

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

Environmental Protection Licence No:	21266
Licensee:	Snowy Hydro Limited
Licensee address:	PO Box 332, Cooma, NSW 2630
Premises:	Snowy 2.0 Pumped Hydro Power Station Talbingo and Tantangara, Kosciuszko National Park and Rock Forest, Kosciuszko NSW 2642
EPA Public Register:	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=21266&id=21266&option=licence&searchrange=licence&range=POEO%20licence&prp=no&status=Issued

Monthly water sampling and analysis is performed as part of the Snowy 2.0 Approval Conditions, Environmental Protection Licence No 21266 - Variation 20 December 2024, and the approved Water Management Plan to ensure that works are not impacting on nearby receiving waters.

A map showing the location of each of the EPL named sampling points is provided after the results tables.

Surface Water Results: Surface Water monitoring results indicate sporadic exceedances throughout the reporting period. These results are likely attributed to fluctuations in water levels, which influences water temperatures and reduces flow velocity across the surface water managent stream. Minor exceedances in parameters like phosphorus and nutrients were observed, which are considered to be influenced by the aforementioned conditional settings. Elevated nutrient concentrations were primarily observed in leachate basin locations and will be discussed further in the dedicated leachate results section.

Reservoir Results: Minor exceedances in parameters such as phosphorus, metals, and nutrients were observed. Notwithstanding these exceedances, likely attributed to a combination of decreased water levels, high surface temperatures, elevated suspended solids that were observed during sampling. These influences are considered to have impacted results for january.

Discharge Results: As per the latest revision EPL21266, only water within discharge criteria can be released into Talbingo and Tantangara reservoirs from the final discharge points. FGJV is committed to mitigating environmental impacts, so the Environmental Team only permits discharge if all parameters are within WQO. There were no discharges during January at Talbingo and Tantangara. However, if the water met reuse criteria, the water was reused.

Groundwater Results: Throughout January 2025, pH and other such analytes exceedances were observed at both upstream and downstream monitoring locations at all three sites. The observed results are likely attributed to seasonal variation of environmental inputs (for example, an extended period of no rainfall). Minor exceedances in metals and total nitrogen concentrations were also observed, particularly near spoil emplacement areas, with higher exceedances observed downstream of the GF01 emplacement. Additional measures such as groundwater extraction and transportation for treatment, spoil emplacement permit reviews and management strategy reviews are underway. FGJV remains committed to implementing all necessary actions to minimize environmental impacts.

Leachate results: Leachate analysis revealed minor exceedances in pH, electrical conductivity (EC), dissolved oxygen (DO), and turbidity, including comprehensive analytes, these results are within expectations for locations storing such water.

The publication of this pollution monitoring data is carried out in accordance with section 66 (6) of the Protection of the Environment Operations Act 1997 (NSW).

Snowy Hydro Limited gives no warranty or representation regarding the data suitability for any particular purpose.

Snowy Hydro Limited excludes all liability to any person for loss or damage of any kind (however caused, including but not limited to by negligence) arising whether directly or indirectly from or relating in any way to the use of this data, whether in whole or in part.



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*
Field			
pH	pH Unit	-	6.5-8
Electrical Conductivity	µS/cm	-	20-30
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	No Water Quality Objective Value
Dissolved Oxygen	% saturation	-	90-110
Turbidity	NTU	-	1-20
Laboratory analytes			
Total suspended solids	mg/L	5	No Water Quality Objective Value
Hardness as CaCO ₃ (filtered)	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	10
Nitrite + Nitrate as N (NO _x)	µg/L	10	10
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	350
Reactive Phosphorus	µg/L	1	5
Phosphorus (Total)	µg/L	10	10
Inorganics			
Cyanide Total	µg/L	4	7
Hydrocarbons			
Oil and Grease	mg/L	1	5
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium (III+VI) (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1,900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 [^]
Biochemical Oxygen Demand	mg/L	2	1/5 [^]

EPL10	EPL11	EPL28	EPL29	EPL32	EPL38	EPL39	EPL40	EPL46	EPL51	EPL107	EPL108	EPL109
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
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
97	79	30	25	26	38	27	22.4	26	25	49	43	85
184	177	212	241	-48	200	201	199.1	244	238	170	169	175
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
63.5	63.7	109.1	92.4	91.9	74.6	90	100	90	91	71.8	69.4	81.3
0	1	8.6	8.9	7.1	30.6	9.6	4.13	6.3	7.4	3.1	3.4	6.3
<5	<5	<5	<5	<5	34	<5	<5	<5	5	<5	<5	17
43	38	9	9	9	9	13	9	9	<1	17	14	14
20	50	<10	<10	40	<10	10	10	<10	<10	<10	10	<10
<10	5	<2	4	<10	8	10	4	2	<10	<2	8	<2
200	200	300	300	400	400	200	300	400	300	200	200	200
200	200	300	300	400	400	200	300	400	300	200	200	200
2	<1	4	1	4	3	3	4	4	4	5	2	2
30	<10	40	90	60	80	60	50	60	50	<10	10	<10
<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
<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	<5	30	30	30	31	27	25	30	33	6	<5	<5
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
<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
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
36	16	278	273	280	285	161	77	278	310	6	6	5
<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
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
<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
<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
590	2,700	100	-	-	-	-	-	-	80	-	-	-
<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 faecal 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*
Field			
pH	-	-	6.5-8
Electrical Conductivity	µS/cm	-	30-350
Oxidation Reduction Potential	mv	-	No Water Quality Objective Value
Temperature	°C	-	No Water Quality Objective Value
Dissolved Oxygen	% saturation	-	90-110
Turbidity	NTU	-	2-25
Laboratory analyses			
TSS	mg/L	5	No Water Quality Objective Value
Hardness as CaCO3	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	13
Nitrite + Nitrate as N (NOx)	µg/L	10	15
Nitrate as N (NO3)	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	250
Reactive Phosphorus	µg/L	1	15
Phosphorus (Total)	µg/L	10	20
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
Arsenic (total)	µg/L	0.2	No Water Quality Objective Value
Arsenic (dissolved)	µg/L	0.2	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
Copper (total)	µg/L	0.5	No Water Quality Objective Value
Copper (dissolved)	µg/L	0.5	1
Iron (total)	µg/L	2	No Water Quality Objective Value
Iron (dissolved)	µg/L	2	300
Lead (total)	µg/L	0.1	No Water Quality Objective Value
Lead (dissolved)	µg/L	0.1	1
Manganese (total)	µg/L	0.5	No Water Quality Objective Value
Manganese (dissolved)	µg/L	0.5	1,200
Nickel (total)	µg/L	0.5	No Water Quality Objective Value
Nickel (dissolved)	µg/L	0.5	8
Silver (total)	µg/L	0.01	No Water Quality Objective Value
Silver (dissolved)	µg/L	0.01	0.02
Zinc (total)	µg/L	1	No Water Quality Objective Value
Zinc (dissolved)	µg/L	1	2.4

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	
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	17/01/25	11/12/25	Dry	Dry	Dry	Dry	
8.16	7.72	7.78	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	9.14	8.33	8.44	8.41	Dry	Dry	Dry	Dry	
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	
141	163	164	153	153	170	172	97	70	158	192	208	212	206	193	195	162	185	-15	Dry	Dry	Dry	Dry	Dry	151	Dry	Dry	Dry	38	88	88	83	Dry	Dry	Dry	Dry	
19.63	18.53	21.35	21.64	19.66	19.83	20.61	22.21	18.52	12.45	13.32	12.32	12.17	14.26	12.98	12.09	23	28.32	25.56	Dry	Dry	Dry	Dry	Dry	20.19	Dry	Dry	Dry	14.62	15.73	13.42	23.1	Dry	Dry	Dry	Dry	
86.5	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	77.6	78.9	100.8	Dry	Dry	Dry	Dry	
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	59.3	80	15.3	Dry	Dry	Dry	Dry	
<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	
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	188	243	327	Dry	Dry	Dry	Dry	
<10	<10	<10	<10	10	<10	<10	10	<10	10	<10	30	20	<10	<10	20	10	20	20	Dry	Dry	Dry	Dry	Dry	390	Dry	Dry	Dry	560	30	30	20	Dry	Dry	Dry	Dry	
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	2,880	17,500	30,600	18,100	Dry	Dry	Dry	Dry	
<100	<100	200	100	100	<100	100	<100	3,100	200	100	100	200	400	300	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		
<100	<100	300	100	100	<100	100	<100	37,700	200	100	100	200	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	
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	11	2	5	6	Dry	Dry	Dry	Dry		
<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	
<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	
<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	Dry	Dry	Dry	<1.0	Dry	Dry	Dry	<1.0	<1.0	<1.0	<1.0	Dry	Dry	Dry	Dry	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	82	Dry	Dry	Dry	Dry	Dry	-	-	-	-	-	-	-	-	-	-	-	-	
<5	<5	<5	<5	<5	<5	<5	<5	8	7	30	13	22	23	22	20	54	13	Dry	Dry	Dry	Dry	Dry	Dry	59	Dry	Dry	Dry	52	61	55	<5	Dry	Dry	Dry	Dry	
0.5	0.3	0.5	0.5	0.5	0.5	0.5	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	0.3	<0.2	<0.2	0.4	0.6	5.6	Dry	Dry	Dry	Dry	Dry	11.3	Dry	Dry	Dry	1.6	2.3	3.6	2.1	Dry	Dry	Dry	Dry	
<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.3	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.6	Dry	Dry	Dry	Dry	Dry	-	-	-	-	-	-	-	-	-	-	-	-	
<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	<0.5	0.6	Dry	Dry	Dry	Dry	Dry	1.3	Dry	Dry	Dry	<0.5	0.8	1.2	<0.5	Dry	Dry	Dry	Dry	
4	11	7	8	4	5	6	4	<2	67	50	63	44	242	180	182	316	380	<2	Dry	Dry	Dry	Dry	Dry	17	Dry	Dry	Dry	2	<2	<2	<2	Dry	Dry	Dry	Dry	
<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	Dry	Dry	Dry	Dry	Dry	<0.1	Dry	Dry	Dry	<0.1	<0.1	<0.1	<0.1	Dry	Dry	Dry	Dry
1.1	4.8	1.4	4.0	0.8	1.2	1.5	2.2	300	8.2	2.7	4.5	2.3	1.4	4.6	5.7	37.0	1.9	2.4	Dry	Dry	Dry	Dry	Dry	<0.5	Dry	Dry	Dry	3.6	8.9	5.2	0.9	Dry	Dry	Dry	Dry	
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	Dry	Dry	Dry	Dry	Dry	0.6	Dry	Dry	Dry	<0.5	0.9	0.9	2.2	Dry	Dry	Dry	Dry	
<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	Dry	Dry	Dry	Dry	Dry	<0.01	Dry	Dry	Dry	<0.01	<0.01	<0.01	<0.01	Dry	Dry	Dry	Dry
<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 (2018), they are not pollutant limits imposed by EPL 21266.
- Samples not required



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

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*
Flow Rate			
Inflow [#]	ML/day	-	-
Outflow [#]	ML/day	-	4.32 (EPL 43 / 50)
Field			
pH	pH Unit	-	6.5-8.5
Electrical Conductivity	µS/cm	-	700 (EPL 41) / 200 (EPL 50)
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	15
Dissolved Oxygen	% saturation	-	No Water Quality Objective Value
Turbidity	NTU	-	<25
Laboratory analytes			
Total suspended solids	mg/L	5	5/10
Hardness as CaCO ₃ (filtered)	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	200/2000 [^]
Nitrite + Nitrate as N (NO _x)	µg/L	10	10
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	350/- [^]
Reactive Phosphorus	µg/L	1	No Water Quality Objective Value
Phosphorus (Total)	µg/L	10	100/300 [^]
Inorganics			
Cyanide Total	µg/L	4	No Water Quality Objective Value
Hydrocarbons			
Oil and Grease	mg/L	1	2/5 [^]
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium (III+VI) (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1,900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 [^]
Biological Oxygen Demand	mg/L	2	5

	EPL 41	EPL 43	EPL 44	EPL 45	EPL 47	EPL 48	EPL 49	EPL 50
22/01/2025								22/01/2024
-	0.0000	0.3858	0.0478	0.2103	0.0889	0.7156	-	-
-	-	-	-	-	-	-	-	-
6.92	-	-	-	-	-	-	-	7.44
161	-	-	-	-	-	-	-	60.7
170	-	-	-	-	-	-	-	176.5
25.46	-	-	-	-	-	-	-	20.4
63.1	-	-	-	-	-	-	-	87.2
20	-	-	-	-	-	-	-	22.49
<5	-	-	-	-	-	-	-	<5
<1	-	-	-	-	-	-	-	<1
3,030	-	-	-	-	-	-	-	200
310	-	-	-	-	-	-	-	220
5,200	-	-	-	-	-	-	-	600
5,500	-	-	-	-	-	-	-	800
<1	-	-	-	-	-	-	-	<1
10	-	-	-	-	-	-	-	20
<4	-	-	-	-	-	-	-	<4
<1.0	-	-	-	-	-	-	-	<1.0
6	-	-	-	-	-	-	-	<5
<0.2	-	-	-	-	-	-	-	<0.2
<0.2	-	-	-	-	-	-	-	<0.2
<0.5	-	-	-	-	-	-	-	<0.5
<2	-	-	-	-	-	-	-	<2
<0.1	-	-	-	-	-	-	-	<0.1
<0.5	-	-	-	-	-	-	-	1.1
<0.5	-	-	-	-	-	-	-	<0.5
<0.01	-	-	-	-	-	-	-	<0.01
<1	-	-	-	-	-	-	-	1
<1	-	-	-	-	-	-	-	<1
<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 EPL Sampling: 01 - 28 February 2025

Environmental Protection Licence No:	21266
Licensee:	Snowy Hydro Limited
Licensee address:	PO Box 332, Cooma, NSW 2630
Premises:	Snowy 2.0 Pumped Hydro Power Station Talbingo and Tantangara, Kosciuszko National Park and Rock Forest, Kosciuszko NSW 2642
EPA Public Register:	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=21266&id=21266&option=licence&searchrange=licence&range=POEO%20licence&prp=no&status=Issued

Monthly water sampling and analysis is performed as part of the Snowy 2.0 Approval Conditions, Environmental Protection Licence No 21266 - Variation 20 December 2024, and the approved Water Management Plan to ensure that works are not impacting on nearby receiving waters.

A map showing the location of each of the EPL named sampling points is provided after the results tables.

Surface Water Results: Surface water results during this period reflect the fluctuating weather conditions recorded throughout the reporting period. Over 100 mm of rainfall was reported across the Project sites throughout the reporting period, which typically results in elevated turbidity and EC concentrations and alterations to pH records. Water reuse for dust suppression is observed to be captured by the numerous basins across the Project.

Reservoir Results: The elevated temperatures and fluctuating water levels in the reservoir water bodies could present as the key drivers for the green discolouration and notable algae decomposition present during sampling. The resulting reduction in DO %, elevated EC and coliform units are possibly reflections of such influence.

Discharge Results: No discharge from either points was recorded during February.

Groundwater Results: Elevated water temperatures were observed throughout Lobs Hole and Tantangara during the reporting period, which was typically accompanied by lower DO%, elevated EC and elevated turbidity readings. Rainfall volumes recorded during the reporting period are anticipated to have influenced the elevated turbidity and EC observations. Elevated turbidity observations are anticipated to reduce following maintenance works soon to be actioned. Additional measures such as groundwater extraction pumps are in place at Tantangara with 4 bore pumps scheduled for installation at Lobs Hole imminently.

Leachate results: Consistent with the function of engineered containment systems, elevated concentrations of analytes are observed within leachate basins throughout the reporting period. These systems are subject to weekly inspections, which are conducted through our digital inspection system.

The publication of this pollution monitoring data is carried out in accordance with section 66 (6) of the Protection of the Environment Operations Act 1997 (NSW).

Snowy Hydro Limited gives no warranty or representation regarding the data suitability for any particular purpose.

Snowy Hydro Limited excludes all liability to any person for loss or damage of any kind (however caused, including but not limited to by negligence) arising whether directly or indirectly from or relating in any way to the use of this data, whether in whole or in part.

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*
Field			
pH	pH Unit	-	6.5-8
Electrical Conductivity	µS/cm	-	20-30
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	No Water Quality Objective Value
Dissolved Oxygen	% saturation	-	90-110
Turbidity	NTU	-	1-20
Laboratory analytes			
Total suspended solids	mg/L	5	No Water Quality Objective Value
Hardness as CaCO ₃ (filtered)	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	10
Nitrite + Nitrate as N (NO _x)	µg/L	10	10
Nitrate Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	350
Reactive Phosphorus	µg/L	1	5
Phosphorus (Total)	µg/L	10	10
Inorganics			
Cyanide Total	µg/L	4	7
Hydrocarbons			
Oil and Grease	mg/L	1	5
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium (III+VI) (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1,900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 [^]
Biochemical Oxygen Demand	mg/L	2	1/5 [^]

EPL10	EPL11	EPL28	EPL29	EPL32	EPL38	EPL39	EPL40	EPL46	EPL51	EPL107	EPL108	EPL109
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
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
78	56	28	26	26	28	30	30.9	27	27	34	32	31
205	209	225	227	230	101	233	168	220	86	221	204	151
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
75.4	69.2	56.9	58.3	65.2	78.4	91.5	88.4	62.9	57.5	69	82.8	80
0.5	0	13	9.3	9	10.3	18.7	5.16	8	9.1	0	0	23.5
<5	<5	8	<5	<5	6	8	<5	<5	<5	<5	<5	<5
43	31	9	9	9	5	7	9	9	9	17	17	14
40	130	<10	20	<10	<10	<10	20	<10	40	60	20	40
30	<10	20	<10	<10	<10	20	<10	20	<10	<10	<10	20
300	400	300	400	400	300	200	300	300	400	200	200	200
300	400	300	400	400	300	200	300	300	400	200	200	200
<10	<10	10	10	10	<10	<10	50	<10	<10	<10	<10	<10
30	40	40	40	40	30	20	50	40	70	<10	10	<10
<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	10	<10
<5	<5	26	32	30	24	37	25	30	31	<5	<5	<5
0.4	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.3	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
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
26	12	388	246	247	186	141	104	252	251	6	4	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
<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
<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
<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,900	68	6000	-	-	-	-	-	-	3300	-	-	-
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 faecal 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 - Treated Water

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*
Flow Rate			
Inflow [#]	ML/day	-	-
Outflow [#]	ML/day	-	4.32 (EPL 43 / 50)
Field			
pH	pH Unit	-	6.5-8.5
Electrical Conductivity	µS/cm	-	700 (EPL 41) / 200 (EPL 50)
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	15
Dissolved Oxygen	% saturation	-	No Water Quality Objective Value
Turbidity	NTU	-	<25
Laboratory analytes			
Total suspended solids	mg/L	5	5/10
Hardness as CaCO ₃ (filtered)	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	200/2000 [^]
Nitrite + Nitrate as N (NO _x)	µg/L	10	10
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	350/- [^]
Reactive Phosphorus	µg/L	1	No Water Quality Objective Value
Phosphorus (Total)	µg/L	10	100/300 [^]
Inorganics			
Cyanide Total	µg/L	4	No Water Quality Objective Value
Hydrocarbons			
Oil and Grease	mg/L	1	2/5 [^]
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium (III+VI) (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1,900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 [^]
Biological Oxygen Demand	mg/L	2	5

EPL 41	EPL 43	EPL 44	EPL 45	EPL 47	EPL 48	EPL 49	EPL 50
2/2/2025							
-	0.0000	0.1994	0.0523	0.2074	0.0887	0.6811	-
-	-	-	-	-	-	-	-
26/2/2025							
8.32	-	-	-	-	-	-	5.14
2210	-	-	-	-	-	-	10.8
203	-	-	-	-	-	-	224.5
26.69	-	-	-	-	-	-	19.6
66.3	-	-	-	-	-	-	85.7
9.9	-	-	-	-	-	-	0.8
2/2/2025							
<5	-	-	-	-	-	-	<5
106	-	-	-	-	-	-	<1
26/2/2025							
2,110	-	-	-	-	-	-	30
18,300	-	-	-	-	-	-	20
3,300	-	-	-	-	-	-	200
21,600	-	-	-	-	-	-	200
70	-	-	-	-	-	-	<10
80	-	-	-	-	-	-	40
2/2/2025							
11	-	-	-	-	-	-	<4
26/2/2025							
<1.0	-	-	-	-	-	-	<1.0
2/2/2025							
16	-	#	-	-	-	-	<5
3.0	-	#	-	-	-	-	<0.2
13.3	-	#	-	-	-	-	<0.2
<0.5	-	#	-	-	-	-	<0.5
<2	-	#	-	-	-	-	<2
<0.1	-	#	-	-	-	-	<0.1
2.7	-	#	-	-	-	-	<0.5
<0.5	-	#	-	-	-	-	<0.5
<0.01	-	#	-	-	-	-	<0.01
2	-	#	-	-	-	-	<1
26/2/2025							
<1	-	-	-	-	-	-	<1
<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 EPL Sampling: 01 - 31 March 2025

Environmental Protection Licence No:	21266
Licensee:	Snowy Hydro Limited
Licensee address:	PO Box 332, Cooma, NSW 2630
Premises:	Snowy 2.0 Pumped Hydro Power Station Talbingo and Tantangara, Kosciuszko National Park and Rock Forest, Kosciuszko NSW 2642
EPA Public Register:	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=21266&id=21266&option=licence&searchrange=licence&range=POEO%20licence&prp=no&status=Issued

Monthly water sampling and analysis is performed as part of the Snowy 2.0 Approval Conditions, Environmental Protection Licence No 21266 - Variation 20 December 2024, and the approved Water Management Plan to ensure that works are not impacting on nearby receiving waters.

A map showing the location of each of the EPL named sampling points is provided after the results tables.

Surface Water Results: Surface water results revealed EPL24 to show elevated concentrations in Electrical conductivity, Total Nitrogen, Nitrates, and Manganese. These levels fall within range of historical data, though we have seen an increased trend of these analytes, it is important to note that this location is sampled weekly when water levels permit. It has been observed that some EPL locations on the Yarrongabily river, Wallaces Creek, Nungar Creek, Eucumbene River, Kelly's Creek, and the Murrumbidgee River have shown decreased levels of Dissolved Oxygen which could be attributed to the lower levels of flow that had also been recorded historically when similar conditions were present. EPL 52, EPL EPL84, EPL85, and EPL86 are all showing high levels on Total Nitrogen, Electrical Conductivity, and pH. These locations are sediment basins and the results lie within our expectations for the results we received. EPL100, EPL101 are basins that have been well managed and have been dewatered promptly after rain events leaving them too low to obtain a sample.

Reservoir Results: Talbingo and Tantangara reservoir had low water levels, higher temperatures, and both had evidence of algae blooms with green colours and physical growths on the surface. These conditions may have contributed to the results recorded this month as there were exceedances in Electrical conductivity, as well as faecal coliforms. There were slight exceedances recorded for the Total Nitrogen and Dissolved oxygen were recorded at levels below our Water Quality Objectives for some of the locations.

Discharge Results: Water was discharged on the 01/03/2025 following sufficient NATA accredited laboratory results. The conductivity of EPL41 and EPL50 are below Water Quality Objectives, Nitrates are slightly above WQO's, though faecal coliforms are within the guideline values.

Groundwater Results: The groundwater EPL points recorded at Tantangara (Emplacement area) and Lobs Hole (Lick Hole Gully, Main Yard, GF01) areas have recorded exceedances in Electrical conductivity. These locations are situated near spoil emplacement areas. EPL81, EPL82, and EPL88 are also showing exceedances in Arsenic (filtered), Iron (filtered), and Nitrogen Total. Bore maintenance is currently on going within nominated locations. The results showing for EPL116, and EPL117 in phosphorus are extremely high in accordance to our WQO's, these spikes do not fall within historical records, and it is to note these locations are down gradients of the Spoil emplacement area. These EPL points are downgradient of the spoil emplacement areas, located near the reservoir. This is currently under investigation.

Leachate results: Results for leachate basins show exceedances in pH, EC, DO, and turbidity, as well as the results received for the comprehensive samples. These results are within expectations. The Marica EPL locations were consistently managed at levels that prohibit sample collection.

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

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*
Field			
pH	pH Unit	-	6.5-8
Electrical Conductivity	µS/cm	-	20-30
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	No Water Quality Objective Value
Dissolved Oxygen	% saturation	-	90-110
Turbidity	NTU	-	1-20
Laboratory analytes			
Total suspended solids	mg/L	5	No Water Quality Objective Value
Hardness as CaCO ₃ (filtered)	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	10
Nitrite + Nitrate as N (NO _x)	µg/L	10	10
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	350
Reactive Phosphorus	µg/L	1	5
Phosphorus (Total)	µg/L	10	10
Inorganics			
Cyanide Total	µg/L	4	7
Hydrocarbons			
Oil and Grease	mg/L	1	5
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium III+VI (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1,900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 ^a
Biochemical Oxygen Demand	mg/L	2	1/5 ^a

EPL10	EPL11	EPL28	EPL29	EPL32	EPL38	EPL39	EPL40	EPL46	EPL51	EPL107	EPL108	EPL109
2/3/25	2/3/25	26/3/25	26/3/25	26/3/25	1/3/25	9/3/25	9/3/25	26/3/25	26/3/25	16/3/25	16/3/25	16/3/25
8.1	8.01	7.82	8.42	8.18	7.94	6.34	8.95	8.5	8.43	7.79	7.72	7.77
102	63	27	26	26	36	29.6	31.7	26	26	40	38	36
191	192	130	140	14	174	664.1	625.5	139	140	193	190	180
22.97	22.84	18.43	20.14	20.19	22.63	17.6	16.5	20.29	20.21	22.01	21.97	21.7
64.8	70.6	93.2	95.5	91.5	54.1	62.1	75.3	97.1	93.8	72.6	67.8	75.6
1.61	1.15	7.3	13.4	12.9	8.8	7.17	2.63	12.5	10.7	0.76	0.85	0.66
<5	<5	<5	<5	<5	<5	<5	<5	<5	5	<5	<5	<5
46	28	9	9	9	9	13	16	9	9	14	14	14
<10	<10	70	<10	<10	20	30	140	90	<10	<10	40	20
<10	<10	10	<10	<10	<10	290	20	10	<10	<10	10	<10
100	100	300	400	400	300	100	200	300	400	100	100	100
100	100	300	400	400	300	400	200	300	400	100	100	100
<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
20	10	20	30	30	20	<10	<10	40	30	20	20	10
<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
<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	<5	12	9	11	40	26	19	10	10	<5	<5	<5
0.7	0.5	0.4	0.4	0.4	0.4	0.2	<0.2	0.4	0.4	0.3	0.4	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
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
20	6	141	90	92	218	98	89	96	91	4	3	3
<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	<0.5	0.6	<0.5	<0.5	1.7	3.4	3.4	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	<0.5
<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
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
75	230	7	-	-	-	-	-	5	-	-	-	-
4	3	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 faecal coliforms

^a 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 March 2025 - Surface Water

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*
Field			
pH			6.5-8
Electrical Conductivity	µS/cm		30-350
Oxidation Reduction Potential	mV		No Water Quality Objective Value
Temperature	°C		No Water Quality Objective Value
Dissolved Oxygen	% saturation		90-110
Turbidity	NTU		2-25
Laboratory analyses			
TSS	mg/L	5	No Water Quality Objective Value
Hardness as CaCO3	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	mg/L	10	13
Nitrite + Nitrate as N (NOx)	mg/L	15	
Ketohal Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	250
Reactive Phosphorus	µg/L	1	15
Phosphorus (Total)	µg/L	10	20
Inorganics			
Cyanide Total	mg/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
Arsenic (total)	µg/L	0.2	No Water Quality Objective Value
Arsenic (dissolved)	µg/L	0.2	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
Copper (total)	µg/L	0.5	No Water Quality Objective Value
Copper (dissolved)	µg/L	0.5	1
Iron (total)	µg/L	2	No Water Quality Objective Value
Iron (dissolved)	µg/L	2	300
Lead (total)	µg/L	0.1	No Water Quality Objective Value
Lead (dissolved)	µg/L	0.1	1
Manganese (total)	µg/L	0.5	No Water Quality Objective Value
Manganese (dissolved)	µg/L	0.5	1,200
Nickel (total)	µg/L	0.5	No Water Quality Objective Value
Nickel (dissolved)	µg/L	0.5	8
Silver (total)	µg/L	0.01	No Water Quality Objective Value
Silver (dissolved)	µg/L	0.01	0.02
Zinc (total)	µg/L	1	No Water Quality Objective Value
Zinc (dissolved)	µg/L	1	2.4

EPL5	EPL6	EPL8	EPL9	EPL12	EPL14	EPL15	EPL16	EPL14	EPL16	EPL17	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		
3/01/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	3/03/25	
8.03	7.9	7.86	8.14	8.06	7.99	8.05	8.25	8.7	7.86	8.33	8.89	7.12	7.23	8.19	7.87	7.29	7.35	9.21							9.29	8.85	8.87		10.45								
229	123	221	177	172	166	170	175	1270	37	36	42	32	31	48	42	52	54	863	Dry	Dry	Dry	Dry	Dry	Dry	966	561	1130	Dry	511	Dry							
90	118	139	146	301	121	125	137	134	190	164	208	285	239	136	155	136	145	93	Dry	Dry	Dry	Dry	Dry	Dry	115	129	147	Dry	59	Dry							
17.93	16.42	21.61	20.07	17.47	17.39	17.77	22.66	18.43	11.98	11	13.43	13.5	17.83	12.18	11.71	16.06	15.75	23.49	Dry	Dry	Dry	Dry	Dry	Dry	28.62	23.51	27.8	Dry	12.29	Dry							
88.4	63.3	68.7	84	66.2	107.4	71.5	65.2	65.1	74.2	71.2	61.4	69.4	68.3	66.3	68.8	58.2	63.2	80.4	Dry	Dry	Dry	Dry	Dry	Dry	128.5	56	80.4	Dry	69.8	Dry							
8	3.7	4.6	10.1	1.6	3.3	1.7	3.3	0.4	5.3	7.65	5.1	8.8	13.2	71.9	14.9	7.8	9.2	47.1	Dry	Dry	Dry	Dry	Dry	Dry	782	1000	56.5	Dry	170	Dry							
7	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	36	<5	<5	<5	<5	<5	<5	24	Dry	Dry	Dry	Dry	Dry	Dry	223	418	26	Dry	72	Dry							
212	60	90	82	87	85	85	85	330	18	18	13	9	16	16	17	17	260	Dry	44	31	217	Dry	188	Dry													
26	30	20	<10	<10	16	<10	<10	10	20	<10	40	<10	20	30	30	20	20	390	Dry	20	50	20	Dry	130	Dry												
<100	<100	380	80	<100	10	100	20	61,600	<100	<100	10	<100	10	<100	<100	80	10	38,100	Dry	2,180	3,320	11,900	Dry	5,380	Dry												
<100	<100	<100	<100	<100	<100	100	<100	5,100	<100	<100	300	<100	300	400	300	100	300	7,000	Dry	800	1,400	1,700	Dry	2,200	Dry												
<100	<100	400	<100	<100	<100	100	<100	66,500	<100	<100	200	<100	300	400	300	100	300	45,100	Dry	2,900	6,900	13,600	Dry	8,600	Dry												
<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	Dry	<10	20	<10	Dry	<10	Dry												
10	30	50	40	<100	30	40	30	40	100	20	30	40	<100	40	30	30	30	30	Dry	150	160	90	Dry	130	Dry												
<4	<4	<4	<4	14	<4	<4	<4	5	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	Dry	<4	<4	<4	Dry	<4	Dry												
<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	<1.0	<1.0	<1.0	Dry	<1.0	Dry												
<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	11	12	24	16	15	16	23	<5	Dry	<5	<5	<5	Dry	65	Dry												
0.7	0.3	0.7	0.6	0.7	0.7	0.7	0.7	0.4	<0.2	<0.2	<0.2	0.4	0.2	0.2	0.3	0.4	<0.2	0.3	0.4	<0.2	Dry	Dry	Dry	Dry	Dry	20.5	21.9	6.2	Dry	1.4	Dry						
<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.4	0.3	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	Dry	Dry	Dry	Dry	Dry	8.6	15.6	9.3	Dry	76.6	Dry						
<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	<0.5	<0.5	<0.5	<0.5	Dry	Dry	Dry	Dry	Dry	4.0	1.9	0.8	Dry	0.7	Dry						
6	22	11	12	6	8	9	13	2	22	15	46	35	145	213	221	324	269	<2	Dry	27	36	<2	Dry	5	Dry												
<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	Dry	Dry	Dry	Dry	Dry	<0.1	<0.1	<0.1	Dry	<0.1	Dry						
0.6	2.4	1.5	5.0	0.8	0.8	1.5	2.9	275	5.2	2.8	3.5	2.0	0.9	11.8	5.6	43.2	0.8	<0.5	Dry	0.8	<0.5	<0.5	Dry	<0.5	Dry												
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.2	<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	Dry	Dry	Dry	1.2	0.6	0.6	Dry	<0.5	Dry						
<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	Dry	Dry	Dry	Dry	Dry	<0.01	<0.01	<0.01	Dry	<0.01	Dry						
<1	<1	<1	<1	<1	<1	<1	<1	7	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	Dry	Dry	Dry	Dry	Dry	<1	<1	<1	Dry	<1	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 95% of aquatic species ANZECC / ARMCANZ (2018), they are not pollutant limits imposed by EPL 21266.

- Samples not required



**Snowy Hydro 2.0 Main Works
Monthly EPL Sampling: 01-31 March 2025 - Discharge Water**

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*
Flow Rate			
Inflow [#]	ML/day	-	-
Outflow [#]	ML/day	-	4.32 (EPL 43 / 50)
Field			
pH	pH Unit	-	6.5-8.5
Electrical Conductivity	µS/cm	-	700 (EPL 41) / 200 (EPL 50)
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	15
Dissolved Oxygen	% saturation	-	No Water Quality Objective Value
Turbidity	NTU	-	<25
Laboratory analytes			
Total suspended solids	mg/L	5	5/10
Hardness as CaCO ₃ (filtered)	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	200/2000 [^]
Nitrite + Nitrate as N (NO _x)	µg/L	10	10
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	350/- [^]
Reactive Phosphorus	µg/L	1	No Water Quality Objective Value
Phosphorus (Total)	µg/L	10	100/300 [^]
Inorganics			
Cyanide Total	µg/L	4	No Water Quality Objective Value
Hydrocarbons			
Oil and Grease	mg/L	1	2/5 [^]
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium (III+VI) (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1,900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 [^]
Biological Oxygen Demand	mg/L	2	5

EPL 41	EPL 43	EPL 44	EPL 45	EPL 47	EPL 48	EPL 49	EPL 50
16/03/2025							
-	0.0000	0.2650	0.0512	0.2177	0.0970	0.7472	-
-	-	-	-	-	-	-	-
12/03/2025							
7.84	-	-	-	-	-	-	7.92
6	-	-	-	-	-	-	18.6
507	-	-	-	-	-	-	701
25.15	-	-	-	-	-	-	16.1
73.6	-	-	-	-	-	-	55.2
0.9	-	-	-	-	-	-	0.53
<5							
<1	-	-	-	-	-	-	<1
40							
100	-	-	-	-	-	-	<10
<100	-	-	-	-	-	-	<100
100	-	-	-	-	-	-	<100
<10	-	-	-	-	-	-	<10
<10	-	-	-	-	-	-	10
<4							
<1.0	-	-	-	-	-	-	<1
<5							
<0.2	-	*	-	-	-	-	<0.2
<0.2	-	*	-	-	-	-	<0.2
<0.5	-	*	-	-	-	-	<0.5
<2	-	*	-	-	-	-	<2
<0.1	-	*	-	-	-	-	<0.1
<0.5	-	*	-	-	-	-	<0.5
<0.5	-	*	-	-	-	-	<0.5
<0.01	-	*	-	-	-	-	<0.01
<1	-	*	-	-	-	-	<1
11.00							
<2	-	-	-	-	-	-	<1

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 EPL Sampling: 01 - 30 April 2025

Environmental Protection Licence No:	21266
Licensee:	Snowy Hydro Limited
Licensee address:	PO Box 332, Cooma, NSW 2630
Premises:	Snowy 2.0 Pumped Hydro Power Station Talbingo and Tantangara, Kosciuszko National Park and Rock Forest, Kosciuszko NSW 2642
EPA Public Register:	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=21266&id=21266&option=licence&searchrange=licence&range=POEO%20licence&prp=no&status=Issued

Monthly water sampling and analysis is performed as part of the Snowy 2.0 Approval Conditions, Environmental Protection Licence No 21266 - Variation 20 December 2024, and the approved Water Management Plan to ensure that works are not impacting on nearby receiving waters.

A map showing the location of each of the EPL named sampling points is provided after the results tables.

Surface Water Results: EPL24 reported elevated nutrient concentrations, electrical conductivity and select heavy metals in line with previous sampling rounds, consistent with low water levels at the location. Although this is typical of low flows the site will continue to be monitored weekly. Multiple locations, such as EPL122 have reported elevated EC, low DO, and elevated nitrogen analytes. These are understood to be influenced by the low flow rates within the streams, and the catchments for our basin locations.

Reservoir Results: Reduced water levels and the developing algal cycle within the Tantangara and Talbingo water bodies are understood to heavily influence the observed analytical results. Notable concentrations of biological analytes, DO, EC and the nitrogen compounds observed at multiple locations are reflective of this.

Discharge Results: The analytical results reflect sample collection during the plant recirculation phase. Slight exceedances of nitrogen compounds and in-situ readings were noted. Note: No discharge occurred on the date the samples were collected. Although the samples were taken from the EPL designated EPL41, the commissioning of the INX-OUT location further downstream is understood to be a more representative location.

Groundwater Results: The results for downstream groundwater points have returned elevated results in Nitrogen, Nitrates, Phosphorus, and Ammonia that are greater than adopted WQO's. Multiple locations have reported concentrations of nitrogenous compounds across the Project footprint, particularly from locations within proximity to the emplacement area GF01. Locations such as EPL57 are returning elevated nitrates, Nitrogens, and phosphorus results were observed to be increasing. Heavy metals such as Arsenic and Copper (dissolved) were reported as greater than adopted WQO's at Main Yard locations particularly. It is noted the majority of heavy metal concentrations are within historic ranges for the historic mining locations. EPL87, EPL95, EPL105 reported elevated concentrations of dissolved zinc outside historic ranges.

Leachate results: The exceedances found within the leachate basin results are in line with intended design functionality for the storage locations of leachate water. GF01 leachate basin was under repair works by construction and therefore had no water available for collection.

Snowy Hydro Limited gives no warranty or representation regarding the data suitability for any particular purpose.

Snowy Hydro Limited excludes all liability to any person for loss or damage of any kind (however caused, including but not limited to by negligence) arising whether directly or indirectly from or relating in any way to the use of this data, whether in whole or in part.

Snowy Hydro 2.0 Main Works
Monthly EPL Sampling: 01-30 April 2025 - Talbingo and Tantangara Reservoir

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*
Field			
pH	pH Unit	-	6.5-8
Electrical Conductivity	µS/cm	-	20-30
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	No Water Quality Objective Value
Dissolved Oxygen	% saturation	-	90-110
Turbidity	NTU	-	1-20
Laboratory analytes			
Total suspended solids	mg/L	5	No Water Quality Objective Value
Hardness as CaCO ₃ (filtered)	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	10
Nitrite + Nitrate as N (NO _x)	µg/L	10	10
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	350
Reactive Phosphorus	µg/L	1	5
Phosphorus (Total)	µg/L	10	10
Inorganics			
Cyanide Total	µg/L	4	7
Hydrocarbons			
Oil and Grease	mg/L	1	5
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium (III+VI) (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1,900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 [^]
Biochemical Oxygen Demand	mg/L	2	1/5 [^]

EPL10	EPL11	EPL28	EPL29	EPL32	EPL38	EPL39	EPL40	EPL46	EPL51	EPL107	EPL108	EPL109
13/04/2025	13/04/2025	16/04/2025	15/04/2025	15/04/2025	12/04/2025	6/04/2025	12/04/2025	15/04/2025	16/04/2025	13/04/2025	13/04/2025	13/04/2025
7.35	7.35	8.93	7.82	8.13	8.59	7.2	7.72	7.74	7.87	7.24	7.29	7.9
47	41	13.9	27	27	27	2	32.5	28	27.5	38	33	35
193	190	110.1	134	110	113	259	143.5	165	144.7	183	175	145
18.32	18.42	15.3	14.65	14.7	14.9	11.75	16.2	13.84	16.6	17.75	17.4	17.27
87.2	91.2	89.7	60.1	101.6	89.1	65	101.3	93.6	91	85	89.2	85.7
5.1	9.5	6.85	0	3.3	57.9	6	3.28	8.2	10.96	0.5	11	15.9
<5	<5	17	<5	<5	18	<5	<5	<5	<5	<5	<5	<5
22	19	9	9	9	9	7	9	9	9	10	10	10
30	30	<10	10	10	<10	<10	<10	20	<10	<10	<10	<10
<10	<10	10	<10	<10	<10	80	<10	<10	<10	<10	<10	<10
100	100	1,200	500	300	800	100	<100	300	400	<100	<100	<100
100	100	1,200	500	300	800	200	<100	300	400	<100	<100	<100
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
30	20	70	30	30	40	150	20	20	50	20	20	<10
<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
<5	<5	15	9	9	9	12	13	8	9	<5	<5	<5
0.4	0.4	0.3	0.3	0.4	0.4	<0.2	<0.2	0.4	0.4	0.4	0.4	0.3
<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
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
6	4	72	55	56	52	77	58	61	58	4	4	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
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.2	2.4	<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	<0.5
<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
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
28	21	100	-	-	-	-	-	-	1	-	-	-
4	3	4	-	-	-	-	-	-	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 / ARM CANZ (2000), they are not pollutant limits imposed by EPL 21266.

** Algal blooms can present as faecal coliforms

[^] 90th percentile concentration limits / 100 percentile concentration limits

- Sample not required at this location.

Snowy Hydro 2.0 Main Works
Monthly EPL Sampling: 01-30 April 2025 - Surface Water

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*
Field			
pH	-	-	6.5-8
Electrical Conductivity	µS/cm	-	30-350
Oxidation Reduction Potential	mv	-	No Water Quality Objective Value
Temperature	°C	-	No Water Quality Objective Value
Dissolved Oxygen	% saturation	-	90-110
Turbidity	NTU	-	2-25
Laboratory analyses			
TSS	mg/L	5	No Water Quality Objective Value
Hardness as CaCO3	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	13
Nitrite + Nitrate as N (NOx)	µg/L	10	15
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	250
Reactive Phosphorus	µg/L	1	15
Phosphorus (Total)	µg/L	10	20
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
Arsenic (total)	µg/L	0.2	No Water Quality Objective Value
Arsenic (dissolved)	µg/L	0.2	0.8
Chromium (III+VI) (total)	µg/L	0.2	0.01
Chromium (III+VI) (dissolved)	µg/L	0.2	No Water Quality Objective Value
Copper (total)	µg/L	0.5	1
Copper (dissolved)	µg/L	0.5	1
Iron (total)	µg/L	2	No Water Quality Objective Value
Iron (dissolved)	µg/L	2	300
Lead (total)	µg/L	0.1	No Water Quality Objective Value
Lead (dissolved)	µg/L	0.1	1
Manganese (total)	µg/L	0.5	No Water Quality Objective Value
Manganese (dissolved)	µg/L	0.5	1,200
Nickel (total)	µg/L	0.5	No Water Quality Objective Value
Nickel (dissolved)	µg/L	0.5	8
Silver (total)	µg/L	0.01	No Water Quality Objective Value
Silver (dissolved)	µg/L	0.01	0.02
Zinc (total)	µg/L	1	No Water Quality Objective Value
Zinc (dissolved)	µg/L	1	2.4

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	
11/04/2025	11/04/2025	11/04/2025	11/04/2025	11/04/2025	11/04/2025	11/04/2025	11/04/2025	9/04/2025	13/04/2025	13/04/2025	6/04/2025	6/04/2025	6/04/2025	6/04/2025	6/04/2025	22/04/2025	5/04/2025	9/04/2025	Dry	Dry	Dry	Dry	Dry	29/04/2025	29/04/2025	11/04/2025	Dry	13/04/2025	19/04/2025	13/04/2025	12/04/2025	Dry	Dry	Dry	22/04/2025	
8.14	8.09	8.18	8.18	8.18	8.2	8.17	8.34	6.83	8.23	8.09	7.66	7.53	7.51	7.87	7.69	6.76	7.45	8.71	Dry	Dry	Dry	Dry	Dry	9.02	9.04	8.85	Dry	9.5	8.74	7.17	8.85	Dry	Dry	Dry	8.26	
150	127	153	149	147	144	146	147	922	37	32	11	1	7	13	7	40	22	960	Dry	Dry	Dry	Dry	Dry	937	679	871	Dry	479	1050	1330	1660	Dry	Dry	Dry	656	
173	173	175	176	167	173	176	170	112	124	133	236	244	229	182	180	201	201	165	Dry	Dry	Dry	Dry	Dry	94	113	-15	Dry	4	74	115	44	Dry	Dry	Dry	135	
12.21	12.56	16.69	15.83	12.36	13.31	13.84	15.63	14.29	10.46	9.27	8.13	7.87	14.11	9.3	7.54	11.89	12.21	13.56	Dry	Dry	Dry	Dry	Dry	18.89	18.05	19.01	Dry	17.66	16.25	18.34	17.44	Dry	Dry	Dry	15.06	
92.3	96.7	89.3	97.9	93.3	95.1	97.2	93.8	50.6	74.3	77.7	75	58.8	63.2	81	68.9	51.8	64.9	69.5	Dry	Dry	Dry	Dry	Dry	89.8	72.6	90.2	Dry	94.9	62.3	5.33	89.2	Dry	Dry	Dry	59.3	
3.83	0.59	0.86	0.69	0.4	1.11	0.3	0.3	18.6	16.4	14.2	6.3	3.6	30.8	9.4	3.6	15.2	23.5	73.2	Dry	Dry	Dry	Dry	Dry	1000	1000	190	Dry	26.6	167	41.3	17	Dry	Dry	Dry	1000	
6	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	6	<5	<5	16	29	34	Dry	Dry	Dry	Dry	Dry	349	571	77	Dry	<5	60	<5	<5	Dry	Dry	Dry	577	
81	72	81	85	83	87	87	-	282	18	14	13	9	9	16	16	13	17	285	Dry	Dry	Dry	Dry	Dry	39	46	144	Dry	170	276	303	460	Dry	Dry	Dry	61	
40	<10	50	20	20	20	10	6	<10	20	10	<10	<10	20	30	<10	10	20	30	Dry	Dry	Dry	Dry	Dry	50	60	20	Dry	12,300	690	2,110	20	Dry	Dry	Dry	20	
<10	<10	120	80	<10	<10	<10	2	39,100	10	<10	10	<10	60	20	<10	60	<10	32,600	Dry	Dry	Dry	Dry	Dry	8,220	7,580	10,200	Dry	33,400	37,800	38,000	10,300	Dry	Dry	Dry	6,820	
200	100	200	200	100	100	100	400	5,200	<100	<100	<100	<100	400	100	100	200	600	100	Dry	Dry	Dry	Dry	Dry	3,800	1,700	2,500	Dry	15,000	4,200	7,200	8,000	Dry	Dry	Dry	2,500	
200	100	300	300	100	100	100	400	44,300	<100	<100	<100	<100	500	100	100	300	600	32,700	Dry	Dry	Dry	Dry	Dry	12,000	9,300	12,700	Dry	48,400	42,000	45,200	18,300	Dry	Dry	Dry	9,300	
<1	<1	<1	<1	<1	<1	<1	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	Dry	Dry	Dry	Dry	Dry	<10	<10	<10	Dry	<10	<10	<10	<10	Dry	Dry	Dry	<10	
<10	<10	<10	30	<10	<10	20	9	20	<10	30	10	<10	20	10	20	20	40	60	Dry	Dry	Dry	Dry	Dry	850	630	60	Dry	20	100	30	<10	Dry	Dry	Dry	730	
<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	<4	<4	Dry	116	<4	7	<4	Dry	Dry	Dry		
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	Dry	Dry	Dry	Dry	Dry	<1	<1	<1	Dry	<1	<1	<1	<1	Dry	Dry	Dry	<1	
<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	7	8	9	8	8	16	16	31	Dry	Dry	Dry	Dry	Dry	11	9	8	Dry	16	20	8	6	Dry	Dry	Dry	6	
0.7	0.3	0.7	0.7	0.7	0.6	0.6	<1	1.1	<0.2	<0.2	<0.2	<0.2	0.4	<0.2	<0.2	0.3	0.3	4.4	Dry	Dry	Dry	Dry	Dry	19.5	21.4	15.4	Dry	1.3	1.9	2.3	2.5	Dry	Dry	Dry	2.0	
<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	<1	1.6	0.3	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	5.1	-	-	-	-	5.1	-	-	-	-	-	-	-	-	-	-	-	
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	Dry	Dry	Dry	Dry	Dry	6.2	2.0	2.0	Dry	2.0	1.5	1.7	<0.5	Dry	Dry	Dry	1.0	
48	21	7	9	3	4	6	<50	8	14	9	33	25	83	118	134	211	136	3	Dry	Dry	Dry	Dry	Dry	20	5	<2	Dry	<2	<2	<2	<2	Dry	Dry	Dry	8	
<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	34.2	-	-	-	-	0.5	0.1	<0.1	Dry	<0.1	<0.1	<0.1	<0.1	Dry	Dry	Dry	<0.1	
3.2	3.8	1.3	3.4	0.6	0.6	1.4	<5	238	3.3	1.0	4.4	2.1	<0.5	6.7	9.3	36.2	4.1	1.7	Dry	Dry	Dry	Dry	Dry	0.8	<0.5	<0.5	Dry	2.1	42.0	116	<0.5	Dry	Dry	Dry	7.9	
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	4.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	Dry	Dry	Dry	Dry	Dry	1.8	0.8	0.8	Dry	0.6	1.8	1.9	1.9	Dry	Dry	Dry	1.1	
<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<5	<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	-	-	-	-	-	-	-	-	-	-	-	
<1	<1	<1	<1	<1	<1	<1	<5	14	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	Dry	Dry	Dry	Dry	Dry	1	<1	<1	Dry	<1	<1	<1	<1	<1	Dry	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

Snowy Hydro 2.0 Main Works
Monthly EPL Sampling: 01-30 April 2025 - Volumes

Date
1/04/2025
2/04/2025
3/04/2025
4/04/2025
5/04/2025
6/04/2025
7/04/2025
8/04/2025
9/04/2025
10/04/2025
11/04/2025
12/04/2025
13/04/2025
14/04/2025
15/04/2025
16/04/2025
17/04/2025
18/04/2025
19/04/2025
20/04/2025
21/04/2025
22/04/2025
23/04/2025
24/04/2025
25/04/2025
26/04/2025
27/04/2025
28/04/2025
29/04/2025
30/04/2025

EPL 43 *	EPL 50 ^
Discharge volume (Megalitres)	
-	0.12
0.52	0.63
0.46	-
0.38	0.82
0.28	-
-	0.74
-	-
-	0.34
-	0.58
-	-
-	0.44
0.17	0.33
-	0.37
-	0.61
0.28	-
-	0.55
-	0.18
-	-
-	-
-	0.07
-	-
0.43	0.14
0.56	-
-	-
0.37	-
-	-
0.46	-
-	-

EPL 44	EPL 45	EPL 47	EPL 48	EPL 49
Discharge volume (Megalitres)				
0.21	0.05	0.19	0.06	1.10
0.25	0.06	0.23	0.08	0.95
0.22	0.05	0.23	0.09	0.62
0.14	0.07	0.28	0.10	0.60
0.04	0.03	0.24	0.07	0.33
0.19	0.06	0.21	0.10	0.72
0.30	0.06	0.25	0.07	0.59
0.46	0.06	0.22	0.09	0.76
0.48	0.06	0.23	0.05	0.52
0.51	0.08	0.17	0.09	0.71
0.25	0.07	0.18	0.28	0.71
0.41	0.05	0.30	0.08	0.48
0.27	0.05	0.23	0.04	0.53
0.27	0.05	0.39	0.03	0.66
0.59	0.05	0.22	0.08	0.52
0.29	0.04	0.20	0.25	0.46
0.16	0.04	0.19	0.09	0.52
0.28	0.06	0.18	0.05	0.56
0.28	0.04	0.20	0.07	0.54
0.31	0.05	0.19	0.09	0.64
0.36	0.05	0.19	0.10	0.51
0.50	0.06	0.20	0.06	0.35
0.41	0.09	0.19	0.03	0.62
0.28	0.06	0.20	0.02	0.33
0.19	0.05	0.23	0.08	0.36
0.27	0.05	0.21	0.08	0.29
0.47	0.06	0.22	0.02	0.58
0.20	0.06	0.26	0.05	0.54
0.49	0.05	0.22	0.09	0.71
0.22	0.04	0.21	0.07	0.60

- 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 8.45 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



Snowy Hydro 2.0 Main Works
Monthly EPL Sampling: 01-30 April 2025 - Discharge Water

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*
Flow Rate			
Inflow [#]	ML/day	-	-
Outflow [#]	ML/day	-	4.32 (EPL 43 / 50)
Field			
pH	pH Unit	-	6.5-8.5
Electrical Conductivity	µS/cm	-	700 (EPL 41) / 200 (EPL 50)
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	15
Dissolved Oxygen	% saturation	-	No Water Quality Objective Value
Turbidity	NTU	-	<25
Laboratory analytes			
Total suspended solids	mg/L	5	5/10
Hardness as CaCO ₃ (filtered)	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	200/2000 [^]
Nitrite + Nitrate as N (NO _x)	µg/L	10	10
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	350/- [^]
Reactive Phosphorus	µg/L	1	No Water Quality Objective Value
Phosphorus (Total)	µg/L	10	100/300 [^]
Inorganics			
Cyanide Total	µg/L	4	No Water Quality Objective Value
Hydrocarbons			
Oil and Grease	mg/L	1	2/5 [^]
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium (III+VI) (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1,900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 [^]
Biological Oxygen Demand	mg/L	2	5

	EPL 41	EPL 43	EPL 44	EPL 45	EPL 47	EPL 48	EPL 49	EPL 50
23/04/2025								27/04/2025
-	0.0000	0.3093	0.0545	0.2226	0.0815	0.5803	-	-
-	-	-	-	-	-	-	-	-
7.63	-	-	-	-	-	-	-	7.71
9.4	-	-	-	-	-	-	-	19.1
156	-	-	-	-	-	-	-	97.8
19.91	-	-	-	-	-	-	-	16.7
56	-	-	-	-	-	-	-	88.8
0.24	-	-	-	-	-	-	-	0.58
<5	-	-	-	-	-	-	-	<5
<1	-	-	-	-	-	-	-	<1
20	-	-	-	-	-	-	-	<10
80	-	-	-	-	-	-	-	10
<100	-	-	-	-	-	-	-	<100
<100	-	-	-	-	-	-	-	<100
<1	-	-	-	-	-	-	-	<10
<1	-	-	-	-	-	-	-	20
<4	-	-	-	-	-	-	-	<4
<1.0	-	-	-	-	-	-	-	<1.0
<5	-	-	-	-	-	-	-	<5
<0.2	-	-	-	-	-	-	-	<0.2
<0.2	-	-	-	-	-	-	-	<0.2
<0.5	-	-	-	-	-	-	-	0.6
<2	-	-	-	-	-	-	-	<2
<0.1	-	-	-	-	-	-	-	<0.1
<0.5	-	-	-	-	-	-	-	<0.5
<0.5	-	-	-	-	-	-	-	<0.5
<0.01	-	-	-	-	-	-	-	<0.01
<1	-	-	-	-	-	-	-	5
<1	-	-	-	-	-	-	-	<1
<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

Environmental Protection Licence No:	21266
Licensee:	Snowy Hydro Limited
Licensee address:	PO Box 332, Cooma, NSW 2630
Premises:	Snowy 2.0 Pumped Hydro Power Station Talbingo and Tantangara, Kosciuszko National Park and Rock Forest, Kosciuszko NSW 2642
EPA Public Register:	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=21266&id=21266&option=licence&searchrange=licence&range=POEO%20licence&prp=no&status=Issued

Monthly water sampling and analysis is performed as part of the Snowy 2.0 Approval Conditions, Environmental Protection Licence No 21266 - Variation 20 December 2024, and the approved Water Management Plan to ensure that works are not impacting on nearby receiving waters.

A map showing the location of each of the EPL named sampling points is provided after the results tables.

Surface Water Results:

Ammonia concentrations were slightly elevated in some EPL locations along Wallaces Creek, Yarrangobilly River, and Murrumbidgee River. EPL24 is reported elevated nutrient and select heavy metal concentrations alongside elevated EC concentrations which have been recorded previous sampling rounds. These results are consistent with low flowing, shallow waterway that was observed at the time of sampling. There are exceedances noted from EPL122 where the concentrations of Nutrients, Electrical Conductivity, Phosphorus, and Ammonia are exceeding our WQO's and could be attributed to environmental conditions of shallow waterways and low flows, with lots of surrounding vegetation.

Reservoir Results:

Tantangara and Talbingo Reservoirs report consistent elevations in nitrogen in line with those data captures from previous monitoring events. Reduced water levels, consistent Nitrogen concentrations and the developing algal cycle within the Tantangara and Talbingo water bodies are understood to heavily influence the fluctuations in dissolved oxygen levels, such as those reported at EPL10, EPL29 and EPL39. EPL39 was captured during an extremely low water level time and is understood to be unrepresentative of the water quality at the time of monitoring. Elevated levels of Faecal coliforms, EC and Ammonia are potentially attributed to the fluctuations in water levels and the collection of samples from the waters.

Discharge Results: Results for the discharge locations met the adopted WQO's for the periods of discharge. The discharge from EPL50 on the 26th was registered in the early hours of the morning prior to results returning. FGJV is in the process of finalising the discharge procedure which returns monitoring back to the EPL license for greater clarity.

Groundwater Results: Results for groundwater bores surrounding Lickhole Gully have reported elevated concentrations of nutrients and select dissolved heavy metals. These heavy metals have been reported previously as being above adopted WQO's and are possibly influenced by the historic mining activities in the immediate vicinity. GF01 down gradient locations comprise similar characteristics. These elevations are not only seen in LHG PSE area but also in GF01 PSE down gradient locations. EPL1 which is sampled quarterly has returned elevated Electrical Conductivity, Ammonia, and Nutrient levels although this is not outside of data recorded from previous sample rounds.

Leachate results: The exceedances found within the leachate basin results are in line with intended design functionality for the storage of PSE generated leachate water. GF01 basin has previously been reconstructed and has not since had water in it to sample.

The publication of this pollution monitoring data is carried out in accordance with section 66 (6) of the Protection of the Environment Operations Act 1997 (NSW).

Snowy Hydro Limited gives no warranty or representation regarding the data suitability for any particular purpose.

Snowy Hydro Limited excludes all liability to any person for loss or damage of any kind (however caused, including but not limited to by negligence) arising whether directly or indirectly from or relating in any way to the use of this data, whether in whole or in part.

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

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*
Field			
pH	pH Unit	-	6.5-8
Electrical Conductivity	µS/cm	-	20-30
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	No Water Quality Objective Value
Dissolved Oxygen	% saturation	-	90-110
Turbidity	NTU	-	1-20
Laboratory analytes			
Total suspended solids	mg/L	5	No Water Quality Objective Value
Hardness as CaCO ₃ (filtered)	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	10
Nitrite + Nitrate as N (NO _x)	µg/L	10	10
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	350
Reactive Phosphorus	µg/L	1	5
Phosphorus (Total)	µg/L	10	10
Inorganics			
Cyanide Total	µg/L	4	7
Hydrocarbons			
Oil and Grease	mg/L	1	5
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium (III+VI) (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1,900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 [^]
Biochemical Oxygen Demand	mg/L	2	1/5 [^]

EPL10	EPL11	EPL28	EPL29	EPL32	EPL38	EPL39	EPL40	EPL46	EPL51	EPL107	EPL108	EPL109
4/05/2025	4/05/2025	25/05/2025	25/05/2025	25/05/2025	17/05/2025	17/05/2025	12/04/2025	15/04/2025	16/04/2025	13/04/2025	13/04/2025	13/04/2025
7.58	7.47	7.26	7.19	7.22	7.63	8.76	8.31	7.1	7.18	7.47	7.5	7.63
54	50	31	30	30	23	27	40.4	34	30	28	24	25
205	206	318	349	353	243	156	138.4	367	349	197	192	186
14.96	14.97	8.37	9	8.88	13.16	9.63	10.9	8.8	8.94	15.03	15.27	14.6
59.7	57	104.7	104.1	76.3	68.6	68.6	96.7	84.3	85.6	63.9	75.3	84.4
4.3	5.2	13.9	17.3	17.7	40.3	22.6	4.38	0.8	14.3	10.1	18	14.6
28	14	6	<5	<5	12	8	<5	<5	<5	8	<5	<5
33	33	9	9	9	9	7	9	9	9	17	14	14
30	30	60	60	60	<10	<10	40	100	60	80	40	70
10	30	20	10	10	10	50	<10	50	10	10	20	<10
100	200	500	500	400	1,000	<100	<100	500	500	200	200	200
100	200	500	500	400	1,000	<100	<100	600	500	200	200	200
<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
<10	10	10	20	<10	60	50	<10	10	20	20	<10	<10
<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
<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	<5	30	26	26	26	14	14	26	27	<5	<5	<5
0.4	0.4	0.3	0.4	0.4	0.4	<0.2	<0.2	0.4	0.4	0.3	0.3	0.2
<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.3	<0.2	<0.2	<0.2	<0.2
<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
5	5	96	96	97	107	53	47	92	95	3	<2	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
<0.5	<0.5	1.8	1.4	1.4	2.0	1.8	3.0	1.4	1.5	<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
<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
<1	<1	<1	<1	<1	1	<1	<1	<1	<1	<1	<1	<1
6	3	22	-	-	-	-	-	-	11	-	-	-
3	4	8	-	-	-	-	-	-	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 faecal 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 May 2025 - Discharge Water

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*
Flow Rate			
Inflow [#]	ML/day	-	-
Outflow [#]	ML/day	-	4.32 (EPL 43 / 50)
Field			
pH	pH Unit	-	6.5-8.5
Electrical Conductivity	µS/cm	-	700 (EPL 41) / 200 (EPL 50)
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	15
Dissolved Oxygen	% saturation	-	No Water Quality Objective Value
Turbidity	NTU	-	<25
Laboratory analytes			
Total suspended solids	mg/L	5	5/10
Hardness as CaCO ₃ (filtered)	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	200/2000 [^]
Nitrite + Nitrate as N (NO _x)	µg/L	10	10
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	350/- [^]
Reactive Phosphorus	µg/L	1	No Water Quality Objective Value
Phosphorus (Total)	µg/L	10	100/300 [^]
Inorganics			
Cyanide Total	µg/L	4	No Water Quality Objective Value
Hydrocarbons			
Oil and Grease	mg/L	1	2/5 [^]
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium (III+VI) (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1,900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 [^]
Biological Oxygen Demand	mg/L	2	5

EPL 41	EPL 43	EPL 44	EPL 45	EPL 47	EPL 48	EPL 49	EPL 50
25/05/2025							26/5/2025
-	0.0000	0.3576	0.0568	0.2285	2.6710	0.5803	-
-	-	-	-	-	-	-	-
8.01	-	-	-	-	-	-	7.58
16	-	-	-	-	-	-	46.18
147	-	-	-	-	-	-	-
14.59	-	-	-	-	-	-	7.3
68.7	-	-	-	-	-	-	-
18.9	-	-	-	-	-	-	0.39
<5	-	-	-	-	-	-	<5
-	-	-	-	-	-	-	<1
<10	-	-	-	-	-	-	50
50	-	-	-	-	-	-	<10
<100	-	-	-	-	-	-	<100
<100	-	-	-	-	-	-	<100
<10	-	-	-	-	-	-	<10
10	-	-	-	-	-	-	20
<4	-	-	-	-	-	-	<4
<1.0	-	-	-	-	-	-	<1.0
<5	-	-	-	-	-	-	<5
<0.2	-	-	-	-	-	-	<0.2
<0.2	-	-	-	-	-	-	1.5
<0.5	-	-	-	-	-	-	1.3
<2	-	-	-	-	-	-	<2
<0.1	-	-	-	-	-	-	<0.1
<0.5	-	-	-	-	-	-	<0.5
<0.5	-	-	-	-	-	-	<0.5
<0.01	-	-	-	-	-	-	<0.01
<1	-	-	-	-	-	-	2
<1	-	-	-	-	-	-	<1
5	-	-	-	-	-	-	3

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 May 2025 - Volumes

Date
1/05/2025
2/05/2025
3/05/2025
4/05/2025
5/05/2025
6/05/2025
7/05/2025
8/05/2025
9/05/2025
10/05/2025
11/05/2025
12/05/2025
13/05/2025
14/05/2025
15/05/2025
16/05/2025
17/05/2025
18/05/2025
19/05/2025
20/05/2025
21/05/2025
22/05/2025
23/05/2025
24/05/2025
25/05/2025
26/05/2025
27/05/2025
28/05/2025
29/05/2025
30/05/2025
31/05/2025

EPL 43 *	EPL 50 ^
Discharge volume (Megalitres)	
0.85	-
0.93	-
-	-
1.07	-
0.68	-
0.70	-
-	-
0.87	-
-	-
-	-
-	-
1.60	-
-	0.14
0.86	0.59
-	-
0.32	0.23
-	0.41
-	0.72
-	0.50
-	-
0.51	-
0.59	0.74
-	0.67
0.83	0.89
-	0.45
1.04	0.36
0.40	-
-	-
0.54	-
-	-
-	-

EPL 44	EPL 45	EPL 47	EPL 48	EPL 49
Discharge volume (Megalitres)				
0.37	0.05	0.22	0.07	1.10
0.30	0.05	0.22	0.09	0.95
0.24	0.05	0.22	0.08	0.62
0.45	0.05	0.22	0.07	0.60
0.18	0.03	0.18	0.10	0.33
0.60	0.05	0.26	0.07	0.72
0.21	0.05	0.17	0.08	0.59
0.26	0.04	0.25	0.55	0.76
0.13	0.05	0.25	0.11	0.52
0.44	0.08	0.16	-0.23	0.71
0.43	0.05	0.21	0.08	0.71
0.39	0.05	0.21	0.08	0.48
0.11	0.04	0.23	0.07	0.53
0.74	0.04	0.22	-0.06	0.66
0.29	0.05	0.26	77.78	0.52
0.50	0.05	0.16	0.07	0.46
0.23	0.04	0.24	0.07	0.52
0.32	0.06	0.23	-77.64	0.56
0.43	0.08	0.27	77.79	0.54
0.29	0.07	0.20	0.08	0.64
0.30	0.03	0.09	-77.86	0.51
0.24	0.03	0.09	77.97	0.35
0.57	0.21	0.52	0.88	0.62
0.44	0.07	0.27	-0.71	0.33
0.35	0.05	0.22	0.12	0.36
0.46	0.06	0.26	0.08	0.29
0.32	0.04	0.21	0.10	0.58
0.25	0.02	0.12	-78.45	0.54
0.25	0.02	0.12	78.63	0.71
0.28	0.12	0.37	0.07	0.60
0.36	0.05	0.20		

- 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 8.45 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

Snowy Hydro 2.0 Main Works EPL Sampling: 01 - 30 June 2025

Environmental Protection Licence No:	21266
Licensee:	Snowy Hydro Limited
Licensee address:	PO Box 332, Cooma, NSW 2630
Premises:	Snowy 2.0 Pumped Hydro Power Station Talbingo and Tantangara, Kosciuszko National Park and Rock Forest, Kosciuszko NSW 2642
EPA Public Register:	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=21266&id=21266&option=licence&searchrange=licence&range=PEO%20licence&prp=no&status=Issued

Monthly water sampling and analysis is performed as part of the Snowy 2.0 Approval Conditions, Environmental Protection Licence No 21266 - Variation 20 December 2024, and the approved Water Management Plan to ensure that works are not impacting on nearby receiving waters.

A map showing the location of each of the EPL named sampling points is provided after the results tables.

Groundwater Results:

Results for groundwater bores surrounding Lick Hole Gully have reported elevated concentrations of nutrients and select dissolved heavy metals. These heavy metals have been reported previously as being above adopted WQO's. Increasing levels of nutrients have been reported at EPL56 and EPL57, similar to results reported down gradient of GF01. This may indicate that these bores are no longer representative of up gradient water quality. Investigations are underway to redrill EPL56 and EPL57 in more suitable locations.

Reservoir Results:

Increases in nutrients (particularly ammonia) in Tantangara Reservoir observed this month (EPL28, 29, 32, 38, 40, 46, 51) are likely associated with decomposition of algal biomass generated during the summer months, exacerbated by low water levels. Detection of thermotolerant coliforms in in Talbingo Reservoir (51 CFU/100mL at EPL11) is within the 90th percentile concentration limits and likely attributable to wildlife.

Surface Water Results:

Exceedances in nutrients and conductivity have been reported at EPL24 and EPL122, consistent with previously recorded data. These sites have low flow and water level which contributes to the high concentrations. Increases in nutrients at EPL33 was also observed, consistent with increases in nutrients at the upstream locations in the Tantangara reservoir. As expected, exceedances were noted in leachate storage infrastructure.

Discharge Results:

Results for the discharge locations met the adopted WQO's for the periods of discharge. A minor exceedance in pH was detected on the day of testing (15/06/2025) at EPL41, with no recorded discharge occurring on this day.

The publication of this pollution monitoring data is carried out in accordance with section 66 (6) of the Protection of the Environment Operations Act 1997 (NSW).

Snowy Hydro Limited gives no warranty or representation regarding the data suitability for any particular purpose.

Snowy Hydro Limited excludes all liability to any person for loss or damage of any kind (however caused, including but not limited to by negligence) arising whether directly or indirectly from or relating in any way to the use of this data, whether in whole or in part.



Snowy Hydro 2.0 Main Works
Monthly EPL Sampling: 01-30 June 2025 - Talbingo and Tantangara Reservoir

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*
Field			
pH	pH Unit	-	6.5-8
Electrical Conductivity	µS/cm	-	20-30
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	No Water Quality Objective Value
Dissolved Oxygen	% saturation	-	90-110
Turbidity	NTU	-	1-20
Laboratory analytes			
Total suspended solids	mg/L	5	No Water Quality Objective Value
Hardness as CaCO ₃	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	10
Nitrite + Nitrate as N (NO _x)	µg/L	10	10
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	350
Reactive Phosphorus	µg/L	1	5
Phosphorus (Total)	µg/L	10	10
Inorganics			
Cyanide Total	µg/L	4	7
Hydrocarbons			
Oil and Grease	mg/L	1	5
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium (III+VI) (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1,900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 [^]
Biochemical Oxygen Demand	mg/L	2	1/5 [^]

EPL10	EPL11	EPL28	EPL29	EPL32	EPL38	EPL39	EPL40	EPL46	EPL51	EPL107	EPL108	EPL109
22/06/2025	22/06/2025	29/06/2025	29/06/2025	29/06/2025	14/06/2025	14/06/2025	29/06/2025	29/06/2025	29/06/2025	22/06/2025	22/06/2025	22/06/2025
7.98	7.97	7.62	8.02	7.87	7.66	7.61	7.37	7.2	8.46	7.95	7.96	8.05
39	36	27	37	35	33	20	26	31	62	33	29	31
284	285	171	131	142	240	266	182	203	109	281	273	255
8.22	8.66	3.37	5.55	4.96	6.41	6.96	3.14	3.8	6.58	9.13	9.17	9.36
73	95.7	79	68.3	65.9	72.8	81.3	73	89.2	71.3	98.6	99.9	104.3
2.9	3.8	1.8	0	0	5.1	5.1	2.1	1.9	0.5	3.4	2.8	3.2
<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
14	14	5	5	5	2	<1	5	9	9	12	12	12
80	10	70	160	150	170	<10	70	170	310	30	10	50
30	20	60	60	40	30	50	70	40	40	30	20	30
200	200	500	700	1,000	500	100	400	600	700	200	100	300
200	200	600	800	1,000	500	200	500	600	700	200	100	300
<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
20	40	<10	<10	10	20	<10	10	40	30	<10	<10	30
<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
<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	<5	47	39	38	39	32	54	36	38	<5	<5	<5
0.3	0.3	<0.2	0.3	0.3	0.4	<0.2	<0.2	0.4	0.4	0.2	0.2	0.2
<0.2	<0.2	0.2	<0.2	0.3	<0.2	<0.2	<0.2	0.2	0.2	<0.2	<0.2	<0.2
<0.5	<0.5	0.9	0.6	1.0	<0.5	<0.5	0.8	0.6	0.8	<0.5	<0.5	<0.5
14	11	93	112	119	115	52	96	111	114	10	10	5
<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
3.3	1.0	13.6	19.1	20.1	12.1	3.8	13.2	20.4	20.4	0.7	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	<0.5	<0.5
<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
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1	51**	4	-	-	-	-	-	-	<1	-	-	-
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 faecal coliforms

[^] 90th percentile concentration limits / 100 percentile concentration limits

- Sample not required at this location.



Snowy Hydro 2.0 Main Works
Monthly EPL Sampling: 01-30 June 2025 - Discharge Water

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*
Flow Rate			
Inflow [#]	ML/day	-	-
Outflow [#]	ML/day	-	4.32 (EPL 43 / 50)
Field			
pH	pH Unit	-	6.5-8.5
Electrical Conductivity	µS/cm	-	700 (EPL 41) / 200 (EPL 50)
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	15
Dissolved Oxygen	% saturation	-	No Water Quality Objective Value
Turbidity	NTU	-	<25
Laboratory analytes			
Total suspended solids	mg/L	5	5/10
Hardness as CaCO ₃	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	200/2000 [^]
Nitrite + Nitrate as N (NO _x)	µg/L	10	10
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	350/- [^]
Reactive Phosphorus	µg/L	1	No Water Quality Objective Value
Phosphorus (Total)	µg/L	10	100/300 [^]
Inorganics			
Cyanide Total	µg/L	4	No Water Quality Objective Value
Hydrocarbons			
Oil and Grease	mg/L	1	2/5 [^]
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium (III+VI) (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1,900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 [^]
Biological Oxygen Demand	mg/L	2	5

	EPL 41	EPL 43	EPL 44	EPL 45	EPL 47	EPL 48	EPL 49	EPL 50
15/06/2025								29/06/2025
-	0.0000	0.2339	0.0643	0.2230	0.0793	0.2703	-	-
-	-	-	-	-	-	-	-	-
8.58	-	-	-	-	-	-	-	6.85
4	-	-	-	-	-	-	-	51
216	-	-	-	-	-	-	-	313
12.49	-	-	-	-	-	-	-	7.86
97	-	-	-	-	-	-	-	68.2
1.3	-	-	-	-	-	-	-	0
<5	-	-	-	-	-	-	-	<5
<1	-	-	-	-	-	-	-	<1
<10	-	-	-	-	-	-	-	50
90	-	-	-	-	-	-	-	<10
<100	-	-	-	-	-	-	-	400
<100	-	-	-	-	-	-	-	400
<10	-	-	-	-	-	-	-	<10
<10	-	-	-	-	-	-	-	<10
<4	-	-	-	-	-	-	-	26
<1.0	-	-	-	-	-	-	-	<1.0
<5	-	-	-	-	-	-	-	<5
<0.2	-	-	-	-	-	-	-	<0.2
<0.2	-	-	-	-	-	-	-	0.8
<0.5	-	-	-	-	-	-	-	<0.5
<2	-	-	-	-	-	-	-	<2
<0.1	-	-	-	-	-	-	-	<0.1
<0.5	-	-	-	-	-	-	-	<0.5
<0.5	-	-	-	-	-	-	-	<0.5
<0.01	-	-	-	-	-	-	-	<0.01
<1	-	-	-	-	-	-	-	<1
<1	-	-	-	-	-	-	-	<1
<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: 01-30 June 2025 - Volumes

Date
1/06/2025
2/06/2025
3/06/2025
4/06/2025
5/06/2025
6/06/2025
7/06/2025
8/06/2025
9/06/2025
10/06/2025
11/06/2025
12/06/2025
13/06/2025
14/06/2025
15/06/2025
16/06/2025
17/06/2025
18/06/2025
19/06/2025
20/06/2025
21/06/2025
22/06/2025
23/06/2025
24/06/2025
25/06/2025
26/06/2025
27/06/2025
28/06/2025
29/06/2025
30/06/2025

EPL 43 *	EPL 50 ^
-	-
-	-
-	-
0.76	-
-	-
-	0.53
-	0.08
-	0.11
-	0.31
-	0.50
1.32	-
-	-
-	0.39
-	0.92
-	0.18
-	0.34
-	0.26
-	0.05
1.65	0.08
-	-
-	0.35
-	-
-	0.52
0.39	0.76
-	0.66
-	0.63
0.59	1.00
-	0.60
0.40	0.40
0.23	0.89

EPL 44	EPL 45	EPL 47	EPL 48	EPL 49
0.29	0.04	0.23	0.04	0.75
0.51	0.05	0.19	0.13	0.71
0.42	0.05	0.17	0.09	0.69
0.40	0.04	0.16	0.09	0.63
0.20	0.02	0.20	0.06	0.09
0.01	0.06	0.30	0.10	0.29
0.67	0.06	0.17	0.10	0.73
0.48	0.07	0.27	0.08	0.61
0.41	0.06	0.23	0.07	0.48
0.36	0.10	0.23	0.08	0.32
0.12	0.07	0.25	0.08	0.63
0.14	0.10	0.32	0.11	0.66
0.13	0.03	0.10	0.04	0.31
0.24	0.07	0.25	0.09	0.46
0.03	0.06	0.21	0.07	0.16
0.04	0.06	0.20	0.06	0.08
0.04	0.07	0.23	0.08	0.11
0.03	0.07	0.38	0.07	0.11
0.02	0.07	0.06	0.07	0.03
0.01	0.07	0.23	0.08	0.02
0.04	0.08	0.24	0.08	0.09
0.16	0.07	0.22	0.08	0.06
0.29	0.11	0.21	0.05	0.01
0.25	0.07	0.21	0.08	0.02
0.39	0.08	0.23	0.08	0.03
0.39	0.07	0.32	0.08	0.002
0.20	0.07	0.18	0.08	0.001
0.03	0.07	0.26	0.09	0.0004
0.30	0.06	0.24	0.09	0.001
0.39	0.06	0.22	0.07	0.002

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 7.75 L/s
- ^ The maximum flow rate capacity for Tantangara STP/PWTP during the reporting month was 7.63 L/s
- Water not discharged on this day

Environmental Protection Licence No:	21266
Licensee:	Snowy Hydro Limited
Licensee address:	PO Box 332, Cooma, NSW 2630
Premises:	Snowy 2.0 Pumped Hydro Power Station Talbingo and Tantangara, Kosciuszko National Park and Rock Forest, Kosciuszko NSW 2642
EPA Public Register:	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=21266&id=21266&option=licence&searchrange=licence&range=POEO%20licence&prp=no&status=Issued

Monthly water sampling and analysis is performed as part of the Snowy 2.0 Approval Conditions, Environmental Protection Licence No 21266 - Variation 23 July 2025, and the approved Water Management Plan to ensure that works are not impacting on nearby receiving waters.

A map showing the location of each of the EPL named sampling points is provided after the results tables.

Groundwater Results:

EPL56 has elevated concentrations of total nitrogen (TN) at 400ug/L, but the downgradient locations recorded increased concentrations of EPL57 of 2080ug/L, and EPL58 at 53,400 ug/L. EPL57 and EPL58 have increased significantly, and it is evident in the results that the TN has risen as we get further down the watercourse. The phosphorus has not increased in the same trends seen for TN, although they are above the WQO's, they are not linear in their values. EPL95 which is measured at similar depths to EPL58 slightly lower exceedances but similar concentrations for TN.

The results for TN within Tantangara groundwater sampling locations (EPL68, 69, 103, 104, 105) are all exceeding with differing levels, none of which are linear or displaying obvious trends displaying correlation between upgradient and down gradient locations. The reported elevated concentrations for ground water locations within Lickhole Gully have previously been recorded above the WQO's for TN.

Heavy metals have been reported for multiple sites as above WQO's. More specifically, GF01 (Nickel, Zinc, Copper, Iron, and Arsenic – all dissolved), Lickhole Gully (Arsenic, Chromium, Copper, Iron, Nickel, and Zinc), Ravine Bay (Aluminium, Chromium, Copper, Zinc).

Reservoir Results:

The results for Talbingo reservoir returned concentrations that indicate the environmental conditions are consistent with the ambient conditions. Although Ammonia has indicated an exceedance at EPL107, it is within the objectives for the other locations up and down stream for the reservoir. All other parameters have been recorded within the WQO's, other than the Nitrite and Nitrates which are slightly above, although the Total Nitrogen is below the objectives.

For Tantangara Reservoir there are more nutrient levels exceeding our WQO's for most locations sampled within the area. Ammonia is slightly exceeding for all locations but EPL39 and EPL40, which is upstream of construction. Total Nitrogen, Reactive and Total Phosphorus have exceeded for most of the locations on the reservoir. Aluminium is the only metal that has returned concentrations above the WQO's for the locations on the reservoir. These concentration levels for parameters exceeding the WQO's have been recorded from previous sample periods for these locations.

Surface Water Results:

EPL24 has returned elevated concentrations of TN although all other parameters except for Zinc have identified all other parameters have met the WQO's for this location. Locations along the natural water ways of the Murrumbidgee River, Nungar creek, and Eucumbene River have returned slight exceedances for TN, Phosphorus, and some select heavy metals. EPL52 and EPL55 located within the GF01 area have returned exceedances for TN at levels that have been recorded and reported on from previous sampling periods. There are a few select heavy metals that are also exceeding for these locations, however EPL55 is below EPL52 in location, and as such is showing lesser concentration volumes than EPL52.

Discharge Results:

Results for the discharge locations met the adopted Water Quality Objectives (WQOs) during the discharge periods.

The publication of this pollution monitoring data is carried out in accordance with section 66 (6) of the Protection of the Environment Operations Act 1997 (NSW).

Snowy Hydro Limited gives no warranty or representation regarding the data suitability for any particular purpose.

Snowy Hydro Limited excludes all liability to any person for loss or damage of any kind (however caused, including but not limited to by negligence) arising whether directly or indirectly from or relating in any way to the use of this data, whether in whole or in part.



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

Table with columns for Analyte, Unit, Limit of Reporting, Water Quality Objective Value*, and 48 sampling points (EPL06 to EPL17). Rows include Physicochemical (pH, Conductivity, Temperature, etc.), Laboratory Analyses (Nitrate, Nitrite, etc.), Heavy Metals (Aluminum, Arsenic, etc.), and Pesticides (Atrazine, etc.).

* Water Quality Objective values for groundwater refer to the default (lower) values for physical and chemical elements in south-east Australia's inland groundwater for the protection of 95% of aquatic ecosystems (ANZECC & ARMCANZ 2000). They are not suitable for use in EPL 21246. Sample not required for this location.



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

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*
Field			
pH	pH Unit	-	6.5-8
Electrical Conductivity	µS/cm	-	20-30
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	No Water Quality Objective Value
Dissolved Oxygen	% saturation	-	90-110
Turbidity	NTU	-	1-20
Laboratory analytes			
Total suspended solids	mg/L	5	No Water Quality Objective Value
Hardness as CaCO ₃	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	10
Nitrite + Nitrate as N (NO _x)	µg/L	10	10
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	350
Reactive Phosphorus	µg/L	1	5
Phosphorus (Total)	µg/L	10	10
Inorganics			
Cyanide Total	µg/L	4	7
Hydrocarbons			
Oil and Grease	mg/L	1	5
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium (III+VI) (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1,900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 ^a
Biochemical Oxygen Demand	mg/L	2	1/5 ^a

EPL10	EPL11	EPL28	EPL29	EPL32	EPL38	EPL39	EPL40	EPL46	EPL51	EPL107	EPL108	EPL109
27/07/2025	27/07/2027	20/07/2025	20/07/2025	20/07/2025	5/07/2025	5/07/2025	20/07/2025	20/07/2025	20/07/2025	22/07/2025	22/07/2025	22/07/2025
8.38	7.83	7.09	7.19	7.13	7.4	6.69	7.29	7.28	7.2	7.32	7.38	7.58
37	30	11.4	17.9	18	29	13	10.7	18.7	18.2	21	21	21
116	133	113	173.1	171	285	299	177.6	118	144	169	175	166
8.11	8.63	4.1	5.7	5.5	6.77	6.47	3.7	9.2	5.5	9.4	9.3	9.6
93.3	115.5	83.9	86.9	86.6	64	69.4	85.5	85.9	86.5	92.1	91	91.5
3.4	2.2	2.86	3.76	3.9	10.5	5.2	2.14	4.01	4.28	0.85	1.04	0.8
<5	<5	<5	<5	<5	14	<5	<5	<5	<5	<5	<5	<5
12	12	2	5	5	5	<1	2	5	5	5	5	5
<10	<10	30	110	90	120	<10	<10	160	120	50	10	<10
50	30	30	60	60	80	30	20	60	60	30	30	30
200	200	100	300	300	400	200	<100	400	300	200	100	200
200	200	100	400	400	500	200	<100	500	400	200	100	200
<10	<10	<10	<10	<10	10	10	<10	<10	<10	<10	<10	<10
<10	20	10	<10	<10	50	40	<10	30	30	<10	<10	20
<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
<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
12	11	49	58	62	45	41	24	56	60	<5	<5	7
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
0.7	<0.2	0.2	0.3	0.3	<0.2	<0.2	<0.2	0.3	0.3	<0.2	<0.2	<0.2
<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
17	12	60	130	130	119	40	24	128	131	6	4	4
<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.2
1.6	0.7	6.7	18.9	19.9	36.2	4.3	1.8	20.3	19.8	<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
<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2	<1	<1	<1	<1	3	2	<1	<1	<1	<1	<1	<1
6	2	<1	-	-	-	-	-	-	<1	-	-	-
<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 faecal coliforms

^a 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 July 2025 - Surface Water

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
			EP13	EP14	EP15	EP16	EP17	EP18	EP19	EP20	EP21	EP22	EP23	EP24	EP25	EP26	EP27	EP28	EP29	EP30	EP31	EP32	EP33	EP34	EP35	EP36	EP37	EP38	EP39	EP40	EP41	EP42	EP43	EP44	EP45	EP46	EP47	EP48	EP49	EP50	EP51	EP52	EP53	EP54	EP55	EP56	EP57	EP58	EP59	EP60	EP61	EP62	EP63	EP64	EP65	EP66	EP67	EP68	EP69	EP70	EP71	EP72	EP73	EP74	EP75	EP76	EP77	EP78	EP79	EP80	EP81	EP82	EP83	EP84	EP85	EP86	EP87	EP88	EP89	EP90	EP91	EP92	EP93	EP94	EP95	EP96	EP97	EP98	EP99	EP100	EP101	EP102	EP103	EP104	EP105	EP106	EP107	EP108	EP109	EP110	EP111	EP112	EP113	EP114	EP115	EP116	EP117	EP118	EP119	EP120	EP121	EP122	EP123	EP124	EP125	EP126	EP127	EP128	EP129	EP130	EP131	EP132	EP133	EP134	EP135	EP136	EP137	EP138	EP139	EP140	EP141	EP142	EP143	EP144	EP145	EP146	EP147	EP148	EP149	EP150	EP151	EP152	EP153	EP154	EP155	EP156	EP157	EP158	EP159	EP160	EP161	EP162	EP163	EP164	EP165	EP166	EP167	EP168	EP169	EP170	EP171	EP172	EP173	EP174	EP175	EP176	EP177	EP178	EP179	EP180	EP181	EP182	EP183	EP184	EP185	EP186	EP187	EP188	EP189	EP190	EP191	EP192	EP193	EP194	EP195	EP196	EP197	EP198	EP199	EP200	EP201	EP202	EP203	EP204	EP205	EP206	EP207	EP208	EP209	EP210	EP211	EP212	EP213	EP214	EP215	EP216	EP217	EP218	EP219	EP220	EP221	EP222	EP223	EP224	EP225	EP226	EP227	EP228	EP229	EP230	EP231	EP232	EP233	EP234	EP235	EP236	EP237	EP238	EP239	EP240	EP241	EP242	EP243	EP244	EP245	EP246	EP247	EP248	EP249	EP250	EP251	EP252	EP253	EP254	EP255	EP256	EP257	EP258	EP259	EP260	EP261	EP262	EP263	EP264	EP265	EP266	EP267	EP268	EP269	EP270	EP271	EP272	EP273	EP274	EP275	EP276	EP277	EP278	EP279	EP280	EP281	EP282	EP283	EP284	EP285	EP286	EP287	EP288	EP289	EP290	EP291	EP292	EP293	EP294	EP295	EP296	EP297	EP298	EP299	EP300	EP301	EP302	EP303	EP304	EP305	EP306	EP307	EP308	EP309	EP310	EP311	EP312	EP313	EP314	EP315	EP316	EP317	EP318	EP319	EP320	EP321	EP322	EP323	EP324	EP325	EP326	EP327	EP328	EP329	EP330	EP331	EP332	EP333	EP334	EP335	EP336	EP337	EP338	EP339	EP340	EP341	EP342	EP343	EP344	EP345	EP346	EP347	EP348	EP349	EP350	EP351	EP352	EP353	EP354	EP355	EP356	EP357	EP358	EP359	EP360	EP361	EP362	EP363	EP364	EP365	EP366	EP367	EP368	EP369	EP370	EP371	EP372	EP373	EP374	EP375	EP376	EP377	EP378	EP379	EP380	EP381	EP382	EP383	EP384	EP385	EP386	EP387	EP388	EP389	EP390	EP391	EP392	EP393	EP394	EP395	EP396	EP397	EP398	EP399	EP400	EP401	EP402	EP403	EP404	EP405	EP406	EP407	EP408	EP409	EP410	EP411	EP412	EP413	EP414	EP415	EP416	EP417	EP418	EP419	EP420	EP421	EP422	EP423	EP424	EP425	EP426	EP427	EP428	EP429	EP430	EP431	EP432	EP433	EP434	EP435	EP436	EP437	EP438	EP439	EP440	EP441	EP442	EP443	EP444	EP445	EP446	EP447	EP448	EP449	EP450	EP451	EP452	EP453	EP454	EP455	EP456	EP457	EP458	EP459	EP460	EP461	EP462	EP463	EP464	EP465	EP466	EP467	EP468	EP469	EP470	EP471	EP472	EP473	EP474	EP475	EP476	EP477	EP478	EP479	EP480	EP481	EP482	EP483	EP484	EP485	EP486	EP487	EP488	EP489	EP490	EP491	EP492	EP493	EP494	EP495	EP496	EP497	EP498	EP499	EP500	EP501	EP502	EP503	EP504	EP505	EP506	EP507	EP508	EP509	EP510	EP511	EP512	EP513	EP514	EP515	EP516	EP517	EP518	EP519	EP520	EP521	EP522	EP523	EP524	EP525	EP526	EP527	EP528	EP529	EP530	EP531	EP532	EP533	EP534	EP535	EP536	EP537	EP538	EP539	EP540	EP541	EP542	EP543	EP544	EP545	EP546	EP547	EP548	EP549	EP550	EP551	EP552	EP553	EP554	EP555	EP556	EP557	EP558	EP559	EP560	EP561	EP562	EP563	EP564	EP565	EP566	EP567	EP568	EP569	EP570	EP571	EP572	EP573	EP574	EP575	EP576	EP577	EP578	EP579	EP580	EP581	EP582	EP583	EP584	EP585	EP586	EP587	EP588	EP589	EP590	EP591	EP592	EP593	EP594	EP595	EP596	EP597	EP598	EP599	EP600	EP601	EP602	EP603	EP604	EP605	EP606	EP607	EP608	EP609	EP610	EP611	EP612	EP613	EP614	EP615	EP616	EP617	EP618	EP619	EP620	EP621	EP622	EP623	EP624	EP625	EP626	EP627	EP628	EP629	EP630	EP631	EP632	EP633	EP634	EP635	EP636	EP637	EP638	EP639	EP640	EP641	EP642	EP643	EP644	EP645	EP646	EP647	EP648	EP649	EP650	EP651	EP652	EP653	EP654	EP655	EP656	EP657	EP658	EP659	EP660	EP661	EP662	EP663	EP664	EP665	EP666	EP667	EP668	EP669	EP670	EP671	EP672	EP673	EP674	EP675	EP676	EP677	EP678	EP679	EP680	EP681	EP682	EP683	EP684	EP685	EP686	EP687	EP688	EP689	EP690	EP691	EP692	EP693	EP694	EP695	EP696	EP697	EP698	EP699	EP700	EP701	EP702	EP703	EP704	EP705	EP706	EP707	EP708	EP709	EP710	EP711	EP712	EP713	EP714	EP715	EP716	EP717	EP718	EP719	EP720	EP721	EP722	EP723	EP724	EP725	EP726	EP727	EP728	EP729	EP730	EP731	EP732	EP733	EP734	EP735	EP736	EP737	EP738	EP739	EP740	EP741	EP742	EP743	EP744	EP745	EP746	EP747	EP748	EP749	EP750	EP751	EP752	EP753	EP754	EP755	EP756	EP757	EP758	EP759	EP760	EP761	EP762	EP763	EP764	EP765	EP766	EP767	EP768	EP769	EP770	EP771	EP772	EP773	EP774	EP775	EP776	EP777	EP778	EP779	EP780	EP781	EP782	EP783	EP784	EP785	EP786	EP787	EP788	EP789	EP790	EP791	EP792	EP793	EP794	EP795	EP796	EP797	EP798	EP799	EP800	EP801	EP802	EP803	EP804	EP805	EP806	EP807	EP808	EP809	EP810	EP811	EP812	EP813	EP814	EP815	EP816	EP817	EP818	EP819	EP820	EP821	EP822	EP823	EP824	EP825	EP826	EP827	EP828	EP829	EP830	EP831	EP832	EP833	EP834	EP835	EP836	EP837	EP838	EP839	EP840	EP841	EP842	EP843	EP844	EP845	EP846	EP847	EP848	EP849	EP850	EP851	EP852	EP853	EP854	EP855	EP856	EP857	EP858	EP859	EP860	EP861	EP862	EP863	EP864	EP865	EP866	EP867	EP868	EP869	EP870	EP871	EP872	EP873	EP874	EP875	EP876	EP877	EP878	EP879	EP880	EP881	EP882	EP883	EP884	EP885	EP886	EP887	EP888	EP889	EP890	EP891	EP892	EP893	EP894	EP895	EP896	EP897	EP898	EP899	EP900	EP901	EP902	EP903	EP904	EP905	EP906	EP907	EP908	EP909	EP910	EP911	EP912	EP913	EP914	EP915	EP916	EP917	EP918	EP919	EP920	EP921	EP922	EP923	EP924	EP925	EP926	EP927	EP928	EP929	EP930	EP931	EP932	EP933	EP934	EP935	EP936	EP937	EP938	EP939	EP940	EP941	EP942	EP943	EP944	EP945	EP946	EP947	EP948	EP949	EP950	EP951	EP952	EP953	EP954	EP955	EP956	EP957	EP958	EP959	EP960	EP961	EP962	EP963	EP964	EP965	EP966	EP967	EP968	EP969	EP970	EP971	EP972	EP973	EP974	EP975	EP976	EP977	EP978	EP979	EP980	EP981	EP982	EP983	EP984	EP985	EP986	EP987	EP988	EP989	EP990	EP991	EP992	EP993	EP994	EP995	EP996	EP997	EP998	EP999	EP1000	EP1001	EP1002	EP1003	EP1004	EP1005	EP1006	EP1007	EP1008	EP1009	EP1010	EP1011	EP1012	EP1013	EP1014	EP1015	EP1016	EP1017	EP1018	EP1019	EP1020	EP1021	EP1022	EP1023	EP1024	EP1025	EP1026	EP1027	EP1028	EP1029	EP1030	EP1031	EP1032	EP1033	EP1034	EP1035	EP1036	EP1037	EP1038	EP1039	EP1040	EP1041	EP1042	EP1043	EP1044	EP1045	EP1046	EP1047	EP1048	EP1049	EP1050	EP1051	EP1052	EP1053	EP1054	EP1055	EP1056	EP1057	EP1058	EP1059	EP1060	EP1061	EP1062	EP1063	EP1064	EP1065	EP1066	EP1067	EP1068	EP1069	EP1070	EP1071	EP1072	EP1073	EP1074	EP1075	EP1076	EP1077	EP1078	EP1079	EP1080	EP1081	EP1082	EP1083	EP1084	EP1085	EP1086	EP1087	EP1088	EP1089	EP1090	EP1091	EP1092	EP1093	EP1094	EP1095	EP1096	EP1097	EP1098	EP1099	EP1100	EP1101	EP1102	EP1103	EP1104	EP1105	EP1106	EP1107	EP1108	EP1109	EP1110	EP1111	EP1112	EP1113	EP1114	EP1115	EP1116	EP1117	EP1118	EP1119	EP1120	EP1121	EP1122	EP1123	EP1124	EP1125	EP1126	EP1127	EP1128	EP1129	EP1130	EP1131	EP1132	EP1133	EP1134	EP1135	EP1136	EP1137	EP1138	EP1139	EP1140	EP1141	EP1142	EP1143	EP1144	EP1145	EP1146	EP1147	EP1148	EP1149	EP1150	EP1151	EP1152	EP1153	EP1154	EP1155	EP1156	EP1157	EP1158	EP1159	EP1160	EP1161	EP1162	EP1163	EP1164	EP1165	EP1166	EP1167	EP1168	EP1169	EP1170	EP1171	EP1172	EP1173	EP1174	EP1175	EP1176	EP1177	EP1178	EP1179	EP1180	EP1181	EP1182	EP1183	EP1184	EP1185	EP1186	EP1187	EP1188	EP1189	EP1190	EP1191	EP1192	EP1193	EP1194	EP1195	EP1196	EP1197	EP1198	EP1199	EP1200	EP1201	EP1202	EP1203	EP1204	EP1205	EP1206	EP1207	EP1208	EP1209	EP1210	EP1211	EP1212	EP1213	EP1214	EP1215	EP1216	EP1217	EP1218	EP1219	EP1220	EP1221	EP1222	EP1223	EP1224	EP1225	EP1226	EP1227	EP1228	EP1229	EP1230	EP1231	EP1232	EP1233	EP1234	EP1235	EP1236	EP1237	EP1238	EP1239	EP1240	EP1241	EP1242	EP1243	EP1244	EP1245	EP1246	EP1247	EP1248	EP1249	EP1250	EP1251	EP1252	EP1253	EP1254	EP1255	EP1256	EP1257	EP1258	EP1259	EP1260	EP1261	EP1262	EP1263	EP1264	EP1265	EP1266	EP1267	EP1268	EP1269	EP1270	EP1271	EP1272	EP1273	EP1274	EP1275	EP1276	EP1277	EP1278	EP1279	EP1280	EP1281	EP1282	EP1283	EP1284	EP1285	EP1286	EP1287	EP1288	EP1289	EP1290	EP1291	EP1292	EP1293	EP1294	EP1295	EP1296	EP1297	EP1298	EP1299	EP1300	EP1301	EP1302	EP1303	EP1304	EP1305	EP1306	EP1307	EP1308	EP1309	EP1310	EP1311	EP1312	EP1313	EP1314	EP1315	EP1316	EP1317	EP1318	EP1319	EP1320	EP1321	EP1322	EP1323	EP1324	EP1325	EP1326	EP1327	EP1328	EP1329	EP1330	EP1331

Snowy Hydro 2.0 Main Works
Monthly EPL Sampling: 01-31 July 2025 - Discharge Water

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*
Flow Rate			
Inflow [#]	ML/day	-	-
Outflow [#]	ML/day	-	4.32 (EPL 43 / 50)
Field			
pH	pH Unit	-	6.5-8.5
Electrical Conductivity	µS/cm	-	700 (EPL 41) / 200 (EPL 50)
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	15
Dissolved Oxygen	% saturation	-	No Water Quality Objective Value
Turbidity	NTU	-	<25
Laboratory analytes			
Total suspended solids	mg/L	5	5/10
Hardness as CaCO ₃	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	200/2000 [^]
Nitrite + Nitrate as N (NO _x)	µg/L	10	10
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	350/- [^]
Reactive Phosphorus	µg/L	1	No Water Quality Objective Value
Phosphorus (Total)	µg/L	10	100/300 [^]
Inorganics			
Cyanide Total	µg/L	4	No Water Quality Objective Value
Hydrocarbons			
Oil and Grease	mg/L	1	2/5 [^]
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium (III+VI) (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1,900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 [^]
Biological Oxygen Demand	mg/L	2	5

EPL 41	EPL 43	EPL 44	EPL 45	EPL 47	EPL 48	EPL 49	EPL 50
6/07/2025							20/07/2025
-	0.0000	0.3320	0.0647	0.2330	0.0817	0.0271	-
-	-	-	-	-	-	-	-
7.55	-	-	-	-	-	-	7.31
7	-	-	-	-	-	-	47.7
221	-	-	-	-	-	-	115.6
12.87	-	-	-	-	-	-	6.4
70.8	-	-	-	-	-	-	87.3
0.09	-	-	-	-	-	-	0.14
<5	-	-	-	-	-	-	<5
<1	-	-	-	-	-	-	<1
20	-	-	-	-	-	-	20
60	-	-	-	-	-	-	<10
<100	-	-	-	-	-	-	<100
<100	-	-	-	-	-	-	<100
<10	-	-	-	-	-	-	<10
<10	-	-	-	-	-	-	<10
<4	-	-	-	-	-	-	<4
<1.0	-	-	-	-	-	-	<1.0
<5	-	-	-	-	-	-	<5
<0.2	-	-	-	-	-	-	<0.2
<0.2	-	-	-	-	-	-	0.7
<0.5	-	-	-	-	-	-	<0.5
<2	-	-	-	-	-	-	<2
<0.1	-	-	-	-	-	-	<0.1
<0.5	-	-	-	-	-	-	<0.5
<0.5	-	-	-	-	-	-	<0.5
<0.01	-	-	-	-	-	-	<0.01
<1	-	-	-	-	-	-	<1
<1	-	-	-	-	-	-	<1
<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 July 2025 - Volumes

Date
1/07/2025
2/07/2025
3/07/2025
4/07/2025
5/07/2025
6/07/2025
7/07/2025
8/07/2025
9/07/2025
10/07/2025
11/07/2025
12/07/2025
13/07/2025
14/07/2025
15/07/2025
16/07/2025
17/07/2025
18/07/2025
19/07/2025
20/07/2025
21/07/2025
22/07/2025
23/07/2025
24/07/2025
25/07/2025
26/07/2025
27/07/2025
28/07/2025
29/07/2025
30/07/2025
31/07/2025

EPL 43 *	EPL 50 ^
Discharge volume (Megalitres)	
0.34	-
-	-
0.87	0.62
-	0.72
-	0.68
-	0.30
2.11	0.92
-	-
-	-
0.57	-
0.32	-
0.67	-
0.70	-
0.37	0.87
-	0.46
-	0.58
0.44	0.81
-	0.55
-	-
0.58	0.20
-	0.10
0.83	0.16
0.46	0.84
0.99	0.50
-	0.53
-	0.73
-	0.93
1.00	1.17
-	1.13
1.02	0.76
-	0.44

EPL 44	EPL 45	EPL 47	EPL 48	EPL 49
Discharge volume (Megalitres)				
0.01	0.06	0.23	0.07	0.002
0.01	0.06	0.18	0.01	0.002
0.01	0.06	0.16	0.01	0.002
0.61	0.06	0.15	0.01	0.002
0.14	0.04	0.26	0.30	0.03
0.30	0.06	0.26	0.08	0.03
0.41	0.06	0.20	0.14	0.05
0.35	0.06	0.28	0.07	0.01
0.28	0.07	0.22	0.06	0.003
0.57	0.10	0.24	0.03	0.02
0.15	0.05	0.22	0.10	0.23
0.24	0.06	0.27	0.06	0.001
0.60	0.02	0.27	0.08	0.002
0.26	0.05	0.13	0.07	0.004
0.38	0.05	0.19	0.08	0.01
0.34	0.05	0.19	0.08	0.03
0.43	0.06	0.24	0.08	0.02
0.24	0.06	0.37	0.09	0.01
0.58	0.07	0.10	0.08	0.03
0.47	0.08	0.26	0.08	0.004
0.34	0.06	0.25	0.07	0.02
0.53	0.09	0.24	0.08	0.16
0.43	0.12	0.24	0.07	0.08
0.23	0.07	0.26	0.09	0.03
0.52	0.09	0.26	0.13	0.004
0.01	0.07	0.34	0.03	0.019
0.39	0.08	0.19	0.14	0.004
0.26	0.07	0.26	0.08	0.006
0.40	0.08	0.22	0.09	0.007
0.48	0.09	0.31	0.09	0.002
0.56	0.07	0.29	0.09	0.06

- 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 6.94 L/s

^ The maximum flow rate capacity for Tantangara STP/PWTP during the reporting month was 3.47 L/s

Snowy Hydro 2.0 Main Works EPL Sampling: 01 - 31 August 2025

Environmental Protection Licence No:	21266
Licensee:	Snowy Hydro Limited
Licensee address:	PO Box 332, Cooma, NSW 2630
Premises:	Snowy 2.0 Pumped Hydro Power Station Talbingo and Tantangara, Kosciuszko National Park and Rock Forest, Kosciuszko NSW 2642
EPA Public Register:	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=21266&id=21266&option=licence&searchrange=licence&range=POEO%20licence&prp=no&status=Issued

Monthly water sampling and analysis is performed as part of the Snowy 2.0 Approval Conditions, Environmental Protection Licence No 21266 - Variation 23 July 2025, and the approved Water Management Plan to ensure that works are not impacting on nearby receiving waters.

A map showing the location of each of the EPL named sampling points is provided after the results tables.

Groundwater Results: In August, we were unable to sample locations EPL2, EPL4, and EPL25 due to flooding in their surrounding areas, which compromised the accurate representation of conditions in these locations. At EPL1, we observed an increase in Total Nitrogen and Nitrite + Nitrate as N concentrations, alongside a significant decrease in total phosphorus levels during this previous quarter period. In contrast, locations for sites such as GFO1, LHG, and Ravine Bay in Lobs Hole exhibited stable concentrations consistent with previous reports. Meanwhile, EPL58 and EPL95, located downstream of GFO1, continue to show the highest concentrations in the area. In the LHG region, locations including EPL81, EPL83, EPL87, and EPL89 reported Total Kjeldahl Nitrogen concentrations ranging from 500 µg/L to 1000 µg/L. Sampling points in Tantangara maintained stable pH levels between 6.1 and 6.7, although we noted an increase in NTU, likely due to the 115.4 mm of precipitation that fell in the area. Notably, EPL105 recorded the highest Total Nitrogen concentration of 4200 µg/L.

Reservoir Results: For this period, sampling points within the Talbingo Reservoir showed a slight increase in Ammonia concentrations for EPL10, with a concentration of 30 µg/L, compared to EPL11, which met its WQO. However, for Nitrite + Nitrate as N (NOx), concentrations were reported between 40 µg/L and 50 µg/L, which is also the case for locations within the Tantangara Reservoir. While the majority of sampling points remained within the acceptable limits for Total Nitrogen, some, such as EPL32, showed a slight uptick, registering a concentration of 400 µg/L. Additionally, several sites, including EPL11, EPL39, and EPL51, recorded a slight increase in Total Phosphorus, with concentrations ranging from 20 µg/L to 40 µg/L. However, these values are consistent with historical data and align with baseline water quality results, indicating stability in the overall water quality within the Reservoirs.

Surface Water Results: In August, some locations, including EPL5, EPL30, EPL31, EPL33, and EPL34, recorded high pH concentrations, which are within their historical ranges, fluctuating between 8.0 and 8.16. Meanwhile, EPL24, EPL55, and EPL122 continue to show the highest surface water concentrations in Lobs Hole. This is likely attributed to their location downstream of the GF01 leachate area. These locations remain under TARP conditions and are monitored weekly. Kellys Plain Creek locations, such as EPL30 and EPL31, recorded a slight increase in Dissolved Aluminium concentrations. Additionally, Total Nitrogen concentrations at locations like EPL33, EPL34, EPL36, and EPL37, which were between 200 µg/L and 500 µg/L, were influenced by Total Kjeldahl Nitrogen, which recorded similar concentration levels. As for the leachate storage locations, they maintain their conditions and are continuously monitored for water reuse once they meet the criteria.

Discharge Results: Results for the discharge locations met the adopted Water Quality Objectives (WQOs) during the discharge periods.

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Snowy Hydro Limited excludes all liability to any person for loss or damage of any kind (however caused, including but not limited to by negligence) arising whether directly or indirectly from or relating in any way to the use of this data, whether in whole or in part.

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

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*
Field			
pH	pH Unit	-	6.5-8
Electrical Conductivity	µS/cm	-	20-30
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	No Water Quality Objective Value
Dissolved Oxygen	% saturation	-	90-110
Turbidity	NTU	-	1-20
Laboratory analytes			
Total suspended solids	mg/L	5	No Water Quality Objective Value
Hardness as CaCO ₃	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	10
Nitrite + Nitrate as N (NO _x)	µg/L	10	10
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	350
Reactive Phosphorus	µg/L	1	5
Phosphorus (Total)	µg/L	10	10
Inorganics			
Cyanide Total	µg/L	4	7
Hydrocarbons			
Oil and Grease	mg/L	1	5
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium (III+VI) (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1,900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 ^a
Biochemical Oxygen Demand	mg/L	2	1/5 ^a

EPL10	EPL11	EPL28	EPL29	EPL32	EPL38	EPL39	EPL40	EPL46	EPL51	EPL107	EPL108	EPL109
20/08/2025	20/08/2025	6/08/2025	6/08/2025	6/08/2025	6/08/2025	2/08/2025	6/08/2025	6/08/2025	6/08/2025	20/08/2025	20/08/2025	20/08/2025
7.74	7.9	7.29	6.93	6.9	6.91	7.66	6.97	6.9	6.93	8.25	8.16	7.96
50	41	22	21	22	20	19	16	23	22	70	44	36
227	207	205	239	239	233	233	222	243	239	141	175	192
8.37	7.77	5.73	4.93	4.89	4.98	5.16	5.54	4.89	4.86	6.9	6.94	7.53
61	66.3	92.9	91.4	72.5	68.1	86.2	77.2	86.1	91.3	83.2	74.9	72
2.7	0.3	12.8	7.2	6.1	6.8	3.7	4.9	6.3	7	17.9	6	6.7
<5	<5	<5	<5	<5	<5	<5	<5	7	<5	<5	<5	<5
19	14	2	2	2	2	<1	<1	2	2	12	12	12
30	<10	20	30	30	20	<10	<10	30	30	<10	<10	<10
50	50	40	40	50	40	10	10	40	40	40	40	40
200	<100	200	200	300	200	200	100	200	200	100	<100	<100
200	<100	200	200	400	200	200	100	200	200	100	<100	<100
<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
10	20	<10	<10	<10	10	40	<10	10	20	<10	<10	<10
<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
<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
10	9	50	54	55	50	40	27	52	55	8	7	6
0.3	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	0.3	0.3	0.2	<0.2	0.2	0.3	0.3	<0.2	<0.2	<0.2
<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
50	15	63	69	81	71	25	30	84	83	11	10	8
<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
47.6	3.2	7.1	7.6	9.5	8.4	3.5	4.5	10.5	10.3	1.3	0.8	<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
<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2	2	<1	-	-	-	-	-	-	23	-	-	-
<2	<2	2	-	-	-	-	-	-	3	-	-	-

* 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 faecal 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 August 2025 - Discharge Water

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*
Flow Rate			
Inflow [#]	ML/day	-	-
Outflow [#]	ML/day	-	4.32 (EPL 43 / 50)
Field			
pH	pH Unit	-	6.5-8.5
Electrical Conductivity	µS/cm	-	700 (EPL 41) / 200 (EPL 50)
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	15
Dissolved Oxygen	% saturation	-	No Water Quality Objective Value
Turbidity	NTU	-	<25
Laboratory analytes			
Total suspended solids	mg/L	5	5/10
Hardness as CaCO ₃	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	200/2000 [^]
Nitrite + Nitrate as N (NO _x)	µg/L	10	10
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	350/- [^]
Reactive Phosphorus	µg/L	1	No Water Quality Objective Value
Phosphorus (Total)	µg/L	10	100/300 [^]
Inorganics			
Cyanide Total	µg/L	4	No Water Quality Objective Value
Hydrocarbons			
Oil and Grease	mg/L	1	2/5 [^]
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium (III+VI) (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1,900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 [^]
Biological Oxygen Demand	mg/L	2	5

EPL 41	EPL 43	EPL 44	EPL 45	EPL 47	EPL 48	EPL 49	EPL 50
13/08/2025							6/08/2025
-	0.0000	0.3754	0.0706	0.1472	0.0837	0.4190	-
-	-	-	-	-	-	-	-
7.48	-	-	-	-	-	-	6.96
14	-	-	-	-	-	-	192
186	-	-	-	-	-	-	224
12.38	-	-	-	-	-	-	9.04
98.5	-	-	-	-	-	-	60.1
0.08	-	-	-	-	-	-	3.4
<5	-	-	-	-	-	-	<5
<1	-	-	-	-	-	-	17
<10	-	-	-	-	-	-	20
110	-	-	-	-	-	-	90
200	-	-	-	-	-	-	200
300	-	-	-	-	-	-	300
<10	-	-	-	-	-	-	10
<10	-	-	-	-	-	-	<10
<4	-	-	-	-	-	-	<4
<1.0	-	-	-	-	-	-	<1.0
<5	-	-	-	-	-	-	<5
<0.2	-	-	-	-	-	-	<0.2
<0.2	-	-	-	-	-	-	1.0
<0.5	-	-	-	-	-	-	<0.5
<2	-	-	-	-	-	-	<2
<0.1	-	-	-	-	-	-	<0.1
<0.5	-	-	-	-	-	-	0.5
<0.5	-	-	-	-	-	-	<0.5
<0.01	-	-	-	-	-	-	<0.01
<1	-	-	-	-	-	-	<1
<1	-	-	-	-	-	-	<1
<2	-	-	-	-	-	-	<2

Note: Treated water was not being discharged at Talbingo or Tantangara 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 August 2025 - Volumes

Date
1/08/2025
2/08/2025
3/08/2025
4/08/2025
5/08/2025
6/08/2025
7/08/2025
8/08/2025
9/08/2025
10/08/2025
11/08/2025
12/08/2025
13/08/2025
14/08/2025
15/08/2025
16/08/2025
17/08/2025
18/08/2025
19/08/2025
20/08/2025
21/08/2025
22/08/2025
23/08/2025
24/08/2025
25/08/2025
26/08/2025
27/08/2025
28/08/2025
29/08/2025
30/08/2025
31/08/2025

EPL 43 *	EPL 50 ^
Discharge volume (Megalitres)	
1.99	0.82
-	0.18
-	0.35
-	0.64
-	0.58
-	-
-	0.84
-	0.48
-	0.44
1.40	1.19
-	0.77
-	0.75
1.18	0.70
-	1.08
-	1.04
-	0.98
-	1.00
-	0.86
1.54	1.10
-	1.11
-	0.81
-	0.18
1.53	-
1.45	0.35
-	0.57
-	-
-	-
-	-
-	-
-	-
-	-

EPL 44	EPL 45	EPL 47	EPL 48	EPL 49
Discharge volume (Megalitres)				
0.56	0.08	0.20	0.09	0.058
0.45	0.09	0.16	0.08	0.001
0.31	0.07	0.17	0.09	0.0004
0.37	0.08	0.24	0.08	0.43
0.16	0.04	0.00	0.10	0.61
0.36	0.09	0.11	0.08	0.56
0.38	0.09	0.11	0.09	0.69
0.36	0.07	0.11	0.09	0.43
0.24	0.10	0.09	0.08	0.20
0.38	0.13	0.11	0.09	0.39
0.34	0.09	0.15	0.10	0.46
0.16	0.08	0.15	0.07	0.71
0.43	0.08	0.15	0.08	0.15
0.44	0.09	0.14	0.08	0.17
0.15	0.07	0.12	0.08	0.66
0.56	0.08	0.14	0.09	0.59
0.47	0.07	0.12	0.07	0.46
0.35	0.07	0.10	0.08	0.68
0.34	0.08	0.10	0.09	0.51
0.33	0.08	0.13	0.06	0.23
0.30	0.07	0.16	0.09	0.47
0.45	0.06	0.21	0.09	0.41
0.66	0.06	0.17	0.06	0.39
0.49	0.04	0.14	0.08	0.28
0.47	0.04	0.15	0.19	0.55
0.39	0.04	0.19	0.07	0.39
0.30	0.06	0.19	0.09	0.73
0.32	0.04	0.18	0.10	0.63
0.29	0.05	0.19	0.04	0.28
0.44	0.05	0.23	0.04	0.439
0.33	0.08	0.19	0.03	0.58

- 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 6.48 L/s

^ The maximum flow rate capacity for Tantangara STP/PWTP during the reporting month was 7.87 L/s

-- Water not discharged on this day



Snowy Hydro 2.0 Main Works EPL Sampling: 01 - 30 September 2025



Environmental Protection Licence No:	21266
Licensee:	Snowy Hydro Limited
Licensee address:	PO Box 332, Cooma, NSW 2630
Premises:	Snowy 2.0 Pumped Hydro Power Station Talbingo and Tantangara, Kosciuszko National Park and Rock Forest, Kosciuszko NSW 2642
EPA Public Register:	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=21266&id=21266&option=licence&searchrange=licence&range=POEO%20licence&prp=no&status=Issued

Monthly water sampling and analysis is performed as part of the Snowy 2.0 Approval Conditions, Environmental Protection Licence No 21266 - Variation 23 July 2025, and the approved Water Management Plan to ensure that works are not impacting on nearby receiving waters.

A map showing the location of each of the EPL named sampling points is provided after the results tables.

Groundwater:
Elevated concentrations of nutrients have continued to be observed in groundwater monitoring wells across the Snowy 2.0 sites, most notably downgradient of permanent spoil emplacement areas. As reported previously, bores within the area of influence of GF01 have the greatest concentrations in nutrients (e.g. EPL58 - 42,600 µg/L Total Nitrogen). Exceedances in Total Nitrogen were also observed in the Main Yard area (up to 13,500 µg/L at EPL87), Ravine Bay (up to 700 µg/L at EPL113) and Tantangara (up to 3,500 µg/L at EPL105).

Reservoir:
Minor exceedances in nutrients were observed in both Talbingo and Tantangara Reservoirs in the month of September, however, concentrations are consistent with previous reports indicating stability in the overall water quality. An exceedance in aluminium at EPL28 (147 µg/L) has been noted will be examined during the next reporting period.

Surface Water:
Consistent with previous reporting periods, EPL24, EPL55, and EPL122 continue to show the highest surface water concentrations of nutrients in Lobs Hole, aside from leachate storage infrastructure. This is likely attributed to their location downstream of the GF01 leachate area and the ephemeral nature of the waterways. These locations remain under TARP conditions and are monitored weekly. High nutrient concentrations were also observed at EPL36 and EPL37, likely attributed to low flows and agricultural impact.

Discharge:
Compliance testing at EPL50 on the 17th of September met criteria for discharge however EPL41 on the 7th of the September did not meet criteria for discharge as TN was slightly elevated. Non compliant discharges have been investigated in Incident Report S2-ENV-WA-SFW-INC-FGJV00036. Temperatures for both sampling rounds are not considered reflective of conditions as temperatures were recorded a prior to discharge. Review of Discharge Procedure documentation has commenced as a result of recent non-compliance.

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Snowy Hydro 2.0 Main Works

Monthly EPL Sampling: 01-30 September 2025 - Talbingo and Tantangara Reservoir

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*
Field			
pH	pH Unit	-	6.5-8
Electrical Conductivity	µS/cm	-	20-30
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	No Water Quality Objective Value
Dissolved Oxygen	% saturation	-	90-110
Turbidity	NTU	-	1-20
Laboratory analytes			
Total suspended solids	mg/L	5	No Water Quality Objective Value
Hardness as CaCO ₃	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	10
Nitrite + Nitrate as N (NO _x)	µg/L	10	10
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	350
Reactive Phosphorus	µg/L	1	5
Phosphorus (Total)	µg/L	10	10
Inorganics			
Cyanide Total	µg/L	4	7
Hydrocarbons			
Oil and Grease	mg/L	1	5
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium (III+VI) (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1,900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 [^]
Biochemical Oxygen Demand	mg/L	2	1/5 [^]

EPL10	EPL11	EPL28	EPL29	EPL32	EPL38	EPL39	EPL40	EPL46	EPL51	EPL107	EPL108	EPL109
2/09/2025	2/09/2025	3/09/2025	3/09/2025	3/09/2025	3/09/2025	3/09/2025	3/09/2025	3/09/2025	3/09/2025	2/09/2025	2/09/2025	2/09/2025
7.39	7.39	6.92	6.75	6.69	6.8	7.46	7.62	6.6	6.73	7.32	7.48	7.83
36	32	7	10	10	9	45	6	10	10	25	23	24
190	185	199	214	216	209	210	170	225	216	174	165	148
10.56	10.8	5.72	6.46	6.4	6.22	9.31	5.68	6.45	6.46	8.96	8.77	8.67
85.7	93.6	75.6	62.8	65.9	69.4	77.2	88.8	65.3	72.9	87.2	84.2	91.5
2.8	2.8	4.9	3.5	3.7	3.4	6.7	1.3	3.2	9.4	6	8	7.4
<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
17	14	<1	2	2	2	<1	2	<1	2	12	5	5
<10	<10	20	<10	10	<10	<10	<10	10	10	<10	<10	<10
40	50	20	20	30	20	60	10	30	20	40	40	40
200	100	200	200	200	200	200	100	200	200	200	100	100
200	200	200	200	200	200	300	100	200	200	200	100	100
<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
10	20	<10	<10	<10	<10	120	<10	<10	<10	30	30	50
<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<6
<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
14	10	147	32	35	41	20	41	30	64	5	<5	<5
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	<0.2	0.3	0.2	<0.2	<0.2	<0.2	<0.2
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5
33	23	72	44	45	56	19	40	43	60	11	7	6
<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
9.4	5.6	8.1	1.2	1.0	1.6	5.1	3.2	1.5	1.4	<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
<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1	1	3	-	-	-	-	-	-	<1	-	-	-
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 faecal coliforms

[^] 90th percentile concentration limits / 100 percentile concentration limits

- Sample not required at this location.



Snowy Hydro 2.0 Main Works

Monthly EPL Sampling: 01-30 September 2025 - Discharge Water

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*
Flow Rate			
Inflow [#]	ML/day	-	-
Outflow [#]	ML/day	-	4.32 (EPL 43 / 50)
Field			
pH	pH Unit	-	6.5-8.5
Electrical Conductivity	µS/cm	-	700 (EPL 41) / 200 (EPL 50)
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	15
Dissolved Oxygen	% saturation	-	No Water Quality Objective Value
Turbidity	NTU	-	<25
Laboratory analytes			
Total suspended solids	mg/L	5	5/10
Hardness as CaCO ₃	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	200/2000 [^]
Nitrite + Nitrate as N (NO _x)	µg/L	10	No Water Quality Objective Value
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	350/- [^]
Reactive Phosphorus	µg/L	1	No Water Quality Objective Value
Phosphorus (Total)	µg/L	10	100
Inorganics			
Cyanide Total	µg/L	4	No Water Quality Objective Value
Hydrocarbons			
Oil and Grease	mg/L	1	2/5 [^]
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium (III+VI) (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1,900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 [^]
Biological Oxygen Demand	mg/L	2	5

EPL 41	EPL 43	EPL 44	EPL 45	EPL 47	EPL 48	EPL 49	EPL 50
7/09/2025							17/09/2025
-	0.0000	0.4031	0.0471	0.1514	0.0465	0.3649	-
-	-	-	-	-	-	-	-
6.65	-	-	-	-	-	-	6.75
190	-	-	-	-	-	-	109
269	-	-	-	-	-	-	240
14.38	-	-	-	-	-	-	10.35
81.8	-	-	-	-	-	-	86.2
3.69	-	-	-	-	-	-	4.3
<5	-	-	-	-	-	-	<5
<1	-	-	-	-	-	-	<1
<10	-	-	-	-	-	-	<10
50	-	-	-	-	-	-	40
300	-	-	-	-	-	-	<100
400	-	-	-	-	-	-	<100
<10	-	-	-	-	-	-	<10
20	-	-	-	-	-	-	50
<4	-	-	-	-	-	-	<4
<1.0	-	-	-	-	-	-	<1.0
<5	-	*	-	-	-	-	<5
<0.2	-	*	-	-	-	-	<0.2
<0.2	-	*	-	-	-	-	0.5
<0.5	-	*	-	-	-	-	<0.5
<2	-	*	-	-	-	-	<2
<0.1	-	*	-	-	-	-	<0.1
<0.5	-	*	-	-	-	-	<0.1
<0.5	-	*	-	-	-	-	<0.5
<0.01	-	*	-	-	-	-	<0.01
<0.1	-	*	-	-	-	-	<1
<1	-	-	-	-	-	-	<1
<2	-	-	-	-	-	-	<2

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: 01-30 September 2025 - Volumes

Date
1/09/2025
2/09/2025
3/09/2025
4/09/2025
5/09/2025
6/09/2025
7/09/2025
8/09/2025
9/09/2025
10/09/2025
11/09/2025
12/09/2025
13/09/2025
14/09/2025
15/09/2025
16/09/2025
17/09/2025
18/09/2025
19/09/2025
20/09/2025
21/09/2025
22/09/2025
23/09/2025
24/09/2025
25/09/2025
26/09/2025
27/09/2025
28/09/2025
29/09/2025
30/09/2025

EPL 43 *	EPL 50 ^
Discharge volume (Megalitres)	
0.79	-
-	0.16
-	0.06
-	0.59
-	0.42
-	-
-	0.72
-	0.73
-	1.11
0.64	1.12
0.35	-
-	-
-	-
0.65	-
0.85	1.16
0.40	0.28
0.44	0.13
0.57	-
0.38	0.28
-	0.09
-	0.04
0.53	0.04
-	0.04
-	0.19
-	0.67
-	0.18
0.68	0.004
1.17	0.16
-	0.31
-	0.50

EPL 44	EPL 45	EPL 47	EPL 48	EPL 49
Discharge volume (Megalitres)				
0.33	0.09	0.19	0.09	0.58
0.39	0.09	0.27	0.09	0.14
0.43	0.07	0.19	0.08	1.64
0.36	0.05	0.15	0.10	0.52
0.18	0.06	0.13	0.07	0.68
0.41	0.07	0.13	0.08	0.39
0.20	0.07	0.21	0.07	0.62
0.34	0.06	0.18	0.09	0.55
0.47	0.05	0.21	0.09	0.01
0.64	0.08	0.18	0.07	0.53
0.42	0.06	0.19	0.08	0.52
0.38	0.06	0.19	0.10	0.75
0.45	0.05	0.21	0.06	0.54
0.19	0.05	0.16	0.07	0.71
0.26	0.06	0.22	0.08	0.74
0.44	0.06	0.16	0.10	0.72
0.35	0.06	0.19	0.09	0.67
0.30	0.08	0.16	0.00	0.62
0.40	0.06	0.20	0.00	0.00
0.36	0.06	0.20	0.00	0.00
0.19	0.06	0.21	0.00	0.00
0.54	0.07	0.19	0.00	0.00
0.70	0.00	0.18	0.00	0.00
0.54	0.00	0.24	0.00	0.00
0.32	0.00	0.00	0.00	0.00
0.42	0.00	0.00	0.00	0.00
0.41	0.00	0.00	0.00	0.00
0.46	0.00	0.00	0.00	0.00
0.60	0.00	0.00	0.00	0.00
0.66	0.00	0.00	0.00	0.00

- 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 7.63 L/s
- ^ The maximum flow rate capacity for Tantangara STP/PWTP during the reporting month was 18.68 L/s
- Water not discharged on this day

Snowy Hydro 2.0 Main Works EPL Sampling: 01 - 31 October 2025

Environmental Protection Licence No:	21266
Licensee:	Snowy Hydro Limited
Licensee address:	PO Box 332, Cooma, NSW 2630
Premises:	Snowy 2.0 Pumped Hydro Power Station Talbingo and Tantangara, Kosciuszko National Park and Rock Forest, Kosciuszko NSW 2642
EPA Public Register:	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=21266&id=21266&option=licence&searchrange=licence&range=PEO%20licence&prp=no&status=Issued

Monthly water sampling and analysis is performed as part of the Snowy 2.0 Approval Conditions, Environmental Protection Licence No 21266 - Variation 20 December 2024, and the approved Water Management Plan to ensure that works are not impacting on nearby receiving waters.

A map showing the location of each of the EPL named sampling points is provided after the results tables.

Groundwater:

Concentrations of nutrients in groundwater monitoring wells were observed above the WQO's across the Snow 2.0 sites, most notably, within the area of influence of permanent spoil emplacement areas. Highest concentrations of nutrients were observed downgradient of GF01 with EPL58 and EPL95 reporting 54,600 µg/L and 46,500 µg/L respectively. Monitoring bores EPL90, EPL96 and EPL97 also continue to report exceedances in total nitrogen (600 – 24,500 µg/L). Exceedances in Total Nitrogen were also observed in the Main Yard area (most notably at EPL87 - 11,500 µg/L), Ravine Bay (up to 300 µg/L at EPL113 and EPL115) and Tantangara (up to 2,500 µg/L at EPL105).

A pH gradient has been observed across the Tantangara PSE with pH values of 6.16 – 6.76 in upgradient bores, decreasing to 5.39 - 5.52 in downgradient bores. This will be investigated further in the next reporting period.

Concentrations of select metals were observed above the WQO's in some groundwater monitoring wells. Notably, high concentrations of Dissolved Iron in EPL81 and EPL82 and EPL117 (2000 µg/L, 2210 µg/L and 3180 µg/L respectively).

Reservoir:

Seasonal warming has resulted in notable increases in reservoir surface water temperatures, with Talbingo Reservoir exhibiting a rise of approximately 7°C and Tantangara Reservoir increasing by around 5°C. An exceedance in aluminium at EPL28 noted in the previous reporting period has decreased to the below the WQO (147 µg/L to 29 µg/L). Minor exceedances of the WQO's were also observed in nutrient concentrations.

Surface Water:

Leachate storage infrastructure continues to exhibit the highest nutrient concentrations and electrical conductivity across the monitoring network. Consistent with previous reporting periods, nutrient concentrations at EPL24, and EPL122 exceed the WQO's, likely due the ephemeral nature of the waterways and proximity to GF01. Elevated nutrient concentrations were also recorded at EPL36 and EPL37, likely influenced by low flows and hooved stock interaction.

Discharge:

Amendments to Condition L2.4 within EPL21266 were included within the September variation (understood to comprise the latest license). The amendments included increased discharge analytical limits for key contaminants of concern. Noting this, the analytical results for EPL41 and EPL50 were observed to comply with the updated criteria.

The publication of this pollution monitoring data is carried out in accordance with section 66 (6) of the Protection of the Environment Operations Act 1997 (NSW).

Snowy Hydro Limited gives no warranty or representation regarding the data suitability for any particular purpose.

Snowy Hydro Limited excludes all liability to any person for loss or damage of any kind (however caused, including but not limited to by negligence) arising whether directly or indirectly from or relating in any way to the use of this data, whether in whole or in part.



Snowy Hydro 2.0 Main Works

Monthly EPL Sampling: 01-31 October 2025 - Talbingo and Tantangara Reservoir

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*
Field			
pH	pH Unit	-	6.5-8
Electrical Conductivity	µS/cm	-	20-30
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	No Water Quality Objective Value
Dissolved Oxygen	% saturation	-	90-110
Turbidity	NTU	-	1-20
Laboratory analytes			
Total suspended solids	mg/L	5	No Water Quality Objective Value
Hardness as CaCO ₃	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	10
Nitrite + Nitrate as N (NO _x)	µg/L	10	10
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	350
Reactive Phosphorus	µg/L	1	5
Phosphorus (Total)	µg/L	10	10
Inorganics			
Cyanide Total	µg/L	4	7
Hydrocarbons			
Oil and Grease	mg/L	1	5
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium (III+VI) (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1,900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 [^]
Biochemical Oxygen Demand	mg/L	2	1/5 [^]

EPL10	EPL11	EPL28	EPL29	EPL32	EPL38	EPL39	EPL40	EPL46	EPL51	EPL107	EPL108	EPL109
22/10/2025	22/10/2025	19/10/2025	19/10/2025	19/10/2025	19/10/2025	18/10/2025	31/10/2025	19/10/2025	19/10/2025	22/10/2025	22/10/2025	22/10/2025
7.92	7.99	7.7	7.49	7.49	7.58	7.08	5.17	7.42	7.42	7.91	8.15	8.45
85	67	21	19	17	19	17	92	17	17	52	50	54
167	161	188	243	237	222	240	232	254	250	162	144	122
17.33	17.28	12.85	12.68	12.55	12.63	9.71	14.51	12.7	12.67	16.98	16.85	16.85
71.5	7.61	89.9	77.3	69.6	90.9	67.8	169.1	78.7	76.5	75.5	75.1	85.1
1.3	1.1	18.1	3.2	2.5	2.3	4.4	2.8	3.4	2.5	1.5	0.9	0.95
Laboratory analytes												
<5	<5	<5	<5	6	<5	<5	<5	8	<5	<5	<5	<5
230	31	2	2	2	2	<1	<1	2	2	19	17	17
Nutrients												
20	<10	30	30	<10	<10	<10	<10	<10	<10	<10	<10	20
10	10	10	<10	<10	<10	10	30	<10	<10	10	10	10
200	200	100	100	200	<100	<100	200	100	100	200	200	200
200	200	100	100	200	<100	<100	200	100	100	200	200	200
<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
60	30	20	30	10	30	<10	90	90	20	30	20	<10
Inorganics												
<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Hydrocarbons												
<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												
6	6	29	26	27	26	11	15	26	23	5	6	6
0.4	0.3	<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	0.3	0.3	0.3	0.3	0.2	<0.2	0.3	0.2	<0.2	<0.2	<0.2
<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
15	14	98	67	68	71	35	44	66	62	10	10	10
<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
1.1	<0.5	22.0	1.8	1.8	3.3	1.6	2.5	1.6	1.6	<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
<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Biological												
5	1	<1	-	-	-	-	-	-	<1	-	-	-
<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 faecal 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 October 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	EPL119	EPL120	EPL122	
				27/10/2025	27/10/2025	28/10/2025	28/10/2025	27/10/2025	27/10/2025	28/10/2025	28/10/2025	14/10/2025	10/10/2025	10/10/2025	6/10/2025	6/10/2025	6/10/2025	6/10/2025	18/10/2025	18/10/2025	15/10/2025	Dry	Dry	Dry	Dry	Dry	11/10/2025	11/10/2025	6/10/2025	Dry	10/10/2025	10/10/2025	Dry	14/10/2025	3/10/2025	Dry	Dry	3/10/2025	14/10/2025		
pH	-	-	6.5-8	7.62	7.91	7.91	7.64	7.76	8.19	8	7.93	7.19	7.05	7.65	7.22	7.33	7.31	6.9	7.04	6.95	7.22	8.68	-	-	-	-	-	-	8.07	7.35	8.29	-	8.44	8.63	-	8.25	7.07	-	-	7.26	8.14
Electrical Conductivity	µS/cm	-	30-300	62	78	78	87	84	87	86	86	844.00	31	33	17.6	19.8	14.8	10.5	10.6	44	51	1180.00	-	-	-	-	-	-	700.00	919	1070.00	-	609	784	-	1380.00	55	-	-	40	182
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value	296	301	301	164	304	286	144	145	209	146	76	106.7	50.5	124.5	141.9	132.7	232	230	192	-	-	-	-	-	-	77	91	71	-	75	60	-	20	157	-	-	165	145
Temperature	°C	-	No Water Quality Objective Value	12.87	12.32	12.32	12.64	12.36	13.36	13.81	12.24	14.25	11.52	11.96	10.3	9.5	11.4	9	9.2	18.35	18.86	14	-	-	-	-	-	-	15.07	18.9	15.64	-	16.99	17.88	-	16.85	9.01	-	-	10.63	16.04
Dissolved Oxygen	% saturation	-	60-110	110.7	103.3	103.3	109.4	109.4	99.1	130.4	153.2	79.5	87.1	87.8	87.7	87.3	89.6	85.2	86.2	76.5	73.8	-	-	-	-	-	-	99.4	103.5	75.8	-	59.4	80.8	-	103.3	88.7	-	-	75.3	78.5	
Turbidity	NTU	-	2-25	3.59	2.52	2.52	3.18	5.03	3.86	4.51	3.18	8	0	0	87.7	87.3	4	4.2	2.5	32.2	45.1	28.8	-	-	-	-	-	-	82.4	4.60	42.9	-	97.6	118	-	4.1	0	-	-	267	41.8
Ultraviolet analysis																																									
TSS	mg/L	5	No Water Quality Objective Value	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	12	<5	<5	5	23	12	10	-	-	-	-	-	18	16	22	-	28	33	-	<5	<5	-	-	88	34	
Hardness as CaCO3	mg/L	1	No Water Quality Objective Value	27	22	26	27	27	27	27	27	234	9	9	<1	7	<1	<1	<1	13	13	370	-	-	-	-	-	96	234	240	-	200	209	-	451	17	-	-	12	116	
Ammonia as N	µg/L	10	13	<10	<10	20	<10	<10	<10	30	30	10	40	20	30	10	40	<10	<10	30	<10	30	-	-	-	-	-	30	30	<10	-	9.230	30	-	110	30	-	-	<10	<10	
Nitrate as N (No3)	µg/L	30	30	<10	<10	20	30	<10	<10	<10	<10	30,300	<10	<10	<10	30	30	<10	<10	30	<10	30	-	-	-	-	-	4,200	1,400	30,200	-	26,300	18,100	-	64,800	<10	-	-	<10	<10	
Nitrite as N (No2)	µg/L	100	No Water Quality Objective Value	200	200	200	200	200	200	200	200	5,600	<100	<100	<100	100	200	100	<100	100	200	100	-	-	-	-	-	600	800	400	-	16,000	2,600	-	6,500	<100	-	-	<900	3,000	
Nitrogen (Total)	µg/L	100	250	200	200	200	200	200	200	200	200	36,700	<100	<100	<100	100	200	200	<100	100	200	100	-	-	-	-	-	4,800	2,400	10,600	-	53,300	21,100	-	71,400	<100	-	-	<900	15,800	
Ammonia Nitrogen	µg/L	1	15	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	-	-	-	-	<10	<10	<10	-	<10	<10	-	<10	<10	-	-	<10	<10	
Phosphorus (Total)	µg/L	10	20	<10	10	40	40	30	20	60	10	<10	20	<10	20	10	20	<10	10	20	10	20	-	-	-	-	-	30	20	20	-	20	100	-	<10	<10	-	-	150	40	
Organics																																									
Calcium	mg/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	-	128	<4	-	<4	<4	-	-	<4	<4	
Magnesium	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	
Aluminum (Total)	µg/L	5	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	295	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aluminum (Dissolved)	µg/L	5	27	7	<5	15	14	7	6	15	14	<5	5	5	13	14	26	19	20	41	44	7	-	-	-	-	-	<5	<5	<5	-	6	21	-	<5	<5	-	-	8	<5	
Arsenic (Total)	µg/L	0.2	No Water Quality Objective Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Arsenic (Dissolved)	µg/L	0.2	0.8	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-	-	-	2.9	1.6	1.8	-	2.8	1.7	-	3.7	0.6	-	-	0.6	<0.2	
Chromium (Total)	µg/L	0.2	No Water Quality Objective Value	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.3	0.3	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-	-	-	1.6	1.1	1.4	-	1.8	5.1	-	1.9	<0.2	-	-	<0.2	<0.2	
Chromium (Dissolved)	µg/L	0.5	No Water Quality Objective Value	<0.5	<0.5	<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	<0.5	-	-	-	-	-	1.0	0.6	1.6	-	8.7	<0.5	-	0.7	<0.5	-	-	<0.5	0.5	
Copper (Total)	µg/L	3	No Water Quality Objective Value	15	8	29	30	13	12	29	30	3	13	12	18	22	52	37	40	118	390	<2	-	-	-	-	-	<2	<2	<2	-	<2	<2	-	8	3	-	-	19	<2	
Copper (Dissolved)	µg/L	0.5	1	<0.5	<0.5	<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	<0.5	-	-	-	-	-	1.0	0.6	1.6	-	8.7	<0.5	-	0.7	<0.5	-	-	<0.5	0.5	
Iron (Total)	µg/L	2	No Water Quality Objective Value	<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	
Lead (Total)	µg/L	0.1	1	1.1	1.7	1.5	2.3	0.9	1.0	1.3	1.7	105	1.5	1.1	1.7	2.3	1.4	5.7	5.8	25.6	30.7	<0.5	-	-	-	-	-	13.5	35.3	4.9	-	10.1	0.8	-	3.0	0.7	-	-	6.9	2.4	
Manganese (Total)	µg/L	0.5	No Water Quality Objective Value	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	1.5	6.4	0.8	-	2.6	0.9	-	3.5	<0.5	-	-	<0.5	0.9	
Nickel (Dissolved)	µg/L	0.5	8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	1.5	6.4	0.8	-	2.6	0.9	-	3.5	<0.5	-	-	<0.5	0.9	
Silver (Total)	µg/L	0.01	No Water Quality Objective Value	<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	
Silver (Dissolved)	µg/L	0.02	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	
Zinc (Total)	µg/L	1	No Water Quality Objective Value	<1	<1	<1	<1	<1	<1	<1	<1	2	<1	<1	<1	2	<1	<1	<1	<1	<1	<1	-	-	-	-	-	<1	3	<1	-	<1	<1	-	<1	<1	-	-	<1	<1	
Zinc (Dissolved)	µg/L	1	2.4	<1	<1	<1	<1	<1	<1	<1	<1	2	<1	<1	<1	2	<1	<1	<1	<1	<1	<1	-	-	-	-	-	<1	3	<1	-	<1	<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

Snowy Hydro 2.0 Main Works
Monthly EPL Sampling: 01-31 October 2025 - Discharge Water

Analyte	Unit	Limit of Reporting	Discharge Criteria
Field			
pH	pH Unit	-	6.5-8.5
Electrical Conductivity	µS/cm	-	700 (EPL 41) / 200 (EPL 50)
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	15
Dissolved Oxygen	% saturation	-	No Water Quality Objective Value
Turbidity	NTU	-	<25
Laboratory analytes			
Total suspended solids	mg/L	5	5/10
Hardness as CaCO ₃	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	1000/2000 [^]
Nitrite + Nitrate as N (NO _x)	µg/L	10	No Water Quality Objective Value
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	1500/3000 [^]
Reactive Phosphorus	µg/L	1	No Water Quality Objective Value
Phosphorus (Total)	µg/L	10	300/500 [^]
Inorganics			
Cyanide Total	µg/L	4	No Water Quality Objective Value
Hydrocarbons			
Oil and Grease	mg/L	1	2/5 [^]
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium (III+VI) (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1,900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 [^]
Biological Oxygen Demand	mg/L	2	3.5/5 [^]

EPL 41	EPL 50
6/10/2025	6/10/2025
7.81	6.86
34	90
132	67.5
17.02	14.9
66.5	85.8
0	4.09
<5	<5
<1	<1
<10	<10
160	120
300	200
500	300
<10	<10
20	<10
<4	<4
<1.0	<1.0
<5	<5
<0.2	<0.2
<0.2	0.7
<0.5	<0.5
<2	<2
<0.1	<0.1
<0.5	<0.5
<0.5	<0.5
<0.01	<0.01
<1	<1
<1	<1
<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

- 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 October 2025 - Volumes

Date
1/10/2025
2/10/2025
3/10/2025
4/10/2025
5/10/2025
6/10/2025
7/10/2025
8/10/2025
9/10/2025
10/10/2025
11/10/2025
12/10/2025
13/10/2025
14/10/2025
15/10/2025
16/10/2025
17/10/2025
18/10/2025
19/10/2025
20/10/2025
21/10/2025
22/10/2025
23/10/2025
24/10/2025
25/10/2025
26/10/2025
27/10/2025
28/10/2025
29/10/2025
30/10/2025
31/10/2025

EPL 43 *	EPL 50 ^
Discharge volume (Megalitres)	
0.19	0.15
0.55	0.61
0.50	0.25
-	0.02
0.44	0.33
0.82	0.34
-	0.21
0.29	0.24
-	0.26
0.66	0.31
-	0.01
0.75	0.33
1.08	0.17
0.64	0.34
-	0.06
1.04	0.29
0.86	-
1.06	0.26
-	0.26
1.01	-
1.03	0.84
0.95	0.45
-	0.40
1.06	0.18
-	-
-	0.48
-	0.436
-	0.29
1.10	-
0.50	0.37
1.23	-

- 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 7.63 L/s
- ^ The maximum flow rate capacity for Tantangara STP/PWTP during the reporting month was 18.68 L/s
- Water not discharged on this day

Snowy Hydro 2.0 Main Works EPL Sampling: 01 - 31 November 2025

Environmental Protection Licence No:	21266
Licensee:	Snowy Hydro Limited
Licensee address:	PO Box 332, Cooma, NSW 2630
Premises:	Snowy 2.0 Pumped Hydro Power Station Talbingo and Tantangara, Kosciuszko National Park and Rock Forest, Kosciuszko NSW 2642
EPA Public Register:	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=21266&id=21266&option=licence&searchrange=licence&range=PEO%20licence&prp=no&status=Issued
<p>Monthly water sampling and analysis is performed as part of the Snowy 2.0 Approval Conditions, Environmental Protection Licence No 21266 - Variation 26 September 2025.</p> <p>A map showing the location of each of the EPL named sampling points is provided after the results tables.</p>	
<p>Groundwater</p> <p>Groundwater bores at EPL2, EPL4, and EPL25 remain submerged under sediment or water due to location within a drain or spillway, making them unrepresentative. Nutrient concentrations continue to exceed in bores within GF01 and Mainyard areas. Exceedances of heavy metals including arsenic, chromium, copper, iron, nickel, and zinc have been recorded at GF01, Mainyard, and Ravine Bay. Iron exceedances are limited to EPL81, EPL82, and EPL117. Groundwater at Tantangara continues exceedances in nutrients and metals such as copper and zinc.</p>	
<p>Reservoir</p> <p>An increase in faecal coliforms has been observed at EPL10 and EPL11 during this reporting period, likely due to the increasing temperature and notable green colour within the shallower waterbody and the calm nature of the waterbody during sampling. Resampling will occur in early December.</p>	
<p>Surface Water</p> <p>Seasonal changes, including reduced rainfall and warmer temperatures, resulted in several sites, EPL53, EPL54, EPL55, EPL67, EEPL71, EPL98, EPL120 and EPL122, being dry and unable to be sampled. Nutrient exceedances were recorded at EPL24 likely due to the ephemeral nature of the waterways and proximity to GF01. Minor elevations in nutrient concentrations were also observed at EPL36 and EPL37, likely influenced by low flows and interaction with hooved stock. Other locations which have exceedances in nutrients include EPL14, EPL16, EPL8, EPL30 and EPL33, however these locations differ from the extreme exceedances of EPL24 and EPL52 which could be attributed with the environmental contributors such as seasonal changes as these are natural streams. It has been identified that there were multiple heavy metals that have returned exceedances in different locations across FGJV sites (Lobs Hole, Tantangara, Marica and Rockforest), these heavy metals being aluminium (filtered), arsenic (filtered), chromium (III + IV), copper (filtered), iron (filtered) and zinc (filtered). These analytes were seen in locations of natural streams such as EPL6, EPL15, EPL16, EPL24, EPL33, EPL36 and EPL37. Leachate storage infrastructure which continues to exhibit the highest nutrient concentrations and electrical conductivity across the monitoring network.</p>	
<p>Discharge</p> <p>Analytical results for EPL41 and EPL50 complied with discharge criteria during the month of November. Volumes discharged between 24/11/2025 and 30/11/2025 are pending due to a reporting systems upgrade in progress.</p>	



Snowy Hydro 2.0 Main Works
Monthly EPL Sampling: 01-30 November 2025 - Talbingo and Tantangara Reservoir

Analyte	Unit	Limit of Reporting	Water Quality Objective Value*
Field			
pH	pH Unit	-	6.5-8
Electrical Conductivity	µS/cm	-	20-30
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	No Water Quality Objective Value
Dissolved Oxygen	% saturation	-	90-110
Turbidity	NTU	-	1-20
Laboratory analytes			
Total suspended solids	mg/L	5	No Water Quality Objective Value
Hardness as CaCO ₃	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	10
Nitrite + Nitrate as N (NO _x)	µg/L	10	10
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	350
Reactive Phosphorus	µg/L	1	5
Phosphorus (Total)	µg/L	10	10
Inorganics			
Cyanide Total	µg/L	4	7
Hydrocarbons			
Oil and Grease	mg/L	1	5
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium (III+VI) (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 [^]
Biochemical Oxygen Demand	mg/L	2	1/5 [^]

EPL10	EPL11	EPL28	EPL29	EPL32	EPL38	EPL39	EPL40	EPL46	EPL51	EPL107	EPL108	EPL109
19/11/2025	19/11/2025	23/11/2025	23/11/2025	23/11/2025	23/11/2025	8/11/2025	23/11/2025	23/11/2025	23/11/2025	19/11/2025	19/11/2025	19/11/2025
7.96	7.89	7.71	7.43	7.48	7.5	6.66	7.86	7.36	7.4	7.83	7.81	7.79
50	45	14	11	11	11	18	13	12	11	31	31	31
167	167	196	217	216	211	193	189	221	219	164	160	150
19.54	19.64	14.2	14.5	14.01	13.95	15.03	14.26	14.34	14.21	18.23	18.27	17.95
64.5	96.9	91.7	77.8	78.8	81.7	107.1	78.2	76.2	77.4	99.5	107.2	94.9
1.24	1.24	5.6	5	5.9	14.0	9.1	3.7	7.3	6.5	1.35	1.17	1.25
<5	<5	<5	<5	<5	<5	<5	<5	<5	2	<5	<5	<5
22	19	5	2	2	2	<1	<1	5	<5	10	10	7
<10	10	<10	60	<10	40	<10	<10	40	40	<10	<10	<10
<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
100	200	300	300	300	200	<100	200	200	300	100	<100	<100
100	200	300	300	300	200	<100	200	200	300	100	<100	<100
<10	<10	<10	<10	<10	<10	30	<10	<10	<10	<10	<10	<10
50	50	20	20	10	10	10	20	<10	30	50	40	30
<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
<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	<5	24	32	31	34	17	31	39	31	<5	<5	<5
0.3	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	0.3	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
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
15	14	101	131	132	127	53	116	142	131	10	8	8
<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	0.6	1.4	1.8	1.8	1.7	2.5	1.8	2.0	1.8	0.6	<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
<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
<1	<1	<1	<1	<1	7	<1	<1	<1	<1	<1	<1	<1
120	29	1	-	-	-	-	-	-	1	-	-	-
<2	<2	<2	-	-	-	-	-	-	<2	-	-	-

[^] 90th percentile concentration limits / 100 percentile concentration limits
 - Sample not required at this location.

Snowy Hydro 2.0 Main Works
Monthly EPL Sampling: 01-30 November 2025 - Discharge Water

Analyte	Unit	Limit of Reporting	Discharge Criteria
Field			
pH	pH Unit	-	6.5-8.5
Electrical Conductivity	µS/cm	-	700 (EPL 41) / 200 (EPL 50)
Oxidation Reduction Potential	mV	-	No Water Quality Objective Value
Temperature	°C	-	15
Dissolved Oxygen	% saturation	-	No Water Quality Objective Value
Turbidity	NTU	-	<25
Laboratory analytes			
Total suspended solids	mg/L	5	5/10 [^]
Hardness as CaCO ₃	mg/L	1	No Water Quality Objective Value
Nutrients			
Ammonia as N	µg/L	10	1000/2000 [^]
Nitrite + Nitrate as N (NO _x)	µg/L	10	No Water Quality Objective Value
Kjeldahl Nitrogen Total	µg/L	100	No Water Quality Objective Value
Nitrogen (Total)	µg/L	100	1500/3000 [^]
Reactive Phosphorus	µg/L	1	No Water Quality Objective Value
Phosphorus (Total)	µg/L	10	300/500 [^]
Inorganics			
Cyanide Total	µg/L	4	No Water Quality Objective Value
Hydrocarbons			
Oil and Grease	mg/L	1	2/5 [^]
Metals			
Aluminium (dissolved)	µg/L	5	55
Arsenic (dissolved)	µg/L	0.2	13
Chromium (III+VI) (dissolved)	µg/L	0.2	1
Copper (dissolved)	µg/L	0.5	14
Iron (dissolved)	µg/L	2	300
Lead (dissolved)	µg/L	0.1	3.4
Manganese (dissolved)	µg/L	0.5	1,900
Nickel (dissolved)	µg/L	0.5	11
Silver (dissolved)	µg/L	0.01	0.05
Zinc (dissolved)	µg/L	1	8
Biological			
Faecal Coliforms	CFU/100mL	1	10/100 [^]
Biological Oxygen Demand	mg/L	2	3.5/5 [^]

EPL 41	EPL 50
09 Nov 2025	09 Nov 2025
7.47	7.95
47	80
210	256
18.5	16.2
86.6	109.9
0.95	0.17
<5	<5
<1	<1
<10	30
150	60
<100	200
200	300
<10	<10
30	40
<4	<4
<1.0	<1.0
<5	<5
<0.2	<0.2
<0.2	<0.2
<0.5	<0.5
<2	<2
<0.1	<0.1
<0.5	<0.5
<0.5	<0.5
<0.01	<0.01
<1	<1
<1	<1
<2	<2

Note: Treated water was not being discharged at Tantangara Reservoir at the time of EPL sampling.

[^] 90 Percentile concentration limit/100 Percentile limit

Snowy Hydro 2.0 Main Works
Monthly EPL Sampling: 01-30 November 2025 - Volumes

Date
1/11/2025
2/11/2025
3/11/2025
4/11/2025
5/11/2025
6/11/2025
7/11/2025
8/11/2025
9/11/2025
10/11/2025
11/11/2025
12/11/2025
13/11/2025
14/11/2025
15/11/2025
16/11/2025
17/11/2025
18/11/2025
19/11/2025
20/11/2025
21/11/2025
22/11/2025
23/11/2025
24/11/2025
25/11/2025
26/11/2025
27/11/2025
28/11/2025
29/11/2025
30/11/2025

EPL 43 *	EPL 50 ^
Discharge volume (Megalitres)	
1.02	0.52
0.76	-
-	0.25
1.20	0.19
0.81	0.27
1.02	-
1.00	0.57
0.98	0.24
0.19	-
0.91	0.46
-	0.14
0.77	-
0.70	0.14
0.56	0.35
0.94	0.18
-	0.22
0.43	0.32
0.88	-
0.66	-
0.72	0.48
0.65	-
0.54	-
0.70	0.27
*	*
*	*
*	*
*	*
*	*
*	*
*	*
*	*

- 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.
- * Volumes discharged between 24/11/2025 and 30/11/2025 are pending due to a reporting systems upgrade in progress.