



DRINKING WATER QUALITY ANNUAL REPORT 2024-25

EAST GIPPSLAND WATER



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Cover Image: EGW local media source – Network/Aerial Imagery 2023. The Woodglen water treatment plant and supply basin one. This supplies the majority of the East Gippsland population



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1. INTRODUCTION

This report conforms with guidance from the Department of Health in relation to section 26 *Safe Drinking Water Act 2003*. Additional details have been included in the report in accordance with section 16 of the *Safe Drinking Water Regulations 2015*.

East Gippsland Water (EGW) provides quality water and recycled water services across an area covering 10% of Victoria and a population of approximately 49,000 people. This includes 26,204 active water service connections. We are committed to providing customers with excellent quality and safe drinking water that meets the requirements of the *Safe Drinking Water Act 2003*, EGW's Statement of Obligations, customer expectations and EGW's Drinking Water Quality Policy.

EGW treated and delivered over 4,688 ML of drinking water in 2024-25. The quality of our drinking water consistently performed well against the *Safe Drinking Water Regulations 2015* with all drinking water supplied to our customers remaining compliant with health-based drinking water quality standards during 2024-25.

We continue to improve our supplies through strategic investment in new infrastructure and focus on maintenance systems for existing assets. We continue to improve our operational activities to identify hazards and manage risks.

1.1. Characteristics of the region

The Gippsland region presents a climate that is generally temperate and humid. Our service region covers approximately 21,000 square kilometres and extends east from Lindenow and Bairnsdale, Lakes Entrance to Mallacoota near the New South Wales border, and as far north as Omeo and Dinner Plain in the High Country of the Victorian Alps (Figure 1).

Most of the water delivered to customers is sourced from local river systems. Underground aquifers are utilised in our Mallacoota and Mitchell systems to supplement river-based supply. Dinner Plain is the only locality where all drinking water is sourced from local groundwater aquifers.

The region is currently experiencing a moderate population increase of 1 to 2 percent per year.



As reported in previous years, nine individual water supply systems serve the communities of East Gippsland including:

1. Bemm River
2. Buchan
3. Cann River
4. Dinner Plain
5. Mallacoota
6. Mitchell System - Bairnsdale, Bruthen, Eagle Point, Johnsonville, Lakes Entrance, Lake Tyers Aboriginal Trust, Lake Tyers Beach, Lindenow, Lindenow South, Metung, Newlands Arm, Nicholson, Nowa Nowa, Paynesville, Raymond Island, Sarsfield, Swan Reach
7. Omeo
8. Orbost, Marlo, Newmerella (Brodrigg System) and
9. Swifts Creek.

A summary of our water supply and treatment systems is provided in Section 2.1.



Figure 1: EGW's region of operation

2. WATER TREATMENT AND QUALITY RISK MANAGEMENT SYSTEMS

To manage water quality risks, a Drinking Water Quality Risk Management System (DWQRMS) supports and identifies key risks, ensuring they are managed appropriately. The DWQRMS has been developed in accordance with the Australian Drinking Water Guidelines 2011 (Version 3.8, September 2022). An overview of its structure is shown in Figure 2.

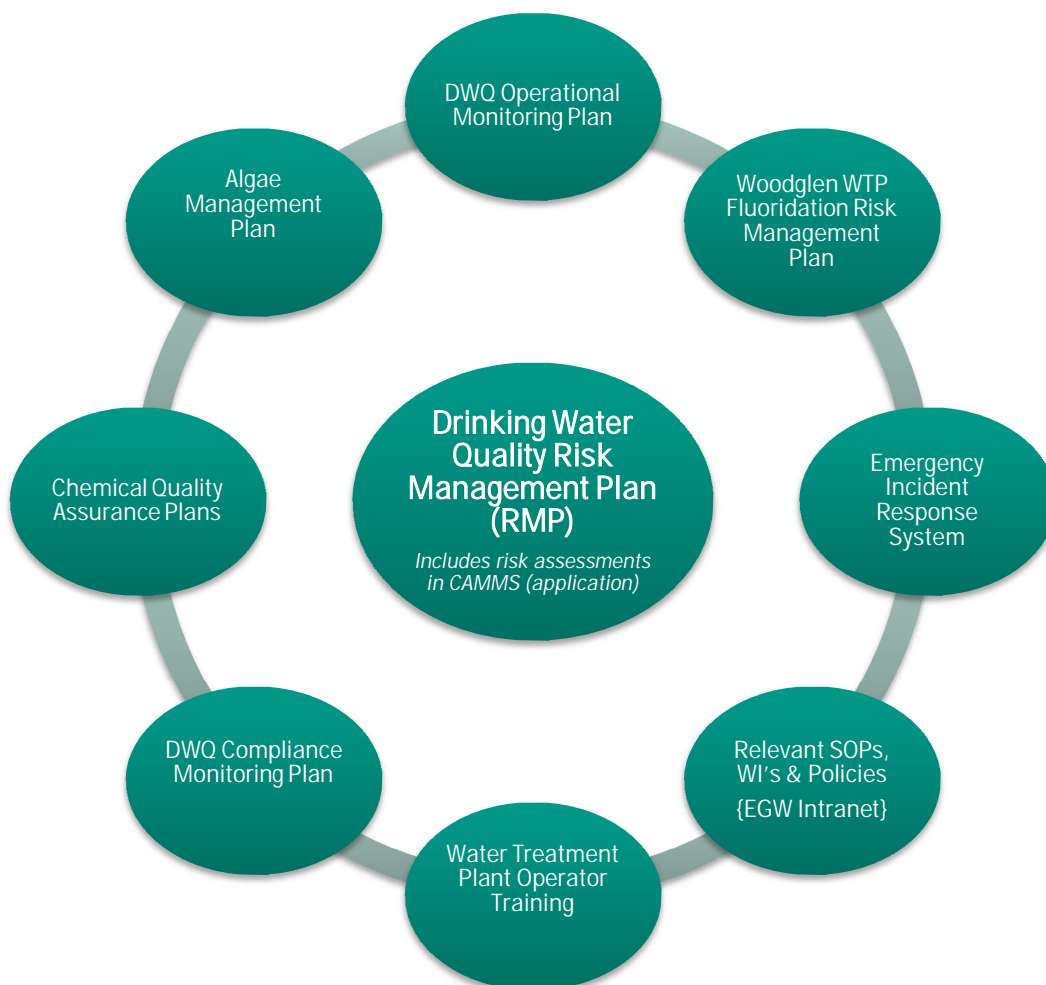


Figure 2: Structure of the Drinking Water Quality Risk Management System with reference to internal documents.

2.1. Water Supply System Summary

Water treatment processes vary slightly according to each locality. A description of each treatment process and chemical additives is included in the glossary of terms in section 12 of this report.

A summary of the nine systems is provided in Table 2.



Table 2: Water Supply and Treatment Systems Summary

WATER SAMPLING LOCALITY	POPULATION SUPPLIED*	SOURCE WATER	CATCHMENT DESCRIPTION	RAW WATER STORAGE	TREATMENT PLANT	TREATMENT PROCESS	ADDED SUBSTANCES	COMMENTS
BAIRNSDALE	8910	Mitchell River and the Latrobe Aquifer (5 bores, seasonal supplemental supply)	Primarily forest (> 90%) with some human, forestry and agricultural impacts, some cattle and some septic tanks particularly around the town of Dargo. The non-forested area is around 5-10% of the catchment, but is mostly located near the river banks	Woodglen No. 1 (850ML) & 2 (713ML) storage basins	Woodglen	Coagulation, flocculation, clarification (dissolved air flotation), filtration (granular media filter), disinfection, fluoridation, mechanical dewatering	Caustic soda, poly (Magnafloc LT 25 & 27), poly aluminium chlorohydrate (PAC 23), chlorine (compressed chlorine gas and sodium hypochlorite); fluoride (fluorosilicic acid), powder activated carbon, copper sulphate (Earthtec)	LT 25 used for backwash water clarification LT 27 used for centrifuge Fluoride dosing commenced in August 2010 Capacity for powder activated carbon addition exists, but is not currently in use Earthtec - a product utilised to reduce algae in
LINDENOW	255							
LINDENOW SOUTH	199							
SARSFIELD-BRUTHEN	632							
MERRANGBAUR	1055							
SUNLAKES-TOORLOO	3140							
KALIMNA	709							
EAGLE POINT-PAYNESVILLE NEWLANDS ARM	4335							
NICHOLSON-SWAN REACH	963							
METUNG	1521							
NOWA NOWA	118							



								water basins as required
BUCHAN	108	Buchan River	80% forest with some minor impacts (forestry, agriculture, cattle and camping)	420kL	Buchan	Buchan, Cann River and Buchan localities: Coagulation, flocculation, clarification (dissolved air flotation), filtration (granular media filter), disinfection	Caustic soda, poly aluminium chlorohydrate (PAC 23), poly (LT 25), chlorine (sodium hypochlorite), copper sulphate (Earthtec)	LT 25 used for backwash water clarification
CANN RIVER	195	Cann River	Forest, some agricultural land (cattle), minimal septic tanks, roads	3.4ML basin	Cann River			1 modular floating cover (Bemm) and Shadecloth removed (Cann)
BEMM RIVER	103	Bemm River	90% forest, with some minor forestry, agricultural and human impacts.	6.4 ML covered basin ¹ .	Bemm River			
SWIFTS CREEK	130	Tambo River	Forest, agricultural land (cattle), some septic tanks, roads and logging	4.6ML basin	Swifts Creek	Coagulation, flocculation, dissolved air flotation, filtration, disinfection (Ultraviolet (UV) and chlorine)	Caustic soda, poly aluminium chlorohydrate (PAC 23), poly (LT 25), chlorine (sodium hypochlorite)	LT 25 used for backwash water clarification Basin shadecloth cover removed



ORBOST (INC MARLO AND NEWMERELLA)	2088	Brodribb River & Rocky River	90% forest, with some forestry, agricultural and human impacts	6ML basin	Orbost	Orbost & Omeo localities: Coagulation, flocculation, clarification (Up flow clarifier), filtration (granular media filter), disinfection,	Caustic Soda, poly aluminium chlorohydrate (PAC 23), poly (LT 20), chlorine (sodium hypochlorite)	Modular floating covers (Omeo) Shadecloth covers Omeo (raw) and Orbost (partially treated)
OMEO	271	Butchers Creek	State forest with minimal human impacts (some grazing)	5ML (shade-cloth covered) and 10ML (Hex-covered) basins	Omeo			
MALLACOOTA	1062	Betka River & Aquifer (3 bores)	State forest with minimal human impacts (some forestry)	41ML basin (shade-cloth covered)	Mallacoota	Ultraviolet (UV) disinfection (Mallacoota only)	Caustic soda, poly aluminium chlorohydrate (PAC 23), poly (LT 20 & 25), chlorine (sodium hypochlorite)	LT 25 used for backwash water clarification
DINNER PLAIN	410	Aquifer (2 bores)	Supply is extracted from bores at ~70m depth	700kL tank (clear water)	Dinner Plain	Ultraviolet (UV) disinfection	Chlorine low dose to support UV	Community engagement being finalised

* The Population supplied is the equivalent number of customer connections, including both residential and non-residential customers.

2.2. Issues

There were no water quality issues in addition to what has been reported in this document.

2.3. Source Water Protection

The Drinking Water Quality Risk Management Plan (RMP), identifies risks to drinking water quality at all steps in the water supply chain, from catchment to consumer. This ensures that appropriate control measures and checks are in place to effectively manage those risks.

In accordance with catchment and water protection policy we recognise the critical importance of sustainable catchment management for the protection of water quality and quantity. EGW works in collaboration with a number of external stakeholders, including the Department of Energy, Environment and Climate Action and the East Gippsland and North East Catchment Management Authorities to identify and manage water quality risks at the catchment level. Our catchments' health risks are addressed in comprehensive waterway strategies developed by the above authorities with the support of EGW with the primary goal of continual improvement to river and catchment health. The works conducted as part of the waterway strategies reduce source water quality risks. EGW however, acknowledges ongoing improvements are needed, through initiatives such as livestock exclusion from rivers, riparian zone revegetation and river bank stabilisation for erosion control. This applies in all water catchments as shown in Figure 3.

This integrated management approach to protecting source water is underpinned via following legislation:

- *Water Act 1989*
- *Planning and Environment Act 1987*
- *Catchment and Land Protection Act 1994*
- *Land Act 1958*
- *Environment Protection Act 2017*

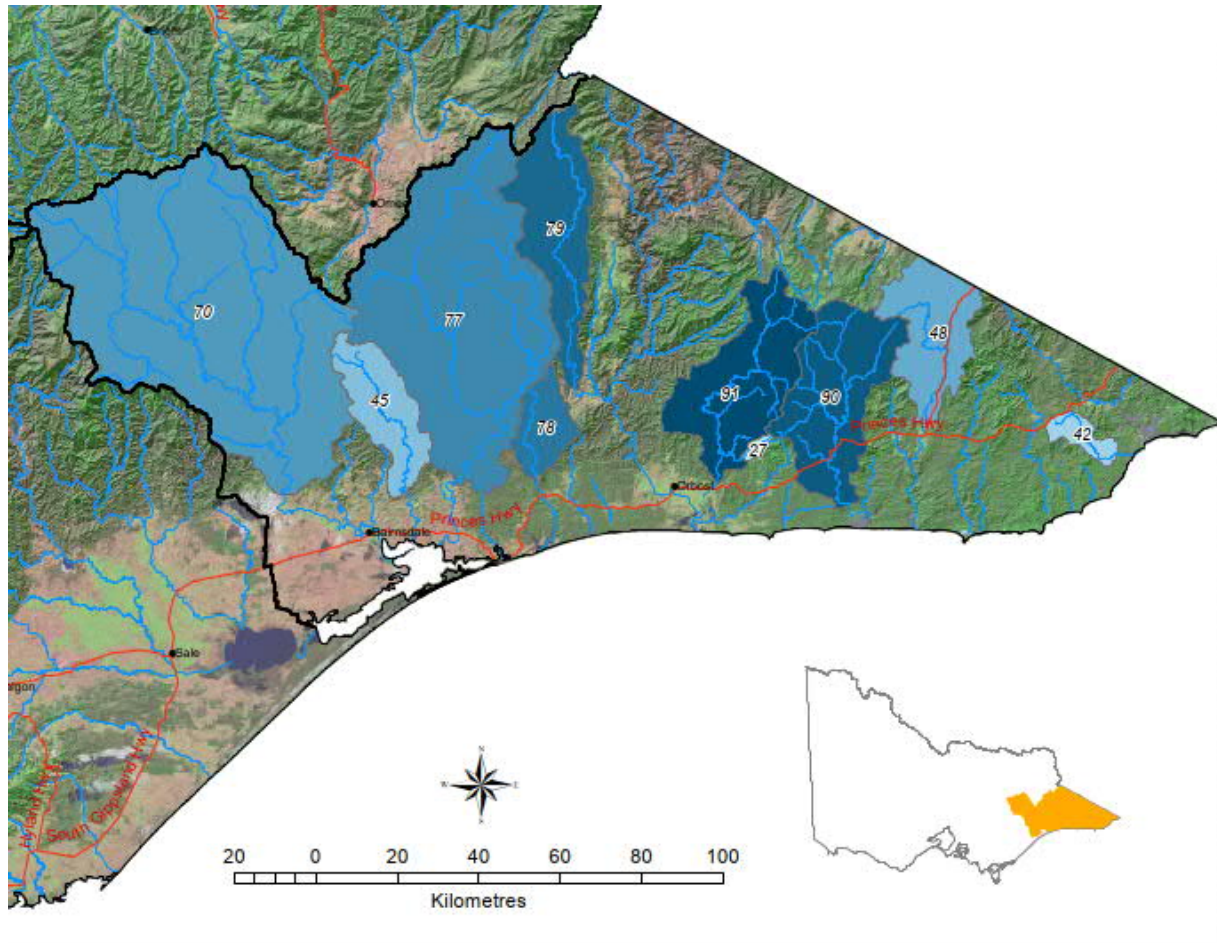


Figure 3: EGW Source Water Catchments
(Source: Declared Water Supply Catchments)

Catchments such as №. 27, 45 and 78 are not supply catchments for EGW but fall within our operating area.

3. DRINKING WATER RISK MANAGEMENT PLAN AUDIT RESULTS

Regulatory audits of the DWQRMS are undertaken as directed by the Department of Health (DH). A regulatory audit of EGW's drinking water risk management plan was undertaken in February 2023, against the requirements of the *Safe Drinking Water Act 2003* (the Act) and *Regulations 2015*. Last year's '[Annual Drinking Water Quality Report 2023-2024](#)' available on the EGW web-site, provides a summary of the actions taken to close the audit findings (refer pages 9 thru 10 of the report).

New *Safe Drinking Water Regulations 2025* came into operation in Victoria on 6 July 2025, and future regulatory audits will be undertaken against the Act and the new regulations when required.

A copy of the RMP audit certificate is provided in the Appendix A to this document.

4. EMERGENCY INCIDENT AND EVENT MANAGEMENT

4.1 Management of Incidents

EGW implements an Emergency Incident Responses System that assists with managing and responding to incidents including water quality incidents. EGW's Drinking Water Quality Risk Management System has specific operational alarm limits related to forecasting non-compliant drinking water so that appropriate and timely response can react before a drinking water health risk occurs. Section 18 and 22 notifications are captured in these systems.

4.2. Section 18 Notifications/Reports

A Section 18 notification is a notification to DH required under Section 18 of the *Safe Drinking Water Act 2003*, which states:

'A water supplier must notify the Secretary in writing if it becomes aware that the drinking water it is supplying to another person does not comply, or is not likely to comply, with any relevant water quality standard and must do so within 10 days after it becomes aware of that fact.'

In 2024-25, there were **no** Section 18 notifications made to DH.

4.3. Section 22 Reports

A Section 22 report is a report to DH required under Section 22 of the *Safe Drinking Water Act 2003*, which states:

'(1) This section applies if an officer of a water supplier, water storage manager or council believes or suspects, on reasonable grounds, that water supplied, or to be supplied, for drinking purposes-

- (a) may be the cause of an illness; or*
- (b) may be the means by which an illness is being, has been or will be, transmitted; or*
- (c) may contain any pathogen, substance, chemical or blue-green algae toxin, whether alone or in combination, at levels that may pose a risk to human health; or*
- (d) may cause widespread public complaint.*

'(2) On forming that belief or suspicion, the officer must immediately report his or her belief or suspicion to the Secretary, and must make the report in the form required by the Secretary.'

In 2024-25, there were **no** Section 22 notifications made to DH.

5. QUALITY OF DRINKING WATER FOR 2024-25

The 2024-25 Water Quality Annual Report includes Regulated Parameter data for the *Safe Drinking Water Regulations 2015* (SDWR 15) as shown in table 2. All results irrespective of sample location and type for drinking water supply have been included.

Table 2: SDWR 2015 – Schedule 2 Drinking Water Quality Standards

SCHEDULE 2 PARAMETER	RELEVANT SAMPLING FREQUENCY PER WATER SAMPLING LOCALITY	WATER QUALITY STANDARD FOR EACH WATER SAMPLING LOCALITY	PRESENTATION OF EGW RESULTS
ESCHERICHIA COLI (<i>E. coli</i>)	One sample per week	'All samples of drinking water collected are found to contain no <i>Escherichia coli</i> per 100 millilitres of drinking water, with the exception of any false positive sample'	Reported as 0 <i>Escherichia coli</i> detected in 100mL
TOTAL TRIHALOMETHANES	One sample per month	Less than or equal to 0.25 milligrams per litre (mg/L) of drinking water	Results expressed to two decimal places
TURBIDITY	One sample per week	The 95 th percentile of results for samples in any 12-month period must be less than or equal to 5.0 Nephelometric Turbidity Units	Results expressed to one decimal place.

EGW follows a risk-based sampling program from catchment to consumer throughout each drinking water supply system. In addition to the drinking water parameters sampled, this program determines the location and frequency of samples taken throughout each system.

In 2024-25 EGW complied with the schedule of the risk-based drinking water sampling program.

5.1. Regulated Parameters

5.1.1. *Escherichia coli* (*E. coli*)

E. coli is a microorganism that may cause illness in susceptible individuals. *E. coli* is associated with contamination of water supplies with faecal material and is therefore considered to be an important indicator of the safety of the water supply. Samples are taken at least weekly in each of the water sampling localities. There must be no *E. coli* detected in drinking water within the distribution system, i.e. zero *E. coli*/100 ml.

Table 3: *E. coli* sampling frequency and results for 2024-25

WATER SAMPLING LOCALITY	Sampling Frequency	Total No. Samples ¹	Maximum Detected (orgs/100ml)	Number of detections and investigations conducted (s.22)	Number of samples where standard was not met.	Comments Complying (Yes / No)
BAIRNSDALE	Weekly	121	0	-	0	Yes
BEMM RIVER	Weekly	104	0	-	0	Yes
BUCHAN	Weekly	98	0	-	0	Yes
CANN RIVER	Weekly	104	0	-	0	Yes
DINNER PLAIN	Weekly	107	0	-	0	Yes
EAGLE POINT-PAYNESVILLE	Weekly	101	0	-	0	Yes
KALIMNA	Weekly	104	0	-	0	Yes
LINDENOW	Weekly	100	0	-	0	Yes
LINDENOW SOUTH	Weekly	100	0	-	0	Yes
MALLACOOTA	Weekly	104	0	-	0	Yes
MERRANGBAUR	Weekly	104	0	-	0	Yes
METUNG	Weekly	104	0	-	0	Yes
NICHOLSON-SWAN REACH	Weekly	105	0	-	0	Yes
NOWA NOWA	Weekly	155	0	-	0	Yes
OMEQ	Weekly	106	0	-	0	Yes
ORBOST	Weekly	104	0	-	0	Yes
SARFIELD-BRUTHEN	Weekly	98	0	-	0	Yes
SUNLAKES-TOORLOO	Weekly	109	0	-	0	Yes
SWIFTS CREEK	Weekly	106	0	-	0	Yes

¹ Multiple site samples are taken across localities.

All water sampling localities were compliant with the *E. coli* water quality standard for the 2024-25 reporting period (Table 3).

5.1.2. Total Trihalomethanes

Trihalomethanes (THMs) are compounds that may be produced when chlorine disinfectant reacts with organic material present in the water. These compounds may impact public health if they are present in drinking water in high concentrations over a long period of time. Samples are taken monthly in each of the water sampling localities. There must be less than or equal to 0.25 mg/L of Total Trihalomethanes within drinking water.

Table 4: Total Trihalomethanes sampling frequency and results for 2024-25

WATER SAMPLING LOCALITY	SAMPLING FREQUENCY	TOTAL NO. SAMPLES	NO. OF SAMPLES ABOVE THE STANDARD	MAX mg/L	AVERAGE mg/L	MET THE STANDARD (YES / NO)
Bairnsdale	Monthly	12	0	0.05	0.03	Yes
Bemm River	Monthly	12	0	0.08	0.05	Yes
Buchan	Monthly	12	0	0.08	0.06	Yes
Cann River	Monthly	12	0	0.09	0.07	Yes
Dinner Plain*	Monthly+	53	0	0.01	0.00	Yes
Eagle Point-Paynesville	Monthly+	14	0	0.05	0.03	Yes
Kalimna	Monthly	12	0	0.07	0.05	Yes
Lindenow	Monthly	12	0	0.03	0.02	Yes
Lindenow South	Monthly	12	0	0.04	0.03	Yes
Mallacoota	Monthly	12	0	0.10	0.07	Yes
Merrangbaur	Monthly	12	0	0.07	0.05	Yes
Metung	Monthly	12	0	0.05	0.04	Yes
Nicholson-Swan Reach	Monthly	12	0	0.05	0.03	Yes
Nowa Nowa	Monthly	12	0	0.09	0.06	Yes
Omeo	Monthly	12	0	0.07	0.04	Yes
Orbost	Monthly	12	0	0.06	0.03	Yes
Sarsfield-Bruthen	Monthly	12	0	0.06	0.03	Yes
Sunlakes-Toorloo	Monthly	12	0	0.08	0.05	Yes
Swifts Creek	Monthly	12	0	0.08	0.05	Yes

* Dinner Plain had more THM samples in this twelve-month period due to the ongoing use of a chlorine disinfection system to control occasional bacterial detections within source (bore) supply.

All water sampling localities were compliant with the Total Trihalomethanes water quality standard for the 2024-25 reporting period (Table 4).

5.1.3. Turbidity

Turbidity measures the presence of fine suspended material present in the water and at elevated levels may result in a 'cloudy' appearance of water. Turbidity is an indirect indicator for the general quality of water and may represent fine particles such as clays, minerals or microscopic organisms. Samples are taken weekly in each of the water sampling localities. The 95th percentile of turbidity results for samples in any 12-month period must be less than or equal to 5.0 NTU within drinking water.

Table 5: Turbidity sampling frequency and results for 2024-25

Water Sampling Locality	Sampling Frequency	Total No. Samples	Max NTU	95 th Percentile	Met the Standard (yes / no)
Bairnsdale	Weekly	121	3.0	0.1	Yes
Bemm River	Weekly	102	0.4	0.2	Yes
Buchan	Weekly	98	0.2	0.1	Yes
Cann River	Weekly	104	0.6	0.1	Yes
Dinner Plain	Weekly	107	0.1	0.1	Yes
Eagle Point-Paynesville	Weekly	101	0.1	0.1	Yes
Kalimna	Weekly	104	0.3	0.2	Yes
Lindenow	Weekly	100	0.7	0.2	Yes
Lindenow South	Weekly	100	0.4	0.2	Yes
Mallacoota	Weekly	104	0.9	0.6	Yes
Merrangbaur	Weekly	104	0.2	0.1	Yes
Metung	Weekly	104	0.1	0.1	Yes
Nicholson-Swan Reach	Weekly	105	0.3	0.1	Yes
Nowa Nowa	Weekly	102	0.1	0.1	Yes
Omeo	Weekly	106	0.2	0.1	Yes
Orbost	Weekly	102	0.6	0.3	Yes
Sarsfield-Bruthen	Weekly	98	0.3	0.1	Yes
Sunlakes-Toorloo	Weekly	109	0.3	0.1	Yes
Swifts Creek	Weekly	106	0.5	0.1	Yes

All samples taken in water sampling localities were compliant with the turbidity water quality standard for the 2024-25 reporting period (Table 5).

5.1.4. Fluoride

Fluoride is added to the Mitchell system and remains as per past reports, the only system providing fluoridation. Fluoride samples are taken monthly in each of the fluoridated water sampling localities, resulting in a weekly sample being taken at different locations in the Mitchell system.

Compliance is measured as: the annual rolling average fluoride level must not exceed 1.0 milligram per litre and all individual samples must be less than 1.5 mg/L. *Meeting Obligation* is measured as: annual average fluoride level between 0.8 – 1.0 mg/L in fluoridated systems.

Table 6: Fluoride sampling frequency and results for 2024-25

WATER SAMPLING LOCALITY	SAMPLING FREQUENCY	TOTAL NO. SAMPLES	OPERATING TARGET (mg/L)	MAX (mg/L)	AVERAGE	NUMBER OF SAMPLES WHERE STANDARD (>1.5mg/L) WAS NOT MET.
BAIRNSDALE	Weekly	70	0.9	0.94	0.85	0
BEMM RIVER	N/A	0	N/A	-	-	-
BUCHAN	N/A	0	N/A	-	-	-
CANN RIVER	N/A	0	N/A	-	-	-
DINNER PLAIN	N/A	0	N/A	-	-	-
EAGLE POINT-PAYNESVILLE	Monthly	10	0.9	0.93	0.86	0
KALIMNA	Monthly	11	0.9	0.90	0.86	0
LINDENOW	Monthly	13	0.9	0.90	0.82	0
LINDENOW SOUTH	Monthly	12	0.9	0.91	0.83	0
MALLACOOTA	N/A	0	N/A	-	-	-
MERRANGBAUR	Monthly	10	0.9	0.92	0.87	0
METUNG	Monthly	12	0.9	0.91	0.85	0
NICHOLSON-SWAN REACH	Monthly	12	0.9	0.93	0.86	0
NOWA NOWA	Monthly	12	0.9	0.92	0.84	0
OMELO	N/A	0	N/A	-	-	0
ORBOST	N/A	0	N/A	-	-	0
SARFIELD-BRUTHEN	Monthly	10	0.9	0.92	0.85	0
SUNLAKES-TOORLOO	Monthly	11	0.9	0.92	0.86	0
SWIFTS CREEK	N/A	0	N/A	-	-	-

N/A - Not Applicable as these systems are not fluoridated.

All relevant water sampling localities were compliant for fluoride in the 2024-25 reporting period (Table 6). EGW has been 100% compliant with this standard at each fluoridated sampling locality since fluoridation began in 2010.

5.2. Other Substances

5.2.1. Arsenic

Arsenic can be introduced into water in the catchment through the presence of naturally occurring minerals and ores. Short and long-term exposure to arsenic may result in potential health impacts. Samples are taken annually in each applicable water sampling locality.

Compliance is measured as: less than or equal to 0.01 milligrams per litre (health-based guideline value under the Australian Drinking Water Guidelines 2011).

Table 7: Arsenic sampling frequency and results for 2024-25

WATER SAMPLING LOCALITY	SAMPLING FREQUENCY	TOTAL No. SAMPLES	No. OF SAMPLES ABOVE THE STANDARD	MAX (mg/L)	COMPLYING (YES / NO)
BAIRNSDALE	Annually	1	0	<0.001	YES
BEMM RIVER	Annually	1	0	<0.001	YES
BUCHAN	Annually	1	0	<0.001	YES
CANN RIVER	Annually	1	0	<0.001	YES
DINNER PLAIN	Annually	1	0	<0.001	YES
EAGLE POINT-PAYNESVILLE ¹	Annually	0	0	-	YES
KALIMNA ¹	Annually	0	0	-	YES
LINDENOW ¹	Annually	0	0	-	YES
LINDENOW SOUTH ¹	Annually	0	0	-	YES
MALLACOOTA	Annually	1	0	<0.001	YES
MERRANGBAUR ¹	Annually	0	0	-	YES
METUNG ¹	Annually	0	0	-	YES
NICHOLSON-SWAN REACH ¹	Annually	0	0	-	YES
NOWA NOWA ¹	Annually	0	0	-	YES
OMELO	Annually	1	0	<0.001	YES
ORBOST	Annually	1	0	<0.001	YES
SARFIELD-BRUTHEN ¹	Annually	0	0	-	YES
SUNLAKES-TOORLOO ¹	Annually	0	0	-	YES
SWIFTS CREEK	Annually	1	0	<0.001	YES

Note: ¹ Separate sampling at these other locations was *not required*: Eagle Pt, Kalimna, Lindenow, Eagle Pt, Merrangbaur, Metung, Nicholson-Swan Reach, Sarsfield, etc., because the source water was the same as for Bairnsdale (<0.001 mg/L).

All water sampling localities were compliant for Arsenic in the 2024-25 reporting period (Table 7).

5.2.2. Cadmium

Cadmium may be introduced into drinking water supplies through corrosion of pipes and fittings. Exposure to high concentrations of cadmium may result in potential health implications. Samples are taken quarterly in each of the water sampling localities.

Compliance is measured as: less than or equal to 0.002 mg/L (health-based guideline value under the Australian Drinking Water Guidelines 2011).

Table 8: Cadmium sampling frequency and results for 2024-25

Water Sampling Locality	Sampling Frequency	Total No. Samples	No. of Non-Complying Samples	Maximum (mg/L)	Complying (yes / no)
BAIRNSDALE	Monthly	12	0	<0.0002	Yes
BEMM RIVER	Monthly	12	0	<0.0002	Yes
BUCHAN	Monthly	12	0	<0.0002	Yes
CANN RIVER	Monthly	12	0	<0.0002	Yes
DINNER PLAIN	Monthly	13	0	<0.0002	Yes
EAGLE POINT-PAYNESVILLE	Monthly	14	0	<0.0002	Yes
KALIMNA	Monthly	12	0	<0.0002	Yes
LINDENOW	Monthly	12	0	<0.0002	Yes
LINDENOW SOUTH	Monthly	12	0	<0.0002	Yes
MALLACOOTA	Monthly	12	0	<0.0002	Yes
MERRANGBAUR	Monthly	12	0	<0.0002	Yes
METUNG	Monthly	12	0	<0.0002	Yes
NICHOLSON-SWAN REACH	Monthly	12	0	<0.0002	Yes
NOWA NOWA	Monthly	12	0	<0.0002	Yes
OMELO	Monthly	12	0	<0.0002	Yes
ORBOST	Monthly	12	0	<0.0002	Yes
SARFIELD-BRUTHEN	Monthly	12	0	<0.0002	Yes
SUNLAKES-TOORLOO	Monthly	12	0	<0.0002	Yes
SWIFTS CREEK	Monthly	12	0	<0.0002	Yes

All water sampling localities were compliant for Cadmium in the 2024-25 reporting period (Table 8).

5.2.3. Chromium

Chromium may occur naturally in the environment or be introduced through human activity. Exposure to high concentrations of chromium may have adverse dermatological effects over many years, such as allergic dermatitis (skin reactions). Samples are taken quarterly in each of the water sampling localities.

Compliance is measured as: less than or equal to 0.05 mg/L of Cr (VI) (health-based guideline value under the Australian Drinking Water Guidelines 2011).

Table 9: Chromium sampling frequency and results for 2024-25

WATER SAMPLING LOCALITY	SAMPLING FREQUENCY	TOTAL NO. SAMPLES	NO. OF NON-COMPLYING SAMPLES	MAXIMUM (mg/L)	COMPLYING (YES / NO)
BAIRNSDALE	Monthly	12	0	<0.001	Yes
BEMM RIVER	Monthly	12	0	<0.001	Yes
BUCHAN	Monthly	12	0	<0.001	Yes
CANN RIVER	Monthly	12	0	<0.001	Yes
DINNER PLAIN	Monthly	13	0	<0.001	Yes
EAGLE POINT-PAYNESVILLE	Monthly	14	0	<0.001	Yes
KALIMNA	Monthly	12	0	<0.001	Yes
LINDENOW	Monthly	12	0	<0.001	Yes
LINDENOW SOUTH	Monthly	12	0	<0.001	Yes
MALLACOOTA	Monthly	12	0	<0.001	Yes
MERRANGBAUR	Monthly	12	0	<0.001	Yes
METUNG	Monthly	12	0	<0.001	Yes
NICHOLSON-SWAN REACH	Monthly	12	0	<0.001	Yes
NOWA NOWA	Monthly	12	0	<0.001	Yes
OMEQ	Monthly	12	0	<0.001	Yes
ORBOST	Monthly	12	0	<0.001	Yes
SARFIELD-BRUTHEN	Monthly	12	0	<0.001	Yes
SUNLAKES-TOORLOO	Monthly	12	0	<0.001	Yes
SWIFTS CREEK	Monthly	12	0	<0.001	Yes

All water sampling localities were compliant for Chromium in the 2024-25 reporting period (Table 9).

5.2.4. Copper

Copper may occur naturally in the environment or be introduced into water through contact with corroding copper pipes and fittings. Exposure to high levels of copper can cause nausea, vomiting, diarrhoea, gastric (stomach) complaints and headaches. Samples are taken quarterly in each applicable water sampling locality.

Compliance is measured as: less than 2 mg/L (health-based guideline value under the Australian Drinking Water Guidelines 2011) and less than or equal to 1 milligram per litre (aesthetic guideline value under the Australian Drinking Water Guidelines 2011).

Table 10: Copper sampling frequency and results for 2024-25

WATER SAMPLING LOCALITY	SAMPLING FREQUENCY	TOTAL No. SAMPLES	No. OF NON-COMPLYING SAMPLES	MAXIMUM (mg/L)	COMPLYING (YES / NO)
BAIRNSDALE	Monthly	12	0	0.015	Yes
BEMM RIVER	Monthly	12	0	0.010	Yes
BUCHAN	Monthly	12	0	0.002	Yes
CANN RIVER	Monthly	12	0	0.024	Yes
DINNER PLAIN	Monthly	13	0	0.670	Yes
EAGLE POINT-PAYNESVILLE	Monthly	14	0	0.040	Yes
KALIMNA	Monthly	12	0	0.014	Yes
LINDENOW	Monthly	12	0	0.022	Yes
LINDENOW SOUTH	Monthly	12	0	0.021	Yes
MALLACOOTA	Monthly	12	0	0.003	Yes
MERRANGBAUR	Monthly	12	0	0.010	Yes
METUNG	Monthly	12	0	0.025	Yes
NICHOLSON-SWAN REACH	Monthly	12	0	0.014	Yes
NOWA NOWA	Monthly	12	0	0.004	Yes
OMELO	Monthly	12	0	0.005	Yes
ORBOST	Monthly	12	0	0.005	Yes
SARFIELD-BRUTHEN	Monthly	12	0	0.076	Yes
SUNLAKES-TOORLOO	Monthly	12	0	0.020	Yes
SWIFTS CREEK	Monthly	12	0	0.014	Yes

All water sampling localities were compliant for Copper in the 2024-25 reporting period (Table 10).

5.2.5. Cyanide

Cyanide may occur naturally in the environment or be introduced through human activity. Exposure to cyanide may cause rapid breathing, tremors and other neurological effects. Testing for cyanide is performed annually in each applicable water sampling locality.

Compliance is measured as: less than or equal to 0.08 milligrams per litre (health-based guideline value under the Australian Drinking Water Guidelines 2011).

Table 11: Cyanide sampling frequency and results for 2024-25

WATER SAMPLING LOCALITY	SAMPLING FREQUENCY	TOTAL NO. SAMPLES	NO. OF NON-COMPLYING SAMPLES	MAXIMUM (mg/L)	COMPLYING (YES / NO)
BAIRNSDALE	Annually	1	0	<0.005	Yes
BEMM RIVER	Annually	1	0	<0.005	Yes
BUCHAN	Annually	1	0	<0.005	Yes
CANN RIVER	Annually	1	0	<0.005	Yes
DINNER PLAIN	Annually	1	0	<0.005	Yes
EAGLE POINT-PAYNESVILLE ¹	Annually	0	0	-	Yes
KALIMNA ¹	Annually	0	0	-	Yes
LINDENOW ¹	Annually	0	0	-	Yes
LINDENOW SOUTH ¹	Annually	0	0	-	Yes
MALLACOOTA	Annually	1	0	<0.005	Yes
MERRANGBAUR ¹	Annually	0	0	-	Yes
METUNG ¹	Annually	0	0	-	Yes
NICHOLSON-SWAN REACH ¹	Annually	0	0	-	Yes
NOWA NOWA ¹	Annually	0	0	-	Yes
OMELO	Annually	1	0	<0.005	Yes
ORBOST	Annually	1	0	<0.005	Yes
SARFIELD-BRUTHEN ¹	Annually	0	0	-	Yes
SUNLAKES-TOORLOO ¹	Annually	0	0	-	Yes
SWIFTS CREEK	Annually	1	0	<0.005	Yes

Note:¹Separate sampling for cyanide at these other locations was *not required*: Eagle Pt, Kalimna, Lindenow, Eagle Pt, Merrangbaur, Metung, Nicholson-Swan Reach, Sarsfield, etc., because the source water was the same as for Bairnsdale (<0.005 mg/L).

All water sampling localities were compliant for Cyanide in the 2024-25 reporting period (Table 11).

5.2.6. Dichloroacetic Acid

Dichloroacetic Acid (DCA) is a halo-acetic acid produced as a by-product of the reaction between chlorine and naturally occurring humic and fulvic acids. Based on preliminary data, concentrations of dichloroacetic acid in Australian drinking waters range from 0.001 mg/L to 0.1 mg/L.

Compliance is measured as: less than 0.1 mg/L (health-based guideline value under the Australian Drinking Water Guidelines 2011).

Table 12: Dichloroacetic Acid sampling frequency and results for 2024-25

WATER SAMPLING LOCALITY	SAMPLING FREQUENCY	TOTAL No. SAMPLES	No. OF NON-COMPLYING SAMPLES	MAXIMUM (mg/L)	COMPLYING (YES / NO)
BAIRNSDALE	Quarterly	4	0	0.016	Yes
BEMM RIVER	Quarterly	4	0	0.011	Yes
BUCHAN	Quarterly	4	0	0.011	Yes
CANN RIVER	Quarterly	4	0	0.009	Yes
DINNER PLAIN	N/A	N/A	N/A	N/A	N/A
EAGLE POINT-PAYNESVILLE	Quarterly	6	0	0.012	Yes
KALIMNA	Quarterly	4	0	0.018	Yes
LINDENOW	Quarterly	4	0	<0.005	Yes
LINDENOW SOUTH	Quarterly	4	0	0.006	Yes
MALLACOOTA	Quarterly	4	0	<0.005	Yes
MERRANGBAUR	Quarterly	4	0	0.012	Yes
METUNG	Quarterly	4	0	0.009	Yes
NICHOLSON-SWAN REACH	Quarterly	4	0	0.017	Yes
NOWA NOWA	Quarterly	4	0	0.008	Yes
OMELO	Quarterly	4	0	0.010	Yes
ORBOST	Quarterly	4	0	<0.005	Yes
SARFIELD-BRUTHEN	Quarterly	4	0	0.013	Yes
SUNLAKES-TOORLOO	Quarterly	4	0	0.020	Yes
SWIFTS CREEK	Quarterly	4	0	0.009	Yes

Note: Dichloroacetic acid is not sampled in Dinner Plain based on assessment as very LOW risk.

All water sampling localities were compliant for Dichloroacetic Acid in the 2024-25 reporting period (Table 12).

5.2.7. Free Chlorine

Chlorine is a disinfection agent that is added to drinking water to kill harmful microorganisms and ensure the water is safe to drink. Chlorine has an odour threshold in drinking water of about 0.6 mg/L, but some people may detect lower levels.

The Australian Drinking Water Guidelines 2011 state that Chlorine concentrations in the drinking water supply must be less than or equal to 5 mg/L for health purposes.

Table 13: Free Chlorine sampling frequency and results for 2024-25

WATER SAMPLING LOCALITY	SAMPLING FREQUENCY	TOTAL No. SAMPLES	MINIMUM (mg/L)	MAXIMUM (mg/L)	AVERAGE (mg/L)
BAIRNSDALE	Weekly	123	0.26	1.10	0.82
BEMM RIVER	Weekly	104	0.47	1.20	0.89
BUCHAN	Weekly	100	0.29	1.90	0.85
CANN RIVER	Weekly	104	0.19	1.10	0.67
DINNER PLAIN ¹	Weekly	107	0.11	0.50	0.30
EAGLE POINT-PAYNESVILLE	Weekly	103	0.19	0.99	0.57
KALIMNA	Weekly	106	0.50	1.00	0.84
LINDENOW	Weekly	102	0.06	1.40	0.89
LINDENOW SOUTH	Weekly	102	0.16	1.20	0.63
MALLACOOTA	Weekly	104	0.05 ²	1.50	0.73
MERRANGBAUR	Weekly	106	0.37	0.92	0.70
METUNG	Weekly	106	0.40	0.95	0.72
NICHOLSON-SWAN REACH	Weekly	107	0.34	1.10	0.84
NOWA NOWA	Weekly	104	0.05 ²	1.00	0.56
OMELO	Weekly	106	0.05 ²	0.97	0.63
ORBOST	Weekly	104	0.05 ²	1.50	0.86
SARFIELD-BRUTHEN	Weekly	100	0.07	1.30	0.76
SUNLAKES-TOORLOO	Weekly	111	0.52	1.10	0.84
SWIFTS CREEK	Weekly	106	0.25	1.10	0.65

Notes:

1 In response to *E. coli* detection in the Dinner Plain raw water source during December 2021, chlorine disinfection was introduced as a secondary treatment barrier and the sampling program updated.

2 EGW aims for a free chlorine concentration of >0.2 mg/L within all reticulation systems. While some free chlorine levels were less than 0.2 mg/L temporarily, they were not considered a health risk.

Notwithstanding, EGW responds to low chlorine levels by routinely and reactively flushing the main in vicinity of the sample point. These are notified on the day to the EGW water quality team from the sampling contractor and operations then respond on the day with a mains flush operation.

All water sampling localities were compliant for Free Chlorine in the 2024-25 reporting period (Table 13).

5.2.8. Lead

Lead may occur naturally in water or be introduced through contact with lead pipes and fittings. Human exposure to high levels of lead may result in toxic effects. Samples are taken quarterly in each applicable water sampling locality.

Compliance is measured as: less than or equal to 0.01 mg/L (health-based guideline value under the Australian Drinking Water Guidelines 2011).

Table 14: Lead sampling frequency and results for 2024-25

WATER SAMPLING LOCALITY	SAMPLING FREQUENCY (minimum)	TOTAL No. SAMPLES	No. OF NON-COMPLYING SAMPLES	MAXIMUM (mg/L)	COMPLYING (YES / NO)
BAIRNSDALE	Monthly	12	0	<0.001	Yes
BEMM RIVER	Monthly	12	0	<0.001	Yes
BUCHAN	Monthly	12	0	<0.001	Yes
CANN RIVER	Monthly	12	0	<0.001	Yes
DINNER PLAIN	Monthly	13	0	<0.001	Yes
EAGLE POINT-PAYNESVILLE	Monthly	14	0	<0.001	Yes
KALIMNA	Monthly	12	0	<0.001	Yes
LINDENOW	Monthly	12	0	<0.001	Yes
LINDENOW SOUTH	Monthly	12	0	<0.001	Yes
MALLACOOTA	Monthly	12	0	<0.001	Yes
MERRANGBAUR	Monthly	12	0	<0.001	Yes
METUNG	Monthly	12	0	<0.001	Yes
NICHOLSON-SWAN REACH	Monthly	12	0	<0.001	Yes
NOWA NOWA	Monthly	12	0	<0.001	Yes
OMEQ	Monthly	12	0	<0.001	Yes
ORBOST	Monthly	12	0	<0.001	Yes
SARFIELD-BRUTHEN	Monthly	12	0	<0.001	Yes
SUNLAKES-TOORLOO	Monthly	12	0	<0.001	Yes
SWIFTS CREEK	Monthly	12	0	<0.001	Yes

All water sampling localities were compliant for Lead in the 2024-25 reporting period (Table 14).

5.2.9. Manganese

Manganese may occur naturally in the environment, or may be introduced through industrial activity. Manganese may cause aesthetic issues such as taste or staining of laundry and appliances as well as health issues at high concentrations.

Compliance is measured as: less than or equal to 0.1 mg/L (aesthetic value) and less than or equal to 0.5 mg/L (health-based guideline value under the Australian Drinking Water Guidelines 2011).

Table 15: Manganese sampling frequency and results for 2024-25

WATER SAMPLING LOCALITY	SAMPLING FREQUENCY	TOTAL No. SAMPLES	MINIMUM (mg/L)	MAXIMUM (mg/L)	COMPLYING (YES / NO)
BAIRNSDALE	Monthly	12	<0.001	<0.001	Yes
BEMM RIVER	Monthly	12	<0.001	0.002	Yes
BUCHAN	Monthly	12	<0.001	<0.001	Yes
CANN RIVER	Monthly	12	<0.001	0.002	Yes
DINNER PLAIN	Monthly	13	<0.001	<0.001	Yes
EAGLE POINT-PAYNESVILLE	Monthly	14	<0.001	<0.001	Yes
KALIMNA	Monthly	12	<0.001	<0.001	Yes
LINDENOW	Monthly	12	<0.001	<0.001	Yes
LINDENOW SOUTH	Monthly	12	<0.001	<0.001	Yes
MALLACOOTA	Monthly	12	<0.001	0.004	Yes
MERRANGBAUR	Monthly	12	<0.001	<0.001	Yes
METUNG	Monthly	12	<0.001	<0.001	Yes
NICHOLSON-SWAN REACH	Monthly	12	<0.001	<0.001	Yes
NOWA NOWA	Monthly	12	<0.001	0.002	Yes
OMELO	Monthly	12	<0.001	<0.001	Yes
ORBOST	Monthly	12	<0.001	0.004	Yes
SARFIELD-BRUTHEN	Monthly	12	<0.001	<0.001	Yes
SUNLAKES-TOORLOO	Monthly	12	<0.001	<0.001	Yes
SWIFTS CREEK	Monthly	12	<0.001	<0.001	Yes

All water sampling localities were compliant for Manganese in the 2024-25 reporting period; both aesthetic and health values. (Table 15).

5.2.10. Trichloroacetic Acid

Trichloroacetic acid (TCA) is a chloroacetic acid produced in drinking water as a by-product of the reaction between chlorine and naturally occurring humic and fulvic acids.

Compliance is measured as: less than 0.1 mg/L (health-based guideline value under the Australian Drinking Water Guidelines 2011).

Table 16: Trichloroacetic Acid sampling frequency and results for 2024-25

Water Sampling Locality	Sampling Frequency	Total No. Samples	No. of Non-Complying Samples	Maximum (mg/L)	Complying (yes / no)
BAIRNSDALE	Quarterly	4	0	0.014	Yes
BEMM RIVER	Quarterly	4	0	0.009	Yes
BUCHAN	Quarterly	4	0	0.013	Yes
CANN RIVER	Quarterly	4	0	0.006	Yes
DINNER PLAIN	N/A	N/A	N/A	N/A	N/A
EAGLE POINT-PAYNESVILLE	Quarterly	6	0	0.019	Yes
KALIMNA	Quarterly	4	0	0.020	Yes
LINDENOW	Quarterly	4	0	0.005	Yes
LINDENOW SOUTH	Quarterly	4	0	0.007	Yes
MALLACOOTA	Quarterly	4	0	<0.005	Yes
MERRANGBAUR	Quarterly	4	0	0.019	Yes
METUNG	Quarterly	4	0	0.019	Yes
NICHOLSON-SWAN REACH	Quarterly	4	0	0.017	Yes
NOWA NOWA	Quarterly	4	0	0.022	Yes
OMELO	Quarterly	4	0	0.024	Yes
ORBOST	Quarterly	4	0	<0.005	Yes
SARFIELD-BRUTHEN	Quarterly	4	0	0.013	Yes
SUNLAKES-TOORLOO	Quarterly	4	0	0.022	Yes
SWIFTS CREEK	Quarterly	4	0	<0.005	Yes

Note: Dichloroacetic acid is not sampled in Dinner Plain based on risk assessment.

All water sampling localities were compliant for Trichloroacetic Acid in the 2024-25 reporting period (Table 16).

5.3. Aesthetic Characteristics

5.3.1. Colour (True)

Colour generally occurs in water as a result of dissolved organic material. Although not a health consideration, elevated colour can be an aesthetic issue.

Compliance is measured as: less than or equal to 15 Hazen Units (HU) which is the amount of colour that is just noticeable in a glass of water; (Australian Drinking Water Guidelines 2011 aesthetic value).

Table 17: Colour sampling frequency and results for 2024-25

WATER SAMPLING LOCALITY	SAMPLING FREQUENCY	TOTAL NO. SAMPLES	MINIMUM (HU)	MAXIMUM (HU)	COMPLYING (YES / NO)
BAIRNSDALE	Weekly	123	<2	<2	Yes
BEMM RIVER	Weekly	90	<2	4	Yes
BUCHAN	Weekly	102	<2	<2	Yes
CANN RIVER	Weekly	92	<2	<2	Yes
DINNER PLAIN	Weekly	107	<2	<2	Yes
EAGLE POINT-PAYNESVILLE	Weekly	103	<2	<2	Yes
KALIMNA	Weekly	106	<2	<2	Yes
LINDENOW	Weekly	102	<2	4	Yes
LINDENOW SOUTH	N/A	N/A	N/A	N/A	N/A
MALLACOOTA	Weekly	102	<2	<2	Yes
MERRANGBAUR	Weekly	53	<2	4	Yes
METUNG	Weekly	106	<2	<2	Yes
NICHOLSON-SWAN REACH	N/A	N/A	N/A	N/A	N/A
NOWA NOWA	Weekly	102	<2	4	Yes
OMELO	Weekly	105	<2	4	Yes
ORBOST	Weekly	104	<2	6	Yes
SARFIELD-BRUTHEN	Weekly	102	<2	<2	Yes
SUNLAKES-TOORLOO	Weekly	111	<2	4	Yes
SWIFTS CREEK	Weekly	106	<2	4	Yes

Note: Colour is not sampled in some sampling localities within the Mitchell system based on risk assessment and results from network samples taken downstream of these localities i.e., Lindenow South, Nicholson-Swan Reach.

All water sampling localities were compliant for colour in the 2024-25 reporting period (Table 17).

5.3.2. Hardness

Hardness is caused by the presence of dissolved calcium compounds in water. Hard water may result in scaling issues.

Compliance is measured as: less than or equal to 200 mg/L (Australian Drinking Water Guidelines 2011 aesthetic value) as total hardness (as calcium carbonate).

Table 18: Hardness sampling frequency and results for 2024-25

WATER SAMPLING LOCALITY	SAMPLING FREQUENCY	TOTAL NO. SAMPLES	MINIMUM (mg/L)	MAXIMUM (mg/L)	COMPLYING (YES / NO)
BAIRNSDALE	Monthly	11	17	28	Yes
BEMM RIVER	Monthly	12	14	19	Yes
BUCHAN	Monthly	11	20	45	Yes
CANN RIVER	Monthly	12	20	33	Yes
DINNER PLAIN	Monthly	9	26	44	Yes
EAGLE POINT-PAYNESVILLE	Monthly	8	17	28	Yes
KALIMNA	Monthly	12	17	29	Yes
LINDENOW	Monthly	12	17	28	Yes
LINDENOW SOUTH	Monthly	12	18	32	Yes
MALLACOOTA	Monthly	12	31	79	Yes
MERRANGBAUR	Monthly	12	18	29	Yes
METUNG	Monthly	12	20	30	Yes
NICHOLSON-SWAN REACH	Monthly	N/A	N/A	N/A	N/A
NOWA NOWA	Monthly	12	23	34	Yes
OMELO	Monthly	12	9	19	Yes
ORBOST	Monthly	7	18	25	Yes
SARFIELD-BRUTHEN	Monthly	11	18	28	Yes
SUNLAKES-TOORLOO	Monthly	12	18	30	Yes
SWIFTS CREEK	Monthly	12	39	87	Yes

Notes: NA - Not Applicable;

Hardness is not sampled in some sampling localities within the Mitchell system based on risk assessment and results from network samples taken downstream of these localities i.e., Nicholson-Swan Reach.

All water sampling localities were compliant for Hardness in the 2024-25 reporting period (Table 18).

5.3.3. Iron

Iron may occur naturally in the environment and can be introduced through industrial activity, as well as through cast iron pipework. High levels of iron in water can impart taste and may stain laundry or fittings. There is no health-based guideline for iron in drinking water.

Compliance is measured as: less than or equal to 0.3 mg/L (Australian Drinking Water Guidelines 2011 aesthetic value).

Table 19: Iron sampling frequency and results for 2024-25

WATER SAMPLING LOCALITY	SAMPLING FREQUENCY	TOTAL No. SAMPLES	MINIMUM (mg/L)	MAXIMUM (mg/L)	COMPLYING (YES / NO)
BAIRNSDALE	Monthly	12	<0.01	<0.01	Yes
BEMM RIVER	Monthly	12	<0.01	0.04	Yes
BUCHAN	Monthly	12	<0.01	<0.01	Yes
CANN RIVER	Monthly	12	<0.01	0.01	Yes
DINNER PLAIN	Monthly	13	<0.01	<0.01	Yes
EAGLE POINT-PAYNESVILLE	Monthly	14	<0.01	0.03	Yes
KALIMNA	Monthly	12	<0.01	<0.01	Yes
LINDENOW	Monthly	12	<0.01	<0.01	Yes
LINDENOW SOUTH	Monthly	12	<0.01	0.03	Yes
MALLACOOTA	Monthly	12	<0.01	0.04	Yes
MERRANGBAUR	Monthly	12	<0.01	<0.01	Yes
METUNG	Monthly	12	<0.01	<0.01	Yes
NICHOLSON-SWAN REACH	Monthly	12	<0.01	0.02	Yes
NOWA NOWA	Monthly	12	<0.01	<0.01	Yes
OMELO	Monthly	12	<0.01	0.03	Yes
ORBOST	Monthly	12	<0.01	0.02	Yes
SARSFIELD-BRUTHEN	Monthly	12	<0.01	<0.01	Yes
SUNLAKES-TOORLOO	Monthly	12	<0.01	0.02	Yes
SWIFTS CREEK	Monthly	12	<0.01	0.03	Yes

All water sampling localities were compliant for iron in the 2024-25 reporting period (Table 19).

5.3.4. pH

pH is the measure of the acidity (pH <7.0) or alkalinity (pH >7.0) of the water. Extreme pH values may cause corrosion or scaling in certain circumstances. High pH may also reduce the effectiveness of chlorine disinfection.

The Australian Drinking Water Guidelines 2011 state that the pH of drinking water should be between pH 6.5 and 8.5 (aesthetic guideline limit). However, cement mortar-lined pipes and newly constructed concrete water storages may raise pH. Values up to pH 9.2 may be tolerated provided no deterioration in microbiological quality of the water supply is observed.

Table 20: pH sampling frequency and results for 2024-25

WATER SAMPLING LOCALITY	SAMPLING FREQUENCY	TOTAL No. SAMPLES	MINIMUM (mg/L)	MAXIMUM (mg/L)	AVERAGE (mg/L)
BAIRNSDALE	Weekly	123	7.00	8.90	7.52
BEMM RIVER	Weekly	104	7.20	8.50	7.92
BUCHAN	Weekly	100	7.60	9.30	8.41
CANN RIVER	Weekly	104	7.60	9.30	8.47
DINNER PLAIN	Weekly	106	6.80	7.80	7.26
EAGLE POINT-PAYNESVILLE	Weekly	103	7.10	9.00	7.67
KALIMNA	Weekly	106	7.20	7.90	7.35
LINDENOW	Weekly	102	7.20	8.50	7.72
LINDENOW SOUTH	Weekly	102	7.30	8.20	7.82
MALLACOOTA	Weekly	104	7.10	8.90	7.89
MERRANGBAUR	Weekly	106	7.20	7.80	7.45
METUNG	Weekly	106	7.30	8.50	7.74
NICHOLSON-SWAN REACH	Weekly	106	7.10	8.60	7.35
NOWA NOWA	Weekly	104	7.00	9.50	8.22
OMEQ	Weekly	106	6.50	8.90	8.16
ORBOST	Weekly	104	7.20	9.50	8.25
SARFIELD-BRUTHEN	Weekly	100	7.10	8.40	7.55
SUNLAKES-TOORLOO	Weekly	111	7.20	9.00	7.53
SWIFTS CREEK	Weekly	106	7.80	8.60	8.16

Based on the average values over the year (Table 20), pH values for all water sampling localities are within the aesthetic guideline limit (6.5 to 8.5). Elevated individual pH values have been observed in a number of water sampling localities. This is largely due to the presence of cement-lined distribution pipes. However, these higher pH values have not impacted water quality or asset condition (pipes and tanks). When higher than expected pH is detected EGW have flushed the network and reviewed the resulting pH.

5.3.5. Zinc

Zinc may occur naturally in the environment, or may be introduced through industrial activity, as well as through corrosion of customer piping. High levels of zinc in water can impart taste and appearance issues with drinking water.

Compliance is measured as: less than or equal to 3 mg/L (Australian Drinking Water Guidelines 2011 aesthetic value).

Table 21: Zinc sampling frequency and results for 2024-25

WATER SAMPLING LOCALITY	SAMPLING FREQUENCY	TOTAL NO. SAMPLES	MINIMUM (mg/L)	MAXIMUM (mg/L)	% COMPLIANCE
BAIRNSDALE	Monthly	12	<0.001	0.007	100
BEMM RIVER	Monthly	12	0.003	0.010	100
BUCHAN	Monthly	12	<0.001	<0.001	100
CANN RIVER	Monthly	12	<0.001	0.006	100
DINNER PLAIN	Monthly	13	0.002	0.028	100
EAGLE POINT-PAYNESVILLE	Monthly	14	0.001	0.003	100
KALIMNA	Monthly	12	0.001	0.005	100
LINDENOW	Monthly	12	<0.001	0.002	100
LINDENOW SOUTH	Monthly	12	0.001	0.007	100
MALLACOOTA	Monthly	12	<0.001	0.004	100
MERRANGBAUR	Monthly	12	0.002	0.004	100
METUNG	Monthly	12	0.001	0.008	100
NICHOLSON-SWAN REACH	Monthly	12	<0.001	0.005	100
NOWA NOWA	Monthly	12	<0.001	0.003	100
OMELO	Monthly	12	<0.001	0.006	100
ORBOST	Monthly	12	<0.001	0.003	100
SARFIELD-BRUTHEN	Monthly	12	<0.001	0.016	100
SUNLAKES-TOORLOO	Monthly	12	<0.001	0.033	100
SWIFTS CREEK	Monthly	12	<0.001	0.007	100

All water sampling localities were compliant for Zinc in the 2024-25 reporting period (Table 21).

5.3.6. Acid Soluble Aluminium

EGW applies poly aluminium chlorohydrate to multiple water treatment processes as a coagulant. This can result in the presence of acid soluble aluminium within drinking water. Should acid soluble aluminium exceed the compliance concentration of 0.2 mg/L, a white gelatinous precipitate can form within the distribution network causing “milky coloured” water (depending on the pH of the water).

Table 22: Acid Soluble Aluminium sampling frequency and results for 2024-25

WATER SAMPLING LOCALITY ^{1, 2}	ENTRY WATER SAMPLING FREQUENCY	RETICULATION SAMPLING FREQUENCY	TOTAL No. SAMPLES	MINIMUM (mg/L)	MAXIMUM (mg/L)	% COMPLYING
BAIRNSDALE	Weekly	Monthly	76	<0.01	0.05	100
BEMM RIVER	Monthly	Monthly	24	0.01	0.08	100
BUCHAN	Monthly	Monthly	23	<0.01	0.05	100
CANN RIVER	Monthly	Monthly	24	<0.01	0.03	100
DINNER PLAIN ¹	NA	NA	NA	NA	NA	NA
EAGLE POINT-PAYNESVILLE	NA	Monthly	14	<0.01	0.03	100
KALIMNA	NA	Monthly	12	<0.01	0.03	100
LINDENOW	NA	Monthly	12	<0.01	0.03	100
LINDENOW SOUTH	NA	Monthly	12	<0.01	0.03	100
MALLACOOTA ²	Monthly	Monthly	24	<0.01	0.08	100
MERRANGBAUR	NA	Monthly	12	<0.01	0.02	100
METUNG	NA	Monthly	12	<0.01	0.02	100
NICHOLSON-SWAN REACH	NA	Monthly	12	<0.01	0.03	100
NOWA NOWA	NA	Monthly	12	<0.01	0.03	100
OMEQ	Monthly	Monthly	24	<0.01	0.02	100
ORBOST ²	Monthly	Monthly	24	<0.01	0.23	96
SARFIELD-BRUTHEN	NA	Monthly	12	<0.01	0.03	100
SUNLAKES-TOORLOO	NA	Monthly	12	<0.01	0.03	100
SWIFTS CREEK	Monthly	Monthly	24	<0.01	0.03	100

Note 1: Dinner Plain does not use aluminium based coagulant.

Note 2: Orbost entry water had a small number of results > 0.2mg/L, attributable to water treatment plant treatment duration.

All of the sampling localities were compliant for Acid Soluble Aluminium for the 2024-25 reporting period (Table 22), with the exception of Orbost. No customer complaints for milky coloured water were received at the time of the exceedance for this location. This is a by-product of the treatment process and reported levels do not pose health impacts.

5.4. Analysis of Results

All sampling localities were compliant with the parameters described in Schedule 2 of the *Safe Drinking Water Regulations 2015*.

These include two samples for *chlorite* analysis from Raymond Island (Mitchell system) which didn't warrant having their own table, but were both <0.05 mg/L which is below the compliance value of 0.8 mg/L. Chlorite is a breakdown product of free chlorine and is sometimes found in solutions of concentrated sodium hypochlorite. As such, chlorite may occasionally be transmitted to drinking water where sodium hypochlorite is used as a disinfectant.

EGW samples for additional parameters in raw water, entry points and throughout the reticulation system. As outlined in Table 23 and 24, all entry point and reticulation samples have been 100% compliant against the health guideline values in the Australian Drinking Water Guidelines 2011.

As reported in Table 20, a small number of pH values for water sampling localities were above the upper guideline range for pH (i.e., pH ≤ 9.5). These have been risk assessed as not impacting human health.



Table 23. Reticulation and entry point monitoring and results 2022 to 2024-25

PARAMETER	UNIT	HEALTH GUIDELINE VALUE (ADWG 2011)	AESTHETIC GUIDELINE VALUE (ADWG 2011)	PERFORMANCE AGAINST GUIDELINE VALUES 2022/23	PERFORMANCE AGAINST GUIDELINE VALUES 2023/24	PERFORMANCE AGAINST GUIDELINE VALUES 2024/25 (%)
ACID SOLUBLE ALUMINIUM	mg/L	-	0.2	99.0	99.4	99.7
ARSENIC	mg/L			100.0	NS	100.0
BARIUM	mg/L			100.0	NS	NS
CADMIUM	mg/L	0.002	-	100.0	100.0	100.0
CHLORINE (AS FREE CHLORINE) ¹	mg/L	5	0.6	100.0	100.0	100.0
CHLORITE	mg/L	0.8	-	100.0	100.0	100.0
CHROMIUM	mg/L	0.05	-	100.0	100.0	100.0
COLOUR (TRUE)	HU	-	15	100.0	100.0	100.0
COPPER	mg/L	2	1	100.0	100.0	100.0
CYANIDE	mg/L	0.08	-	100.0	NS	100.0
E.COLI	orgs/100ml	0	-	100.0	100.0	100.0
FLUORIDE	mg/L	1.5	-	100.0	100.0	100.0
DICHLOROACETIC ACID	mg/L	0.1	-	100.0	100.0	100.0
TRICHLOROACETIC ACID	mg/L	0.1	-	100.0	100.0	100.0
HARDNESS (AS CaCO ₃)	mg/L	-	200	100.0	100.0	100.0
IODIDE	mg/L	0.5	-	100.0	NS	NS
IRON	mg/L	-	0.3	100.0	100.0	100.0
LEAD	mg/L	0.01	-	100.0	100.0	100.0
MANGANESE	mg/L	0.5	0.1	100.0	100.0	100.0
PH (FIELD) ²	mg/L	-	6.5-up to 9.2	99.8	99.6	99.4
SILVER	mg/L	0.1	-	NS	NS	NS
TOTAL TRIHALOMETHANES	mg/L	0.25	-	100.0	100.0	100.0
TURBIDITY	NTU	-	5	100.0	100.0	100.0
ZINC	mg/L	3	3	100.0	100.0	100.0

Note 1: Yellow highlight – Regulated parameters under the legislation. Refer Table 23.

2. Elevated individual pH values have been observed in a small number of water sampling localities. This is largely due to the presence of cement-lined distribution pipes. However, these higher pH values have not impacted water quality as evidenced by compliant microbiological and aesthetic quality during the period.

NS- means 'Not Sampled' during the period shown.



Parameters not listed in the ADWG 2011, version 3.8, as having health guideline values were also analysed (Table 24).

Table 24: Reticulation and entry point - other parameter monitoring results 2023-24

PARAMETER	UNIT	2022/23 MAXIMUM	2023/24 MAXIMUM	2024/25 MAXIMUM
CALCIUM	mg/L	29.0	22.0	20.0
CHLORATE	mg/L	0.44	0.34	0.05
TOTAL COLIFORMS	Colilert mpn/ 100 mL	210	9	20
ELECTRICAL CONDUCTIVITY	(μ S/cm @ 25C)	610	590	520
MONOCHLOROACETIC ACID ¹ (H.A.A.)	mg/L	0.005	0.005	0.005
BROMOACETIC ACID (H.A.A.)	mg/L	0.005	0.005	0.005
BROMOCHLOROACETIC ACID (H.A.A.)	mg/L	0.008	0.006	0.007
BROMODICHLOROACETIC ACID (H.A.A.)	mg/L	0.007	0.006	0.005
DIBROMOACETIC ACID (H.A.A.)	mg/L	0.009	0.010	0.012
MAGNESIUM	mg/L	13.0	15.0	12.0
TOTAL ALUMINIUM	mg/L	0.38	0.80	0.24

Note: ¹ monochloroacetic acid in the table above is listed in the ADWG as 'chloroacetic acid' with a Health Guideline Value of 0.15 mg/L; For ALL other items in the table, there is insufficient information to specify a health guideline value.

H.A.A.s or '*halo-acetic acids*' may be produced as by-products of disinfection with chlorine, however these have historically been shown to have very low presence in EGW water supply systems and beyond any health concern. / mpn=most probable number (of organisms)

6. QUALITY OF RAW AND PARTIALLY TREATED WATER FOR 2024-25

The following information applies to substances of interest that are sampled for in EGW's raw water storages (untreated water) and partially treated clear water storages (water that has been treated, but not undergone secondary disinfection).

6.1. Other Substances

6.1.1. Radiological

Radiologically active compounds may impact public health. Based on risk assessment, radiological activity samples are taken from bore waters every two years and from surface waters every five years.



Table 25: Radiological samples from raw water sources taken in 2023-24 (Not sampled in 2025)

WATER SAMPLING LOCALITY	Nº. OF SAMPLES	Nº. OF NON COMPLYING SAMPLE	MAXIMUM ('Bq/L)	HEALTH GUIDELINE VALUE Bq/L [^] (ADWG 2011)	COMPLYING (YES / NO)
BAIRNSDALE - RIVER	2	0	0.1	0.5	Yes
BEMM RIVER - RAW WATER STORAGE BASIN	2	0	0.1	0.5	Yes
BUCHAN - RAW WATER SOURCE - RIVER	2	0	0.1	0.5	Yes
CANN RIVER - RAW WATER SOURCE	2	0	0.1	0.5	Yes
DINNER PLAIN - CLEAR WATER STORAGE	2	0	0.1	0.5	Yes
MALLACOOTA - BORE	6	0	0.23	0.5	Yes
MALLACOOTA - RAW WATER SOURCE	2	0	0.1	0.5	Yes
OMEQ - RAW WATER SOURCE	2	0	0.1	0.5	Yes
ORBOST - RAW WATER SOURCE	2	0	0.1	0.5	Yes
SWIFTS CREEK - RAW WATER SOURCE	2	0	0.1	0.5	Yes

[^] for each of gross- α and gross- β radiation individually

6.1.2. Biocides in raw water sources

All surface raw water sources are analysed annually for biocides (i.e., herbicides and pesticides). A representative suite of these biocides is examined based on land management activities in the water supply catchments. Sampling occurs during the months of heaviest rainfall, namely July or September.

The targeted biocides are presented in the table below. Compliance is measured as recorded values being below the Australian Drinking Water Guidelines 2011 health-based guideline value, or if not specified in the Guidelines, the absence of the compound above the laboratory's limits of detection.



EGW maintains close liaison with local stakeholders (e.g. catchment management authorities) regarding biocide application in water supply catchments to ensure minimal risk to the drinking water supply. This informs the frequency of biocide sampling and testing.

In the 2024-25 period, raw surface water samples were again analysed from Bairnsdale, Bemm River, Buchan, Cann River, Mallacoota, Orbost, Omeo, and Swifts Creek.

Table 26. Biocide sampling program and results 2024-25

WATER SAMPLING LOCALITY	CLASS	COMPOUND	UNITS	HEALTH GUIDELINE VALUE (ADWG 2011)	MAX RESULT	
JANUARY 2025 -	N/A	Glyphosate	mg/L	1	<0.030	
JANUARY 2025 - BAIRNSDALE	Organo-Chlorine Biocides	BHC (Alpha Isomer)	mg/L		<0.0001	
JANUARY 2025 - BEMM RIVER		BHC (Beta Isomer)	mg/L		<0.0001	
JANUARY 2025 - BUCHAN		BHC (Delta Isomer) [Benzene Hexachloride]	mg/L		<0.0001	
JANUARY 2025 - CANN RIVER		cis-Chlordane	mg/L	0.002	<0.00001	
JANUARY 2025 - MALLACOOTA		trans-Chlordane	mg/L	0.002	<0.00001	
JANUARY 2025 - OMEO		4,4'-DDD	mg/L		<0.0001	
JANUARY 2025 - ORBOST		4,4'-DDE	mg/L		<0.0001	
JANUARY 2025 - SWIFTS CREEK		4,4'-DDT	mg/L	0.009	<0.0001	
OCTOBER 2024 - BAIRNSDALE		Endosulfan I	mg/L	0.02	<0.0001	
OCTOBER 2024 - BEMM RIVER		Endosulfan II	mg/L		<0.0001	
OCTOBER 2024 - BUCHAN		Endosulphan Sulphate	mg/L		<0.0001	
OCTOBER 2024 - CANN RIVER		Endrin	mg/L		<0.0001	
OCTOBER 2024 - MALLACOOTA		Endrin Aldehyde	mg/L		<0.0001	
OCTOBER 2024 - OMEO		Heptachlor	mg/L		<0.0500	
OCTOBER 2024 - ORBOST		Heptachlor Epoxide	mg/L		<0.0500	
OCTOBER 2024 - SWIFTS CREEK		Lindane (BHC Gamma Isomer)	mg/L	0.01	<0.0001	
		Methoxychlor	mg/L	0.3	<0.2000	
		Organo-Phosphorus Biocides	Dichlorvos	mg/L	0.005	<0.001
			Monocrotophos	mg/L	0.002	<0.001
	Prophos		mg/L		<0.001	
	Tetraethylthiopyrphos		mg/L		<0.001	
	Phorate		mg/L		<0.001	
		Demeton-S	mg/L		<0.001	



	Diazinon	mg/L	0.004	<0.001
	Methyl Parathion	mg/L		<0.001
	Ronnel	mg/L		<0.001
	Malathion	mg/L		<0.001
	Fenthion	mg/L	0.007	<0.001
	Chloropyrifos	mg/L	0.01	<0.001
	Trichlorinate	mg/L		<0.001
	Tetrachlovinphos	mg/L	0.1	<0.001
	Tukuthion	mg/L		<0.001
	Fensulfothion	mg/L	0.01	<0.001
	EPN	mg/L		<0.001
	Coumaphos	mg/L		<0.001

Table 26 results were below the health-based guideline values in the Australian Drinking Water Guidelines, or if not specified in the Guidelines, were below the lower limits of detection, and were deemed to be compliant in 2024-25.

6.1.3. *Blue green algae in raw water and clear water*

Blue green algae (or cyanobacteria) are microscopic organisms that may thrive in warm, nutrient rich waters. They may impact water quality by releasing taste and odour compounds. In some extreme circumstances, these organisms may release concentrations of toxins. Samples are taken seasonally in each of the relevant water sampling localities. In addition to routine monitoring samples, additional samples may be taken to monitor the progression of algal growth during the summer/autumn seasons.

Under the Victorian Blue Green Algae Circular (2018), DH must be notified when samples representing the quality of drinking water supplied to customers indicate any of the following:

- Total microcystins are detected at greater than or equal to 1.3 micrograms per litre.
- *Microcystis aeruginosa* is present at greater than or equal to 6,500 cells per millilitre.
- Total combined biovolume of known toxic cyanobacterial species is greater than or equal to 0.6 cubic millimetres per litre.
- Total combined biovolume of all cyanobacterial species is greater than or equal to 10 cubic millimetres per litre.

Table 27 below summarises our monitoring program for blue green algae in 2024-25 in both raw water and clear water supplies.



Table 27: Blue green algae sampling program and results 2024-25

WATER SAMPLING LOCALITY	N ^o . OF SAMPLES (RAW WATER)	N ^o . OF SAMPLES (PARTIALLY TREATED WATER)
BAIRNSDALE	62	N/A
EAGLE POINT-PAYNESVILLE		N/A
KALIMNA		N/A
LINDENOW		N/A
LINDENOW SOUTH		N/A
MERRANGBAUR		N/A
METUNG		N/A
NICHOLSON-SWAN REACH		N/A
NOWA NOWA		N/A
SARFIELD-BRUTHEN		N/A
SUNLAKES-TOORLOO		N/A
BEMM RIVER		5
BUCHAN	N/A	N/A
CANN RIVER	36	N/A
DINNER PLAIN	N/A	N/A
MALLACOOTA	36	6
OMELO	11	N/A
ORBOST	36	6
SWIFTS CREEK	5	N/A

Note: N/A – Not Applicable; this may be due to the absence of an open storage within this locality, or due to the low risk from algal growth due to the presence of a fully sealed storage tank.

While no samples exceeded the reporting thresholds for blue green algae (BGA) in 2024-25, some species of algae can release compounds (by-products) that have objectionable taste and odour. This caused a number of customer complaints during a previous financial year but not during 2024-25. Geosmin and MIB are two such compounds produced by BGA. EGW have updated its central working document, the Algae Risk Management Plan based on learnings over the past year. The Swifts Creek Water Treatment Plant required use of activated carbon to assist removal of potential taste during December 2023. This was successful.

There is now consideration for taste and odour contributions from soil with the EGW monitoring plan. The 2020 fires heavily impacted some catchments including Swifts Creek and Mallacoota. The close scrutiny of water harvesting during periods of heavy rainfall has been important over the past year to ensure impacts from soil are minimised.

6.1.4. *Emerging contaminants*

These include naturally occurring and synthetic chemicals such as per & polyfluoroalkyl substances (PFAS) and their variants, personal care and pharmaceuticals (PPCPs) and microplastics. They may have been recorded over time globally and like recent PFAS developments in Australia and the U.S.A., require further testing and sampling by relevant research and government agencies, such as the NH&MRC (National Health & Medical



Research Council) PFAS Taskforce. New PFAS Health Guidelines for drinking water were rolled out in 2025 which inform relevant national and Victorian health standards.

EGW have previously applied a 5-yearly PFAS sampling program on raw water sources however, due to a higher level of public interest, the raw water PFAS sampling program frequency has been increased. In 2025, eight (8) raw water samples were taken from each of the EGW drinking water catchments, as well as nine (9) samples of treated water entering the distribution system from each water treatment plant after treatment. In all of the latest samples PFAS was 'Not detected', or in other words was below the detection limit of 0.002 µg (2 ng) /L. PFAS and is compliant with the new guidelines for drinking water ADWG (2011), version 4, which were released in June, 2025.



7. CONTINUOUS IMPROVEMENT MEASURES – NOW AND FUTURE

Throughout 2024-25, work continued to improve EGW's drinking water quality management system (DWQMS) by: -

- Reviewing catchment health and health-based water quality targets for East Gippsland Water's drinking water systems at Mallacoota & Cann River, as part of a broader review.
- Employing a water quality technical expert during 2025 to review elements of the DWQMS and provide high level of advice concerning future water quality improvements.
- Incorporating changes into East Gippsland Water's risk management framework in order to provide further health benefits to the public. This includes a greater suite of chemicals for analysis and many new health-based and aesthetic constituents from 2027. These changes are arising as a result of the DH Victoria's review of the *Safe Drinking Water Regulations* that occurred in 2024/25.
- East Gippsland Water's quality and treatment team critically reviewing some of their Operational Monitoring Control Points settings during the last period.
- EGW committing to further training and upgrading its Water (Quality) Information Management System (WIMS) during 2024-25. External training by the WIMS subject matter experts will ensure this is rolled out to all EGW regions and remains current.
- Improved alignment of EGW water sampling procedures with the sampling contractor via use of a real-life sample point training tool including video recording to allow any-time refresher training (ongoing).
- Reviewing the sampling & water quality testing of new mains procedure to ensure clearer triggers for re-sampling before final connection to customer.
- Embarking on necessary tank maintenance, including camera inspections and reporting which have assisted in prioritisation of the refurbishment program.
- Works to refurbish EGW's largest clear water storage in Bairnsdale commenced in March 2024, and was completed by December 2024- January 2025. This will support safe and secure supplies for the next 25 years and directly services over 80% of the East Gippsland population.
- Scoping study began of potential ground water supplies north of Bairnsdale to augment current storages at Bairnsdale and Lakes Entrance and support population growth and assist mitigation of climate change.
- Facility master planning for water treatment facilities remains an important tool to assess community needs for the next 25 years including water quality and volume aspects.



8. COMPLAINTS RELATING TO WATER QUALITY

EGW's Customer Charter sets out the obligations to customers as outlined by the Essential Services Commission's Customer Service Code for metropolitan, retail and regional water businesses. This includes specific standards and conditions of service that apply to all water businesses in Victoria.

Further information relating to EGW's Customer Charter can be found on our website www.egwater.vic.gov.au.

East Gippsland Water continues to follow the definition for water quality complaints in line with the requirements of the Essential Services Commission. Consequently, this resulted in 40 water quality complaints, compared to 38 in the 2023-24 financial year. Taste and odour complaints (usually chlorine or 'chemical taste' related) and air in the water (water pipe breaks related) were the most common classes (Table 28). Seventy-three percent (73%) of the complaints came from the large population centres of Bairnsdale, Paynesville and Metung (Table 29).

East Gippsland Water continues to improve the maintenance regimes of its water delivery network to reduce the likelihood of customer complaints.

Table 28: Summary of all customer water quality complaints 2020-2024

TYPE OF COMPLAINTS	NUMBER OF COMPLAINTS					COMPARISON BETWEEN YEARS	COMMENTS
	2020-21	2021-22	2022-23	2023-24	2024-25		
ALLEGED ILLNESS	0	0	2	1	1	Stable	
DISCOLOURED/ COLOURED WATER	11	18	11	6	14	Increase	
TASTE AND ODOUR	11	23	14	13	16	Comparable to previous	
AIR IN WATER (WHITE WATER)	23	7	6	12	7	Decrease – not significant	Usually due to local mains break
OTHER	6	5	3	6	2	Decrease	



Table 29: Summary of all customer water quality complaints per locality 2024-25

WATER SAMPLING LOCALITY	TYPE OF COMPLAINT					Total
	Alleged Illness *	Discoloured Water	Taste and Odour	White Water/Air	Other	
BAIRNSDALE		7	7		1	15
BEMM RIVER						0
BUCHAN						0
CANN RIVER						0
DINNER PLAIN						0
EAGLE POINT- PAYNESVILLE		2	3	4#		9
KALIMNA		1				1
LAKES ENTRANCE			1			1
LINDENOW						0
LINDENOW SOUTH						0
MALLACOOTA		1	1			2
MERRANGBAUR						0
METUNG		1	2	1	1	5
NICHOLSON-SWAN REACH		1		1		2
NOWA NOWA			1			1
OMEQ				1		1
ORBOST	1*	1	1			3
SUNLAKES-TOORLOO						0
SARFIELD-BRUTHEN						0
SWIFTS CREEK						0
UNKNOWN (ANONYMOUS)						0
TOTAL	1	14	16	7	2	40

* at Marlo—reported indirectly by the Shire Health Officer (EHO), though no illness confirmed

Two complaints were reported by the same person, at differing times

8.1. Alleged Health Complaints

One alleged health complaint was recorded in 2024-25 from a locality near Orbost. This related to the belief that an illness may have been caused by EGW's drinking water. The advice came indirectly from the GRPHU (Gippsland region Public Health Unit) in Traralgon, via the East Gippsland Shire Council -EHO (Environmental Health Officer), then to EGW. However, there was no direct contact of the customer with EGW, and there was 100% compliance of water quality monitoring in the area at that time.

8.2. Discoloured Water

Fourteen complaints of discoloured drinking water were recorded in 2024-25. These were mostly due to works being undertaken on water mains, high draw down from fire



hydrants and brown water or as a result of internal plumbing issues. The majority of these were managed through flushing of the reticulation system.

8.3. Taste and Odour

Sixteen taste and odour complaints were recorded in 2024-25. At least seven of these complaints related to drinking water taste and the smell of chlorine. EGW manages these complaints by re-sampling for chlorine residual and/or flushing the system where required. Re-sampling confirmed 100% compliance with health-based guidelines.

8.4. Air in Water (White Water)

Air in water can cause drinking water to appear cloudy as a result of the formation of tiny bubbles. A decrease from twelve to seven complaints related to air in water were recorded in 2024-25 (Table 28). This can be attributed to mains breaks (water loss and resulting air turbulence) and air scouring (proactive works).

8.5. Summary

There was an overall small increase in the total number of complaints from the previous year. Thirty-four of the total number of forty complaints were linked to the EGW mains water supply coming from the Mitchell system which supplies Bairnsdale-Paynesville-Metung and surrounds. These are the areas where most of the people live. There were only six complaints from other rural and remote East Gippsland locations. The most common remedy was to flush the local mains. Flushing was also a key remedy when no issue was found and internal customer plumbing was judged most likely cause.

EGW's proactive asset maintenance program to replace ageing infrastructure and routinely flush or air scour mains to remove sediment, were positive contributing factors to this good result.

9. REGULATED WATER

Regulated Water is "water that is not intended for drinking but could reasonably be mistaken for drinking water". EGW has no declared Regulated Water supplies as defined in Section 6 (2) of the *Safe Drinking Water Act 2003*.

EGW has no regulated water supplies, however, there are a number of customers who are supplied non-potable water by agreement. We remind those customers that their water is non-potable on their quarterly invoice.



10. UNDERTAKINGS, AESTHETIC STANDARD VARIATIONS AND EXEMPTIONS

EGW has no undertakings, aesthetic standard variations or exemptions relating to the provision of Safe Drinking Water during 2024-25.

11. FURTHER INFORMATION

This Water Quality Annual Report is prepared in accordance with Section 26 of the *Safe Drinking Water Act 2003*.

Section 23 of the *Safe Drinking Water Act 2003* requires that EGW make available for inspection by the public the results of any water quality monitoring program that is conducted on any drinking water supplied by this Corporation.

Customers and members of the public may access drinking water quality data by contacting EGW on the details provided below;

For further information regarding water quality information, please refer to the EGW website (www.egwater.vic.gov.au), or contact EGW on 1800 671 841.



12. GLOSSARY OF TERMS

TERM	DEFINITION
Bq	Becquerel – standard unit for radioactivity
CAMMS	EGW risk management software program
COAGULATION/ FLOCCULATION	Treatment process where chemicals are added to raw water to bind suspended solids, generally expressed as turbidity. Once bound, the chemical and turbidity form “floc” which is either settled out in the clarification process or floated off during the dissolved air flotation process.
CHLORINE GAS	Chemical added for disinfection of water
CWS	Clear water storage (treated drinking water storage)
DH	Department of Health
DWQRMS	Drinking Water Quality Risk Management System
DISSOLVED AIR FLOTATION	Treatment process utilising air dissolved in water to float suspended particles to the surface of a treatment plant clarifier cell. The float is periodically removed and clear water is drained from the bottom of the cell.
DISINFECTION	Treatment process where chlorine or ultraviolet light is introduced to the flow of clear water prior to customer consumption to kill any pathogenic organisms (make it safe to drink) that may be present in the clear water following the sedimentation/dissolved air flotation and granular media filtration processes.
FLUORIDATION	The addition of fluoride to the water supply system for the benefit of dental hygiene
FLUOROSILICIC ACID	Chemical used for fluoridation of water
GRANULAR MEDIA FILTRATION	Treatment process which utilises anthracite, sands and gravels to filter out suspended particles following the sedimentation/dissolved air flotation processes. Suspended particles are trapped within the media and clear water passes through prior to being disinfected. The particles build up in the media and are periodically washed out in a reverse flow process.
HU	Hazen units
kL	Kilolitres (1,000 litres)
L/s	Litres per second
mg/L	Milligrams per litre
ng	Nanograms
MECHANICAL DEWATERING	Treatment process where solids and water are separated through a high-speed centrifugal separation process. High speed revolutions force separation between the solid and liquid, solids are captured for processing and water is returned back to the treatment process.
ML	Megalitre (1,000,000 litres)
N/A	Not applicable
NTU	Nephelometric turbidity units (turbidity/cloudiness)
POLY ALUMINIUM CHLOROHYDRATE (PAC 23)	Coagulant chemical used during coagulation process to remove suspended solids from raw water



POLYMER (MAGNAFLOC LT20, 25, 27)	Chemical used as a flocculation aid to increase settlement rate of suspended solids in the coagulation process
POWDER ACTIVATED CARBON	Product used for reduction/removal of taste and odour compounds and algae toxins in water
RMP	Risk management plan
SOP	Standard operating procedure
SODA ASH	Chemical used for pH correction to aid the coagulation/flocculation process
SODIUM HYDROXIDE (CAUSTIC SODA)	Chemical used for pH correction to aid the coagulation/ flocculation process
SODIUM HYPOCHLORITE	Chemical added for disinfection of water
SEDIMENTATION/ CLARIFICATION	Treatment process where flocculated particles in the raw water are settled into the bottom of a clarifier and periodically removed. Clear water is taken from the top of the clarifier prior to filtration and disinfection.
WTP	Water treatment plant



APPENDIX A. RISK MANAGEMENT PLAN CERTIFICATE* OF COMPLIANCE

Risk Management Plan Audit Certificate
Safe Drinking Water Regulations 2015

Certificate Number: 186
Audit period: 1 January 2021 – 31 December 2022

To:
Aline Cardoso
Coordinator Operations Monitoring and Reporting
East Gippsland Water
PO Box 52
Bairnsdale, Vic 3875
Australian Business Number (ABN): 40 096 764 586

I, Karen Pither, after conducting a risk management plan audit of the water supplied by East Gippsland Water, am of the opinion that East Gippsland Water *has not* complied with the obligations imposed by section 7(1) of the *Safe Drinking Water Act 2003* during the audit period.

The details of the reasons for noncompliance are—

Section 8(1)(d)(v) of the Safe Drinking Water Regulation requires that a risk management plan developed by a water supplier, specifies the basis on which the location for the collection of a particular sample will be determined, so as to ensure that, for the purposes of routine sampling, samples are not taken from the same location within a water sampling locality on two consecutive occasions.

The audit noted that some chemical parameters were sampled from the same location within a sampling location on two or more consecutive occasions.

The non-compliance was considered minor as there is a low potential for a risk situation, and the potential impact of the noncompliance is not likely to be a serious or imminent risk to public health, or compromise public health.

Karen Pither


10/3/2023

Certificate Image: EGW 2-yearly drinking water quality audit certificate.*

* The Department of Health has since advised there would be no further audits conducted until after the review of the *Safe Drinking Water Regulations* in 2025.

The requirement not to sample consecutively in the same sampling location, as a compliance element, has since been removed from the revised Regulations - the *Safe Drinking Water Regulations 2025*.

EAST GIPPSLAND WATER

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LinkedIn: [East-Gippsland-Water](https://www.linkedin.com/company/East-Gippsland-Water)



East Gippsland **Water**