

# Annual Surface Water and Groundwater Monitoring Report 2025



## Albany Motorsport Park

Lot 5780 Down Road South

Drome WA

V1.0

COA019

18/02/2025



# DOCUMENT CONTROL

**Title: AMP Annual Surface Water and Groundwater Monitoring Report 2025**

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Reviewer (s): G.Penter & K.Kinnear

Job No.: COA0019

Client: City of Albany

## REVISION RECORD

Revision	Summary	Prepared By	Reviewed by:	Date
Draft V1.0 ID	Internal Technical & QA Review	A.Tucker and M.Wearing	K.Kinnear	11/02/2026
Draft V1.0 ID	Internal Approval Review	A.Tucker and M.Wearing	G.Penter	17/02/2026
Final V1.0 ID	Final Report issued to client			18/02/2026



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## 1. Introduction

Groundwater and surface water monitoring was conducted at the Albany Motorsport Park (AMP) site from February 2025 to December 2025. Monitoring was completed monthly from April, with the exception of the month of November. Monitoring in the 2025 period included 9 rounds of monitoring (Feb 25, Apr 25, May 25, Jun 25, Jul 25, Aug 25, Sep 25, Oct 25 and Dec 25). Four surface water sites, six shallow bores and one deep bore were monitored as part of the continued monthly monitoring program for April 25 until December 25. See Appendix A (Table 10) for the 2025 DWER approved testing regime and Appendix B for plans showing the location of the monitoring sites. Parameters have not been recorded in all monitoring rounds due to occasional dry conditions, specifically CS04 was dry for the June, October and December monitoring rounds and MB03 was dry for the May monitoring round.

This report summarises the findings of the surface water and groundwater quality monitoring, and compares fixed point photography to indicate any potential disturbances/impacts at the AMP site for the 2025 monitoring period. Water quality results are compared to relevant trigger values where available. The 2025 monitoring results include the October 2022, 2023 and 2024 water quality results where applicable for the three-year comparison of the precinct.

### 1.1. Overview

The motocross precinct, four-wheel drive precinct and the access road was completed in 2024. Construction of the race track precinct (Stage 1B) in the northeast of the site commenced in April 2025 with the final road seal being applied in November 2025. The deep bore, constructed to a depth of 41 m in 2019 is now an operational production bore for the motocross facility.

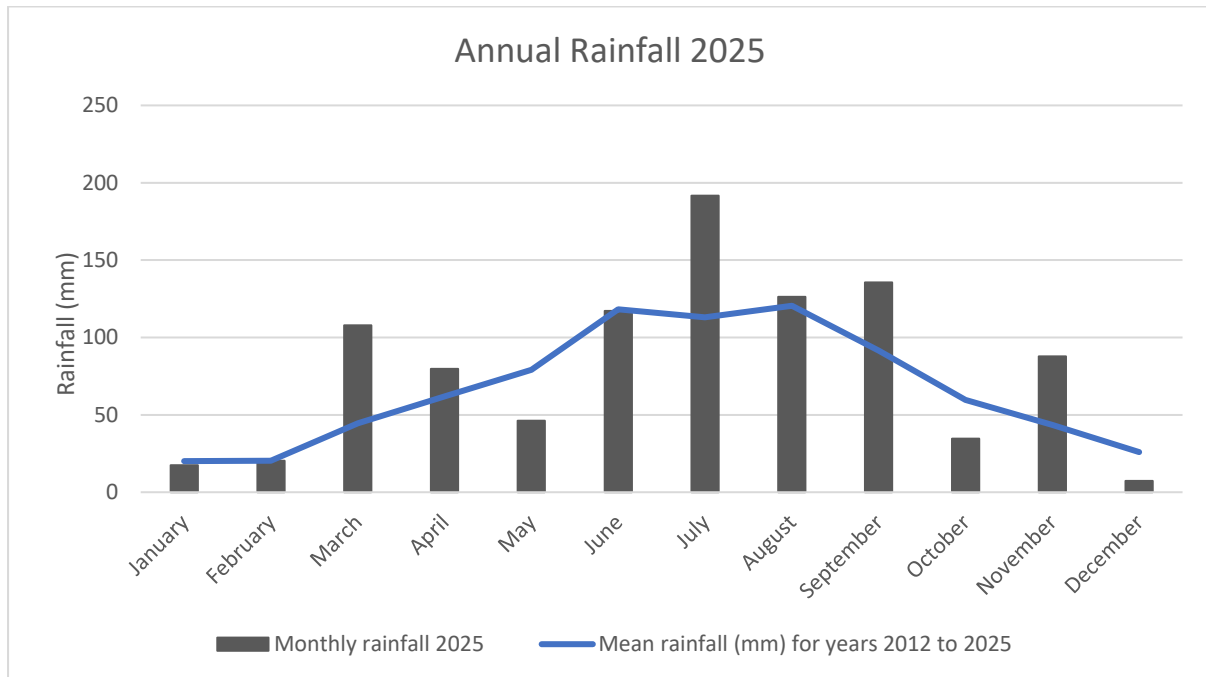
Monitoring and reporting in the current constructed bores commenced in October 2022, with the bores constructed near some of the original surface water bore locations (pre 2022 monitoring). For the purpose of this report, October 2022, 2023, 2024 and 2025 monitoring events have been included to identify any variation/s since the introduction of the constructed shallow water bores. This report therefore captures the pre-construction periods and post construction period of the precinct.

This report summarizes the sampling at the AMP site via the tested parameters. Where samples exceed established trigger values, these are shown in red in the following sections. In 2025, MB03 and CS04 were not measured consistently due to being dry during the May, June, October and December sample events. The CS04 sample point is only measured when it has water present.

## 1.2. Annual Rainfall 2025 monitoring period

The closest open Bureau of Meteorology (BoM) site recording rainfall is Albany Airport (9500) and it is located approximately 6 km to the southeast of the site. The BoM Albany Airport station recorded a higher-than-average rainfall for the 2025 monitoring period with a total of 972 mm for the year, compared to the average rainfall of 789 mm, which equates to a 23% increase. Higher than average rainfall was experienced in all seasons except summer. Rainfall data from the Albany Airport station is shown below in Figure 1.

**Figure 1: Albany Airport BOM (station no. 9500) annual rainfall 2025**



## 2. Water quality

### 2.1. pH

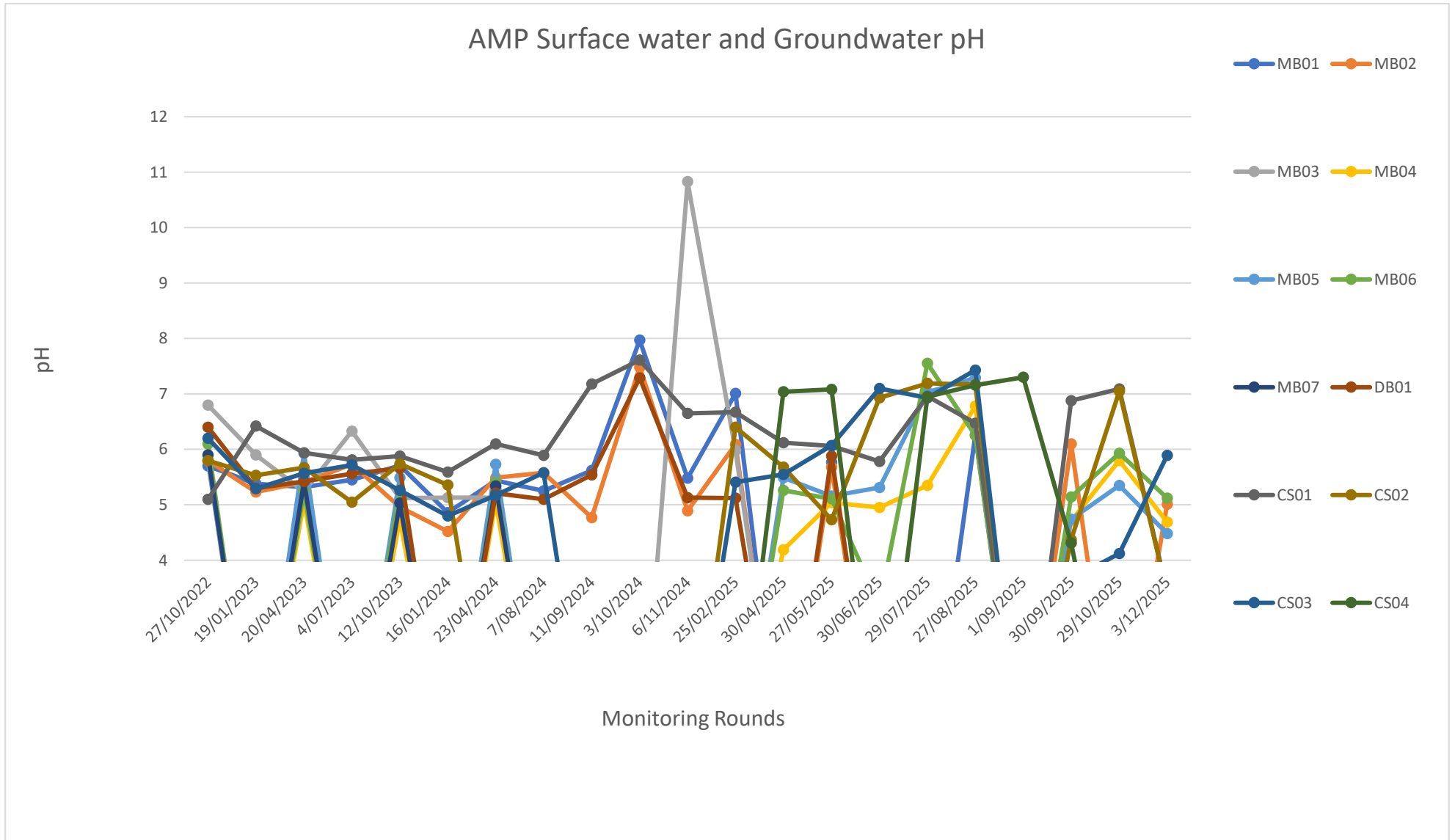
The pH levels in 2025 at the surface water sites, the shallow bores and the deep bore were found to be slightly alkaline to acidic (7.43 to 3.42) and below the ANZECC and ARMCANZ (2000) lower trigger value for slightly-disturbed wetlands ecosystems in the Southwest of Australia (7- 8.5). Sampling points CS01 and CS02 fell below historical ranges in December 2025, measuring 3.43 and 3.42 respectively. Groundwater bore MB06 also showed a spike of more acidic water in the month of June.

There has been some minor fluctuations in pH levels in the surface water and groundwater since monitoring commenced in October 2022, this is not unusual given pH has many influencing factors. The pH levels for the monitoring period are presented in Table 1 and shown graphically in Figure 2, with the raw pH data presented in Appendix C.

**Table 1 –Monitoring results pH**

	MB01	MB02	MB03	MB04	MB05	MB06	MB07	DB01	CS01	CS02	CS03	CS04
27/10/2022	5.7	5.8	6.8	5.8	5.8	6.1	5.9	6.4	5.1	5.8	6.2	Not tested
19/01/2023	5.38	5.23	5.9	Not tested	Not tested	Not tested	Not tested	5.3	6.42	5.53	5.29	Not tested
20/04/2023	5.32	5.41	5.24	5.08	5.93	5.25	5.42	5.42	5.94	5.67	5.57	Not tested
4/07/2023	5.45	5.73	6.33	Not tested	Not tested	Not tested	Not tested	5.56	5.81	5.05	5.72	Not tested
12/10/2023	5.71	4.96	5.12	4.75	5.49	5.27	5.03	5.66	5.88	5.74	5.26	Not tested
16/01/2024	4.86	4.52	5.13	Not tested	Not tested	Not tested	Not tested	Not tested	5.59	5.36	4.8	Not tested
23/04/2024	5.44	5.49	5.13	5.06	5.73	5.41	5.34	5.21	6.10	Dry	5.17	Not tested
7/08/2024	5.25	5.58	Dry	Not tested	Not tested	Not tested	Not tested	5.10	5.89	Dry	5.58	Not tested
11/09/2024	5.62	4.77	Dry	Dry	Not tested	Not tested	Not tested	5.54	7.18	Not tested	Not tested	Not tested
3/10/2024	7.97	7.48	Dry	Not tested	Not tested	Not tested	Not tested	7.29	7.61	Not tested	Not tested	Not tested
6/11/2024	5.48	4.89	10.83	Not tested	Not tested	Not tested	Not tested	5.13	6.65	Not tested	Not tested	Not tested
25/02/2025	7.01	6.09	5.98	Not tested	Not tested	Not tested	Not tested	5.12	6.67	6.4	5.41	Not tested
30/04/2025	Not tested	Not tested	Not tested	4.19	5.49	5.26	Not tested	Not tested	6.12	5.68	5.55	7.04
27/05/2025	5.77	5.68	Dry	5.04	5.16	5.11	Not tested	5.88	6.06	4.73	6.07	7.08
30/06/2025	Not tested	Not tested	Not tested	4.95	5.31	3.18	Not tested	Not tested	5.78	6.93	7.10	Dry
29/07/2025	Not tested	Not tested	Not tested	5.35	7.03	7.55	Not tested	Not tested	6.96	7.19	6.93	6.95
27/08/2025	6.26	Not tested	Not tested	6.78	7.29	6.25	Not tested	Not tested	6.47	7.17	7.43	7.16
1/09/2025	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	7.3
30/09/2025	Not tested	6.10	Not tested	4.71	4.74	5.14	Not tested	Not tested	6.88	4.37	3.66	4.31
29/10/2025	Not tested	Not tested	Not tested	5.80	5.35	5.93	Not tested	Not tested	7.09	7.05	4.12	Dry
3/12/2025	Not tested	5.01	Not tested	4.69	4.48	5.12	Not tested	Not tested	3.43	3.42	5.89	Dry

Figure 2: Surface water and groundwater pH



## 2.2. Electrical Conductivity

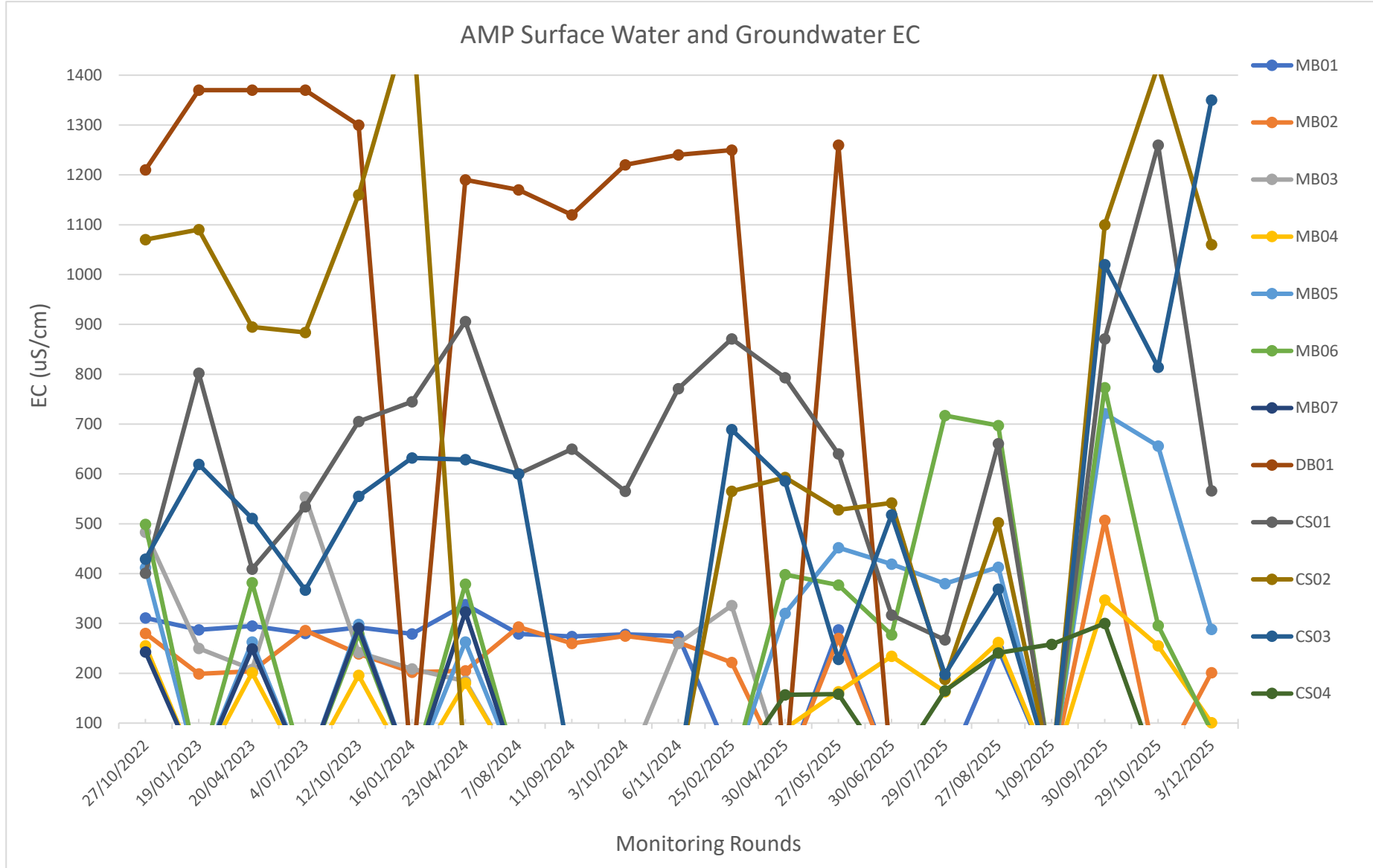
The Electrical Conductivity (EC) at the surface water sites, the shallow bores and the deep bore at the AMP site varied with both location and sampling event. Generally, EC levels across the site were low and below the ANZECC and ARMCANZ (2000) upper trigger value for slightly-disturbed wetland ecosystems in Southwest Australia (1500uS/cm) in Table 3.3.7 of the ANZECC guidelines. EC levels were elevated at CS01, CS02 and CS03 during the later months of 2025, compared to the other monitoring sites, whilst still remaining below the ANZECC and ARMCANZ (2000) upper trigger value at these sites. EC levels at each of the monitoring sites are shown in Table 2 and Figure 3, with the raw EC data presented in Appendix C.

Note: Trigger levels for EC were altered in consultation with DWER half way through 2025. Amendments have been made to historical data in this report, however, all reports prior to 2025 will still indicate the previous trigger levels.

**Table 2 –Monitoring results EC**

	MB01	MB02	MB03	MB04	MB05	MB06	MB07	DB01	CS01	CS02	CS03	CS04
27/10/2022	311	280	483	255	412	499	243	1210	401	1070	429	Not tested
19/01/2023	287	199	250	Not tested	Not tested	Not tested	Not tested	1370	802	1090	619	Not tested
20/04/2023	295	204	208	201	263	382	249	1370	409	895	511	Not tested
4/07/2023	280	286	554	Not tested	Not tested	Not tested	Not tested	1370	534	884	367	Not tested
12/10/2023	292	239	242	196	298	279	291	1300	705	1160	555	Not tested
16/01/2024	279	202	209	Not tested	Not tested	Not tested	Not tested	Not tested	745	1530	632	Not tested
23/04/2024	338	205	184	180	263	379	323	1190	906	Dry	629	Not tested
7/08/2024	279	293	Dry	Not tested	Not tested	Not tested	Not tested	1170	600	Dry	600	Not tested
11/09/2024	274	260	Dry	Dry	Not tested	Not tested	Not tested	1120	650	Not tested	Not tested	Not tested
3/10/2024	278	275	Dry	Not tested	Not tested	Not tested	Not tested	1220	565	Not tested	Not tested	Not tested
6/11/2024	275	262	260	Not tested	Not tested	Not tested	Not tested	1240	771	Not tested	Not tested	Not tested
25/02/2025	26	222	336	Not tested	Not tested	Not tested	Not tested	1250	871	565	689	Not tested
30/04/2025	Not tested	Not tested	Not tested	89	320	398	Not tested	Not tested	793	593	586	157
27/05/2025	287	270	Dry	163	452	377	Not tested	1260	640	528	228	158
30/06/2025	Not tested	Not tested	Not tested	234	419	277	Not tested	Not tested	317	542	518	Dry
29/07/2025	Not tested	Not tested	Not tested	163	380	717	Not tested	Not tested	267	188	198	165
27/08/2025	249	Not tested	Not tested	262	413	697	Not tested	Not tested	661	502	369	241
1/09/2025	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	258
30/09/2025	Not tested	507	Not tested	347	721	773	Not tested	Not tested	871	1100	1020	300
29/10/2025	Not tested	Not tested	Not tested	255	656	296	Not tested	Not tested	1260	1420	814	Dry
3/12/2025	Not tested	201	Not tested	101	288	84	Not tested	Not tested	566	1060	1350	Dry

Figure 3: Surface water and groundwater EC



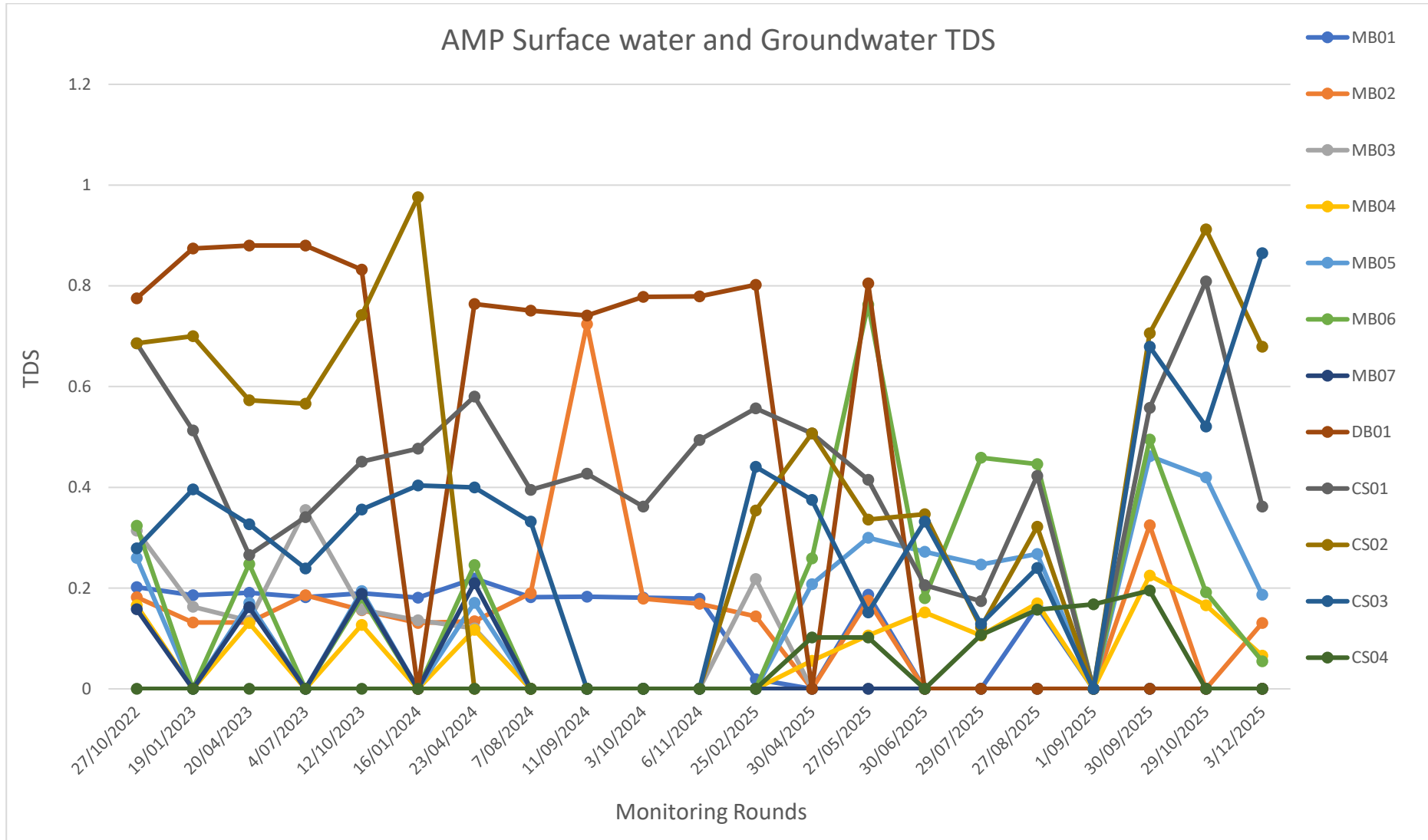
### 2.3. Total Dissolved Solids

The Total Dissolved Solids (TDS) at the surface water sites and the shallow bores and the deep bore at the AMP site varied with both location and sampling event. TDS levels across the site were all low (<1). TDS levels in 2025 were elevated at DB01, during each monitoring event, compared to the other monitoring sites consistent with the 2023 and 2024 EC results. TDS levels in CSO1, CSO2 and CSO3 were elevated in November and December monitoring events when compared to previous months and other monitoring sites. TDS levels for each of the monitoring sites are shown in Table 3 and Figure 4, with the raw TDS data presented in Appendix C.

**Table 3 –Monitoring results TDS**

	MB01	MB02	MB03	MB04	MB05	MB06	MB07	DB01	CSO1	CSO2	CSO3	CSO4
27/10/2022	0.202	0.182	0.314	0.166	0.26	0.324	0.158	0.775	0.686	0.686	0.279	Not tested
19/01/2023	0.186	0.132	0.163	Not tested	Not tested	Not tested	Not tested	0.874	0.513	0.7	0.396	Not tested
20/04/2023	0.191	0.132	0.135	0.131	0.171	0.248	0.162	0.88	0.266	0.573	0.327	Not tested
4/07/2023	0.182	0.186	0.355	Not tested	Not tested	Not tested	Not tested	0.88	0.341	0.566	0.239	Not tested
12/10/2023	0.190	0.156	0.157	0.127	0.194	0.181	0.189	0.832	0.451	0.742	0.356	Not tested
16/01/2024	0.181	0.131	0.136	No data	No data	No data	No data	No data	0.477	0.976	0.404	Not tested
23/04/2024	0.219	0.134	0.120	0.117	0.171	0.246	0.210	0.764	0.580	Dry	0.4	Not tested
7/08/2024	0.182	0.190	Dry	Not tested	Not tested	Not tested	Not tested	0.751	0.395	Dry	0.332	Not tested
11/09/2024	0.183	0.724	Dry	Dry	Not tested	Not tested	Not tested	0.741	0.427	Not tested	Not tested	Not tested
3/10/2024	0.181	0.179	Dry	Not tested	Not tested	Not tested	Not tested	0.778	0.362	Not tested	Not tested	Not tested
6/11/2024	0.179	0.169	No data	Not tested	Not tested	Not tested	Not tested	0.779	0.494	Not tested	Not tested	Not tested
25/02/2025	0.019	0.144	0.218	Not tested	Not tested	Not tested	Not tested	0.802	0.557	0.354	0.441	Not tested
30/04/2025	Not tested	Not tested	Not tested	0.056	0.208	0.259	Not tested	Not tested	0.507	0.507	0.375	0.102
27/05/2025	0.187	0.175	Dry	0.106	0.300	0.763	Not tested	0.805	0.415	0.336	0.152	0.102
30/06/2025	Not tested	Not tested	Not tested	0.152	0.272	0.180	Not tested	Not tested	0.206	0.347	0.332	Dry
29/07/2025	Not tested	Not tested	Not tested	0.106	0.247	0.459	Not tested	Not tested	0.174	0.122	0.129	0.107
27/08/2025	0.163	Not tested	Not tested	0.170	0.268	0.446	Not tested	Not tested	0.423	0.322	0.240	0.157
1/09/2025	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	0.168
30/09/2025	Not tested	0.325	Not tested	0.225	0.462	0.495	Not tested	Not tested	0.558	0.706	0.679	0.195
29/10/2025	Not tested	Not tested	Not tested	0.166	0.420	0.192	Not tested	Not tested	0.809	0.912	0.521	Dry
3/12/2025	Not tested	0.131	Not tested	0.066	0.187	0.055	Not tested	Not tested	0.362	0.679	0.865	Dry

Figure 4: Surface water and groundwater TDS



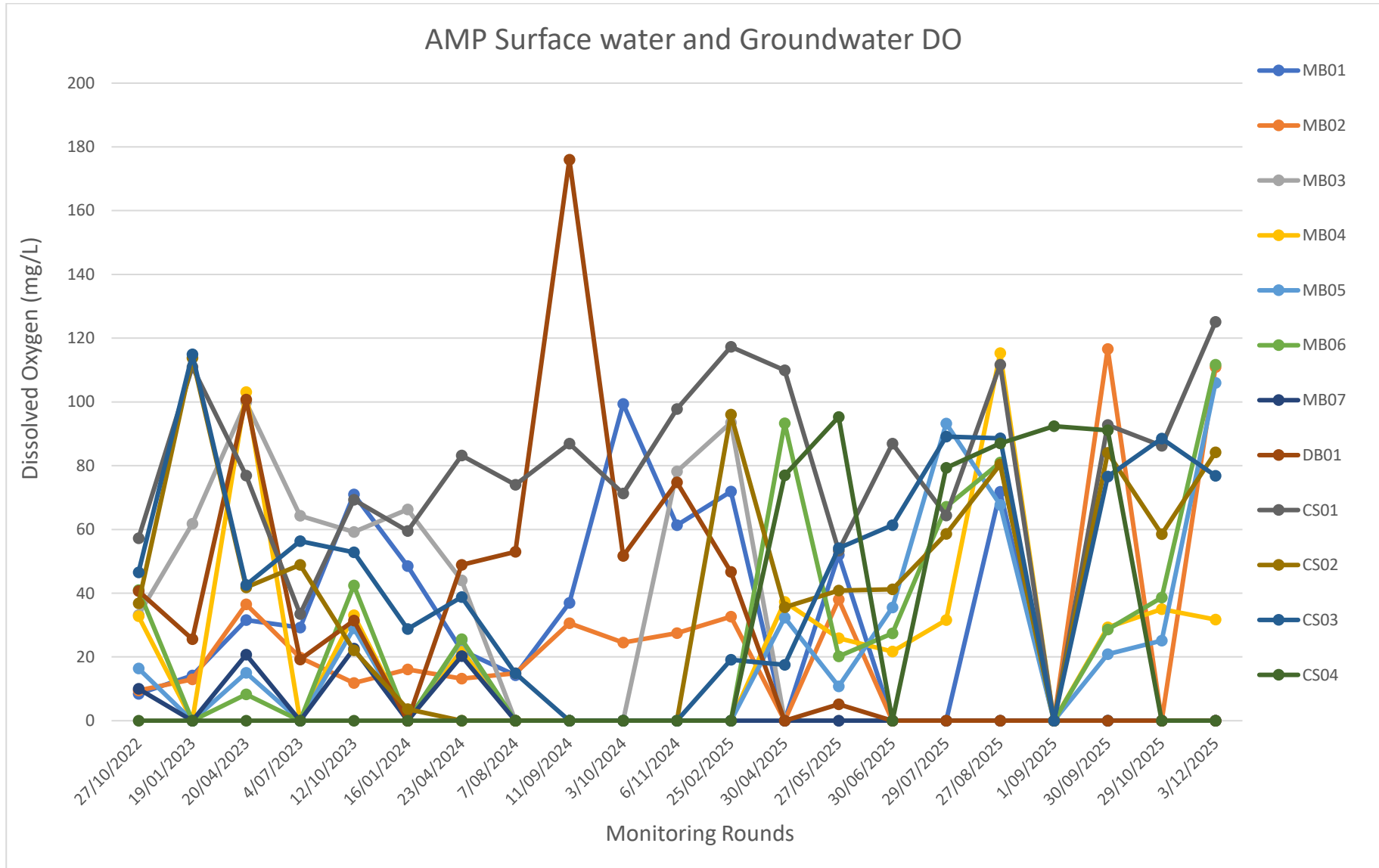
## 2.4. Dissolved Oxygen

The Dissolved Oxygen (DO) levels recorded at the surface water sites varied across monitoring events in 2025, with no clear fluctuation trend. Fluctuations in DO levels were evident across all monitoring sites and monitoring months, both in groundwater and surface waters samples. DO levels in 2025 were very low at DB01 during the May monitoring event compared to the other monitoring sites, as well as when compared to previous 2023 and 2024 DO results for DB01. DO levels for each of the monitoring sites are shown in Table 4 and Figure 5, with the raw DO data presented in Appendix C. It is noted that CS04 did not have water in it for the latter part of 2025 reporting period, and subsequently no data was recorded.

**Table 4 –Monitoring results DO**

	MB01	MB02	MB03	MB04	MB05	MB06	MB07	DB01	CS01	CS02	CS03	CS04
27/10/2022	8.4	9.5	33.2	32.8	16.4	41	10	40.7	57.2	36.8	46.5	Not tested
19/01/2023	14.2	13	61.8	Not tested	Not tested	Not tested	Not tested	25.6	111	113.8	114.9	Not tested
20/04/2023	31.6	36.5	99.9	103.1	15	8.3	20.7	100.7	76.9	41.8	42.6	Not tested
4/07/2023	29.2	19.8	64.3	Not tested	Not tested	Not tested	Not tested	19.2	33.5	48.9	56.3	Not tested
12/10/2023	71	11.8	59.2	33.1	29	42.4	22.6	31.4	69.3	22.1	52.8	Not tested
16/01/2024	48.5	16.1	66.3	No data	No data	No data	No data	No data	59.5	3.6	28.80	Not tested
23/04/2024	22.1	13.2	44	22.1	25.3	25.6	20.3	48.9	83.2	Dry	38.8	Not tested
7/08/2024	14.3	14.9	Dry	Not tested	Not tested	Not tested	Not tested	53	74	Dry	14.9	Not tested
11/09/2024	37	30.6	Dry	Dry	Not tested	Not tested	Not tested	176	86.9	Not tested	Not tested	Not tested
3/10/2024	99.4	24.5	Dry	Not tested	Not tested	Not tested	Not tested	51.7	71.3	Not tested	Not tested	Not tested
6/11/2024	61.3	27.5	78.2	Not tested	Not tested	Not tested	Not tested	74.8	97.8	Not tested	Not tested	Not tested
25/02/2025	71.9	32.6	93.5	Not tested	Not tested	Not tested	Not tested	46.7	117.3	96	19.1	Not tested
30/04/2025	Not tested	Not tested	Not tested	37.3	32.3	93.3	Not tested	Not tested	109.9	35.6	17.5	77.0
27/05/2025	52	38	Dry	25.9	10.75	20.2	Not tested	5.2	53.4	40.8	54.1	95.3
30/06/2025	Not tested	Not tested	Not tested	21.7	35.5	27.4	Not tested	Not tested	86.9	41.2	61.3	Dry
29/07/2025	Not tested	Not tested	Not tested	31.6	93.2	67.1	Not tested	Not tested	64.4	58.6	89.1	79.3
27/08/2025	71.8	Not tested	Not tested	115.3	67.7	81.0	Not tested	Not tested	111.7	80.4	88.6	87.0
1/09/2025	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	92.4
30/09/2025	Not tested	116.60	Not tested	29.30	20.90	28.60	Not tested	Not tested	92.80	84.0	76.6	91.1
29/10/2025	Not tested	Not tested	Not tested	35	25.1	38.6	Not tested	Not tested	86.2	58.5	88.5	Dry
3/12/2025	Not tested	110.9	Not tested	31.7	106.0	111.7	Not tested	Not tested	125.1	84.2	76.8	Dry

Figure 5: Surface water and groundwater DO



## 2.5. Turbidity

Turbidity was first measured at the surface water sites during the July 2023 monitoring event to indicate the concentration of suspended solids and fine sediment within the surface water. Noting that fine sediment had been reported in the creek further downstream of the AMP site following heavy rainfall. Trigger levels for Turbidity (10-20 NTU) have been taken from Table 3.3.7 for upland and lowland rivers in slightly-disturbed wetland ecosystems in Southwest Australia, of the ANZECC guidelines. Turbidity had increased across all monitoring sites at times during the 2025 monitoring events, except for MB01 and MB04. MB02 (when had water) continued to recorded high turbidity levels. Elevated turbidity has been recorded in MB05 since September which coincided with tampering of the casing which likely contaminated the bore. MB06 has also recorded a rise in turbidity in July and August. Elevated turbidity levels at CS01, CS02 and CS03 coincided with months of above average rainfall and an unstable construction site (batters and loose soils on site) which is likely to have contributed to mobilization of silts and sediment run-off. It was noted in the July monthly report that GreenSkills had slashed woody weeds in the wetland which disturbed the creek edges and is likely to have contributed to increased turbidity levels in the creek.

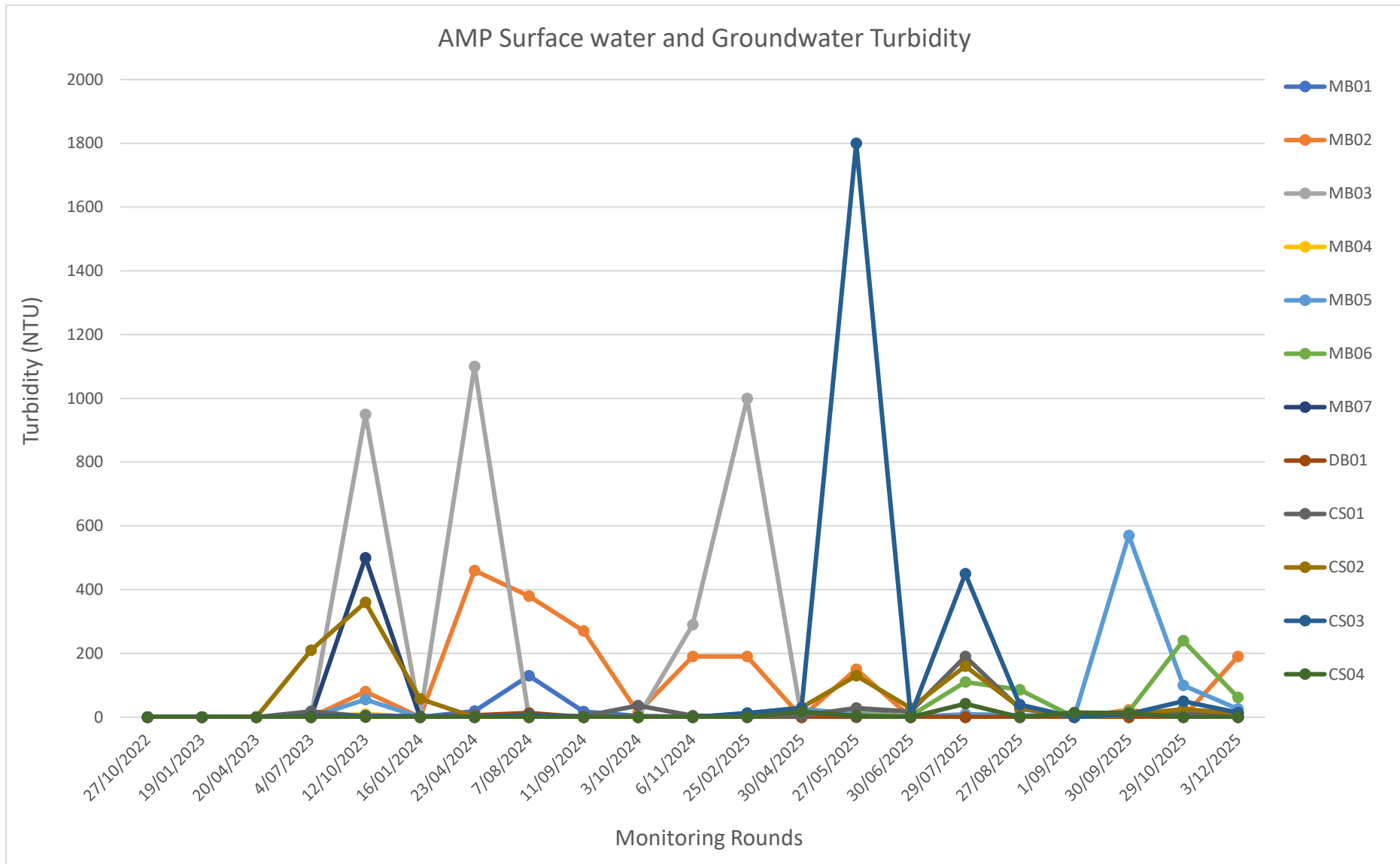
Turbidity results for each of the monitoring sites are shown in Table 5 and Figure 6, with the raw Turbidity data presented in Appendix C.

Note: Trigger levels for Turbidity were altered in consultation with DWER half way through 2025. Amendments have been made to historical data in this report, however, all reports prior to 2025 will still indicate the previous trigger levels.

**Table 5 –Monitoring results Turbidity**

	MB01	MB02	MB03	MB04	MB05	MB06	MB07	DB01	CS01	CS02	CS03	CS04
27/10/2022	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	Not tested
19/01/2023	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	Not tested
20/04/2023	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	No data	Not tested
4/07/2023	No data	No data	No data	Not tested	Not tested	Not tested	Not tested	Not tested	18	210	2.9	Not tested
12/10/2023	3	80	950	10	55	3.5	500	3.5	2.5	360	4.2	Not tested
16/01/2024	No data	No data	No data	No data	No data	No data	No data	No data	2.4	57	1.9	Not tested
23/04/2024	19	460	1100	No data	No data	No data	No data	6.3	2.9	Dry	No data	Not tested
7/08/2024	130	380	Dry	Not tested	Not tested	Not tested	Not tested	13	6.8	Dry	6.3	Not tested
11/09/2024	17	270	Dry	Dry	Not tested	Not tested	Not tested	0.24	3.2	Not tested	Not tested	Not tested
3/10/2024	3.9	14	Dry	Not tested	Not tested	Not tested	Not tested	1.4	36	Not tested	Not tested	Not tested
6/11/2024	1.3	190	290	Not tested	Not tested	Not tested	Not tested	0.34	4.4	Not tested	Not tested	Not tested
25/02/2025	2.7	190	1000	Not tested	Not tested	Not tested	Not tested	2.6	2.8	11	13	Not tested
30/04/2025	Not tested	Not tested	Not tested	2.7	26	2.7	Not tested	Not tested	4.5	30	29	17
27/05/2025	20	150	Dry	12	9.5	6.4	Not tested	0.48	29	130	1800	4.0
30/06/2025	Not tested	Not tested	Not tested	1.7	1.6	4.6	Not tested	Not tested	17	29	4.2	Dry
29/07/2025	Not tested	Not tested	Not tested	3.8	8.9	110	Not tested	Not tested	190	160	450	42
27/08/2025	1.9	Not tested	Not tested	3.5	6.9	86	Not tested	Not tested	27	30	39	Not tested
1/09/2025	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	14
30/09/2025	Not tested	23	Not tested	2.0	570	18	Not tested	Not tested	11	8.0	9.7	13
29/10/2025	Not tested	Not tested	Not tested	2.1	100	240	Not tested	Not tested	11	25	50	Dry
3/12/2025	Not tested	190	Not tested	1.9	26	62	Not tested	Not tested	5.2	12	14	Dry

Figure 6: Turbidity



## 2.6. Nutrients

The Total Nitrogen (TN) at the surface water sites and the shallow bores varied with both location and sampling event. Total Nitrogen (TN) and Nitrogen Oxides (Nox\_N) in MB01, MB05 and MB06 is noticeably higher than the other monitoring sites. They have all exceeded the trigger values given in the guidelines for TN and Nox\_N since May 2025 (when water present). MB01 and MB06 have shown a similar trend since the start and the monitoring round in October 2022.

CS01 had elevated TN above trigger levels in July 2025 at 2.8 mg/L (> trigger level of 1.5mg/L) and CS02 and CS03 exceeded trigger levels in all but February, April, May and August. CS04, the upstream monitoring location, only had elevated levels in April and May and did not have water in it for the latter part of 2025 reporting period, with no data recorded.

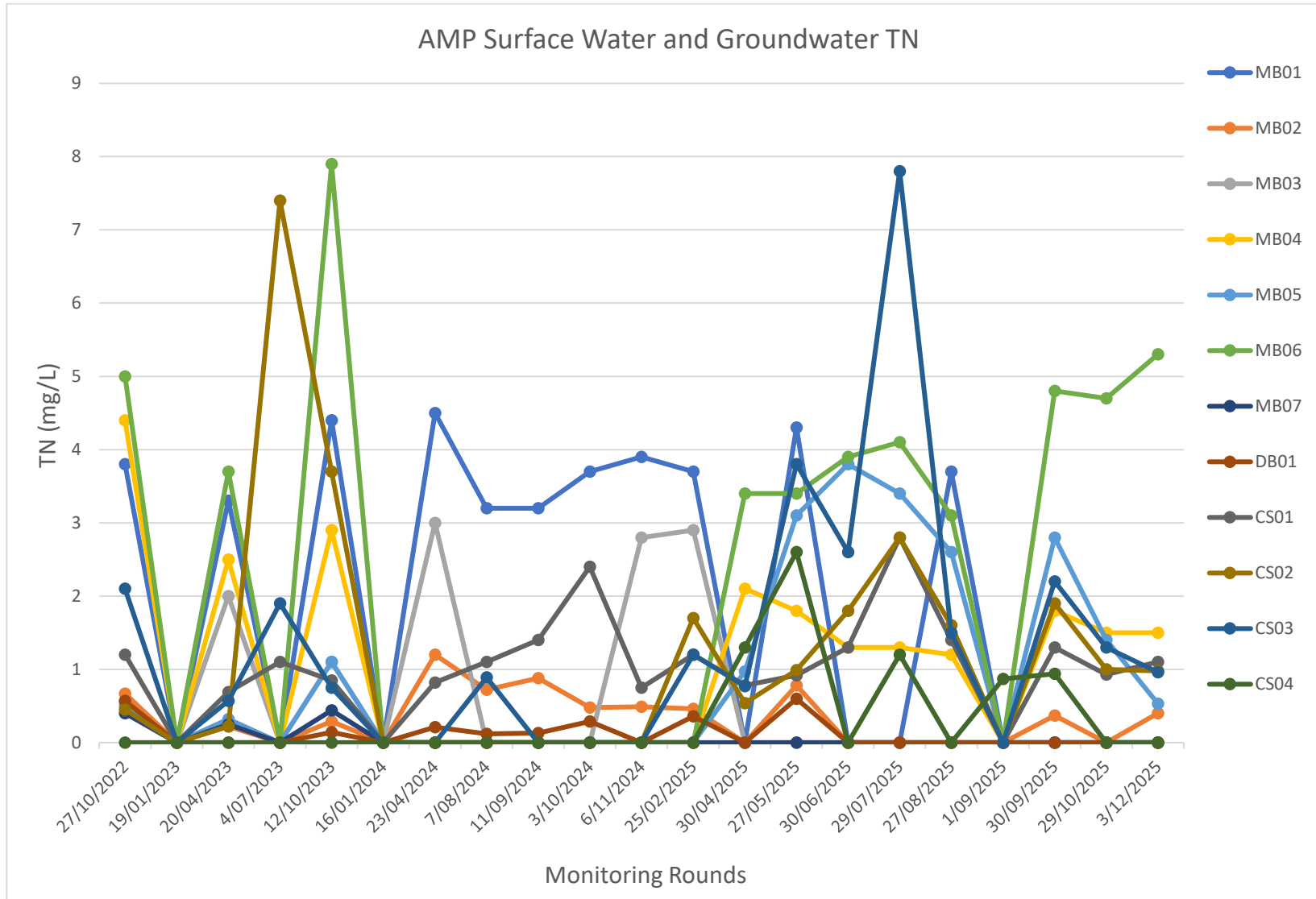
The elevated TN and Nox\_N may be the result of past fertiliser use and stock grazing, noting fertiliser history of the property is unknown. Stock grazing on the property discontinued in 2024.

The TN levels at the monitoring sites are shown in Table 6 and Figure 7, with the raw TN data shown in Appendix C.

**Table 6 –Monitoring results TN**

	MB01	MB02	MB03	MB04	MB05	MB06	MB07	DB01	CS01	CS02	CS03	CS04
27/10/2022	3.8	0.67	0.55	4.4	0.5	5	0.4	0.57	1.2	0.45	2.1	Not tested
19/01/2023	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
20/04/2023	3.3	0.22	2	2.5	0.32	3.7	0.25	<0.10	0.69	0.22	0.57	Not tested
4/07/2023	No data	No data	No data	No data	No data	No data	No data	No data	1.1	7.4	1.9	Not tested
12/10/2023	4.4	0.29	1.1	2.9	1.1	7.9	0.44	0.14	0.85	3.7	0.75	Not tested
16/01/2024	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
23/04/2024	4.5	1.2	3	Not tested	Not tested	Not tested	Not tested	0.21	0.82	Dry	No data	Not tested
7/08/2024	3.2	0.72	Dry	Not tested	Not tested	Not tested	Not tested	0.12	1.1	Dry	0.89	Not tested
11/09/2024	3.2	0.88	Dry	Dry	Not tested	Not tested	Not tested	0.13	1.4	Not tested	Not tested	Not tested
3/10/2024	3.7	0.48	Dry	Not tested	Not tested	Not tested	Not tested	0.29	2.4	Not tested	Not tested	Not tested
6/11/2024	3.9	0.49	2.8	Not tested	Not tested	Not tested	Not tested	<0.10	0.75	Not tested	Not tested	Not tested
25/02/2025	3.7	0.46	2.9	Not tested	Not tested	Not tested	Not tested	0.36	1.2	1.7	1.2	Not tested
30/04/2025	Not tested	Not tested	Not tested	2.1	0.97	3.4	Not tested	Not tested	0.78	0.54	0.77	1.3
27/05/2025	4.3	0.78	Dry	1.8	3.1	3.4	Not tested	0.60	0.92	0.99	3.8	2.6
30/06/2025	Not tested	Not tested	Not tested	1.3	3.8	3.9	Not tested	Not tested	1.3	1.8	2.6	Dry
29/07/2025	Not tested	Not tested	Not tested	1.3	3.4	4.1	Not tested	Not tested	2.8	2.8	7.8	1.2
27/08/2025	3.7	Not tested	Not tested	1.2	2.6	3.1	Not tested	Not tested	1.4	1.6	1.5	Not tested
1/09/2025	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	0.87
30/09/2025	Not tested	0.37	Not tested	1.8	2.8	4.8	Not tested	Not tested	1.3	1.9	2.2	0.94
29/10/2025	Not tested	Not tested	Not tested	1.5	1.4	4.7	Not tested	Not tested	0.93	1.0	1.3	Dry
3/12/2025	Not tested	0.40	Not tested	1.5	0.53	5.3	Not tested	Not tested	1.1	0.98	0.96	Dry

Figure 7: Surface water and groundwater TN



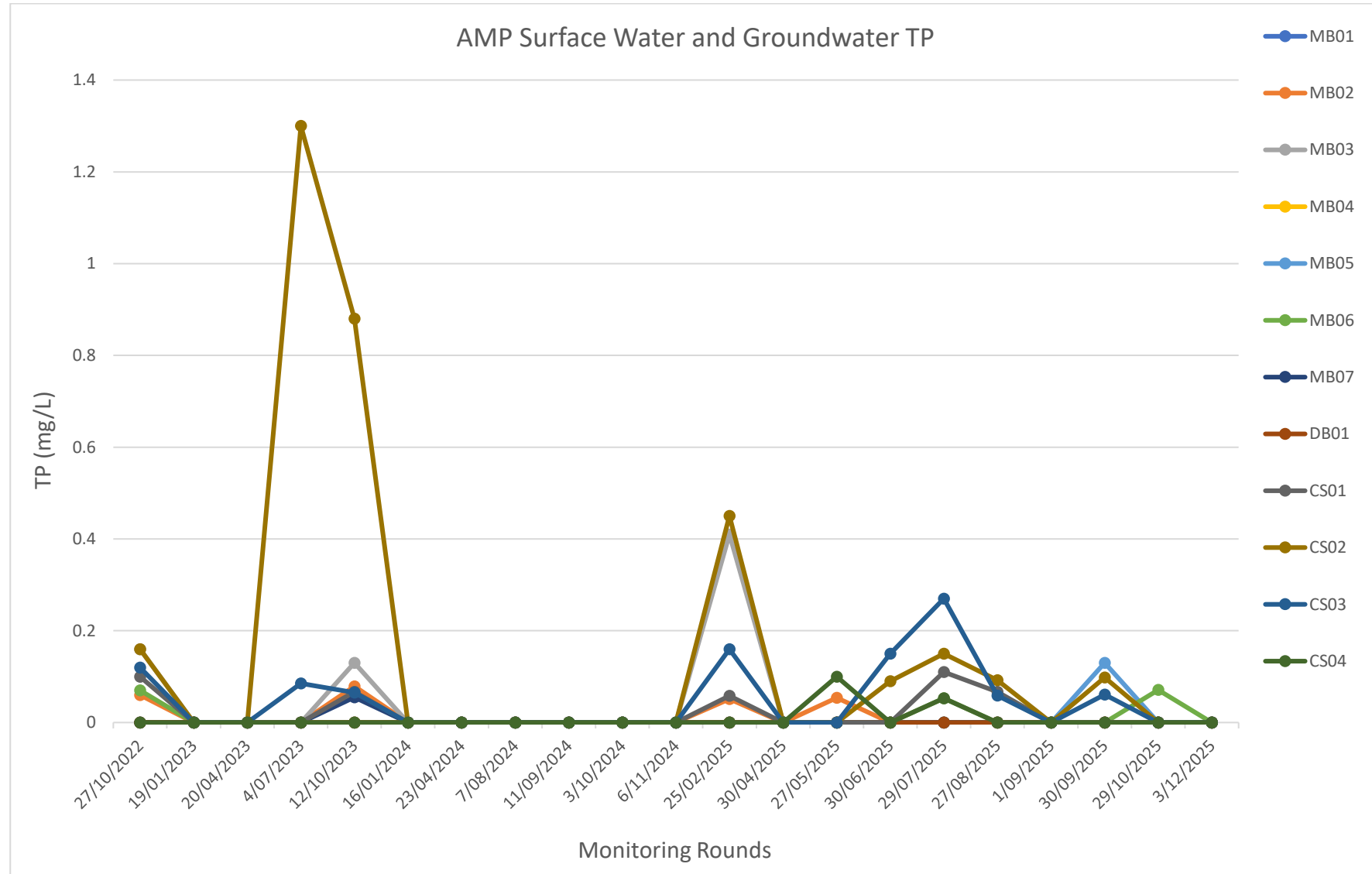
Total Phosphorus (TP) spiked above the ANZECC and ARMCANZ (2000) trigger value (0.06 mg/L) at least once in the 2025 sampling events at MB03, MB05, MB06, CS01, CS02, CS03 and CS04. Elevated TP levels at CS01, CS02 and CS03 coincided with months of above average rainfall and an unstable construction site (batters and loose soils on site) which is likely to have contributed to mobilization of silts and sediment run-off.

The TP levels at the monitoring sites are shown in Table 7 and Figure 8, with the raw data shown in Appendix C.

**Table 7 –Monitoring results TP**

	MB01	MB02	MB03	MB04	MB05	MB06	MB07	DB01	CS01	CS02	CS03	CS04
27/10/2022	<0.050	0.06	0.16	<0.050	<0.050	0.07	<0.050	<0.050	0.1	0.16	0.12	Not tested
19/01/2023	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
20/04/2023	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	Not tested
4/07/2023	No data	No data	No data	Not tested	Not tested	Not tested	Not tested	No data	No data	1.3	0.085	Not tested
12/10/2023	<0.050	0.079	0.13	<0.050	<0.050	<0.050	0.055	<0.050	0.067	0.88	0.065	Not tested
16/01/2024	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
23/04/2024	<0.050	<0.050	<0.050	Not tested	Not tested	Not tested	Not tested	<0.050	<0.050	Dry	No data	Not tested
7/08/2024	<0.050	<0.050	Dry	Not tested	Not tested	Not tested	Not tested	<0.050	<0.050	Dry	<0.050	Not tested
11/09/2024	<0.050	<0.050	Dry	Dry	Not tested	Not tested	Not tested	<0.050	<0.050	Not tested	Not tested	Not tested
3/10/2024	<0.050	<0.050	Dry	Not tested	Not tested	Not tested	Not tested	<0.050	<0.050	Not tested	Not tested	Not tested
6/11/2024	<0.050	<0.050	<0.050	Not tested	Not tested	Not tested	Not tested	<0.050	<0.050	Not tested	Not tested	Not tested
25/02/2025	<0.050	0.051	0.41	Not tested	Not tested	Not tested	Not tested	<0.050	0.058	0.45	0.16	Not tested
30/04/2025	Not tested	Not tested	Not tested	<0.050	<0.050	<0.050	Not tested	Not tested	<0.050	<0.050	<0.050	<0.050
27/05/2025	<0.050	0.054	Dry	<0.050	<0.050	<0.050	Not tested	<0.050	<0.050	<0.050	<0.050	0.10
30/06/2025	Not tested	Not tested	Not tested	<0.050	<0.050	<0.050	Not tested	Not tested	<0.050	0.090	0.15	Dry
29/07/2025	Not tested	Not tested	Not tested	<0.050	<0.050	0.053	Not tested	Not tested	0.11	0.15	0.27	0.053
27/08/2025	<0.050	Not tested	Not tested	<0.050	<0.050	<0.050	Not tested	Not tested	0.067	0.092	0.059	Not tested
1/09/2025	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	<0.050
30/09/2025	Not tested	<0.050	Not tested	<0.050	0.13	<0.050	Not tested	Not tested	<0.050	0.098	0.061	<0.050
29/10/2025	Not tested	Not tested	Not tested	<0.050	<0.050	0.071	Not tested	Not tested	<0.050	<0.050	<0.050	Dry
3/12/2025	Not tested	<0.050	Not tested	<0.050	<0.050	<0.050	Not tested	Not tested	<0.050	<0.050	<0.050	Dry

Figure 8: Surface water and groundwater TP



## 2.7. Dissolved Metals

Dissolved metal (arsenic, cadmium, chromium, copper, mercury, nickel, lead and zinc) levels were generally found to be low and below the ANZECC & ARM CANZ (2000) trigger values for toxicants in freshwater ecosystems at 95% level of protection. All sites monitored showed some exceedance of Chromium, Copper or Zinc or a combination of all.

After rising steadily since October 2023, the levels of Zinc in DB01 has dropped in 2025, although it is still above trigger levels.

The dissolved metal levels for each monitoring site for the monitoring period are shown in Appendix C.

## 2.8. Hydrocarbons

The Volatile Total Recoverable Hydrocarbons (TRH), Methyl tertiary-butyl ether, benzene, toluene, ethylbenzene, xylene and Naphthalene (MBTEXN), and Semi-volatile TRH laboratory results were found to be below the laboratory detection limit for all parameters at all monitoring sites sampled, except for CS02 and CS03, where toluene was first ever recorded in August and September (CS02 3.2 and 4.4µg/L, CS03 1.3µg/L). The TRH, MBTEXN and semi-volatile TRH levels for each monitoring site for the monitoring period are shown in Appendix C.

## 2.9. PAHs in water

Polycyclic Aromatic Hydrocarbons (PAHs) laboratory results were found to be below laboratory detection limits at all monitoring sites during each monitoring event. The PAH levels for each monitoring site for the monitoring period are shown in Appendix C.

## 2.10. Surfactants

The Methyl Blue Active Substances (MBAS) analysis, which detects foaming agents and detergents as well as other anionic substances in water, showed all sites sampled had MBAS readings below the laboratory detection limit or very low levels. Previous monitoring results for MBAS have showed similar results with either very low levels or below detection limits of MBAS at all monitoring sites.

The MBAS levels for each monitoring site for the monitoring period are shown in Appendix C.

## 2.11. Coliforms

Thermotolerant coliforms (TC) and *E.coli* have been present since monitoring began in October 2022 in CS01. Prior to the monitoring rounds in 2025, TC and *E.coli* have fluctuated with occasional spikes, likely linked to livestock removal from the property. CS03 has recorded consistently high counts of TC and *E. coli* since May, except for a decline in *E. coli* in June. Counts in CS01, CS02 have been consistently high since July with a single spike in TC in February in CS01 and CS04 (upstream monitoring site) has recorded consistently high counts of both TC and *E. coli*, except for when dry in June, November and December.

The TC and *E. coli* levels for each monitoring site for the monitoring period are shown in Appendix C. It is noted that there is no trigger level for TC and *E. coli* in the ANZECC & ARMCAZ guidelines.

### 3. Groundwater and Surface water Levels

#### 3.1. Groundwater levels

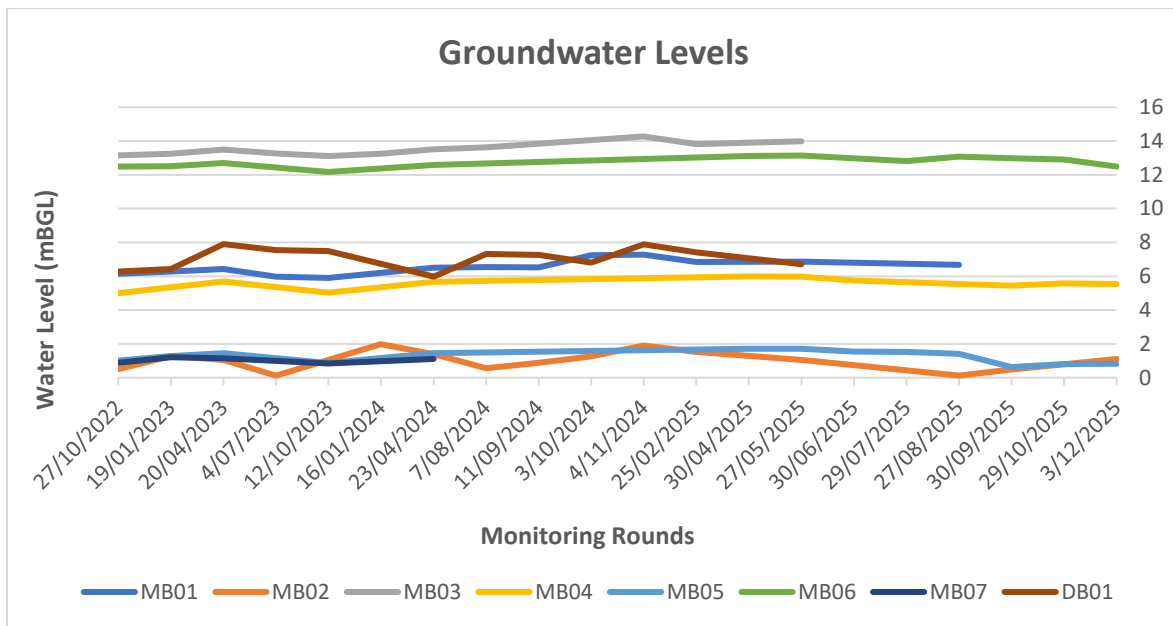
Groundwater levels in the shallow bores have fluctuated with some temporal lag as a result of rainfall events, whilst the deep bore has remained relatively stable, as it is connected to the regional aquifer. The previous 12 months have experienced 23% more rainfall than average for the Albany area (Figure 1) which has resulted in a relative increase in water tables overall towards the end of 2025 compared to the end of 2024 which would be attributable to the overall increase in annual rainfall.

There is no indication that construction works at the AMP site have impacted on the superficial or confined aquifer groundwater levels. The groundwater levels recorded in the monitoring bores in 2022-2025 are shown in Table 8 and Figure 9. The data gaps in Figure 9 are for when specific monitoring sites weren't tested for that monitoring round. Testing ceased at the Deep Bore (DB01) after the May 2025 monitoring round as samples could not be reliably collected from the bore and tank water was deemed not to be returning true values for the bore water quality.

**Table 8 –Groundwater levels**

	MB01	MB02	MB03	MB04	MB05	MB06	MB07	DB01
27/10/2022	6.15	0.51	13.16	5	1.02	12.48	0.88	6.28
19/01/2023	6.27	1.28	13.25	5.35	1.27	12.51	1.21	6.43
20/04/2023	6.42	1.05	13.49	5.69	1.45	12.7	1.15	7.9
4/07/2023	5.98	0.12	13.27	Not tested	Not tested	Not tested	Not tested	7.54
12/10/2023	5.9	1.05	13.11	5.03	0.87	12.17	0.84	7.48
16/01/2024	6.2	1.98	13.24	Not tested	1.17	Not tested	Not tested	Not tested
23/04/2024	6.5	1.39	13.51	5.67	1.44	12.585	1.11	5.98
7/08/2024	6.55	0.55	13.62	Not tested	Not tested	Not tested	Not tested	7.31
11/09/2024	7.2	1.45	Not tested	Not tested	Not tested	Not tested	Not tested	7.74
3/10/2024	7.25	1.25	Not tested	Not tested	Not tested	Not tested	Not tested	6.8
4/11/2024	7.28	1.9	14.27	Not tested	Not tested	Not tested	Not tested	7.89
25/02/2025	6.85	1.53	13.82	Not tested	Not tested	Not tested	Not tested	7.42
30/04/2025	Not tested	Not tested	Not tested	5.99	1.71	13.12	Not tested	Not tested
27/05/2025	6.86	1.05	13.99	5.98	1.71	13.14	Not tested	6.71
30/06/2025	Not tested	Not tested	Not tested	5.75	1.55	Not tested	Not tested	Not tested
29/07/2025	Not tested	Not tested	Not tested	5.65	1.52	12.81	Not tested	Not tested
27/08/2025	6.67	0.13	Not tested	5.53	1.41	13.08	Not tested	Not tested
30/09/2025	Not tested	0.48	Not tested	5.44	0.63	12.98	Not tested	Not tested
29/10/2025	Not tested	Not tested	Not tested	5.58	0.81	12.91	Not tested	Not tested
3/12/2025	Not tested	1.11	Not tested	5.54	0.82	12.49	Not tested	Not tested

**Figure 9: Groundwater levels**



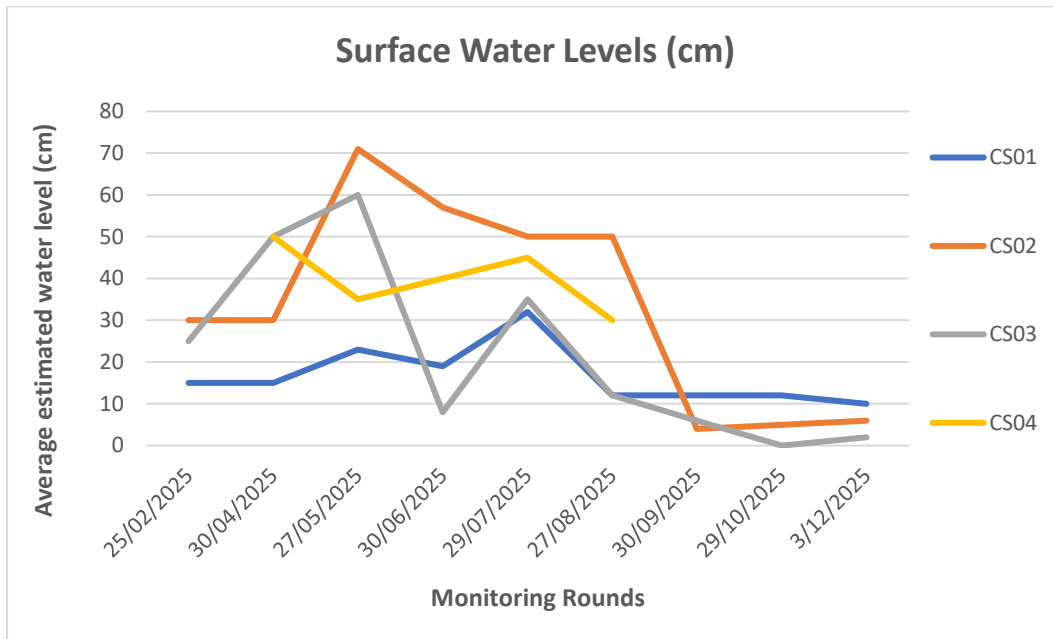
### 3.2. Surface water levels

Surface water levels within the creek fluctuated consistent with rainfall, with no indication that construction works have impacted on surface water levels within the creek. Surface water levels for the monitoring period are presented in Table 9 and Figure 10. The data gaps for CS04 is when the creek was dry at sampling points so no water was collected.

**Table 9: 2025 monitoring results surface water levels**

	CS01	CS02	CS03	CS04
25/02/2025	15	30	25	Not measured
30/04/2025	15	30	50	50
27/05/2025	23	71	60	35
30/06/2025	19	57	8	Dry
29/07/2025	32	50	35	45
27/08/2025	12	50	12	30
30/09/2025	12	4	6	Dry
29/10/2025	12	5	3	Dry
3/12/2025	10	6	2	Dry

**Figure 10: Surface water levels**



## 4. Fixed point photography

Fixed-point photography commenced in October 2022 as part of the DWER endorsed monitoring program. Fixed-point photography at monitoring sites (MB01-FP, MB02-FP, MB05-FP, MB05-FP2, MB07-FP, CS01-FP, CS02-FP and CS03-FP) show little change in the wetland morphology and vegetation structure since monitoring commenced and is shown in the fixed-point photography in Appendix E. The observed colour of the water at CS01 shows less tannin staining compared to historical data which may be attributable to the de-stocking of the property. Turbidity changes in CS01, CS02 and CS03 following above average rainfall months is clearly evident.

## 5. References

ANZECC & ARMCANZ (Australian and New Zealand Environment and Conservation Council and Agriculture and Resource Management Council of Australia and New Zealand) (2000). *Australian and New Zealand Guidelines for Fresh and Marine Water Quality*.

## **Appendix A**

### DWER endorsed monitoring program 2025

Table 10 – DWER endorsed AMP Monitoring Program for 2025

Development Proposal	Monitoring Proposal	Monitoring Parameters	Approximate Timeframe
Motocross and Offroad Precincts	<ul style="list-style-type: none"> <li>• MB1, MB2, MB3, DB1 and CS01, CS03 and CS04 (noting CS03 and CS04 when flowing water is present).</li> <li>• Bioretention basin: sediment testing for baseline data collection. Location to be defined prior to February 2024 testing. Hydrocarbons only.</li> <li>• Basin inlet/outlet water: tested following 1EY event, if possible, divert to sediment testing if required. Insitu and Hydrocarbons only. (SD1 and SD2)</li> </ul>	<ul style="list-style-type: none"> <li>• Continue visual inspection and fixed-point photography adjacent/within wetlands.</li> <li>• BGL /Water levels.</li> <li>• In-situ: pH, EC, TDS &amp; Dissolved Oxygen.</li> <li>• Laboratory: pH &amp; EC. Turbidity (CS01, CS03 &amp; CS04 only) Thermotolerant Coliforms &amp; E. coli (CS01, CS03 &amp; CS04 only) Heavy metals. TRH (C6-C10) &amp; MBTEXN</li> </ul>	Quarterly: February, May 2025.
*On demand *monitoring if major spill or environmental accident recorded. Level and composition of spill to determine testing regime. See Monitoring Response and contingency plan below.			Ongoing
A review of the monitoring program in consultation with DWER.			June 2025
BDS to investigate the potential for sediment sampling from the entry/exit main retention pond as a means of detecting any contaminants and report back to the group prior to February monitoring round. Noted as SD1 and SD2 approximate locations on mapping to coincide with drainage pipes on the property, shown below.			By February 2025
A review of the monitoring program in consultation with DWER to occur should Stage 2 construction commence. Construction to be discussed with DWER 1 month prior to commencement to allow time for approval for any variation in this plan. Refer the Monitoring Program Mapping for details of agreed monitoring locations.			Ongoing 2025

## **Appendix B**

### Surface and Groundwater location maps 2025





Albany Office: 29 Hercules Crescent Albany, WA 6330 (08) 9842 1575  
 Denmark Office: 7/40 South Coast Highway Denmark, WA 6333 (08) 9848 1309  
 Esperance Office: 2A/113 Dempster Street Esperance, WA 6450 (08) 9072 1382



Overview Map Scale 1:500,000

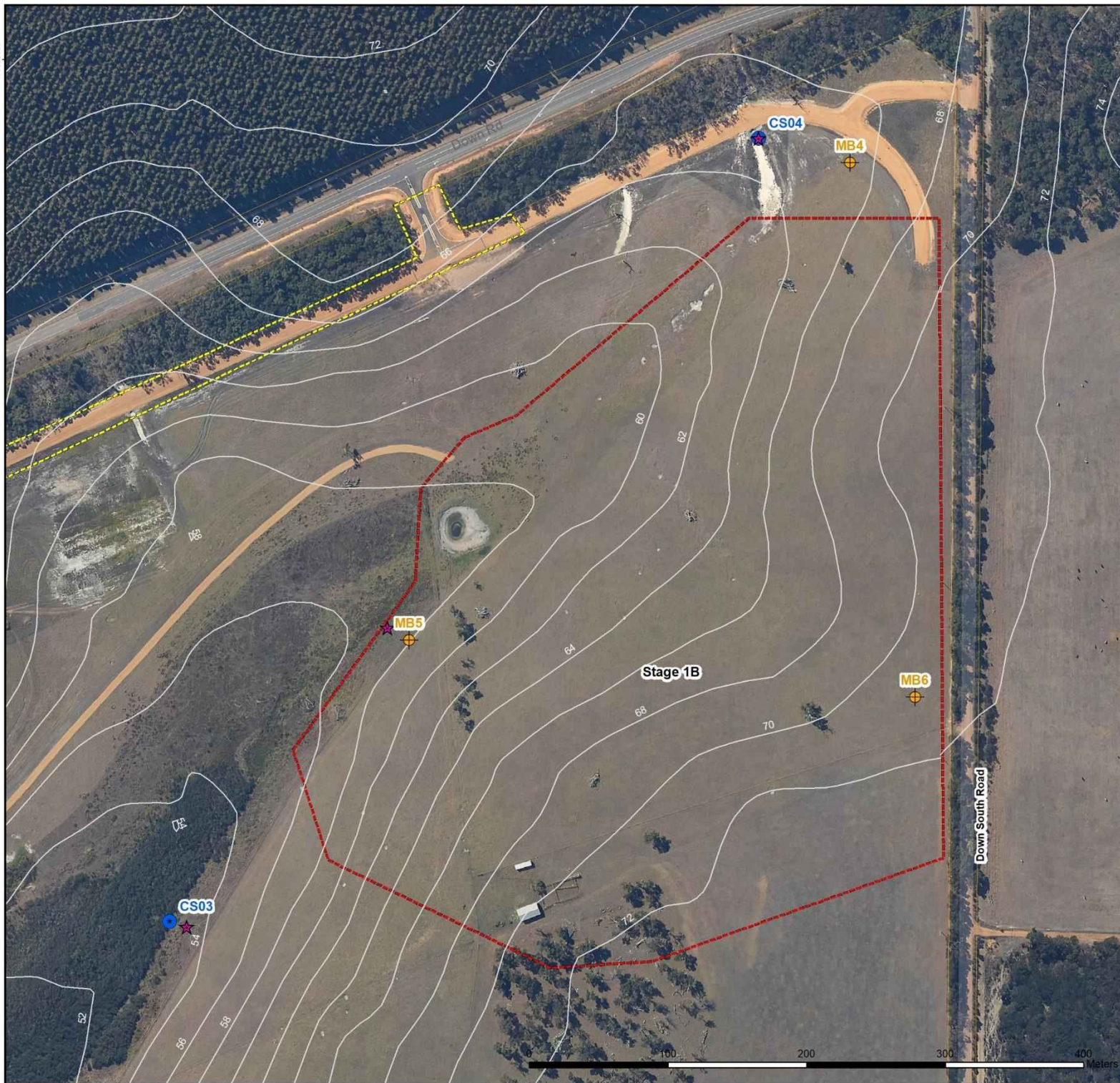
- Legend**
- Cadastre
  - Fixed Point Photography
  - Shallow groundwater bores
  - Surface water sites
  - Deep Bore
  - Sediment
  - Extent\_1A
  - Extent\_1B
  - Contours\_2m\_DPIRD\_072

Scale  
 1:5,750 @ A3  
 GDA MGA 2020 Zone 50

**Data Sources**  
 Aerial Imagery: WA Now, Landgate Subscription Imagery  
 Cadastre, Relief Contours and Roads: Landgate 2017  
 IRIS Road Network: Main Roads Western Australia 2017  
 Overview Map: World Topographic map service, ESRI 2012

**CLIENT**  
 Albany Motorsport Park  
 Lot 5780 Down Road South  
 Drome, WA 6330

Surface Water and Groundwater localities		
Site Assessment	QA Check	Drawn by
N/A	BMG	KPK
STATUS	FILE	DATE
FINAL	COA0019	07/04/2025



Albany Office: 29 Hercules Crescent Albany, WA 6330 (08) 9842 1575  
 Denmark Office: 7/40 South Coast Highway Denmark, WA 6333 (08) 9848 1309  
 Esperance Office: 2A/113 Dempster Street Esperance, WA 6450 (08) 9072 1382



Overview Map Scale 1:500,000

**Legend**

- Cadastre
- Fixed Point Photography
- Shallow groundwater bores
- Surface water sites
- Extent\_1B



Scale  
 1:2,750 @ A3  
 GDA MGA 2020 Zone 50

Data Sources  
 Aerial Imagery: WA Now, Landgate Subscription Imagery  
 Cadastre, Relief Contours and Roads: Landgate 2017  
 IRIS Road Network, Main Roads Western Australia 2017  
 Overview Map: World Topographic map service, ESRI 2012

CLIENT  
 Albany Motorsport Park  
 Lot 5780 Down Road South  
 Drome, WA 6330

**Stage 1 B Surface Water and Groundwater localities**

Site Assessment	QA Check	Drawn by
N/A	BMG	KPK
STATUS	FILE	DATE
FINAL	COA0019	07/04/2025

## **Appendix C**

Water quality monitoring results

CS01

Parameters	Guideline	27/10/2022	19/01/2023	20/04/2023	4/07/2023	12/10/2023	16/01/2024	23/04/2024	7/08/2024	11/09/2024	3/10/2024	6/11/2024	25/02/2025	30/04/2025	27/05/2025	30/06/2025	29/07/2025	27/08/2025	30/09/2025	29/10/2025	3/12/2025
<b>Physicochemical</b>																					
pH	7 to 8.5 <sup>1)</sup>	3.48	6.42	5.94	5.81	5.88	5.59	6.10	5.89	7.18	7.61	6.65	6.67	6.12	6.06	5.78	6.96	6.47	6.88	7.09	3.43
pH - lab	7 to 8.5 <sup>1)</sup>	6.4	-	6.1	6.2	6.3	-	6.3	6.2	6.4	6.2	6.3	6.5	6.4	6.1	6.5	6.6	6.6	6.5	6.4	6.5
Electrical Conductivity (µS/cm)	<1500 <sup>1)</sup>	401	802	409	534	705	745	906	600	650	565	771	871	793	640	317	267	661	871	1260	566
Electrical Conductivity - lab (µS/cm)	<1500 <sup>1)</sup>	580	-	860	-	690	-	920	650	700	570	810	930	880	800	670	280	390	640	740	760
Dissolved Oxygen (mg/L)		5.67	9.92	7.46	3.07	6.88	5.51	8.27	7.62	8.98	7.18	9.55	10.5	10.55	5.07	8.39	6.6	10.87	9.22	7.87	11.22
Dissolved Oxygen (%)	90 to 120 <sup>1)</sup>	57.2	111	76.9	33.5	69.3	59.5	83.2	74	86.9	71.3	97.8	117.3	109.9	53.4	86.9	64.4	111.7	92.80	86.2	125.1
Total Dissolved Solids (g/L)	<1 <sup>1)</sup>	0.686	0.513	0.266	0.341	0.451	0.477	0.58	0.395	0.427	0.362	0.494	0.557	0.507	0.415	0.206	0.174	0.423	0.558	0.809	0.362
Turbidity - lab (NTU)	<20 <sup>1)</sup>	-	-	-	18	2.5	2.4	2.9	6.8	3.2	36	4.4	2.8	4.5	29	17	190	27	11	11	5.2
<b>Nutrients (mg/L)</b>																					
TN	<1.5 <sup>1)</sup>	1.2	-	0.69	1.1	0.85	-	0.82	1.1	1.4	2.4	0.75	1.2	0.78	0.92	1.3	2.8	1.4	1.3	0.93	1.1
TKN N <sup>*</sup>		1.0	-	0.41	1.0	0.58	-	0.56	0.88	1.2	2.3	0.56	0.81	0.58	0.71	1.1	2.5	1.2	1	0.58	0.63
NH3_N	<0.04 <sup>1)</sup>	0.01	-	<0.0050	0.012	0.0086	-	0.0087	<0.0050	0.026	0.083	0.017	0.013	0.0062	0.0070	<0.0050	0.35	0.018	0.011	0.0098	0.013
NO3_N		0.21	-	0.28	0.12	0.27	-	0.26	0.21	0.14	0.57	0.86	0.39	0.20	0.20	0.2	0.21	0.16	0.29	0.35	0.46
NO2_N		<0.050	-	<0.0050	<0.0050	<0.0050	-	<0.0050	<0.050	<0.050	<0.20	<0.20	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
NOx_N	<0.1 <sup>1)</sup>	0.21	-	0.28	0.11	0.27	-	0.26	0.21	0.16	0.13	0.19	0.39	0.20	0.20	0.21	0.22	0.16	0.29	0.36	0.46
TP (Acid Extractable Metals - Groundwater)		-	-	-	-	-	-	<0.050	0.069	<0.050	0.071	<0.050	0.058	<0.050	<0.050	<0.050	0.11	0.067	<0.050	<0.050	<0.050
TP (Dissolved Metals - Groundwater)	<0.06 <sup>1)</sup>	0.10	-	<0.050	<0.050	0.067	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.50	<0.050	-	-	<0.050	<0.050	<0.050	<0.050	<0.050
PO4_P	<0.03 <sup>1)</sup>	0.019	-	0.0054	0.021	0.0065	-	<0.0050	0.010	0.050	0.011	<0.050	<0.0050	0.0064	0.0068	0.0051	0.015	0.014	0.01	<0.0050	<0.0050
<b>Dissolved Metals (µg/L)</b>																					
Arsenic, As	<13 <sup>2)</sup>	<1.0	-	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.0	1.4	<1.0	<1.0	<1.0
Cadmium, Cd	<0.2 <sup>2)</sup>	<0.10	-	<0.10	<0.10	<0.10	-	<0.10	<0.10	0.17	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium, Cr	<1.0 <sup>2)</sup>	1.1	-	1.0	1.1	<1.0	-	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	<1.0	1.9	4.1	2.0	1.2	1.1	<1.0
Copper, Cu	<1.4 <sup>2)</sup>	<1.0	-	<1.0	<1.0	<1.0	-	<1.0	<1.0	3.1	10	7.7	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Mercury, Hg	<0.6 <sup>2)</sup>	<0.050	-	<0.050	<0.050	<0.050	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nickel, Ni	<11 <sup>2)</sup>	<1.0	-	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Lead Pb	<3.4 <sup>2)</sup>	<1.0	-	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Zinc, Zn	<8.0 <sup>2)</sup>	8.2	-	1.0	2.2	1.1	-	3.7	4.5	7.0	8.9	22	16	<1.0	<1.0	<1.0	5.6	3.4	3.4	2.6	4.5
<b>Volatile Total Recoverable Hydrocarbons (µg/L)</b>																					
TRH C6 - C9		<10	-	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10
TRH C6 - C10		<10	-	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10
TRH C6 - C10 less BTEX (F1)		<10	-	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<20	<10
<b>MBTEX (µg/L)</b>																					
MTBE		<1.0	-	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
Benzene	950 <sup>2)</sup>	<1.0	-	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
Toluene		<1.0	-	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
Ethylbenzene		<1.0	-	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
m,p-xylene	350 <sup>2)</sup>	<2.0	-	<2.0	<2.0	<2.0	-	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0
o-xylene		<1.0	-	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
Total Xylene		<3.0	-	<3.0	<3.0	<3.0	-	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<4.0	<1.0
Naphthalene		<1.0	-	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0
<b>Semi-volatile Total Recoverable Hydrocarbons (µg/L)</b>																					
TRH C10 - C14		<50	-	<50	<50	<50	-	<50	<50	<50	150	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
TRH C15 - C28		<100	-	<100	<100	<100	-	<100	<100	220	140	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
TRH C29 - C36		<100	-	<100	<100	<100	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Total +ve TRH C10-C36		<50	-	<50	<50	<50	-	<50	<50	220	290	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
TRH >C10 - C16		<50	-	<50	<50	<50	-	<50	<50	53	150	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
TRH >C10 - C16 less N (F2)		<50	-	<50	<50	<50	-	<50	<50	53	150	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
TRH >C16 - C34		<100	-	<100	<100	<100	-	<100	<100	240	140	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
TRH >C34 - C40		<100	-	<100	<100	<100	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Total +ve TRH >C10-C40		<50	-	<50	<50	<50	-	<50	<50	290	290	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
<b>PAHs in water (µg/L)</b>																					
Naphthalene	16 <sup>2)</sup>	<0.10	-	<0.10	<0.10	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Acenaphthylene		<0.10	-	<0.10	<0.10	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Acenaphthene		<0.10	-	<0.10	<0.10	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Fluorene		<0.10	-	<0.10	<0.10	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Phenanthrene		<0.10	-	<0.10	<0.10	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Anthracene		<0.10	-	<0.10	<0.10	<															

MB01

Parameters	Guideline	27/10/2022	19/01/2023	20/04/2023	4/07/2023	12/10/2023	16/01/2024	23/04/2024	7/08/2024	11/09/2024	3/10/2024	6/11/2024	25/02/2025	27/05/2025	30/06/2025	29/07/2025	27/08/2025
<b>Physicochemical</b>																	
pH	7 - 8.5 <sup>1)</sup>	3.59	5.38	5.32	5.45	5.71	4.86	5.44	5.25	5.62	7.97	5.48	7.01	5.77	-	-	6.26
pH - lab	7 - 8.5 <sup>1)</sup>	5.7	-	5.4	-	5.90	-	5.4	5.5	5.6	6.1	6	5.8	5.8	-	-	5.9
Electrical Conductivity (µS/cm)	<1500 <sup>1)</sup>	311	287	295	280	292	279	338	279	274	278	275	26	287	-	-	249
Electrical Conductivity - lab (µS/cm)	<1500 <sup>1)</sup>	250	-	310	-	270	-	270	310	280	270	290	280	290	-	-	270
Dissolved Oxygen (mg/L)		0.8	1.2	2.98	2.77	6.84	4.5	2.05	1.34	3.45	9.51	5.76	6.10	0.53	-	-	6.97
Dissolved Oxygen (%)		8.4	14.2	31.6	29.2	71.0	48.5	22.1	14.3	37	99.4	61.3	71.9	52	-	-	71.8
Total Dissolved Solids (g/L)	<1 <sup>1)</sup>	0.202	0.186	0.191	0.182	0.190	0.181	0.219	0.182	0.183	0.181	0.179	0.019	0.187	-	-	0.163
Turbidity - lab (NTU)		-	-	-	-	3.0	-	19	130	17	3.9	1.3	2.7	20	-	-	1.9
<b>Nutrients (mg/L)</b>																	
TN	<1.5 <sup>1)</sup>	3.8	-	3.3	-	4.4	-	4.5	3.2	3.2	3.7	3.9	3.7	4.3	-	-	3.7
TKN N*		0.8	-	0.11	-	0.59	-	0.86	0.27	0.72	0.51	0.72	0.44	0.9	-	-	0.49
NH <sub>4</sub> -N	<0.04 <sup>1)</sup>	<0.0050	-	<0.0050	-	0.014	-	0.0066	<0.0050	0.014	0.068	0.048	<0.0050	0.0076	-	-	<0.0050
NO <sub>3</sub> -N		2.8	-	3.2	-	3.8	-	3.6	2.9	2.5	14	14	3.3	3.4	-	-	3.2
NO <sub>2</sub> -N		0.23	-	<0.0050	-	<0.0050	-	<0.0050	<0.0050	<0.050	<0.020	<0.020	<0.0050	<0.0050	-	-	<0.0050
NOx-N	<0.1 <sup>1)</sup>	3.0	-	3.2	-	3.8	-	3.6	2.9	2.5	3.2	3.2	3.3	3.4	-	-	3.2
TP (Acid Extractable Metals - Groundwater)	<0.06 <sup>1)</sup>	<0.050	-	<0.050	-	<0.050	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-	-	<0.050
TP (Dissolved Metals - Groundwater)		-	-	-	-	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-	-	<0.050
PO <sub>4</sub> -P	<0.03 <sup>1)</sup>	<0.0050	-	<0.0050	-	0.005	-	0.0072	<0.0050	0.0084	<0.0050	<0.0050	0.0053	0.0094	-	-	<0.0050
<b>Dissolved Metals (µg/L)</b>																	
Arsenic, As	<13 <sup>2)</sup>	<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0
Cadmium, Cd	<0.2 <sup>2)</sup>	<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<1.0	<0.10	<0.10	-	-	<0.10
Chromium, Cr	<1.0 <sup>2)</sup>	<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0
Copper, Cu	<1.4 <sup>2)</sup>	<1.0	-	<1.0	-	1.5	-	<1.0	<1.0	<1.0	3.1	3.6	1.1	1.0	-	-	1.0
Mercury, Hg	<0.6 <sup>2)</sup>	<0.050	-	<0.050	-	<0.050	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-	-	<0.050
Nickel, Ni	<11 <sup>2)</sup>	<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0
Lead Pb	<3.4 <sup>2)</sup>	<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0
Zinc, Zn	<8.0 <sup>2)</sup>	5.5	-	1.5	-	27	-	14	4	2.9	33	38	18	34	-	-	21
<b>Volatile Total Recoverable Hydrocarbons (µg/L)</b>																	
TRH C6 - C9		<10	-	<10	-	<10	-	<10	<10	<10	<10	<10	<10	<10	-	-	<10
TRH C6 - C10		<10	-	<10	-	<10	-	<10	<10	<10	<10	<10	<10	<10	-	-	<10
TRH C6 - C10 less BTEX (F1)		<10	-	<10	-	<10	-	<10	<10	<10	<10	<10	<10	<10	-	-	<10
<b>MBTEXN (µg/L)</b>																	
MTBE		<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0
Benzene	950 <sup>2)</sup>	<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0
Toluene		<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0
Ethylbenzene		<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0
m+p-xylene	350 <sup>2)</sup>	<2.0	-	<2.0	-	<2.0	-	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-	-	<2.0
o-xylene		<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0
Total Xylene		<3.0	-	<3.0	-	<3.0	-	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	-	-	<3.0
Naphthalene		<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0
<b>Semi-volatile Total Recoverable Hydrocarbons (µg/L)</b>																	
TRH C10 - C14		<50	-	<50	-	<50	-	<50	<50	<50	<50	<50	<50	<50	-	-	<50
TRH C15 - C28		<100	-	<100	-	<100	-	<100	<100	<100	<100	<100	<100	<100	-	-	<100
TRH C29 - C36		<100	-	<100	-	<100	-	<100	<100	<100	<100	<100	<100	<100	-	-	<100
Total +ve TRH C10-C36		<50	-	<50	-	<50	-	<50	<50	<50	<50	<50	<50	<50	-	-	<50
TRH >C10 - C16		<50	-	<50	-	<50	-	<50	<50	<50	<50	<50	<50	<50	-	-	<50
TRH >C10 - C16 less N (F2)		<50	-	<50	-	<50	-	<50	<50	<50	<50	<50	<50	<50	-	-	<50
TRH >C16 - C34		<100	-	<100	-	<100	-	<100	<100	<100	<100	<100	<100	<100	-	-	<100
TRH >C34 - C40		<100	-	<100	-	<100	-	<100	<100	<100	<100	<100	<100	<100	-	-	<100
Total +ve TRH >C10-C40		<50	-	<50	-	<50	-	<50	<50	<50	<50	<50	<50	<50	-	-	<50
<b>PAHs in water (µg/L)</b>																	
Naphthalene	16 <sup>2)</sup>	<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10
Acenaphthylene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10
Acenaphthene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10
Fluorene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10
Phenanthrene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10
Anthracene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10
Fluoranthene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10
Pyrene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10
Benzo(a)anthracene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10
Chrysene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10
Benzo(b,j,k)fluoranthene		<0.20	-	<0.20	-	<0.20	-	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	-	-	<0.20
Benzo(a)pyrene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10
Indeno(1,2,3-c,d)pyrene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10
Dibenzo(a,h)anthracene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10
Benzo(g,h,i)perylene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10
Total +ve PAHs		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10
<b>Surfactants (mg/L)</b>																	
MBAS		<0.10	-	0.11	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10
<b>Microbial Testing (cfu/100mL)</b>																	
Thermotolerant Coliforms		<10	-	<10	-	20	-	20	<10	<10	2	<1	<10	50	-	-	<10
E.coli		<10	-	<10	-	20	-	20	<10	<10	1	<1	<10	50	-	-	<10

<sup>1)</sup> ANZECC and ARMCANZ (2000) Trigger values for South-west Australia for slightly-disturbed wetland ecosystems; target exceedance printed in red.  
<sup>2)</sup> ANZECC and ARMCANZ (2000) Trigger values for toxicants in freshwater ecosystems at 95% level of protection, stated otherwise; target exceedance printed in red.

\* TKN as N by calculation

MB02

Parameters	Guideline	27/10/2022	19/01/2023	20/04/2023	4/07/2023	12/10/2023	16/01/2024	23/04/2024	7/08/2024	11/09/2024	3/10/2024	6/11/2024	25/02/2025	27/05/2025	30/06/2025	27/08/2025	27/08/2025	30/09/2025	3/12/2025
<b>Physicochemical</b>																			
pH	7 to 8.5 <sup>1)</sup>	2.93	5.23	5.41	5.73	4.96	4.52	5.49	5.58	4.77	7.48	4.89	6.09	5.68	-	-	5.56	6.10	5.01
pH - lab	7 to 8.5 <sup>1)</sup>	5.8	-	5	-	4.9	-	4.8	4.7	4.6	4.4	4.6	5.2	4.9	-	-	5.4	5.5	5.4
Electrical Conductivity (µS/cm)	<1500 <sup>1)</sup>	280	199	204	286	239	202	205	293	260	275	262	222	270	-	-	524	507	201
Electrical Conductivity - lab (µS/cm)	<1500 <sup>1)</sup>	240	-	190	-	230	-	200	280	280	280	260	230	260	-	-	270	260	250
Dissolved Oxygen (mg/L)		0.9	1.07	3.22	2.07	1.13	1.48	1.21	1.41	2.86	2.4	2.62	2.82	3.18	-	-	4.64	11.50	10.05
Dissolved Oxygen (%)		9.5	13	36.5	19.8	11.80	16.1	13.2	14.9	30.6	24.5	27.5	32.6	38	-	-	47.4	116.60	110.9
Total Dissolved Solids (g/L)	<1 <sup>1)</sup>	0.182	0.132	0.132	0.186	0.156	0.131	0.134	0.19	0.724	0.179	0.169	0.144	0.175	-	-	0.335	0.325	0.131
Turbidity - lab (NTU)	<20 <sup>1)</sup>	-	-	-	-	80	-	460	380	270	14	190	190	150	-	-	150	23	190
<b>Nutrients (mg/L)</b>																			
TN	<1.5 <sup>1)</sup>	0.67	-	0.22	-	0.29	-	1.2	0.72	0.88	0.48	0.49	0.46	0.78	-	-	0.91	0.37	0.40
TKN_N*		0.58	-	0.22	-	0.29	-	1.2	0.71	0.88	0.45	0.46	0.42	0.76	-	-	0.42	0.30	0.40
NH <sub>4</sub> _N	<0.04 <sup>1)</sup>	0.16	-	0.017	-	0.073	-	0.040	0.015	0.029	0.064	0.023	0.038	0.0056	-	-	<0.0050	0.017	0.018
NO <sub>3</sub> _N		0.085	-	<0.0050	-	0.0064	-	0.020	0.007	<0.050	0.13	0.12	0.036	0.02	-	-	0.49	0.07	<0.0050
NO <sub>2</sub> _N		0.0071	-	<0.0050	-	<0.0050	-	<0.0050	<0.0050	<0.050	<0.020	<0.020	<0.0050	<0.0050	-	-	<0.0050	<0.0050	<0.0050
NOx_N	<0.1 <sup>1)</sup>	0.1	-	0.0050	-	0.0081	-	0.021	0.0086	<0.050	0.031	0.029	0.038	0.020	-	-	0.49	0.073	0.0051
Groundwater)	<0.06 <sup>1)</sup>	0.06	-	<0.050	-	0.079	-	0.11	0.062	<0.050	<0.050	0.12	0.051	0.054	-	-	<0.050	<0.050	<0.050
TP (Dissolved Metals - Groundwater)		-	-	-	-	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-	-	-	<0.050	<0.050	<0.050
PO <sub>4</sub> _P	<0.03 <sup>1)</sup>	<0.0050	-	<0.0050	-	<0.0050	-	<0.0050	<0.0050	0.0056	0.0055	0.0094	<0.0050	<0.0050	-	-	<0.0050	<0.0050	<0.0050
<b>Dissolved Metals (µg/L)</b>																			
Arsenic, As	<13 <sup>2)</sup>	<1.0	-	1.4	-	<1.0	-	2.3	<1.0	<1.0	<1.0	<1.0	1.7	<1.0	-	-	<1.0	<1.0	<1.0
Cadmium, Cd	<0.2 <sup>2)</sup>	<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10	<0.10	<0.10
Chromium, Cr	<1.0 <sup>2)</sup>	<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	<1.0	<1.0
Copper, Cu	<1.4 <sup>2)</sup>	<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	1.6	4.9	<1.0	<1.0	1.4	-	-	<1.0	1.2	<1.0
Mercury, Hg	<0.6 <sup>2)</sup>	<0.050	-	<0.050	-	<0.050	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-	-	<0.050	<0.050	<0.050
Nickle, Ni	<11 <sup>2)</sup>	4.8	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	-	-	<1.0	<1.0	<1.0
Lead Pb	<3.4 <sup>2)</sup>	<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	<1.0	<1.0
Zinc, Zn	<8.0 <sup>2)</sup>	13	-	4.9	-	3.9	-	7.3	6.8	8.9	12	15	17	25	-	-	2.7	8.5	6.2
<b>Volatile Total Recoverable Hydrocarbons (µg/L)</b>																			
TRH C6 - C9		<10	-	<10	-	<10	-	<10	<10	<10	<10	<10	<10	<10	-	-	<10	<10	<10
TRH C6 - C10		<10	-	<10	-	<10	-	<10	<10	<10	<10	<10	<10	<10	-	-	<10	<10	<10
TRH C6 -C10 less BTEX (F1)		<10	-	<10	-	<10	-	<10	<10	<10	<10	<10	<10	<10	-	-	<10	<10	<10
<b>MBTEXN (µg/L)</b>																			
MTBE		<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	<1.0	<1.0
Benzene	950 <sup>2)</sup>	<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	<1.0	<1.0
Toluene		<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	<1.0	<1.0
Ethylbenzene		<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	<1.0	<1.0
m+p-xylene	350 <sup>2)</sup>	<2.0	-	<2.0	-	<2.0	-	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-	-	<2.0	<2.0	<2.0
o-xylene		<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	<1.0	<1.0
Total Xylene		<3.0	-	<3.0	-	<3.0	-	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	-	-	<3.0	<3.0	<3.0
Naphthalene		<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	<1.0	<1.0
<b>Semi-volatile Total Recoverable Hydrocarbons (µg/L)</b>																			
TRH C10 - C14		<50	-	<50	-	<50	-	<50	<50	<50	<50	<50	<50	<50	-	-	<50	<50	<50
TRH C15 - C28		110	-	<100	-	<100	-	<100	<100	<100	<100	<100	<100	<100	-	-	<100	<100	<100
TRH C29 - C36		<100	-	<100	-	<100	-	<100	<100	<100	<100	<100	<100	<100	-	-	<100	<100	<100
Total +ve TRH C10-C36		110	-	<50	-	<50	-	<50	<50	<50	<50	<50	<50	<50	-	-	<50	<50	<50
TRH >C10 - C16		<50	-	<50	-	<50	-	<50	<50	<50	<50	<50	<50	<50	-	-	<50	<50	<50
TRH >C10 -C16 less N (F2)		<50	-	<50	-	<50	-	<50	<50	<50	<50	<50	<50	<50	-	-	<50	<50	<50
TRH >C16 - C34		120	-	<100	-	<100	-	<100	<100	<100	<100	<100	<100	<100	-	-	<100	<100	<100
TRH >C34 - C40		<100	-	<100	-	<100	-	<100	<100	<100	<100	<100	<100	<100	-	-	<100	<100	<100
Total +ve TRH >C10-C40		120	-	<50	-	<50	-	<50	<50	<50	<50	<50	<50	<50	-	-	<50	<50	<50
<b>PAHs in water (µg/L)</b>																			
Naphthalene	16 <sup>2)</sup>	<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10	<0.10	<0.10
Acenaphthylene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10	<0.10	<0.10
Acenaphthene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10	<0.10	<0.10
Fluorene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10	<0.10	<0.10
Phenanthrene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10	<0.10	<0.10
Anthracene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10	<0.10	<0.10
Fluoranthene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10	<0.10	<0.10
Pyrene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10	<0.10	<0.10
Benzo(a)anthracene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10	<0.10	<0.10
Chrysene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10	<0.10	<0.10
Benzo(b,j,k)fluoranthene		<0.20	-	<0.20	-	<0.20	-	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	-	-	<0.20	<0.20	<0.20
Benzo(a)pyrene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10	<0.10	<0.10
Indeno(1,2,3-c,d)pyrene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	<0.10	<0.10	<0.10
Dibenzo(a,h)anthracene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10										

MB03

Parameters	Guideline	27/10/2022	19/01/2023	20/04/2023	4/07/2023	12/10/2023	16/01/2024	23/04/2024	7/08/2024	11/09/2024	3/10/2024	6/11/2024	25/02/2025	27/05/2025	30/06/2025
<b>Physicochemical</b>															
pH	7 to 8.5 <sup>1)</sup>	3.61	5.9	5.24	6.33	5.12	5.13	5.13	Dry	Dry	-	10.83	5.98	DRY	-
pH - lab	7 to 8.5 <sup>1)</sup>	6.8	-	5.4	-	5.40	-	5.3	Dry	Dry	-	5.4	5.6	-	-
Electrical Conductivity (uS/cm)	<1500 <sup>1)</sup>	483	250	208	554	242	209	184	Dry	Dry	-	121	336	-	-
Electrical Conductivity - lab (uS/cm)	<1500 <sup>1)</sup>	740	-	190	-	220	-	200	Dry	Dry	-	260	380	-	-
Dissolved Oxygen (mg/L)		3.15	5.05	9.24	6.31	5.55	6.17	4.17	Dry	Dry	-	7.61	8.02	-	-
Dissolved Oxygen (%)		33.2	61.8	99.9	64.3	59.2	66.3	44	Dry	Dry	-	78.2	93.5	-	-
Total Dissolved Solids (g/L)	<1 <sup>1)</sup>	0.314	0.163	0.135	0.355	0.157	0.136	0.120	Dry	Dry	-	0.079	0.218	-	-
Turbidity - lab (NTU)	10-100 <sup>1)</sup>	-	-	-	-	950	-	1100	Dry	Dry	-	290	1000	-	-
<b>Dissolved Metals (µg/L)</b>															
TN	<1.5 <sup>1)</sup>	0.55	-	2.0	-	1.1	-	3.0	-	-	-	2.8	2.9	-	-
TKN_N*		0.33	-	0.13	-	0.63	-	1.8	-	-	-	0.94	2.1	-	-
NH <sub>3</sub> _N	<0.04 <sup>1)</sup>	<0.0050	-	<0.0050	-	<0.0050	-	<0.0050	-	-	-	0.033	0.076	-	-
NO <sub>3</sub> _N		0.21	-	1.9	-	0.48	-	1.2	-	-	-	8.4	0.86	-	-
NO <sub>2</sub> _N		0.018	-	8.3	-	<0.0050	-	<0.0050	-	-	-	<0.020	<0.0050	-	-
Nox_N	<0.1 <sup>1)</sup>	0.2	-	1.9	-	0.49	-	1.2	-	-	-	1.9	0.86	-	-
TP (Acid Extractable Metals -		-	-	-	-	-	-	0.1	-	-	-	0.15	0.41	-	-
TP (Dissolved Metals - Groundwater)	<0.06 <sup>1)</sup>	0.16	-	<0.050	-	0.13	-	<0.050	-	-	-	<0.050	<0.050	-	-
PO <sub>4</sub> _P	<0.03 <sup>1)</sup>	<0.0050	-	<0.0050	-	<0.0050	-	<0.0050	-	-	-	0.019	<0.0050	-	-
<b>Volatile Total Recoverable Hydrocarbons (µg/L)</b>															
TRH C6 - C9		220	-	<10	-	<10	-	<10	-	-	-	<10	<10	-	-
TRH C6 - C10		270	-	<10	-	<10	-	<10	-	-	-	<10	<10	-	-
TRH C6 -C10 less BTEX (F1)		270	-	<10	-	<10	-	<10	-	-	-	<10	<10	-	-
<b>MBTEXN (µg/L)</b>															
MTBE		<1.0	-	<1.0	-	<1.0	-	<1.0	-	-	-	<1.0	<1.0	-	-
Benzene	950 <sup>2)</sup>	<1.0	-	<1.0	-	<1.0	-	<1.0	-	-	-	<1.0	<1.0	-	-
Toluene		<1.0	-	<1.0	-	<1.0	-	<1.0	-	-	-	<1.0	4.2	-	-
Ethylbenzene		<1.0	-	<1.0	-	<1.0	-	<1.0	-	-	-	<1.0	<1.0	-	-
m+p-xylene		<2.0	-	<2.0	-	<2.0	-	<2.0	-	-	-	<2.0	<2.0	-	-
o-xylene	350 <sup>2)</sup>	<1.0	-	<1.0	-	<1.0	-	<1.0	-	-	-	<1.0	<1.0	-	-
Total Xylene		<3.0	-	<3.0	-	<3.0	-	<3.0	-	-	-	<3.0	<3.0	-	-
Naphthalene		<1.0	-	<1.0	-	<1.0	-	<1.0	-	-	-	<1.0	<1.0	-	-
<b>Semi-volatile Total Recoverable Hydrocarbons (µg/L)</b>															
TRH C10 - C14		68	-	<50	-	<50	-	<50	-	-	-	<50	<50	-	-
TRH C15 - C28	950 <sup>2)</sup>	630	-	130	-	<100	-	<100	-	-	-	<100	<100	-	-
TRH C29 - C36		1000	-	250	-	<100	-	<100	-	-	-	<100	<100	-	-
Total +ve TRH C10-C36		1698	-	380	-	<50	-	<50	-	-	-	<50	<50	-	-
TRH >C10 - C16		68	-	<50	-	<50	-	<50	-	-	-	<50	<50	-	-
TRH >C10 -C16 less N (F2)	350 <sup>2)</sup>	68	-	<50	-	<50	-	<50	-	-	-	<50	<50	-	-
TRH >C16 - C34		1400	-	310	-	<100	-	<100	-	-	-	<100	<100	-	-
TRH >C34 - C40		970	-	190	-	<100	-	<100	-	-	-	<100	<100	-	-
Total +ve TRH >C10-C40		2438	-	500	-	<50	-	<50	-	-	-	<50	<50	-	-
<b>PAHs in water (µg/L)</b>															
Naphthalene	16 <sup>2)</sup>	<0.10	-	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	<0.10	-	-
Acenaphthylene		<0.10	-	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	<0.10	-	-
Acenaphthene		<0.10	-	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	<0.10	-	-
Fluorene		<0.10	-	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	<0.10	-	-
Phenanthrene		<0.10	-	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	<0.10	-	-
Anthracene		<0.10	-	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	<0.10	-	-
Fluoranthene		<0.10	-	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	<0.10	-	-
Pyrene		<0.10	-	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	<0.10	-	-
Benzo(a)anthracene		<0.10	-	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	<0.10	-	-
Chrysene		<0.10	-	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	<0.10	-	-
Benzo(b,j+k)fluoranthene		<0.20	-	<0.20	-	<0.20	-	<0.20	-	-	-	<0.20	<0.20	-	-
Benzo(a)pyrene		<0.10	-	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	<0.10	-	-
Indeno(1,2,3-c,d)pyrene		<0.10	-	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	<0.10	-	-
Dibenzo(a,h)anthracene		<0.10	-	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	<0.10	-	-
Benzo(g,h,i)perylene		<0.10	-	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	<0.10	-	-
Total +ve PAHs		<0.10	-	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	<0.10	-	-
<b>Surfactants (mg/L)</b>															
MBAS		<0.10	-	0.24	-	<0.10	-	0.12	-	-	-	<0.10	<0.10	-	-
<b>Microbial Testing (cfu/100mL)</b>															
Thermotolerant Coliforms		30	-	<10	-	<10	-	<10	-	-	-	<10	<10	-	-
E.coli		30	-	<10	-	<10	-	<10	-	-	-	<10	<10	-	-

<sup>1)</sup> ANZECC and ARMCANZ (2000) Trigger values for South-west Australia for slightly-disturbed wetland ecosystems; target exceedance printed in red.

<sup>2)</sup> ANZECC and ARMCANZ (2000) Trigger values for toxicants in freshwater ecosystems at 95% level of protection, stated otherwise; target exceedance printed in red.

\* TKN as N by calculation

\* 03/10/24 no groundwater present to test (suspected surface water only)

\*\* 11/09/2024 not enough for laboratory testing.

DB01

Parameters	Guideline	27/10/2022	19/01/2023	20/04/2023	4/07/2023	12/10/2023	16/01/2024	23/04/2024	7/08/2024	11/09/2024	3/10/2024	6/11/2024	25/02/2025	27/05/2025	30/06/2025
<b>Physicochemical</b>															
pH	7 to 8.5 <sup>1)</sup>	3.65	5.3	5.42	5.56	5.66	-	5.21	5.1	5.54	7.29	5.13	5.12	5.88	-
pH - lab	7 to 8.5 <sup>1)</sup>	6.2	-	5.4	-	6.0	-	5.4	5.4	5.6	5.8	5.3	5.3	6.0	-
Electrical Conductivity (µS/cm)	300-1500 <sup>1)</sup>	1210	1370	1370	1370	1300	-	1190	1170	1120	1220	1240	1250	1260	-
Electrical Conductivity - lab (µS/cm)	300-1500 <sup>1)</sup>	1000	-	1300	-	1200	-	1200	1200	1200	1200	1200	1300	1300	-
Dissolved Oxygen (mg/L)		3.87	2.25	9.5	1.87	2.96	-	4.38	5.24	17.4	5.02	6.69	4.04	4.87	-
Dissolved Oxygen (%)		40.7	25.6	100.7	19.2	31.4	-	48.9	53	176	51.7	74.8	46.7	5.2	-
Total Dissolved Solids (g/L)	<1 <sup>1)</sup>	0.775	0.874	0.88	0.88	0.832	-	0.764	0.751	0.741	0.778	0.779	0.802	0.805	-
Turbidity - lab (NTU)		-	-	-	-	3.5	-	6.3	13	0.24	1.4	0.34	2.6	0.48	-
<b>Nutrients (mg/L)</b>															
TN	<1.5 <sup>1)</sup>	0.57	-	<0.10	-	0.14	-	0.21	0.12	0.13	0.29	<0.10	0.36	0.60	-
TKN_N*		0.21	-	0.14	-	0.13	-	0.22	0.10	0.13	0.15	<0.10	0.23	0.24	-
NH3_N	<0.04 <sup>1)</sup>	<0.0050	-	<0.0050	-	0.026	-	<0.0050	0.017	0.024	0.12	<0.0050	0.011	<0.0050	-
NO3_N		0.35	-	0.0097	-	0.0055	-	<0.0050	0.018	<0.050	0.63	<0.020	0.12	0.37	-
NO2_N		<0.0050	-	<0.0050	-	<0.0050	-	<0.0050	<0.0050	<0.050	<0.020	<0.020	<0.0050	<0.0050	-
NOx_N	<0.1 <sup>1)</sup>	0.35	-	0.011	-	0.0077	-	<0.0050	0.023	<0.050	0.15	<0.0050	0.12	0.37	-
Groundwater)		-	-	-	-	-	-	<0.0050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-
TP (Dissolved Metals - Groundwater)	<0.06 <sup>1)</sup>	<0.050	-	<0.050	-	<0.050	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-	-
PO4_P	<0.03 <sup>1)</sup>	0.019	-	<0.0050	-	<0.0050	-	<0.0050	<0.0050	0.0091	0.012	<0.0050	<0.0050	0.0066	-
<b>Dissolved Metals (µg/L)</b>															
Arsenic, As	<13 <sup>2)</sup>	<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-
Cadmium, Cd	<0.2 <sup>2)</sup>	0.1	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
Chromium, Cr	<1.0 <sup>2)</sup>	<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-
Copper, Cu	<1.4 <sup>2)</sup>	<1.0	-	<1.0	-	<1.0	-	10	2.0	3.3	2.6	2.9	4.0	4.0	-
Mercury, Hg	<0.6 <sup>2)</sup>	<0.050	-	<0.050	-	<0.050	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-
Nickle, Ni	<11 <sup>2)</sup>	1.8	-	<1.0	-	1.1	-	4.3	4.4	2	8.1	9.1	2.7	1.2	-
Lead, Pb	<3.4 <sup>2)</sup>	<1.0	-	<1.0	-	<1.0	-	16	2.8	<1.0	<1.0	1.1	<1.0	<1.0	-
Zinc, Zn	<8.0 <sup>2)</sup>	46	-	3.4	-	14	-	35	110	240	150	220	120	31	-
<b>Volatile Total Recoverable Hydrocarbons (µg/L)</b>															
TRH C6 - C9		<10	-	<10	-	<10	-	<10	<10	<10	<10	<10	<10	<10	-
TRH C6 - C10		<10	-	<10	-	<10	-	<10	<10	<10	<10	<10	<10	<10	-
TRH C6 -C10 less BTEX (F1)		<10	-	<10	-	<10	-	<10	<10	<10	<10	<10	<10	<10	-
<b>MBTEXN (µg/L)</b>															
MTBE		<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-
Benzene	950 <sup>2)</sup>	<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-
Toluene		<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-
Ethylbenzene		<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-
m+p-xylene		<2.0	-	<2.0	-	<2.0	-	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-
o-xylene	350 <sup>2)</sup>	<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-
Total Xylene		<3.0	-	<3.0	-	<3.0	-	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	-
Naphthalene		<1.0	-	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-
<b>Semi-volatile Total Recoverable Hydrocarbons (µg/L)</b>															
TRH C10 - C14		<50	-	<50	-	<50	-	<50	<50	<50	<50	<50	<50	<50	-
TRH C15 - C28		<100	-	<100	-	<100	-	<100	<100	<100	<100	<100	<100	<100	-
TRH C29 - C36		<100	-	<100	-	<100	-	<100	<100	<100	<100	<100	<100	<100	-
Total +ve TRH C10-C36		<50	-	<50	-	<50	-	<50	<50	<50	<50	<50	<50	<50	-
TRH >C10 - C16		<50	-	<50	-	<50	-	<50	<50	<50	<50	<50	<50	<50	-
TRH >C10 -C16 less N (F2)		<50	-	<50	-	<50	-	<50	<50	<50	<50	<50	<50	<50	-
TRH >C16 - C34		<100	-	<100	-	<100	-	<100	<100	<100	<100	<100	<100	<100	-
TRH >C34 - C40		<100	-	<100	-	<100	-	<100	<100	<100	<100	<100	<100	<100	-
Total +ve TRH >C10-C40		<50	-	<50	-	<50	-	<50	<50	<50	<50	<50	<50	<50	-
<b>PAHs in water (µg/L)</b>															
Naphthalene	16 <sup>2)</sup>	<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
Acenaphthylene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
Acenaphthene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
Fluorene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
Phenanthrene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
Anthracene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
Fluoranthene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
Pyrene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
Benzo(a)anthracene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
Chrysene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
Benzo(b,j,k)fluoranthene		<0.20	-	<0.20	-	<0.20	-	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	-
Benzo(a)pyrene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
Indeno(1,2,3-c,d)pyrene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
Dibenzo(a,h)anthracene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
Benzo(g,h,i)perylene		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
Total +ve PAHs		<0.10	-	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
<b>Surfactants (mg/L)</b>															
MBAS		<0.10	-	0.27	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-
<b>Microbial Testing (cfu/100mL)</b>															
Thermotolerant Coliforms		10	-	<10	-	<10	-	<10	<10	<1	<1	<1	<10	<10	-
E.coli		10	-	<10	-	<10	-	<10	<10	<1	<1	<1	<10	<10	-

<sup>1)</sup> ANZECC and ARMCANZ (2000) Trigger values for South-west Australia for slightly-disturbed wetland ecosystems; target exceedance printed in red.

<sup>2)</sup> ANZECC and ARMCANZ (2000) Trigger values for toxicants in freshwater ecosystems at 95% level of protection; target exceedance printed in red.

\* TKN as N by calculation

## **Appendix D**

Long-term water quality monitoring results

## Long-term water quality monitoring results

Groundwater and surface water monitoring has been conducted at the AMP site since 2018. Water quality monitoring results from October 2022 to December 2025 have been compared to historical monitoring results from the 2018/2019 monitoring period for pH, EC, TN and TP. Noting, that some monitoring sites have altered since the 2018/2019 monitoring period. CS01, CS02 and DB01 remain in the same location, whilst SB04 is in the same location as MB02 and SB09 is in the same location as MB07. All other monitoring sites as part of the 2018/2019 monitoring program are either not in the vicinity of the current monitoring sites or they have insufficient data to be compared to the current sites. The data gaps are for when specific monitoring sites weren't tested for that monitoring round.

Figure 11: Long-term pH levels at the AMP site (May 2018 to December 2025)

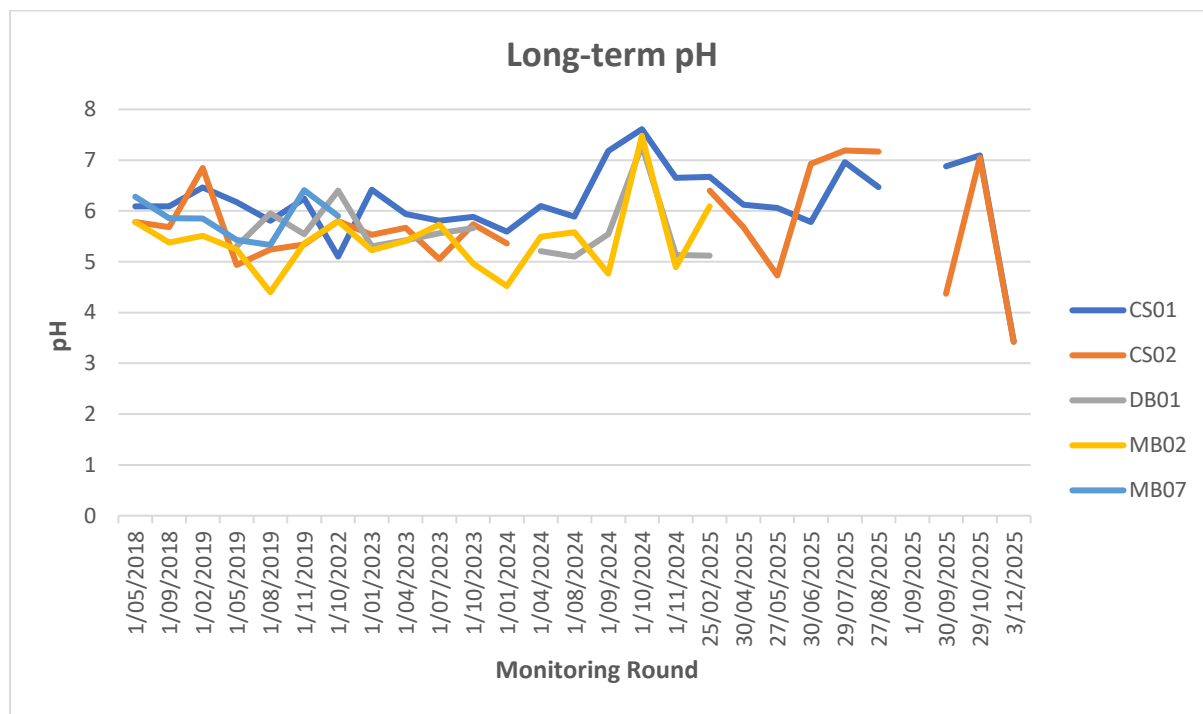


Figure 12: Long-term EC levels at the AMP site (February 2018 to December 2025)

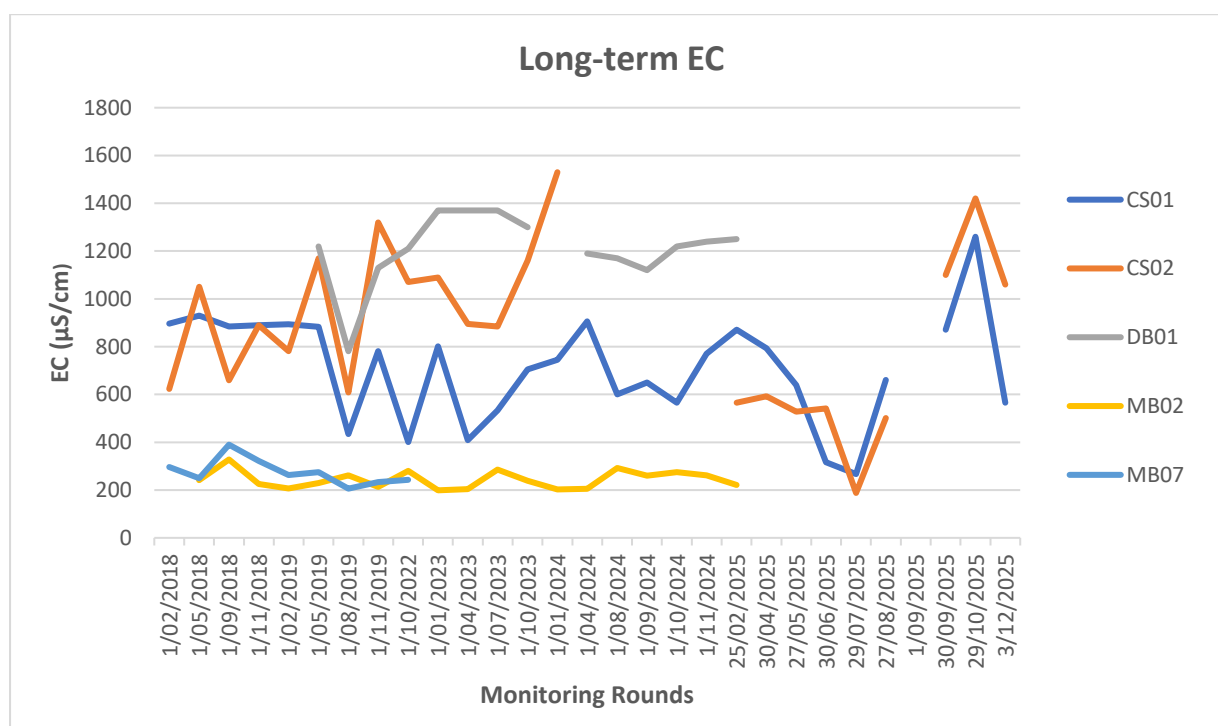


Figure 13: Long-term TN levels at the AMP site (February 2018 to December 2025)

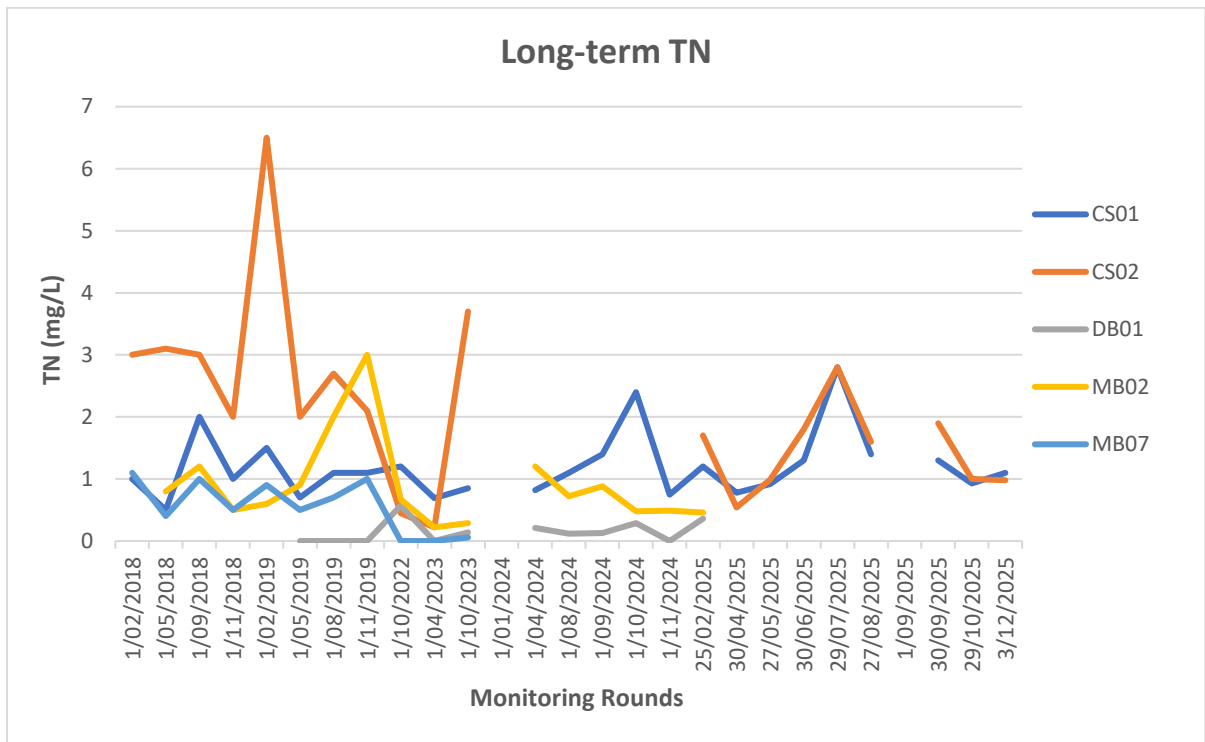
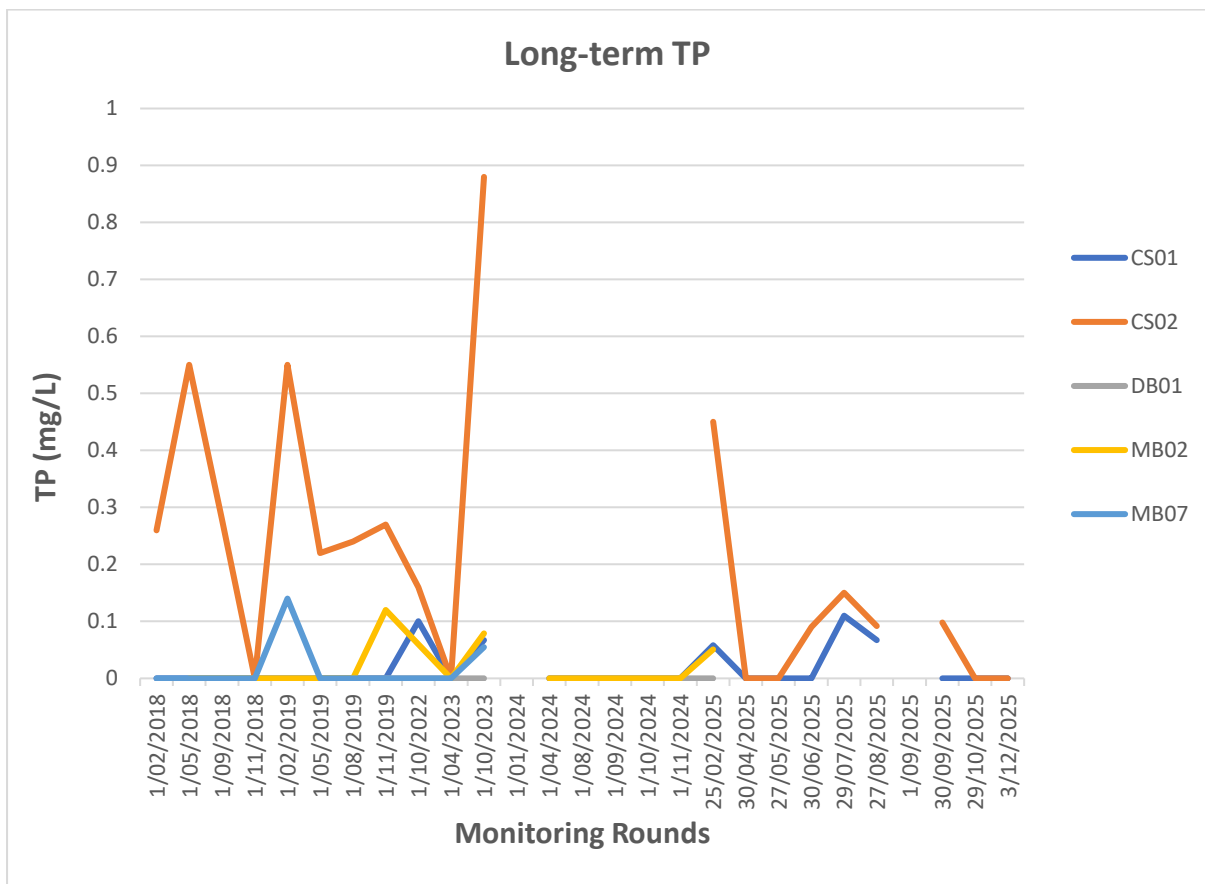


Figure 14: Long-term TP levels at the AMP site (February 2018 to December 2025)



## **Appendix E**

Fixed-point photography

**MB01-FP**

**27 October 2022**



**19 January 2023**

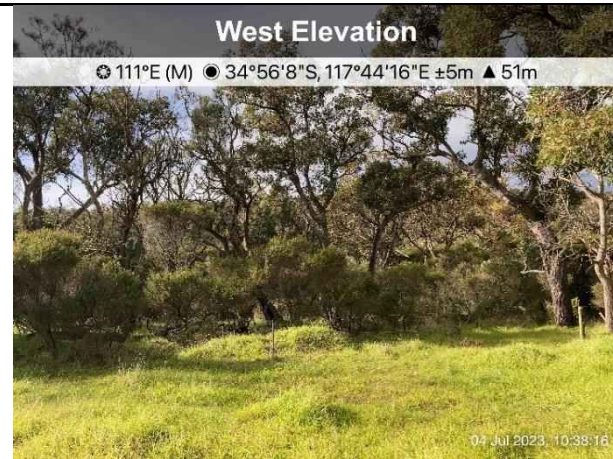
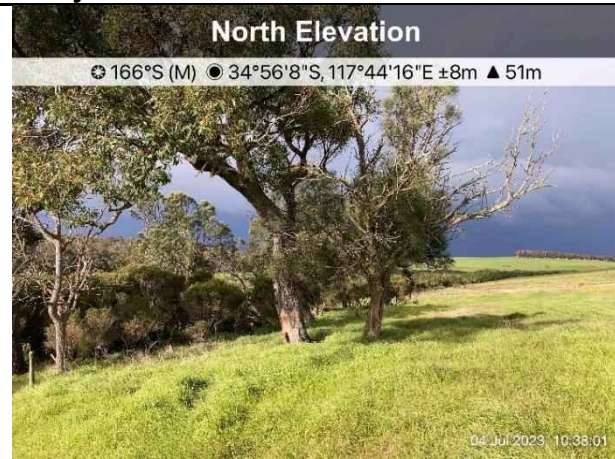


**MB01-FP**

**20 April 2023**



**4 July 2023**



**MB01-FP**

**12 October 2023**

**North Elevation**

☉ 181°S (M) ● 34°56'8"S, 117°44'16"E ±4m ▲ 51m



**North West Elevation**

☉ 123°SE (M) ● 34°56'8"S, 117°44'16"E ±4m ▲ 51m



**South West Elevation**

☉ 37°NE (M) ● 34°56'8"S, 117°44'16"E ±4m ▲ 52m



**16 January 2024**

E 90 SE 120 150 S 180 SW 210 240

☉ 165°S (M) ● 34°56'8"S, 117°44'16"E ±4m ▲ 51m



NE 30 E 90 SE 120 S 150 180 210 240

☉ 116°SE (M) ● 34°56'8"S, 117°44'16"E ±4m ▲ 50m



330 N 0 NE 30 E 60 SE 90 120 150

☉ 55°NE (M) ● 34°56'8"S, 117°44'16"E ±4m ▲ 50m

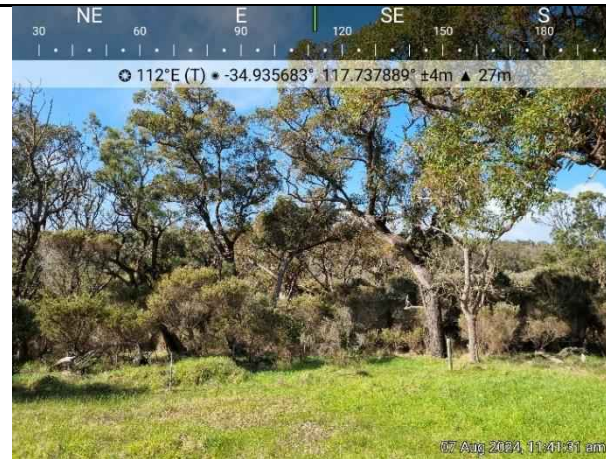


**MB01-FP**

**23 April 2024**

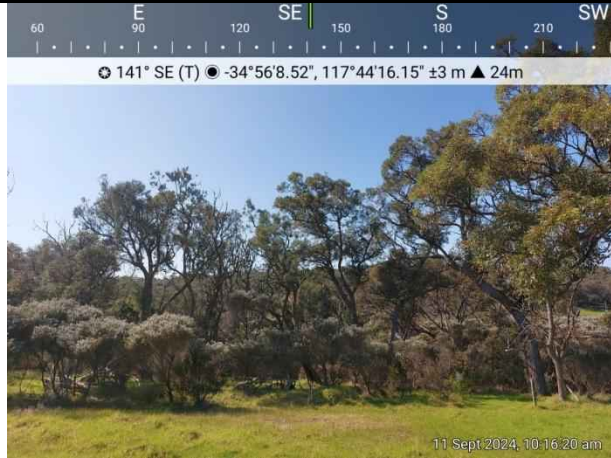


**7 August 2024**

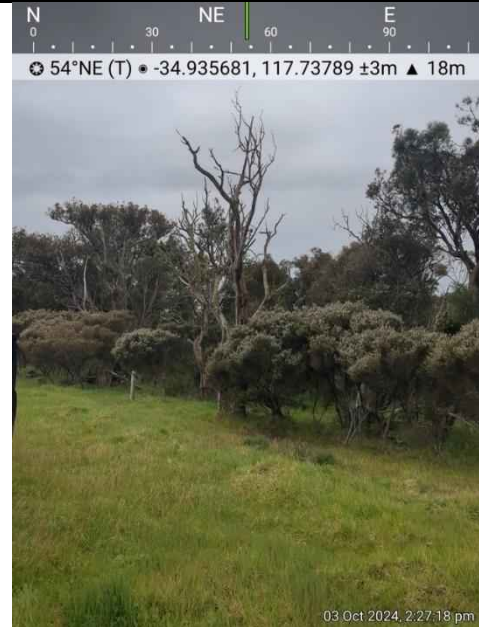


**MB01-FP**

**11 September 2024**

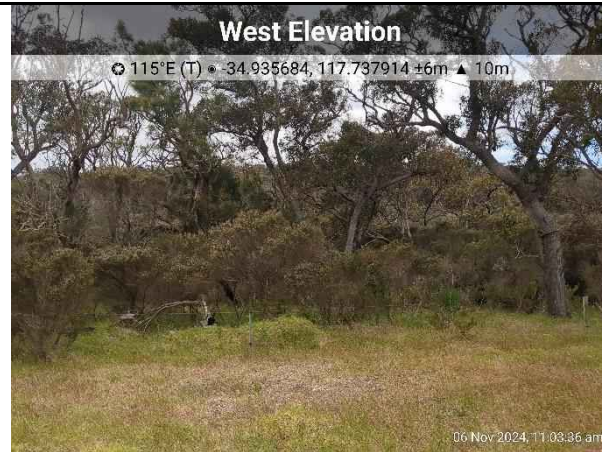


**3 October 2024**

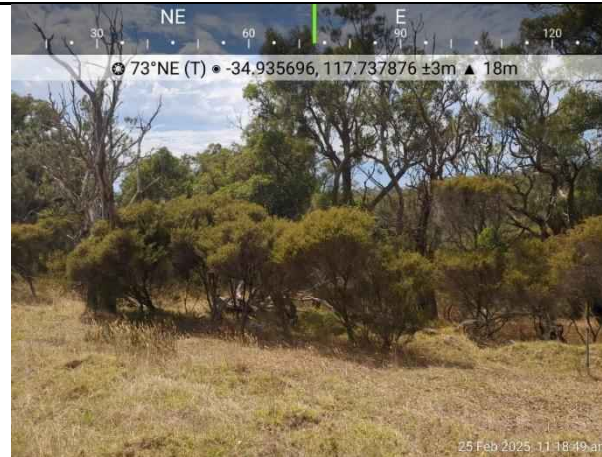


**MB01-FP**

**6 November 2024**

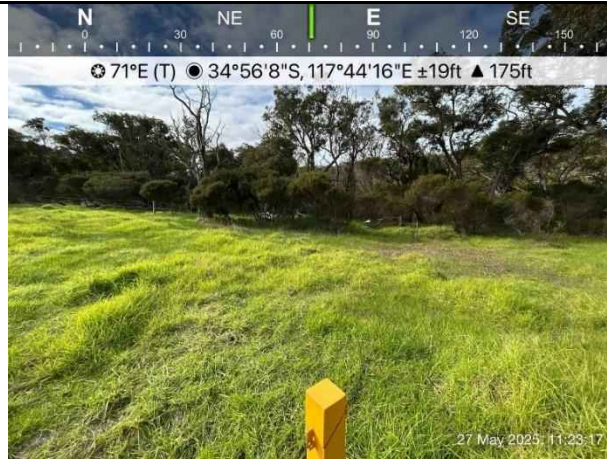
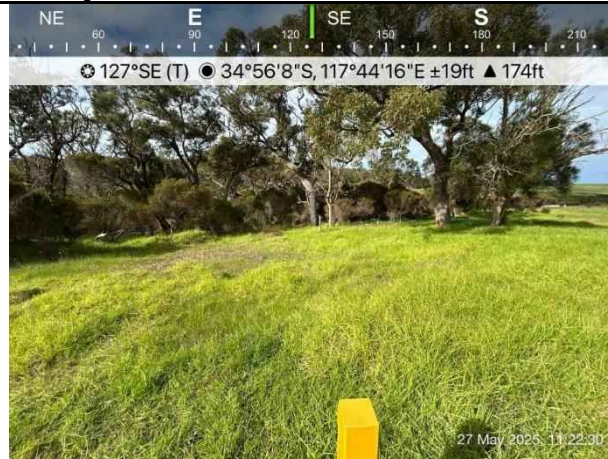


**25 February 2025**



**MB01-FP**

**27 May 2025**



**27 August 2025**



**MB02-FP**

**19 January 2023**



**20 April 2023**



**MB02-FP**

**4 July 2023**

**East Elevation**

☉ 276°W (M) ● 34°55'56"S, 117°44'27"E ±4m ▲ 50m



04 Jul 2023, 10:11:51

**North Elevation**

☉ 187°S (M) ● 34°55'56"S, 117°44'27"E ±4m ▲ 50m



04 Jul 2023, 10:12:28

**North West Elevation**

☉ 122°SE (M) ● 34°55'56"S, 117°44'28"E ±4m ▲ 50m



04 Jul 2023, 10:13:17

**12 October 2023**

**East Elevation**

☉ 276°W (M) ● 34°55'56"S, 117°44'27"E ±4m ▲ 50m



12 Oct 2023, 10:37:33

**North Elevation**

☉ 186°S (M) ● 34°55'56"S, 117°44'27"E ±4m ▲ 50m



12 Oct 2023, 10:39:04

**North West Elevation**

☉ 122°SE (M) ● 34°55'56"S, 117°44'27"E ±4m ▲ 51m



12 Oct 2023, 10:39:34

**MB02-FP**

**16 January 2024**

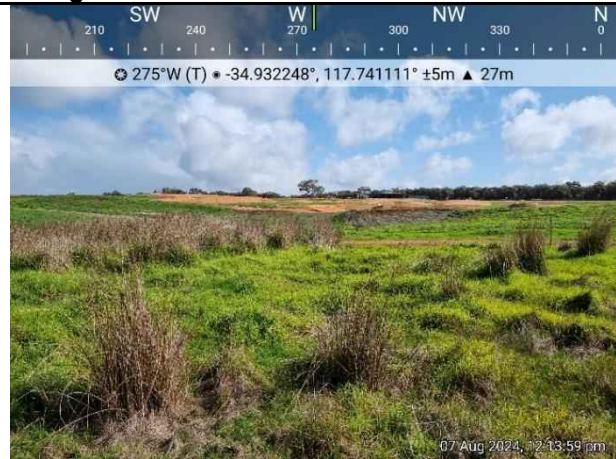


**23 April 2024**



**MB02-FP**

**7 August 2024**



**11 September 2024**



**MB02-FP**

**3 October 2024**



**6 November 2024**



**MB02-FP**

**27 May 2025**



**27 August 2025**



**30 September 2025**



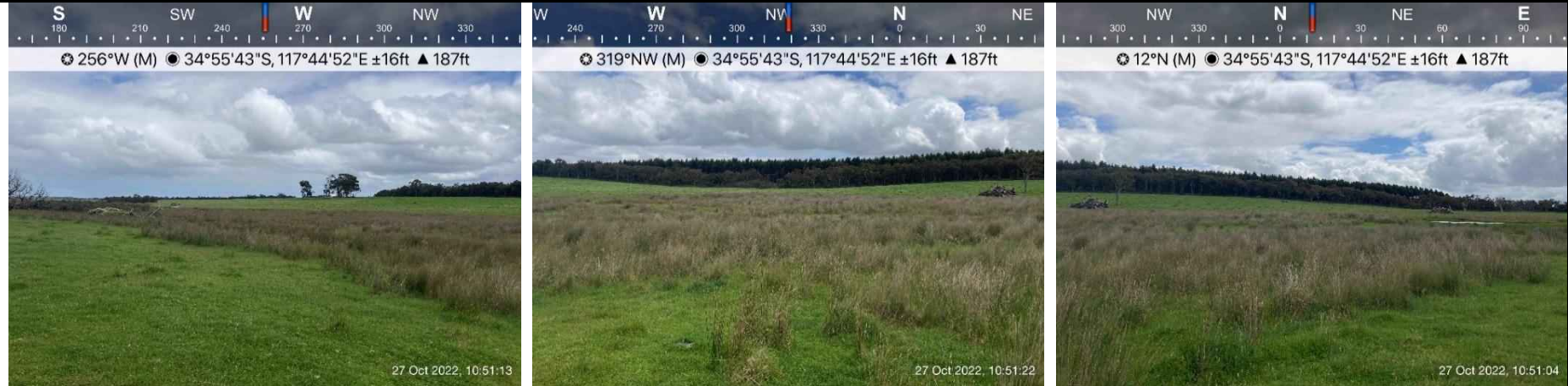
**MB02-FP**

**3 December 2025**



**MB05-FP**

**27 October 2022**



**19 January 2023**



**MB05-FP**

**20 April 2023**



**12 October 2023**



**MB05-FP**

**23 April 2024**

**North East Elevation**

☉ 242°SW (T) • -34.928855°, 117.747866° ±4 m ▲ 33 m



23 Apr 2024, 11:20:59 am

**South East Elevation**

☉ 325°NW (T) • -34.928855°, 117.747867° ±4 m ▲ 32 m



23 Apr 2024, 11:21:27 am

**South Elevation**

☉ 17°N (T) • -34.928855°, 117.747867° ±4 m ▲ 32 m



23 Apr 2024, 11:21:41 am

**30 April 2025**



☉ 271°W (T) ☉ 34°55'43"S, 117°44'52"E ±13ft ▲ 193ft



30 Apr 2025, 09:42:40



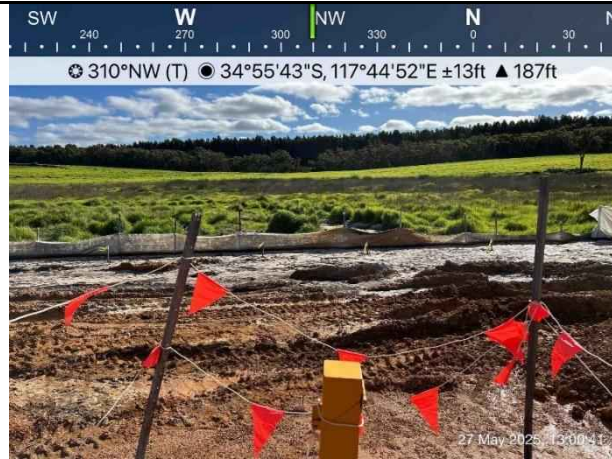
☉ 311°NW (T) ☉ 35°2'20"S, 117°45'51"E ±29842ft ▲ 0ft



30 Apr 2025, 09:42:33

**MB05-FP**

**27 May 2025**



**30 June 2025**



**29 July 2025**

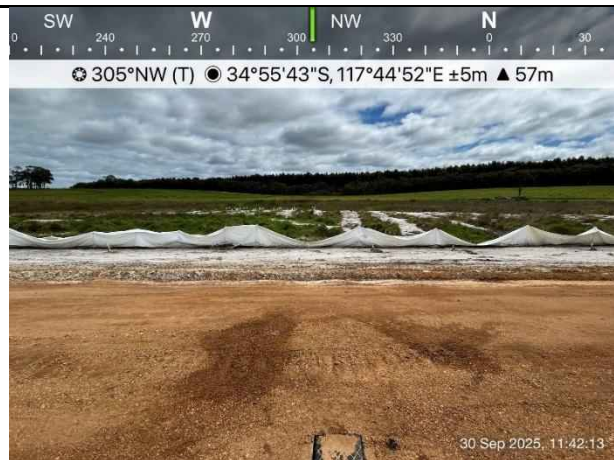


**MB05-FP**

**27 August 2025**



**30 September 2025**



**29 October 2025**



**MB05-FP**

**3 December 2025**



☉ 261°W (T) ● 34°55'43"S, 117°44'52"E ±4m ▲ 57m



☉ 302°NW (T) ● 34°55'44"S, 117°44'52"E ±2m ▲ 57m



**MB07-FP**

**27 October 2022**



**20 April 2023**



**MB07-FP**

**12 October 2023**

**East Elevation**

☉ 248°W (M) ● 34°55'58"S, 117°44'42"E ±4m ▲ 52m



12 Oct 2023, 12:3

**South East Elevation**

☉ 301°NW (M) ● 34°55'58"S, 117°44'42"E ±4m ▲ 51m



12 Oct 2023, 12:3

**South Elevation**

☉ 14°N (M) ● 34°55'58"S, 117°44'42"E ±4m ▲ 52m



12 Oct 2023, 12:3

**20 April 2023**

S 180 SW 210 240 W 270 NW 300 330

☉ 247°SW (M) ● 34°55'58"S, 117°44'42"E ±4m ▲ 51m



20 Apr 2023, 13:08:29

SW 210 240 W 270 NW 300 330 N 0 30

☉ 302°NW (M) ● 34°55'58"S, 117°44'42"E ±7m ▲ 52m



20 Apr 2023, 13:08:08

NW 300 330 N 0 30 NE 60 90 E

☉ 15°N (M) ● 34°55'58"S, 117°44'42"E ±4m ▲ 49m



20 Apr 2023, 13:09:06

**MB07-FP**

**23 April 2024**

**North East Elevation**

📍 237°SW (T) • -34.932935°, 117.745044° ±4 m ▲ 26 m



23 Apr 2024, 11:45:26 am

**East Elevation**

📍 300°W (T) • -34.932934°, 117.745038° ±4 m ▲ 27 m



23 Apr 2024, 11:44:42 am

**South Elevation**

📍 351°N (T) • -34.932927°, 117.745044° ±4 m ▲ 26 m



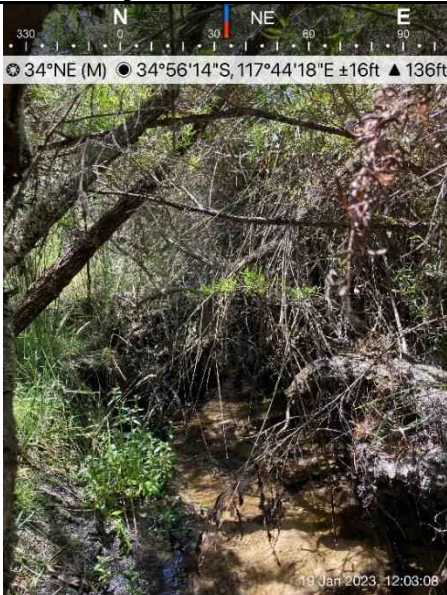
23 Apr 2024, 11:46:04 am

**CS01-FP**

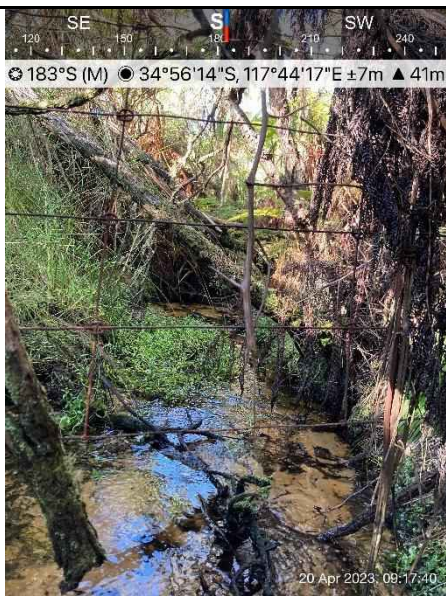
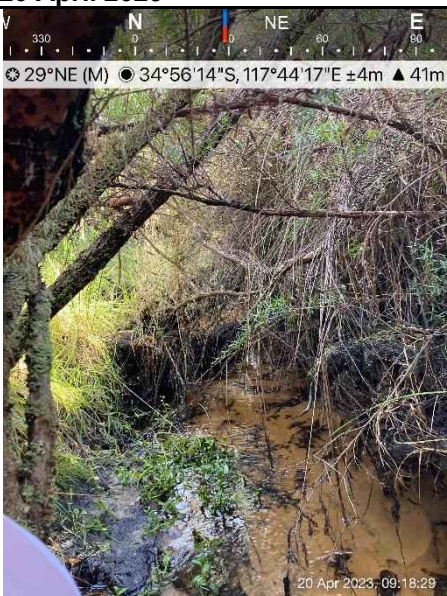
**27 October 2022**



**19 January 2023**



**20 April 2023**

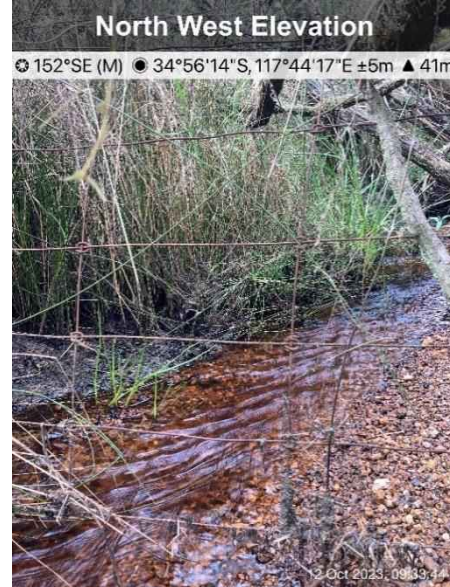


**CS01-FP**

**4 July 2023**



**12 October 2023**

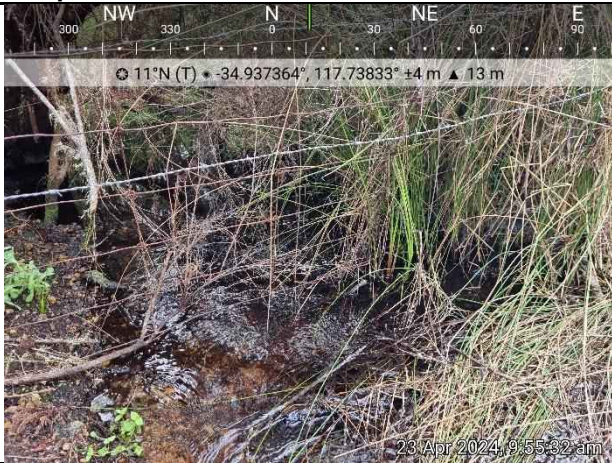


**16 January 2024**



**CS01-FP**

**23 April 2024**



**7 August 2024**



**6 November 2024**



**CS01-FP**

**25 February 2025**



**30 April 2025**



**27 May 2025**



**CS01-FP**

**30 June 2025**



**29 July 2025**



**27 August 2025**



**CS01-FP**

**30 September 2025**



**29 October 2025**



**3 December 2025**

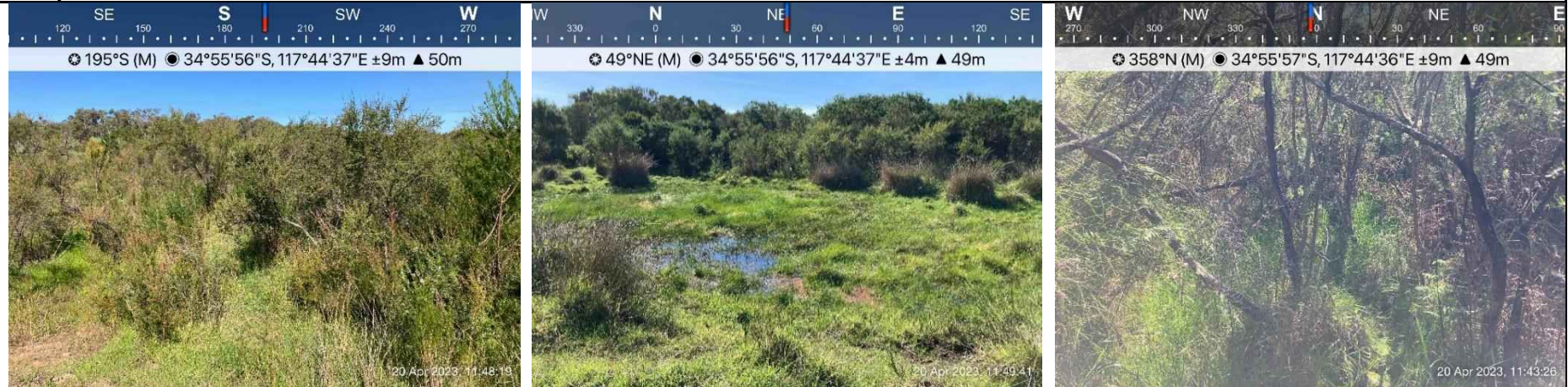


**CSO2-FP**

**27 October 2022**



**20 April 2023**



**CSO2-FP**

**4 July 2023**



**12 October 2023**



**CSO2-FP**

**16 January 2024**



**CS02-FP**

**25 February 2025**



**30 April 2025**



**27 May 2025**

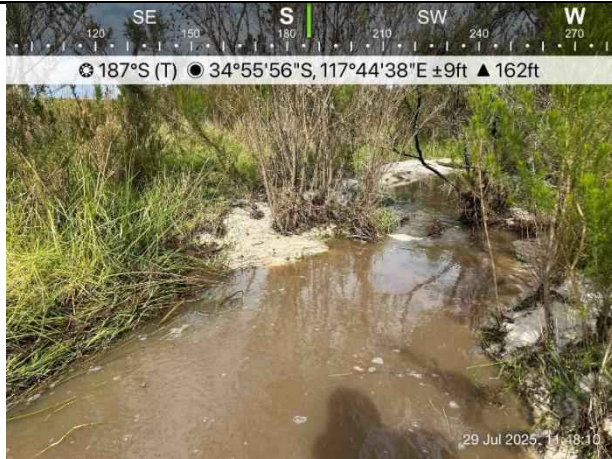


**CS02-FP**

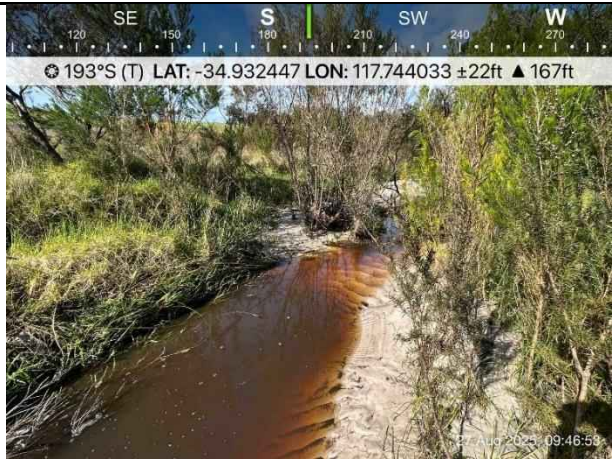
**30 June 2025**



**29 July 2025**

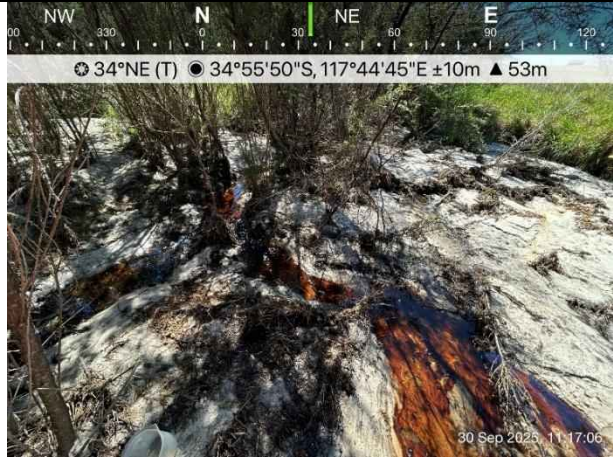


**27 August 2025**



**CS02-FP**

**30 September 2025**



**29 October 2025**



**3 December 2025**



**CSO3-FP**

**27 October 2022**



**19 January 2023**



**CSO3-FP**

**20 April 2023**



**4 July 2023**



**CSO3-FP**

**12 October 2023**



**16 January 2024**



**CSO3-FP**

**23 April 2024**



**7 August 2024**

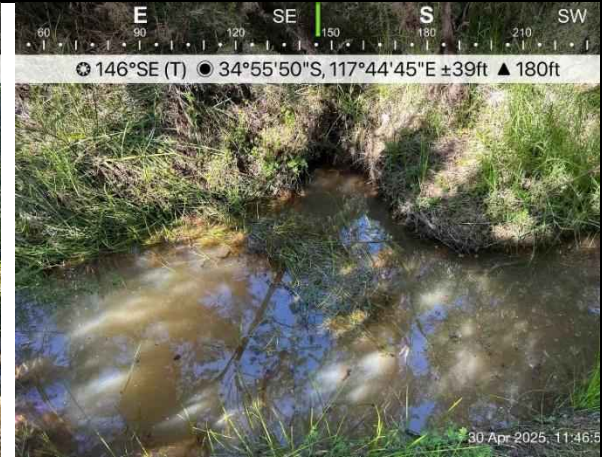
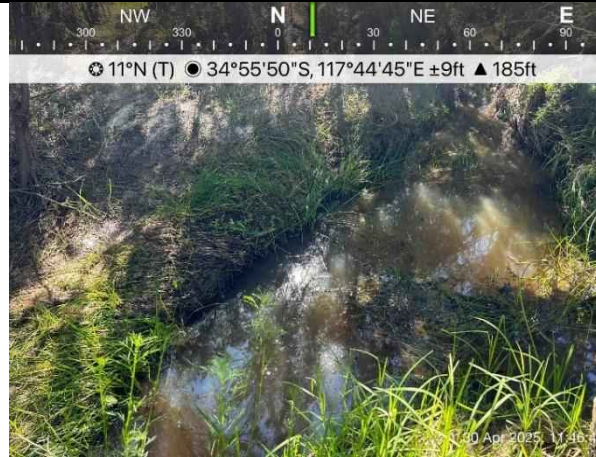


**CS03-FP**

**25 February 2025**



**30 April 2025**

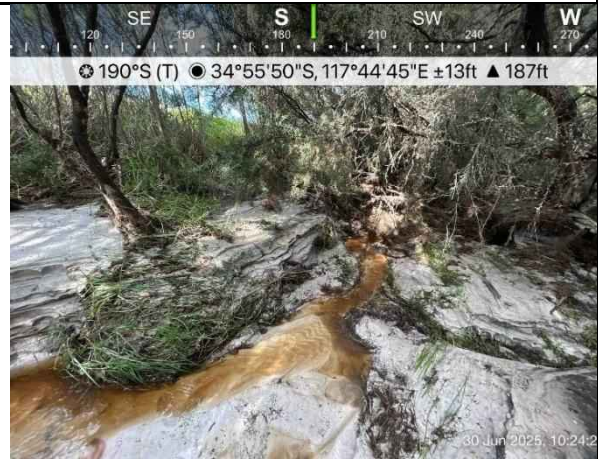


**27 May 2025**



**CS03-FP**

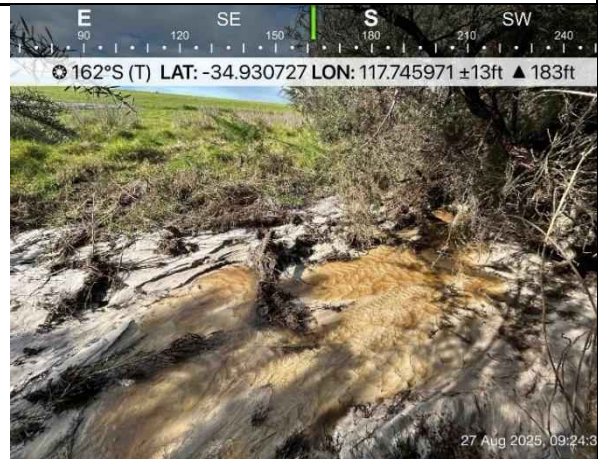
**30 June 2025**



**29 July 2025**



**27 August 2025**

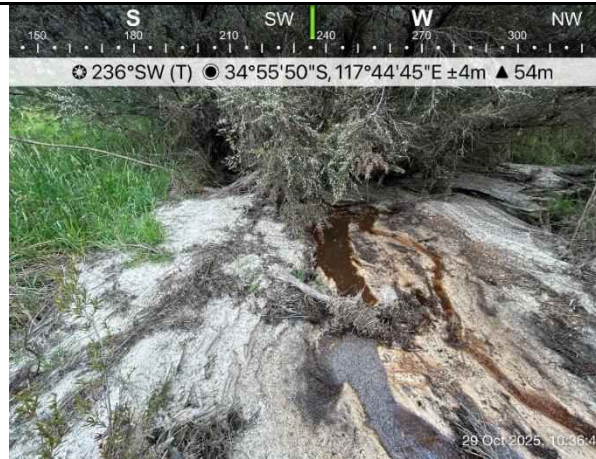


**CS03-FP**

**30 September 2025**



**29 October 2025**



**3 December 2025**

