



forestry, fisheries
and the environment

Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

SALDANHA BAY SEA BASED AQUACULTURE DEVELOPMENT ZONE SPECIALIST ENVIRONMENTAL MONITORING QUARTERLY MONITORING REPORT 6



February 2023



ANCHOR
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1 INTRODUCTION

The Marine Living Resources Fund (MLRF), a Schedule 3A Public Entity established in terms of the Public Finance Management Act, 1999 (Act No 1 Of 1999), under the auspices of Department of Forestry, Fisheries and the Environment (DFFE), has appointed Anchor Research & Monitoring (Pty) Ltd, part of the Anchor Environmental group of companies, to undertake specialist monitoring according to the environmental Sampling Plan for the sea based Aquaculture Development Zone (ADZ) located within Saldanha Bay in the Western Cape, in compliance with the stipulations in the Environmental Authorisation (EA) and the Environmental Management Plan (EMP) for the ADZ, for a period of two years.

This Quarterly Environmental Monitoring Report details activities completed during the sixth quarter (December 2022 to end February 2023) and lists the planned monitoring activities for the seventh quarter. This report is to be shared with the Aquaculture Management Committee (AMC) and the Consultative Forum (CF) to inform all stakeholders regarding the progress of ongoing monitoring within the ADZ as it relates to the Environmental Authorisation and Environmental Monitoring Programme for the ADZ.

2 PROGRESS DURING THE QUATER

2.1 Quarter 5 progress meeting and reporting

The Quarter 5 progress report was submitted to DFFE for comment on 30 November 2022, and the Quarter 5 progress meeting between the DFFE and Anchor Research and Monitoring (Pty) Ltd (Anchor) was held on the 8 December 2022.

2.2 Retrieval, maintenance and redeployment of oxygen probes and nitrate sensor

A servicing schedule has been drawn up and approved by DFFE. The proposed service interval is every 6 weeks in summer/spring/autumn and every 8 weeks in winter is shown in Table 1 below. These dates are however subject to change depending on weather conditions and dive team safety; the DFFE scientists are consulted when service intervals are adjusted based on weather suitability.

For all service intervals, Anchor and DFFE co-ordinate to ensure that both teams are available on the chosen dates and that the weather is suitable for servicing the instruments. On the agreed service date, Anchor's dive team launches as early as possible from Pepper Bay in Saldanha or Langebaan yacht club to retrieve the existing instruments from Small Bay and Big Bay at the locations provided by the DFFE. The Anchor team also collects a 100 ml water sample from the nitrate sensor location which is given to the DFFE scientific team on return to the jetty. Additionally, the instruments are cleaned and handed over to the DFFE scientific team for data download and servicing. Once the data download has been completed, the batteries of the instruments are checked and replaced if required. The instruments are then be placed in new nylon stockings to limit biofouling of the sensors, and Anchor re-deploys the instruments at their original locations using the same dive team.

Table 1. Instrument service schedule.

Service number	Date	Service number	Date
1	2-3 September 2021 (complete)	9	29 August-2 September 2022 (complete)
2	19-20 October 2021 (complete)	10	24-29 October 2022 (complete 2-3 Nov 2022)
3	25-26 November 2021 (complete)	11	5-9 December 2022 (complete 12-13 December 2022)
4	10-11 January 2022 (complete)	12	16-25 January 2023 (complete 17-18 January 2023)
5	14-15 February 2022 (complete)	13	27 February - 3 March 2023 (underway)
6	4-5 April 2022 (complete)	14	10-15 April 2023
7	9-10 May 2022 (complete)	15	22-27 May 2023
8	4-9 July 2022 (complete)	16	17-23 July 2023
		17	3-9 September 2023

All four DO instruments and the nitrate sensor were successfully recovered, serviced and redeployed during field trips undertaken on the 12-13 December 2022 and the 17-18 January 2023.

3 CHALLENGES AND CONCERNS

No significant challenges were encountered during the December 2022 and January 2023 instrument servicing.

4 PLANS FOR MARCH 2023 – MAY 2023 (Q7)

The service interval 13 is scheduled to take place on the 2-3 March 2023 and dive planning is underway. Two instrument service trips are scheduled for Q7 (Service interval 14: 10-15 Apr 2023 and Service interval 15: 22-27 May 2023). The servicing dates will be finalised in consultation with DFFE staff the week before dependent on staff availability and weather predictions.



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