ANNEX F

GRAPHICAL PRESENTATION OF CONSTRUCTION PHASE MARINE WATER QUALITY MONITORING RESULTS

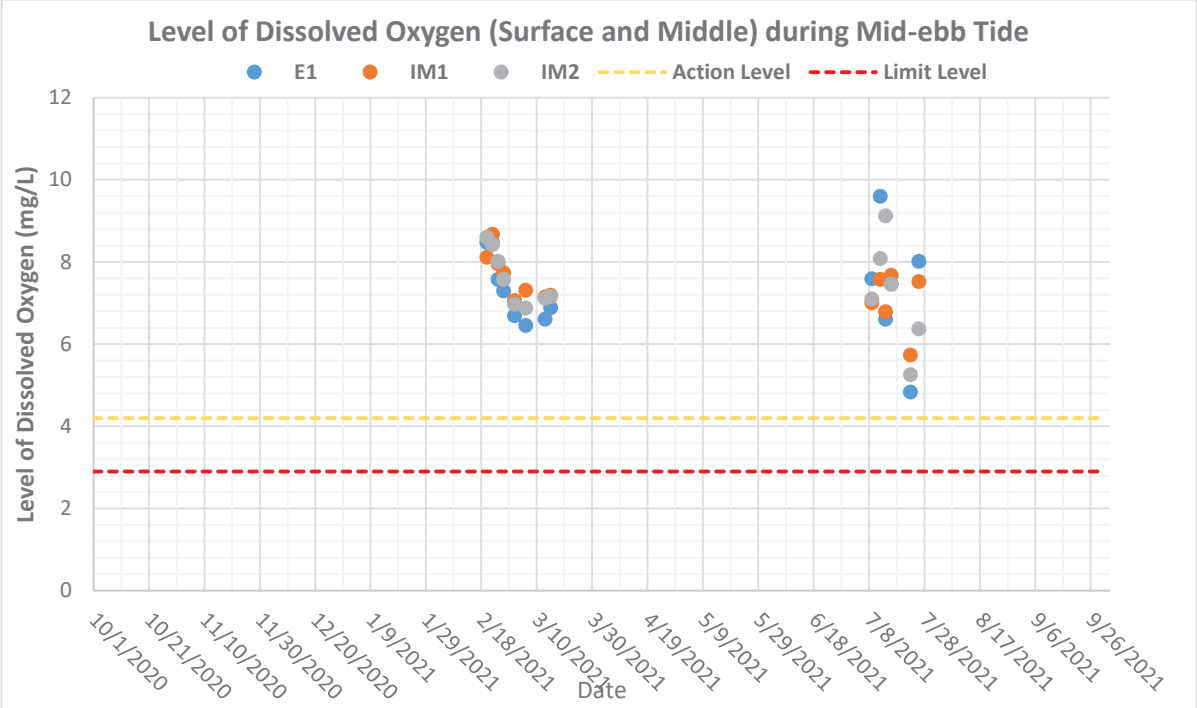

Figure F1a: Levels of Surface and Middle Dissolved Oxygen (mg/L) at control station (E1) and impact stations (IM1-IM2) under Group 1 during mid-ebb tides between October 2020 and September 2021

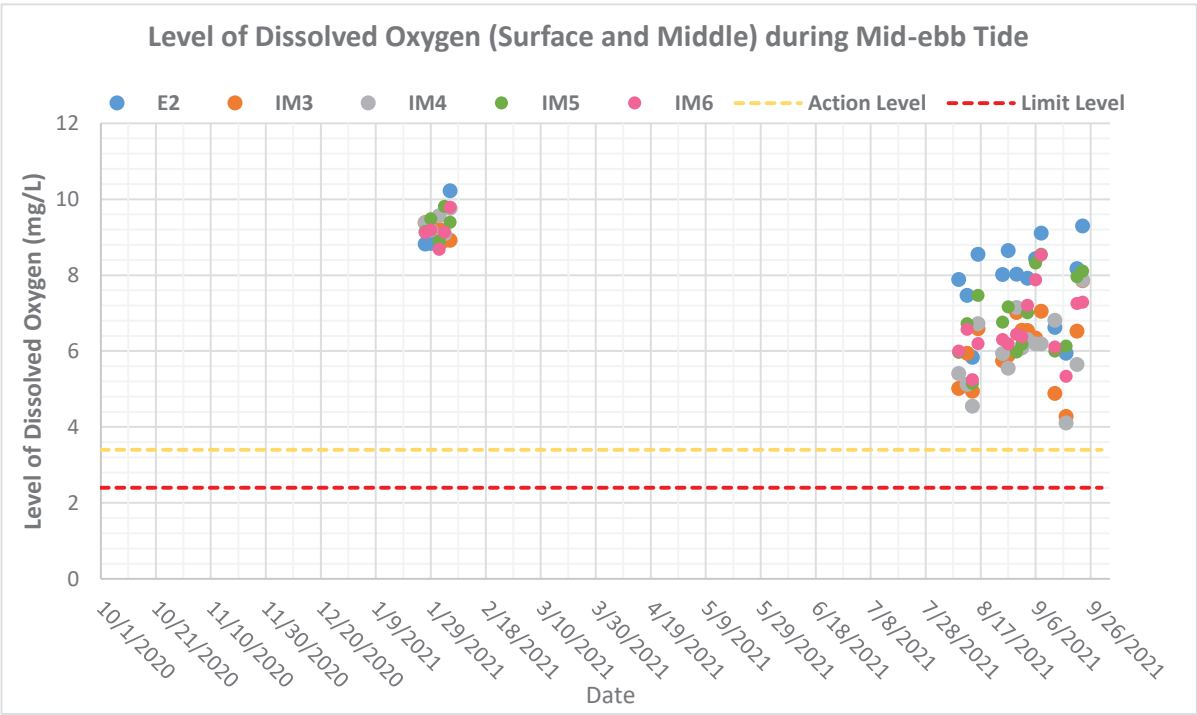

Figure F1b: Levels of Surface and Middle Dissolved Oxygen (mg/L) at control station (E2) and impact stations (IM3-IM6) under Group 2 during mid-ebb tides between October 2020 and September 2021

Source: P:\Projects\0505354 CLP Power Hong Kong Limited FSRU Pre-con EM&A.RC\07 Data\08 Impact WQ

Date: 21/3/2022

Environmental Resources Management

ERM

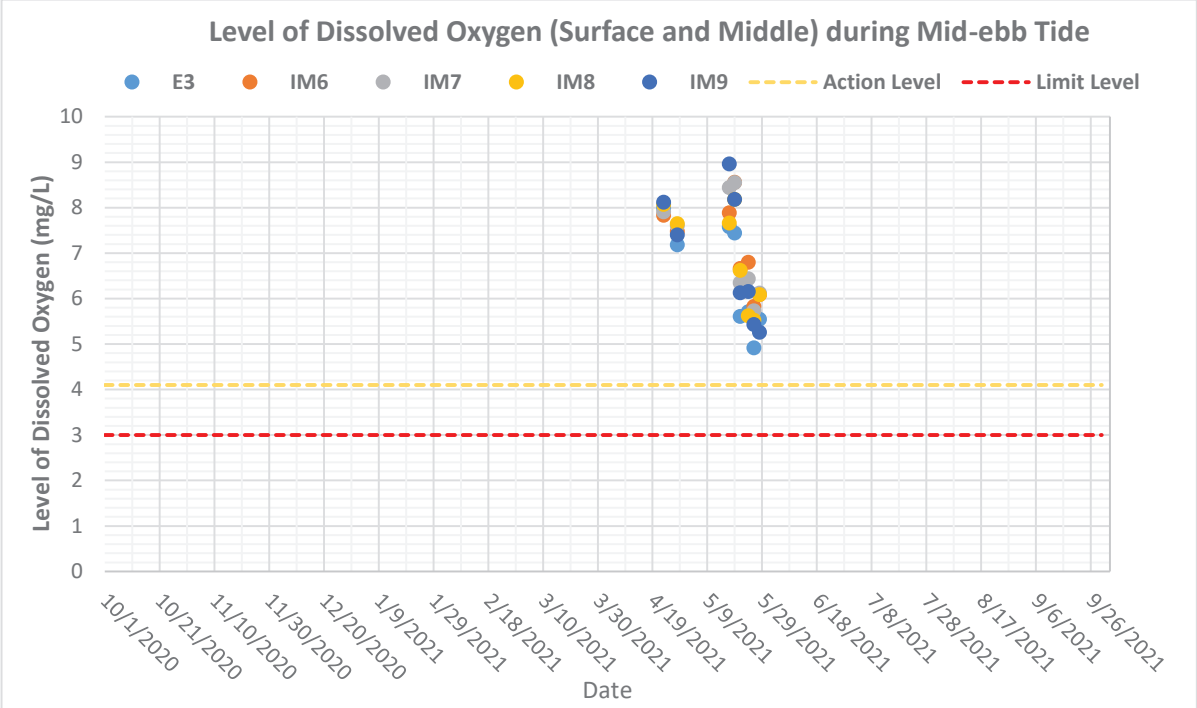

Figure F1c: Levels of Surface and Middle Dissolved Oxygen (mg/L) at control station (E3) and impact stations (IM6-IM9) under Group 3 during mid-ebb tides between October 2020 and September 2021

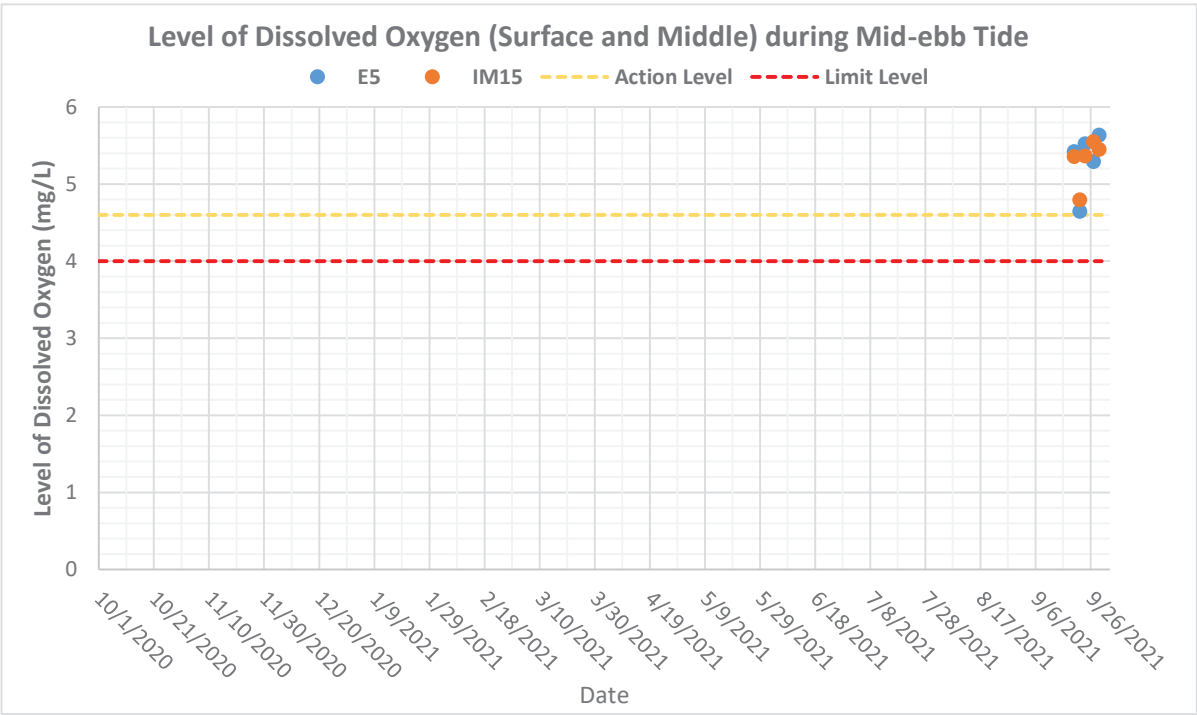

Figure F1d: Levels of Surface and Middle Dissolved Oxygen (mg/L) at control station (E5) and impact station (IM15) under Group 5 during mid-ebb tides between October 2020 and September 2021

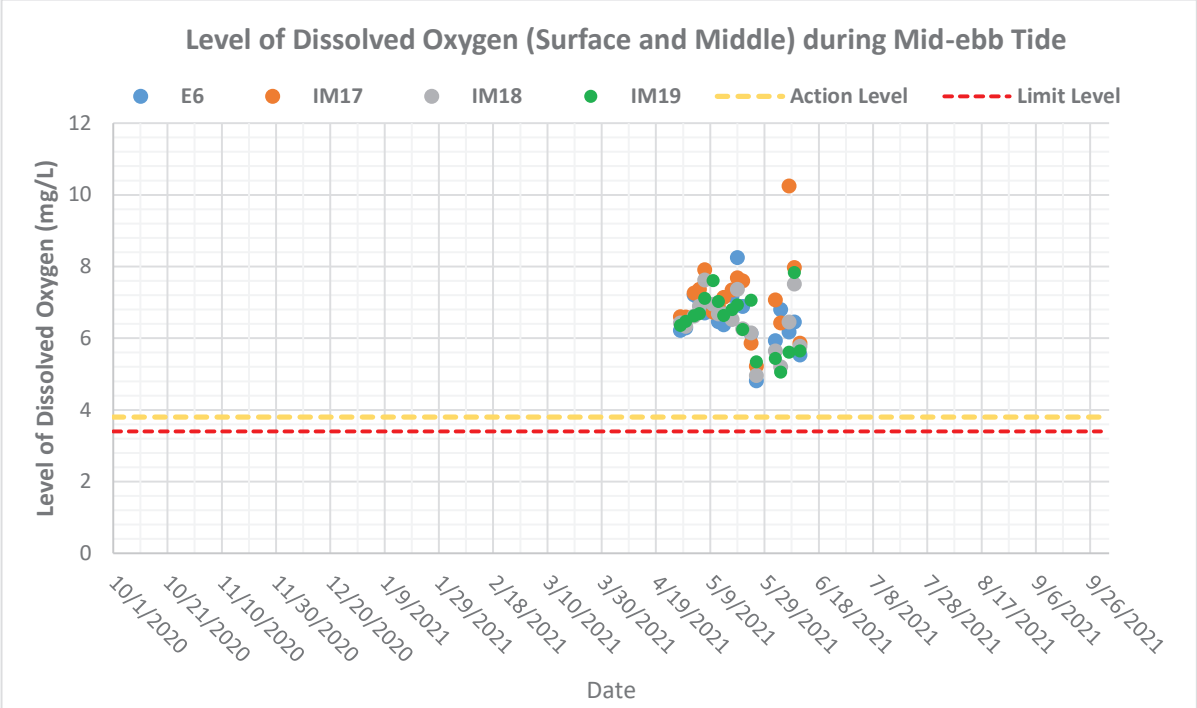

Figure F1e: Levels of Surface and Middle Dissolved Oxygen (mg/L) at control station (E6) and impact stations (IM17-IM19) under Group 7 during mid-ebb tides between October 2020 and September 2021

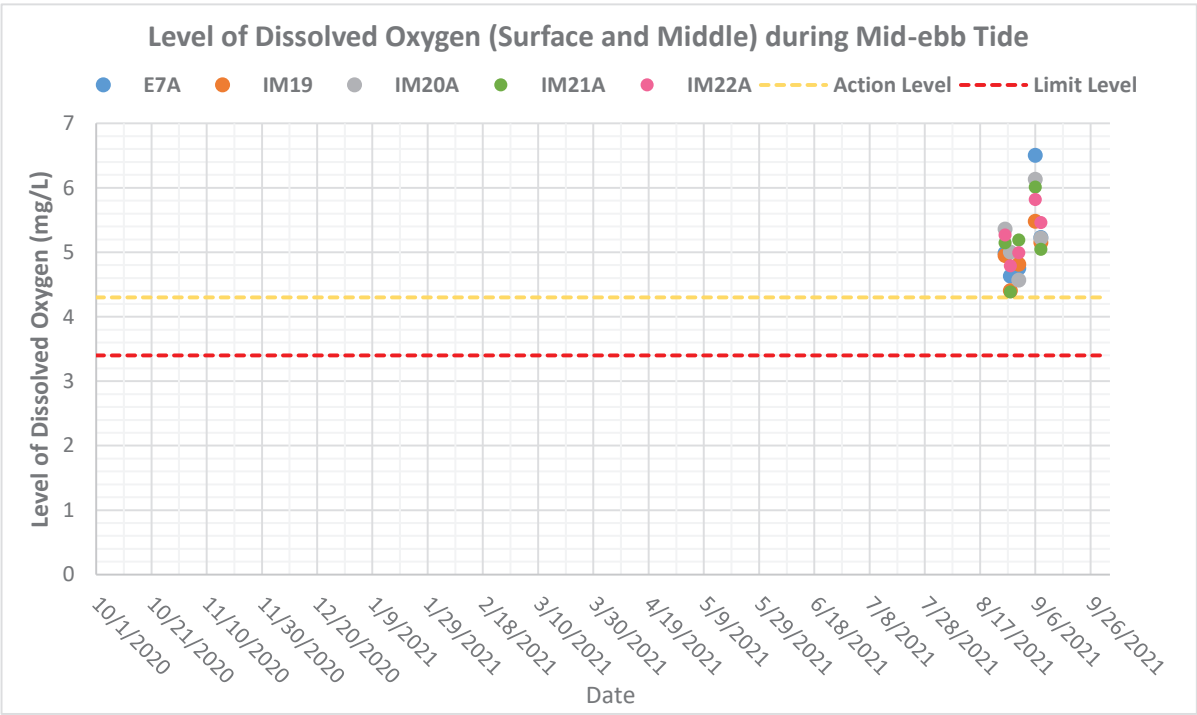

Figure F1f: Levels of Surface and Middle Dissolved Oxygen (mg/L) at control station (E7A) and impact stations (IM19-IM22A) under Group 8 during mid-ebb tides between October 2020 and September 2021

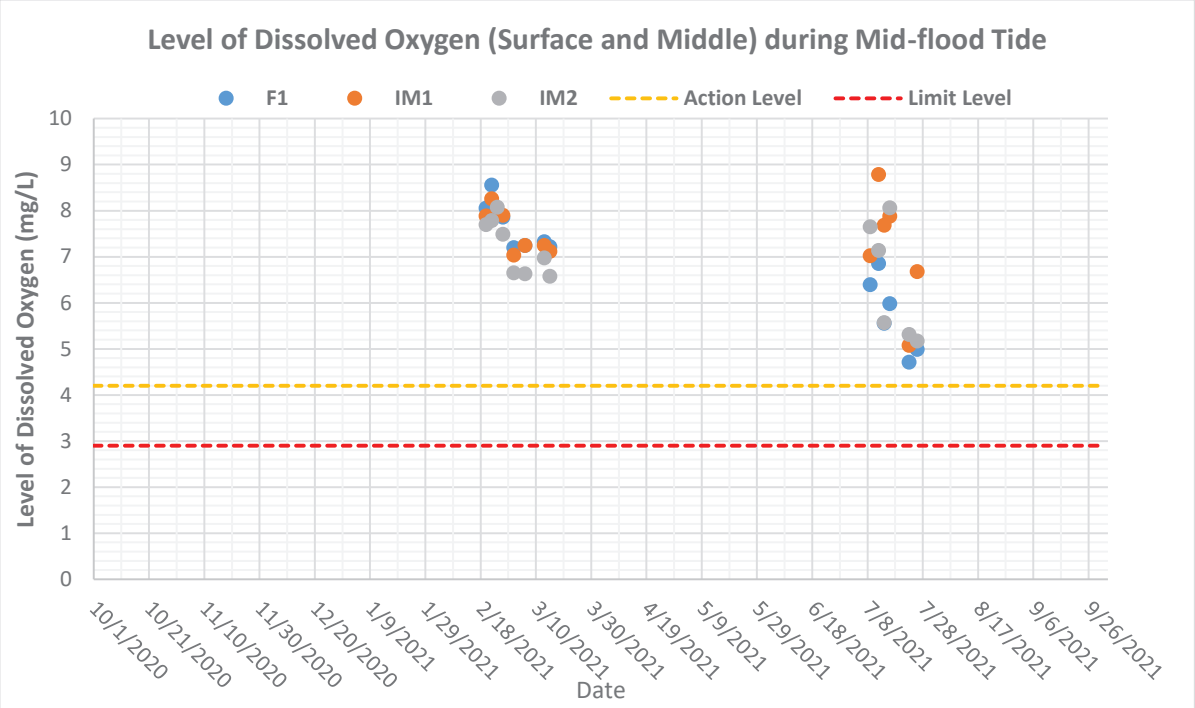

Figure F1g: Levels of Surface and Middle Dissolved Oxygen (mg/L) at control station (F1) and impact stations (IM1-IM2) under Group 1 during mid-flood tides between October 2020 and September 2021

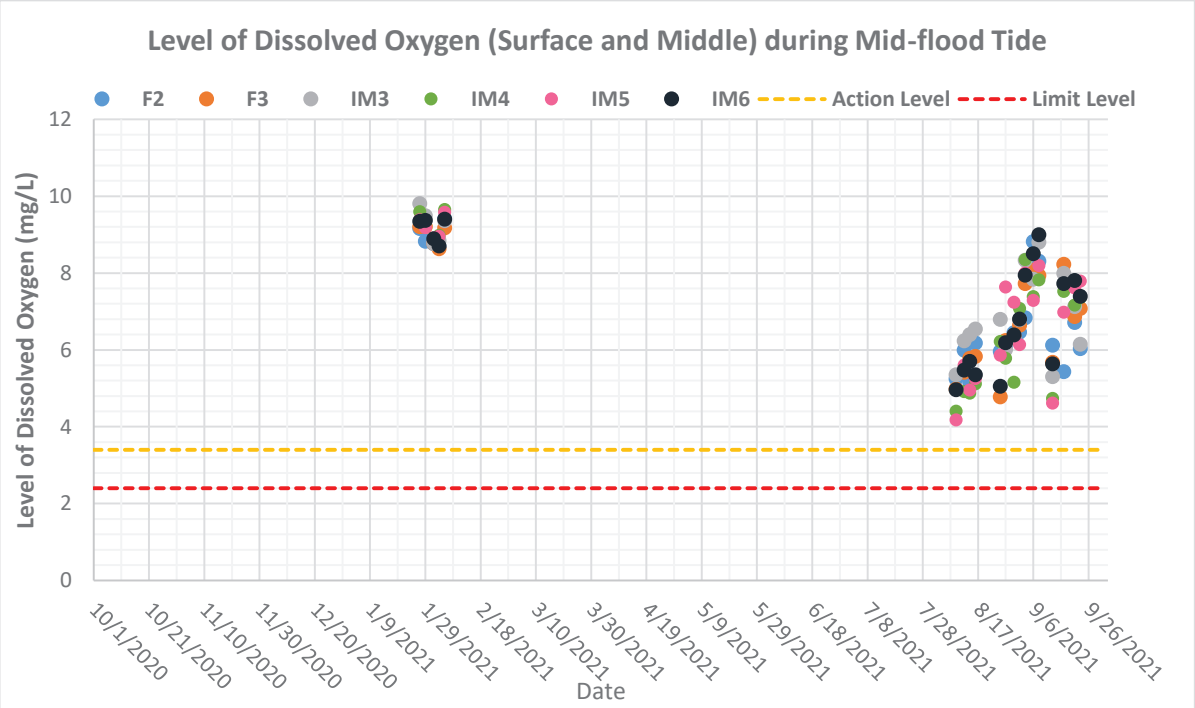

Figure F1h: Levels of Surface and Middle Dissolved Oxygen (mg/L) at control stations (F2-F3) and impact stations (IM3-IM6) under Group 2 during mid-flood tides between October 2020 and September 2021

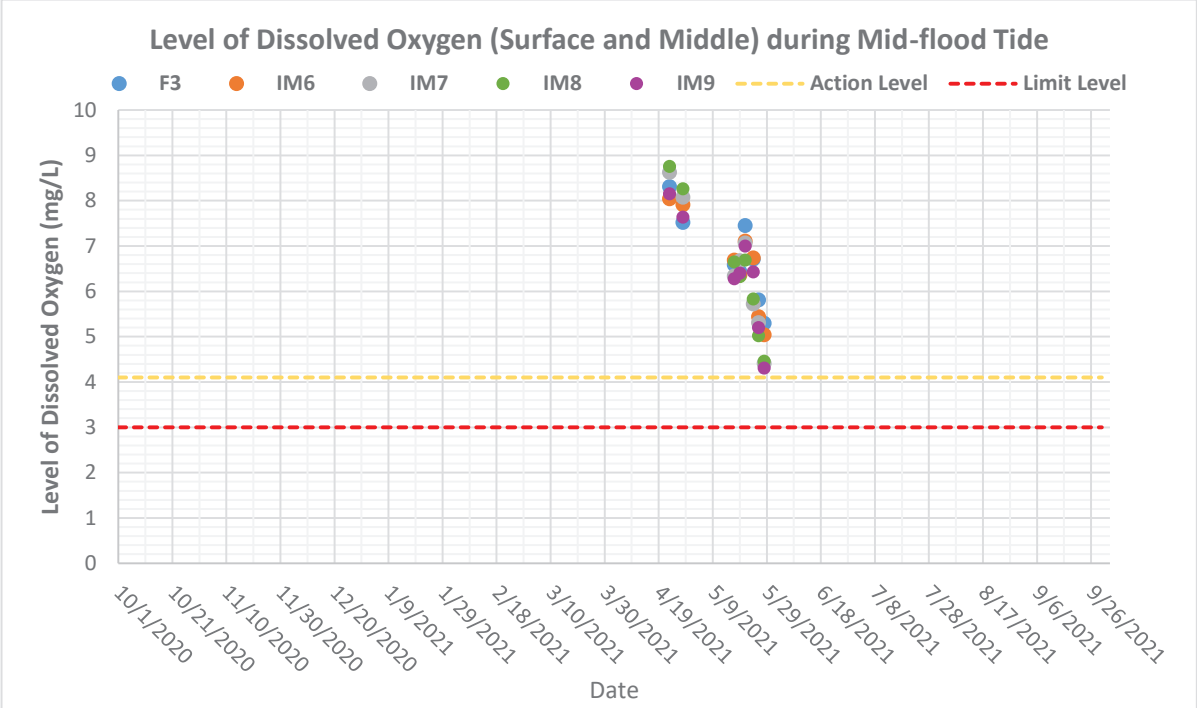

Figure F1i: Levels of Surface and Middle Dissolved Oxygen (mg/L) at control station (F3) and impact stations (IM6-IM9) under Group 3 during mid-flood tides between October 2020 and September 2021

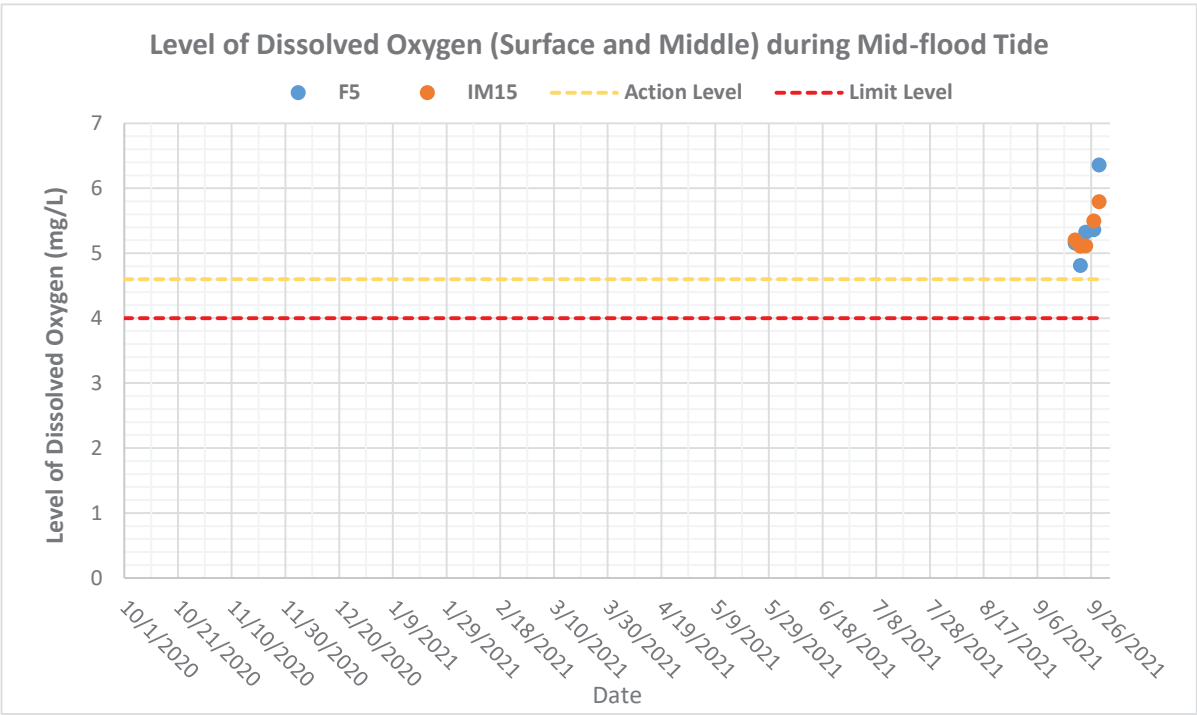

Figure F1j: Levels of Surface and Middle Dissolved Oxygen (mg/L) at control station (F5) and impact station (IM15) under Group 5 during mid-flood tides between October 2020 and September 2021

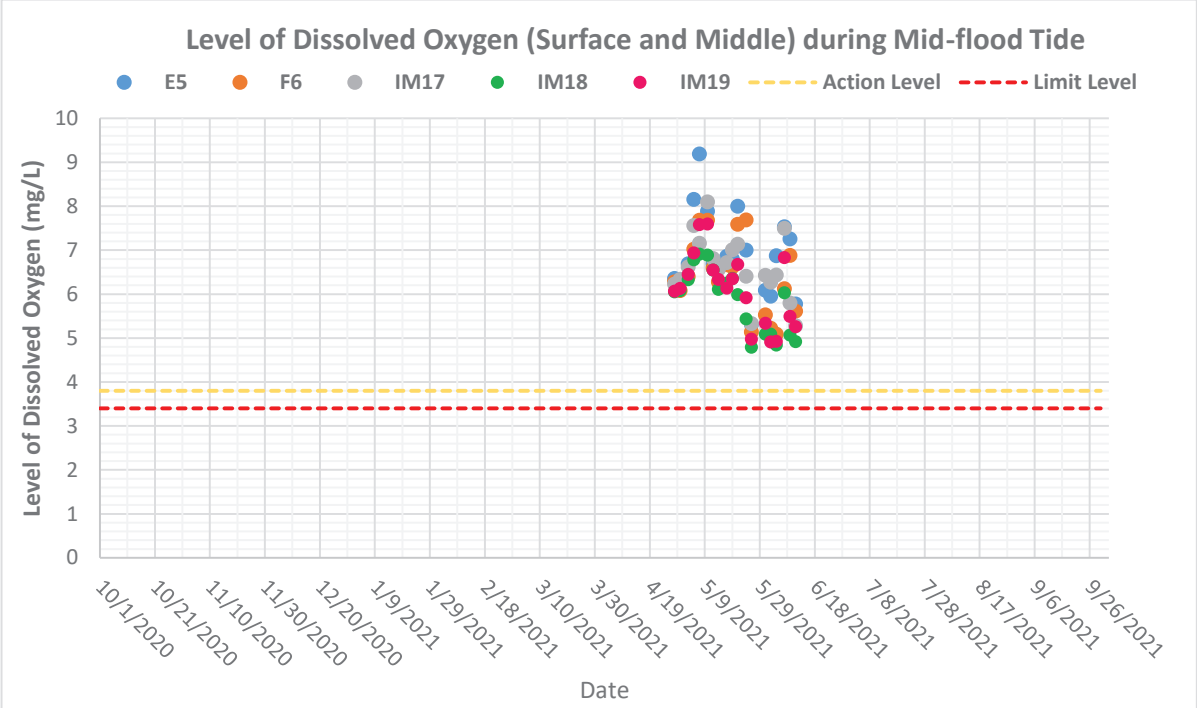

Figure F1k: Levels of Surface and Middle Dissolved Oxygen (mg/L) at control stations (E5, F6) and impact stations (IM17-IM19) under Group 7 during mid-flood tides between October 2020 and September 2021

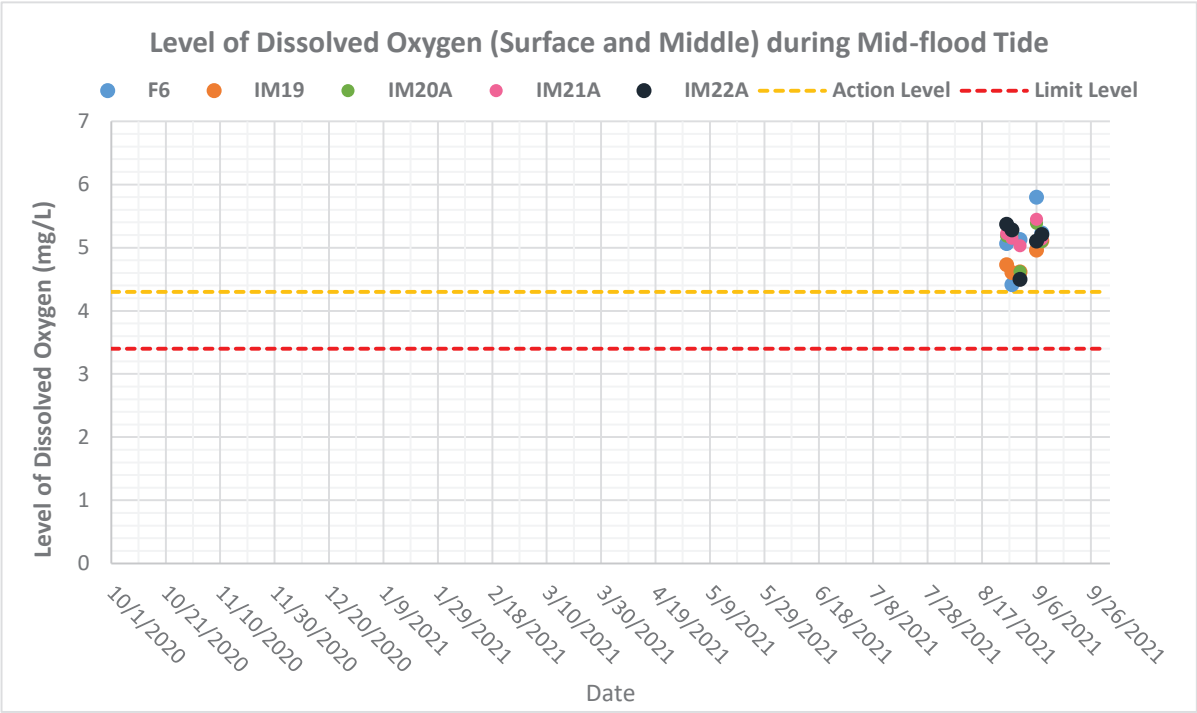

Figure F1l: Levels of Surface and Middle Dissolved Oxygen (mg/L) at control station (F6) and impact stations (IM19-IM22A) under Group 8 during mid-flood tides between October 2020 and September 2021

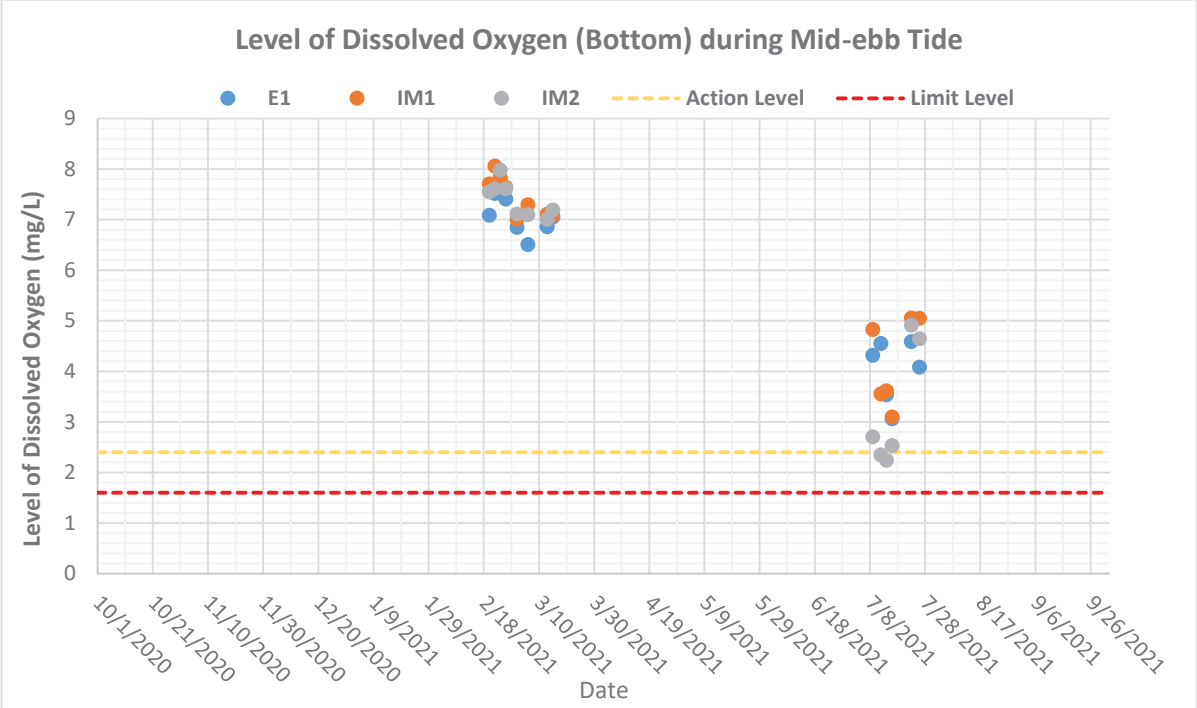

Figure F2a: Levels of Bottom Dissolved Oxygen (mg/L) at control station (E1) and impact stations (IM1-IM2) under Group 1 during mid-ebb tides between October 2020 and September 2021

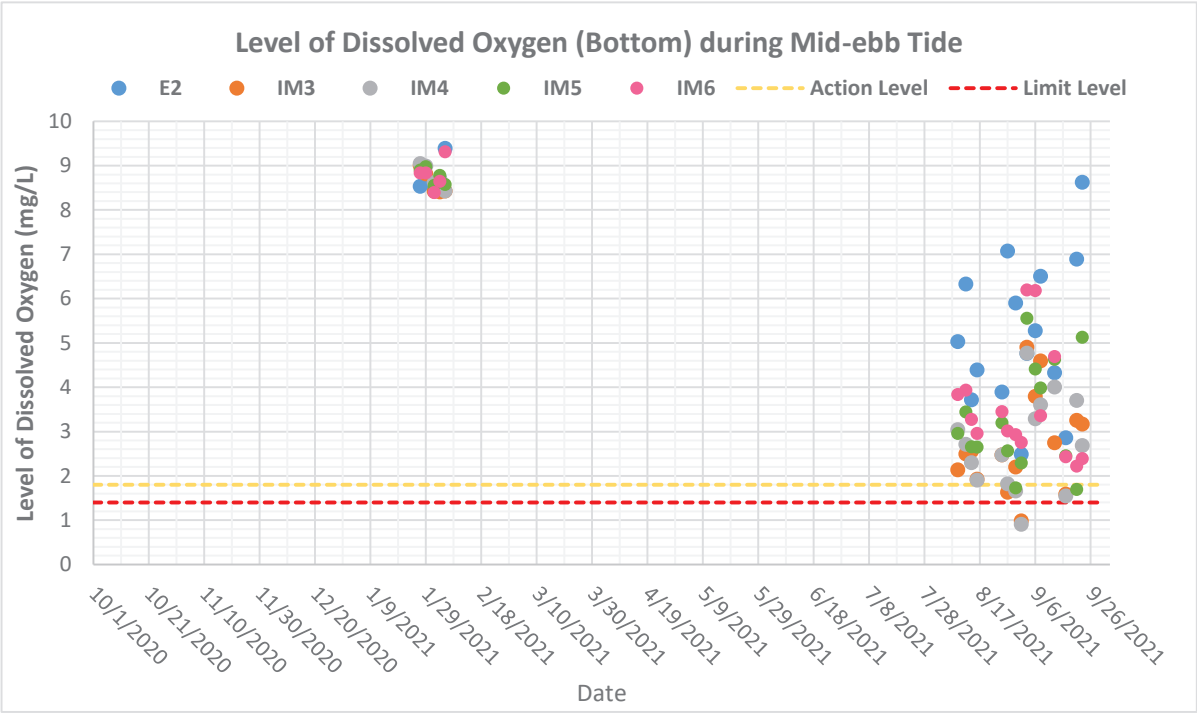

Figure F2b: Levels of Bottom Dissolved Oxygen (mg/L) at control station (E2) and impact stations (IM3-IM6) under Group 2 during mid-ebb tides between October 2020 and September 2021

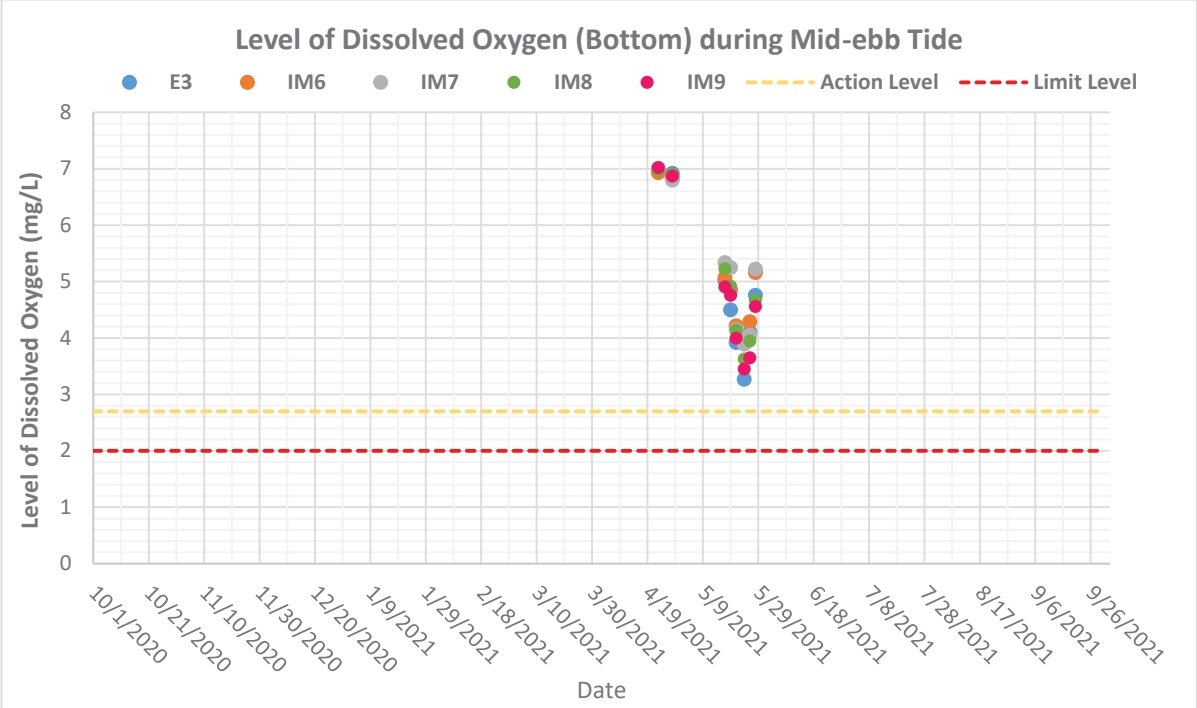

Figure F2c: Levels of Bottom Dissolved Oxygen (mg/L) at control station (E3) and impact stations (IM6-IM9) under Group 3 during mid-ebb tides between October 2020 and September 2021

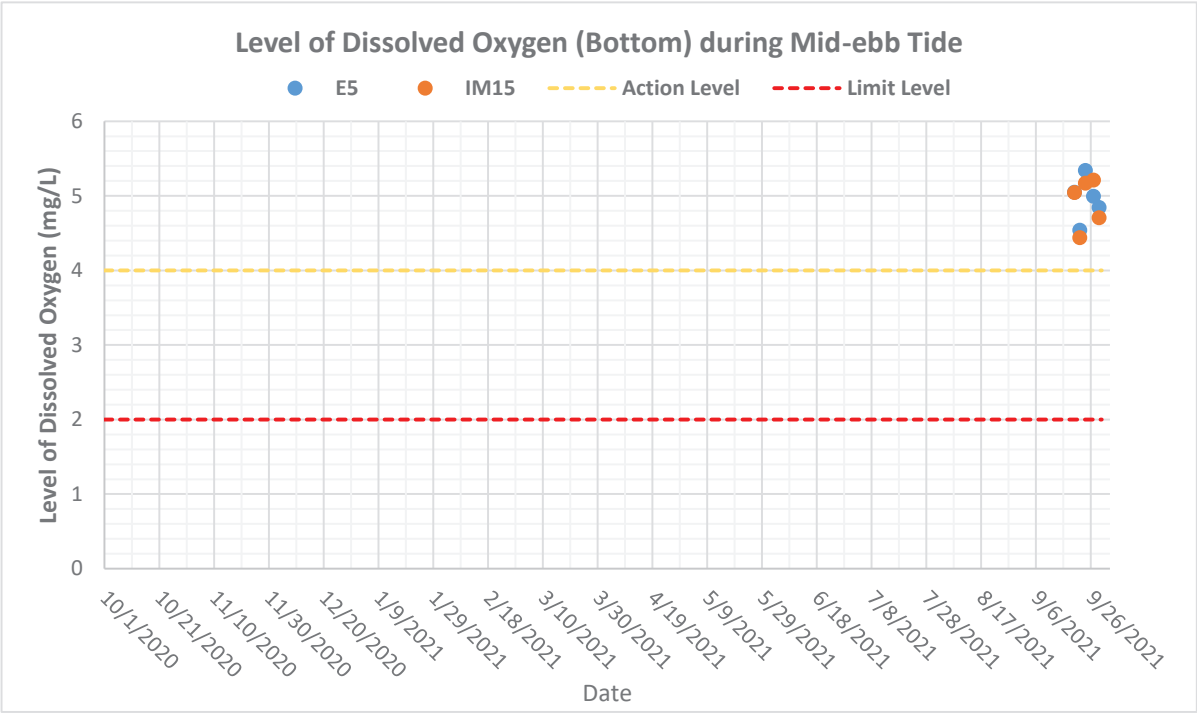

Figure F2d: Levels of Bottom Dissolved Oxygen (mg/L) at control station (E5) and impact station (IM15) under Group 5 during mid-ebb tides between October 2020 and September 2021

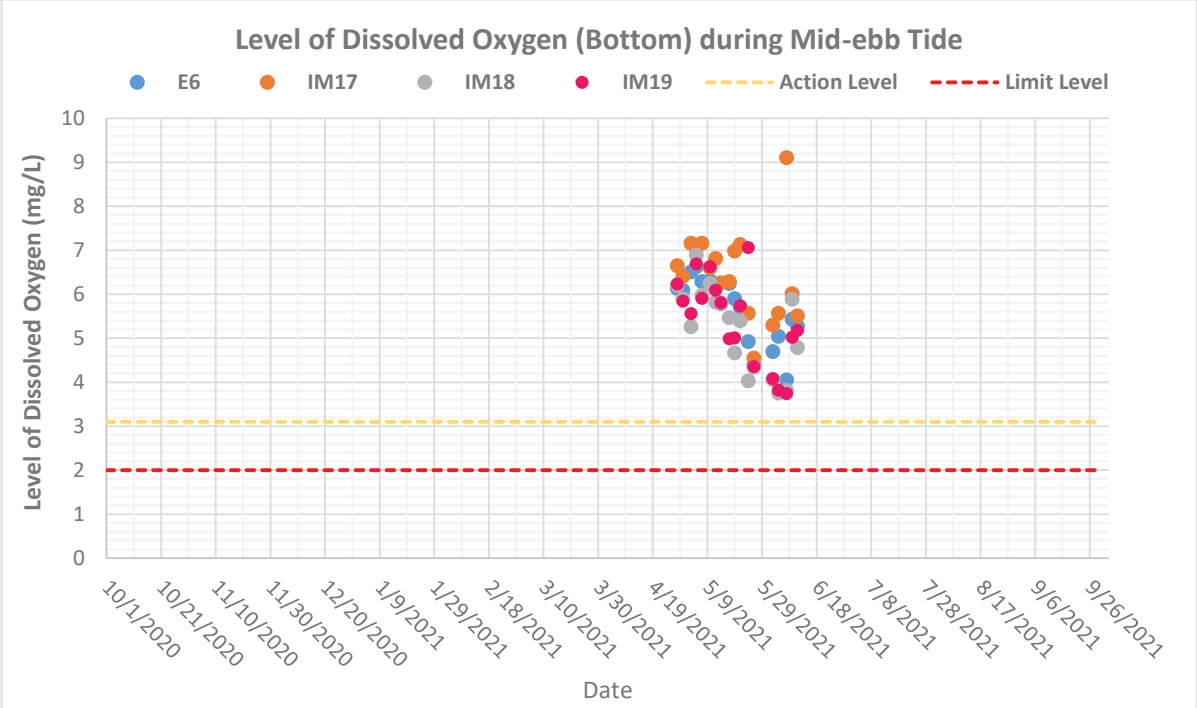

Figure F2e: Levels of Bottom Dissolved Oxygen (mg/L) at control station (E6) and impact stations (IM17-IM19) under Group 7 during mid-ebb tides between October 2020 and September 2021

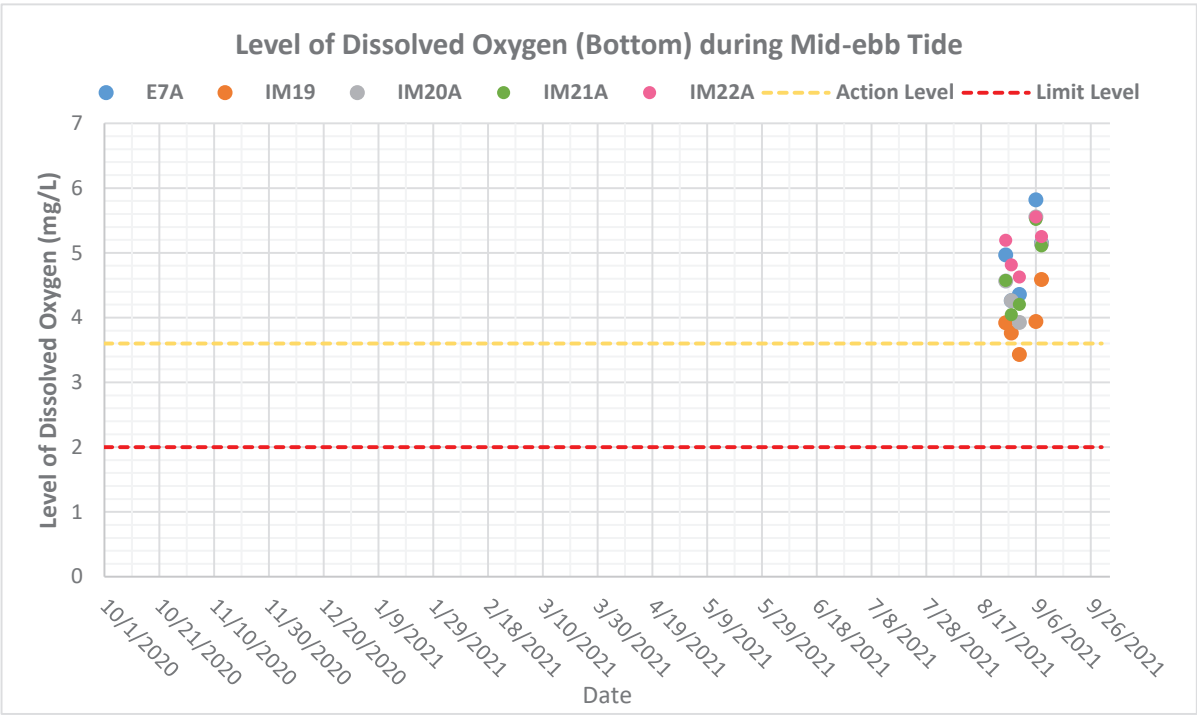

Figure F2f: Levels of Bottom Dissolved Oxygen (mg/L) at control station (E7A) and impact stations (IM19-IM22A) under Group 8 during mid-ebb tides between October 2020 and September 2021

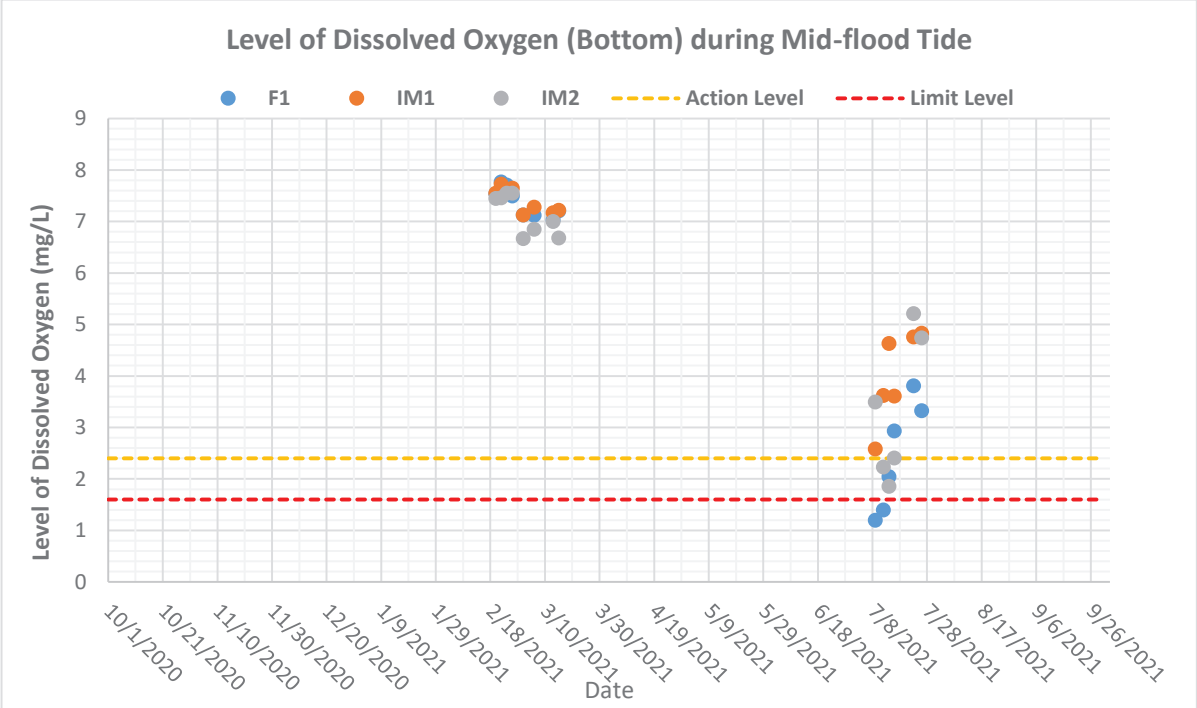

Figure F2g: Levels of Bottom Dissolved Oxygen (mg/L) at control station (F1) and impact stations (IM1-IM2) under Group 1 during mid-flood tides between October 2020 and September 2021

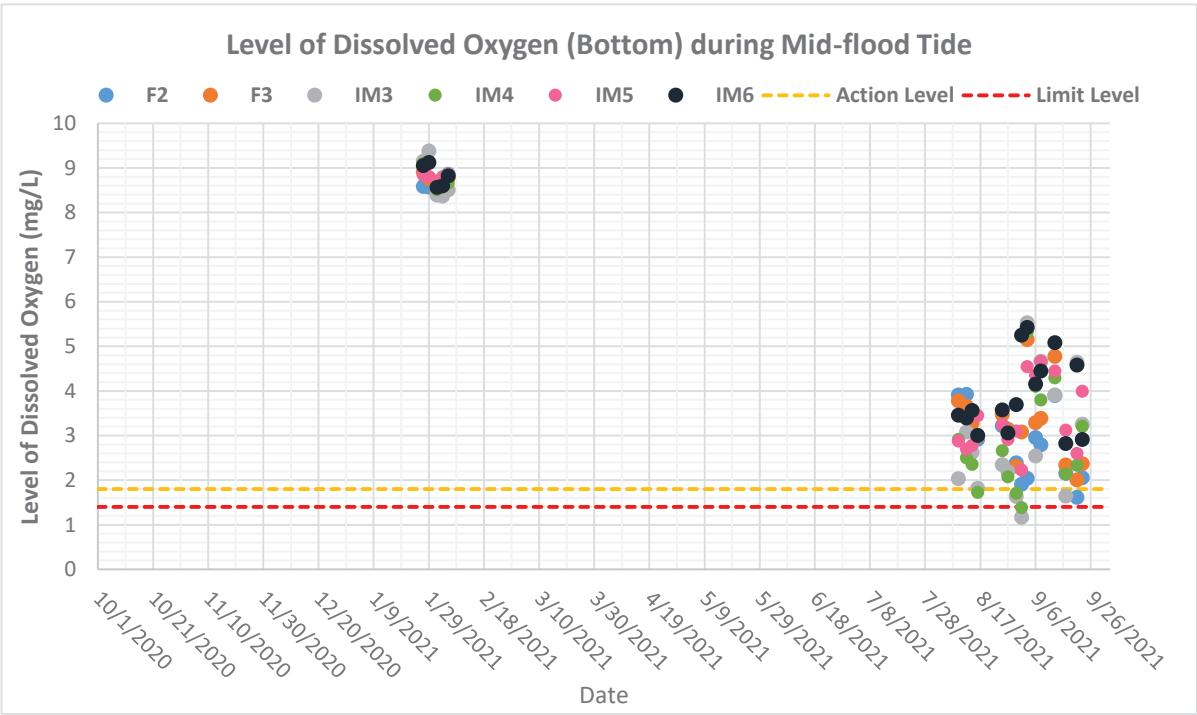

Figure F2h: Levels of Bottom Dissolved Oxygen (mg/L) at control stations (F2-F3) and impact stations (IM3-IM6) under Group 2 during mid-flood tides between October 2020 and September 2021

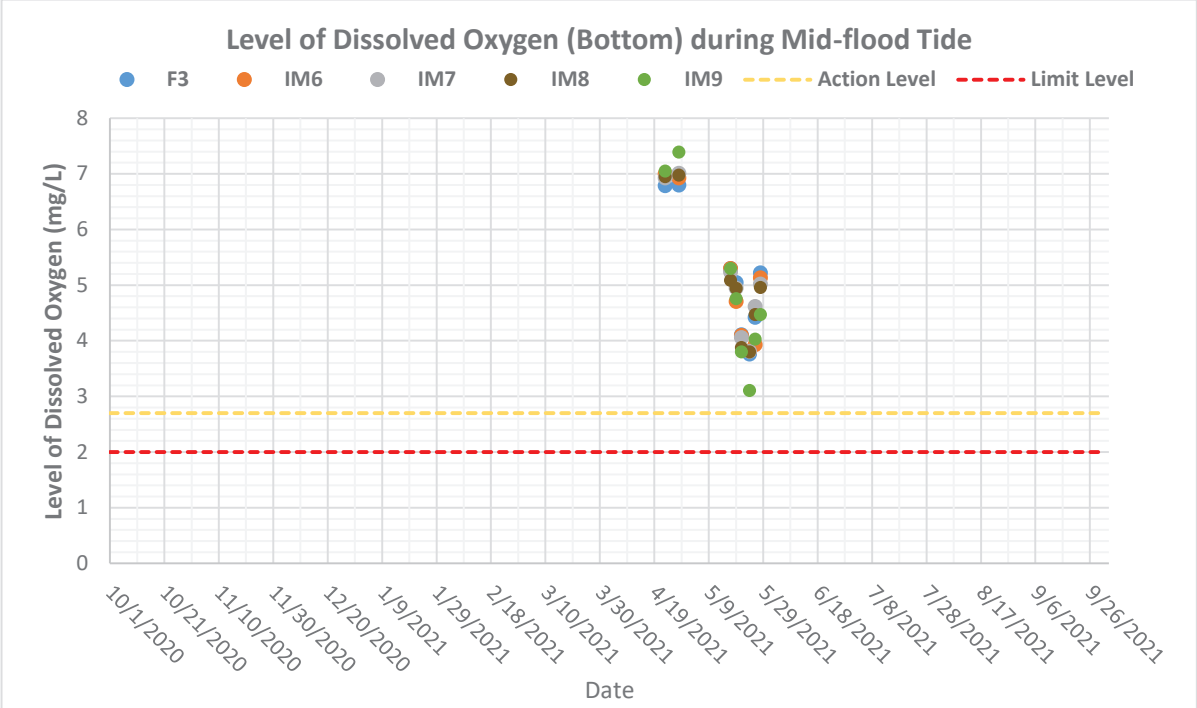

Figure F2i: Levels of Bottom Dissolved Oxygen (mg/L) at control station (F3) and impact stations (IM6-IM9) under Group 3 during mid-flood tides between October 2020 and September 2021

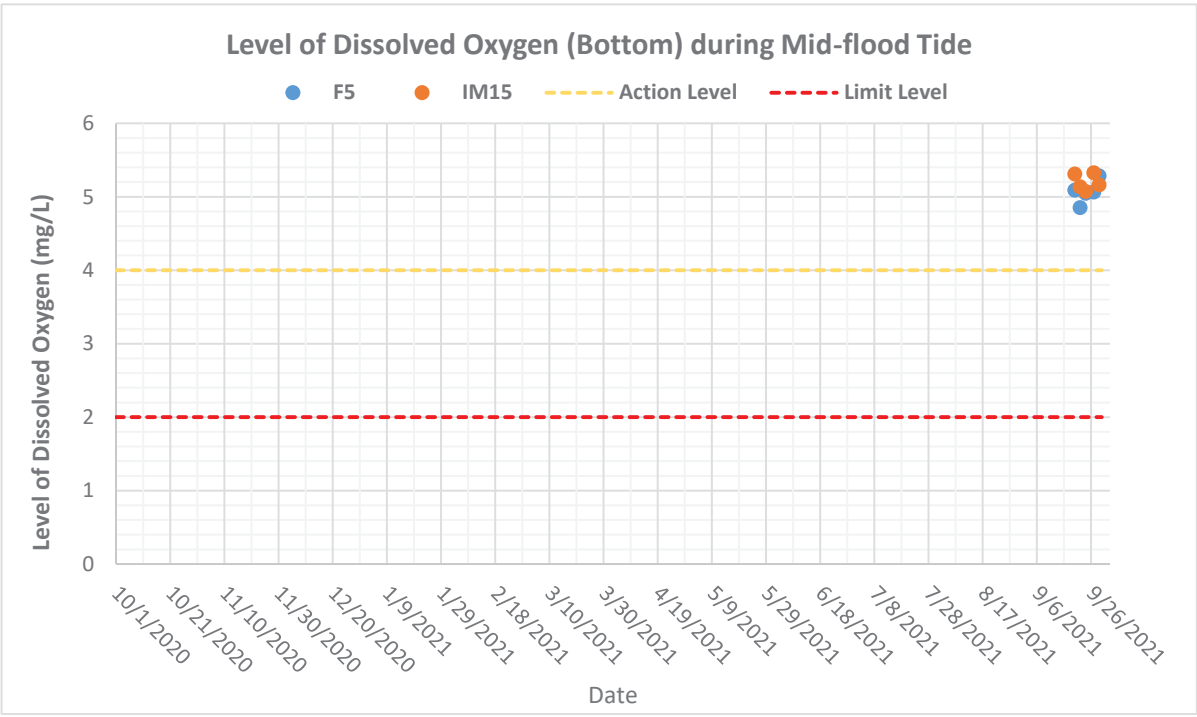

Figure F2j: Levels of Bottom Dissolved Oxygen (mg/L) at control station (F5) and impact station (IM15) under Group 5 during mid-flood tides between October 2020 and September 2021

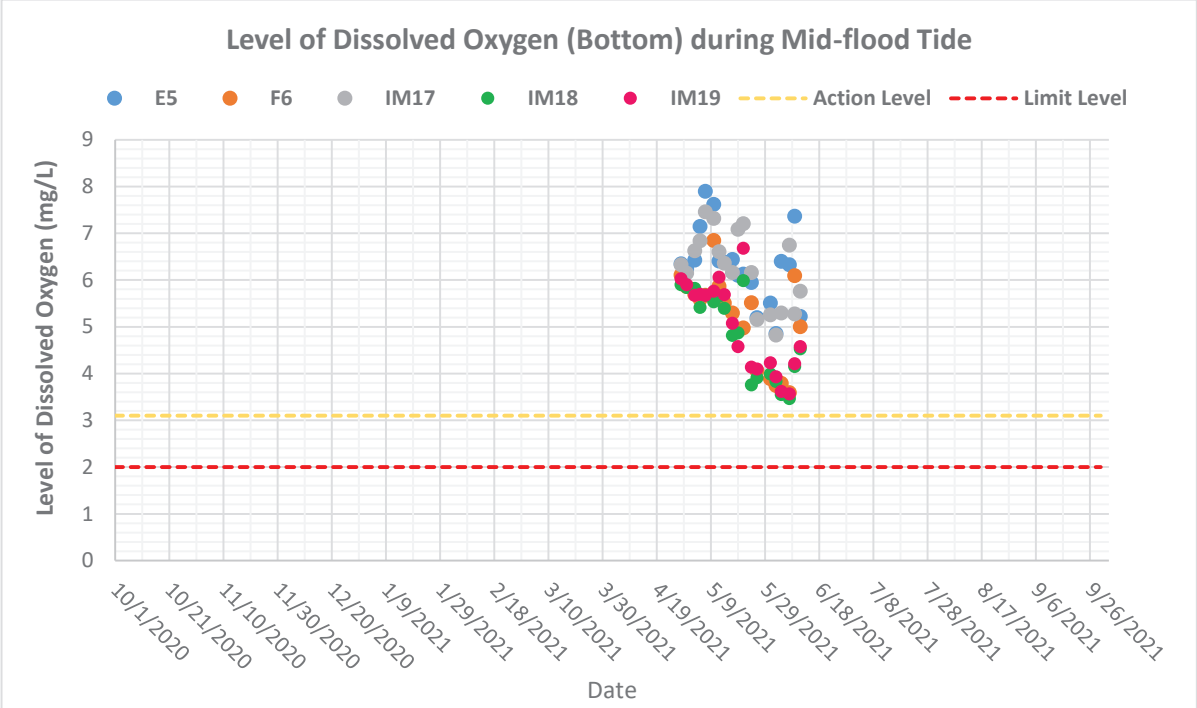

Figure F2k: Levels of Bottom Dissolved Oxygen (mg/L) at control stations (E5, F6) and impact stations (IM17-IM19) under Group 7 during mid-flood tides between October 2020 and September 2021

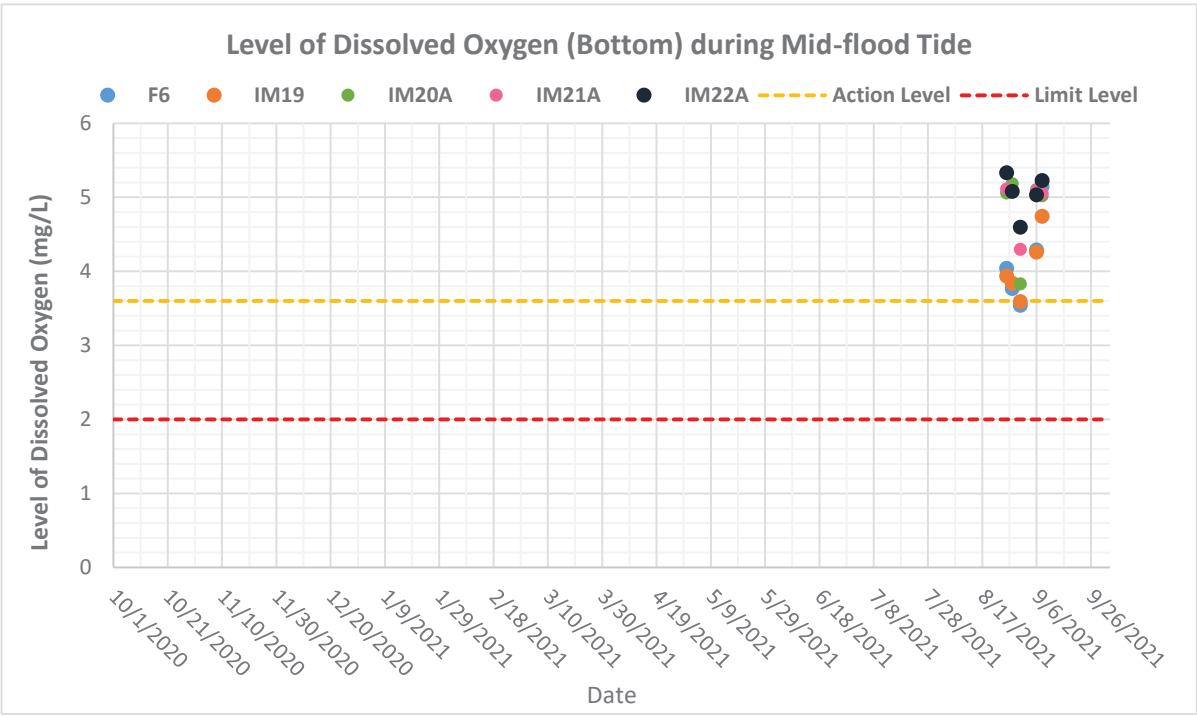

Figure F2l: Levels of Bottom Dissolved Oxygen (mg/L) at control station (F6) and impact stations (IM19-IM22A) under Group 8 during mid-flood tides between October 2020 and September 2021

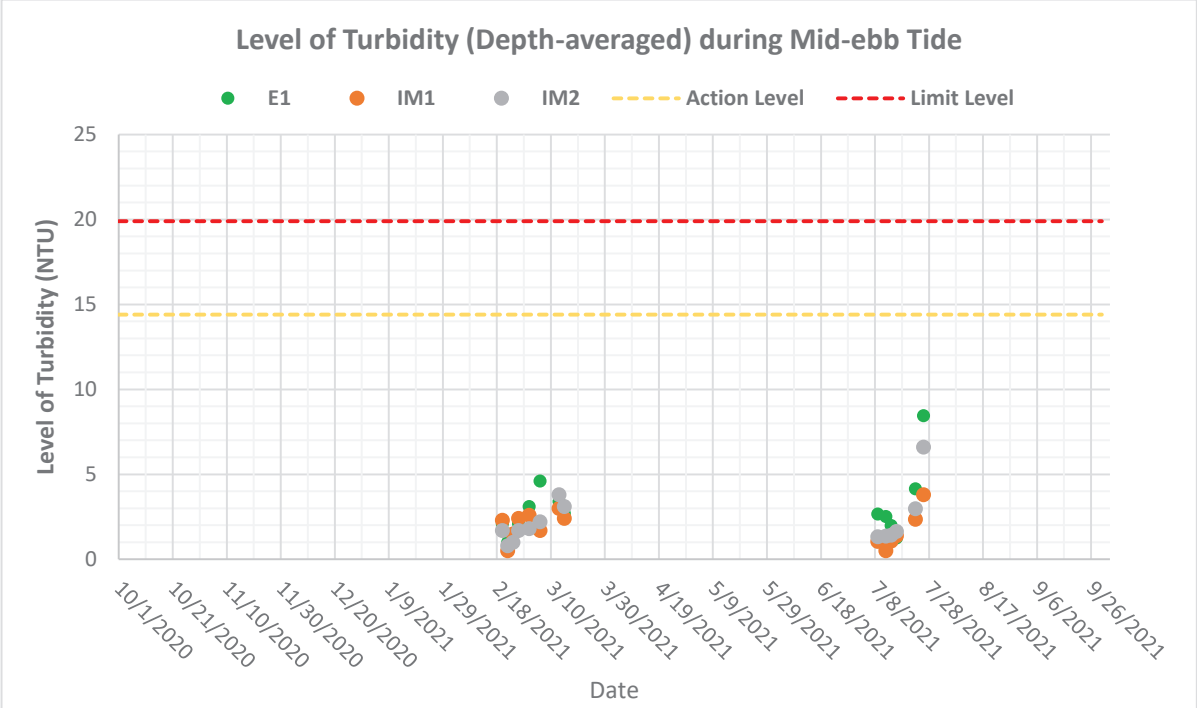

Figure F3a: Levels of Depth-averaged Turbidity (NTU) at control station (E1) and impact stations (IM1-IM2) under Group 1 during mid-ebb tides between October 2020 and September 2021

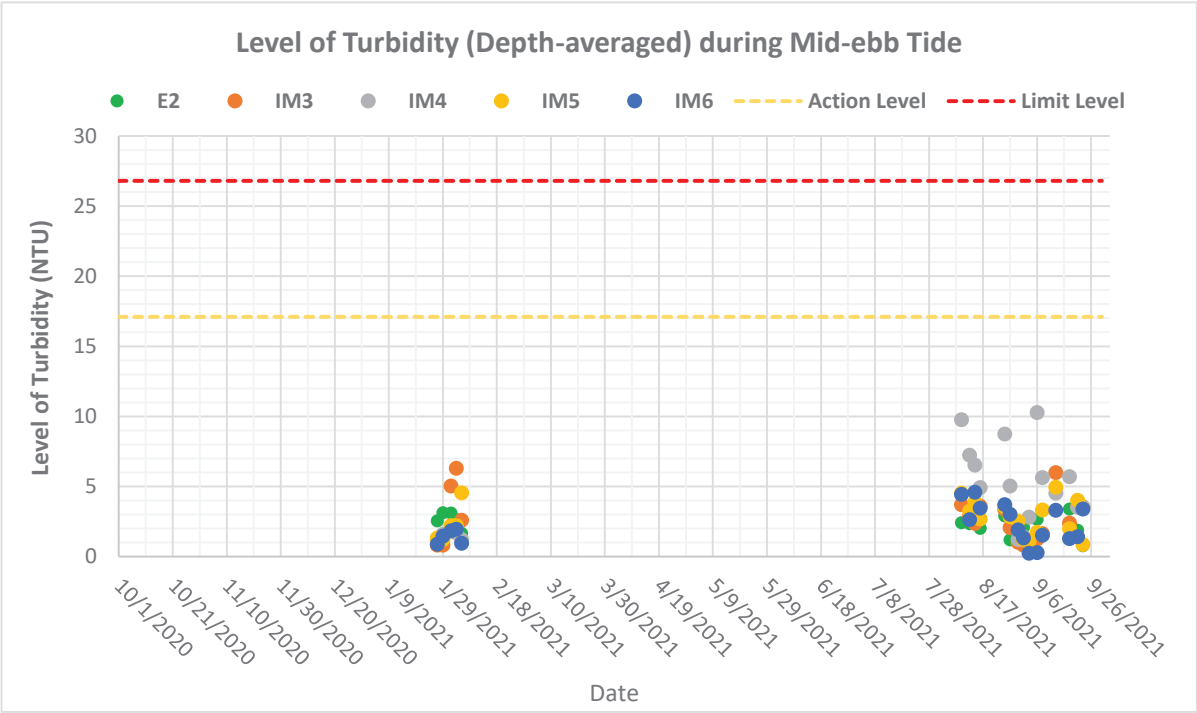

Figure F3b: Levels of Depth-averaged Turbidity (NTU) at control station (E2) and impact stations (IM3-IM6) under Group 2 during mid-ebb tides between October 2020 and September 2021

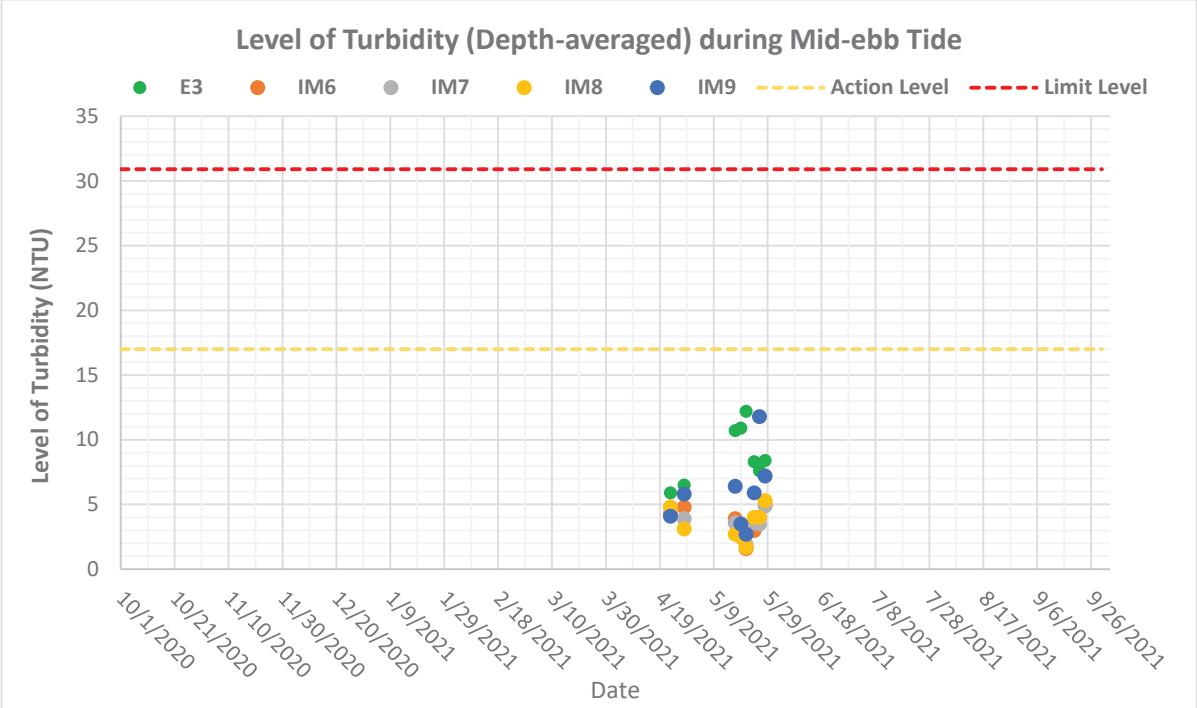

Figure F3c: Levels of Depth-averaged Turbidity (NTU) at control station (E3) and impact stations (IM6-IM9) under Group 3 during mid-ebb tides between October 2020 and September 2021

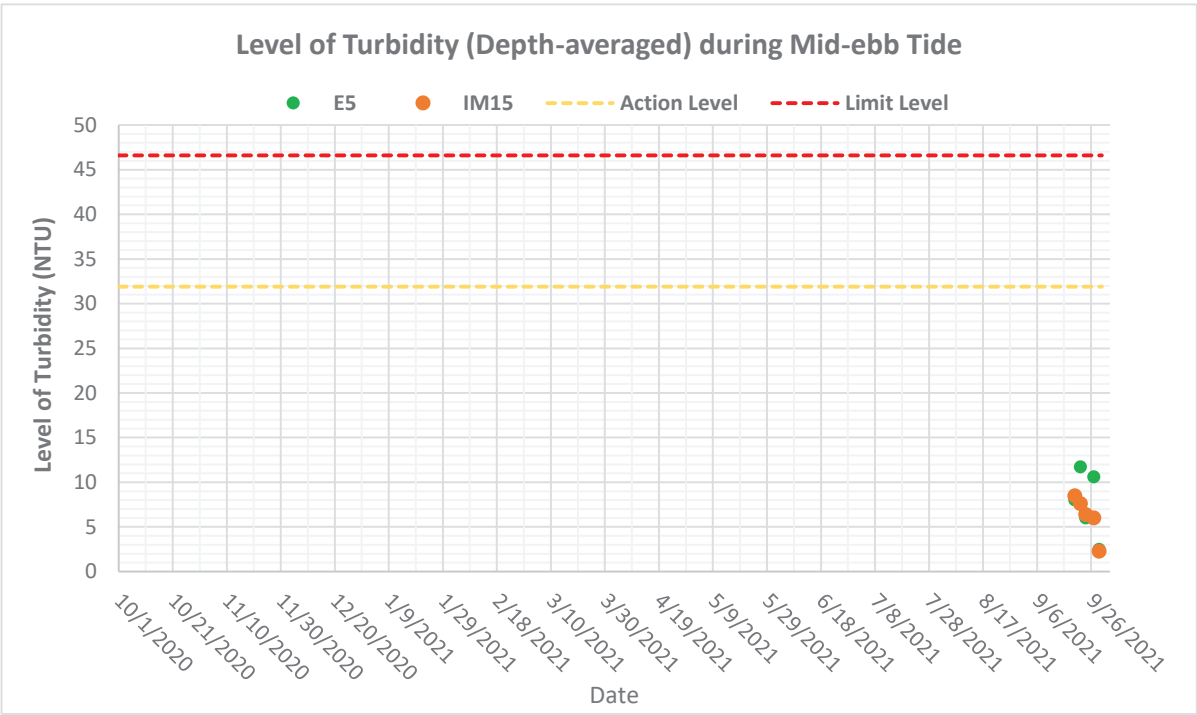

Figure F3d: Levels of Depth-averaged Turbidity (NTU) at control station (E5) and impact station (IM15) under Group 5 during mid-ebb tides between October 2020 and September 2021

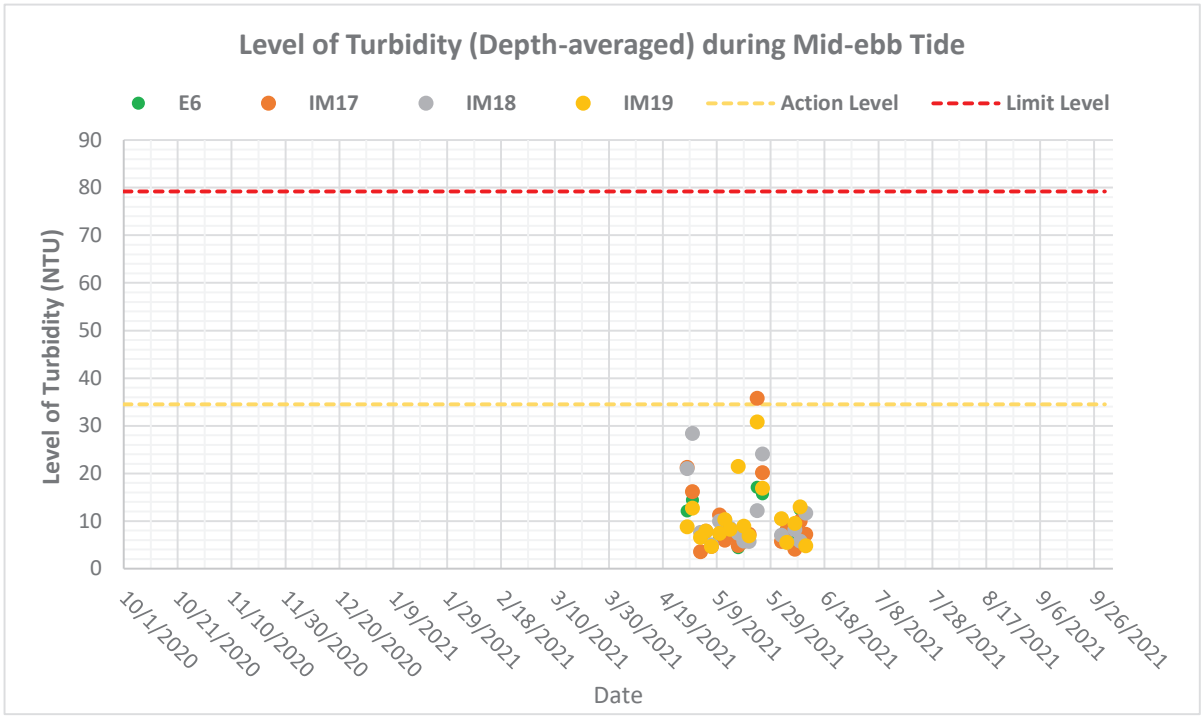

Figure F3e: Levels of Depth-averaged Turbidity (NTU) at control station (E6) and impact stations (IM17-IM19) under Group 7 during mid-ebb tides between October 2020 and September 2021

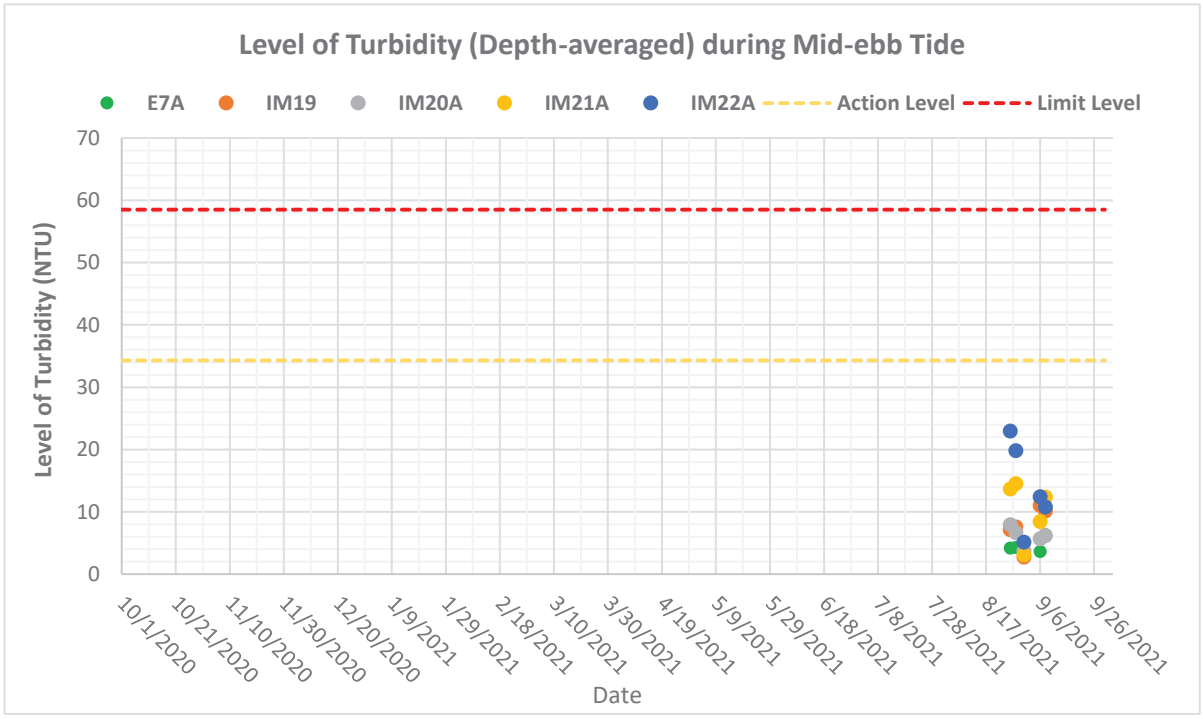

Figure F3f: Levels of Depth-averaged Turbidity (NTU) at control station (E7A) and impact stations (IM19-IM22A) under Group 8 during mid-ebb tides between October 2020 and September 2021

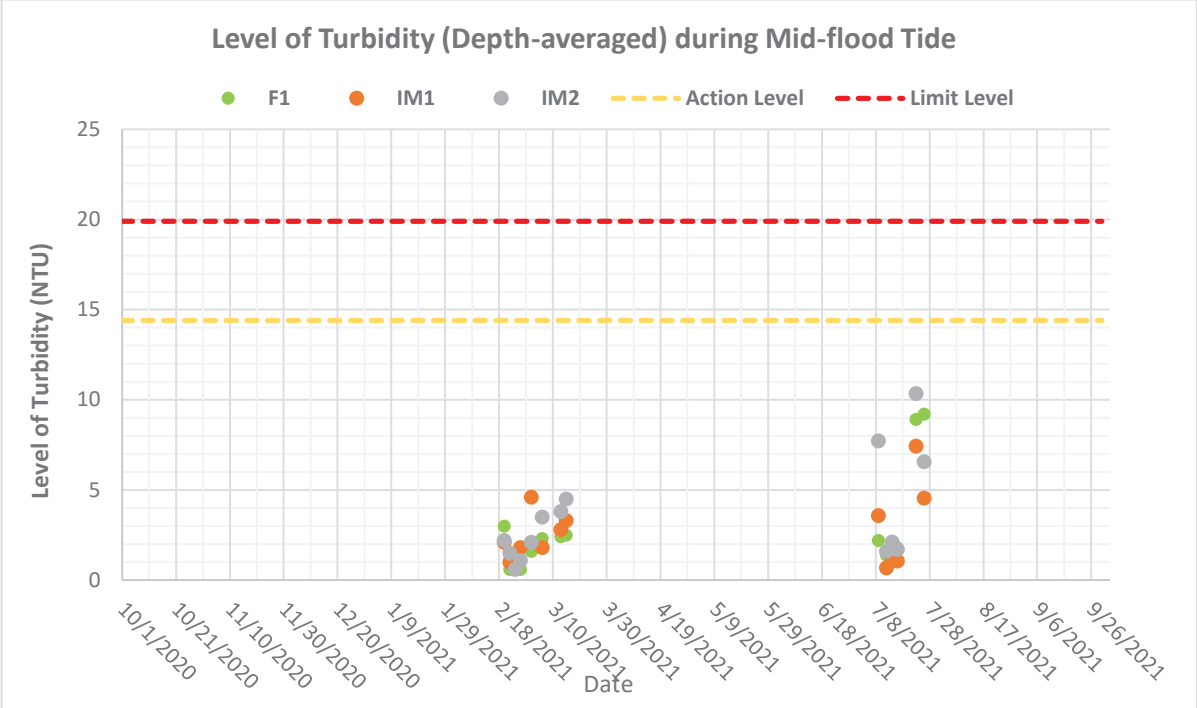

Figure F3g: Levels of Depth-averaged Turbidity (NTU) at control station (F1) and impact stations (IM1-IM2) under Group 1 during mid-flood tides between October 2020 and September 2021

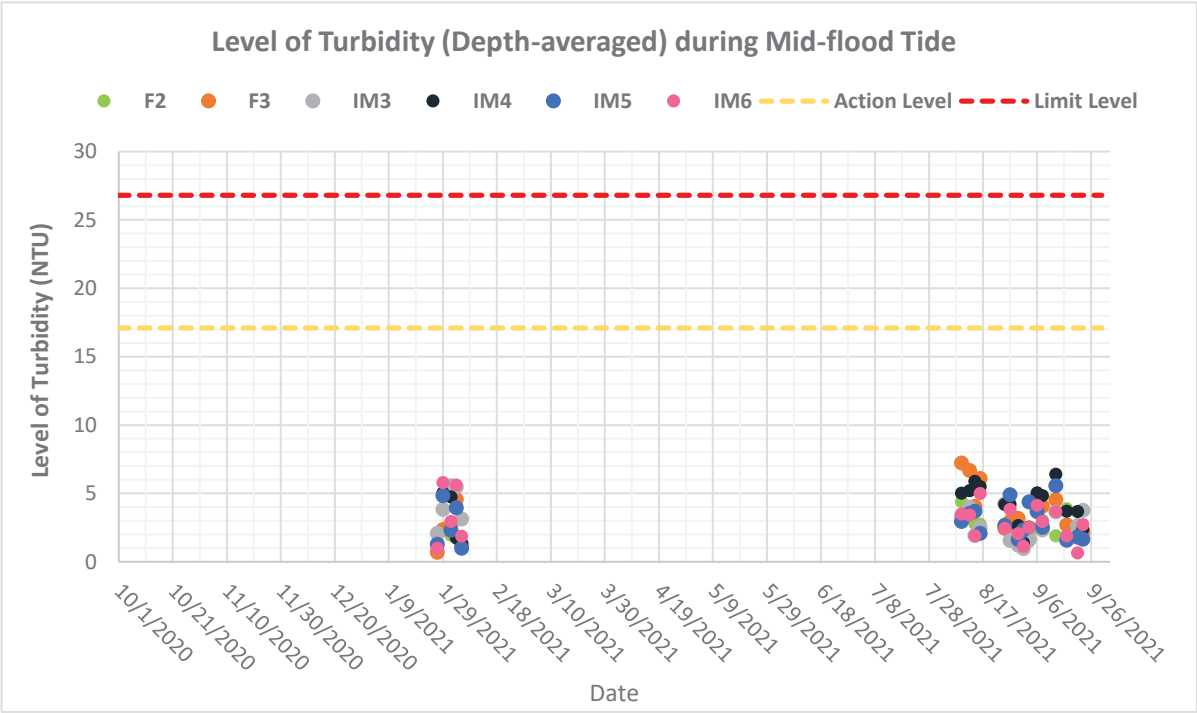

Figure F3h: Levels of Depth-averaged Turbidity (NTU) at control stations (F2-F3) and impact stations (IM3-IM6) under Group 2 during mid-flood tides between October 2020 and September 2021

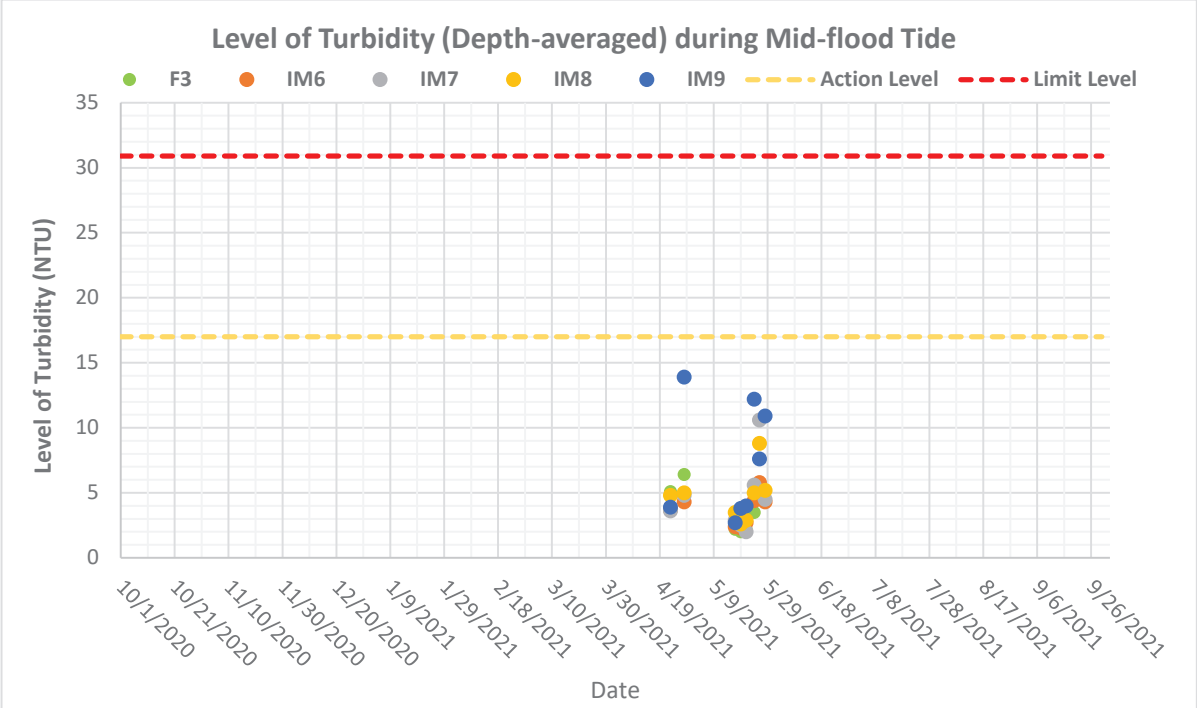

Figure F3i: Levels of Depth-averaged Turbidity (NTU) at control station (F3) and impact stations (IM6-IM9) under Group 3 during mid-flood tides between October 2020 and September 2021

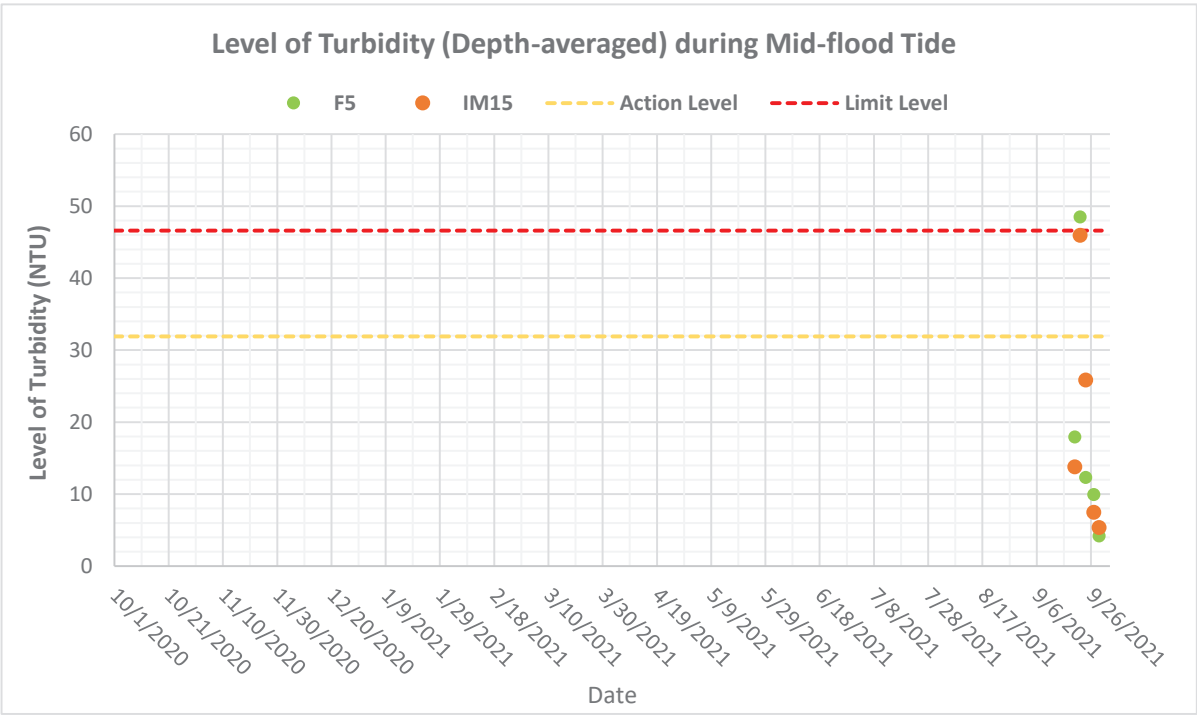

Figure F3j: Levels of Depth-averaged Turbidity (NTU) at control station (F5) and impact station (IM15) under Group 5 during mid-flood tides between October 2020 and September 2021

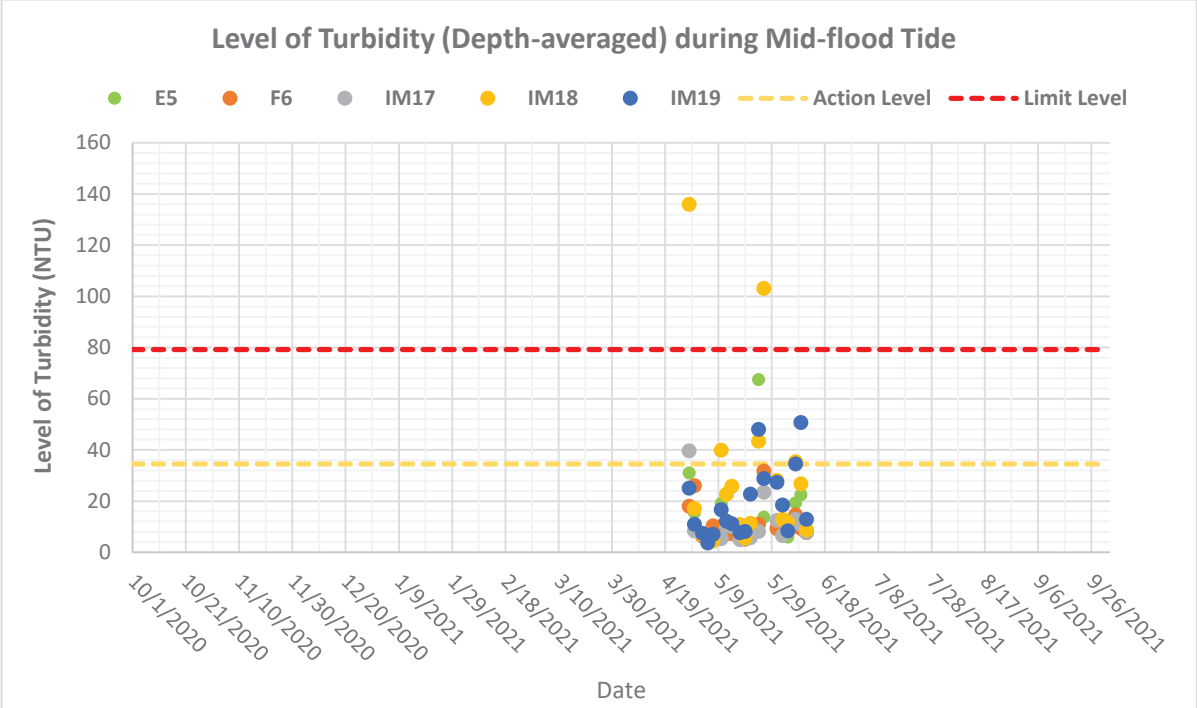

Figure F3k: Levels of Depth-averaged Turbidity (NTU) at control stations (E5, F6) and impact stations (IM17-IM19) under Group 7 during mid-flood tides between October 2020 and September 2021

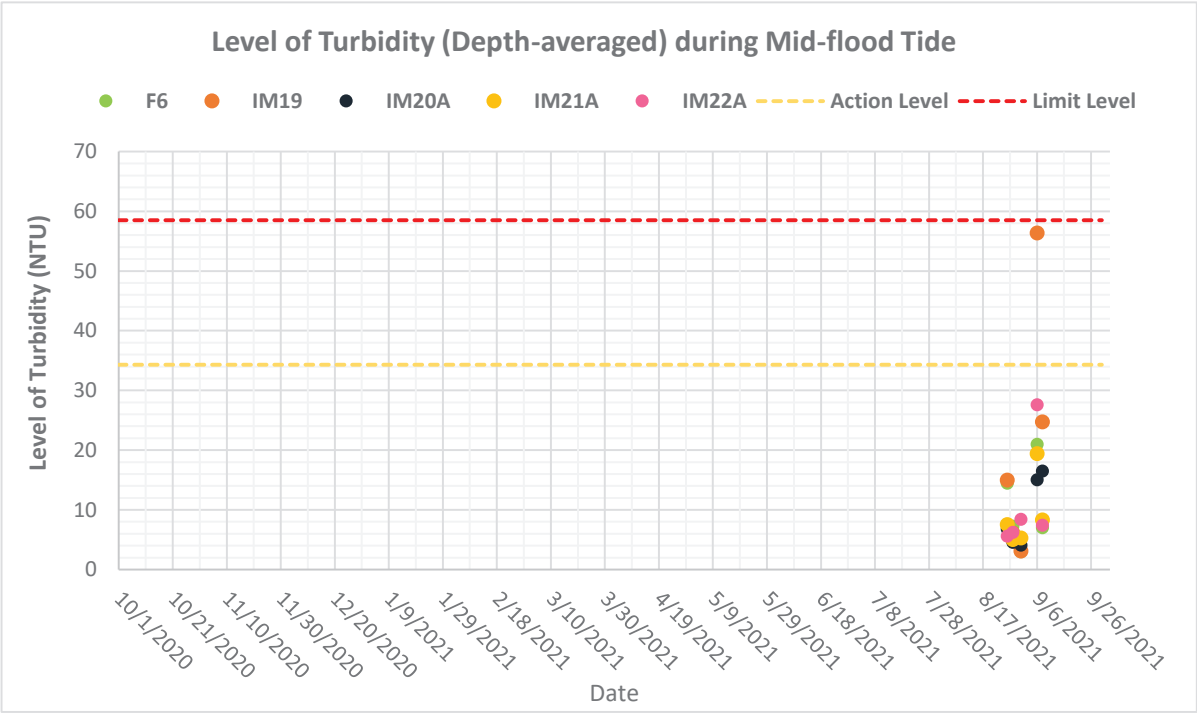

Figure F3l: Levels of Depth-averaged Turbidity (NTU) at control station (F6) and impact stations (IM19-IM22A) under Group 8 during mid-flood tides between October 2020 and September 2021

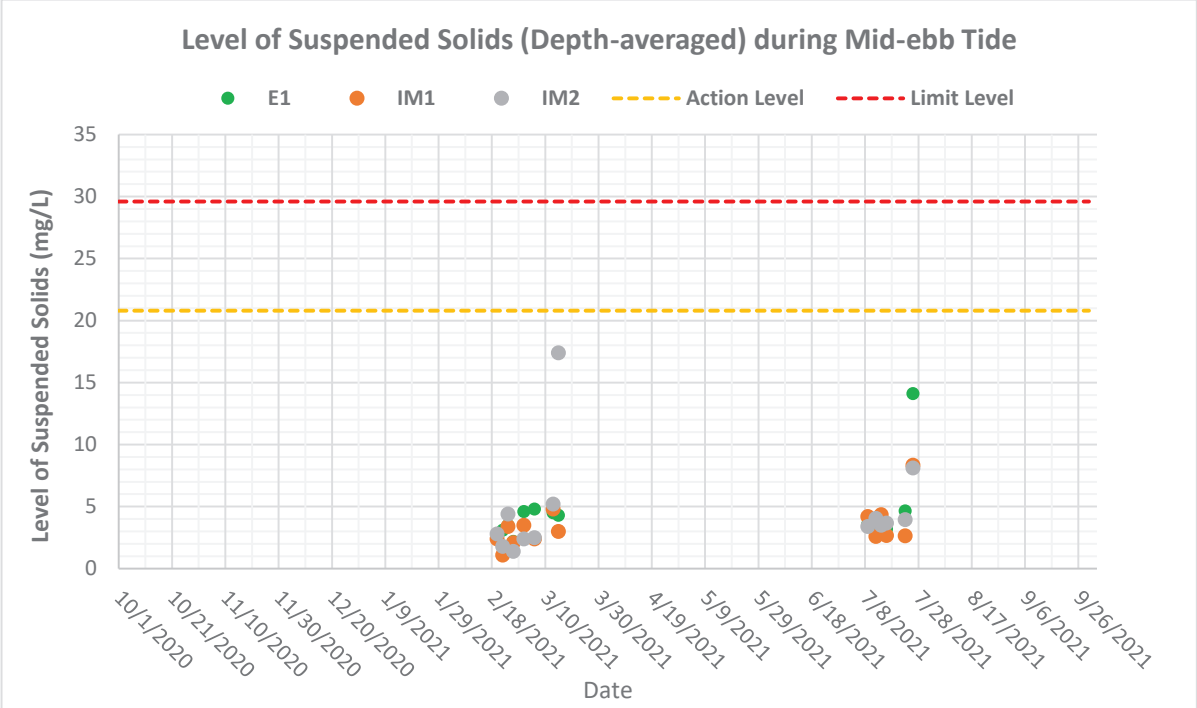

Figure F4a: Levels of Depth-averaged Suspended Solids (mg/L) at control station (E1) and impact stations (IM1-IM2) under Group 1 during mid-ebb tides between October 2020 and September 2021

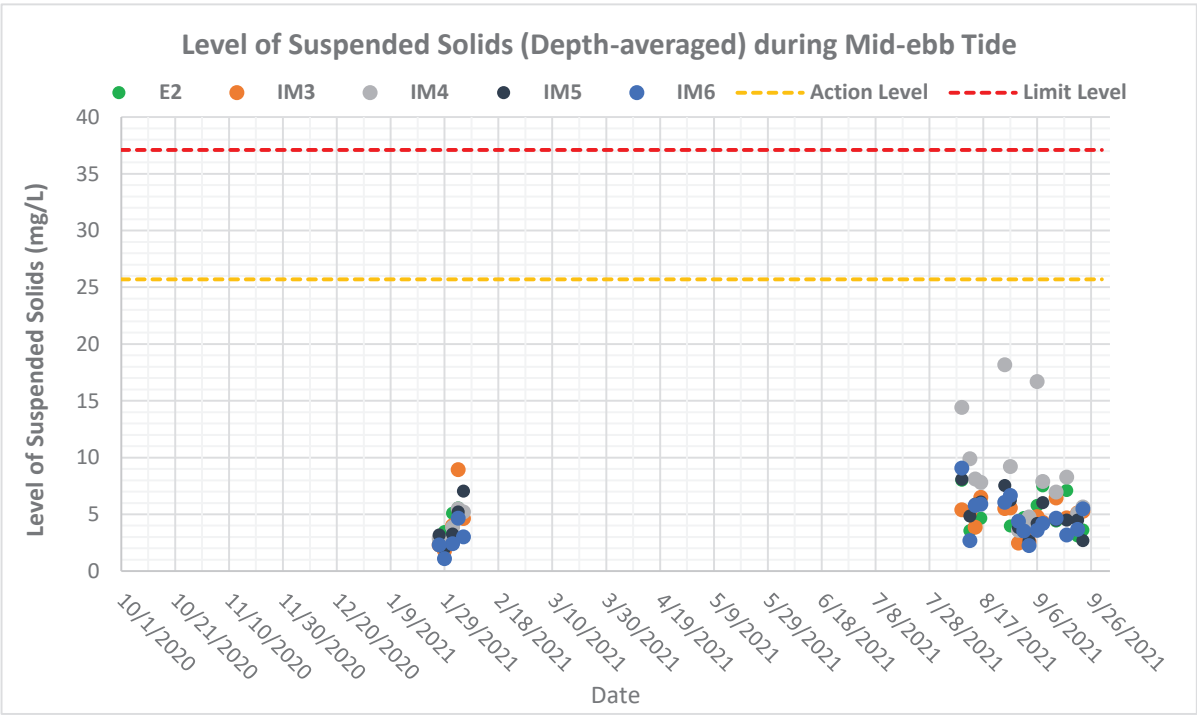

Figure F4b: Levels of Depth-averaged Suspended Solids (mg/L) at control station (E2) and impact stations (IM3-IM6) under Group 2 during mid-ebb tides between October 2020 and September 2021

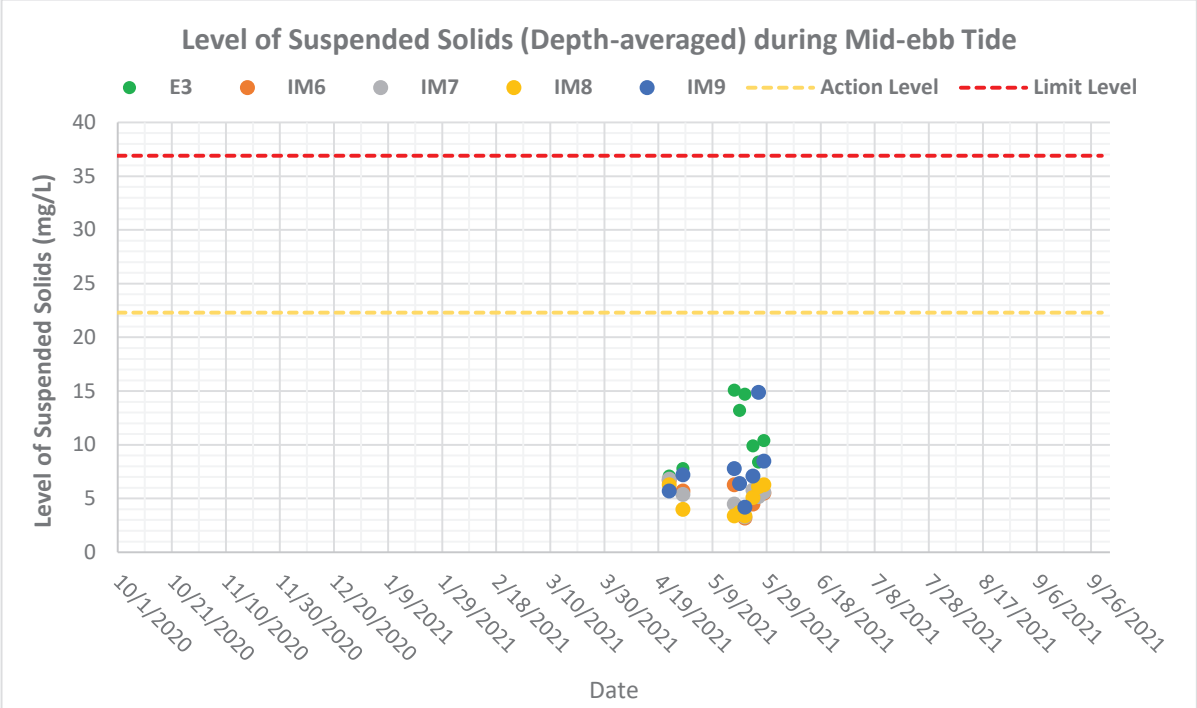

Figure F4c: Levels of Depth-averaged Suspended Solids (mg/L) at control station (E3) and impact stations (IM6-IM9) under Group 3 during mid-ebb tides between October 2020 and September 2021

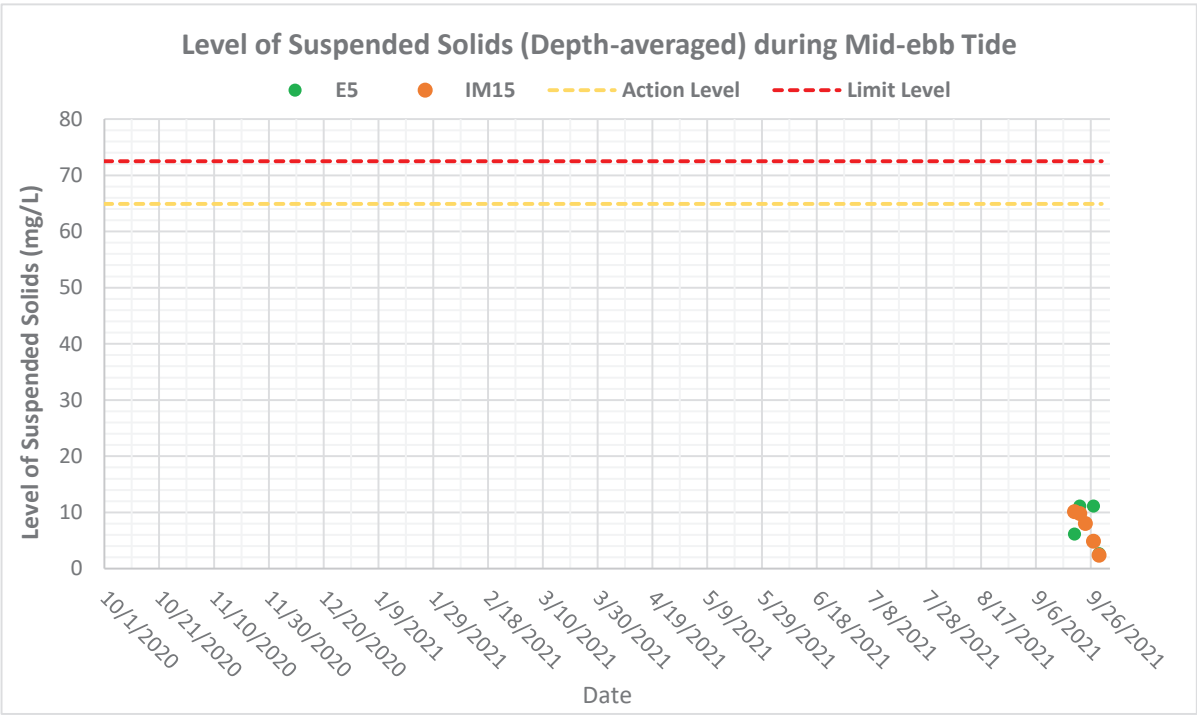

Figure F4d: Levels of Depth-averaged Suspended Solids (mg/L) at control station (E5) and impact station (IM15) under Group 5 during mid-ebb tides between October 2020 and September 2021

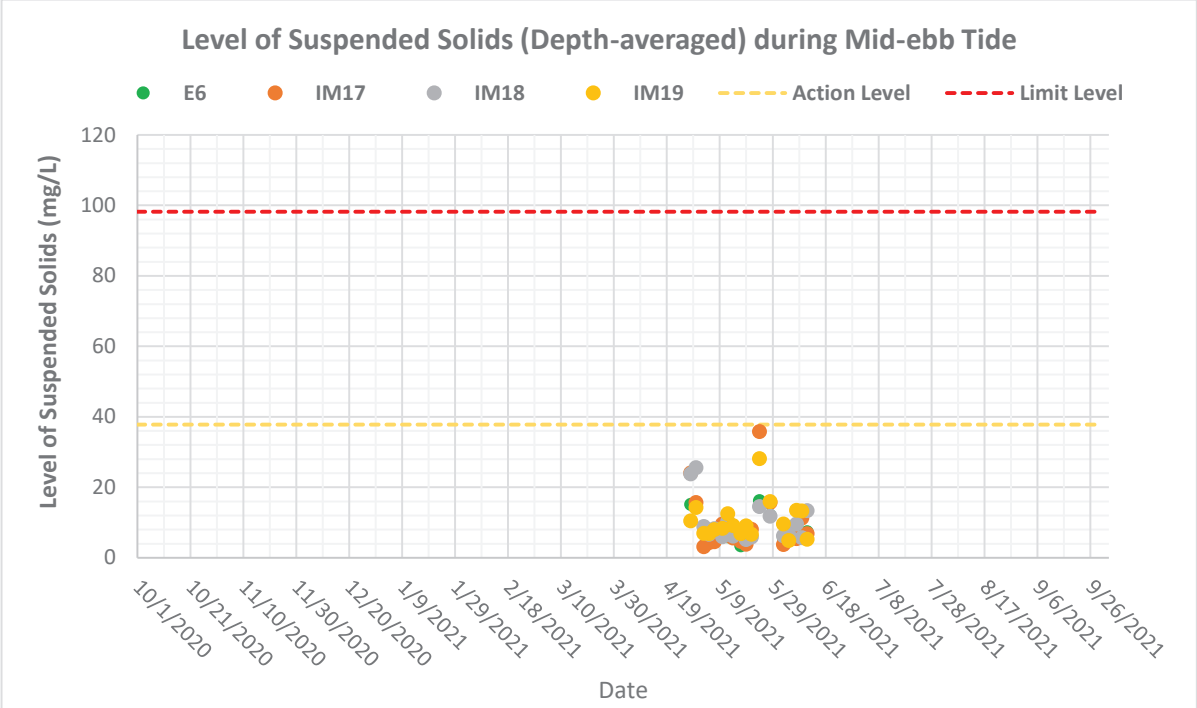

Figure F4e: Levels of Depth-averaged Suspended Solids (mg/L) at control station (E6) and impact stations (IM17-IM19) under Group 7 during mid-ebb tides between October 2020 and September 2021

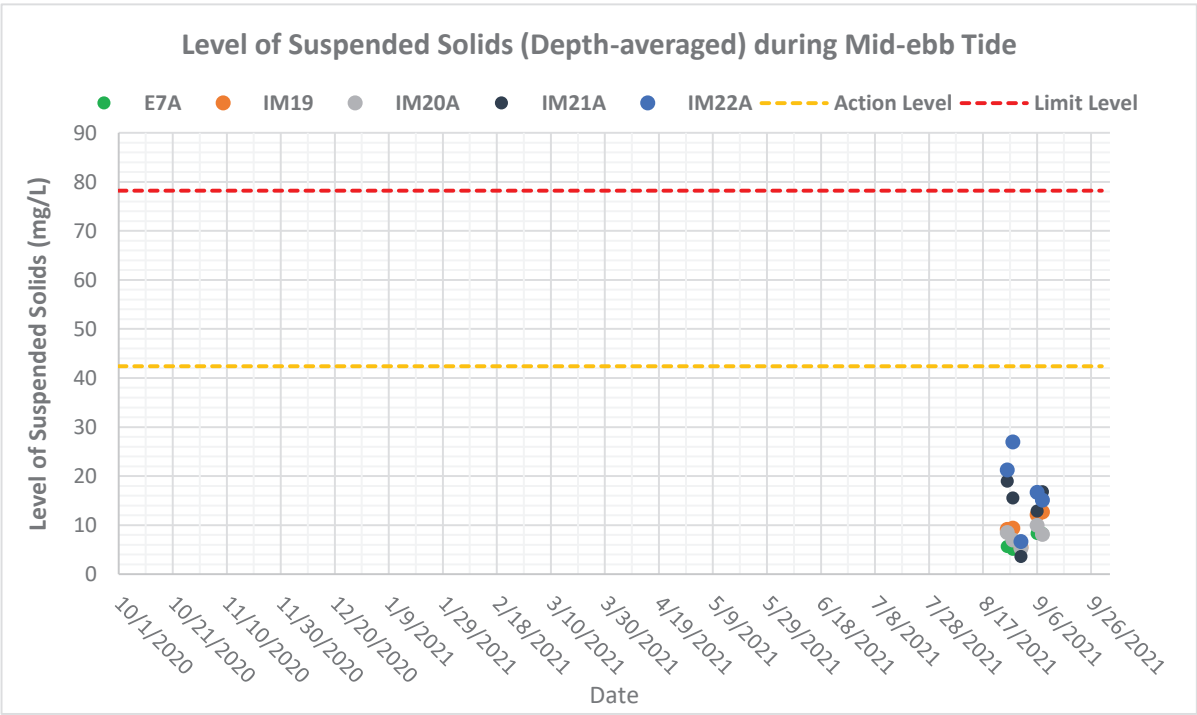

Figure F4f: Levels of Depth-averaged Suspended Solids (mg/L) at control station (E7A) and impact stations (IM19-IM22A) under Group 8 during mid-ebb tides between October 2020 and September 2021

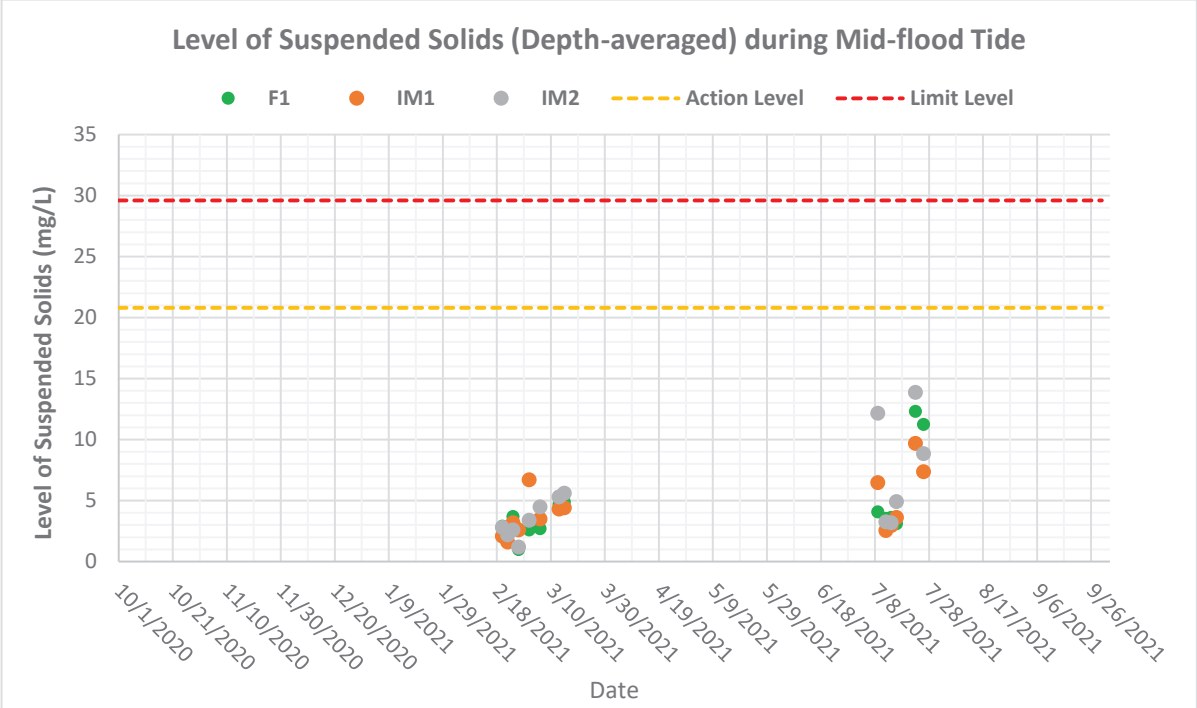

Figure F4g: Levels of Depth-averaged Suspended Solids (mg/L) at control station (F1) and impact stations (IM1-IM2) under Group 1 during mid-flood tides between October 2020 and September 2021

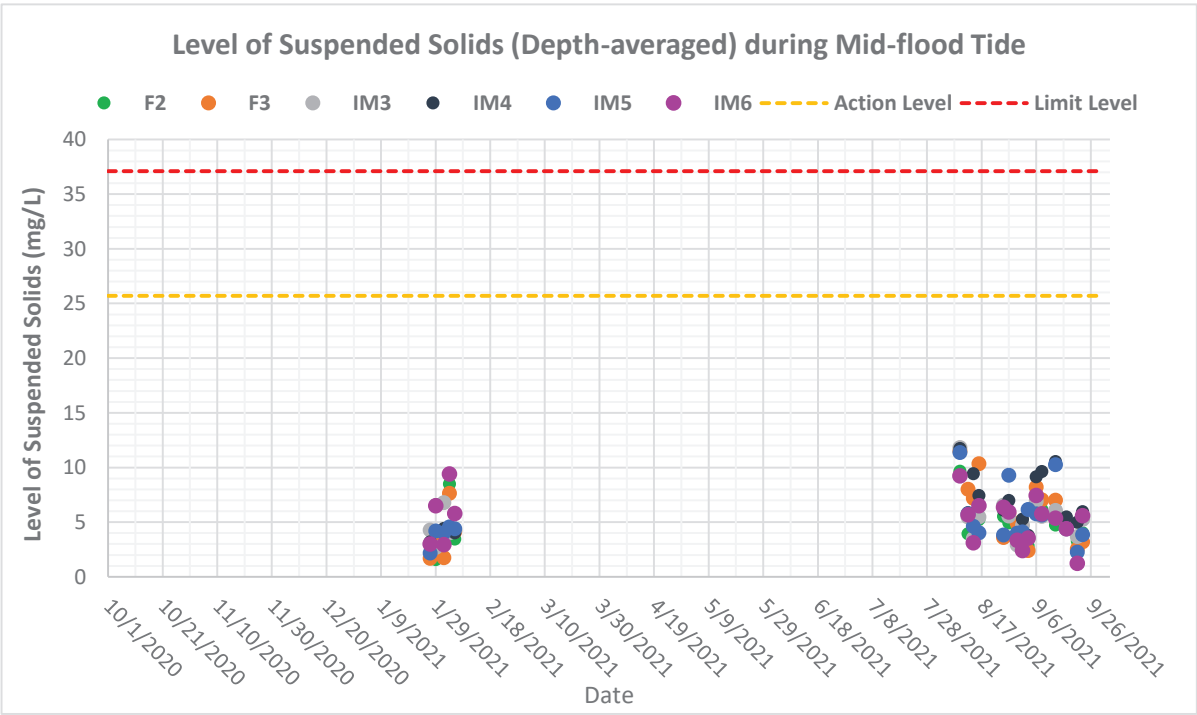

Figure F4h: Levels of Depth-averaged Suspended Solids (mg/L) at control stations (F2-F3) and impact stations (IM3-IM6) under Group 2 during mid-flood tides between October 2020 and September 2021

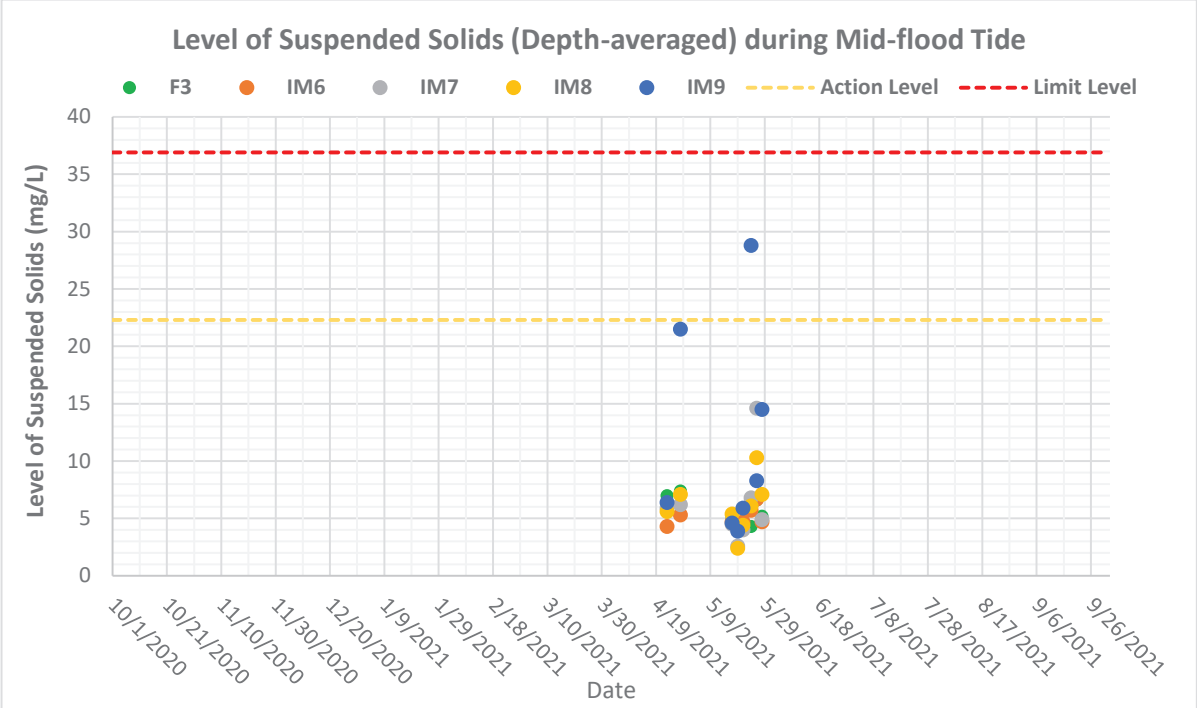

Figure F4i: Levels of Depth-averaged Suspended Solids (mg/L) at control station (F3) and impact stations (IM6-IM9) under Group 3 during mid-flood tides between October 2020 and September 2021

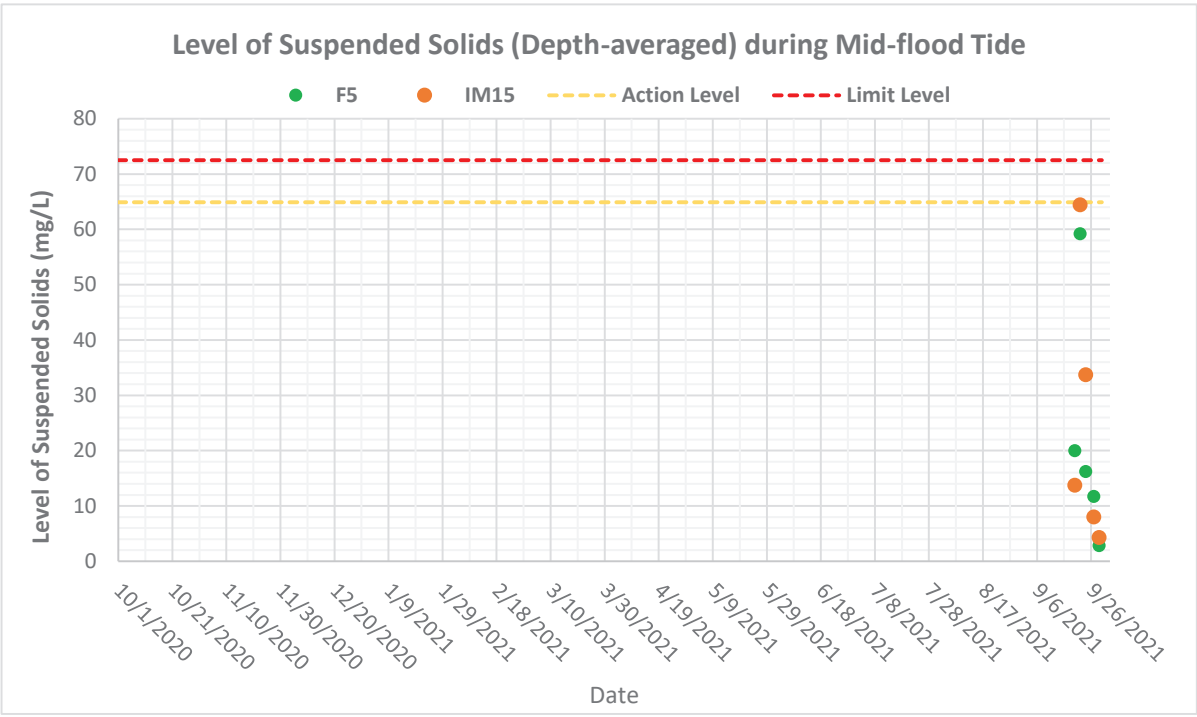

Figure F4j: Levels of Depth-averaged Suspended Solids (mg/L) at control station (F5) and impact station (IM15) under Group 5 during mid-flood tides between October 2020 and September 2021

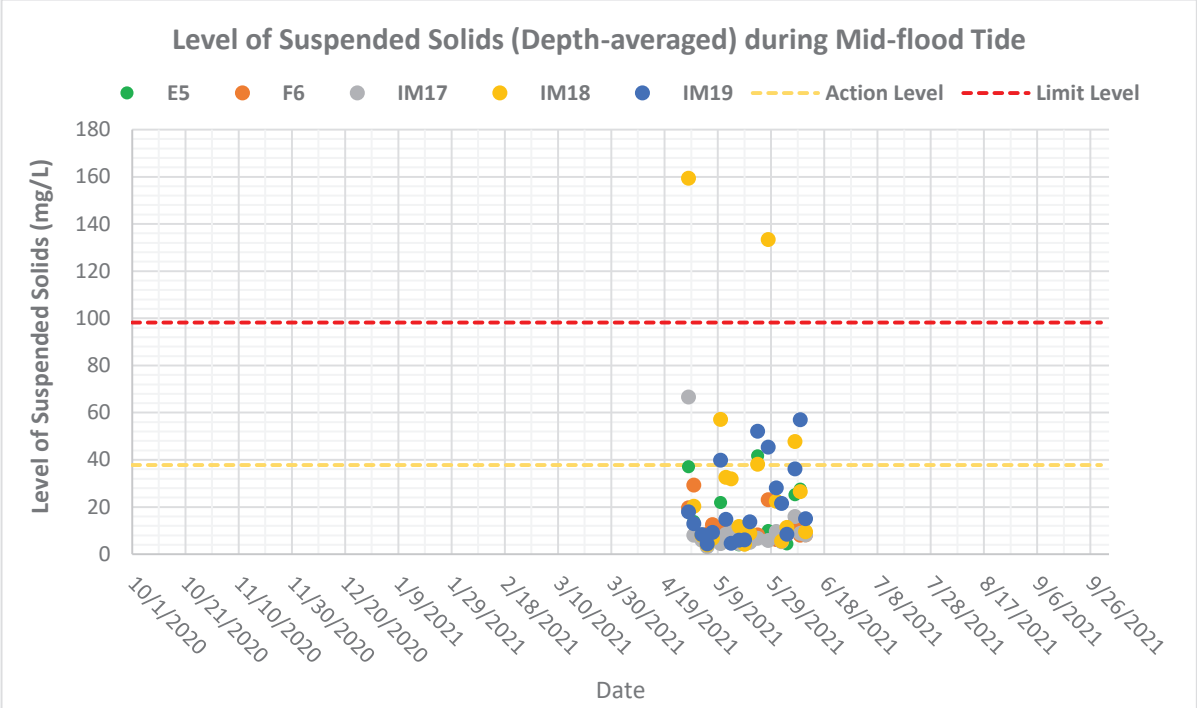

Figure F4k: Levels of Depth-averaged Suspended Solids (mg/L) at control stations (E5, F6) and impact stations (IM17-IM19) under Group 7 during mid-flood tides between October 2020 and September 2021

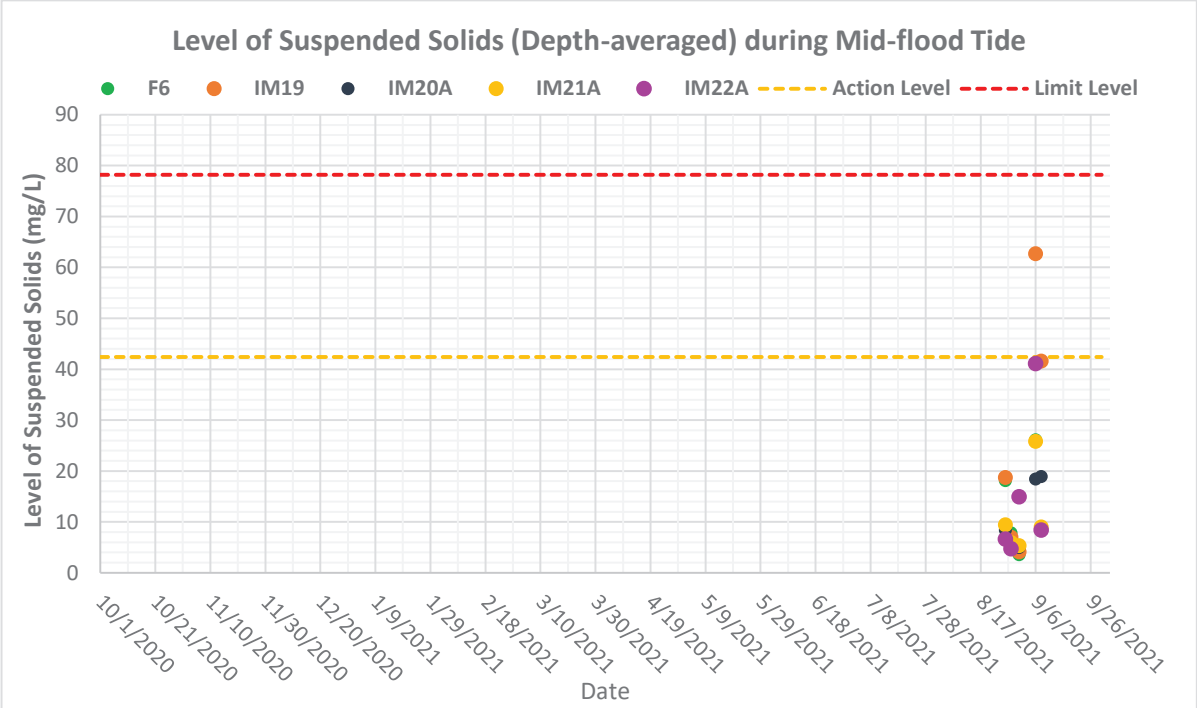

Figure F4l: Levels of Depth-averaged Suspended Solids (mg/L) at control station (F6) and impact stations (IM19-IM22A) under Group 8 during mid-flood tides between October 2020 and September 2021

Source: P:\Projects\0505354 CLP Power Hong Kong Limited FSRU Pre-con EM&A.RC\07 Data\08 Impact WQ

Date: 21/3/2022

Environmental Resources Management

ERM

Annotations:

- Key marine-based activities of the Project undertaken for construction of BPPS Pipeline included:
  i. pre-trenching works in terms of dredging operation in the vicinity of marine water quality monitoring stations under Group 3 on 24 April and 16 to 28 May 2021;
  ii. pre-trenching works in terms of dredging operation in the vicinity of marine water quality monitoring stations under Group 7 on 28 to 20 April, 1 to 26, 30, 31 May and 1 to 12 June 2021;
  iii. pre-trenching works in terms of dredging operation in the vicinity of marine water quality monitoring stations under Group 8 on 26 to 31 August, 1, 8 and 9 September 2021; and
  iv. post-trenching works in terms of jetting operation in the vicinity of marine water quality monitoring stations under Group 5 on 18 to 30 September 2021.
- Key marine-based activities of the Project undertaken for construction of LPS Pipeline included:
  i. pre-trenching works in terms of dredging operation in the vicinity of marine water quality monitoring stations under Group 2 on 1, 2 and 4 February 2021;
  ii. de-burial works by mass flow excavator in the vicinity of marine water quality monitoring stations under Group 1 on 23, 26, 27 February, 5, 6, 13, 14 and 15 March 2021.
  iii. post-trenching works in terms of jetting operation in the vicinity of marine water quality monitoring stations under Group 1 on 5, 6, 8 to 18 and 22 to 26 July 2021 (1); and
  iv. post-trenching works in terms of jetting operation in the vicinity of marine water quality monitoring stations under Group 2 on 8 to 16, 24 to 31 August, 1 to 8, 12 to 14 and 17 to 23 September 2021.
- Marine water quality monitoring was conducted at monitoring stations under Group 1 on 20, 22, 24, 26 February, 2, 6, 13, 15 March, 9, 12, 14, 16, 23 and 26 July 2021.
- Marine water quality monitoring was conducted at monitoring stations under Group 2 on 27, 29 January, 1, 3, 5 February, 9, 12, 14, 16, 25, 27, 30 August, 1, 3, 6, 8, 13, 17, 21 and 23 September 2021 (2).
- Marine water quality monitoring was conducted at monitoring stations under Group 3 on 23, 28 (3) April, 17, 19, 21, 24, 26 and 28 May 2021.
- Marine water quality monitoring was conducted at monitoring stations under Group 5 on 20, 22, 24, 27 and 29 September 2021.
- Marine water quality monitoring was conducted at monitoring stations under Group 7 on 28, 30 April, 3, 5, 7, 10, 12, 14, 17, 19, 21, 24, 26, 31 (4) May, 2, 4, 7, 9 and 11 June 2021.
- Marine water quality monitoring was conducted at monitoring stations under Group 8 on 26, 28, 31 August, 6 and 8 September 2021 (5).
- Weather conditions during the monitoring period ranged from fine to cloudy, with sea conditions ranged from calm to moderate. Detailed meteorological conditions can be referred to *Annex G of the associated Monthly EM&A Reports* for the reporting period.
- No special phenomena and/or other factors which might affect the monitoring results were observed and recorded during the monitoring period.

Notes:

(1) Preparation works for marine jetting operation (e.g. installation of cage-type silt curtain, anchoring activities, etc.) were undertaken on 5 and 6 July 2021 while marine jetting operation commenced since 8 July 2021.

(2) Monitoring station, IM6, was occupied by a crane barge during the monitoring events since 27 August 2021. Therefore, the monitoring station was shifted to the nearest practicable location.

(3) Marine water quality monitoring was conducted under Group 3 on 28 April 2021 as a follow-up monitoring due to the cancellation of monitoring scheduled on 26 April 2021 for marine dredging operation at Cable Sterile Corridor for BPPS Pipeline.

(4) Marine water quality monitoring during ebb tide on 31 May 2021 was cancelled due to the adverse weather at the time of monitoring event.

(5) Monitoring stations, IM20A and IM21A, were occupied by oyster rafts and crane barge, respectively, during the monitoring events since 26 August 2021. Therefore, the monitoring stations were shifted to the nearest practicable locations.