







MOMBASA SPECIAL ECONOMIC ZONE PROJECT
CONTRACT PACKAGE 1 – CIVIL AND BUILDING WORKS
(KPA/065/2022-23/PDM)

MONTHLY ENVIRONMENTAL MONITORING REPORT

NOVEMBER 2025

DOCUMENT REVIEW VALIDATION:

ACTION	TITLE	NAME	SIGNATURE
Prepared by	Lead Environmental Expert	Dr. Philip Manyi OMENGE	 Digitally signed by Philip Manyi Omenge Date: 2026.03.03 16:59:31 +03'00'
Coordinated by	Engineering and Design Manager	Andhrayose JOSEPH	 Digitally signed by a_joseph Date: 2026.03.04 12:23:38 +03'00'
Reviewed by	Quality Assurance Manager	Dr. Mohamed KAMAL	 Digitally signed by MOHAMMAD KAMAL Date: 2026.03.05 16:50:15 +03'00'
Verified by	Construction Manager	Asayuki FUKUI	 FUKUI 2026.03.04 13:42:59+03'00'

DOCUMENT REVISION HISTORY:

01	01 March 2026	Submitted for approval
00	09 January 2026	Preliminary Submission
Revision	Date	Reason for Revision
EMPLOYER: KENYA PORTS AUTHORITY (KPA) ENGINEER: GENERAL MANAGER OF INFRASTRUCTURE DEVELOPMENT- KENYA PORTS AUTHORITY (GMID-KPA) ENGINEER'S REPRESENTATIVE: NIPPON KOEI		

TABLE OF CONTENTS

1.	INTRODUCTION	- 1 -
2.	DESCRIPTION OF CONSTRUCTION ACTIVITIES	- 1 -
3.	ENVIRONMENTAL MANAGEMENT	- 5 -
4.	ENVIRONMENTAL MONITORING	- 6 -
4.1.	NOISE.....	- 6 -
4.1.1.	Objective.....	- 6 -
4.1.2.	Method	- 7 -
4.1.3.	Results and Discussion.....	- 8 -
4.2.	AIR QUALITY.....	- 8 -
4.2.1.	Objective.....	- 8 -
4.2.2.	Method	- 9 -
4.2.3.	Results and Discussion.....	- 10 -
4.3.	WATER QUALITY.....	- 10 -
4.3.1.	Turbidity (In-situ Measurement).....	- 10 -
4.3.2.	Turbidity (Aerial Survey)	- 11 -
4.3.3.	General Water Quality.....	- 12 -
4.4.	CORAL	- 20 -
4.4.1.	Objective.....	- 20 -
4.4.2.	Method	- 20 -
4.4.3.	Results and Discussion	- 20 -
4.5.	SEAGRASS	- 27 -
4.5.1.	Objective.....	- 27 -
4.5.2.	Method	- 27 -
4.5.3.	Results and Discussion.....	- 27 -
5.	WASTE MANAGEMENT.....	- 33 -
6.	OIL SPILL.....	- 33 -
7.	PUBLIC AWARENESS.....	- 34 -
8.	HERITAGE	- 37 -
9.	GRIEVANCES	- 37 -
10.	ATTACHMENT	- 38 -
10.1.	ANNEX A - DRONE PHOTOS OF AERIAL TURBIDITY MONITORING	A

LIST OF TABLES

Table 1	Summary of Main Construction Activities.....	- 1 -
Table 2	Photos of Main Construction Activities.....	- 2 -
Table 3	Implemented Mitigation Measures	- 5 -
Table 4	Implementation Status of Environmental Monitoring.....	- 6 -

Table 5 Method of Noise Monitoring	- 7 -
Table 6 Results of Noise Monitoring	- 8 -
Table 7 Method of Air Quality Monitoring	- 9 -
Table 8 Results of Air Quality Monitoring (Dust and Exhaust Emissions)	- 10 -
Table 9 Method of Turbidity Monitoring (In-situ Measurement)	- 11 -
Table 10 Results of Turbidity Monitoring (NTU)	- 10 -
Table 11 Implemented Remedial Actions	- 11 -
Table 12 Method of Turbidity Monitoring (Aerial Survey)	- 12 -
Table 13 Results of Turbidity Monitoring (Aerial Survey)	- 12 -
Table 14 Method of General Water Quality Monitoring	- 12 -
Table 15 Reference Standard	- 13 -
Table 16 Results of Water Quality Monitoring	- 14 -
Table 17 Method of Coral Monitoring	- 20 -
Table 18 Results of Coral Monitoring	- 22 -
Table 19 Results of Coral Monitoring	- 23 -
Table 20 Method of Seagrass Monitoring	- 27 -
Table 21 Results of Seagrass Monitoring	- 28 -
Table 22 Results of Seagrass Monitoring	- 29 -
Table 23 Record of Waste Management	- 33 -
Table 24 Record of Oil Spill	- 34 -
Table 25 Summary of Meetings Held in the Month of November 2025	- 35 -
Table 26 Stakeholders Meeting Photos	- 36 -
Table 27 Record of Chance Findings	- 37 -
Table 28 Record of Documented Chance Findings	- 37 -

LIST OF FIGURES

Figure 1 Noise Monitoring Sites	- 7 -
Figure 2 Air Quality Monitoring Sites	- 9 -
Figure 3 Turbidity Monitoring Sites	- 11 -
Figure 4 Coral monitoring sites	- 20 -
Figure 5 Seagrass Monitoring Sites	- 27 -

1. INTRODUCTION

The Project is located within Mbuta Location of Likoni Sub-County, and comprises mainly of the following construction components:

- Quay (L: 300 m, W: 50 m, D: -15 m)
- Trestle and causeway (L: 363 m, W: 20 m)
- Cargo yard (13 ha)
- Turning basin / navigation channel (-15 m)
- Port facilities (e.g. administration building, gate, workshop)

This Monthly Environmental Monitoring Report provides a summary of the environmental management and monitoring activities undertaken in November 2025

2. DESCRIPTION OF CONSTRUCTION ACTIVITIES

Table 1 summarizes the main construction activities undertaken during the month.

Table 1 Summary of Main Construction Activities	
Component	Construction activities
Temporary facilities	Construction of access road, weighbridge, Contractor's office and canteen, perimeter fence and gate
Quay	Dredging of quay foundation and disposal of dredged material at designated offshore disposal site
Trestle / causeway	Dredging of trestle foundation and disposal of dredged material at designated offshore disposal site
Cargo yard	Sand delivery and stockpile, site clearance utility area
Turning basin / navigation channel	No activity
Port facilities	No activity
Others	Mangrove cutting

Table 2 Photos of Main Construction Activities



Survey Platform 1 Construction



Powerhouse LGS Panel Assembly



Contractor Office: Laying of DPM & Formwork Installation



Canteen: DPM and BRC Installation



Weighbridge Installation



Weighbridge Calibration



Temporary Access Road: Cutting and Hauling Material ACS-10



Temporary Access Road: Compacting 1st Later Wearing Course ACS-05



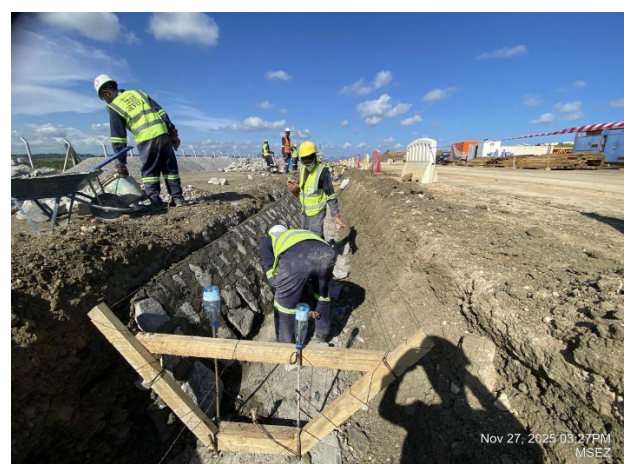
Dredging



Dredging



Rock Sand Stockpiling



Drainage Works Grouting & Stone Pitching



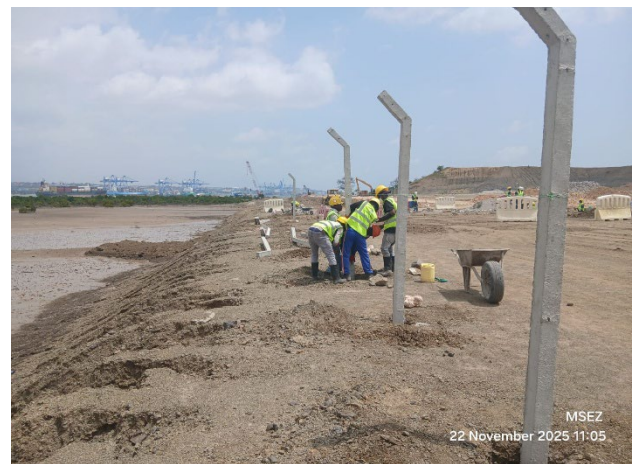
Mangrove Cutting



Mangrove Cutting and Clearing



Perimeter Fencing: Installation of Chain Link Fencing Between Point 1 and 30



Perimeter Fencing: Execution of Fencing Posts Between Point 1 and 30

3. **ENVIRONMENTAL MANAGEMENT**

Table 3 shows the main mitigation measures undertaken during the month.

Table 3 Implemented Mitigation Measures	
Potential Impacts	Mitigation Measures
Turbidity dispersion from dredging	Use of frame-type silt curtain
Fugitive dust from vehicle movement	Water sprinkling of access road and construction site using water bowser
Accidents from sand haulage trucks	Trucks hauling sand from quarry areas are regularly serviced as per manufacture's specifications.
Leakages or discharges of dredging material during transport to the offshore disposal site	Use of a Dredging and Dumping Monitoring System (DDMS), a real-time monitoring system to track and detect leakages from hopper barges involved in dredging and disposal operation.
Waste pollution	Storage of wastes within designated areas and containers.
Noise pollution	Truck drivers are instructed not to race nor hoot when approaching school and health center zones

4. ENVIRONMENTAL MONITORING

Table 4 shows the environmental monitoring implemented during the month.

Table 4 Implementation Status of Environmental Monitoring			
Monitoring Item	Implementation (Y/N)	Implementation Dates	Reason for non-implementation
Noise	Yes	<ul style="list-style-type: none"> ○ 04/11/2025 ○ 11/11/2025 ○ 19/11/2025 ○ 25/11/2025 	Implemented on schedule
Air quality	Yes	Implemented daily from 01/11/2025 to 31/11/2025	Implemented on schedule
Turbidity (in situ survey)	Yes	<ul style="list-style-type: none"> ○ 01/11/2025 ○ 04/11/2025 ○ 05/11/2025 ○ 06/11/2025 ○ 12/11/2025 ○ 13/11/2025 ○ 14/11/2025 ○ 18/11/2025 ○ 19/11/2025 ○ 20/11/2025 ○ 25/11/2025 ○ 26/11/2025 ○ 27/11/2025 	Implemented on schedule
Turbidity (aerial survey)	Yes	<ul style="list-style-type: none"> ○ 28/11/2025 	Application to fly was approved by authorities for the month of November on 28/11/2025
General water quality	Yes	<ul style="list-style-type: none"> ○ 01/11/2025 ○ 06/11/2025 ○ 14/11/2025 ○ 20/11/2025 ○ 27/11/2025 	Implemented on schedule
Coral	Yes	<ul style="list-style-type: none"> ○ 08-09/11/2025 ○ 23-24/11/2025 	Implemented on schedule
Seagrass	Yes	<ul style="list-style-type: none"> ○ 09-10/11/2025 ○ 21-23/11/2205 	Implemented on schedule
Macrobenthos	No		Scheduled date for implementation was not yet due

4.1. NOISE

4.1.1. Objective

Noise monitoring was conducted to confirm whether construction noise remained within acceptable levels (i.e. reference standard).

4.1.2. Method

Table 5 outlines the method of noise monitoring. Figure 1 shows the noise monitoring sites.

Table 5 Method of Noise Monitoring	
Parameters	A-weighted equivalent sound level (LAeq)
Method	In-situ measurement with sound level meter (PCE-322 Sound Level Meter)
Frequency	Once a week during daytime working hours (06:00-18:00)
Location	Construction boundary: N1 and N2 Sensitive site*: N3 (DCC office) *: Monitoring sites will be increased as necessary
Reference standard	N1 and N2: 75 dB* ¹ N3: 55 dB (mixed residential)* ² *1: Second Schedule of Environmental Management and Coordination (Noise and Excessive Vibration Pollution) (Control) Regulations 2009 *2: First Schedule of Environmental Management and Coordination (Noise and Excessive Vibration Pollution) (Control) Regulations 2009



Figure 1 Noise Monitoring Sites

4.1.3. Results and Discussion

Table 6 shows the results of noise monitoring and the implemented remedial actions.

Table 6 Results of Noise Monitoring				
Date	Site	LAeq (dB)	Ref. standard (dB)	Possible cause of exceedance and remedial actions
4/11/2025	N1	52.3	75	Noise level was below the Reference Standard
	N2	39.4	75	Noise level was below the Reference Standard
	N3	46.5	55	Noise level was below the Reference Standard
11/11/2025	N1	54.5	75	Noise level was below the Reference Standard
	N2	43.5	75	Noise level was below the Reference Standard
	N3	43.6	55	Noise level was below the Reference Standard
18/11/2025	N1	55.7	75	Noise level was below the Reference Standard
	N2	45.6	75	Noise level was below the Reference Standard
	N3	44.1	55	Noise level was below the Reference Standard
25/11/2025	N1	54.6	75	Noise level was below the Reference Standard
	N2	42.9	75	Noise level was below the Reference Standard
	N3	45.9	55	Noise level was below the Reference Standard

4.2. AIR QUALITY

4.2.1. Objective

Air quality monitoring was conducted to confirm whether construction activities are not causing excessive air pollution.

4.2.2. Method

Table 7 Outlines the method of air quality monitoring. Figure 2 shows the monitoring locations.

Table 7 Method of Air Quality Monitoring	
Parameters	Fugitive dust and exhaust gas emissions
Method	Visual observation at fixed locations
Frequency	Daily during daytime working hours (6:00-18:00)
Location	DCC Office: AQ1, Lutsangani Primary School: AQ2
Reference standard	N/A



Figure 2 Air Quality Monitoring Sites

4.2.3. Results and Discussion

Table 8 shows the results of air quality monitoring and the implemented remedial actions. Note that monitoring at Lutsangani Primary School was not conducted as sand delivery from Mteza Quarry was yet to commence.

Table 8 Results of Air Quality Monitoring (Dust and Exhaust Emissions)			
Location	Results		Remedial Actions
AQ 1	Fugitive dust	Increase in fugitive dust in some days was observed due to increased trucks delivering sand to the temporary yard	Water sprinkling commenced
	Exhaust gas	None of the trucks were observed to be emitting excessive black smoke from exhaust pipe	None
AQ 2	Fugitive dust	Monitoring at Lutsangani Primary School was not conducted as sand delivery from Mteza Quarry was yet to commence	None
	Exhaust gas	Monitoring at Lutsangani Primary School was not conducted as sand delivery from Mteza Quarry was yet to commence	None

4.3. WATER QUALITY

4.3.1. Turbidity (In-situ Measurement)

4.3.1.1. Objective

Turbidity monitoring (in-situ measurement) was conducted to confirm whether turbidity dispersion from dredging and disposal activities remained within acceptable levels (i.e. reference standard).

4.3.1.2. Method

Table 9 outlines the method of turbidity monitoring. Figure 2 shows turbidity monitoring sites.

Table 9 Method of Turbidity Monitoring (In-situ Measurement)	
Parameters	Turbidity (NTU)
Method	In situ measurement with water quality meter (TOA-DKK WQS-24)
Frequency	Three times/week during dredging works
Layer	Surface and bottom
Location	Port Reitz/ Kilindini: 5 sites (WI1-WI5) Tudor Creek: 3 sites (WI6-WI8) Inner reef: 4 sites (WIR1- WIR4) Outer reef: 5 sites (WOR3-WOR7)
Reference standard	Dredging/disposal method will be reconsidered in case of exceedance of the following levels for 2 weeks continuously: Inshore: Site specific baseline + Site specific threshold level Inner reef area: Site specific baseline + Threshold level (2 NTU) Outer reef area: Site specific baseline + Threshold level (1 NTU)



Figure 3 Turbidity Monitoring Sites

4.3.1.3. Results and Discussion

Table 10 shows the results of turbidity monitoring.

Table 10 Results of Turbidity Monitoring (NTU)

Date		WI1	WI2	WI3	WI4	WI5	WI6	WI7	WI8	WIR1	WIR2	WIR3	WIR4	WOR3	WOR4	WOR5	WOR6	WOR7
1/11/2025	S	9.4	2.3	5.3	4.1	0.0	1.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	B	4.6	2.1	4.8	0.0	0.5	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4/11/2025	S	14.4	10.6	2.0	10.5	3.3	3.3	10.3	2.9	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
	B	13.3	13.4	3.3	5.2	0.0	5.1	11.6	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/11/2025	S	23.0	12.5	5.5	2.9	3.0	13.9	19.2	7.2	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	1.1
	B	23.3	19.0	6.1	4.3	3.3	18.9	24.4	4.9	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	1.1
6/11/2025	S	20.9	14.2	6.3	3.9	5.4	17.1	23.5	3.7	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
	B	21.7	22.1	4.6	4.6	6.2	21.9	25.6	3.2	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0
12/11/2025	S	3.2	4.1	1.1	0.8	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	B	3.3	4.8	1.3	0.5	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13/11/2025	S	3.4	4.5	0.7	0.2	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	B	3.3	3.2	1.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14/11/2025	S	4.4	3.4	2.2	3.3	0.4	0.0	0.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
	B	6.6	3.3	2.3	4.7	0.3	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18/11/2025	S	7.9	5.9	1.9	2.4	1.3	1.1	1.4	13.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	B	8.7	6.6	2.7	2.0	1.2	2.7	2.9	13.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19/11/2025	S	9.4	5.8	1.5	2.1	0.8	2.5	4.9	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
	B	9.9	8.7	2.2	2.9	1.4	4.9	6.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20/11/2025	S	10.6	6.0	2.5	1.7	1.6	2.3	6.3	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.3	0.0
	B	10.5	7.0	1.8	2.7	1.5	5.8	6.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
25/11/2025	S	7.3	6.0	1.9	1.8	1.1	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	B	8.5	10.4	2.4	1.2	0.7	0.0	0.0	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
26/11/2025	S	7.5	6.3	2.4	1.5	0.9	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	B	8.3	8.3	2.2	1.8	0.3	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
27/11/2025	S	5.7	6.0	1.9	2.1	0.5	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	B	5.3	5.3	1.4	1.3	0.9	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Ref. Standard	S/B	22.6	17.2	7.5	6.5	3.3	11.3	13.9	15.7	2.8	3.1	2.4	2.5	1.0	1.1	1.0	1.0	1.0

Table 11 shows the remedial actions implemented in cases where exceedances of the reference standard occurred due to construction-related activities.

Table 11 Implemented Remedial Actions		
Site	Exceedance of Ref. Standard (Y/N)*	Possible Cause of Exceedance and Remedial Actions
WI1	N	Turbidity was within the reference standard
WI2	N	Turbidity was within the reference standard
WI3	N	Turbidity was within the reference standard
WI4	N	Turbidity was within the reference standard
WI5	N	Turbidity was within the reference standard
WI6	N	Turbidity was within the reference standard
WI7	N	Turbidity was within the reference standard
WI8	N	Turbidity was within the reference standard
WIR1	N	Turbidity was within the reference standard
WIR2	N	Turbidity was within the reference standard
WIR3	N	Turbidity was within the reference standard
WIR4	N	Turbidity was within the reference standard
WOR3	N	Turbidity was within the reference standard
WOR4	N	Turbidity was within the reference standard
WOR5	N	Turbidity was within the reference standard
WOR6	N	Turbidity was within the reference standard
WOR7	N	Turbidity was within the reference standard

*: Exceedance of ref. standard for 2 weeks continuously.

4.3.2. Turbidity (Aerial Survey)

4.3.2.1. Objective

Turbidity monitoring (aerial survey) was conducted to confirm whether turbidity dispersion from dredging and disposal activities remained within acceptable levels (i.e. reference standard).

4.3.2.2. Method

Table 12 outlines the method of turbidity monitoring (aerial survey).

Table 12 Method of Turbidity Monitoring (Aerial Survey)	
Parameters	Turbidity
Method	Taking of aerial photographs by drone
Frequency	Once / week during dredging works
Location	2 sites: Dredging area and between dredging area and disposal site
Reference standard	Dredging/disposal method will be reconsidered in case of observation of significant outflow of turbidity (e.g. from dredging area and hopper barge).

4.3.2.3. Results and Discussion

Table 13 shows the results of turbidity monitoring and the implemented remedial actions.

The aerial photographs are presented in Annex A - Drone Photos of Aerial Turbidity Monitoring.

Table 13 Results of Turbidity Monitoring (Aerial Survey)			
Date	Location	Exceedance of Ref. Standard (Y/N)*	Remedial Actions
28/11/2025	Kilindini	No	No exceedance of ref. standard hence no remedial actions triggered

*: Observation of significant outflow of turbidity

4.3.3. General Water Quality

4.3.3.1. Objective

General water quality monitoring was conducted to confirm the status of water quality around the construction site.

4.3.3.2. Method

Table 14 shows the method of general water quality monitoring. The monitoring sites are the same as turbidity monitoring (see Figure 2).

Table 14 Method of General Water Quality Monitoring	
Parameters	Water temp., salinity, pH, DO, SS, T-N, T-P, Coliforms
Method	Water temp., salinity, pH, DO: In-situ measurement with portable multi-item water quality meter (TOA-DKK WQS-24) SS, T-N, T-P, Coliforms: Sampling and laboratory analysis
Frequency	One time/week during dredging works
Layer	Surface and bottom
Location	Port Reitz/ Kilindini: 5 sites (WI1-WI5) Tudor Creek: 3 sites (WI6-WI8) Inner reef: 4 sites (WIR1- WIR4) Outer reef: 5 sites (WOR3-WOR7)
Reference standard	N/A

Table 15 is the reference standard of general water quality parameters

Table 15 Reference Standard

Monitoring location	pH	SS (mg/l)	T-N (mg/l)	TP (mg/l)	Total coliform (CFU/100ml)
WI1	6-9	42.6-88.9	2.4-4.4	0.01	<500
WI2		33.8-87.7	2.5-3.6	0.01	
WI3		22.8-72.8	0.1-2.2	0.01	
WI4		17.6-66.1	0.3-17.0	0.01-0.1	
WI5		7.9-52.6	1.8-2.9	0.01	
WI6		14.9-63.7	0.2-3.0	0.01	
WI7		22.1-74.8	0.2-4.5	0.01	
WI8		52.3-90.1	0.2-2.8	0.01	
WIR1		3.8-39.1	0.2-2.2	0.01	
WIR2		3.7-38.6	1.4-4.1	0.01	
WIR3		52.3	1.8-3.0	0.01-0.1	
WIR4		-	2.0-3.6	0.01	
WOR3		5.3-26.5	2.2-4.2	0.01	
WOR4		7.2-29.3	0.2-2.3	0.01	
WOR5		5.4-26.7	0.8-3.0	0.01	
WOR6		5.0-29.2	0.2-2.3	0.01	
WOR7		4.5-22.6	0.2-2.7	0.01	

Note: These values are set for reference purpose only.

pH and total coliform: The Environmental Management and Coordination (Water Quality) Regulations (2024), Schedule 10

SS: Range recorded through the Natural Condition Survey (2024)

T-N and T-P: Range recorded through the 14-day baseline survey (June-July 2025)

4.3.3.3. Results and discussion

Table 16 shows the results of general water quality monitoring. Overall, the water quality was within normal levels, with no significant deviation from the reference standards

Table 16 Results of Water Quality Monitoring

Site	Date	-	Temp. (°C)	Salinity	pH	DO (mg/l)	SS (mg/l)	T-N (mg/l)	T-P (mg/l)	Coliforms (CFU/100ml)	
PORT REITZ/ KILINDINI CREEK											
WI1	1/11/2025	S	28.90	31.80	7.99	5.57	48.0	0.2	0.4	80.0	
		B	28.90	31.80	8.00	5.54	44.4	0.7	0.2	60.0	
	6/11/2025	S	29.70	31.90	7.94	6.83	53.2	0.1	0.1	Nil	
		B	29.80	31.90	7.96	6.06	49.6	0.3	<0.10	6.0	
	14/11/2025	S	28.70	32.20	8.00	4.99	54.0	0.1	<0.10	Nil	
		B	28.60	32.20	8.04	4.98	52.8	0.0	<0.10	Nil	
	20/11/2025	S	29.00	32.00	8.07	5.31	118.4	0.3	<0.10	10.0	
		B	30.00	32.70	8.09	5.54	102.0	0.1	<0.10	6.0	
	27/11/2025	S	29.00	32.30	8.10	6.36	114.0	1.8	0.1	34.0	
		B	29.00	32.30	8.13	6.40	100.4	3.9	0.1	30.0	
	WI2	1/11/2025	S	28.60	31.10	8.03	5.54	9.2	2.6	<0.10	Nil
			B	28.50	31.30	8.02	5.49	24.0	2.1	<0.10	Nil
		6/11/2025	S	29.30	31.90	7.95	7.14	19.2	1.4	0.1	Nil
			B	29.00	31.90	8.00	5.80	20.0	1.7	<0.10	Nil
14/11/2025		S	28.60	32.10	8.03	5.68	12.0	0.0	<0.10	Nil	
		B	28.60	32.00	8.02	5.29	7.6	0.0	<0.10	Nil	
20/11/2025		S	28.00	32.00	8.07	5.94	33.6	0.0	<0.10	Nil	
		B	28.60	32.00	8.06	5.77	20.0	0.0	<0.10	Nil	
27/11/2025		S	28.60	32.00	8.15	6.33	29.6	3.2	0.1	18.0	
		B	28.50	32.00	8.19	6.52	24.0	5.0	0.1	12.0	
WI3		1/11/2025	S	28.00	31.90	8.07	6.20	36.8	3.0	<0.10	12.0
			B	27.90	31.80	8.08	5.63	29.2	2.5	<0.10	10.0
		6/11/2025	S	28.30	31.80	8.12	7.90	40.4	2.5	<0.10	Nil
			B	28.50	31.80	8.16	7.01	38.0	2.0	<0.10	Nil
	14/11/2025	S	28.50	32.10	8.14	5.87	30.0	0.0	<0.10	Nil	
		B	28.40	32.10	8.16	5.74	39.2	0.0	<0.10	Nil	
	20/11/2025	S	28.50	31.90	8.26	6.19	30.0	0.0	<0.10	Nil	
		B	28.30	32.00	8.27	6.22	44.4	0.0	<0.10	Nil	
	27/11/2025	S	28.40	32.10	8.21	6.42	27.2	3.5	0.1	48.0	
		B	28.20	32.00	8.24	6.21	20.0	3.0	0.1	40.0	
	WI4	1/11/2025	S	28.10	31.90	8.08	6.11	51.2	0.6	<0.10	4.0

Table 16 Results of Water Quality Monitoring

Site	Date	-	Temp. (°C)	Salinity	pH	DO (mg/l)	SS (mg/l)	T-N (mg/l)	T-P (mg/l)	Coliforms (CFU/100ml)
	6/11/2025	B	27.30	31.80	8.09	5.92	49.6	0.0	0.2	Nil
		S	28.70	31.90	8.16	7.28	34.0	0.3	<0.10	Nil
	14/11/2025	B	28.30	31.80	8.14	6.77	22.0	0.7	<0.10	Nil
		S	29.40	31.90	8.17	5.51	28.8	0.2	<0.10	Nil
	20/11/2025	B	28.20	31.80	8.18	5.63	36.0	0.2	<0.10	Nil
		S	28.20	32.00	8.25	6.04	27.2	0.2	<0.10	Nil
	27/11/2025	B	28.20	32.00	8.26	5.91	29.6	0.1	<0.10	Nil
		S	28.30	32.00	8.28	6.50	19.6	0.8	0.1	Nil
WI5	1/11/2025	S	26.90	31.70	8.14	6.19	11.2	0.2	<0.10	10.0
		B	26.90	31.70	8.15	6.32	12.0	0.0	<0.10	10.0
	6/11/2025	S	28.70	31.90	8.23	8.17	13.2	0.2	<0.10	Nil
		B	27.80	31.90	8.15	6.98	12.0	0.2	<0.10	Nil
	14/11/2025	S	28.40	31.90	8.21	6.00	24.0	0.1	<0.10	Nil
		B	28.30	31.90	8.21	5.94	22.0	0.3	0.1	Nil
	20/11/2025	S	28.00	32.00	8.28	6.17	28.8	0.0	<0.10	Nil
		B	27.70	31.90	8.28	6.08	24.0	0	<0.10	Nil
27/11/2025	S	28.20	32.00	8.25	6.49	20.0	0.2	<0.10	Nil	
	B	28.10	32.00	8.26	6.46	18.0	0	<0.10	Nil	
TUDOR CREEK										
WI6	1/11/2025	S	27.00	32.70	8.02	5.15	18.0	1.2	<0.10	Nil
		B	27.10	32.80	8.02	5.06	10.0	1.0	<0.10	Nil
	6/11/2025	B	27.80	32.70	8.01	5.01	16.4	1.4	0.1	1.0
		S	27.70	32.80	8.00	5.02	11.2	0.8	0.1	3.0
	14/11/2025	S	28.00	32.70	8.05	5.84	14.0	0.0	<0.10	2.0
		B	27.90	32.60	8.06	5.75	15.6	0.0	<0.10	Nil
	20/11/2025	S	28.00	33.00	8.08	5.37	29.6	0.0	<0.10	Nil
		B	28.00	33.10	8.06	5.45	32.8	0.0	<0.10	Nil
27/11/2025	S	28.00	33.20	8.12	5.27	30.4	1.2	0.2	20.0	
	B	27.30	33.10	8.13	5.45	28.0	0.8	0.1	28.0	
WI7	1/11/2025	S	27.70	32.70	7.94	5.15	44.4	0.9	0.1	30.0
		B	27.80	32.80	7.93	5.06	36.4	0.7	<0.10	10.0

Table 16 Results of Water Quality Monitoring

Site	Date	-	Temp. (°C)	Salinity	pH	DO (mg/l)	SS (mg/l)	T-N (mg/l)	T-P (mg/l)	Coliforms (CFU/100ml)	
	6/11/2025	S	27.80	32.70	7.99	4.95	49.6	0.2	<0.10	10.0	
		B	27.70	32.80	8.00	5.03	40.0	0.5	0.1	12.0	
	14/11/2025	S	28.00	32.40	8.05	4.99	40.0	0.0	<0.10	5.0	
		B	28.00	32.40	8.05	5.56	29.6	0.0	<0.10	3.0	
	20/11/2025	S	28.30	33.10	8.02	5.31	89.6	0.2	<0.10	7.0	
		B	28.10	33.20	8.03	5.47	51.2	0.1	<0.10	4.0	
	27/11/2025	S	28.00	33.20	8.08	5.35	51.2	0.6	0.1	36.0	
		B	27.20	33.20	8.12	5.99	40.0	0.1	0.1	30.0	
	WI8	1/11/2025	S	27.70	29.90	7.85	5.36	54.8	1.4	<0.10	20.0
			B	27.80	30.80	7.84	4.94	49.6	1.0	<0.10	30.0
		6/11/2025	S	28.50	32.70	7.90	4.49	51.2	0.0	<0.10	10.0
			B	28.22	32.70	7.91	4.59	56.0	0.5	0.1	Nil
14/11/2025		S	29.40	32.00	7.88	5.57	44.4	0.0	<0.10	Nil	
		B	29.60	32.00	7.86	5.18	48.0	0.0	<0.10	Nil	
20/11/2025		S	29.30	33.10	7.91	4.85	54	0.1	<0.10	Nil	
		B	28.90	33.20	7.92	4.85	50.8	0.0	<0.10	Nil	
27/11/2025	S	29.00	33.50	7.93	4.99	64	2.0	0.1	30.0		
	B	29.00	33.60	7.85	4.91	58.0	1.6	0.2	10.0		
INNER REEF											
WIR1	1/11/2025	S	27.00	32.60	8.16	6.40	22.0	1.0	0.1	10.0	
		B	27.10	32.70	8.15	6.37	27.4	1.2	<0.10	6.0	
	6/11/2025	S	27.80	33.00	8.14	5.65	20.0	0.0	<0.10	Nil	
		B	27.80	33.00	8.14	5.50	18.0	0.0	<0.10	Nil	
	14/11/2025	S	28.00	33.00	8.14	6.42	8.0	0.6	<0.10	Nil	
		B	28.00	33.10	8.15	6.67	10.0	0.4	<0.10	Nil	
	20/11/2025	S	27.70	33.10	8.13	5.72	12.0	0.1	<0.10	Nil	
		B	27.70	33.10	8.13	5.77	11.2	0.1	<0.10	Nil	
	27/11/2025	S	27.80	33.10	8.11	5.60	10.0	0.4	<0.10	Nil	
		B	27.80	33.10	8.12	5.76	7.2	0.7	<0.10	Nil	
	WIR2	1/11/2025	S	26.80	32.70	8.22	6.13	24	0.5	0.1	50.0
			B	26.80	32.70	8.22	6.59	25.6	0.1	<0.10	30.0

Table 16 Results of Water Quality Monitoring

Site	Date	-	Temp. (°C)	Salinity	pH	DO (mg/l)	SS (mg/l)	T-N (mg/l)	T-P (mg/l)	Coliforms (CFU/100ml)	
	6/11/2025	S	27.30	32.80	8.12	5.14	18	0.0	<0.10	3.0	
		B	27.30	32.80	8.11	6.01	15.6	0.0	<0.10	3.0	
	14/11/2025	S	28.00	33.10	8.15	5.55	17.2	0.0	<0.10	Nil	
		B	28.00	33.00	8.14	5.39	18.0	0.0	<0.10	Nil	
	20/11/2025	S	27.30	33.00	8.11	5.46	15.8	0.0	<0.10	Nil	
		B	27.30	33.10	8.09	5.32	16.4	0.0	<0.10	Nil	
	27/11/2025	S	26.70	32.90	8.14	5.70	12	0.0	0.1	Nil	
		B	26.70	33.00	8.14	5.69	11.2	0.1	<0.10	Nil	
	WIR3	1/11/2025	S	27.10	32.70	8.23	7.23	15.6	0.7	<0.10	Nil
			B	27.10	32.70	8.22	7.24	18.0	1.0	0.3	7.0
		6/11/2025	S	28.20	32.80	8.21	6.99	19.2	0.9	<0.10	Nil
			B	28.20	32.80	8.21	6.81	20.0	0.6	<0.10	Nil
14/11/2025		S	29.30	33.00	8.14	5.99	6.8	0.4	<0.10	Nil	
		B	29.30	33.10	8.13	6.02	12.0	0.2	<0.10	Nil	
20/11/2025		S	28.80	33.30	8.24	6.54	13.4	0.0	<0.10	Nil	
		B	28.70	33.30	8.24	6.39	10.0	0.0	<0.10	Nil	
27/11/2025	S	27.30	33.30	8.09	5.95	8	1.0	0.1	10.0		
	B	27.30	38.00	8.09	5.87	10.4	1.2	0.1	8.0		
WIR4	1/11/2025	S	27.10	32.70	8.24	7.28	14.4	0.0	<0.10	Nil	
		B	27.10	32.70	8.23	7.24	9.2	0.0	<0.10	Nil	
	6/11/2025	S	28.40	32.90	8.24	6.86	28.0	0.1	<0.10	Nil	
		B	28.40	32.90	8.23	6.90	29.2	0.0	<0.10	Nil	
	14/11/2025	S	29.00	33.10	8.24	6.65	25.6	0.0	<0.10	Nil	
		B	29.10	33.10	8.23	6.61	20.0	0.0	<0.10	Nil	
	20/11/2025	S	27.70	33.10	8.32	6.29	20.6	0.0	<0.10	Nil	
		B	27.70	33.10	8.30	6.11	22.0	0.0	<0.10	Nil	
27/11/2025	S	27.70	32.90	7.96	6.06	18.4	0.0	<0.10	Nil		
	B	27.70	33.00	7.97	6.00	25.6	0.0	0.1	Nil		

Table 16 Results of Water Quality Monitoring

Site	Date	-	Temp. (°C)	Salinity	pH	DO (mg/l)	SS (mg/l)	T-N (mg/l)	T-P (mg/l)	Coliforms (CFU/100ml)	
OUTER REEF											
WOR3	1/11/2025	S	26.60	29.90	8.24	6.29	7.6	0.6	<0.10	Nil	
		B	26.60	30.30	8.23	6.28	12.0	1.0	<0.10	Nil	
	6/11/2025	S	27.20	31.70	8.24	7.80	9.2	0.5	<0.10	Nil	
		B	27.10	31.80	8.25	7.49	8.0	0.8	<0.10	Nil	
	14/11/2025	S	28.00	31.70	8.25	7.09	27.2	0.2	<0.10	Nil	
		B	28.00	31.80	8.25	7.02	28.0	0.4	<0.10	Nil	
	20/11/2025	S	27.20	31.80	8.24	6.45	16.0	0.2	<0.10	Nil	
		B	27.20	31.80	8.23	6.28	27.8	0.2	<0.10	Nil	
	27/11/2025	S	28.00	31.90	8.30	6.53	28.8	0.7	<0.10	Nil	
		B	27.80	32.00	8.27	6.75	30.0	1.0	<0.10	Nil	
	WOR4	1/11/2025	S	26.80	31.20	8.10	6.52	16.4	0.4	<0.10	Nil
			B	26.60	31.20	8.11	6.38	18.0	0.7	<0.10	Nil
		6/11/2025	S	27.50	31.80	8.22	7.12	12.0	0.2	<0.10	Nil
			B	27.20	31.80	8.24	7.02	20.0	0.1	<0.10	Nil
14/11/2025		S	28.20	31.90	8.23	6.99	14.4	0.0	<0.10	Nil	
		B	28.10	31.90	8.23	6.81	16.0	0.0	<0.10	Nil	
20/11/2025		S	27.50	31.90	8.30	6.20	12.0	0.0	<0.10	Nil	
		B	27.40	31.80	8.31	6.27	14.0	0.0	<0.10	Nil	
27/11/2025		S	27.80	31.90	8.28	6.60	15.6	0.3	<0.10	Nil	
		B	27.70	32.00	8.30	6.85	17.2	0.0	<0.10	Nil	
WOR5		1/11/2025	S	26.60	31.50	8.17	6.45	12.0	1.2	<0.10	Nil
			B	26.60	31.20	8.19	6.39	19.2	1.0	<0.10	Nil
		6/11/2025	S	28.20	31.90	8.19	7.35	16.4	1.4	<0.10	Nil
			B	27.70	31.80	8.22	7.17	18.0	1.8	<0.10	Nil
	14/11/2025	S	28.40	31.80	8.18	7.07	14.4	0.0	<0.10	Nil	
		B	28.30	31.80	8.23	6.78	18.0	0.3	<0.10	Nil	
	20/11/2025	S	28.40	31.90	8.28	6.23	22.0	0.0	<0.10	Nil	
		B	27.90	31.80	8.29	6.16	19.2	0.0	<0.10	Nil	

Table 16 Results of Water Quality Monitoring

Site	Date	-	Temp. (°C)	Salinity	pH	DO (mg/l)	SS (mg/l)	T-N (mg/l)	T-P (mg/l)	Coliforms (CFU/100ml)
	27/11/2025	S	27.60	31.90	8.22	6.50	24.8	0.6	<0.10	19.0
		B	27.60	31.90	8.24	6.61	20.0	0.9	<0.10	11.0
WOR6	1/11/2025	S	26.50	31.40	8.23	6.24	28.8	0.6	<0.10	30.0
		B	26.40	31.50	8.23	6.01	26.0	0.3	<0.10	22.0
	6/11/2025	S	27.30	31.70	8.22	6.89	10.0	0.4	<0.10	Nil
		B	27.30	31.70	8.23	6.99	7.6	0.2	<0.10	Nil
	14/11/2025	S	27.50	31.70	8.06	7.11	20.0	0.1	<0.10	Nil
		B	27.70	31.70	8.11	6.99	13.4	0.3	<0.10	Nil
	20/11/2025	S	27.30	31.80	8.24	6.53	18.4	0.0	<0.10	Nil
		B	27.20	31.70	8.25	6.33	16.0	0.0	<0.10	Nil
	27/11/2025	S	27.90	31.80	8.30	6.83	14.0	0.0	<0.10	Nil
		B	27.90	31.90	8.43	6.68	10.0	0.0	<0.10	Nil
WOR7	1/11/2025	S	26.50	31.50	8.30	6.45	20.0	1.3	0.3	10.0
		B	26.50	31.50	8.30	6.47	8.0	1.1	0.1	Nil
	6/11/2025	S	27.30	31.60	8.24	7.93	20.0	1.2	<0.10	Nil
		B	27.30	31.70	8.26	7.76	22.0	1.5	<0.10	Nil
	14/11/2025	S	28.00	31.70	8.13	6.99	12.0	0.6	<0.10	Nil
		B	28.00	31.80	8.15	6.85	9.6	0.2	<0.10	Nil
	20/11/2025	S	27.20	31.70	8.18	6.55	25.6	0.0	<0.10	Nil
		B	26.90	31.80	8.23	6.47	24.0	0.0	<0.10	Nil
	27/11/2025	S	27.90	31.70	8.30	6.7	16.0	0.2	<0.10	Nil
		B	27.90	31.90	8.19	6.76	19.2	0.0	<0.10	Nil

4.4. CORAL

4.4.1. Objective

Coral monitoring was conducted to confirm whether dredging and disposal activities caused any adverse impacts on corals.

4.4.2. Method

Table 17 outlines the method of coral monitoring. Figure 4 shows the coral monitoring sites.

Table 17 Method of Coral Monitoring	
Parameters	Hard coral coverage, algae coverage, bleaching, sedimentation, Abundance of <i>Drupella</i> spp. and <i>Acanthaster planci</i> , coral health (e.g., discoloration, mucus secretion, disease)
Method	Quadrat survey (10 x 10 m and 1 x 1 m)
Frequency	Once every 2 weeks during dredging works
Location	Inner reef: 2 sites (C1-C2) Outer reef: 2 sites (C3-C4)
Reference standard	Dredging/disposal method will be reconsidered in case adverse impacts on corals (e.g., reduction of coral coverage, significant bleaching, excessive mucus secretion, sedimentation) are observed through the monitoring.

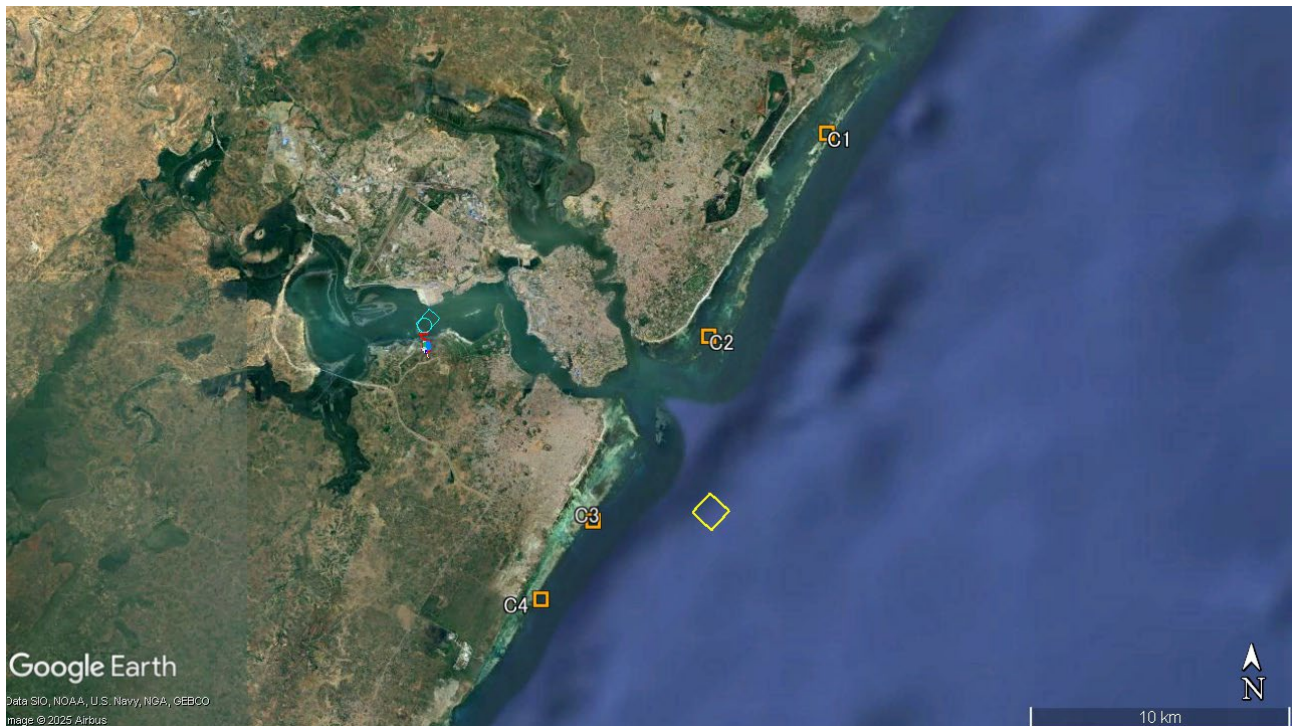


Figure 4 Coral monitoring sites

4.4.3. Results and Discussion

Table 18 and Table 19 show the results of coral monitoring.

Coral monitoring results show that so far, there are no observable impacts on corals at the 4 monitoring sites. Collected empirical datasets and pictorial observations support this.





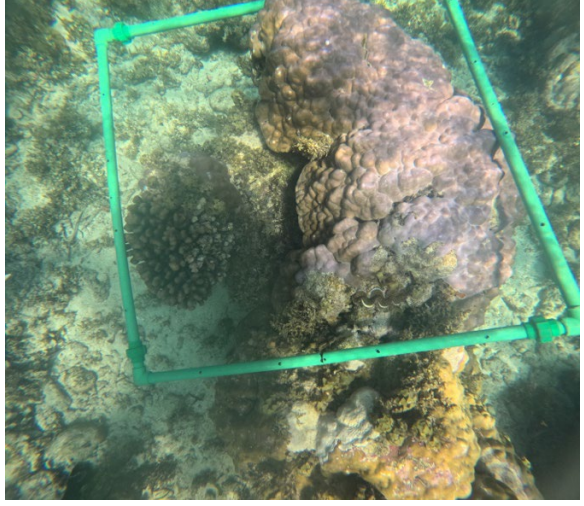

Table 18 Results of Coral Monitoring

Site	Date	Hard coral cover (%)	Algae cover (%)	Bleaching (%)	<i>Drupella</i> sp. (Y/N)	<i>Acanthaster planci</i> (Y/N)	Discoloration (Y/N)	Mucus secretion (N/L/M/H)	Disease (N/L/M/H)	Sédimentation (N/L/M/H)
C1	Baseline 2025/06/25	8.0%	50%	0%	N	N	N	N (0%)	L	L (6.25%)
	Monitoring 2025/11/08	7.0%	52%	0%	N	N	Y (5%)	N	L (10%)	L (9%)
	Monitoring 2025/11/23	8.0%	53%	0%	N	N	Y (5%)	N	L (7%)	L (9%)
C2	Baseline 2025/06/25	8.0%	41%	5%	N	N	N	N	L	L (5%)
	Monitoring 2025/11/08	9.5%	74%	0%	N	N	L (5%)	N	L (5%)	L (5%)
	Monitoring 2025/11/23	7.5%	64%	5%	N	N	5%	L (5%)	L (7%)	L (5%)
C3	Baseline 2025/06/24	21%	51%	0%	N	N	N	N	N	L (5%)
	Monitoring 2025/11/07	13%	59%	0%	N	N	N	L (8%)	L (8%)	L (6%)
	Monitoring 2025/11/22	20%	60%	0%	N	N	N	L (5%)	L (6%)	L (5%)
C4	Baseline 2025/06/24	27.0%	36%	0%	N	N	N	N	N	N
	Monitoring 2025/11/07	21.5%	50%	0%	N	N	L (5%)	L (5%)	L (5%)	L (10%)
	Monitoring 2025/11/22	32.0%	55%	0%	N	N	L (5%)	L (5%)	L (7%)	L (5%)

N: None, L: Low, M: Medium, H: High

Table 19 Results of Coral Monitoring

C1 – Coral Carden (Inner Reef)

	
<p>Baseline- 2025/06/24 & 25</p>	<p>Baseline- 2025/06/24 & 25</p>
	
<p>2025/11/07 & 08</p>	<p>2025/11/07 & 08</p>
	
<p>2025/11/22 & 23</p>	<p>2025/11/22 & 23</p>

C2 Marine Reserve (Inner Reef)



Baseline- 2025/06/24 & 25



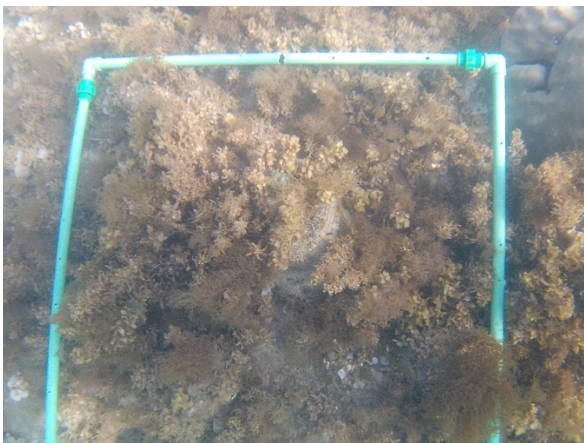
Baseline- 2025/06/24 & 25



2025/11/07 & 08



2025/11/07 & 08



2025/11/22 & 23



2025/11/22 & 23

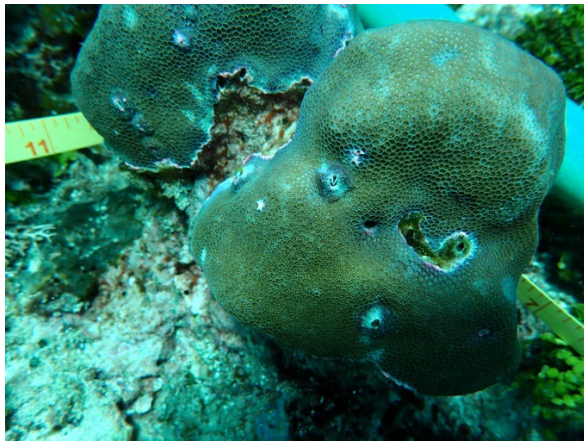
C3 Shelly Beach (Outer Reef)



Baseline- 2025/06/24 & 25



Baseline- 2025/06/24 & 25



2025/11/07 & 08








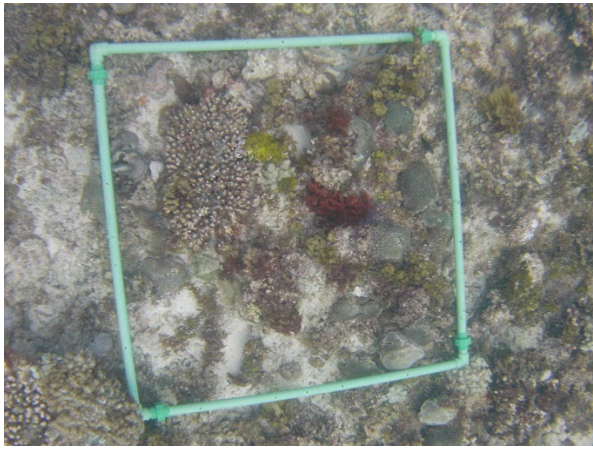
2025/11/07 & 08



2025/11/22 & 23



2025/11/22 & 23

C4 Shika Adabu (Outer Reef)	
	
Baseline- 2025/06/24 & 25	Baseline- 2025/06/24 & 25
	
2025/11/07 & 08	2025/11/07 & 08
	
2025/11/22 & 23	2025/11/22 & 23

4.5. SEAGRASS

4.5.1. Objective

Seagrass monitoring was conducted to confirm whether dredging and disposal activities have caused any adverse impacts on seagrass.

4.5.2. Method

Table 20 outlines the method of seagrass monitoring. Figure 5 shows the seagrass monitoring sites.

Table 20 Method of Seagrass Monitoring	
Parameters	Seagrass coverage, algae coverage, sedimentation
Method	Quadrat survey (10 x 10 m and 1 x 1 m)
Frequency	Once every 2 weeks during dredging works
Location	Inner reef: 4 sites (S1-S4)
Reference standard	Dredging disposal method shall be reconsidered in case adverse impacts on seagrass (e.g., reduction of seagrass coverage, sedimentation) are observed through the monitoring.

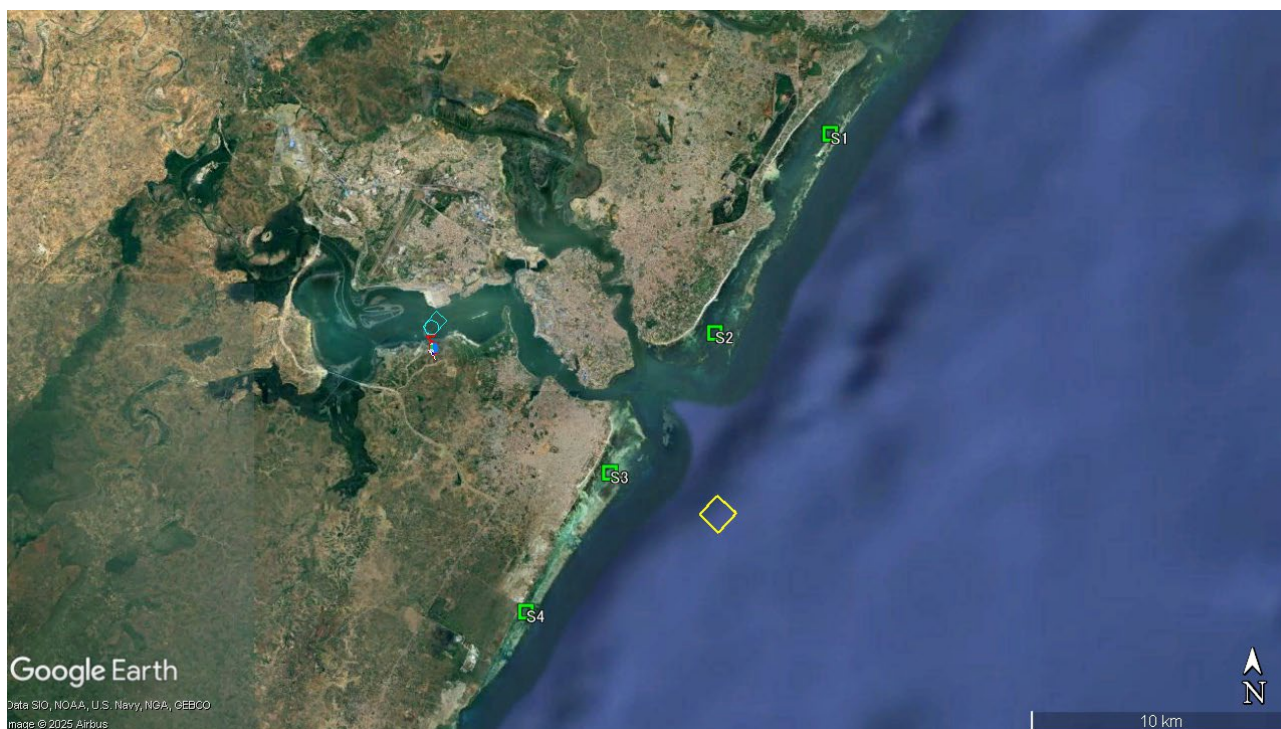


Figure 5 Seagrass Monitoring Sites

4.5.3. Results and Discussion

Table 21 and Table 22 show the results of seagrass monitoring.

Seagrass monitoring results show that so far, there are no observable impacts on seagrass beds at the 4 monitoring sites. Collected empirical datasets and pictorial observations support this.

Table 21 Results of Seagrass Monitoring				
Site	Date	Seagrass cover (%)	Algae cover (%)	Sédimentation (Visual) (N/L/M/H)
S1 (CG)	Baseline June 23 – 27, 2025	TC = 100	0	N
	Monitoring 2025/11/09&10	TC = 100	0	N
	Monitoring 2025/11/21	TC = 100	0	N
S2 (MR)	Baseline June 23 – 27, 2025	TC = 90	0	N
	Monitoring 2025/11/09&10	TC = 90	0	N
	Monitoring 2025/11/21	TC = 90	0	N
S3 (SB)	Baseline June 23 – 27, 2025	TH = 70	5	L
	Monitoring 2025/11/09&10	TH = 70	10	L
	Monitoring 2025/11/22	TH = 70	0	L
S4 (CFG)	Baseline June 23 – 27, 2025	TC = 90	0	N
	Monitoring 2025/11/09&10	TC = 100	0	N
	Monitoring 2025/11/23	TC = 100	0	N

N: None, L: Low, M: Medium, H: High

TC - *Thalassodendron ciliatum*

TH - *Thalassia hemprichii*

Table 22 Results of Seagrass Monitoring

S1 Coral Garden (CG)

Baseline June 23 – 27, 2025



2025/06/25 (10 x 10m)



2025/06/25 (0.5 x 0.5m)

Monitoring November 2025



2025/11/09 (10 x 10m) (epiphytic cover)



2025/11/09 (0.5 x 0.5m) (epiphytic cover)



2025/11/21 (10 x 10m)



2025/11/21 (0.5 x 0.5m)

S2 Marine Reserve (MR)

Baseline June 23 – 27, 2025



2025/06/25 (10 x 10m)



2025/06/25 (0.5 x 0.5m)

Monitoring November 2025



2025/11/09&10 (10 x 10m)



2025/11/09&10 (0.5 x 0.5m)



2025/11/21 (10 x 10m)



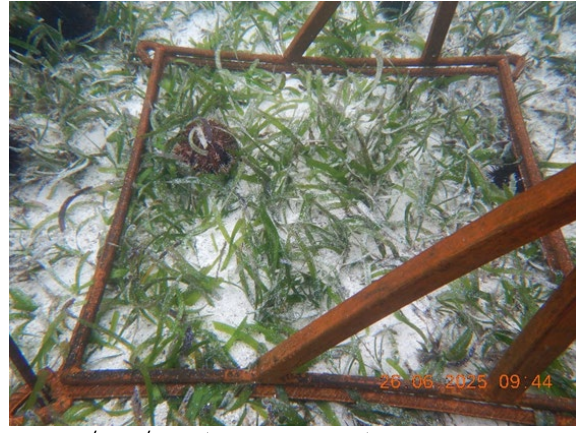
2025/11/21 (0.5 x 0.5m)

S3 (Shelly Beach SB)

Baseline June 23 – 27, 2025



2025/06/26 (10 X 10m)



2025/06/26 (0.5 X 0.5m)

Monitoring November 2025



2025/11/09&10 (10 X 10m)



2025/11/10 (0.5 x 0.5m)



2025/11/22 (10 X 10m)



2025/11/22 (0.5 x 0.5m)

S4 Calcium Fishing Ground (CFG)

Baseline June 23 – 27, 2025



2025/06/26 (10 X 10m)



2025/06/26 (0.5 X 0.5m)

Monitoring November 2025



2025/11/10 (10 X 10m)



2025/11/10 (0.5 x 0.5m)



2025/11/23(10 X 10m)



2025/11/23 (0.5 x 0.5m)

5. WASTE MANAGEMENT

Table 23 shows the record of waste management.

Table 23 Record of Waste Management					
	Waste type		Waste source	Waste Volume	Waste destination
Solid waste	Hazardous	Cement bags	Temporary yard	50 KG	Incineration
		Sanitary waste	Offices	0.5 KG	Incineration
	Non-hazardous	Scrap metal	Temporary yard	146 KG	Sold to scrap dealers
		Pet bottles	Temporary yard	1.5 KG	Sold to Agents of recyclers
		Waste paper	Offices	2.5 KG	Incineration
Liquid waste	Hazardous	Sewage	Dredging fleet	5,000 L	Sewage Treatment Plant
	Non-hazardous	Nil	Nil	Nil	Nil

6. OIL SPILL

Table 24 presents the Record of Oil Spill, which is maintained to document any oil spill incidents occurring during the course of the project. This record serves as a formal log to ensure compliance with environmental protection requirements and to support effective monitoring, reporting, and corrective action.

Table 24 Record of Oil Spill

Date	Spill source/location	Spill volume	Oil type	Actions taken
18/11/2025	<ul style="list-style-type: none"> ○ Spill source was truck delivering sand from Kaydee Quarry ○ Location of spill was at the Sand Mat stockpile Area 	A few drops	Hydraulic oil	<ul style="list-style-type: none"> ○ Spill tray positioned to collect the spill. ○ Mechanic called in and fixed the faulty hydraulic system. ○ Spill was cleaned
24/11/2025	<ul style="list-style-type: none"> ○ Spill source was a truck delivering sand from Kaydee Quarry ○ Location of spill was TOA Weighbridge 	A few drops	Diesel	<ul style="list-style-type: none"> ○ Spill was cleaned ○ A permanent spill kit was positioned at the Weighbridge area
26/11/2025	<ul style="list-style-type: none"> ○ Spill source was a truck delivering sand from Kaydee Quarry ○ Location of spill was TOA Weighbridge 	A few drops	Hydraulic oil	<ul style="list-style-type: none"> ○ Spill was cleaned ○ A permanent spill kit was positioned at the Weighbridge area

7. PUBLIC AWARENESS

Stakeholder consultations were conducted during the month targeting specific stakeholders both around the project area and the material sites. Table 25 is a summary of the stakeholder meetings held in the month while Table 26 is the stakeholder meeting photos

Table 25 Summary of Meetings Held in the Month of November 2025

Date	Stakeholder Type	Agenda	Key outcomes/ Issues
7/11/2025	KFS and CFA	Candidate mangrove transplantation site	Candidate transplantation site was identified at Bombo Creek
20/11/2025	Local Labour Committee	Sourcing of labour	Local community to be given priority when sourcing labor
24/11/2025	Kaydee Quarry CDA committee	Kaydee Quarry trucking route	Dust suppression to be done, speed pumps to be erected and signage to be put along the trucking route
25/11/2025	Goat owner Mbuta Chief Assistant chief	Straying of goats to temporary yard	Owner of the goats to relocate the goats. Toa to Fasttrack installation of perimeter fence and gate
27/11/2025	Kaya Elders	Vikadini shrines	No encroachment to Vikadini shrines was seen after the inspection of the shrines
27/11/2025	Vendors at DK1 Main gate	Mushrooming of food vendors outside DK 1 gate	A maximum of three food vendor kiosks will be allowed outside DK1 gate

Table 26 Stakeholders Meeting Photos



Meeting with key Kaydee Quarry CDA Committee



Meeting with Kaliang'ombe Ass. Chief



KFS and CFA on Mangrove transplanting

8. HERITAGE

Table 27 Record of Chance Findings

Date	Location	Type	Quantity	Actions taken
05/11/2025	Offshore	Steel anchor chain	1	According to the National Museums of Kenya, the old steel anchor chain had no cultural heritage or was not of historical value, therefore recommended for disposal as scrap metal to scarp dealers

Table 28 Record of Documented Chance Findings



Old steel Anchor Chain recovered from the ocean

9. GRIEVANCES

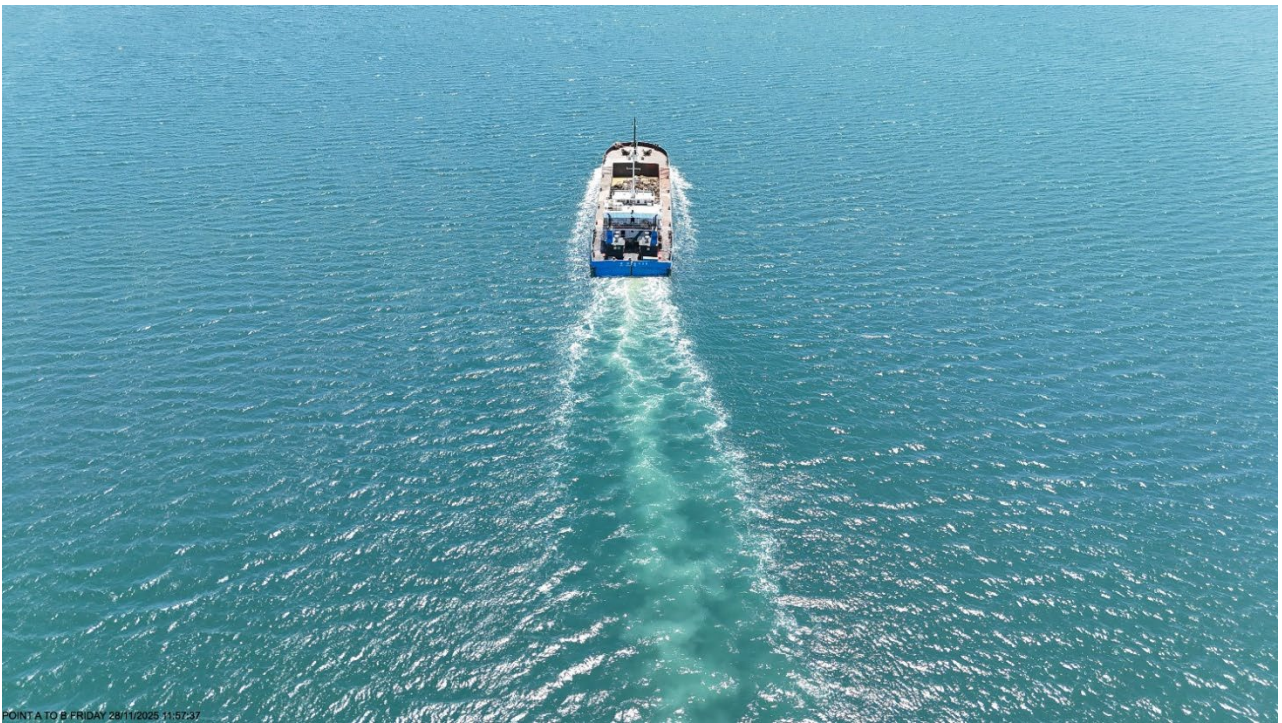
There was no grievance in the month of November.

10. ATTACHMENT

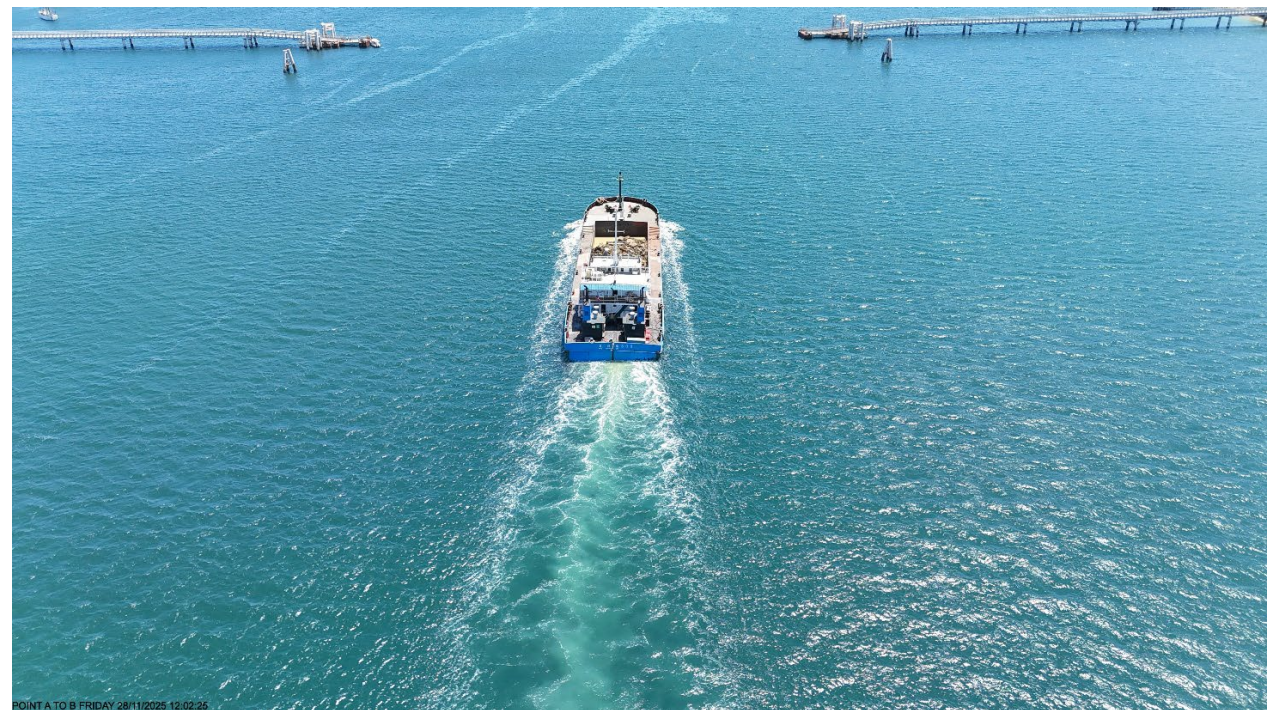
ANNEX A - DRONE PHOTOS OF AERIAL TURBIDITY MONITORING
--

10.1. ANNEX A - DRONE PHOTOS OF AERIAL TURBIDITY MONITORING

There was no grievance in the month of November.



Barge



Barge



Barge



Barge