SEPTEMBER 2025

MONTHLY CONSTRUCTION WATER QUALITY MONITORING REPORT

September 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.

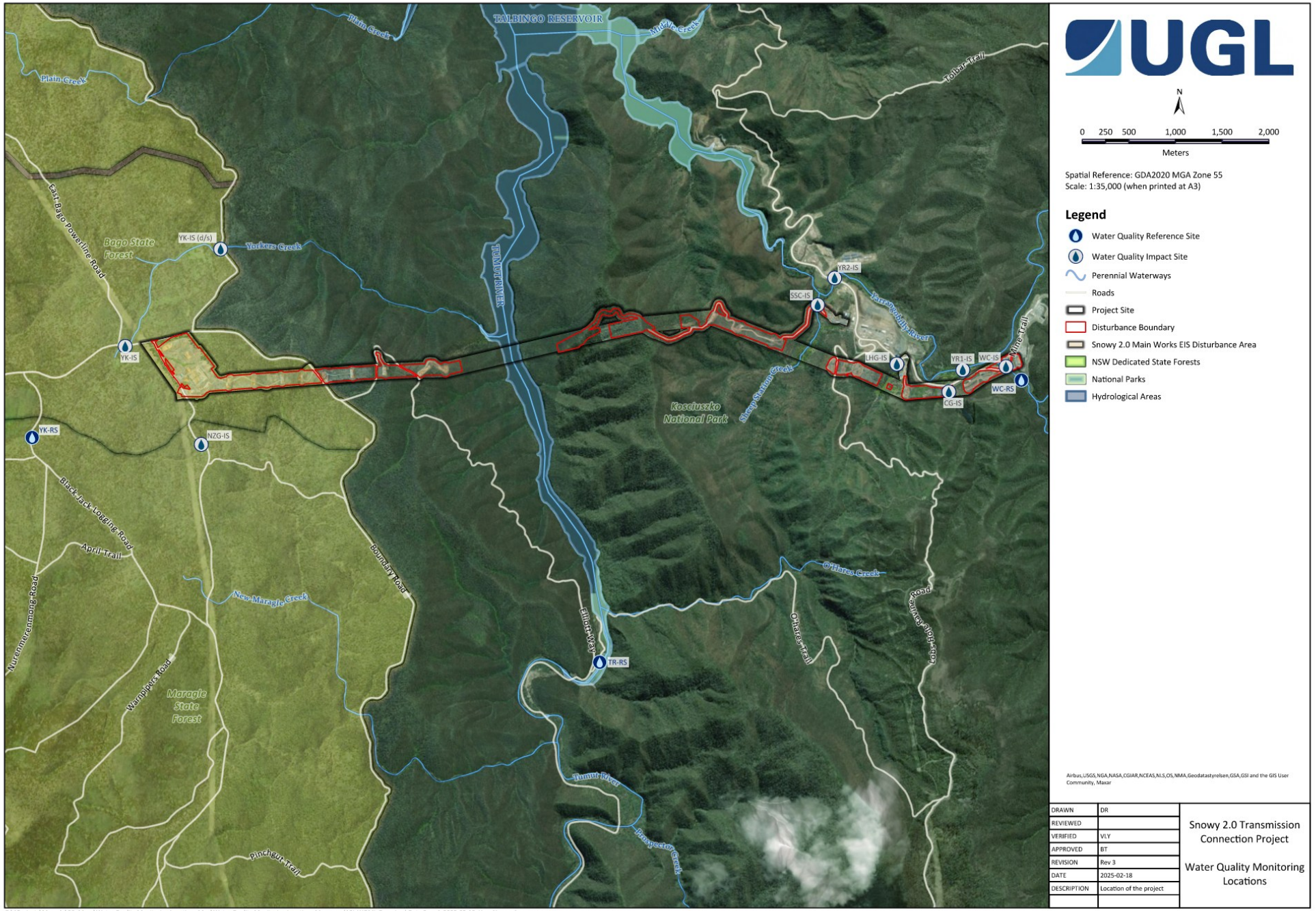


FIGURE 1 LOCALITY OF THE PROJECT AND SWQ MONITORING LOCATIONS

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

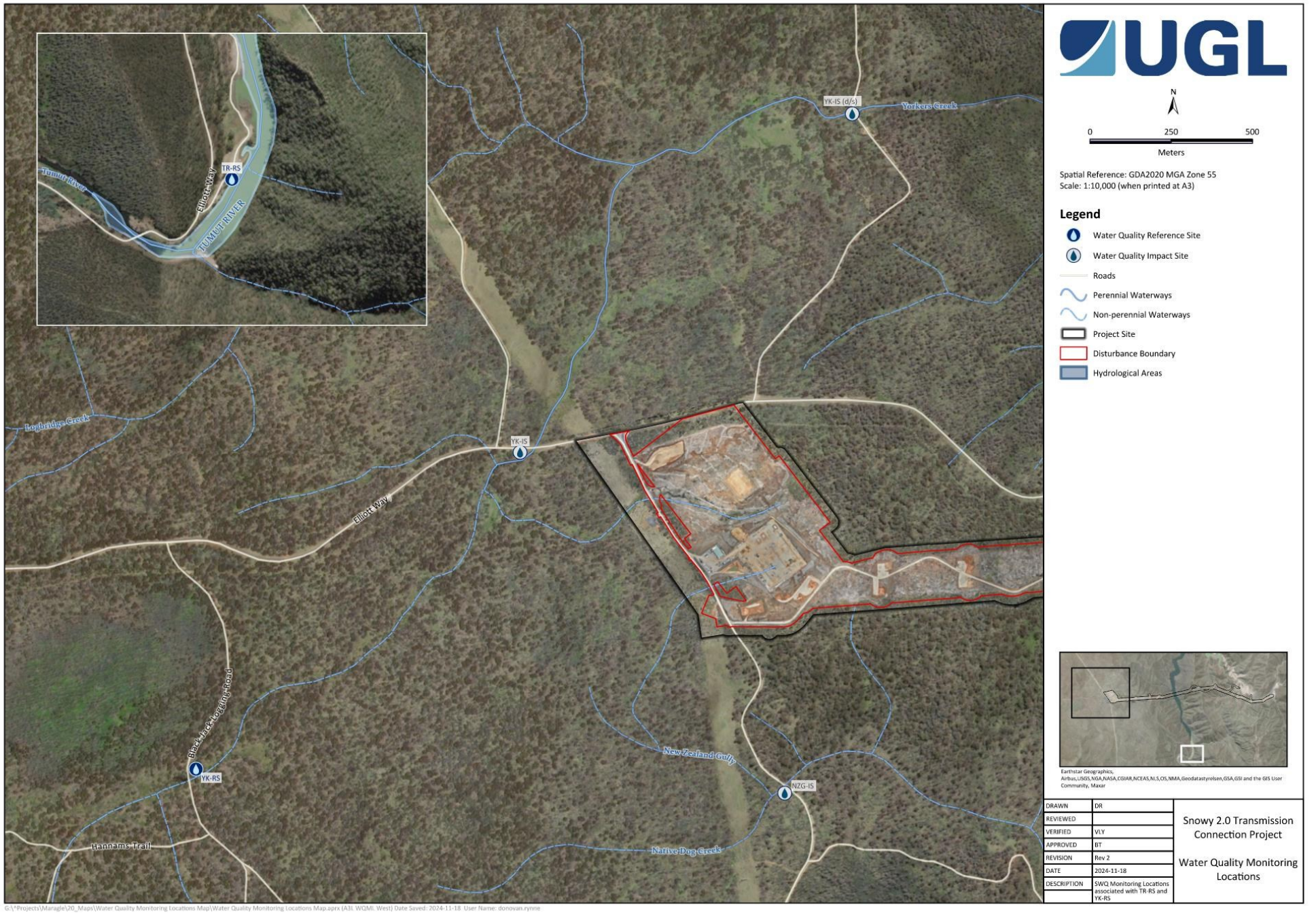


FIGURE 2 WATER QUALITY MONITORING LOCATIONS ASSOCIATED WITH REFERENCE SITE YR-RS AND TR-RS IN RELATION TO THE PROJECT

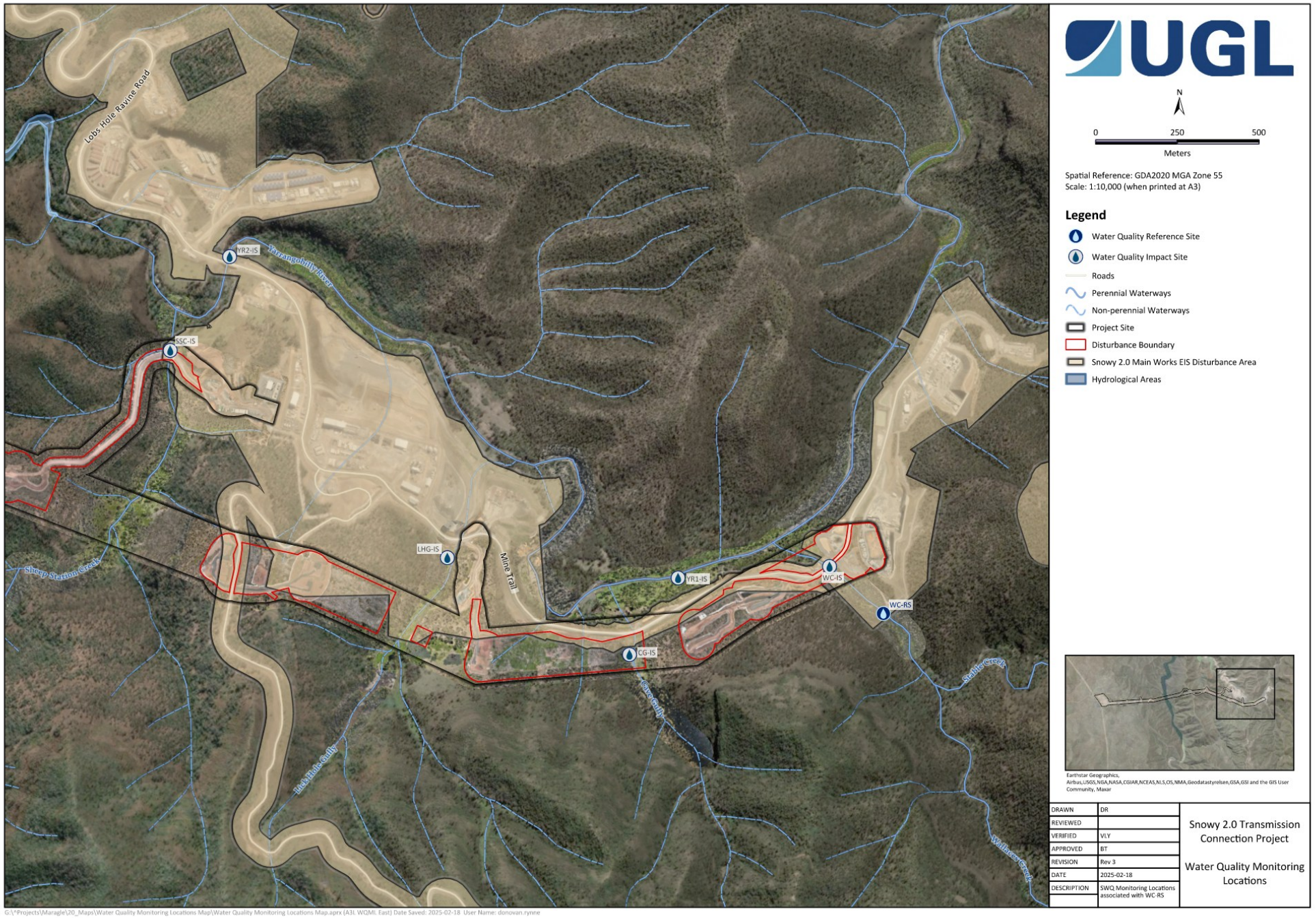


FIGURE 3 WATER QUALITY MONITORING LOCATIONS ASSOCIATED WITH REFERENCE SITE WC-RS IN RELATION TO THE PROJECT

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 SEPTEMBER 2025 MONITORING

SW sampling was undertaken at 12 monitoring locations from 23 September 2025.

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.

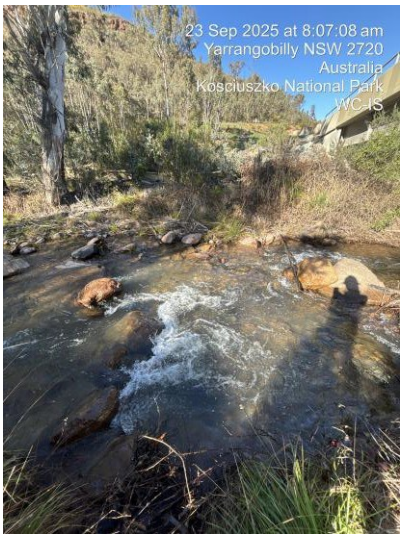
5.1 Observations

Field observations during sampling are summarised in Table 3.

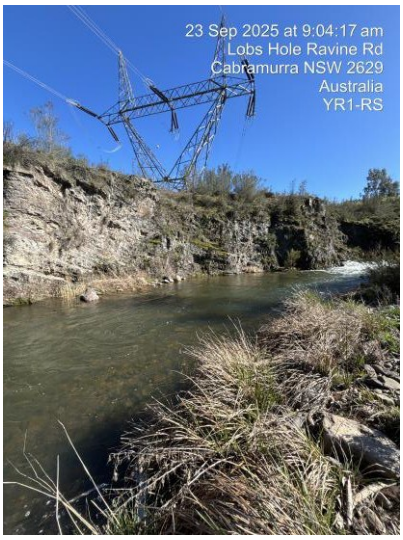
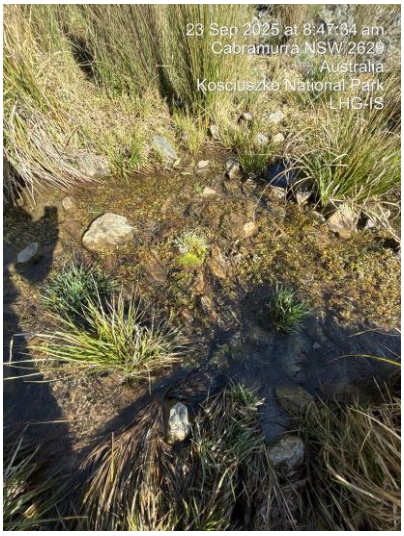
Table 3 Field observations during sampling

FIELD OBSERVATIONS		
Date	23-24 September 2025	
Weather	The weather forecast for 23 September was 8 degrees Celsius (°C) with 60 percent of <1 millimetres (mm) of rain. The previous 48 hours were cloudy and experienced a total of 4.8mm of rainfall across 21 to 22 September 2025. The weather forecast for 24 September was 6°C with 60 percent if 1-5 mm. At the time of sampling, the weather was fine and sunny. The previous 48 hours were cloudy and produced 2.5mm of rainfall across 22 to 23 of September.	
ID	**Observations**	**Photo**
WC-RS	• Moderate volume and flow rate. • Water clear with no visible discolouration. • Presence of aquatic vegetation in water channel. • Rocky and eroded banks with exposed roots from a large tree. • Riparian vegetation comprising groundcover species, shrubs and mature trees. • Moderate weed density, including blackberry (*Rubus fruticosus*).	

FIELD OBSERVATIONS

ID	Observations	Photo
WC-IS	• Moderate volume and flow rate. • Water clear with no visible discolouration. • Presence of aquatic vegetation in water channel. • Presence of vegetative detritus in waterbody. • Rocky and undercut banks present. • Riparian vegetation, comprised of trees and grass. • High weed density, including blackberry (*Rubus fruticosus*). • Monitoring location is situated adjacent to bridge and Mine Trail Road which is frequently used by snowy 2.0 vehicles, plant and machinery.	
CG-IS	• Low water volume and flow rate. • Water clear with no visible discolouration. • Presence of aquatic vegetation in water channel. • Presence of old metal pipe was local to waterbody. • Eroded banks and sandy bed. • Overhanging vegetation present.	

FIELD OBSERVATIONS

ID	Observations	Photo
YR1-IS	• Moderate water volume and flow rate. • Slight water discolouration present. • Presence of aquatic vegetation in channel. • Rocky banks with sections of exposed soil along upper bank areas. • Riparian vegetation comprising of groundcover species, shrubs and trees. • Moderate weed density including thistle (*Cirsium spp.*) and blackberry (*Rubus fruticosus*). • Monitoring location is situated adjacent to bridge and electrical transmission tower on top of rocky cliff and Snowy 2.0 laydown area.	
LHG-IS	• Low water volume and flow rate. • Water clear with no visible discolouration. • Presence of aquatic vegetation within channel. • Vegetation of vegetative detritus in waterbody. • Presence of silt and grass seed husks on stream bed. • Rocky bed with no defined banks. • Overgrown vegetation, predominantly groundcover species. • Monitoring location is adjacent to Mine Trail Road which is frequently used by Snowy 2.0 vehicles, plant and machinery.	

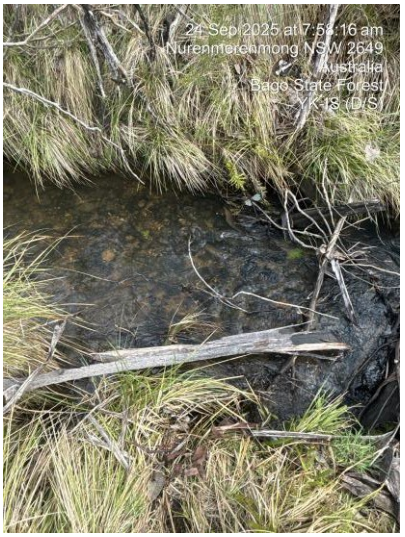
FIELD OBSERVATIONS

ID	Observations	Photo
YR2-IS	• Low water volume and flow rate. • Slight yellow tinge observed in water. • Presence of aquatic vegetation in channel. • Presence of vegetative detritus. • Rocky bed with no defined banks. • Riparian vegetation comprised of groundcover species, shrubs and trees. • Moderate weed density, including blackberry (*Rubus fruticosus*). • Presence of road washout from Mine Trail Road in vegetation adjacent to river.	
SSC-IS	• Minimal water volume and flow rate. • Water clear and no visible discolouration of water. • Presence of aquatic vegetation. • Presence of vegetative detritus in waterbody. • Sandy and rocky stream bed. • Undercut banks. • Overhanging vegetation present. • Groundcover species comprised of shrubs and grass.	

FIELD OBSERVATIONS

ID	Observations	Photo
TR-RS	• Low water volume and flow rate. • Yellow tinge observed in water. • Presence of aquatic invertebrates and vegetation in water channel. • Presence of vegetative detritus in waterbody. • Sandy bed and rocky banks. • Riparian vegetation consisted of groundcover and trees. • Presence of landslips. • Monitoring location is situated adjacent to publicly accessible O'Hares Campground and Talbingo Reservoir ancillary infrastructure. •	
YK-RS	• Low water volume and flow rate. • Yellow and brown tinge observed in water. • Presence of aquatic vegetation (including algae) in water channel. • Presence of vegetative detritus in waterbody. • Eroded and undercut banks. • Ground cover is comprised of shrubs and grasses.	

FIELD OBSERVATIONS

ID	Observations	Photo
YK-IS (D/S)	• Low water volume and flow rate. • Yellow and brown tinge observed in water. • Presence of aquatic vegetation (including algae) in water channel. • Presence of vegetative detritus observed in waterbody. • Evidence of undermined banks. • Rocky and sandy stream bed. • Riparian vegetation consisted of groundcover species and trees. • Monitoring location is situated adjacent to publicly accessible 4WD track.	
NZG-IS	• Low water volume and flow rate. • Slight yellow tinge observed in water. • Presence of aquatic vegetation (including algae) in water channel. • Presence of organic detritus in waterbody. • Evidence of eroded and undermined banks. • Pebbly stream bed. • Riparian vegetation consisted of groundcover species and trees. • Monitoring location is situated adjacent to publicly accessible 4WD track.	

FIELD OBSERVATIONS

ID	Observations	Photo
YK-IS	• Low water volume and flow rate. • Yellow and brown tinge observed in water. • Presence of aquatic vegetation in water channel. • Presence of vegetative detritus in waterbody. • Rocky and sandy stream bed. • Eroded banks. • Overhanging vegetation. • Riparian vegetation consisted of groundcover species, shrubs and trees. • Low weed density. • Monitoring location is situated adjacent to Elliot Way, leading towards culvert.	

5.2 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 5.2.1. Results for dissolved and total metals, including site-specific trigger values, are covered in Sections 5.2.2 and 5.2.3. Upon review of the data, observations were noted between the reference and impact sites.

The complete table of results is attached in Appendix C.

5.2.1 Key Physical and Chemical Parameters

See below for results of key physical and chemical parameters.

5.2.1.1 Temperature

During September 2025, all three sampling locations (Yarrangobilly catchment, Talbingo Reservoir and Yorkers Creek Catchment) exhibited a downward trend in temperature (°C) compared to August 2025 (Figure 4—6). In Yarrangobilly Catchment, mean temperatures reduced to 8.1°C (Figure 4). Talbingo Reservoir, reduced marginally from 12°C to 11°C (Figure 5). Yorkers Creek Catchment observed a similar downward trend from August 2025, averaging 6.25°C (Figure 6).

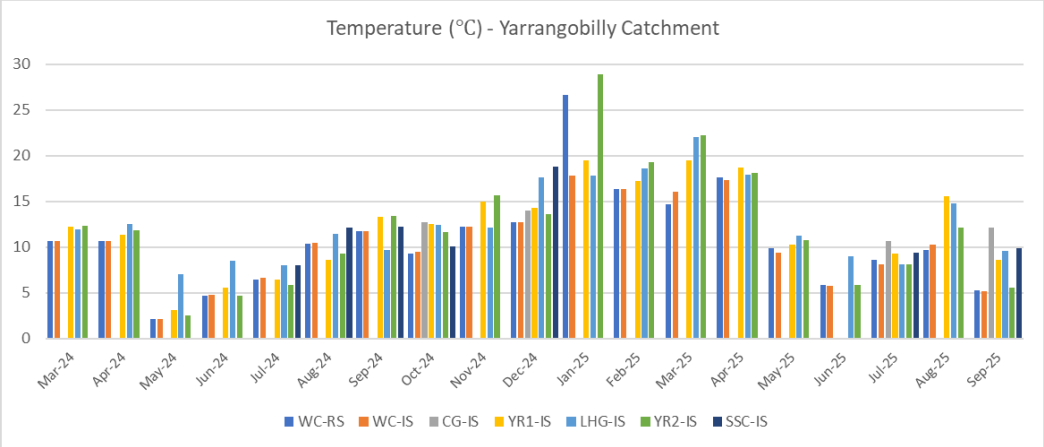


FIGURE 4 : TEMPERATURE FOR YARRANGOBILLY RIVER CATCHMENT

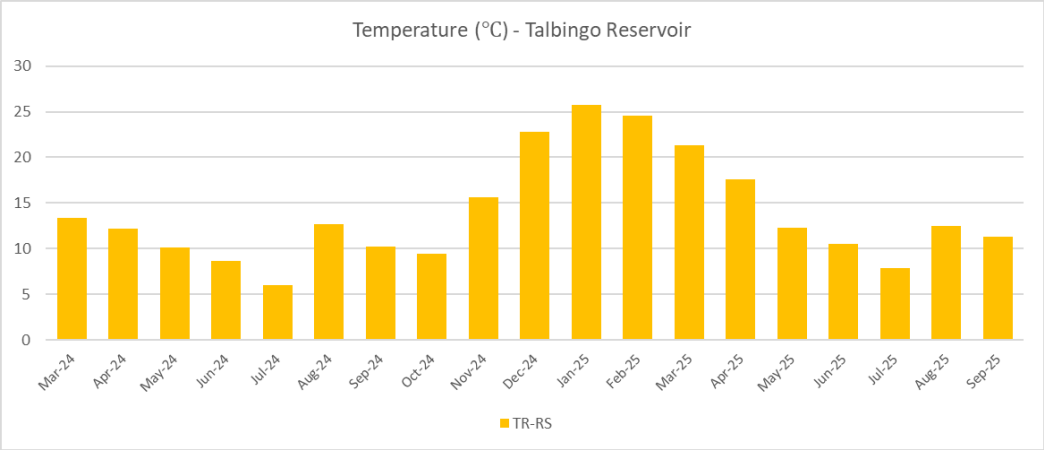


FIGURE 5: TEMPERATURE FOR TALBINGO RESERVOIR

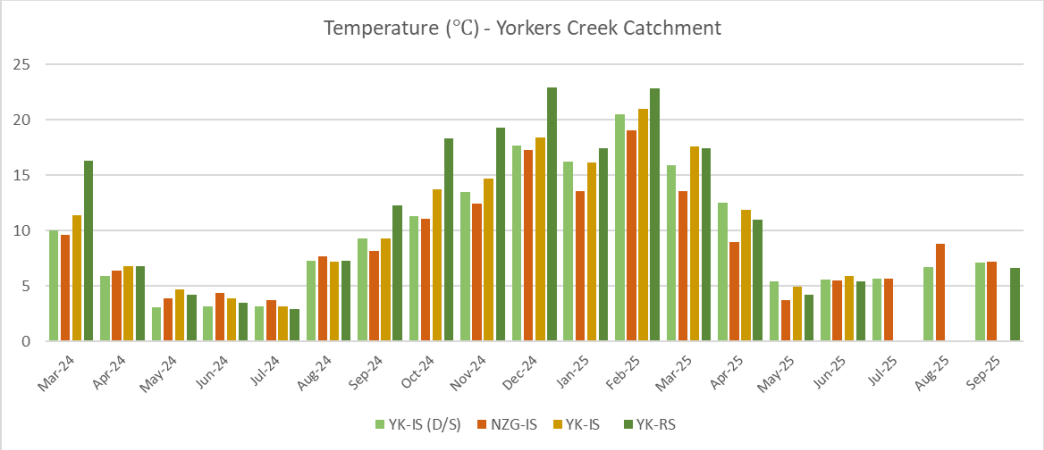


FIGURE 6: TEMPERATURE FOR YORKERS CREEK CATCHMENT

5.2.1.2 pH

During the September 2025 sampling period, Yarrangobilly Catchment pH results continued trending upwards, marginally exceeding the June—November SSGV value (Figure 7). Talbingo Reservoir continued to present a downward trend in pH values, reducing to pH 4.9 (Figure 8). Yorkers Creek Catchment presented a reduction from August 2025 mean pH results, marginal exceedances of the June—November SSGV, was recorded at NZG-IS and YK-RS (Figure 9).

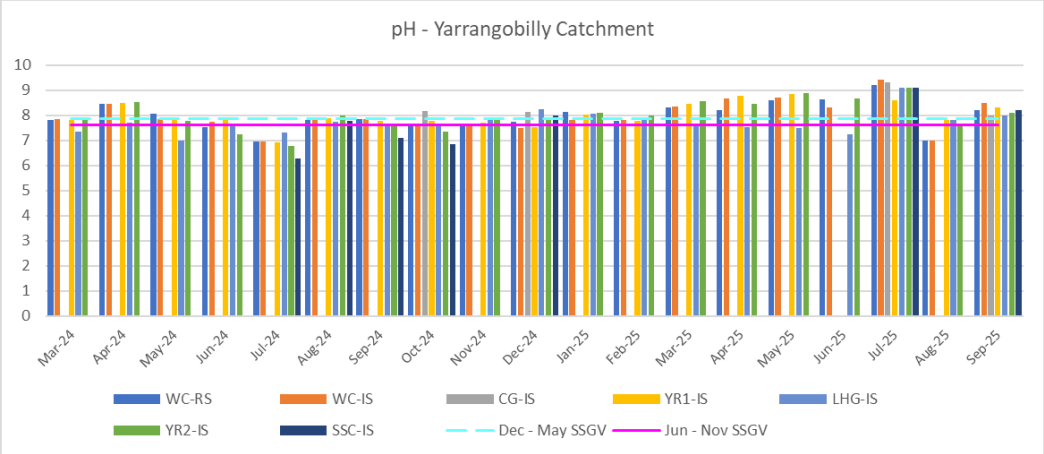


FIGURE 7: PH FOR YARRANGOBILLY RIVER CATCHMENT

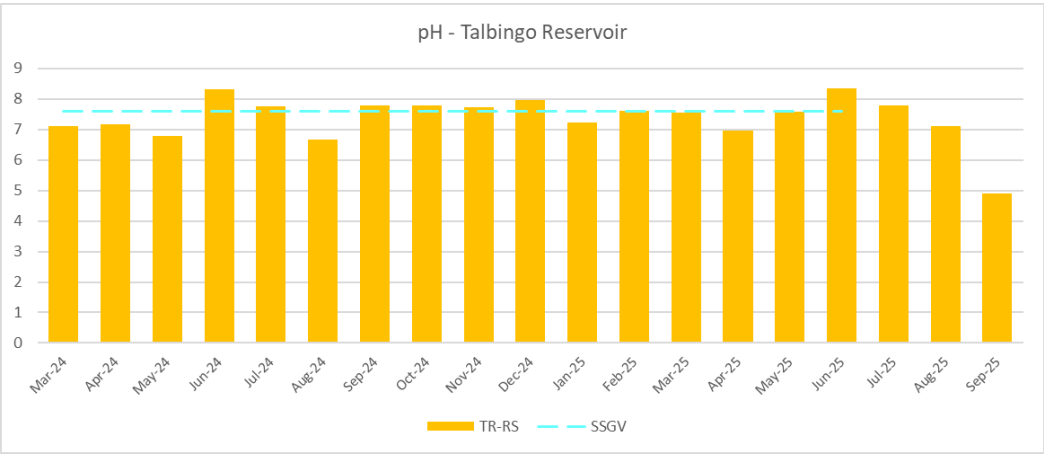


FIGURE 8: PH FOR TALBINGO RESERVOIR

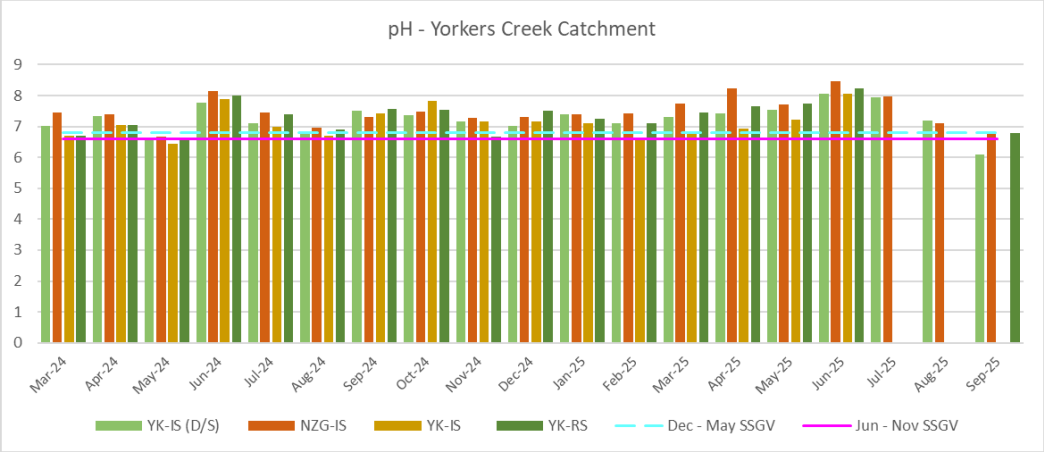


FIGURE 9: PH FOR YORKERS CREEK CATCHMENT

5.2.1.3 Dissolved Oxygen

During the September 2025 sampling period, DO (%) maintained consistent results to August 2025 (Figure 10—12). Yarrangobilly Catchment exhibited results above the June—November SSGV (Figure 10), Talbingo Reservoir, met the June—November SSGV (Figure 11), and Yorkers Creek Catchment provided results slightly below the June—November SSGV (Figure 12).

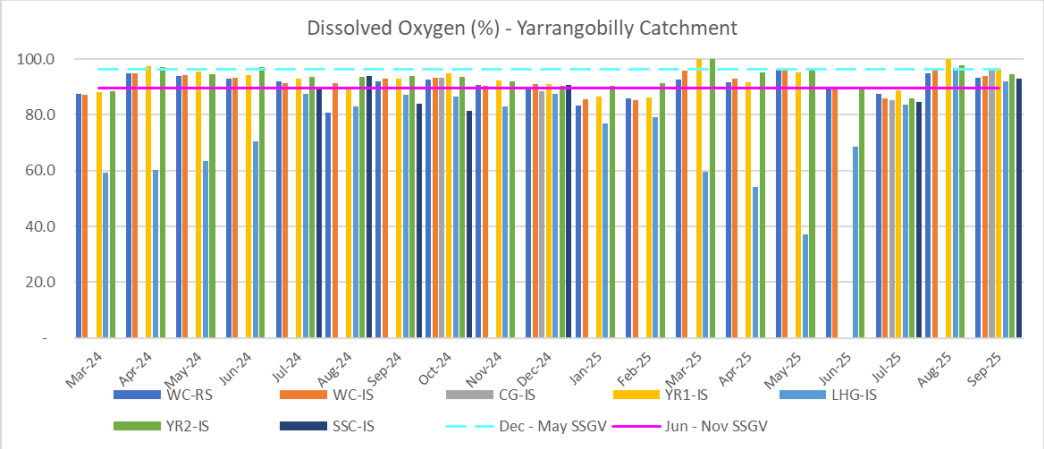


FIGURE 10: DO FOR YARRANGOBILLY RIVER CATCHMENT

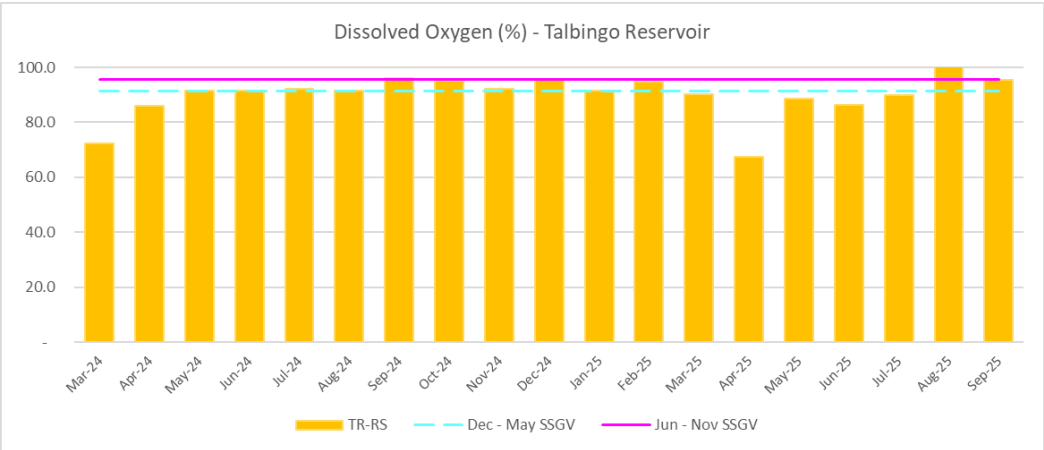


FIGURE 11: DO FOR TALBINGO RESERVOIR

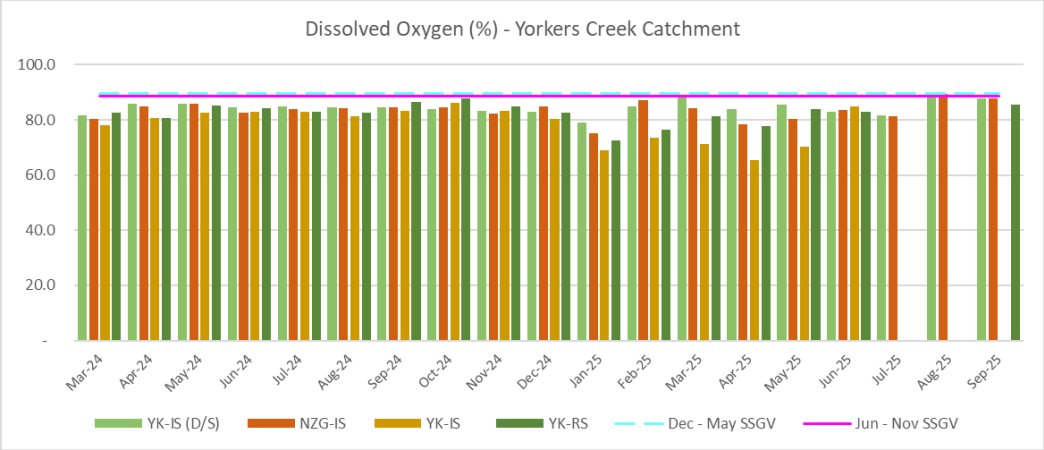


FIGURE 12: DO FOR YORKERS CREEK CATCHMENT

5.2.1.4 Specific Conductance

September 2025 specific conductance (µS/cm) results varied across all sampling locations. Exceedance of the June—November SSGV were recorded in Yarrangobilly Catchment at SSC-IS, and notable results at CG-IS and LHG-IS (Figure 13). A marginal exceedance was recorded in Talbingo Reservoir (Figure 14). Increase in SPC (µS/cm) was identified across all Yorkers Creek sampling locations compared to August 2025 (Figure 15).

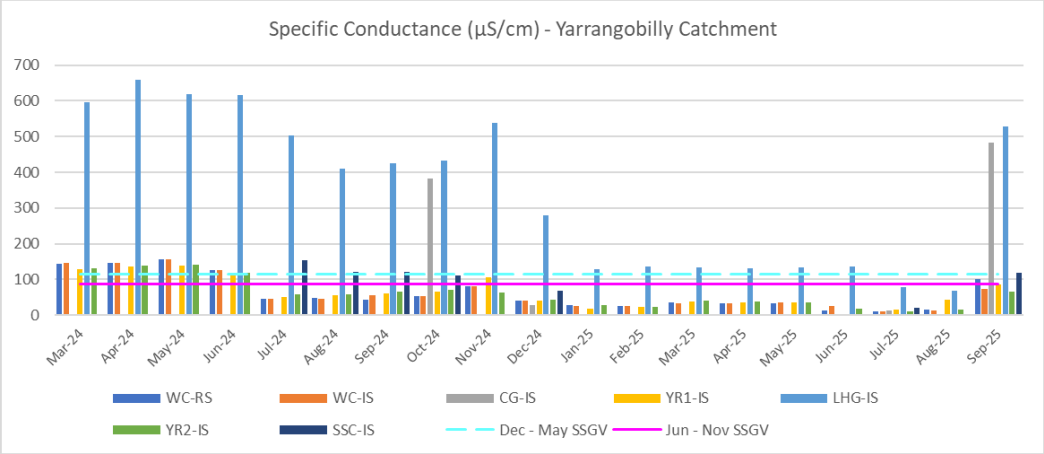


FIGURE 13: SPC FOR YARRANGOBILLY RIVER CATCHMENT

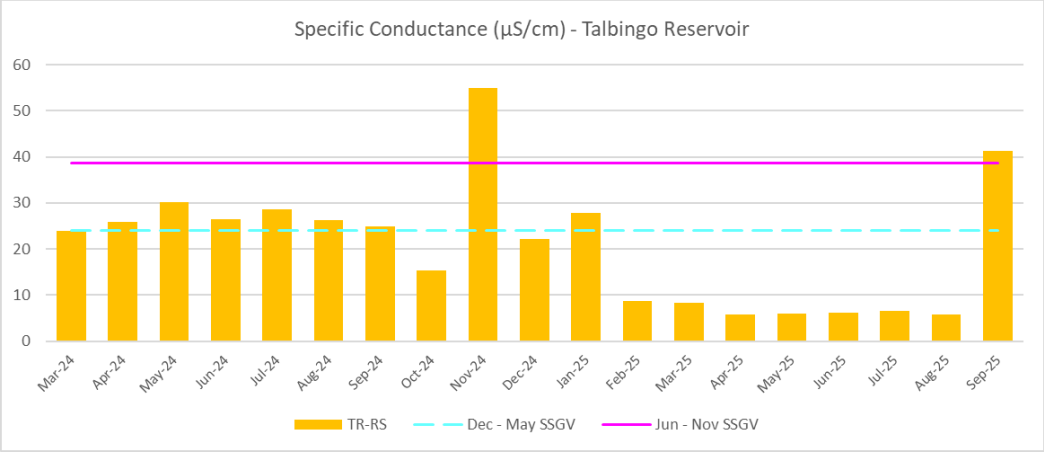


Figure 14: SPC for Talbingo Reservoir

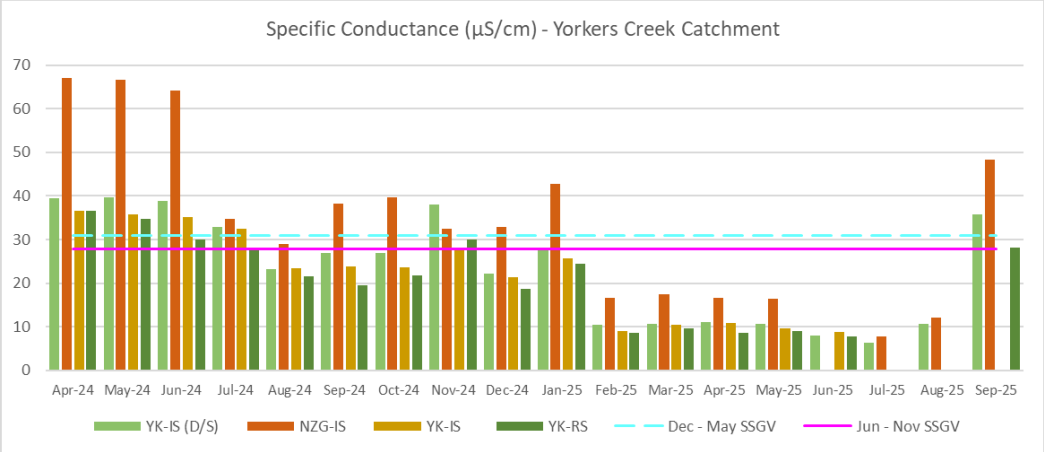


FIGURE 15: SPC FOR YORKERS CREEK CATCHMENT

5.2.1.5 Electrical Conductivity

In September 2025, Electrical Conductivity (EC, µS/cm) increased across all three sampling catchments (Yarrangobilly Catchment, Talbingo Reservoir and Yorkers Creek Catchment) compared to previous results (Figure 16—18). The most notable exceedance of the June—November SSGV, were recorded at two sampling locations (CG-IS and LHG-IS) of Yarrangobilly Catchment (Figure 16).

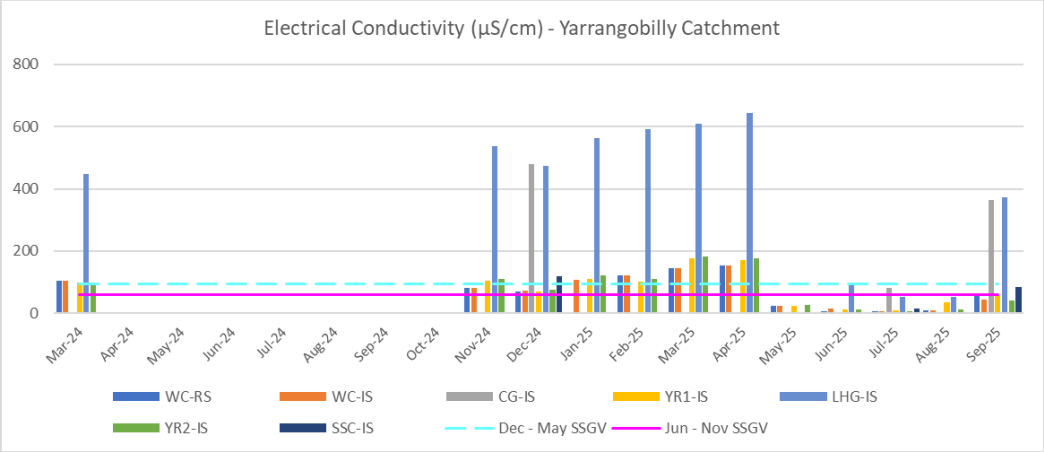


FIGURE 16: EC FOR YARRANGOBILLY RIVER CATCHMENT

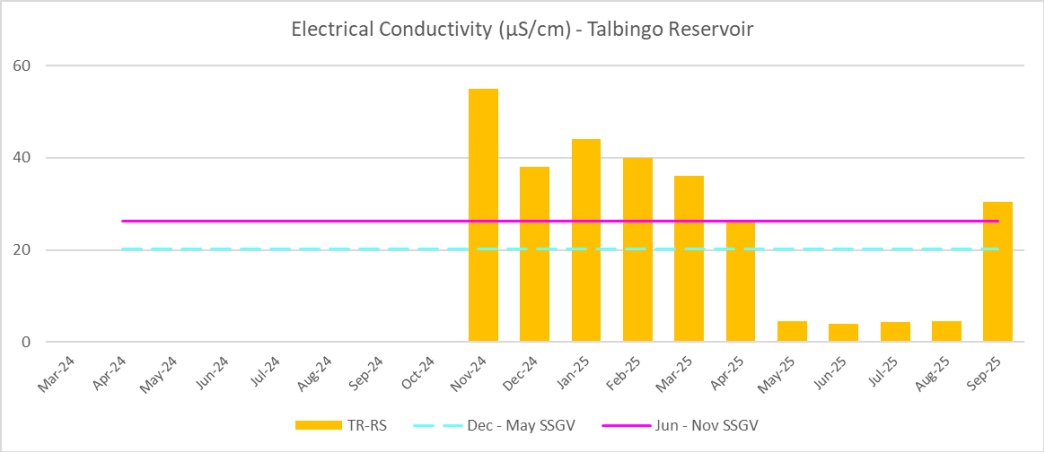


Figure 17: EC for Talbingo Reservoir

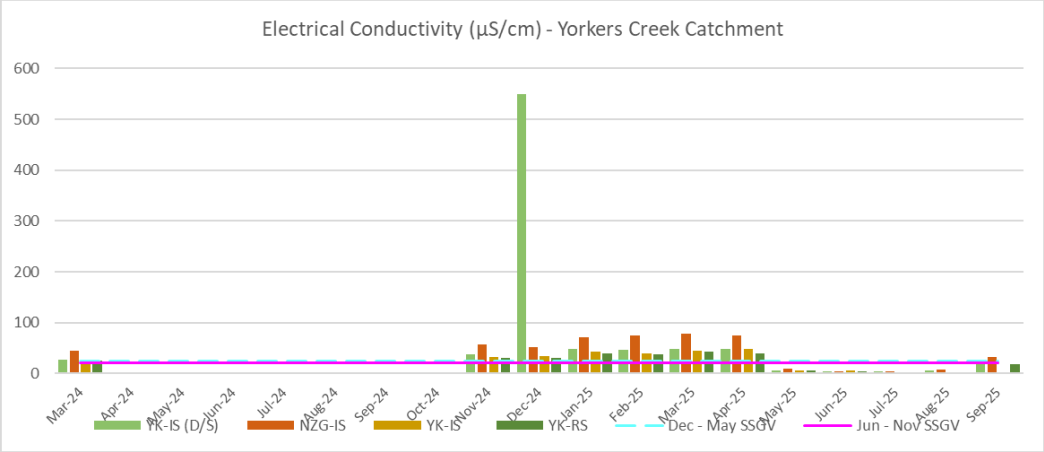


FIGURE 18: EC FOR YORKERS CREEK CATCHMENT

5.2.1.6 Turbidity

In September 2025, results varied across each sampling location. Yarrangobilly Catchment remained consistent with August 2025 Turbidity (NTU) results (Figure 19). A reduction in NTU was identified at Talbingo Reservoir, reducing from 6.1NTU in August 2025 to 2NTU (Figure 20). Yorkers Creek Catchment observed an increase at YK-RS, rising to 16NTU (Figure 21).

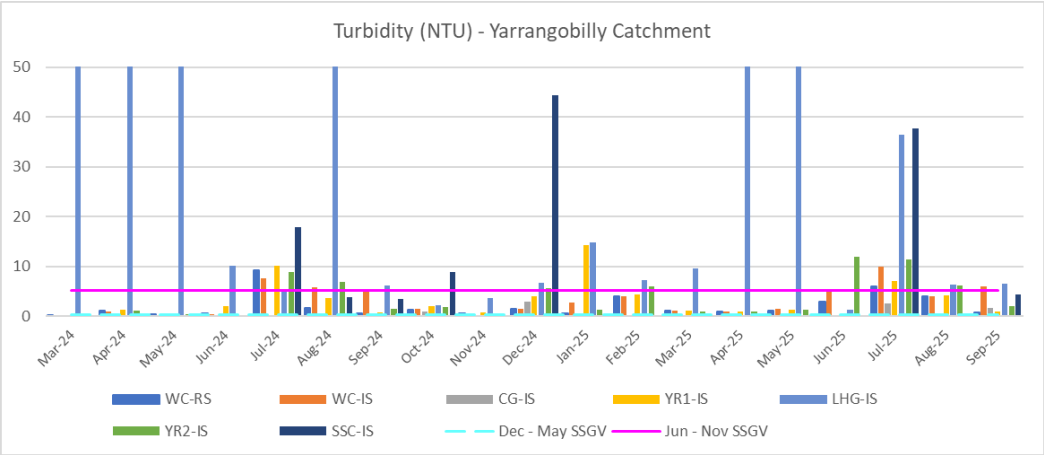


FIGURE 19: TURBIDITY FOR YARRANGOBILLY RIVER CATCHMENT

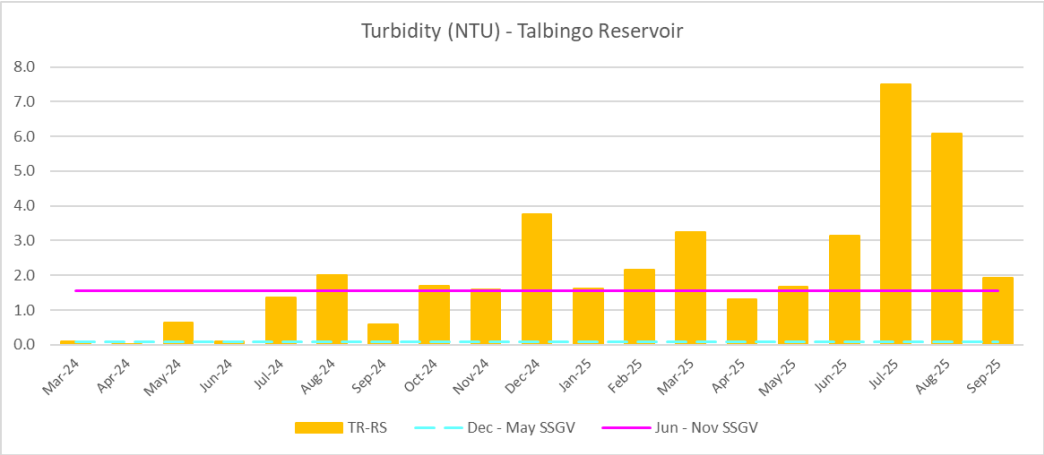


Figure 20: Turbidity for Talbingo Reservoir

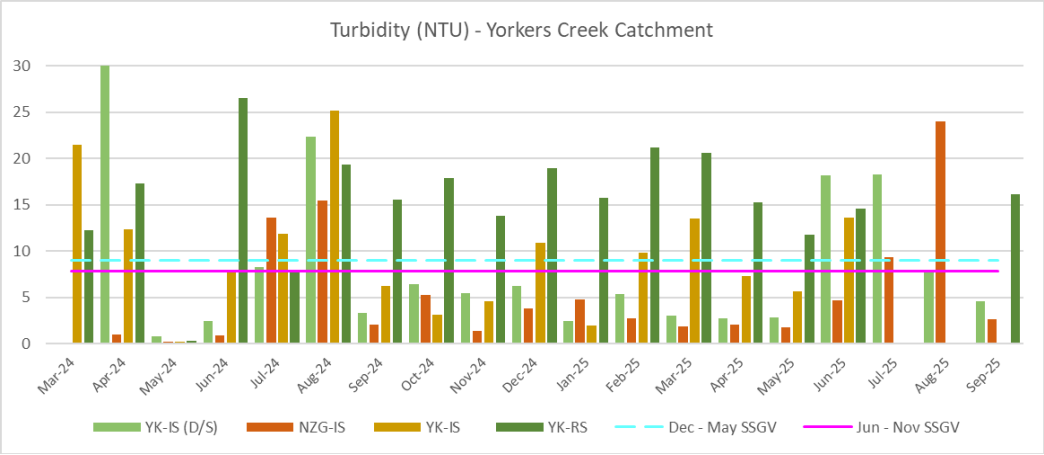


FIGURE 21: TURBIDITY FOR YORKERS CREEK CATCHMENT

5.2.1.7 Total Suspended Solids

Total Suspended Solids (mg/L) continued a downward trend across Yarrangobilly Catchment and Talbingo Reservoir (Figure 22—23) albeit TR-RS continued to exceed its respective SSGV (Figure 23). Yorkers Creek Catchment maintained similar results from August 2025 samples although greater exceedance of the June—November SSGV was identified at YK-RS which met the December—May SSGV (Figure 24).

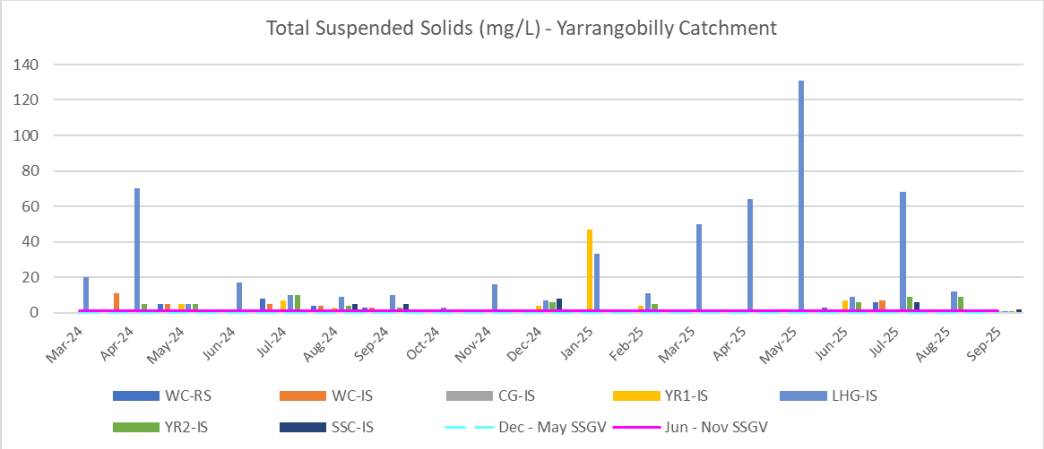


FIGURE 22: TSS FOR YARRANGOBILLY RIVER CATCHMENT

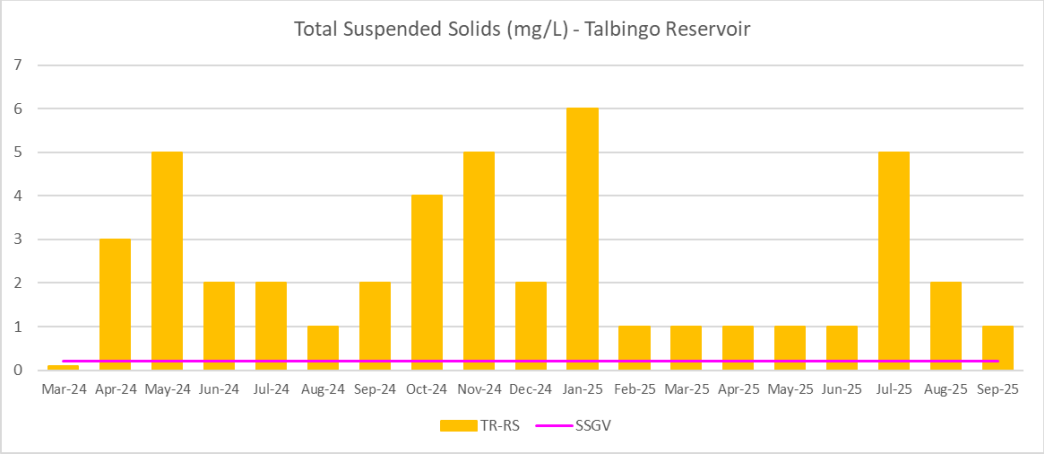


Figure 23: TSS for Talbingo Reservoir

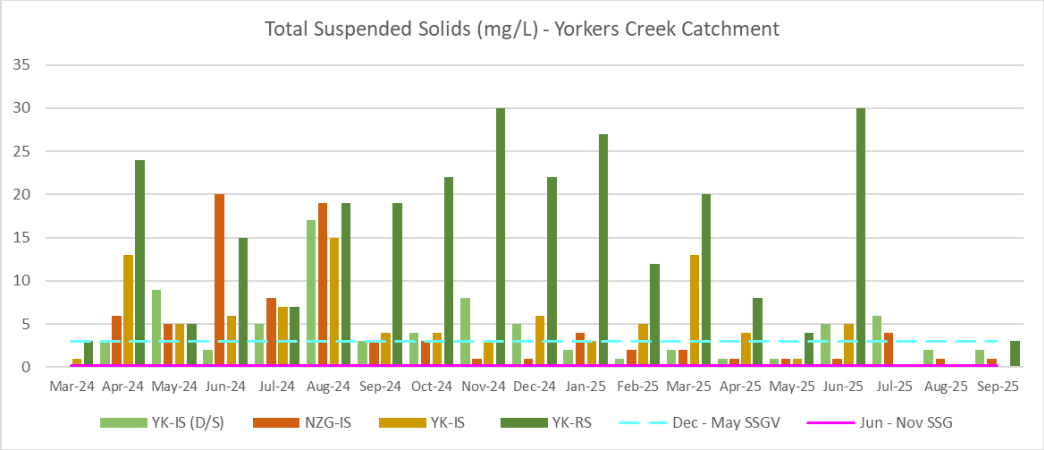


FIGURE 24: TSS FOR YORKERS CREEK CATCHMENT

5.2.1.8 Total Dissolved Solids

Total dissolved solids (mg/L) results continue to vary across each catchment (Figure 25—27). Exceedance of the June—November SSGV were recorded at the Yarrangobilly Catchment at CG-IS (312mg/L), YR1-IS (56mg/L), LHG-IS (350mg/L) and SSC-IS (71mg/L) (Figure 25). Total Dissolved Solids rose considerably from August 2025 results (18mg/L) to September 2025 (46mg/L) (Figure 26). Each sampling location of Yorkers Creek Catchment exceeded the respective SSGV (Figure 27).

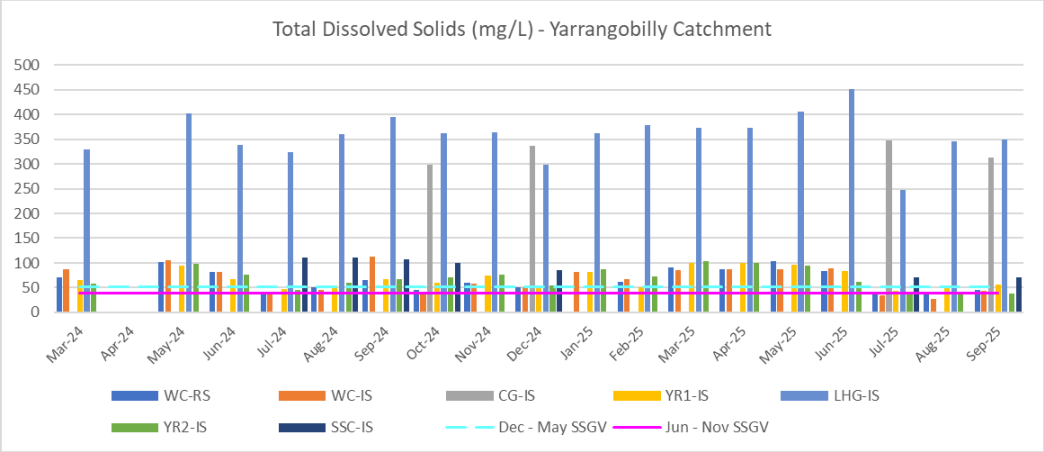


Figure 25 TDS for Yarrangobilly River Catchment

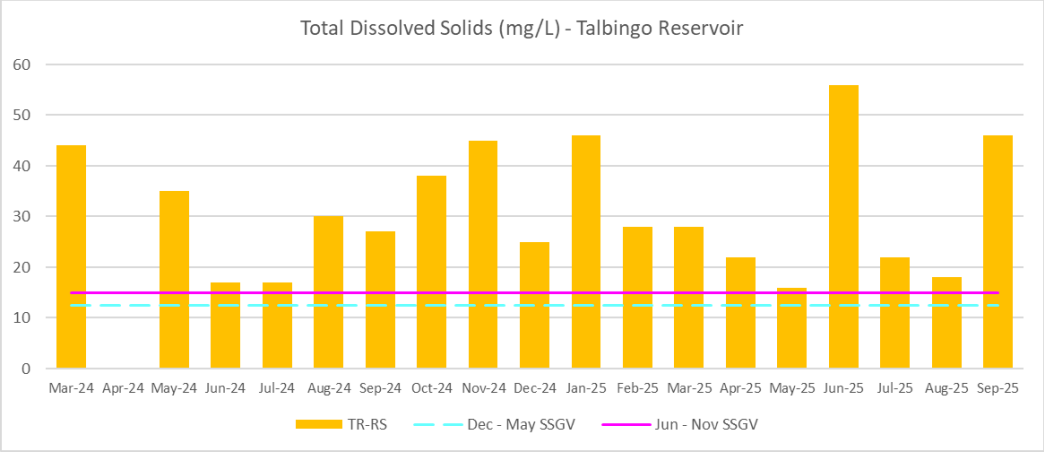


Figure 26 TDS for Talbingo Reservoir

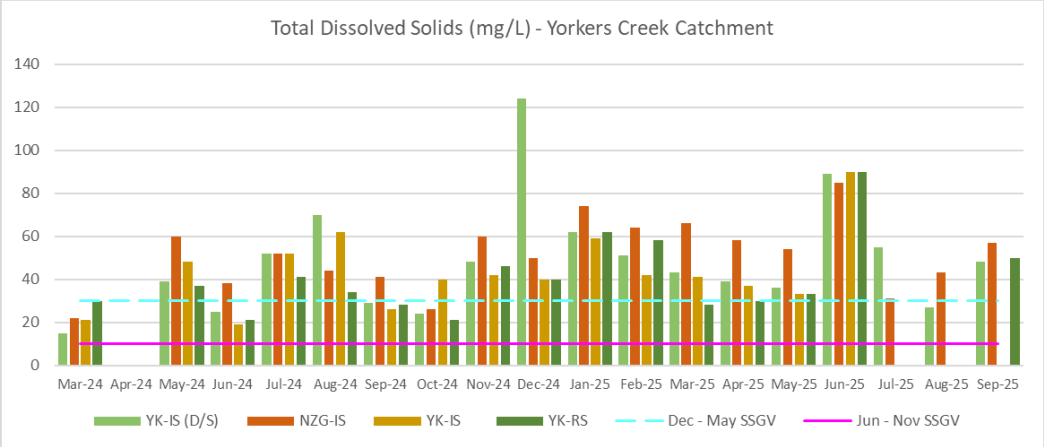


FIGURE 27 TDS FOR YORKERS CREEK CATCHMENT

5.2.1.9 Redox

During the September 2025 sampling period, all locations experienced a reduction in Redox (mV) results, all samples remained in exceedance of the June—November SSGV (Figure 28—30).

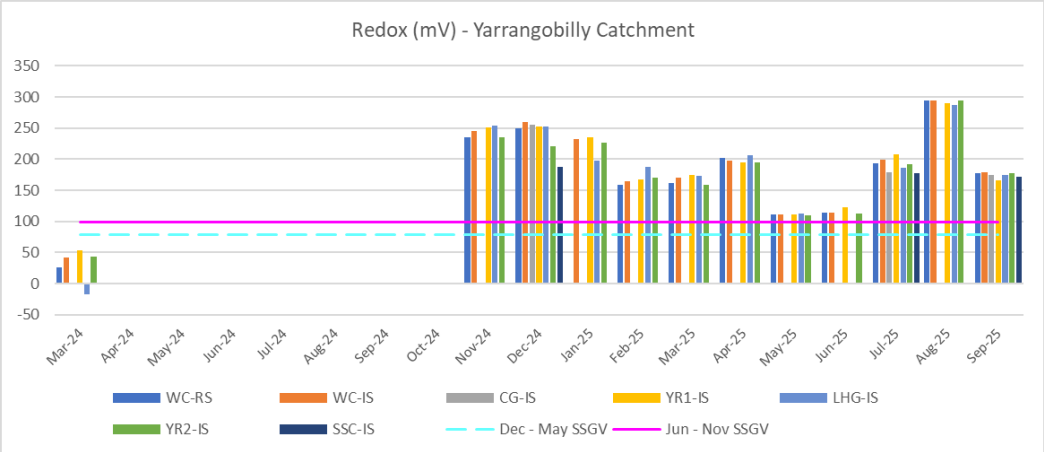


FIGURE 28: REDOX FOR YARRANGOBILLY RIVER CATCHMENT

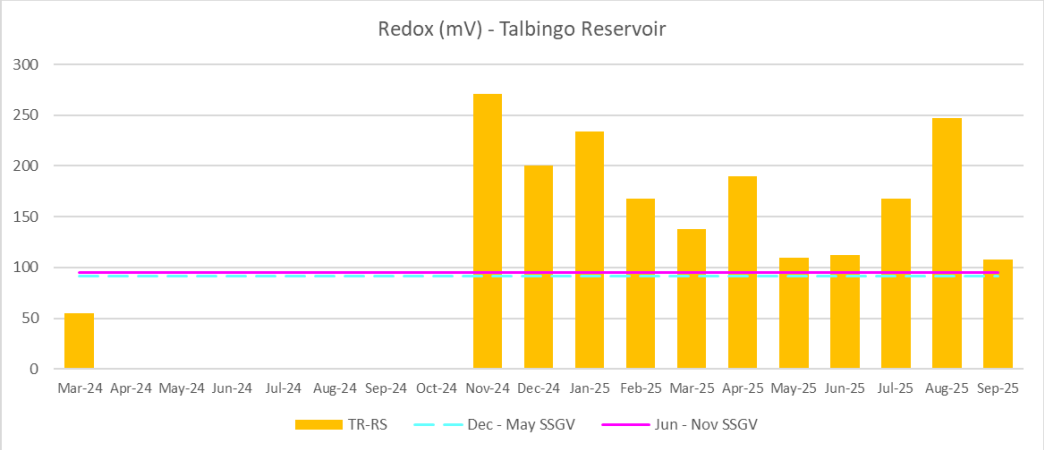


Figure 29: Redox for Talbingo Reservoir

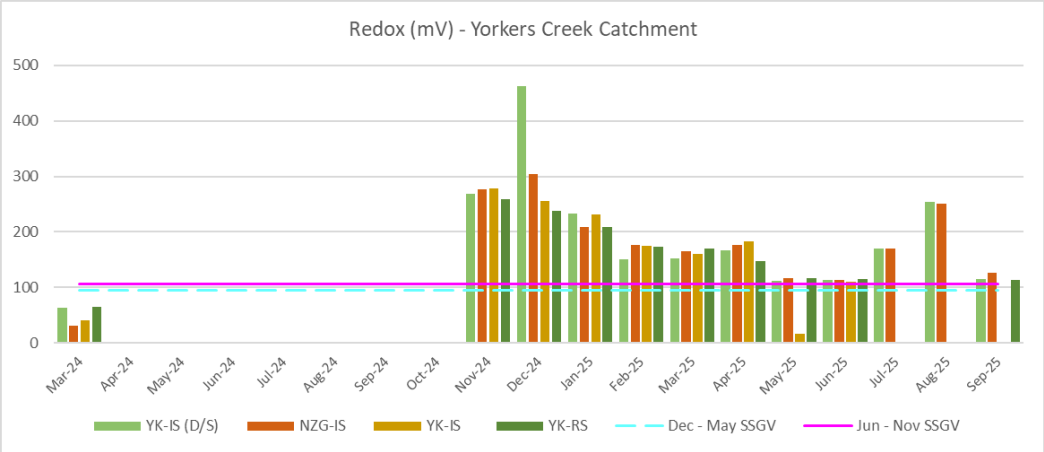


FIGURE 30: REDOX FOR YORKERS CREEK CATCHMENT

5.2.1.10 Nitrogen Oxides

Nitrogen Oxide (mg/L) levels remained consistent with August 2025 Results during September 2025 sampling, although a notable exceedance was observed at Talbingo Reservoir, TR-RS (2.66mg/L) (Figure 31—33).

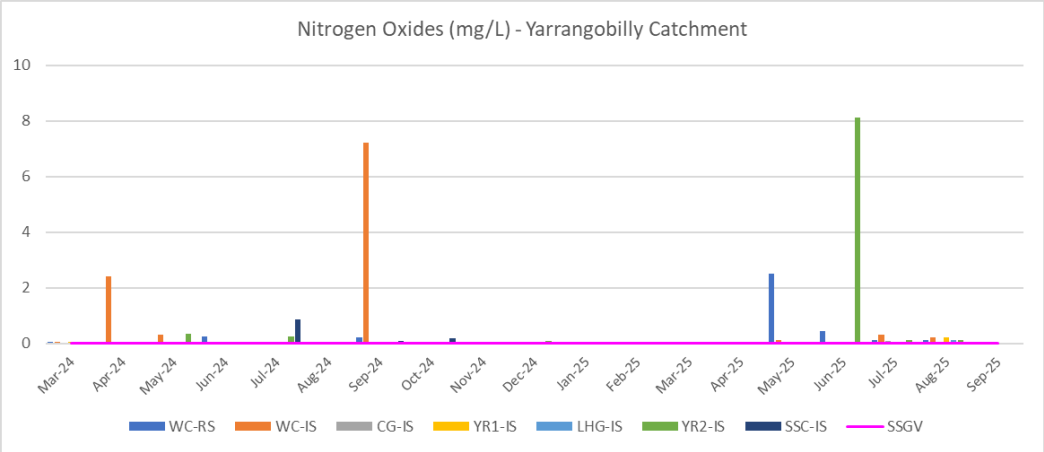


FIGURE 31: NITROGEN OXIDES FOR YARRANGOBILLY RIVER CATCHMENT

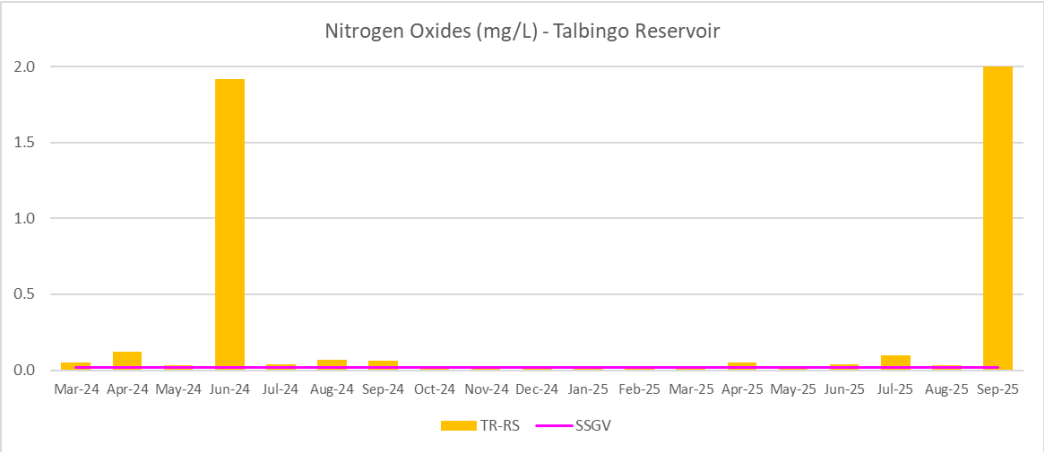


FIGURE 32: NITROGEN OXIDES FOR TALBINGO RESERVOIR

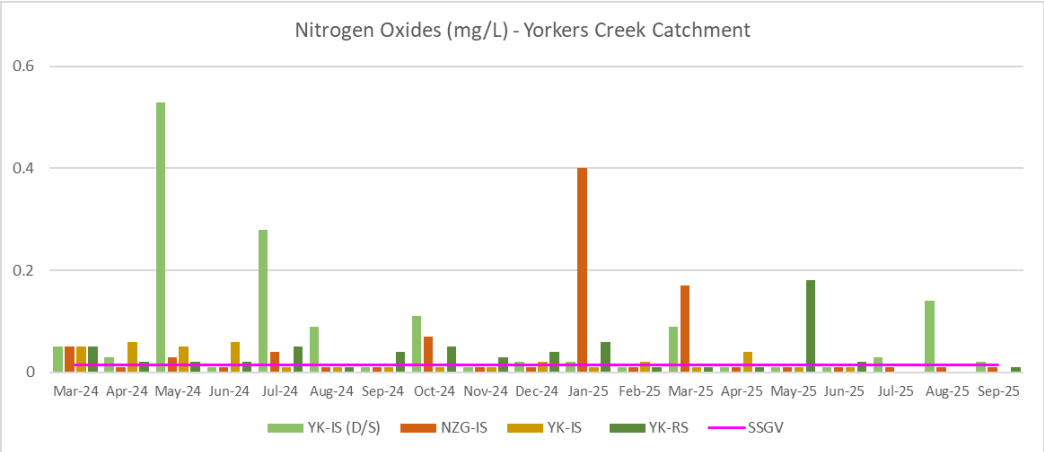


FIGURE 33: NITROGEN OXIDES FOR YORKERS CREEK CATCHMENT

5.2.1.11 Ammonia

Ammonia (mg/L) concentrations remained consistent with August 2025 results during the September 2025 sampling period (Figure 34—36), excluding Yorkers Creek Catchment, YK-IS(D/S) reduced notably to below the SSGV (Figure 36).

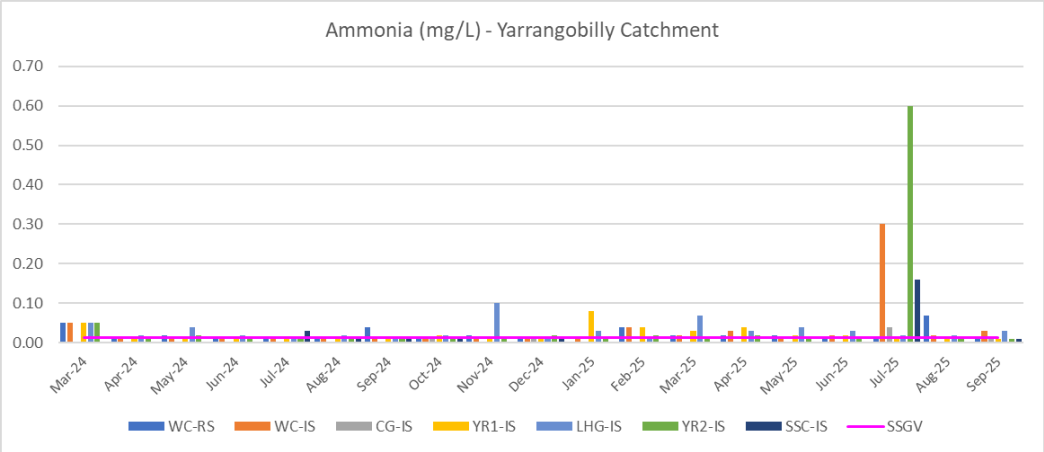


FIGURE 34: AMMONIA FOR YARRANGOBILLY RIVER CATCHMENT

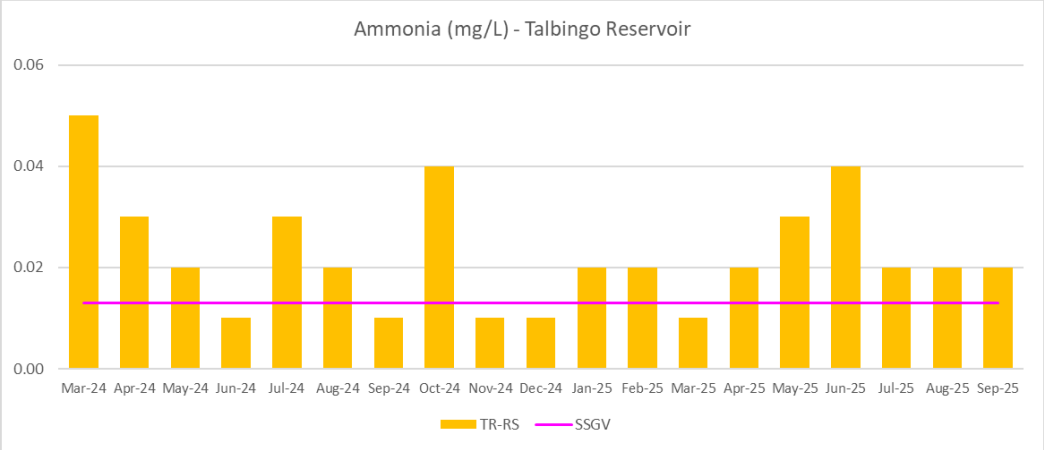


Figure 35: Ammonia for Talbingo Reservoir

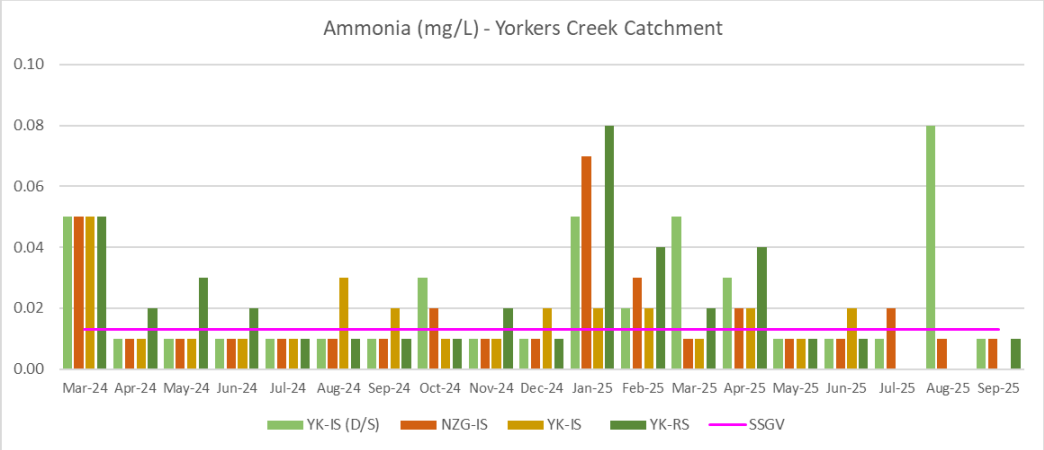


FIGURE 36: AMMONIA FOR YORKERS CREEK CATCHMENT

5.2.1.12 Cyanide

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

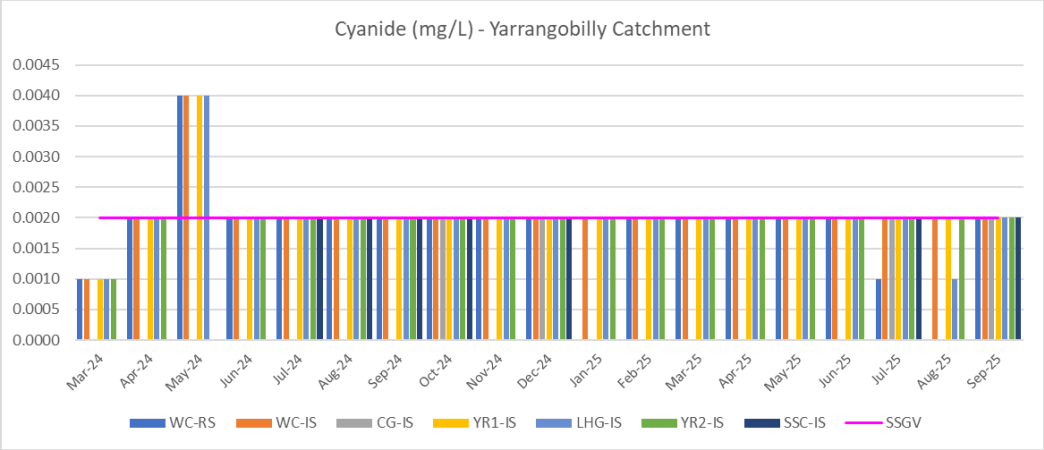


FIGURE 37: CYANIDE FOR YARRANGOBILLY RIVER CATCHMENT

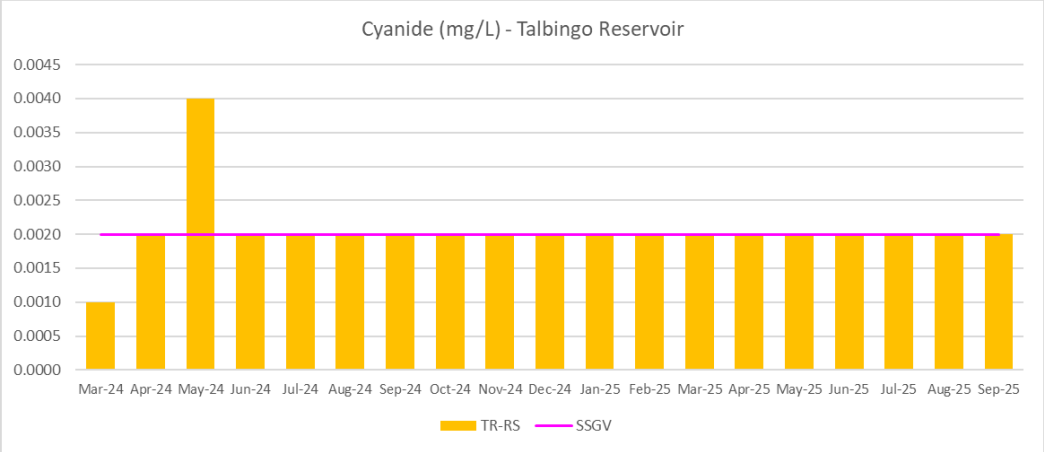


Figure 38: Cyanide for Talbingo Reservoir

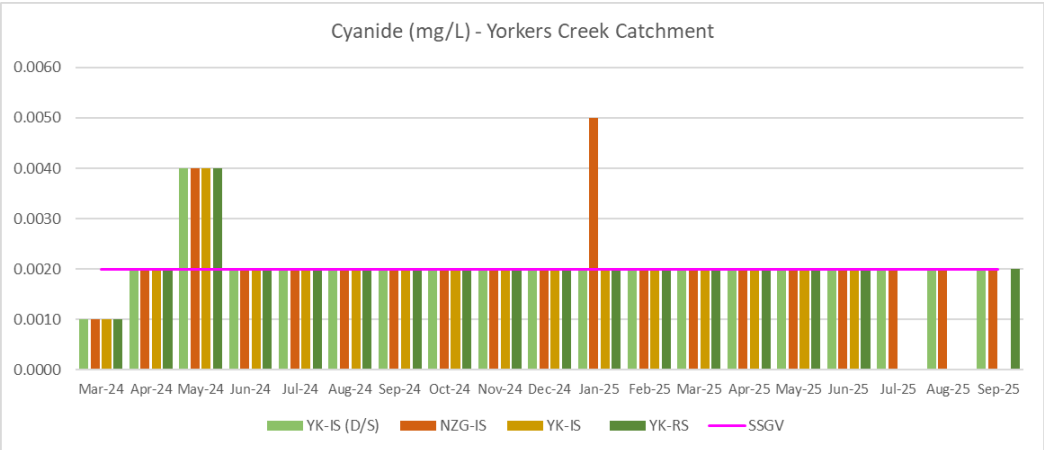


FIGURE 39: CYANIDE FOR YORKERS CREEK CATCHMENT

5.2.1.13 Total Hardness

During the September 2025 sampling period, each sampling site (excluding, TR-RS) exhibited a reduction in Total Hardness levels ($CaCO_3$ (mg/L) although typically remained above the respective June—November SSGV (Figure 40—42). TR-RS in the Talbingo Reservoir increased from 5mg/L in August 2025 to 14mg/L in September 2025.

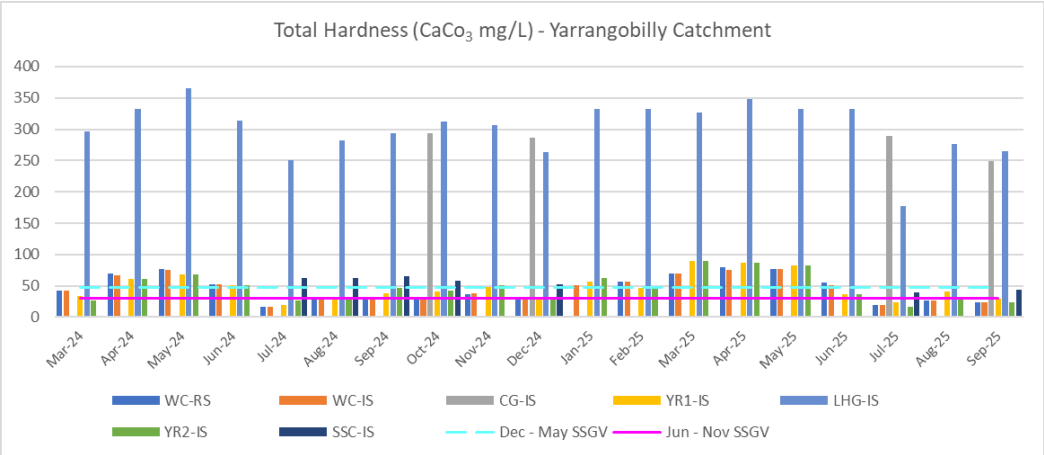


FIGURE 40: $CACO_3$ FOR YARRANGOBILLY RIVER CATCHMENT

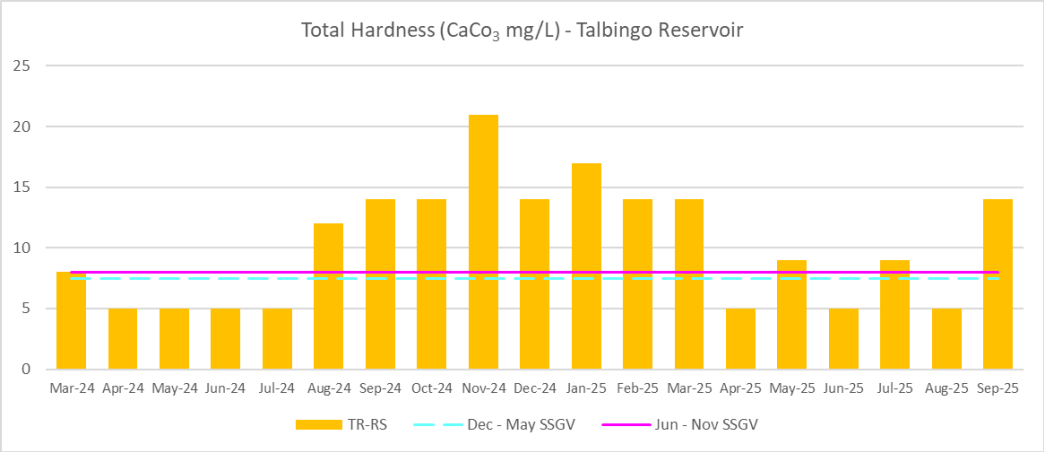


FIGURE 41: $CACO_3$ FOR TALBINGO RESERVOIR

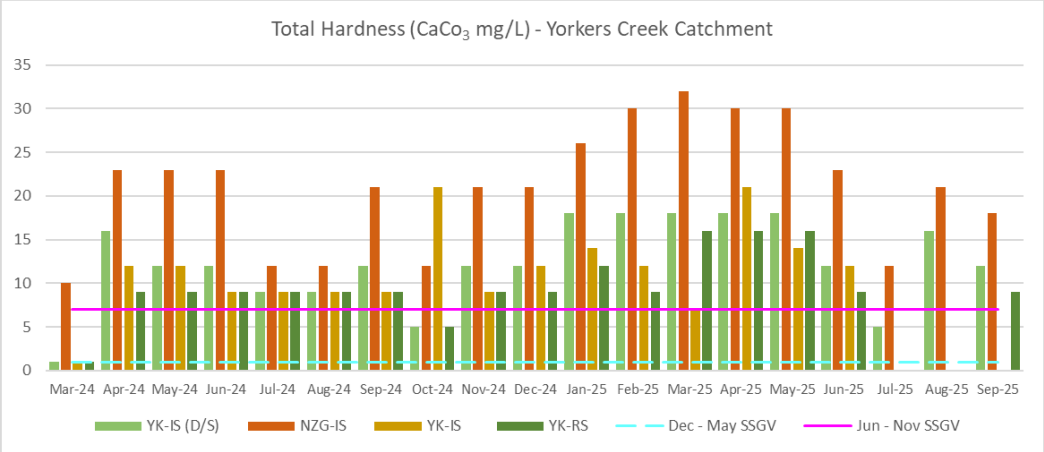


FIGURE 42: $CACO_3$ FOR YORKERS CREEK CATCHMENT

5.2.1.14 Total Kjeldahl Nitrogen

During the September 2025 sampling period, results varied across each sampling location (Yarrangobilly Catchment, Talbingo Reservoir and Yorkers Creek Catchment). Exceedance of the TKN SSGV was recorded at each sampling location (Figure 43—45). YR2-IS from Yarrangobilly Catchment produced a result of 0.3mg/L (Figure 43), TR-RS from Talbingo Reservoir produced a result of 0.5mg/L (Figure 44) and YK-RS from Yorkers Creek Catchment produced a result of 0.3mg/L (Figure 45).

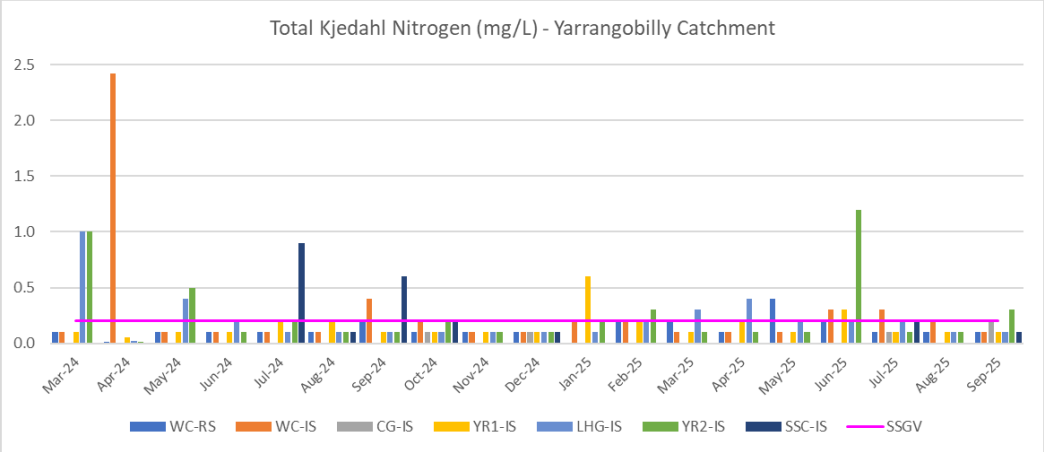


FIGURE 43: TKN FOR YARRANGOBILLY RIVER CATCHMENT

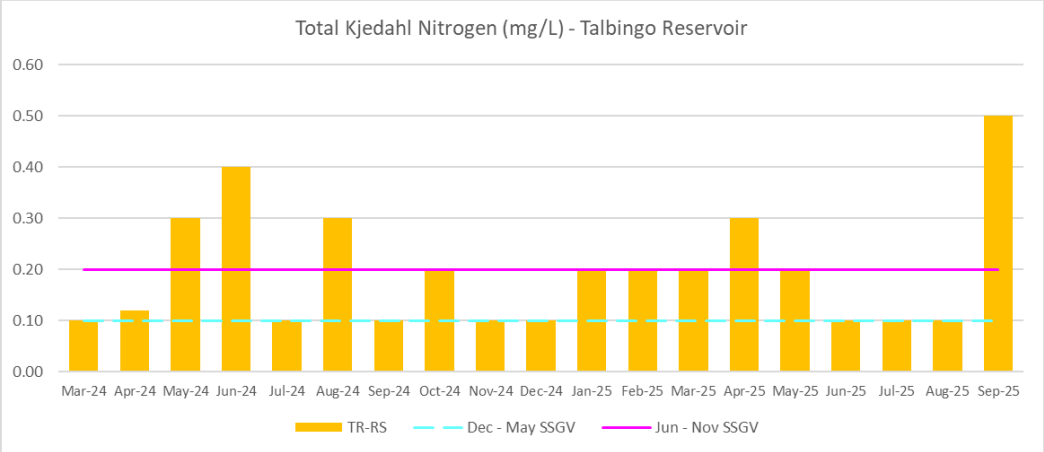


FIGURE 44: TKN FOR TALBINGO RESERVOIR

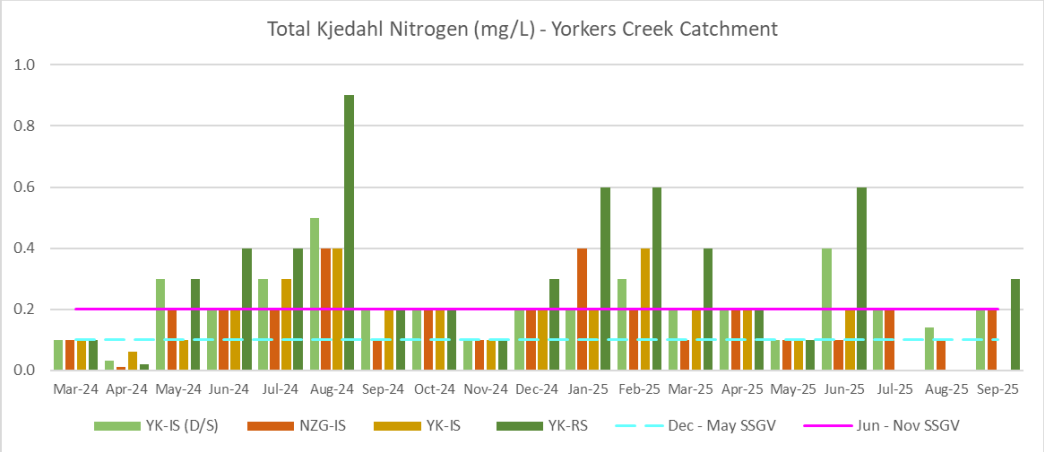


FIGURE 45: TKN FOR YORKERS CREEK CATCHMENT

5.2.1.15 Total Nitrogen

TN (mg/L) results remained consistent at the Yarrangobilly Catchment (Figure 46). Exceedance of SSGV was recorded at TR-RS from Talbingo Reservoir (3.2mg/L) (Figure 47) and YK-RS from Yorkers Creek Catchment (0.3mg/L) (Figure 48).

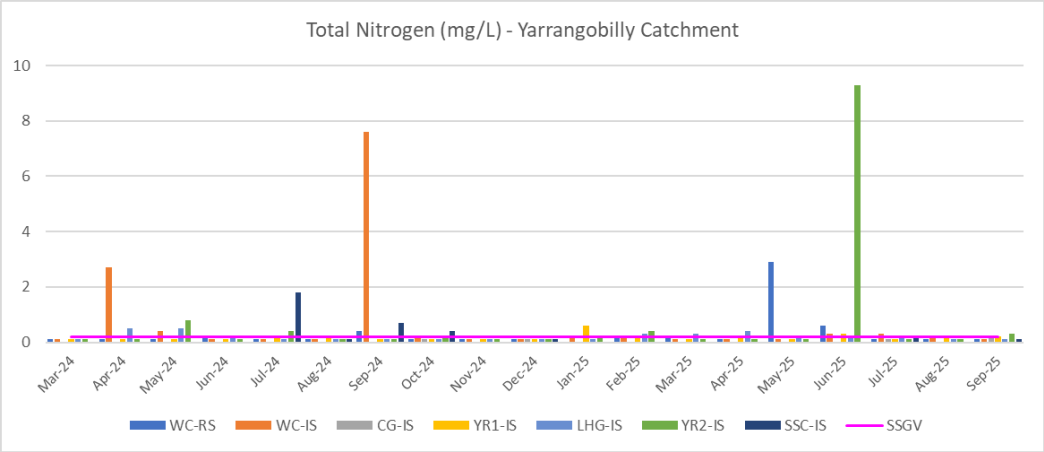


FIGURE 46: TN FOR YARRANGOBILLY RIVER CATCHMENT

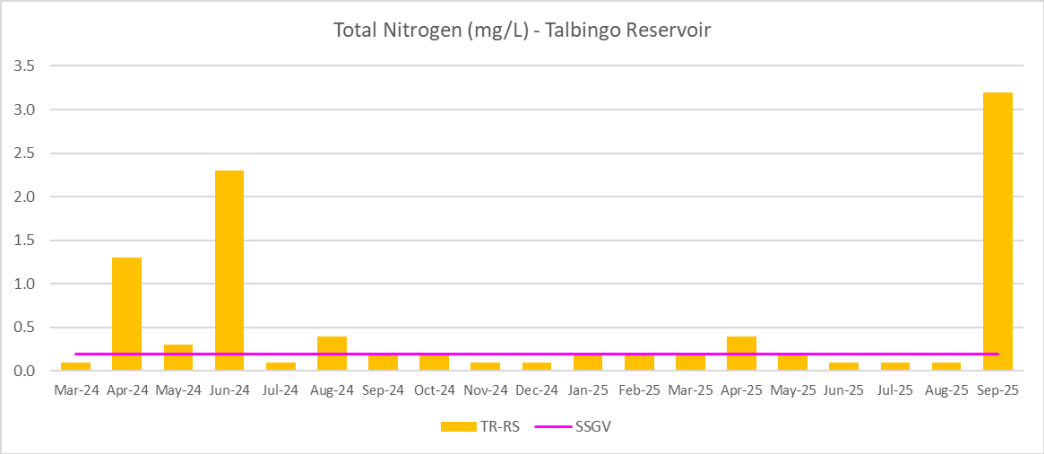


Figure 47: TN for Talbingo Reservoir

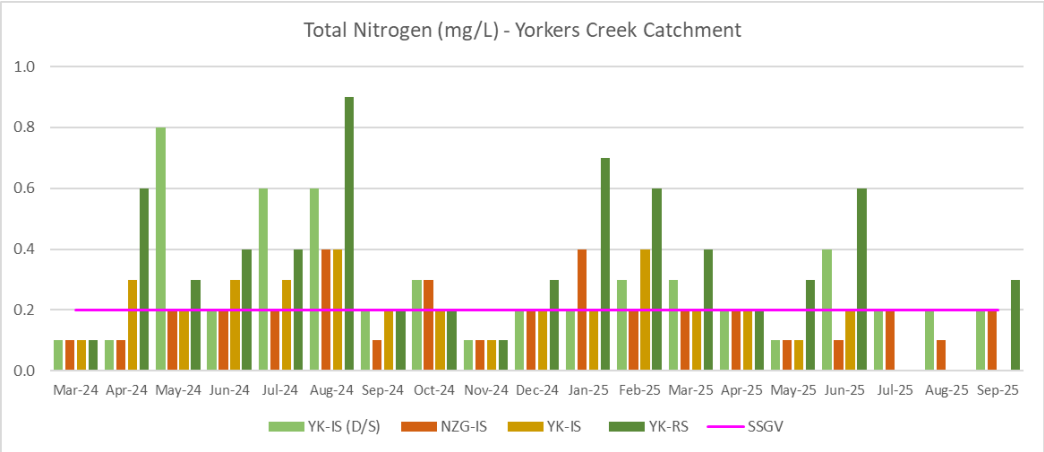


FIGURE 48: TN FOR YORKERS CREEK CATCHMENT

5.2.1.16 Total Phosphorus

Exceedance of TP (mg/L) SSGV was recorded at majority of the sampling locations. Two locations produced results below or met their respective SSGV (Figure 49—51). CG-IS from Yarrangobilly Catchment produced a result of 0.01mg/L (Figure 49) and TR-RS from Talbingo Reservoir produced a result of 0.02mg/L (Figure 50).

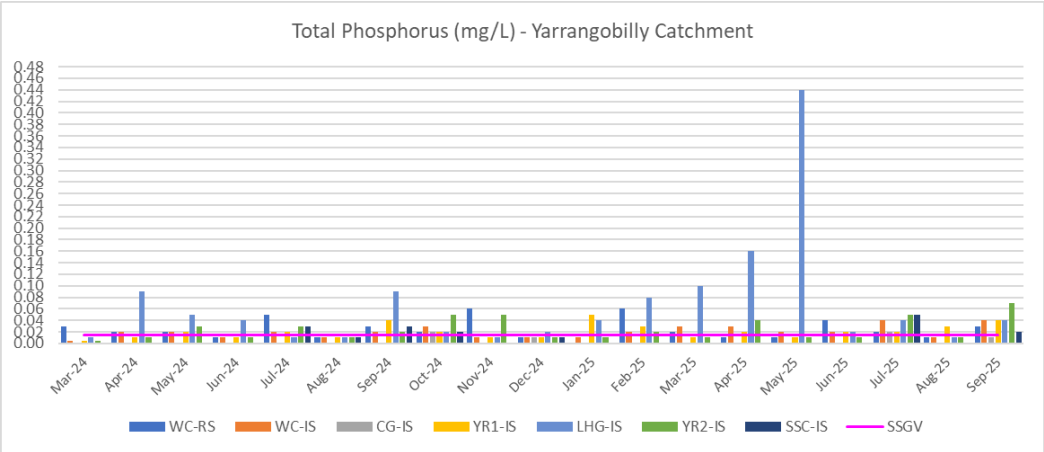


FIGURE 49: TP FOR YARRANGOBILLY RIVER CATCHMENT

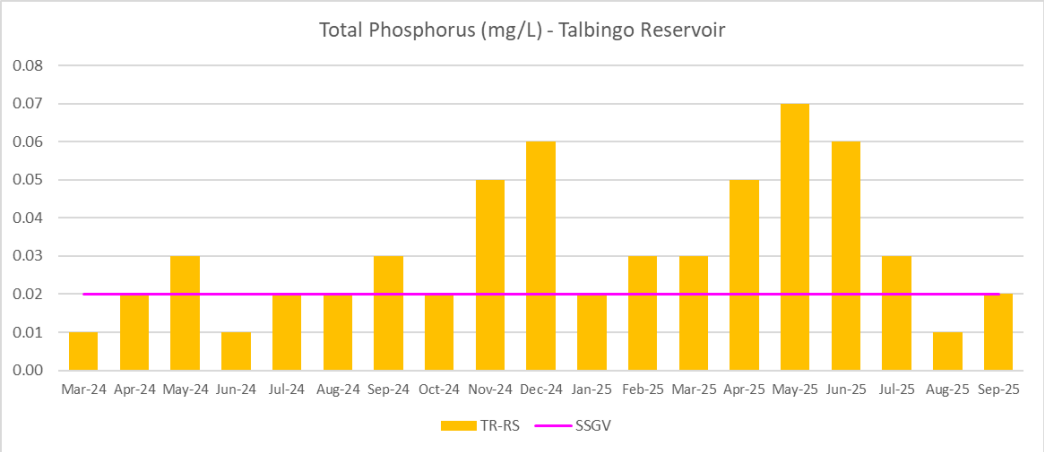


FIGURE 50: TP FOR TALBINGO RESERVOIR

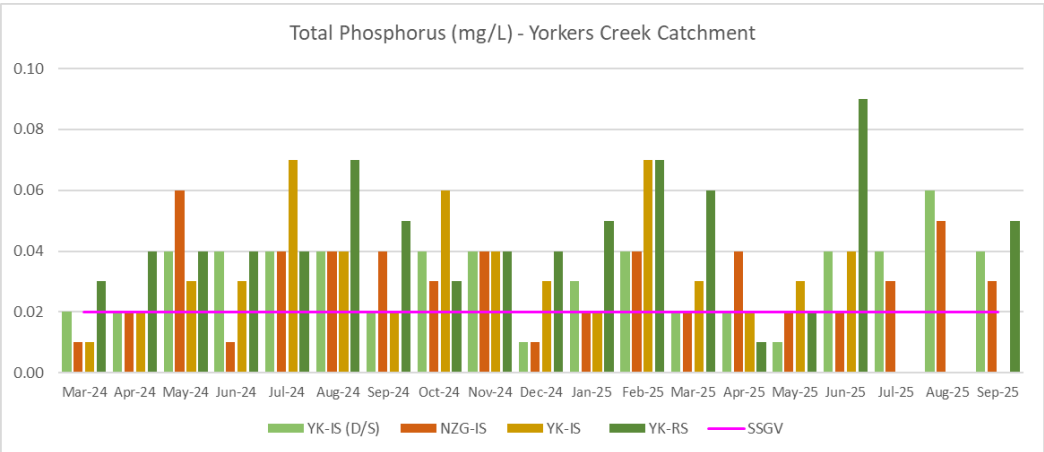


FIGURE 51: TP FOR YORKERS CREEK CATCHMENT

5.2.1.17 Reactive Phosphorus

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

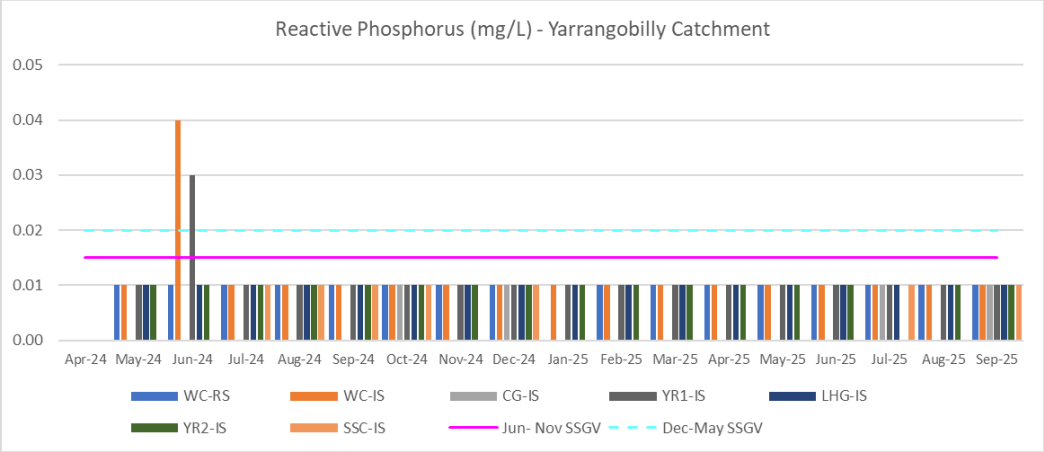


FIGURE 52: RP FOR YARRANGOBILLY RIVER CATCHMENT

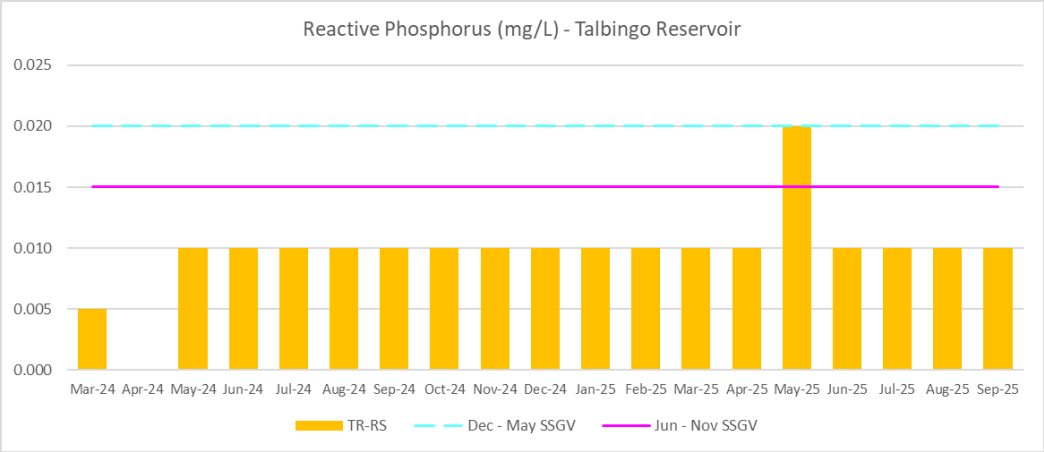


FIGURE 53: RP FOR TALBINGO RESERVOIR

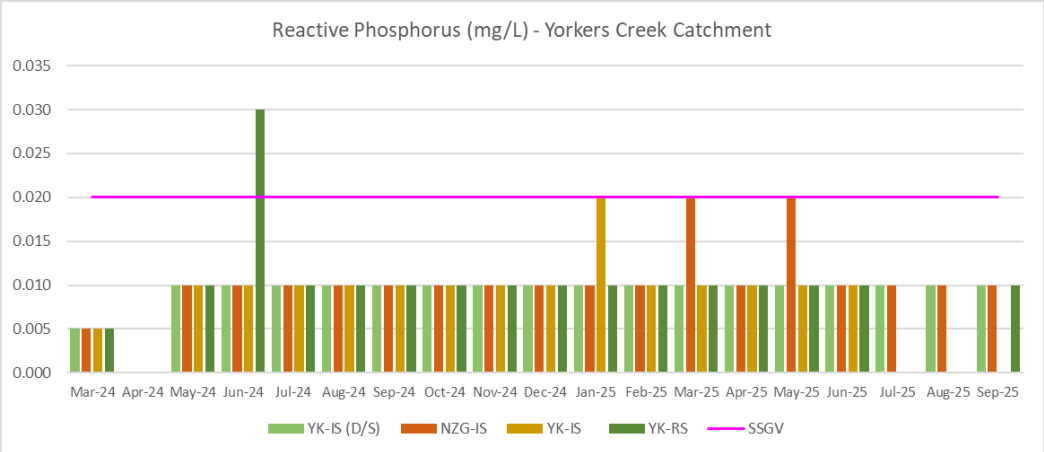


FIGURE 54: RP FOR YORKERS CREEK CATCHMENT

5.2.2 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**
Al	YR1-IS	0.7	0.4	Dissolved Al exceedance was recorded at YR1-IS, SSC-IS and YK-IS(D/S) with the highest exceedance found at YR1-IS (0.7mg/L). All other samples were within respective DGV value.
	SSC-IS	0.5		
	YK-IS(D/S)	0.6	0.32	
Cu	WC-IS	0.003	0.0002	Dissolved Cu exceedance was recorded at one site across the three catchments. WC-IS produced a result of 0.003mg/L. All other samples were within respective DGV value.
Mn	LHG-IS	0.006	0.002	Dissolved Mn SSGV value exceedance was recorded LHG-IS, YR2-IS, YK-IS(D/S), NZG-IS and YK-IS during the September 2025. All other samples were within respective DGV values.
	YR2-IS	0.003		
	YK-IS(D/S)	0.01	0.003	
	NZG-IS	0.004		
	YK-IS	0.006		

5.2.3 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	WC-RS	0.09	0.027	All listed sampling locations exceeded the DGV value for Total Al (mg/L)
	WC-IS	0.08		
	YR1-IS	0.12		
	LHG-IS	0.08		
	YR2-IS	0.1		
	SSC-IS	0.5		
	TR-RS	0.03		
	YK-RS	0.25		
	YK-IS(D/S)	0.12		
	NZG-IS	0.16		
	YK-IS	0.44		
Cu	WC-IS	0.004	0.001	WC-IS exceeded the DGV value for Total Cu (mg/L). All other samples were within respective DGV value.
Zn	WC-IS	0.006	0.0024	Total Zn exceedance was recorded at WC-IS, YR2-IS, TR-RS and YK-IS(D/S). All other samples were within respective DGV value.
	YR2-IS	0.006		
	TR-RS	0.01		
	YK-IS(D/S)	0.007		
Fe	YK-IS	0.33	0.3	Total Fe (mg/L) exceedance was recorded at YK-IS. All other samples were within their respective DGV value.
Hg	SSC-IS	0.002	0.00006	Total Hg (mg/L) exceedance was recorded at SSC-IS. All other samples were within respective DGV value.

6 DISCUSSION

Below is a summary of key observations and discussion points from the September 2025 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
- 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
- SWQ parameters:
  - » Since March 2024, sites at the Yarrangobilly River catchment, including the reference site WC-RS, have consistently exceeded the relevant SSGV/DGV for the following parameters: $CaCO_3$, TSS, TDS, redox and total Al
  - » Since March 2024, Talbingo Reservoir has consistently exceeded the relevant SSGV/DGV for the following parameters: DO, pH, turbidity, ammonia, nitrogen oxides, $CaCO_3$, TSS, TDS, redox and total Al
  - » Since March 2024, sites at the Yorkers Creek catchment, including the reference site YK-RS, have consistently exceeded the relevant SSGV/DGV for the following parameters: DO, pH, turbidity, dissolved Mn, TP, nitrogen oxides, $CaCO_3$, TSS, TDS, redox, total Al and total Fe

- Presence of aquatic fauna, invertebrates, algae (not overgrown) and aquatic vegetation indicates that water quality remains sufficient to support aquatic ecosystems despite exceedances
- LHG-IS continues to record multiple parameter exceedances, likely influenced by shallow water depth and elevated silt deposits
- CG-IS has limited flow occurrence during construction monitoring, resulting in insufficient data for meaningful comparison
- During the September 2025 sampling period, temperature (°C) decreased from August 2025
- Specific conductance (SPC) and electrical conductivity (EC) increased across all sites, with notable exceedances at CG-IS and LHG-IS
- pH:
  - Yarrangobilly and Yorkers Creek generally consistent with SSGV, with minor exceedances
  - Talbingo Reservoir recorded low pH (4.9), below guideline range
- DO (%) remained generally consistent with SSGV, with slightly lower values in Yorkers Creek catchment
- Turbidity remained broadly consistent, with minor exceedances, notably at YK-RS
- TSS showed a downward trend in Yarrangobilly and Talbingo, with exceedances persisting at TR-RS and YK-RS
- TDS exceeded SSGV across multiple sites, particularly:
  - CG-IS (312 mg/L)
  - LHG-IS (350 mg/L)
  - All Yorkers Creek sites
- Redox decreased compared to August but remained above SSGV across all sites
- Nitrogen oxides were generally compliant, except for a significant exceedance at TR-RS (2.66 mg/L). Similar exceedances have been recorded previously at this location, suggesting the result is influenced by site-specific or background conditions rather than construction activities
- Ammonia was generally compliant, with minor exceedances at WC-IS, LHG-IS and TR-RS
- TKN exceeded SSGV at:
  - YR2-IS
  - All Yorkers Creek sites
  - TR-RS
- Total nitrogen (TN) exceedances were limited to:
  - TR-RS (3.2 mg/L)
  - YK-RS (0.3 mg/L)
- Total phosphorus (TP) exceeded SSGV at most sites, with only CG-IS and TR-RS meeting guideline values

- Reactive phosphorus (RP) was below detection limits at all sites
- Total metals exceedances (DGV) recorded for:
  - Al (all sites)
  - Cu (WC-IS only)
  - Zn (WC-IS, YR2-IS, TR-RS, YK-IS D/S)
  - Fe (YK-IS only)
  - Hg (SSC-IS – significantly elevated, ~33× DGV)
- Dissolved metals exceedances (SSGV) recorded for:
  - Al (YR1-IS, SSC-IS, YK-IS D/S)
  - Cu (WC-IS – ~15× SSGV)
  - Mn (multiple sites including LHG-IS, YR2-IS, YK-IS D/S, NZG-IS, YK-IS)
- Exceedances are widespread and consistent with baseline trends since March 2024
- Many exceedances are likely influenced by:
  - Natural site conditions (shallow flows, silt, organic matter)
  - Existing disturbance (tracks, recreation, fauna activity)
  - Broader Snowy 2.0 project influences
  - Despite exceedances, biological indicators suggest waterways remain functionally healthy

7 CONCLUSION

Surface water quality monitoring undertaken in September 2025 indicates that while exceedances of SSGV and DGV continue to be recorded across all catchments, these are consistent with trends observed since March 2024 and are not isolated to construction-phase activities. Exceedances are widespread across both reference and impact sites, suggesting a strong influence from natural site conditions, existing catchment disturbances, and broader regional activities associated with Snowy 2.0.

Key parameters including TDS, redox, total aluminium and nutrients exhibited exceedances across multiple locations; however, many other parameters remained generally consistent with guideline values or showed only marginal exceedances. Notably, biological indicators such as the presence of aquatic fauna, invertebrates, algae and vegetation confirm that waterways continue to support functioning aquatic ecosystems.

Variability in results is also influenced by site-specific conditions such as shallow water depths, elevated sediment loads and limitations associated with sampling and laboratory detection limits.

Overall, the September 2025 monitoring results do not indicate a significant deterioration in surface water quality attributable solely to construction activities. Continued implementation of erosion and sediment controls, along with ongoing monitoring, will ensure that potential impacts are identified and managed appropriately.

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UGL. (2025). September 2025. *Water Quality Monitoring Field Data Sheet*. NSW, Australia: UGL Limited.

Appendix A: Field Sheet (UGL, 2025)

UGL

WATER QUALITY MONITORING FIELD SHEET

Date: 24109125 **Personnel:** EH & SD **Sampling Purpose:** September 2025 Monthly WQM

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: 0.0mm in 24hr
Dec - May SSGV:		-	-	96.2	115	7.85	0.37	0.2	Weather Forecast: 60% 1-5mm
Jun - Nov SSGV:		-	-	89.7	88	7.62	5.12	1	Weather Time of Sampling: overcast
YK-RS Yorkers Creek	8:32	6.6	668.0	85.4	28.2 / 18.3 cus/cm	6.8 / 112.7 mV	16.12	0.00	• Low flow & level • Shrubs & grass • aquatic veg & algae • organic detritus • Yellow & brown tinge to water • over hanging veg • eroded & undercut banks.
YK-IS (D/S) Yorkers Creek	7:59	7.1	671.6	87.9	35.8 / 23.5 cus/cm	6.1 / 115.3 mV	4.58	0.00	• Low flow & level • undercut bank • aquatic veg & algae • over hanging veg • organic detritus • Yellow/brown tinge to water • rocky/sandy bed. • adjacent to public access track.
NZG-IS New Zealand Gully	8:52	7.2	673.3	87.9	48.4 / 31.9 cus/cm	6.8 / 126.6 mV	2.68	0.00	• low flow & level • organic detritus • eroded banks • muddy banks • overhanging veg • aquatic algae • sandy/rocky bed • aquatic veg. • Yellow tinge to water
YK-IS Yorkers Creek	8:15	7.0	669.8	84.2	30.6 / 20.1 cus/cm	7.0 / 122.5 mV	7.52	0.00	• Low level & flow • adjacent to Elliot way & culvert • yellow/Brown Tinge to water • organic detritus • over hanging veg • rocky bed/sandy • grass & shrubs • aquatic veg • eroded banks • algae

UGL

WATER QUALITY MONITORING FIELD SHEET

Date: 23109125 **Personnel:** EH & SVB **Sampling Purpose:** September 2025 WQM Monthly

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: 0.0mm in 24hr
Dec - May SSGV:		-	-	96.2	115	7.85	0.37	0.2	Weather Forecast: 60% <1mm
Jun - Nov SSGV:		-	-	89.7	88	7.62	5.12	1	Weather Time of Sampling: Sunny & clear skies
WC-RS Wallace Creek	7:50	5.3	718.5	93.3	101.1 / 63.1 cus/cm	8.2 / 177.5 MV	0.8	0.00	• moderate Flow & level • aquatic veg • exposed root • clear water • eroded banks • rocky bed
WC-IS Wallace Creek	8:08	5.2	718.9	93.9	72.1 / 44.9 cus/cm	8.5 / 178.5 MV	6.0	0.00	• moderate Flow & level • aquatic veg • undercut bank • clear water • under bridge & adjacent to mine trial road • organic detritus • rocky bed • overhanging veg
CG-IS Cave Gully	10:00	12.1	717.8	96.6	483.0 / 364.4 cus/cm	8.0 / 175.1	1.63	0.00	• Low level & Flow • pipe • undercut bank • adjacent to road • no discolouration in water • overhanging veg
YR1-IS Yarrangobilly River	9:66	8.6	721.1	96.6	85.1 / 58.4 cus/cm	8.3 / 166.5	1.0	0.00	• moderate Flow & level • rocky bed • under bridge • slight yellow tinge to water. • adjacent to powerline • aquatic veg • overhanging veg

UGL

WATER QUALITY MONITORING FIELD SHEET

Date: 23109125 **Personnel:** EH & SVB **Sampling Purpose:** September 2025 WQM Monthly

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: 0.0mm in 24hr
Dec - May SSGV:		-	-	96.2	115	7.85	0.37	0.2	Weather Forecast: 60% <1mm
Jun - Nov SSGV:		-	-	89.7	88	7.62	5.12	1	Weather Time of Sampling: Fine & clear skies
LHG-IS Lick Hole Gully	8:46	9.6	718.5	91.9	527 / 372 cus/cm	8.0 / 174.7 mV	6.43	0.00	• Low level & flow • rocky & sandy bed • aquatic veg • overhanging veg • no discolouration to water • adjacent to colvert & public access road • shrubs • organic detritus
YR2-IS Yarrangobilly River	8:23	5.6	719.3	94.6	64.7 / 40.8 cus/cm	8.1 / 177.7 mV	2.0	0.00	• Slight yellow tinge to water • Low level & flow • rocky bed • eroded & undecut banks • organic detritus • overhanging veg • sediment deposition off mine Trail road.
SSC-IS Sheep Station Creek	9:21	9.9	720.8	93.1	118.5 / 84.4 cus/cm	8.2 / 171.2 mV	4.33	0.00	• very low flow & level • sandy & rocky bed • undercut banks • adjacent to SSC Bridge • overhanging veg • organic detritus • no discolouration to water. • aquatic veg • shrubs & grass
TR-RS Talbingo Reservoir	7:30	11.3	718.8	95.6	41.3 / 30.5 cus/cm	4.9 / 107.8 mV	1.92	0.00	• Low level & flow • Sandy rocky bed • yellow tinge to water • Ducks present

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

CERTIFICATE OF ANALYSIS

Work Order	: **ES2530486**	Page	: 1 of 6
Client	: **UGL LIMITED**	Laboratory	: Environmental Division Sydney
Contact	: LAUREN LOGUE	Contact	: Customer Services ES
Address	: Cnr Hill Rd & Pondage Link Rd HOMEBUSH BAY 2127	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: UGL Maragle September Monthly WQM 2025	Date Samples Received	: 30-Sep-2025 15:55
Order number	: 4501837828	Date Analysis Commenced	: 01-Oct-2025
C-O-C number	: 88888	Issue Date	: 07-Oct-2025 11:51
Sampler	: EBONY HAMES		
Site	: UGL Maragle		
Quote number	: ES24UGLLIM0001_V4		
No. of samples received	: 13		
No. of samples analysed	: 7		

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
Ivan Taylor	Analyst	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.
- TDS by method EA-015 various samples may bias high due to the presence of fine particulate matter, which may pass through the prescribed GF/C paper.
- 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: SURFACE WATER (Matrix: WATER)				Sample ID	SSC-IS	LHG-IS	WC-IS	WC-RS	YR2-IS
				Sampling date / time	23-Sep-2025 10:14	23-Sep-2025 10:23	23-Sep-2025 10:29	23-Sep-2025 10:34	23-Sep-2025 10:44
Compound	CAS Number	LOR	Unit		ES2530486-001	ES2530486-002	ES2530486-003	ES2530486-004	ES2530486-005
					Result	Result	Result	Result	Result
EA015: Total Dissolved Solids dried at 180 ± 5 °C									
Total Dissolved Solids @180°C	----	10	mg/L		**71**	**350**	**44**	**46**	**38**
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	----	1	mg/L		**2**	<1	<1	<1	**1**
ED093F: SAR and Hardness Calculations									
Total Hardness as CaCO3	----	1	mg/L		**44**	**265**	**23**	**23**	**23**
EG020F: Dissolved Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		**0.05**	<0.01	**0.03**	**0.03**	**0.03**
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	**0.003**	<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**	**0.010**	**0.007**
Manganese	7439-96-5	0.001	mg/L		**0.001**	**0.006**	**0.002**	**0.002**	**0.003**
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	<0.05	<0.05	<0.05
EG020T: Total Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		**0.50**	**0.08**	**0.08**	**0.09**	**0.10**
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	**0.004**	<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	**0.006**
Manganese	7439-96-5	0.001	mg/L		**0.003**	**0.008**	**0.005**	**0.005**	**0.005**

Analytical Results

Sub-Matrix: SURFACE WATER (Matrix: WATER)				Sample ID	YR1-IS	CG-IS	----	----	----
				Sampling date / time	23-Sep-2025 10:46	23-Sep-2025 10:51	----	----	----
Compound	CAS Number	LOR	Unit		ES2530486-006	ES2530486-007	--------	--------	--------
					Result	Result	----	----	----
EA015: Total Dissolved Solids dried at 180 ± 5 °C									
Total Dissolved Solids @180°C	----	10	mg/L		**56**	**312**	----	----	----
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	----	1	mg/L		<1	<1	----	----	----
ED093F: SAR and Hardness Calculations									
Total Hardness as CaCO3	----	1	mg/L		**29**	**249**	----	----	----
EG020F: Dissolved Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		**0.07**	<0.01	----	----	----
Arsenic	7440-38-2	0.001	mg/L		<0.001	<0.001	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	<0.001	----	----	----
Copper	7440-50-8	0.001	mg/L		<0.001	<0.001	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	<0.005	----	----	----
Manganese	7439-96-5	0.001	mg/L		**0.002**	<0.001	----	----	----
Silver	7440-22-4	0.001	mg/L		<0.001	<0.001	----	----	----
Iron	7439-89-6	0.05	mg/L		<0.05	<0.05	----	----	----
EG020T: Total Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		**0.12**	<0.01	----	----	----
Arsenic	7440-38-2	0.001	mg/L		<0.001	<0.001	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	<0.001	----	----	----
Copper	7440-50-8	0.001	mg/L		<0.001	<0.001	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	<0.005	----	----	----
Manganese	7439-96-5	0.001	mg/L		**0.004**	<0.001	----	----	----

Analytical Results

Sub-Matrix: SURFACE WATER (Matrix: WATER)				Sample ID	YR1-IS	CG-IS	----	----	----
				Sampling date / time	23-Sep-2025 10:46	23-Sep-2025 10:51	----	----	----
Compound	CAS Number	LOR	Unit		ES2530486-006	ES2530486-007	--------	--------	--------
					Result	Result	----	----	----
EG020T: Total Metals by ICP-MS - Continued									
Silver	7440-22-4	0.001	mg/L		<0.001	<0.001	----	----	----
Iron	7439-89-6	0.05	mg/L		**0.08**	<0.05	----	----	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	----	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	----	----	----
EK026SF: Total CN by Segmented Flow Analyser									
Total Cyanide	57-12-5	0.002	mg/L		<0.002	<0.002	----	----	----
EK055G: Ammonia as N by Discrete Analyser									
Ammonia as N	7664-41-7	0.01	mg/L		<0.01	<0.01	----	----	----
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	0.01	mg/L		<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	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L		**0.01**	<0.01	----	----	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		**0.1**	**0.2**	----	----	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L		**0.1**	**0.2**	----	----	----
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		**0.04**	**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	----	----	----

Appendix C: September 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 ana	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*
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	108	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	164	4.08	0.06	*0.001*	*0.0001*	*0.001*	*0.001*	*0.002*	0.08	*0.001*	0.007	*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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	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 Va		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 ana	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*
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*	45	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*
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	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*
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*
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*

	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 Va		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*
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*
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*

	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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 Va		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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	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*

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*

	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*
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	-	221.76	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*
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*

	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*
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*
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*

	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	25.9	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*	0.46	*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*

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

Appendix D: Calibration Certificate

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CALIBRATION CERTIFICATE - WATER

Invoice No: 17218

Equipment Received: YSI ProDSS

Handheld S/N 23H104391

Cable S/N:

Included Items:

SENSOR CALIBRATION DETAILS

	Pre Calibration	Post Calibration	Accuracy	Pass	Fail
Temp	Factory	Calibrated	+/- 0.2C	✓	
pH	4.1	pH 4.00	+/- 0.2	✓	
pH	7	pH 7.00	+/- 0.2	✓	
ORP	220	225.3mV@24.3	+/- 30mV	✓	
Conductivity	12950uS/cm	12900uS/cm	+/- 0.5%	✓	
DO	98%	100% @763.3	+/- 2%	✓	
Turbidity	0	0 FNU	+/- 0.3 FNU	✓	
Turbidity	118	124 FNU	+/- 20 FNU	✓	
			+/-		
			+/-		
			+/-		

Findings/ Recommendations /Comments:

1/ DO cap and calibration cup seal replaced.

2/ Firmware version upgraded.

3/ Calibrated.

4/

This is to certify that where possible, this instrument has been calibrated in accordance with the manufacturer's calibration procedure as recommended in the instrument service manual.

Regards,

Navid Black

Equipment Specialist
ECO Environmental Holdings

06-Nov-2025

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