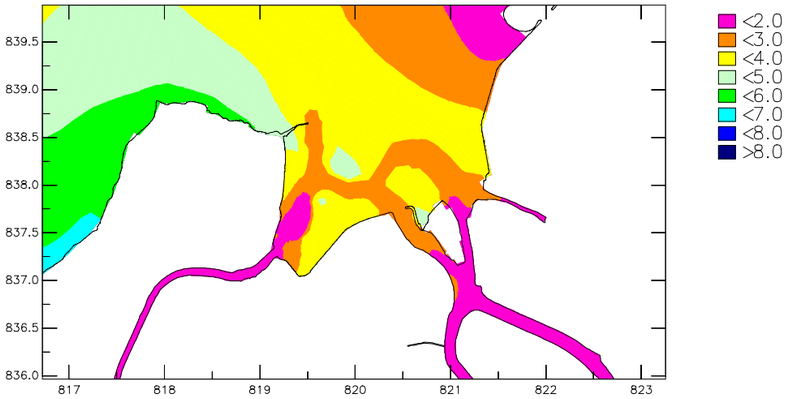
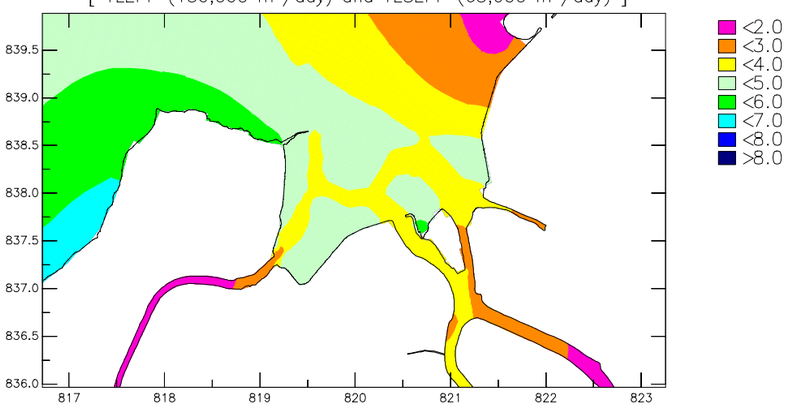
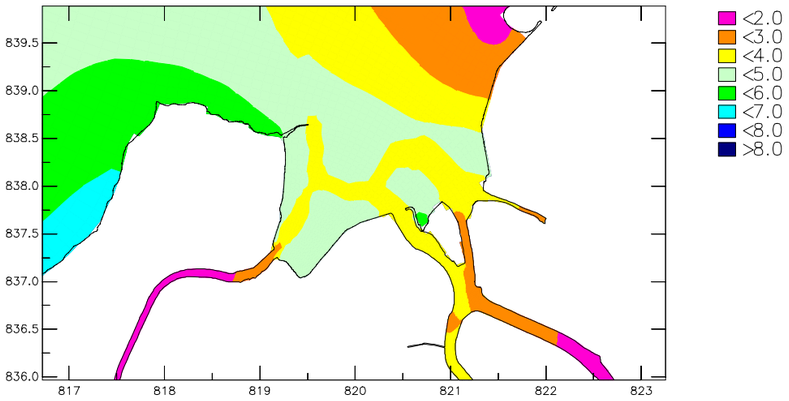
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

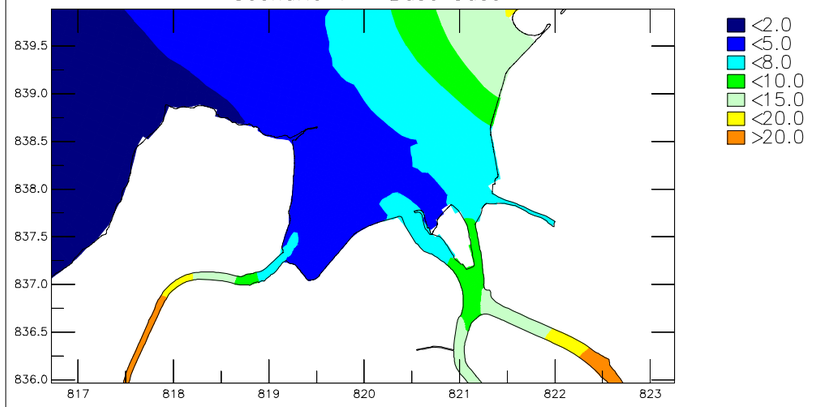


Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

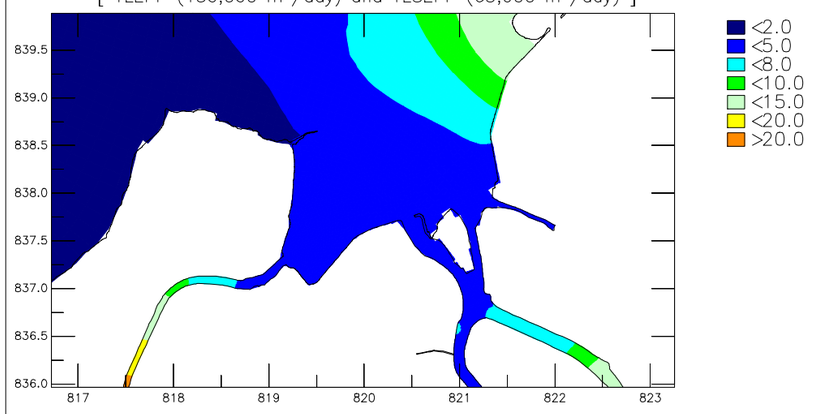


Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Dry Season
10 Percentile Depth Averaged Dissolved Oxygen (mg/L) Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)		Appendix 5.4 – 01
AECOM	/GPP	OpWQ-d.ssn

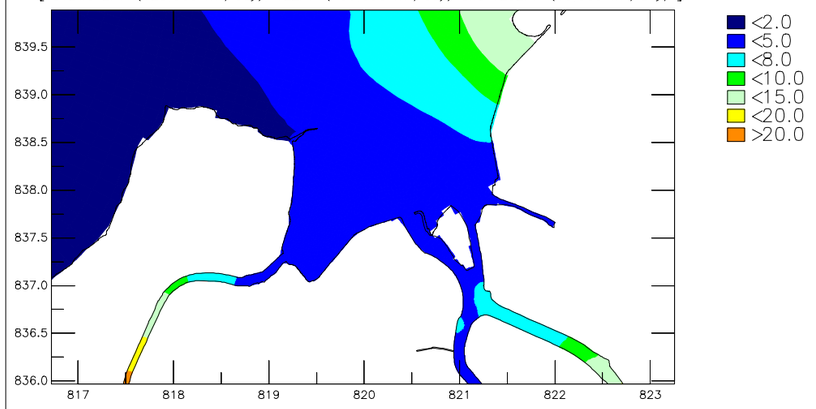
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

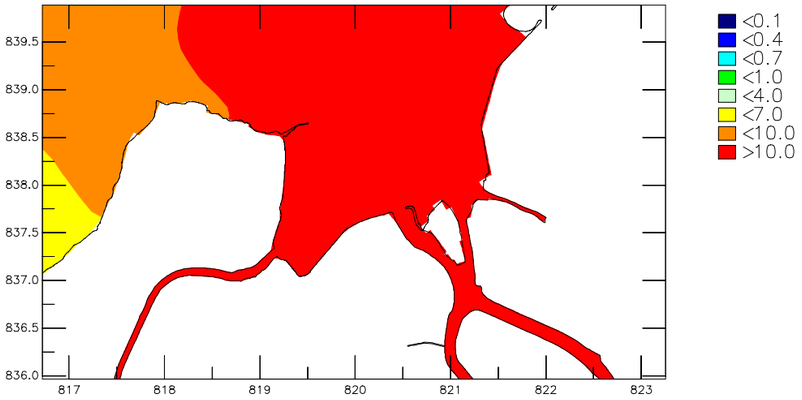


Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

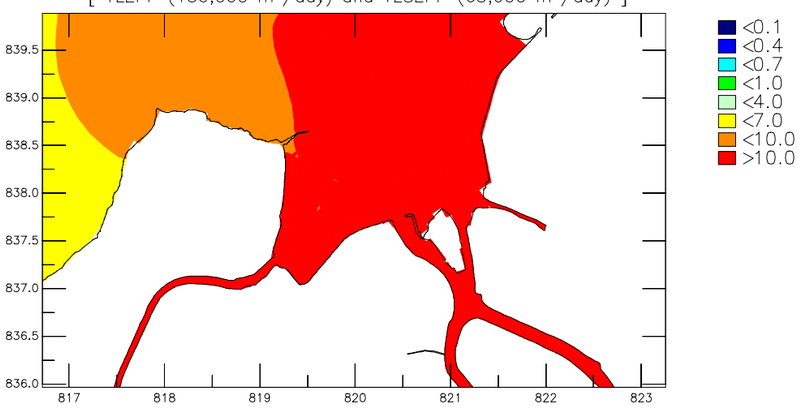


Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Dry Season
Mean Depth Averaged 5-Day Biochemical Oxygen Demand (mg/L) Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)		Appendix 5.4 – 02
AECOM	/GPP	OpWQ-d.ssn

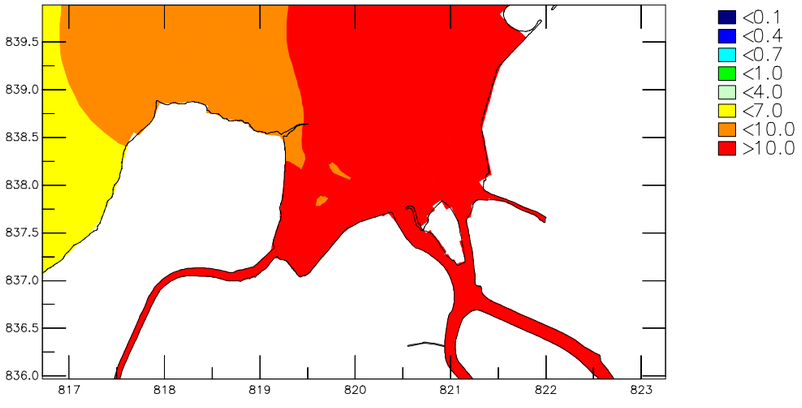
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

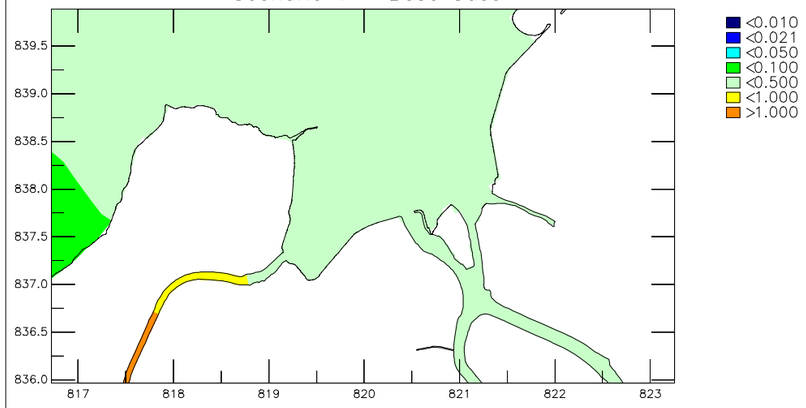


Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

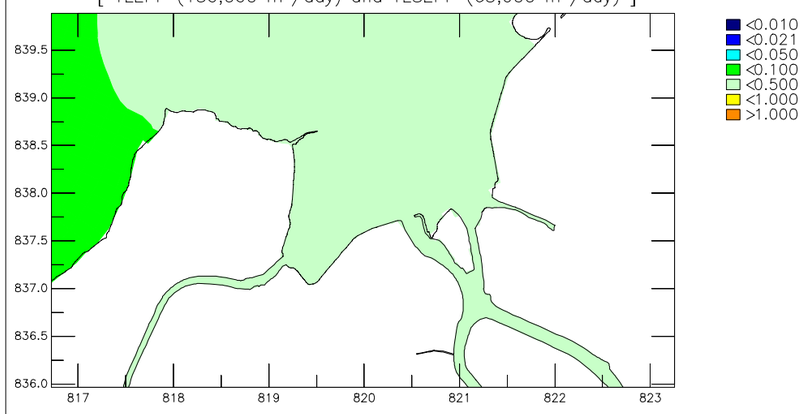


Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Dry Season
Mean Depth Averaged Total Inorganic Nitrogen (mg/L) Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)		Appendix 5.4 – 03
AECOM	/GPP	OpWQ-d.ssn

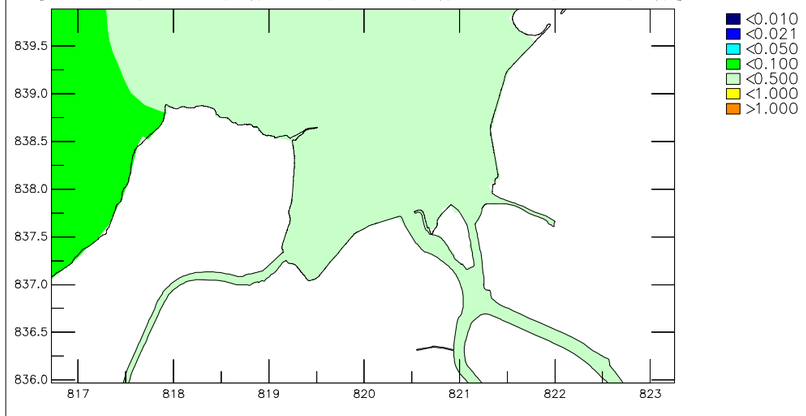
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

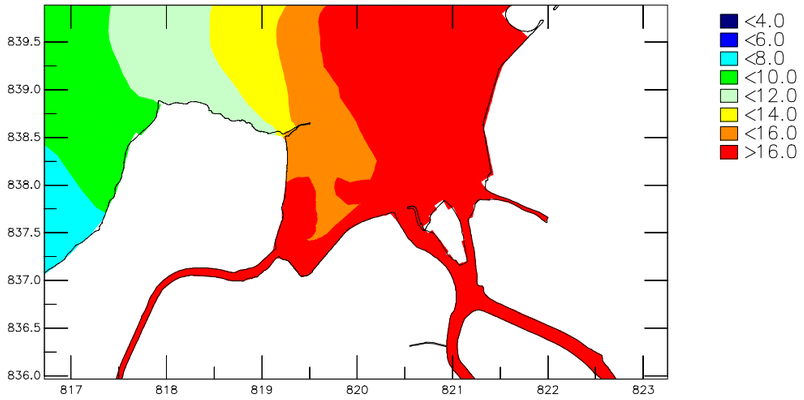


Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

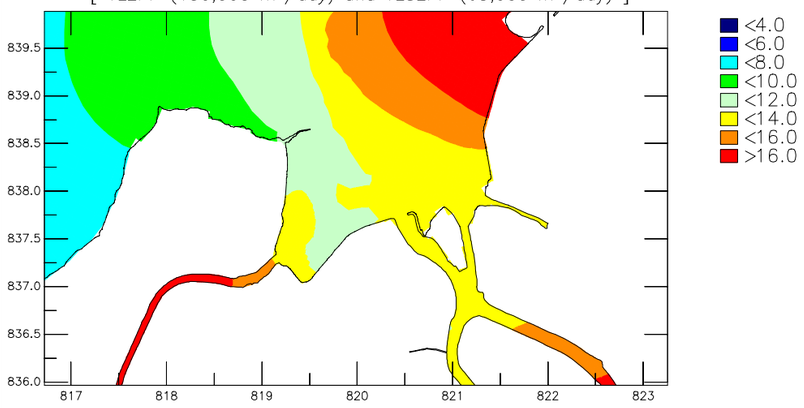


Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Dry Season
Mean Depth Averaged Unionised Ammonia (mg/L) Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)		Appendix 5.4 – 04
AECOM	/GPP	OpWQ-d.ssn

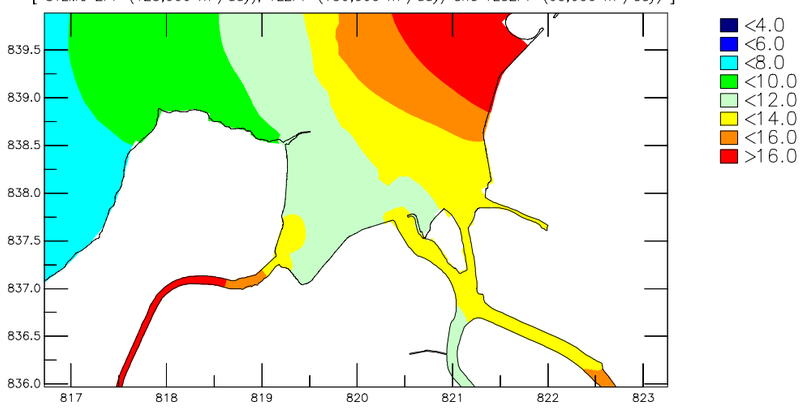
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

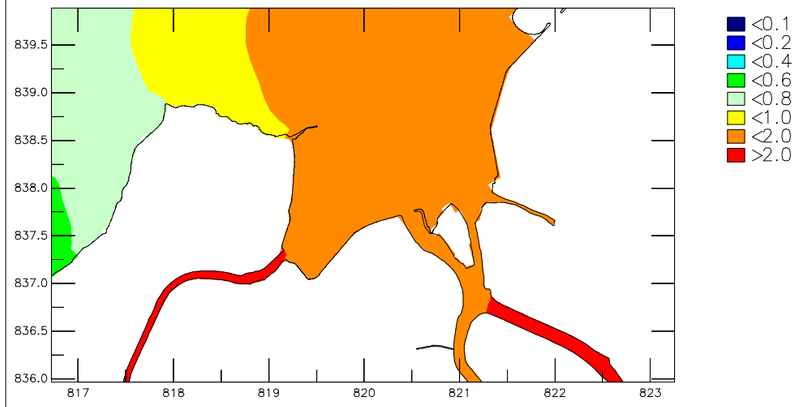


Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

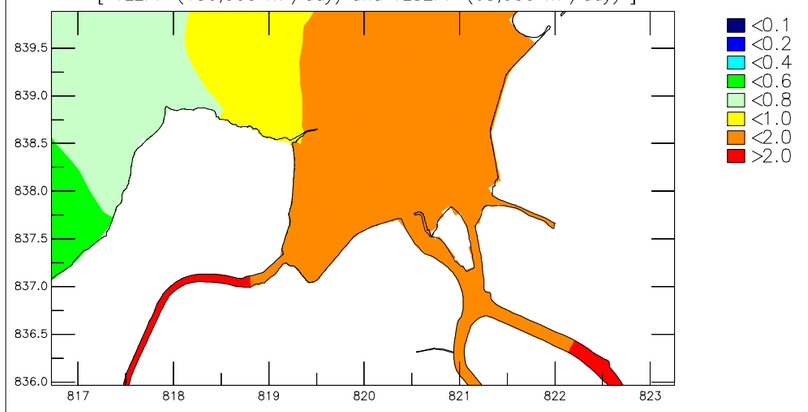


Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Dry Season
Mean Depth Averaged Total Nitrogen (mg/L) Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)	Appendix 5.4 – 05	
AECOM	/GPP	OpWQ-d.ssn

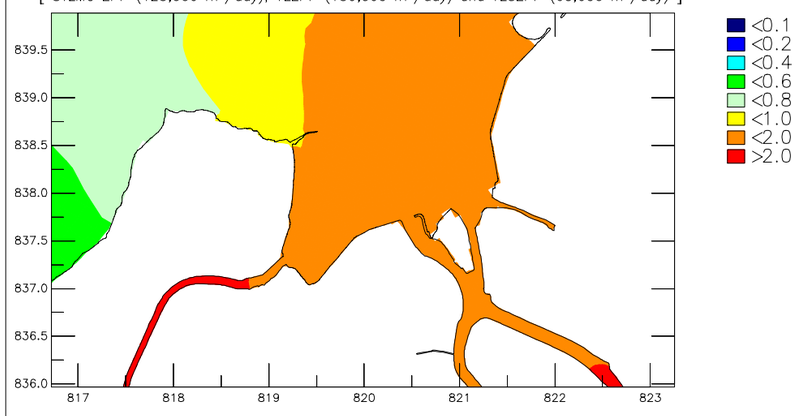
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

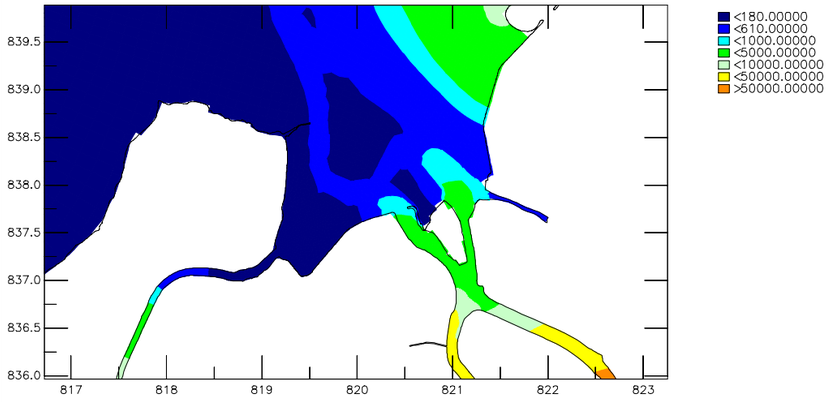


Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

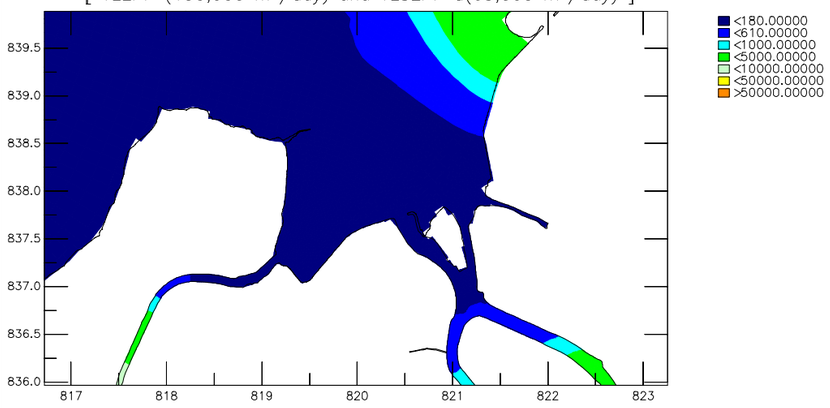


Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Dry Season
Mean Depth Averaged Total Phosphorus (mg/L) Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)	Appendix 5.4 – 06	
AECOM	/GPP	OpWQ-d.ssn

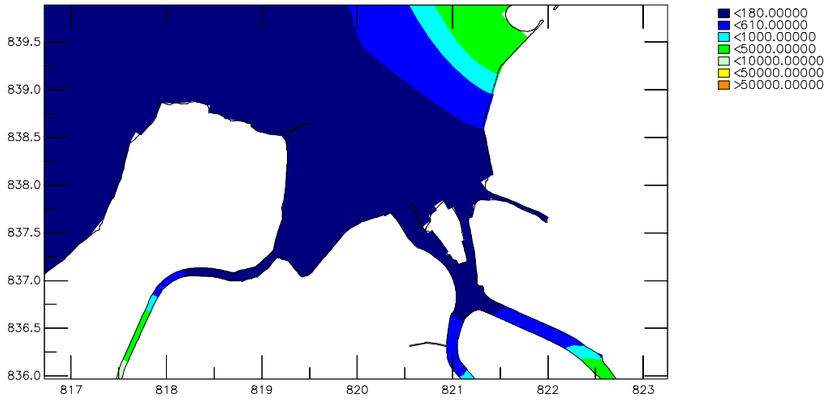
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP a(65,000 m^3/day)]

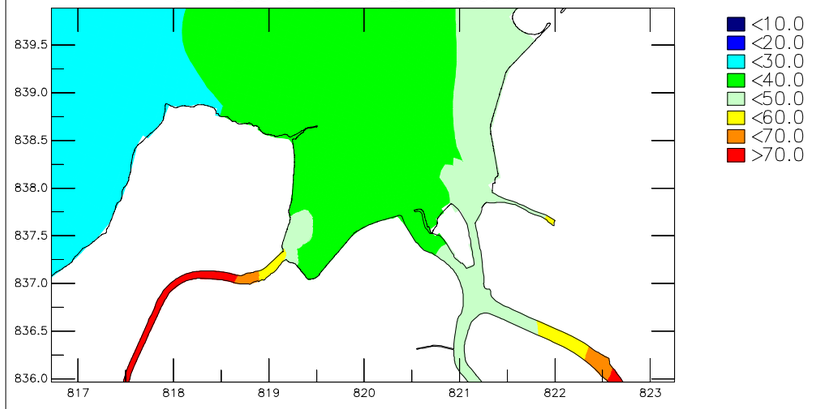


Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

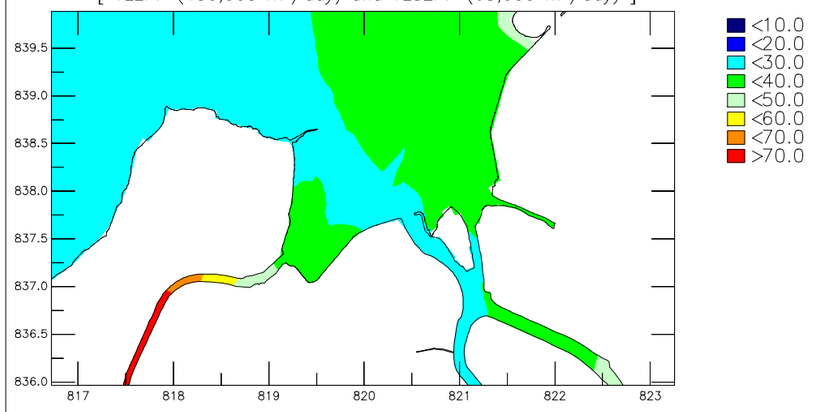


Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Dry Season
Geometric Mean Depth Averaged E.coli (no./100mL) Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)		Appendix 5.4 – 07
AECOM	/GPP	OpWQ-d.ssn

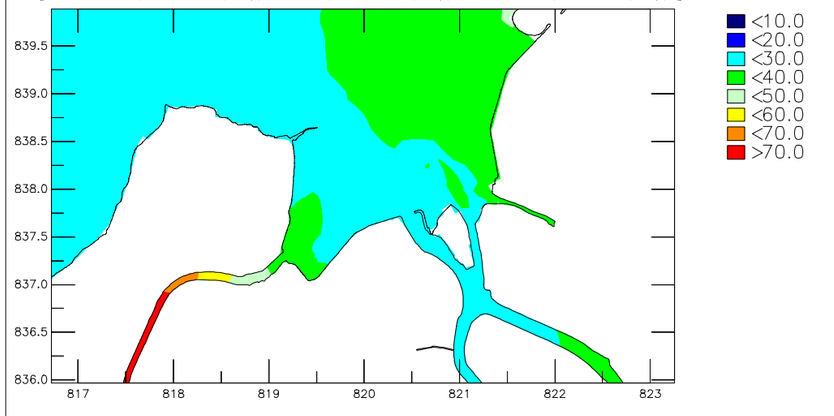
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

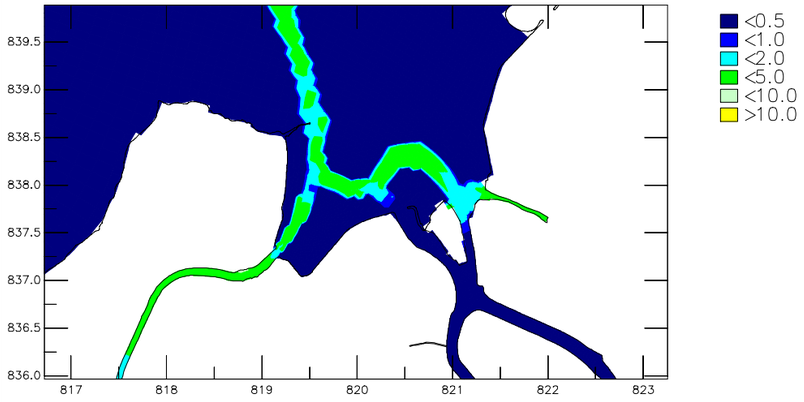


Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

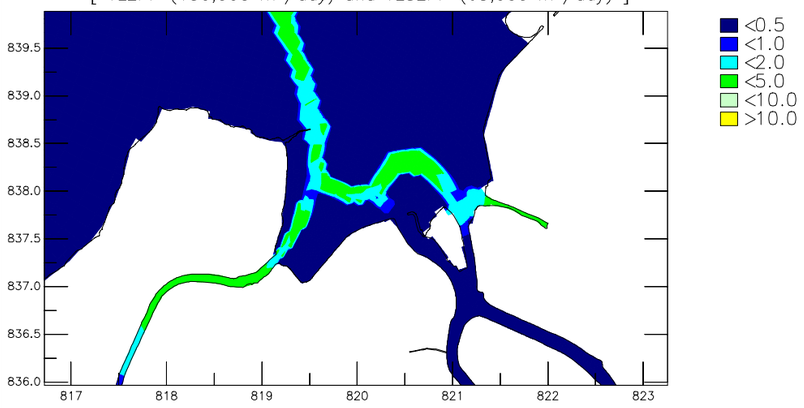


Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Dry Season
Mean Depth Averaged Suspended Solids (mg/L) Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)		Appendix 5.4 – 08
AECOM	/GPP	OpWQ-d.ssn

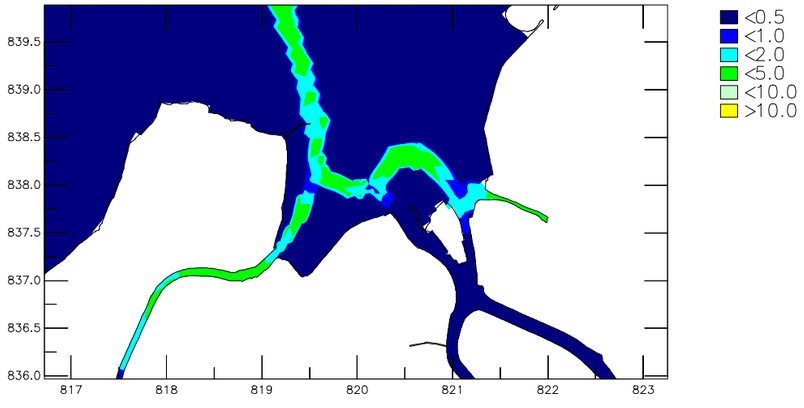
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

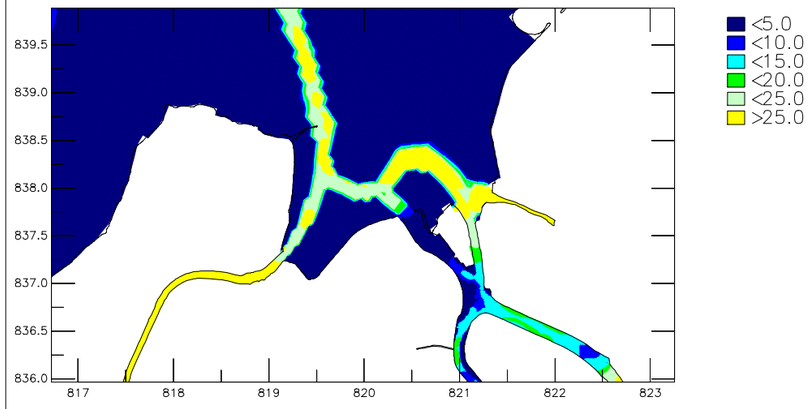


Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

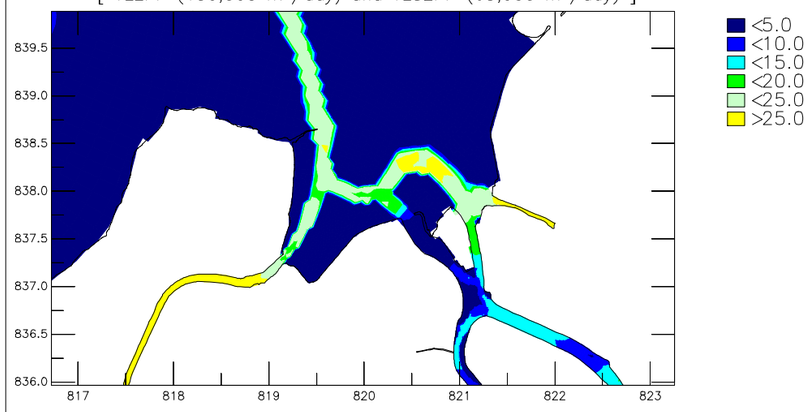


Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Dry Season
Mean Sedimentation Rate (g/m^2/day) Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)		Appendix 5.4 – 09
AECOM	/GPP	OpWQ-d.ssn

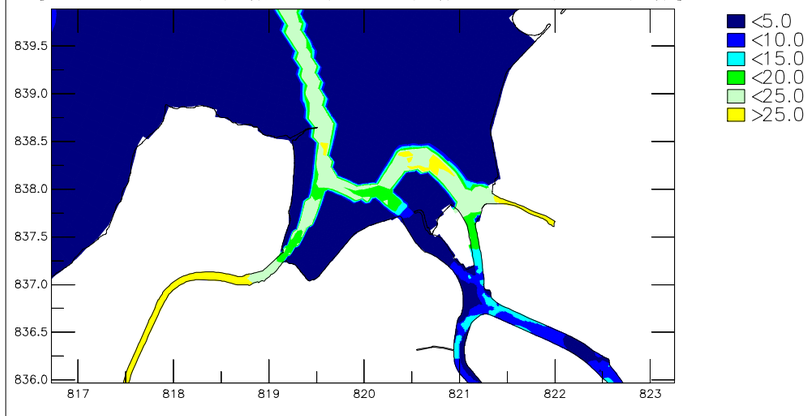
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

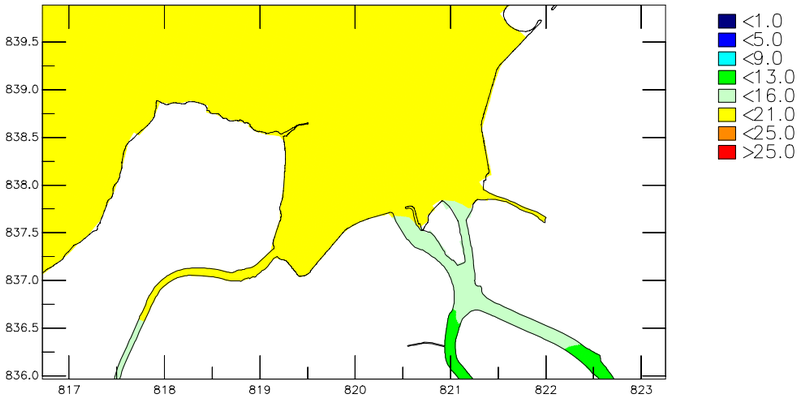


Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

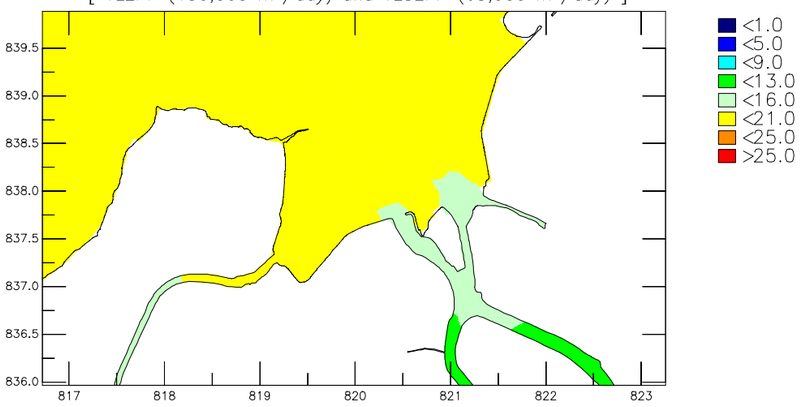


Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Dry Season
Maximum Sedimentation Rate (g/m^2/day) Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)		Appendix 5.4 – 10
AECOM	/GPP	OpWQ-d.ssn

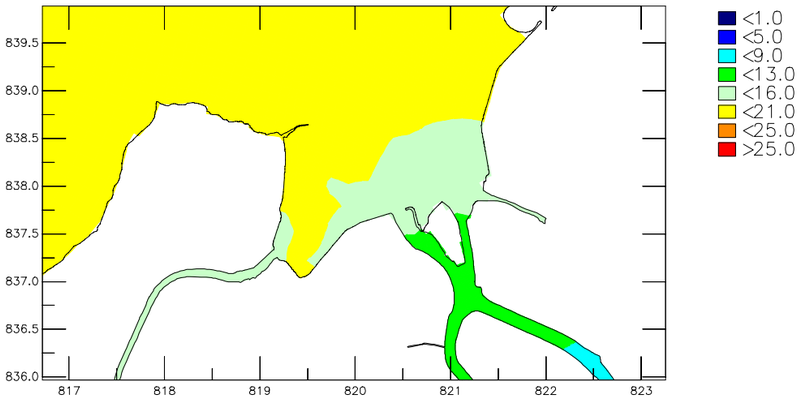
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

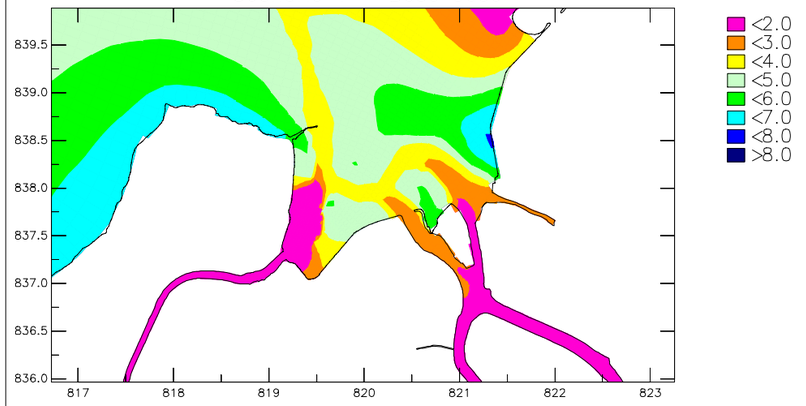


Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

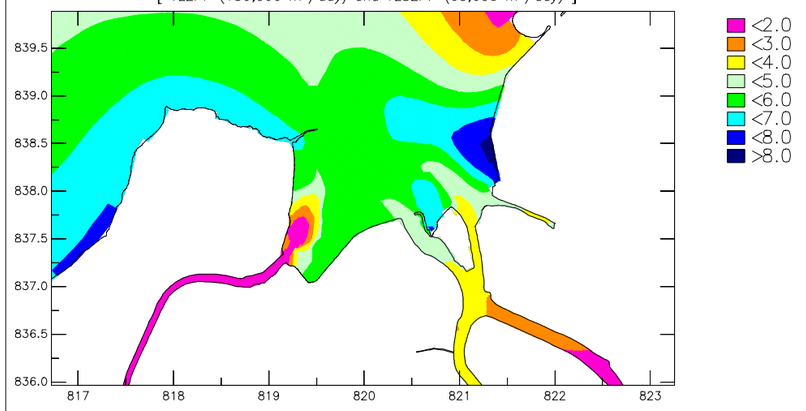


Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Dry Season
Mean Depth Averaged Salinity Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)		Appendix 5.4 – 11
AECOM	/GPP	OpWQ-d.ssn

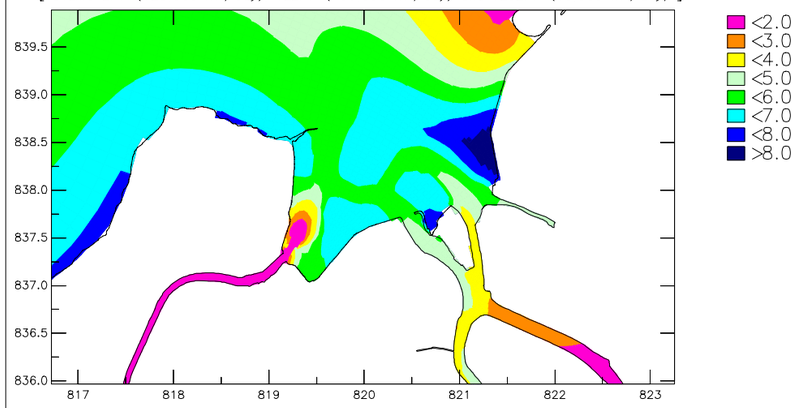
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

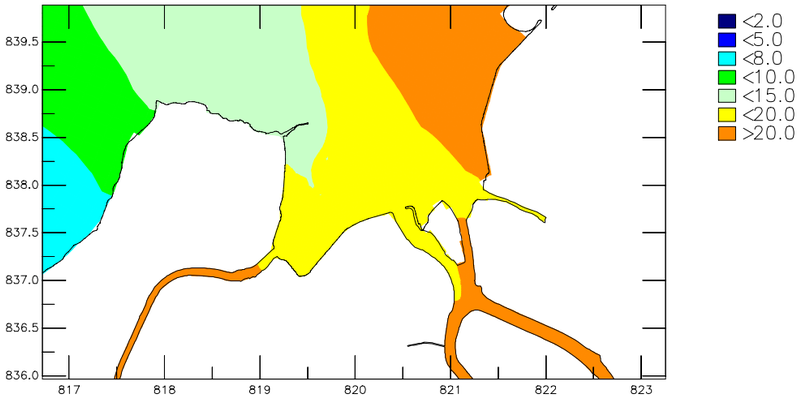


Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

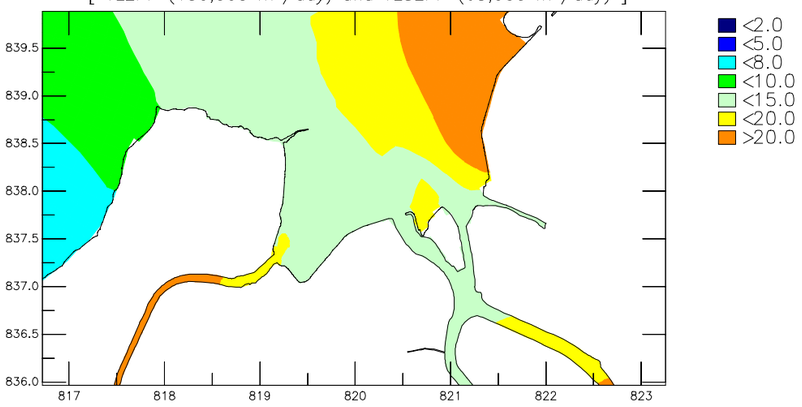


Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Wet Season
10 Percentile Depth Averaged Dissolved Oxygen (mg/L) Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)		Appendix 5.4 – 12
AECOM	/GPP	OpWQ-w.ssn

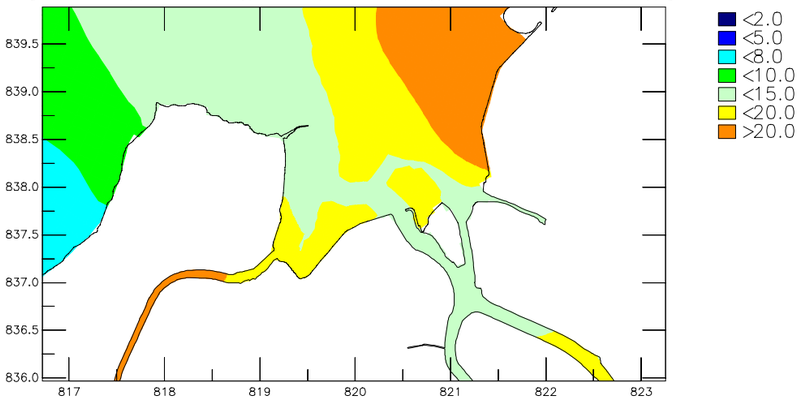
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

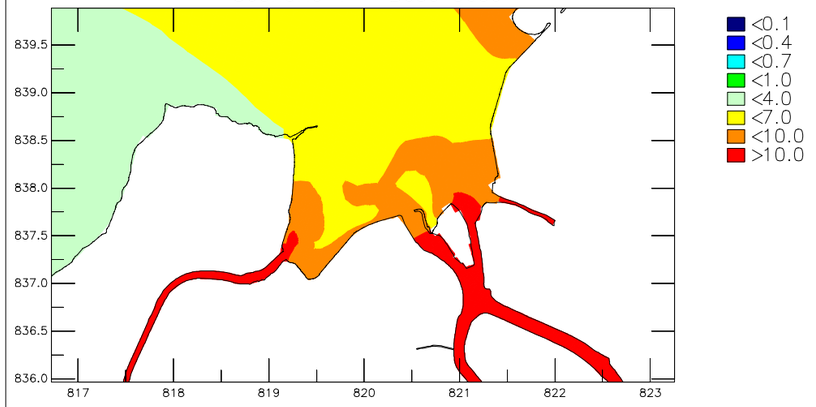


Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

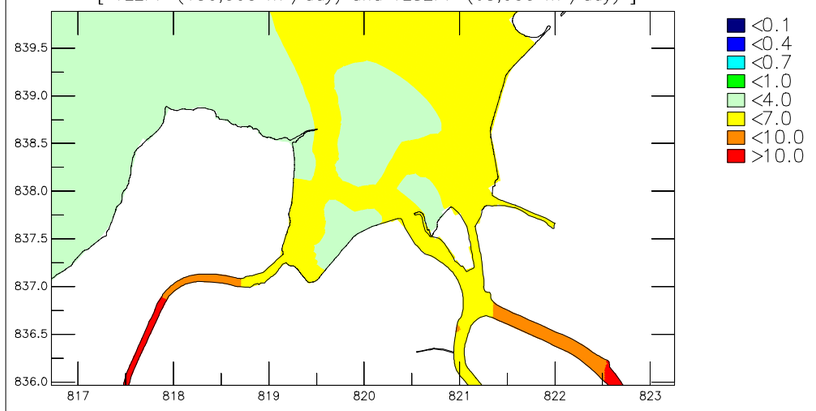


Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Wet Season
Mean Depth Averaged 5–Day Biochemical Oxygen Demand (mg/L) Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)		Appendix 5.4 – 13
AECOM	/GPP	OpWQ-w.ssn

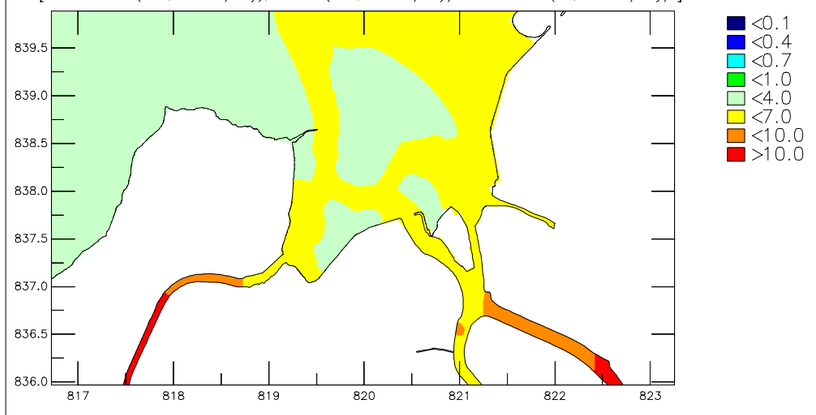
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

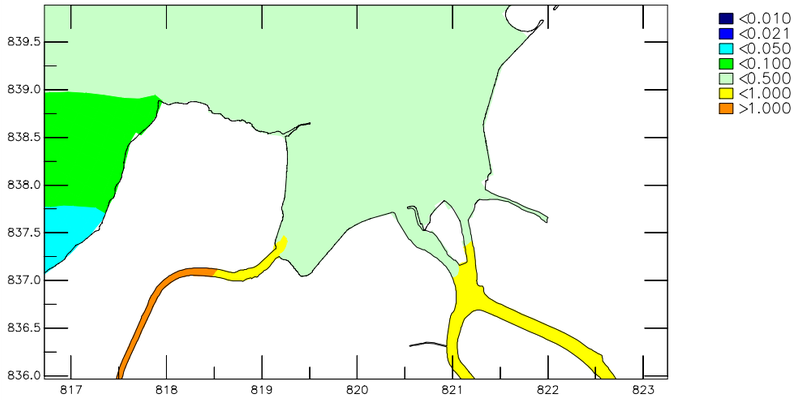


Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

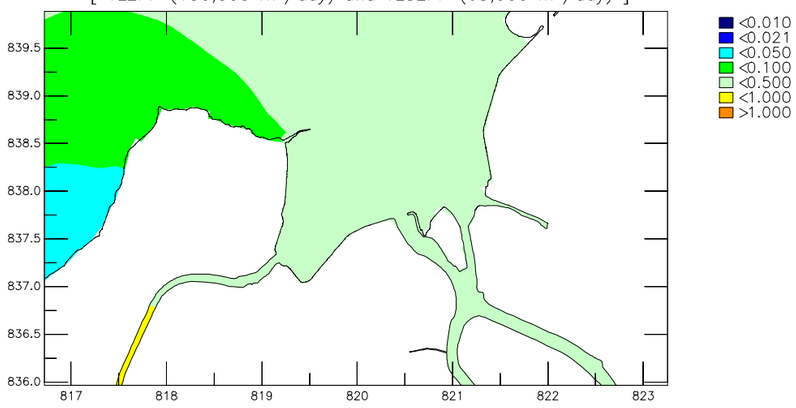


Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Wet Season
Mean Depth Averaged Total Inorganic Nitrogen (mg/L) Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)		Appendix 5.4 – 14
AECOM	/GPP	OpWQ-w.ssn

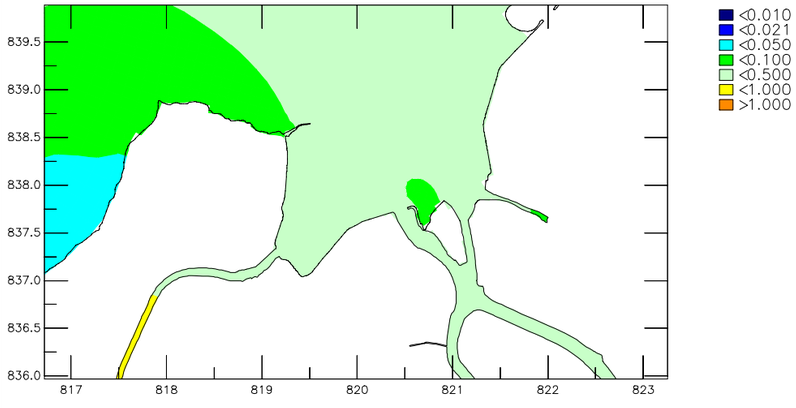
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

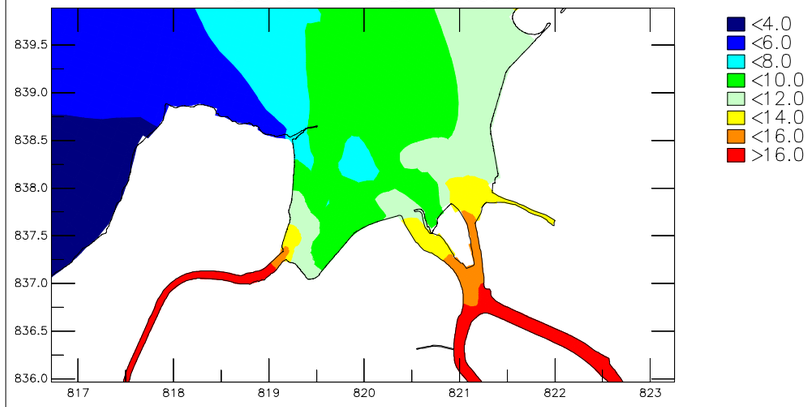


Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

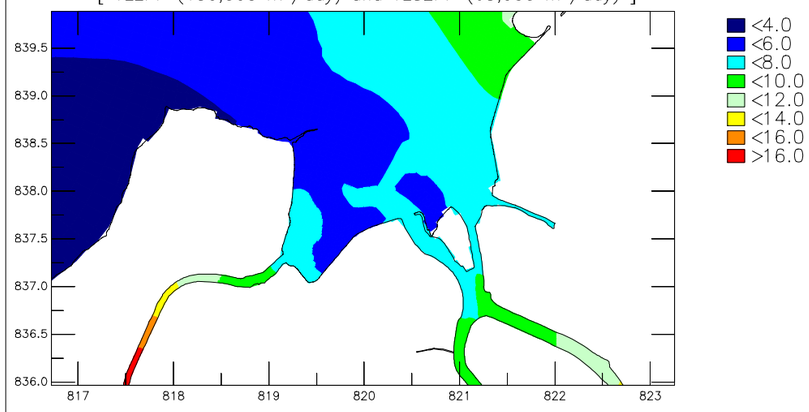


Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Wet Season
Mean Depth Averaged Unionised Ammonia (mg/L) Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)		Appendix 5.4 – 15
AECOM	/GPP	OpWQ-w.ssn

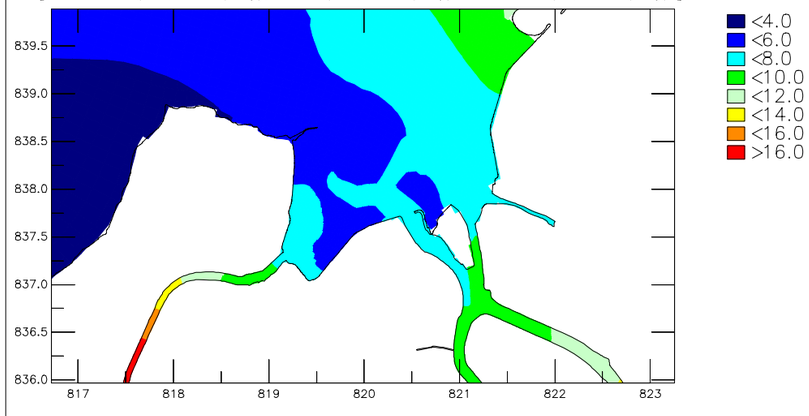
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

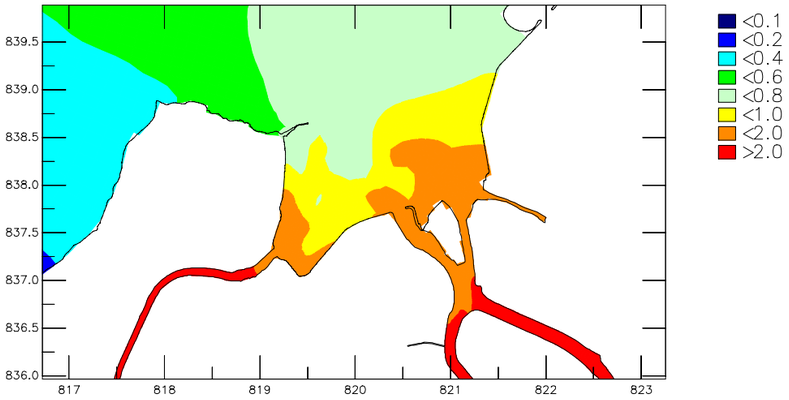


Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

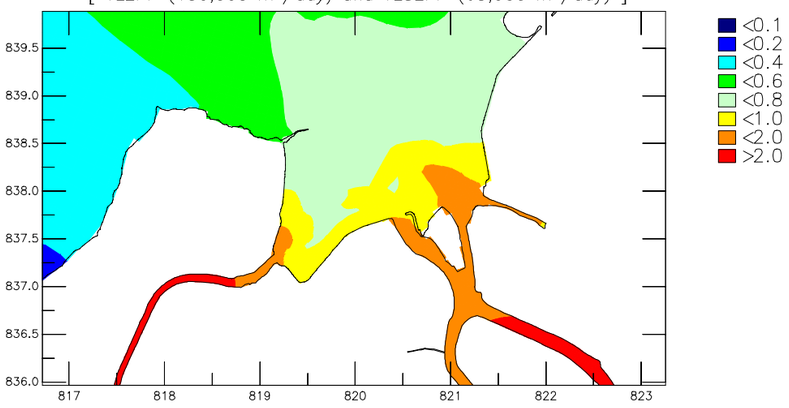


Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Wet Season
Mean Depth Averaged Total Nitrogen (mg/L) Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)		Appendix 5.4 – 16
AECOM	/GPP	OpWQ-w.ssn

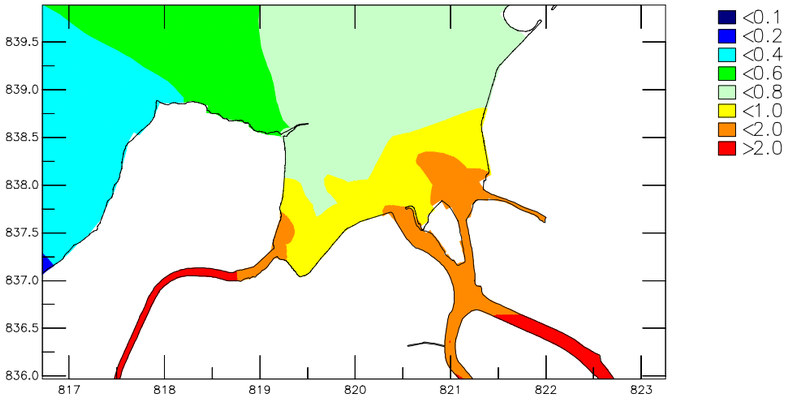
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

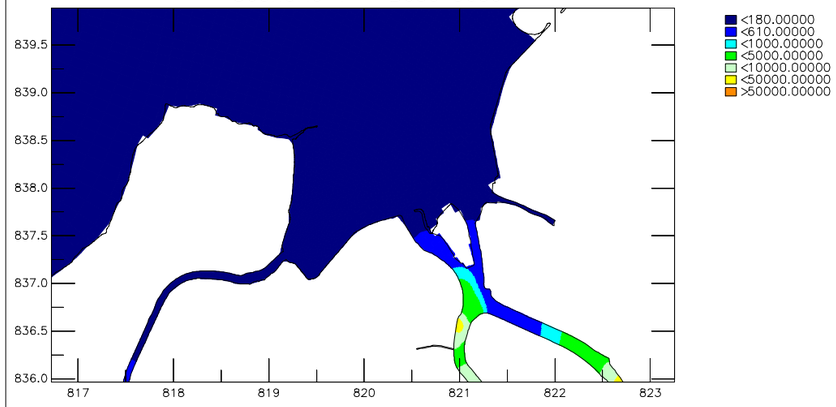


Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

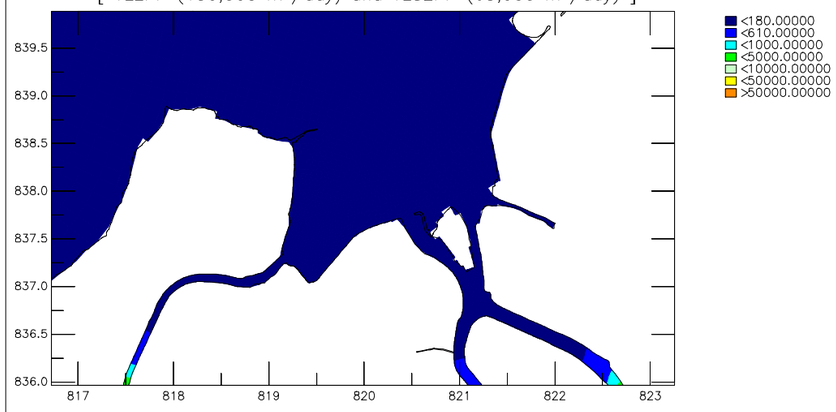


Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Wet Season
Mean Depth Averaged Total Phosphorus (mg/L) Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)	Appendix 5.4 – 17	
AECOM	/GPP	OpWQ-w.ssn

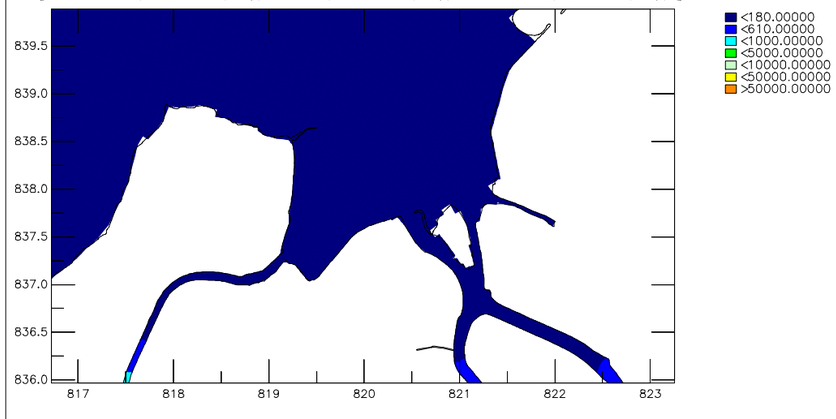
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

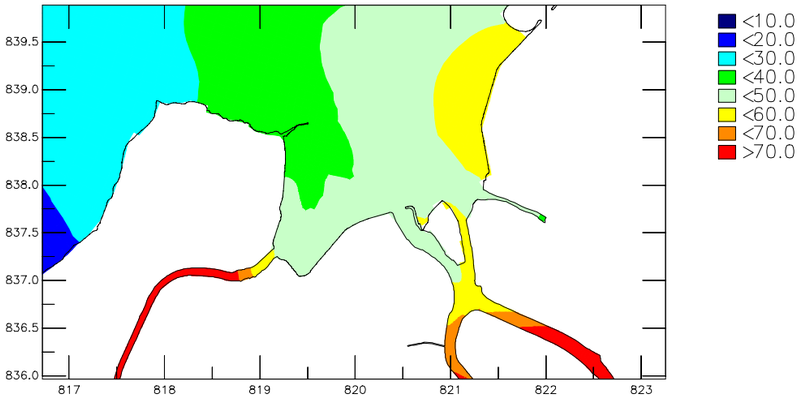


Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

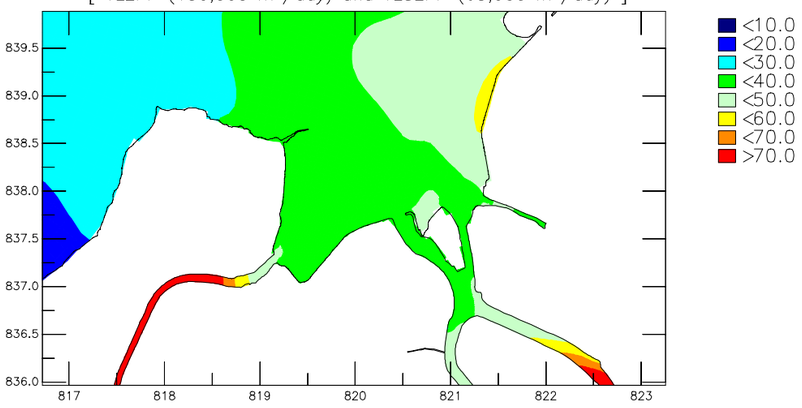


Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Wet Season
Geometric Mean Depth Averaged E.coli (no./100mL) Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)	Appendix 5.4 – 18	
AECOM	/GPP	OpWQ-w.ssn

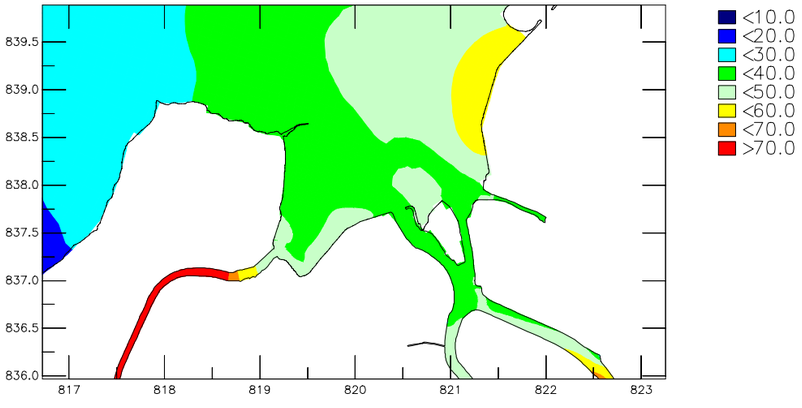
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

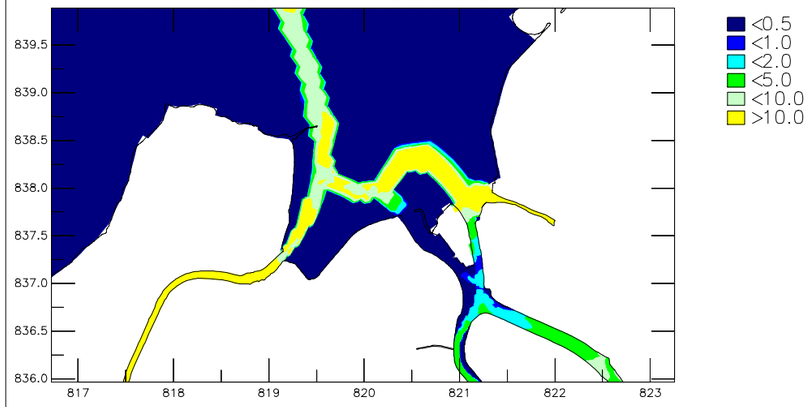


Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

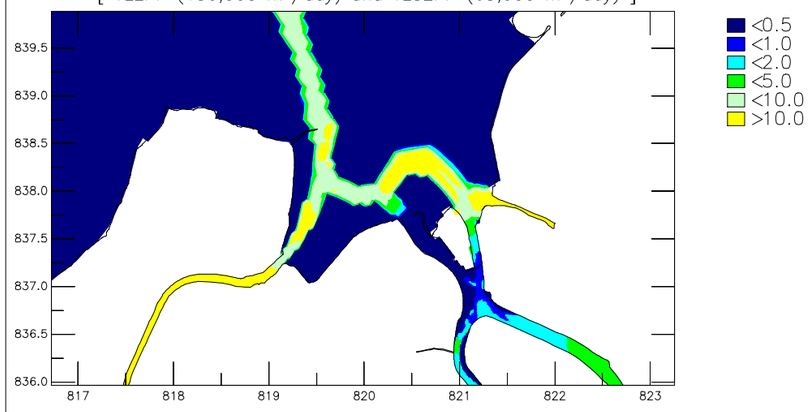


Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Wet Season
Mean Depth Averaged Suspended Solids (mg/L) Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)	Appendix 5.4 – 19	
AECOM	/GPP	OpWQ-w.ssn

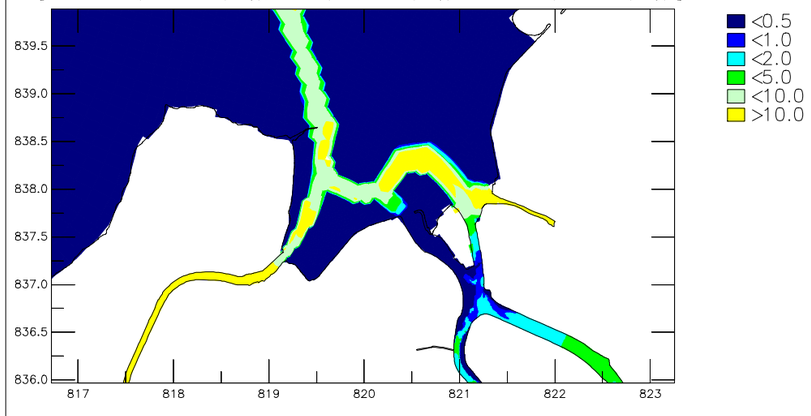
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

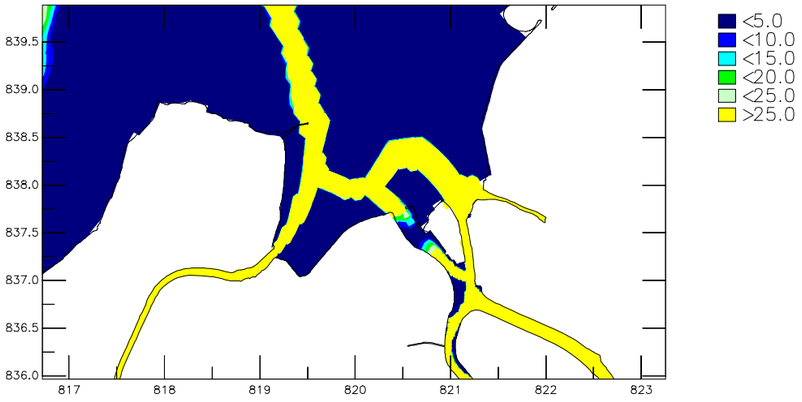


Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

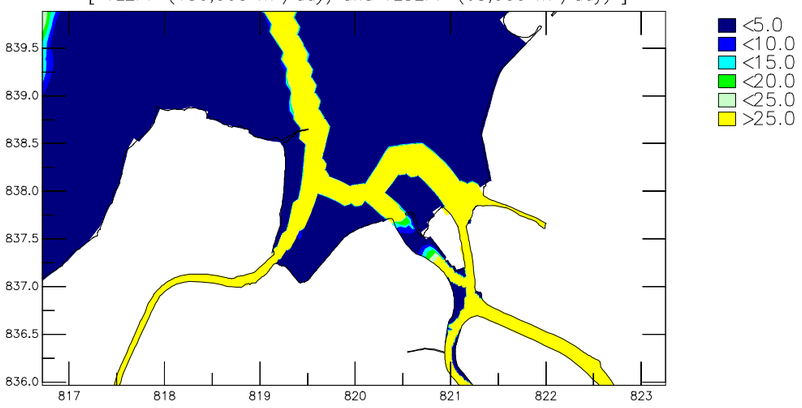


Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Wet Season
Mean Sedimentation Rate (g/m^2/day) Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)	Appendix 5.4 – 20	
AECOM	/GPP	OpWQ-w.ssn

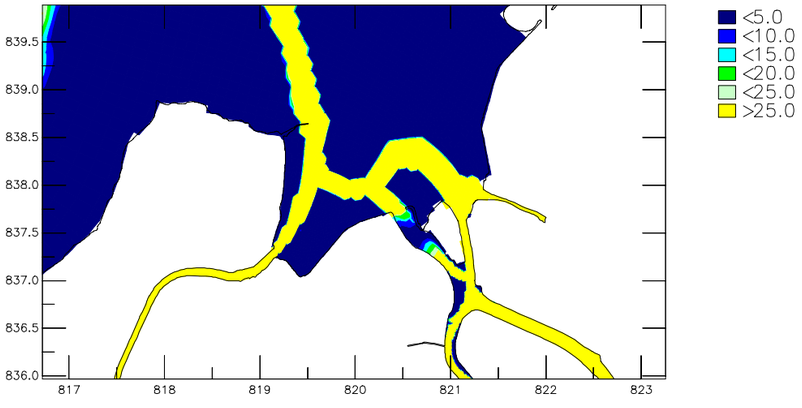
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

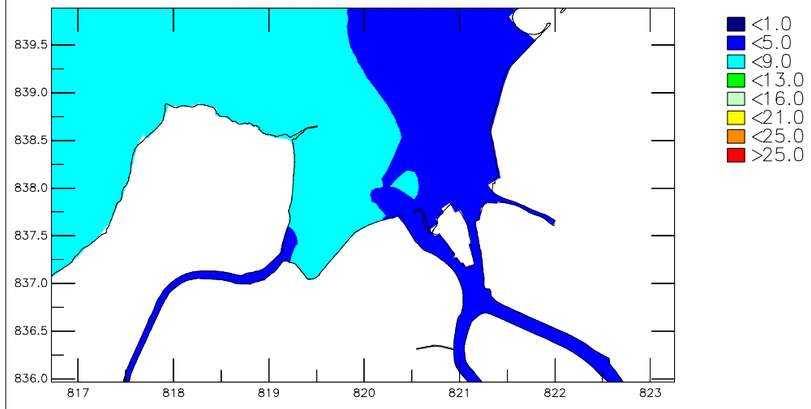


Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]

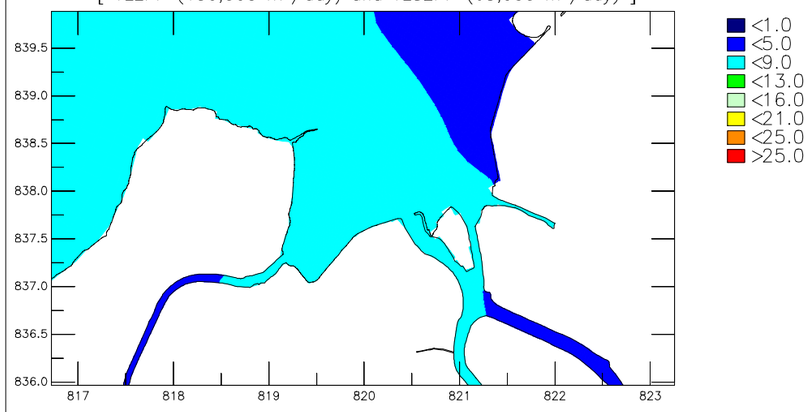


Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Wet Season
Maximum Sedimentation Rate (g/m^2/day) Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)	Appendix 5.4 – 21	
AECOM	/GPP	OpWQ-w.ssn

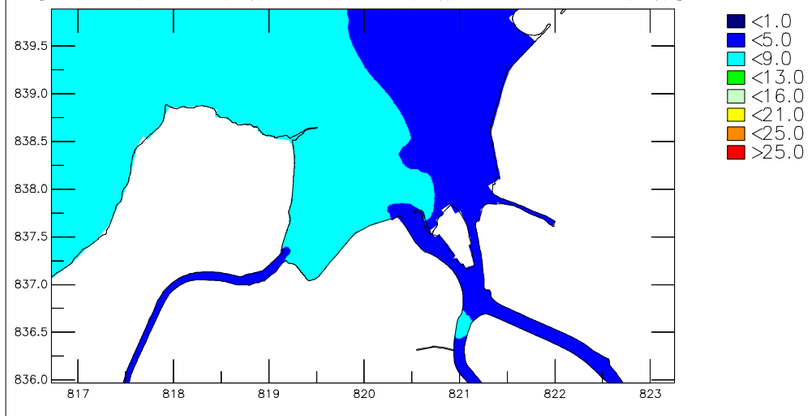
Scenario 1 – Base Case



Scenario 2 – "Without Project" condition
[YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]



Scenario 3 – Normal Operation of STLMC EPP
[STLMC EPP (125,000 m^3/day), YLEPP (150,000 m^3/day) and YLSEPP (65,000 m^3/day)]



Agreement No. CE 20/2021 (CE) First Phase Development of The New Territories North – San Tin / Lok Ma Chau Development Node – Investigation		Wet Season
Mean Depth Averaged Salinity Upper: Scenario 1 – "Base Case" Scenario; Middle: Scenario 2 – "Without Project" condition; Lower: Scenario 3 – Normal Operation of STLMC EPP (with 125,000 m^3/day Effluent Discharge)	Appendix 5.4 – 22	
AECOM	/GPP	OpWQ-w.ssn