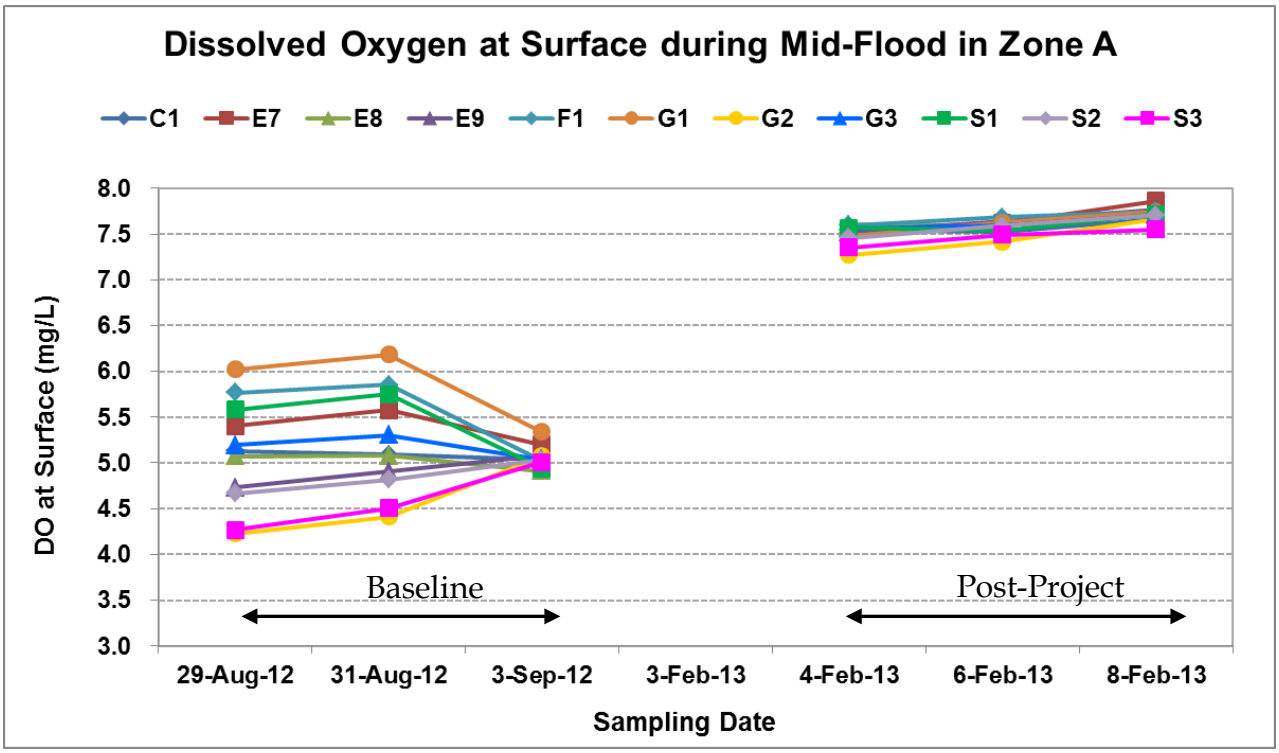
Annex C18 Post Project Water Quality Monitoring Results during Mid-ebb on 19 February 2013

Date:	19-Feb-13
Tide:	Mid-Ebb
Weather:	Cloudy
Sea Conditions:	Small Wave
Zone	C

Location	Sampling Time	Water Depth (m)	Current direction	Current speed (ms^{-1})	Monitoring Depth	Temperrature (°C)			Salinity (ppt)			DO (mg/l)			DO Saturation (%)			Turbidity (NTU)				Suspended Solids (mg/l)			
						1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	1	2	Ave.*	D.A.**	1	2	Ave.*	D.A.**
E4	1700-1715	22.0	E	0.5	*Surface*	17.9	17.9	17.9	27.2	27.2	27.2	7.6	7.6	7.6	93.3	92.9	93.1	2.7	2.6	2.6		4.6	4.4	4.5	
					Middle	17.8	17.7	17.8	27.3	27.3	27.3	7.4	7.4	7.4	90.4	90.0	90.2	2.7	2.8	2.8	2.8	4.6	4.7	4.7	4.7
					Bottom	17.7	17.6	17.7	27.3	27.4	27.4	7.2	7.3	7.3	88.7	89.0	88.9	2.9	2.9	2.9		4.8	4.8	4.8	
C3	1718-1734	30.2	E	0.5	*Surface*	17.9	17.9	17.9	27.2	27.2	27.2	7.6	7.5	7.5	92.5	91.8	92.2	2.9	2.9	2.9		4.8	4.6	4.7	
					Middle	17.8	17.7	17.8	27.3	27.4	27.4	7.4	7.4	7.4	90.8	90.5	90.7	3.1	3.1	3.1	3.1	5.2	5.1	5.2	5.1
					Bottom	17.6	17.7	17.7	27.4	27.4	27.4	7.3	7.3	7.3	89.4	88.9	89.2	3.2	3.3	3.3		5.4	5.5	5.5	
E5	1737-1753	39.4	E	0.6	*Surface*	17.9	17.8	17.9	27.2	27.3	27.3	7.7	7.7	7.7	93.8	94.3	94.1	3.0	3.1	3.1		5.0	5.3	5.2	
					Middle	17.8	17.7	17.8	27.4	27.3	27.4	7.5	7.4	7.4	91.4	91.0	91.2	3.2	3.3	3.2	3.2	5.3	5.5	5.4	5.4
					Bottom	17.6	17.6	17.6	27.4	27.5	27.5	7.3	7.4	7.4	89.9	90.4	90.2	3.3	3.3	3.3		5.6	5.5	5.6	
G6	1757-1812	31.2	E	0.5	*Surface*	17.8	17.9	17.9	27.3	27.2	27.3	7.7	7.8	7.7	94.4	94.9	94.7	2.5	2.5	2.5		4.1	4.2	4.2	
					Middle	17.8	17.8	17.8	27.4	27.4	27.4	7.6	7.6	7.6	93.0	93.6	93.3	2.6	2.7	2.6	2.7	4.4	4.5	4.5	4.4
					Bottom	17.7	17.7	17.7	27.5	27.4	27.5	7.4	7.4	7.4	90.6	90.3	90.5	2.8	2.9	2.9		4.6	4.8	4.7	
G5	1815-1830	29.6	E	0.4	*Surface*	17.9	17.8	17.9	27.2	27.3	27.3	7.7	7.6	7.6	94.0	93.3	93.7	2.4	2.4	2.4		4.1	4.1	4.1	
					Middle	17.8	17.8	17.8	27.3	27.4	27.4	7.5	7.5	7.5	92.4	91.9	92.2	2.6	2.6	2.6	2.6	4.2	4.4	4.3	4.4
					Bottom	17.7	17.6	17.7	27.4	27.4	27.4	7.4	7.4	7.4	90.5	90.0	90.3	2.8	2.8	2.8		4.9	4.8	4.9	

Remark or Obsevation:

Note: * Average ** Depth Average



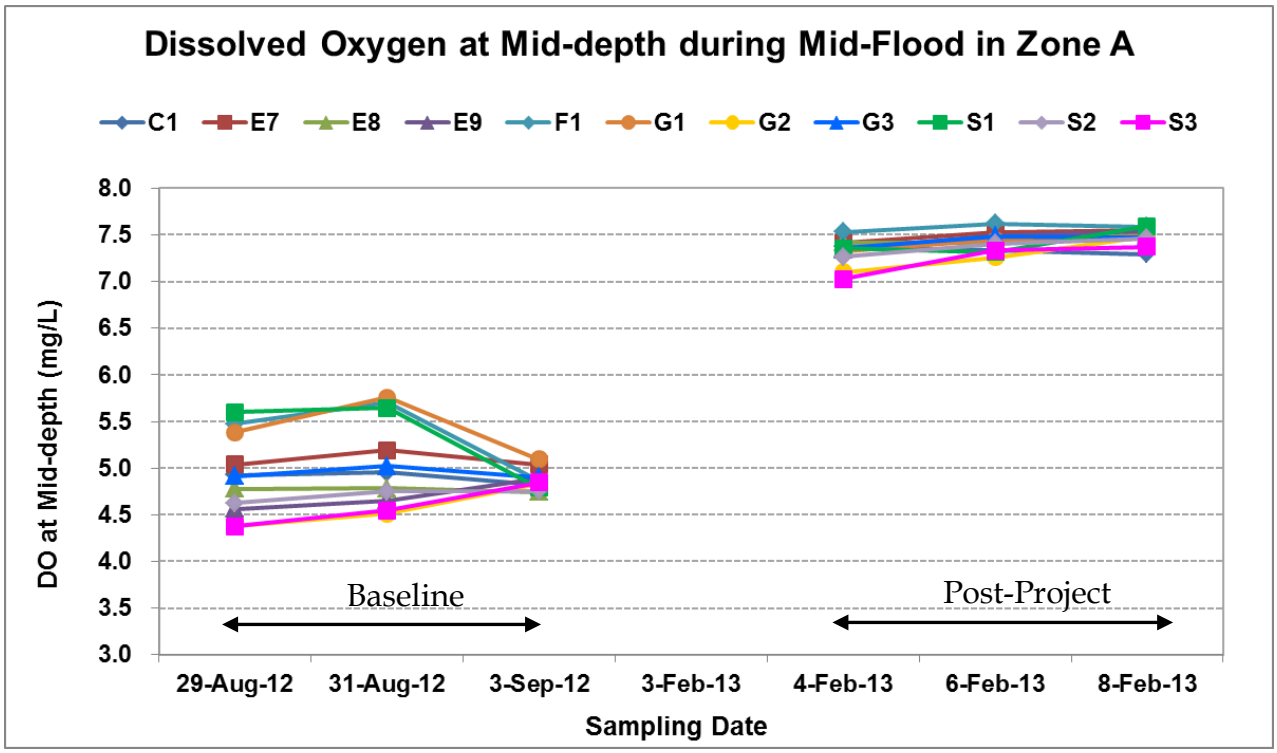


Figure C1 Dissolved oxygen (mg/L) at surface and mid-depth of water column measured during mid-flood in Zone A

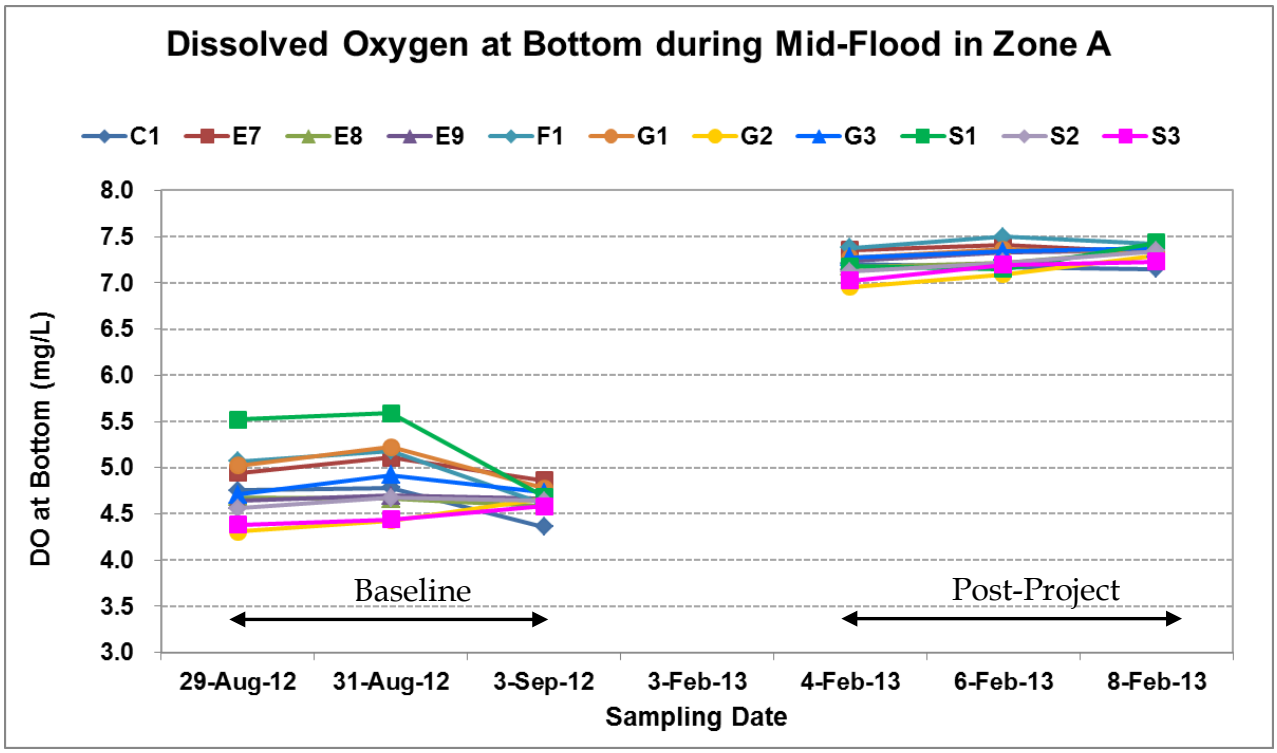
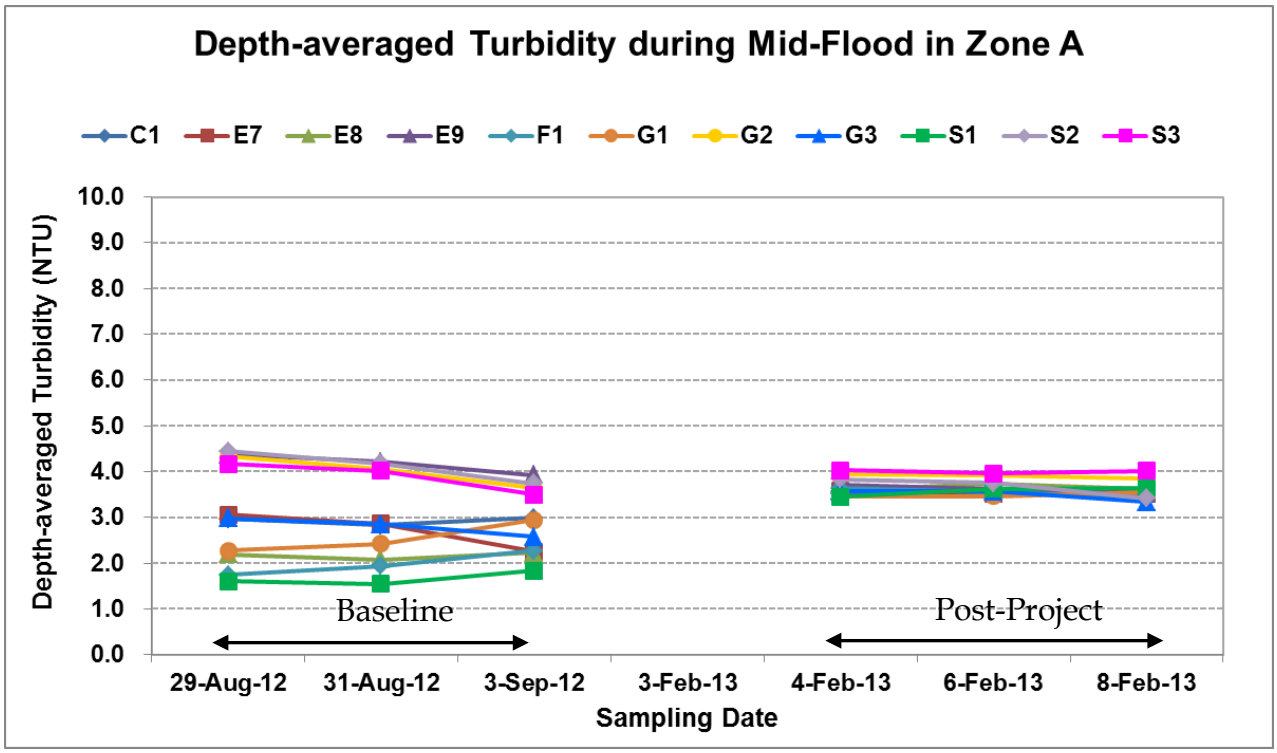


Figure C2 Dissolved oxygen (mg/L) at bottom of water column measured during mid-flood in Zone A



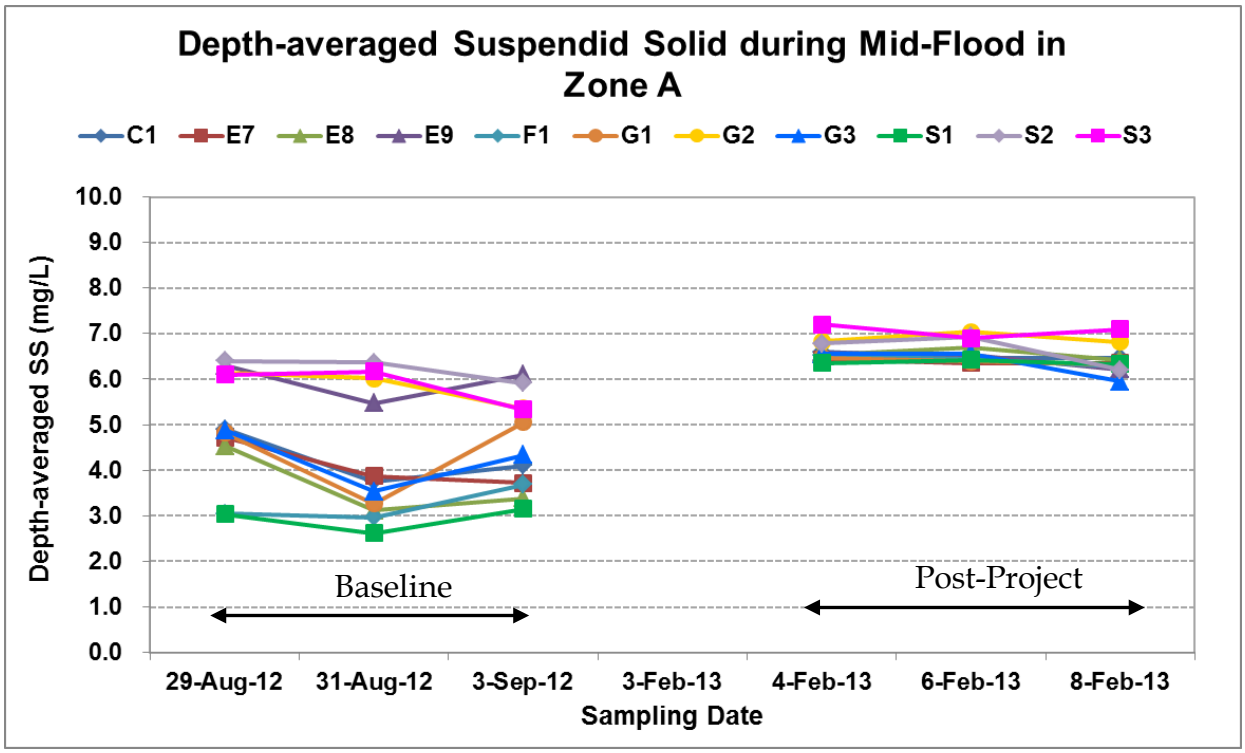
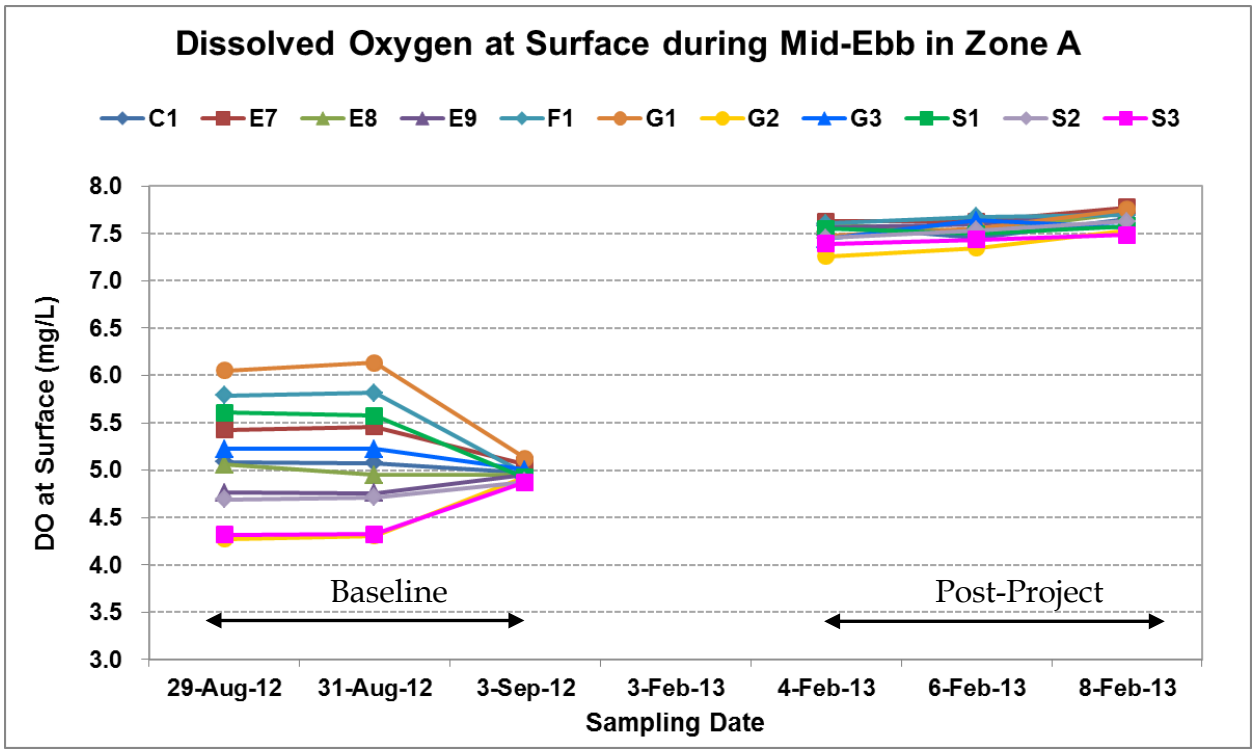


Figure C3 Depth-averaged Turbidity (NTU) and Depth-averaged Suspended Solid (mg/L) measured during mid-flood in Zone A



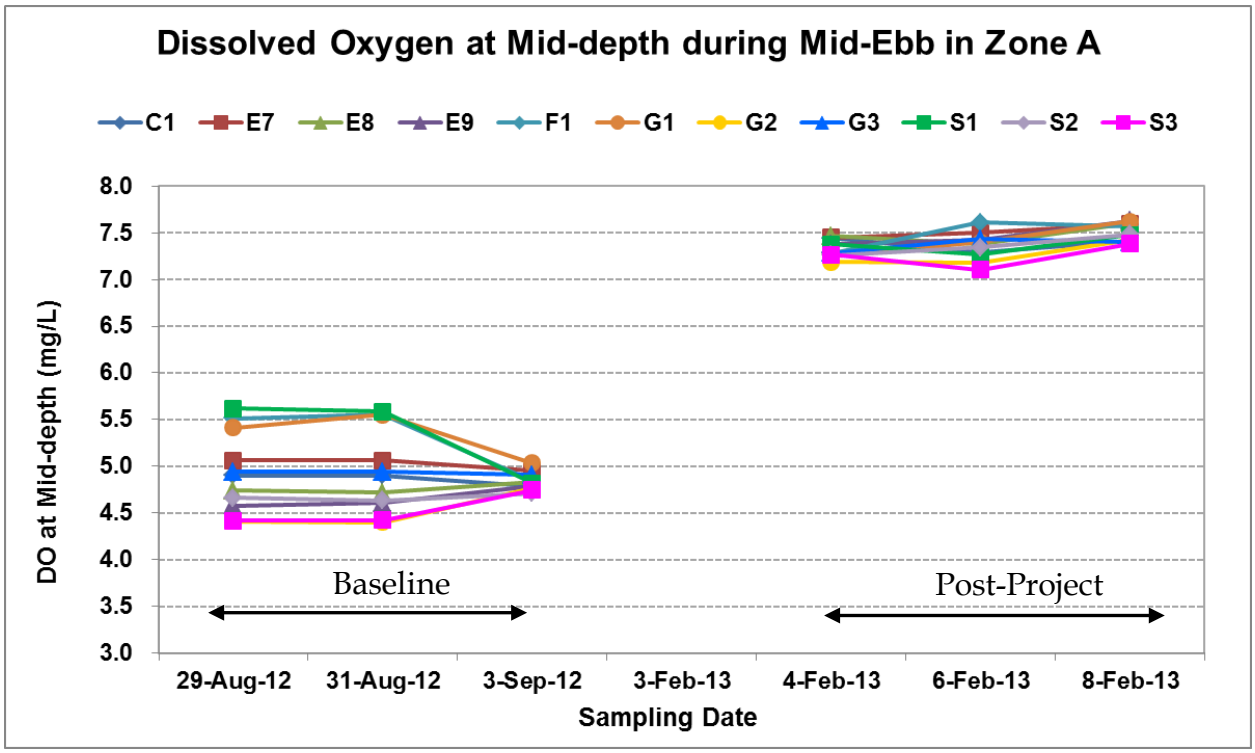


Figure C4 Dissolved oxygen (mg/L) at surface and mid-depth of water column measured during mid-ebb in Zone A

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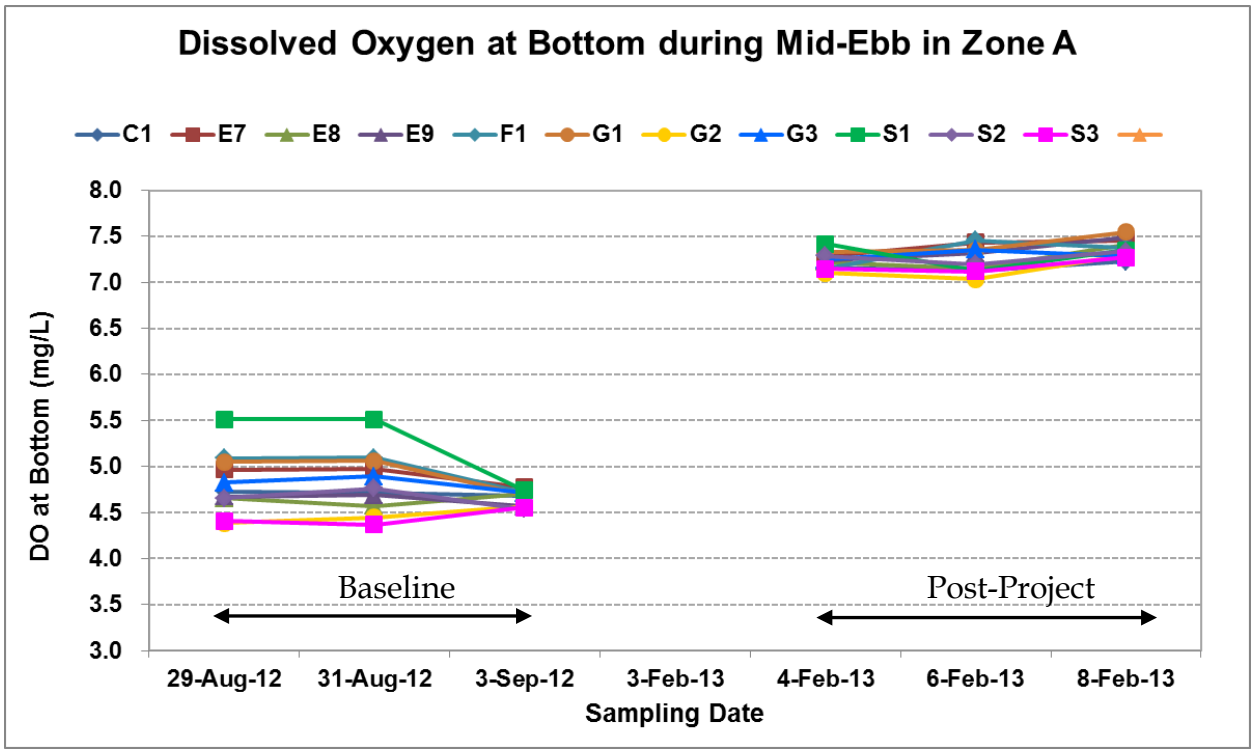
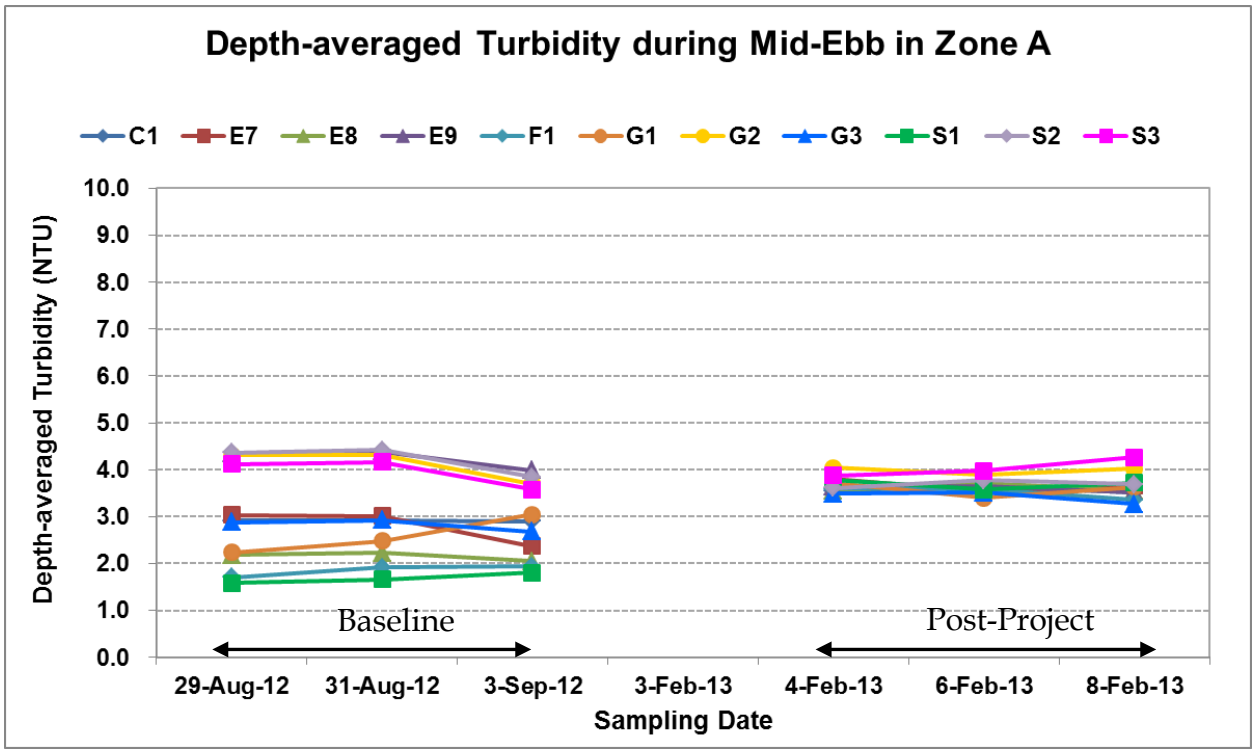


Figure C5 Dissolved oxygen (mg/L) at bottom of water column measured during mid-ebb in Zone A



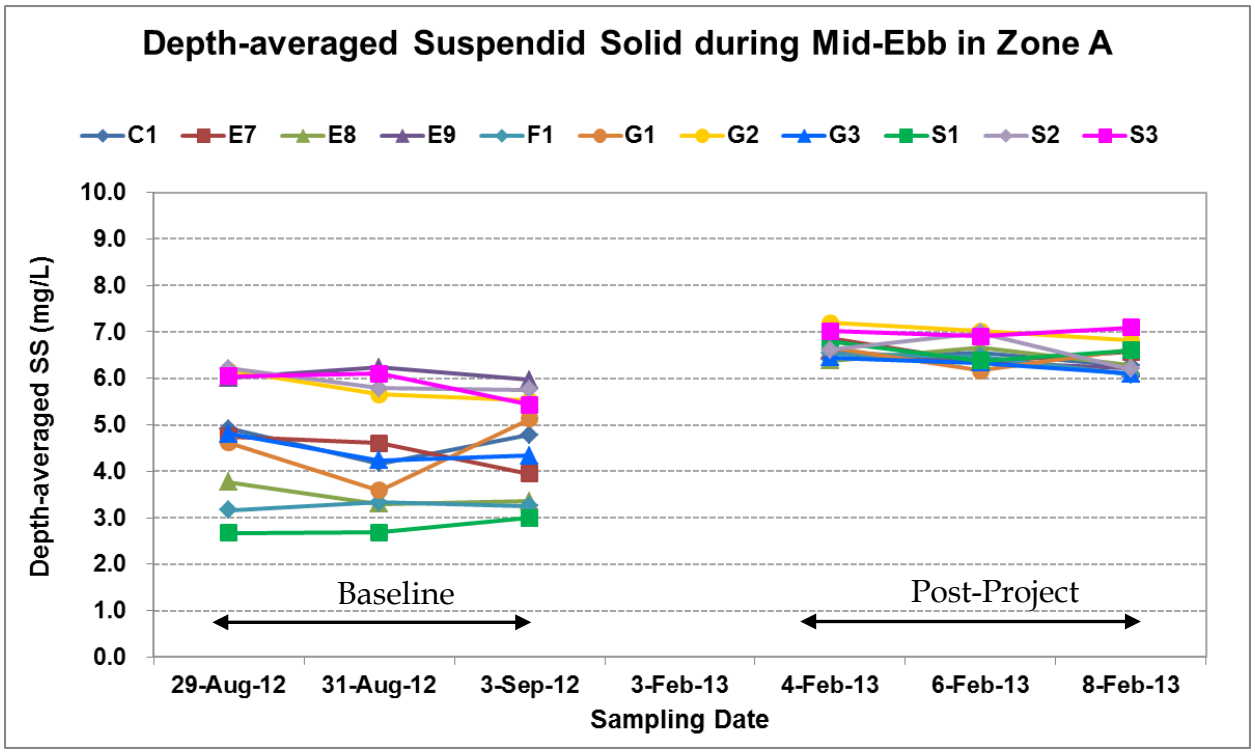
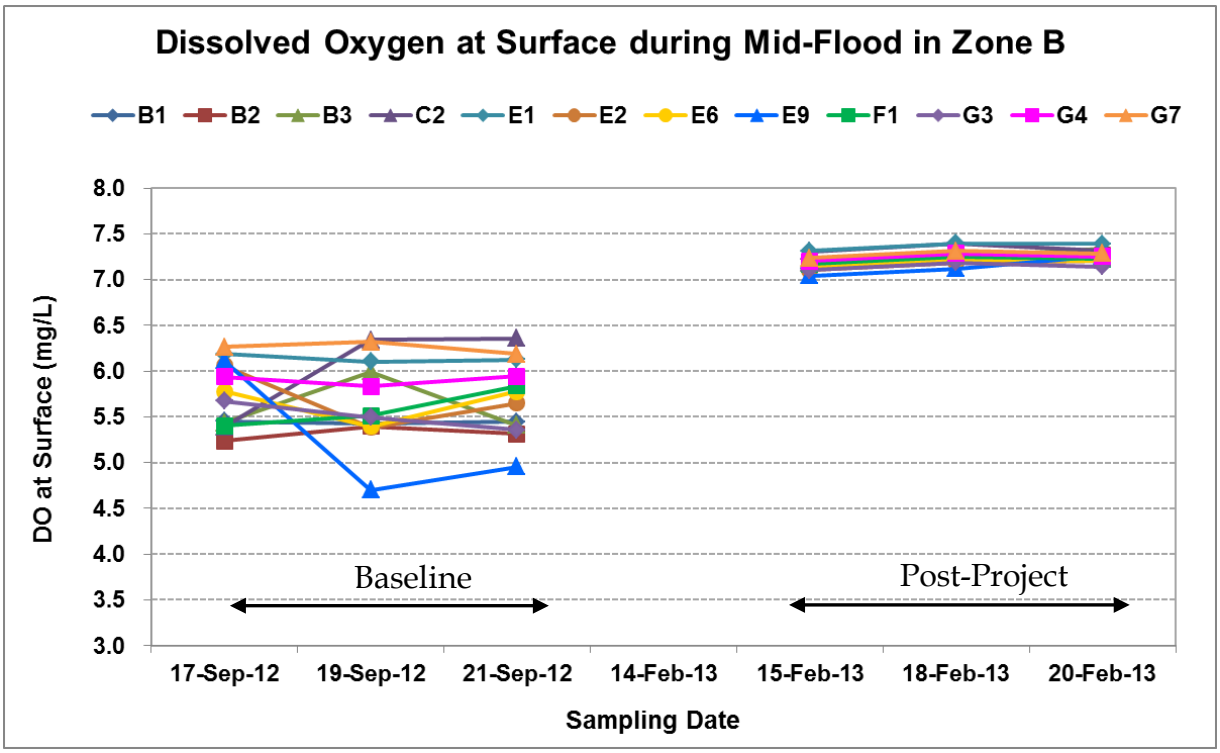


Figure C6 Depth-averaged Turbidity (NTU) and Depth-averaged Suspended Solid (mg/L) during mid-ebb in Zone A



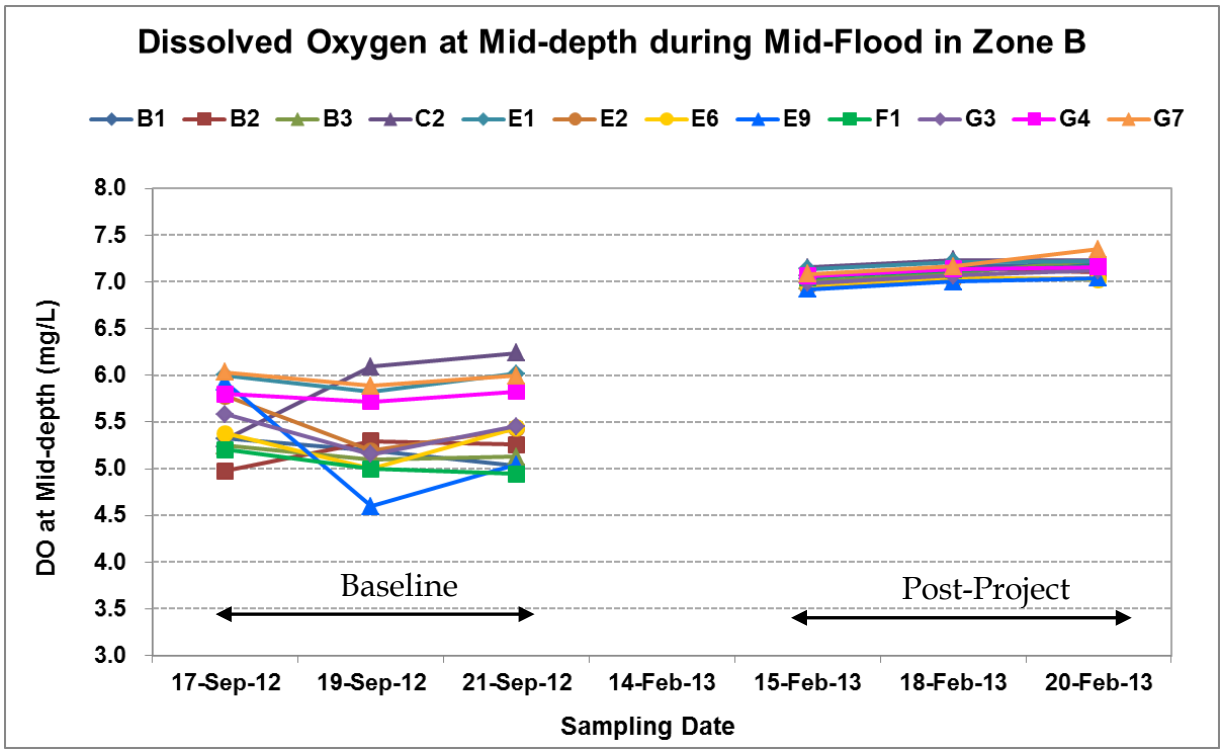


Figure C7 Dissolved oxygen (mg/L) at surface and mid-depth of water column measured during mid-flood in Zone B

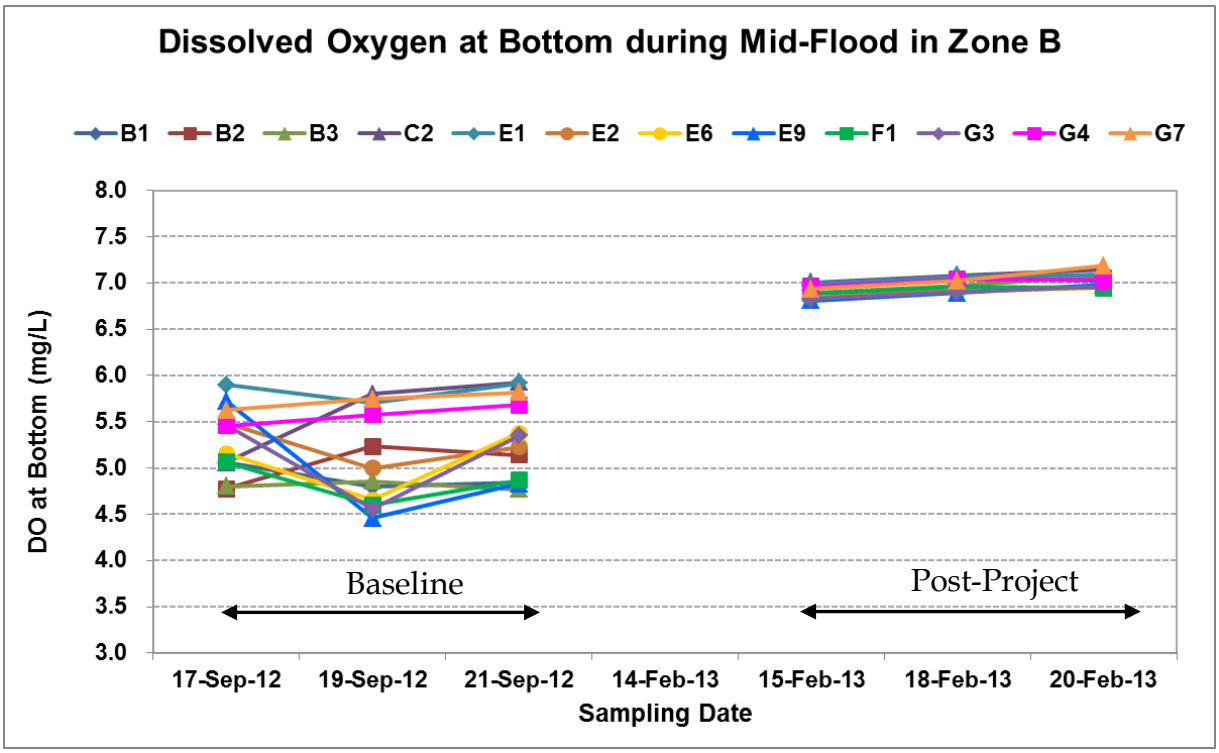
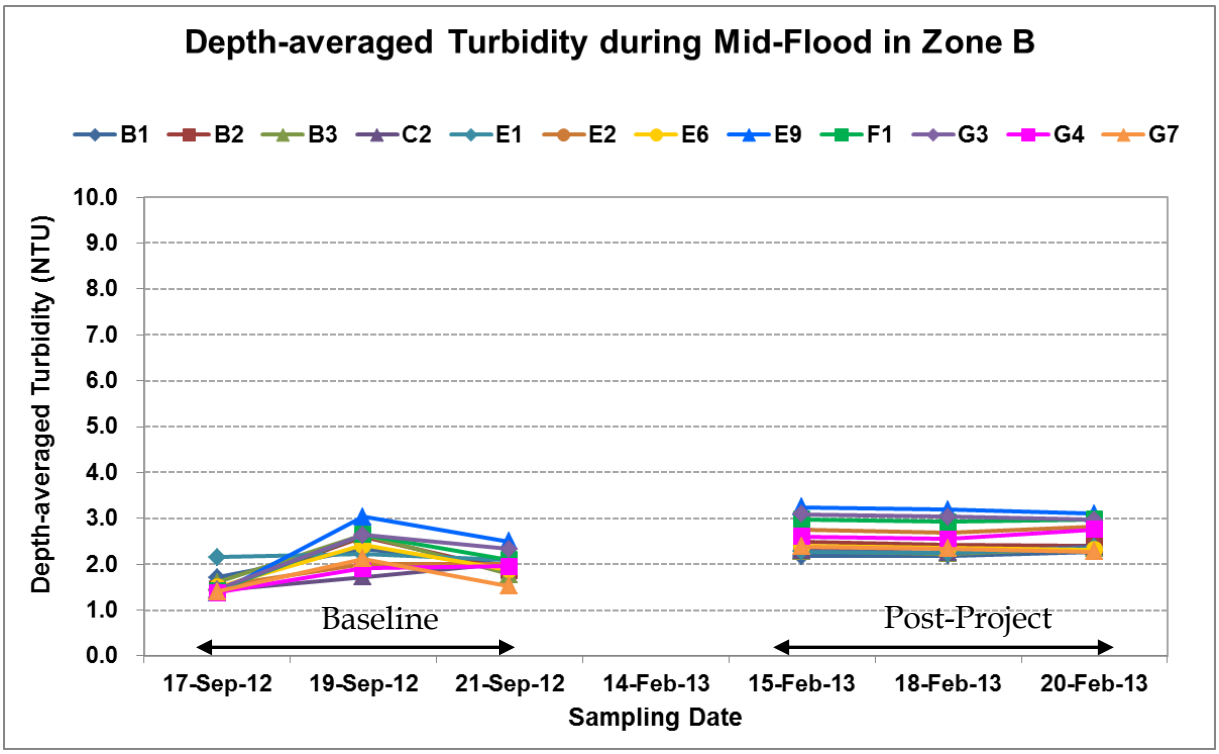


Figure C8 Dissolved oxygen (mg/L) at bottom of water column measured during mid-flood in Zone B



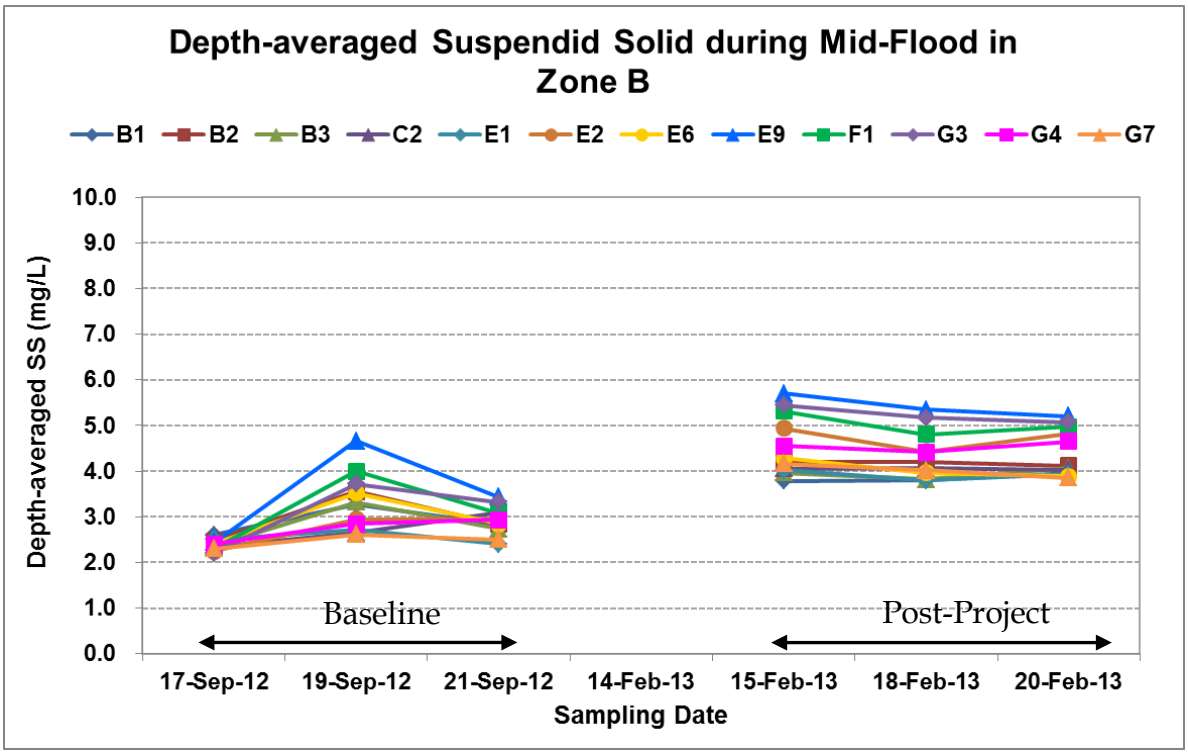
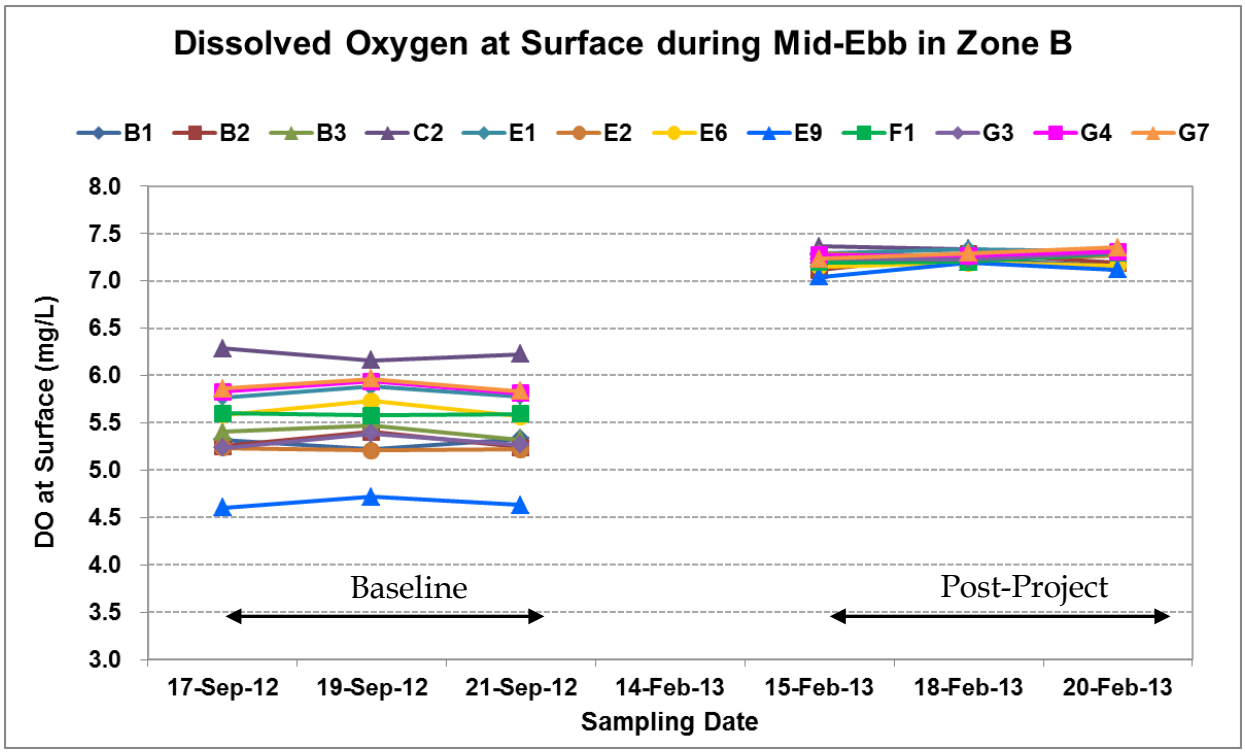


Figure C9 Depth-averaged Turbidity (NTU) and Depth-averaged Suspended Solid (mg/L) during mid-flood in Zone B



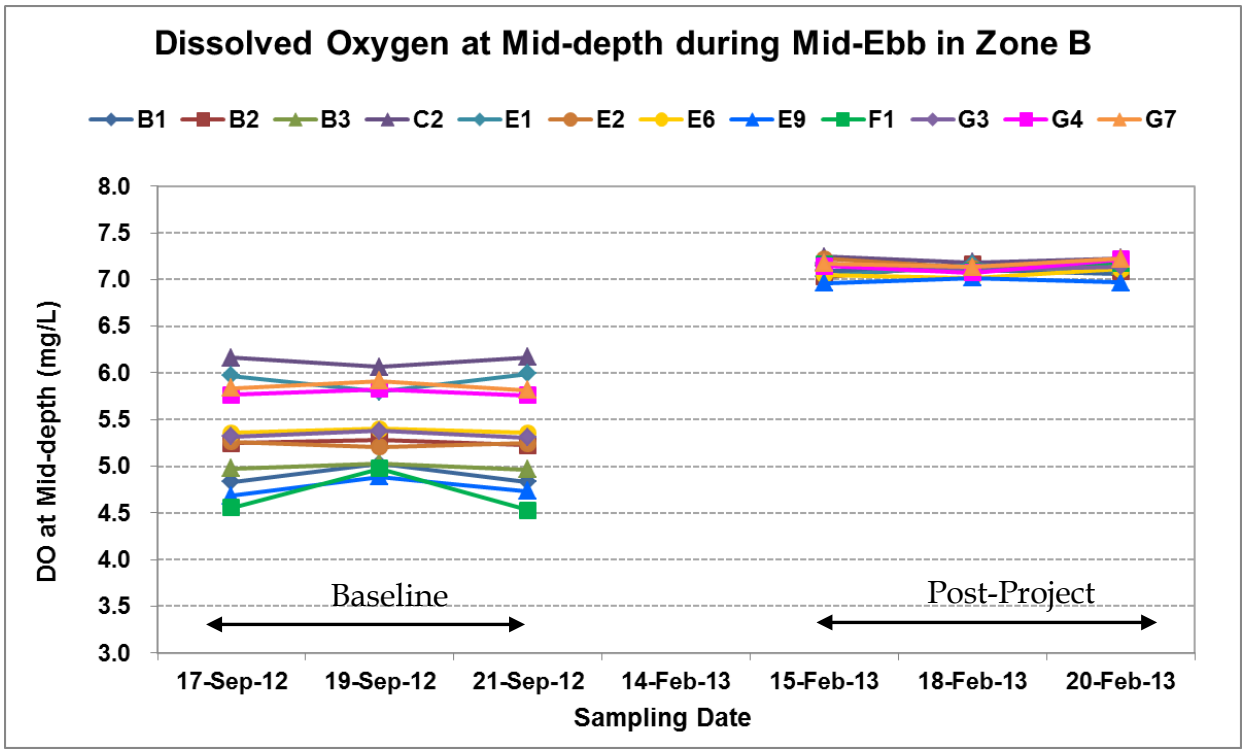


Figure C10 Dissolved oxygen (mg/L) at surface and mid-depth of water column measured during mid-ebb in Zone B

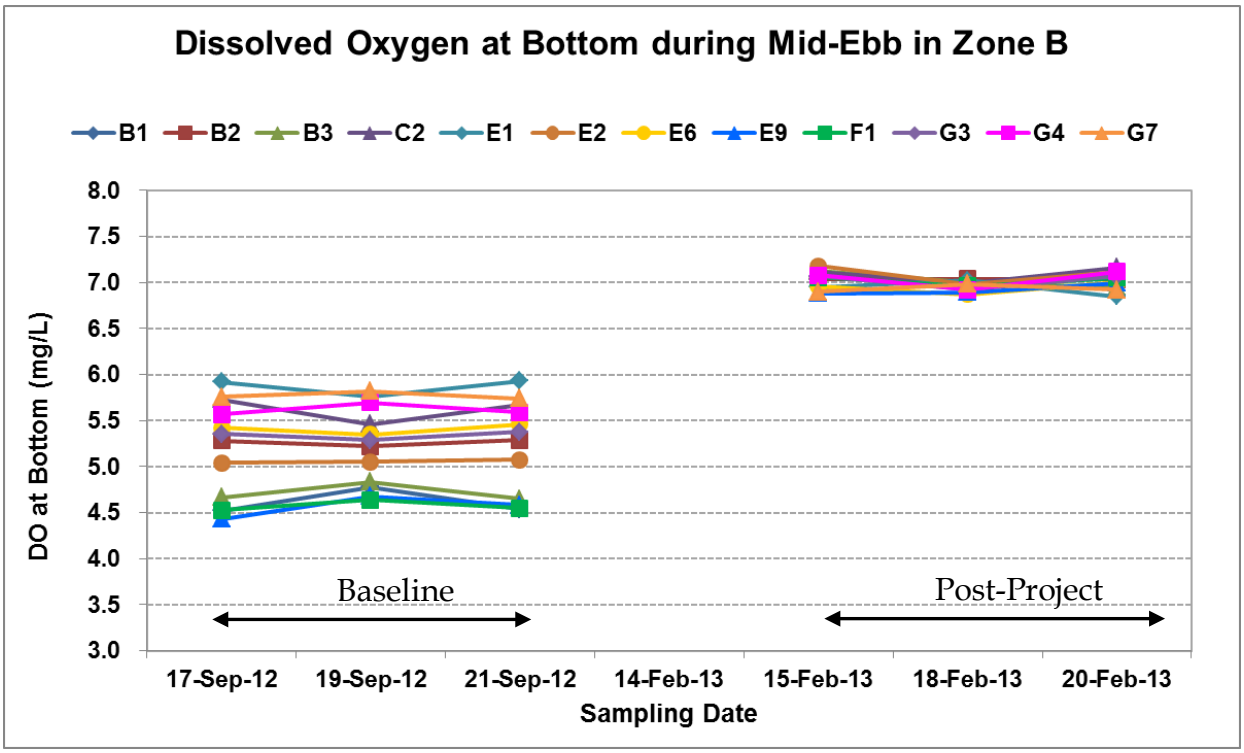
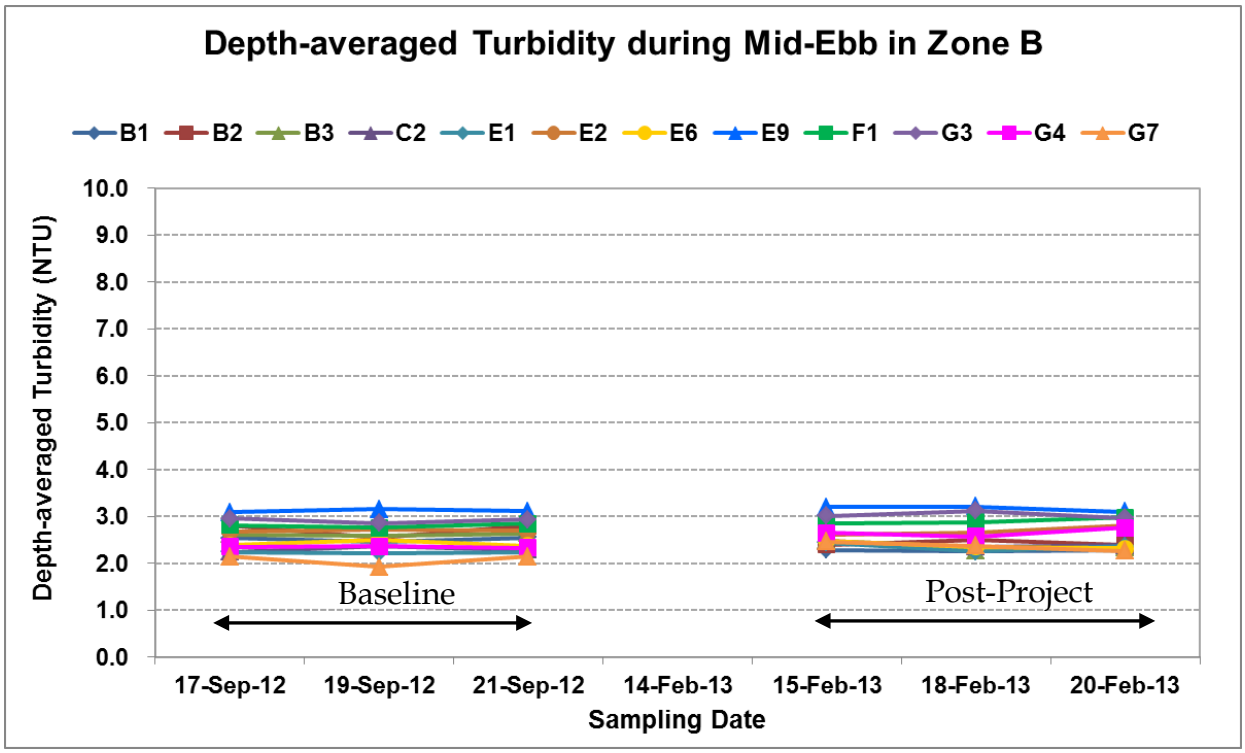


Figure C11 Dissolved oxygen (mg/L) at bottom of water column measured during mid-ebb in Zone B



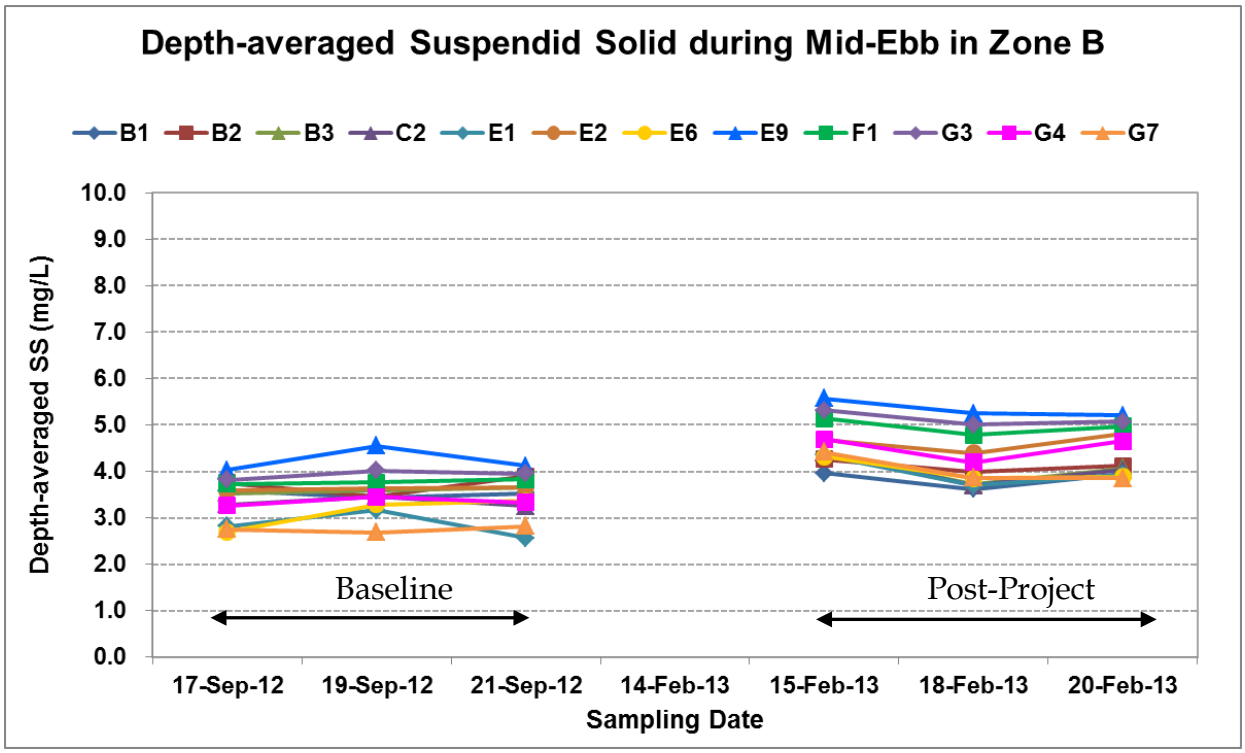
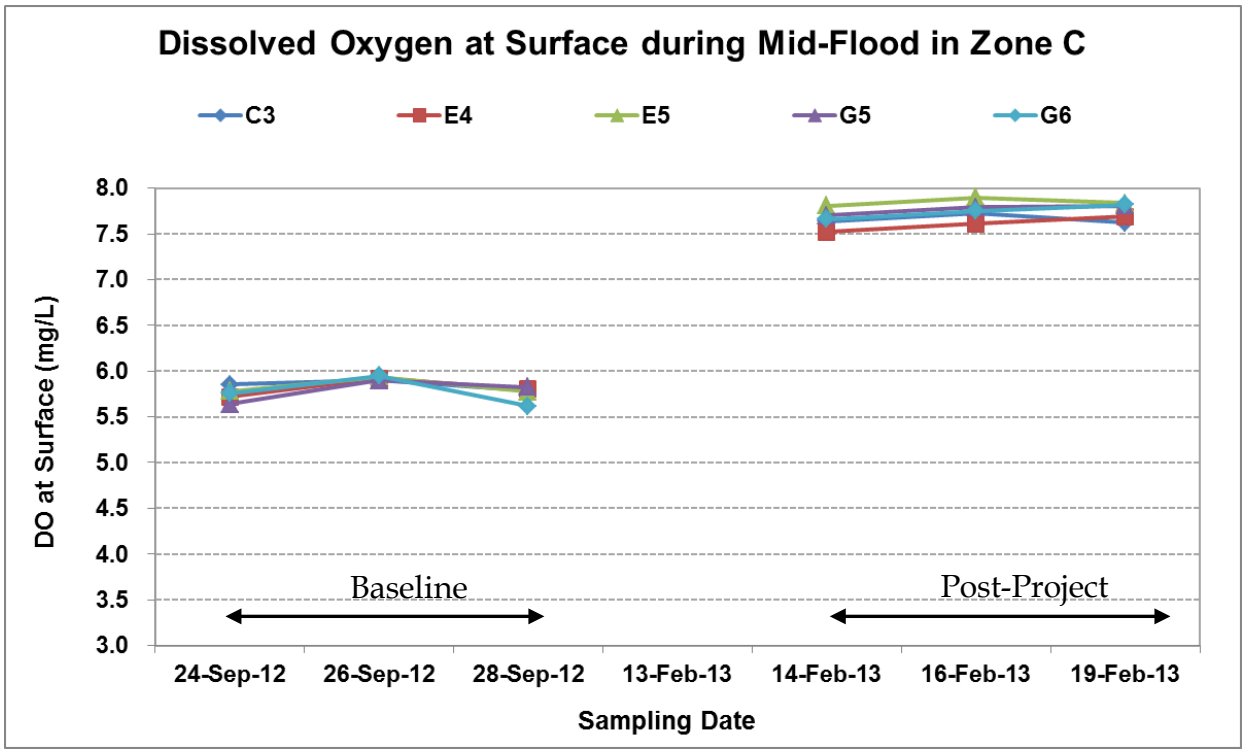


Figure C12 Depth-averaged Turbidity (NTU) and Depth-averaged Suspended Solid (mg/L) during mid-ebb in Zone B



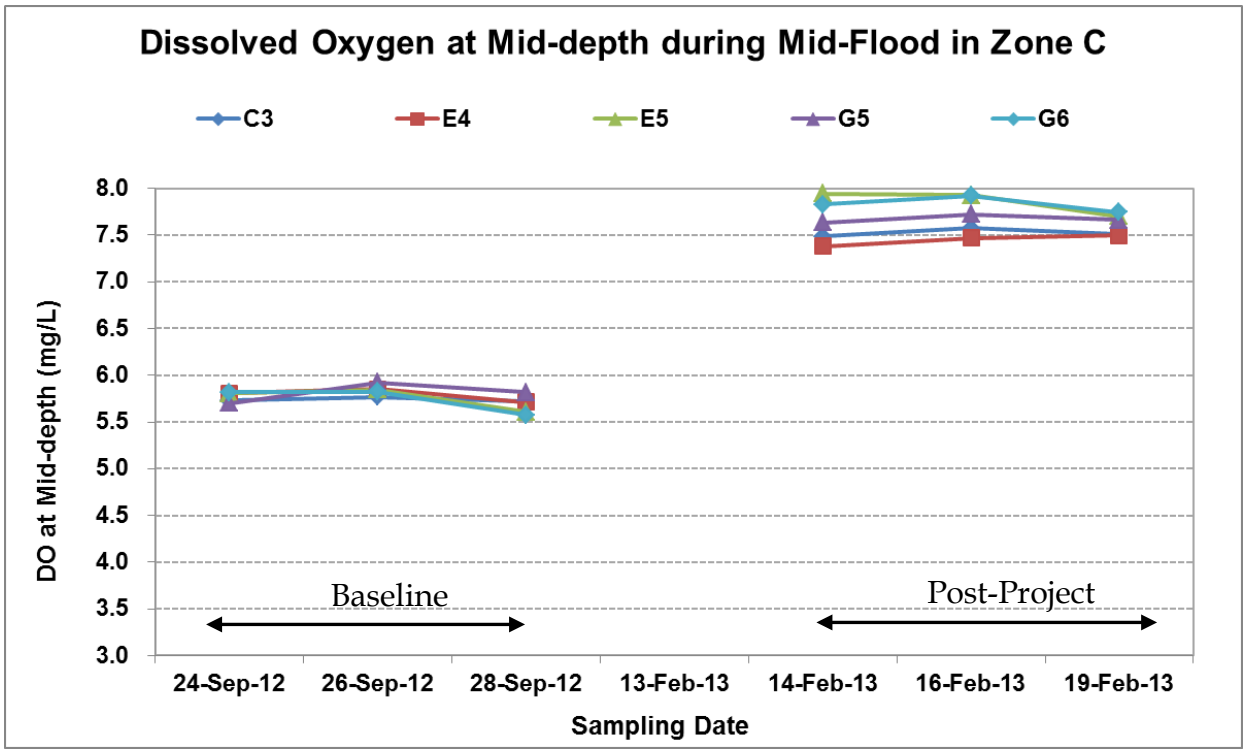


Figure C13 Dissolved oxygen (mg/L) at surface and mid-depth of water column measured during mid-flood in Zone C

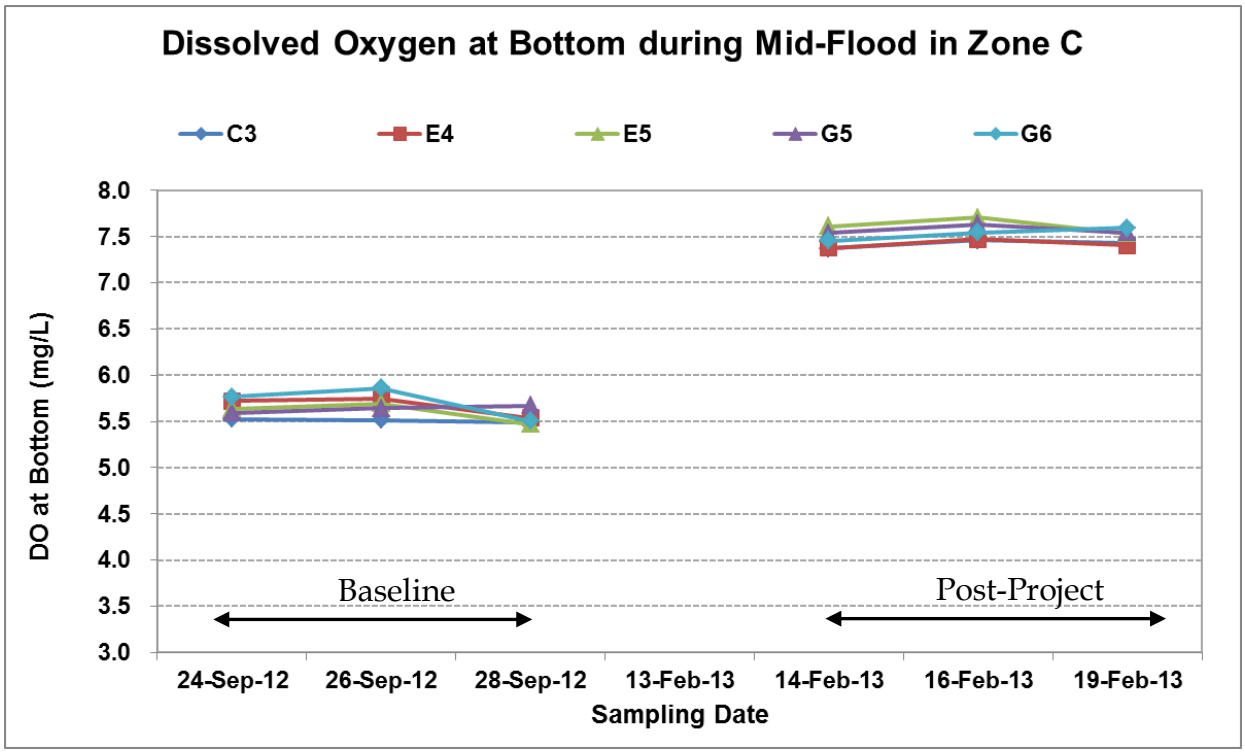
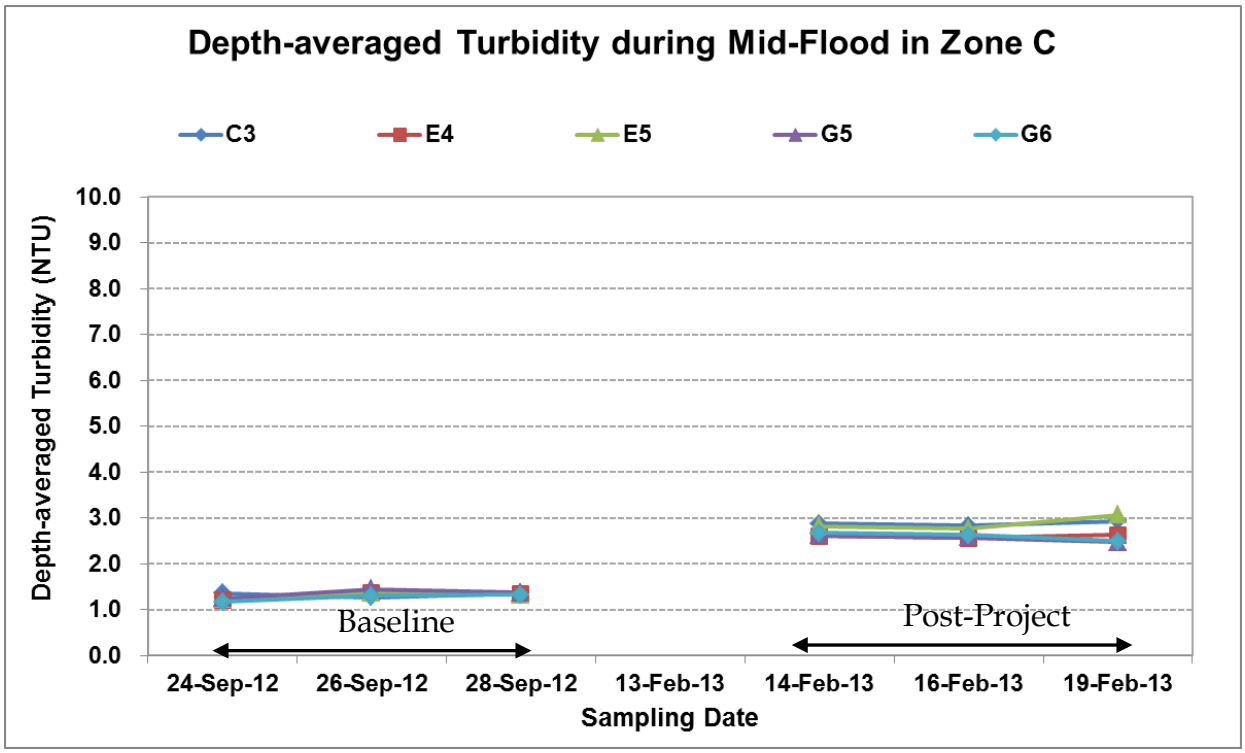


Figure C14 Dissolved oxygen (mg/L) at bottom of water column measured during mid-flood in Zone C



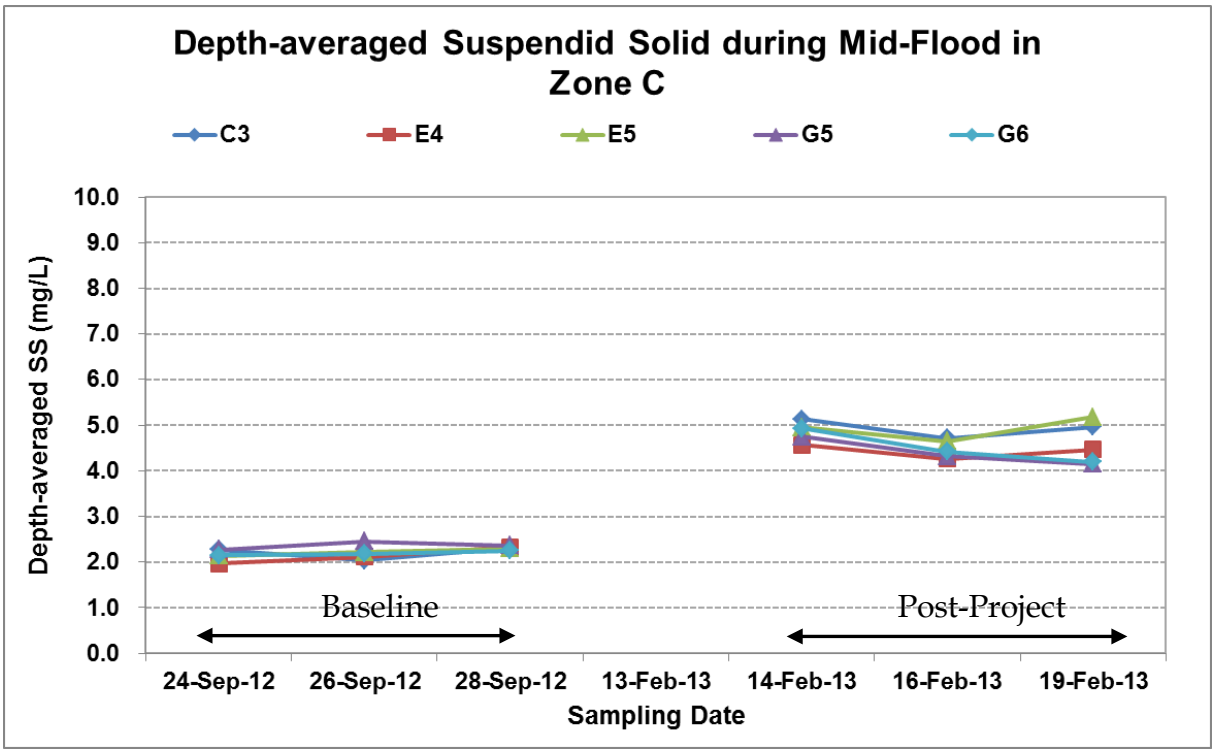
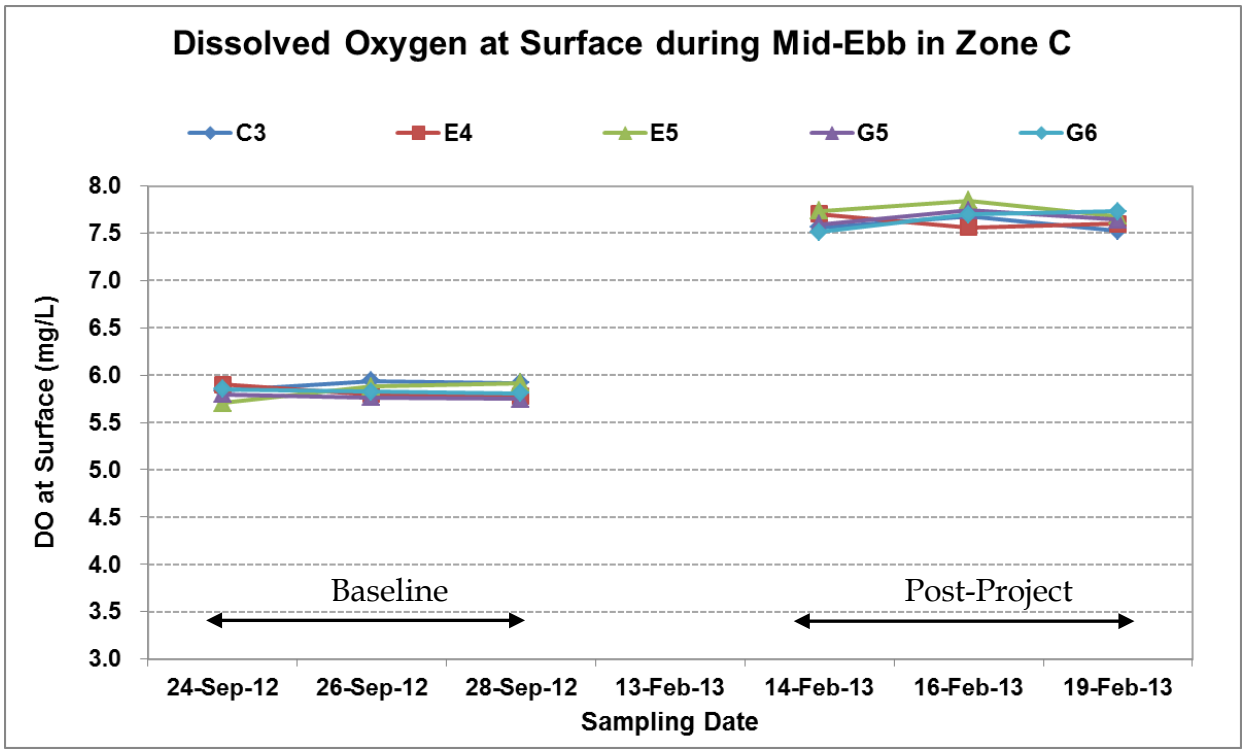


Figure C15 Depth-averaged Turbidity (NTU) and Depth-averaged Suspended Solid (mg/L) during mid-flood in Zone C



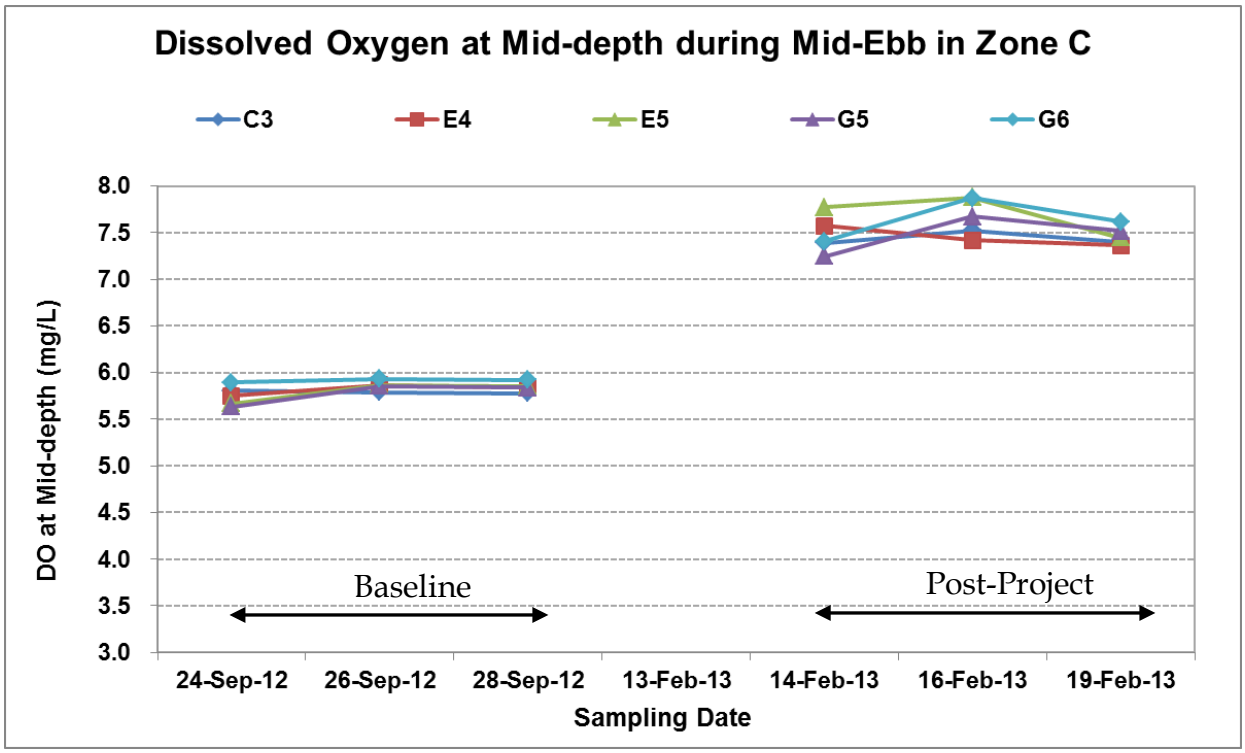


Figure C16 Dissolved oxygen (mg/L) at surface and mid-depth of water column measured during mid-ebb in Zone C

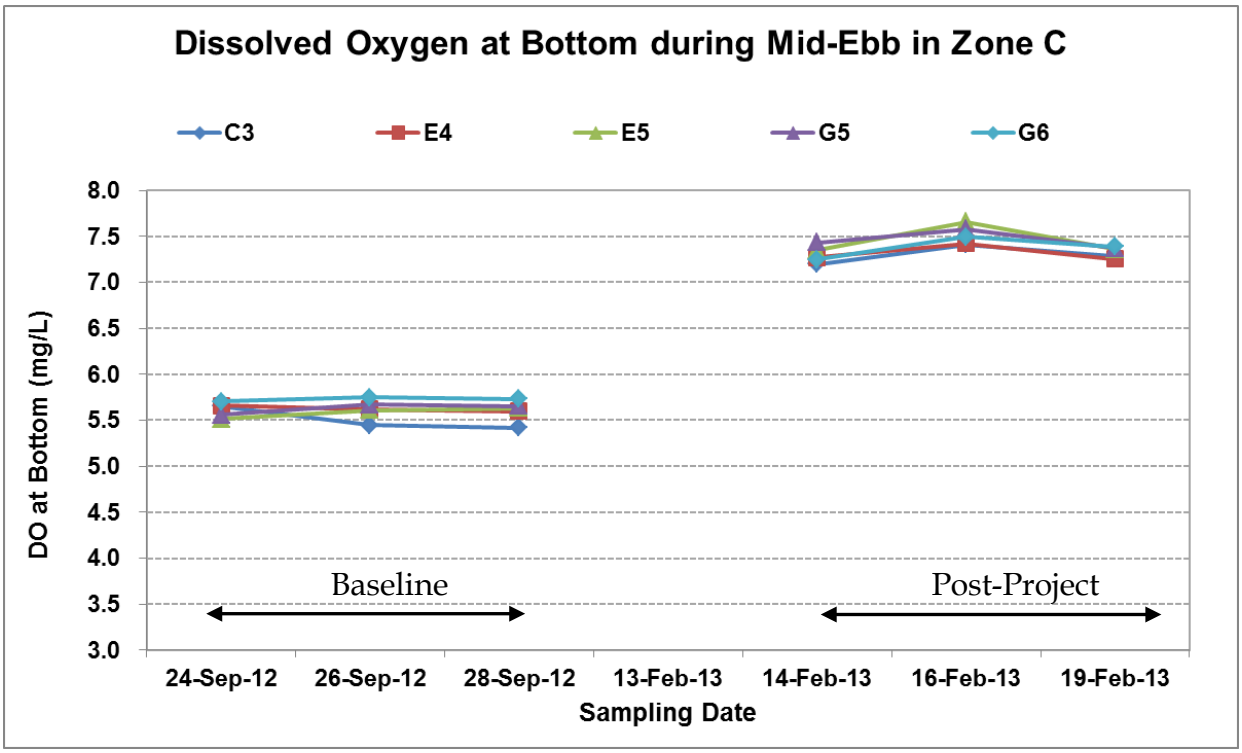
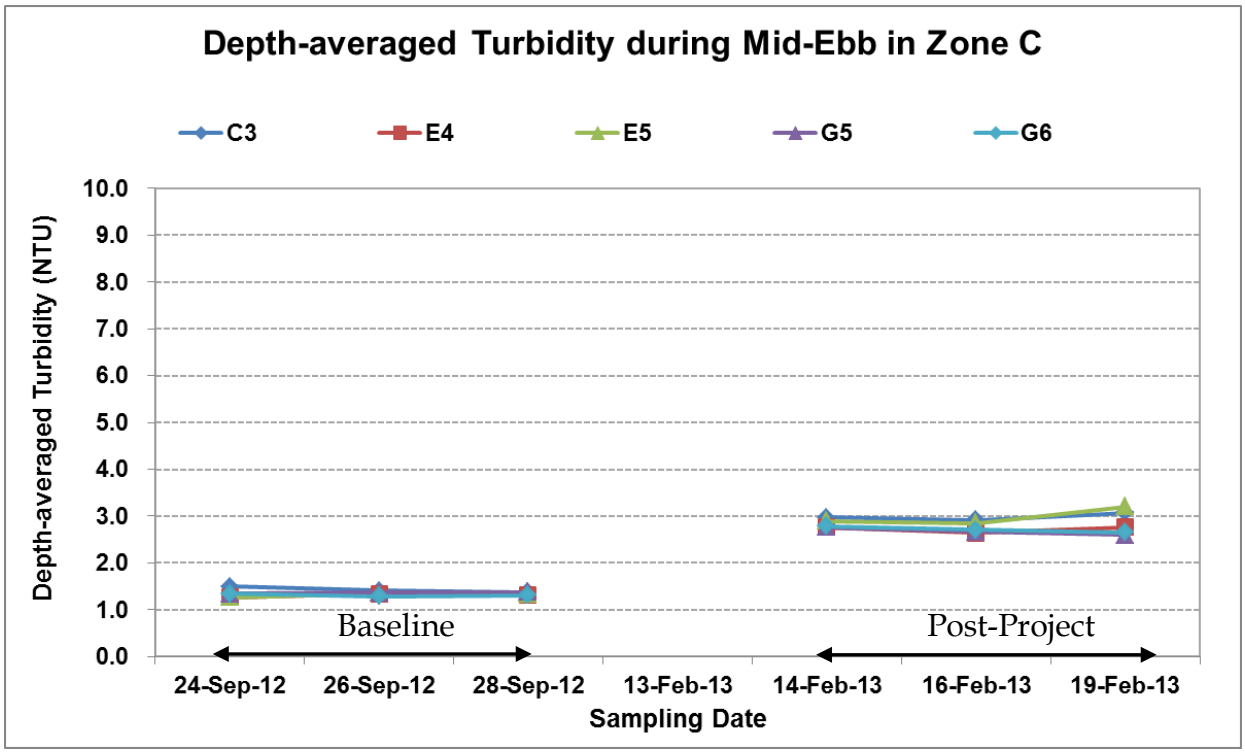


Figure C17 Dissolved oxygen (mg/L) at bottom of water column measured during mid-ebb in Zone C



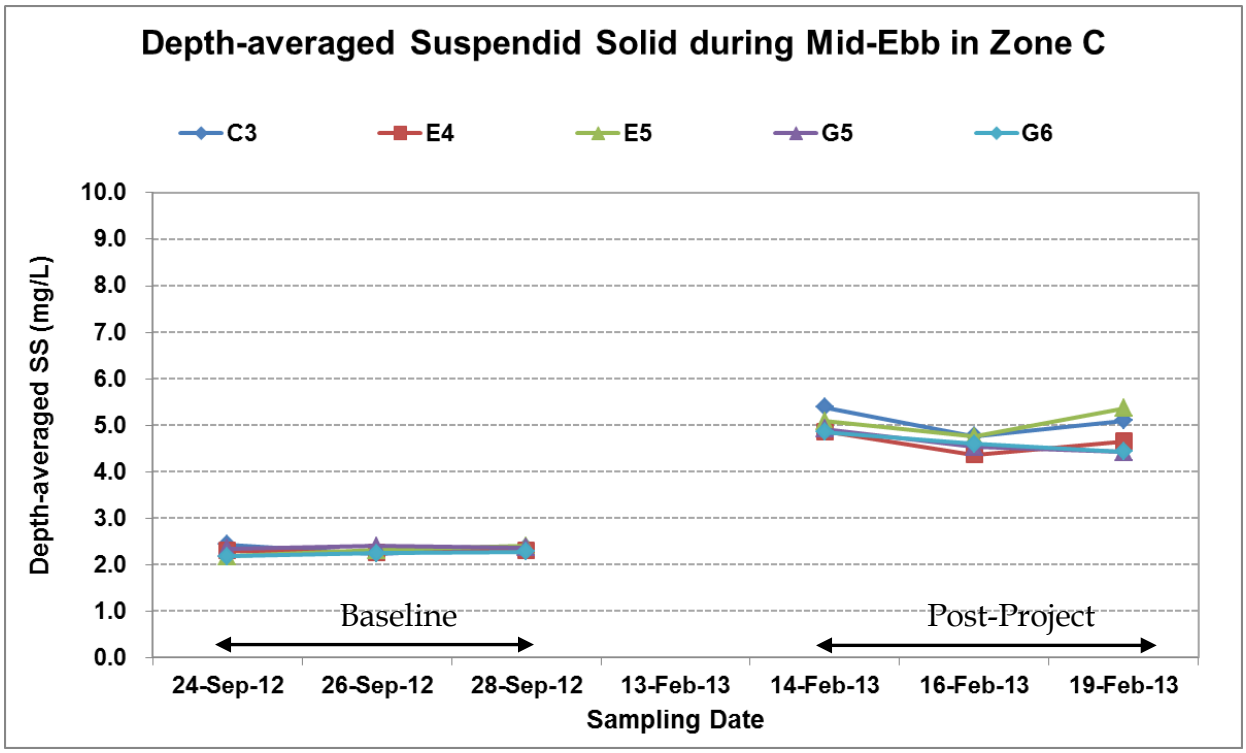


Figure C18 Depth-averaged Turbidity (NTU) and Depth-averaged Suspended Solid (mg/L) during mid-ebb in Zone C

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