

Annex B

Monitoring Results

Water Quality Profiling for CMP IV - December 2009 Sampling

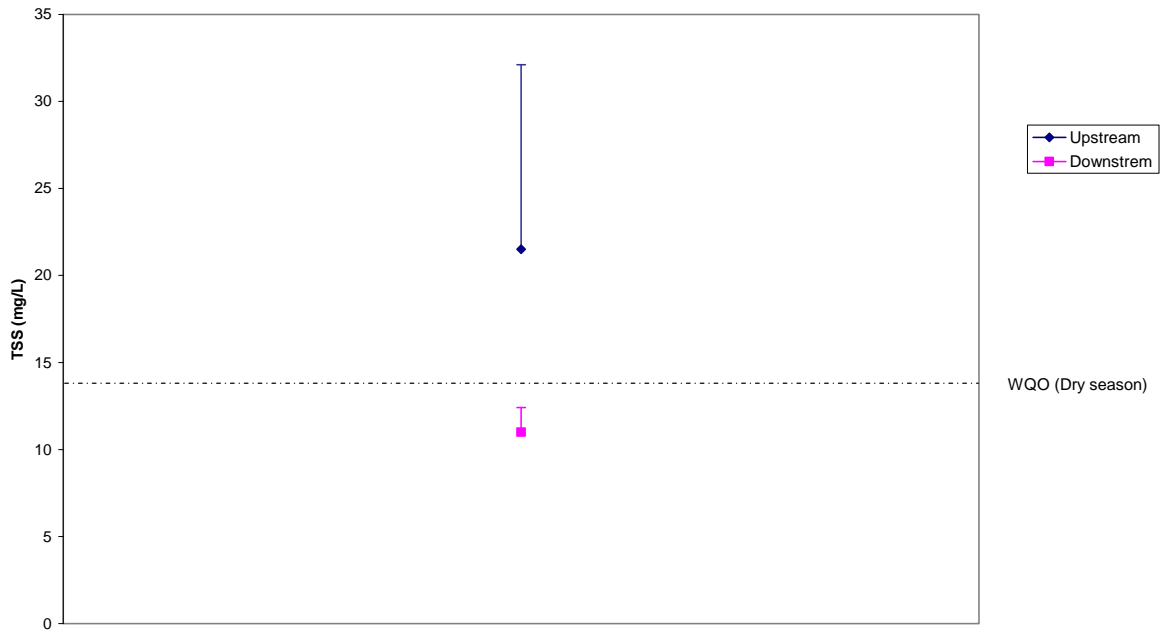


Figure 1: Total Suspended Solids (mean + SD) during Water Column Profiling for CMP IV in December 2009.

Water Column Profiling for CMP IV - Dec 2009 Sampling

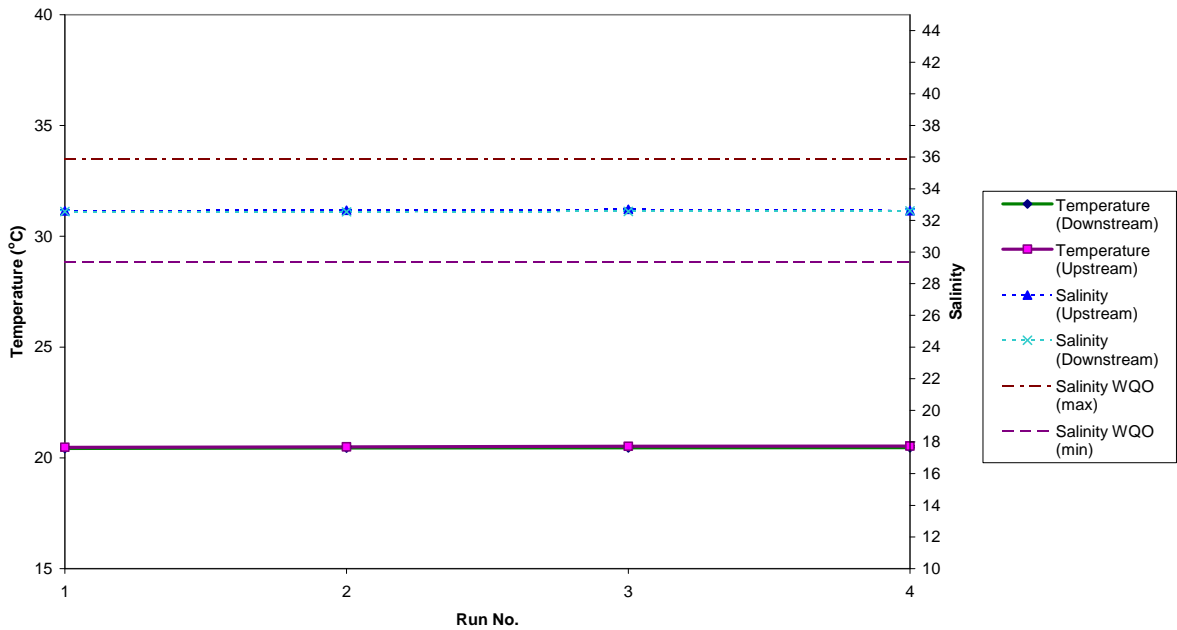


Figure 2: Salinity and Temperature (mean + SD) during Water Column Profiling for CMP IV in December 2009

Source: H:\Team\EM\GMS Projects\0103262 CEDD EM&A for CMP at Sha Chau (2009 - 2013)\06 Contract Submission (LAM)\06.9 Water Column Profiling CMP IV\Dec 2009

Date: 03/02/2010

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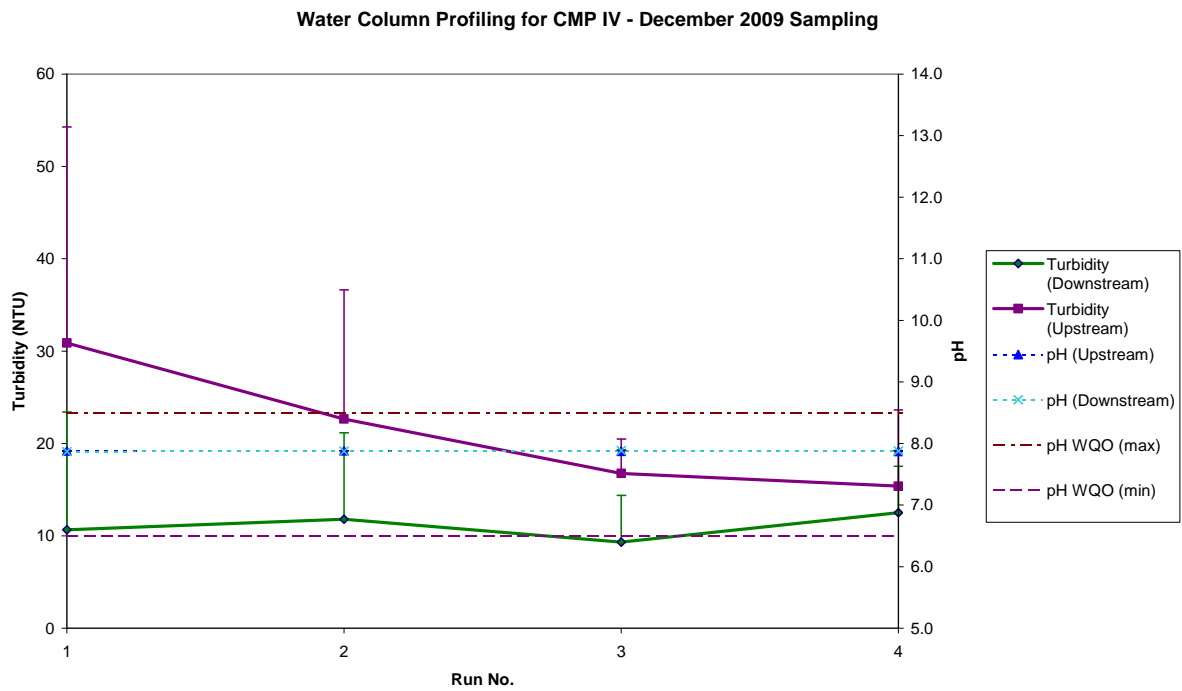


Figure 3: Turbidity and pH (mean + SD) during Water Column Profiling for CMP IV in December 2009.

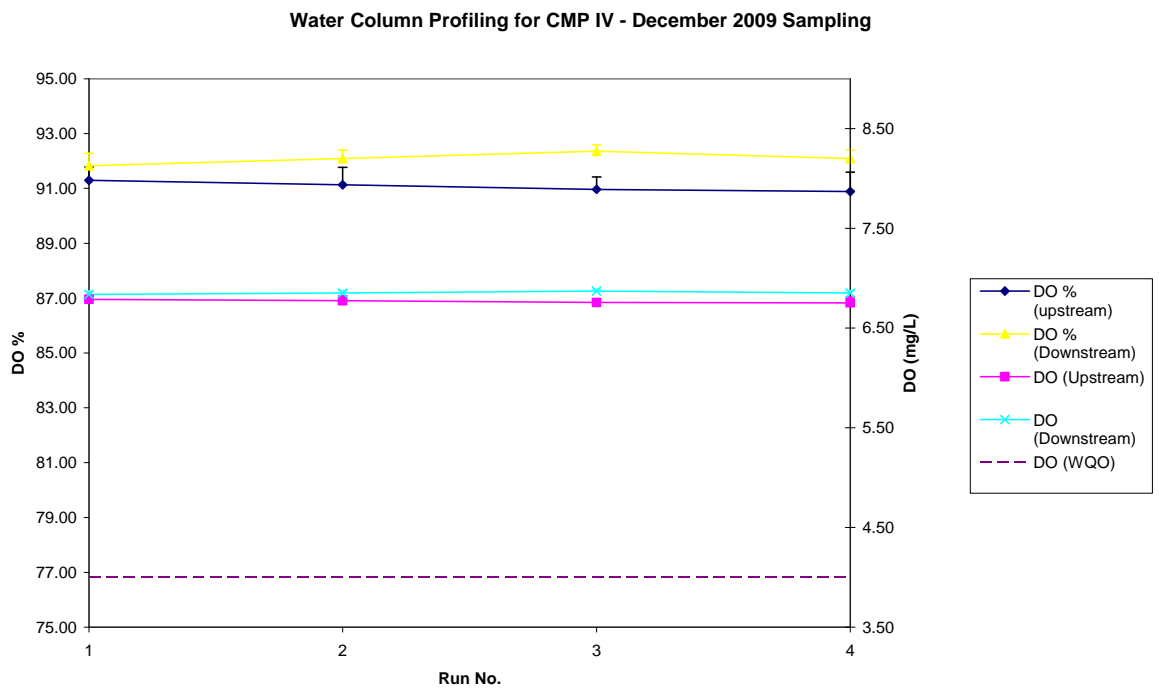


Figure 4: Dissolved Oxygen (mean + SD) during Water Column Profiling for CMP IV in December 2009.

Source: H:\Team\EM\GMS Projects\0103262 CEDD EM&A for CMP at Sha Chau (2009 - 2013)\06 Contract Submission (LAM)\06.9 Water Column Profiling CMP IV\Dec 2009
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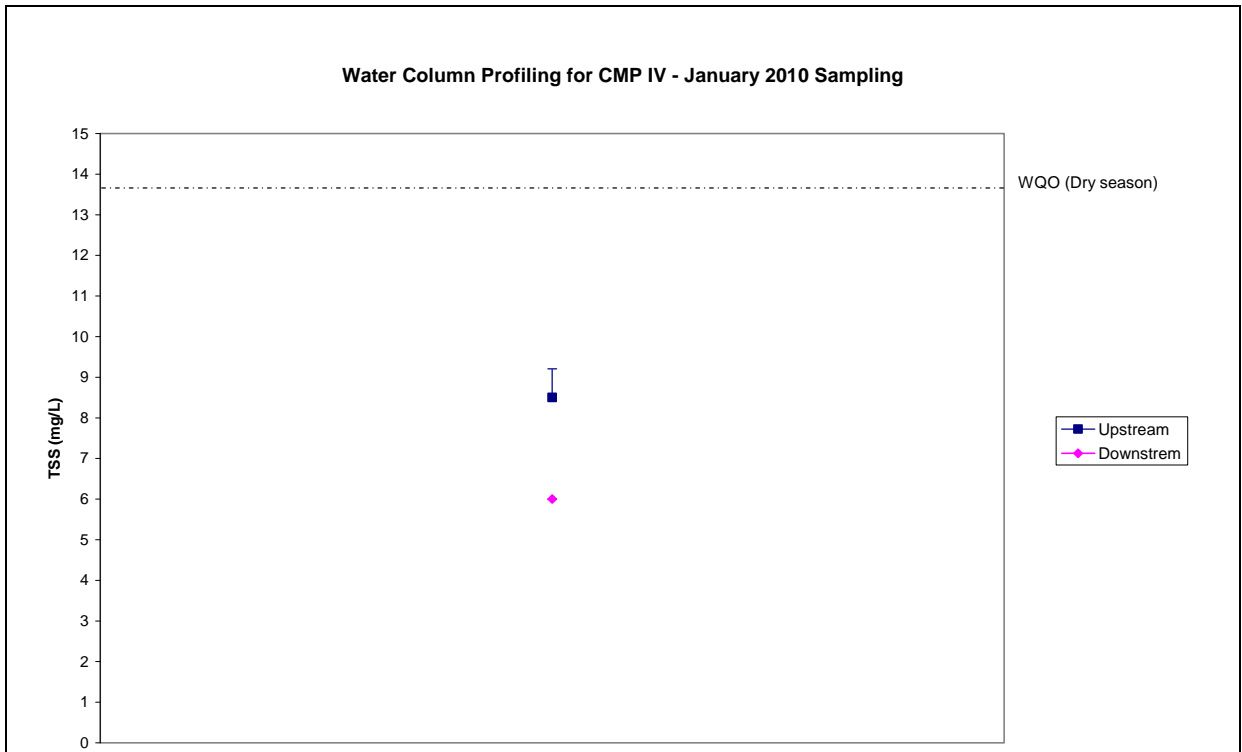


Figure 5: Total Suspended Solids (mean + SD) during Water Column Profiling for CMP IV in January 2010.

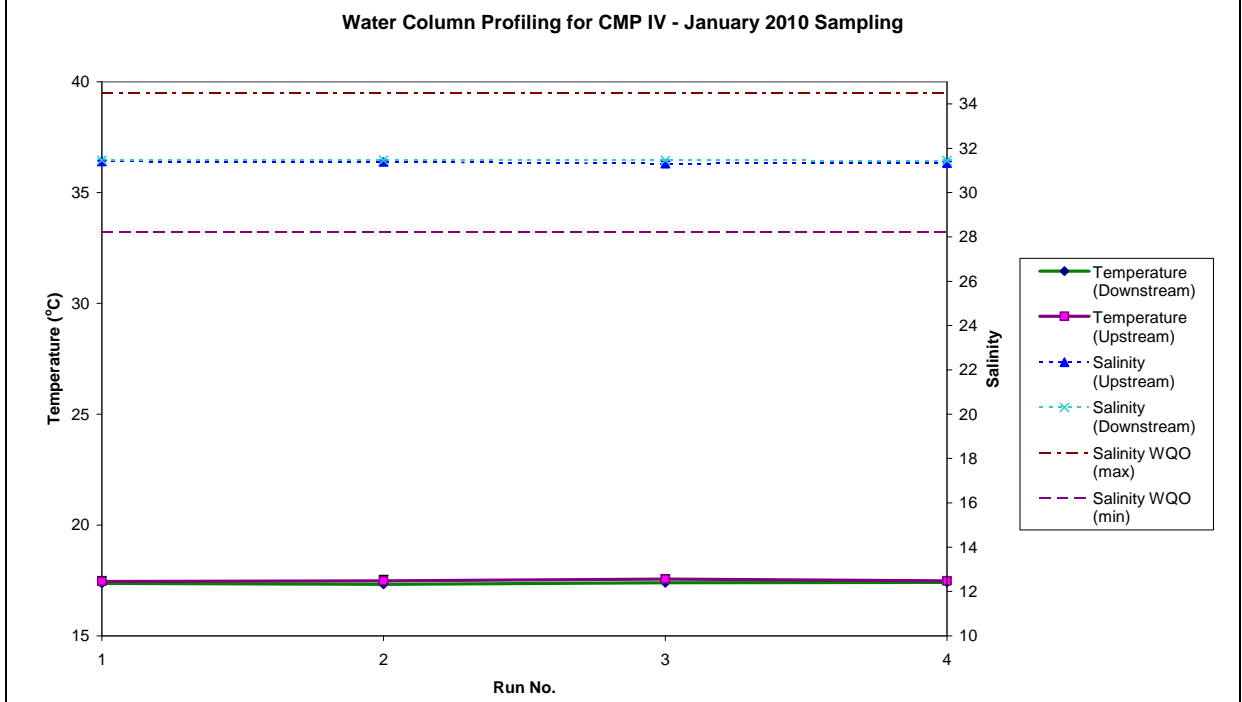


Figure 6: Salinity and Temperature (mean + SD) during Water Column Profiling for CMP IV in January 2010.

Source: H:\Team\EM\GMS Projects\0103262 CEDD EM&A for CMP at Sha Chau (2009 - 2013)\06 Contract Submission (LAM)\06.9 Water Column Profiling CMP IV\Jan 2010
 Date: 03/02/2010

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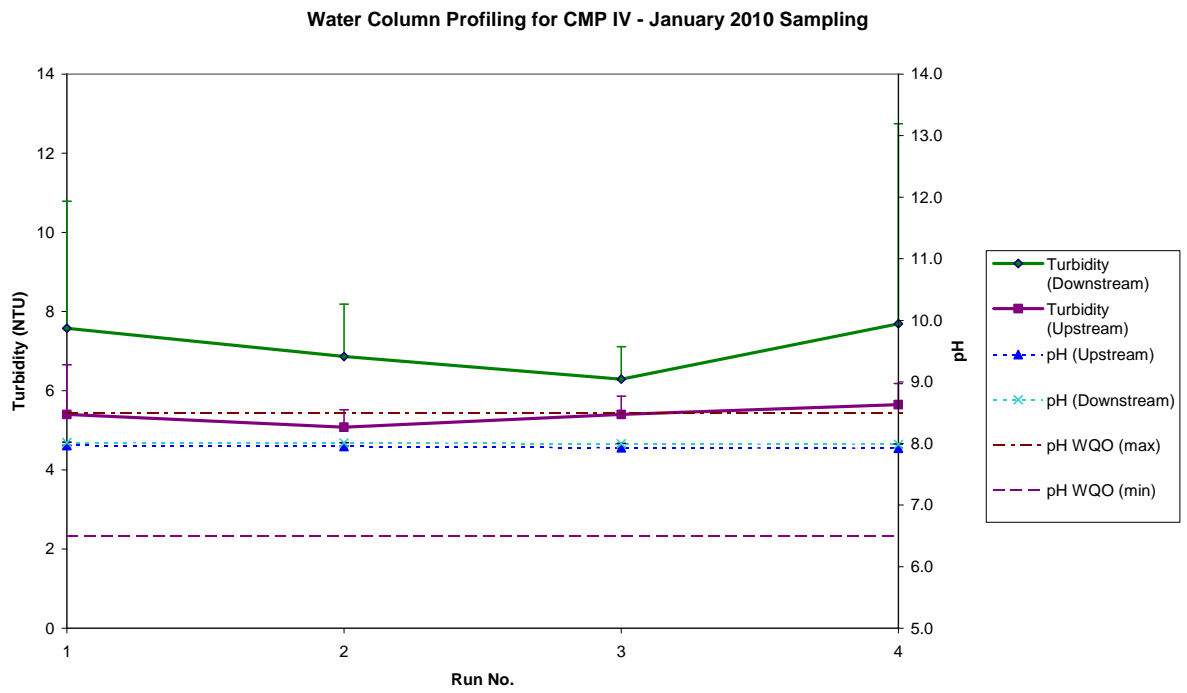


Figure 7: Turbidity and pH (mean + SD) during Water Column Profiling for CMP IV in January 2010.

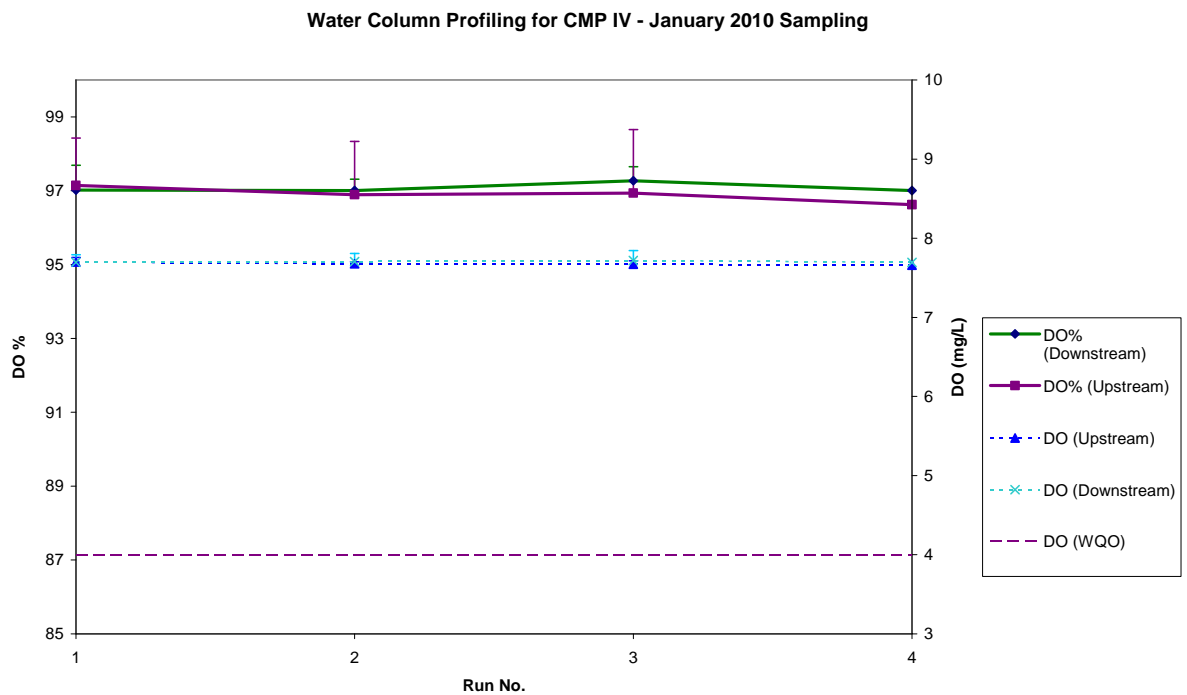


Figure 8: Dissolved Oxygen (mean + SD) during Water Column Profiling for CMP IV in January 2010.

Source: H:\Team\EM\GMS Projects\0103262 CEDD EM&A for CMP at Sha Chau (2009 - 2013)\06 Contract Submission (LAM)\06.9 Water Column Profiling CMP IV\Jan 2010
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Water Quality Sampling for CMP V - January 2010 Sampling

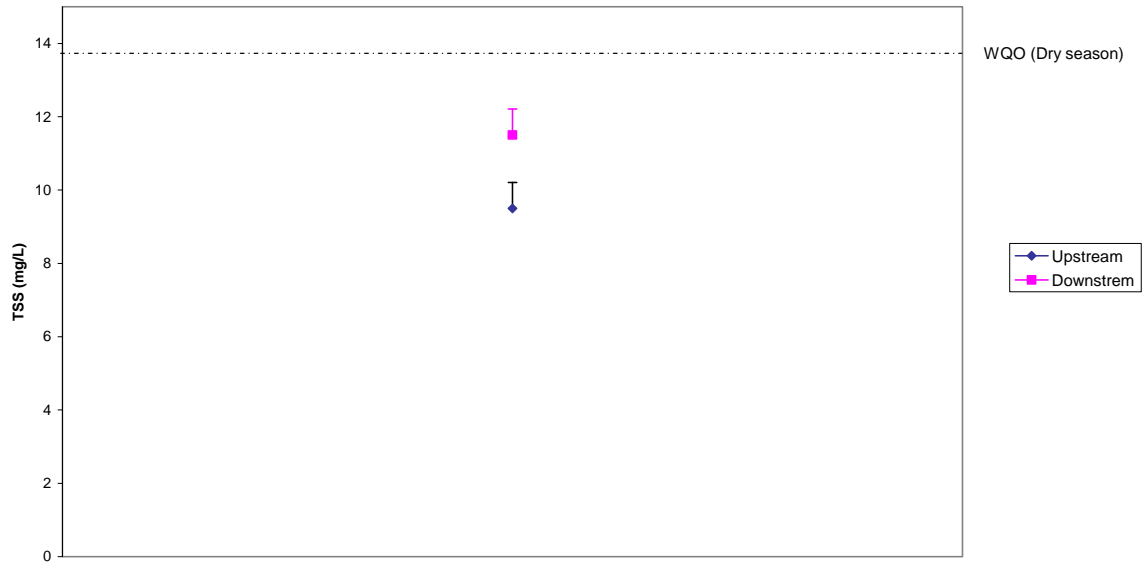


Figure 9: Total Suspended Solids (mean + SD) during Water Column Profiling for CMP V in January 2010.

Water Column Profiling for CMP V - January 2010 Sampling

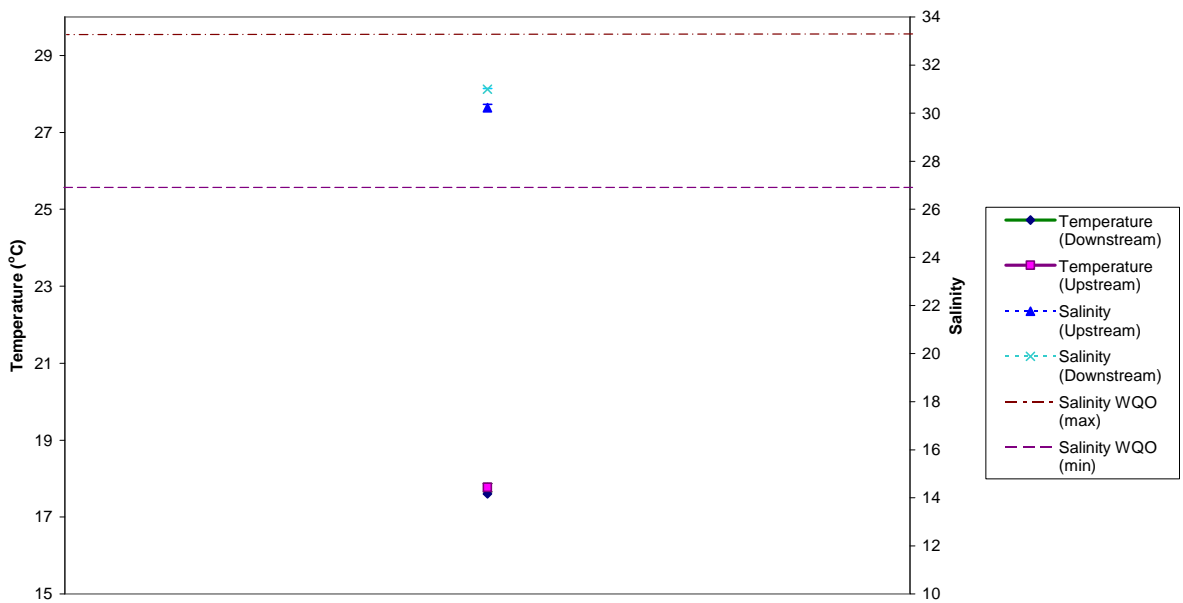


Figure 10: Salinity and Temperature (mean + SD) during Water Column Profiling for CMP V in January 2010.

Source: H:\Team\EM\GMS Projects\0103262 CEDD EM&A for CMP at Sha Chau (2009 - 2013)\06 Contract Submission (LAM)\06. 12 Water Column Profiling CMP V\Jan 2010
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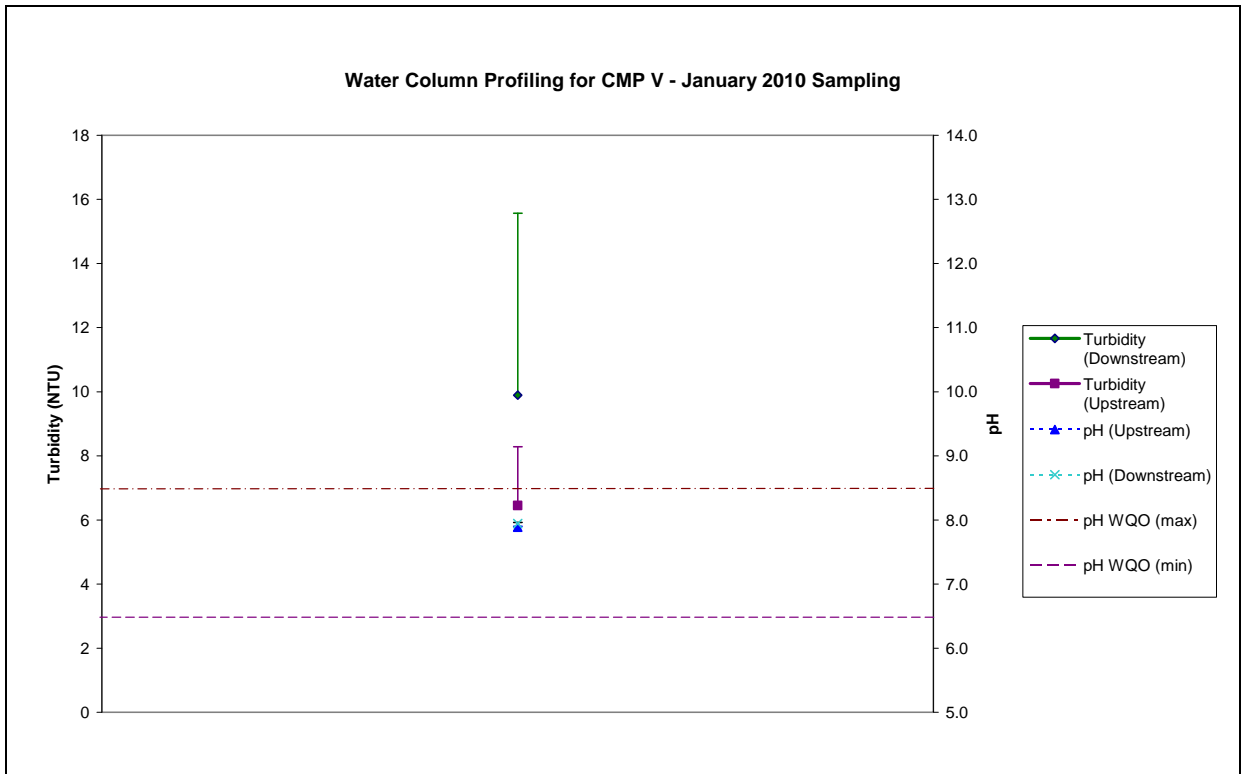


Figure 11: Turbidity and pH (mean + SD) during Water Column Profiling for CMP V in January 2010.

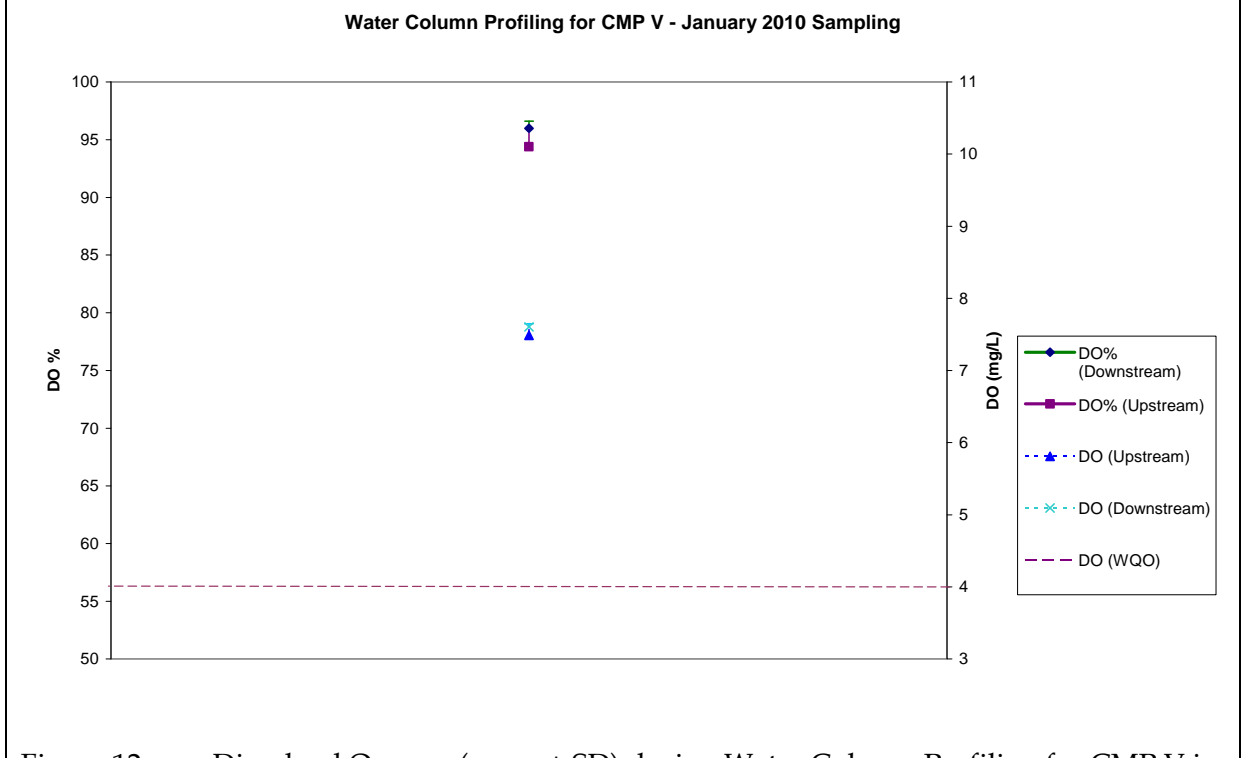


Figure 12: Dissolved Oxygen (mean + SD) during Water Column Profiling for CMP V in January 2010.

Source: H:\Team\EM\GMS Projects\0103262 CEDD EM&A for CMP at Sha Chau (2009 - 2013)\06 Contract Submission (LAM)\06. 12 Water Column Profiling CMP V\Jan 2010
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Impact Monitoring during Dredging for CMP V – 20 January 2010

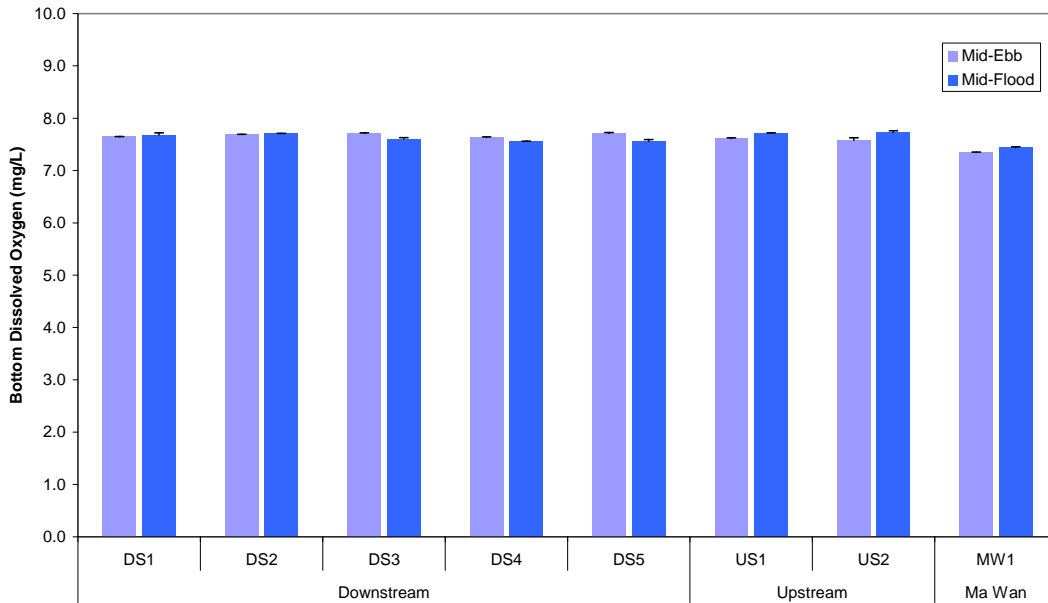


Figure 13: Bottom DO level (mean + SD) at Downstream (DS1, DS2, DS3, DS4 and DS5 stations), Upstream (US1 and US2 stations) and Ma Wan (MW1 station) during Impact Monitoring for Dredging on 20 January 2010.

Impact Monitoring during Dredging for CMP V – 20 January 2010

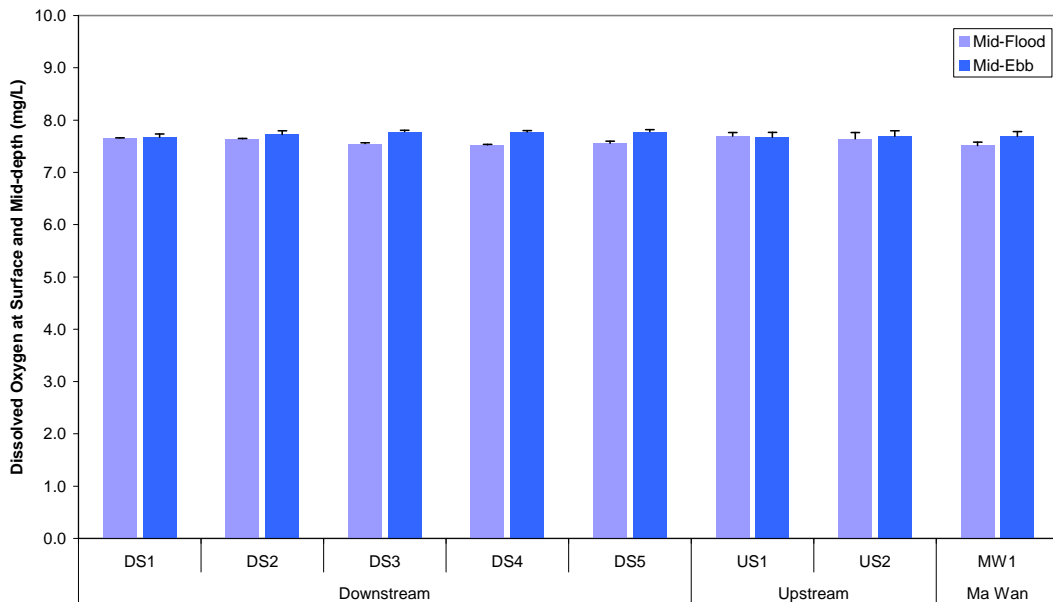


Figure 14: DO Level at Surface and Mid-depth (mean + SD) at Downstream (DS1, DS2, DS3, DS4 and DS5 stations), Upstream (US1 and US2 stations) and Ma Wan (MW1 station) during Impact Monitoring for Dredging on 20 January 2010.

Impact Monitoring during Dredging for CMP V – 20 January 2010

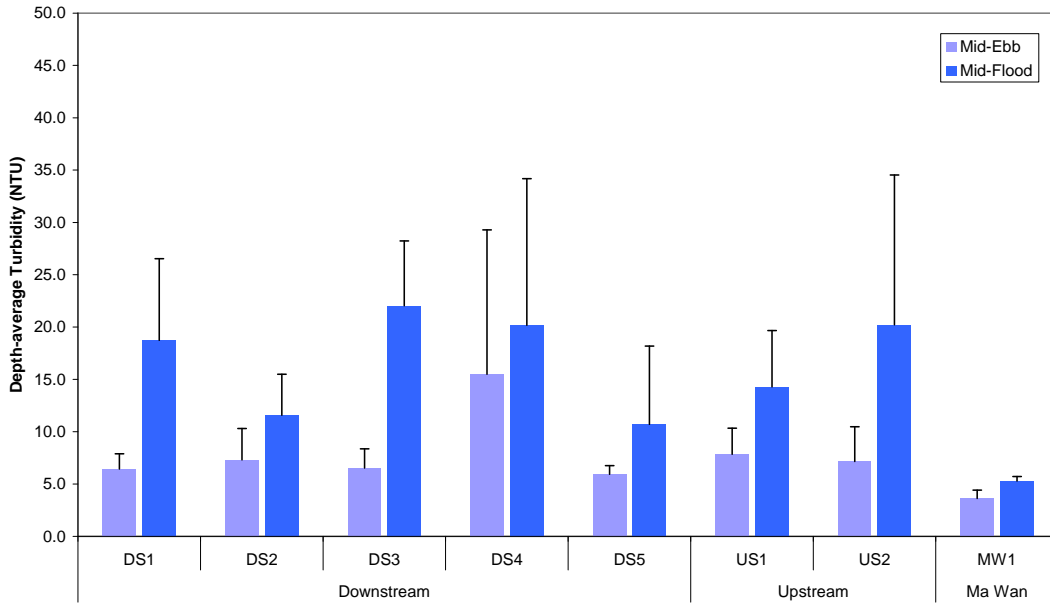


Figure 15: Depth-average Turbidity (mean + SD) at Downstream (DS1, DS2, DS3, DS4 and DS5 stations), Upstream (US1 and US2 stations) and Ma Wan (MW1 station) during Impact Monitoring for Dredging on 20 January 2010.

Impact Monitoring during Dredging for CMP V – 20 January 2010

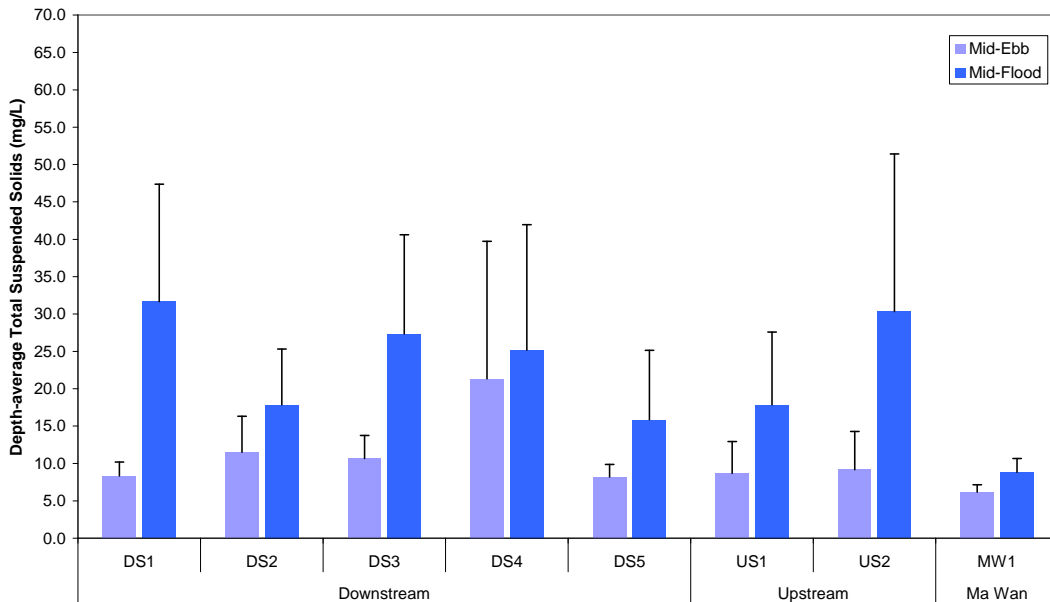


Figure 16: Depth-average Total Suspended Solids (mean + SD) at Downstream (DS1, DS2, DS3, DS4 and DS5), Upstream (US1 and US2) and Ma Wan (MW1) stations during Impact Monitoring for Dredging on 20 January 2010.

Source: H:\Team\EM\GMS Projects\0103262 CEDD EM&A for CMP at Sha Chau (2009 - 2013)\06 Contract Submission (LAM)\06.2 Impact Monitoring during Dredging\Jan 2010

Date: 03/02/2010

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Table B1: Impact Water Quality Monitoring for Dredging Activities during Mid-ebb Tide for 20 January 2010

Station	Downstream (Impact)		
Time (hh:mm)	14:45-15:23		
Monitoring Depth (m)	Depth Average	Surface and Middle	Bottom
D.O. (mg/L)	N/A	7.75	7.68
Turbidity (NTU)	8.34	N/A	N/A
SS (mg/L)	12.00	N/A	N/A
Remarks	Dredging works were observed.		

Station	Upstream (Reference)		
Time (hh:mm)	14:25-14:59		
Monitoring Depth (m)	Depth Average	Surface and Middle	Bottom
D.O. (mg/L)	N/A	7.68	7.6
Turbidity (NTU)	7.49	N/A	N/A
SS (mg/L)	8.92	N/A	N/A
Remarks	Dredging works were observed.		

Station	Ma Wan		
Time (hh:mm)	16:09-16:13		
Monitoring Depth (m)	Depth Average	Surface and Middle	Bottom
D.O. (mg/L)	N/A	7.43	7.35
Turbidity (NTU)	3.63	N/A	N/A
SS (mg/L)	6.17	N/A	N/A
Remarks			

Compliance with Action and Limit Levels

Parameter	Action Level		Limit Level		Mean Value at Impact Stations	Mean Value at Reference Stations	Compliance with Action level	Compliance with Limit Level
	Impact Stations	Comparison between I and R ^(a)	Mean Value at Impact Stations	Comparison between I and R ^(a)				
DO (Bottom)	< 2.96	R significantly greater than I (t-test, p < 0.05)	< 2.00	R significantly greater than I (t-test, p < 0.05)	7.68	7.60	Y	Y
DO (Surface and Mid Depth)	< 3.76	R significantly greater than I (t-test, p < 0.05)	< 3.11	R significantly greater than I (t-test, p < 0.05)	7.75	7.68	Y	Y
Turbidity (Depth-averaged)	> 28.14	I ≥ 1.2 R (8.99)	> 38.32	I ≥ 1.3 R (9.74)	8.34	7.49	Y	Y
SS (Depth-averaged)	> 37.88	I ≥ 1.2 R (10.70)	> 61.92	I ≥ 1.3 R (11.59)	12.00	8.92	Y	Y

Table B2: Impact Water Quality Monitoring for Dredging Activities during Mid-flood Tide for 20 January 2010

Station	Downstream (Impact)		
Time (hh:mm)	10:19 - 10:58		
Monitoring Depth (m)	Depth Average	Surface and Middle	Bottom
D.O. (mg/L)	N/A	7.59	7.62
Turbidity (NTU)	16.64	N/A	N/A
SS (mg/L)	23.57	N/A	N/A
Remarks	Dredging works were observed.		

Station	Upstream (Reference)		
Time (hh:mm)	09:56 - 10:13		
Monitoring Depth (m)	Depth Average	Surface and Middle	Bottom
D.O. (mg/L)	N/A	7.67	7.7
Turbidity (NTU)	17.25	N/A	N/A
SS (mg/L)	24.08	N/A	N/A
Remarks	Dredging works were observed.		

Station	Ma Wan		
Time (hh:mm)	08:37 - 09:33		
Monitoring Depth (m)	Depth Average	Surface and Middle	Bottom
D.O. (mg/L)	N/A	7.52	7.44
Turbidity (NTU)	5.29	N/A	N/A
SS (mg/L)	8.83	N/A	N/A
Remarks			

Compliance with Action and Limit Levels

Parameter	Action Level		Limit Level		Mean Value at Impact Stations	Mean Value at Reference Stations	Compliance with Action level	Compliance with Limit Level
	Mean Value at Impact Stations	Comparison between I and R ^(a)	Mean Value at Impact Stations	Comparison between I and R ^(a)				
DO (Bottom)	< 2.96	R significantly greater than I (t-test, p < 0.05)	< 2.00	R significantly greater than I (t-test, p < 0.05)	7.62	7.7	Y	Y
DO (Surface and Mid Depth)	< 3.76	R significantly greater than I (t-test, p < 0.05)	< 3.11	R significantly greater than I (t-test, p < 0.05)	7.59	7.67	Y	Y
Turbidity (Depth-averaged)	> 28.14	I ≥ 1.2 R (20.70)	> 38.32	I ≥ 1.3 R (22.43)	16.64	17.25	Y	Y
SS (Depth-averaged)	> 37.88	I ≥ 1.2 R (28.90)	> 61.92	I ≥ 1.3 R (31.31)	23.57	24.08	Y	Y

Note: (a) I = Impact; R = Reference Stations