



JANUARY 2026

# MONTHLY CONSTRUCTION WATER QUALITY MONITORING REPORT

January 2026

Project No.: 3200-0645

Project: Transgrid Maragle 500/330 kV Substation

Private & Confidential

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## APPENDICES

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## ABBREVIATIONS

Acronym	Full Form
°C	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 <sub>3</sub>	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.

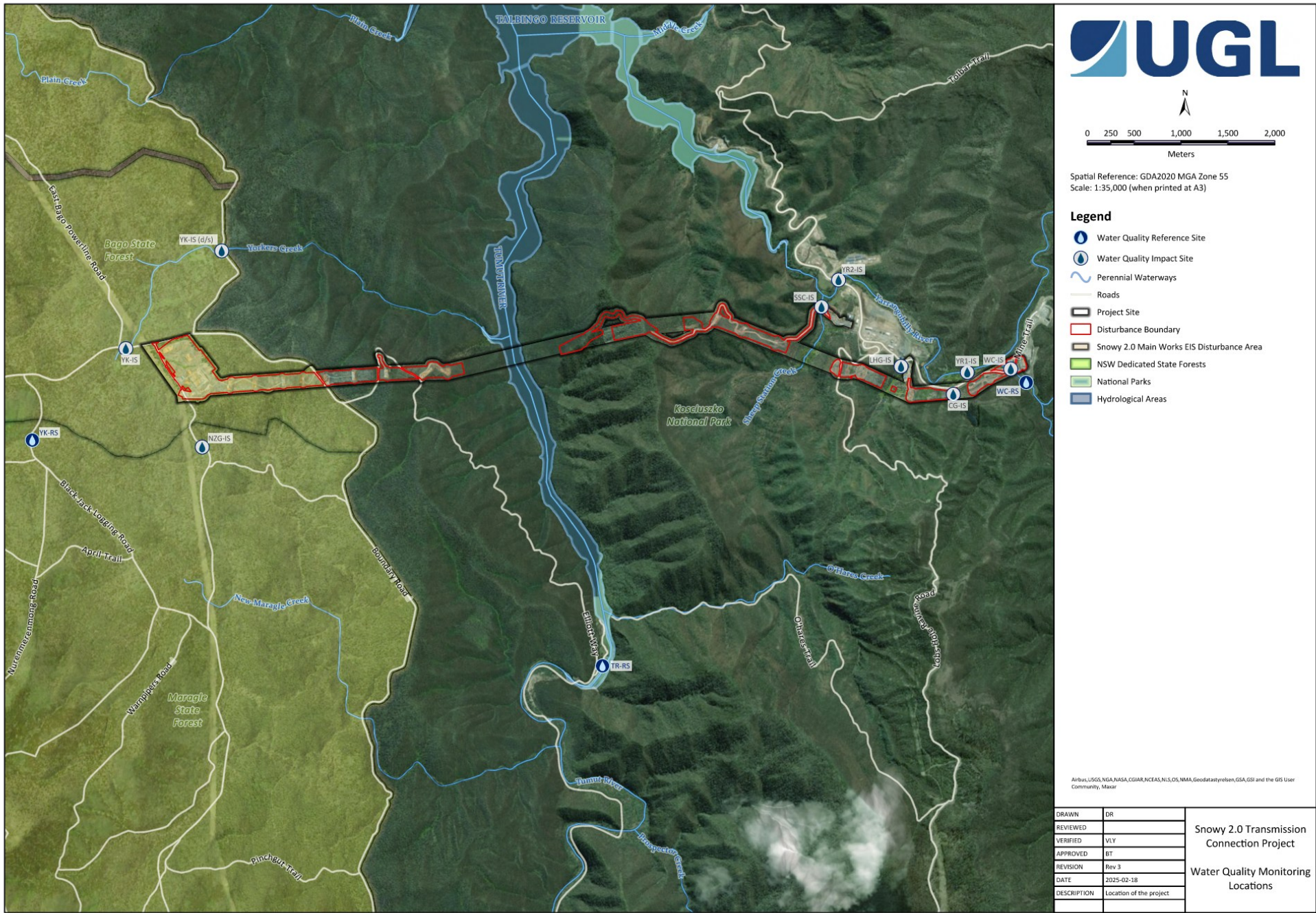


FIGURE 1 LOCALITY OF THE PROJECT AND SWQ MONITORING LOCATIONS

## 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



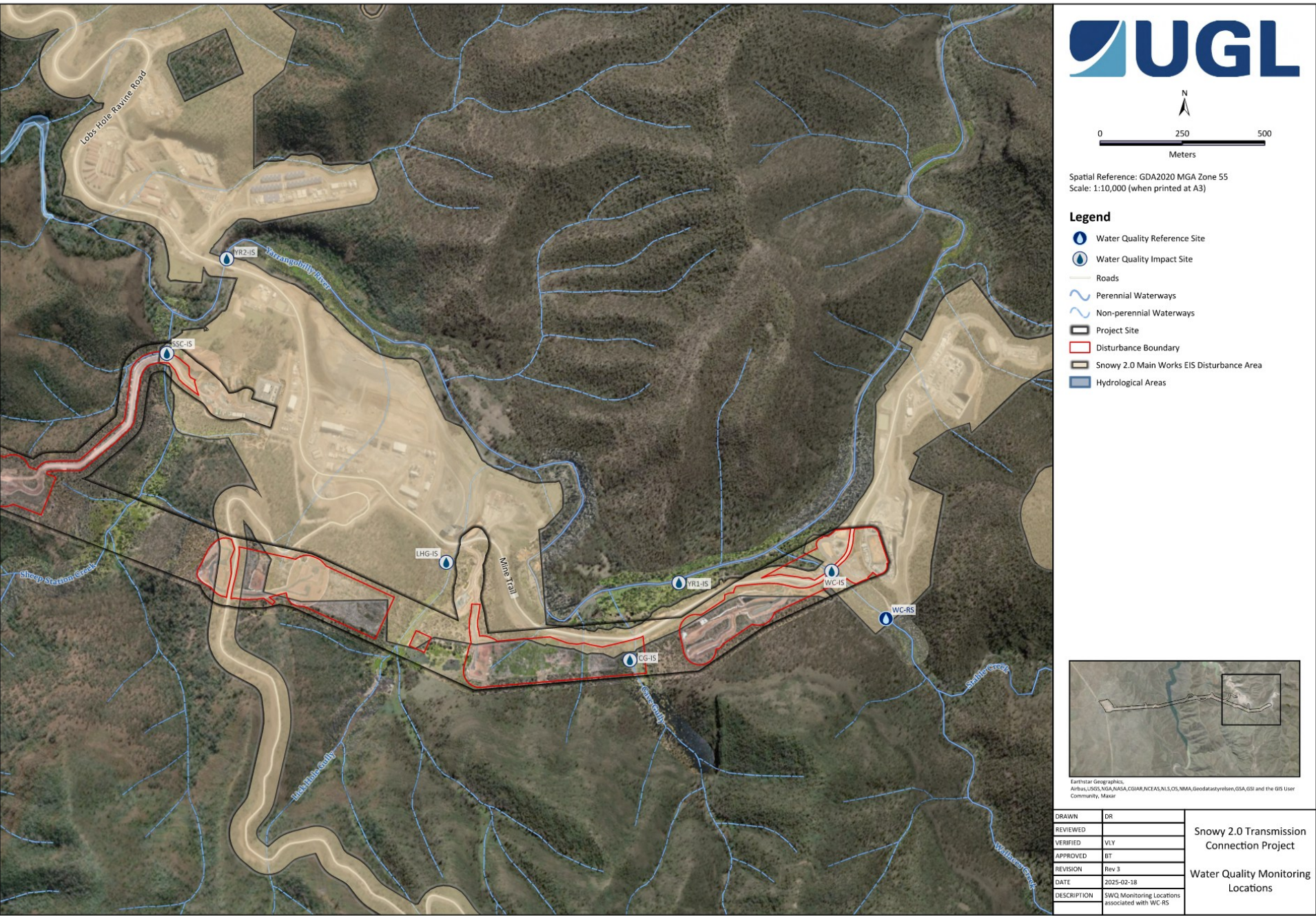


FIGURE 3 WATER QUALITY MONITORING LOCATIONS ASSOCIATED WITH REFERENCE SITE WC-RS IN RELATION TO THE PROJECT

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 <sup>+</sup>	9.08	10.28	8.79	11.53	8.35	10.2	-
Specific Electrical Conductivity (EC)***	SPC <sup>^</sup> μS/cm <sup>^^</sup>	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 <sup>##</sup>	79.1	98.4	91.2	95.4	94.6	106.1	-
Turbidity***	NTU <sup>**</sup>	0.37	5.12	0.09	1.56	9	7.87	2-25
Dissolved Aluminium (Al)	mg/L <sup>++</sup>	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 <sub>3</sub> )	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 <sup>@</sup>	mg/L	-	-	-	-	-	-	0.027
Total As <sup>@</sup>	mg/L	-	-	-	-	-	-	0.0008
Total Cd <sup>@</sup>	mg/L	-	-	-	-	-	-	0.0006
Total Cr <sup>@</sup>	mg/L	-	-	-	-	-	-	0.00001
Total Cu <sup>@</sup>	mg/L	-	-	-	-	-	-	0.001
Total Pb <sup>@</sup>	mg/L	-	-	-	-	-	-	0.001
Total Mn <sup>@</sup>	mg/L	-	-	-	-	-	-	1.2
Total Ni <sup>@</sup>	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 <sup>@</sup>	mg/L	-	-	-	-	-	-	0.00002
Total Zn <sup>@</sup>	mg/L	-	-	-	-	-	-	0.0024
Total Fe <sup>@</sup>	mg/L	-	-	-	-	-	-	0.3
Total Hg <sup>@</sup>	mg/L	-	-	-	-	-	-	0.00006

\* °C = 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 JANUARY 2026 MONITORING

SW sampling was undertaken at 7 monitoring locations on 13 January 2026. CG-IS, LHG-IS, SSC-IS, YK-RS and YK-IS(D/S) were dry or had no flow at the time of monitoring.


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

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

## 5.1 Observations

Field observations during sampling are summarised in Table 3.



**Table 3 Field observations during sampling**

FIELD OBSERVATIONS		
<b>Date</b>	13 January 2025	
<b>Weather</b>	The weather forecast for 13 January was 22 degrees Celsius (°C) with 5 percent of <1 millimetres (mm) of rain. The previous 48 hours was cloudy and experienced a total of 0.0mm of rainfall across 12 to 11 January. At the time of sampling, the weather was fine and sunny.	
<b>ID</b>	<b>Observations</b>	<b>Photo</b>
WC-RS	<ul style="list-style-type: none"> <li>• Very low level and flow</li> <li>• Rocky and eroded banks including exposed roots from a large tree</li> <li>• Presence of aquatic vegetation</li> <li>• No discolouration to water</li> <li>• Riparian vegetation consisted of groundcover, shrubs and trees</li> </ul> <p>Moderate weed density including of Blackberry (<i>Rubus fruticosus</i>)</p>	



## FIELD OBSERVATIONS

ID	Observations	Photo
WC-IS	<ul style="list-style-type: none"> <li>• Low volume and flow</li> <li>• Presence of vegetative detritus</li> <li>• Presence of aquatic vegetation</li> <li>• No discolouration to water</li> <li>• Riparian vegetation predominantly trees and grass</li> <li>• High weed density including Blackberry (<i>Rubus fruticosus</i>)</li> <li>• Rocky banks and undercut banks</li> <li>• Monitoring location is adjacent to bridge and Mine Trail Road which is frequently used by Snowy 2.0 vehicles, plant and machinery</li> </ul>	
CG-IS	<ul style="list-style-type: none"> <li>• Dry, no flow at the time of sampling</li> </ul>	

## FIELD OBSERVATIONS

ID	Observations	Photo
YR1-IS	<ul style="list-style-type: none"> <li>• No discolouration to water</li> <li>• Very low volume and flow</li> <li>• Moderate weed density including Thistle and Blackberry (<i>Rubus fruticosus</i>)</li> <li>• Riparian vegetation consisted of groundcover, shrubs and trees</li> <li>• Rocky banks with sections of exposed soil higher up the bank</li> <li>• Presence of aquatic vegetation</li> <li>• Monitoring location is adjacent to bridge and electrical transmission tower on top of rocky cliff and Snowy 2.0 laydown area</li> </ul>	
LHG-IS	<ul style="list-style-type: none"> <li>• No flow, dry at the time of sampling</li> </ul>	



## FIELD OBSERVATIONS

ID	Observations	Photo
YR2-IS	<ul style="list-style-type: none"> <li>• Presence of aquatic vegetation</li> <li>• Rocky bed and banks</li> <li>• Moderate volume and flow</li> <li>• Riparian vegetation predominantly groundcover</li> <li>• Moderate weed density including Blackberry (<i>Rubus fruticosus</i>)</li> <li>• Presence of vegetative detritus</li> <li>• Presence of road washout from mine trail road in vegetation adjacent to river</li> </ul>	
SSC-IS	<ul style="list-style-type: none"> <li>• Dry; no flow at the time of sampling.</li> </ul>	

## FIELD OBSERVATIONS

ID	Observations	Photo
TR-RS	<ul style="list-style-type: none"> <li>• Rocky banks and sandy bed</li> <li>• Monitoring location is adjacent to publicly accessible O'Hares Campground and Talbingo Reservoir ancillary infrastructure</li> <li>• Presence of aquatic invertebrates and vegetation</li> <li>• Very low volume and flow</li> <li>• Presence of vegetative detritus</li> <li>• Riparian vegetation consisted of groundcover and trees</li> <li>• Presence of landslips</li> <li>• Presence of smoke from Victoria bushfires</li> </ul>	
YK-RS	<ul style="list-style-type: none"> <li>• Dry, no flow at the time of sampling.</li> </ul>	

## FIELD OBSERVATIONS

ID	Observations	Photo
YK-IS (D/S)	<ul style="list-style-type: none"> <li>• Dry, no flow at the time of sampling</li> </ul>	 <p>13 Jan 2026 at 11:09:25 am Nürenmerenbong NSW 2649 Australia Bago State Forest YK-IS (D/S)</p>
NZG-IS	<ul style="list-style-type: none"> <li>• Presence of aquatic vegetation including algae</li> <li>• Presence of organic detritus</li> <li>• Overhanging vegetation</li> <li>• No discolouration to water</li> <li>• High weed density including Blackberry (<i>Rubus fruticosus</i>)</li> <li>• Monitoring location is adjacent to publicly accessible 4WD track</li> <li>• Very low volume and flow</li> <li>• Eroded and undermined banks and pebbly bed</li> <li>• Riparian vegetation consisted of groundcover and trees</li> </ul>	 <p>13 Jan 2026 at 12:07:46 pm Nürenmerenbong NSW 2649 Australia Bago State Forest NZG-IS</p>

## FIELD OBSERVATIONS

ID	Observations	Photo
YK-IS	<ul style="list-style-type: none"> <li>• Brown tinge to water</li> <li>• Presence of aquatic vegetation</li> <li>• Very low volume and flow</li> <li>• Suspended sediment throughout water</li> <li>• Eroded banks</li> <li>• Overhanging vegetation</li> <li>• Presence of vegetative detritus</li> <li>• Riparian vegetation consisted of groundcover, shrubs and trees</li> <li>• Rocky and sandy bed</li> <li>• Low weed density</li> <li>• Monitoring location is adjacent to Elliott Way, leading towards culvert</li> </ul>	

## 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 January 2026, all three sampling locations (Yarrangobilly River Catchment, Talbingo Reservoir and Yorkers Creek Catchment) exhibited an increase in temperature (°C), refer Figure 4—Figure 6. In Yarrangobilly River Catchment, mean temperatures increased to ≈24°C, with a notable rise at the reference site (WC-RS) to ≈28°C (Figure 4). Talbingo Reservoir temperature increased to ≈25°C (Figure 5). Mean temperatures at Yorkers Creek Catchment increased to ≈22°C (Figure 6).

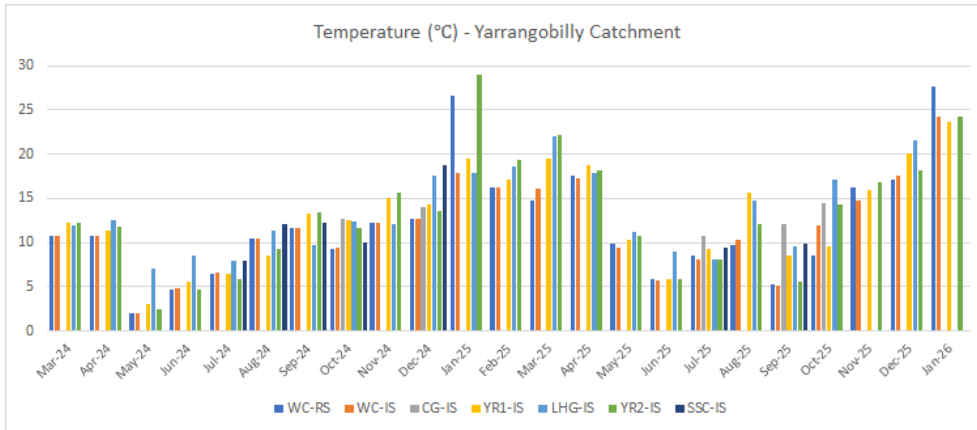


FIGURE 4 : TEMPERATURE FOR YARRANGOBILLY RIVER CATCHMENT

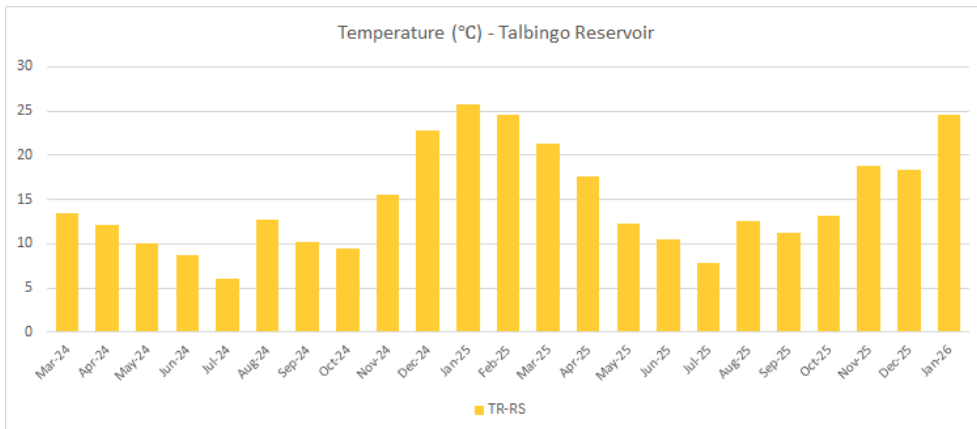


FIGURE 5: TEMPERATURE FOR TALBINGO RESERVOIR

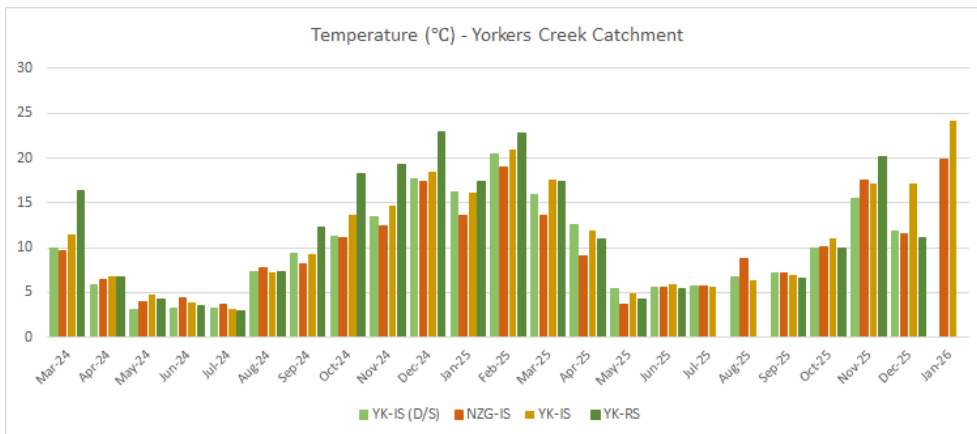


FIGURE 6: TEMPERATURE FOR YORKERS CREEK CATCHMENT

### 5.2.1.2 pH

During the January 2026 sampling period, all sites across all three catchments recorded pH values more than the respective December-May SSGV, except YK-IS in Yorkers Creek Catchment, which was below the SSGV. (Figure 7 – Figure 9).

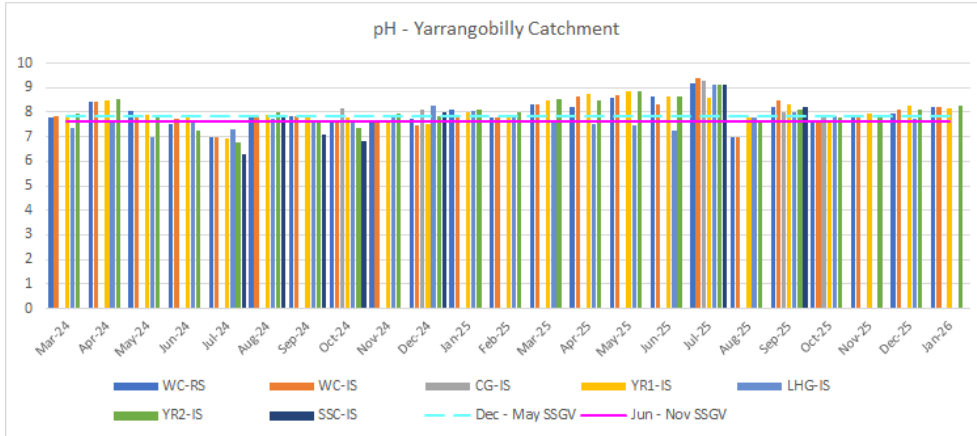


FIGURE 7: PH FOR YARRANGOBILLY RIVER CATCHMENT

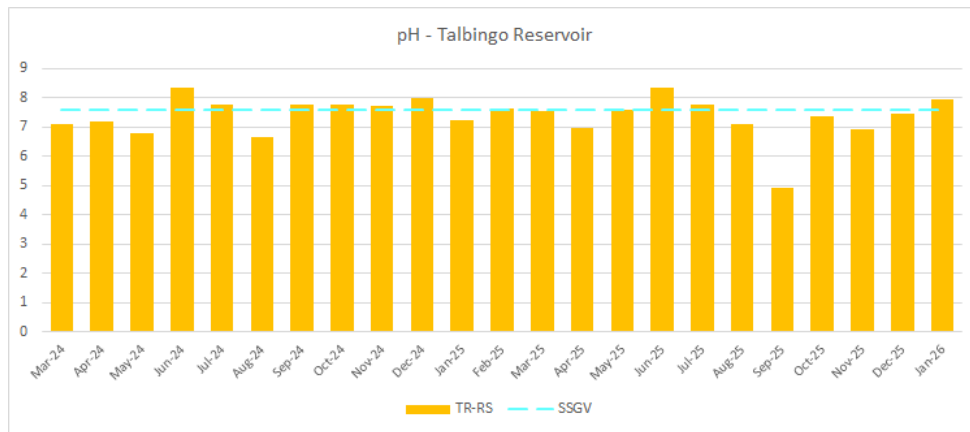


FIGURE 8: PH FOR TALBINGO RESERVOIR

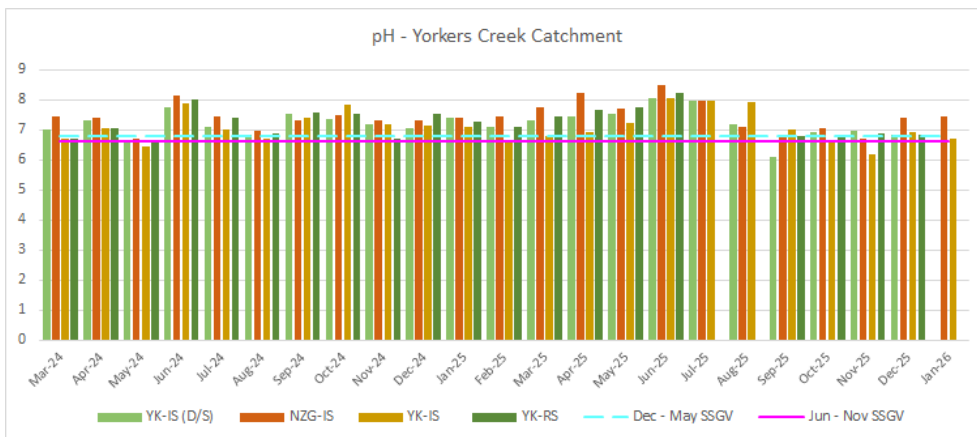


FIGURE 9: PH FOR YORKERS CREEK CATCHMENT

### 5.2.1.3 Dissolved Oxygen

During the January 2026 sampling period, Dissolved Oxygen (DO, %) improved across all sites, however remained below the respective December-May SSGV values at all sampled locations except Talbingo Reservoir, which was marginally above the SSGV (Figure 10 – Figure 12).

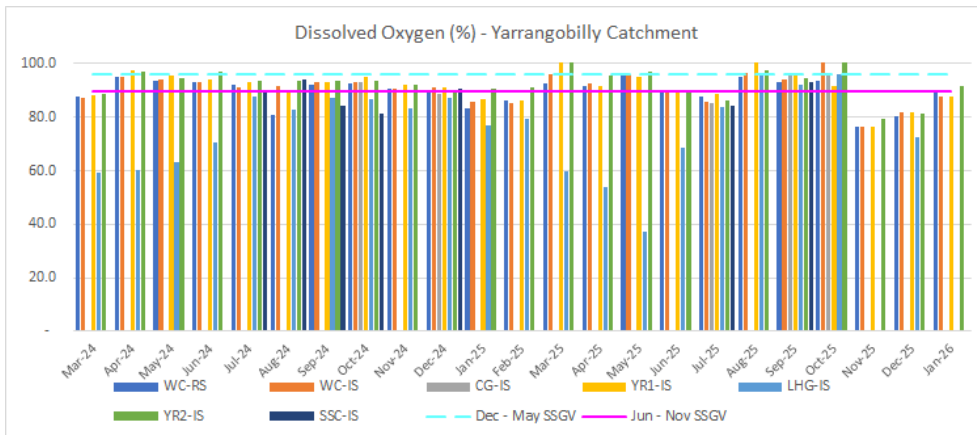


FIGURE 10: DO FOR YARRANGOBILLY RIVER CATCHMENT

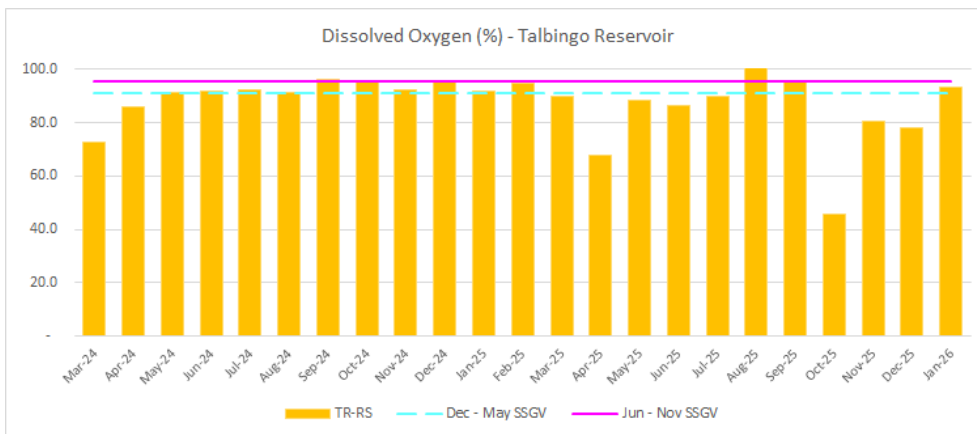


FIGURE 11: DO FOR TALBINGO RESERVOIR

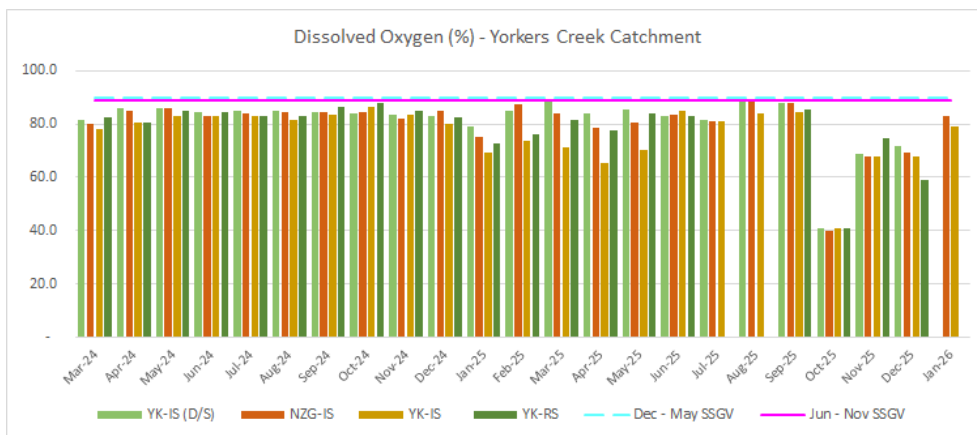


FIGURE 12: DO FOR YORKERS CREEK CATCHMENT

### 5.2.1.4 Specific Conductance

January 2026 specific conductance ( $\mu\text{S}/\text{cm}$ ) values generally increased across the three catchments (Figure 13-Figure 15). All sites exceeded the December-May SSGV except the reference site (WC-RS) in Yarrangobilly River Catchment. A notable increase was recorded at YR2-IS, which increased to  $256.4 \mu\text{S}/\text{cm}$  (Figure 13).

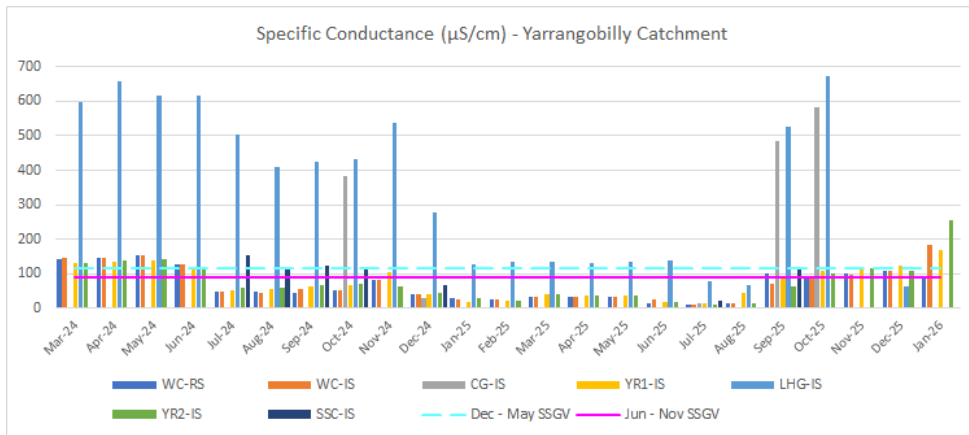


FIGURE 13: SPC FOR YARRANGOBILLY RIVER CATCHMENT

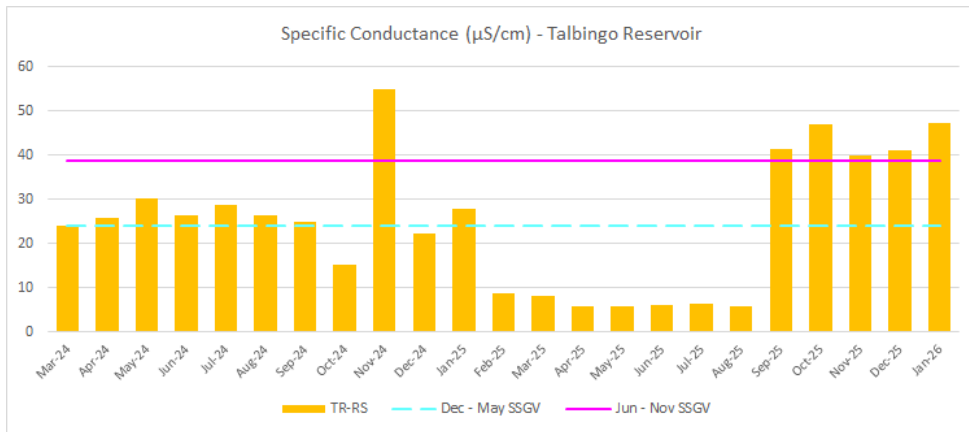


FIGURE 14: SPC FOR TALBINGO RESERVOIR

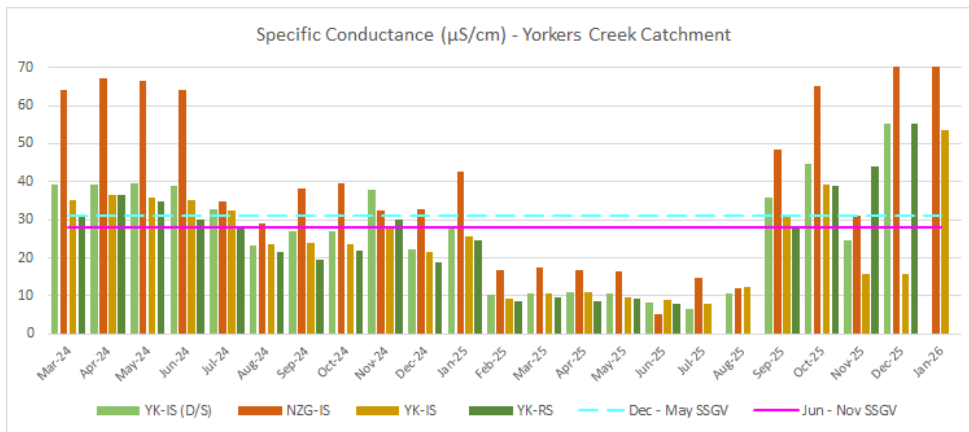


FIGURE 15: SPC FOR YORKERS CREEK CATCHMENT

### 5.2.1.5 Electrical Conductivity

In January 2026, Electrical Conductivity (EC,  $\mu\text{S}/\text{cm}$ ) exhibited an increase compared with December 2025 and exceeded the December-May SSGV values at all sites, except at WC-RS and WC-IS in the Yarrangobilly River Catchment, which were below the SSGV (Figure 16-Figure 18).

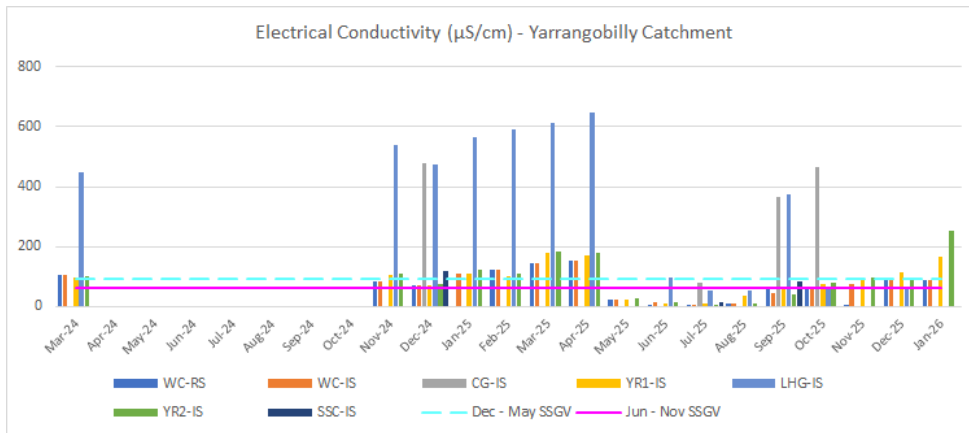


FIGURE 16: EC FOR YARRANGOBILLY RIVER CATCHMENT

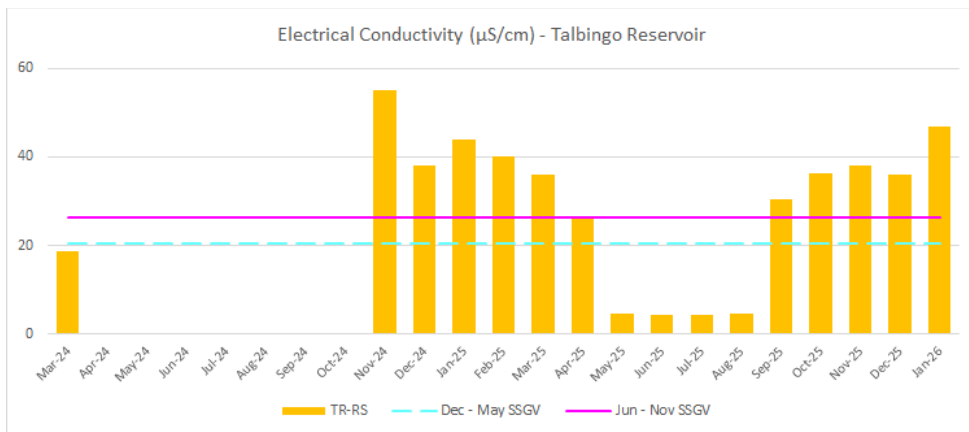


FIGURE 17: EC FOR TALBINGO RESERVOIR

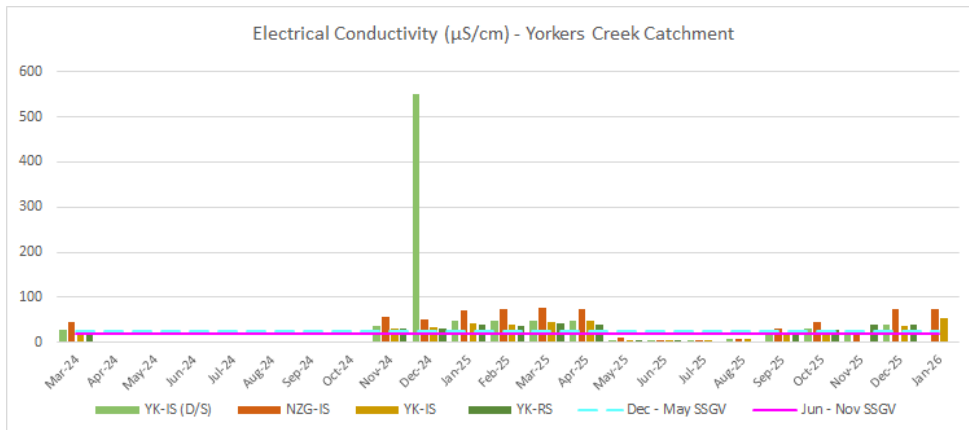


FIGURE 18: EC FOR YORKERS CREEK CATCHMENT

### 5.2.1.6 Turbidity

In January 2026, results for turbidity were above the December-May SSGV at all sampled sites (Figure 19—Figure 21). A notable exceedance was recorded at YK-IS (21.83 NTU) in the Yorkers Creek Catchment (Figure 21).

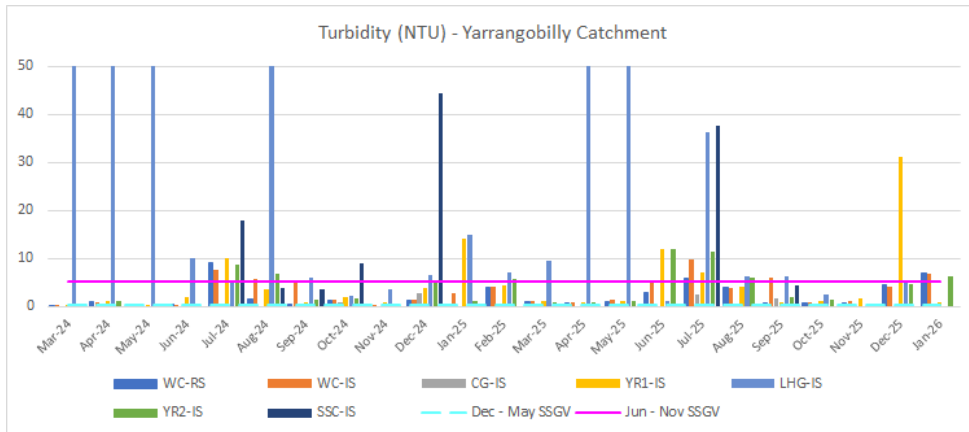


FIGURE 19: TURBIDITY FOR YARRANGOBILLY RIVER CATCHMENT

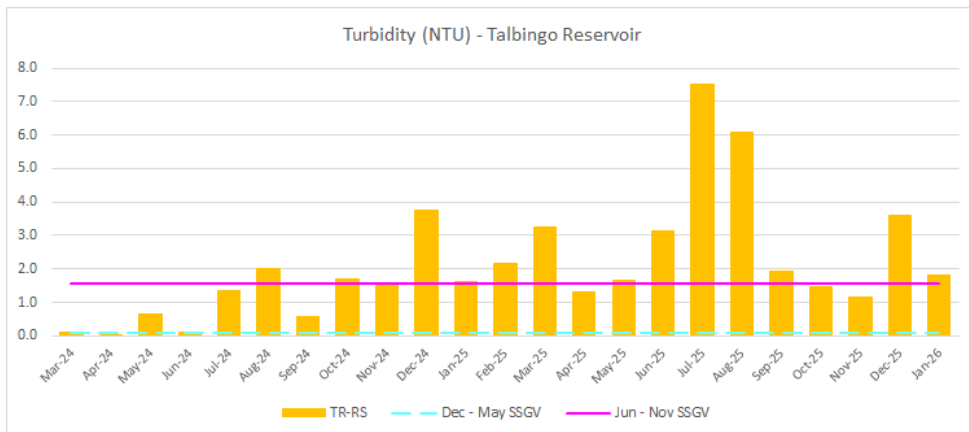


FIGURE 20: TURBIDITY FOR TALBINGO RESERVOIR

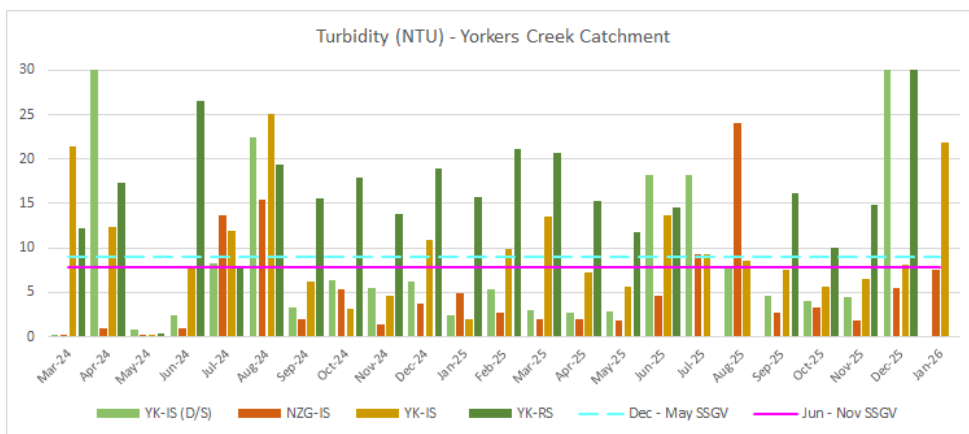


FIGURE 21: TURBIDITY FOR YORKERS CREEK CATCHMENT

### 5.2.1.7 Total Suspended Solids

Total Suspended Solids (TSS, mg/L) values were below the LOR at all sites in the January 2026, except NZG-IS and YK-IS in Yorkers Creek Catchment, which exceeded the December-May SSGV (Figure 22-Figure 24).

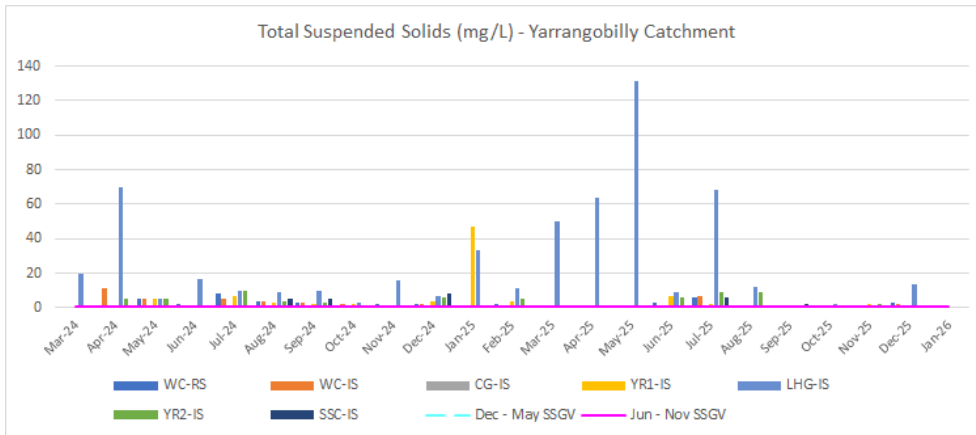


FIGURE 22: TSS FOR YARRANGOBILLY RIVER CATCHMENT

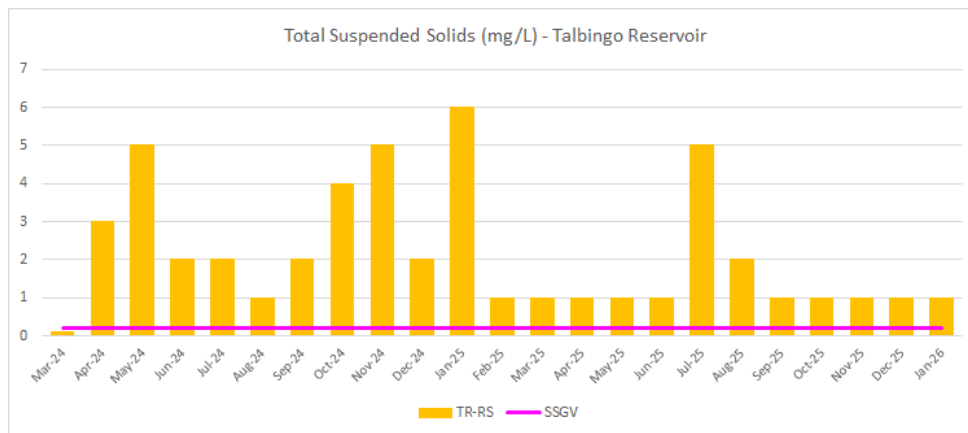


FIGURE 23: TSS FOR TALBINGO RESERVOIR

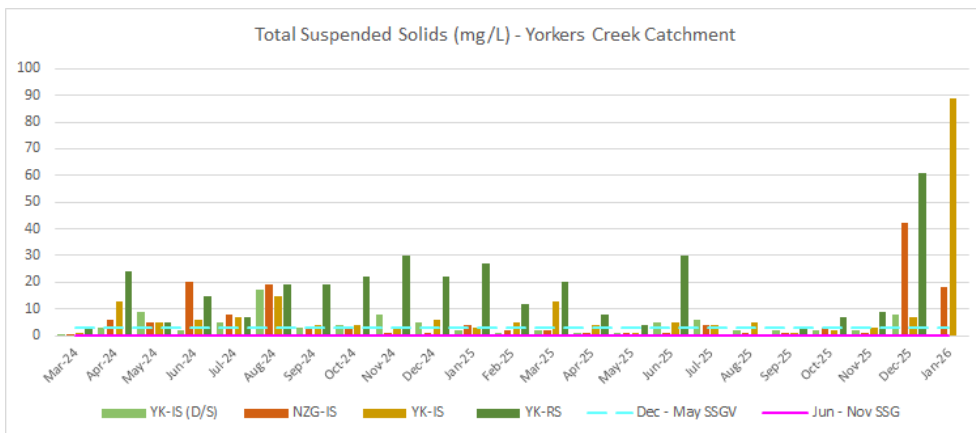


FIGURE 24: TSS FOR YORKERS CREEK CATCHMENT

### 5.2.1.8 Total Dissolved Solids

Total Dissolved Solids (mg/L) values during the January 2026 sampling period exceeded the December-May SSGV at all sites except YK-IS in Yorkers Creek Catchment, which was below the SSGV (Figure 25-Figure 27).

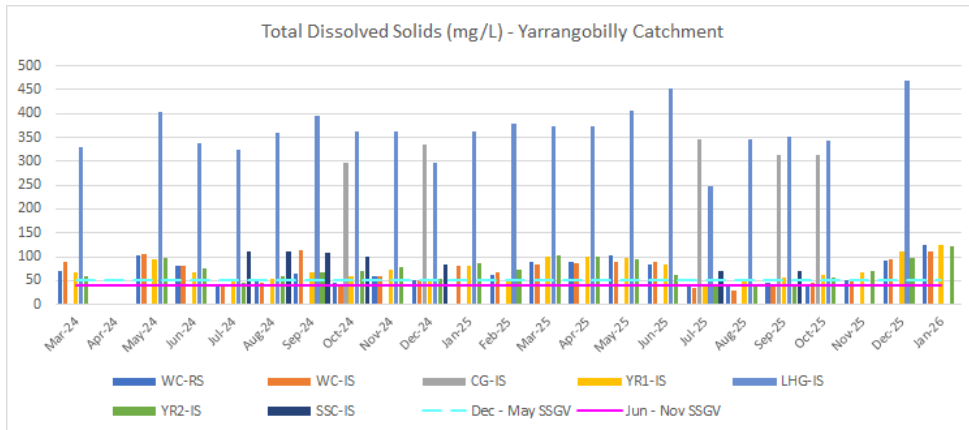


FIGURE 25: TDS FOR YARRANGOBILLY RIVER CATCHMENT

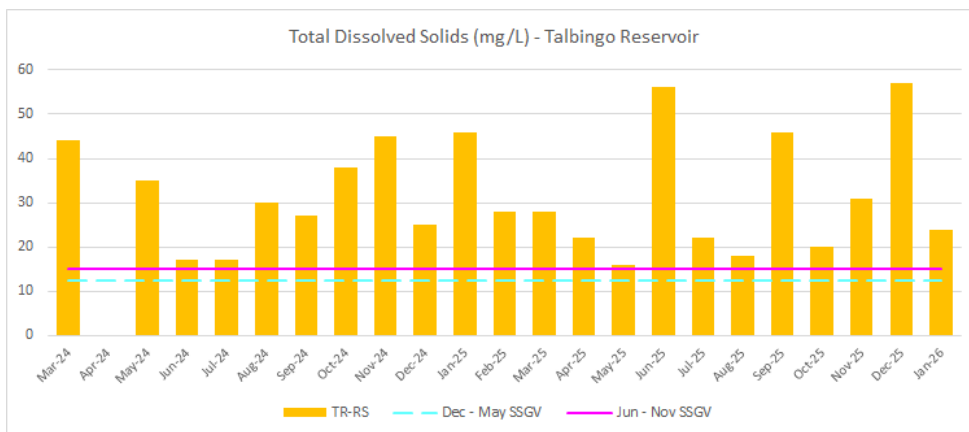


FIGURE 26: TDS FOR TALBINGO RESERVOIR

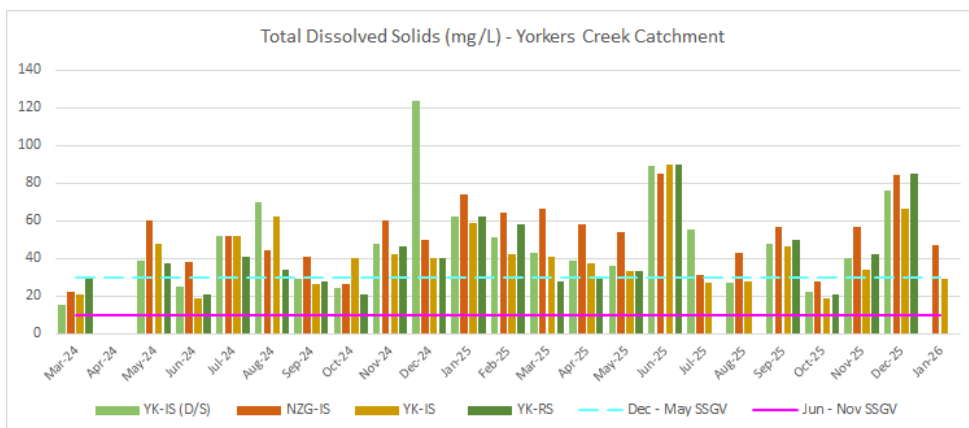


FIGURE 27: TDS FOR YORKERS CREEK CATCHMENT

### 5.2.1.9 Redox

Redox (mV) results were generally lower in January 2026 compared with December 2025, except at NZG-IS and YK-IS in Yorkers Creek Catchment, which increased. All sites across all catchments exceeded the December-May SSGV (Figure 28- Figure 29).

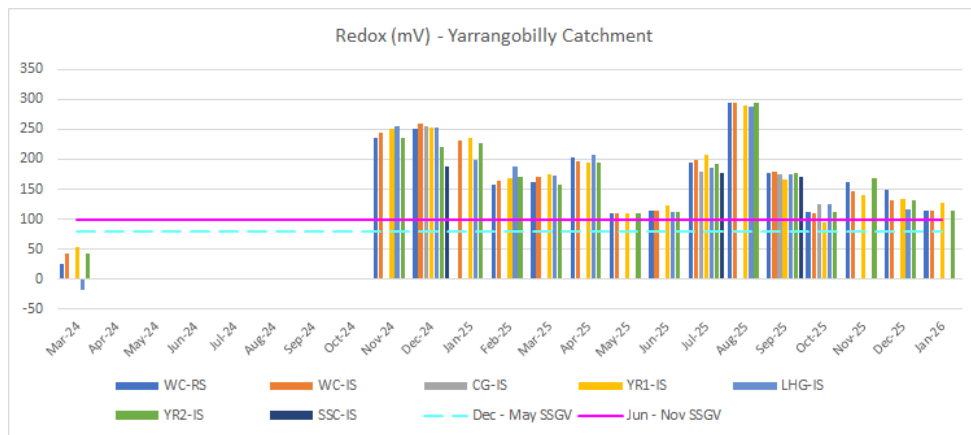


FIGURE 28: REDOX FOR YARRANGOBILLY RIVER CATCHMENT

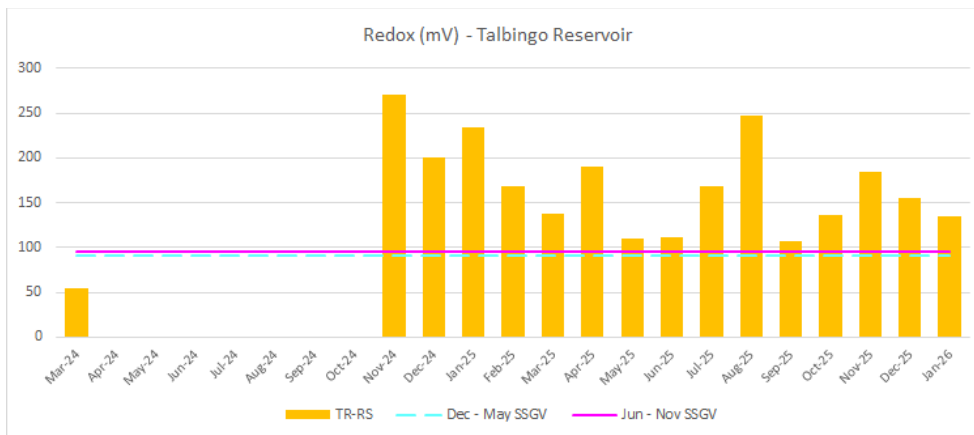


FIGURE 29: REDOX FOR TALBINGO RESERVOIR

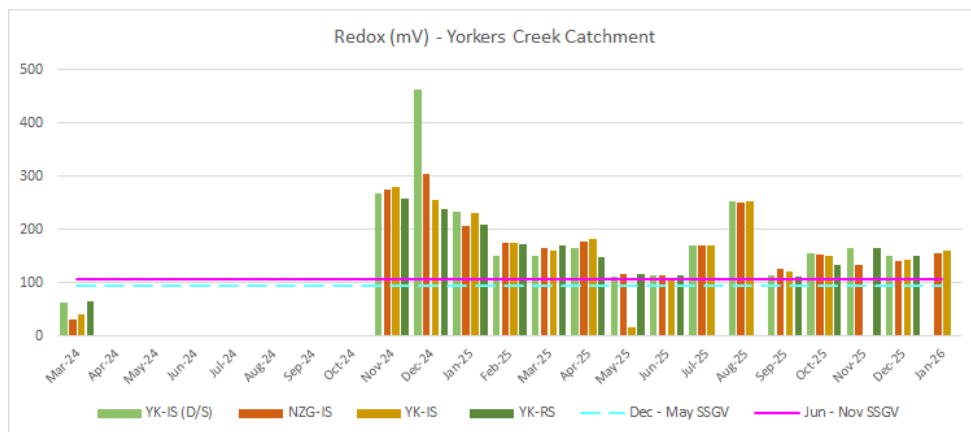


FIGURE 30: REDOX FOR YORKERS CREEK CATCHMENT

### 5.2.1.10 Nitrogen Oxides

Nitrogen Oxides (mg/L) levels exceeded the December-May SSGV at all sites during the January 2026 sampling period. Notable increases were recorded at TR-RS (0.86 mg/L) and YK-IS (0.26 mg/L), refer Figure 31 – 33.

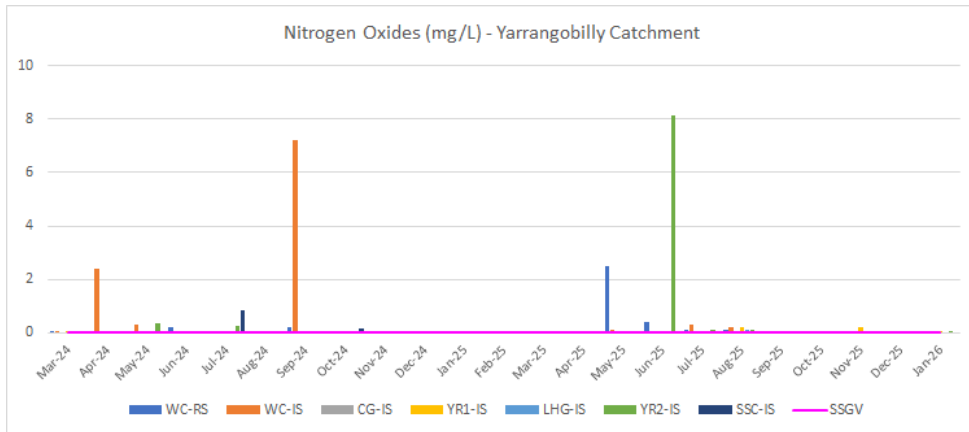


FIGURE 31: NITROGEN OXIDES FOR YARRANGOBILLY RIVER CATCHMENT

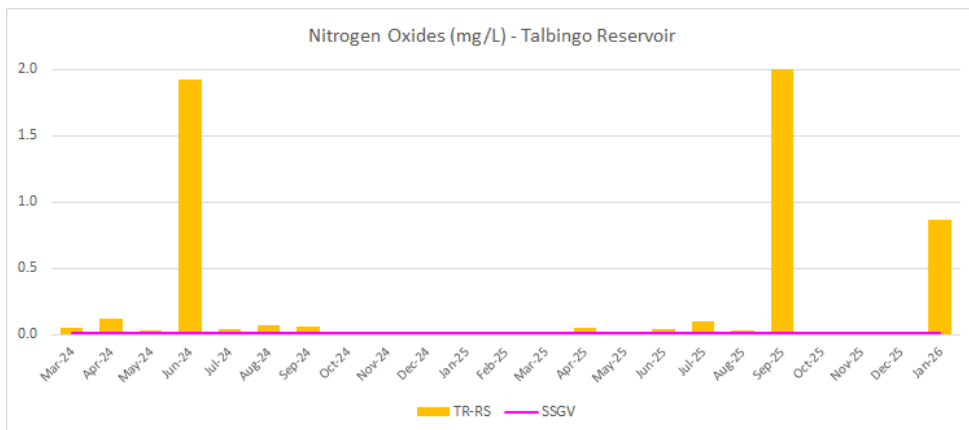


FIGURE 32: NITROGEN OXIDES FOR TALBINGO RESERVOIR

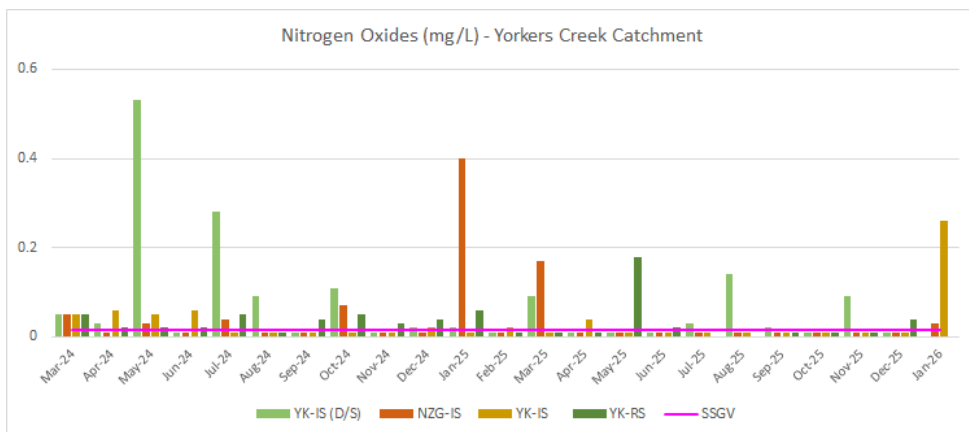


FIGURE 33: NITROGEN OXIDES FOR YORKERS CREEK CATCHMENT

### 5.2.1.11 Ammonia

Ammonia (mg/L) concentrations for the January 2026 sampling period exceeded the December-May SSGV at one location (YR1-IS) in Yarrangobilly River Catchment. All other sites across the three catchments were below the LOR (Figure 34-Figure36).

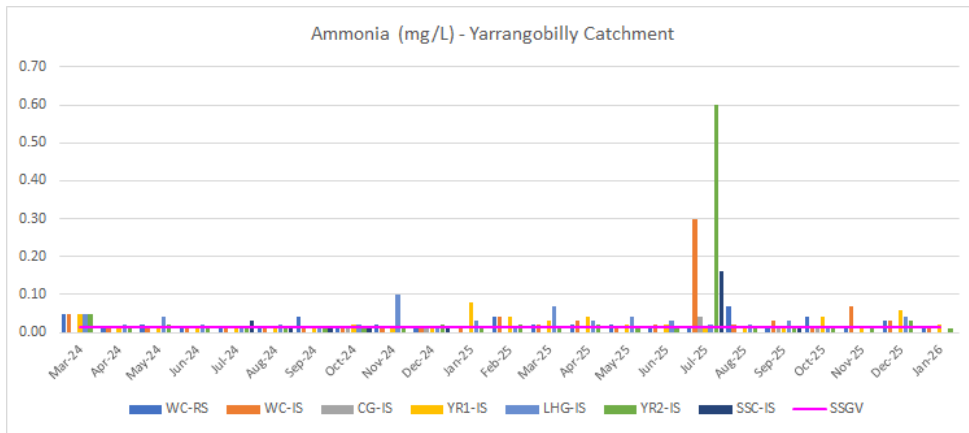


FIGURE 34: AMMONIA FOR YARRANGOBILLY RIVER CATCHMENT

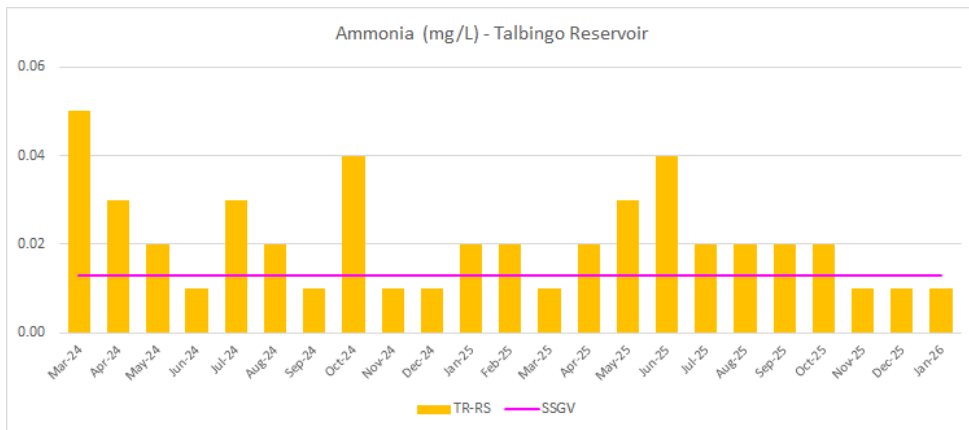


FIGURE 35: AMMONIA FOR TALBINGO RESERVOIR

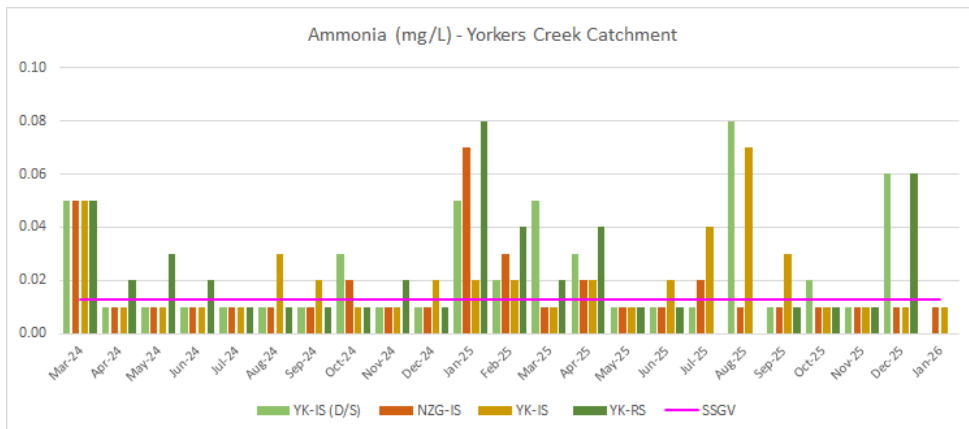


FIGURE 36: AMMONIA FOR YORKERS CREEK CATCHMENT

### 5.2.1.12 Cyanide

Cyanide (mg/L) concentrations were below the LOR at all sites across all three catchments, refer Figure 37 to Figure 38.

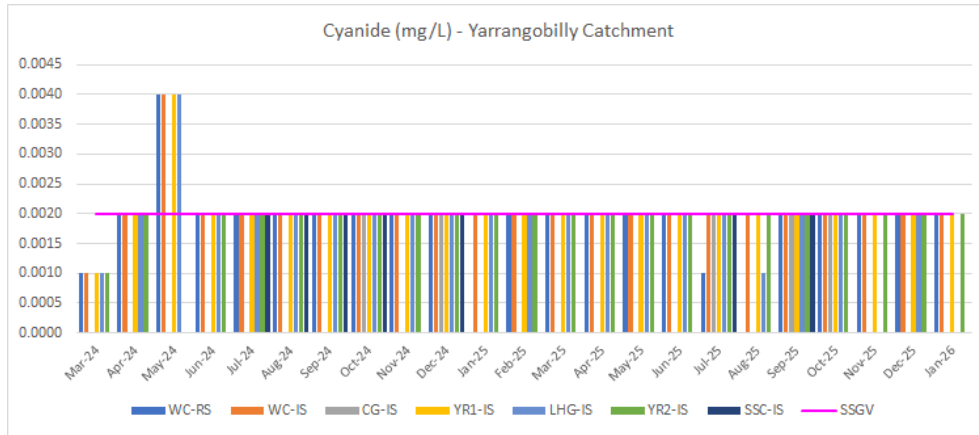


FIGURE 37: CYANIDE FOR YARRANGOBILLY RIVER CATCHMENT

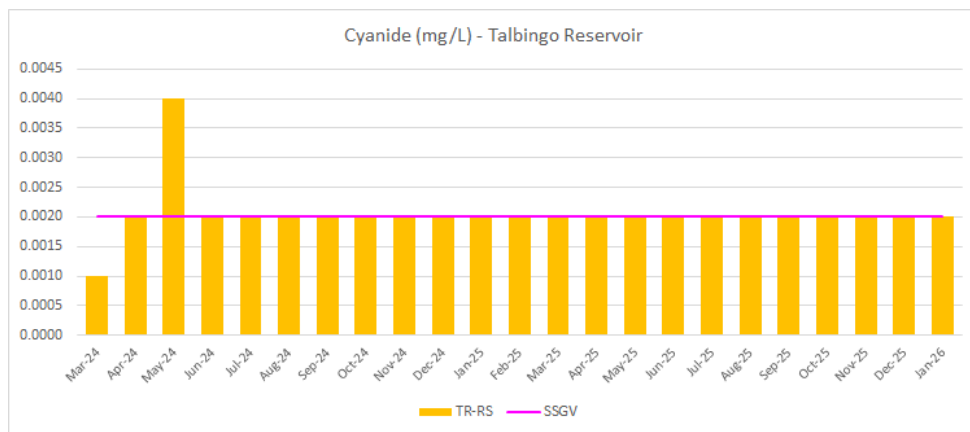


FIGURE 38: CYANIDE FOR TALBINGO RESERVOIR

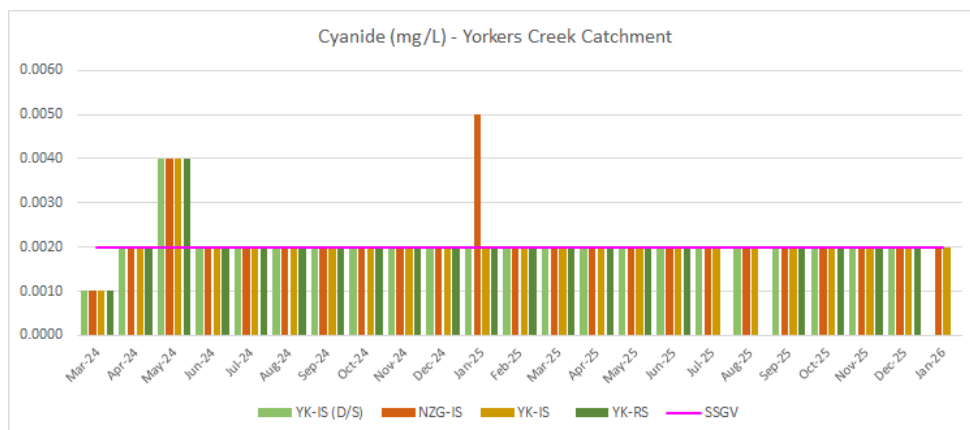


FIGURE 38: CYANIDE FOR YORKERS CREEK CATCHMENT

### 5.2.1.13 Total Hardness

January 2026 Total Hardness (mg/L) values generally increased compared with December 2025 (Figure 40-Figure 42). All sampled sites exceeded the December-May SSGV.

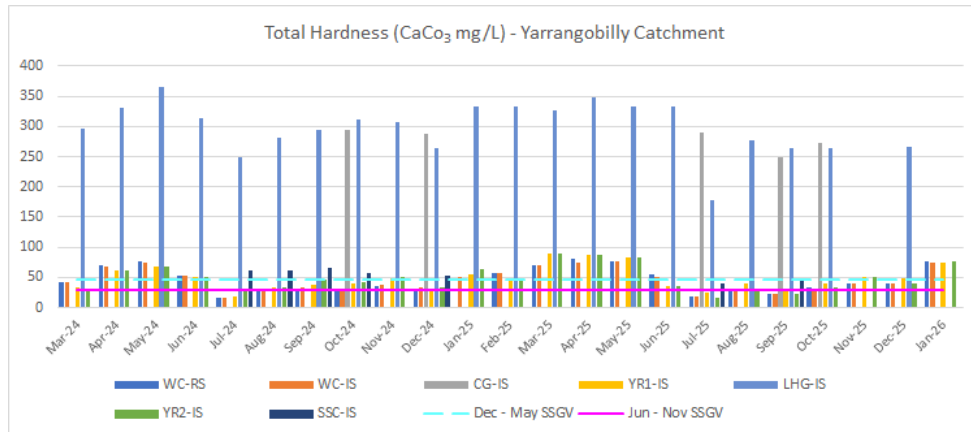


FIGURE 39: CaCO<sub>3</sub> FOR YARRANGOBILLY RIVER CATCHMENT

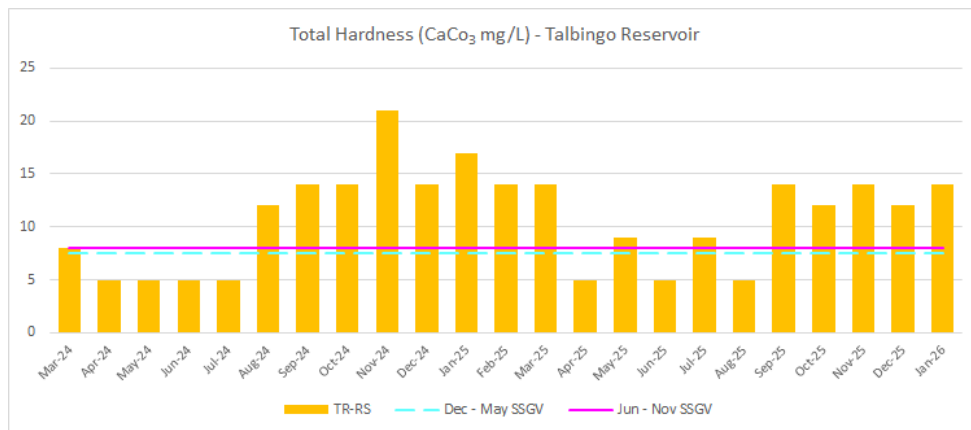


FIGURE 40: CaCO<sub>3</sub> FOR TALBINGO RESERVOIR

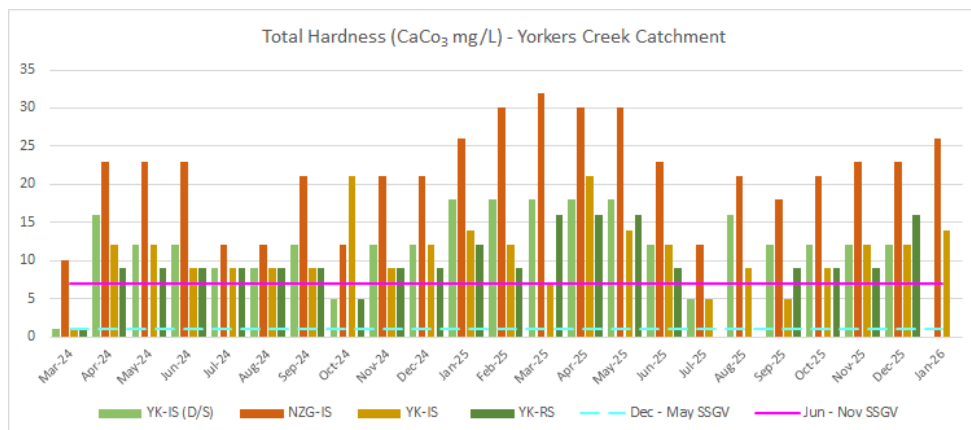


FIGURE 41: CaCO<sub>3</sub> FOR YORKERS CREEK CATCHMENT

### 5.2.1.14 Total Kjeldahl Nitrogen

During the January 2026 sampling period, Total Kjeldahl (mg/L) varied across the catchments. In Yarrangobilly River Catchment, all sites were on-par with the December-May SSGV or below the LOR, except the reference site (WC-RS) which exceeded the SSGV (Figure 43). The reference site at Talbingo Reservoir (TR-RS), and two impact sites at Yorkers Creek Catchment (NZG-IS, YK-IS) also exceeded the December – May SSGV (Figure 44-Figure 45).

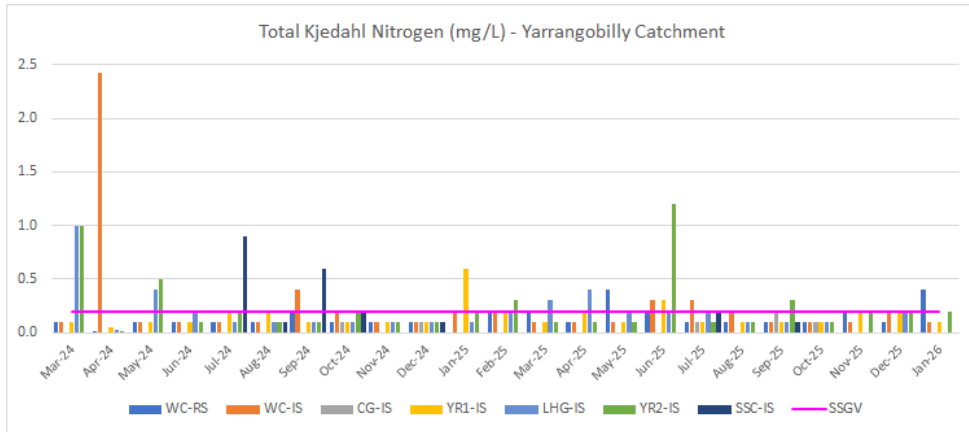


FIGURE 42: TKN FOR YARRANGOBILLY RIVER CATCHMENT

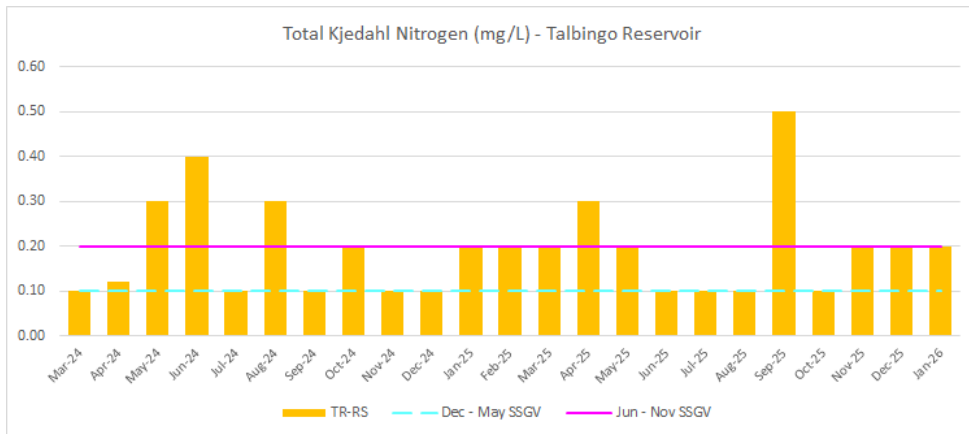


FIGURE 43: TKN FOR TALBINGO RESERVOIR

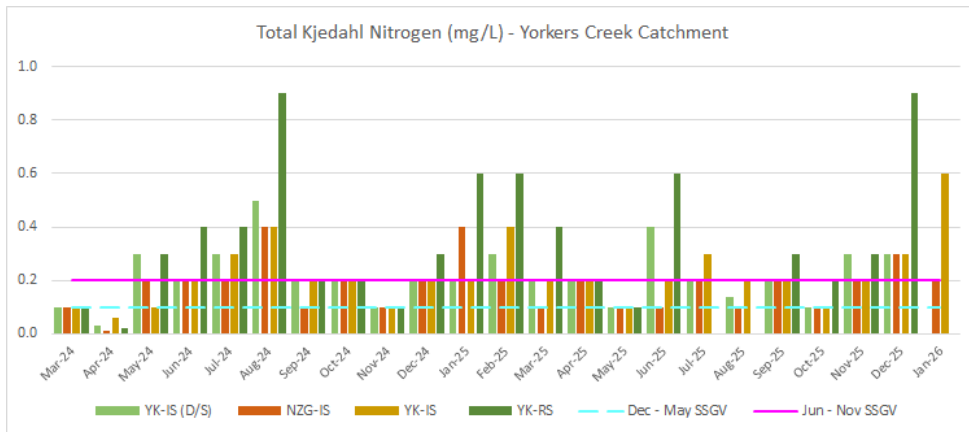


FIGURE 44: TKN FOR YORKERS CREEK CATCHMENT

### 5.2.1.15 Total Nitrogen

TN (mg/L) results varied across the three catchments. At Yarrangobilly River Catchment and Talbingo Reservoir, the two reference sites (WC-RS, TR-RS) exceeded the December-May SSGV, with all other sites below the LOR (Figure 46-Figure 47). At Yorkers Creek Catchment, the impact site, YK-IS, notably exceeded the SSGV (Figure 48).

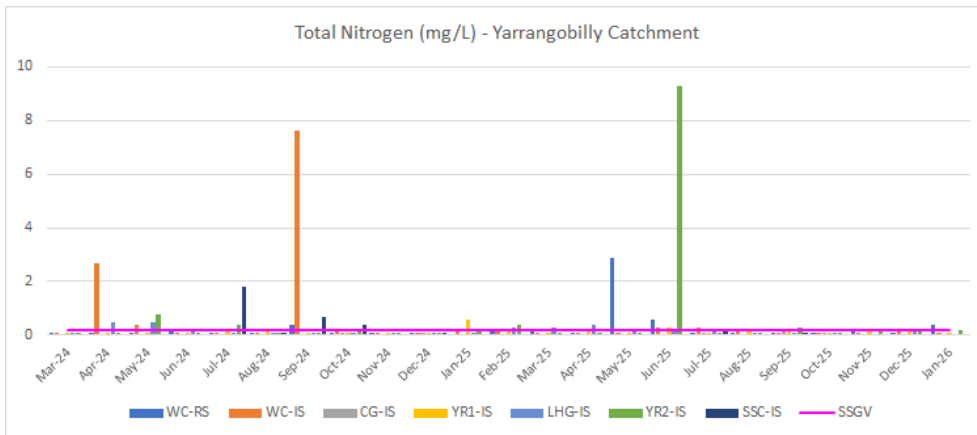


FIGURE 45: TN FOR YARRANGOBILLY RIVER CATCHMENT

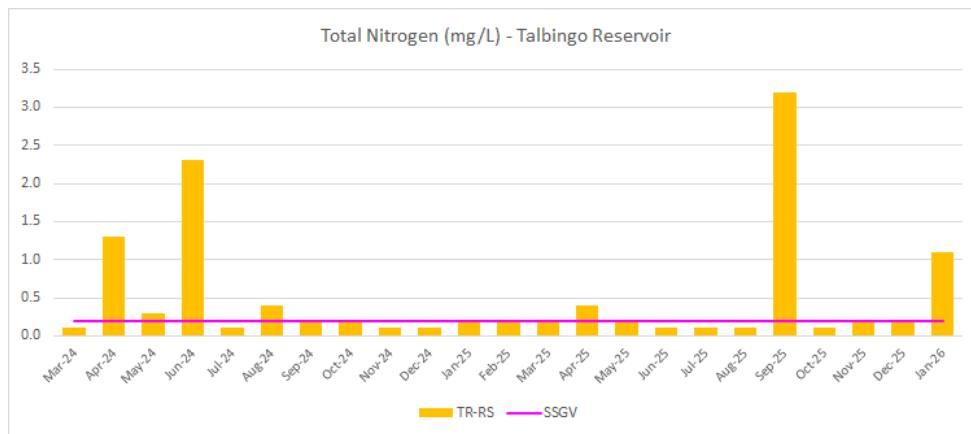


FIGURE 46: TN FOR TALBINGO RESERVOIR

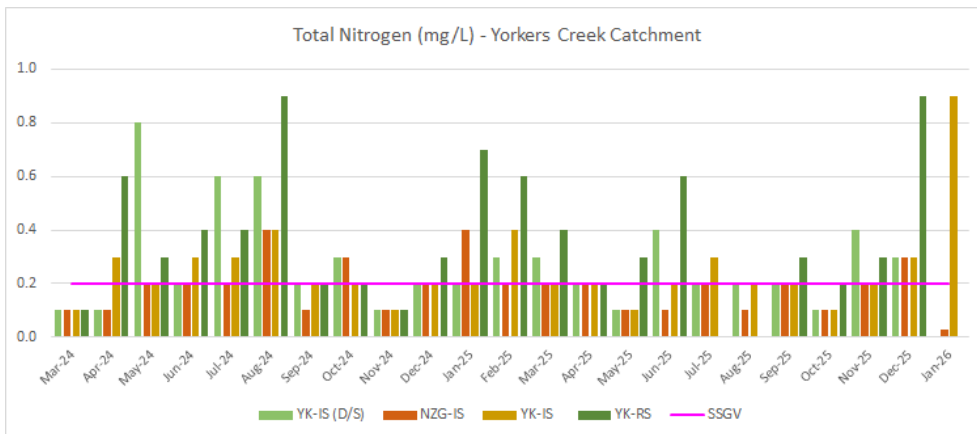


FIGURE 47: TN FOR YORKERS CREEK CATCHMENT

### 5.2.1.16 Total Phosphorus

During the January 2026 sampling period, marginal Total Phosphorus (mg/L) SSGV exceedance was recorded at WC-RS and WC-IS in Yarrangobilly River Catchment (Figure 49). Talbingo Reservoir (TR-RS) recorded a value below the LOR (Figure 50). Across Yorkers Creek Catchment, a notable exceedance of the December – May SSGV was recorded at NZG-IS and YK-IS (Figure 51).

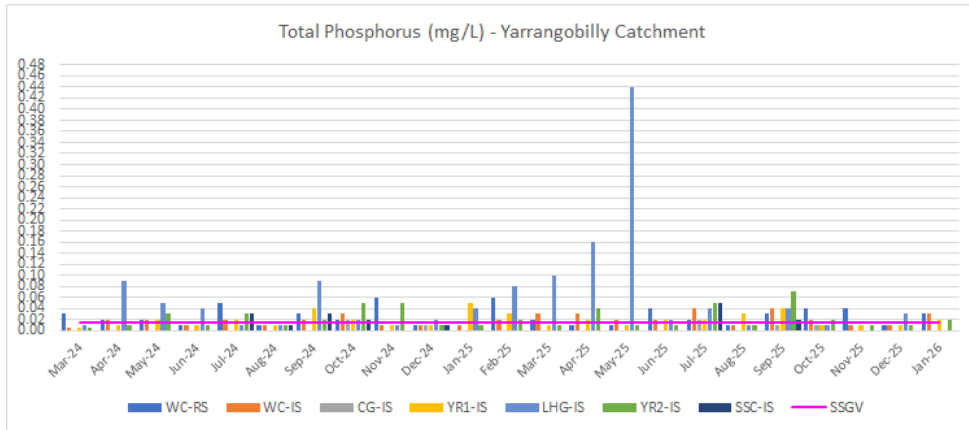


FIGURE 48: TP FOR YARRANGOBILLY RIVER CATCHMENT

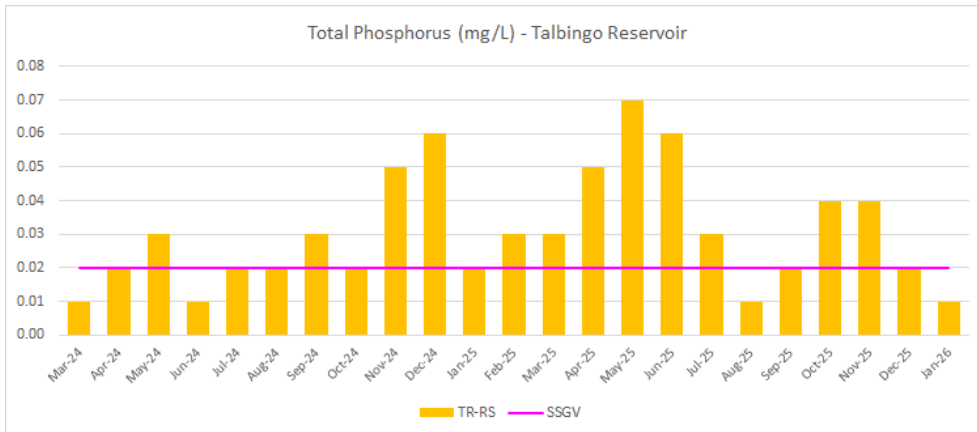


FIGURE 49: TP FOR TALBINGO RESERVOIR

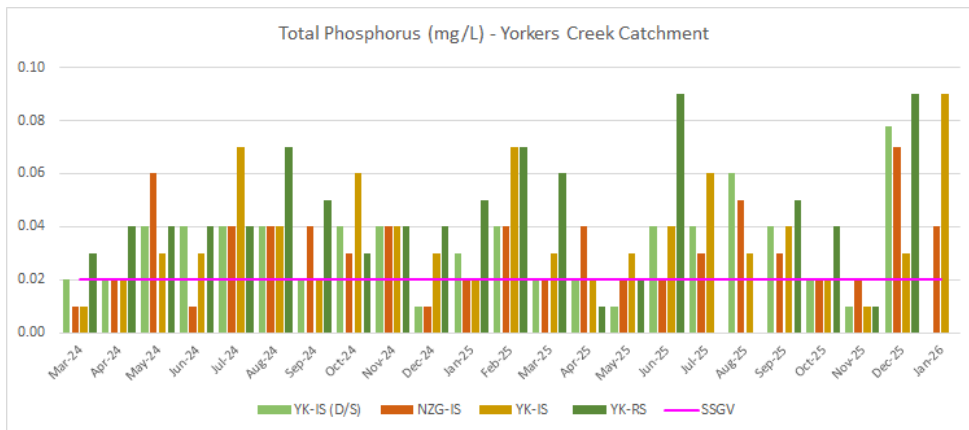


FIGURE 50: TP FOR YORKERS CREEK CATCHMENT

### 5.2.1.17 Reactive Phosphorus

All sites measured below the LOR for RP (mg/L), refer to Figure 51 - Figure 53.

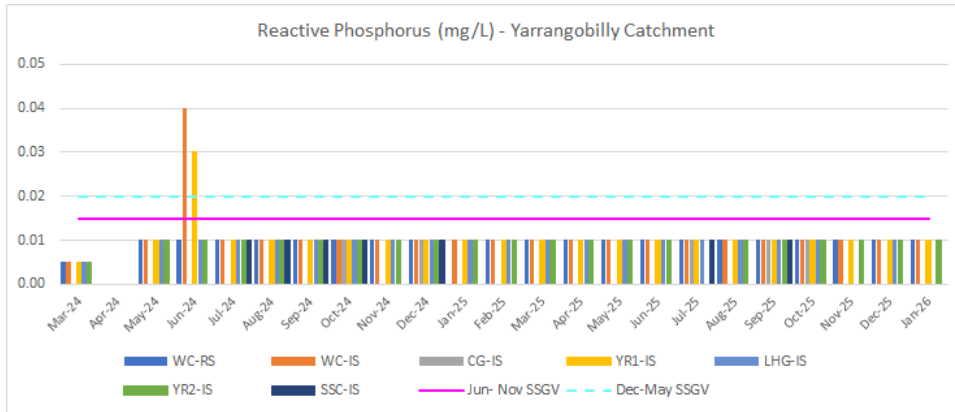


FIGURE 51: RP FOR YARRANGOBILLY RIVER CATCHMENT

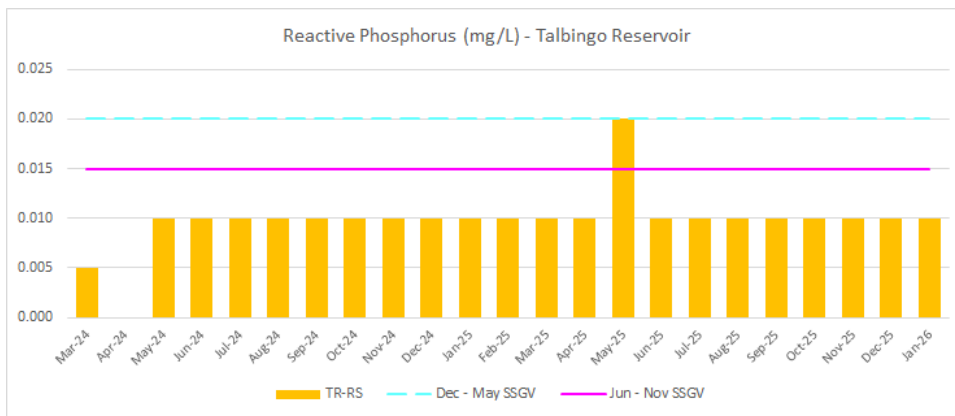


FIGURE 52: RP FOR TALBINGO RESERVOIR

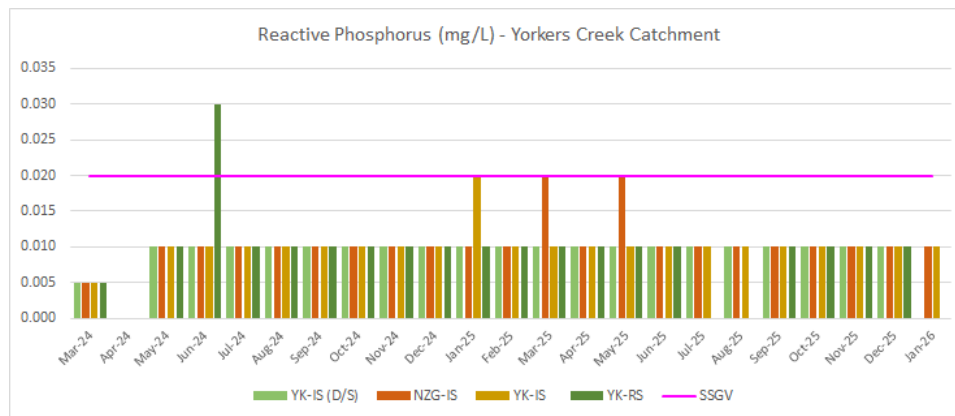


FIGURE 53: RP FOR YORKERS CREEK CATCHMENT

### 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
Mn	WC-RS	0.054	0.002	During the January 2026 sampling period, the December-May SSGV for Dissolved Mn (mg/L) was exceeded at several sites across Yarrangobilly River Catchment and Yorkers Creek Catchment.
	WC-IS	0.008		
	YR1-IS	0.008		
	YR2-IS	0.004		
	NZG-IS	0.007	0.005	
	YK-IS	0.087		
Zn	WC-RS	0.054	0.002	The December-May SSGV value for Zn of 0.002mg/L was exceeded at a number of sites across Yarrangobilly River Catchment.
	WC-IS	0.056		
	YR1-IS	0.018		
	YR2-IS	0.128		

### 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	0.04	0.027	Several sites exceeded the DGV value for Total Al (0.027mg/L) including the reference sites at Yarrangobilly River Catchment (WC-RS) and Talbingo Reservoir (TR-RS).
	WC-IS	0.05		
	TR-RS	0.09		
	NZG-IS	0.33		
	YK-IS	1.19		
Cr	YK-IS	0.002	0.00001	During the January 2026 sampling period, Total Cr (0.00001mg/L) exceeded the DGV value at YK-IS in Yorkers Creek Catchment.
Zn	WC-RS	0.057	0.0024	The DGV value for Zn (0.0024mg/L) was exceeded at several locations across all three catchments (Yarrangobilly River Catchment, Talbingo Reservoir, Yorkers Creek Catchment).
	WC-IS	0.041		
	YR1-IS	0.015		
	YR2-IS	0.083		
	TR-RS	0.022		
	NZG-IS	0.010		
	YK-IS	0.018		
Fe	NZG-IS	0.47	0.3	A notable exceedance of the DGV value for Fe (0.3mg/L) was recorded at YK-IS in Yorkers Creek Catchment.
	YK-IS	2.06		

## 6 DISCUSSION

Below is a summary of key observations and discussion points from the January 2026 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 has 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:
  - » Since March 2024, exceedances of SSGV/DGV across all catchments remain consistent with historical trends
  - » Temperature (°C) increased across all catchments compared to previous monitoring periods, with the highest values recorded at WC-RS (~28°C)
  - » pH:
    - Exceeded SSGV at most sites across all catchments
    - One site (YK-IS) recorded values below the SSGV
  - » DO (%):
    - Improved across all catchments compared to previous sampling periods
    - Remained below SSGV at most sites, with Talbingo Reservoir marginally exceeding SSGV
  - » SPC (µS/cm):
    - Increased across all catchments
    - Exceeded SSGV at most sites, with WC-RS remaining below

- » EC ( $\mu\text{S}/\text{cm}$ ):
  - Increased compared to December 2025
  - Exceeded SSGV across most sites, with WC-RS and WC-IS remaining below
- » Turbidity (NTU):
  - Exceeded SSGV across all sites
  - Notable exceedance at YK-IS (21.83 NTU)
- » TSS (mg/L):
  - Below LOR at most sites
  - Exceedances recorded at NZG-IS and YK-IS
- » TDS (mg/L):
  - Exceeded SSGV at most sites
  - YK-IS remained below SSGV
- » Redox (mV):
  - Decreased compared to December
  - Remained above SSGV across all sites
- » Nitrogen oxides (mg/L):
  - Exceeded SSGV across all sites
  - Notable increases at TR-RS and YK-IS
- » Ammonia (mg/L):
  - Below LOR at most sites
  - Exceedance recorded at YR1-IS
- » Cyanide (mg/L):
  - Below LOR across all sites
- »  $\text{CaCO}_3$  (mg/L):
  - Increased compared to previous sampling
  - Exceeded SSGV across all sites
- » TKN (mg/L):
  - Generally compliant in Yarrangobilly River catchment
  - Exceedances at WC-RS, TR-RS and select Yorkers Creek sites
- » TN (mg/L):

- Exceedances at reference sites WC-RS and TR-RS
- Notable exceedance at YK-IS
- » TP (mg/L):
  - Marginal exceedances at WC-RS and WC-IS
  - Notable exceedances at NZG-IS and YK-IS
  - Below LOR at Talbingo Reservoir
- » RP (mg/L):
  - Below LOR across all sites
- » Dissolved Mn exceeded SSGV across multiple sites in Yarrangobilly River and Yorkers Creek catchments
- » Dissolved Zn exceeded SSGV across multiple sites in Yarrangobilly River catchment
- » Total Al exceeded DGV across multiple sites including WC-RS, TR-RS, NZG-IS and YK-IS
- » Total Cr exceeded DGV at YK-IS
- » Total Zn exceeded DGV across all catchments
- » Total Fe exceeded DGV at NZG-IS and significantly at YK-IS
- » **Key interpretation:**
- » Exceedances remain widespread and consistent with baseline trends observed since March 2024
- » Results continue to be influenced by:
  - Low flow and dry conditions across multiple sites
  - Natural catchment characteristics (sediment, organics and geology)
  - Ongoing disturbance from project and external activities
- » Increased temperature and reduced flow conditions likely contributed to:
  - Elevated concentrations of dissolved constituents (TDS, EC, metals)
  - Increased variability in nutrient and redox parameters
- » Despite exceedances, field observations (clear water at flowing sites, presence of aquatic vegetation and fauna) indicate that waterways continue to function and support aquatic ecosystems

## 7 CONCLUSION

Monthly construction SWQ monitoring was undertaken in January 2026 in accordance with EPL 21753 and the revised methodology outlined in Section 3, across the monitoring locations listed in Table 1.

The results indicate that exceedances of SSGV and DGV continue to be recorded across all catchments (Yarrangobilly River, Talbingo Reservoir and Yorkers Creek), consistent with trends observed since the commencement of construction monitoring in March 2024. These exceedances are evident at both reference and impact sites, indicating that water quality is influenced by a combination of natural catchment conditions, low flow environments, existing disturbances and broader project-related activities.

During the January 2026 sampling period, increased temperatures and widespread low or no flow conditions were observed across multiple monitoring locations. These conditions are likely to have influenced the concentration of several parameters, including specific conductance, electrical conductivity, total dissolved solids and metals. pH values were generally elevated across most sites, while dissolved oxygen improved compared to previous monitoring periods but remained below guideline values at the majority of locations.

Turbidity exceeded SSGV at WC-RS (0.37NTU), TR-RS (0.09NTU) and YK-RS (9NTU), while total suspended solids were generally low or below detection limits, with isolated exceedances recorded within the Yorkers Creek catchment. Nutrient parameters were generally low or below detection limits, with exceedances primarily associated with nitrogen oxides across all sites and isolated exceedances of ammonia, TKN, TN and TP at select locations.

Exceedances of both dissolved and total metals were recorded across multiple sites, including aluminium, manganese, zinc, chromium and iron. These exceedances are consistent with historical monitoring results and are likely influenced by natural geology, reduced dilution capacity and catchment disturbance.

Overall, the January 2026 monitoring results do not indicate a significant deterioration in surface water quality attributable solely to construction activities. Field observations, including the presence of aquatic vegetation and fauna at flowing sites, indicate that waterways continue to function and support aquatic ecosystems.

Continued implementation of erosion and sediment controls, together with ongoing monitoring, will ensure that potential impacts to surface water quality are identified and appropriately managed throughout the construction phase.

## REFERENCES

- ALS. (2025a). ES2504313. *Certificate of Analysis*. NSW, Australia: ALS Limited.
- ALS. (2025b). ES2504313. *QA/QC Compliance Assessment to assist with Quality Review*. NSW, Australia: ALS Limited.
- ALS. (2025c). ES2504313. *Quality Control Report*. NSW, Australia: ALS Limited.
- ANZG. (2018). *Australian and New Zealand Guidelines for Fresh and Marine Water Quality*. ACT, Australia: Australian and New Zealand Governments and Australian state and territory governments.
- Jacobs. (2020). *Environmental Impact Statement*. NSW: Transgrid.
- NGH. (2022). *Pre-construction Water Quality Monitoring Program and Methodology*. NSW: NGH Pty Ltd.
- NGH. (2024). *Baseline Water Quality Report*. NSW: NGH Pty Ltd.
- UGL. (2025). October 2025. *Water Quality Monitoring Field Data Sheet*. NSW, Australia: UGL Limited.



## Appendix A: Field Sheet (UGL, 2025)

## WATER QUALITY MONITORING FIELD SHEET

Date: 14.12.25 Personnel: EH & SVB Sampling Purpose: DEC 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: 0.00mm in 24 hr (Loops)
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
<b>WC-RS</b> Wallace Creek	11:18	17.2	704.6	80.1	109.9 <hr style="width: 50%; margin: 0 auto;"/> EC 93.5	7.95 <hr style="width: 50%; margin: 0 auto;"/> mV 1480	4.54	0.00	<ul style="list-style-type: none"> <li>• low level &amp; moderate flow</li> <li>• clear visibility</li> <li>• rocky fine bed</li> <li>• prior company sampling</li> <li>• overhanging veg &amp; outgrown</li> <li>• eroded bank &amp; exposed tree root</li> <li>• aquatic veg</li> </ul>
<b>WC-IS</b> Wallace Creek	11:32	17.6	704.6	81.8	109.0 <hr style="width: 50%; margin: 0 auto;"/> EC 93.5	8.10 <hr style="width: 50%; margin: 0 auto;"/> mV 132.1	4.29	0.00	<ul style="list-style-type: none"> <li>• low level &amp; flow</li> <li>• clear visibility</li> <li>• foam collecting waters surface</li> <li>• rocky/pebbly bed</li> <li>• under cut bank</li> <li>• overhanging veg</li> <li>• eroded bank</li> </ul>
<span style="color: blue;">★</span> <b>CG-IS</b> Cave Gully									
<b>YR1-IS</b> Yarrangobilly River	12:09	20.1	706.7	81.9	124.8 <hr style="width: 50%; margin: 0 auto;"/> EC 113.2	8.28 <hr style="width: 50%; margin: 0 auto;"/> mV 134.6	31.04	0.00	<ul style="list-style-type: none"> <li>• moderate level &amp; flow</li> <li>• clear visibility</li> <li>• rocky &amp; pebbly bed</li> <li>• aquatic veg</li> <li>• moderate weed presence</li> <li>• underneath bridge</li> <li>• adjacent to transmission line.</li> </ul>



## WATER QUALITY MONITORING FIELD SHEET

Date: 14.12.25 Personnel: EH & SVB Sampling Purpose: DEC MQM 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: 0.00mm in 24hr (Lobs)
Dec - May SSGV:		-	-	96.2	115	7.85	0.37	0.2	Weather Forecast: 60-1. i-5mm in 24hr.
Jun - Nov SSGV:		-	-	89.7	88	7.62	5.12	1	Weather Time of Sampling: OVERCAST
★ <b>LHG-IS</b> Lick Hole Gully	1:54	21.6	703.4	72.3	61.9 EC 579	7.72 MV 117.0	5.58	0.00	<ul style="list-style-type: none"> <li>• very low level</li> <li>• rocky bed / sandy</li> <li>• odour like sulphur smell</li> <li>• moderate visibility</li> <li>• aquatic vegetation</li> <li>• slight yellow tinge to water</li> </ul>
<b>YR2-IS</b> Yarrangobilly River	11:49	18.2	704.9	81.4	109.7 EC 95.5	8.13 MV 131.5	4.63	0.00	<ul style="list-style-type: none"> <li>• very low level &amp; flow</li> <li>• undercut banks</li> <li>• clear visibility</li> <li>• eroded &amp; undercut banks</li> <li>• rocky bed / pebbly bed</li> <li>• overhanging vegetation</li> <li>• aquatic vegetation</li> </ul>
<b>SSC-IS</b> Sheep Station Creek									
<b>TR-RS</b> Talbingo Reservoir	9:13	18.3	708.8	78.1	41.2 EC 36.0	7.45 MV 155.3	3.59	0.00	<ul style="list-style-type: none"> <li>• moderate level, low flow</li> <li>• clear visibility</li> <li>• Turbidity dispensed sediment</li> <li>• presence of campers, fire, ducks &amp; dead fish at time of sampling</li> <li>• grass &amp; shrubs</li> <li>• adjacent to public accessible road.</li> </ul>

## WATER QUALITY MONITORING FIELD SHEET

Date: 14.12.25 Personnel: EH & SD Sampling Purpose: DEC 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: <u>0.3mm in 24 hr</u>
Dec - May SSGV:		-	-	96.2	115	7.85	0.37	0.2	Weather Forecast: <u>overcast</u> <del>cloud</del> <u>60%</u> <u>1-5mm</u>
Jun - Nov SSGV:		-	-	89.7	88	7.62	5.12	1	Weather Time of Sampling: <u>overcast</u>
<b>YK-RS</b> Yorkers Creek	7:42	11.1	659.9	58.9	55.2 EC 40.5	6.84 mV 151.7	32.56	0.00	very low level & FLOW Brown water Turbid water muddy banks • overhanging veg • eroded banks • new track work. • sandy bed • adjacent to public access track
<b>YK-IS (D/S)</b> Yorkers Creek	8:08	11.8	663.5	71.6	48.1 EC 35.9	7.06 mV 161.8	7.49	0.00	Low FLOW & level Brown tinge to water Low visibility Foam collecting on waters surface • overhanging veg • undercut bank • rocky bed • adjacent to public access track
<b>NZG-IS</b> New Zealand Gully	7:07	11.5	665.2	69.2	101.2	7.41 EC 75.0	5.55 mV 142.2	0.00	very low level & FLOW overgrown & overhanging veg sandy bed High-mod blackberry adjacent to public access track • aquatic veg • grass, shrubs, trees • eroded muddy bank
<b>YK-IS</b> Yorkers Creek	7:27	10.9	661.8	64.3	49.0	6.90 EC 35.8	8.09 mV 143.9	0.00	Very low & FLOW yellow & Brown tinge to water rocky/sandy bed Low visibility Foam collecting on waters surface • adjacent to overt • moderate weed density



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



## CERTIFICATE OF ANALYSIS

Work Order	: <b>ES2540098</b>	Page	: 1 of 8
Client	: <b>UGL LIMITED</b>	Laboratory	: Environmental Division Sydney
Contact	: <b>EBONY HAMES</b>	Contact	: Customer Services ES
Address	: Level 4, 40 Miller Street North Sydney 2060	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: ----	Date Samples Received	: 16-Dec-2025 09:50
Order number	: 4501837828	Date Analysis Commenced	: 16-Dec-2025
C-O-C number	: ----	Issue Date	: 23-Dec-2025 16:13
Sampler	: <b>EBONY HAMES</b>		
Site	: Cabramurra/Tumbarumba NSW		
Quote number	: ES24UGLLIM0001_V4		
No. of samples received	: 11		
No. of samples analysed	: 11		



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.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW



## General Comments

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

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

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

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

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

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

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

- EG020: It is recognised that total concentration is less than dissolved for some metal analytes. However, the difference is within experimental variation of the methods.
- TDS by method EA-015 may bias high for various samples 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: WATER (Matrix: WATER)				Sample ID	TR-RS	WC-RS	YR2-IS	YR1-IS	YK-RS
Sampling date / time				14-Dec-2025 00:00	14-Dec-2025 00:00	14-Dec-2025 00:00	14-Dec-2025 00:00	14-Dec-2025 00:00	
Compound	CAS Number	LOR	Unit	ES2540098-001	ES2540098-002	ES2540098-003	ES2540098-004	ES2540098-005	
				Result	Result	Result	Result	Result	
<b>EA015: Total Dissolved Solids dried at 180 ± 5 °C</b>									
Total Dissolved Solids @180°C	----	10	mg/L	<b>57</b>	<b>93</b>	<b>98</b>	<b>110</b>	<b>85</b>	
<b>EA025: Total Suspended Solids dried at 104 ± 2°C</b>									
Suspended Solids (SS)	----	1	mg/L	<b>1</b>	<b>3</b>	<1	<1	<b>61</b>	
<b>ED093F: SAR and Hardness Calculations</b>									
Total Hardness as CaCO3	----	1	mg/L	<b>12</b>	<b>41</b>	<b>41</b>	<b>48</b>	<b>16</b>	
<b>EG020F: Dissolved Metals by ICP-MS</b>									
Aluminium	7429-90-5	0.01	mg/L	<0.01	<b>0.01</b>	<b>0.10</b>	<b>0.02</b>	<b>0.26</b>	
Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<b>0.001</b>	
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	<b>0.005</b>	<0.005	<b>0.024</b>	
Manganese	7439-96-5	0.001	mg/L	<b>0.002</b>	<b>0.003</b>	<b>0.005</b>	<b>0.002</b>	<b>0.132</b>	
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	<b>0.06</b>	<0.05	<b>1.04</b>	
<b>EG020T: Total Metals by ICP-MS</b>									
Aluminium	7429-90-5	0.01	mg/L	<b>0.03</b>	<b>0.11</b>	<b>0.09</b>	<b>0.03</b>	<b>1.36</b>	
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	<b>0.002</b>	
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<b>0.002</b>	
Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<b>0.002</b>	
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	<0.005	<0.005	<b>0.017</b>	
Manganese	7439-96-5	0.001	mg/L	<b>0.008</b>	<b>0.008</b>	<b>0.005</b>	<b>0.003</b>	<b>0.161</b>	



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	TR-RS	WC-RS	YR2-IS	YR1-IS	YK-RS
Sampling date / time				14-Dec-2025 00:00	14-Dec-2025 00:00	14-Dec-2025 00:00	14-Dec-2025 00:00	14-Dec-2025 00:00	
Compound	CAS Number	LOR	Unit	ES2540098-001	ES2540098-002	ES2540098-003	ES2540098-004	ES2540098-005	
				Result	Result	Result	Result	Result	
<b>EG020T: Total Metals by ICP-MS - Continued</b>									
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	<b>0.05</b>	<b>0.12</b>	<b>0.09</b>	<0.05	<b>2.43</b>	
<b>EG035F: Dissolved Mercury by FIMS</b>									
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
<b>EG035T: Total Recoverable Mercury by FIMS</b>									
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
<b>EK026SF: Total CN by Segmented Flow Analyser</b>									
Total Cyanide	57-12-5	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	
<b>EK055G: Ammonia as N by Discrete Analyser</b>									
Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<b>0.03</b>	<b>0.03</b>	<b>0.06</b>	<b>0.06</b>	
<b>EK057G: Nitrite as N by Discrete Analyser</b>									
Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	
<b>EK058G: Nitrate as N by Discrete Analyser</b>									
Nitrate as N	14797-55-8	0.01	mg/L	<0.01	<b>0.02</b>	<0.01	<b>0.01</b>	<b>0.04</b>	
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser</b>									
Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	<b>0.02</b>	<0.01	<b>0.01</b>	<b>0.04</b>	
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<b>0.2</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>	<b>0.9</b>	
<b>EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser</b>									
<sup>^</sup> Total Nitrogen as N	----	0.1	mg/L	<b>0.2</b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>	<b>0.9</b>	
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>									
Total Phosphorus as P	----	0.01	mg/L	<b>0.02</b>	<0.01	<0.01	<0.01	<b>0.09</b>	
<b>EK071G: Reactive Phosphorus as P by discrete analyser</b>									
Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	<b>0.01</b>	<b>0.01</b>	<0.01	<0.01	



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	YK-IS (D/S)	WC-IS	TR-RS (DUPLICATE)	NZG-IS	LHG-IS
Sampling date / time				14-Dec-2025 00:00	14-Dec-2025 00:00	14-Dec-2025 00:00	14-Dec-2025 00:00	14-Dec-2025 00:00	
Compound	CAS Number	LOR	Unit	ES2540098-006	ES2540098-007	ES2540098-008	ES2540098-009	ES2540098-010	
				Result	Result	Result	Result	Result	
<b>EA015: Total Dissolved Solids dried at 180 ± 5 °C</b>									
Total Dissolved Solids @180°C	----	10	mg/L	<b>76</b>	<b>94</b>	<b>48</b>	<b>84</b>	<b>470</b>	
<b>EA025: Total Suspended Solids dried at 104 ± 2°C</b>									
Suspended Solids (SS)	----	1	mg/L	<b>8</b>	<b>2</b>	<b>3</b>	<b>42</b>	<b>14</b>	
<b>ED093F: SAR and Hardness Calculations</b>									
Total Hardness as CaCO3	----	1	mg/L	<b>12</b>	<b>41</b>	<b>12</b>	<b>23</b>	<b>267</b>	
<b>EG020F: Dissolved Metals by ICP-MS</b>									
Aluminium	7429-90-5	0.01	mg/L	<b>0.10</b>	<b>0.02</b>	<0.01	<b>0.04</b>	<0.01	
Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Zinc	7440-66-6	0.005	mg/L	<b>0.007</b>	<0.005	<0.005	<0.005	<0.005	
Manganese	7439-96-5	0.001	mg/L	<b>0.011</b>	<b>0.003</b>	<b>0.002</b>	<b>0.005</b>	<b>0.113</b>	
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	<b>0.16</b>	<0.05	<0.05	<b>0.07</b>	<b>0.16</b>	
<b>EG020T: Total Metals by ICP-MS</b>									
Aluminium	7429-90-5	0.01	mg/L	<b>0.37</b>	<b>0.10</b>	<b>0.07</b>	<b>0.43</b>	<b>0.10</b>	
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	<b>0.001</b>	<0.001	
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	<0.001	<b>0.001</b>	<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	<b>0.006</b>	<0.005	<0.005	<0.005	<0.005	
Manganese	7439-96-5	0.001	mg/L	<b>0.015</b>	<b>0.006</b>	<b>0.011</b>	<b>0.025</b>	<b>0.110</b>	



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	YK-IS (D/S)	WC-IS	TR-RS (DUPLICATE)	NZG-IS	LHG-IS
Sampling date / time				14-Dec-2025 00:00	14-Dec-2025 00:00	14-Dec-2025 00:00	14-Dec-2025 00:00	14-Dec-2025 00:00	
Compound	CAS Number	LOR	Unit	ES2540098-006	ES2540098-007	ES2540098-008	ES2540098-009	ES2540098-010	
				Result	Result	Result	Result	Result	
<b>EG020T: Total Metals by ICP-MS - Continued</b>									
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	<b>0.43</b>	<b>0.13</b>	<b>0.11</b>	<b>0.68</b>	<b>0.38</b>	
<b>EG035F: Dissolved Mercury by FIMS</b>									
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
<b>EG035T: Total Recoverable Mercury by FIMS</b>									
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
<b>EK026SF: Total CN by Segmented Flow Analyser</b>									
Total Cyanide	57-12-5	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	
<b>EK055G: Ammonia as N by Discrete Analyser</b>									
Ammonia as N	7664-41-7	0.01	mg/L	<b>0.06</b>	<b>0.03</b>	<0.01	<0.01	<b>0.04</b>	
<b>EK057G: Nitrite as N by Discrete Analyser</b>									
Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	
<b>EK058G: Nitrate as N by Discrete Analyser</b>									
Nitrate as N	14797-55-8	0.01	mg/L	<b>0.01</b>	<0.01	<0.01	<b>0.01</b>	<0.01	
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser</b>									
Nitrite + Nitrate as N	----	0.01	mg/L	<b>0.01</b>	<0.01	<0.01	<b>0.01</b>	<0.01	
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<b>0.3</b>	<b>0.2</b>	<b>0.4</b>	<b>0.3</b>	<b>0.2</b>	
<b>EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser</b>									
<sup>^</sup> Total Nitrogen as N	----	0.1	mg/L	<b>0.3</b>	<b>0.2</b>	<b>0.4</b>	<b>0.3</b>	<b>0.2</b>	
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>									
Total Phosphorus as P	----	0.01	mg/L	<b>0.08</b>	<0.01	<b>0.03</b>	<b>0.07</b>	<b>0.03</b>	
<b>EK071G: Reactive Phosphorus as P by discrete analyser</b>									
Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<b>0.01</b>	<0.01	<0.01	<b>0.01</b>	<b>0.01</b>	



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	YK-IS	----	----	----	----
Sampling date / time			14-Dec-2025 00:00	----	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2540098-011	-----	-----	-----	-----
				Result	---	---	---	---
<b>EA015: Total Dissolved Solids dried at 180 ± 5 °C</b>								
Total Dissolved Solids @180°C	----	10	mg/L	<b>66</b>	----	----	----	----
<b>EA025: Total Suspended Solids dried at 104 ± 2°C</b>								
Suspended Solids (SS)	----	1	mg/L	<b>7</b>	----	----	----	----
<b>ED093F: SAR and Hardness Calculations</b>								
Total Hardness as CaCO3	----	1	mg/L	<b>12</b>	----	----	----	----
<b>EG020F: Dissolved Metals by ICP-MS</b>								
Aluminium	7429-90-5	0.01	mg/L	<b>0.14</b>	----	----	----	----
Arsenic	7440-38-2	0.001	mg/L	<0.001	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L	<0.001	----	----	----	----
Copper	7440-50-8	0.001	mg/L	<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L	<0.001	----	----	----	----
Lead	7439-92-1	0.001	mg/L	<0.001	----	----	----	----
Zinc	7440-66-6	0.005	mg/L	<b>0.013</b>	----	----	----	----
Manganese	7439-96-5	0.001	mg/L	<b>0.025</b>	----	----	----	----
Silver	7440-22-4	0.001	mg/L	<0.001	----	----	----	----
Iron	7439-89-6	0.05	mg/L	<b>0.23</b>	----	----	----	----
<b>EG020T: Total Metals by ICP-MS</b>								
Aluminium	7429-90-5	0.01	mg/L	<b>0.42</b>	----	----	----	----
Arsenic	7440-38-2	0.001	mg/L	<0.001	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L	<0.001	----	----	----	----
Copper	7440-50-8	0.001	mg/L	<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L	<0.001	----	----	----	----
Lead	7439-92-1	0.001	mg/L	<0.001	----	----	----	----
Zinc	7440-66-6	0.005	mg/L	<b>0.005</b>	----	----	----	----
Manganese	7439-96-5	0.001	mg/L	<b>0.031</b>	----	----	----	----



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	YK-IS	----	----	----	----
Sampling date / time				14-Dec-2025 00:00	----	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2540098-011	-----	-----	-----	-----	-----
				Result	---	---	---	---	---
<b>EG020T: Total Metals by ICP-MS - Continued</b>									
Silver	7440-22-4	0.001	mg/L	<0.001	----	----	----	----	----
Iron	7439-89-6	0.05	mg/L	<b>0.64</b>	----	----	----	----	----
<b>EG035F: Dissolved Mercury by FIMS</b>									
Mercury	7439-97-6	0.0001	mg/L	<0.0001	----	----	----	----	----
<b>EG035T: Total Recoverable Mercury by FIMS</b>									
Mercury	7439-97-6	0.0001	mg/L	<0.0001	----	----	----	----	----
<b>EK026SF: Total CN by Segmented Flow Analyser</b>									
Total Cyanide	57-12-5	0.002	mg/L	<0.002	----	----	----	----	----
<b>EK055G: Ammonia as N by Discrete Analyser</b>									
Ammonia as N	7664-41-7	0.01	mg/L	<b>0.01</b>	----	----	----	----	----
<b>EK057G: Nitrite as N by Discrete Analyser</b>									
Nitrite as N	14797-65-0	0.01	mg/L	<0.01	----	----	----	----	----
<b>EK058G: Nitrate as N by Discrete Analyser</b>									
Nitrate as N	14797-55-8	0.01	mg/L	<0.01	----	----	----	----	----
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser</b>									
Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	----	----	----	----	----
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<b>0.3</b>	----	----	----	----	----
<b>EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser</b>									
<sup>^</sup> Total Nitrogen as N	----	0.1	mg/L	<b>0.3</b>	----	----	----	----	----
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>									
Total Phosphorus as P	----	0.01	mg/L	<b>0.03</b>	----	----	----	----	----
<b>EK071G: Reactive Phosphorus as P by discrete analyser</b>									
Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	----	----	----	----	----



## Appendix C: January 2026 WQ 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)	
<b>YARRANGOBILLY CATCHMENT</b>																				
<b>Default Guideline Value (DGV)</b>	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	
<b>Limit of Reporting (LOR)</b>									0.1	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.001	0.0001	
<b>Dec - May Site Specific Guideline Value (SSGV)</b>			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	
<b>June - Nov SSGV</b>			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	
<b>WC-RS</b>	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	0.01	0.03	0.002	0.003	0.00002
	Apr-24	No	10.7	94.8	-	145.6	-	8.44	-	1.05	0.01	0.001	0.0001	0.001	0.001	0.02	0.11	0.001	0.007	0.0001
	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
	Jun-24	No	4.7	92.9	-	126.8	-	7.51	-	0.56	0.01	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.005	0.0001
	Jul-24	No	6.4	91.9	-	46.6	-	6.96	-	9.24	0.07	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.002	0.0001
	Aug-24	No	10.4	80.6	-	47.1	-	7.80	-	1.6	0.02	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.002	0.0001
	Sep-24	No	11.7	92.0	-	43	-	7.86	-	0.5	0.01	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.002	0.0001
	Oct-24	No	9.3	92.7	-	52	-	7.55	-	1.3	0.02	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.002	0.0001
	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	0.02	0.05	0.001	0.004	0.0001
	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	0.02	0.05	0.001	0.001	0.0001
*sample not an	Jan-25	No	26.6	83.2	-	27.3	-	8.13	-	0.65	-	-	-	-	-	-	-	-	-	-
	Feb-25	No	16.3	86.0	9.2	26.3	123	7.76	158	4.01	0.06	0.001	0.0001	0.001	0.001	0.02	0.08	0.001	0.008	0.0001
	Mar-25	Yes	14.7	92.7	9.8	34.6	145	8.32	162	1.16	0.01	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.008	0.0001
	Apr-25	No	17.6	91.8	10.5	34	155	8.19	202	0.9	0.01	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.007	0.0001
	May-25	Yes	9.9	96.0	-	33.7	24	8.59	110.8	1.04	0.01	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.007	0.0001
	Jun-25	No	5.9	89.1	-	12.4	7.9	8.63	113.9	2.87	0.02	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.005	0.0001
	Jul-25	No	8.6	87.6	-	11.3	7.7	9.20	193.5	5.9	0.06	0.001	0.0001	0.001	0.001	0.01	0.001	0.001	0.001	0.0001
	Aug-25	No	9.7	94.9	-	15.4	9.8	7.00	294.9	3.93	0.02	0.001	0.0001	0.001	0.001	-	0.05	0.001	0.001	0.0001
*sample not an	Sep-25	No	5.3	93.3	-	101.1	63.1	8.20	177.5	0.8	0.03	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.002	0.0001
	Oct-25	Yes	8.6	93.4	-	86.7	59.6	7.59	111.6	0.88	0.01	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.002	0.0001
	Nov-25	No	16.3	76.4	-	99.2	4	7.88	161.3	0.73	0.01	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.003	0.0001
	Dec-25	No	17.2	80.1	-	109.9	93.5	7.95	148	4.54	0.01	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.003	0.0001
	Jan-26	No	27.6	90.2	-	84	88.1	8.22	113.9	6.91	0.01	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.054	0.0001
<b>WC-IS</b>	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	0.01	0.03	0.002	0.003	0.00002
	Apr-24	No	10.7	95.0	-	145.2	-	8.45	-	0.9	0.01	0.001	0.0001	0.001	0.001	0.02	0.07	0.001	0.006	0.0001
	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
	Jun-24	No	4.8	93.3	-	126.7	-	7.72	-	0.35	0.01	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.004	0.0001
	Jul-24	No	6.6	91.2	-	46.6	-	6.96	-	7.65	0.07	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.002	0.0001
	Aug-24	No	10.5	91.5	-	45.6	-	7.83	-	5.85	0.02	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.001	0.0001
	Sep-24	No	11.7	92.9	-	54.4	-	7.83	-	5.5	0.04	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.005	0.0001
	Oct-24	No	9.5	93.3	-	52.1	-	7.66	-	1.4	0.02	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.002	0.0001
	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	0.02	0.05	0.001	0.002	0.0001
	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	0.02	0.05	0.001	0.001	0.0001
	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	0.02	0.05	0.001	0.007	0.0001
	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	0.02	0.08	0.001	0.007	0.0001
	Mar-25	No	16.1	95.8	9.7	31.8	145	8.33	170	1.13	0.01	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.006	0.0001
	Apr-25	No	17.3	92.8	10.6	33.5	155	8.66	197	1.02	0.01	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.005	0.0001
	May-25	No	9.4	96.1	-	34.3	24.1	8.71	110.9	1.4	0.01	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.006	0.0001
	Jun-25	No	5.8	89.6	-	24.5	15.5	8.30	113.6	5.1	0.02	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.003	0.0001
	Jul-25	No	8.1	85.9	-	11.2	7.6	9.40	199.4	9.92	0.06	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.001	0.0001
	Aug-25	No	10.3	96.5	-	13.7	9.8	7.00	294.9	3.93	0.02	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.002	0.0001
	Sep-25	No	5.2	93.9	-	72.1	44.9	8.50	178.5	6	0.03	0.001	0.0001	0.001	0.003	0.02	0.05	0.001	0.002	0.0001
	Oct-25	No	11.9	100.6	-	89.7	67.2	7.64	110.3	0.88	0.01	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.002	0.0001
	Nov-25	No	14.7	76.5	-	95.3	76.5	7.84	147	1.15	0.01	0.001	0.0001	0.001	0.005	0.02	0.05	0.001	0.003	0.0001
	Dec-25	No	17.6	81.8	-	109	93.5	8.10	132.1	4.29	0.02	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.003	0.0001
	Jan-26	No	24.3	87.8	-	181.8	88.1	8.22	113.9	6.91	0.01	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.008	0.0001

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

Parameter	Dissolved Ni (mg/L)	TN (mg/L)	TP (mg/L)	Dissolved Ag (mg/L)	Dissolved Zn (mg/L)	Ammonia (mg/L)	Nitrogen Oxides (mg/L)	Reactive Phosphorus (mg/L)	Total Hardness (mg/L) (CaCO3)	Total Kjeldahl 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)	
<b>YARRANGOBILLY CATCHMENT</b>																									
<b>Default Guideline Value (DGV)</b>	0.008	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	
<b>Limit of Reporting (LOR)</b>	0.001	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	
<b>Dec - May Site Specific Guideline Value (SSGV)</b>	0.001	0.2	0.02	0.00002	0.002	0.013	0.015	0.020	47	0.2	52	0.2													
<b>June - Nov SSGV</b>	0.001	0.2	0.02	0.00002	0.002	0.013	0.015	0.015	30	0.2	39	1.0													
<b>WC-RS</b>																									
Mar-24	0.001	0.1	0.03	0.00001	0.001	0.050	0.05	0.005	42	0.1	70	0.1	-	-	-	-	-	-	-	-	-	-	-	-	
Apr-24	0.001	0.1	0.02	0.001	0.005	0.010	0.01	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	0.001	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	0.001	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	0.001	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	0.001	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	0.001	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	0.001	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	0.001	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	0.001	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	
<b>*sample not an</b>																									
Jan-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Feb-25	0.001	0.2	0.06	0.001	0.005	0.040	0.02	0.01	57	0.2	61	2	0.16	0.001	0.0001	0.001	0.001	0.001	0.011	0.001	0.001	0.008	0.15	0.0001	
Mar-25	0.001	0.2	0.02	0.001	0.005	0.020	0.01	0.01	70	0.2	90	1	0.01	0.001	0.0001	0.001	0.001	0.001	0.01	0.001	0.001	0.005	0.05	0.0001	
Apr-25	0.001	0.1	0.01	0.001	0.005	0.020	0.01	0.01	80	0.1	88	1	0.01	0.001	0.0001	0.001	0.001	0.001	0.009	0.001	0.001	0.005	0.06	0.0001	
May-25	0.001	2.9	0.01	0.001	0.005	0.020	2.5	0.01	77	0.4	104	1	0.01	0.001	0.0001	0.001	0.001	0.001	0.009	0.001	0.001	0.005	0.05	0.0001	
Jun-25	0.001	0.6	0.04	0.001	0.005	0.010	0.42	0.01	55	0.2	84	3	0.08	0.001	0.0001	0.001	0.001	0.001	0.008	0.001	0.001	0.005	0.09	0.0001	
Jul-25	0.001	0.1	0.02	0.001	0.005	0.010	0.1	0.01	19	0.1	36	6	0.17	0.001	0.0001	0.001	0.001	0.001	0.011	0.001	0.001	0.005	0.16	0.0001	
Aug-25	0.001	0.1	0.01	0.001	0.005	0.070	0.1	0.01	26	0.1	37	1	0.05	0.001	0.0001	0.001	0.001	0.001	0.004	0.001	0.001	0.005	0.05	0.0001	
Sep-25	0.001	0.1	0.03	0.001	0.01	0.010	0.01	0.01	23	0.1	46	1	0.09	0.001	0.0001	0.001	0.001	0.001	0.005	0.001	0.001	0.005	0.07	0.0001	
Oct-25	0.001	0.1	0.04	0.001	0.005	0.040	0.01	0.01	33	0.1	44	1	0.04	0.001	0.0001	0.001	0.001	0.001	0.004	0.001	0.001	0.005	0.05	0.0001	
Nov-25	0.001	0.2	0.04	0.001	0.025	0.010	0.01	0.01	41	0.2	52	1	0.02	0.001	0.0001	0.001	0.001	0.001	0.004	0.001	0.005	0.028	0.05	0.0001	
Dec-25	0.001	0.1	0.01	0.001	0.005	0.030	0.02	0.01	41	0.1	93	3	0.11	0.001	0.0001	0.001	0.001	0.001	0.008	0.001	0.001	0.005	0.12	0.0001	
Jan-26	0.001	0.4	0.03	0.001	0.054	0.010	0.02	0.01	77	0.4	125	1	0.04	0.001	0.0001	0.001	0.001	0.001	0.011	0.001	0.001	0.057	0.09	0.0001	
<b>WC-IS</b>																									
Mar-24	0.0005	0.1	0.005	0.00001	0.001	0.050	0.05	0.005	42	0.1	88	0.1	-	-	-	-	-	-	-	-	-	-	-	-	
Apr-24	0.001	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	0.001	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	0.001	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	0.001	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	0.001	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	0.001	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	0.001	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	0.001	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	0.001	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	0.001	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	0.001	0.2	0.02	0.001	0.005	0.040	0.01	0.01	57	0.2	68	1	0.14	0.001	0.0001	0.001	0.001	0.001	0.01	0.001	0.001	0.005	0.14	0.0001	
Mar-25	0.001	0.1	0.03	0.001	0.005	0.020	0.01	0.01	70	0.1	85	1	0.01	0.001	0.0001	0.001	0.001	0.001	0.007	0.001	0.001	0.005	0.05	0.0001	
Apr-25	0.001	0.1	0.03	0.001	0.005	0.030	0.01	0.01	75	0.1	87	1	0.01	0.001	0.0001	0.001	0.001	0.001	0.006	0.001	0.001	0.005	0.06	0.0001	
May-25	0.001	0.1	0.02	0.001	0.005	0.010	0.1	0.01	77	0.1	88	1	0.01	0.001	0.0001	0.001	0.001	0.001	0.006	0.001	0.001	0.005	0.05	0.0001	
Jun-25	0.001	0.3	0.02	0.001	0.005	0.020	0.03	0.01	51	0.3	89	1	0.12	0.001	0.0001	0.001	0.001	0.001	0.016	0.001	0.001	0.005	0.19	0.0001	
Jul-25	0.001	0.3	0.04	0.001	0.005	0.300	0.3	0.01	19	0.3	35	7	0.14	0.001	0.0001	0.001	0.001	0.001	0.01	0.001	0.001	0.005	0.13	0.0001	
Aug-25	0.001	0.2	0.01	0.001	0.01	0.020	0.2	0.01	26	0.2	28	1	0.06	0.001	0.0001	0.001	0.001	0.001	0.005	0.001	0.001	0.012	0.05	0.0001	
Sep-25	0.001	0.1	0.04	0.001	0.006	0.030	0.01	0.01	23	0.1	44	1	0.08	0.001	0.0001	0.001	0.004	0.001	0.005	0.001	0.001	0.006	0.07	0.0001	
Oct-25	0.001	0.1	0.02	0.001	0.005	0.010	0.01	0.01	31	0.1	46	1	0.04	0.001	0.0001	0.001	0.001	0.001	0.004	0.001	0.001	0.005	0.05	0.0001	
Nov-25	0.001	0.1	0.01	0.001	0.009	0.070	0.01	0.01	41	0.1	54	1	0.03	0.001	0.0001	0.001	0.015	0.001	0.005	0.001	0.001	0.01	0.05	0.0001	
Dec-25	0.001	0.2	0.01	0.001	0.005	0.030	0.01	0.01	41	0.2	94	2	0.1	0.001	0.0001	0.001	0.001	0.001	0.006	0.001	0.001	0.005	0.13	0.0001	
Jan-26	0.001	0.1	0.03	0.001	0.054	0.010	0.02	0.01	75	0.1	110	1	0.05	0.001	0.0001	0.001	0.001	0.001	0.009	0.001					

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)	
<b>YARRANGOBILLY CATCHMENT</b>																				
<b>Default Guideline Value (DGV)</b>		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
<b>Limit of Reporting (LOR)</b>										0.1	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.001	0.0001
<b>Dec - May Site Specific Guideline Value (SSGV)</b>				96.2	9.08	115	93.2	7.85	79.1	0.37	0.03	0.0003	0.00002	0.00001	0.0002	0.03	0.001	0.002	0.00003	
<b>June - Nov SSGV</b>				89.7	10.28	88	60.85	7.62	98.4	5.12	0.04	0.0003	0.00002	0.00001	0.0002	0.02	0.001	0.002	0.00003	
<b>CG-IS</b>	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	-	362.8	-	8.17	-	1	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.001	0.0001
	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
	Jan-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Feb-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mar-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	May-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jun-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-25	No	10.7	85.1	-	13.1	80.9	9.30	179	2.6	0.03	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.004	0.0001
	Aug-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sep-25	No	12.1	96.6	-	483	364.4	8.00	175.1	1.63	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.001	0.0001
	Oct-25	No	14.4	95.8	-	582	464.4	7.84	124.5	0.24	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.001	0.0001
	Nov-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dec-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-26	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>YR1-IS</b>	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	0.00015
	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
	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
	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
	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
	Aug-24	No	8.6	89.8	-	55.8	-	7.67	-	3.62	0.07	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.001	0.0001
	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
	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
	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
	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
	Jan-25	No	19.5	86.6	9	19.2	110	8.01	235	14.16	0.04	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.003	0.0001
	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
	Mar-25	No	19.5	101.4	9.6	39.3	178	8.46	175	1.16	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.002	0.0001
	Apr-25	Yes	18.7	91.6	10.4	36.3	171	8.76	195	0.98	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.006	0.0001
	May-25	Yes	10.3	95.1	-	35.1	25.2	8.84	110.9	1.29	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.002	0.0001
	Jun-25	No	5.9	89.8	-	18.2	11.5	8.66	122.1	11.92	0.14	0.001	0.0001	0.001	0.001	0.002	0.12	0.001	0.003	0.0001
	Jul-25	No	9.3	88.8	-	15.3	10.7	8.60	207.5	7.02	0.12	0.001	0.0001	0.001	0.001	0.002	0.06	0.001	0.001	0.0001
	Aug-25	No	15.6	101.0	-	42.9	35.2	7.80	290	4.21	0.04	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.002	0.0001
	Sep-25	No	8.6	96.6	-	85.1	58.4	8.30	166.5	1	0.7	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.002	0.0001
	Oct-25	No	9.6	91.8	-	108.4	76.4	7.66	94.9	1.3	0.06	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.002	0.0001
	Nov-25	No	16	76.6	-	111.9	92.6	7.93	139.7	1.75	0.02	0.001	0.0001	0.001	0.004	0.002	0.05	0.001	0.002	0.0001
	Dec-25	No	20.1	81.9	-	124.8	113.2	8.28	134.6	31.04	0.02	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.002	0.0001
	Jan-26	No	23.7	87.8	-	169.5	165.4	8.17	127.1	0.9	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.008	0.0001

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

Parameter	Dissolved Ni (mg/L)	TN (mg/L)	TP (mg/L)	Dissolved Ag (mg/L)	Dissolved Zn (mg/L)	Ammonia (mg/L)	Nitrogen Oxides (mg/L)	Reactive Phosphorus (mg/L)	Total Hardness (mg/L) (CaCO3)	Total Kjeldahl 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)	
<b>YARRANGOBILLY CATCHMENT</b>																									
Default Guideline Value (DGV)	0.008	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)	0.001	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 Value (SSGV)	0.001	0.2	0.02	0.00002	0.002	0.013	0.015	0.020	47	0.2	52	0.2													
June - Nov SSGV	0.001	0.2	0.02	0.00002	0.002	0.013	0.015	0.015	30	0.2	39	1.0													
<b>CG-IS</b>																									
Mar-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Apr-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
May-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Jun-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Jul-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aug-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sep-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Oct-24	0.001	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	0.001	0.1	0.01	0.001	0.005	0.010	0.02	0.01	287	0.1	336	1	0.01	0.001	0.0001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.05	0.0001	
Jan-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Feb-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mar-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Apr-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
May-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Jun-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Jul-25	0.001	0.1	0.02	0.001	0.005	0.040	0.07	0.01	290	0.1	347	1	0.03	0.001	0.0001	0.001	0.001	0.001	0.001	0.004	0.001	0.005	0.05	0.0001	
Aug-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sep-25	0.001	0.2	0.01	0.001	0.005	0.010	0.01	0.01	249	0.2	312	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	
Oct-25	0.001	0.1	0.01	0.001	0.005	0.010	0.01	0.01	272	0.1	312	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	
Nov-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dec-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Jan-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>YR1-IS</b>																									
Mar-24	0.001	0.1	0.005	0.00001	0.001	0.050	0.05	0.005	34	0.1	66	0.1													
Apr-24	0.001	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	0.001	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	0.001	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	0.001	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	0.001	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	0.001	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	0.001	0.1	0.02	0.001	0.005	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	0.001	0.1	0.01	0.001	0.005	0.010	0.01	0.01	46	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	0.001	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	0.001	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	0.001	0.2	0.03	0.001	0.005	0.040	0.02	0.01	46	0.2	51	4	0.15	0.001	0.0001	0.001	0.001	0.001	0.01	0.001	0.001	0.015	0.16	0.0001	
Mar-25	0.001	0.1	0.01	0.001	0.005	0.030	0.01	0.01	90	0.1	100	1	0.01	0.001	0.0001	0.001	0.001	0.001	0.003	0.001	0.001	0.005	0.05	0.0001	
Apr-25	0.001	0.2	0.02	0.001	0.005	0.040	0.01	0.01	87	0.2	100	1	0.01	0.001	0.0001	0.001	0.001	0.001	0.006	0.001	0.001	0.005	0.05	0.0001	
May-25	0.001	0.1	0.01	0.001	0.005	0.020	0.01	0.01	82	0.1	96	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	
Jun-25	0.001	0.3	0.02	0.001	0.008	0.020	0.02	0.01	36	0.3	83	7	0.71	0.001	0.0001	0.002	0.001	0.001	0.014	0.002	0.001	0.01	0.56	0.0001	
Jul-25	0.001	0.1	0.02	0.001	0.005	0.010	0.02	0.01	24	0.1	44	2	0.15	0.001	0.0001	0.001	0.002	0.001	0.005	0.001	0.001	0.005	0.2	0.0001	
Aug-25	0.001	0.2	0.03	0.001	0.005	0.010	0.2	0.01	41	0.1	53	1	0.07	0.001	0.0001	0.001	0.001	0.001	0.003	0.001	0.001	0.005	0.05	0.0001	
Sep-25	0.001	0.2	0.04	0.001	0.005	0.010	0.01	0.01	29	0.1	56	1	0.12	0.001	0.0001	0.001	0.001	0.001	0.004	0.001	0.001	0.005	0.08	0.0001	
Oct-25	0.001	0.1	0.01	0.001	0.005	0.040	0.01	0.01	41	0.1	63	1	0.12	0.001	0.0001	0.001	0.001	0.001	0.004	0.001	0.001	0.005	0.09	0.0001	
Nov-25	0.001	0.2	0.01	0.001	0.012	0.010	0.2	0.01	51	0.2	67	2	0.05	0.001	0.0001	0.001	0.014	0.001	0.01	0.001	0.001	0.013	0.14	0.0001	
Dec-25	0.001	0.2	0.01	0.001	0.005	0.060	0.01	0.01	48	0.2	110	1	0.03	0.001	0.0001	0.001	0.001	0.001	0.003	0.001	0.001	0.005	0.05	0.0001	
Jan-26	0.001	0.1	0.02	0.001	0.018	0.020	0.02	0.01	75	0.1	125	1	0.02	0.001	0.0001	0.001	0.001	0.001	0.008	0.001	0.001	0.015	0.06	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)	
<b>YARRANGOBILLY CATCHMENT</b>																				
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	
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	
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	
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	
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
	Apr-24	No	12.5	60.1	-	658	-	7.69	-	69.72	0.01	0.001	0.0001	0.001	0.001	0.02	0.34	0.001	0.184	0.0001
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	Mar-25	Yes	22	59.6	8.7	134.7	610	7.62	173	9.64	0.08	0.004	0.0001	0.001	0.015	0.002	2.51	0.001	0.597	0.0001
	Apr-25	Yes	17.9	54.1	8.9	131	645	7.52	207	50.12	0.01	0.003	0.0001	0.001	0.001	0.002	1.38	0.001	0.997	0.0001
	May-25	Yes	11.2	37.1	-	134	-	7.47	-	71.43	0.01	0.003	0.0001	0.001	0.001	0.002	1.9	0.001	0.736	0.0001
	Jun-25	No	9	68.5	-	136.5	94.9	7.25	112.7	1.32	0.01	0.001	0.0001	0.001	0.001	0.002	0.75	0.001	0.261	0.0001
	Jul-25	No	8.1	83.7	-	78.3	53.1	9.10	185.7	36.35	0.09	0.001	0.0001	0.001	0.001	0.002	0.07	0.001	0.001	0.0001
	Aug-25	No	14.8	96.7	-	67.2	54.1	7.80	267.5	6.39	0.01	0.001	0.0001	0.001	0.001	0.001	0.005	0.001	0.009	0.001
	Sep-25	No	9.6	91.9	-	527	372	8.00	174.7	6.43	0.01	0.001	0.0001	0.001	0.001	0.002	0.005	0.001	0.006	0.0001
	Oct-25	No	17.2	96.2	-	674	57	7.86	125.1	2.62	0.01	0.001	0.0001	0.001	0.001	0.002	0.5	0.001	0.011	0.0001
	Nov-25	No flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dec-25	No	21.6	72.3	-	61.9	57.9	7.72	117	5.56	0.01	0.001	0.0001	0.001	0.001	0.002	0.16	0.001	0.113	0.0001
	Jan-26	No flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	Mar-25	No	22.2	102.1	9.5	39.9	182	8.55	158	0.89	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.003	0.0001
	Apr-25	No	18.1	95.3	10.5	37.7	178	8.46	195	0.94	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.003	0.0001
	May-25	No	10.8	96.8	-	35.7	26	8.87	110.1	1.27	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.001	0.0001
	Jun-25	No	5.9	89.8	-	18.2	12.6	8.66	112.7	11.92	0.26	0.001	0.0001	0.001	0.002	0.002	0.18	0.001	0.004	0.0001
	Jul-25	No	8.1	86.0	-	11.2	7.6	9.10	191.5	11.35	0.07	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.002	0.0001
	Aug-25	No	12.1	97.7	-	15.4	11.6	7.60	294	6.18	0.8	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.01	0.0001
	Sep-25	No	5.6	94.6	-	64.7	40.8	8.10	177.7	2	0.03	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.003	0.0001
	Oct-25	No	14.3	100.2	-	102.2	81.1	7.78	112.6	1.44	0.05	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.001	0.0001
	Nov-25	No	16.9	79.5	-	116.1	98.1	7.79	168.2	0.63	0.02	0.001	0.0001	0.001	0.011	0.002	0.05	0.001	0.002	0.0001
	Dec-25	No	18.2	81.4	-	109.7	95.5	8.13	131.5	4.63	0.1	0.001	0.0001	0.001	0.001	0.002	0.06	0.001	0.005	0.0001
	Jan-26	No	24.2	91.8	-	256.4	252.6	8.29	114.4	6.37	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.004	0.0001

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

Parameter	Dissolved Ni (mg/L)	TN (mg/L)	TP (mg/L)	Dissolved Ag (mg/L)	Dissolved Zn (mg/L)	Ammonia (mg/L)	Nitrogen Oxides (mg/L)	Reactive Phosphorus (mg/L)	Total Hardness (mg/L) (CaCO3)	Total Kjeldahl 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)	
<b>YARRANGOBILLY CATCHMENT</b>																									
Default Guideline Value (DGV)	0.008	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)	0.001	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 Value (SSGV)	0.001	0.2	0.02	0.00002	0.002	0.013	0.015	0.020	47	0.2	52	0.2													
June - Nov SSGV	0.001	0.2	0.02	0.00002	0.002	0.013	0.015	0.015	30	0.2	39	1.0													
LHG-IS																									
Mar-24	0.003	0.1	0.01	0.00001	0.006	0.050	0.05	0.005	297	1	330	20													
Apr-24	0.001	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	0.001	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	0.001	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	0.001	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	0.001	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	0.001	0.1	0.09	0.001	0.006	0.010	0.01	0.01	294	0.06	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	0.001	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	0.001	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	0.001	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	0.001	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	0.001	0.3	0.06	0.001	0.005	0.010	0.06	0.01	333	0.2	378	11	0.09	0.001	0.0001	0.001	0.001	0.001	0.121	0.001	0.001	0.007	0.41	0.0001	
Mar-25	0.001	0.3	0.1	0.001	0.005	0.070	0.04	0.01	326	0.3	372	50	0.1	0.001	0.0001	0.001	0.01	0.001	0.559	0.001	0.001	0.006	4.16	0.0001	
Apr-25	0.001	0.4	0.16	0.001	0.006	0.030	0.01	0.01	348	0.4	372	64	0.55	0.01	0.0001	0.001	0.002	0.001	1.17	0.001	0.001	0.008	8.45	0.0001	
May-25	0.001	0.2	0.44	0.001	0.005	0.040	0.03	0.01	333	0.2	406	131	0.61	0.019	0.0001	0.001	0.001	0.002	2.22	0.002	0.001	0.009	19.2	0.0001	
Jun-25	0.001	0.2	0.02	0.001	0.006	0.030	0.01	0.01	333	0.2	452	9	0.22	0.001	0.0001	0.001	0.001	0.001	0.281	0.001	0.001	0.005	1.32	0.0001	
Jul-25	0.001	0.2	0.04	0.001	0.005	0.020	0.03	0.01	177	0.2	247	68	0.46	0.001	0.0001	0.001	0.001	0.001	0.134	0.001	0.001	0.005	1.04	0.0001	
Aug-25	0.001	0.1	0.01	0.001	0.005	0.020	0.1	0.01	277	0.1	346	12	0.05	0.001	0.0001	0.001	0.001	0.001	0.014	0.001	0.001	0.005	0.09	0.0001	
Sep-25	0.001	0.1	0.04	0.001	0.005	0.030	0.01	0.01	265	0.1	350	1	0.08	0.001	0.0001	0.001	0.001	0.001	0.008	0.001	0.001	0.005	0.07	0.0001	
Oct-25	0.001	0.1	0.01	0.001	0.005	0.010	0.01	0.01	264	0.1	344	2	0.05	0.001	0.0001	0.001	0.001	0.001	0.016	0.001	0.001	0.006	0.1	0.0001	
Nov-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dec-25	0.001	0.2	0.03	0.001	0.005	0.040	0.01	0.01	267	0.2	470	14	0.1	0.001	0.0001	0.001	0.001	0.001	0.11	0.001	0.001	0.005	0.38	0.0001	
Jan-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
YR2-IS																									
Mar-24	0.001	0.1	0.005	0.00001	0.001	0.050	0.05	0.005	27	1	58	0.1													
Apr-24	0.001	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	0.001	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	0.001	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	0.001	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	0.001	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	0.001	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	0.001	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	0.001	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	0.001	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	0.001	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	0.001	0.4	0.02	0.001	0.005	0.020	0.05	0.01	48	0.3	72	5	0.2	0.001	0.0001	0.001	0.001	0.001	0.01	0.001	0.001	0.005	0.21	0.0001	
Mar-25	0.001	0.1	0.01	0.001	0.005	0.010	0.01	0.01	90	0.1	104	1	0.01	0.001	0.0001	0.001	0.001	0.001	0.004	0.001	0.001	0.005	0.05	0.0001	
Apr-25	0.001	0.1	0.04	0.001	0.005	0.020	0.02	0.01	87	0.1	100	1	0.01	0.001	0.0001	0.001	0.001	0.001	0.004	0.001	0.001	0.005	0.05	0.0001	
May-25	0.001	0.1	0.01	0.001	0.005	0.010	0.03	0.01	82	0.1	94	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	
Jun-25	0.001	9.3	0.01	0.001	0.005	0.010	8.13	0.01	36	1.2	62	6	0.67	0.001	0.0001	0.002	0.001	0.001	0.011	0.002	0.001	0.005	0.48	0.0001	
Jul-25	0.001	0.1	0.05	0.001	0.005	0.600	0.1	<0.01	17	0.1	37	9	0.29	0.001	0.0001	0.001	0.001	0.001	0.013	0.001	0.001	0.005	0.28	0.0001	
Aug-25	0.001	0.1	0.01	0.001	0.005	0.010	0.1	0.01	31	0.1	37	9	0.07	0.001	0.0001	0.001	0.001	0.001	0.008	0.001	0.001	0.005	0.06	0.0001	
Sep-25	0.001	0.3	0.07	0.001	0.007	0.010	0.02	0.01	23	0.3	38	1	0.1	0.001	0.0001	0.001	0.001	0.001	0.005	0.001	0.001	0.006	0.09	0.0001	
Oct-25	0.001	0.1	0.02	0.001	0.005	0.010	0.01	0.01	33	0.1	56	1	0.08	0.001	0.0001	0.001	0.001	0.001	0.003	0.001	0.001	0.005	0.06	0.0001	
Nov-25	0.001	0.2	0.01	0.001	0.019	0.010	0.01	0.01	51	0.2	70	2	0.04	0.001	0.0001	0.001	0.011	0.001	0.004	0.001	0.001	0.017	0.05	0.0001	
Dec-25	0.001	0.2	0.01	0.001	0.005	0.030	0.01	0.01	41	0.2	98	1	0.09	0.001	0.0001	0.001	0.001	0.001	0.005	0.001	0.001	0.005	0.09	0.0001	
Jan-26	0.001	0.2	0.02	0.001	0.012	0.010	0.02	0.01	76	0.2	122	1	0.02	0.001	0.0001	0.001	0.001	0.001	0.004	0.001	0.001	0.063	0.05	0.0001	

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

Parameter	Sheen/ oil/ grease	Temp. (°C)	Dissolved Oxygen (DO %)	DO (ppm)	Specific EC (SPC uS/cm)	EC (uS/cm)	pH	Redox (mV)	Turbidity (NTU)	Dissolved Al (mg/L)	Dissolved As (mg/L)	Dissolved Cd (mg/L)	Dissolved Cr (mg/L)	Dissolved Cu (mg/L)	Cyanide (mg/L)	Dissolved Fe (mg/L)	Dissolved Pb (mg/L)	Dissolved Mn (mg/L)	Dissolved Hg (mg/L)	
<b>YARRANGOBILLY CATCHMENT</b>																				
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	
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	
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	
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	
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
	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
	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
	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
	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
	Jan-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Feb-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mar-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	May-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jun-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-25	No	9.4	84.5	-	20.2	14.2	9.10	177.5	37.69	0.49	0.001	0.0001	0.001	0.001	0.002	0.31	0.001	0.001	0.0001
	Aug-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sep-25	No	9.9	93.1	-	118.5	84.4	8.20	171.2	4.33	0.05	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.001	0.0001
	Oct-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nov-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dec-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-26	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

Parameter	Dissolved Ni (mg/L)	TN (mg/L)	TP (mg/L)	Dissolved Ag (mg/L)	Dissolved Zn (mg/L)	Ammonia (mg/L)	Nitrogen Oxides (mg/L)	Reactive Phosphorus (mg/L)	Total Hardness (mg/L) (CaCO3)	Total Kjeldahl 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)	
<b>YARRANGOBILLY CATCHMENT</b>																									
Default Guideline Value (DGV)	0.008	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)	0.001	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 Value (SSGV)	0.001	0.2	0.02	0.00002	0.002	0.013	0.015	0.020	47	0.2	52	0.2													
June - Nov SSGV	0.001	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	<i>0.001</i>	<i>1.8</i>	<i>0.03</i>	<i>0.001</i>	<i>0.024</i>	<i>0.030</i>	<i>0.85</i>	<i>0.01</i>	<i>62</i>	<i>0.9</i>	<i>110</i>	<i>1</i>	<i>0.09</i>	<i>0.001</i>	<i>0.0001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.006</i>	<i>0.001</i>	<i>0.025</i>	<i>0.4</i>	<i>0.0001</i>
	Aug-24	<i>0.001</i>	<i>0.1</i>	<i>0.01</i>	<i>0.001</i>	<i>0.005</i>	<i>0.010</i>	<i>0.01</i>	<i>0.01</i>	<i>62</i>	<i>0.1</i>	<i>110</i>	<i>5</i>	<i>0.21</i>	<i>0.001</i>	<i>0.0001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.005</i>	<i>0.09</i>	<i>0.0001</i>
	Sep-24	<i>0.001</i>	<i>0.7</i>	<i>0.03</i>	<i>0.001</i>	<i>0.036</i>	<i>0.010</i>	<i>0.07</i>	<i>0.01</i>	<i>65</i>	<i>0.6</i>	<i>108</i>	<i>5</i>	<i>0.10</i>	<i>0.001</i>	<i>0.0001</i>	<i>0.001</i>	<i>0.003</i>	<i>0.001</i>	<i>0.004</i>	<i>0.001</i>	<i>0.001</i>	<i>0.028</i>	<i>0.08</i>	<i>0.0001</i>
	Oct-24	<i>0.001</i>	<i>0.4</i>	<i>0.02</i>	<i>0.001</i>	<i>0.005</i>	<i>0.010</i>	<i>0.18</i>	<i>0.01</i>	<i>58</i>	<i>0.2</i>	<i>100</i>	<i>1</i>	<i>0.13</i>	<i>0.001</i>	<i>0.0001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.005</i>	<i>0.1</i>	<i>0.0001</i>	
	Nov-24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Dec-24	<i>0.001</i>	<i>0.1</i>	<i>0.01</i>	<i>0.001</i>	<i>0.005</i>	<i>0.01</i>	<i>0.01</i>	<i>0.01</i>	<i>53</i>	<i>0.1</i>	<i>85</i>	<i>8</i>	<i>0.57</i>	<i>0.001</i>	<i>0.0001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.013</i>	<i>0.001</i>	<i>0.001</i>	<i>0.005</i>	<i>0.41</i>	<i>0.0001</i>
	Jan-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Feb-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Mar-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Apr-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	May-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Jun-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Jul-25	<i>0.002</i>	<i>0.2</i>	<i>0.05</i>	<i>0.001</i>	<i>0.005</i>	<i>0.16</i>	<i>0.01</i>	<i>0.01</i>	<i>39</i>	<i>0.2</i>	<i>71</i>	<i>6</i>	<i>1.64</i>	<i>0.001</i>	<i>0.0001</i>	<i>0.002</i>	<i>0.001</i>	<i>0.003</i>	<i>0.015</i>	<i>0.002</i>	<i>0.001</i>	<i>0.008</i>	<i>1.16</i>	<i>0.0001</i>
	Aug-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Sep-25	<i>0.001</i>	<i>0.1</i>	<i>0.02</i>	<i>0.001</i>	<i>0.005</i>	<i>0.01</i>	<i>0.01</i>	<i>0.01</i>	<i>44</i>	<i>0.1</i>	<i>71</i>	<i>2</i>	<i>0.5</i>	<i>0.001</i>	<i>0.0001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.003</i>	<i>0.001</i>	<i>0.001</i>	<i>0.005</i>	<i>0.29</i>	<i>0.002</i>
	Oct-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Nov-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Dec-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Jan-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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)	
<b>TALBINGO RESERVOIR</b>																					
<b>DGV</b>		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	
<b>LOR</b>										0.1	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.001	0.0001	
<b>Dec - May SSGV</b>				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	
<b>June - Nov SSGV</b>				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	
<b>TR-RS</b>	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	
	Apr-24	No	12.2	85.9	-	25.9	-	7.17	-	0.02	0.01	0.001	0.0001	0.001	0.001	0.005	0.02	0.05	0.001	0.026	0.0001
	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	
	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	
	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	
	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	
	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	
	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	
	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	0.005	0.0001	
	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	
	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	
	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	
	Mar-25	No	21.3	90.1	8.9	8.3	36	7.56	138	3.25	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.002	0.0001	
	Apr-25	No	17.6	67.6	9.9	5.8	26	6.96	190	1.3	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.03	0.0001	
	May-25	No	12.3	88.6	-	5.9	4.5	7.59	109.8	1.68	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.003	0.0001	
	Jun-25	No	10.5	86.4	-	6.1	4.4	8.34	111.9	3.15	0.02	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.008	0.0001	
	Jul-25	No	7.9	90	-	6.5	4.4	7.78	168.1	7.5	0.1	0.001	0.0001	0.001	0.001	0.002	0.18	0.001	0.011	0.0001	
	Aug-25	No	12.5	103.6	-	5.8	4.5	7.1	246.8	6.08	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.002	0.0001	
	Sep-25	No	11.3	95.6	-	41.3	30.5	4.9	107.8	1.92	0.02	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.003	0.0001	
	Oct-25	No	13.2	45.9	-	47	36.4	7.35	136.6	1.46	0.02	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.001	0.0001	
	Nov-25	No	18.8	80.7	-	40	37.9	6.91	184.3	1.15	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.003	0.001	
	Dec-25	No	18.3	78.1	-	41.2	36	7.45	155.3	3.59	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.002	0.0001	
	Jan-26	No	24.5	93.4	-	47.4	46.9	7.92	134.4	1.83	0.02	0.002	0.0001	0.001	0.001	0.002	0.05	0.001	0.001	0.0001	

	Reference Site exceeds SSGV
	Impact Site Result exceeds SSGV or DGV
<i>italics</i>	Result exceeds the Limit of Reporting

Parameter	Dissolved Ni (mg/L)	TN (mg/L)	TP (mg/L)	Dissolved Ag (mg/L)	Dissolved Zn (mg/L)	Ammonia (mg/L)	Nitrogen Oxides (mg/L)	Reactive Phosphorus (mg/L)	Total Hardness (mg/L) (CaCO3)	Total Kjeldahl 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)	
<b>TALBINGO RESERVOIR</b>																									
DGV	0.008	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	0.001	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	0.001	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	0.001	0.2	0.02	0.00002	0.002	0.013	0.015	0.015	8	0.2	15	0.2													
TR-RS	0.0005	0.1	0.01	0.00001	0.001	0.050	0.05	0.005	8	0.1	44	0.1													
Mar-24	0.001	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	
Apr-24	0.001	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	
May-24	0.001	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	
Jun-24	0.001	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	
Jul-24	0.001	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	
Aug-24	0.001	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	
Sep-24	0.001	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	
Oct-24	0.001	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	
Nov-24	0.001	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	
Dec-24	0.001	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	
Jan-25	0.001	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	
Feb-25	0.001	0.2	0.03	0.001	0.005	0.010	0.01	0.01	14	0.2	28	1	0.04	0.001	0.0001	0.001	0.001	0.001	0.019	0.001	0.001	0.005	0.06	0.0001	
Mar-25	0.001	0.4	0.05	0.001	0.005	0.020	0.05	0.01	5	0.3	22	1	0.03	0.001	0.0001	0.001	0.001	0.001	0.051	0.001	0.001	0.005	0.09	0.0001	
Apr-25	0.001	0.2	0.07	0.001	0.005	0.030	0.01	0.02	9	0.2	16	1	0.01	0.001	0.0001	0.001	0.001	0.001	0.03	0.001	0.001	0.005	0.05	0.0001	
May-25	0.001	0.1	0.06	0.001	0.005	0.040	0.04	0.01	5	0.1	56	1	0.02	0.001	0.0001	0.001	0.001	0.001	0.046	0.001	0.001	0.005	0.05	0.0001	
Jun-25	0.001	0.1	0.03	0.001	0.005	0.020	0.1	0.01	9	0.1	22	5	0.16	0.001	0.0001	0.001	0.001	0.001	0.111	0.001	0.001	0.009	0.18	0.0001	
Jul-25	0.001	0.1	0.01	0.001	0.005	0.020	0.03	0.01	5	0.1	18	2	0.04	0.001	0.0001	0.001	0.001	0.001	0.006	0.001	0.001	0.005	0.05	0.0001	
Aug-25	0.001	3.2	0.02	0.001	0.006	0.020	2.66	0.01	14	0.5	46	1	0.03	0.001	0.0001	0.001	0.001	0.001	0.005	0.001	0.001	0.01	0.05	0.0001	
Sep-25	0.001	0.1	0.04	0.001	0.005	0.020	0.01	0.01	12	0.1	20	1	0.04	0.001	0.0001	0.001	0.001	0.001	0.004	0.001	0.001	0.005	0.05	0.0001	
Oct-25	0.001	0.2	0.04	0.001	0.021	0.010	0.01	0.01	14	0.2	31	1	0.05	0.001	0.0001	0.001	0.001	0.001	0.009	0.001	0.001	0.005	0.08	0.0001	
Nov-25	0.001	0.2	0.02	0.001	0.005	0.010	0.01	0.01	12	0.2	57	1	0.03	0.001	0.0001	0.001	0.001	0.001	0.008	0.001	0.001	0.005	0.05	0.0001	
Dec-25	0.001	1.1	0.01	0.001	0.005	0.010	0.86	0.01	14	0.2	24	1	0.09	0.001	0.0001	0.001	0.001	0.001	0.01	0.001	0.001	0.022	0.14	0.0001	
Jan-26	0.001	1.1	0.01	0.001	0.005	0.010	0.86	0.01	14	0.2	24	1	0.09	0.001	0.0001	0.001	0.001	0.001	0.01	0.001	0.001	0.022	0.14	0.0001	

	Reference Site exceeds SSGV
	Impact Site Result exceeds SSGV or DGV
<i>italics</i>	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)	
<b>YORKERS CREEK CATCHMENT</b>																				
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	
LOR									0.1	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.001	0.0001	
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	
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	
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
	Apr-24	No	6.8	80.7	-	36.5	-	7.04	-	17.27	0.10	-	0.0001	0.001	0.001	0.02	0.12	0.001	0.014	0.0001
	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
	Jun-24	No	3.5	84.2	-	30.1	-	7.99	-	26.48	0.09	0.001	0.0001	0.001	0.001	0.02	0.18	0.001	0.021	0.0001
	Jul-24	No	2.9	83.1	-	27.8	-	7.40	-	7.97	0.19	0.001	0.0001	0.001	0.001	0.02	0.21	0.001	0.010	0.0001
	Aug-24	No	7.3	82.7	-	21.6	-	6.89	-	19.36	0.33	0.001	0.0001	0.001	0.001	0.02	0.29	0.001	0.017	0.0001
	Sep-24	No	12.3	86.5	-	19.5	-	7.58	-	15.51	0.09	0.001	0.0001	0.001	0.001	0.02	0.16	0.001	0.013	0.0001
	Oct-24	No	18.3	87.8	-	21.8	-	7.55	-	17.9	0.14	0.001	0.0001	0.001	0.001	0.02	0.15	0.001	0.013	0.0001
	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	0.02	0.12	0.001	0.014	0.0001
	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	0.02	0.16	0.001	0.024	0.0001
	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	0.02	0.15	0.001	0.015	0.0001
	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	0.02	0.32	0.001	0.009	0.0001
	Mar-25	No	17.4	81.4	9.3	9.7	43	7.46	170	20.65	0.45	0.001	0.0001	0.001	0.001	0.02	0.3	0.001	0.009	0.0001
	Apr-25	No	11	77.6	10.2	8.6	39	7.64	148	15.23	0.12	0.001	0.0001	0.001	0.001	0.02	0.17	0.001	0.004	0.0001
	May-25	Yes	4.2	83.9	-	9.1	5.5	7.73	116.9	11.81	0.08	0.001	0.0001	0.001	0.001	0.02	0.14	0.001	0.004	0.0001
	Jun-25	No	5.4	83.0	-	7.8	4.9	8.24	114.3	14.6	0.19	0.001	0.0001	0.001	0.001	0.02	0.31	0.001	0.016	0.0001
	Jul-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Aug-25	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sep-25	No	6.6	85.4	-	28.2	18.3	6.80	112.7	16.12	0.1	0.001	0.0001	0.001	0.001	0.02	0.15	0.001	0.011	0.0001
	Oct-25	No	9.9	40.7	-	38.9	27.3	6.80	134.9	10.07	0.14	0.001	0.0001	0.001	0.001	0.02	0.57	0.001	0.025	0.0001
	Nov-25	No	20.1	74.5	-	43.9	39.8	6.88	164.7	14.8	0.16	0.001	0.0001	0.001	0.001	0.02	0.25	0.001	0.015	0.0001
	Dec-25	No	11.1	58.9	-	55.2	40.5	6.84	151.7	32.56	0.26	0.001	0.0001	0.001	0.001	0.02	1.04	0.001	0.132	0.0001
	Jan-26	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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
	Apr-24	No	5.9	86.0	-	39.4	-	7.33	-	221.78	0.05	0.001	0.0001	0.001	0.001	0.02	0.11	0.001	0.014	0.0001
	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
	Jun-24	No	3.2	84.6	-	38.9	-	7.76	-	2.46	0.06	0.001	0.0001	0.001	0.001	0.02	0.1	0.001	0.009	0.0001
	Jul-24	No	3.2	85.0	-	32.8	-	7.11	-	8.29	0.28	0.001	0.0001	0.001	0.001	0.02	0.22	0.001	0.005	0.0001
	Aug-24	No	7.3	84.7	-	23.2	-	6.85	-	22.38	0.51	0.001	0.0001	0.001	0.001	0.02	0.34	0.001	0.011	0.0001
	Sep-24	No	9.3	84.5	-	26.9	-	7.52	-	3.34	0.07	0.001	0.0001	0.001	0.001	0.02	0.1	0.001	0.008	0.0001
	Oct-24	No	11.3	84.0	-	27	-	7.36	-	6.4	0.1	0.001	0.0001	0.001	0.001	0.02	0.12	0.001	0.010	0.0001
	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	0.02	0.1	0.001	0.011	0.0001
	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	0.02	0.1	0.001	0.004	0.0001
	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	0.02	0.14	0.001	0.013	0.0001
	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	0.02	0.24	0.001	0.016	0.0001
	Mar-25	No	15.9	89.2	9.6	10.7	48	7.32	152	3.01	0.07	0.001	0.0001	0.001	0.002	0.02	0.21	0.001	0.016	0.0001
	Apr-25	No	12.5	84.0	10.7	11.1	49	7.42	166	2.71	0.04	0.001	0.0001	0.001	0.001	0.02	0.1	0.001	0.018	0.0001
	May-25	No	5.4	85.5	-	10.6	6.6	7.54	111.1	2.84	0.05	0.001	0.0001	0.001	0.001	0.02	0.1	0.001	0.013	0.0001
	Jun-25	No	5.6	83.1	-	8.1	5.1	8.07	114.4	18.14	0.18	0.001	0.0001	0.001	0.001	0.02	0.3	0.001	0.01	0.0001
	Jul-25	No	5.7	81.6	-	6.4	4.1	7.95	170.2	18.25	0.45	0.001	0.0001	0.001	0.001	0.02	0.29	0.001	0.005	0.0001
	Aug-25	No	6.7	89.7	-	10.6	6.9	7.20	253.9	7.77	0.17	0.001	0.0001	0.001	0.001	0.02	0.15	0.001	0.009	0.0001
	Sep-25	No	7.1	87.9	-	35.8	23.5	6.10	115.3	4.58	0.6	0.001	0.0001	0.001	0.001	0.02	0.19	0.001	0.01	0.0001
	Oct-25	No	9.9	40.7	-	44.6	31.7	6.93	156.2	4.01	0.08	0.001	0.0001	0.001	0.001	0.02	0.1	0.001	0.008	0.0001
	Nov-25	No	15.5	68.9	-	24.6	20.2	6.96	165.7	4.4	0.09	0.001	0.0001	0.001	0.003	0.02	0.15	0.001	0.011	0.0001
	Dec-25	No	11.8	71.6	-	55.2	40.5	6.84	151.7	32.56	0.1	0.001	0.0001	0.001	0.001	0.02	0.16	0.001	0.011	0.0001
	Jan-26	No Flow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

Parameter	Dissolved Ni (mg/L)	TN (mg/L)	TP (mg/L)	Dissolved Ag (mg/L)	Dissolved Zn (mg/L)	Ammonia (mg/L)	Nitrogen Oxides (mg/L)	Reactive Phosphorus (mg/L)	Total Hardness (mg/L) (CaCO3)	Total Kjedaahl 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)
<b>YORKERS CREEK CATCHMENT</b>																								
DGV	0.008	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	0.001	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	0.001	0.2	0.02	0.00002	0.002	0.013	0.015	0.02	1	0.1	30	3												
June - Nov SSGV	0.001	0.2	0.02	0.00002	0.002	0.013	0.015	0.02	7	0.2	10	0.2												
YK-RS	0.0005	0.1	0.03	0.00001	0.003	0.050	0.05	0.005	1	0.1	30	3												
Mar-24	0.001	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
Apr-24	0.001	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
May-24	0.001	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
Jun-24	0.001	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
Jul-24	0.001	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
Aug-24	0.001	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
Sep-24	0.001	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
Oct-24	0.001	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
Nov-24	0.001	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
Dec-24	0.001	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
Jan-25	0.001	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
Feb-25	0.001	0.4	0.06	0.001	0.005	0.020	0.01	0.01	16	0.4	28	20	0.39	0.001	0.0001	0.001	0.001	0.001	0.015	0.001	0.001	0.005	0.7	0.0001
Mar-25	0.001	0.2	0.01	0.001	0.005	0.040	0.01	0.01	16	0.2	30	8	0.78	0.001	0.0001	0.001	0.001	0.001	0.009	0.001	0.001	0.005	0.74	0.0001
Apr-25	0.001	0.3	0.02	0.001	0.005	0.010	0.18	0.01	16	0.1	33	4	0.52	0.001	0.0001	0.001	0.001	0.001	0.009	0.001	0.001	0.005	0.63	0.0001
May-25	0.001	0.6	0.09	0.001	0.005	0.010	0.02	0.01	9	0.6	90	30	1.07	0.001	0.0001	0.002	0.001	0.001	0.023	0.001	0.001	0.005	0.88	0.0001
Jun-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jul-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aug-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sep-25	0.001	0.3	0.05	0.001	0.005	0.010	0.01	0.01	9	0.3	50	3	0.25	0.001	0.0001	0.001	0.001	0.001	0.013	0.001	0.001	0.005	0.27	0.0001
Oct-25	0.001	0.2	0.04	0.001	0.005	0.010	0.01	0.01	9	0.2	21	7	0.6	0.001	0.0001	0.001	0.001	0.001	0.025	0.001	0.001	0.005	0.57	0.0001
Nov-25	0.001	0.3	0.01	0.001	0.005	0.010	0.01	0.01	9	0.3	42	9	0.94	0.001	0.0001	0.002	0.001	0.001	0.03	0.001	0.001	0.005	0.87	0.0001
Dec-25	0.001	0.9	0.09	0.001	0.024	0.060	0.04	0.01	16	0.9	85	61	1.36	0.001	0.0001	0.002	0.002	0.001	0.161	0.002	0.001	0.017	2.43	0.0001
Jan-26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
YK-IS (D/S)	0.0005	0.1	0.02	0.00001	0.002	0.050	0.05	0.005	1	0.1	15	0.1												
Mar-24	0.001	0.1	0.02	0.001	0.005	0.010	0.03	0.01	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
Apr-24	0.001	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
May-24	0.001	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
Jun-24	0.001	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
Jul-24	0.001	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
Aug-24	0.001	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
Sep-24	0.001	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
Oct-24	0.001	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
Nov-24	0.001	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
Dec-24	0.001	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
Jan-25	0.001	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
Feb-25	0.001	0.3	0.02	0.001	0.005	0.050	0.09	0.01	18	0.2	43	2	0.06	0.001	0.0001	0.001	0.001	0.001	0.019	0.001	0.001	0.005	0.33	0.0001
Mar-25	0.001	0.2	0.02	0.001	0.005	0.030	0.01	0.01	18	0.2	39	1	0.08	0.001	0.0001	0.001	0.001	0.001	0.02	0.001	0.001	0.005	0.26	0.0001
Apr-25	0.001	0.1	0.01	0.001	0.005	0.010	0.01	0.01	18	0.1	36	1	0.17	0.001	0.0001	0.001	0.001	0.001	0.033	0.001	0.001	0.005	0.44	0.0001
May-25	0.001	0.4	0.04	0.001	0.005	0.010	0.01	0.01	12	0.4	89	5	0.24	0.001	0.0001	0.001	0.001	0.001	0.015	0.001	0.001	0.005	0.46	0.0001
Jun-25	0.001	0.2	0.04	0.001	0.005	0.010	0.03	0.01	5	0.2	55	6	0.67	0.001	0.0001	0.001	0.001	0.001	0.009	0.001	0.001	0.005	0.48	0.0001
Jul-25	0.001	0.2	0.06	0.001	0.005	0.080	0.14	0.01	16	0.14	27	2	0.61	0.001	0.0001	0.001	0.001	0.001	0.009	0.001	0.001	0.005	0.18	0.0001
Aug-25	0.001	0.2	0.04	0.001	0.014	0.010	0.02	0.01	12	0.2	48	2	0.12	0.001	0.0001	0.001	0.001	0.001	0.01	0.001	0.001	0.007	0.19	0.0001
Sep-25	0.001	0.1	0.02	0.001	0.005	0.020	0.01	0.01	12	0.1	22	2	0.27	0.001	0.0001	0.001	0.001	0.001	0.011	0.001	0.001	0.005	0.27	0.0001
Oct-25	0.001	0.4	0.01	0.001																				

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)	
<b>YORKERS CREEK CATCHMENT</b>																				
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	
LOR									0.1	0.01	0.001	0.0001	0.001	0.001	0.002	0.05	0.001	0.001	0.0001	
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	
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	
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
	Apr-24	No	6.4	84.9	-	67.1	-	7.38	-	0.96	0.03	0.0001	0.001	0.001	0.001	0.02	0.08	0.001	0.006	0.0001
	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
	Jun-24	No	4.4	82.7	-	64.1	-	8.14	-	0.89	0.04	0.001	0.0001	0.001	0.001	0.02	0.07	0.001	0.005	0.0001
	Jul-24	No	3.7	83.9	-	34.8	-	7.44	-	13.66	0.2	0.001	0.0001	0.001	0.001	0.02	0.18	0.001	0.004	0.0001
	Aug-24	No	7.7	84.4	-	28.9	-	6.95	-	15.47	0.44	0.001	0.0001	0.001	0.001	0.02	0.31	0.001	0.008	0.0001
	Sep-24	No	8.2	84.6	-	38.2	-	7.32	-	2.02	0.06	0.001	0.0001	0.001	0.001	0.02	0.08	0.001	0.004	0.0001
	Oct-24	No	11.1	84.5	-	39.6	-	7.47	-	5.3	0.08	0.001	0.0001	0.001	0.001	0.02	0.11	0.001	0.008	0.0001
	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	0.02	0.06	0.001	0.005	0.0001
	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	0.02	0.06	0.001	0.001	0.0001
	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
	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	0.02	0.09	0.001	0.004	0.0001
	Mar-25	No	13.6	84.1	9.6	17.4	78	7.75	165	1.91	0.03	0.001	0.0001	0.001	0.001	0.02	0.07	0.001	0.005	0.0001
	Apr-25	No	9	78.4	10.7	16.6	75	8.24	177	2.03	0.05	0.001	0.0001	0.001	0.001	0.02	0.1	0.001	0.007	0.0001
	May-25	No	3.7	80.3	-	16.4	9.7	7.71	117.1	1.78	0.02	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.004	0.0001
	Jun-25	No	5.5	83.5	-	5.1	5.1	8.47	114.1	4.66	0.06	0.001	0.0001	0.001	0.001	0.02	0.14	0.001	0.006	0.0001
	Jul-25	No	5.7	81.2	-	14.8	5.1	7.97	169.7	9.32	0.18	0.001	0.0001	0.001	0.001	0.02	0.15	0.0001	0.003	0.0001
	Aug-25	No	8.8	89.4	-	12.1	8.4	7.10	250.3	23.99	0.12	0.001	0.0001	0.001	0.001	0.02	0.08	0.001	0.004	0.0001
	Sep-25	No	7.2	87.9	-	48.4	31.9	6.80	126.6	2.68	0.04	0.001	0.0001	0.001	0.001	0.02	0.06	0.001	0.004	0.0001
	Oct-25	No	10.1	39.9	-	65.1	46.6	7.06	152.3	3.28	0.08	0.001	0.0001	0.001	0.001	0.02	0.07	0.001	0.004	0.0001
	Nov-25	No	17.5	67.8	-	31.1	26.7	6.71	133.7	1.81	0.08	0.001	0.0002	0.001	0.509	0.02	0.08	0.013	0.006	0.0001
	Dec-25	No	11.5	69.2	-	101.2	75	7.41	142.2	5.55	0.04	0.001	0.0001	0.001	0.001	0.02	0.07	0.001	0.025	0.0001
	Jan-26	No	19.8	83.1	-	81.6	73.4	7.43	154.9	7.56	0.03	0.001	0.0001	0.001	0.001	0.02	0.05	0.001	0.007	0.0001
YK-IS	Mar-24	No	11.4	78.0	8.53	35	25.8	6.70	41.1	21.44	0.45	0.00015	0.00001	0.000005	0.001	0.001	0.4	0.0005	0.018	0.000015
	Apr-24	No	6.8	80.7	-	36.5	-	7.04	-	12.37	0.09	0.001	0.0001	0.001	0.001	0.02	0.15	0.001	0.016	0.0001
	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
	Jun-24	No	3.9	83.1	-	35.1	-	7.88	-	7.99	0.08	0.001	0.0001	0.001	0.001	0.02	0.15	0.001	0.010	0.0001
	Jul-24	No	3.2	82.8	-	32.5	-	7.00	-	11.9	0.31	0.001	0.0001	0.001	0.001	0.02	0.25	0.001	0.008	0.0001
	Aug-24	No	7.2	81.3	-	23.5	-	6.70	-	25.12	0.67	0.001	0.0001	0.001	0.001	0.02	0.46	0.001	0.015	0.0001
	Sep-24	No	9.3	83.4	-	23.8	-	7.41	-	6.24	0.09	0.001	0.0001	0.001	0.001	0.02	0.13	0.001	0.009	0.0001
	Oct-24	No	13.7	86.3	-	23.7	-	7.83	-	3.1	0.07	0.001	0.0001	0.001	0.001	0.02	0.06	0.001	0.004	0.0001
	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	0.02	0.12	0.001	0.016	0.0001
	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	0.02	0.16	0.001	0.017	0.0001
	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	0.02	0.12	0.001	0.051	0.0001
	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	0.02	0.46	0.001	0.036	0.0001
	Mar-25	No	17.6	71.4	8.8	10.5	45	6.77	161	13.54	0.02	0.001	0.0001	0.001	0.001	0.02	0.19	0.001	0.059	0.0001
	Apr-25	Yes	11.9	65.4	9.7	10.9	49	6.93	183	7.27	0.07	0.001	0.0001	0.001	0.001	0.02	0.19	0.001	0.036	0.0001
	May-25	No	4.9	70.3	-	9.7	6	7.21	15.8	5.62	0.08	0.001	0.0001	0.001	0.001	0.02	0.18	0.001	0.021	0.0001
	Jun-25	No	5.9	84.9	-	8.9	5.6	8.07	110.3	13.6	0.14	0.001	0.0001	0.001	0.001	0.02	0.25	0.001	0.01	0.0001
	Jul-25	No	5.7	81.2	-	7.9	5	7.97	169.7	9.32	0.26	0.001	0.0001	0.001	0.001	0.02	0.2	0.001	0.004	0.0001
	Aug-25	No	6.3	84.1	-	12.2	7.8	7.90	252.8	8.58	0.18	0.001	0.0001	0.001	0.001	0.02	0.14	0.001	0.006	0.0001
	Sep-25	No	7	84.2	-	30.6	20.1	7.00	122.5	7.52	0.1	0.001	0.0001	0.001	0.001	0.02	0.12	0.001	0.006	0.0001
	Oct-25	No	11	41.0	-	39.1	28.6	6.61	151.6	5.67	0.13	0.001	0.0001	0.001	0.001	0.02	0.14	0.001	0.009	0.0001
	Nov-25	No	17.2	67.7	-	15.7	N/A	6.18	N/A	6.52	0.3	0.001	0.0001	0.001	0.154	0.02	0.23	0.002	0.017	0.0001
	Dec-25	No	17.2	67.7	-	15.7	35.8	6.90	143.9	8.09	0.14	0.001	0.0001	0.001	0.001	0.02	0.23	0.001	0.025	0.0001
	Jan-26	Yes	24.1	78.8	-	53.6	52.7	6.69	159.5	21.83	0.09	0.001	0.0001	0.001	0.001	0.02	0.34	0.001	0.087	0.0001

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

Parameter	Dissolved Ni (mg/L)	TN (mg/L)	TP (mg/L)	Dissolved Ag (mg/L)	Dissolved Zn (mg/L)	Ammonia (mg/L)	Nitrogen Oxides (mg/L)	Reactive Phosphorus (mg/L)	Total Hardness (mg/L) (CaCO3)	Total Kjeldahl 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)
<b>YORKERS CREEK CATCHMENT</b>																								
DGV	0.008	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	0.001	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	0.001	0.2	0.02	0.00002	0.002	0.013	0.015	0.02	1	0.1	30	3												
June - Nov SSGV	0.001	0.2	0.02	0.00002	0.002	0.013	0.015	0.02	7	0.2	10	0.2												
NZG-IS																								
	Mar-24	0.0005	0.1	0.01	0.00001	0.002	0.050	0.05	0.005	10	0.1	22	0.1											
	Apr-24	0.001	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	0.001	0.2	0.06	0.001	0.007	0.010	0.03	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	0.001	0.2	0.01	0.001	0.005	0.010	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	0.001	0.2	0.04	0.001	0.005	0.010	0.04	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	0.001	0.4	0.04	0.001	0.005	0.010	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	0.001	0.1	0.04	0.001	0.005	0.010	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	0.001	0.3	0.03	0.001	0.005	0.020	0.07	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	0.001	0.1	0.04	0.001	0.005	0.010	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	0.001	0.2	0.01	0.001	0.005	0.010	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	0.001	0.4	0.02	0.001	0.005	0.070	0.4	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	0.001	0.2	0.04	0.001	0.005	0.030	0.01	30	0.2	64	2	0.07	0.001	0.0001	0.001	0.001	0.001	0.007	0.001	0.001	0.005	0.14	0.0001
	Mar-25	0.001	0.2	0.02	0.001	0.005	0.010	0.17	32	0.1	66	2	0.11	0.001	0.0001	0.001	0.001	0.001	0.007	0.001	0.001	0.005	0.18	0.0001
	Apr-25	0.001	0.2	0.04	0.001	0.005	0.020	0.01	30	0.2	58	1	0.04	0.001	0.0001	0.001	0.001	0.001	0.006	0.001	0.001	0.005	0.12	0.0001
	May-25	0.001	0.1	0.02	0.001	0.005	0.010	0.01	30	0.1	54	1	0.11	0.001	0.0001	0.001	0.005	0.001	0.008	0.001	0.001	0.011	0.16	0.0001
	Jun-25	0.001	0.1	0.02	0.001	0.005	0.010	0.01	23	0.1	85	1	0.14	0.001	0.0001	0.001	0.001	0.001	0.005	0.001	0.001	0.005	0.18	0.0001
	Jul-25	0.001	0.2	0.03	0.001	0.005	0.020	0.01	12	0.2	31	4	0.21	0.001	0.0001	0.001	0.001	0.001	0.006	0.001	0.001	0.005	0.21	0.0001
	Aug-25	0.001	0.1	0.05	0.001	0.005	0.010	0.01	21	0.1	43	1	0.2	0.001	0.0001	0.001	0.001	0.001	0.006	0.001	0.001	0.005	0.17	0.0001
	Sep-25	0.001	0.2	0.03	0.001	0.005	0.010	0.01	18	0.2	57	1	0.16	0.001	0.0001	0.001	0.001	0.001	0.006	0.001	0.001	0.005	0.18	0.0001
	Oct-25	0.001	0.1	0.02	0.001	0.005	0.010	0.01	21	0.1	28	3	0.15	0.001	0.0001	0.001	0.001	0.001	0.007	0.001	0.001	0.005	0.17	0.0001
	Nov-25	0.001	0.2	0.02	0.001	0.005	0.010	0.01	23	0.2	57	1	0.13	0.001	0.0001	0.001	0.001	0.001	0.008	0.001	0.001	0.005	0.18	0.0001
	Dec-25	0.001	0.3	0.07	0.001	0.005	0.010	0.01	23	0.3	84	42	0.43	0.001	0.0001	0.001	0.001	0.001	0.025	0.001	0.001	0.005	0.68	0.0001
	Jan-26	0.001	0.03	0.04	0.001	0.005	0.010	0.03	26	0.2	47	18	0.33	0.001	0.0001	0.001	0.001	0.001	0.021	0.001	0.001	0.01	0.47	0.0001
YK-IS																								
	Mar-24	0.0005	0.1	0.01	0.00001	0.004	0.050	0.05	0.005	1	0.1	21	1											
	Apr-24	0.001	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	0.001	0.2	0.03	0.001	0.005	0.010	0.05	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	0.001	0.3	0.03	0.001	0.005	0.010	0.06	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	0.001	0.3	0.07	0.001	0.009	0.010	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	0.002	0.4	0.04	0.001	0.005	0.030	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	0.001	0.2	0.02	0.001	0.005	0.020	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	0.001	0.2	0.06	0.001	0.005	0.010	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	0.001	0.1	0.04	0.001	0.01	0.010	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	0.001	0.2	0.03	0.001	0.005	0.020	0.02	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	0.001	0.2	0.02	0.001	0.008	0.020	0.01	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	0.001	0.4	0.07	0.001	0.005	0.020	0.02	12	0.4	42	5	1.44	0.001	0.0001	0.002	0.001	0.001	0.048	0.001	0.001	0.005	1.31	0.0001
	Mar-25	0.001	0.2	0.03	0.001	0.005	0.010	0.01	7	0.2	41	13	0.25	0.001	0.0001	0.001	0.001	0.001	0.054	0.001	0.001	0.005	0.74	0.0001
	Apr-25	0.001	0.2	0.02	0.001	0.005	0.020	0.04	21	0.2	37	4	0.15	0.001	0.0001	0.001	0.001	0.001	0.095	0.001	0.001	0.005	0.88	0.0001
	May-25	0.001	0.1	0.03	0.001	0.005	0.010	0.01	14	0.1	33	1	0.15	0.001	0.0001	0.001	0.001	0.001	0.027	0.001	0.001	0.005	0.58	0.0001
	Jun-25	0.001	0.2	0.04	0.001	0.005	0.020	0.01	12	0.2	90	5	0.28	0.001	0.0001	0.001	0.001	0.001	0.011	0.001	0.001	0.005	0.38	0.0001
	Jul-25	0.001	0.3	0.06	0.001	0.005	0.040	0.01	5	0.3	27	4	0.26	0.001	0.0001	0.001	0.001	0.001	0.004	0.001	0.001	0.005	0.2	0.0001
	Aug-25	0.001	0.2	0.03	0.0001	0.005	0.070	0.01	9	0.2	28	5	0.3	0.001	0.0001	0.001	0.001	0.001	0.008	0.001	0.001	0.005	0.26	0.0001
	Sep-25	0.001	0.2	0.04	0.001	0.012	0.030	0.01	5	0.2	46	1	0.44	0.001	0.0001	0.001	0.001	0.001	0.008	0.001	0.001	0.005	0.33	0.0001
	Oct-25	0.001	0.1	0.02	0.001	0.005	0.010	0.01</																



## Appendix D: Calibration Certificate

## 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	<input checked="" type="checkbox"/>	<input type="checkbox"/>
pH	4.1	pH 4.00	+/- 0.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
pH	7	pH 7.00	+/- 0.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ORP	220	225.3mV@24.3	+/- 30mV	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Conductivity <input type="checkbox"/>	12950uS/cm	12900uS/cm	+/- 0.5%	<input checked="" type="checkbox"/>	<input type="checkbox"/>
DO <input type="checkbox"/>	98%	100% @763.3	+/- 2%	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Turbidity	0	0 FNU	+/- 0.3 FNU	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Turbidity	118	124 FNU	+/- 20 FNU	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			+/-	<input type="checkbox"/>	<input type="checkbox"/>
			+/-	<input type="checkbox"/>	<input type="checkbox"/>
			+/-	<input type="checkbox"/>	<input type="checkbox"/>

#### 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