APRIL 2025

MONTHLY CONSTRUCTION WATER QUALITY MONITORING REPORT

April 2025
Project No.: 3200-0645
Project: Transgrid Maragle 500/330 kV Substation
Private & Confidential

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ABBREVIATIONS

Acronym	Full Form
℃	degrees Celsius
µS/cm	micro Siemens per centimetre
%	percent
4WD	Four wheel drive
Ag	Silver
Al	Aluminium
ALS	ALS Limited
ANZECC	Australian and New Zealand Environment and Conservation Council
ANZG	Australian and New Zealand Guidelines
ARMCANZ	Agriculture and Resource Management Council of Australia and New Zealand
As	Arsenic
Baseline Report	'Baseline Water Quality Report' (NGH, 2024)
$CaCO_3$	Total Hardness
Cd	Cadmium
COA	'Certificate of Analysis' (ALS, 2025a)
COC	Chain of Custody
Cr	Chromium
Cu	Copper
DGV	Default Guideline Values
DO	Dissolved Oxygen
EC	Electrical Conductivity
EIS	Environmental Impact Statement
EPL	Environmental Protection Licence
Fe	Iron
Field Sheet	'Water Quality Monitoring Field Data Sheet' (UGL, 2025)
Hg	Mercury
km	kilometres
KNP	Kosciuszko National Park
kV	kilovolt
LOR	limit of reporting
mg/L	milligram per litre
mm	millimetre
Mn	Manganese
mV	millivolt
NATA	National Association of Testing Authorities, Australia

ABBREVIATIONS

Acronym	Full Form
NEM	National Energy Market
NGH	NGH Pty Ltd
Ni	Nickel
NSW	New South Wales
NTU	Nephelometric Turbidity Unit
Pb	Lead
ppm	parts per million
Pty Ltd	Proprietary Limited
QA/QC Assessment	'QA/QC Compliance Assessment to assist with Quality Review' (ALS, 2025b)
QCR	'Quality Control Report' (ALS, 2025c)
RP	reactive phosphorus
RS	Reference Site
Snowy 2.0	Snowy Scheme expansion project (EPBC 2018/8322)
Snowy Hydro	Snowy Hydro Limited
Snowy Scheme	Snowy Mountains Hydro-electric Scheme
SPC	specific conductance
SSGV	Site Specific Guideline Values
SW	surface water
SWQ	surface water quality
TDS	Total Dissolved Solids
The Methodology	'Pre-construction Water Quality Monitoring Program and Methodology' (NGH, 2022)
The Project	Construction of a 330 kV substation and overhead transmission lines between Nurenmerenmong, NSW and Cabramurra, NSW
TKN	Total Kjeldahl Nitrogen
TN	Total Nitrogen
TP	Total Phosphorus
Transgrid	The Trustee for the NSW Electricity Operations Trust
TSS	Total Suspended Solids
UGL	UGL Limited
WQO	water quality objectives
Zn	Zinc

1 BACKGROUND

In 2020 Snowy Hydro Limited (Snowy Hydro) obtained approval (EPBC 2018/8322) to expand the existing Snowy Mountains Hydro-electric Scheme (Snowy Scheme), by linking the existing Tantangara and Talbingo reservoirs through a series of underground tunnels and constructing a new underground hydro-electric power station (Snowy 2.0).

To connect Snowy 2.0 to the National Energy Market (NEM), a new transmission connection was required. The Trustee for the New South Wales (NSW) Electricity Operations Trust (TransGrid) is constructing a 330 kilovolt (kV) substation and overhead transmission lines (the Project) to facilitate the connection of Snowy 2.0 to the existing electrical transmission network. The Project is located within Kosciuszko National Park (KNP) between Nurenmerenmong and Cabramurra, NSW, approximately 27 kilometres (km) east of Tumbarumba, NSW (Figure 1). UGL Limited (UGL) has been engaged on behalf of Transgrid to undertake the Project.

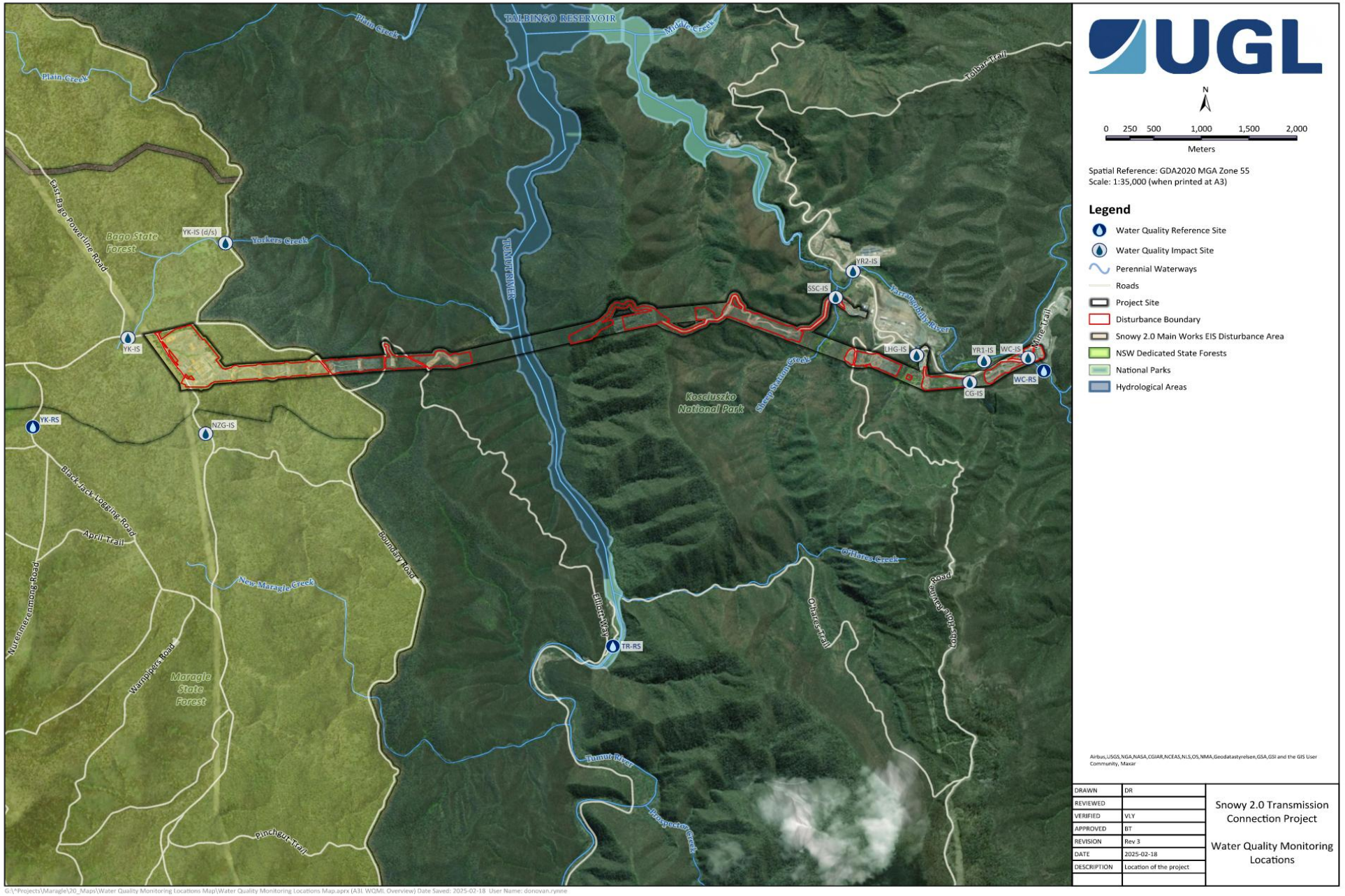

FIGURE 1 LOCALITY OF THE PROJECT AND SWQ MONITORING LOCATIONS

2 INTRODUCTION

The Project is adjacent to, and forms part of, the Snowy 2.0 project area and is located within KNP, an area of high conservation value. A total of 22 mapped waterways, tributaries of Yarrangobilly River and Tumut River, transect the Project Boundary (Figure 1).

One of the conditions of approval to meet the requirements outlined in the 'Environmental Impact Statement' (EIS) (Jacobs, 2020) and the Project's Environmental Protection Licence (EPL 21753) is to undertake regular surface water quality (SWQ) monitoring to mitigate environmental impacts on SWQ.

Pre-construction SWQ monitoring was undertaken by NGH Pty Ltd (NGH) between March 2022 and February 2024 to determine site specific baseline values for SWQ parameters prior to Project construction works. The pre-construction SWQ monitoring was undertaken using the 'Pre-construction Water Quality Monitoring Program and Methodology' (the Methodology) developed by NGH in 2022 (refer Section 3). Two years of pre-construction SWQ monitoring was analysed and summarised in the 'Baseline Water Quality Report' (Baseline Report) (NGH, 2024). The results were used to determine seasonal Site Specific Guideline Values (SSGV) for ongoing SWQ monitoring during the construction phase.

Construction for the Project commenced in March 2024. Construction SWQ monitoring will be undertaken by UGL on a monthly basis as per the revised methodology outlined in Section 3 to identify potential changes to SWQ that may be associated with the Project. SW samples from the construction SWQ monitoring would be analysed and presented in monthly Construction Water Quality Monitoring Reports.

3 METHODOLOGY

The Methodology was prepared by NGH in 2022 to support the pre-construction SWQ monitoring for the Project. The Methodology detailed the water quality objectives (WQO) for the Project, identified the monitoring locations and outlined the methodology for surface water (SW) sampling during the pre-construction phase. The Methodology (NGH, 2022) took into account the Project location within an area of high conservation value where the WQO for physical and chemical stressors, as outlined in the 'Australian and New Zealand Guidelines for Fresh and Marine Water Quality' (ANZG) (ANZG, 2018), includes no change in biodiversity beyond natural variability and where possible, there should also be no change in water/sediment chemical and physical properties, including toxicants.

Monitoring locations are outlined in Table 1. Figure 2 and Figure 3 show the water quality monitoring locations in relation to the Project and Snowy 2.0.

The Methodology (NGH, 2022) has been revised for construction SWQ monitoring by taking into account the seasonal SSGV set out in the Baseline Report (NGH, 2024) (refer to Section 4.2).

Construction SWQ monitoring would be analysed against the seasonal SSGV where available and appropriate. The Default Guideline Values (DGV) for Upland Rivers (ANZG, 2018) would be applied to water quality parameters that were not assessed in the Baseline Report (NGH, 2024) or where a guideline range is more appropriate. Table 2 outlines the seasonal SSGV and DGV used to compare construction SWQ to pre-construction SWQ.

Table 1 SWQ monitoring locations outlined in the Methodology (NGH, 2022)

WATER QUALITY MONITORING LOCATIONS					
ID	**Waterway**	**Site Type**	**Catchment**	**Latitude**	**Longitude**
WC-RS	Wallace Creek	Reference	Yarrangobilly River	-35.794258	148.415253
WC-IS	Wallace Creek	Impact		-35.792982	148.413404
CG-IS	Cave Gully	Impact		-35.795495	148.406665
YR1-IS	Yarrangobilly River	Impact		-35.793358	148.408277
LHG-IS	Lick Hole Gully	Impact		-35.792890	148.400445
YR2-IS	Yarrangobilly River	Impact		-35.784656	148.392921
SSC-IS	Sheep Station Creek	Impact		-35.793243	148.391046
TR-RS	Talbingo Reservoir	Reference	Talbingo Reservoir	-35.822094	148.365690
YK-RS	Yorkers Creek	Reference	Yorkers Creek	-35.801126	148.297979
YK-IS (D/S)	Yorkers Creek	Impact		-35.782684	148.320040
NZG-IS	New Zealand Gully	Impact		-35.801575	148.318051
YK-IS	Yorkers Creek	Impact		-35.792209	148.308878

FIGURE 2 WATER QUALITY MONITORING LOCATIONS ASSOCIATED WITH REFERENCE SITE YR-RS AND TR-RS IN RELATION TO THE PROJECT

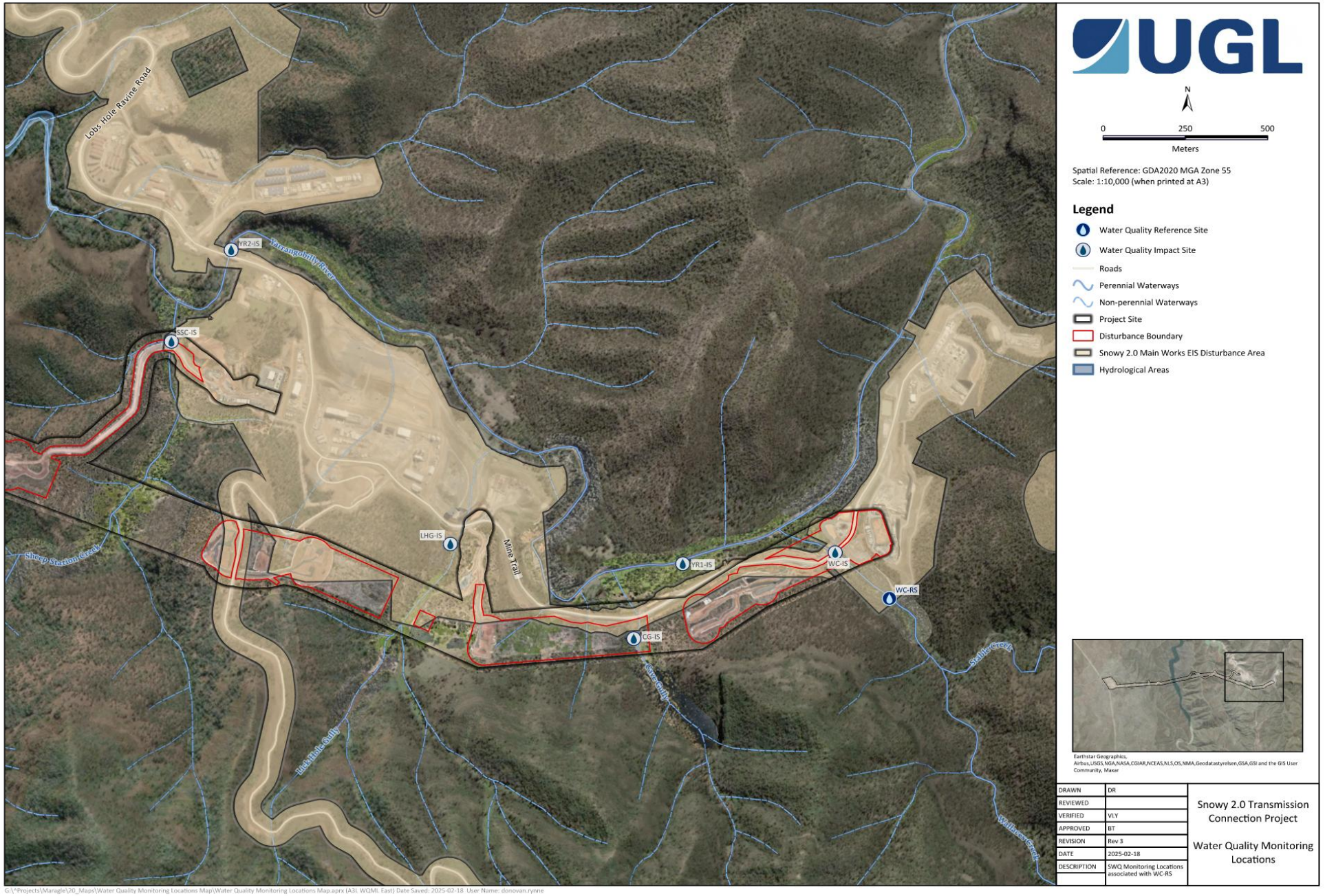

FIGURE 3 WATER QUALITY MONITORING LOCATIONS ASSOCIATED WITH REFERENCE SITE WC-RS IN RELATION TO THE PROJECT

Table 2 Seasonal SSGV (NGH, 2024) and DGV (ANZG, 2018) for water quality parameters

SURFACE WATER QUALITY GUIDELINE VALUES								
Parameter	**Unit**	**WC-RS**		**TR-RS**		**YK-RS**		**DGV**
		SSGV (Summer/Autumn)	**SSGV (Winter/Spring)**	**SSGV (Summer/Autumn)**	**SSGV (Winter/Spring)**	**SSGV (Summer/Autumn)**	**SSGV (Winter/Spring)**	
Temperature	°C*	-	-	-	-	-	-	-
Dissolved Oxygen (DO) ***	%#	96.2	89.7	91.3	95.5	89.6	88.7	90-110
DO	ppm+	9.08	10.28	8.79	11.53	8.35	10.2	-
Specific Electrical Conductivity (EC)***	SPC^ µS/cm^^	115	88	24	38.7	31	27.9	30-350
EC***	µS/cm	93.2	60.85	20.3	26.2	24	20.5	30-350
pH***	-	7.85	7.62	7.59	7.59	6.79	6.61	6.5-8
Redox	mV##	79.1	98.4	91.2	95.4	94.6	106.1	-
Turbidity***	NTU**	0.37	5.12	0.09	1.56	9	7.87	2-25
Dissolved Aluminium (Al)	mg/L++	0.03	0.04	0.03	0.015	0.36	0.32	0.027
Dissolved Arsenic (As)	mg/L	0.003	0.0003	0.003	0.0003	0.003	0.0003	0.0008
Dissolved Cadmium (Cd)	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.0006
Dissolved Chromium (Cr)	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
Dissolved Copper (Cu)	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.001
Cyanide	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.004
Dissolved Iron (Fe)	mg/L	0.03	0.02	0.04	0.02	0.41	0.23	0.3
Dissolved Lead (Pb)	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Dissolved Manganese (Mn)	mg/L	0.002	0.002	0.003	0.002	0.005	0.003	1.2
Dissolved Mercury (Hg)	mg/L	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00006

SURFACE WATER QUALITY GUIDELINE VALUES

Parameter	Unit	WC-RS		TR-RS		YK-RS		DGV
		SSGV (Summer/Autumn)	SSGV (Winter/Spring)	SSGV (Summer/Autumn)	SSGV (Winter/Spring)	SSGV (Summer/Autumn)	SSGV (Winter/Spring)	
Dissolved Nickel (Ni)	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.008
Total Nitrogen (TN)	mg/L	0.2	0.2	0.2	0.2	0.2	0.2	0.25
Total Phosphorus (TP)	mg/L	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Dissolved Silver (Ag)	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
Dissolved Zinc (Zn)	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.0024
Ammonia	mg/L	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Nitrogen Oxides	mg/L	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Reactive Phosphorus (RP)	mg/L	0.02	0.015	0.02	0.015	0.02	0.02	0.015
Total Hardness ($CaCO_3$)	mg/L	47	30	7.5	8	1	7	-
Total Kjeldahl Nitrogen (TKN)	mg/L	0.2	0.2	0.1	0.2	0.1	0.2	-
Total Dissolved Solids (TDS)	mg/L	52	39	12.5	15	30	10	-
Total Suspended Solids (TSS)	mg/L	0.2	1	0.2	0.2	3	0.2	0.2
Total Al[@]	mg/L	-	-	-	-	-	-	0.027
Total As[@]	mg/L	-	-	-	-	-	-	0.0008
Total Cd[@]	mg/L	-	-	-	-	-	-	0.0006
Total Cr[@]	mg/L	-	-	-	-	-	-	0.00001
Total Cu[@]	mg/L	-	-	-	-	-	-	0.001
Total Pb[@]	mg/L	-	-	-	-	-	-	0.001
Total Mn[@]	mg/L	-	-	-	-	-	-	1.2
Total Ni[@]	mg/L	-	-	-	-	-	-	0.008

SURFACE WATER QUALITY GUIDELINE VALUES

Parameter	Unit	WC-RS		TR-RS		YK-RS		DGV
		SSGV (Summer/Autumn)	SSGV (Winter/Spring)	SSGV (Summer/Autumn)	SSGV (Winter/Spring)	SSGV (Summer/Autumn)	SSGV (Winter/Spring)	
Total Ag[@]	mg/L	-	-	-	-	-	-	0.00002
Total Zn[@]	mg/L	-	-	-	-	-	-	0.0024
Total Fe[@]	mg/L	-	-	-	-	-	-	0.3
Total Hg[@]	mg/L	-	-	-	-	-	-	0.00006

** ℃ = degrees Celsius* *[#] % = percent* *[##] mV = millivolt* *[+] ppm = parts per million* *[^] SPC = specific conductance* *[++] mg/L = milligram per litre*

*** NTU = Nephelometric Turbidity Unit* *[^^] µS/cm = micro Siemens per centimetre* *[@] parameter not analysed by NGH* **** assessed against DGV where guideline range is more appropriate for the parameter*

4 BASELINE WATER QUALITY

4.1 Water Quality Objectives

Water quality objectives are outlined in Section 2.1 of the Baseline Report (NGH, 2024).

4.2 Site Specific Guideline Values

In accordance with the ANZG (ANZG, 2018), SSGV for the three Reference Sites (RS) (WC-RS, TR-RS and YK-RS) were derived from the results collected during the 24 month pre-construction SWQ monitoring period. The SSGV reflect the seasonality observed in the baseline data and are characterised by the drier months of Summer/Autumn (December to May) and wetter months of Winter/Spring (June to November) in accordance with the 'Australian and New Zealand Environment and Conservation Council (ANZECC) and Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ) (2000) methodology and derivatives developed to 2018 of the ANZG (ANZG, 2018).

Table 2 outlines the seasonal SSGV provided in the Baseline Report (NGH, 2024).

5 APRIL 2025 MONITORING

SW sampling was undertaken at 10 monitoring locations from 14 April 2025. Two monitoring locations, SSC-IS and CG-IS, were dry at the time of monitoring.

In accordance with the methodology outlined in Section 3, SW samples were either measured in situ using a calibrated YSI ProDSS Sonde Multiparameter Digital Water Quality Meter (refer to Appendix D) or analysed by National Association of Testing Authorities, Australia (NATA) accredited ALS Limited (ALS) laboratory.

The 'Water Quality Monitoring Field Data Sheet' (Field Sheet) (UGL, 2025) is provided in Appendix A. The 'Certificate of Analysis' (COA) (ALS, 2025a), 'QA/QC Compliance Assessment to assist with Quality Review' (QA/QC Assessment) (ALS, 2025b) and 'Quality Control Report' (QCR) (ALS, 2025c) are attached in Appendix B.

Observations

Field observations during sampling are summarised in Table 3.

Table 3 Field observations during sampling

FIELD OBSERVATIONS		
Date	14 April 2025	
Weather	The weather forecast for 14 April was 14.7 degrees Celsius (℃) with 60 percent of 1-5 millimetres (mm) of rain. The previous 48 hours was cloudy and experienced a total of 42.4 mm of rainfall across 10 to 11 February. At the time of sampling, the weather was sunny with cloud cover.	
ID	**Observations**	**Photo**
WC-RS	• Low water volume and low flow rate • Rocky and eroded banks including exposed roots from a large tree • Presence of algae • Clear water • Riparian vegetation consisted of groundcover, shrubs and trees • Moderate density including of Blackberry (*Rubus fruticosus*)	

FIELD OBSERVATIONS

Date	14 April 2025
Weather	The weather forecast for 14 April was 14.7 degrees Celsius (°C) with 60 percent of 1-5 millimetres (mm) of rain. The previous 48 hours was cloudy and experienced a total of 42.4 mm of rainfall across 10 to 11 February. At the time of sampling, the weather was sunny with cloud cover.

ID	Observations	Photo
WC-IS	• Low volume with high flow rate • Clear water • Riparian vegetation predominantly trees and grass • Presence of weed *sp*. including Blackberry (*Rubus fruticosus*) • Rocky banks and undercut banks • Monitoring location is adjacent to bridge and Mine Trail Road which is frequently used by Snowy 2.0 vehicles, plant and machinery	
CG-IS	• No flow, dry	
YR1-IS	• Clear water • Low volume with low flow rate • Sheen from organic decomposition on surface of water • High weed density including Thistle and Blackberry (*Rubus fruticosus*) • Riparian vegetation consisted of groundcover, shrubs and trees • Rocky banks with sections of exposed soil higher up the bank • Presence of aquatic invertebrate, vegetation and algae	

FIELD OBSERVATIONS

Date	14 April 2025
Weather	The weather forecast for 14 April was 14.7 degrees Celsius (°C) with 60 percent of 1-5 millimetres (mm) of rain. The previous 48 hours was cloudy and experienced a total of 42.4 mm of rainfall across 10 to 11 February. At the time of sampling, the weather was sunny with cloud cover.

ID	Observations	Photo
LHG-IS	• Monitoring location is adjacent to Mine Trail Road which is frequently used by Snowy 2.0 vehicles, plant and machinery • Rocky bed with no banks • Water with brown/milky tinge and odour • Overgrown vegetation, predominantly groundcover • Very low volume • Presence of silt and grass seed husks on bed • Presence of oily sheen from organic decomposition on surface of water • Presence of aquatic invertebrate and vegetation	
YR2-IS	• Presence of aquatic vegetation • Clear water • Rocky bed and banks • Low volume with moderate flow rate • Riparian vegetation predominantly groundcover • High weed density including Blackberry (*Rubus fruticosus*) • Monitoring location is adjacent to bridge and electrical transmission tower on top of rocky cliff and Snowy 2.0 laydown area	
SSC-IS	• No flow, dry	

FIELD OBSERVATIONS

Date	14 April 2025
Weather	The weather forecast for 14 April was 14.7 degrees Celsius (°C) with 60 percent of 1-5 millimetres (mm) of rain. The previous 48 hours was cloudy and experienced a total of 42.4 mm of rainfall across 10 to 11 February. At the time of sampling, the weather was sunny with cloud cover.

ID	Observations	Photo
TR-RS	• Rocky banks and sandy bed • Monitoring location is adjacent to publicly accessible O'Hares Campground and Talbingo Reservoir ancillary infrastructure • Presence of aquatic vegetation and invertebrates • Clear water • High volume with minimal flow rate • Riparian vegetation consisted of groundcover and trees • Presence of landslips • High presence of vegetative detritus	
YK-RS	• Presence of aquatic invertebrate • Water murky with yellow tinge • Low weed density including Blackberry (*Rubus fruticosus*) • Eroded banks and sandy bed • Riparian vegetation consisted of groundcover and trees • Murky water with brown tinge • Monitoring location is adjacent to publicly accessible four-wheel drive (4WD) track • Presence of kangaroo scats • Vegetative detritus in water • Low volume with no flow rate • Presence of hoof marks	
YK-IS (D/S)	• Presence of aquatic invertebrates and vegetation • Vegetative detritus in water • Potential burrows in banks • Riparian vegetation consisted of groundcover and trees • Low weed density including Blackberry (*Rubus fruticosus*) • Moderate volume with low flow rate • Undermined banks and rocky and sandy bed with mica • Monitoring location is adjacent to publicly accessible 4WD track • Presence of vegetative detritus	

FIELD OBSERVATIONS

Date	14 April 2025
Weather	The weather forecast for 14 April was 14.7 degrees Celsius (°C) with 60 percent of 1-5 millimetres (mm) of rain. The previous 48 hours was cloudy and experienced a total of 42.4 mm of rainfall across 10 to 11 February. At the time of sampling, the weather was sunny with cloud cover.

ID	Observations	Photo
NZG-IS	• Presence of aquatic vegetation • Presence of organic detritus • Overhanging vegetation • Clear water • Low weed density including Blackberry (*Rubus fruticosus*) • Monitoring location is adjacent to publicly accessible 4WD track • Lower volume with low flow rate • Eroded and undermined banks and pebbly bed with mica • Riparian vegetation consisted of groundcover and trees	
YK-IS	• Murky water with slight yellow tinge • High presence of aquatic vegetation • Low volume with low flow rate • Eroded banks with mica in bed • Overhanging vegetation • Presence of vegetative detritus • Riparian vegetation consisted of groundcover, shrubs and trees • Low weed density • Monitoring location is adjacent to Elliott Way, leading towards culvert	

5.1 Results

The results from the construction SWQ monitoring program have been reported for each respective catchment: Yarrangobilly River, Talbingo Reservoir, and Yorkers Creek.

- **Yarrangobilly River catchment** monitoring includes the reference site at Wallace Creek and impact sites at Yarrangobilly River, Wallace Creek, Cave Gully, Lick Hole Gully, and Sheep Station Creek.
- **Yorkers Creek catchment** monitoring includes the reference site at Yorkers Creek and impact sites at Yorkers Creek and New Zealand Gully.
- **Talbingo Reservoir** features a reference site located upstream within the reservoir, serving as an overall reference for monitoring sites in the Yarrangobilly River and Yorkers Creek catchments.

This reference site provides a baseline for the SWQ monitoring program.

The SWQ monitoring results for key physical and chemical parameters, along with site-specific trigger values, are detailed in Section 5.1.1. Results for dissolved and total metals, including site-specific trigger values, are covered in Sections 5.1.2 and 5.1.3. Upon review of the data, observations were noted between the reference and impact sites.

The complete table of results is attached in Appendix C.

5.1.1 Key Physical and Chemical Parameters

See below for results of key physical and chemical parameters.

5.1.1.1 Temperature

In April 2025, temperatures (°C) in the Yarrangobilly River catchment decreased compared to March 2025, ranging from 17.3°C to 18.7°C, except for WC-RS and WC-IS which increased 2.9°C and 1.2°C respectively, refer to Figure 4. Temperatures in Talbingo Reservoir decreased from 21.3°C in March 2025 to 17.6°C, refer to Figure 5. Temperatures in the Yorkers Creek catchment also reduced in April 2025, ranging from 9.0°C to 12.5°C, as illustrated in Figure 6.

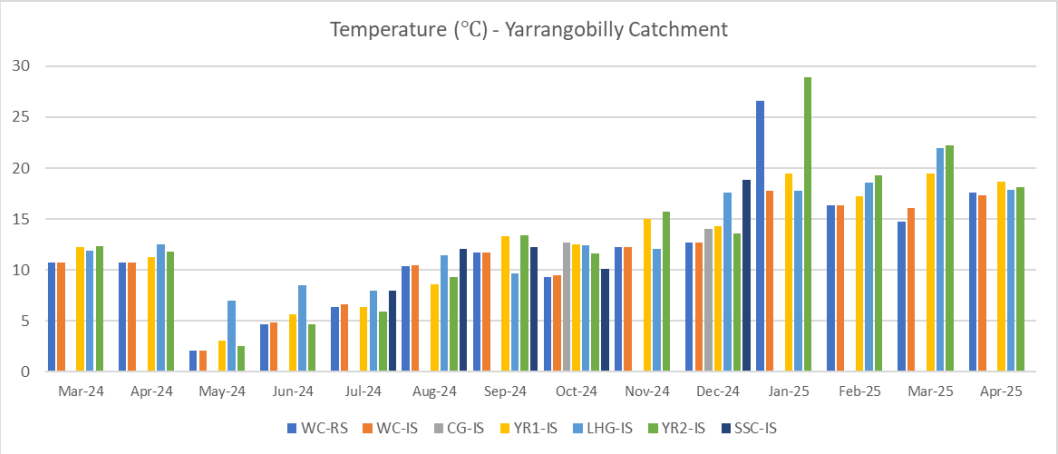

FIGURE 4 : TEMPERATURE FOR YARRANGOBILLY RIVER CATCHMENT

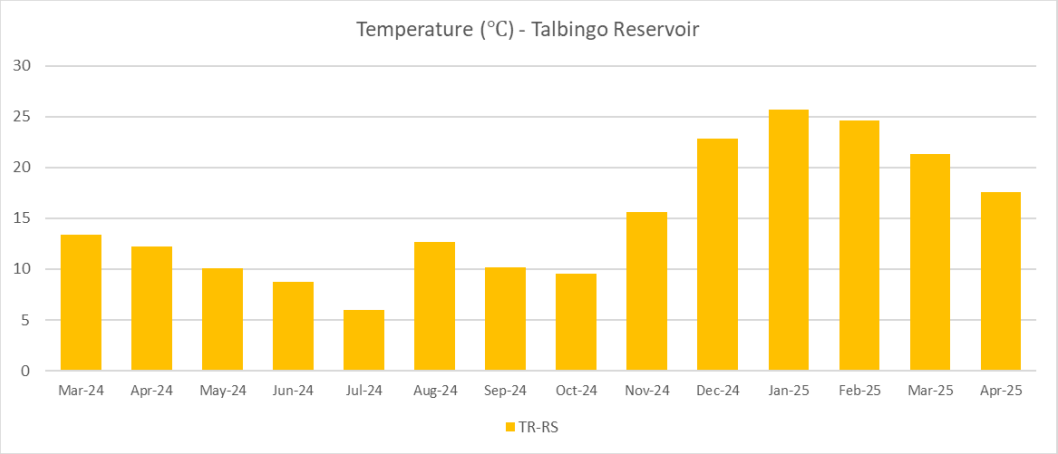

FIGURE 5: TEMPERATURE FOR TALBINGO RESERVOIR

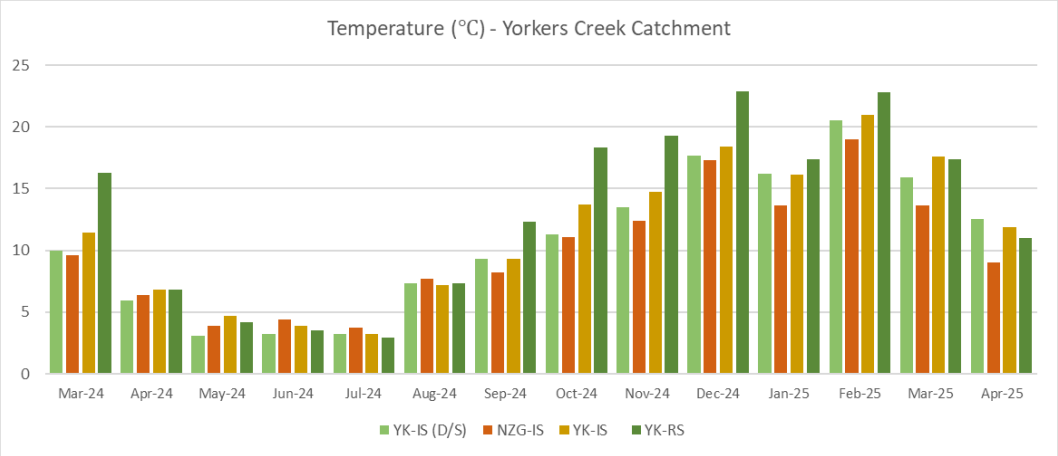

FIGURE 6: TEMPERATURE FOR YORKERS CREEK CATCHMENT

5.1.1.2 pH

pH values exceeded the December to May SSGV (7.85) in April 2025 for majority of the Yarrangobilly River catchment sites except for LHG-IS, refer Figure 7. In contrast, Talbingo Reservoir was within the SSGV, refer to Figure 8. All sites in Yorkers Creek catchment exceeded the December to May SSGV (6.79), refer Figure 9.

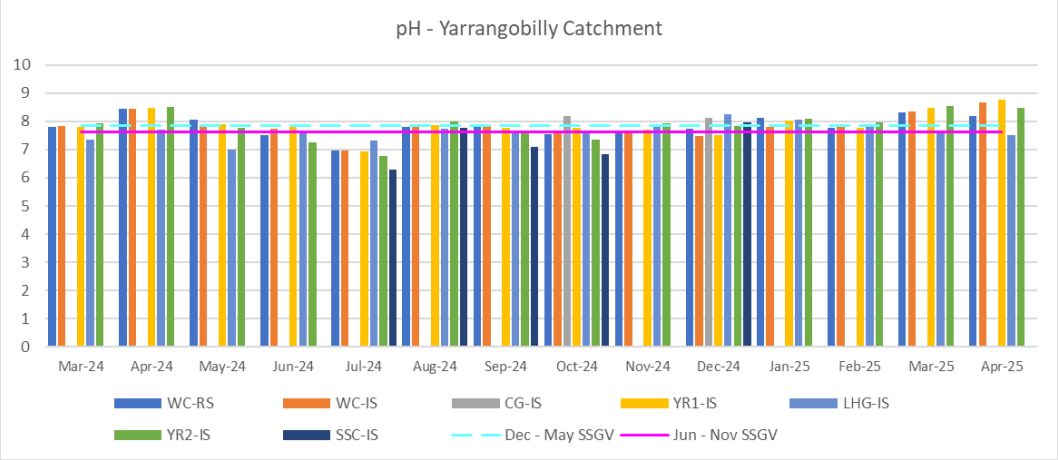

FIGURE 7: PH FOR YARRANGOBILLY RIVER CATCHMENT

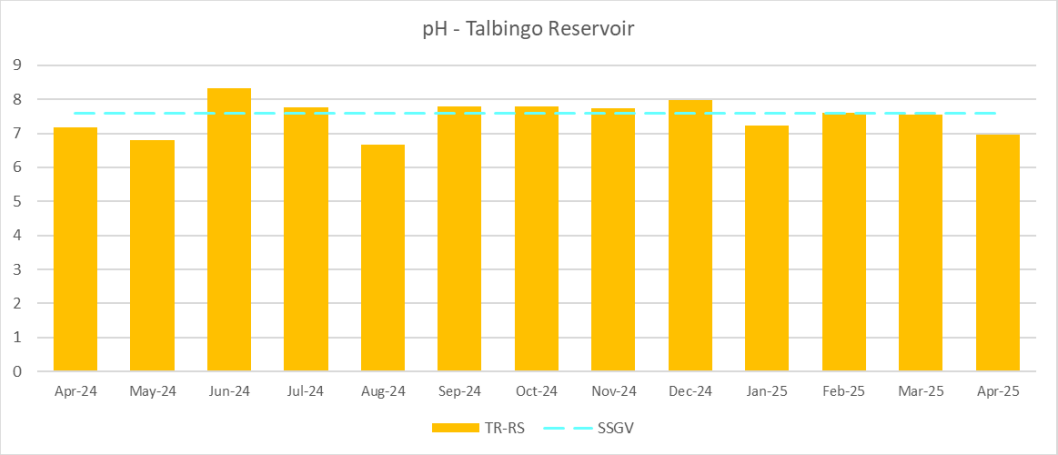

FIGURE 8: PH FOR TALBINGO RESERVOIR

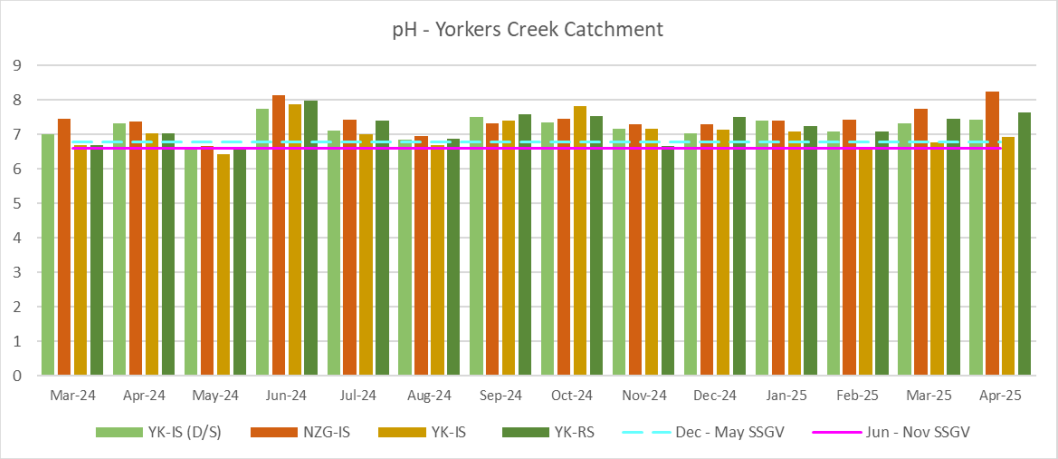

FIGURE 9: PH FOR YORKERS CREEK CATCHMENT

5.1.1.3 Dissolved Oxygen

April 2025 DO (%) levels were below the respective December to May SSGV at all sites across the three catchments, refer to Figure 10 to Figure 12.

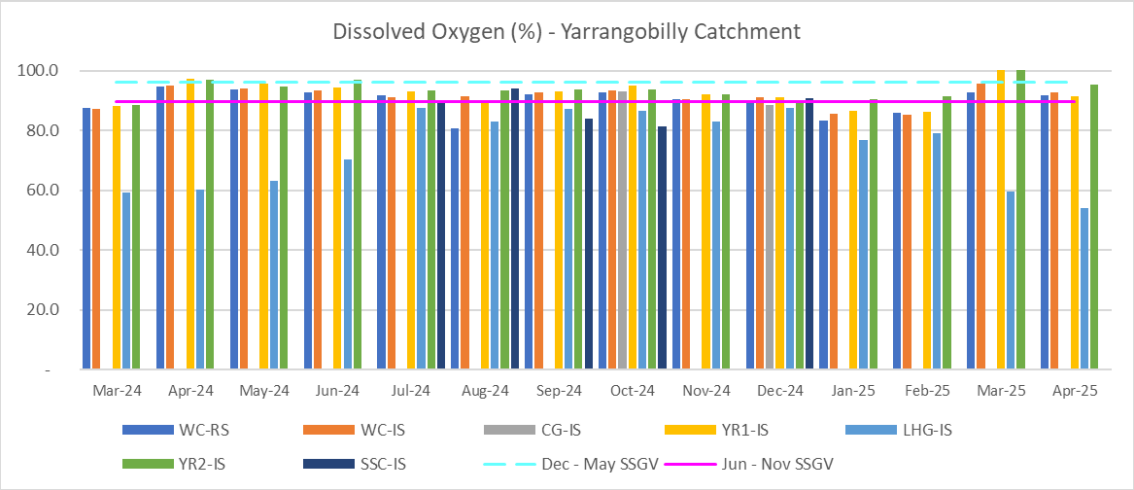

FIGURE 10: DO FOR YARRANGOBILLY RIVER CATCHMENT

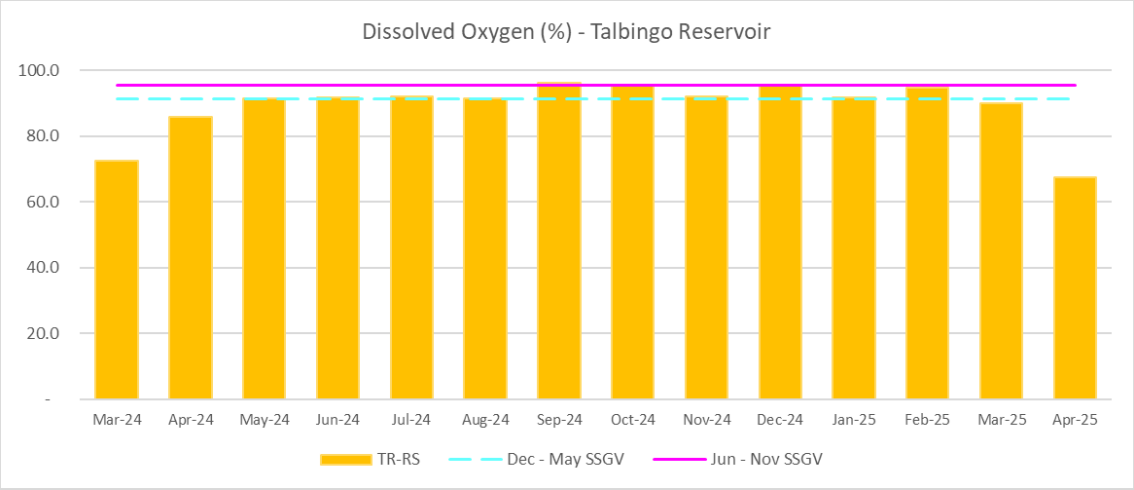

FIGURE 11: DO FOR TALBINGO RESERVOIR

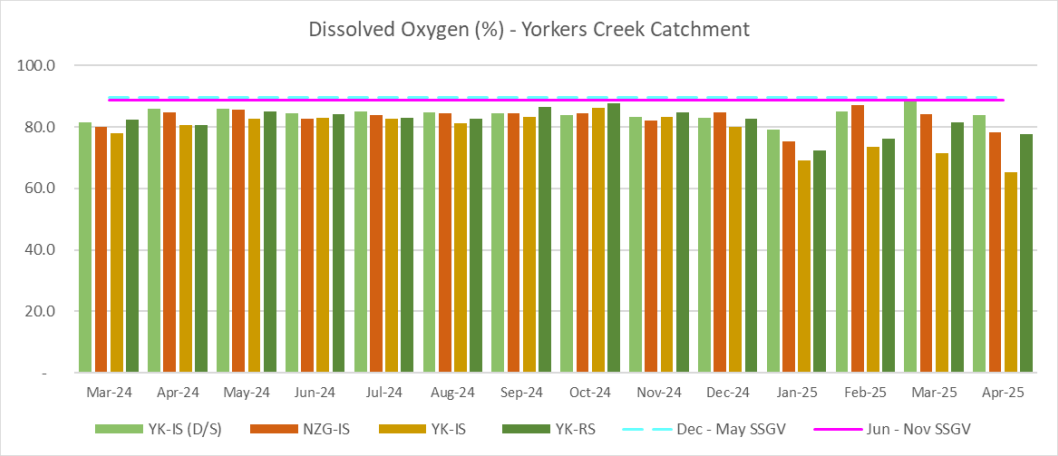

FIGURE 12: DO FOR YORKERS CREEK CATCHMENT

5.1.1.4 Specific Conductance

SPC (µS/cm) levels in the Yarrangobilly River catchment were within the December to May SSGV (115 µS/cm) at all sites except for LHG-IS, which has always exceeded the SSGV, refer Figure 13. SPC levels were also within the respective SSGV for Talbingo Reservoir and Yorkers Creek catchment, refer Figure 14 and Figure 15.

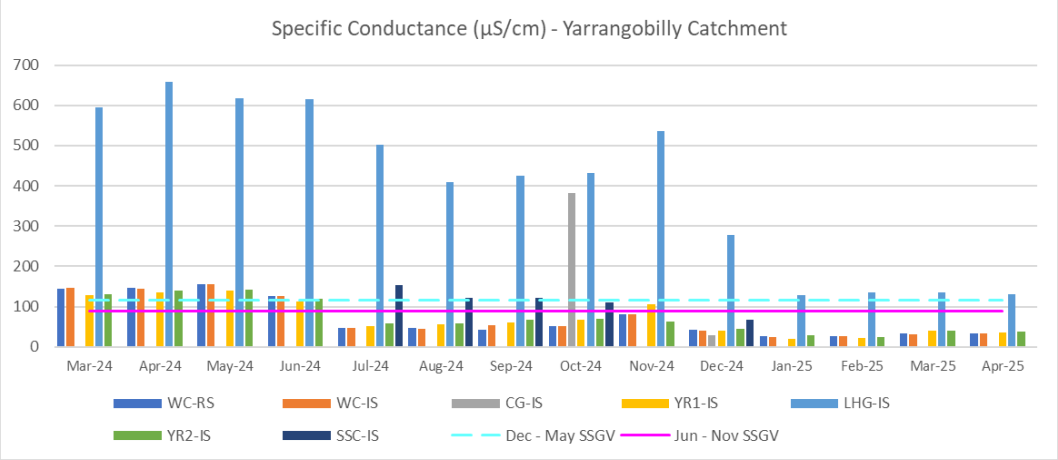

FIGURE 13: SPC FOR YARRANGOBILLY RIVER CATCHMENT

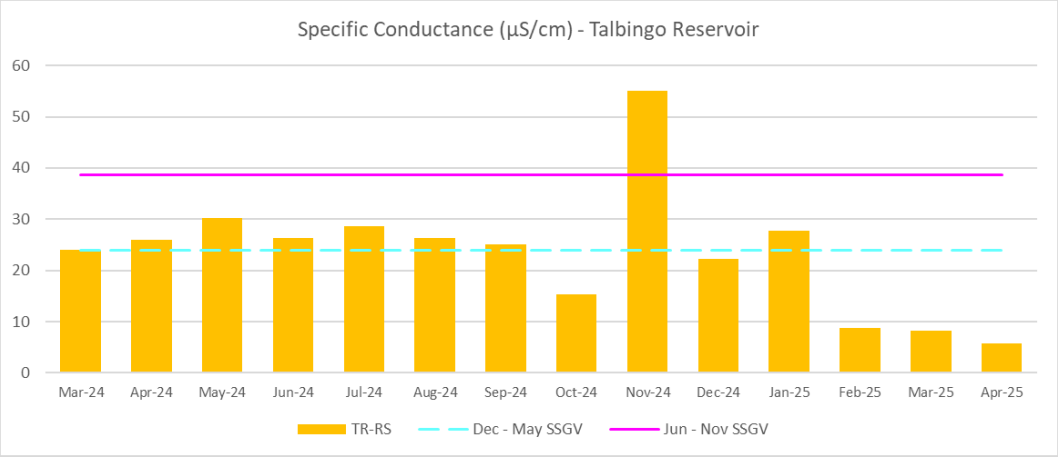

FIGURE 14: SPC FOR TALBINGO RESERVOIR

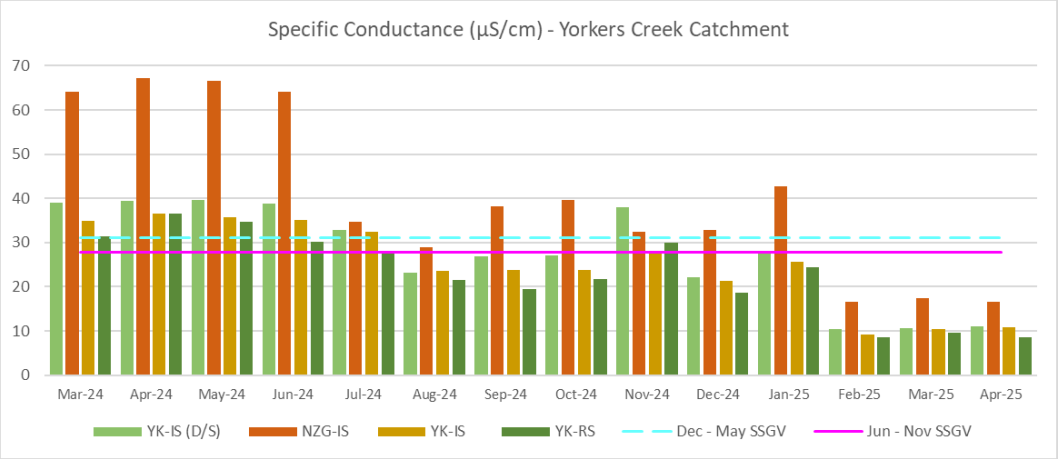

FIGURE 15: SPC FOR YORKERS CREEK CATCHMENT

5.1.1.5 Electrical Conductivity

Similar to previous monitoring periods, EC (µS/cm) values all exceeded the December to May SSGV of each catchment in April 2025, refer to Figure 16 to Figure 18.

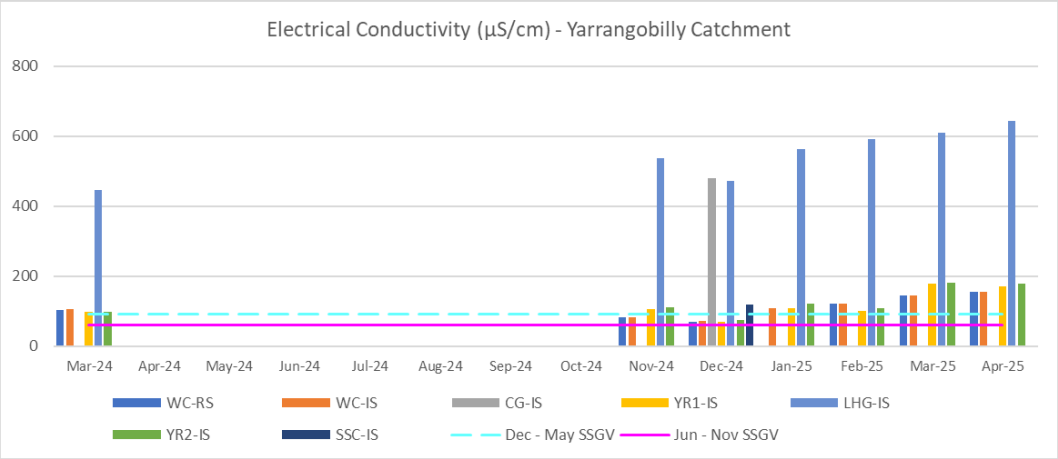

FIGURE 16: EC FOR YARRANGOBILLY RIVER CATCHMENT

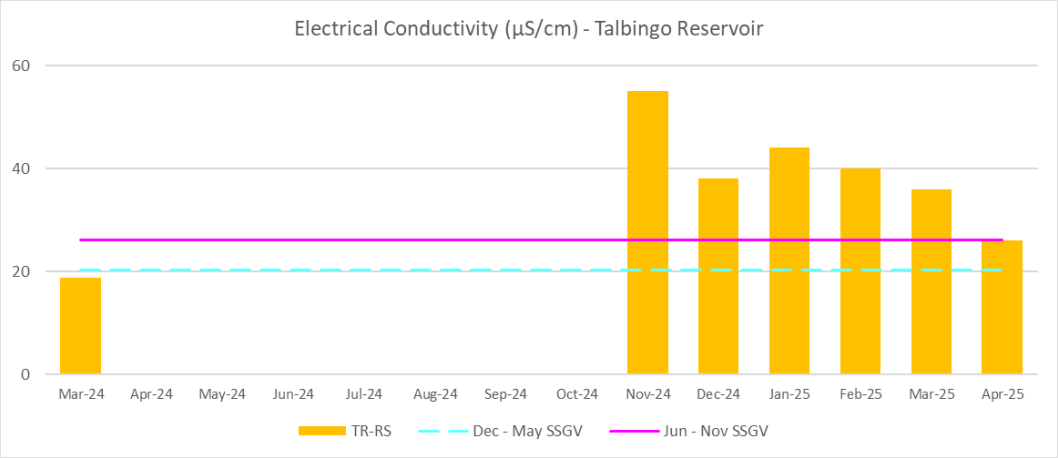

FIGURE 17: EC FOR TALBINGO RESERVOIR

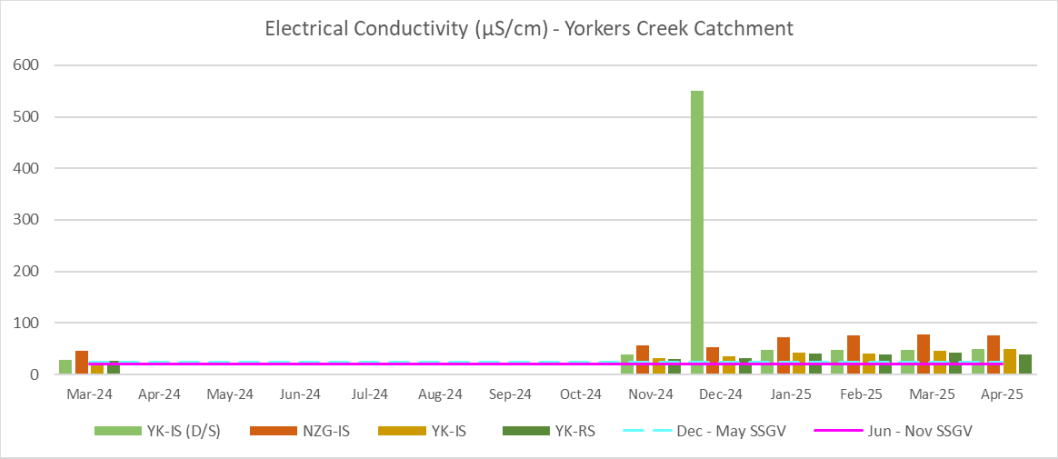

FIGURE 18: EC FOR YORKERS CREEK CATCHMENT

5.1.1.6 Turbidity

Turbidity (NTU) levels exceeded the December to May SSGV at all reference sites and majority of the impact sites, except for YK-IS (D/S), NZG-IS and YK-IS in Yorkers Creek catchment, which were within the SSGV of 9, refer to Figure 19 to Figure 21.

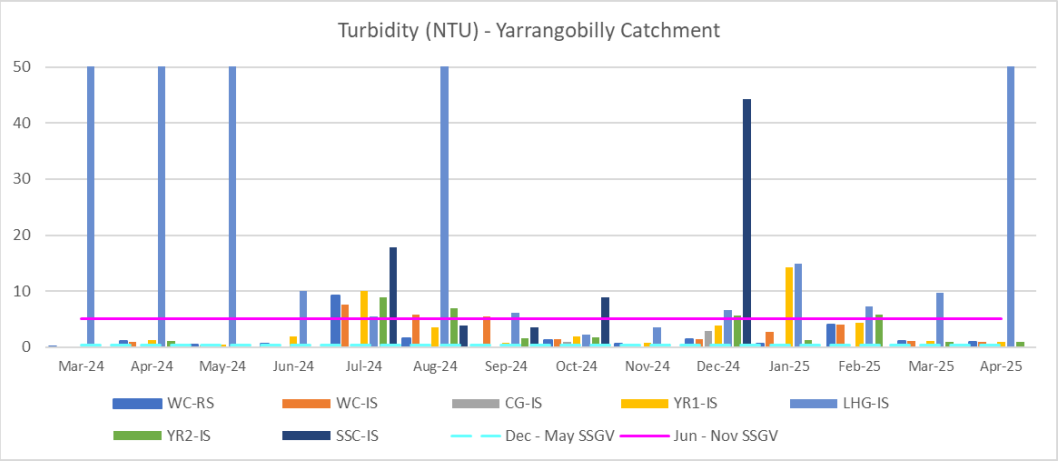

FIGURE 19: TURBIDITY FOR YARRANGOBILLY RIVER CATCHMENT

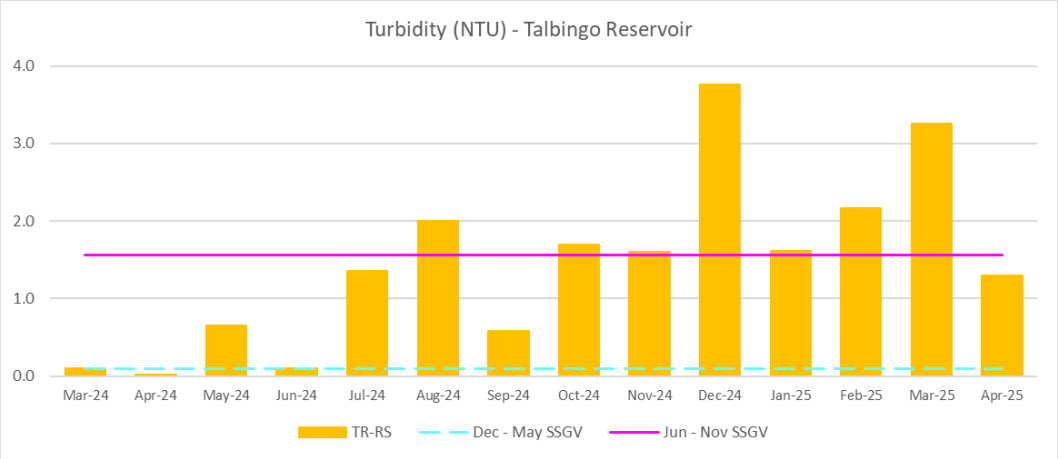

FIGURE 20: TURBIDITY FOR TALBINGO RESERVOIR

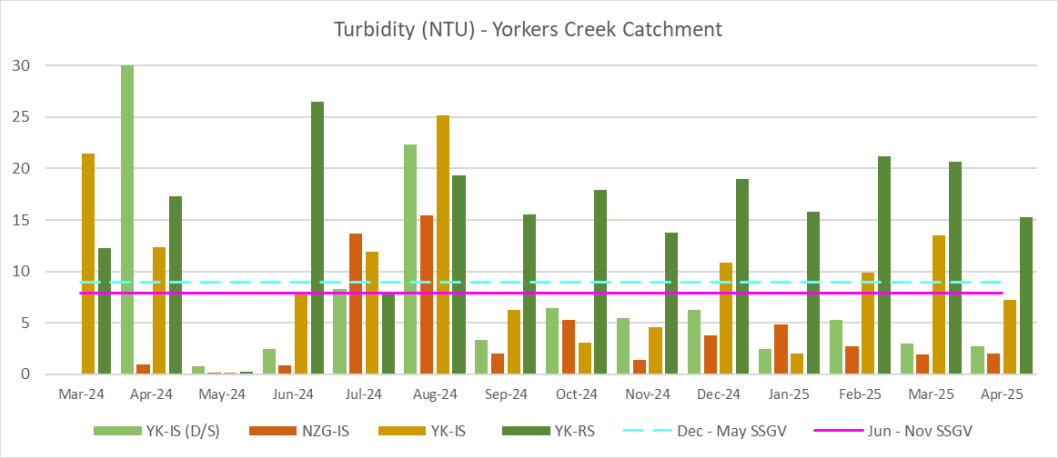

FIGURE 21: TURBIDITY FOR YORKERS CREEK CATCHMENT

5.1.1.7 Total Suspended Solids

In the Yarrangobilly River catchment, all sites were below the LOR, except for LHG-IS which exceeded the December to May SSGV (0.2 mg/L), refer to Figure 22. Talbingo Reservoir was also below the LOR, refer to Figure 23. In Yorkers Creek catchment, YK-RS and YK-IS were both above the December to May SSGV (3 mg/L) and NZG-IS and YK-IS(D/S) were below the LOR, refer to Figure 24.

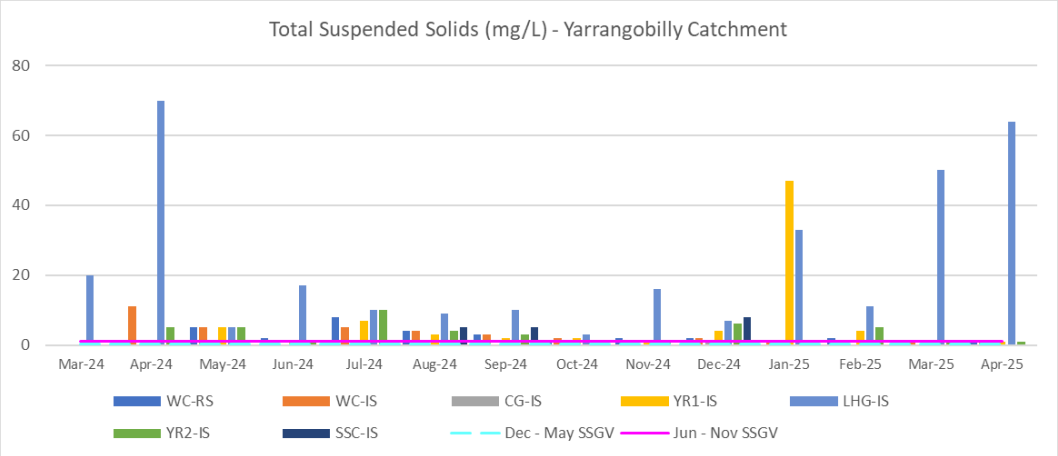

FIGURE 22: TSS FOR YARRANGOBILLY RIVER CATCHMENT

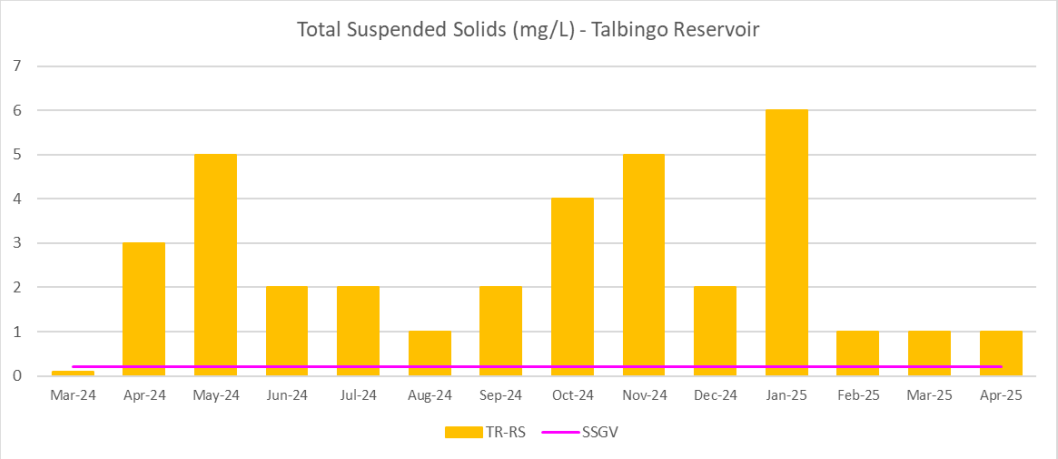

FIGURE 23: TSS FOR TALBINGO RESERVOIR

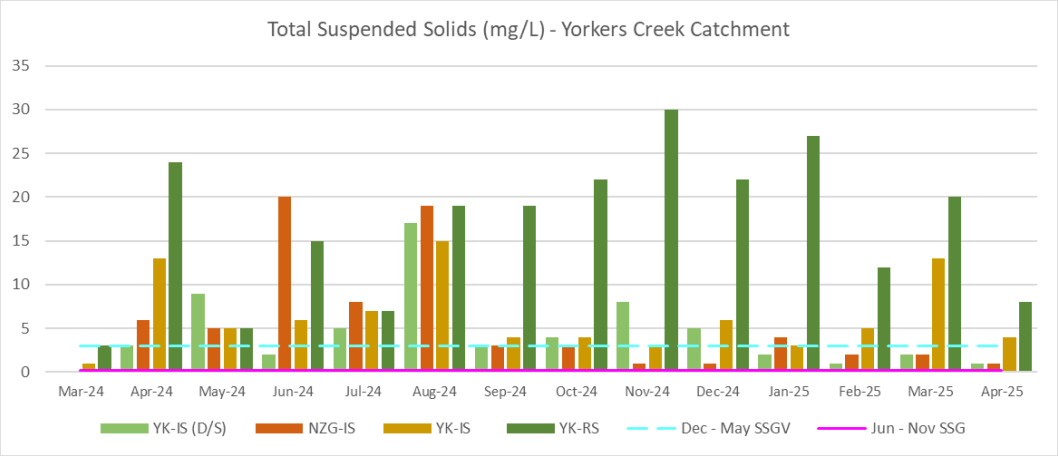

FIGURE 24: TSS FOR YORKERS CREEK CATCHMENT

5.1.1.8 Total Dissolved Solids

In April 2025, all sites within the Yarrangobilly River catchment exceeded the December to May SSGV (52mg/L), with LHG-IS measuring significantly higher at 372 mg/L, refer to Figure 25. Talbingo Reservoir also exceeded the December to May SSGV (12.5mg/L), returning a result of 22mg/L, refer to Figure 26. All sites within the Yorkers Creek catchment exceeded the December to May SSGV (30mg/L), except for the reference site, YK-RS, which was on-par with the SSGV, refer to Figure 27.

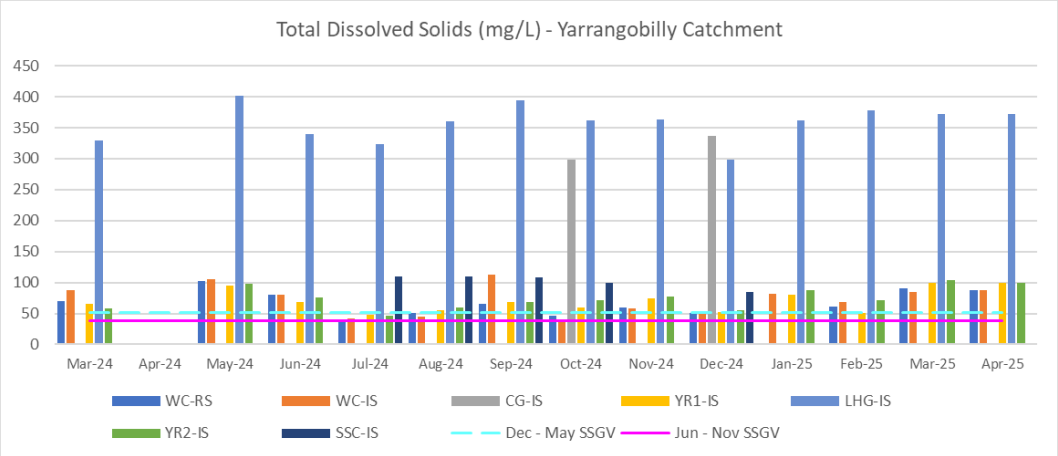

FIGURE 25 TDS FOR YARRANGOBILLY RIVER CATCHMENT

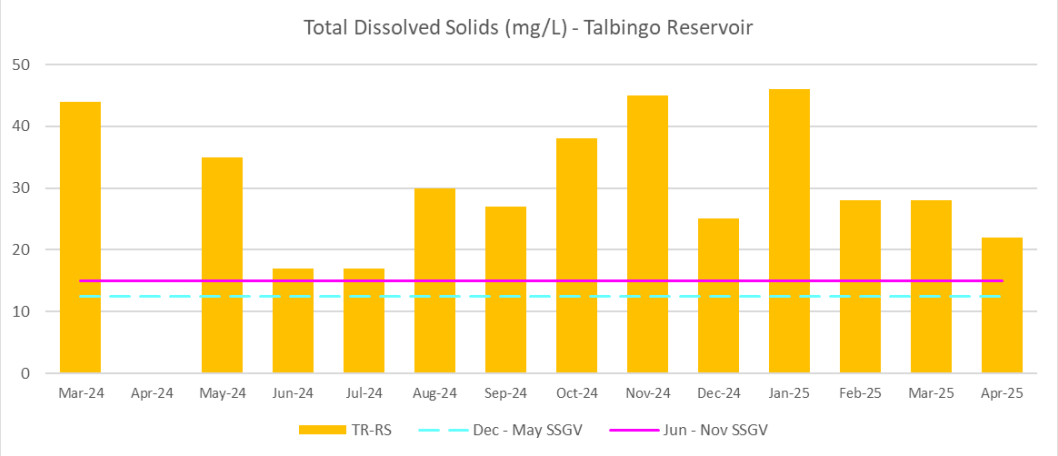

FIGURE 26 TDS FOR TALBINGO RESERVOIR

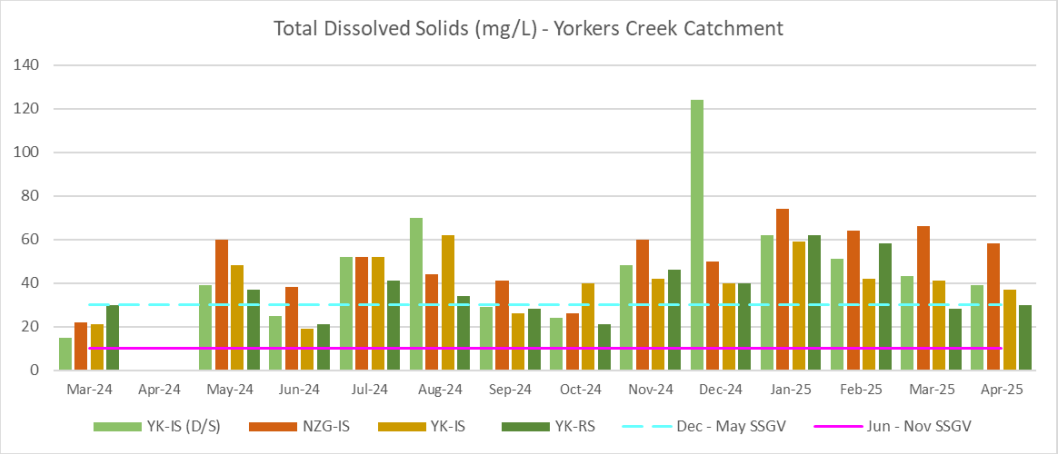

FIGURE 27 TDS FOR YORKERS CREEK CATCHMENT

5.1.1.9 Redox

The December to May SSGV for redox (mV) was exceeded at all sites across all three catchments, refer to Figure 28 to Figure 30.

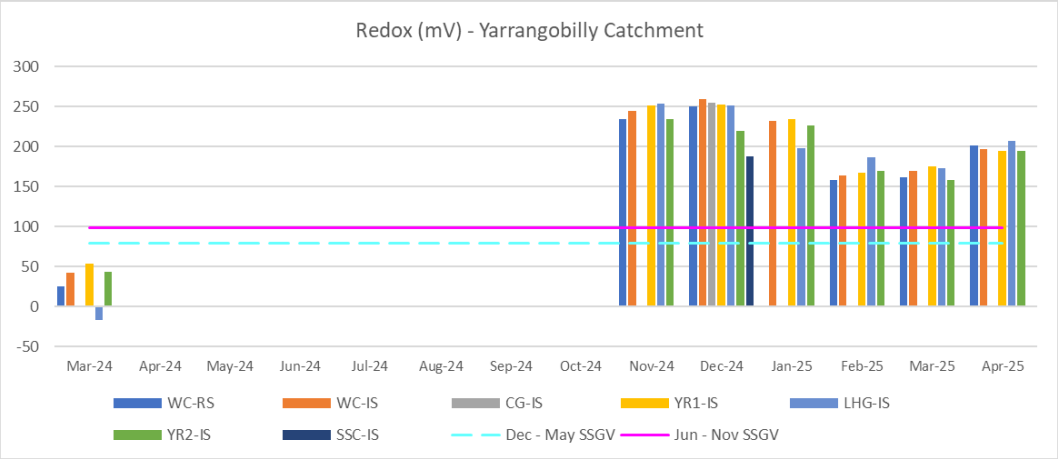

FIGURE 28: REDOX FOR YARRANGOBILLY RIVER CATCHMENT

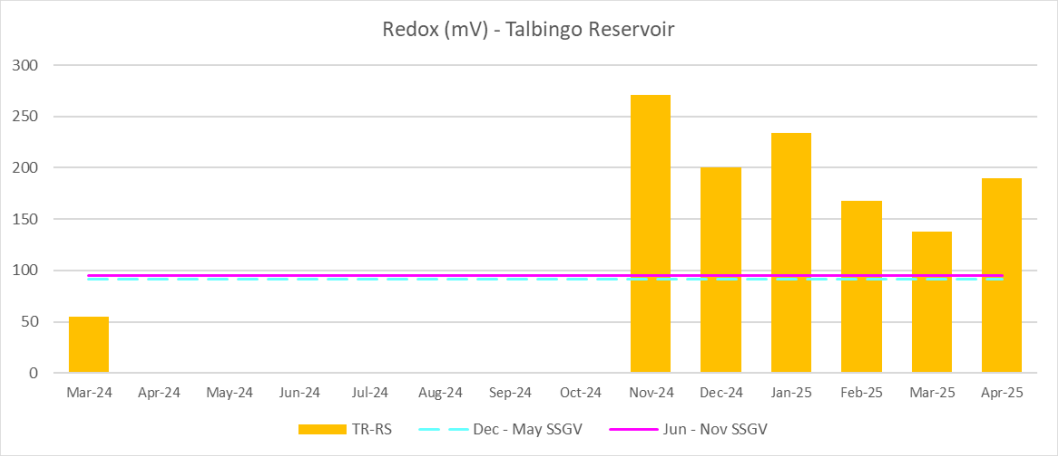

FIGURE 29: REDOX FOR TALBINGO RESERVOIR

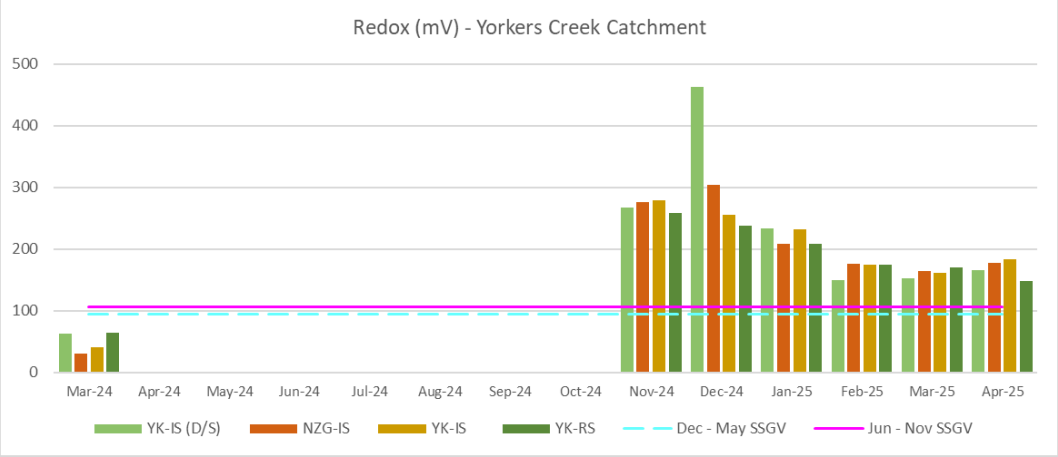

FIGURE 30: REDOX FOR YORKERS CREEK CATCHMENT

5.1.1.10 Nitrogen Oxides

Nitrogen oxides (mg/L) levels exceeded the December to May SSGV (0.015 mg/L) at YR2-IS in Yarrangobilly River catchment, TR-RS at Talbingo Reservoir and YK-IS in Yorkers Creek catchment. All other sites were below the LOR, refer to Figure 31 to Figure 33.

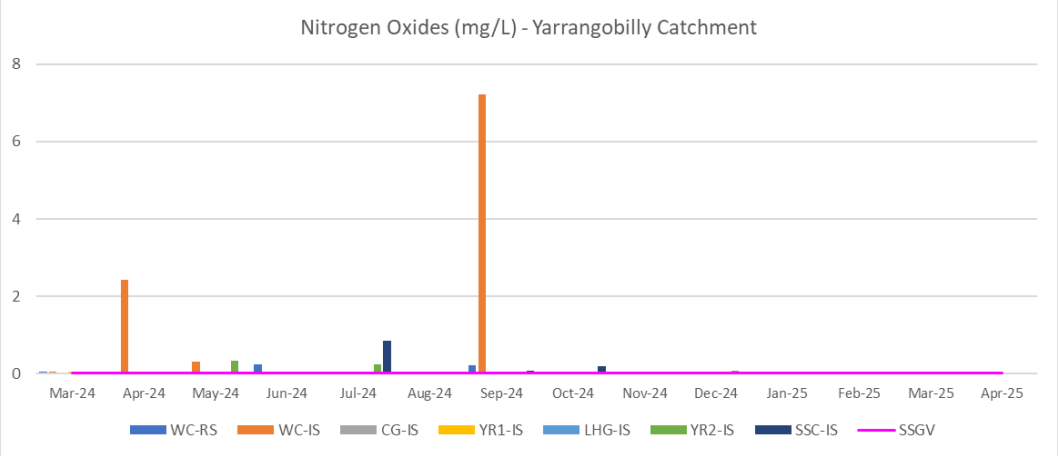

FIGURE 31: NITROGEN OXIDES FOR YARRANGOBILLY RIVER CATCHMENT

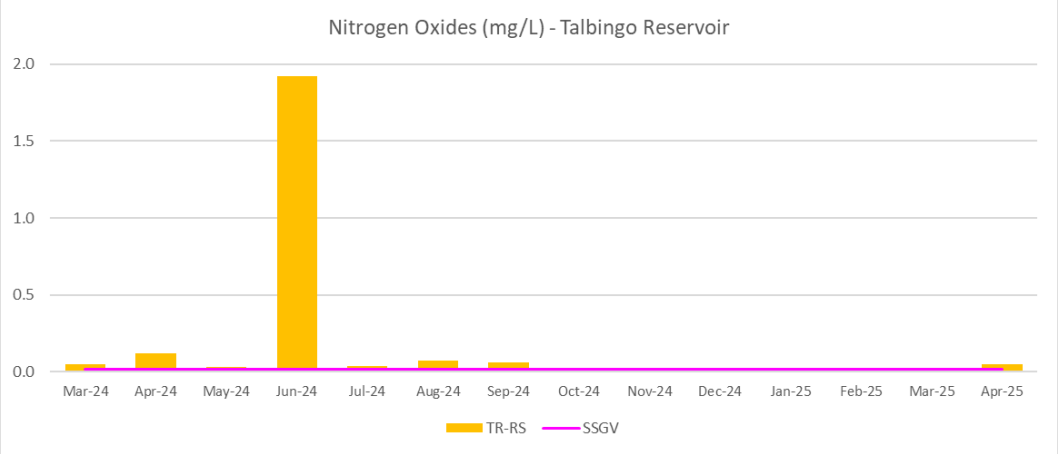

FIGURE 32: NITROGEN OXIDES FOR TALBINGO RESERVOIR

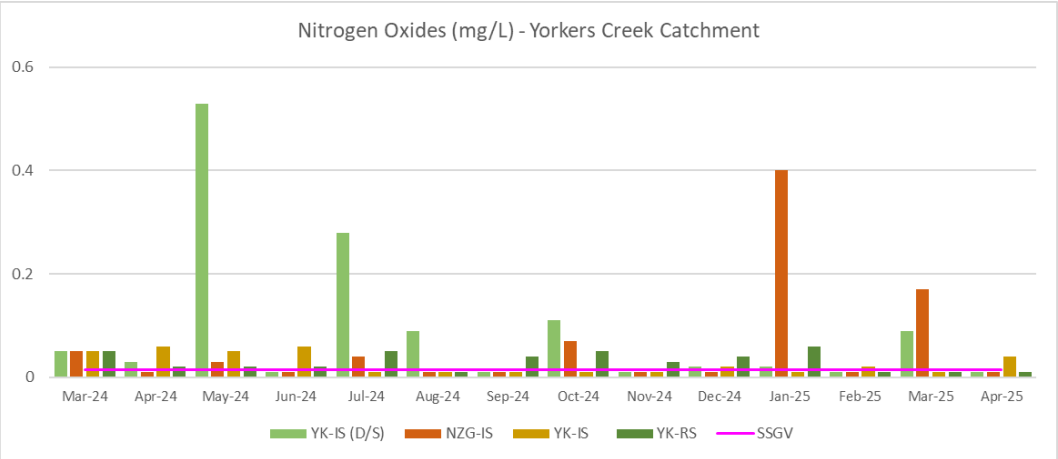

FIGURE 33: NITROGEN OXIDES FOR YORKERS CREEK CATCHMENT

5.1.1.11 Ammonia

Ammonia (mg/L) levels exceeded the December to May SSGV (0.013 mg/L) at all sites across the three catchments, refer to Figure 34 to Figure 36.

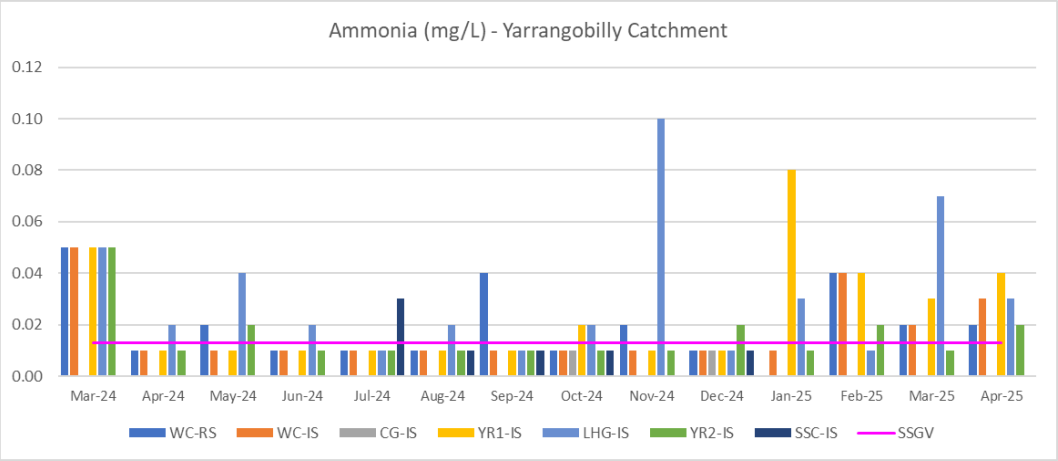

FIGURE 34: AMMONIA FOR YARRANGOBILLY RIVER CATCHMENT

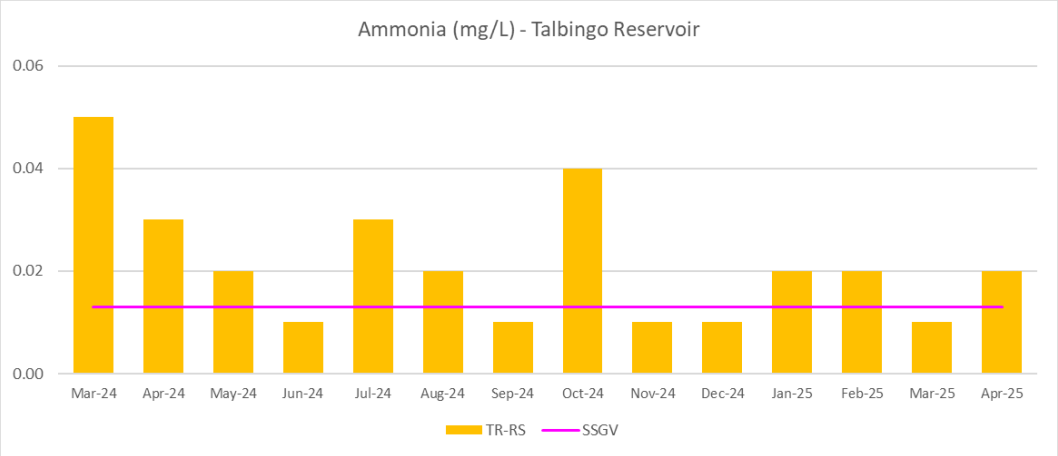

FIGURE 35: AMMONIA FOR TALBINGO RESERVOIR

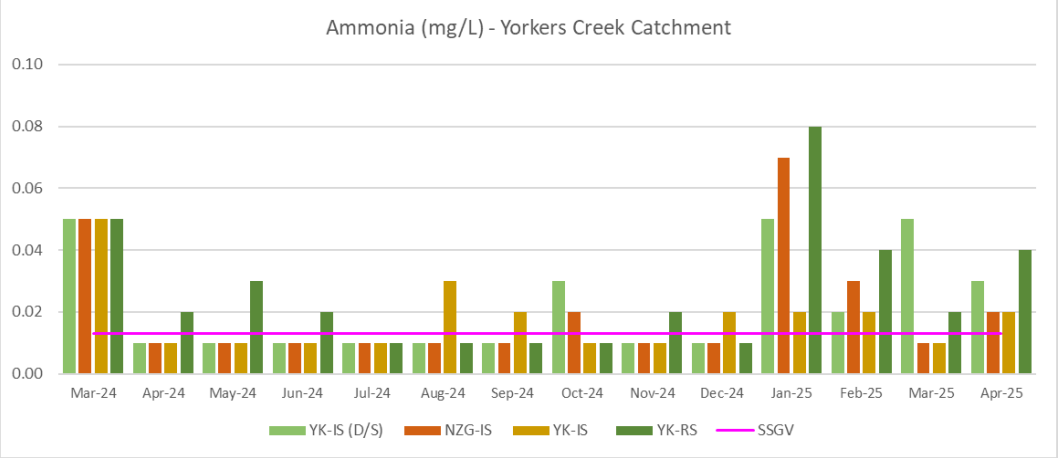

FIGURE 36: AMMONIA FOR YORKERS CREEK CATCHMENT

5.1.1.12 Cyanide

Cyanide (mg/L) was below the LOR at all sites across all three catchments, refer Figure 37 to Figure 39.

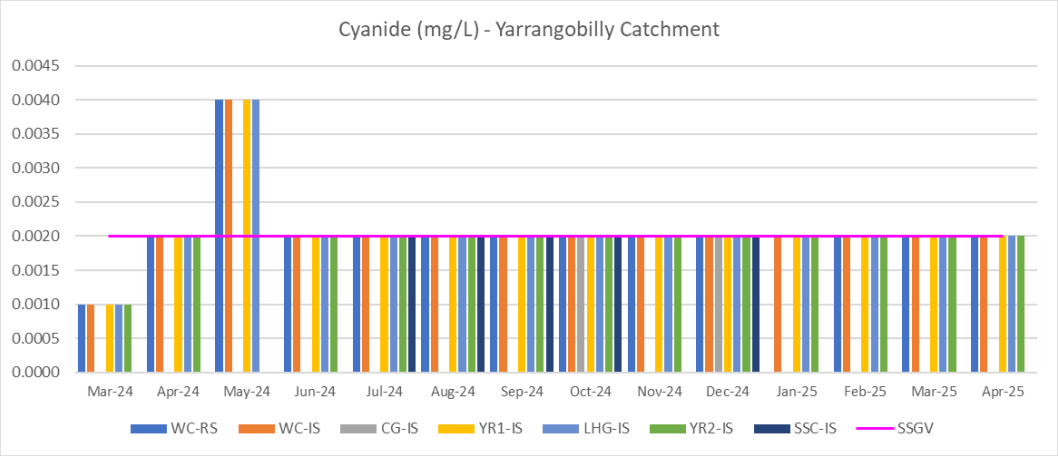

FIGURE 37: CYANIDE FOR YARRANGOBILLY RIVER CATCHMENT

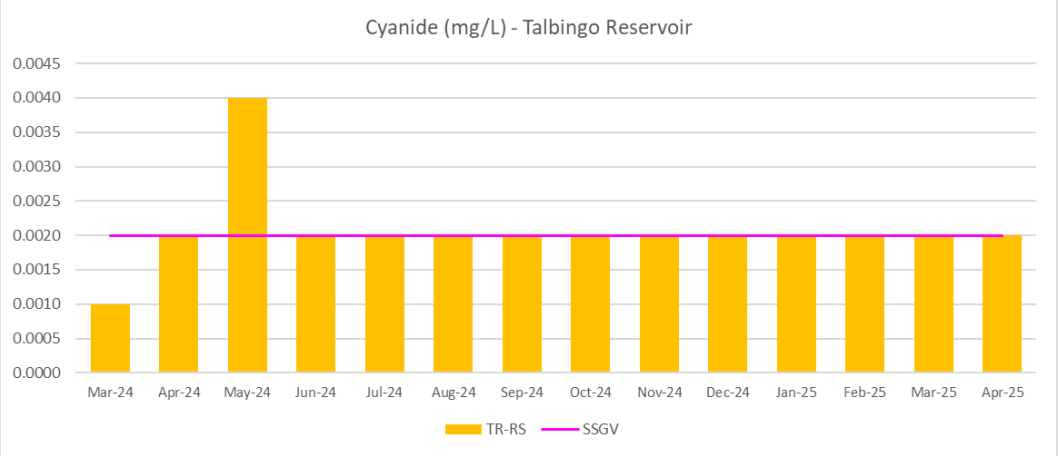

FIGURE 38: CYANIDE FOR TALBINGO RESERVOIR

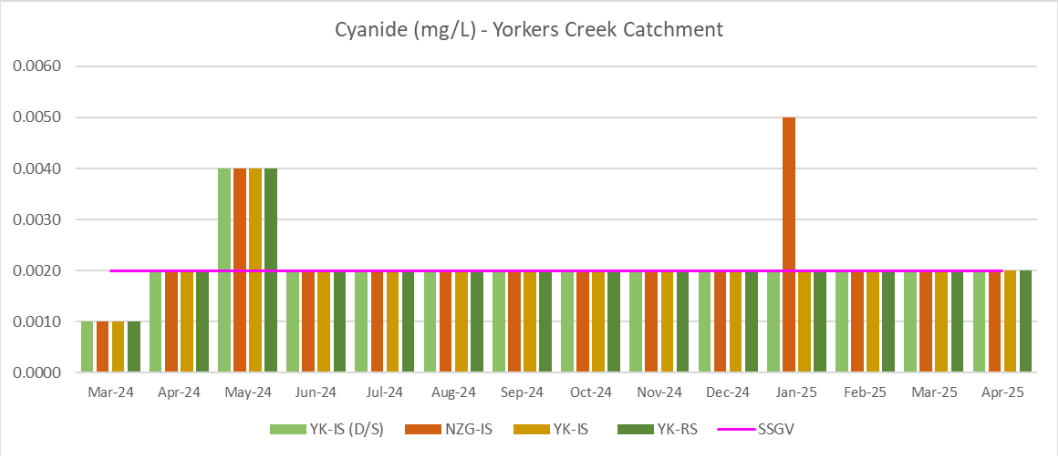

FIGURE 39: CYANIDE FOR YORKERS CREEK CATCHMENT

5.1.1.13 Total Hardness

In April 2025, $CaCO_3$ (mg/L) levels exceeded the December to May SSGV at all locations, except at TR-RS in Talbingo Reservoir which was within the SSGV, refer Figure 40, Figure 41 and Figure 42.

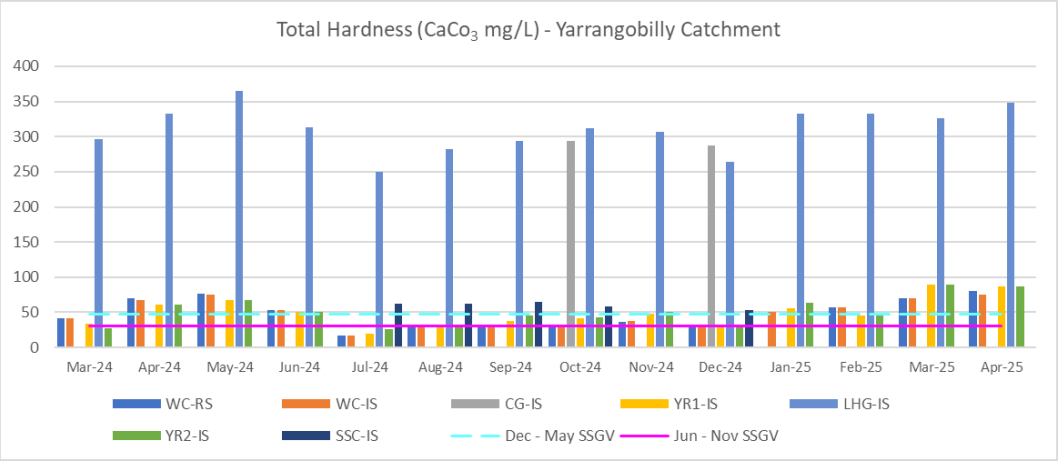

FIGURE 40: $CACO_3$ FOR YARRANGOBILLY RIVER CATCHMENT

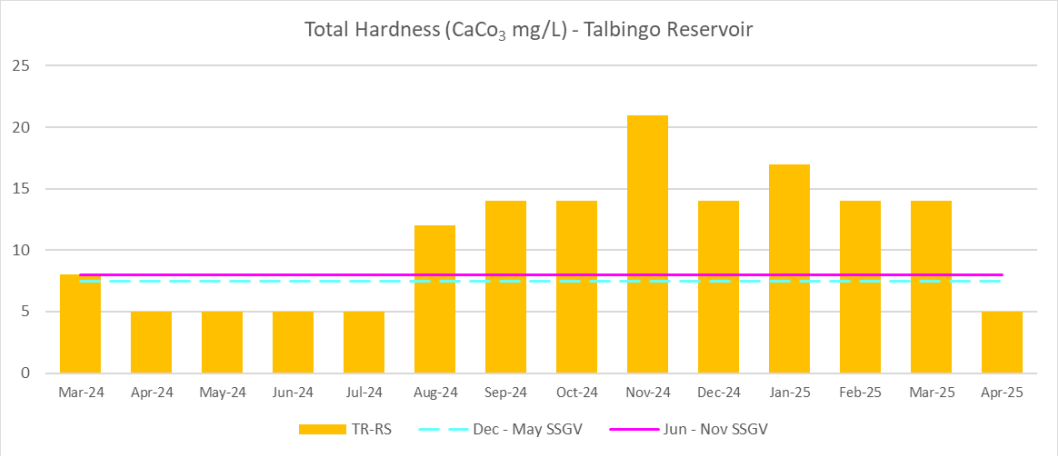

FIGURE 41: $CACO_3$ FOR TALBINGO RESERVOIR

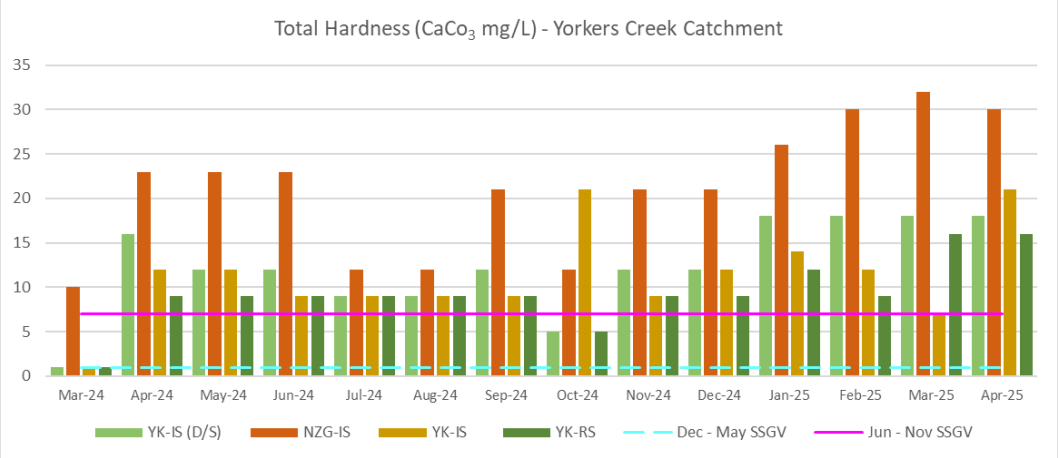

FIGURE 42: $CACO_3$ FOR YORKERS CREEK CATCHMENT

5.1.1.14 Total Kjeldahl Nitrogen

TKN (mg/L) values exceeded the December to May SSGV (0.2 mg/L) at LHG-IS, but were on-par with the SSGV at YR1-IS. All other sites within Yarrangobilly River catchment were below the LOR, refer Figure 43. Talbingo Reservoir and all Yorkers Creek catchment sites exceeded the December to May SSGV (0.1 mg/L), refer to Figure 44 and Figure 45.

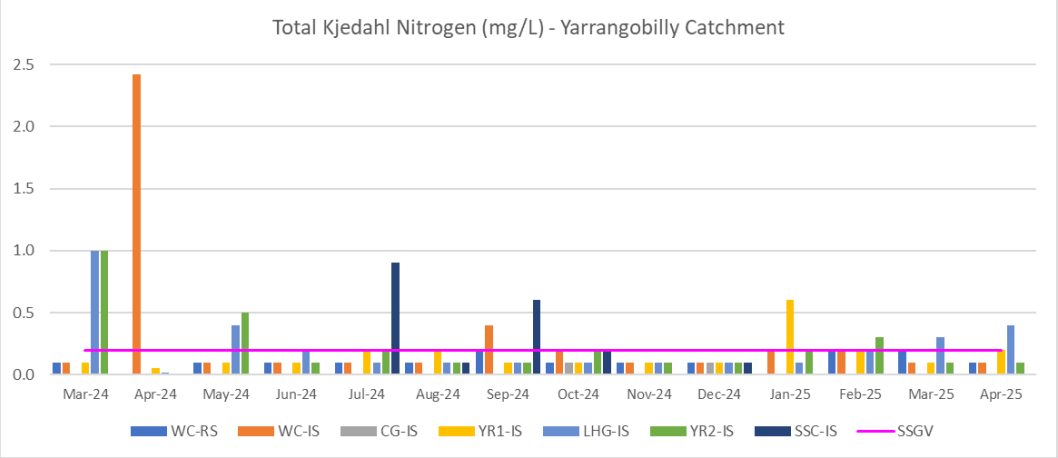

FIGURE 43: TKN FOR YARRANGOBILLY RIVER CATCHMENT

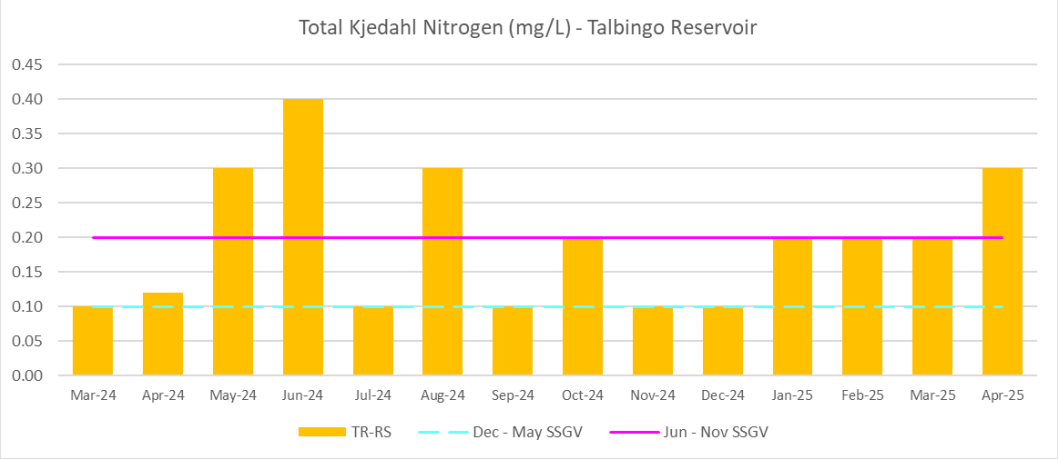

FIGURE 44: TKN FOR TALBINGO RESERVOIR

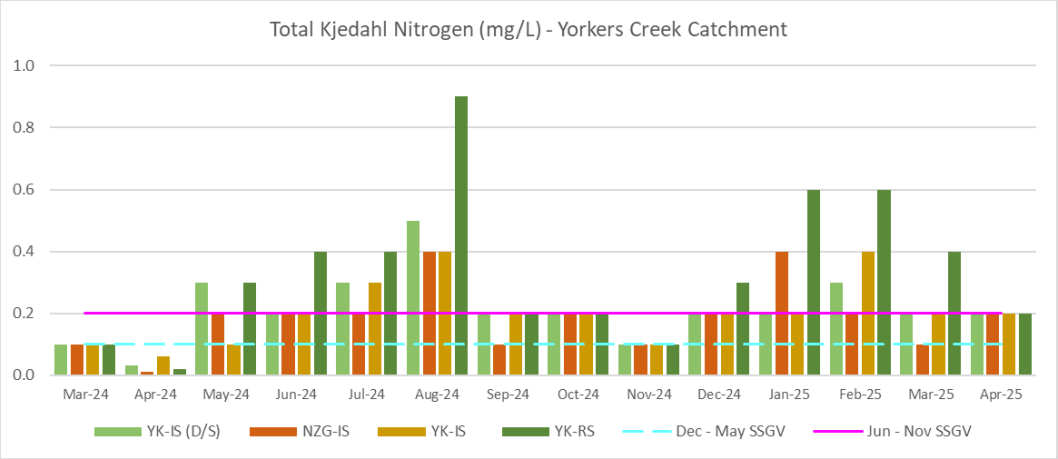

FIGURE 45: TKN FOR YORKERS CREEK CATCHMENT

5.1.1.15 Total Nitrogen

TN (mg/L) exceeded the SSGV (0.2 mg/L) at LHG-IS but was on-par with the SSGV at YR1-IS within Yarrangobilly River catchment, refer to Figure 46. Similarly, Talbingo Reservoir exceedance the SSGV, while all sites within Yorkers Creek catchment were on-par with the SSGV, refer Figure 47 and Figure 48.

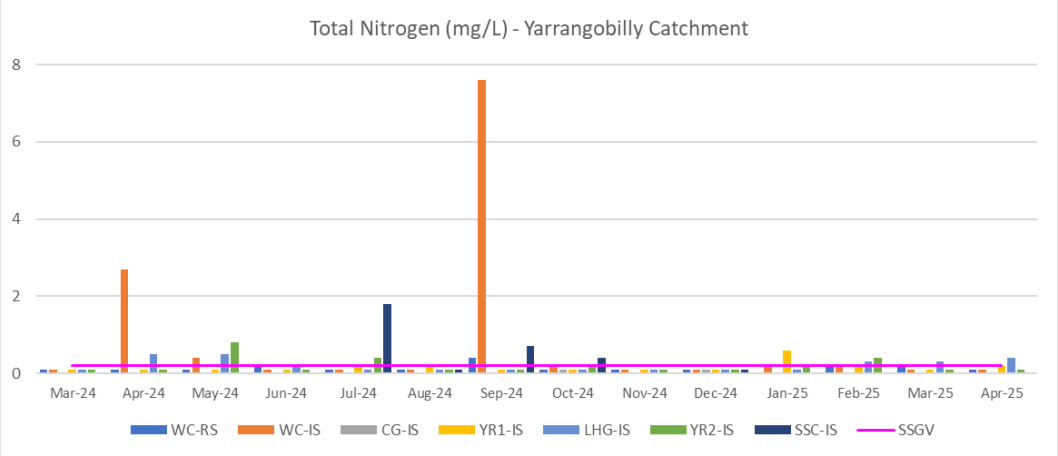

FIGURE 46: TN FOR YARRANGOBILLY RIVER CATCHMENT

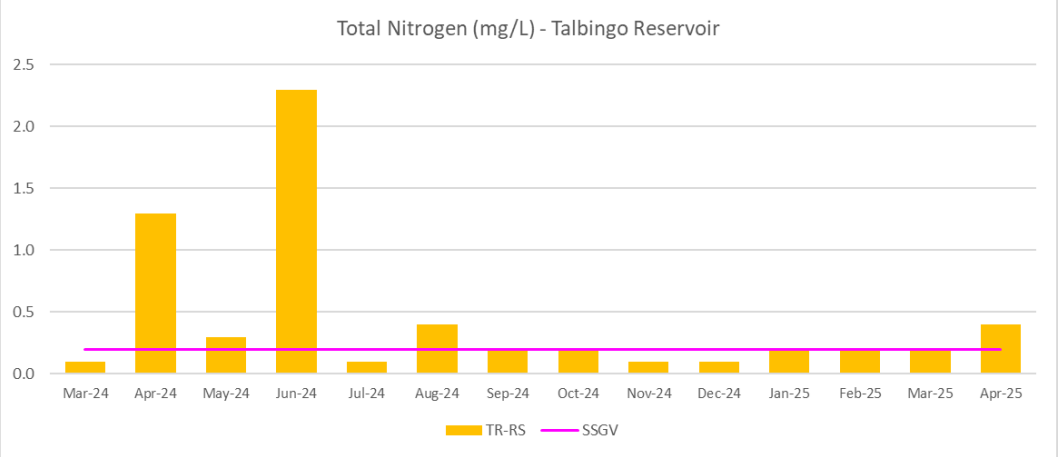

FIGURE 47: TN FOR TALBINGO RESERVOIR

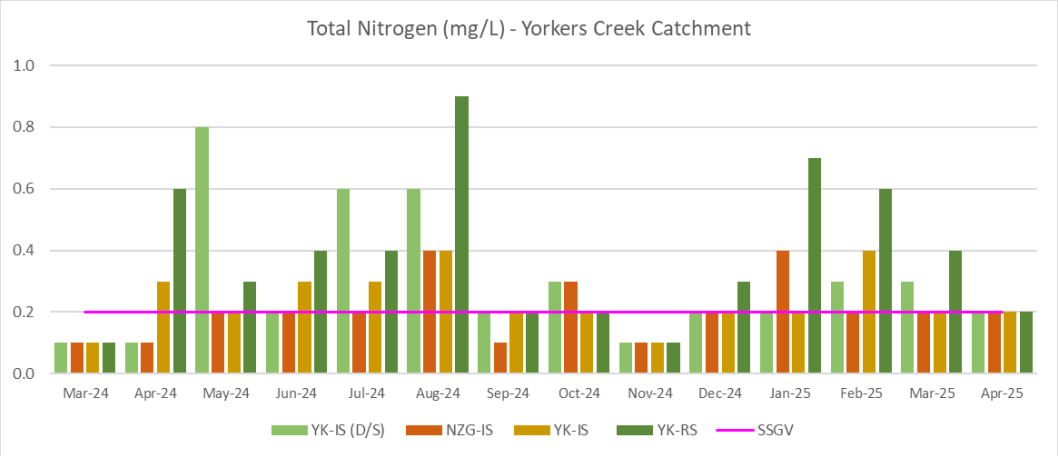

FIGURE 48: TN FOR YORKERS CREEK CATCHMENT

5.1.1.16 Total Phosphorus

TP (mg/L) values exceeded the December to May SSGV (0.02mg/L) at WC-IS, LHG-IS and YR2-IS within Yarrangobilly River catchment, refer to Figure 49. Talbingo Reservoir also exceeded the SSGV, refer to Figure 50. In Yorkers Creek catchment, YK-IS(D/S) and YK-IS were on-par with the SSGV while NZG-IS exceeded the SSGV, refer to Figure 51.

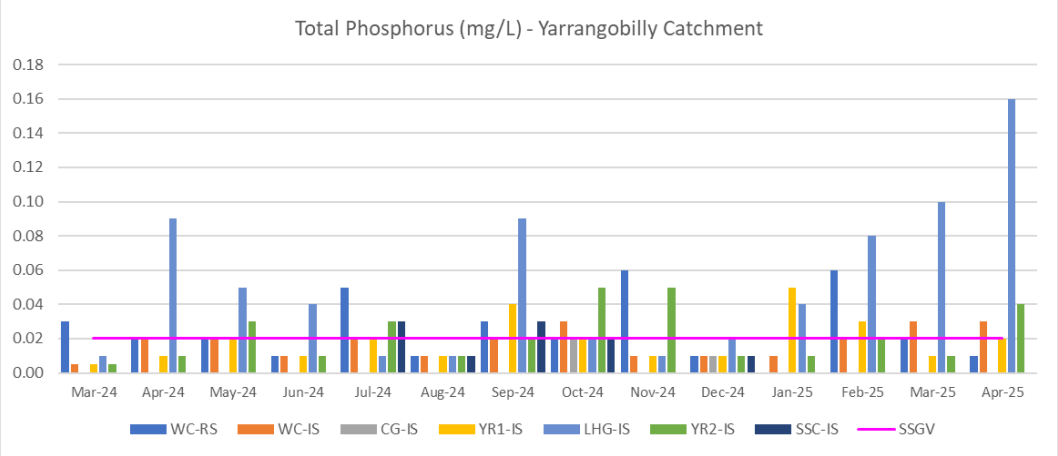

FIGURE 49: TP FOR YARRANGOBILLY RIVER CATCHMENT

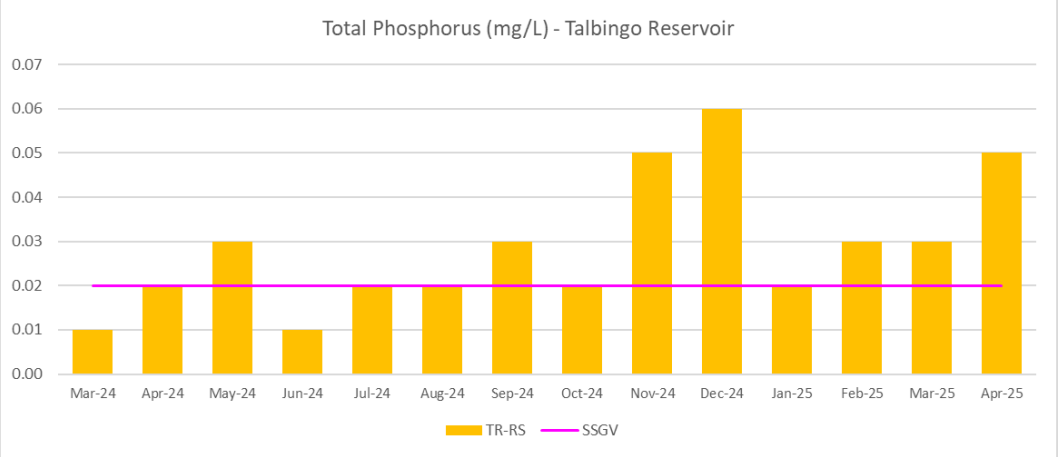

FIGURE 50: TP FOR TALBINGO RESERVOIR

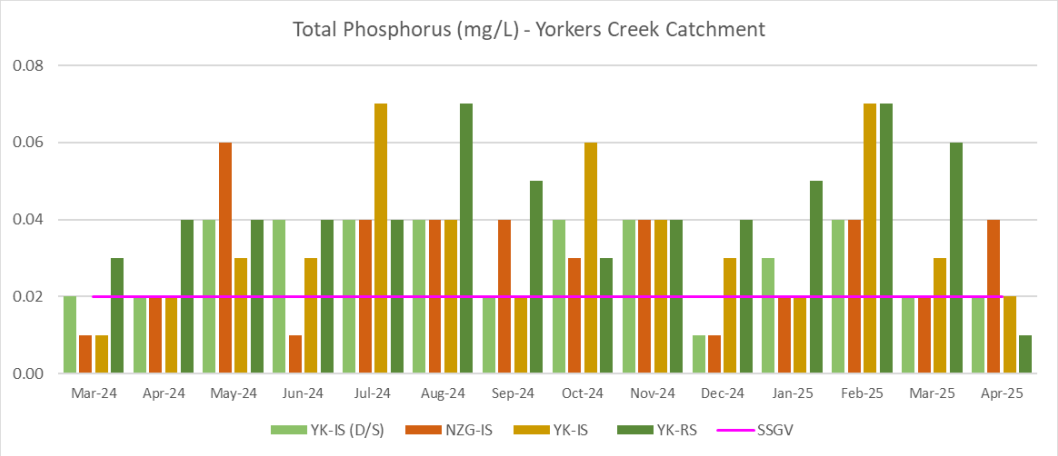

FIGURE 51: TP FOR YORKERS CREEK CATCHMENT

5.1.1.17 Reactive Phosphorus

All sites measured below the LOR for RP (mg/L), refer to Figure 52 to Figure 54.

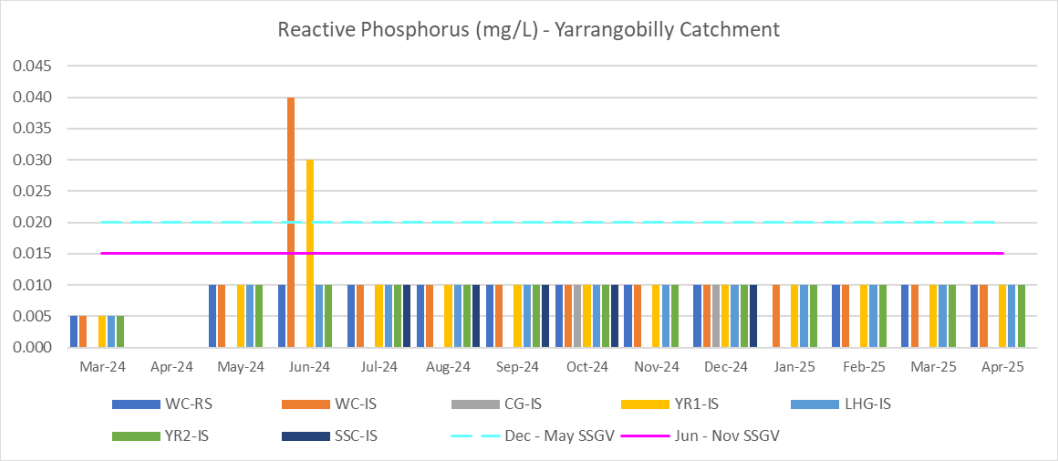

FIGURE 52: RP FOR YARRANGOBILLY RIVER CATCHMENT

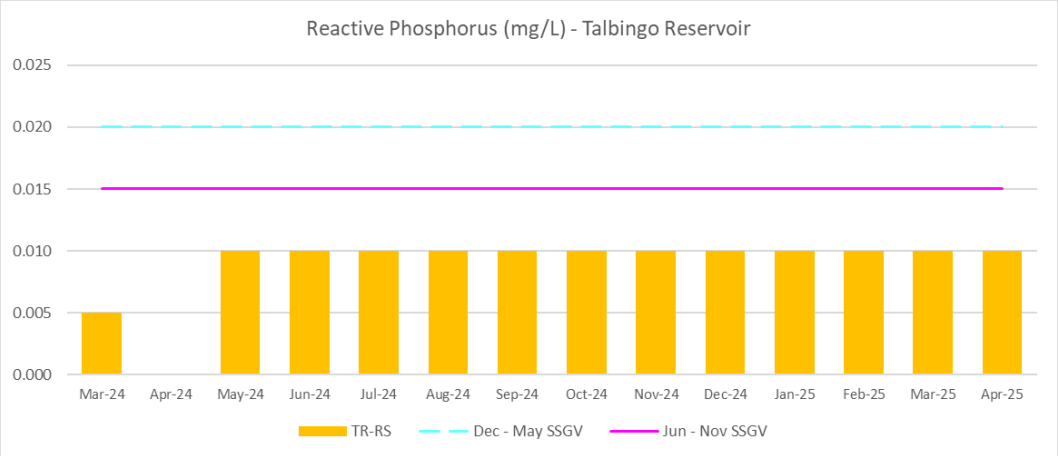

FIGURE 53: RP FOR TALBINGO RESERVOIR

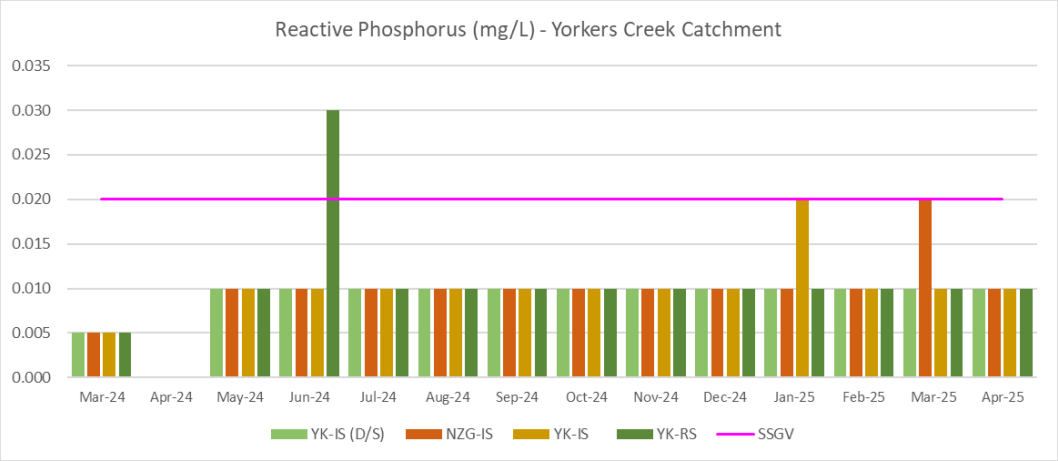

FIGURE 54: RP FOR YORKERS CREEK CATCHMENT

5.1.2 Dissolved Metals

Dissolved metals exceeding the relevant SSGV are listed in Table 4.

Table 4: Results for Dissolved Metals

DISSOLVED METALS RESULTS				
Analyte	**Site**	**Result (mg/L)**	**SSGV (mg/L)**	**Comment**
Cu	YR1-IS	0.01	0.001	All sites were below the LOR, except YR1-IS in Yarrangobilly River catchment, which exceeded the Al (mg/L) SSGV.
Fe	LHG-IS	1.38	0.03	All sites within the Yarrangobilly River catchment and Talbingo Reservoir were below the LOR, except LHG-IS which exceeded the Fe (mg/L) SSGV. All sites within the Yorkers Creek catchment were within the SSGV.
Mn	WC-RS	0.007	0.002	All sites across all catchments exceeded the SSGV for Mn (mg/L), except for the reference site at Yorkers Creek catchment, which was within the SSGV. The greatest exceedance was seen at LHG-IS.
	WC-IS	0.005		
	YR1-IS	0.006		
	LHG-IS	0.997		
	YR2-IS	0.003		
	TR-RS	0.03	0.003	
	YK-IS (D/S)	0.018	0.005	
	NZG-IS	0.007		
	YK-IS	0.036		

5.1.3 Total Metals

Total metals exceeding the DGV are listed in Table 5.

Table 5: Results for Total Metals

TOTAL METALS RESULTS				
Analyte	**Site**	**Result (mg/L)**	**DGV (mg/L)**	**Comment**
Al	LHG-IS	0.55	0.027	Within Yarrangobilly River catchment, all sites were below the LOR, except LHG-IS, which exceeded the DGV for Al (mg/L). Talbingo Reservoir and all Yorkers Creek catchment sites exceeded the DGV.
	TR-RS	0.03		
	YK-RS	0.78		
	YK-IS (D/S)	0.06		
	NZG-IS	0.04		
	YK-IS	0.15		
Cu	LHG-IS	0.002	0.001	LHG-IS within Yorkers Creek catchment was the only Cu (mg/L) exceedance, all other sites were below the LOR.
Fe	LHG-IS	8.45	0.3	LHG-IS was the only exceedance of Fe (mg/L) within the Yarrangobilly River catchment. No exceedance in Talbingo Reservoir. Within the Yorkers Creek catchment, the reference site, YK-RS, and impact site, YK-IS, both exceeded the DGV.
	YK-RS	0.74		
	YK-IS	0.88		
Zn	LHG-IS	0.008	0.0024	All sites were below the LOR, except for LHG-IS which exceeded the Zn (mg/L) DGV.

6 DISCUSSION

Below is a summary of key observations and discussion points from the April monitoring results:

- Potential impacts to SWQ:
  - » Transmission line clearing and bulk earthworks activities were ongoing within the Yarrangobilly and Yorkers Creek catchment areas
  - » Impact sites within the Yarrangobilly River catchment are influenced by other activities associated with the Snowy 2.0
  - » TR-RS is located in O'Hares Campground, a popular public recreational area for water based activities including boating. It is also located adjacent to ancillary infrastructure associated with Talbingo Reservoir
  - » Many reference sites and impact sites are located adjacent to publicly accessible tracks used for maintenance and recreational activities
  - » Hoof marks, fauna scats and aquatic fauna indicate presence of fauna in and around waterways increasing potential for erosion of banks and sedimentation into waterways
  - » Vegetative debris and materials in the water have potential to leach nutrients into waterways
  - » Existing eroded banks increase potential for sedimentation into waterways
  - » Waterways with shallow water depth are more prone to SWQ impacts due to lack of volume
  - » Overhanging vegetation have potential to fall into waterways and influence water parameters
  - » Vegetation cover along the riparian zone can influence the stability of the banks and groundwater which in turn may influence the waterways
  - » Sheen from organic decomposition observed on the surface of the water at LHG-IS and YK-RS may impact WQ parameters
- Sampling and analysis:
  - » Many of the results were recorded as below (<) the LOR
  - » Analysis of some parameters were inconclusive as the SSGV/DGV for a number of parameters was lower than the LOR from the laboratory
  - » Shallow water depth at sampling sites increased difficulty of sampling without disturbing bed
  - » Redox (mV), RP (mg/L) and DO (ppm) were analysed outside their respective holding times which may have decreased reliability of results
  - » CG-IS and SSC-IS were dry at the time of monitoring, therefore no samples were collected
- SWQ parameters:
  - » Temperature decreased across most sites compare to March 2025.
  - » pH within the Yarrongabilly River Catchment was exceeded at most sites SSGV (7.85), except LHG-IS

- Talbingo Reservoir catchment sites were within the SSGV (7.85), whereas all sites within the Yorkers Creek Catchment exceeded the SSGV (6.79)
- Dissolved Oxygen (% saturation) were below their respective SSGVs across all sites across.
- Specific conductance was within the SSGV at all sites except LHG-IS in Yarrangobilly.
- Electrical conduction exceeded SSGVs at all sites, consistent with previous months.
- Presence of algae (not overgrown) and aquatic vegetation in waterways indicate the SWQ is sufficient to support aquatic ecosystems
- LHG-IS has consistently recorded exceedances across multiple parameters. This could be influenced by the shallow depth of the water and the high silt deposits observed in the bed
- CG-IS has only flowed twice during construction sampling, therefore, there is insufficient data to compare the results
- Total dissolved solids (TDS) exceeded the SSGV at all sites in Yarongobilly and Talbingo and in Yorkers Creek only TK-RS was on par with its SSGV
- Total Suspended Solids (TSS) was exceeded at LHG-IS, YK-RS and YK-IS. All other sites were below the LOR.
- Redox exceeded SSGVs at all sites across all catchments, continuing the trend.
- Nitrogen Oxides: exceeded at YR2-IS, TR-RS, and YK-IS whilst all other sites below LOR.
- Ammonia exceeded SSGVs at all sites.
- Cyanide and Reactive Phosphorus were below LOR at all sites.
- Total Hardness ($CaCO_3$) exceeded SSGVs at all sites except TR-RS (within SSGV).
- Total Kjeldahl Nitrogen (TKN) exceeded at LHG-IS, on-par at YR1-IS, all others below LOR. All Talbingo and Yorkers Creek sites exceeded.
- Total Nitrogen (TN) exceeded at LHG-IS and Talbingo whilst Yorkers Creek sites were on-par with SSGV.
- Total Phosphorus (TP) exceeded at WC-IS, LHG-IS, YR2-IS, Talbingo, and NZG-IS, whilst YK-IS(D/S) and YK-IS were on-par with SSGV.
- Dissolved Copper (Cu) exceeded at YR1-RS whilst all other sites were below the LOR
- Dissolved Iron (Fe) exceeded the SSGV at LHG-IS (1.38mg/L)
- Levels of dissolved manganese (Mn) exceeded the SSGV at all sites except for YK-RS. The highest level was recorded at LHG-IS (0.997 mg/L).
- Total aluminium (Al) had widespread exceedances, namely at LHG-IS (0.55 mg/L), TR-RS, YK-RS, YK-IS, NZG-IS, YK-IS(D/S).
- Total copper (Cu) was exceeded at LHG-IS whilst all other sites were below the LOR.
- Total zinc (Zn) was exceeded at LHG-IS (0.008 mg/L).

7 CONCLUSION

Monthly construction SWQ monitoring was undertaken on 14 April 2025 in accordance with EPL 21753. Monitoring was completed using the revised methodology outlined in Section 3 at the 12 locations listed in Table 1.

The results from the construction SWQ monitoring program were reported for three key catchments: Yarrangobilly River, Talbingo Reservoir, and Yorkers Creek. Each catchment had a reference site, with impact sites also monitored for comparison. Key parameters such as temperature, pH, DO, SPC, EC, turbidity, TSS, redox, ammonia, nitrogen oxides, cyanide, TKN, $CaCO_3$, TN, TP, RP and metals (both dissolved and total) were analysed.

The April 2025 surface water quality (SWQ) monitoring program identified a number of exceedances across the Yarrangobilly River, Talbingo Reservoir, and Yorkers Creek catchments. Construction activities, including transmission line bulk earthworks, were underway throughout the Yarrangobilly and Yorkers Creek catchments. Impact sites within the Yarrangobilly River catchment are also influenced by broader Snowy 2.0 activities, while the reference site at Talbingo Reservoir (TR-RS) is located within O'Hares Campground—a public recreation area frequented for water-based activities and situated adjacent to ancillary infrastructure. Many other reference and impact sites are positioned near publicly accessible roads and tracks used for maintenance and recreation, adding to the potential for disturbance.

Field observations further support the likelihood of environmental stressors affecting water quality. Signs of faunal presence—including hoof marks, scats, and aquatic life—were recorded at several sites and may be contributing to bank instability and sedimentation. Eroded and undercut banks, vegetative debris, shallow water depths, and overhanging vegetation were common across many locations. These features, along with the presence of sheen from organic decomposition observed at LHG-IS and YK-RS, may be influencing nutrient levels and other water quality parameters. Vegetation cover along riparian zones also plays a critical role in stabilising banks and regulating groundwater interaction, which in turn may affect surface water conditions.

Sampling and laboratory analysis presented several challenges during the April monitoring round. Two sites, CG-IS and SSC-IS, were dry at the time of sampling, preventing data collection. At other locations, low water levels made it difficult to collect samples without disturbing the bed. Some analytes—specifically redox, reactive phosphorus, and dissolved oxygen (in ppm)—were analysed outside their recommended holding times, potentially reducing the reliability of these results. Additionally, many parameters were reported below the laboratory's limit of reporting (LOR), particularly where the SSGV or DGV was lower than analytical detection thresholds.

Despite these limitations, the results from April 2025 indicate consistent patterns of exceedance across many parameters. Temperature decreased across most sites relative to March, reflecting seasonal change. pH levels exceeded the seasonal SSGV (7.85) at most Yarrangobilly River sites, except LHG-IS. In the Yorkers Creek catchment, all sites exceeded the lower SSGV of 6.79, while Talbingo Reservoir remained within its guideline range. Dissolved oxygen (% saturation) levels were below the SSGV at all sites, a trend consistent with previous months.

Specific conductance was within SSGV at all sites except LHG-IS in the Yarrangobilly River catchment, while electrical conductivity (EC) exceeded SSGVs across all catchments, continuing the pattern from earlier monitoring rounds. Turbidity levels were elevated across all reference and most impact sites, although YK-IS (D/S), NZG-IS and YK-IS in the Yorkers Creek catchment were within the 9 NTU SSGV. Total suspended solids (TSS) exceeded the SSGV at LHG-IS, YK-RS, and YK-IS, with all other sites below the LOR. Total dissolved solids (TDS) exceeded SSGVs at all sites in the Yarrangobilly and Talbingo catchments, while YK-RS was the only site in the Yorkers Creek catchment that met the guideline.

Redox potential (mV) continued to exceed SSGVs at all sites across all catchments, a trend persisting since late 2024. Nitrogen oxides exceeded the SSGV at YR2-IS, TR-RS, and YK-IS, with all other sites returning values below the LOR. Ammonia concentrations exceeded the SSGV at all sites, while cyanide and reactive phosphorus remained below detection limits. Total hardness ($CaCO_3$) exceeded the SSGV at all sites, except TR-RS which returned a compliant value. Total Kjeldahl nitrogen (TKN) exceeded the guideline at LHG-IS and was on par at YR1-IS, with all other Yarrangobilly sites below the LOR; however, Talbingo and all Yorkers Creek sites exceeded their respective SSGVs. Total nitrogen (TN) exceeded at LHG-IS and Talbingo, while all Yorkers Creek sites were on-par with the SSGV. Total phosphorus (TP) exceeded the guideline at WC-IS, LHG-IS, YR2-IS, Talbingo, and NZG-IS; results at YK-IS and YK-IS (D/S) were on-par.

Dissolved metals data showed a copper (Cu) exceedance at YR1-IS, while all other sites were below the LOR. Iron (Fe) exceeded the SSGV at LHG-IS (1.38 mg/L), and manganese (Mn) exceeded at all sites except YK-RS, with the highest concentration again recorded at LHG-IS (0.997 mg/L). Total metals also showed widespread exceedances: total aluminium (Al) was elevated at LHG-IS, TR-RS, and all Yorkers Creek sites; total copper and total zinc were both exceeded at LHG-IS, while total iron exceeded at LHG-IS, YK-RS, and YK-IS.

Despite widespread exceedances, biological indicators such as aquatic vegetation, algae (non-overgrown), and invertebrates were observed at multiple sites, suggesting that water quality remains sufficient to support aquatic life. However, LHG-IS continues to consistently exceedances across numerous parameters, likely influenced by low water volumes, organic loading, and high silt deposition.

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Appendix A: Field Sheet (UGL, 2025)

UGL

WATER QUALITY MONITORING FIELD SHEET

Date: 14.4.25 Personnel: VLY, LP Sampling Purpose: Monthly WQ Monitoring - April

Site	Time	Temp (°C)	Water Pressure (mmhg)	DO (%)	SPC (µS/cm)	pH	Turbidity (NTU)	TSS (mg/L)	Observations
DGV:		-	-	90 - 110	30 - 350	6.5 - 8	2 - 25	0.2	Weather Pre 24 hrs: 0mm, cloudy
Dec - May SSGV:		-	-	96.2	115	7.85	0.37	0.2	Weather Forecast: 10% 1mm
Jun - Nov SSGV:		-	-	89.7	88	7.62	5.12	1	Weather Time of Sampling: sunny, cloudy, 0mm
LHG-IS Lick Hole Gully	16:00	17.9	716.6	54.1	137	7.52	50.12		• low flow - very difficult to get a sample. • Alot of algae growth - impacting sample quality • Heavy silt deposition • Thick grass growth in gully line • sheen on water from organic deposition • Rotten egg gas smell (decomposition)
YR2-IS Yarrangobilly River	13:15	18.1	719.3	95.3	37.7	8.46	0.94		• Flowing • clear, good visibility, rocky bed and banks • upstream & landuse, under transmission line • Lomandra, Callistemon & grasses on banks • small amount of aquatic veg close to bank @ sampling point
SSC-IS Sheep Station Creek	16:45								• dry
TR-RS Talbingo Reservoir	11:10 am	17.6	721.2	67.6	5.8	6.96	1.3	0.00	• ducks, ~~fish~~ fish • rocky bed banks • clear water, high visibility, veg detritus • high volume, ~~low~~ flow • native bentmen • adjacent to others and reservoir infrastructure • aquatic veg • veg is groundcover and trees

UGL

WATER QUALITY MONITORING FIELD SHEET

Date: 14/04/25 Personnel: VLY LPo Sampling Purpose: Monthly WQ monitoring - April

Site	Time	Temp (°C)	Water Pressure (mmhg)	DO (%)	SPC (µS/cm)	pH	Turbidity (NTU)	TSS (mg/L)	Observations
DGV:		-	-	90 - 110	30 - 350	6.5 - 8	2 - 25	0.2	Weather Pre 24 hrs: 0mm, cloudy
Dec - May SSGV:		-	-	96.2	115	7.85	0.37	0.2	Weather Forecast: 10% 1mm
Jun - Nov SSGV:		-	-	89.7	88	7.62	5.12	1	Weather Time of Sampling: sunny, cloudy, 0mm
YK-RS Yorkers Creek	8:20 am	11	673.2	77.6	8.6	7.64	15.23	0.00	• no flow, low volume • yellow tinge, slightly murky • algae • low weed density • eroded banks • adjacent to publicly accessible track • vegetative detritus • moss • groundcover and trees • hoof marks • kangaroo scats
YK-IS (D/S) Yorkers Creek	10am	12.5	676.4	84	11.1	7.47	2.71	0.00	• moderate flow, low volume • vegetative detritus • low weed density • aquatic veg • undercut banks • moss, rocky bed • adjacent to access track, culvert • veg ~~grass~~ grass, shrubs, trees • kangaroo scats • overhanging veg
NZG-IS New Zealand Gully	7:45 am	9	678.5	78.4	16.6	8.24	2.03	0.00	• clear water, low flow, low volume, possible hoof marks, • moss • silty bed • algae • vegetative detritus • adjacent to public access track • overhanging veg • veg mainly up adjacent, groundcover, • low weed density, ine blackberry • moss provided banks
YK-IS Yorkers Creek	9am	11.9	674.8	65.4	10.9	6.93	7.27	0.00	• aquatic veg • hoof marks • low volume, ~~high~~ low flow • yellow tinge, slightly murky • moss • algae • oily sheen on surface • rocky bed • bubbles on surface • groundcover and trees • eroded banks • adjacent to Elliots way, moving into culvert

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WATER QUALITY MONITORING FIELD SHEET

Date: 14.4.25 Personnel: VLY, LP Sampling Purpose: Monthly WQ monitoring April

Site	Time	Temp (°C)	Water Pressure (mmhg)	DO (%)	SPC (µS/cm)	pH	Turbidity (NTU)	TSS (mg/L)	Observations
DGV:		-	-	90 - 110	30 - 350	6.5 - 8	2 - 25	0.2	Weather Pre 24 hrs: Overcast, cloudy
Dec - May SSGV:		-	-	96.2	115	7.85	0.37	0.2	Weather Forecast: 10% rain
Jun - Nov SSGV:		-	-	89.7	88	7.62	5.12	1	Weather Time of Sampling: sunny, cloudy, 10mm
WC-RS Wallace Creek	13:50	17.6	716.7	91.8	34.0	8.19	0.90	0.00	• Flowing • overhanging trees • clear water, rocky bottom • grass and trees on banks • small amount of filimentaceous algae • sediment deposition evident in areas outside of flow
WC-IS Wallace Creek	14:15	17.3	716.7	92.8	33.5	8.66	1.02	0.00	• Flowing, silt deposition where low flows • clear water, good viscability, rocky bottom • site upstream of bridge • grass and shrubs lining bank - very dusty from dirt rd. • Blackberry has been sprayed
CG-IS Cave Gully	15:45 ~~13:45~~								• Dry
YR1-IS Yarrangobilly River	15:05	18.7	717.5	91.6	36.3	8.76	0.98	0.00	• oil sheen (organic) aquatic veg — very detritus • high flow, low volume • clear water, high visibility • rocky bed • high weed density on blackberry • trees, shrubs, ground cover • eroded upper bank (exposed soil), exposed roots)

Appendix B: COA (ALS, 2025a), QA/QC Assessment (ALS, 2025b) and QCR (ALS, 2025c)

CERTIFICATE OF ANALYSIS

Work Order	: **ES2511173**	Page	: 1 of 8
Client	: **UGL LIMITED**	Laboratory	: Environmental Division Sydney
Contact	: VIVIAN LEEYU	Contact	: Customer Services ES
Address	: Level 4, 40 Miller Street North Sydney 2060	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: Maragle Monthly WQ monitoring - April 2025	Date Samples Received	: 16-Apr-2025 14:50
Order number	: 4501837828	Date Analysis Commenced	: 19-Apr-2025
C-O-C number	: ----	Issue Date	: 28-Apr-2025 15:11
Sampler	: VIVIAN LEEYU		
Site	: Maragle / Lobs Hole		
Quote number	: ES24UGLLIM0001_V3		
No. of samples received	: 10		
No. of samples analysed	: 10		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EG020: It is recognised that total concentration is less than dissolved for some metal analytes. However, the difference is within experimental variation of the methods.
- Sodium Adsorption Ratio (where reported): Where results for Na, Ca or Mg are <LOR, a concentration at half the reported LOR is incorporated into the SAR calculation. This represents a conservative approach for Na relative to the assumption that <LOR = zero concentration and a conservative approach for Ca & Mg relative to the assumption that <LOR is equivalent to the LOR concentration.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	YK-RS	YK-IS (D/S)	NZG-IS	YK-IS	WC-RS
				Sampling date / time	14-Apr-2025 08:20	14-Apr-2025 10:00	14-Apr-2025 07:45	14-Apr-2025 09:00	14-Apr-2025 13:50
Compound	CAS Number	LOR	Unit		ES2511173-001	ES2511173-002	ES2511173-003	ES2511173-004	ES2511173-005
					Result	Result	Result	Result	Result
EA005P: pH by PC Titrator									
pH Value	----	0.01	pH Unit		7.10	7.19	7.46	6.83	8.11
EA010P: Conductivity by PC Titrator									
Electrical Conductivity @ 25°C	----	1	µS/cm		39	49	75	49	155
EA015: Total Dissolved Solids dried at 180 ± 5 °C									
Total Dissolved Solids @180°C	----	10	mg/L		30	39	58	37	88
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	----	1	mg/L		8	<1	1	4	<1
EA045: Turbidity									
Turbidity	----	0.1	NTU		16.5	1.7	0.9	4.4	0.5
EA075: Redox Potential									
Redox Potential	----	0.1	mV		148	166	177	183	202
pH Redox	----	0.01	pH Unit		6.83	6.75	7.14	6.99	7.98
ED093F: SAR and Hardness Calculations									
Total Hardness as CaCO3	----	1	mg/L		16	18	30	21	80
EG020F: Dissolved Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		0.12	0.04	0.05	0.07	<0.01
Arsenic	7440-38-2	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium	7440-47-3	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Copper	7440-50-8	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Zinc	7440-66-6	0.005	mg/L		<0.005	<0.005	<0.005	<0.005	<0.005
Manganese	7439-96-5	0.001	mg/L		0.004	0.018	0.007	0.036	0.007
Silver	7440-22-4	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Iron	7439-89-6	0.05	mg/L		0.17	0.10	0.10	0.19	<0.05
EG020T: Total Metals by ICP-MS									

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	YK-RS	YK-IS (D/S)	NZG-IS	YK-IS	WC-RS
				Sampling date / time	14-Apr-2025 08:20	14-Apr-2025 10:00	14-Apr-2025 07:45	14-Apr-2025 09:00	14-Apr-2025 13:50
Compound	CAS Number	LOR	Unit		ES2511173-001	ES2511173-002	ES2511173-003	ES2511173-004	ES2511173-005
					Result	Result	Result	Result	Result
EG020T: Total Metals by ICP-MS - Continued									
Aluminium	7429-90-5	0.01	mg/L		**0.78**	**0.08**	**0.04**	**0.15**	<0.01
Arsenic	7440-38-2	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium	7440-47-3	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Copper	7440-50-8	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Zinc	7440-66-6	0.005	mg/L		<0.005	<0.005	<0.005	<0.005	<0.005
Manganese	7439-96-5	0.001	mg/L		**0.009**	**0.020**	**0.006**	**0.095**	**0.009**
Silver	7440-22-4	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Iron	7439-89-6	0.05	mg/L		**0.74**	**0.26**	**0.12**	**0.88**	**0.06**
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
EK026SF: Total CN by Segmented Flow Analyser									
Total Cyanide	57-12-5	0.002	mg/L		<0.002	<0.002	<0.002	<0.002	<0.002
EK055G: Ammonia as N by Discrete Analyser									
Ammonia as N	7664-41-7	0.01	mg/L		**0.04**	**0.03**	**0.02**	**0.02**	**0.02**
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	0.01	mg/L		<0.01	<0.01	<0.01	<0.01	<0.01
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N	14797-55-8	0.01	mg/L		**0.01**	<0.01	<0.01	**0.04**	<0.01
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L		**0.01**	<0.01	<0.01	**0.04**	<0.01
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		**0.2**	**0.2**	**0.2**	**0.2**	**0.1**
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	YK-RS	YK-IS (D/S)	NZG-IS	YK-IS	WC-RS
				Sampling date / time	14-Apr-2025 08:20	14-Apr-2025 10:00	14-Apr-2025 07:45	14-Apr-2025 09:00	14-Apr-2025 13:50
Compound	CAS Number	LOR	Unit		ES2511173-001	ES2511173-002	ES2511173-003	ES2511173-004	ES2511173-005
					Result	Result	Result	Result	Result
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser - Continued									
^ Total Nitrogen as N	----	0.1	mg/L		**0.2**	**0.2**	**0.2**	**0.2**	**0.1**
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		**0.01**	**0.02**	**0.04**	**0.02**	<0.01
EK071G: Reactive Phosphorus as P by discrete analyser									
Reactive Phosphorus as P	14265-44-2	0.01	mg/L		<0.01	<0.01	<0.01	<0.01	<0.01
EP025: Oxygen - Dissolved (DO)									
Dissolved Oxygen	----	0.1	mg/L		**10.2**	**10.7**	**10.7**	**9.7**	**10.5**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	WC-IS	YR1-IS	LHG-IS	YR2-IS	TR-RS
				Sampling date / time	14-Apr-2025 14:15	14-Apr-2025 15:05	14-Apr-2025 16:00	14-Apr-2025 13:15	14-Apr-2025 11:10
Compound	CAS Number	LOR	Unit		ES2511173-006	ES2511173-007	ES2511173-008	ES2511173-009	ES2511173-010
					Result	Result	Result	Result	Result
EA005P: pH by PC Titrator									
pH Value	----	0.01	pH Unit		**8.20**	**8.28**	**7.74**	**8.29**	**7.02**
EA010P: Conductivity by PC Titrator									
Electrical Conductivity @ 25°C	----	1	µS/cm		**155**	**171**	**645**	**178**	**26**
EA015: Total Dissolved Solids dried at 180 ± 5 °C									
Total Dissolved Solids @180°C	----	10	mg/L		**87**	**100**	**372**	**100**	**22**
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	----	1	mg/L		<1	<1	**64**	<1	<1
EA045: Turbidity									
Turbidity	----	0.1	NTU		**0.5**	**0.5**	**26.4**	**0.4**	**1.6**
EA075: Redox Potential									
Redox Potential	----	0.1	mV		**197**	**195**	**207**	**195**	**190**
pH Redox	----	0.01	pH Unit		**8.02**	**8.17**	**7.59**	**8.18**	**7.34**
ED093F: SAR and Hardness Calculations									
Total Hardness as CaCO3	----	1	mg/L		**75**	**87**	**348**	**87**	**5**
EG020F: Dissolved Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Arsenic	7440-38-2	0.001	mg/L		<0.001	<0.001	**0.003**	<0.001	<0.001
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium	7440-47-3	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Copper	7440-50-8	0.001	mg/L		<0.001	**0.010**	<0.001	<0.001	<0.001
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Zinc	7440-66-6	0.005	mg/L		<0.005	<0.005	**0.006**	<0.005	<0.005
Manganese	7439-96-5	0.001	mg/L		**0.005**	**0.006**	**0.997**	**0.003**	**0.030**
Silver	7440-22-4	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Iron	7439-89-6	0.05	mg/L		<0.05	<0.05	**1.38**	<0.05	<0.05
EG020T: Total Metals by ICP-MS									

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	WC-IS	YR1-IS	LHG-IS	YR2-IS	TR-RS
				Sampling date / time	14-Apr-2025 14:15	14-Apr-2025 15:05	14-Apr-2025 16:00	14-Apr-2025 13:15	14-Apr-2025 11:10
Compound	CAS Number	LOR	Unit		ES2511173-006	ES2511173-007	ES2511173-008	ES2511173-009	ES2511173-010
					Result	Result	Result	Result	Result
EG020T: Total Metals by ICP-MS - Continued									
Aluminium	7429-90-5	0.01	mg/L		**0.01**	<0.01	**0.55**	**0.01**	**0.03**
Arsenic	7440-38-2	0.001	mg/L		<0.001	<0.001	**0.010**	<0.001	<0.001
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium	7440-47-3	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Copper	7440-50-8	0.001	mg/L		<0.001	<0.001	**0.002**	<0.001	<0.001
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	**0.001**	<0.001	<0.001
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Zinc	7440-66-6	0.005	mg/L		<0.005	<0.005	**0.008**	<0.005	<0.005
Manganese	7439-96-5	0.001	mg/L		**0.006**	**0.006**	**1.17**	**0.004**	**0.051**
Silver	7440-22-4	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Iron	7439-89-6	0.05	mg/L		**0.06**	<0.05	**8.45**	<0.05	**0.09**
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
EK026SF: Total CN by Segmented Flow Analyser									
Total Cyanide	57-12-5	0.002	mg/L		<0.002	<0.002	<0.002	<0.002	<0.002
EK055G: Ammonia as N by Discrete Analyser									
Ammonia as N	7664-41-7	0.01	mg/L		**0.03**	**0.04**	**0.03**	**0.02**	**0.02**
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	0.01	mg/L		<0.01	<0.01	<0.01	<0.01	<0.01
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N	14797-55-8	0.01	mg/L		<0.01	<0.01	<0.01	**0.02**	**0.05**
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L		<0.01	<0.01	<0.01	**0.02**	**0.05**
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		**0.1**	**0.2**	**0.4**	**0.1**	**0.3**
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	WC-IS	YR1-IS	LHG-IS	YR2-IS	TR-RS
				Sampling date / time	14-Apr-2025 14:15	14-Apr-2025 15:05	14-Apr-2025 16:00	14-Apr-2025 13:15	14-Apr-2025 11:10
Compound	CAS Number	LOR	Unit		ES2511173-006	ES2511173-007	ES2511173-008	ES2511173-009	ES2511173-010
					Result	Result	Result	Result	Result
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser - Continued									
^ Total Nitrogen as N	----	0.1	mg/L		**0.1**	**0.2**	**0.4**	**0.1**	**0.4**
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		**0.03**	**0.02**	**0.16**	**0.04**	**0.05**
EK071G: Reactive Phosphorus as P by discrete analyser									
Reactive Phosphorus as P	14265-44-2	0.01	mg/L		<0.01	<0.01	<0.01	<0.01	<0.01
EP025: Oxygen - Dissolved (DO)									
Dissolved Oxygen	----	0.1	mg/L		**10.6**	**10.4**	**8.9**	**10.5**	**9.9**

Appendix C: April 2025 SWQ Monitoring Results

Parameter		Sheen/ oil/ grease	Temp. (°C)	Dissolved Oxygen (DO %)	DO (ppm)	Specific EC (SPC uS/cm)	EC (uS/cm)	pH	Redox (mV)	Turbidity (NTU)	Dissolved Al (mg/L)	Dissolved As (mg/L)	Dissolved Cd (mg/L)	Dissolved Cr (mg/L)	Dissolved Cu (mg/L)	Cyanide (mg/L)	Dissolved Fe (mg/L)	Dissolved Pb (mg/L)	Dissolved Mn (mg/L)	Dissolved Hg (mg/L)	Dissolved Ni (mg/L)
YARRANGOBILLY CATCHMENT																					
Default Guideline Value (DGV)		No	-	90-110	-	30-350	30-350	6.5-8	-	2-25	0.027	0.0008	0.0006	0.00001	0.001	0.004	0.3	0.001	1.2	0.00006	0.008
Limit of Reporting (LOR)				-	-	-	-	-	-	0.1	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.001	0.0001	0.001
Dec - May Site Specific Guideline Value (SSGV)				96.2	9.08	115	93.2	7.85	79.1	0.37	0.03	0.0003	0.00002	0.00001	0.0002	0.002	0.03	0.001	0.002	0.00003	0.001
June - Nov SSGV				89.7	10.28	88	60.85	7.62	98.4	5.12	0.04	0.0003	0.00002	0.00001	0.0002	0.002	0.02	0.001	0.002	0.00003	0.001
WC-RS	Mar-24	No	10.7	87.5	9.72	143.6	104.3	7.80	25.9	*0.1*	0.02	*0.00015*	*0.00001*	*0.00001*	0.002	*0.001*	*0.03*	0.002	0.003	*0.00002*	*0.001*
	Apr-24	No	10.7	94.8	-	145.6	-	8.44	-	1.05	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.11	*0.001*	0.007	*0.0001*	*0.001*
	May-24	No	2.1	93.8	-	155	-	8.05	-	0.39	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	0.004	*0.05*	*0.001*	0.009	*0.0001*	*0.001*
	Jun-24	No	4.7	92.9	-	126.8	-	7.51	-	0.56	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.005	*0.0001*	*0.001*
	Jul-24	No	6.4	91.9	-	46.6	-	6.96	-	9.24	0.07	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.002	*0.0001*	*0.001*
	Aug-24	No	10.4	80.6	-	47.1	-	7.80	-	1.6	0.02	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.002	*0.0001*	*0.001*
	Sep-24	No	11.7	92.0	-	43	-	7.86	-	0.5	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.002	*0.0001*	*0.001*
	Oct-24	No	9.3	92.7	-	52	-	7.55	-	1.3	0.02	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.002	*0.0001*	*0.001*
	Nov-24	No	12.2	90.6	9.7	82	82	7.63	235	0.6	0.02	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.004	*0.0001*	*0.001*
	Dec-24	Yes	12.7	90.0	10.0	41.8	71.0	7.75	250	1.4	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	*0.001*	*0.0001*	*0.001*
*sample not an	Jan-25	No	26.6	83.2	-	27.3	-	8.13	-	0.65	-	-	-	-	-	-	-	-	-	-	-
	Feb-25	No	16.3	86.0	9.2	26.3	123	7.76	158	4.01	0.06	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.08	*0.001*	0.008	*0.0001*	*0.001*
	Mar-25	Yes	14.7	92.7	9.8	34.6	145	8.32	162	1.16	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.008	*0.0001*	*0.001*
	Apr-25	No	17.6	91.8	10.5	34	155	8.19	202	0.9	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.007	*0.0001*	*0.001*
WC-IS	Mar-24	No	10.7	87.1	9.68	145.9	105.9	7.83	41.9	*0.1*	0.03	*0.00015*	*0.00001*	*0.00001*	0.002	*0.001*	*0.03*	0.002	0.003	*0.00002*	*0.0005*
	Apr-24	No	10.7	95.0	-	145.2	-	8.45	-	0.9	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.07	*0.001*	0.006	*0.0001*	*0.001*
	May-24	No	2.1	94.1	-	154.9	-	7.86	-	0.3	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	0.004	*0.05*	*0.001*	0.007	*0.0001*	*0.001*
	Jun-24	No	4.8	93.3	-	126.7	-	7.72	-	0.35	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.004	*0.0001*	*0.001*
	Jul-24	No	6.6	91.2	-	46.6	-	6.96	-	7.65	0.07	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.002	*0.0001*	*0.001*
	Aug-24	No	10.5	91.5	-	45.6	-	7.83	-	5.85	0.02	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	*0.001*	*0.0001*	*0.001*
	Sep-24	No	11.7	92.9	-	54.4	-	7.83	-	5.5	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.005	*0.0001*	*0.001*
	Oct-24	No	9.5	93.3	-	52.1	-	7.66	-	1.4	0.02	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.002	*0.0001*	*0.001*
	Nov-24	No	12.2	90.4	9.9	82	82	7.63	245	0.3	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.002	*0.0001*	*0.001*
	Dec-24	No	12.7	91.1	10.1	41.3	72	7.48	259	1.4	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	*0.001*	*0.0001*	*0.001*
	Jan-25	No	17.8	85.7	9.1	24.5	106	7.80	232	2.75	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.007	*0.0001*	*0.001*
	Feb-25	No	16.3	85.2	9.4	26	123	7.80	184	4.08	0.06	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.08	*0.001*	0.007	*0.0001*	*0.001*
	Mar-25	No	16.1	95.8	9.7	31.8	145	8.33	170	1.13	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.006	*0.0001*	*0.001*
	Apr-25	No	17.3	92.8	10.6	33.5	155	8.66	197	1.02	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.005	*0.0001*	*0.001*
CG-IS	Mar-24	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-24	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	May-24	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jun-24	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-24	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Aug-24	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sep-24	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-24	No	12.7	93.2	-	382.8	-	8.17	-	1	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	*0.001*	*0.0001*	*0.001*
	Nov-24	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dec-24	No	14	88.5	9.7	29	480	8.12	255	2.84	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	*0.001*	*0.0001*	*0.001*
	Jan-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Feb-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mar-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	Reference Site exceeds SSGV
	Impact Site Result exceeds SSGV or DGV
italics	Result exceeds the Limit of Reporting

Parameter		TN (mg/L)	TP (mg/L)	Dissolved Ag (mg/L)	Dissolved Zn (mg/L)	Ammonia (mg/L)	Nitrogen Oxides (mg/L)	Reactive Phosphorous (mg/L)	Total Hardness (mg/L) (CaCO3)	Total Kjedahl Nitrogen (mg/L) (TKN)	TDS (mg/L)	TSS (mg/L)	Total Al (mg/L)	Total As (mg/L)	Total Cd (mg/L)	Total Cr (mg/L)	Total Cu (mg/L)	Total Pb (mg/L)	Total Mn (mg/L)	Total Ni (mg/L)	Total Ag (mg/L)	Total Zn (mg/L)	Total Fe (mg/L)	Total Hg (mg/L)
YARRANGOBILLY CATCHMENT																								
Default Guideline Value (DGV)		0.25	0.02	0.00002	0.0024	0.013	0.015	0.015	-	-	-	0.2	0.027	0.0008	0.0006	0.00001	0.001	0.001	1.2	0.008	0.00002	0.0024	0.3	0.00006
Limit of Reporting (LOR)		0.1	0.01	0.001	0.005	0.010	0.010	0.010	1	0.1	10	1	0.01	0.001	0.0001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.05	0.0001
Dec - May Site Specific Guideline V		0.2	0.02	0.00002	0.002	0.013	0.015	0.020	47	0.2	52	0.2												
June - Nov SSGV		0.2	0.02	0.00002	0.002	0.013	0.015	0.015	30	0.2	39	1.0												
WC-RS	Mar-24	*0.1*	0.03	*0.00001*	*0.001*	0.050	0.05	*0.005*	42	*0.1*	70	*0.1*	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-24	*0.1*	0.02	*0.001*	*0.005*	*0.010*	*0.01*	-	70	*0.01*	-	*1*	0.02	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.01	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	May-24	*0.1*	0.02	*0.001*	*0.005*	0.020	*0.01*	*0.01*	77	*0.1*	102	5	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.007	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Jun-24	0.2	*0.01*	*0.001*	*0.005*	*0.010*	0.23	*0.01*	53	*0.1*	81	2	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.007	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Jul-24	*0.1*	0.05	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	17	*0.1*	38	8	0.09	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.01	*0.001*	*0.001*	*0.005*	0.09	*0.0001*
	Aug-24	*0.1*	*0.01*	*0.001*	0.032	*0.010*	*0.01*	*0.01*	28	*0.1*	51	4	0.06	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.007	*0.001*	*0.001*	*0.005*	0.07	*0.0001*
	Sep-24	0.4	0.03	*0.001*	*0.005*	0.040	0.22	*0.01*	31	0.2	65	3	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.005	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Oct-24	*0.1*	0.02	*0.001*	*0.005*	*0.010*	0.02	*0.01*	31	*0.1*	46	*1*	0.07	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.004	*0.001*	*0.001*	*0.005*	0.1	*0.0001*
	Nov-24	*0.1*	0.06	*0.001*	*0.005*	0.020	0.02	*0.01*	36	*0.1*	60	2	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.003	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Dec-24	*0.1*	*0.01*	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	31	*0.1*	51	2	0.09	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.006	*0.001*	*0.001*	*0.005*	0.08	*0.0001*
*sample not an	Jan-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Feb-25	0.2	0.06	*0.001*	*0.005*	0.040	0.02	*0.01*	57	0.2	61	2	0.16	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.011	*0.001*	*0.001*	0.008	0.15	*0.0001*
	Mar-25	0.2	0.02	*0.001*	*0.005*	0.020	*0.01*	*0.01*	70	0.2	90	*1*	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.01	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Apr-25	*0.1*	*0.01*	*0.001*	*0.005*	0.020	*0.01*	*0.01*	80	*0.1*	88	*1*	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.009	*0.001*	*0.001*	*0.005*	0.06	*0.0001*
WC-IS	Mar-24	*0.1*	*0.005*	*0.00001*	*0.001*	0.050	0.05	*0.005*	42	*0.1*	88	*0.1*	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-24	2.7	0.02	*0.001*	*0.005*	*0.010*	2.42	-	67	2.42	-	11	0.15	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.022	0.004	*0.001*	*0.005*	0.22	*0.0001*
	May-24	0.4	0.02	*0.001*	*0.005*	*0.010*	0.31	*0.01*	75	*0.1*	106	5	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.006	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Jun-24	*0.1*	*0.01*	*0.001*	*0.005*	*0.010*	0.02	0.04	53	*0.1*	81	*1*	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.005	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Jul-24	*0.1*	0.02	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	17	*0.1*	42	5	0.11	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.011	*0.001*	*0.001*	*0.005*	0.1	*0.0001*
	Aug-24	*0.1*	*0.01*	*0.001*	0.006	*0.010*	0.03	*0.01*	28	*0.1*	46	4	0.06	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.006	*0.001*	*0.001*	*0.005*	0.06	*0.0001*
	Sep-24	7.6	0.02	*0.001*	0.017	*0.010*	7.21	*0.01*	33	0.4	113	3	0.02	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.002	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Oct-24	0.2	0.03	*0.001*	*0.005*	*0.010*	0.02	*0.01*	31	0.2	39	2	0.08	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.004	0.005	*0.001*	*0.005*	0.12	*0.0001*
	Nov-24	*0.1*	*0.01*	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	38	*0.1*	58	*1*	0.02	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.003	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Dec-24	*0.1*	*0.01*	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	33	*0.1*	51	2	0.08	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.006	*0.001*	*0.001*	*0.005*	0.09	*0.0001*
	Jan-25	0.2	*0.01*	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	51	0.2	82	*1*	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.015	*0.001*	*0.001*	*0.005*	0.07	*0.0001*
	Feb-25	0.2	0.02	*0.001*	*0.005*	0.040	*0.01*	*0.01*	57	0.2	68	*1*	0.14	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.01	*0.001*	*0.001*	*0.005*	0.14	*0.0001*
	Mar-25	*0.1*	0.03	*0.001*	*0.005*	0.020	*0.01*	*0.01*	70	*0.1*	88	*1*	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.007	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Apr-25	*0.1*	0.03	*0.001*	*0.005*	0.030	*0.01*	*0.01*	75	*0.1*	87	*1*	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.006	*0.001*	*0.001*	*0.005*	0.06	*0.0001*
CG-IS	Mar-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	May-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jun-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Aug-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sep-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-24	*0.1*	0.02	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	294	*0.1*	298	*1*	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Nov-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dec-24	*0.1*	*0.01*	*0.001*	*0.005*	*0.010*	0.02	*0.01*	287	*0.1*	336	*1*	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Jan-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Feb-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mar-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	Reference Site exceeds SSGV
	Impact Site Result exceeds SSGV or DGV
italics	Result exceeds the Limit of Reporting

Parameter		Sheen/ oil/ grease	Temp. (°C)	Dissolved Oxygen (DO %)	DO (ppm)	Specific EC (SPC uS/cm)	EC (uS/cm)	pH	Redox (mV)	Turbidity (NTU)	Dissolved Al (mg/L)	Dissolved As (mg/L)	Dissolved Cd (mg/L)	Dissolved Cr (mg/L)	Dissolved Cu (mg/L)	Cyanide (mg/L)	Dissolved Fe (mg/L)	Dissolved Pb (mg/L)	Dissolved Mn (mg/L)	Dissolved Hg (mg/L)	Dissolved Ni (mg/L)
YARRANGOBILLY CATCHMENT																					
Default Guideline Value (DGV)		No	-	90-110	-	30-350	30-350	6.5-8	-	2-25	0.027	0.0008	0.0006	0.00001	0.001	0.004	0.3	0.001	1.2	0.00006	0.008
Limit of Reporting (LOR)				-	-	-	-	-	-	0.1	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.001	0.0001	0.001
Dec - May Site Specific Guideline Value (SSGV)				96.2	9.08	115	93.2	7.85	79.1	0.37	0.03	0.0003	0.00002	0.00001	0.0002	0.002	0.03	0.001	0.002	0.00003	0.001
June - Nov SSGV				89.7	10.28	88	60.85	7.62	98.4	5.12	0.04	0.0003	0.00002	0.00001	0.0002	0.002	0.02	0.001	0.002	0.00003	0.001
YR1-IS	Mar-24	No	12.2	88.2	9.47	129.4	97.7	7.81	53.8	*0.1*	0.05	*0.00015*	*0.00001*	*0.000005*	0.002	*0.001*	*0.03*	*0.0005*	0.002	*0.000015*	*0.001*
	Apr-24	No	11.3	97.4	-	136.1	-	8.49	-	1.23	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.002	*0.0001*	*0.001*
	May-24	No	3.1	95.6	-	138.8	-	7.91	-	0.42	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	0.004	*0.05*	*0.001*	0.002	*0.0001*	*0.001*
	Jun-24	No	5.6	94.3	-	112.4	-	7.80	-	1.94	0.02	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.14	*0.001*	0.003	*0.0001*	*0.001*
	Jul-24	No	6.4	93.0	-	51.5	-	6.93	-	10.05	0.18	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.11	*0.001*	0.002	*0.0001*	*0.001*
	Aug-24	No	8.6	89.8	-	55.8	-	7.87	-	3.62	0.07	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	*0.001*	*0.0001*	*0.001*
	Sep-24	No	13.3	93.1	-	61.4	-	7.77	-	0.79	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.002	*0.0001*	*0.001*
	Oct-24	No	12.5	94.9	-	66.8	-	7.77	-	2	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	*0.001*	*0.0001*	*0.001*
	Nov-24	No	15	92.2	9.7	105	105	7.69	251	0.8	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.020	*0.0001*	*0.001*
	Dec-24	No	14.3	91.1	9.9	40.4	69	7.52	253	3.94	0.1	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.06	*0.001*	*0.001*	*0.0001*	*0.001*
	Jan-25	No	19.5	86.6	9	19.2	110	8.01	235	14.18	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.003	*0.0001*	*0.001*
	Feb-25	No	17.2	86.3	9.3	21.8	101	7.78	168	4.35	0.14	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.13	*0.001*	0.005	*0.0001*	*0.001*
	Mar-25	No	19.5	101.4	9.6	39.3	178	8.46	175	1.16	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.002	*0.0001*	*0.001*
	Apr-25	Yes	18.7	91.6	10.4	36.3	171	8.76	195	0.98	*0.01*	*0.001*	*0.0001*	*0.001*	0.01	*0.002*	*0.05*	*0.001*	0.006	*0.0001*	*0.001*
LHG-IS	Mar-24	Yes	11.9	59.2	6.38	596	447.2	7.35	-17.2	408.5	0.2	*0.00015*	*0.00001*	*0.001*	0.003	*0.001*	0.18	0.005	0.040	*0.000015*	0.003
	Apr-24	No	12.5	60.1	-	658	-	7.69	-	69.72	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.34	*0.001*	0.184	*0.0001*	*0.001*
	May-24	No	7	63.3	-	618	-	7.00	-	1003.7	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	0.004	0.71	*0.001*	0.184	*0.0001*	*0.001*
	Jun-24	No	8.5	70.4	-	616	-	7.65	-	10.05	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.48	*0.001*	0.158	*0.0001*	*0.001*
	Jul-24	No	8	87.5	-	503	-	7.30	-	5.44	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.07	*0.001*	0.025	*0.0001*	*0.001*
	Aug-24	No	11.4	83.0	-	408.8	-	7.74	-	76.59	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.07	*0.001*	0.020	*0.0001*	*0.001*
	Sep-24	No	9.7	87.3	-	424.6	-	7.68	-	6.13	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.06	*0.001*	0.045	*0.0001*	*0.001*
	Oct-24	No	12.4	86.5	-	432.4	-	7.59	-	2.2	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.10	*0.001*	0.036	*0.0001*	*0.001*
	Nov-24	No	12.1	83.1	9.9	537	537	7.91	254	3.6	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.002	*0.0001*	*0.001*
	Dec-24	No	17.6	87.4	9.4	278.1	473	8.24	252	6.7	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.005	*0.0001*	*0.001*
	Jan-25	Yes	17.8	76.9	9.1	128.7	563	8.05	198	14.89	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.07	*0.001*	0.041	*0.0001*	*0.001*
	Feb-25	Yes	18.6	79.2	9.3	136.1	591	7.80	187	7.23	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.06	*0.001*	0.105	*0.0001*	*0.001*
	Mar-25	Yes	22	59.6	8.7	134.7	610	7.62	173	9.64	0.08	0.004	*0.0001*	*0.001*	0.015	*0.002*	2.51	*0.001*	0.597	*0.0001*	*0.001*
	Apr-25	Yes	17.9	54.1	8.9	131	645	7.52	207	50.12	*0.01*	0.003	*0.0001*	*0.001*	*0.001*	*0.002*	1.38	*0.001*	0.997	*0.0001*	*0.001*
YR2-IS	Mar-24	No	12.3	88.5	9.47	130.8	99.1	7.93	43.2	*0.1*	0.03	*0.00015*	*0.00001*	*0.000005*	*0.001*	*0.001*	*0.02*	0.005	*0.001*	*0.000015*	*0.001*
	Apr-24	No	11.8	97.1	-	139.7	-	8.52	-	1.16	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.003	*0.0001*	*0.001*
	May-24	No	2.5	94.7	-	142.1	-	7.77	-	0.343	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	0.024	*0.05*	*0.001*	0.004	*0.0001*	*0.001*
	Jun-24	No	4.7	97.1	-	118.6	-	7.24	-	*0*	0.02	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.003	*0.0001*	*0.001*
	Jul-24	No	5.9	93.5	-	58.4	-	6.78	-	8.87	0.17	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.12	*0.001*	0.002	*0.0001*	*0.001*
	Aug-24	No	9.3	93.5	-	58.5	-	7.98	-	6.97	0.06	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.002	*0.0001*	*0.001*
	Sep-24	No	13.4	93.8	-	66.7	-	7.62	-	1.56	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.005	*0.0001*	*0.001*
	Oct-24	No	11.6	93.7	-	69.9	-	7.34	-	1.8	0.03	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.002	*0.0001*	*0.001*
	Nov-24	No	15.7	92.1	10	62	111	7.92	235	0.6	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.002	*0.0001*	*0.001*
	Dec-24	No	13.6	90.3	9.8	44.1	75	7.84	220	5.64	0.09	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.06	*0.001*	*0.001*	*0.0001*	*0.001*
	Jan-25	No	28.9	90.5	8.8	28.5	123	8.09	226	1.32	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.004	*0.0001*	*0.001*
	Feb-25	No	19.3	91.3	9.4	23.3	109	7.97	170	5.89	0.11	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.11	*0.001*	0.005	*0.0001*	*0.001*
	Mar-25	No	22.2	102.1	9.5	39.9	182	8.55	158	0.89	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.003	*0.0001*	*0.001*
	Apr-25	No	18.1	95.3	10.5	37.7	178	8.46	195	0.94	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.003	*0.0001*	*0.001*

	Reference Site exceeds SSGV
	Impact Site Result exceeds SSGV or DGV
italics	Result exceeds the Limit of Reporting

Parameter		TN (mg/L)	TP (mg/L)	Dissolved Ag (mg/L)	Dissolved Zn (mg/L)	Ammonia (mg/L)	Nitrogen Oxides (mg/L)	Reactive Phosphorous (mg/L)	Total Hardness (mg/L) (CaCO3)	Total Kjedahl Nitrogen (mg/L) (TKN)	TDS (mg/L)	TSS (mg/L)	Total Al (mg/L)	Total As (mg/L)	Total Cd (mg/L)	Total Cr (mg/L)	Total Cu (mg/L)	Total Pb (mg/L)	Total Mn (mg/L)	Total Ni (mg/L)	Total Ag (mg/L)	Total Zn (mg/L)	Total Fe (mg/L)	Total Hg (mg/L)
YARRANGOBILLY CATCHMENT																								
Default Guideline Value (DGV)		0.25	0.02	0.00002	0.0024	0.013	0.015	0.015	-	-	-	0.2	0.027	0.0008	0.0006	0.00001	0.001	0.001	1.2	0.008	0.00002	0.0024	0.3	0.00006
Limit of Reporting (LOR)		0.1	0.01	0.001	0.005	0.010	0.010	0.010	1	0.1	10	1	0.01	0.001	0.0001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.05	0.0001
Dec - May Site Specific Guideline V		0.2	0.02	0.00002	0.002	0.013	0.015	0.020	47	0.2	52	0.2												
June - Nov SSGV		0.2	0.02	0.00002	0.002	0.013	0.015	0.015	30	0.2	39	1.0												
YR1-IS	Mar-24	*0.1*	*0.005*	*0.00001*	*0.001*	0.050	0.05	*0.005*	34	*0.1*	66	*0.1*												
	Apr-24	*0.1*	*0.01*	*0.001*	*0.005*	*0.010*	0.05	-	61	*0.05*	-	*1*	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.002	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	May-24	*0.1*	0.02	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	68	*0.1*	95	5	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Jun-24	*0.1*	*0.01*	*0.001*	*0.005*	*0.010*	*0.01*	0.03	51	*0.1*	68	*1*	0.03	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Jul-24	0.2	0.02	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	19	0.2	48	7	0.17	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.009	*0.001*	*0.001*	*0.005*	0.15	*0.0001*
	Aug-24	0.2	*0.01*	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	33	0.2	55	3	0.12	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.004	*0.001*	*0.001*	*0.005*	0.09	*0.0001*
	Sep-24	*0.1*	0.04	*0.001*	*0.005*	*0.010*	0.02	*0.01*	38	*0.1*	68	2	0.06	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.003	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Oct-24	*0.1*	0.02	*0.001*	0.006	0.020	*0.01*	*0.01*	41	*0.1*	60	2	0.08	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.005*	0.09	*0.0001*
	Nov-24	*0.1*	*0.01*	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	48	*0.1*	74	*1*	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.003	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Dec-24	*0.1*	*0.01*	*0.001*	*0.005*	*0.010*	0.02	*0.01*	31	*0.1*	52	4	0.17	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.006	*0.001*	*0.001*	0.039	0.15	*0.0001*
	Jan-25	0.6	0.05	*0.001*	*0.005*	0.080	0.05	*0.01*	56	0.6	81	47	0.27	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.051	*0.001*	*0.001*	0.009	0.33	*0.0001*
	Feb-25	0.2	0.03	*0.001*	*0.005*	0.040	0.02	*0.01*	46	0.2	51	4	0.15	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.01	*0.001*	*0.001*	0.015	0.16	*0.0001*
	Mar-25	*0.1*	*0.01*	*0.001*	*0.005*	0.030	*0.01*	*0.01*	90	*0.1*	100	*1*	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.003	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Apr-25	0.2	0.02	*0.001*	*0.005*	0.040	*0.01*	*0.01*	87	0.2	100	*1*	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.006	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
LHG-IS	Mar-24	*0.1*	*0.01*	*0.00001*	0.006	0.050	0.05	*0.005*	297	1	330	20												
	Apr-24	0.5	0.09	*0.001*	*0.005*	0.020	0.02	-	332	*0.02*	-	70	0.25	0.003	*0.0001*	*0.001*	0.002	*0.001*	0.51	0.006	*0.001*	0.009	2.22	*0.0001*
	May-24	0.5	0.05	*0.001*	*0.005*	0.040	0.06	*0.01*	365	0.4	402	5	0.07	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.177	*0.001*	*0.001*	*0.005*	1.09	*0.0001*
	Jun-24	0.2	0.04	*0.001*	*0.005*	0.020	0.02	*0.01*	313	0.2	339	17	0.38	0.002	*0.0001*	*0.001*	*0.001*	*0.001*	0.282	*0.001*	*0.001*	*0.005*	1.54	*0.0001*
	Jul-24	*0.1*	*0.01*	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	250	*0.1*	324	10	0.53	*0.001*	*0.0001*	*0.001*	0.002	*0.001*	0.033	*0.001*	*0.001*	*0.005*	0.16	*0.0001*
	Aug-24	*0.1*	*0.01*	*0.001*	0.006	0.020	*0.01*	*0.01*	282	*0.1*	360	9	0.09	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.026	*0.001*	*0.001*	*0.005*	0.17	*0.0001*
	Sep-24	*0.1*	0.09	*0.001*	0.006	*0.010*	*0.01*	*0.01*	294	*0.1*	394	10	0.06	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.051	*0.001*	*0.001*	*0.005*	0.19	*0.0001*
	Oct-24	*0.1*	0.02	*0.001*	*0.005*	0.020	*0.01*	*0.01*	312	*0.1*	362	3	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.034	*0.001*	*0.001*	*0.005*	0.26	*0.0001*
	Nov-24	*0.1*	*0.01*	*0.001*	*0.005*	0.100	*0.01*	*0.01*	307	*0.1*	363	16	0.15	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.023	*0.001*	*0.001*	*0.005*	0.21	*0.0001*
	Dec-24	*0.1*	0.02	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	264	*0.1*	298	7	0.13	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.014	*0.001*	*0.001*	*0.005*	0.12	*0.0001*
	Jan-25	*0.1*	0.04	*0.001*	*0.005*	0.030	*0.01*	*0.01*	333	*0.1*	362	33	0.26	0.002	*0.0001*	*0.001*	*0.001*	*0.001*	0.219	*0.001*	*0.001*	*0.005*	1.13	*0.0001*
	Feb-25	0.3	0.08	*0.001*	*0.005*	*0.010*	0.06	*0.01*	333	0.2	378	11	0.09	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.121	*0.001*	*0.001*	0.007	0.41	*0.0001*
	Mar-25	0.3	0.1	*0.001*	*0.005*	0.070	0.04	*0.01*	326	0.3	372	50	0.1	*0.001*	*0.0001*	*0.001*	0.01	*0.001*	0.559	*0.001*	*0.001*	0.006	4.16	*0.0001*
	Apr-25	0.4	0.16	*0.001*	0.006	0.030	*0.01*	*0.01*	348	0.4	372	64	0.55	0.01	*0.0001*	*0.001*	0.002	*0.001*	1.17	*0.001*	*0.001*	0.008	8.45	*0.0001*
YR2-IS	Mar-24	*0.1*	*0.005*	*0.00001*	*0.001*	0.050	0.05	*0.005*	27	1	58	*0.1*												
	Apr-24	*0.1*	*0.01*	*0.001*	*0.005*	*0.010*	*0.01*	-	61	*0.01*	-	5	0.02	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.004	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	May-24	0.8	0.03	*0.001*	0.007	0.020	0.34	*0.01*	68	0.5	98	5	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.002	*0.001*	*0.001*	0.007	*0.05*	*0.0001*
	Jun-24	*0.1*	*0.01*	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	51	*0.1*	76	*1*	0.03	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.002	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Jul-24	0.4	0.03	*0.001*	*0.005*	*0.010*	0.24	*0.01*	26	0.2	46	10	0.17	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.012	*0.001*	*0.001*	0.007	0.16	*0.0001*
	Aug-24	*0.1*	*0.01*	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	33	*0.1*	59	4	0.11	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.005	*0.001*	*0.001*	*0.005*	0.09	*0.0001*
	Sep-24	*0.1*	0.02	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	46	*0.1*	68	3	0.07	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.006	*0.001*	*0.001*	*0.005*	0.07	*0.0001*
	Oct-24	0.2	0.05	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	43	0.2	71	*1*	0.07	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.002	*0.001*	*0.001*	*0.005*	0.08	*0.0001*
	Nov-24	*0.1*	0.05	*0.001*	*0.005*	*0.010*	0.02	*0.01*	51	*0.1*	77	*1*	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.005	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Dec-24	*0.1*	*0.01*	*0.001*	*0.005*	0.020	0.08	*0.01*	33	*0.1*	55	6	0.21	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.007	*0.001*	*0.001*	*0.005*	0.18	*0.0001*
	Jan-25	0.2	*0.01*	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	63	0.2	87	*1*	0.2	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.004	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Feb-25	0.4	0.02	*0.001*	*0.005*	0.020	0.05	*0.01*	48	0.3	72	5	0.2	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.01	*0.001*	*0.001*	*0.005*	0.21	*0.0001*
	Mar-25	*0.1*	*0.01*	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	90	*0.1*	104	*1*	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.004	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Apr-25	*0.1*	0.04	*0.001*	*0.005*	0.020	0.02	*0.01*	87	*0.1*	100	*1*	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.004	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*

	Reference Site exceeds SSGV
	Impact Site Result exceeds SSGV or DGV
italics	Result exceeds the Limit of Reporting

Parameter		Sheen/ oil/ grease	Temp. (°C)	Dissolved Oxygen (DO %)	DO (ppm)	Specific EC (SPC uS/cm)	EC (uS/cm)	pH	Redox (mV)	Turbidity (NTU)	Dissolved Al (mg/L)	Dissolved As (mg/L)	Dissolved Cd (mg/L)	Dissolved Cr (mg/L)	Dissolved Cu (mg/L)	Cyanide (mg/L)	Dissolved Fe (mg/L)	Dissolved Pb (mg/L)	Dissolved Mn (mg/L)	Dissolved Hg (mg/L)	Dissolved Ni (mg/L)
YARRANGOBILLY CATCHMENT																					
Default Guideline Value (DGV)		No	-	90-110	-	30-350	30-350	6.5-8	-	2-25	0.027	0.0008	0.0006	0.00001	0.001	0.004	0.3	0.001	1.2	0.00006	0.008
Limit of Reporting (LOR)				-	-	-	-	-	-	0.1	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.001	0.0001	0.001
Dec - May Site Specific Guideline Value (SSGV)				96.2	9.08	115	93.2	7.85	79.1	0.37	0.03	0.0003	0.00002	0.00001	0.0002	0.002	0.03	0.001	0.002	0.00003	0.001
June - Nov SSGV				89.7	10.28	88	60.85	7.62	98.4	5.12	0.04	0.0003	0.00002	0.00001	0.0002	0.002	0.02	0.001	0.002	0.00003	0.001
SSC-IS	Mar-24	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-24	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	May-24	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jun-24	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-24	No	8	90.1	-	152.6	-	6.29	-	17.88	0.1	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.07	*0.001*	0.002	*0.0001*	*0.001*
	Aug-24	No	12.1	94.0	-	120.9	-	7.78	-	3.9	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	*0.001*	*0.0001*	*0.001*
	Sep-24	No	12.2	84.1	-	122.2	-	7.10	-	3.53	0.05	*0.001*	*0.0001*	*0.001*	0.003	*0.002*	*0.05*	*0.001*	0.002	*0.0001*	*0.001*
	Oct-24	No	10.1	81.5	-	110.3	-	6.83	-	8.9	0.08	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	*0.001*	*0.0001*	*0.001*
	Nov-24	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dec-24	No	18.8	90.7	9.4	68.5	118	7.97	188	44.29	0.08	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	*0.001*	*0.0001*	*0.001*
	Jan-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Feb-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mar-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Parameter		TN (mg/L)	TP (mg/L)	Dissolved Ag (mg/L)	Dissolved Zn (mg/L)	Ammonia (mg/L)	Nitrogen Oxides (mg/L)	Reactive Phosphorous (mg/L)	Total Hardness (mg/L) (CaCO3)	Total Kjedahl Nitrogen (mg/L) (TKN)	TDS (mg/L)	TSS (mg/L)	Total Al (mg/L)	Total As (mg/L)	Total Cd (mg/L)	Total Cr (mg/L)	Total Cu (mg/L)	Total Pb (mg/L)	Total Mn (mg/L)	Total Ni (mg/L)	Total Ag (mg/L)	Total Zn (mg/L)	Total Fe (mg/L)	Total Hg (mg/L)
YARRANGOBILLY CATCHMENT																								
Default Guideline Value (DGV)		0.25	0.02	0.00002	0.0024	0.013	0.015	0.015	-	-	-	0.2	0.027	0.0008	0.0006	0.00001	0.001	0.001	1.2	0.008	0.00002	0.0024	0.3	0.00006
Limit of Reporting (LOR)		0.1	0.01	0.001	0.005	0.010	0.010	0.010	1	0.1	10	1	0.01	0.001	0.0001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.05	0.0001
Dec - May Site Specific Guideline V		0.2	0.02	0.00002	0.002	0.013	0.015	0.020	47	0.2	52	0.2												
June - Nov SSGV		0.2	0.02	0.00002	0.002	0.013	0.015	0.015	30	0.2	39	1.0												
SSC-IS	Mar-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	May-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jun-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-24	1.8	0.03	*0.001*	0.024	0.030	0.85	*0.01*	62	0.9	110	*1*	0.09	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.006	*0.001*	*0.001*	0.025	0.4	*0.0001*
	Aug-24	*0.1*	*0.01*	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	62	*0.1*	110	5	0.21	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.005*	0.09	*0.0001*
	Sep-24	0.7	0.03	*0.001*	0.036	*0.010*	0.07	*0.01*	65	0.6	108	5	0.10	*0.001*	*0.0001*	*0.001*	0.003	*0.001*	0.004	*0.001*	*0.001*	0.028	0.08	*0.0001*
	Oct-24	0.4	0.02	*0.001*	*0.005*	*0.010*	0.18	*0.01*	58	0.2	100	*1*	0.13	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.005*	0.1	*0.0001*
	Nov-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dec-24	*0.1*	*0.01*	*0.001*	*0.005*	*0.01*	*0.01*	*0.01*	53	*0.1*	85	8	0.57	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.013	*0.001*	*0.001*	*0.005*	0.41	*0.0001*
	Jan-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Feb-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mar-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	Reference Site exceeds SSGV
	Impact Site Result exceeds SSGV or DGV
italics	Result exceeds the Limit of Reporting

Parameter		Sheen/ oil/ grease	Temp. (°C)	Dissolved Oxygen (DO %)	DO (ppm)	Specific EC (SPC uS/cm)	EC (uS/cm)	pH	Redox (mV)	Turbidity (NTU)	Dissolved Al (mg/L)	Dissolved As (mg/L)	Dissolved Cd (mg/L)	Dissolved Cr (mg/L)	Dissolved Cu (mg/L)	Cyanide (mg/L)	Dissolved Fe (mg/L)	Dissolved Pb (mg/L)	Dissolved Mn (mg/L)	Dissolved Hg (mg/L)	Dissolved Ni (mg/L)
TALBINGO RESERVOIR																					
DGV		No	-	90-110	-	30-350	30-350	6.5-8	-	2-25	0.027	0.0008	0.0006	0.00001	0.001	0.004	0.3	0.001	1.2	0.00006	0.008
LOR				-	-	-	-	-	-	0.1	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.001	0.0001	0.001
Dec - May SSGV				91.3	8.79	24.0	20.3	7.59	91.2	0.09	0.03	0.003	0.00002	0.00001	0.0002	0.002	0.04	0.001	0.003	0.00003	0.001
June - Nov SSGV				95.5	11.53	38.7	26.2	7.59	95.4	1.56	0.015	0.0003	0.00002	0.00001	0.0002	0.002	0.02	0.001	0.002	0.00003	0.001
TR-RS	Mar-24	No	13.4	72.5	7.57	24	18.7	7.10	55	*0.10*	0.015	*0.00015*	*0.00001*	*0.000005*	*0.0001*	*0.001*	*0.05*	0.005	0.005	*0.000015*	*0.0005*
	Apr-24	No	12.2	85.9	-	25.9	-	7.17	-	*0.02*	*0.01*	*0.001*	*0.0001*	*0.001*	0.005	*0.002*	*0.05*	*0.001*	0.026	*0.0001*	*0.001*
	May-24	No	10.1	91.5	-	30.2	-	6.80	-	0.65	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	0.004	*0.05*	*0.001*	0.002	*0.0001*	*0.001*
	Jun-24	No	8.7	91.6	-	26.4	-	8.32	-	*0.10*	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.010	*0.0001*	*0.001*
	Jul-24	No	6	92.1	-	28.7	-	7.76	-	1.35	0.02	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.003	*0.0001*	*0.001*
	Aug-24	No	12.7	91.5	-	26.3	-	6.67	-	2.0	0.02	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.002	*0.0001*	*0.001*
	Sep-24	No	10.2	96.2	-	25	-	7.78	-	0.58	0.02	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.002	*0.0001*	*0.001*
	Oct-24	No	9.5	95.2	-	15.3	-	7.78	-	1.7	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.008	*0.0001*	*0.001*
	Nov-24	No	15.6	92.1	9.7	55	55	7.73	271	1.6	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.05	*0.0001*	*0.001*
	Dec-24	No	22.8	95.5	9.1	22.2	38	7.97	200	3.76	0.02	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	*0.001*	*0.0001*	*0.001*
	Jan-25	No	25.7	91.6	9.1	27.8	44	7.23	234	1.61	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	*0.001*	*0.0001*	*0.001*
	Feb-25	No	24.6	94.8	9.1	8.7	40	7.61	168	2.16	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.002	*0.0001*	*0.001*
	Mar-25	No	21.3	90.1	8.9	8.3	36	7.56	138	3.25	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.002	*0.0001*	*0.001*
	Apr-25	No	17.6	67.6	9.9	5.8	26	6.96	190	1.3	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	*0.05*	*0.001*	0.03	*0.0001*	*0.001*

Parameter		TN (mg/L)	TP (mg/L)	Dissolved Ag (mg/L)	Dissolved Zn (mg/L)	Ammonia (mg/L)	Nitrogen Oxides (mg/L)	Reactive Phosphorous (mg/L)	Total Hardness (mg/L) (CaCO3)	Total Kjedahl Nitrogen (mg/L) (TKN)	TDS (mg/L)	TSS (mg/L)	Total Al (mg/L)	Total As (mg/L)	Total Cd (mg/L)	Total Cr (mg/L)	Total Cu (mg/L)	Total Pb (mg/L)	Total Mn (mg/L)	Total Ni (mg/L)	Total Ag (mg/L)	Total Zn (mg/L)	Total Fe (mg/L)	Total Hg (mg/L)
TALBINGO RESERVOIR																								
DGV		0.25	0.02	0.00002	0.0024	0.013	0.015	0.015	-	-	-	0.2	0.027	0.0008	0.0006	0.00001	0.001	0.001	1.2	0.008	0.00002	0.0024	0.3	0.00006
LOR		0.1	0.01	0.001	0.005	0.010	0.010	0.01	1	0.1	10	1	0.01	0.001	0.0001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.05	0.0001
Dec - May SSGV		0.2	0.02	0.00002	0.002	0.013	0.015	0.02	7.5	0.1	12.5	0.2												
June - Nov SSGV		0.2	0.02	0.00002	0.002	0.013	0.015	0.015	8	0.2	15	0.2												
TR-RS	Mar-24	*0.1*	*0.01*	*0.00001*	*0.001*	0.050	0.05	*0.005*	8	*0.1*	44	*0.1*												
	Apr-24	1.3	0.02	*0.001*	0.066	0.030	0.12	-	5	0.12	-	3	0.02	*0.001*	*0.0001*	*0.001*	0.006	*0.001*	0.039	0.002	*0.001*	0.067	0.07	*0.0001*
	May-24	0.3	0.03	*0.001*	0.023	0.020	0.03	*0.01*	5	0.3	35	5	0.03	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.033	*0.001*	*0.001*	0.012	0.06	*0.0001*
	Jun-24	2.3	*0.01*	*0.001*	*0.005*	*0.010*	1.92	*0.01*	5	0.4	17	2	0.03	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.056	*0.001*	*0.001*	*0.005*	0.07	*0.0001*
	Jul-24	*0.1*	0.02	*0.001*	*0.005*	0.030	0.04	*0.01*	5	*0.1*	17	2	0.05	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.014	*0.001*	*0.001*	*0.005*	0.06	*0.0001*
	Aug-24	0.4	0.02	*0.001*	0.011	0.020	0.07	*0.01*	12	0.3	30	*1*	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.004	*0.001*	*0.001*	0.008	*0.05*	*0.0001*
	Sep-24	0.2	0.03	*0.001*	*0.005*	*0.010*	0.06	*0.01*	14	*0.1*	27	2	0.06	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.006	*0.001*	*0.001*	*0.005*	0.07	*0.0001*
	Oct-24	0.2	0.02	*0.001*	0.013	0.040	0.02	*0.01*	14	0.2	38	4	0.07	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.01	*0.001*	*0.001*	*0.005*	0.11	*0.0001*
	Nov-24	*0.1*	0.05	*0.001*	*0.005*	*0.010*	0.02	*0.01*	21	*0.1*	45	5	0.14	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.07	*0.001*	*0.001*	*0.005*	0.23	*0.0001*
	Dec-24	*0.1*	0.06	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	14	*0.1*	25	2	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.007	*0.001*	*0.001*	0.007	0.06	*0.0001*
	Jan-25	0.2	0.02	*0.001*	*0.005*	0.020	*0.01*	*0.01*	17	0.2	46	6	0.03	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.018	*0.001*	*0.001*	*0.005*	*0.05*	*0.0001*
	Feb-25	0.2	0.03	*0.001*	*0.005*	0.020	*0.01*	*0.01*	14	0.2	28	*1*	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.017	*0.001*	*0.001*	*0.005*	0.07	*0.0001*
	Mar-25	0.2	0.03	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	14	0.2	28	*1*	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.019	*0.001*	*0.001*	*0.005*	0.06	*0.0001*
	Apr-25	0.4	0.05	*0.001*	*0.005*	0.020	0.05	*0.01*	5	0.3	22	*1*	0.03	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.051	*0.001*	*0.001*	*0.005*	0.09	*0.0001*

	Reference Site exceeds SSGV
	Impact Site Result exceeds SSGV or DGV
italics	Result exceeds the Limit of Reporting

Parameter		Sheen/ oil/ grease	Temp. (°C)	Dissolved Oxygen (DO %)	DO (ppm)	Specific EC (SPC uS/cm)	EC (uS/cm)	pH	Redox (mV)	Turbidity (NTU)	Dissolved Al (mg/L)	Dissolved As (mg/L)	Dissolved Cd (mg/L)	Dissolved Cr (mg/L)	Dissolved Cu (mg/L)	Cyanide (mg/L)	Dissolved Fe (mg/L)	Dissolved Pb (mg/L)	Dissolved Mn (mg/L)	Dissolved Hg (mg/L)	Dissolved Ni (mg/L)
YORKERS CREEK CATCHMENT																					
DGV		No	-	90-110	-	30-350	30-350	6.5-8	-	2-25	0.027	0.0008	0.0006	0.00001	0.001	0.004	0.3	0.001	1.2	0.00006	0.008
LOR				-	-	-	-	-	-	0.1	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.001	0.0001	0.001
Dec - May SSGV				89.6	8.35	31	24	6.79	94.6	9	0.36	0.003	0.00002	0.00001	0.002	0.002	0.41	0.001	0.005	0.00003	0.001
June - Nov SSGV				88.7	10.2	27.9	20.5	6.61	106.1	7.87	0.32	0.0003	0.00002	0.00001	0.0002	0.002	0.23	0.001	0.003	0.00003	0.001
YK-RS	Mar-24	Yes	16.3	82.5	8.09	31.5	26.2	6.69	64.5	12.24	0.6	*0.00015*	*0.00001*	*0.000005*	*0.001*	*0.001*	0.66	0.002	0.013	*0.000015*	*0.0005*
	Apr-24	No	6.8	80.7	-	36.5	-	7.04	-	17.27	0.10		*0.0001*	*0.001*	*0.001*	*0.002*	0.12	*0.001*	0.014	*0.0001*	*0.001*
	May-24	No	4.2	85.1	-	34.7	-	6.62	-	0.3	0.10	*0.001*	*0.0001*	*0.001*	*0.001*	0.004	0.17	*0.001*	0.026	*0.0001*	*0.001*
	Jun-24	No	3.5	84.2	-	30.1	-	7.99	-	26.48	0.09	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.18	*0.001*	0.021	*0.0001*	*0.001*
	Jul-24	No	2.9	83.1	-	27.8	-	7.40	-	7.97	0.19	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.21	*0.001*	0.010	*0.0001*	*0.001*
	Aug-24	No	7.3	82.7	-	21.6	-	6.89	-	19.36	0.33	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.29	*0.001*	0.017	*0.0001*	*0.001*
	Sep-24	No	12.3	86.5	-	19.5	-	7.58	-	15.51	0.09	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.16	*0.001*	0.013	*0.0001*	*0.001*
	Oct-24	No	18.3	87.8		21.8	-	7.55	-	17.9	0.14	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.15	*0.001*	0.013	*0.0001*	*0.001*
	Nov-24	No	19.3	84.8	9	30	30	6.68	259	13.8	0.06	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.12	*0.001*	0.014	*0.0001*	*0.001*
	Dec-24	No	22.9	82.6	8.3	18.7	31	7.52	238	19	0.13	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.16	*0.001*	0.024	*0.0001*	*0.001*
	Jan-25	No	17.4	72.5	8.8	24.5	40	7.26	209	15.77	0.08	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.15	*0.001*	0.015	*0.0001*	*0.001*
	Feb-25	Yes	22.8	76.3	8.9	8.6	38	7.09	174	21.19	0.18	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.32	*0.001*	0.009	*0.0001*	*0.001*
	Mar-25	No	17.4	81.4	9.3	9.7	43	7.46	170	20.65	0.45	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.3	*0.001*	0.009	*0.0001*	*0.001*
	Apr-25	No	11	77.6	10.2	8.6	39	7.64	148	15.23	0.12	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.17	*0.001*	0.004	*0.0001*	*0.001*
YK-IS (D/S)	Mar-24	No	10	81.6	9.21	39.1	27.9	7.02	63.2	*0.1*	*0.0065*	*0.00015*	*0.00001*	*0.000005*	*0.0001*	*0.001*	0.26	*0.0005*	0.006	*0.000015*	*0.0005*
	Apr-24	No	5.9	86.0	-	39.4	-	7.33	-	221.78	0.05	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.11	*0.001*	0.014	*0.0001*	*0.001*
	May-24	No	3.1	85.9	-	39.6	-	6.59	-	0.8	0.09	*0.001*	*0.0001*	*0.001*	*0.001*	0.004	0.15	*0.001*	0.021	*0.0001*	*0.001*
	Jun-24	No	3.2	84.6	-	38.9	-	7.76	-	2.46	0.06	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.1	*0.001*	0.009	*0.0001*	*0.001*
	Jul-24	No	3.2	85.0	-	32.8	-	7.11	-	8.29	0.28	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.22	*0.001*	0.005	*0.0001*	*0.001*
	Aug-24	No	7.3	84.7	-	23.2	-	6.85	-	22.38	0.51	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.34	*0.001*	0.011	*0.0001*	*0.001*
	Sep-24	No	9.3	84.5	-	26.9	-	7.52	-	3.34	0.07	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.1	*0.001*	0.008	*0.0001*	*0.001*
	Oct-24	No	11.3	84.0		27		7.36		6.4	0.1	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.12	*0.001*	0.010	*0.0001*	*0.001*
	Nov-24	No	13.5	83.3	9.4	38	38	7.17	268	5.5	0.05	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.1	*0.001*	0.011	*0.0001*	*0.001*
	Dec-24	No	17.7	82.9	9.2	22.2	550	7.03	463	6.27	0.07	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.1	*0.001*	0.004	*0.0001*	*0.001*
	Jan-25	No	16.2	79.2	9.2	28.2	48	7.40	233	2.44	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.14	*0.001*	0.013	*0.0001*	*0.001*
	Feb-25	No	20.5	85.0	9.3	10.4	47	7.09	150	5.32	0.14	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.24	*0.001*	0.016	*0.0001*	*0.001*
	Mar-25	No	15.9	89.2	9.6	10.7	48	7.32	152	3.01	0.07	*0.001*	*0.0001*	*0.001*	0.002	*0.002*	0.21	*0.001*	0.016	*0.0001*	*0.001*
	Apr-25	No	12.5	84.0	10.7	11.1	49	7.42	166	2.71	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.1	*0.001*	0.018	*0.0001*	*0.001*
NZG-IS	Mar-24	No	9.6	80.2	9.13	64.2	45.3	7.45	31.1	*0.1*	0.14	*0.00015*	*0.00001*	*0.000005*	*0.0001*	*0.001*	0.18	*0.0005*	0.004	*0.000015*	*0.0005*
	Apr-24	No	6.4	84.9	-	67.1	-	7.38	-	0.96	0.03		*0.0001*	*0.001*	*0.001*	*0.002*	0.08	*0.001*	0.006	*0.0001*	*0.001*
	May-24	No	3.9	85.8	-	66.6	-	6.68	-	0.2	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	0.004	0.07	*0.001*	0.007	*0.0001*	*0.001*
	Jun-24	No	4.4	82.7	-	64.1	-	8.14	-	0.89	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.07	*0.001*	0.005	*0.0001*	*0.001*
	Jul-24	No	3.7	83.9	-	34.8	-	7.44	-	13.66	0.2	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.18	*0.001*	0.004	*0.0001*	*0.001*
	Aug-24	No	7.7	84.4	-	28.9	-	6.95	-	15.47	0.44	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.31	*0.001*	0.008	*0.0001*	*0.001*
	Sep-24	No	8.2	84.6	-	38.2	-	7.32	-	2.02	0.06	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.08	*0.001*	0.004	*0.0001*	*0.001*
	Oct-24	No	11.1	84.5		39.6		7.47		5.3	0.08	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.11	*0.001*	0.008	*0.0001*	*0.001*
	Nov-24	No	12.4	82.2	9.6	32.4	57	7.29	276	1.4	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.06	*0.001*	0.005	*0.0001*	*0.001*
	Dec-24	No	17.3	84.8	9.2	32.8	52	7.30	304	3.79	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.06	*0.001*	*0.001*	*0.0001*	*0.001*
	Jan-25	No	13.6	75.2	9.3	42.7	72	7.40	208	4.83	0.02	*0.001*	*0.0001*	*0.001*	*0.001*	0.005	*0.05*	*0.001*	0.004	*0.0001*	*0.001*
	Feb-25	No	19	87.1	9.3	16.6	75	7.42	176	2.72	0.07	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.09	*0.001*	0.004	*0.0001*	*0.001*
	Mar-25	No	13.6	84.1	9.6	17.4	78	7.75	165	1.91	0.03	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.07	*0.001*	0.005	*0.0001*	*0.001*
	Apr-25	No	9	78.4	10.7	16.6	75	8.24	177	2.03	0.05	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.1	*0.001*	0.007	*0.0001*	*0.001*

	Reference Site exceeds SSGV
	Impact Site Result exceeds SSGV or DGV
italics	Result exceeds the Limit of Reporting

Parameter		TN (mg/L)	TP (mg/L)	Dissolved Ag (mg/L)	Dissolved Zn (mg/L)	Ammonia (mg/L)	Nitrogen Oxides (mg/L)	Reactive Phosphorous (mg/L)	Total Hardness (mg/L) (CaCO3)	Total Kjedahl Nitrogen (mg/L) (TKN)	TDS (mg/L)	TSS (mg/L)	Total Al (mg/L)	Total As (mg/L)	Total Cd (mg/L)	Total Cr (mg/L)	Total Cu (mg/L)	Total Pb (mg/L)	Total Mn (mg/L)	Total Ni (mg/L)	Total Ag (mg/L)	Total Zn (mg/L)	Total Fe (mg/L)	Total Hg (mg/L)
YORKERS CREEK CATCHMENT																								
DGV		0.25	0.02	0.00002	0.0024	0.013	0.015	0.015	-	-	-	0.2	0.027	0.0008	0.0006	0.00001	0.001	0.001	1.2	0.008	0.00002	0.0024	0.3	0.00006
LOR		0.1	0.01	0.001	0.005	0.010	0.010	0.01	1	0.1	10	1	0.01	0.001	0.0001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.05	0.0001
Dec - May SSGV		0.2	0.02	0.00002	0.002	0.013	0.015	0.02	1	0.1	30	3												
June - Nov SSGV		0.2	0.02	0.00002	0.002	0.013	0.015	0.02	7	0.2	10	0.2												
YK-RS	Mar-24	*0.1*	0.03	*0.00001*	*0.003*	0.050	0.05	*0.005*	*1*	*0.1*	30	3												
	Apr-24	0.6	0.04	*0.001*	0.013	0.020	0.02	-	9	*0.02*	-	24	0.15	*0.001*	*0.0001*	*0.001*	0.007	*0.001*	0.021	0.006	*0.001*	0.016	0.46	*0.0001*
	May-24	0.3	0.04	*0.001*	*0.005*	0.030	0.02	*0.01*	9	0.3	37	5	0.10	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.027	*0.001*	*0.001*	*0.005*	0.34	*0.0001*
	Jun-24	0.4	0.04	*0.001*	*0.005*	0.020	0.02	0.03	9	0.4	21	15	0.23	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.032	*0.001*	*0.001*	*0.005*	0.50	*0.0001*
	Jul-24	0.4	0.04	*0.001*	0.007	*0.010*	0.05	*0.01*	9	0.4	41	7	0.59	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.017	*0.001*	*0.001*	*0.005*	0.53	*0.0001*
	Aug-24	0.9	0.07	*0.001*	0.012	*0.010*	*0.01*	*0.01*	9	0.9	34	19	1.82	*0.001*	*0.0001*	0.003	*0.001*	*0.001*	0.076	*0.001*	*0.001*	*0.005*	1.77	*0.0001*
	Sep-24	0.2	0.05	*0.001*	0.010	*0.010*	0.04	*0.01*	9	0.2	28	19	0.28	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.023	*0.001*	*0.001*	*0.005*	0.52	*0.0001*
	Oct-24	0.2	0.03	*0.001*	*0.005*	*0.010*	0.05	*0.01*	5	0.2	21	22	0.24	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.02	*0.001*	*0.001*	*0.005*	0.45	*0.0001*
	Nov-24	*0.1*	0.04	*0.001*	0.008	0.020	0.03	*0.01*	9	*0.1*	46	30	1.29	*0.001*	*0.0001*	0.002	*0.001*	*0.001*	0.032	*0.001*	*0.001*	*0.005*	1.05	*0.0001*
	Dec-24	0.3	0.04	*0.001*	*0.005*	*0.010*	0.04	*0.01*	9	0.3	40	22	0.22	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.031	*0.001*	*0.001*	*0.005*	0.51	*0.0001*
	Jan-25	0.7	0.05	*0.001*	*0.005*	0.080	0.06	*0.01*	12	0.6	62	27	0.43	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.038	*0.001*	*0.001*	*0.005*	0.96	*0.0001*
	Feb-25	0.6	0.07	*0.001*	*0.005*	0.040	*0.01*	*0.01*	9	0.6	58	12	0.4	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.017	*0.001*	*0.001*	0.007	0.77	*0.0001*
	Mar-25	0.4	0.06	*0.001*	*0.005*	0.020	*0.01*	*0.01*	16	0.4	28	20	0.39	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.015	*0.001*	*0.001*	*0.005*	0.7	*0.0001*
	Apr-25	0.2	*0.01*	*0.001*	*0.005*	0.040	*0.01*	*0.01*	16	0.2	30	8	0.78	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.009	*0.001*	*0.001*	*0.005*	0.74	*0.0001*
YK-IS (D/S)	Mar-24	*0.1*	0.02	*0.00001*	*0.002*	0.050	0.05	*0.005*	*1*	*0.1*	15	*0.1*												
	Apr-24	*0.1*	0.02	*0.001*	*0.005*	*0.010*	0.03	-	16	*0.03*	-	3	0.1	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.016	0.003	*0.001*	0.006	0.26	*0.0001*
	May-24	0.8	0.04	*0.001*	*0.005*	*0.010*	0.53	*0.01*	12	0.3	39	9	0.12	*0.001*	*0.0001*	0.003	*0.001*	*0.001*	0.035	0.002	*0.001*	*0.005*	0.61	*0.0001*
	Jun-24	0.2	0.04	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	12	0.2	25	2	0.48	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.027	*0.001*	*0.001*	*0.005*	0.66	*0.0001*
	Jul-24	0.6	0.04	*0.001*	0.007	*0.010*	0.28	*0.01*	9	0.3	52	5	0.3	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.011	*0.001*	*0.001*	*0.005*	0.32	*0.0001*
	Aug-24	0.6	0.04	*0.001*	*0.005*	*0.010*	0.09	*0.01*	9	0.5	70	17	1.02	*0.001*	*0.0001*	0.005	*0.001*	*0.001*	0.026	*0.001*	*0.001*	*0.005*	0.89	*0.0001*
	Sep-24	0.2	0.02	*0.001*	0.011	*0.010*	*0.01*	*0.01*	12	0.2	29	3	0.16	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.012	*0.001*	*0.001*	*0.005*	0.26	*0.0001*
	Oct-24	0.3	0.04	*0.001*	0.009	0.030	0.11	*0.01*	5	0.2	24	4	0.22	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.01	*0.001*	*0.001*	*0.005*	0.28	*0.0001*
	Nov-24	*0.1*	0.04	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	12	*0.1*	48	8	0.26	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.07	*0.001*	*0.001*	*0.005*	0.41	*0.0001*
	Dec-24	0.2	*0.01*	*0.001*	*0.005*	*0.010*	0.02	*0.01*	12	0.2	124	5	0.13	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.01	*0.001*	*0.001*	0.011	0.27	*0.0001*
	Jan-25	0.2	0.03	*0.001*	*0.005*	0.050	0.02	*0.01*	18	0.2	62	2	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.013	*0.001*	*0.001*	*0.005*	0.14	*0.0001*
	Feb-25	0.3	0.04	*0.001*	*0.005*	0.020	*0.01*	*0.01*	18	0.3	51	*1*	0.25	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.021	*0.001*	*0.001*	*0.005*	0.45	*0.0001*
	Mar-25	0.3	0.02	*0.001*	*0.005*	0.050	0.09	*0.01*	18	0.2	43	2	0.06	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.019	*0.001*	*0.001*	*0.005*	0.33	*0.0001*
	Apr-25	0.2	0.02	*0.001*	*0.005*	0.030	*0.01*	*0.01*	18	0.2	39	*1*	0.08	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.02	*0.001*	*0.001*	*0.005*	0.26	*0.0001*
NZG-IS	Mar-24	*0.1*	*0.01*	*0.00001*	*0.002*	0.050	0.05	*0.005*	10	*0.1*	22	*0.1*												
	Apr-24	*0.1*	0.02	*0.001*	*0.005*	*0.010*	*0.01*	-	23	*0.01*	-	6	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.012	*0.001*	*0.001*	*0.005*	0.24	*0.0001*
	May-24	0.2	0.06	*0.001*	0.007	*0.010*	0.03	*0.01*	23	0.2	60	5	0.06	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.021	*0.001*	*0.001*	*0.005*	0.35	*0.0001*
	Jun-24	0.2	*0.01*	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	23	0.2	38	20	0.12	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.037	*0.001*	*0.001*	*0.005*	0.67	*0.0001*
	Jul-24	0.2	0.04	*0.001*	*0.005*	*0.010*	0.04	*0.01*	12	0.2	52	8	0.22	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.009	*0.001*	*0.001*	*0.005*	0.26	*0.0001*
	Aug-24	0.4	0.04	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	12	0.4	44	19	0.92	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.023	*0.001*	*0.001*	*0.005*	0.85	*0.0001*
	Sep-24	*0.1*	0.04	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	21	*0.1*	41	3	0.07	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.006	*0.001*	*0.001*	*0.005*	0.15	*0.0001*
	Oct-24	0.3	0.03	*0.001*	*0.005*	0.020	0.07	*0.01*	12	0.2	26	3	0.17	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.01	0.002	*0.001*	*0.005*	0.27	*0.0001*
	Nov-24	*0.1*	0.04	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	21	*0.1*	60	*1*	0.11	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.006	*0.001*	*0.001*	*0.005*	0.14	*0.0001*
	Dec-24	0.2	*0.01*	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	21	0.2	50	*1*	0.09	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.007	*0.001*	*0.001*	*0.005*	0.16	*0.0001*
	Jan-25	0.4	0.02	*0.001*	*0.005*	0.070	0.4	*0.01*	26	0.4	74	4	0.06	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.008	*0.001*	*0.001*	*0.005*	0.16	*0.0001*
	Feb-25	0.2	0.04	*0.001*	*0.005*	0.030	*0.01*	*0.01*	30	0.2	64	2	0.07	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.007	*0.001*	*0.001*	*0.005*	0.14	*0.0001*
	Mar-25	0.2	0.02	*0.001*	*0.005*	*0.010*	0.17	0.02	32	*0.1*	66	2	0.11	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.007	*0.001*	*0.001*	*0.005*	0.18	*0.0001*
	Apr-25	0.2	0.04	*0.001*	*0.005*	0.020	*0.01*	*0.01*	30	0.2	58	*1*	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.006	*0.001*	*0.001*	*0.005*	0.12	*0.0001*

	Reference Site exceeds SSGV
	Impact Site Result exceeds SSGV or DGV
italics	Result exceeds the Limit of Reporting

Parameter		Sheen/ oil/ grease	Temp. (°C)	Dissolved Oxygen (DO %)	DO (ppm)	Specific EC (SPC uS/cm)	EC (uS/cm)	pH	Redox (mV)	Turbidity (NTU)	Dissolved Al (mg/L)	Dissolved As (mg/L)	Dissolved Cd (mg/L)	Dissolved Cr (mg/L)	Dissolved Cu (mg/L)	Cyanide (mg/L)	Dissolved Fe (mg/L)	Dissolved Pb (mg/L)	Dissolved Mn (mg/L)	Dissolved Hg (mg/L)	Dissolved Ni (mg/L)
YORKERS CREEK CATCHMENT																					
DGV		No	-	90-110	-	30-350	30-350	6.5-8	-	2-25	0.027	0.0008	0.0006	0.00001	0.001	0.004	0.3	0.001	1.2	0.00006	0.008
LOR				-	-	-	-	-	-	0.1	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.001	0.0001	0.001
Dec - May SSGV				89.6	8.35	31	24	6.79	94.6	9	0.36	0.003	0.00002	0.00001	0.002	0.002	0.41	0.001	0.005	0.00003	0.001
June - Nov SSGV				88.7	10.2	27.9	20.5	6.61	106.1	7.87	0.32	0.0003	0.00002	0.00001	0.0002	0.002	0.23	0.001	0.003	0.00003	0.001
YK-IS	Mar-24	No	11.4	78.0	8.53	35	25.8	6.70	41.1	21.44	0.45	*0.00015*	*0.00001*	*0.000005*	*0.001*	*0.001*	0.4	*0.0005*	0.018	*0.000015*	*0.0005*
	Apr-24	No	6.8	80.7	-	36.5	-	7.04	-	12.37	0.09	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.15	*0.001*	0.016	*0.0001*	*0.001*
	May-24	No	4.7	82.7	-	35.8	-	6.43	-	0.2	0.06	*0.001*	*0.0001*	*0.001*	*0.001*	0.004	0.1	*0.001*	0.015	*0.0001*	*0.001*
	Jun-24	No	3.9	83.1	-	35.1	-	7.88	-	7.99	0.08	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.15	*0.001*	0.010	*0.0001*	*0.001*
	Jul-24	No	3.2	82.8	-	32.5	-	7.00	-	11.9	0.31	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.25	*0.001*	0.008	*0.0001*	*0.001*
	Aug-24	No	7.2	81.3	-	23.5	-	6.70	-	25.12	0.67	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.46	*0.001*	0.015	*0.0001*	0.002
	Sep-24	No	9.3	83.4	-	23.8	-	7.41	-	6.24	0.09	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.13	*0.001*	0.009	*0.0001*	*0.001*
	Oct-24	No	13.7	86.3		23.7		7.83		3.1	0.07	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.06	*0.001*	0.004	*0.0001*	*0.001*
	Nov-24	No	14.7	83.3	9.3	27.7	32	7.17	279	4.6	0.06	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.12	*0.001*	0.016	*0.0001*	*0.001*
	Dec-24	No	18.4	80.2	8.7	21.4	35	7.15	256	10.86	0.08	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.16	*0.001*	0.017	*0.0001*	*0.001*
	Jan-25	No	16.1	69.0	8.7	25.7	43	7.09	232	1.98	*0.01*	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.12	*0.001*	0.051	*0.0001*	*0.001*
	Feb-25	No	21	73.5	8.8	9.1	40	6.61	175	9.85	0.46	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.48	*0.001*	0.036	*0.0001*	*0.001*
	Mar-25	No	17.6	71.4	8.8	10.5	45	6.77	161	13.54	0.02	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.19	*0.001*	0.059	*0.0001*	*0.001*
	Apr-25	Yes	11.9	65.4	9.7	10.9	49	6.93	183	7.27	0.07	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.19	*0.001*	0.036	*0.0001*	*0.001*

Parameter		TN (mg/L)	TP (mg/L)	Dissolved Ag (mg/L)	Dissolved Zn (mg/L)	Ammonia (mg/L)	Nitrogen Oxides (mg/L)	Reactive Phosphorous (mg/L)	Total Hardness (mg/L) (CaCO3)	Total Kjedahl Nitrogen (mg/L) (TKN)	TDS (mg/L)	TSS (mg/L)	Total Al (mg/L)	Total As (mg/L)	Total Cd (mg/L)	Total Cr (mg/L)	Total Cu (mg/L)	Total Pb (mg/L)	Total Mn (mg/L)	Total Ni (mg/L)	Total Ag (mg/L)	Total Zn (mg/L)	Total Fe (mg/L)	Total Hg (mg/L)
YORKERS CREEK CATCHMENT																								
DGV		0.25	0.02	0.00002	0.0024	0.013	0.015	0.015	-	-	-	0.2	0.027	0.0008	0.0006	0.00001	0.001	0.001	1.2	0.008	0.00002	0.0024	0.3	0.00006
LOR		0.1	0.01	0.001	0.005	0.010	0.010	0.01	1	0.1	10	1	0.01	0.001	0.0001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.05	0.0001
Dec - May SSGV		0.2	0.02	0.00002	0.002	0.013	0.015	0.02	1	0.1	30	3												
June - Nov SSGV		0.2	0.02	0.00002	0.002	0.013	0.015	0.02	7	0.2	10	0.2												
YK-IS	Mar-24	*0.1*	*0.01*	*0.00001*	*0.004*	0.050	0.05	*0.005*	*1*	*0.1*	21	*1*												
	Apr-24	0.3	0.02	*0.001*	*0.005*	*0.010*	0.06	-	12	*0.06*	-	13	0.15	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.024	*0.001*	*0.001*	*0.005*	0.52	*0.0001*
	May-24	0.2	0.03	*0.001*	*0.005*	*0.010*	0.05	*0.01*	12	*0.1*	48	5	0.04	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.014	*0.001*	*0.001*	*0.005*	0.16	*0.0001*
	Jun-24	0.3	0.03	*0.001*	*0.005*	*0.010*	0.06	*0.01*	9	0.2	19	6	0.32	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.014	*0.001*	*0.001*	*0.005*	0.42	*0.0001*
	Jul-24	0.3	0.07	*0.001*	0.009	*0.010*	*0.01*	*0.01*	9	0.3	52	7	0.8	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.015	*0.001*	*0.001*	*0.005*	0.62	*0.0001*
	Aug-24	0.4	0.04	*0.001*	*0.005*	0.030	*0.01*	*0.01*	9	0.4	62	15	1.22	*0.001*	*0.0001*	0.003	*0.001*	*0.001*	0.026	*0.001*	*0.001*	*0.005*	0.99	*0.0001*
	Sep-24	0.2	0.02	*0.001*	*0.005*	0.020	*0.01*	*0.01*	9	0.2	26	4	0.16	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.012	*0.001*	*0.001*	*0.005*	0.26	*0.0001*
	Oct-24	0.2	0.06	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	21	0.2	40	4	0.14	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.006	*0.001*	*0.001*	*0.005*	0.23	*0.0001*
	Nov-24	*0.1*	0.04	*0.001*	0.01	*0.010*	*0.01*	*0.01*	9	*0.1*	42	3	0.31	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.022	*0.001*	*0.001*	*0.005*	0.39	*0.0001*
	Dec-24	0.2	0.03	*0.001*	*0.005*	0.020	0.02	*0.01*	12	0.2	40	6	0.59	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.026	*0.001*	*0.001*	*0.005*	0.55	*0.0001*
	Jan-25	0.2	0.02	*0.001*	0.008	0.020	*0.01*	0.02	14	0.2	59	3	0.07	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.055	*0.001*	*0.001*	*0.005*	0.61	*0.0001*
	Feb-25	0.4	0.07	*0.001*	*0.005*	0.020	0.02	*0.01*	12	0.4	42	5	1.44	*0.001*	*0.0001*	0.002	*0.001*	*0.001*	0.048	*0.001*	*0.001*	*0.005*	1.31	*0.0001*
	Mar-25	0.2	0.03	*0.001*	*0.005*	*0.010*	*0.01*	*0.01*	7	0.2	41	13	0.25	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.054	*0.001*	*0.001*	*0.005*	0.74	*0.0001*
	Apr-25	0.2	0.02	*0.001*	*0.005*	0.020	0.04	*0.01*	21	0.2	37	4	0.15	*0.001*	*0.0001*	*0.001*	*0.001*	*0.001*	0.095	*0.001*	*0.001*	*0.005*	0.86	*0.0001*

	Reference Site exceeds SSGV
	Impact Site Result exceeds SSGV or DGV
italics	Result exceeds the Limit of Reporting

Appendix D: Calibration Certificate

HK Calibration Technologies Pty Ltd
ACN: 152 274 014 ABN: 84 152 274 014
Postal Address: PO Box 4489, North Rocks, 2151 NSW Australia
T: 1300 309 881 F: 1300 885 178
Email: info@hkcalibrations.com.au
Web: www.hkcalibrations.com.au

CALIBRATION CERTIFICATE

REPORT NO: 177471-1

CLIENT:	**CLIENT ADDRESS:**
UGL PTY LIMITED -AUBURN	3 GEORGE YOUNG STREET AUBURN NSW 2144

INSTRUMENT DATA

A	EQUIPMENT TYPE	WATER QUALITY METER
B	MAKE	YSI
C	MODEL	PRO DSS
D	SERIAL NUMBER	23H104391
E	ASSET NUMBER	NOT FOUND
F	DESCRIPTION OF TYPE	DIGITAL
G	RANGE	VARIOUS
H	RATED ACCURACY / TOLERANCE OF U.U.T. (±)	AS FOUND

CALIBRATION DATE

I	DATE OF CALIBRATION	25/10/2024
J	RECOMMENDED DUE DATE	25/10/2025

CALIBRATION RESULT

The results of the tests, calibrations, and /or measurements included in this document are traceable to Australian/national standards.

K	READING OF U.U.T.	SEE PAGE 2
L	READING OF MASTER INSTRUMENT	SEE PAGE 2
M	ADJUSTMENT	NIL
N	REPAIR	NIL
O	SERVICEABILITY/FUNCTIONALITY	ACCEPTABLE
P	TECHNICIAN COMMENT	THIS INSTRUMENT WAS FOUND TO BE FUNCTIONING AS INDICATED BY OUR FINDINGS WITHIN THIS REPORT.

The applicable measurement uncertainties are calculated in accordance with the method described in the ISO Guide to the Expression of Uncertainty in Measurement, with confidence level of 95% using a coverage factor k=2.

CALIBRATION PROCEDURE AND TRACEABILITY

Q	LOCATION OF EQUIPMENT	TEST AND MEASUREMENT LAB
R	CALIBRATED BY	CHINMAY
S	CALIBRATION ENVIRONMENT	TEMPERATURE: 23.0 ± 2°C AVERAGE HUMIDITY: 45% ± 10% RH
T	CALIBRATION PROCEDURE	HKC SOP 11-28-V8
U	REFERENCE CALIBRATION STANDARD USED:- HKCT'S PRECISION INSTRUMENT TRACEABLE TO AUSTRALIAN NATIONAL STANDARDS VIA A NATA CERTIFIED CALIBRATION CERTIFICATE:-	*MODEL: 5502E,34465A* *ASSET: HKC001A,HKC001C* *SERIAL NO: 2371801,MY60083003* *NATA REPORT NO: A43641EA, 2023004169*