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REPORT

QUARTERLY ENVIRONMENTAL WATER REPORT DECEMBER 2024 – FEBRUARY 2025

S2-FGJV-ENV-REP-0127

REV B

JUNE 2025

This Report has been prepared to satisfy the reporting requirements in the Main Works – Water Management Plan (WMP) and to meet Condition of Approval (CoA) 31(c)(d) of the Infrastructure Approval Schedule which requires publicly available reporting of the outcomes of the WMP. The Report provides commentary on the performance of the monitoring programs as part of the WMP.

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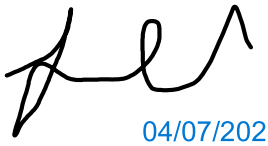
E ndorsed:	Name: Dave Drummond Job Title: QHSE Director Signed:  Justin Tannock 04/07/2025 Date:

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ABBREVIATIONS AND DEFINITIONS

Acronym	Definition
AWS	Automatic weather stations
BoM	Bureau of Meteorology
CoA	Condition of Approval
ECVT	Emergency Cable and Ventilation Tunnel
EPL	Environmental Protection Licence
FGJV	Future Generation Joint Venture
MAT	Main Access Tunnel
MDB	Murray Darling Basin
NEM	National Electricity Market
SHL	Snowy Hydro Limited
Snowy Scheme	Snowy Mountains Hydro-electric Scheme
SWMP	Surface Water Management Plan
TARP	Trigger Action Response Plan
TBM	Tunnel Boring Machine
WMP	Water Management Plan
WQO	Water Quality Objectives

1. INTRODUCTION

Snowy Hydro Limited (SHL) is constructing a pumped hydro-electric expansion of the Snowy Mountains Hydro-electric Scheme (Snowy Scheme), called Snowy 2.0. Snowy 2.0 will be built by the delivery of two projects: Exploratory Works and Snowy 2.0 Main Works (which is ongoing).

Snowy 2.0 is a pumped hydro-electric project that will link the existing Tantangara and Talbingo reservoirs through a series of new underground tunnels and a hydro-electric power station. Most of the project's facilities will be built underground, with approximately 27 kilometres of concrete-lined tunnels constructed to link the two reservoirs and a further 20 kilometres of tunnels required to support the facility. Intake and outlet structures will be built at both Tantangara and Talbingo Reservoirs.

Snowy 2.0 will increase the generation capacity of the Snowy Scheme by an additional 2,200 MW, and at full capacity will provide approximately 350,000 MWh of large-scale energy storage to the National Electricity Market (NEM). This will be enough to ensure the stability and reliability of the NEM, even during prolonged periods of adverse weather conditions.

WeBuild, Clough and Lane have formed the Future Generation Joint Venture (FGJV) and have been engaged to deliver both Stage 2 of Exploratory Works and Snowy 2.0 Main Works.

2. PURPOSE

This Environmental Water Report has been prepared to satisfy the reporting requirements in the Main Works – Water Management Plan (WMP) and to meet Infrastructure Approval CSSI 9687 (CoA) Schedule 3, Condition 31(c)(d) which requires publicly available reporting of the outcomes of the WMP. The Environmental Water Report is intended to provide commentary on the performance of the monitoring programs as part of the WMP (identified in Table 2-1).

A report detailing the management of the SHL controlled groundwater network is to be provided separately by SHL.

Table 2-1: Monitoring Overview

Aspect	Objective
Surface Water Monitoring Program	
Routine receiving surface water quality monitoring	• Inform and assess the performance of management processes/measures that seek to minimise the Project's impact on surface water quality. • Help determine source and extent of any water quality changes. • Collect baseline data to characterise water quality and determine site specific values.
Event based wet weather overtopping water quality monitoring	
Groundwater Monitoring Program	
Groundwater quality monitoring	Inform and assess the performance of management. • Processes/measures that seek to minimise the Project's impact on regional and local (including alluvial) aquifers and GDEs.
Water extraction monitoring	• Inform and assess water usages, site water balance and compliance with water access licences.

3. OVERVIEW

3.1. Reporting Period

This Environmental Water Report covers the monitoring period from 1 December 2024 through to 28 February 2025.

3.2. Construction Progress

Table 3-1 summarises the key construction activities which have been undertaken during the reporting period of 1 December 2024 to 28 February 2025.

Table 3-1: Key Construction Activities

Location	Key Construction Activities
Lobs Hole Ravine Bay	• Spoil placement ongoing from Intake and D&B tunnel. • Piped connection between leachate basin and treatment plant continuing to transfer water.
Lobs Hole	ACCOMMODATION CAMPS • Exploratory Camp Accommodation – Fabrication of all 6 buildings completed 4 out of 6 buildings installed. MAIN YARD • LH Main Office Expansion - Building installation and internal fit-out ongoing. Utilities installation and upgrades ongoing. • Main yard surface temporary works ongoing. ECVT • TBM 1 advancing up the alignment. • Grouting in LST and other testing works ongoing. GF01 • Temporary placement storage management ongoing. TALBINGO • BH05 steel casing installation completed. • Stage 2 excavation is ongoing.
Marica	• USS excavation works ongoing. • Marica Adit Portal clearing and grubbing works throughout the footprint. • Temporary placement works occurring throughout the site.
Rock Forest	• NA – site under operational use as laydown area.
Tantangara	• In HRT, TBM 3 has installed 139.0 rings during the period. • STP processing for muck coming from TBM3 ongoing.

4. WEATHER CONDITIONS

There are several weather stations along the alignment of the project that report real-time data. These include:

- “Lobs Hole” - which is an Automatic Weather Station managed by FGJV in Lobs Hole construction site.
- “Cabramurra” - an Automatic Weather Station located near the lookout in the Cabramurra township managed by the Bureau of Meteorology

- "Tantangara" - an Automatic Weather Station managed by FGJV in Tantangara construction site.

The Tantangara and Cabramurra gauges are in sub-alpine environments, with elevations of approximately 1220 m and 1475 m, respectively. Cabramurra records substantially higher annual rainfall amount than the lower-elevation gauges at Lobs Hole and Tantangara. Tantangara and Lobs Hole weather stations record actual onsite conditions at the respective construction sites, while Cabramurra weather station, at 1470 m is representative of conditions at Marica – which has an elevation of 1480 m and is approximately 15 km north of the Cabramurra Station.

A summary of climate data for the ravine and plateau areas is provided in Table 4.1

Table 4-1: Weather Conditions Within the Reporting Period

Parameter	Lobs Hole[1]			Marica (Cabramurra)			Tantangara[2]		
	Dec	Jan	Feb	Dec	Jan	Feb	Dec	Jan	Feb
Temperature									
Mean maximum	33.4	33.9	34.7	26	27.1	28.3	29.9	29.8	32.5
Mean minimum	6.6	7.6	3.9	1.4	4.4	-1.4	3.5	4.2	-1
Rainfall									
Monthly	112.4	37.6	145	91.6	58.8	2.0	76	96.4	102.8
Long Term Average	94.13	105.67	78.8	76.3	146.3	36.47	127.2	135.87	47.4

1. Lobs Hole long term average rainfall is taken from the Tumbarumba weather station.
2. Tantangara long term average rainfall is taken from the Adaminaby Alpine Tourist Park weather station.

This quarter, climatic conditions typical of the summer months in the Snowy Mountains were noted, primarily including high temperatures, isolated storms through to large scale thunderstorms. Lobs Hole, Marica and Tantangara reached maximum mean temperatures of 34.7°C, 28.3°C and 32.5°C respectively with Lobs Hole reporting the highest temperatures of each site across the reporting period.

In December, Lobs Hole and Marica received higher than average rainfall while Tantangara experienced below average. Tantangara recorded higher than average rainfall during February with volumes more than doubling the long-term average.

5. SURFACE WATER MONITORING PROGRAM

5.1. Routine Surface Water Quality Monitoring

Routine surface water quality monitoring is undertaken in accordance with CoA Condition 31 and Environmental Protection Licence 21266 (EPL - 21266) to determine if project activities may be promoting negative impacts to receiving water quality against the Water Quality Objectives (WQO). The NATA accredited laboratory analytical results have been included in Appendix B.

Publicly available surface water quality monitoring results undertaken in accordance with EPL - 21266 can be accessed here.

During this reporting period, fluctuations of basic physio-chemical water quality indicators were observed on numerous occasions across surface water receptors. Typically, fluctuations were influenced by rainfall events, waterbody depth and streamflow velocities during the reporting period.

Basin monitoring locations were typically influenced by rainfall events, depths to water levels and changes to the catchment characteristics, such as increasing placed spoil volumes that report to a basin.

Consistent algal blooms were observed across Talbingo and Tantangara reservoirs throughout the reporting period. The algal presence is consistent with historic observations made by the Project during the warmer months. The warmer ambient temperatures, reduction in reservoir water volumes (due to construction or potentially SHL BAU operations) and flow reductions are key contributors to these occurrences. The algal presence is reflected in the nutrient concentrations, elevated water temperatures and other such physio-chemical indicators within the water bodies.

Increases to reported thermotolerant coliform units are potentially related to the ability for some coliform strains within the subgroup to grow in the environment (not necessarily related to faecal matter) and for the large numbers of animal matter (bird and horse faecal matter or decomposition) to contribute to water sample volumes. This circumstance may arise when collecting samples from shorelines or stream banks containing animal faecal matter (bird and horse faecal matter), have animals present within the waterbody or in a state of decomposition. These circumstances may influence the reported nutrient concentrations due to the decomposition of plant and animal matter, warmer temperatures and potential flow reductions and may contribute to some of the broader nutrient fluctuations reported during the period.

Minor nutrient fluctuations within EPL31 (up gradient), EPL34 (up gradient), EPL35 and EPL36 are reflective of the aforementioned settings as they occupy smaller water bodies which are subject to seasonal flow influences and heavy animal occupation daily, yet report similar nutrient concentrations across the reporting period, irrespective of the gradient or catchment area.

Alternatively, in locations without similar volumes of animal traffic and seasonal flow influences such as EPL12 and EPL16, the reported total nitrogen concentrations appeared comparably similar, with the above gradient location EPL12 reporting (at times) greater concentrations of total nitrogen compared to the down gradient EPL16.

5.2. Event Based Monitoring

Event based wet weather overtopping water quality monitoring is undertaken in accordance with the SWMP Trigger Action Response Plan (TARP 2) to monitor stormwater overtopping sediment basin discharges. Sediment basins for the Project have been designed to meet, at a minimum, the 85th percentile 5-day rainfall volume (mm). The respective volumes are listed below in Table 5-1.

Table 5-1: Design Rainfall Depths (SWMP Section 5.1.1)

Catchment	Description	85th percentile, 5-day rainfall (mm)	90th percentile, 5-day rainfall (mm)	95th percentile, 5-day rainfall (mm)
Yarrangobilly River	Surface works at Lobs Hole and Marica	28.1	35.6	49.0
Upper Eucumbene River	Surface works between Marica and the Snowy Mountain Highway	35.2	43.4	56.9
Tantangara construction compound	Surface works adjacent to the southern portion of Tantangara Reservoir	30.5	37.0	51.0
Goorudee Rivulet	Surface works at Rock Forest	20.0	25.7	36.1

During the reporting period, occurrences of rainfall exceeding site design capacities of the 85th percentile 5 – day rainfall depths are listed below:

- 6 December 2024 – Lobs Hole - EPL106 overtopped following a total of 153 mm of rainfall since 27 November 2024.
- 7 December 2024 – Lobs Hole - Pad 2 overtopped following 160 mm of rainfall since 27 November 2024.
- 7 December 2024 – Lobs Hole - GF01 Basin overtopping 160 mm of rainfall since 27 November 2024.
- 7 December – 8 December 2024 – Marica MC03 and MC02 respectively overtopped following 71 mm of rainfall since 2 December 2024.
- 10 February 2025 – Lobs Hole – F3a, F5a, F8.5 and F9 overtopped following 51 mm of rainfall since 5 February 2025.
- 10 February 2025 – Marica – MC01, MC02 and MC03 overtopped following 75 mm of rainfall in 24 hours.
- 11 February 2025 – Tantangara – CH300 and Batch Plant overtopped following 57.7 mm of rainfall since 6 February 2025.
- 11 February 2025 – Lobs Hole – F8.5, MYLS and 10.5 overtopped following 89.9 mm of rainfall since 5 February 2025.
- 14 February 2025 – Lobs Hole – F1 and F3b overtopped following 135 mm of rainfall since 5 February 2025.
- 14 February 2025 – Marica – EPL101 overtopped following 78 mm of rainfall in the 10 hours previous.

Following the design exceedances across all Project sites, basic physio-chemical and comprehensive analytical results reported pH, turbidity, electrical conductivity, and dissolved oxygen (DO) levels frequently surpass the established water quality objectives. In response to these conditions, water samples were collected for analysis and the EPA was notified of the releases in accordance with R4.1 of EPL 21266.

6. GROUNDWATER MONITORING PROGRAM

6.1. Groundwater Quality

The Project groundwater network was monitored regularly throughout the reporting period. Fluctuations in EC, turbidity and DO% was most pronounced in bores within proximity to placement activities. Increased sediment load in groundwater bores resulted in the commencement of a bore maintenance program, commencing at Tantangara. Total and dissolved metals were observed in bores with increased sediment loads. These locations typically reflected sediment influenced water physiochemical characteristics. Increasing nutrient concentrations were reported in numerous groundwater locations adjacent placement areas.

Groundwater extraction and bore maintenance works were undertaken at target locations throughout the reporting period. The objective of these works was mitigating any potential risk to receptors where possible.

6.2. Groundwater Levels

Groundwater level monitoring is undertaken in accordance with the Groundwater monitoring program to determine groundwater drawdown as a result from the Project.

6.3. Groundwater Inflows

Groundwater inflow into the tunnels is monitored during construction. This data is required to monitor the volume of extracted groundwater against water access licence limits (Table 6-1).

Table 6-1: Water Access Licence

Water Access Licence	Project	Water Source	Share (ML)
WAL42407 – Specific Purpose Access Licence	Exploratory Works	Upper Tumut water source	227
WAL42408 – Groundwater Licence	Exploratory Works	Lachlan Fold Belt MDB	0
WAL42960 – Groundwater Licence	Exploratory Works	Lachlan Fold Belt MDB	354
RO13-19-093 – via Controlled Allocation	Main Works	Lachlan Fold Belt MDB	3,375
RO1-19-092 – via Controlled Allocation	Main Works	Lachlan Fold Belt South Coast	1,722
Specific Purpose Access Licence	Main Works	Tantangara Water Source	532

7. TRENDS

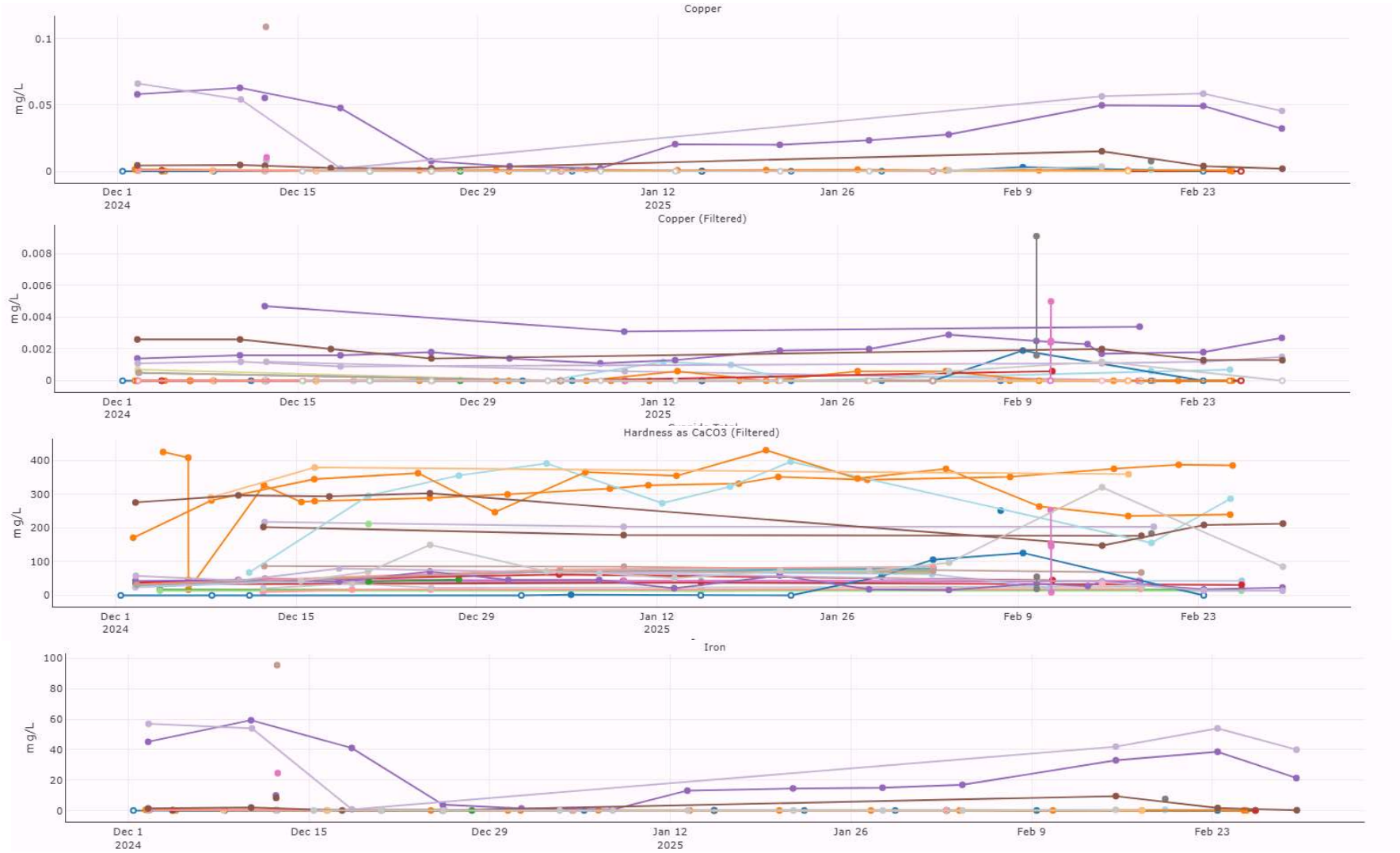
Due to the narrow reporting period, the significant variation in monitoring events across all locations and the inclusion of different monitoring purposes, the following trend analysis focuses on broader observations across project sites within the reporting period.

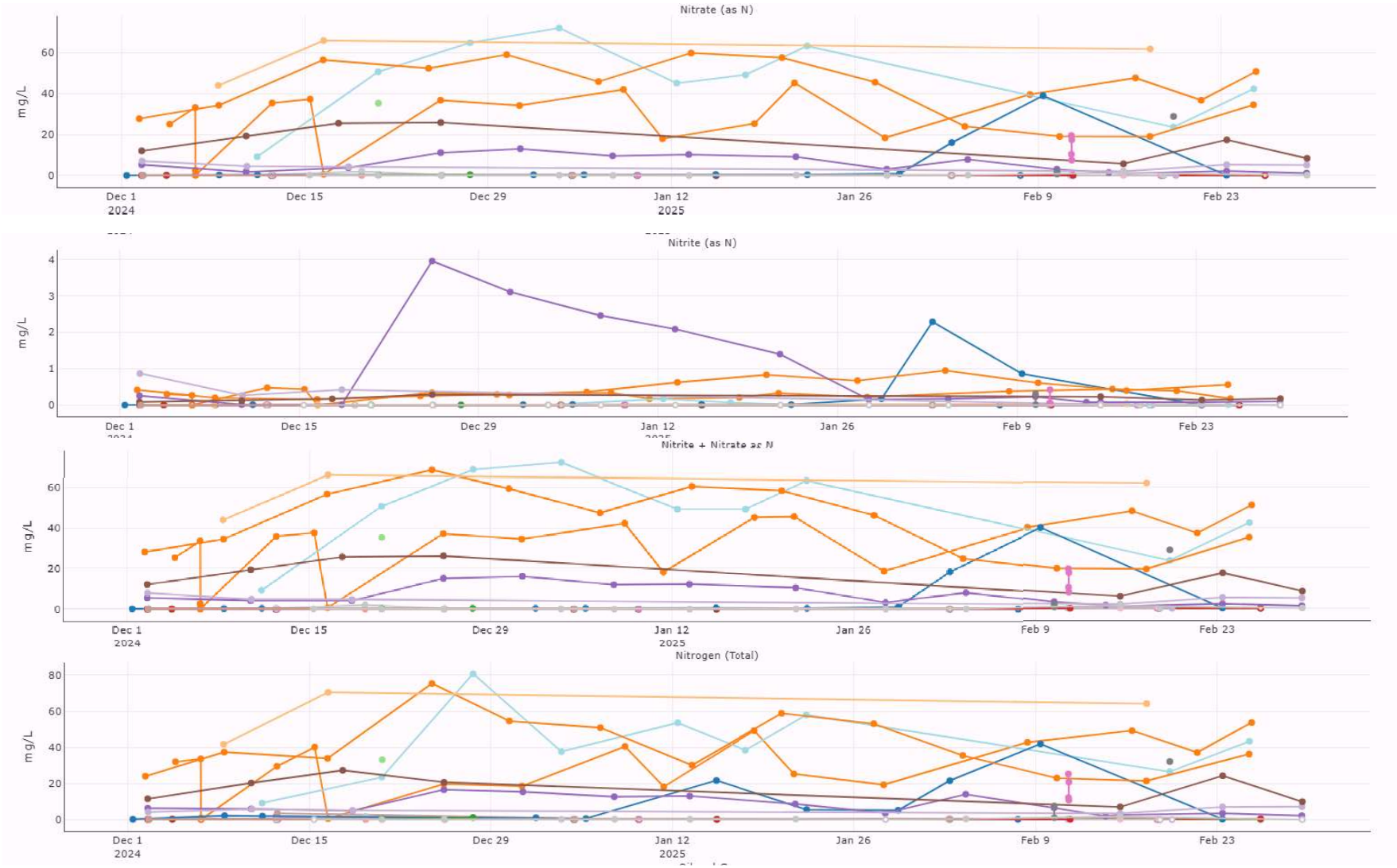
7.1. Lobs Hole

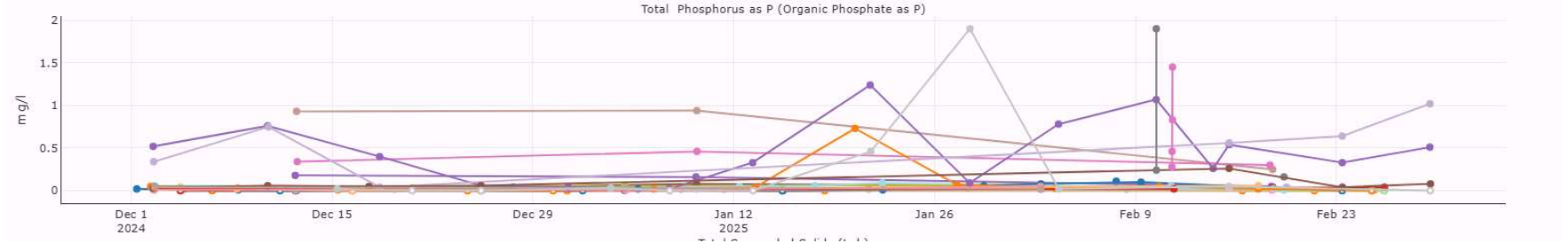
Lobs Hole surface water locations were observed to respond to the significant rainfall volumes occurring in the later stages of the reporting period with an observable upwards trends reported for hardness and heavy metal concentrations such as total and dissolved arsenic, total and dissolved chromium hexavalent, total and dissolved copper and iron. Nutrients such as nitrate, nitrite and total nitrogen appeared to trend slightly down during however were noted to spike upwards at the conclusion of the reporting period. Total phosphorous was observed trending upwards.

Groundwater locations across Lobs Hole reported relatively stabilised analytical trends throughout the reporting period with possible downward trends observably influenced by rainfall events across the site. This is evident when viewing trending responses to the rainfall events across the sites during January and February. Of note, total aluminium saw a reduction in analytical trends during the middle of the reporting period before spiking during rainfall and returning to a slight reduction. Arsenic (both total and dissolved) saw consistent fluctuations within individual locations with an overall slight decrease noted. Total and dissolved copper trends largely decreased during the reporting period before commencing a slight upwards trend during the later portion of the period. Nitrate concentrations saw a large decrease before an overall lift towards the latter half.

7.1.1. Surface Water


Copper
mg/L
0.1
0.05
0
Dec 1
2024
Dec 15
Dec 29
Jan 12
2025
Jan 26
Feb 9
Feb 23
Copper (Filtered)
mg/L
0.008
0.006
0.004
0.002
0
Hardness as CaCO3 (Filtered)
mg/L
400
300
200
100
0
Iron
mg/L
100
80
60
40
20
0


Nitrate (as N)
mg/L
0
20
40
60
Dec 1
2024
Dec 15
Dec 29
Jan 12
2025
Jan 26
Feb 9
Feb 23
Nitrite (as N)
mg/L
0
1
2
3
4
Dec 1
Dec 15
Dec 29
Jan 12
Jan 26
Feb 9
Feb 23
Nitrite + Nitrate as N
mg/L
0
20
40
60
Dec 1
2024
Dec 15
Dec 29
Jan 12
2025
Jan 26
Feb 9
Feb 23
Nitrogen (Total)
mg/L
0
20
40
60
80
Dec 1
2024
Dec 15
Dec 29
Jan 12
2025
Jan 26
Feb 9
Feb 23



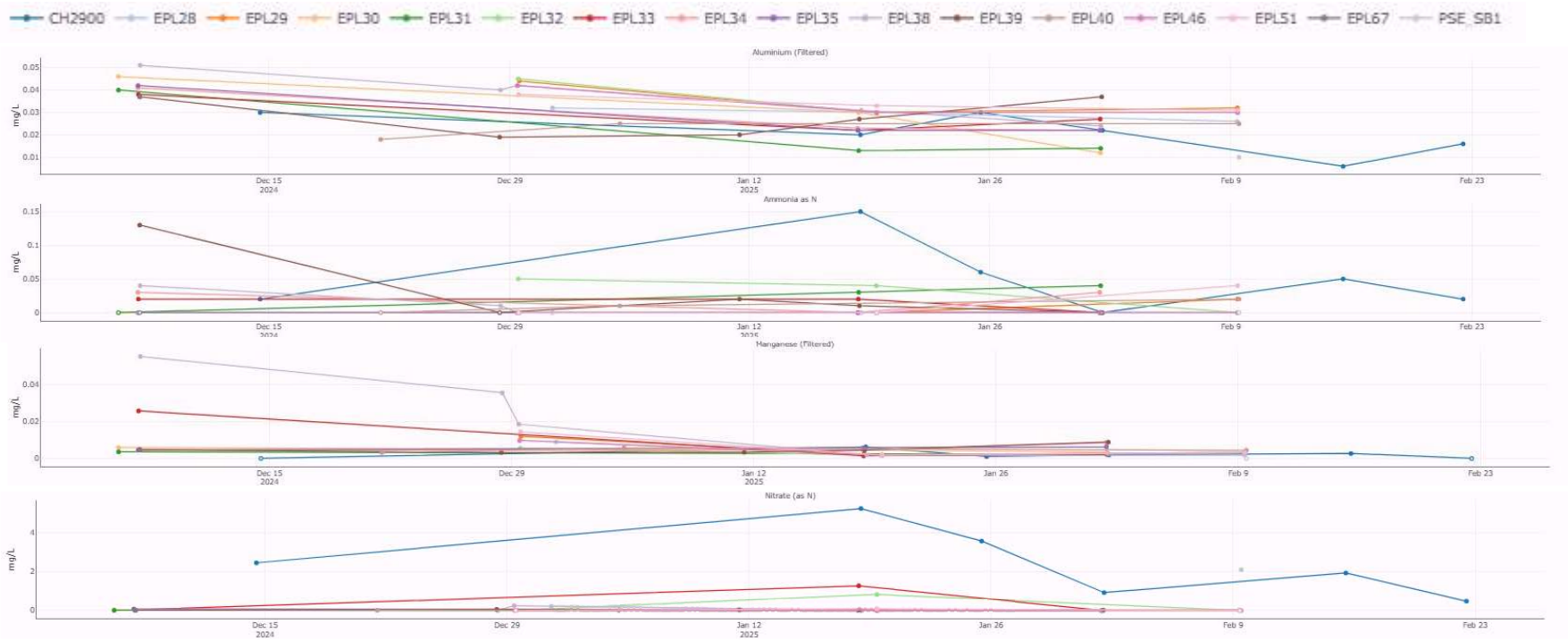
7.1.2. Groundwater

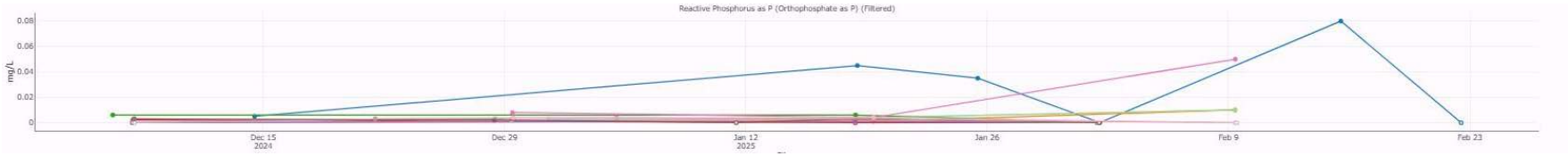
7.2. Tantangara

Overall, the various Tantangara surface water locations appeared stable across the reporting period. Those analytes with observable trending results were influenced by rainfall during January which may have caused slight elevation during this point. Dissolved aluminium initiated a decreasing trend across the site before possibly pivoting slightly upwards towards the later portions of the period. Ammonia was observed to report a slight increase in overall trends throughout the period. Dissolved manganese saw an overall reduction in analytical trends until events in January initiated a possible upwards trend. Nitrate concentrations saw slight increases overall, with a larger change occurring during the rainfall periods. Reactive Phosphorous was observed to increase slightly with a consistent elevation during January.

Groundwater monitoring locations were observed to be largely consistent with the previous reporting period until January whereby heavy rainfall volumes saw a slight to notable increasing trajectory for ammonia, total arsenic, trivalent chromium, filtered hardness total Kjeldahl nitrogen and total phosphorous. The groundwater locations were observed to report greater variation within analytical concentrations reported during each monitoring round. This typically was observed to be triggered during or following January.

7.2.1. Surface Water





7.2.2. Groundwater


Kjeldahl Nitrogen Total
µg/L
1000
500
0
Dec 15
2024
Dec 29
Jan 12
2025
Jan 26
Feb 9
Feb 23
Lead
Phosphorus (Total)
µg/L
1000
500
0
Dec 15
2024
Dec 29
Jan 12
2025
Jan 26
Feb 9
Feb 23

7.3. Marica

Marica surface monitoring locations remained stabled throughout the reporting period. Exceptions given to the leachate basin locations reporting greater differences between monitoring events, which is thought to be influenced by increasing blasting volumes resulting in larger nutrient concentrations, separating these structures from other such surface water locations.

Overall groundwater analytical trends were characterised by analytical correlation between individual monitoring locations and external weather events such as heavy rainfall events across the sits. The reporting period primarily reflects consistent fluctuations between individual monitoring events however no overt analytical trend was understood. The monitoring locations were consistent with other sites in regard to rainfall response, with analytical spikes occurring across the site during these events.

7.4. Rock Forest

No trends were identified.

8. CONCLUSION

During this quarter, construction activities were undertaken to enhance the leachate detection in the basin system. These included the installation of plastic lining to prevent water leakage and infiltration into the groundwater, which potentially contributed to a decrease in downstream nutrient concentrations in the groundwater wells. As previously mentioned throughout this report, climate variations and their impacts on water quality were observed across all surface water monitoring locations, including sediment and leachate basins.

A small number of surface water monitoring locations are understood to reflect ephemeral characteristics including irregular stream flows (typically resulting from rainfall events or incidents across Projects), period of dry or no water and those locations immediately down gradient of surface water migration locations. The reliance on external events for water and flow rates resulted in occasional monitoring locations reported as dry or without representative water quantity for sampling.

High water temperatures have contributed to the increased algal growth and green discolouration of the Talbingo and Tantangara Reservoirs consistent with historical observations made by the Project. The algal presence was typically accompanied by increases to nutrients and occasional thermotolerant coliform accompaniment. Lower reservoir water levels, increased intensity of the rainfall events and the higher temperatures separating such events further promotes the consistent growth of algal blooms.

Increases in select nutrient analytes were observed across the numerous water receptors was typically reported in locations within immediate proximity to spoil emplacement areas, received overland water flow stemming from emplacement areas or roadway runoff. The exceptions to the aforementioned observations include leachate basin concentrations and those locations comprised by smaller streams with abundant animal and plant matter within the body.

To better understand these results, a consideration of reporting periods from previous years was interwoven into the assessments for this reporting period. The concentration were largely consistent with historical ranges, excluding locations recently constructed and leachate basins.

APPENDIX A – BACKGROUND CONDITIONS

SURFACE WATER

	PLATEAU	RAVINE
Major watercourses1 (Dry weather)	• pH generally ranges between 6.2 and 8.5, with occasional lower and upper bound exceedances. • Carbonate and salinity vary seasonally, with higher levels occurring in summer/autumn than winter/spring. • Low concentrations of suspended solids and low turbidity. • Total nitrogen and phosphorus concentrations exceeded WQO values occasionally. • Aluminium concentrations exceeded the WQO value on a frequent basis. Some exceedances were more than 4 x WQO values. • Copper, iron, lead and zinc concentrations exceeded WQO values on an occasional basis. Other metals are generally below WQO values • The water quality during wet weather conditions is poorly understood. It is expected that concentrations of suspended sediment, nutrients, and some metals would be higher than dry weather concentrations.	• pH ranges between 6.2 to 8.5, with occasional lower and upper bound exceedances. • Low concentrations of suspended solids and low turbidity. • Carbonate and salinity vary seasonally, with higher levels occurring in summer/autumn than winter/spring. • Total nitrogen and phosphorus concentrations exceeded WQO values occasionally. • Aluminium concentrations in the Yarrangobilly River exceeded WQO values frequently in winter/spring and occasionally in summer/autumn. Some exceedances were more than 4 x WQO values. • Copper, chromium and zinc concentrations exceeded WQO values occasionally. Other metals are generally below WQO values. • The understanding of water quality during wet weather conditions is informed by data from monitoring undertaken in March and May 2019 following moderate rainfall. Available data indicates that receiving water quality during wet weather conditions is generally poorer relative to dry weather conditions with higher turbidity, lower pH, higher nutrients and metals such as copper and zinc. The median (from five samples) copper concentration was 6 x the WQO value.
Minor watercourses (near proposed surface infrastructure	The water quality of minor watercourses near the Tantangara construction compound is generally poorer than major watercourses, with total phosphorus, total nitrogen	The water quality of minor watercourses in Lobs Hole is generally poorer than major watercourses, with turbidity, total phosphorus, copper and zinc exceeding WQO values on a

	and aluminium all exceeding WQO values on a frequent basis. Turbidity, copper and iron exceeded WQO values on an occasional basis.	frequent basis. Total nitrogen, arsenic and aluminium exceeded WQO values on an occasional basis.
Runoff from existing disturbed areas	No sampling from existing disturbed areas has been undertaken at plateau.	Runoff samples were collected from existing disturbed areas in Lobs Hole such as access tracks and remnant copper mining areas in May and March 2019. Disturbed area runoff is characterised as being mildly acidic, having very high suspended sediment and turbidity levels, high total nitrogen and total phosphorous, and very high aluminium and copper concentrations. During wet weather conditions (when runoff is occurring to local watercourses in Lobs Hole), the water quality in the Yarrangobilly River is expected to be degraded as it passes through Lobs Hole.

Notes: 1. Major watercourses in plateau refer to the Murrumbidgee and Eucumbene rivers, Tantangara, Gooandra, Nungar and Kellys Plain creeks. Major watercourses in ravine refers to the Yarrangobilly River and Wallaces Creek.
2. General note: exceedances are described in the WCR as:
- frequent if the WQO value was exceeded in 20% or more of samples; and
- occasional if the WQO value was exceeded in at least one sample, but in less than 20% of samples.

RESERVOIR

TALBINGO

Water quality characteristics are described as follows:

- pH ranges between 6.3 and 8.2, with occasional lower and upper bound exceedances.
- Low concentrations of suspended solids and low turbidity.
- Carbonate and salinity vary seasonally, with higher levels occurring in summer/autumn, co rrelating with the higher salinity of streamflow over summer and autumn months.
- Oxidised nitrogen concentrations exceeded WQO values frequently in winter/spring a nd occasionally in summer/autumn. This is the opposite trend to the Yarrangobilly River, were exceedances are more likely to occur in summer/autumn.
- Ammonia concentrations frequently exceed WQO values during winter/spring, corelating with the elevated oxidised nitrogen.
- Total phosphorus concentrations exceed WQO values in all summer/autumn samples and in approximately 25% of winter/spring samples.
- All dissolved metal concentrations were below WQO values except for:
- *Copper and zinc concentrations exceeded WQO values frequently in summer/autum n and occasionally in winter/spring; and
- *Chromium (total) and lead concentrations occasionally exceeded WQO values in summe r/autumn.

It is noted that all but one of the copper and zinc exceedances occurred during March 2018 sampli ng, where 80% of samples exceeded the WQO values. Different analysis methods (consistent with the methods applied more broadly to EIS sampling) were applied to subsequent sampling (post-March 2018).

Reservoir water quality during and following wet weather conditions is poorly understood. There is potential for turbidity, nutrients and some metals to fluctuate within watercourse inflow locations for several weeks following a substantial runoff event.

TANTANGARA

Water quality characteristics are described as follows:

- pH ranges between 6.6 and 8.0, with one lower and upper bound exceedance occurring.
- Low levels of suspended solids and low turbidity.
- Carbonate and salinity vary seasonally, with higher levels occurring in summer/autumn.
- Oxidised nitrogen and ammonia occasionally exceeded WQO values in summer/autumn.
- Total phosphorus frequently exceeded WQO values in summer/autumn and winter/spring while reactive phosphorus occasionally exceeded WQO values.
- All dissolved metal concentrations were below WQO values except for:
- * aluminium concentrations exceeded WQO values on a frequent babasis;
- *copper, iron and zinc exceeded WQO values on a frequent basis during summer/autumn; and
- *chromium (total), cobalt and lead exceeded WQO values on an occasional basis during summer/autumn.

It is noted that all of the copper exceedances and the zinc exceedances occurred during March 2018 sampling, where 100% of samples exceeded the WQO values. Different analysis methods (consistent withthe methods applied more broadly to EIS sampling) were applied to subsequent sampling (post-March 2018).

- Reservoir water quality during and following wet weather conditions is poorly understood. There is potential for elevated turbidity, nutrients, and some metals to occur near watercourse inflow locations for several weeks following a substantial runoff event.

APPENDIX B – EPL RESULTS

2024 EPL 21266 In Situ Water Quality Measurements
EPL Monthly Monitoring December 2024

Table 1 - Surface Water Quality Data
River and Minor Watercourses

	Water Quality Objectives (see note 1)							
Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)
-	90 - 110	-	30 - 350	-	6.5 - 8.0	-	2 -25

Date and Time	EPL Site ID	Location Description	Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)	Field Comments	Context
2/12/2024, 12:48 pm	EPL5	Yarrangobilly River, upstream of the exploratory tunnel and construction pad	21.21	140.3	12.45	60	39	7.86	75	9..8	Clear skies, rain in recent days	This location is upstream of works and is therefore representative of background conditions.
2/12/2024, 1:15 pm	EPL6	Wallaces Creek, upstream of Yarrangobilly River and Wallaces Creek confluence	21.42	150.0	13.25	83	54	7.84	121	2.42	Clear skies, rain in recent days. turbidity very low	This location is consistent with background conditions for December 2024.
2/12/2024, 2:48 pm	EPL8	Yarrangobilly River, downstream of Lick Hole Gully	22.78	148.2	12.76	75	48	8.02	119	8..5	Clear sunny day. rain in recent days	Elevated DO is consistent with the background conditions for December 2024, and elevated pH within the historical ranges.
2/12/2024, 3:24 pm	EPL9	Yarrangobilly River, downstream of the accommodation camp and upstream of Talbingo Reservoir	22.99	134.6	11.54	71	46	7.84	131	8..9	Clear skies, rain in recent days	Elevated DO is consistent with the background conditions for December 2024.
2/12/2024, 1:02 pm	EPL12	Yarrangobilly River, immediately downstream of portal pad	21.04	131.7	11.72	59	38	7.82	105	8.13	Clear skies, rain in recent days	Elevated DO is consistent with the background conditions for December 2024.
2/12/2024, 1:35 pm	EPL14	Yarrangobilly River, downstream of road construction areas	21.35	123.1	10.9	62	41	7.78	123	7.44	Clear skies, rain in recent days. turb very low	Elevated DO is consistent with the background conditions for December 2024.
2/12/2024, 1:52 pm	EPL15	Yarrangobilly River, downstream of road construction areas	21.74	140.3	12.33	62	41	7.76	128	7.13	Clear skies, rain in recent days. Turb very low	Elevated DO is consistent with the background conditions for December 2024.
2/12/2024, 3:46 pm	EPL16	Yarrangobilly River, downstream of road construction areas	23.04	125.6	10.76	71	46	7.72	139	9.49	Clear skies, rain in recent days	Elevated DO is consistent with the background conditions for December 2024.
11/12/2024, 8:47 am	EPL24	Yarrangobilly River tributary (Watercourse 2), directly downstream of road	16.6	55.2	5.37	253	165	7.24	56	422	Clear sunny day.	Low DO and elevated turbidity could be attributed to the 73.8mm Lobs Hole received over the last days.
6/12/2024, 9:15 am	EPL26	Eucumbene River downstream of Marica Road	13.59	109.3	11.37	38	25	7.33	112	2.46	Clear water, no odour, high flowing, rain event overninght, a bit turbulent water	All readings are within WQO limits.
6/12/2024, 9:25 am	EPL27	Eucumbene River upstream of Marica Road	12.22	146.0	15.66	33	22	7.22	117	1.41	Clear water, no odour, high flowing, rain event overninght, a bit turbulent water	This location is upstream of works and is therefore representative of background conditions.
7/12/2024, 11:01 am	EPL30	Kellys Plain Creek, downstream of accommodation camp and laydown areas	17.34	104.4	10.02	49	32	7.39	120	27.3	100 mm rain so far in the week	Elevated turbidity could be attributed to the 73.6mm received over the last few days.
7/12/2024, 10:47 am	EPL31	Kellys Plain Creek, upstream of accommodation camp and laydown areas	17.75	100.6	9.57	30	20	7.37	122	8.3	Cloud and rain. heavy rain, iver 100mm last few days	All readings are within WQO limits.
7/12/2024, 10:26 am	EPL33	Murrumbidgee River, downstream of Tantangara reservoir outlet	20.04	106.8	9.71	26	17	7.61	125	8.4	Cloud and rain. heavy rain, iver 100mm last few days	Low EC aligns with historical data for December 2024.
7/12/2024, 9:42 am	EPL34	Nungar Creek, upstream of Tantangara Road	18.4	95.7	8.98	36	23	7.71	81	17.0	Cloud and rain. heavy rain, iver 100mm last few days.	This location is upstream of works and is therefore representative of background conditions.
7/12/2024, 9:59 am	EPL35	Nungar Creek, downstream of Tantangara Road	18.06	88.9	8.4	21	14	7.19	113	16.7	Cloud and rain. heavy rain, iver 100mm last few days	Low EC is consistent with background conditions. Low DO is being monitored to ensure variance is attributed to natural fluctuations.
22/12/2024, 11:51 am	EPL36	Camerons Creek, upstream of works in Rock Forest	20.16	65.9	5.97	49	32	7.25	199	38.8	Clear sunny day. Water is very stagnant. Recent construction in paddock nearby. Water is clear, no odour, slightly dark brown.	This location is upstream of works and is therefore representative of background conditions.
22/12/2024, 11:17 am	EPL37	Camerons Creek, downstream of works in Rock Forest	22.7	87.3	7.53	61	40	7.45	219	27.6	Clear sunny day. Water is very low flow. Brown non turbid. No odour. Recent works started nearby at RF.	Low DO and elevated turbidity are consistent with background conditions for this location in December 2024.
16/12/2024, 9:47 am	EPL52	GF01 leachate basin	24.71	118.1	9.78	1170	746	7.09	141	12.4	Sunny day, clear water, no odour, algae growing in the basin	High DO and EC are due to runoff accumulating in the sediment basin. Water was taken for treatment at the process water treatment plant or re-use where parameters were met.
-	EPL53	GF01 surface water upstream east	-	-	-	-	-	-	-	-	-	Dry site, no flow
-	EPL54	GF01 surface water upstream west	-	-	-	-	-	-	-	-	-	Dry site, no flow
16/12/2024, 10:08 am	EPL55	GF01 surface water downstream	20.67	63.0	5.63	1230	786	6.87	148	4.20	Sunny day, clear water, no odour, considerable flow	Low DO and high EC can be attributed to recent rain events causing increased runoff in the area.
7/12/2024, 12:31 pm	EPL67	Nungar Creek surface water downstream west from Tantangara emplacement area	20.67	108.4	9.72	23	15	7.44	131	16.6	Cloud and rain. heavy rain, over 100mm last few days.	Low EC is within the historical range and is consistent with background conditions for this location for December 2024.
6/12/2024, 10:49 am	EPL71	Surface water downstream of Marica emplacement	18.92	124.8	11.59	96	62	7.46	153	92.4	Rainy day, no odour, turbid water, no flowing	Elevated turbidity could be attributed to the 56.2mm received over the last days
10/12/2024, 12:22 pm	EPL84	F8 Basin	24.99	63.0	5.2	557	357	8.71	101	1000	Clear, sunny day. Turb is greater than 1000ntu	High pH, EC, and turbidity due to runoff accumulating in the sediment basin. Water was taken for treatment at the process water treatment plant or re-use where parameters where met.
10/12/2024, 1:55 pm	EPL85	MY07 Basin	26.04	123.3	9.95	675	433	9.14	43	1000	No odour, turbid, not suitable for reuse	High DO, EC, pH, and turbidity are due to runoff accumulating in the sediment basin. Water was taken for treatment at the process water treatment plant or re-use where parameters where met.
10/12/2024, 12:29 pm	EPL86	LHG01 Basin	24.66	87.3	7.23	1140	732	8.11	113	109	Clear, sunny day.	High DO, EC, pH, and turbidity are due to runoff accumulating in the sediment basin. Water was taken for treatment at the process water treatment plant or re-use where parameters where met.

2024 EPL 21266 In Situ Water Quality Measurements

EPL Monthly Monitoring December 2024

Table 2 - Reservoir Water Quality Data

Talbingo and Tantangara Reservoirs

	Water Quality Objectives (see note 2)						
Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)
-	90 - 110	-	20 - 30	-	6.5 - 8.0	-	1 - 20

Date and Time	EPL Site ID	Location Description	Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)	Field Comments	Context
4/12/2024, 9:35 am	EPL10	Tabingo Reservoir, downstream of road works and upstream of water intake point	23.78	110.1	9.3	75	49	7.84	120	0	clear day. heavy rain yesterday, multiple rain events recently. Turbidity incorrect	Elevated DO and EC are consistent with background conditions in the Yarrangobilly River for December 2024, low turbidity aligns with the historical ranges.
4/12/2024, 9:19 am	EPL11	Tabingo Reservoir, downstream of outlet	23.69	115.7	9.8	75	49	7.83	115	0.6	clear day. heavy rain yesterday, multiple rain events recently. Turbidity reading much lower than expected, likely incorrect.	Elevated DO and EC are consistent with background conditions in the Yarrangobilly River for December 2024, low turbidity aligns with the historical ranges.
31/12/2024, 3:02 pm	EPL28	Tantangara Reservoir, upstream of works in the mouth of the Murrumbidgee River	25.6	107.2	8.76	35.3	23	7.62	128.7	5.9	Clear sunny day with minimal wind. Shallow depth with vegetation growth present. No visible sheen or odour. Campers present in the direct vicinity of the sampling point.	Elevated EC is consistent with background conditions in the Yarrangobilly River for December 2024.
29/12/2024, 11:58 am	EPL29	Tantangara Reservoir, downstream of works area and upstream of lower Murrumbidgee River	20.69	62.4	5.6	24	16	7.92	141	19.1	Clear sunny day. No boat available. Sample taken from edge. Windy increasing, turb increased at edge of lake	Low DO remains with the historical data.
29/12/2024, 11:41 am	EPL32	Tantangara Reservoir, Tantangara Intake. Downstream of construction works	21.49	56.5	4.99	29	19	7.89	164	12.6	Clear sunny day. No boat available. Sample taken from edge. Windy edge of lake increasing turb.	Low DO remains with the historical data.
28/12/2024, 10:52 am	EPL38	Tantangara Reservoir, variable location dependant on tide and reservoir levels. Between the emplacement area and the ancillary facilities for emplacement acivities	18.98	63.6	5.9	24	16	6.28	245	7.0	Sunny day.	Low DO and pH align with the historical data for this location in December 2024.
28/12/2024, 9:40 am	EPL39	Confluence of Nungar Creek and Tantangara Reservoir, variable location dependent ontide and reservoir levels. Upstream of Tantangara construction works	16.24	61.6	6.05	26	17	6.03	248	9.4	Sunny day.	Low DO and pH align with the historical data for this location in December 2024.
21/12/2024, 11:59 am	EPL40	Confluence of the upper Murrumbidgee River and Tantangara Reservoir, variable location dependent on tide and reservoir levels. Upstream of works	20.3	96.4	8.71	26.1	19	7.63	176.1	4.26	Sunny clear day with minimal wind. Algae and aquatic plant life present. Visible sediment. No odour or sheen. Reservoir level 13%, only accessible via shore.	All readings are within WQO limits.
29/12/2024, 11:01 am	EPL 46	Tantangara Reservoir, diffuser outlet discharging into Tantangara Reservoir from Tantangara STP/PWTP	20.56	60.6	5.44	62	40	7.86	164	8.4	Clear sunny day. No boat available. Sample taken from edge.	Elevated EC and low DO levels, likely resulting from decreased water levels and increased organic matter, were observed. These locations will be closely monitored during the next sampling round.
29/12/2024, 11:09 am	EPL 51	Tantangara Reservoir, downstream of Tantangara STP/PWTP diffuser outlet	20.7	55.1	4.94	29	19	7.40	181	3.8	Clear sunny day. No boat available. Sample taken from edge.	Low DO levels, likely resulting from decreased water levels and increased organic matter, were observed for December 2024.

Table 3 - Treated Water Quality Data

Talbingo

	Water Quality Objectives (see note 3)						
Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)
-	-	-	700	-	6.5 - 8.0	-	25

Date and Time	EPL Site ID	Location Description	Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)	Field Comments	Context
1/12/2024, 9:37 am	EPL41	Loos Hole STP/PWTP Final Effluent Quality Monitoring Point. Downstream of final treatment, prior to discharge to Talbingo Reservoir.	28.1	64.3	5.03	18	12	7.37	183	101	NTU: reading error. Water crystal clear, samples warm - water run through beluga	No water was being dicharged at the time of sampling.

Table 4 - Treated Water Quality Data

Tantangara

	Water Quality Objectives (see note 3)						
Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)
-	-	-	200	-	6.5 - 8.0	-	25

Date and Time	EPL Site ID	Location Description	Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)	Field Comments	Context
11/12/2024, 2:04 pm	EPL50	Tantangara STP/PWTP Final Effluent Quality Monitoring Point. Downstream of final treatment, prior to discharge to Tantangara Reservoir.	20.1	91.6	8.32	79.3	57	8.4	212.1	2.75	No odour or discolouration. RO unit had been running for approx 2 hours prior to retrieving sample.	pH readings will be closely monitored, however no water was being discharged at the time of sampling.

2024 EPL 21266 In Situ Water Quality Measurements
EPL Monthly Monitoring December 2024

Table 5 - Groundwater Quality Data
GF01 Surface Water and Groundwater

Water Quality Objectives (see note 1)							
Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)
-	-	-	30 - 350	-	6.5 - 8.0	-	-

Date and Time	EPL Site ID	Location Description	Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)	Field Comments	Context
9/12/2024, 10:49 am	EPL56	GF01 groundwater upstream east	15.55	28.8	2.87	238	155	7.17	72	20.6	SWL- 10.56m, sunny day, turbid water, no odour	All readings are within WQO limits.
9/12/2024, 11:03 am	EPL57	GF01 groundwater upstream west	15.98	14.6	1.45	247	160	7.81	84	53.6	SWL- 13.54 m, sunny day, turbid water, no odour	All readings are within WQO limits.
9/12/2024, 11:52 am	EPL58	GF01 groundwater downstream	16.05	17.6	1.73	878	562	6.02	118	158	SWL- 6.26 m, sunny day, turbid water, no odour	Elevated EC is generally consistent with historical range for this location. Low pH will be monitored however borehole pump extraction method is in the process of being upgraded.
21/12/2024, 10:57 am	EPL68	Tantangara groundwater downstream West	15.06	67.9	6.84	18	12	5.24	294	1.5	WL:3.86m (top of casing). Clear sunny day. Pump almost set up for extraction. Water is clear, no odour.	Low pH and EC are generally consistent with previous results in the last months. These conditions are following expected changes due to altered climatic conditions.
21/12/2024, 10:42 am	EPL69	Tantangara groundwater downstream East	16.68	84	8.17	32	21	5.62	279	2.5	WL: 2.38m (top of casing). Clear sunny day. Ongoing ground disturbance nearby due to PSE. Water is non turbid, no odour.	Low pH is generally consistent with the historical data. These conditions are following expected changes due to altered climatic conditions.
21/12/2024, 9:04 am	EPL70	Tantangara groundwater upstream	16.97	58.3	5.63	108	70	6.53	236	67.9	WL: 6.07m (top of casing). Clear, sunny morning. No recent rain events. Water is clear, non turbid, no odour.	This location is upstream of works and is therefore representative of up gradient conditions.
13/12/2024, 10:59 am	EPL 72	Marica groundwater upstream	15.83	34.7	3.44	118	77	5.48	211	164	SWL- 35.25 m, sunny day, turbid water, no odour	This location is upstream of works and is therefore representative of up gradient conditions.
13/12/2024, 11:48 am	EPL73	Marica groundwater downstream	5.22	107.5	10.77	324	211	6.04	242	242	SWL- 13.23 m, sunny day, turbid water, no odour	This location is consistent with the up gradient conditions.
25/12/2024, 8:20 am	EPL80	LHG groundwater upstream	18.71	21.2	1.97	842	539	6.47	8	76.2	SWL- 20.34m (top of casing), Clear sunny morning. Water is slightly turbid, no odour.	This location is upstream of works and is therefore representative of up gradient conditions.
25/12/2024, 9:19 am	EPL81	LHG groundwater downstream	17.85	10.3	0.97	847	542	6.82	-58	983	WL: 3.69m (top of casing). Clear sunny day. Water is very clear with sediment settling at the bottom, no odour. High turbidity due to bottom of the sleeve.	Elevated EC is consistent with up gradient conditions for December 2024.
25/12/2024, 8:34 am	EPL82	MY groundwater upstream	17.96	71.6	6.73	2720	1740	6.5	-6	73.7	WL: 9.31m (top of casing), Clear sunny morning. Water is very clear, no odour. Very high EC reading, usually this spot has high EC	This location is upstream of works and is therefore representative of up gradient conditions.
25/12/2024, 10:05 am	EPL83	MY groundwater downstream	18.73	10.8	1.01	581	372	6.29	69	201	WL: 3.97m (top of casing), Clear sunny day. Recent works neaby with an excavator creating bunds. Water is slightly turbid, no odour	Low pH and high EC align with the historical ranges and some fluctuations in pH levels due to the climatic conditions have been changed.
25/12/2024, 8:49 am	EPL87	MY groundwater downstream	17.68	17.3	1.65	663	424	6.26	129	1000	WL: 4.01m (top of casing). Clear sunny morning. Water is very brown turbid. Same colour as basin adjacent. Dirt like odour. NTU has surpassed 1000.	Low pH levels align with historical data. However, some fluctuations in pH levels have been observed due to changing climatic conditions.
25/12/2024, 9:47 am	EPL88	MY groundwater downstream	18.07	13.5	1.27	818	523	7.01	-141	2.4	WL:3.22m (top of casing), Clear sunny day. Some ground disturbance nearby with an excavator building bunds. Water is clear with a very strong sulphur smell	Elevated EC aligns with the up gradient conditions for December 2024.
25/12/2024, 8:00 am	EPL89	LHG groundwater downstream	15.96	20.5	2.02	374	243	6.61	154	254	WL: 3.13m (top of casing). Clear sunny morning. Water is clear with sediment settling at the bottom. No odour. Plently of animal scat surrounding bore	Elevated EC aligns with the up gradient conditions for December 2024.
9/12/2024, 10:38 am	EPL 90	GF01 groundwater downstream	15.8	63.6	6.3	90	58	6.23	72	239	SWL- 12.35 m, sunny day, turbid water, no odour	Low pH is consistent with up gradient ranges for this location in December 2024.
9/12/2024, 10:28 am	EPL 91	GF01 groundwater downstream	16.46	20.7	2.02	305	199	6.89	43	57.7	SWL- 7.74 cm, sunny day, turbid water, no odour	All readings are within WQO limits.
9/12/2024, 11:17 am	EPL 92	GF01 groundwater downstream	15.62	80.5	8.01	136	88	6.6	111	244	SWL- 12.25 m, sunny day, turbid water, no odour	All readings are within WQO limits.
9/12/2024, 11:23 am	EPL 93	GF01 groundwater downstream	15.43	15.8	1.58	251	163	7.12	-57	133	SWL- 15.38 m, sunny day, turbid water, no odour	All readings are within WQO limits.
9/12/2024, 11:27 am	EPL 94	GF01 groundwater downstream	15.45	18.1	1.81	173	113	6.89	-72	76.9	SWL- 12.21 m, sunny day, turbid water, no odour	All readings are within WQO limits.
9/12/2024, 11:44 am	EPL 95	GF01 groundwater downstream	16.05	15.1	1.49	608	389	6.04	105	88.9	SWL- 6.58 m, sunny day, turbid water, no odour	Low pH and elevated EC are consistent with up gradient ranges for this location in December 2024.
9/12/2024, 11:37 am	EPL 96	GF01 groundwater downstream	15.74	52.5	5.19	1500	959	7.51	13	484	SWL- 4.57 m, sunny day, turbid water, no odour	Elevated EC is consistent with the up gradient ranges for this location in December 2024.
9/12/2024, 11:59 am	EPL 97	GF01 groundwater downstream	16.03	19	1.87	478	311	6.41	109	18.8	SWL- 6.4 m, sunny day, turbid water, no odour	Low pH and elevated EC are consistent with the up gradient ranges for this location in December 2024.

Note 1: Water Quality Objective values for the Yarrangobilly River and Minor Watercourses refer to the default trigger values for physical and chemical stressors in south-east Australia (upland rivers) that are reported in Tables 3.3.2 and 3.3.3 of ANZECC/ ARMCANZ (2000).

Note 2: Water Quality Objective values for Talbingo Reservoir are the default trigger values for physical and chemical stressors in south-east Australia (freshwater lakes and reservoirs) that are reported in Tables 3.3.2 and 3.3.3 of ANZECC/ ARMCANZ (2000).

Note 3: Water Quality Objective values Treated Water reference the predicted values for physical and chemical stressors from the treatment plant as presented in the Main Works EIS.

Note 4: Water Quality Objective values for groundwater reference the default trigger values for physical and chemical stressors in south-east Australia (upland rivers) for pH and electrical conductivity.

Snowy Hydro 2.0 Main Works

Monthly EPL Sampling: 01-31 Dec 2024 Groundwater

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*	EPL56	EPL57	EPL58	EPL68	EPL69	EPL70	EPL72	EPL73	EPL80	EPL81	EPL82	EPL83	EPL87	EPL88	EPL89	EPL 90	EPL 91	EPL92	EPL93	EPL94	EPL95	EPL96	EPL97
Physiochemical				9/12/24	9/12/24	9/12/24	21/12/24	21/12/24	21/12/24	13/12/24	13/12/24	25/12/24	25/12/24	25/12/24	25/12/24	25/12/24	25/12/24	25/12/24	25/12/24	9/12/24	9/12/24	9/12/24	9/12/24	9/12/24	9/12/24	9/12/24	9/12/24
pH	pH Unit	-	6.5-8	7.17	7.81	6.02	5.24	5.62	6.53	5.48	6.04	6.47	6.82	6.5	6.29	6.26	7.01	6.41	6.23	6.89	6.6	7.12	6.89	6.04	7.51	6.41
Electrical Conductivity	µS/cm	-	30-350	238	247	878	18	32	108	118	324	842	847	2720	581	663	818	374	90	305	136	251	173	608	1500	478
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value	72	84	118	294	279	236	211	241	8	-58	-6	69	129	-141	154	72	43	111	-57	-72	105	13	109
Temperature	°C	-	No Water Quality Objective Value	15.55	15.38	16.05	15.06	16.68	16.97	15.83	5.23	18.71	17.85	17.06	18.73	17.68	18.07	15.96	15.8	16.46	15.62	15.43	15.45	16.05	15.74	16.03
Dissolved Oxygen	% saturation	-	No Water Quality Objective Value	26.8	14.6	17.6	67.9	84	58.3	34.7	107.5	21.2	10.3	71.6	10.8	17.3	13.5	20.5	63.6	20.7	80.5	15.8	18.1	15.1	52.5	19
Turbidity	NTU	-	No Water Quality Objective Value	20.6	53.6	158	1.5	2.5	67	164	241	76.2	983	73.7	201	1000	2.4	254	239	57.7	244	133	76.9	88.9	484	18.8
Laboratory analytes																										
TSS	mg/L	5	No Water Quality Objective Value	50	15	284	<5	<5	<5	40	31	13	216	166	1,190	2,630	10	112	290	30	3,040	68	110	176	736	78
Hardness as CaCO3	mg/L	1	No Water Quality Objective Value	125	130	241	26	7	17	11	16	378	401	1,330	96	136	138	66	33	112	36	113	76	186	712	138
Nutrients																										
Ammonia as N	µg/L	10	13	<10	<10	<10	<10	<10	<10	20	30	20	40	100	20	180	130	100	<10	<10	<10	20	10	660	<10	<10
Nitrite + Nitrate as N (NOx)	µg/L	10	15	<10	790	22,900	1,180	90	350	25	30	5	10	6	74	4,680	<10	10	660	70	40	6	<10	28,400	35,400	790
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value	<100	100	600	<100	<100	<100	<100	<500	100	400	300	800	10,900	300	900	<100	<100	<2,000	<100	<100	4,600	4,000	100
Nitrogen (Total)	µg/L	100	250	<100	900	23,500	1,200	<100	600	<100	<500	100	400	300	900	15,600	300	900	500	<100	<2,000	<100	<100	33,000	39,400	900
Reactive Phosphorus	µg/L	1	15	5	8	1	5	3	20	15	18	6	27	7	12	4	33	10	8	3	<1	13	1	3	7	10
Phosphorus (Total)	µg/L	10	20	30	80	60	20	20	50	50	<50	20	140	40	420	4,990	50	370	80	30	1,270	130	30	200	100	30
Inorganics																										
Cyanide Total	µg/L	4	4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hydrocarbons																										
Oil and Grease	mg/L	1	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Metals																										
Aluminium (total)	µg/L	5	No Water Quality Objective Value	1,030	670	6,360	94	782	1,540	869	481	27	2,250	628	27,600	71,400	42	3,800	1,810	412	16,600	1,440	1,910	713	19,000	864
Aluminium (dissolved)	µg/L	5	27	<5	<5	<5	<5	14	<5	7	<5	<5	<5	<5	<5	<5	<5	<5	21	<5	<5	<5	<5	<5	<5	<5
Arsenic (total)	µg/L	0.2	No Water Quality Objective Value	0.4	2.6	10.1	<0.2	<0.2	0.2	0.5	<0.2	65.8	18.4	31.4	64.8	18.8	33.7	2.2	0.8	3.1	17.0	18.5	13.3	4.0	13.8	2.0
Arsenic (dissolved)	µg/L	0.2	0.8	<0.2	2.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	3.0	1.5	5.3	2.1	0.3	25.0	0.3	<0.2	0.3	0.4	6.0	1.0	1.1	0.8	0.4
Chromium (III+VI) (total)	µg/L	0.2	No Water Quality Objective Value	3.5	1.7	22.9	0.2	0.6	3.3	2.7	0.6	0.7	3.9	1.3	96.1	206	0.9	8.4	4.0	1.2	23.6	3.6	6.0	2.7	60.4	2.4
Chromium (III+VI) (dissolved)	µg/L	0.2	0.01	<0.2	<0.2	0.4	<0.2	<0.2	<0.2	<0.2	0.3	<0.2	<0.2	<0.2	<0.2	0.5	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.8	<0.2
Copper (total)	µg/L	0.5	No Water Quality Objective Value	60.8	51.0	13.7	6.1	2.8	302	4.8	2.0	1.1	5.1	0.7	121	141	29.9	122	3.3	0.8	37.5	2.2	2.0	7.4	44.5	1.3
Copper (dissolved)	µg/L	0.5	1	6.5	4.5	<0.5	1.5	<0.5	33.9	1.5	<0.5	<0.5	<0.5	<0.5	2.4	<0.5	<0.5	9.6	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	0.7	<0.5
Iron (total)	µg/L	2	No Water Quality Objective Value	1,590	864	15,600	53	408	1,160	1,080	160	3,510	3,680	4,500	63,400	104,000	1,450	6,830	1,360	1,450	17,700	1,690	6,500	1,440	34,900	1,640
Iron (dissolved)	µg/L	2	300	<2	<2	<2	<2	30	<2	<2	<2	<2	<2	891	<2	<2	764	<2	22	<2	<2	<2	<2	3	2	<2
Lead (total)	µg/L	0.1	No Water Quality Objective Value	7.0	2.3	111	<0.1	0.3	1.0	3.1	1.0	0.4	4.3	1.2	49.6	131	0.3	3.5	6.1	3.9	751	6.3	9.1	5.1	223	14.0
Lead (dissolved)	µg/L	0.1	1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Manganese (total)	µg/L	0.5	No Water Quality Objective Value	97.2	122	520	5.2	6.1	28.0	40.8	23.7	214	155	391	1,070	1,940	228	79.3	53.9	414	2,150	166	712	1,060	2,210	676
Manganese (dissolved)	µg/L	0.5	1,200	13.4	36.8	99.9	1.5	0.5	1.2	5.7	6.8	167	131	368	37.8	43.9	173	16.7	8.2	32.0	25.1	73.8	590	345	0.6	472
Nickel (total)	µg/L	0.5	No Water Quality Objective Value	4.0	2.8	25.6	0.9	1.0	2.7	3.9	0.7	21.9	9.6	9.1	137	288	3.9	14.5	8.4	2.0	69.6	5.8	9.8	17.9	87.5	9.8
Nickel (dissolved)	µg/L	0.5	8	<0.5	<0.5	3.4	0.5	<0.5	<0.5	1.7	<0.5	16.1	2.5	1.5	5.8	2.4	3.0	3.5	2.3	<0.5	1.4	<0.5	1.8	14.4	0.8	4.1
Silver (total)	µg/L	0.01	No Water Quality Objective Value	<0.01	<0.01	0.28	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	0.16	0.27	0.64	<0.01	0.04	<0.01	<0.01	0.31	<0.01	<0.01	<0.01	0.14	<0.01
Silver (dissolved)	µg/L	0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc (total)	µg/L	1	No Water Quality Objective Value	18	8	59	5	4	5	10	2	4	15	9	194	432	3	16	25	12	297	17	432	40	251	189
Zinc (dissolved)	µg/L	1	2.4	2	<1	8	2	<1	<1	8	<1	<1	<1	2	2	1	<1	1	9	1	6	<1	7	33	<1	68

* Water Quality Objective values for groundwater refer to the default trigger values for physical and chemical stressors in south-east Australia (upland rivers) for the protection of 95% of aquatic species ANZECC / ARMCANZ (2000), they are not pollutant limits imposed by EPL 21266.

\- Sample not required at this location.

Snowy Hydro 2.0 Main Works

Monthly EPL Sampling: 01 - 31 Dec 2024 - Talbingo and Tantangara Reservoir

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*	EPL10	EPL11	EPL28	EPL29	EPL32	EPL38	EPL39	EPL40	EPL46	EPL51
Field				4/12/24	4/12/24	31/12/24	29/12/24	29/12/24	28/12/24	28/12/24	21/12/24	29/12/24	29/12/24
pH	pH Unit	-	6.5-8	7.84	7.83	7.62	7.92	7.89	6.28	6.03	7.63	7.86	7.4
Electrical Conductivity	µS/cm	-	20-30	75	75	35.3	24	29	24	26	26.1	62	29
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value	120	115	128.7	141	164	245	248	176.1	164	181
Temperature	°C	-	No Water Quality Objective Value	23.78	23.69	25.6	20.69	21.49	18.98	16.24	20.3	20.56	20.7
Dissolved Oxygen	% saturation	-	90-110	110.1	115.7	107.2	62.4	56.5	63.6	61.6	96.4	60.6	55.1
Turbidity	NTU	-	1-20	0	0.6	5.9	19.1	12.6	7	9.4	4.26	8.4	3.8
Laboratory analytes													
Total suspended solids	mg/L	5	No Water Quality Objective Value	10	8	<5	20	21	<5	<5	<5	8	<5
Hardness as $CaCO_3$ (filtered)	mg/L	1	No Water Quality Objective Value	33	33	5	2	2	5	7	9	2	2
Nutrients													
Ammonia as N	µg/L	10	10	<10	<10	<10	<10	50	10	<10	<10	<10	<10
Nitrite + Nitrate as N (NOx)	µg/L	10	10	58	57	<10	4	6	<2	50	9	<2	<2
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value	200	200	300	500	500	400	200	200	300	300
Nitrogen (Total)	µg/L	100	350	300	300	300	500	500	400	200	200	300	300
Reactive Phosphorus	µg/L	1	5	5	4	3	2	2	3	2	3	8	4
Phosphorus (Total)	µg/L	10	10	<10	<10	40	50	30	40	30	10	20	20
Inorganics													
Cyanide Total	µg/L	4	7	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hydrocarbons													
Oil and Grease	mg/L	1	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
Metals													
Aluminium (dissolved)	µg/L	5	55	15	15	32	44	45	40	19	18	42	38
Arsenic (dissolved)	µg/L	0.2	13	0.5	0.4	0.3	0.3	0.3	0.3	<0.2	<0.2	0.3	0.3
Chromium (III+VI) (dissolved)	µg/L	0.2	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Copper (dissolved)	µg/L	0.5	14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Iron (dissolved)	µg/L	2	300	48	49	166	242	251	271	90	55	257	256
Lead (dissolved)	µg/L	0.1	3.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Manganese (dissolved)	µg/L	0.5	1,900	1.7	1.2	8.8	11.9	5.6	35.6	3.1	3.2	9.7	14.4
Nickel (dissolved)	µg/L	0.5	11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Silver (dissolved)	µg/L	0.01	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc (dissolved)	µg/L	1	8	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Biological													
Faecal Coliforms	CFU/100mL	1	10/100^	1500**	1200**	10	-	-	-	-	-	-	7
Biochemical Oxygen Demand	mg/L	2	1/5^	2	<2	2	-	-	-	-	-	-	2

* Water Quality Objective values for Talbingo and Tantangara Reservoir refer to the default trigger values for physical and chemical stressors in south-east Australia (fresh lakes and reservoirs) for the protection of 95% of aquatic species ANZECC / ARMCANZ (2000), they are not pollutant limits imposed by EPL 21266.

** Algal blooms can present as feacal coliforms

^ 90th percentile concentration limits / 100 percentile concentration limits

\- Sample not required at this location.

Snowy Hydro 2.0 Main Works
Monthly EPL Sampling: 01 - 31 Dec 2024 - Surface Water

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*	EPL5	EPL6	EPL8	EPL9	EPL12	EPL14	EPL15	EPL16	EPL24	EPL26	EPL27	EPL30	EPL31	EPL33	EPL34	EPL35	EPL36	EPL37	EPL52	EPL53	EPL54	EPL55	EPL67	EPL71	EPL84	EPL85	EPL86
Field				2/12/24	2/12/24	2/12/24	2/12/24	2/12/24	2/12/24	2/12/24	2/12/24	11/12/24	6/12/24	6/12/24	7/12/24	7/12/24	7/12/24	7/12/24	7/12/24	22/12/24	22/12/24	16/12/24	Dry	Dry	16/12/24	7/12/24	6/12/24	10/12/24	10/12/24	10/12/24
pH	-	-	6.5-8	7.86	7.84	8.02	7.84	7.82	7.78	7.76	7.72	7.24	7.33	7.22	7.39	7.37	7.61	7.71	7.19	7.25	7.45	7.09	Dry	Dry	6.87	7.44	7.46	8.71	9.14	8.11
Electrical Conductivity	µS/cm	-	30-350	75	121	119	131	105	123	128	139	56	112	117	48	30	26	36	21	49	61	1170	Dry	Dry	1230	23	96	357	675	1140
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value	75	121	199	131	105	123	128	139	56	112	117	120	122	125	81	113	199	219	141	Dry	Dry	148	131	153	101	43	113
Temperature	°C	-	No Water Quality Objective Value	21.21	21.42	22.78	22.9	21.04	21.35	21.74	23.04	16.6	13.59	12.22	17.34	17.75	20.04	18.4	18.06	20.16	22.7	24.71	Dry	Dry	20.67	20.67	18.92	24.99	26.04	24.66
Dissolved Oxygen	% saturation	-	90-110	140.3	150	148.2	134.6	131.7	123.1	140.3	125.6	55.2	109.3	146	104.4	100.6	106.8	95.7	88.9	65.9	87.3	118.1	Dry	Dry	63	108.4	124.8	63	123.3	87.3
Turbidity	NTU	-	2-25	9.18	2.02	8.15	8.19	8.33	7.04	7.23	9.39	42.2	2.46	1.81	27.3	8	8.4	17	16.7	38.8	27.6	12.4	Dry	Dry	4.2	16.6	92.4	1000	1000	109
Laboratory analytes																														
TSS	mg/L	5	No Water Quality Objective Value	19	9	12	10	12	11	14	12	<5	<5	<5	20	11	<5	18	16	<5	8	8	Dry	Dry	<5	11	18	860	688	26
Hardness as CaCO3	mg/L	1	No Water Quality Objective Value	24	38	33	31	28	31	31	31	68	12	12	16	9	5	7	7	24	24	345	Dry	Dry	380	7	32	46	44	297
Nutrients																														
Ammonia as N	µg/L	10	13	<10	<10	<10	<10	<10	<10	<10	<10	40	10	<10	<10	<10	20	30	<10	<10	70	<10	Dry	Dry	<10	<10	<10	10	30	10
Nitrite + Nitrate as N (NOx)	µg/L	10	15	7	4	40	20	7	8	<10	20	8,550	<10	9	30	12	34	<10	<10	70	60	29,900	Dry	Dry	64,200	<10	3	1,740	3,940	19,000
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value	200	<100	100	200	300	100	100	200	700	<100	<100	200	300	200	300	400	300	1,800	4,000	Dry	Dry	6,300	200	100	1,800	1,900	1,300
Nitrogen (Total)	µg/L	100	250	200	<100	100	200	300	100	100	200	9,200	<100	<100	200	300	200	300	400	400	1,900	33,900	Dry	Dry	70,500	200	100	5,900	5,800	20,300
Reactive Phosphorus	µg/L	1	15	5	5	5	5	4	5	4	5	8	2	3	6	6	2	<1	<1	10	8	4	Dry	Dry	3	3	3	21	15	5
Phosphorus (Total)	µg/L	10	20	20	20	10	40	50	50	10	50	20	30	20	50	50	30	40	40	20	50	<10	Dry	Dry	<10	40	90	760	750	60
Inorganics																														
Cyanide Total	µg/L	4	4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	16	Dry	Dry	15	<4	<4	<4	<4	<4
Hydrocarbons																														
Oil and Grease	mg/L	1	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	Dry	Dry	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Metals																														
Aluminium (total)	µg/L	5	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	879	Dry	Dry	34	304	1,410	34,400	33,100	1,340
Aluminium (dissolved)	µg/L	5	27	70	7	58	47	67	62	67	60	8	8	9	46	40	38	41	42	25	40	10	Dry	Dry	<5	37	12	16	15	<5
Arsenic (total)	µg/L	0.2	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.6	Dry	Dry	0.5	0.2	1.0	18.4	26.6	3.7
Arsenic (dissolved)	µg/L	0.2	0.8	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7	<0.2	<0.2	<0.2	<0.2	0.2	0.3	0.3	0.4	0.5	5.2	Dry	Dry	0.5	0.2	0.5	9.8	17.0	2.2
Chromium (III+VI) (total)	µg/L	0.2	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.6	Dry	Dry	0.7	0.4	2.6	125	132	4.9
Chromium (III+VI) (dissolved)	µg/L	0.2	0.01	0.3	<0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	0.2	<0.2	<0.2	8.5	Dry	Dry	0.7	<0.2	<0.2	16.9	26.8	1.6
Copper (total)	µg/L	0.5	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.1	Dry	Dry	<0.5	<0.5	2.4	63.0	54.1	4.8
Copper (dissolved)	µg/L	0.5	1	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	0.7	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	Dry	Dry	<0.5	<0.5	<0.5	1.6	1.2	2.6
Iron (total)	µg/L	2	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	944	Dry	Dry	28	507	1,800	59,400	54,000	1,980
Iron (dissolved)	µg/L	2	300	90	13	79	71	90	83	87	82	18	23	23	93	80	140	201	204	330	348	<2	Dry	Dry	<2	172	34	22	15	3
Lead (total)	µg/L	0.1	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	Dry	Dry	<0.1	0.2	0.5	104	90.5	3.1
Lead (dissolved)	µg/L	0.1	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	Dry	Dry	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Manganese (total)	µg/L	0.5	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22.0	Dry	Dry	6.8	8.6	56.8	1,450	1,300	155
Manganese (dissolved)	µg/L	0.5	1,200	2.7	3.9	3.1	4.4	2.4	2.8	2.9	3.9	37.8	2.5	1.7	5.9	3.6	25.7	4.3	4.6	53.6	14.2	<0.5	Dry	Dry	4.8	4.4	32.1	0.6	0.9	85.3
Nickel (total)	µg/L	0.5	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.5	Dry	Dry	1.2	1.1	6.2	154	146	5.4
Nickel (dissolved)	µg/L	0.5	8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	0.6	<0.5	Dry	Dry	0.8	<0.5	1.3	<0.5	<0.5	1.2
Silver (total)	µg/L	0.01	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	Dry	Dry	<0.01	<0.01	<0.01	0.10	0.09	<0.01
Silver (dissolved)	µg/L	0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	Dry	Dry	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc (total)	µg/L	1	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	Dry	Dry	8	2	4	264	224	8
Zinc (dissolved)	µg/L	1	2.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	Dry	Dry	4	<1	<1	<1	<1	<1

* Water Quality Objective values for surface water refer to the default trigger values for physical and chemical stressors in south-east Australia (upland rivers) for the protection of 99% of aquatic species ANZECC / ARMCANZ (2018), they are not pollutant limits imposed by EPL 21266.
- Samples not required

Monthly EPL Sampling: 01 - 31 Dec 2024 - Treated Water

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*	EPL 41	EPL 43	EPL 44	EPL 45	EPL 47	EPL 48	EPL 49	EPL 50
Flow Rate				1/12/2024							11/12/2024
Inflow#	ML/day	-	-	-	0.0000	0.5777	0.0557	0.2053	0.0850	0.5851	-
Outflow#	ML/day	-	4.32 (EPL 43 / 50)	-	-	-	-	-	-	-	-
Field											
pH	pH Unit	-	6.5-8.5	7.37	-	-	-	-	-	-	8.4
Electrical Conductivity	µS/cm	-	700 (EPL 41) / 200 (EPL 50)	18	-	-	-	-	-	-	79.3
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value	183	-	-	-	-	-	-	212.2
Temperature	°C	-	15	28.1	-	-	-	-	-	-	20.1
Dissolved Oxygen	% saturation	-	No Water Quality Objective Value	64.3	-	-	-	-	-	-	91.6
Turbidity	NTU	-	<25	101	-	-	-	-	-	-	2.75
Laboratory analytes											
Total suspended solids	mg/L	5	5/10	8.00							<5
Hardness as $CaCO_3$ (filtered)	mg/L	1	No Water Quality Objective Value	<1							<1
Nutrients											
Ammonia as N	µg/L	10	200/2000^	140	-	-	-	-	-	-	640
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value	200	-	-	-	-	-	-	1300
Nitrogen (Total)	µg/L	100	350/-^	200	-	-	-	-	-	-	1300
Reactive Phosphorus	µg/L	1	No Water Quality Objective Value	<1	-	-	-	-	-	-	<1
Phosphorus (Total)	µg/L	10	100/300^	20	-	-	-	-	-	-	<10
Inorganics											
Cyanide Total	µg/L	4	No Water Quality Objective Value	<4	-	-	-	-	-	-	<4
Hydrocarbons											
Oil and Grease	mg/L	1	2/5^	<1.0	-	-	-	-	-	-	<1.0
Metals											
Aluminium (dissolved)	µg/L	5	55	<5	-	-	-	-	-	-	<5
Arsenic (dissolved)	µg/L	0.2	13	<0.2	-	-	-	-	-	-	<0.2
Chromium (III+VI) (dissolved)	µg/L	0.2	1	<0.2	-	-	-	-	-	-	<0.2
Copper (dissolved)	µg/L	0.5	14	<0.5	-	-	-	-	-	-	<0.5
Iron (dissolved)	µg/L	2	300	<2	-	-	-	-	-	-	<2
Lead (dissolved)	µg/L	0.1	3.4	<0.1	-	-	-	-	-	-	<0.1
Manganese (dissolved)	µg/L	0.5	1,900	0.8	-	-	-	-	-	-	<0.5
Nickel (dissolved)	µg/L	0.5	11	<0.5	-	-	-	-	-	-	<0.5
Silver (dissolved)	µg/L	0.01	0.05	<0.01	-	-	-	-	-	-	<0.01
Zinc (dissolved)	µg/L	1	8	4	-	-	-	-	-	-	<1
Biological											
Faecal Coliforms	CFU/100mL	1	10/100^	<1	-	-	-	-	-	-	<1
Biological Oxygen Demand	mg/L	2	5	<2	-	-	-	-	-	-	<2

Note: Treated water was not being discharged at Talbingo Reservoir at the time of EPL sampling.
There is no 100th percentile limit for Nitrogen (Total).

* Water Quality Objective values Treated Water reference the predicted values for physical and chemical stressors from the treatment plant as presented in the Main Works EIS.

\- Samples not required

^ 90 Percentile concentration limit/100 Percentile limit

\# Inflows to STP and CWTP do not directly correspond to outflow at RO as much of the water is reused on site

Snowy Hydro 2.0 Main Works
Monthly EPL Sampling: 01 - 31 Dec 2024 - Treated Water

Date	EPL 43 *	EPL 50 ^	EPL 44	EPL 45	EPL 47	EPL 48	EPL 49
	Discharge volume (Megalitres)		Discharge volume (Megalitres)				
1/12/2024	-	-	0.56	0.04	0.24	0.04	0.44
2/12/2024	0.44	-	0.75	0.04	0.22	0.14	0.67
3/12/2024	-	-	0.75	0.04	0.18	0.10	0.64
4/12/2024	-	-	0.42	0.04	0.20	0.08	0.62
5/12/2024	-	-	0.32	0.02	0.29	0.04	0.79
6/12/2024	-	-	0.31	0.04	0.13	0.15	0.97
7/12/2024	-	-	0.46	0.04	0.18	0.08	0.56
8/12/2024	-	-	0.60	0.17	0.23	0.09	0.72
9/12/2024	-	-	0.41	0.07	0.15	0.02	0.72
10/12/2024	-	-	0.70	0.09	0.23	0.16	0.57
11/12/2024	-	-	0.69	0.06	0.22	0.02	0.50
12/12/2024	-	-	0.42	0.06	0.23	0.08	0.85
13/12/2024	-	-	0.40	0.06	0.21	0.09	0.71
14/12/2024	-	-	0.56	0.05	0.21	0.09	0.54
15/12/2024	-	-	0.84	0.08	0.32	0.20	0.73
16/12/2024	-	-	0.59	0.05	0.19	0.08	0.38
17/12/2024	-	-	0.78	0.04	0.19	0.09	0.30
18/12/2024	-	-	0.55	0.05	0.18	0.10	0.06
19/12/2024	-	-	0.50	0.05	0.16	0.08	0.29
20/12/2024	-	-	0.37	0.06	0.21	0.09	0.22
21/12/2024	-	-	0.57	0.06	0.21	0.09	0.32
22/12/2024	-	-	0.32	0.04	0.36	0.09	0.46
23/12/2024	-	-	0.54	0.08	0.08	0.00	0.53
24/12/2024	-	-	0.46	0.05	0.17	0.06	0.62
25/12/2024	-	-	0.70	0.04	0.17	0.07	0.55
26/12/2024	-	-	0.84	0.04	0.10	0.08	0.84
27/12/2024	-	-	0.75	0.04	0.18	0.07	0.53
28/12/2024	-	-	0.71	0.05	0.17	0.07	0.42
29/12/2024	-	-	0.57	0.05	0.16	0.08	0.67
30/12/2024			0.46	0.05	0.17	0.06	0.74
31/12/2024	-	-	0.46	0.04	0.24	0.08	0.62

\- Water not discharged on this day

Note: The EPL discharge volume limit for EPL 43 and 50 is 4.32 megalitres per day. Compliance with this criteria was met during the reporting month.

* The maximum flow rate capacity for Lobs Hole STP/PWTP during the reporting month was 4.4 L/s

^ The maximum flow rate capacity for Tantangara STP/PWTP during the reporting month was 0.0 L/s

EPL 21266 In Situ Water Quality Measurement:
EPL Monthly Monitoring January 2025

Table 1 - Surface Water Quality Data
River and Minor Watercourses

	Water Quality Objectives (see note 1)							
	Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)
	-	90 - 110	-	30 - 350	-	6.5 - 8.0	-	2 - 25

Date and Time	EPL Site ID	Location Description	Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)	Field Comments	Context
4/1/2025, 9:01 am	EPL5	Yarrangobilly River, upstream of the exploratory tunnel and construction pad	19.63	86.5	7.92	136	89	8.16	141	0.54	Sunny day, clear water, no odour, slow flow	This sample point is upstream of works and is therefore representative of background conditions.
4/1/2025, 9:35 am	EPL6	Wallaces Cree, upstream of Yarrangobilly River and Wallaces Creek confluence	18.53	84.7	7.99	118	77	7.72	163	2	Sunny day, clear water, no odour, slow flow	This sample point is upstream of works and is therefore representative of background conditions.
4/1/2025, 10:32 am	EPL8	Yarrangobilly River, downstream of Lick Hole Gully	21.35	85.7	7.59	146	95	7.78	164	9.7	Sunny day, clear water, no odour, slow flow	Low DO aligns with reults upstream of works and reduced flow.
4/1/2025, 10:49 am	EPL9	Yarrangobilly River, downstream of the accommodation camp and upstream of Talbingo Reservoir	21.64	85.7	7.54	141	91	7.96	153	7.7	Sunny day, clear water, no odour, slow flow, low flowing	Low DO aligns with reults upstream of works and reduced flow.
4/1/2025, 9:19 am	EPL12	Yarrangobilly River, Immediately downstream of portal pad	19.66	97.1	8.88	138	90	8.01	153	0.6	Sunny day, clear water, no odour, slow flow, noticed a discrease in the water level notably	Marginally higher pH slightly out of range. Follow up to occur in February.
4/1/2025, 9:54 am	EPL14	Yarrangobilly River, downstream of road construction areas	19.83	70.9	6.46	135	88	7.62	170	4.9	Sunny day, clear water, no odour, slow flow, low flowing	Low DO aligns with the historical data recorded for this location in January 2025 especially with reduced flow velocity.
4/1/2025, 10:13 am	EPL15	Yarrangobilly River, downstream of road construction areas	20.61	84.9	7.62	136	88	7.62	172	1.1	Sunny day, clear water, no odour, slow flow, low flowing, noticed a dicrease level of water	Low DO aligns with the historical data recorded for this location in January 2025 especially with reduced flow velocity.
4/1/2025, 11:04 am	EPL16	Yarrangobilly River, downstream of road construction areas	22.21	79.9	6.96	140	91	8.26	97	1.2	Sunny day, clear water, no odour, slow flow, very low level of water	Low DO and high pH aligns with reults upstream of works and the reduction of water available.
3/1/2025, 9:24 am	EPL24	Yarrangobilly River tributary (Watercourse 2), directly downstream of road	18.52	51.3	4.78	1,220.00	780	7.68	70	0.4	Sunny day, low flow, no odour, small stream, algae growth upstream.	Location has minimal water level, results are not coidered representative.
12/1/2025, 7:08 am	EPL26	Eucumbene River downstream of Marica Road	12.45	63.4	6.76	42	28	7.51	158	3.7	Sunny day. Low flow. Smells like horse poo and urine, hores tracks in stream.	Low DO aligns with the baseline data and remains with the upstream conditions.
12/1/2025, 6:48 am	EPL27	Eucumbene River upstream of Marica Road	13.32	57.2	5.98	42	27	7.81	192	10.4	Clear day. Water level low. DO low, single point at calibration to 105% completed. Same result returned.	This sample point is upstream of works and is therefore representative of background conditions.
18/1/2025, 8:44 am	EPL30	Kellys Plain Creek, downstream of accommodation camp and laydown areas	12.32	85.8	9.18	39	25	7.36	208	15.4	Overcast, windy day. Water is milky coloured.	This sample point is upstream of works and is therefore representative of background conditions.
18/1/2025, 8:59 am	EPL31	Kellys Plain Creek, upstream of accommodation camp and laydown areas	12.17	81	8.7	28	18	7.19	212	0.0	Overcast, windy day.	Probe malfunctioning, recalibration to occur afternoon of the 18th.
18/1/2025, 8:18 am	EPL33	Murrumbidgee River, downstream of Tantangara reservoir outlet	14.26	80.6	8.26	28	18	7.32	206	5.7	Overcast, windy day. Low flow. Decomposing algae smell.	Low DO and EC aligns directly with reults upstream of works.
18/1/2025, 7:35 am	EPL34	Nungar Creek, upstream of Tantangara Road	12.98	93.8	9.89	30	20	7.67	193	0.0	Overcast, windy day. Low flow. Low turbidity.	Probe malfunctioning, recalibration to occur afternoon of the 18th.
18/1/2025, 7:45 am	EPL35	Nungar Creek, downstream of Tantangara Road	12.09	94.5	10.16	28.0	18	7.16	195	0.0	Overcast, windy day. Low flow. Low turb.	Probe malfunctioning, recalibration to occur afternoon of the 18th.
26/1/2025, 1:22 pm	EPL 36	Camerons Creek, upstream of works in Rock Forest	23	69.3	5.95	50	33	6.96	162	7.6	Sunny day, clear water, low level of water, slow flow	This sample point is upstream of works and is therefore representative of background conditions.
26/1/2025, 2:19 pm	EPL 37	Camerons Creek, downstream of works in Rock Forest	28.32	71.6	5.57	53	34	7.01	185	38.5	Sunny day,turbid water, slow flow	High turbidity and low DO can be attributed to low flow and seasonal changes in January 2025.
13/1/2025, 11:59 am	EPL52	GF01 leachate basin	25.56	94.8	7.73	1,250.00	801	8.98	-15	17.6	Hot sunny day. Recent rain overnight. Basin is slightly green colour. Non turbid	High EC is expected within the leachate storage infrastructure.
-	EPL53	GF01 surface water upstream east	-	-	-	-	-	-	-	-	This location is dry	-
-	EPL54	GF01 surface water upstream west	-	-	-	-	-	-	-	-	This location is dry	-
-	EPL55	GF01 surface water downstream	-	-	-	-	-	-	-	-	This location is dry	-
-	EPL67	Nungar Creek surface water downstream west from Tantangara emplacement area	-	-	-	-	-	-	-	-	The reservoir level at Tantangara is low and is not representative sample.	-
-	EPL71	Surface water downstream of Marica emplacement	-	-	-	-	-	-	-	-	Unable to access site due to land clearing activities.	-
13/1/2025, 7:42 am	EPL84	F8 Basin	20.19	69.1	6.25	1,440.00	919	8.33	151	883	Clear sunny day. Recent rain last night. Plenty of ducks in basin. Water is very turbid. No odour, no sheen.	Low DO and elevated EC due to runoff accumulating in the basin. Water was taken for treatment at the process water treatment plant or re-use where parameters where met.
-	EPL85	MY07 Basin	-	-	-	-	-	-	-	-	Basin is cutrently being relined. Cannot take sample.	-
-	EPL86	LH001 Basin	-	-	-	-	-	-	-	-	Liner under construction. No water no sample.	-
-	EPL98	Rock blanket diversion monitoring under GF01 liner	-	-	-	-	-	-	-	-	This location is dry	-
17/1/2025, 9:50 am	EPL99	Marica Leachate Basin- Turkey's Nest	14.62	70.1	7.12	220	143	8.14	38	350	Wl low. Lots of grout. Clear windy day.	Low DO and elevated turbidity can be attributed to the runoff accumulating in the sediment basin. Water was taken for treatment at the process water treatment plant or re-use where parameters where met.
17/1/2025, 10:17 am	EPL100	Marica Lower Leachate Basin USS Shaft	15.73	77.6	7.69	538	345	8.33	88	59.3	Lots of grout. Clear windy day.	Low DO with elevated EC and turbidity can be attributed to the runoff accumulating in the sediment basin. Water was taken for treatment at the process water treatment plant or re-use where parameters where met.
17/1/2025, 9:59 am	EPL101	Marica Leachate Basin Spoil Pad	13.42	78.9	8.22	670	429	8.44	83	80	Wl low. Lots if grout. Clear windy day.	Low DO with elevated EC and turbidity can be attributed to the runoff accumulating in the sediment basin. Water was taken for treatment at the process water treatment plant or re-use where parameters where met.
11/1/2025, 9:51 am	EPL106	Ravine Bay Leachate basin 1	23.1	100.8	8.6	1,150.00	734	8.41	113	15.3	Clear, no turbidity, no odour, good for reuse, sunny, 8mm yesterday	High EC can be attributed to rainfall overnight. Water in this basin is used for irrigation and dust supression where parameters were met.

EPL 21266 In Situ Water Quality Measurements
EPL Monthly Monitoring January 2025
Table 2 - Reservoir Water Quality Data
Talbingo and Tantangara Reservoirs

Water Quality Objectives (see note 2)								
Temp (°C)	DO (%)	DO (mg/l)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)	
-	90 - 110	-	20 - 30	-	6.5 - 8.0	-	1 - 20	

Date and Time	EPL Site ID	Location Description	Temp (°C)	DO (%)	DO (mg/l)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)	Field Comments	Context
15/1/2025, 8:47 am	EPL10	Talbingo Reservoir, downstream of road works and upstream of water intake point	25.85	63.5	5.17	97	63	7.62	184	0	Sunny day. Turb low.	Low DO and elevated EC align with results upstream of works. EC is consistent with background conditions in the Yarrangobilly River for January 2025.
15/1/2025, 8:27 am	EPL11	Talbingo Reservoir, downstream of outlet	25.2	63.7	5.24	79	51	7.97	177	1	Sunny day. Dust or pollen on waters surface.	Low DO and elevated EC align with results upstream of works. EC is consistent with background conditions in the Yarrangobilly River for January 2025.
19/1/2025, 9:22 am	EPL28	Tantangara Reservoir, upstream of works in the mouth of the Murrumbidgee River	18.28	109.1	10.27	30	19	7.76	212	8.6	Sunny day, clear water, no odour	All reading are within WQO limits.
19/1/2025, 9:50 am	EPL29	Tantangara Reservoir, downstream of works area and upstream of lower Murrumbidgee River	19.19	92.4	8.54	25	16	7.1	241	8.9	Sunny day, clear water, no odour	All reading are within WQO limits.
19/1/2025, 9:30 am	EPL32	Tantangara Reservoir, Tantangara Intake. Downstream of construction works	18.94	91.9	8.54	26	17	7.52	-48	7.1	Sunny day, clear water, no odour	All reading are within WQO limits.
18/1/2025, 12:31 pm	EPL38	Tantangara Reservoir, variable location dependant on tide and reservoir levels. Between the emplacement area and the ancillary facilities for emplacement activities	18.47	74.6	6.99	38	25	7.63	200	30.6	Overcast, windy day. Turb high at lakes edge due to wind.	Low DO and elevated EC with turbidity can be attributed to low reservoir levels in preparation for intake works.
18/1/2025, 9:46 am	EPL39	Confluence of Nungar Creek and Tantangara Reservoir, variable location dependent on tide and reservoir levels. Upstream of Tantangara construction works	14.94	90	9.09	27	18	7.53	201	9.6	Overcast, windy day.	All reading are within WQO limits.
4/1/2025, 1:58 pm	EPL40	Confluence of the upper Murrumbidgee River and Tantangara Reservoir, variable location dependent on tide and reservoir levels. Upstream of works	24.8	100	8.29	22.4	15	7.29	199.1	4.13	Sunny, hot, windy. Water relatively clear; moderately flowing; organic material and algae present; no odour or oily sheen.	All reading are within WQO limits.
19/1/2025, 10:05 am	EPL 46	Tantangara Reservoir, diffuser outlet discharging into Tantangara Reservoir from Tantangara STP/PWTP	19.01	90	8.35	26	17	6.95	244	6.3	Sunny day, clear water, no odour	All reading are within WQO limits.
19/1/2025, 9:57 am	EPL 51	Tantangara Reservoir, downstream of Tantangara STP/PWTP diffuser outlet	19.01	91	8.44	25	16	7.1	238	7.4	Sunny day, clear water, no odour	All reading are within WQO limits.
15/1/2025, 8:02 am	EPL107	Upstream monitoring of Ravine Bay emplacement area within Yarrangobilly River	24.24	71.8	6.02	49	32	8.16	170	3.1	Sunny day.	Low DO and elevated pH with EC align with results upstream of works. EC is consistent with background conditions in the Yarrangobilly River for January 2025.
15/1/2025, 7:42 am	EPL108	Monitoring of Ravine Bay emplacement area (center of PSE) within Yarrangobilly River	23.75	69.4	5.87	43	28	8.17	169	3.4	Clear sunny.	Low DO and elevated pH with EC align with results upstream of works. EC is consistent with background conditions in the Yarrangobilly River for January 2025.
15/1/2025, 7:29 am	EPL109	Upstream monitoring of Ravine Bay emplacement area within Yarrangobilly River	23.04	81.3	6.97	85	55	6.97	175	6.3	Clear day.	Low DO and elevated EC align with results upstream of works. EC is consistent with background conditions in the Yarrangobilly River for January 2025.

Table 3 - Treated Water Quality Data
Talbingo

Water Quality Objectives (see note 3)							
Temp (°C)	DO (%)	DO (mg/l)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)
-	-	-	700	-	6.5 - 8.0	-	25

Date and Time	EPL Site ID	Location Description	Temp (°C)	DO (%)	DO (mg/l)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)	Field Comments	Context
22/1/2025, 9:15 am	EPL41	Lobs Hole STP/PWTP Final Effluent Quality Monitoring Point. Downstream of final treatment, prior to discharge to Talbingo Reservoir.	25.46	63.1	5.17	161	105	6.92	170	20	Potential turb error, visually clear, no odours	All reading are within WQO limits.

Table 4 - Treated Water Quality Data
Tantangara

Water Quality Objectives (see note 3)							
Temp (°C)	DO (%)	DO (mg/l)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)
-	-	-	200	-	6.5 - 8.0	-	25

Date and Time	EPL Site ID	Location Description	Temp (°C)	DO (%)	DO (mg/l)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)	Field Comments	Context
22/1/2025, 11:00 am	EPL50	Tantangara STP/PWTP Final Effluent Quality Monitoring Point. Downstream of final treatment, prior to discharge to Tantangara Reservoir.	20.4	87.2	7.87	60.7	43	7.44	176.5	22.49	Water was visibly clear. No odour	All reading are within WQO limits.

Table 5 - Groundwater Quality Data
GF01 Surface Water and Groundwater

	Water Quality Objectives (see note 1)							
	Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)
	-	-	-	30 - 350	-	6.5 - 8.0	-	-

Date and Time	EPL Site ID	Location Description	Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)	Field Comments	Context
20/1/2025, 9:41 am	EPL56	GF01 groundwater upstream east	15.82	21.6	2.14	241	156	7.32	256	21.7	SWL 10.62. Clear sunny day.	All reading are within WQO limits.
20/1/2025, 9:59 am	EPL57	GF01 groundwater upstream west	17.69	23.5	2.23	248	161	7.9	227	50.7	SWL 14.14m Clear sunny day.	All reading are within WQO limits.
20/1/2025, 11:05 am	EPL58	GF01 groundwater downstream	20.06	20.6	1.86	1200	766	5.83	161	90.5	Clear sunny day. Swl 7.05m	Elavated EC is generally consistent with historical range for this location. Low pH will be monitored closely, however borehole pump extraction method is in the process of being upgraded.
25/1/2025, 9:55 am	EPL68	Tantangara groundwater downstream West	14.93	80.9	8.16	34	22	6.1	195	0.8	Unable to take depht due to the pump has been set up, clear water, no odour, sunny day	Low pH is generally consistent with the historical data for this location. These fall in line with curent seasonal changes.
25/1/2025, 10:08 am	EPL69	Tantangara groundwater downstream East	15.5	76.5	7.63	31	20	6.36	191	116	SWL- 3.25m TD- 7.49m, sunny day, turbid water, no odour	Low pH is generally consistent with the historical data for this location. These fall in line with curent seasonal changes.
25/1/2025, 12:04 pm	EPL70	Tantangara groundwater upstream	17.67	54.2	5.16	93	60	6.45	207	1000	SWL- 6.40 m TD-- 17.20 m, very turbid water, seems like sediments has been emplacement in tne sleeve, no odour	This location is upgradient of works and therefore representative of background conditions.
26/1/2025, 8:04 am	EPL 72	Marica groundwater upstream	12.53	60.1	6.4	36	24	4.87	328	62.1	SWL- 36.62 m, sunny day, clear water, no odour	This location is upgradient of works and therefore representative of background conditions.
26/1/2025, 10:15 am	EPL73	Marica groundwater downstream	16.56	54.8	5.34	123	80	6.54	191	111	SWL- 14.02 m, sunny day, turbid water,no odour	All reading are within WQO limits.
13/1/2025, 9:58 am	EPL80	LHG groundwater upstream	20.04	18.4	1.67	876	561	6.77	-52	62.2	SWL: 20.43m. Clear sunny day. Water is slightly turbid, sediment at bottom of sleeve no odour. Recent rain last night.	This location is upgradient of works and therefore representative of background conditions.
13/1/2025, 8:00 am	EPL81	LHG groundwater downstream	17.53	19	1.82	814	521	6.77	-46	845	SWL: 4.05m. Clear, sunny morning. Recent rain last night. Water is very clear, no odour. Lots of dark grey sediment at the bottom of sleeve.	Elevated EC aligns with results upgradient of works.
13/1/2025, 9:44 am	EPL82	MY groundwater upstream	19.12	13.6	1.25	2650	1700	6.61	-46	84.6	SWL: 9.03m. Hot sunny morning. Recent rain last night. Water is clear with a dirt like odour.	This location is upgradient of works and therefore representative of background conditions.
13/1/2025, 8:59 am	EPL83	MY groundwater downstream	18.49	16.6	1.55	563	360	6.17	56	160	SWL: 3.98m. Clear sunny morning. Recent rain last night. Water is clear, no odour.	Elavated EC aligns with results up gradient of works. Low pH will be closely monitored at this location, however borehole pump extraction method is currently being upgraded.
13/1/2025, 7:28 am	EPL87	MY groundwater downstream	17.4	95.7	9.16	585	374	5.71	231	1000	SWL: 4.16 m. Clear, sunny morning. Recent rain last night. This bore has had some exceedances in Total N recently. Water is turbid, similar colour to 8.5 basin next to it. Turbidity has exceeded 1000 NTU.	Elavated EC aligns with results up gradient of works. Low pH will be closely monitored at this location, however borehole pump extraction method is currently being upgraded.
13/1/2025, 8:38 am	EPL88	MY groundwater downstream	18.36	28.1	2.63	830	531	6.95	-150	0.9	SWL: 3.42m. Clear sunny morning. Recent rain last night. Water is clear, slight sulphur odour.	Elevated EC aligns with results upgradient of works.
13/1/2025, 9:18 am	EPL89	LHG groundwater downstream	18.39	22.7	2.13	349	227	6.53	51	172	SWL: 3.21 m. Hot sunny morning. Recent rain overnight. Water is slightly turbid with sediment settling at bottom of sleeve, no odour.	All reading are within WQO limits.
20/1/2025, 9:26 am	EPL 90	GF01 groundwater downstream	16.06	60.8	5.99	72	47	5.74	274	197	SWL 14.11. Clear sunny day.	Low pH is generally consistent with the historical data for this location. Borehole extraction method is currently being upraded at this location
20/1/2025, 11:27 am	EPL 91	GF01 groundwater downstream	19.94	34.9	3.17	233	152	6.62	168	21.8	SWL 8.55m Clear sunny day. No hose ling enough to leave in well. Using shorter hose that is removed each time.	All reading are within WQO limits.
6/1/2025, 9:51 am	EPL 92	GF01 groundwater downstream	17.13	46.5	4.48	120	78	7.2	154	301	SWL- 13.50 m, sunny day, turbid water, no odour	All reading are within WQO limits.
20/1/2025, 10:31 am	EPL 93	GF01 groundwater downstream	17.6	29.5	2.81	242	157	6.91	38	50.9	SWL 15.72m. Clear sunny day.	All reading are within WQO limits.
20/1/2025, 10:25 am	EPL 94	GF01 groundwater downstream	17.52	24.3	2.32	170	110	6.32	48	83.3	SWL 13.52m Clear sunny day.	Low pH is generally aligned with bores in close proximity. This location will be closely monitored.
20/1/2025, 10:56 am	EPL 95	GF01 groundwater downstream	20.63	20.4	1.82	702	449	6.31	131	65.5	SWL 7.15m Clear sunny day.	Elavated EC and low pH have been consistent at this location for this current seasonal range. This location is currently undergoing upgrades in it's extraction method.
6/1/2025, 10:17 am	EPL 96	GF01 groundwater downstream	17.32	24.4	2.33	860	551	7.14	28	279	SWL- 5.17 m, sunny day, turbid water, no odour	Elevated EC is consistent with the historical ranges for this location for January 2025.
20/1/2025, 11:44 am	EPL 97	GF01 groundwater downstream	19.11	18	1.66	424	276	6.02	121	4.1	SWL 6.55m	Elavated EC and low pH have been consistent at this location for this current seasonal range.
12/1/2025, 7:35 am	EPL102	Groundwater monitoring associated with the Marica emplacement area on Marica Trail	12.04	64.3	6.92	402	261	7.53	-43	42.7	SWL 8.76. Clear day.	Elavated EC can be attributed to land clearing and ground disturbance in close proximity to sample location.
25/1/2025, 11:42 am	EPL103	Upstream groundwater monitoring west of the Tantangara emplacement area	16.39	64.2	6.28	50	32	6.41	214	4.2	SWL- 11.06 m TD- 21.7 m, sunny day, clear wanter, no odour	This location is upgradient of works and therefore representative of background conditions.
25/1/2025, 10:29 am	EPL104	Dowslope groundwater monitoring east of the Tantangara emplacement area	16.01	45.7	4.51	49	32	6.27	197	60.9	SWL- 4.62 m TD- 12.46 m, clear water, sunny day, no odour	Low pH aligns with results upgradient of PSE.
25/1/2025, 11:19 am	EPL105	Dowslope groundwater monitoring east of the Tantangara emplacement area	16.86	55.9	5.41	170	111	7.09	182	3.5	Unable to take depth due to the pump has been set up, clear water, no odour	All reading are within WQO limits.
9/1/2025, 8:51 am	EPL113	Upstream east monitoring of Ravine Bay emplacement area	13.93	102.6	10.58	125	82	6.55	154	752	Turbid, no odours, SWL: 2.90mbtoc	All reading are within WQO limits.
9/1/2025, 9:52 am	EPL114	Upstream west monitoring of Ravine Bay emplacement area	16.59	18.6	1.81	382	248	7.42	85	7.1	Visually clear, no odours. swl: 31.62mbtoc	This location is upgradient of works and therefore representative of background conditions.
9/1/2025, 9:12 am	EPL115	Downstream east monitoring of Ravine Bay emplacement area	15.52	18.1	1.8	365	237	7.33	-20	278	Turbud, no odours, SWL: 10.92mbtoc	Elavated EC directly aligns with results upgradient of PSE.
9/1/2025, 10:18 am	EPL116	Downstream west monitoring of Ravine Bay emplacement area	16.55	71.3	7.09	181	118	7.21	120	1,000.00	Very turbid, no odours, swl: 8.01	All reading are within WQO limits.
9/1/2025, 10:35 am	EPL117	Downstream monitoring of Ravine Bay emplacement area	16.39	11.6	1.13	136	88	6.63	-49	576	Turbid, no odours, swl: 15.53	All reading are within WQO limits.

Snowy Hydro 2.0 Main Works
Monthly EPL Sampling: 01-31 January 2025 - Groundwater

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*	EPL56	EPL57	EPL58	EPL68	EPL69	EPL70	EPL72	EPL73	EPL80	EPL81	EPL82	EPL83	EPL87	EPL88	EPL89	EPL 90	EPL 91	EPL92	EPL93	EPL94	EPL95	EPL96	EPL97	EPL102	EPL103	EPL104	EPL105	EPL113	EPL114	EPL115	EPL116	EPL117
				20/01/25	20/01/25	20/01/25	25/01/25	25/01/25	25/01/25	28/01/25	28/01/25	13/01/25	13/01/25	13/01/25	13/01/25	13/01/25	13/01/25	13/01/25	20/01/25	20/01/25	6/01/25	28/01/25	20/01/25	31/01/25	6/01/25	29/01/25	12/01/25	25/01/25	25/01/25	25/01/25	9/01/25	9/01/25	9/01/25	9/01/25	9/01/25
Physiochemical																																			
pH	pH Unit	-	6.5-8	7.32	7.6	5.83	6.1	6.36	6.45	6.87	6.54	6.77	6.77	6.61	6.17	5.71	6.95	6.53	5.74	6.62	7.2	6.91	6.32	6.31	7.14	6.92	7.53	6.41	6.27	7.09	6.56	7.42	7.03	7.31	6.63
Electrical Conductivity	µS/cm	-	30-350	242	248	1200	34	31	93	36	123	676	814	2650	563	585	630	349	72	233	120	242	170	702	860	424	402	50	49	170	125	362	305	181	136
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value	256	227	161	195	191	207	328	191	-52	-46	-46	56	231	-150	51	274	168	154	38	48	131	28	121	-43	214	197	182	254	85	-20	130	-49
Temperature	°C	-	No Water Quality Objective Value	15.82	17.66	20.06	14.98	15.5	17.47	12.53	16.56	20.04	17.53	18.12	18.49	17.4	18.36	18.39	16.06	18.94	17.13	17.6	17.52	20.63	17.32	19.13	12.99	16.39	16.01	16.86	13.93	16.39	15.52	16.53	16.39
Dissolved Oxygen	% saturation	-	No Water Quality Objective Value	21.6	21.5	20.6	80.9	76.5	54.2	80.1	54.8	18.4	19	13.6	16.6	35.7	28.1	22.7	60.8	34.9	46.5	29.5	24.3	30.4	24.4	18	64.3	64.2	45.7	55.9	102.6	18.6	18.1	71.3	31.6
Turbidity	NTU	-	No Water Quality Objective Value	21.7	50.7	80.5	0.8	1.96	1000	62.1	111	62.2	845	84.6	160	1000	0.9	172	187	21.8	301	50.9	83.3	65.5	279	4.1	42.7	4.2	60.9	3.5	752	7.5	278	1030	576
Laboratory analytes																																			
TSS	mg/L	5	No Water Quality Objective Value	9	7	109	<5	312	1,460	27	62	26	272	172	206	6,600	6	191	106	36	519	103	72	124	272	21	11	10	89	13	341	21	329	6,770	464
Hardness as CaCO3	mg/L	1	No Water Quality Objective Value	154	136	448	7	9	28	13	22	348	622	1,240	84	191	112	64	16	125	48	124	115	310	211	142	121	2	3	40	43	204	179	85	43
Nutrients																																			
Ammonia as N	µg/L	10	13	10	<10	50	<10	30	20	20	20	<10	100	100	<10	190	310	30	20	10	<10	30	<10	10	<10	10	30	30	<10	<10	<10	10	<10	<10	<10
Nitrite + Nitrate as N (NOx)	µg/L	10	15	170	100	77,400	640	540	630	20	40	6	6	6	20	6,490	2	30	140	130	30	7	5	22,700	32,600	160	<10	742	240	2,640	10	5	3	80	30
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value	<100	<100	8,600	<100	<100	600	<100	<100	200	400	300	200	2,500	500	200	100	200	<100	100	<100	4,100	700	100	200	<100	100	200	<1,000	<100	<100	<2,000	<100
Nitrogen (Total)	µg/L	100	150	200	100	87,400	600	200	1,200	<100	<100	200	400	300	200	10,000	500	200	200	300	<100	100	<100	26,800	33,400	300	200	800	300	3,000	<1,000	<100	<100	<2,000	<100
Reactive Phosphorus	µg/L	1	15	15	13	11	<1	1	17	21	13	3	4	2	6	6	5	7	10	20	<1	26	14	12	4	21	15	10	8	3	4	11	8	17	27
Phosphorus (Total)	µg/L	10	20	60	70	60	50	140	1,210	50	30	40	180	10	20	3,190	50	40	570	50	70	750	850	1,080	150	800	30	40	90	20	160	20	80	940	460
Inorganics																																			
Cyanide Total	µg/L	4	4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hydrocarbons																																			
Oil and Grease	mg/L	1	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Metals																																			
Aluminium (total)	µg/L	5	No Water Quality Objective Value	144	356	2,130	336	1,310	18,300	477	540	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminium (dissolved)	µg/L	5	27	<5	<5	5	<5	6	<5	9	<5	<5	<5	<5	8	<5	<5	<5	10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	10	<5	<5	<5	<5
Arsenic (total)	µg/L	0.2	No Water Quality Objective Value	<0.2	2.2	3.1	<0.2	0.3	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arsenic (dissolved)	µg/L	0.2	0.8	<0.2	2.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	2.9	1.8	8.5	2.7	<0.2	12.2	0.2	<0.2	0.2	0.3	4.8	0.5	0.5	<0.2	0.2	0.6	<0.2	<0.2	<0.2	0.4	0.7	0.4	0.6	0.5
Chromium (III+VI) (total)	µg/L	0.2	No Water Quality Objective Value	0.4	0.8	5.9	0.9	1.8	8.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium (III+VI) (dissolved)	µg/L	0.2	0.01	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Copper (total)	µg/L	0.5	No Water Quality Objective Value	8.4	13.4	3.8	0.8	2.2	18.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper (dissolved)	µg/L	0.5	3	1.7	3.2	0.8	<0.5	<0.5	<0.5	10.0	1.0	<0.5	<0.5	<0.5	1.4	<0.5	<0.5	4.1	<0.5	<0.5	<0.5	<0.5	<0.5	1.8	0.6	<0.5	<0.5	3.5	1.4	0.7	3.1	0.6	<0.5	<0.5	<0.5
Iron (total)	µg/L	2	No Water Quality Objective Value	171	368	4,300	318	1,860	12,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron (dissolved)	µg/L	2	300	<2	<2	7	66	6	<2	<2	<2	8	220	1,340	2	<2	18	<2	6	4	<2	4	4	<2	<2	<2	<2	<2	<2	<2	26	<2	<2	<2	<2
Lead (total)	µg/L	0.1	No Water Quality Objective Value	1.4	0.9	25.1	0.1	0.7	4.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead (dissolved)	µg/L	0.1	1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.4	<0.1	<0.1	<0.1	<0.1
Manganese (total)	µg/L	0.5	No Water Quality Objective Value	18.0	97.7	494	117	60.8	138	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manganese (dissolved)	µg/L	0.5	1,200	6.8	57.6	361	87.4	3.8	7.0	5.5	6.7	183	189	354	84.8	37.2	164	19.4	6.1	126	69.1	108	383	773	3.1	437	224	1.1	9.2	17.0	104	336	110	88.4	273
Nickel (total)	µg/L	0.5	No Water Quality Objective Value	<0.5	1.4	12.3	0.6	1.8	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel (dissolved)	µg/L	0.5	8	<0.5	<0.5	6.0	4.5	<0.5	<0.5	1.3	<0.5	15.0	0.8	0.8	5.5	2.0	2.0	1.8	3.4	1.1	2.2	0.6	1.5	12.3	2.4	2.0	0.8	<0.5	<0.5	3.0	0.6	2.4	<0.5	0.8	1.0
Silver (total)	µg/L	0.01	No Water Quality Objective Value	<0.01	<0.01	0.12	<0.01	<0.01	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver (dissolved)	µg/L	0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc (total)	µg/L	1	No Water Quality Objective Value	5	3	29	41	6	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zinc (dissolved)	µg/L	1	2.8	2	<1	12	39	2	<1	6	<1	<1	<1	2	3	<1	<1	<1	8	4	17	<1	6	32	3	33	<1	<1	1	60	5	6	<1	3	<1

* Water Quality Objective values for groundwater refer to the default trigger values for physical and chemical stressors in south-east Australia (upland rivers) for the protection of 95% of aquatic species ANZECC / ARMCANZ (2000), they are not pollutant limits imposed by EPL 21266.
- Sample not required at this location.

Snowy Hydro 2.0 Main Works
Monthly EPL Sampling: 01-31 January 2025 - Talbingo and Tantangara Reservoir

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*	EPL10	EPL11	EPL28	EPL29	EPL32	EPL38	EPL39	EPL40	EPL46	EPL51	EPL107	EPL108	EPL109
Field				15/1/25	15/1/25	19/1/25	19/1/25	19/1/25	18/1/25	18/1/25	4/1/25	19/1/25	19/1/25	4/1/25	19/1/25	19/1/25
pH	pH Unit	-	6.5-8	7.62	7.97	7.76	7.1	7.52	7.63	7.53	7.29	6.95	7.1	8.16	8.17	6.97
Electrical Conductivity	µS/cm	-	20-30	97	79	30	25	26	38	27	22.4	26	25	49	43	85
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value	184	177	212	241	-48	200	201	199.1	244	238	170	169	175
Temperature	°C	-	No Water Quality Objective Value	25.85	25.2	18.28	19.19	18.94	18.47	14.94	24.8	19.01	19.01	24.24	23.75	23.04
Dissolved Oxygen	% saturation	-	90-110	63.5	63.7	109.1	92.4	91.9	74.6	90	100	90	91	71.8	69.4	81.3
Turbidity	NTU	-	1-20	0	1	8.6	8.9	7.1	30.6	9.6	4.13	6.3	7.4	3.1	3.4	6.3
Laboratory analytes																
Total suspended solids	mg/L	5	No Water Quality Objective Value	<5	<5	<5	<5	<5	34	<5	<5	<5	5	<5	<5	17
Hardness as $CaCO_3$ (filtered)	mg/L	1	No Water Quality Objective Value	43	38	9	9	9	9	13	9	9	<1	17	14	14
Nutrients																
Ammonia as N	µg/L	10	10	20	50	<10	<10	40	<10	10	10	<10	<10	<10	10	<10
Nitrite + Nitrate as N (NOx)	µg/L	10	10	<10	5	<2	4	<10	8	10	4	2	<10	<2	8	<2
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value	200	200	300	300	400	400	200	300	400	300	200	200	200
Nitrogen (Total)	µg/L	100	350	200	200	300	300	400	400	200	300	400	300	200	200	200
Reactive Phosphorus	µg/L	1	5	2	<1	4	1	4	3	3	4	4	4	5	2	2
Phosphorus (Total)	µg/L	10	10	30	<10	40	90	60	80	60	50	60	50	<10	10	<10
Inorganics																
Cyanide Total	µg/L	4	7	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hydrocarbons																
Oil and Grease	mg/L	1	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Metals																
Aluminium (dissolved)	µg/L	5	55	<5	<5	30	30	30	31	27	25	30	33	6	<5	<5
Arsenic (dissolved)	µg/L	0.2	13	0.5	0.3	0.3	0.3	0.3	0.3	<0.2	<0.2	0.3	0.3	0.2	<0.2	0.2
Chromium (III+VI) (dissolved)	µg/L	0.2	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Copper (dissolved)	µg/L	0.5	14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Iron (dissolved)	µg/L	2	300	36	16	278	273	280	285	161	77	278	310	6	6	5
Lead (dissolved)	µg/L	0.1	3.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Manganese (dissolved)	µg/L	0.5	1,900	2.0	<0.5	1.6	1.7	1.6	2.0	4.5	5.7	1.7	1.8	<0.5	<0.5	<0.5
Nickel (dissolved)	µg/L	0.5	11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Silver (dissolved)	µg/L	0.01	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc (dissolved)	µg/L	1	8	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Biological																
Faecal Coliforms	CFU/100mL	1	10/100^	590	2,700	100	-	-	-	-	-	-	80	-	-	-
Biochemical Oxygen Demand	mg/L	2	1/5^	<2	<2	3	-	-	-	-	-	-	<2	-	-	-

* Water Quality Objective values for Talbingo and Tantangara Reservoir refer to the default trigger values for physical and chemical stressors in south-east Australia (fresh lakes and reservoirs) for the protection of 95% of aquatic species ANZECC / ARMCANZ (2000), they are not pollutant limits imposed by EPL 21266.

** Algal blooms can present as feacal coliforms

^ 90th percentile concentration limits / 100 percentile concentration limits

\- Sample not required at this location.

Snowy Hydro 2.0 Main Works

Monthly EPL Sampling: 01-31 January 2025 - Surface Water

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*	EPL5	EPL6	EPL8	EPL9	EPL12	EPL14	EPL15	EPL16	EPL24	EPL26	EPL27	EPL30	EPL31	EPL33	EPL34	EPL35	EPL36	EPL37	EPL52	EPL53	EPL54	EPL55	EPL67	EPL71	EPL84	EPL85	EPL86	EPL98	EPL99	EPL100	EPL101	EPL106	EPL110	EPL118	EPL120	EPL122
Field				4/01/25	4/01/25	4/01/25	4/01/25	4/01/25	4/01/25	4/01/25	4/01/25	3/01/25	12/01/25	12/01/25	18/01/25	18/01/25	18/01/25	18/01/25	18/01/25	26/01/25	26/01/25	13/01/25	Dry	Dry	Dry	Dry	Dry	13/01/25	Dry	Dry	Dry	17/01/25	17/01/25	17/1/25	11/1/25	Dry	Dry	Dry	Dry
pH	-	-	6.5-8	8.16	7.72	7.76	7.96	8.01	7.62	7.62	8.28	7.68	7.51	7.81	7.36	7.19	7.32	7.67	7.16	6.96	7.01	8.98	Dry	Dry	Dry	Dry	Dry	8.33	Dry	Dry	Dry	8.14	8.38	8.44	8.41	Dry	Dry	Dry	Dry
Electrical Conductivity	µS/cm	-	30-350	136	118	146	141	138	135	136	140	1220	42	42	39	28	28	30	28	50	53	1250	Dry	Dry	Dry	Dry	Dry	1440	Dry	Dry	Dry	220	538	670	1150	Dry	Dry	Dry	Dry
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value	141	163	164	153	153	170	172	97	70	158	192	208	211	206	193	195	162	185	-15	Dry	Dry	Dry	Dry	Dry	151	Dry	Dry	Dry	38	88	88	83	Dry	Dry	Dry	Dry
Temperature	°C	-	No Water Quality Objective Value	19.63	18.53	21.35	21.64	19.68	19.83	20.81	22.21	18.52	12.45	13.32	12.12	12.37	14.26	12.98	12.09	23	26.32	25.56	Dry	Dry	Dry	Dry	Dry	20.19	Dry	Dry	Dry	14.62	15.73	13.42	23.1	Dry	Dry	Dry	Dry
Dissolved Oxygen	% saturation	-	90-110	88.5	84.7	85.7	85.7	97.1	70.9	84.9	79.9	51.3	63.4	57.2	85.8	81	80.6	93.8	94.5	69.3	71.6	94.8	Dry	Dry	Dry	Dry	Dry	69.1	Dry	Dry	Dry	70.1	77.1	78.9	100.8	Dry	Dry	Dry	Dry
Turbidity	NTU	-	2-25	0.54	2	9.7	7.7	0.6	4.9	1.1	1.2	0.4	3.7	10.4	15.4	0	5.7	0	0	7.6	38.5	17.6	Dry	Dry	Dry	Dry	Dry	863	Dry	Dry	Dry	350	59.1	80	15.3	Dry	Dry	Dry	Dry
Laboratory analytes																																							
TSS	mg/L	5	No Water Quality Objective Value	<5	<5	<5	<5	<5	<5	<5	<5	7	<5	<5	<5	<5	7	<5	<5	<5	8	11	Dry	Dry	Dry	Dry	Dry	322	Dry	Dry	Dry	142	28	45	<5	Dry	Dry	Dry	Dry
Hardness as CaCO3	mg/L	1	No Water Quality Objective Value	71	62	77	72	71	71	71	71	392	18	18	16	13	9	13	13	20	20	355	Dry	Dry	Dry	Dry	Dry	21	Dry	Dry	Dry	90	186	243	327	Dry	Dry	Dry	Dry
Nutrients																																							
Ammonia as N	µg/L	10	13	<10	<10	<10	<10	10	<10	<10	10	<10	10	<10	<10	<10	30	20	<10	<10	20	10	20	Dry	Dry	Dry	Dry	Dry	380	Dry	Dry	Dry	560	30	30	20	Dry	Dry	Dry	Dry
Nitrite + Nitrate as N (NOx)	µg/L	10	15	10	<10	70	4	6	4	7	6	34,600	10	6	10	<2	<10	7	4	20	4	26,900	Dry	Dry	Dry	Dry	Dry	10,500	Dry	Dry	Dry	2,080	17,500	30,600	18,100	Dry	Dry	Dry	Dry
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value	<100	<100	200	100	100	<100	100	<100	3,100	200	100	100	20C	400	300	200	200	400	3,200	Dry	Dry	Dry	Dry	Dry	2,600	Dry	Dry	Dry	1,100	3,100	5,400	<100	Dry	Dry	Dry	Dry
Nitrogen (Total)	µg/L	100	250	<100	<100	300	100	100	<100	100	<100	37,700	200	100	100	20C	400	300	200	200	400	30,100	Dry	Dry	Dry	Dry	Dry	13,100	Dry	Dry	Dry	3,200	20,900	36,000	18,200	Dry	Dry	Dry	Dry
Reactive Phosphorus	µg/L	1	15	4	6	6	4	4	3	3	5	2	4	6	6	6	<1	2	1	7	9	2	Dry	Dry	Dry	Dry	Dry	15	Dry	Dry	Dry	11	2	5	6	Dry	Dry	Dry	Dry
Phosphorus (Total)	µg/L	10	20	<10	10	10	30	10	50	30	30	30	40	10	40	40	80	70	80	30	20	40	Dry	Dry	Dry	Dry	Dry	330	Dry	Dry	Dry	70	80	100	20	Dry	Dry	Dry	Dry
Inorganics																																							
Cyanide Total	µg/L	4	8	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	Dry	Dry	Dry	Dry	Dry	<4	Dry	Dry	Dry	<4	<4	<4	<4	Dry	Dry	Dry	Dry
Hydrocarbons																																							
Oil and Grease	mg/L	1	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.4	<1.0	<1.0	<1.0	<1.0	<1.0	Dry	Dry	Dry	Dry	Dry	<1.0	Dry	Dry	Dry	<1.0	<1.2	<1.0	<1.0	Dry	Dry	Dry	Dry
Metals																																							
Aluminium (total)	µg/L	5	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	82	Dry	Dry	Dry	Dry	-	-	-	-	-	-	-	-	-	-	-	-
Aluminium (dissolved)	µg/L	5	27	<5	<5	<5	<5	<5	<5	<5	<5	<5	8	7	30	13	22	23	22	20	54	13	Dry	Dry	Dry	Dry	Dry	59	Dry	Dry	Dry	52	61	55	<5	Dry	Dry	Dry	Dry
Arsenic (total)	µg/L	0.2	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.1	Dry	Dry	Dry	Dry	-	-	-	-	-	-	-	-	-	-	-	-
Arsenic (dissolved)	µg/L	0.2	0.8	0.5	0.3	0.5	0.5	0.5	0.5	0.5	0.5	<0.2	<0.2	<0.2	<0.2	<0.1	0.3	<0.2	<0.2	0.4	0.6	5.6	Dry	Dry	Dry	Dry	Dry	11.3	Dry	Dry	Dry	1.6	2.1	1.6	2.1	Dry	Dry	Dry	Dry
Chromium (III+VI) (total)	µg/L	0.2	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.6	Dry	Dry	Dry	Dry	-	-	-	-	-	-	-	-	-	-	-	-
Chromium (III+VI) (dissolved)	µg/L	0.2	0.01	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.3	0.3	<0.2	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	1.5	Dry	Dry	Dry	Dry	Dry	51.5	Dry	Dry	Dry	12.2	4.1	14.5	2.5	Dry	Dry	Dry	Dry
Copper (total)	µg/L	0.5	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.7	Dry	Dry	Dry	Dry	-	-	-	-	-	-	-	-	-	-	-	-
Copper (dissolved)	µg/L	0.5	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	Dry	Dry	Dry	Dry	Dry	1.3	Dry	Dry	Dry	<0.5	0.1	1.2	<0.5	Dry	Dry	Dry	Dry
Iron (total)	µg/L	2	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51	Dry	Dry	Dry	Dry	-	-	-	-	-	-	-	-	-	-	-	-
Iron (dissolved)	µg/L	2	300	4	11	7	8	4	5	6	4	<2	67	50	63	44	242	160	182	316	380	<2	Dry	Dry	Dry	Dry	Dry	17	Dry	Dry	Dry	2	<2	<2	<2	Dry	Dry	Dry	Dry
Lead (total)	µg/L	0.1	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	Dry	Dry	Dry	Dry	Dry	-	-	-	-	-	-	-	-	-	-	-	-
Lead (dissolved)	µg/L	0.1	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	Dry	Dry	Dry	Dry	Dry	<0.1	Dry	Dry	Dry	<0.1	<0.1	<0.1	<0.1	Dry	Dry	Dry	Dry
Manganese (total)	µg/L	0.5	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.8	Dry	Dry	Dry	Dry	-	-	-	-	-	-	-	-	-	-	-	-
Manganese (dissolved)	µg/L	0.5	1,200	1.1	4.8	1.4	4.0	0.8	1.2	1.5	2.2	300	8.2	2.7	4.5	2.1	1.4	4.6	5.7	37.0	1.9	2.4	Dry	Dry	Dry	Dry	Dry	<0.5	Dry	Dry	Dry	3.6	8.3	5.2	0.9	Dry	Dry	Dry	Dry
Nickel (total)	µg/L	0.5	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	Dry	Dry	Dry	Dry	-	-	-	-	-	-	-	-	-	-	-	-
Nickel (dissolved)	µg/L	0.5	8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.4	<0.5	<0.5	<0.5	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	Dry	Dry	Dry	Dry	Dry	0.6	Dry	Dry	Dry	<0.5	0.3	0.9	2.2	Dry	Dry	Dry	Dry
Silver (total)	µg/L	0.01	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	Dry	Dry	Dry	Dry	-	-	-	-	-	-	-	-	-	-	-	-
Silver (dissolved)	µg/L	0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	Dry	Dry	Dry	Dry	Dry	<0.01	Dry	Dry	Dry	<0.01	<0.01	<0.01	<0.01	Dry	Dry	Dry	Dry
Zinc (total)	µg/L	1	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	Dry	Dry	Dry	Dry	-	-	-	-	-	-	-	-	-	-	-	-
Zinc (dissolved)	µg/L	1	2.4	<1	<1	<1	<1	<1	<1	<1	<1	10	<1	<1	<1	<1	<1	<1	<1	5	<1	1	Dry	Dry	Dry	Dry	Dry	<1	Dry	Dry	Dry	<1	<1	<1	<1	Dry	Dry	Dry	Dry

* Water Quality Objective values for surface water refer to the default trigger values for physical and chemical stressors in south-east Australia (upland rivers) for the protection of 99% of aquatic species ANZECC / ARMCANZ (2031), they are not pollutant limits imposed by EPL 21266.

- Samples not required

Monthly EPL Sampling: 01-31 January 2025 - Discharge Water

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*	EPL 41	EPL 43	EPL 44	EPL 45	EPL 47	EPL 48	EPL 49	EPL 50
Flow Rate				22/01/2025							22/01/2024
Inflow#	ML/day	-	-	-	0.0000	0.3858	0.0478	0.2103	0.0889	0.7156	-
Outflow#	ML/day	-	4.32 (EPL 43 / 50)	-	-	-	-	-	-	-	-
Field											
pH	pH Unit	-	6.5-8.5	6.92	-	-	-	-	-	-	7.44
Electrical Conductivity	µS/cm	-	700 (EPL 41) / 200 (EPL 50)	161	-	-	-	-	-	-	60.7
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value	170	-	-	-	-	-	-	176.5
Temperature	°C	-	15	25.46	-	-	-	-	-	-	20.4
Dissolved Oxygen	% saturation	-	No Water Quality Objective Value	63.1	-	-	-	-	-	-	87.2
Turbidity	NTU	-	<25	20	-	-	-	-	-	-	22.49
Laboratory analytes											
Total suspended solids	mg/L	5	5/10	<5	-	-	-	-	-	-	<5
Hardness as $CaCO_3$ (filtered)	mg/L	1	No Water Quality Objective Value	<1	-	-	-	-	-	-	<1
Nutrients											
Ammonia as N	µg/L	10	200/2000^	3,030	-	-	-	-	-	-	200
Nitrite + Nitrate as N (NOx)	µg/L	10	10	310	-	-	-	-	-	-	220
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value	5,200	-	-	-	-	-	-	600
Nitrogen (Total)	µg/L	100	350/-^	5,500	-	-	-	-	-	-	800
Reactive Phosphorus	µg/L	1	No Water Quality Objective Value	<1	-	-	-	-	-	-	<1
Phosphorus (Total)	µg/L	10	100/300^	10	-	-	-	-	-	-	20
Inorganics											
Cyanide Total	µg/L	4	No Water Quality Objective Value	<4	-	-	-	-	-	-	<4
Hydrocarbons											
Oil and Grease	mg/L	1	2/5^	<1.0	-	-	-	-	-	-	<1.0
Metals											
Aluminium (dissolved)	µg/L	5	55	6	-	-	-	-	-	-	<5
Arsenic (dissolved)	µg/L	0.2	13	<0.2	-	-	-	-	-	-	<0.2
Chromium (III+VI) (dissolved)	µg/L	0.2	1	<0.2	-	-	-	-	-	-	<0.2
Copper (dissolved)	µg/L	0.5	14	<0.5	-	-	-	-	-	-	<0.5
Iron (dissolved)	µg/L	2	300	<2	-	-	-	-	-	-	<2
Lead (dissolved)	µg/L	0.1	3.4	<0.1	-	-	-	-	-	-	<0.1
Manganese (dissolved)	µg/L	0.5	1,900	<0.5	-	-	-	-	-	-	1.1
Nickel (dissolved)	µg/L	0.5	11	<0.5	-	-	-	-	-	-	<0.5
Silver (dissolved)	µg/L	0.01	0.05	<0.01	-	-	-	-	-	-	<0.01
Zinc (dissolved)	µg/L	1	8	<1	-	-	-	-	-	-	1
Biological											
Faecal Coliforms	CFU/100mL	1	10/100^	<1	-	-	-	-	-	-	<1
Biological Oxygen Demand	mg/L	2	5	<2	-	-	-	-	-	-	<2

Note: Treated water was not being discharged at Talbingo Reservoir at the time of EPL sampling.
There is no 100th percentile limit for Nitrogen (Total).

* Water Quality Objective values Treated Water reference the predicted values for physical and chemical stressors from the treatment plant as presented in the Main Works EIS.

\- Samples not required

^ 90 Percentile concentration limit/100 Percentile limit

Inflows to STP and CWTP do not directly correspond to outflow at RO as much of the water is reused on site

Snowy Hydro 2.0 Main Works
Monthly EPL Sampling: 01-31 January 2025 - Volumes

Date	EPL 43 *	EPL 50 ^	EPL 44	EPL 45	EPL 47	EPL 48	EPL 49
	Discharge volume (Megalitres)		Discharge volume (Megalitres)				
1/01/2025	-	-	0.40	0.04	0.15	0.05	0.62
2/01/2025	-	-	0.43	0.03	0.15	0.07	0.85
3/01/2025	-	-	0.62	0.04	0.18	0.06	0.62
4/01/2025	-	-	0.47	0.05	0.16	0.07	0.89
5/01/2025	-	-	0.29	0.01	0.18	0.07	0.72
6/01/2025	-	-	0.51	0.04	0.19	0.08	0.52
7/01/2025	-	-	0.27	0.05	0.13	0.06	0.69
8/01/2025	-	-	0.57	0.03	0.32	0.07	0.42
9/01/2025	-	-	0.37	0.05	0.14	0.06	0.85
10/01/2025	-	-	0.72	0.07	0.17	0.07	0.60
11/01/2025	-	-	0.28	0.05	0.20	0.07	0.55
12/01/2025	-	-	0.34	0.05	0.24	0.08	0.54
13/01/2025	-	-	0.54	0.05	0.20	0.09	0.71
14/01/2025	-	-	0.40	0.05	0.34	0.08	0.90
15/01/2025	-	-	0.61	0.08	0.19	0.18	0.86
16/01/2025	-	-	0.49	0.01	0.23	0.18	0.65
17/01/2025	-	-	0.67	0.05	0.19	0.08	0.63
18/01/2025	-	-	0.58	0.04	0.15	0.08	0.72
19/01/2025	-	-	0.65	0.06	0.21	0.07	0.57
20/01/2025	-	-	0.26	0.07	0.23	0.08	0.63
21/01/2025	-	-	0.19	0.06	0.21	0.18	0.75
22/01/2025	-	-	0.17	0.05	0.20	0.01	0.79
23/01/2025	-	-	0.31	0.07	0.28	0.09	0.94
24/01/2025	-	-	0.06	0.04	0.16	0.07	0.72
25/01/2025	-	-	0.27	0.05	0.22	0.08	0.82
26/01/2025	-	-	0.17	0.05	0.22	0.09	0.90
27/01/2025	-	-	0.20	0.04	0.21	0.08	0.70
28/01/2025	-	-	0.19	0.04	0.19	0.18	0.60
29/01/2025	-	-	0.19	0.05	0.23	0.08	0.65
30/01/2025	-	-	0.10	0.04	0.25	0.08	0.61
31/01/2025	-	-	0.28	0.05	0.18	0.08	0.45

\- Water not discharged on this day

Note: The EPL discharge volume limit for EPL 43 and 50 is 4.32 megalitres per day. Compliance with this criteria was met during the reporting month.

* The maximum flow rate capacity for Lobs Hole STP/PWTP during the reporting month was 7.18 L/s

^ The maximum flow rate capacity for Tantangara STP/PWTP during the reporting month was 9.84 L/s

-- Water not discharged on this day

Table 1 - Surface Water Quality Data
River and Minor Watercourses

Water Quality Objectives (see note 1)							
Temp (°C)	DO (%)	DO (mg/L)	EC(µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)
-	90 - 110	-	30 - 350	-	6.5 - 8.0	-	2 - 25

Date and Time	EPL Site ID	Location Description	Temp (°C)	DO (%)	DO (mg/L)	EC(µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)	Field Comments	Context
2/2/2025, 7:41 am	EPL5	Yarrangobilly River, upstream of the exploratory tunnel and construction pad	19.83	78.9	7.28	163	106	7.45	267	3.9	Clear sunny day. Lower water level and low rainfall in the last 2 weeks.	This sample point is upstream of works and is therefore representative of background conditons.
11/2/2025, 3:51 pm	EPL6	Wallaces Creek, upstream of Yarrangobilly River and Wallaces Creek confluence	22.46	67.7	5.86	116	76	8.46	38	68.4	Overcast day. High rainfall over the past few days.	This sample point is upstream of works and is therefore representative of background conditons.
2/2/2025, 9:15 am	EPL8	Yarrangobilly River, downstream of Lick Hole Gully	21.2	67.8	6.01	169	110	8.38	206	0.3	Clear sunny day. Lower water level and low rainfall in the last 2 weeks.	Low DO and elevated pH align with results upstream of works and reduced flow.
2/2/2025, 9:41 am	EPL9	Yarrangobilly River, downstream of the accommodation camp and upstream of Talbingo Reservoir	21.23	79.3	7.03	165	107	8.22	212	4.2	Clear sunny day. Lower water level and low rainfall in the last 2 weeks.	Low DO and elevated pH align with results upstream of works and reduced flow.
2/2/2025, 7:59 am	EPL12	Yarrangobilly River, immediately downstream of portal pad	19.61	74.3	6.81	163	106	7.07	288	3.1	Clear sunny day. Lower water level and low rainfall in the last 2 weeks.	Low DO aligns with reults upstream of works and reduced flow.
2/2/2025, 8:44 am	EPL14	Yarrangobilly River, downstream of road construction areas	20.25	75.3	6.81	163	106	7.94	232	2.4	Clear sunny day. Lower water level and low rainfall in the last 2 weeks.	Low DO aligns with reults upstream of works and reduced flow.
2/2/2025, 8:56 am	EPL15	Yarrangobilly River, downstream of road construction areas	20.92	66.5	5.93	162	106	8.27	213	6	Clear sunny day. Lower water level and low rainfall in the last 2 weeks.	Low DO and elevated pH align with the historical data recorded for this location in February 2025, especially with reduced flow velocity.
2/2/2025, 10:05 am	EPL16	Yarrangobilly River, downstream of road construction areas	22.62	77.4	6.69	165	107	8.53	199	0.4	Clear sunny day. Lower water level and low rainfall in the last 2 weeks.	Low DO and elevated pH align with the historical data recorded for this location in February 2025, especially with reduced flow velocity.
19/2/2025, 8:06 am	EPL24	Yarrangobilly River unnamed tributary, downslope of GFO1	14.66	75.5	7.66	607	389	7.17	178	33.6	Sunny day, low flow, clear water	Low ODand high EC can be attributed to low flow, stagnant water. Location will continue to be monitored closely.
7/2/2025, 12:15 pm	EPL26	Eucumbene River downstream of Marica Road	22.71	77.4	6.68	38	25	8.1	161	12	Clear sunny day. Low water level, very low flow. Horse sign in creek bed.	Low DO and elevated pH align with the baseline data and remain with the upstream conditions for February 2025.
7/2/2025, 12:03 pm	EPL27	Eucumbene River upstream of Marica Road	20.38	75.2	6.79	40	26	8.31	148	5.3	Clear sunny day. Low water level, very low flow.	This sample point is upstream of works and is therefore representative of background conditons.
1/2/2025, 10:06 am	EPL30	Kellys Plain Creek, downstream of accommodation camp and laydown areas	16.93	84.3	8.15	33	22	7.89	212	0	Clear, low flow, sunny day, no algal growth	This sample point is upstream of works and is, therefore, representative of background conditions. Turbidity at these sites is very low, as expected in low impact waterways. Likely between 0.1 and 1 NTU. Due to resolution of the Horiba and minor calibration drift 0.0NTU was recorded.
1/2/2025, 10:21 am	EPL31	Kellys Plain Creek, upstream of accommodation camp and laydown areas	17.42	86.4	8.28	28	18	7.66	219	0	Clear, no odours, low flow, sunny day, no algal growth	This sample point is upstream of works and is, therefore, representative of background conditions. . Turbidity at these sites is very low, as expected in low impact waterways. Likely between 0.1 and 1 NTU. Due to resolution of the Horiba and minor calibration drift 0.0NTU was recorded.
1/2/2025, 9:40 am	EPL33	Murrumbidgee River, downstream of Tantangara reservoir outlet	20.73	86.7	7.76	26	17	7.36	241	10.6	Slightly turbid, sunny, no odours	Low DO and EC aligns directly with reults upstream of works.
1/2/2025, 9:06 am	EPL34	Nungar Creek, upstream of Tantangara Road	16.62	98.1	9.56	40	26	7.69	222	0	Clear, no odours, low flow, minor algal growth, sunny	This sample point is upstream of works and is, therefore, representative of background conditions.
1/2/2025, 9:13 am	EPL35	Nungar Creek, downstream of Tantangara Road	16.42	94	9.19	39	26	7.57	225	0	Clear, minor algal growth, no odours, low flow, sunny	Turbidity at these sites is very low, as expected in low impact waterways. Likely between 0.1 and 1 NTU. Due to resolution of the Horiba and minor calibration drift 0.0NTU was recorded.
4/2/2025, 12:39 pm	EPL 36	Camerons Creek, upstream of works in Rock Forest	22.57	68.6	5.93	51	33	7.73	115	14	Clear sunny day. New road being built nearby. Very low water level and low flow.	This sample point is upstream of works and is therefore representative of background conditons.
4/2/2025, 11:59 am	EPL 37	Camerons Creek, downstream of works in Rock Forest	24.93	71.9	5.95	58	38	7.93	161	23.8	Clear sunny day. Very low water level. Water not flowing.	Low DO can be attributed to low flow and seasonal changes in February 2025, however, the ranges remain with the historical data.
3/2/2025, 9:41 am	EPL52	GF01 leachate basin	24.91	78.9	6.51	1380.00	880	9.18	178	16	Basin is lower than usual. Green like colour, a fair bit of algael growth throughout basin. Non turbid. No sheen Clear, sunny day. No recent rain events.	High EC an low DO are expected within the leachate storage infrastructure.
Dry	EPL53	GF01 surface water upstream east	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	-
Dry	EPL54	GF01 surface water upstream west	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	-
17/2/2025, 1:22 pm	EPL55	GF01 surface water downstream	19.6	68.5	6.25	1220.00	782	7.01	142	12.3	Sunny day, high flow, clean water, no odour	High EC and low DO can be attributed to the resent rainfall events before sampling. High EC may be attributed to water source and approximate Project works.
-	EPL67	Nungar Creek surface water downstream west from Tantangara emplacement area	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	-
-	EPL71	Surface water downstream of Marica emplacement	-	-	-	-	-	-	-	-	This lcation has been removed and waiting for re locate it	
15/2/2025, 10:17 am	EPL84	F8 Basin	20.64	74.4	6.67	441	287	8.65	164	1000	Highly turbid, recent heavy rain, no odours detected,	Low DO and elevated EC and turbidity due to runoff accumulating in the sediment basin. Water was taken for treatment at the process water treatment plant or re-use where parameters where met.
15/2/2025, 10:33 am	EPL85	MY07 Basin	19.7	52.5	4.8	461	300	9.14	143	1000	Highly turbid, no odours detected, recent heavy rain	High EC with elevated turbidity and low DO are expected within the leachate storage infrastructure and the rainfall events during this period.
15/2/2025, 11:14 am	EPL86	LHG01 Basin	21.13	74.8	6.63	899	576	8.45	-28	507	Turbid, no odours detected, water recently transferred to LHG basin from MY07	High EC with elevated turbidity and low DO are expected within the leachate storage infrastructure and the rainfall events during this period.
-	EPL98	Rock blanket diversion monitoring under GFO1 liner	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	-
15/2/2025, 10:45 am	EPL99	Marica Leachate Basin- Turkey's Nest	16.14	66.6	6.54	265	172	8.98	47	41.3	sunny day, turbid water, no odour	Elevated turbidity and low DO are expected within the leachate storage infrastructure and the rainfall events during this period.
15/2/2025, 11:01 am	EPL100	Marica Lower Leachate Basin USS Shaft	16.96	67.5	6.52	587	376	8.44	89	81.5	sunny day, turbid water, no odour	Low DO with elevated EC and turbidity can be attributed to the runoff accumulating in the sediment basin. Water was taken for treatment at the process water treatment plant or re-use where parameters where met.

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15/2/2025, 10:52 am	EPL101	Marica Leachate Basin Spoil Pad	16.06	66.9	6.59	362	235	8.86	65	206	sunny day, turbid water, no odour	Low DO with elevated EC and turbidity can be attributed to the runoff accumulating in the sediment basin. Water was taken for treatment at the process water treatment plant or re-use where parameters where met.
8/2/2025, 9:17 am	EPL106	Ravine Bay Leachate basin 1	25.78	74.3	6.03	1,270.00	816	8.67	95	45.6	Dark green colour, birds present, film present, no odour	Elevated turbidity with high EC and low DO are expected within the leachate storage infrastructure and the rainfall events during this period.
18/2/2025, 11:43 am	EPL110	Upstream monitoring of Ravine Bay emplacement area	13.87	95.8	9.9	67	44	7.54	140	44	Clear flow, no odour, heavy rainfall within 5 days	All reading are within WQO limits.
-	EPL118	Ravine Bay Leachate basin 2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	-
-	EPL120	Ravine Bay Leachate basin 4	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	-
19/2/2025, 8:27 am	EPL122	GPO1 Drainage Line (Formerly EPL 55b)	14.06	64.1	6.58	778	498	7.79	173	206	Sunny day, low flow, clear water	Low DO and high EC with turbidity can be attributed to low flow, stagnant water. Location will continue to be monitored closely.

EPL 21266 In Situ Water Quality Measurements

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Table 2 - Reservoir Water Quality Data

Talbingo and Tantangara Reservoirs

	Water Quality Objectives (see note 2)							
	Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)
	-	90 - 110	-	20 - 30	-	6.5 - 8.0	-	1 - 20

Date and Time	EPL Site ID	Location Description	Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)	Field Comments	Context
26/2/2025, 8:16 am	EPL10	Talbingo Reservoir, downstream of road works and upstream of water intake point	23.52	75.4	6.41	78	51	8.12	205	0.5	Horiba 5 not ysi 1 No wind, clear day	Elevated water temperatures were considered to influence all reported results for this location. Warmer temperatures within the shallower location are considered to influence the lower DO and elevated EC. Low NTU results may have resulted from the lack of water movement (including the absence of wind influences) and the green discolouration observed.
26/2/2025, 8:05 am	EPL11	Talbingo Reservoir, downstream of outlet	23.15	69.2	5.92	56	36	7.93	209	0	Horiba 5 not ysi 1 No wind, sunny day	Elevated water temperatures, reduced water movement and the green discolouration within the water body are consistent with organic matter presence during the time of sampling and are considered to effect the conditions recorded at the time of sampling.
9/2/2025, 8:43 am	EPL28	Tantangara Reservoir, upstream of works in the mouth of the Murrumbidgee River	21.2	56.9	5.05	28	18	8.07	225	13	Early morning fog. 5mm overnight rain. Turning to sunny.	Low DO and elevated pH can be attributed to low reservoir levels in preparation for intake works and notably surfaces temperatures incresed.
9/2/2025, 9:12 am	EPL29	Tantangara Reservoir, downstream of works area and upstream of lower Murrumbidgee River	22.5	58.3	5.05	26	17	8.16	227	9.3	Early morning fog turning to sunny. No odour or sign of discolouration. 5mm rain overnight	Low DO and elevated pH can be attributed to low reservoir levels in preparation for intake works and notably surfaces temperatures incresed.
9/2/2025, 9:01 am	EPL32	Tantangara Reservoir, Tantangara Intake. Downstream of construction works	22.4	65.2	5.66	26	17	8.1	230	9	Early morning fog turning to sunny. No odour or sign of discolouration. 5mm rain overnight	Low DO and elevated pH can be attributed to low reservoir levels in preparation for intake works and increased water temperatures.
1/2/2025, 1:14 pm	EPL38	Tantangara Reservoir, variable location dependant on tide and reservoir levels. Between the emplacement area and the ancillary facilities for emplacement activities	26.22	78.4	6.34	28	18	8.95	101	10.3	Visually clear, no odours, no algal growth, sunny	Low DO and elevated pH is thought to result from the very low water level and the corresponding inflow fluctuations.
1/2/2025, 11:49 am	EPL39	Confluence of Nungar Creek and Tantangara Reservoir, variable location dependent on tide and reservoir levels. Upstream of Tantangara construction works	22.65	91.5	7.9	30	19	6.66	233	18.7	Slightly turbid, low flow, sunny day,	All reading are within WQO limits.
9/2/2025, 9:19 am	EPL40	Confluence of the upper Murrumbidgee River and Tantangara Reservoir, variable location dependent on tide and reservoir levels. Upstream of works	19.9	88.4	8.06	30.9	22	7.56	168	5.16	Clear, flowing shallow water. No odour or sheen. Sunny morning with minimal wind. Post rain event last night. Small collections of white bubbles seen on the surface. Water level too low for boat access.	Marginally higher EC and lower DO are understood to have been potentially influenced by the shallow sample collection point and the proximity to the bank.
9/2/2025, 9:29 am	EPL 46	Tantangara Reservoir, diffuser outlet discharging into Tantangara Reservoir from Tantangara STP/PWTP	22.61	62.9	5.43	27	17	8.21	220	8	Early morning fog turning to sunny. No odour or sign of discolouration. 5mm rain overnight	Low DO and elevated pH can be attributed to low reservoir levels in preparation for intake works and elevated temperatures.
9/2/2025, 9:18 am	EPL 51	Tantangara Reservoir, downstream of Tantangara STP/PWTP diffuser outlet	22.65	57.5	4.97	27	17	8.18	-86	9.1	Early morning fog turning to sunny. No odour or sign of discolouration. 5mm rain overnight	Low DO and elevated pH can be attributed to low reservoir levels in preparation for intake works and elevated temperatures.
26/2/2025, 7:50 am	EPL107	Upstream monitoring of Ravine Bay emplacement area within Yarrangobilly River	22.16	69	6.02	34	22	7.64	221	0	Horiba 5 not ysi 1 Slight breeze sunny day	Elevated EC and low DO are consistent with background conditions for this water body in dummer. Turbidity at these sites is very low..Likely between 0.1 and 1 NTU.
26/2/2025, 7:38 am	EPL108	Monitoring of Ravine Bay emplacement area (center of PSE) within Yarrangobilly River	21.74	82.8	7.28	32	21	7.69	204	0	Slight breeze, clear day.	Elevated EC and low DO are consistent with background conditions for this water body in dummer. Turbidity at these sites is very low.. Likely between 0.1 and 1 NTU.
26/2/2025, 7:30 am	EPL109	Upstream monitoring of Ravine Bay emplacement area within Yarrangobilly River	21.52	80	7.06	31	20	7.89	151	23.5	Not much wind, sunny day. Weather has been good the past couple of days.	Marginally elevated EC and low DO align with the background conditions for Yarrangovilly river in February 2025. High turbidity can be attributted to the dicreased in the water level.

Table 3 - Treated Water Quality Data

Talbingo

	Water Quality Objectives (see note 3)							
	Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)
	-	-	-	700	-	6.5 - 8.0	-	25

Date and Time	EPL Site ID	Location Description	Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)	Field Comments	Context
2/2/2025, 9:50 am	EPL41	Lobs Hole STP/PWTP Final Effluent Quality Monitoring Point. Downstream of final treatment, prior to discharge to Talbingo Reservoir.	26.69	66.3	5.28	2,210.00	1,410.00	8.32	203	9.9	Visually clear - likely turbidity probe error, no odours	This location has been monitored twice a week, however, non discharge occurred in this period and has followed the re-use criteria when applicable.

EPL 21266 In Situ Water Quality Measurements

EPL Monthly Monitoring February 2025

Table 2 - Reservoir Water Quality Data

Talbingo and Tantangara Reservoirs

	Water Quality Objectives (see note 2)							
	Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)
	-	90 - 110	-	20 - 30	-	6.5 - 8.0	-	1 - 20

Date and Time	EPL Site ID	Location Description	Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)	Field Comments	Context
26/2/2025, 8:16 am	EPL10	Talbingo Reservoir, downstream of road works and upstream of water intake point	23.52	75.4	6.41	78	51	8.12	205	0.5	Horiba 5 not ysi 1 No wind, clear day	Elevated water temperatures were considered to influence all reported results for this location. Warmer temperatures within the shallower location are considered to influence the lower DO and elevated EC. Low NTU results may have resulted from the lack of water movement (including the absence of wind influences) and the green discolouration observed.
26/2/2025, 8:05 am	EPL11	Talbingo Reservoir, downstream of outlet	23.15	69.2	5.92	56	36	7.93	209	0	Horiba 5 not ysi 1 No wind, sunny day	Elevated water temperatures, reduced water movement and the green discolouration within the water body are consistent with organic matter presence during the time of sampling and are considered to effect the conditions recorded at the time of sampling.
9/2/2025, 8:43 am	EPL28	Tantangara Reservoir, upstream of works in the mouth of the Murrumbidgee River	21.2	56.9	5.05	28	18	8.07	225	13	Early morning fog. 5mm overnight rain. Turning to sunny.	Low DO and elevated pH can be attributed to low reservoir levels in preparation for intake works and notably surfaces temperatures incresed.
9/2/2025, 9:12 am	EPL29	Tantangara Reservoir, downstream of works area and upstream of lower Murrumbidgee River	22.5	58.3	5.05	26	17	8.16	227	9.3	Early morning fog turning to sunny. No odour or sign of discolouration. 5mm rain overnight	Low DO and elevated pH can be attributed to low reservoir levels in preparation for intake works and notably surfaces temperatures incresed.
9/2/2025, 9:01 am	EPL32	Tantangara Reservoir, Tantangara Intake. Downstream of construction works	22.4	65.2	5.66	26	17	8.1	230	9	Early morning fog turning to sunny. No odour or sign of discolouration. 5mm rain overnight	Low DO and elevated pH can be attributed to low reservoir levels in preparation for intake works and increased water temperatures.
1/2/2025, 1:14 pm	EPL38	Tantangara Reservoir, variable location dependant on tide and reservoir levels. Between the emplacement area and the ancillary facilities for emplacement activities	26.22	78.4	6.34	28	18	8.95	101	10.3	Visually clear, no odours, no algal growth, sunny	Low DO and elevated pH is thought to result from the very low water level and the corresponding inflow fluctuations.
1/2/2025, 11:49 am	EPL39	Confluence of Nungar Creek and Tantangara Reservoir, variable location dependent on tide and reservoir levels. Upstream of Tantangara construction works	22.65	91.5	7.9	30	19	6.66	233	18.7	Slightly turbid, low flow, sunny day,	All reading are within WQO limits.
9/2/2025, 9:19 am	EPL40	Confluence of the upper Murrumbidgee River and Tantangara Reservoir, variable location dependent on tide and reservoir levels. Upstream of works	19.9	88.4	8.06	30.9	22	7.56	168	5.16	Clear, flowing shallow water. No odour or sheen. Sunny morning with minimal wind. Post rain event last night. Small collections of white bubbles seen on the surface. Water level too low for boat access.	Marginally higher EC and lower DO are understood to have been potentially influenced by the shallow sample collection point and the proximity to the bank.
9/2/2025, 9:29 am	EPL 46	Tantangara Reservoir, diffuser outlet discharging into Tantangara Reservoir from Tantangara STP/PWTP	22.61	62.9	5.43	27	17	8.21	220	8	Early morning fog turning to sunny. No odour or sign of discolouration. 5mm rain overnight	Low DO and elevated pH can be attributed to low reservoir levels in preparation for intake works and elevated temperatures.
9/2/2025, 9:18 am	EPL 51	Tantangara Reservoir, downstream of Tantangara STP/PWTP diffuser outlet	22.65	57.5	4.97	27	17	8.18	-86	9.1	Early morning fog turning to sunny. No odour or sign of discolouration. 5mm rain overnight	Low DO and elevated pH can be attributed to low reservoir levels in preparation for intake works and elevated temperatures.
26/2/2025, 7:50 am	EPL107	Upstream monitoring of Ravine Bay emplacement area within Yarrangobilly River	22.16	69	6.02	34	22	7.64	221	0	Horiba 5 not ysi 1 Slight breeze sunny day	Elevated EC and low DO are consistent with background conditions for this water body in dummer. Turbidity at these sites is very low.. Likely between 0.1 and 1 NTU.
26/2/2025, 7:38 am	EPL108	Monitoring of Ravine Bay emplacement area (center of PSE) within Yarrangobilly River	21.74	82.8	7.28	32	21	7.69	204	0	Slight breeze, clear day.	Elevated EC and low DO are consistent with background conditions for this water body in dummer. Turbidity at these sites is very low.. Likely between 0.1 and 1 NTU.
26/2/2025, 7:30 am	EPL109	Upstream monitoring of Ravine Bay emplacement area within Yarrangobilly River	21.52	80	7.06	31	20	7.89	151	23.5	Not much wind, sunny day. Weather has been good the past couple of days.	Marginally elevated EC and low DO align with the background conditions for Yarrangovilly river in February 2025. High turbidity can be atributted to the dicreased in the water level.

Table 3 - Treated Water Quality Data

Talbingo

	Water Quality Objectives (see note 3)							
	Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)
	-	-	-	700	-	6.5 - 8.0	-	25

Date and Time	ER Site ID	Location Description	Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)	Field Comments	Context
2/2/2025, 9:50 am	EPL41	Lobs Hole STP/PWTP Final Effluent Quality Monitoring Point. Downstream of final treatment, prior to discharge to Talbingo Reservoir.	26.69	66.3	5.28	2,210.00	1,410.00	8.32	203	9.9	Visually clear - likely turbidity probe error, no odours	This location has been monitored twice a week, however, non discharge occurred in this period and has followed the re-use criteria when applicable.

Table 4 - Treated Water Quality Data

Tantangara

	Water Quality Objectives (see note 3)							
	Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)
	-	-	-	200	-	6.5 - 8.0	-	25

Date and Time	EPL Site ID	Location Description	Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)	Field Comments	Context
26/2/2025, 10:31 am	EPL50	Tantangara STP/PWTP Final Effluent Quality Monitoring Point. Downstream of final treatment, prior to discharge to Tantangara Reservoir.	19.6	85.7	7.89	10.8	8	5.14	224.5	0.8	Sunny. Samoled inside RO container. Water very clear; no sediment present; no odour or oil present. RO plant has chemical cleaning maintenance 3 days prior to sampling.	This location has been monitored twice a week, however, non discharge occurred in this period and has followed the re-use criteria when applicable.

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Table 5 - Groundwater Quality Data
GF01 Surface Water and Groundwater

Water Quality Objectives (see note 1)							
Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)
-	-	-	30 - 350	-	6.5 - 8.0	-	-

Date and Time	EPL Site ID	Location Description	Temp (°C)	DO (%)	DO (mg/L)	EC (µS/cm)	TDS (mg/L)	pH	Redox (mV)	Turbidity (NTU)	Field Comments	Context
7/2/2025, 3:29 pm	EPL1	Wallace Creek Bridge	20.74	17.9	1.61	504	322	6.77	-53	21.9	Clear sunny day. SWL 3.31m	Elevated EC is within the historical range for this location.
16/2/2025, 9:00 am	EPL2	Wallace Creek Bridge	14.62	102.3	10.37	294	752	7.85	-109	294	SWL- 3.8 m, sunny day, turbid water, no odour	All reading are within WQO limits.
11/2/2025, 3:31 pm	EPL4	Portal Access	18.79	16.6	1.54	1,320.00	847	8.59	-95	1,000.00	Bore cap under water. Contaminated with surface water. SWL at surface.	Elevated EC and pH align with the historical range for this location.
11/2/2025, 3:12 pm	EPL25	Portal Access	19.37	29	2.67	506	324	6.58	-57	423	Overcast day. Heavy rainfall last few days.	Elevated EC within the historical range for this location.
10/2/2025, 2:17 pm	EPL56	GF01 groundwater upstream east	18.84	14.8	1.38	237	154	7.28	135	19.6	Clear sunny afternoon. High rainfall overnight. SWL 10.56m	All reading are within WQO limits.
10/2/2025, 2:43 pm	EPL57	GF01 groundwater upstream west	20.89	15.5	1.38	245	159	7.98	119	42.1	Clear sunny afternoon. High rainfall overnight. SWL 15.45m	All reading are within WQO limits.
10/2/2025, 3:42 pm	EPL58	GF01 groundwater downstream	20.71	22.1	1.98	1140	730	6.17	136	38.3	SWL- 7.45m. Clear, sunny day. No recent rain events. Water is clear, no odour, no sheen.	Elevated EC is generally consistent with historical range for this location. Low pH will be monitored closely, however borehole pump extraction method is in the process of being upgraded.
8/2/2025, 10:40 am	EPL68	Tantangara groundwater downstream West	15.92	66.8	6.61	30	19	5.85	198	190	Clear sunny day.	Low pH is generally consistent with the historical data for this location. These fall in line with curent seasonal changes.
8/2/2025, 10:17 am	EPL69	Tantangara groundwater downstream East	17.06	60.8	5.87	31	20	6.34	189	40.8	Clear sunny day. SWL 2.37m. New earth works upstream.	Low pH is generally consistent with the historical data for this location. These fall in line with curent seasonal changes.
8/2/2025, 8:46 am	EPL70	Tantangara groundwater upstream	16.31	52.9	5.19	98	64	6.79	183	1000	Clear sunny day. SWL 7.64m. Very turb, greater than 1000ntu.	All reading are within WQO limits.
15/2/2025, 9:36 am	EPL 72	Marica groundwater upstream	11.54	54.6	5.95	71	46	5.76	223	65.8	SWL- 36.04 m, sunny day, turbid water, no odour	This location is upgradient of works and therefore representative of background conditions.
15/2/2025, 10:14 am	EPL73	Marica groundwater downstream	11.56	91.2	9.93	77	50	5.72	230	36.3	SWL- 11.96 m, sunny day, turbid water,no odour	The ranges are consistent with the upgradient conditions for February 2025.
3/2/2025, 2:18 pm	EPL80	LHG groundwater upstream	23.55	14.7	1.25	800	512	7.11	-48	92.4	SWL: 20.55m. Very hot afternoon. No recent rain events. Water is slightly turbid with silt settling at the bottom. No odour.	This location is upgradient of works and therefore representative of background conditions.
3/2/2025, 3:14 pm	EPL81	LHG groundwater downstream	23.56	28.3	2.41	852	546	7.15	-92	1000	SWL:4.5m. Hot afternoon. No recent rain events. Water is clear with dark grey silty sediment settling at the bottom of the sleeve. No odour. NTU reached 1000NTU.	Elevated EC aligns with results upgradient of works.
3/2/2025, 2:36 pm	EPL82	MY groundwater upstream	20.28	20.4	1.83	2710	1730	6.96	-51	53.4	SWL:6.94m. Very hot afternoon. No recent rain events. Water is clear with no odour.	This location is upgradient of works and therefore representative of background conditions.
3/2/2025, 4:04 pm	EPL83	MY groundwater downstream	21.26	33.9	3	506	324	6.22	46	81.7	SWL: 3.97m. Hot afternoon. No recent rain event.. Water is clear, no odour.	Elevated EC aligns with results up gradient of works. Low pH will be closely monitored at this location, however borehole pump extraction method is currently being upgraded.
3/2/2025, 2:48 pm	EPL87	MY groundwater downstream	20.62	17.5	1.57	629	403	6.28	106	1000	SWL:4.23m. Very hot sunny afternoon. Water is brown turbid. No odour. Very similar colour to adjacent basin 8.5. NTU has exceeded 1000.	Elevated EC aligns with results up gradient of works. Low pH will be closely monitored at this location, however borehole pump extraction method is currently being upgraded.
3/2/2025, 3:51 pm	EPL88	MY groundwater downstream	22.67	15.9	1.37	809	518	7.3	-132	1.2	SWL: 3.47m. Hot afternoon. No recent rain event.. Water is very clear with a sulphur like odour.	Elevated EC aligns with results upgradient of works.
3/2/2025, 1:56 pm	EPL89	LHG groundwater downstream	24.4	24.1	2.01	383	249	6.96	133	226	SWL: 3.27m. Hot sunny day. No recent rain event. Water is slightly turbid, no odour.	Elevated EC aligns with results upgradient of works.
10/2/2025, 2:03 pm	EPL 90	GF01 groundwater downstream	17.88	46.9	4.45	55	35	6.04	154	238	Clear sunny afternoon. High rainfall overnight. SWL 14.09m	Low pH is generally consistent with the historical data for this location. Borehole extraction method is currently being upraded at this location
10/2/2025, 1:51 pm	EPL 91	GF01 groundwater downstream	19.25	24.3	2.24	243	158	7.13	13	21.6	Clear sunny afternoon. High rainfall overnight. SWL 6.58.	All reading are within WQO limits.
10/2/2025, 2:58 pm	EPL 92	GF01 groundwater downstream	19.75	85.5	7.81	115	75	6.87	25	739	Clear sunny afternoon. High rainfall overnight. SWL 13.50m.	All reading are within WQO limits.
10/2/2025, 3:06 pm	EPL 93	GF01 groundwater downstream	18.44	19.3	1.81	236	153	7.15	-56	987	Clear sunny afternoon. High rainfall overnight. SWL 15.20m.	All reading are within WQO limits.
10/2/2025, 3:13 pm	EPL 94	GF01 groundwater downstream	18.42	19.7	1.85	167	109	6.93	3	83.1	Clear sunny afternoon. High rainfall overnight. SWL 15.42m.	All reading are within WQO limits.
10/2/2025, 3:33 pm	EPL 95	GF01 groundwater downstream	20.52	21.7	1.95	840	538	6.3	131	61.8	Clear sunny afternoon. High rainfall overnight. SWL 15.89m	Elevated EC and low pH have been consistent at this location for this current seasonal range. This location is currently undergoing upgrades in it's extraction method.
3/2/2025, 9:28 am	EPL 96	GF01 groundwater downstream	17.42	22	2.11	643	412	7.15	232	236	SWL 5.32m. This sample point is contaminated due to bore placement and cracking. Please see photos. Sample only collected to meet EPA requirements. Water is slightly turbid, no odour.	Elevated EC is consistent with the historical ranges for this location for February 2025.
10/2/2025, 3:57 pm	EPL 97	GF01 groundwater downstream	20.32	18.7	1.68	437	284	6.78	37	11.3	Clear sunny afternoon. High rainfall overnight. SWL 5.60m	Elevated EC has been consistent at this location for this current seasonal range.
15/2/2025, 10:33 am	EPL102	Groundwater monitoring associated with the Marica emplacement area on Marica Trail	12.53	85.6	85.6	407	265	6.68	67	40.9	SWL- 8.68 m, sunny day, turbid water, no odour	Elevated EC has been consistent at this location for this current seasonal range.
8/2/2025, 9:07 am	EPL103	Upstream groundwater monitoring west of the Tantangara emplacement area	15.65	49.8	4.95	39	26	6.44	180	35	Clear sunny day. SWL 11.11m.	This location is upgradient of works and therefore representative of background conditions.
8/2/2025, 11:05 am	EPL104	Dowslope groundwater monitoring east of the Tantangara emplacement area	18.31	40.1	3.77	59	38	6.33	186	17.3	Clear sunny day. SWL 4.66m.	Low pH aligns with results upgradient of PSE.
8/2/2025, 9:39 am	EPL105	Dowslope groundwater monitoring east of the Tantangara emplacement area	16.76	53.7	5.21	152	99	6.25	188	3.9	Clear sunny day. Could not because if pump set up.	Low pH aligns with results upgradient of PSE.
18/2/2025, 11:54 am	EPL113	Upstream east monitoring of Ravine Bay emplacement area	16.88	29.6	2.87	129	84	5.93	219	639	SWL: 2.39m, slightly turbid, no odour, recent rainfall >145mm	This location is upgradient of works and therefore representative of background conditions.
18/2/2025, 1:05 pm	EPL114	Upstream west monitoring of Ravine Bay emplacement area	20.92	13.6	1.22	403	262	7.34	229	30.3	SWL: 31.64m, clear, no odour, recent rainfall >145mm	This location is upgradient of works and therefore representative of background conditions.

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18/2/2025, 12:20 pm	EPL115	Downstream east monitoring of Ravine Bay emplacement area	16.36	103	10.08	856	231	7.36	123	355	SWL:10.74m, slightly turbid, no odour	High EC aligns with results upgradient of PSE.
18/2/2025, 1:37 pm	EPL116	Downstream west monitoring of Ravine Bay emplacement area	18.94	82.6	7.67	215	140	6.76	206	1,000	SWL: 9.61 Highly turbid	All reading are within WQO limits.
18/2/2025, 2:11 pm	EPL117	Downstream monitoring of Ravine Bay emplacement area	19.81	41.2	3.75	147	96	6.14	-8	1000	SWL: 16.27mtoc	Low pH can be attributed to the surrounding conditions in February 2025.

Note 1: Water Quality Objective values for the Yarrangobilly River and Minor Watercourses refer to the default trigger values for physical and chemical stressors in south-east Australia (upland rivers) that are reported in Tables 3.3.2 and 3.3.3 of ANZECC/ ARMCANZ (2000).

Note 2: Water Quality Objective values for Talbingo Reservoir are the default trigger values for physical and chemical stressors in south-east Australia (freshwater lakes and reservoirs) that are reported in Tables 3.3.2 and 3.3.3 of ANZECC/ ARMCANZ (2000).

Note 3: Water Quality Objective values Treated Water reference the predicted values for physical and chemical stressors from the treatment plant as presented in the Main Works EIS.

Note 4: Water Quality Objective values for groundwater reference the default trigger values for physical and chemical stressors in south-east Australia (upland rivers) for pH and electrical conductivity.

Snowy Hydro 2.0 Main Works
Monthly EPL Sampling: 01-28 February 2025 - Groundwater

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*	EPL1	EPL2	EPL4	EPL25
Physiochemical				7/02/25	16/02/25	11/02/25	11/02/25
pH	pH Unit	-	6.5-8	6.77	7.85	8.59	6.58
Electrical Conductivity	µS/cm	-	30-350	504	294	1320	506
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value	-53	-109	-95	-57
Temperature	°C	-	No Water Quality Objective Value	20.74	14.62	18.79	19.37
Dissolved Oxygen	% saturation	-	No Water Quality Objective Value	17.9	102.3	16.6	29
Turbidity	NTU	-	No Water Quality Objective Value	21.9	294	1000	421
Laboratory analytes							
TSS	mg/L	5	No Water Quality Objective Value	23	197	1,990	101
Hardness as CaCO3	mg/L	1	No Water Quality Objective Value	252	104	138	202
Nutrients							
Ammonia as N	µg/L	10	13	60	200	2,400	120
Nitrite + Nitrate as N (NOx)	µg/L	10	13	<10	110	7,050	10
Kjeldahl Nitrogen Total	µg/L	100	13	200	1,000	8,000	700
Nitrogen (Total)	µg/L	100	13	200	1,100	15,000	700
Reactive Phosphorus	µg/L	1	13	<10	70	50	<10
Phosphorus (Total)	µg/L	10	13	110	180	2,000	270
Inorganics							
Cyanide Total	µg/L	4	4	-	-	-	-
Hydrocarbons							
Oil and Grease	mg/L	1	5	-	-	-	-
Metals							
Aluminium (total)	µg/L	5	No Water Quality Objective Value	-	-	-	-
Aluminium (dissolved)	µg/L	5	27	<5	<5	<5	<5
Arsenic (total)	µg/L	0.2	No Water Quality Objective Value	-	-	-	-
Arsenic (dissolved)	µg/L	0.2	0.8	0.5	1.3	11.2	0.8
Chromium (III+VI) (total)	µg/L	0.2	No Water Quality Objective Value	-	-	-	-
Chromium (III+VI) (dissolved)	µg/L	0.2	0.01	<0.2	0.3	0.4	<0.2
Copper (total)	µg/L	0.5	No Water Quality Objective Value	-	-	-	-
Copper (dissolved)	µg/L	0.5	1	<0.5	4.3	1.0	<0.5
Iron (total)	µg/L	2	No Water Quality Objective Value	-	-	-	-
Iron (dissolved)	µg/L	2	300	1,490	8	3	634
Lead (total)	µg/L	0.1	No Water Quality Objective Value	-	-	-	-
Lead (dissolved)	µg/L	0.1	1	<0.1	<0.1	<0.1	<0.1
Manganese (total)	µg/L	0.5	No Water Quality Objective Value	-	-	-	-
Manganese (dissolved)	µg/L	0.5	1,200	213	99.3	158	884
Nickel (total)	µg/L	0.5	No Water Quality Objective Value	-	-	-	-
Nickel (dissolved)	µg/L	0.5	8	1.6	5.1	3.8	4.7
Silver (total)	µg/L	0.01	No Water Quality Objective Value	-	-	-	-
Silver (dissolved)	µg/L	0.01	0.02	<0.01	<0.01	<0.01	<0.01
Zinc (total)	µg/L	1	No Water Quality Objective Value	-	-	-	-
Zinc (dissolved)	µg/L	1	2.4	4	<1	<1	22

Analyte	EPL56	EPL57	EPL58	EPL68	EPL69	EPL70	EPL72	EPL73
Physiochemical	10/02/25	10/02/25	10/02/25	8/02/25	8/02/25	8/02/25	15/02/25	15/02/25
pH	7.28	7.08	6.17	5.85	6.34	6.79	5.76	5.72
Electrical Conductivity	237	245	1140	30	31	98	71	77
Oxidation Reduction Potential	135	119	136	198	189	183	223	230
Temperature	18.84	20.89	20.71	15.92	17.06	16.31	11.54	11.56
Dissolved Oxygen	14.8	15.5	22.1	66.8	60.8	52.9	54.6	91.2
Turbidity	19.6	62.1	38.3	190	40.8	1000	65.8	36.3
Laboratory analytes								
TSS	6	<5	126	46	104	2,930	24	147
Hardness as CaCO3	116	121	339	2	2	29	13	20
Nutrients								
Ammonia as N	20	20	130	10	110	30	<10	10
Nitrite + Nitrate as N (NOx)	40	610	55,100	1,020	140	610	30	30
Kjeldahl Nitrogen Total	<100	200	9,500	<500	200	<100	<100	<100
Nitrogen (Total)	<100	800	64,600	1,000	300	600	<100	<100
Reactive Phosphorus	<10	10	<10	30	10	20	30	10
Phosphorus (Total)	30	100	60	200	60	40	50	100
Inorganics								
Cyanide Total	<4	<4	<4	<4	<4	<4	<4	<4
Hydrocarbons								
Oil and Grease	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Metals								
Aluminium (total)	17	80	482	1,550	493	102,000	491	1,750
Aluminium (dissolved)	<5	<5	<5	<5	6	<5	8	<5
Arsenic (total)	<0.2	2.5	0.6	0.5	0.3	6.2	-	-
Arsenic (dissolved)	<0.2	2.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chromium (III+VI) (total)	<0.2	<0.2	1.3	1.2	1.0	49.3	-	-
Chromium (III+VI) (dissolved)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2
Copper (total)	4.3	6.8	1.4	2.0	2.4	159	-	-
Copper (dissolved)	0.9	1.1	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
Iron (total)	13	46	652	1,080	679	83,900	-	-
Iron (dissolved)	<2	<2	10	<2	3	<2	<2	<2
Lead (total)	0.2	0.2	5.2	0.8	0.5	44.7	-	-
Lead (dissolved)	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1
Manganese (total)	12.6	80.3	209	32.8	33.1	1,790	-	-
Manganese (dissolved)	8.8	58.0	181	4.5	1.7	12.8	4.6	5.2
Nickel (total)	<0.5	<0.5	5.6	1.6	1.2	26.1	-	-
Nickel (dissolved)	<0.5	<0.5	4.4	0.6	<0.5	<0.5	0.8	<0.5
Silver (total)	<0.01	<0.01	0.02	0.02	<0.01	0.06	-	-
Silver (dissolved)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc (total)	8	4	15	8	3	135	-	-
Zinc (dissolved)	4	1	12	4	<1	<1	4	<1

Analyte	EPL80	EPL81	EPL82	EPL83	EPL87	EPL88	EPL89	EPL 90	EPL 91
Physiochemical	3/02/25	3/02/25	3/02/25	3/02/25	3/02/25	3/02/25	3/02/25	10/02/25	10/02/25
pH	7.11	7.15	6.96	6.22	6.28	7.3	6.96	6.04	7.13
Electrical Conductivity	800	852	2710	506	629	809	383	55	243
Oxidation Reduction Potential	-48	-92	-51	46	106	-132	133	154	13
Temperature	23.55	23.56	20.28	21.26	20.62	22.67	24.4	17.88	19.25
Dissolved Oxygen	14.7	28.3	20.4	33.9	17.5	15.9	24.1	46.9	24.3
Turbidity	92.4	1000	53.4	81.7	1000	1.2	226	238	21.6
Laboratory analytes									
TSS	15	469	173	139	2,390	<5	301	292	24
Hardness as CaCO3	314	363	1,220	68	112	92	84	29	115
Nutrients									
Ammonia as N	30	90	300	30	20	190	<10	10	70
Nitrite + Nitrate as N (NOx)	<10	<10	<10	100	2,710	<10	20	90	10
Kjeldahl Nitrogen Total	<100	2,300	200	200	1,600	500	<100	300	200
Nitrogen (Total)	<100	2,300	200	300	4,300	500	<100	300	100
Reactive Phosphorus	<10	<10	<10	<10	10	<10	<10	10	<10
Phosphorus (Total)	140	1,120	90	110	490	50	<10	300	70
Inorganics									
Cyanide Total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hydrocarbons									
Oil and Grease	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Metals									
Aluminium (total)	-	-	-	-	-	-	-	-	-
Aluminium (dissolved)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Arsenic (total)	-	-	-	-	-	-	-	-	-
Arsenic (dissolved)	4.0	9.2	13.1	2.7	0.2	12.0	0.3	<0.2	0.4
Chromium (III+VI) (total)	-	-	-	-	-	-	-	-	-
Chromium (III+VI) (dissolved)	<0.2	<0.2	<0.2	<0.2	0.3	0.2	<0.2	<0.2	<0.2
Copper (total)	-	-	-	-	-	-	-	-	-
Copper (dissolved)	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	3.6	<0.5	<0.5
Iron (total)	-	-	-	-	-	-	-	-	-
Iron (dissolved)	<2	<2	2,720	<2	<2	1,220	<2	<2	<2
Lead (total)	-	-	-	-	-	-	-	-	-
Lead (dissolved)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Manganese (total)	-	-	-	-	-	-	-	-	-
Manganese (dissolved)	188	240	375	82.6	112	177	13.0	10.4	401
Nickel (total)	-	-	-	-	-	-	-	-	-
Nickel (dissolved)	16.7	2.3	1.3	9.8	2.3	2.4	2.2	2.2	0.9
Silver (total)	-	-	-	-	-	-	-	-	-
Silver (dissolved)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc (total)	-	-	-	-	-	-	-	-	-
Zinc (dissolved)	1	1	2	2	<1	<1	<1	11	4

Analyte	EPL92	EPL93	EPL94	EPL95	EPL96	EPL97	EPL102	EPL103	EPL104	EPL105
Physiochemical	10/02/25	10/02/25	10/02/25	10/02/25	10/02/25	10/02/25	15/02/25	8/02/25	8/02/25	8/02/25
pH	6.87	7.15	6.93	6.3	7.15	6.78	6.68	6.44	6.33	6.25
Electrical Conductivity	115	236	167	840	643	437	407	39	59	152
Oxidation Reduction Potential	25	-56	3	131	232	37	67	180	188	188
Temperature	19.75	18.44	18.42	20.52	17.42	20.32	12.53	15.65	18.31	16.76
Dissolved Oxygen	85.5	19.3	19.7	21.7	22	18.7	85.6	48.8	40.1	53.7
Turbidity	739	987	83.1	61.8	236	11.3	40.9	35	17.3	3.9
Laboratory analytes										
TSS	967	717	60	137	350	176	10	15	15	<5
Hardness as CaCO3	57	115	96	292	85	139	168	2	9	50
Nutrients										
Ammonia as N	20	60	10	<10	<10	50	30	<10	50	20
Nitrite + Nitrate as N (NOx)	40	<10	<10	34,600	5,110	280	10	500	240	3,180
Kjeldahl Nitrogen Total	<100	100	100	7,200	<500	100	100	<100	200	600
Nitrogen (Total)	<100	100	100	41,800	5,100	400	100	500	400	3,800
Reactive Phosphorus	20	10	<10	30	<10	10	10	30	10	<10
Phosphorus (Total)	140	130	70	130	90	150	80	60	40	40
Inorganics										
Cyanide Total	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hydrocarbons										
Oil and Grease	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Metals										
Aluminium (total)	-	-	-	-	-	-	-	-	-	-
Aluminium (dissolved)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Arsenic (total)	-	-	-	-	-	-	-	-	-	-
Arsenic (dissolved)	0.4	5.9	0.6	0.7	<0.2	0.5	0.4	<0.2	<0.2	<0.2
Chromium (III+VI) (total)	-	-	-	-	-	-	-	-	-	-
Chromium (III+VI) (dissolved)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.4
Copper (total)	-	-	-	-	-	-	-	-	-	-
Copper (dissolved)	<0.5	<0.5	<0.5	1.0	<0.5	<0.5	<0.5	1.5	0.5	1.2
Iron (total)	-	-	-	-	-	-	-	-	-	-
Iron (dissolved)	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Lead (total)	-	-	-	-	-	-	-	-	-	-
Lead (dissolved)	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2
Manganese (total)	-	-	-	-	-	-	-	-	-	-
Manganese (dissolved)	109	119	281	615	3.2	328	130	0.7	7.1	11.7
Nickel (total)	-	-	-	-	-	-	-	-	-	-
Nickel (dissolved)	2.6	0.6	0.8	10.3	1.9	2.0	1	<0.5	<0.5	5.7
Silver (total)	-	-	-	-	-	-	-	-	-	-
Silver (dissolved)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc (total)	-	-	-	-	-	-	-	-	-	-
Zinc (dissolved)	18	<1	5	35	2	30	<1	<1	2	27

Analyte	EPL113	EPL114	EPL115	EPL116	EPL117
Physiochemical	18/02/25	18/02/25	18/02/25	18/02/25	18/02/25
pH	5.93	7.34	7.36	6.76	6.14
Electrical Conductivity	129	403	356	215	147
Oxidation Reduction Potential	219	229	123	206	-8
Temperature	16.88	20.92	16.36	18.94	19.81
Dissolved Oxygen	29.6	13.8	103	82.6	41.2
Turbidity	639	30.3	355	1000	1000
Laboratory analytes					
TSS	440	<5	228	2,720	492
Hardness as CaCO3	41	204	177	68	43
Nutrients					
Ammonia as N	<10	<10	<10	20	10
Nitrite + Nitrate as N (NOx)	10	10	<10	20	<10
Kjeldahl Nitrogen Total	<100	<100	<100	<100	<100
Nitrogen (Total)	<100	<100	<100	<100	<100
Reactive Phosphorus	<10	<10	<10	10	10
Phosphorus (Total)	50	40	40	250	300
Inorganics					
Cyanide Total	<4	<4	<4	<4	<4
Hydrocarbons					
Oil and Grease	<1.0	<1.0	<1.0	<1.0	<1.0
Metals					
Aluminium (total)	-	-	-	-	-
Aluminium (dissolved)	20	<5	<5	<5	<5
Arsenic (total)	-	-	-	-	-
Arsenic (dissolved)	0.4	0.7	0.4	0.5	0.8
Chromium (III+VI) (total)	-	-	-	-	-
Chromium (III+VI) (dissolved)	<0.2	<0.2	<0.2	0.2	<0.2
Copper (total)	-	-	-	-	-
Copper (dissolved)	3.4	<0.5	<0.5	<0.5	<0.5
Iron (total)	-	-	-	-	-
Iron (dissolved)	36	<2	<2	<2	2,930
Lead (total)	-	-	-	-	-
Lead (dissolved)	0.2	<0.1	<0.1	<0.1	<0.1
Manganese (total)	-	-	-	-	-
Manganese (dissolved)	108	302	359	156	359
Nickel (total)	-	-	-	-	-
Nickel (dissolved)	0.7	0.9	<0.5	1.7	1.6
Silver (total)	-	-	-	-	-
Silver (dissolved)	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc (total)	-	-	-	-	-
Zinc (dissolved)	5	4	<1	3	<1

* Water Quality Objective values for groundwater refer to the default trigger values for physical and chemical stressors in south-east Australia (upland rivers) for the protection of 99% of aquatic species, ANZECC / ARMCANZ (2000); they are not pollutant limits imposed by EPL 21266.

Snowy Hydro 2.0 Main Works

Monthly EPL Sampling: 01-28 February 2025 - Talbingo and Tantangara Reservoir

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*	EPL10	EPL11	EPL28	EPL29	EPL32	EPL38	EPL39	EPL40	EPL46	EPL51	EPL107	EPL108	EPL109
Field				26/2/25	26/2/25	9/2/25	9/2/25	9/2/25	1/2/25	1/2/25	9/2/25	9/2/25	9/2/25	26/2/25	26/2/25	26/2/25
pH	pH Unit	-	6.5-8	8.12	7.93	8.07	8.16	8.1	8.95	6.66	7.56	8.21	8.18	7.64	7.69	7.89
Electrical Conductivity	µS/cm	-	20-30	78	56	28	26	26	28	30	30.9	27	27	34	32	31
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value	205	209	225	227	230	101	233	168	220	86	221	204	151
Temperature	°C	-	No Water Quality Objective Value	23.52	23.15	21.2	22.5	22.4	26.22	22.65	19.9	22.61	22.65	22.16	21.74	21.52
Dissolved Oxygen	% saturation	-	90-110	75.4	69.2	56.9	58.3	65.2	78.4	91.5	88.4	62.9	57.5	69	82.8	80
Turbidity	NTU	-	1-20	0.5	0	13	9.3	9	10.3	18.7	5.16	8	9.1	0	0	23.5
Laboratory analytes																
Total suspended solids	mg/L	5	No Water Quality Objective Value	<5	<5	8	<5	<5	6	8	<5	<5	<5	<5	<5	<5
Hardness as $CaCO_3$ (filtered)	mg/L	1	No Water Quality Objective Value	43	31	9	9	9	5	7	9	9	9	17	17	14
Nutrients																
Ammonia as N	µg/L	10	10	40	130	<10	20	<10	<10	<10	20	<10	40	60	20	40
Nitrite + Nitrate as N (NOx)	µg/L	10	10	30	<10	20	<10	<10	<10	20	<10	20	<10	<10	<10	20
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value	300	400	300	400	400	300	200	300	300	400	200	200	200
Nitrogen (Total)	µg/L	100	350	300	400	300	400	400	300	200	300	300	400	200	200	200
Reactive Phosphorus	µg/L	1	5	<10	<10	10	10	10	<10	<10	<10	50	<10	<10	<10	<10
Phosphorus (Total)	µg/L	10	10	30	40	40	40	40	30	20	50	40	70	<10	10	<10
Inorganics																
Cyanide Total	µg/L	4	7	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hydrocarbons																
Oil and Grease	mg/L	1	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	10	<10
Metals																
Aluminium (dissolved)	µg/L	5	55	<5	<5	26	32	30	24	37	25	30	31	<5	<5	<5
Arsenic (dissolved)	µg/L	0.2	13	0.4	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	<0.2	<0.2
Chromium (III+VI) (dissolved)	µg/L	0.2	1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Copper (dissolved)	µg/L	0.5	14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Iron (dissolved)	µg/L	2	300	26	12	388	246	247	186	141	104	252	251	6	4	4
Lead (dissolved)	µg/L	0.1	3.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Manganese (dissolved)	µg/L	0.5	1,900	<0.5	<0.5	1.7	3.4	3.3	2.7	8.8	4.4	3.0	3.2	<0.5	<0.5	<0.5
Nickel (dissolved)	µg/L	0.5	11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Silver (dissolved)	µg/L	0.01	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc (dissolved)	µg/L	1	8	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Biological																
Faecal Coliforms	CFU/100mL	1	10/100^	1,900	68	6000	-	-	-	-	-	-	3300	-	-	-
Biochemical Oxygen Demand	mg/L	2	1/5^	3	3	5	-	-	-	-	-	-	6	-	-	-

* Water Quality Objective values for Talbingo and Tantangara Reservoir refer to the default trigger values for physical and chemical stressors in south-east Australia (fresh lakes and reservoirs) for the protection of 95% of aquatic species ANZECC / ARMCANZ (2000), they are not pollutant limits imposed by EPL 21266.

** Algal blooms can present as feacal coliforms

^ 90th percentile concentration limits / 100 percentile concentration limits

\- Sample not required at this location.

Snowy Hydro 2.0 Main Works

Monthly EPL Sampling: 01-28 February 2025 - Surface Water

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*	EPL5	EPL6	EPL8	EPL9	EPL12	EPL14	EPL15	EPL16	EPL24	EPL26	EPL27	EPL30	EPL31	EPL33	EPL34	EPL35	EPL36	EPL37	EPL52	EPL53	EPL54	EPL55	EPL67	EPL71	EPL84	EPL85	EPL86	EPL98	EPL99	EPL100	EPL101	EPL106	EPL110	EPL118	EPL120	EPL122
Field				2/02/25	11/02/25	2/02/25	2/02/25	2/02/25	2/02/25	2/02/25	2/02/25	19/02/25	7/02/25	7/02/25	1/02/25	1/02/25	1/02/25	1/02/25	1/02/25	4/02/25	4/02/25	3/02/25	Dry	Dry	17/2/25	Dry	Dry	15/02/25	15/02/25	15/02/25	Dry	15/02/25	15/02/25	15/2/25	8/2/25	18/2/25	Dry	Dry	19/02/25
pH	-	-	6.5-8	7.45	8.46	8.38	8.22	7.07	7.94	8.21	8.53	7.17	8.1	8.31	7.89	7.66	7.36	7.69	7.57	7.73	7.93	9.18	Dry	Dry	7.01	Dry	Dry	8.65	9.24	8.45	Dry	8.98	8.44	8.86	8.67	7.54	Dry	Dry	7.79
Electrical Conductivity	µS/cm	-	30-350	163	116	169	155	163	163	163	165	607	77.4	75.2	84.3	86.4	86.7	98.1	94	68.6	71.9	78.9	Dry	Dry	1220	Dry	Dry	441	461	899	Dry	265	587	362	1270	67	Dry	Dry	778
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value	267	38	206	212	288	232	213	199	178	161	148	212	219	241	222	225	115	161	178	Dry	Dry	142	Dry	Dry	164	143	-28	Dry	47	89	65	95	140	Dry	Dry	173
Temperature	°C	-	No Water Quality Objective Value	19.83	22.46	21.2	21.23	19.61	20.25	20.92	22.62	14.66	22.71	20.38	16.93	17.42	20.73	16.62	16.42	22.57	24.93	24.91	Dry	Dry	19.6	Dry	Dry	20.64	19.7	21.13	Dry	16.14	16.96	16.06	25.78	13.87	Dry	Dry	14.06
Dissolved Oxygen	% saturation	-	90-110	79.9	67.7	67.8	79.3	74.1	75.3	66.1	77.4	75.5	77.4	75.2	84.3	86.4	86.7	98.1	94	68.6	71.9	78.9	Dry	Dry	68.5	Dry	Dry	74.4	52.5	74.8	Dry	66.6	67.5	66.9	74.3	95.8	Dry	Dry	64.1
Turbidity	NTU	-	2-25	3.9	68.4	0.3	4.2	3.1	2.4	1.3	0.4	33.6	12	5.3	0	0	10.6	0	0	14	23.8	16	Dry	Dry	12.3	Dry	Dry	1000	1000	507	Dry	41.3	81.5	206	45.6	44	Dry	Dry	206
Laboratory analytes																																							
TSS	mg/L	5	No Water Quality Objective Value	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	6	<5	<5	<5	5	19	Dry	Dry	<5	Dry	Dry	744	804	176	Dry	25	27	58	<5	<5	Dry	Dry	198
Hardness as CaCO3	mg/L	1	No Water Quality Objective Value	63	45	85	72	68	68	71	80	156	18	12	13	9	9	16	16	21	24	376	Dry	Dry	360	Dry	Dry	41	40	148	Dry	85	226	125	352	19	Dry	Dry	184
Nutrients																																							
Ammonia as N	µg/L	10	13	30	<10	70	<10	20	40	10	20	20	30	10	<10	40	<10	30	<10	<10	20	50	Dry	Dry	20	Dry	Dry	<10	<10	<10	Dry	680	20	100	60	<10	Dry	Dry	20
Nitrite + Nitrate as N (NOx)	µg/L	10	15	10	20	80	<10	10	30	10	<10	23,600	10	30	<10	<10	<10	<10	<10	10	<10	24,900	Dry	Dry	61,800	Dry	Dry	1,000	2,030	5,940	Dry	4,890	19,600	15,800	40,000	40	Dry	Dry	28,900
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value	300	200	300	200	200	200	200	200	2,900	100	<100	200	200	400	300	300	200	400	10,600	Dry	Dry	2,400	Dry	Dry	1,600	1,400	1,100	Dry	1,400	900	500	2,800	<100	Dry	Dry	3,200
Nitrogen (Total)	µg/L	100	250	300	200	400	200	200	200	200	200	26,500	100	<100	200	200	400	300	300	200	400	35,500	Dry	Dry	64,200	Dry	Dry	2,600	3,400	7,000	Dry	6,300	20,500	16,300	42,800	<100	Dry	Dry	32,100
Reactive Phosphorus	µg/L	1	15	<10	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	Dry	Dry	<10	Dry	Dry	10	<10	20	Dry	<10	<10	10	10	<10	Dry	Dry	<10
Phosphorus (Total)	µg/L	10	20	20	20	50	20	40	70	30	20	10	50	30	10	<10	30	20	40	60	50	30	Dry	Dry	60	Dry	Dry	540	560	260	Dry	30	50	80	20	10	Dry	Dry	160
Inorganics																																							
Cyanide Total	µg/L	4	4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	Dry	Dry	<4	Dry	Dry	<4	<4	<4	Dry	<4	<4	<4	<4	<4	Dry	Dry	<4
Hydrocarbons																																							
Oil and Grease	mg/L	1	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	Dry	Dry	<1.0	Dry	Dry	<1.0	<1.0	<1.0	Dry	<1.0	<1.0	<1.0	<1.0	<1.0	Dry	Dry	<1.0
Metals																																							
Aluminium (total)	µg/L	5	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	Dry	Dry	71	Dry	-	-	-	-	-	-	-	-	-	-	-	-	-
Aluminium (dissolved)	µg/L	5	27	<5	17	<5	<5	<5	<5	<5	<5	6	15	8	12	14	27	22	22	19	30	<5	Dry	Dry	<5	Dry	Dry	13	9	<5	Dry	19	20	45	7	12	Dry	Dry	<5
Arsenic (total)	µg/L	0.2	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.9	Dry	Dry	0.8	Dry	-	-	-	-	-	-	-	-	-	-	-	-	-
Arsenic (dissolved)	µg/L	0.2	0.8	0.6	0.4	0.6	0.6	0.6	0.6	0.6	0.6	0.6	<0.2	<0.2	<0.2	<0.2	0.3	0.2	0.3	0.5	0.5	6.8	Dry	Dry	0.8	Dry	Dry	7.7	17.2	6.6	Dry	1.2	2.6	1.9	2.4	0.8	Dry	Dry	0.3
Chromium (III+VI) (total)	µg/L	0.2	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.5	Dry	Dry	0.6	Dry	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium (III+VI) (dissolved)	µg/L	0.2	0.01	0.3	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	0.4	0.3	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.4	Dry	Dry	0.5	Dry	Dry	7.0	13.0	15.2	Dry	18.3	8.4	13.8	2.1	<0.2	Dry	Dry	<0.2
Copper (total)	µg/L	0.5	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	Dry	Dry	<0.5	Dry	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper (dissolved)	µg/L	0.5	1	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	Dry	Dry	<0.5	Dry	Dry	1.7	1.1	2.0	Dry	<0.5	<0.5	0.6	<0.5	<0.5	Dry	Dry	<0.5
Iron (total)	µg/L	2	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	Dry	Dry	68	Dry	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron (dissolved)	µg/L	2	300	4	43	7	8	4	5	6	7	14	74	27	45	33	242	165	173	353	171	<2	Dry	Dry	<2	Dry	Dry	42	7	6	Dry	<2	<2	<2	<2	12	Dry	Dry	4
Lead (total)	µg/L	0.1	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	Dry	Dry	0.1	Dry	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead (dissolved)	µg/L	0.1	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	Dry	Dry	<0.1	Dry	Dry	<0.1	<0.1	<0.1	Dry	<0.1	<0.1	<0.1	<0.1	<0.1	Dry	Dry	<0.1
Manganese (total)	µg/L	0.5	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2	Dry	Dry	9.6	Dry	-	-	-	-	-	-	-	-	-	-	-	-	-
Manganese (dissolved)	µg/L	0.5	1,200	1.2	3.8	1.7	3.0	1.2	1.4	1.9	2.2	108	12.1	2.4	3.5	2.1	2.3	8.5	6.2	68.0	1.5	0.7	Dry	Dry	7.7	Dry	Dry	0.6	<0.5	14.4	Dry	<0.5	14.0	7.2	<0.5	<0.5	Dry	Dry	12.4
Nickel (total)	µg/L	0.5	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	Dry	Dry	1.8	Dry	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel (dissolved)	µg/L	0.5	8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	Dry	Dry	1.1	Dry	Dry	0.6	<0.5	0.6	Dry	<0.5	0.8	<0.5	1.4	<0.5	Dry	Dry	1.3
Silver (total)	µg/L	0.01	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	Dry	Dry	<0.01	Dry	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver (dissolved)	µg/L	0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	Dry	Dry	<0.01	Dry	Dry	<0.01	<0.01	<0.01	Dry	<0.01	<0.01	<0.01	<0.01	<0.01	Dry	Dry	<0.01
Zinc (total)	µg/L	1	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	Dry	Dry	8	Dry	-	-	-	-	-	-	-	-	-	-	-	-	-
Zinc (dissolved)	µg/L	1	2.4	<1	<1	<1	<1	<1	<1	<1	<1	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	Dry	Dry	4	Dry	Dry	<1	<1	<1	Dry	<1	<1	<1	<1	28	Dry	Dry	<1

* Water Quality Objective values for surface water refer to the default trigger values for physical and chemical stressors in south-east Australia (upland rivers) for the protection of 99% of aquatic species ANZECC / ARMCANZ (2018), they are not pollutant limits imposed by EPL 21266.

- Samples not required

Monthly EPL Sampling: 01-28 February 2025 - Treated Water

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*	EPL 41	EPL 43	EPL 44	EPL 45	EPL 47	EPL 48	EPL 49	EPL 50
Flow Rate				2/2/2025							26/2/2025
Inflow#	ML/day	-	-	-	0.0000	0.1994	0.0523	0.2074	0.0887	0.6811	-
Outflow#	ML/day	-	4.32 (EPL 43 / 50)	-	-	-	-	-	-	-	-
Field											
pH	pH Unit	-	6.5-8.5	8.32	-	-	-	-	-	-	5.14
Electrical Conductivity	µS/cm	-	700 (EPL 41) / 200 (EPL 50)	2210	-	-	-	-	-	-	10.8
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value	203	-	-	-	-	-	-	224.5
Temperature	°C	-	15	26.69	-	-	-	-	-	-	19.6
Dissolved Oxygen	% saturation	-	No Water Quality Objective Value	66.3	-	-	-	-	-	-	85.7
Turbidity	NTU	-	<25	9.9	-	-	-	-	-	-	0.8
Laboratory analytes											
Total suspended solids	mg/L	5	5/10	<5	-	-	-	-	-	-	<5
Hardness as $CaCO_3$ (filtered)	mg/L	1	No Water Quality Objective Value	106	-	-	-	-	-	-	<1
Nutrients											
Ammonia as N	µg/L	10	200/2000^	2,110	-	-	-	-	-	-	30
Nitrite + Nitrate as N (NOx)	µg/L	10	10	18,300	-	-	-	-	-	-	20
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value	3,300	-	-	-	-	-	-	200
Nitrogen (Total)	µg/L	100	350/-^	21,600	-	-	-	-	-	-	200
Reactive Phosphorus	µg/L	1	No Water Quality Objective Value	70	-	-	-	-	-	-	<10
Phosphorus (Total)	µg/L	10	100/300^	80	-	-	-	-	-	-	40
Inorganics											
Cyanide Total	µg/L	4	No Water Quality Objective Value	11	-	-	-	-	-	-	<4
Hydrocarbons											
Oil and Grease	mg/L	1	2/5^	<1.0	-	-	-	-	-	-	<1.0
Metals											
Aluminium (dissolved)	µg/L	5	55	16	-	* -	-	-	-	-	<5
Arsenic (dissolved)	µg/L	0.2	13	3.0	-	* -	-	-	-	-	<0.2
Chromium (III+VI) (dissolved)	µg/L	0.2	1	13.3	-	* -	-	-	-	-	<0.2
Copper (dissolved)	µg/L	0.5	14	<0.5	-	* -	-	-	-	-	<0.5
Iron (dissolved)	µg/L	2	300	<2	-	* -	-	-	-	-	<2
Lead (dissolved)	µg/L	0.1	3.4	<0.1	-	* -	-	-	-	-	<0.1
Manganese (dissolved)	µg/L	0.5	1,900	2.7	-	* -	-	-	-	-	<0.5
Nickel (dissolved)	µg/L	0.5	11	<0.5	-	* -	-	-	-	-	<0.5
Silver (dissolved)	µg/L	0.01	0.05	<0.01	-	* -	-	-	-	-	<0.01
Zinc (dissolved)	µg/L	1	8	2	-	-	-	-	-	-	<1
Biological											
Faecal Coliforms	CFU/100mL	1	10/100^	<1	-	-	-	-	-	-	<1
Biological Oxygen Demand	mg/L	2	5	<2	-	-	-	-	-	-	<2

Note: There is no 100th percentile limit for Nitrogen (Total).

* Water Quality Objective values Treated Water reference the predicted values for physical and chemical stressors from the treatment plant as presented in the Main Works EIS.

\- Samples not required

^ 90 Percentile concentration limit/100 Percentile limit

\# Inflows to STP and CWTP do not directly correspond to outflow at RO as much of the water is reused on site

Snowy Hydro 2.0 Main Works
Monthly EPL Sampling: 01-28 February 2025 - Treated Water

Date	EPL 43 *	EPL 50 ^	EPL 44	EPL 45	EPL 47	EPL 48	EPL 49
	Discharge volume (Megalitres)		Discharge volume (Megalitres)				
2/1/2025	-	-	0.18	0.04	0.33	0.18	0.50
2/2/2025	-	-	0.14	0.05	0.28	0.08	0.77
2/3/2025	-	-	0.17	0.04	0.13	0.08	0.84
2/4/2025	-	-	0.19	0.05	0.24	0.07	0.76
2/5/2025	-	-	0.10	0.04	0.21	0.07	0.65
2/6/2025	-	-	0.19	0.02	0.10	0.08	0.77
2/7/2025	-	-	0.22	0.09	0.32	0.08	0.71
2/8/2025	-	-	0.19	0.05	0.25	0.19	0.79
2/9/2025	-	-	0.21	0.03	0.20	0.07	0.87
2/10/2025	-	-	0.24	0.09	0.24	0.09	0.65
2/11/2025	-	-	0.19	0.05	0.24	0.09	0.76
2/12/2025	-	-	0.19	0.05	0.22	0.09	0.66
2/13/2025	-	-	0.24	0.05	0.26	0.08	0.86
2/14/2025	-	-	0.14	0.06	0.17	0.09	0.86
2/15/2025	-	-	0.20	0.05	0.21	0.19	0.68
2/16/2025	-	-	0.20	0.06	0.23	0.07	0.48
2/17/2025	-	-	0.30	0.07	0.21	0.01	0.95
2/18/2025	-	-	0.30	0.06	0.23	0.08	0.87
2/19/2025	-	-	0.33	0.06	0.21	0.10	0.77
2/20/2025	-	-	0.38	0.06	0.26	0.09	0.80
2/21/2025	-	-	0.17	0.05	0.22	0.09	0.59
2/22/2025	-	-	0.11	0.05	0.23	0.04	0.40
2/23/2025	-	-	0.32	0.07	0.21	0.09	0.50
2/24/2025	-	-	0.27	0.06	0.18	0.10	0.34
2/25/2025	-	-	0.30	0.08	0.19	0.03	0.83
2/26/2025	-	-	0.18	0.07	0.17	0.13	0.95
2/27/2025	-	-	0.17	0.04	0.23	0.07	0.99
2/28/2025	-	-	0.18	0.10	0.27	0.22	0.84

\- Water not discharged on this day

Note: The EPL discharge volume limit for EPL 43 and 50 is 4.32 megalitres per day. Compliance with this criteria was met during the reporting month.

* The maximum flow rate capacity for Lobs Hole STP/PWTP during the reporting month was 4.40 L/s

^ The maximum flow rate capacity for Tantangara STP/PWTP during the reporting month was 11.34 L/s

-- Water not discharged on this day