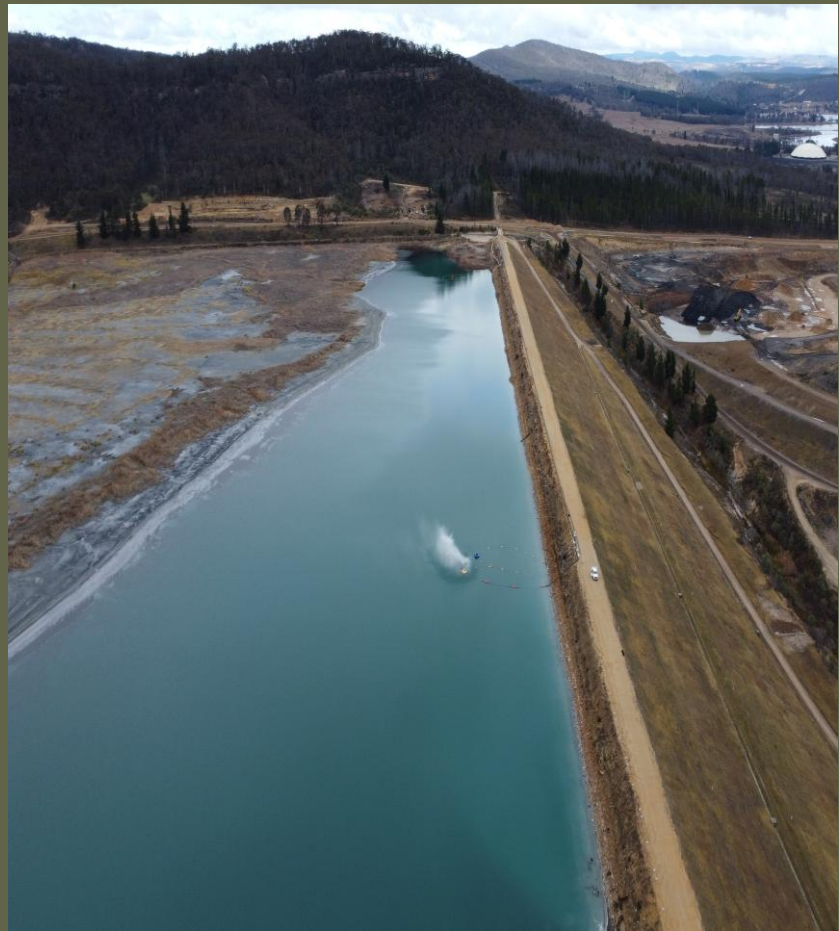



Operational Groundwater Management Plan

Lidsdale Ash Repository 2026



GPM

Document control

Title	Groundwater Management Plan - Lidsdale Ash Repository 2025
Approved by GPM Environment Manager	John Pola
Signed	
Dated	31 st March 2026

Version control

Revision	Date	Description	Author	Reviewer	Approval
Rev 0	27/09/2024	Internal Draft	Laurence Smith	Verity Blair	Verity Blair
Rev 1	19/12/2024	Draft	Verity Blair, Quan Bui	Verity Blair	John Pola
Rev 2	24/02/2025	Update to respond to WaterNSW comments	Nadia Eisenlohr	Daniel Keegan	John Pola
Rev 3	07/10/2025	Update to address DPHI comments	Quan Bui, Nadia Eisenlohr	Henry Noakes	John Pola
Rev 4	4/02/2026	Update to address EPA comments following EPA comments DOC25/354786-1	Tasman Coupe	Henry Noakes	John Pola
Rev 5	31/03/2026	Final	Tasman Coupe	Henry Noakes	John Pola

List of emergency and key contacts

Position	Name	Phone
EPA pollution hotline	General Number	131 555
Fire and Rescue NSW	General Number	000 (for pollution incidents that present an immediate threat to human health or property) 1300 729 579 (for pollution incidents that do not present an immediate threat to human health or property)
Lithgow Hospital	General Number	63502300
SafeWork NSW	General Number	131 050
24-hour community information line	General Number	1800 817 711
Environment Manager	John Pola	0429 205 290
Financial Controller & Company Secretary	Diane Dibben	0412 773 255
Managing Director	David Wood	0484 623 220
Western Region Manager	Marlon Frost	0423 127 030
Engineering Project Officer	Timothy Edwards	0413 446 686
Engineering Project Officer	Julian MacPhee	0427 094 014
Environmental Representative	David Bone	(02) 4907 4800
Lithgow City Council	General Number	(02) 6354 9999
Wallerawang Police	General Number	(02) 6355 1303
Lithgow Police	Chris Sammut	(02) 6352 8399

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Glossary/Abbreviations

Abbreviation	Expanded text
ANZG 2018	Australian and New Zealand Guidelines for fresh and marine waters (default guideline values) 2018
Approval	Approval Modification MP07_005-Mod 2
ASS	Acid Sulphate Soils
CEMP	Construction Environmental Management Plan
CEMS	Contractors Environmental Management System
Compliance audit	Verification of how implementation is proceeding with respect to a Construction Environmental Management Plan (CEMP) (which incorporates the relevant approval conditions).
CoAs	Conditions of approval
Minister, the	Minister of the NSW Department of Planning, Housing and Infrastructure (or delegate)
DGV	Default Guideline Value
DPE	Department of Planning and Environment (now DPHI)
DPHI	NSW Department of Planning, Housing and Infrastructure (formally DPE)
EIS	Environmental Impact Statement
EEC	Endangered Ecological Community
Ecologically sustainable development	Using, conserving and enhancing the community's resources so that the ecological processes on which life depends are maintained and the total quality of life now and in the future, can be increased (Council of Australian Governments, 1992)
EPA	NSW Environment Protection Authority
EPBC-CoA	Federal Conditions of Approval under the EPBC Act
ERG	Environmental Review Group – generally comprising representatives of Roads and Maritime, Environmental Representative, Project delivery team, regulatory authorities and Lithgow Council. The ERG will be maintained for the duration of the Project and will meet regularly and undertake environmental inspections. The role the ERG is to work collaboratively with the project team to provide proactive advice on environmental management issues on the Project.
EMS	Environmental Management System
EMMs	Environmental Management Measures as outlined in the project EIS documentation.
Environmental aspect	Defined by AS/NZS ISO 14001:2015 as an element of an organisation's activities, products or services that can interact with the environment.

Abbreviation	Expanded text
Environmental impact	Defined by AS/NZS ISO 14001:2015 as any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's environmental aspects.
Environmental incident	A set of circumstances that causes or threatens to cause material harm to the environment, and/or breaches or exceeds the limits or performance measures/criteria in this approval.
Environmental objective	Defined by AS/NZS ISO 14001:2015 as an overall environmental goal, consistent with the environmental policy, that an organisation sets itself to achieve.
Environmental policy	Statement by an organisation of its intention and principles for environmental performance.
Environmental target	Defined by AS/NZS ISO 14001:2015 as a detailed performance requirement, applicable to the organisation or parts thereof, that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives.
ER	Environmental Representative: A suitably qualified and experienced person independent of project design and construction personnel employed for the duration of construction. The principal point of advice in relation to all questions and complaints concerning environmental performance.
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i> (NSW)
EPL	Environment Protection Licence
ESCP	Erosion and Sediment Control Plan
GPM	Generator Property Management Pty Ltd
Hold point	Is a verification point that prevents work from commencing prior to approval from Roads and Maritime Services
KPI	Key Performance Indicator
KVAD	Kerosene Vale Ash Dam
KVAR	Kerosene Vale Ash Repository (dry stacked as on top of KVAD)
LADR	Lidsdale Ash Dam Repository
Non-compliance	An occurrence, set of circumstances or development that is a breach of the approval but is not an incident.
OEH	Office of Environment and Heritage
OEMP	Operational environmental management plan
PESCP	Progressive Erosion and Sediment Control Plan
PIRMP	Pollution Incident Response Management Plan
Principal, the	GPM
POEO Act	<i>Protection of the Environment Operations Act 1997</i> (NSW)
REMM	Revised Environmental Management Measure

Abbreviation	Expanded text
Roads and Maritime	Roads and Maritime Services
ROL	Road occupancy licence
SAP	Sensitive Area Plan
Secretary	Secretary of the Department of Planning, Housing and Infrastructure or their Nominee
SSCAD	Sawyers Swamp Creek Ash Dam
SEAR's	Secretary's Environmental Assessment Requirements
SPIR	Submission and Preferred Infrastructure Report
SWMS	Safety & Environmental work method statement
TfNSW	Transport for New South Wales
WaterNSW	The State Water Corporation of NSW
WPS	Wallerawang Power Station

1 Introduction

The Lidsdale Ash Dam Repository (LADR), formerly known as the Wallerawang Ash Repository (WAR), is located at Skelly Road, Lidsdale NSW (the Site) and is approximately 15 kilometres (km) north-west of Lithgow and 2.5 km north-east of Wallerawang Power Station (WPS). The Site comprises an area of approximately 528 hectares (ha) and is situated primarily on Lot 5 of Deposited Plan (DP) 829137.

The Site includes several distinct components, including:

- The Kerosene Vale Dry Ash Repository (KVAR) and underlying former Kerosene Vale Ash Dam (KVAD).
- Sawyers Swamp Creek Ash Dam (SSCAD).
- Lidsdale Cut and adjacent asbestos landfills.
- WPS Asbestos demolition landfill south of the SSCAD

The Site location and general layout are shown in Figure 1.1.

The Site has been used since the 1950s to store ash and other wastes generated by the Wallerawang Power Station. Site operations started prior to the commencement of the *Environmental Planning and Assessment Act 1979* (EP&A Act), when the WPS and associated facilities were owned by the NSW Government.

Ownership and responsibility for the Site was transferred from Energy Australia NSW Pty Ltd to Generator Property Management Pty Limited (GPM) in September 2020. GPM's objectives at the Site include closure of the operational facilities and the rehabilitation and management of the Site in general including the Kerosene Ash Repository (KVAR) and the Sawyers Swamp Creek Ash Dam (SSCAD).

This Operational Groundwater Management Plan (OGMP) has been developed to ensure the care and maintenance of the Site is carried out responsibly and in accordance with the relevant Conditions of Approval (CoAs) and any other requirements.

GPM and its contractors are also undertaking construction activities that will be managed under the Site's Construction Environmental Management Plan (CEMP).

1.1 Background to the Lidsdale Ash Repository

The Lidsdale Site was originally farmland that was gradually turned into mining premises during the late 1800s into the early 20th century. The Kerosene Vale mines were originally a series of open cut operations that changed to underground mines using portals driven under the northern escarpment.

The original ash placement operations were at the KVAD. The mining void was filled with ash transported from the WPS as a slurry (i.e. wet ash placement). When the KVAD was full, it was capped with a clay and then ash placement operations began at the SSCAD, which saw wet ash placement take place from 1980 to 2003. The SSCAD is still used to manage site water requirements with water levels managed by irrigation for dust suppression and other onsite water uses to prevent discharge to Sawyers Swamp Creek. When required, water is transferred for treatment via a Caustic Injection Plant (CIP), clarified and discharged through a licenced discharge point (LDP3). The SSCAD is a declared dam under the NSW *Dams Safety Act 2015 No 26* (DS Act) and is subject to regular surveillance and monitoring by certified engineers in accordance with the DS Act.

The need to further develop the KVAR area to maintain power-generation operations at WPS was identified in 2001. The existing wet ash storage area (i.e. the SSCAD) was approaching its design capacity and the placement of dry ash at the KVAR was identified as a viable alternative. Conversion from wet to dry ash placement aimed to minimise environmental and social impacts potentially resulting from heavy metal accumulation. The extent of both stages is outlined in Figure 1.2.

It is noted that the Site has recently been formally Declared under the *Contaminated Land Management Act* (CLM Act) by the EPA and is subject to a Voluntary Management Plan (VMP) requiring detailed and extensive investigations that will guide long term closure works and may require additional works on the Site that would be subject to further approval.

1.2 Relevant project approval

In 2002, Project Approval was granted by the then Minister of Planning to change from wet to dry ash-producing activities and to use the KVAR area for dry ash storage.

The placement of ash on the Repository was developed in two stages:

- Stage 1: Comprises about one third of the area associated with the Site and located on the south-western section of the site, this area was designed to operate for a period of 5 years and reached its design capacity and has been covered.
- Stage 2: Comprises the remainder the Site, covering an area from the open face of the Stage 1 area to the edge of the original storage area. This stage was designed to operate about 10 years, depending on actual ash production rates.

On 26 November 2008, Project Approval (07_0005) was granted by the then Minister of Planning for the extension of the existing KVAR area to permit the continued disposal of ash generated by the WPS under Part 3A (now repealed) of the *Environmental Planning and Assessment Act 1979*. The KVAR Stage 1 placement works were completed and capped in February 2009. The KVAR Stage 2 placement works commenced soon after in April 2009.

In January 2014, WPS's Unit 7 was removed from service and deregistered from the market; whilst in March 2014, Unit 8 was placed in long term storage. However, in November 2014, EnergyAustralia NSW announced that Unit 8 was to be removed from service and the WPS deregistered from the market.

WPS ceased energy production in April 2014 and is currently being decommissioned and dismantled. The bulk transport and disposal of ash to the KVAR ceased following the closure of the WPS. The Lidsdale Ash Repository is currently being managed in a care and maintenance arrangement. Environmental studies and investigations are currently underway to support GPM's safe decommissioning, demolition, rehabilitation and management of ongoing regulatory and contractual obligations associated with the Lidsdale Ash Repository area.

Modification 1 to 07_005 was approved on 9 August 2018 under section 75W of the EP&A Act. This was to allow for the importation of clean fill (virgin excavated natural material (VENM) and excavated natural material (ENM)) for use in the final shaping and capping of KVAR and SSCAD over two years. This modification included a revised project area that extended the originally approved project to include the area covered by SSCAD.

Modification 2 to 07_005 was approved on 13 October 2023 under section 96(1A) of the EP&A Act. This was to allow for the importation of fill over an additional 10 years (i.e. until 13 October 2033).

The most complete description of the onsite activities was provided in the original *Kerosene Vale Stage 2 Ash Repository Area Environmental Assessment* prepared by Parsons Brinckerhoff in April 2008. This focused on the ongoing ash management without providing any details of site rehabilitation requirements when the power station closed. However, it did include the realignment of a section of Sawyers Swamp Creek (SSC) to allow the structural earthworks required to achieve an acceptable factor of safety against failure of the KVAR ash stockpiles during earthquakes. The subsequent modification applications focussed on the potential impacts of the importation of fill material, rather than on activities within the Site where the material would be utilised.

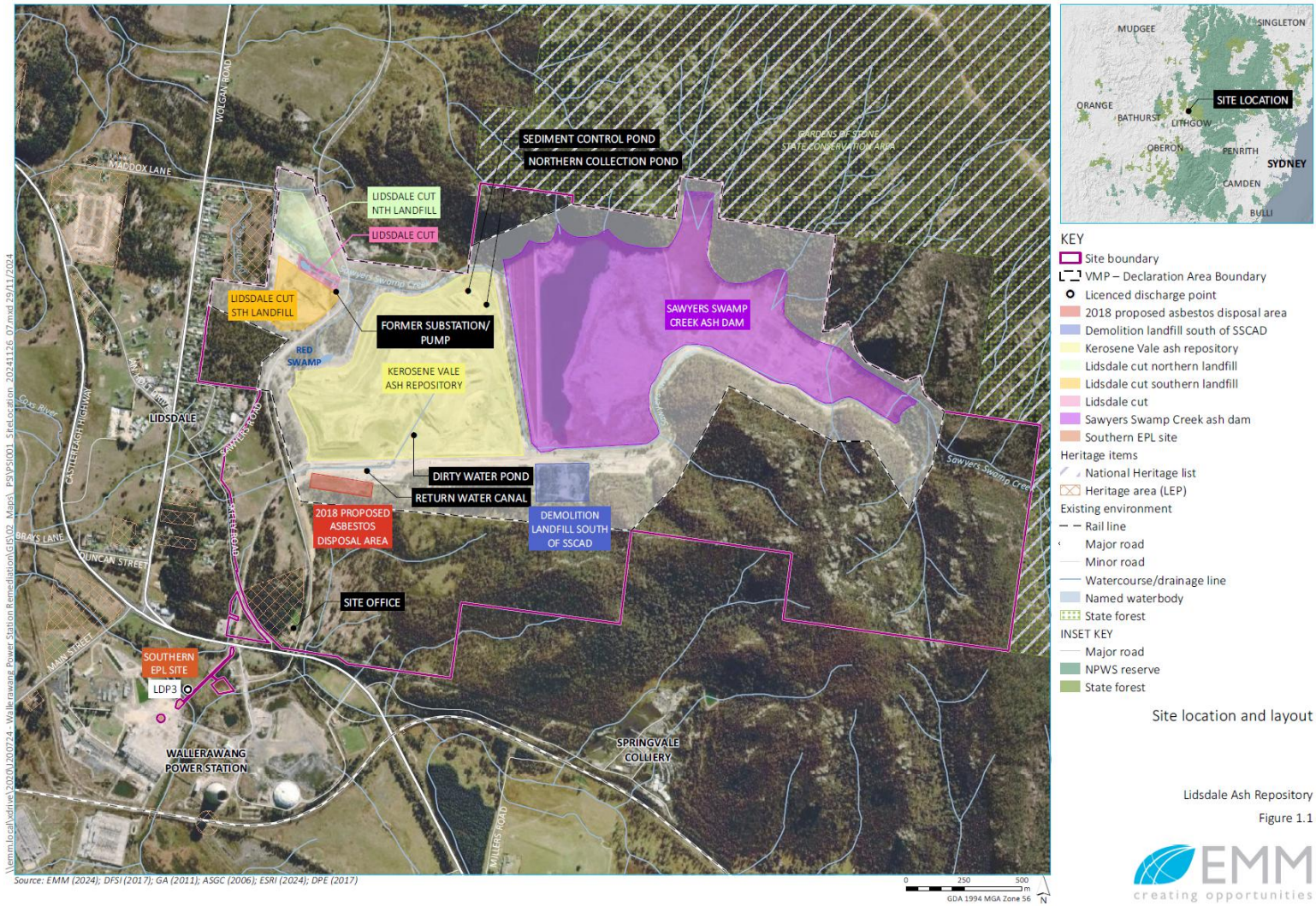


Figure 1.1 Site location and layout



Figure 1.2 Historical ash placement at the cessation of ash placement in KVAR

1.3 Operational Environmental Management Plan and sub-plans

CoA 6.4 requires the applicant to develop an OEMP that outlines the environmental management practices and procedures to be followed during operations, while CoA 6.5 requires the preparation and implementation of the following management plans:

- **Operational Noise Management Plan (ONMP)** - identifies the management measures to minimise operational noise impacts
- **Operational Groundwater Management Plan (OGMP)** - identifies the management measures to minimise operational groundwater impacts
- **Operational Air Quality Management Plan (OAQMP)** - identifies the management measures to minimise operational air quality
- **Operational Surface Water Management Plan (OSWMP)** – identifies the management measures to minimise operational surface water impacts
- **Operational Landscape/Revegetation Plan (OLP)** - identifies the management measures to minimise operational biodiversity impacts
- **Operational Transport Management Plan (OTMP)** - identifies the management measures to minimise traffic and transport impacts during operation

Given the requirement to develop these additional plans in conjunction with the OEMP, these plans are identified as sub-plans to the OEMP.

Table 1.1 provides a high-level overview of the proposed activities that are covered by the OEMP and those covered by the CEMP. Further information on the scope of this OEMP is provided in section 1.4.

Table 1.1 Activities covered by the CEMP and OEMP

Environmental Management Plan	Activities covered
CEMP – construction activities	<ul style="list-style-type: none"> • Sawyers Swamp Creek realignment • Construction of stability berms around the perimeter of the KVAR • Excavation of the former pine plantation area • Sediment controls and surface water dams associated with construction of the KVAR stability berm and realignment of the Sawyers Swamp Creek • Establishment of freshwater collection ponds on the northern edge of SSCAD • Rearrangement of water flows around the KVAR • Establishment of access roads onto the surface of the SSCAD and associated roads across the dam surface • Reinstatement of environmental controls for historic landfill areas including capping of slumped areas, reprofiling for water management and control of sediment runoff during these activities • Concurrent construction activities

Environmental Management Plan	Activities covered
OEMP – care and maintenance operations	<ul style="list-style-type: none"> • Ash management • Management of on-site water systems • Capping material haulage, placement and management • Landscaping and revegetation/rehabilitation of the site • Upgrading and maintaining internal access roads in the project area

1.4 Environmental management system overview

GPM’s Environmental Management System (EMS) is based on AS/NZS ISO 14001. The ISO 14001 standard provides best practice specifications for the implementation of an EMS. An EMS provides a framework for managing the company’s environmental responsibilities so that they are integrated into overall operations. The standard approach integrates environmental management and supports the company’s compliance with legislated and voluntary environmental requirements, as well as continuously improving their overall environmental performance.

The relevant environmental standard ensures a consistent approach is undertaken to integrate environmental management at all levels of the organisation by:

- identifying and maintaining awareness of relevant environmental legislation
- assignment of roles and responsibilities
- establishment of procedures for internal and external communications
- establishment of procedures for monitoring and measuring environmental performance
- setting and reviewing objectives and targets for improving environmental performance
- monitoring and measuring environmental compliance and community inquiries
- setting and reviewing management system programs for achieving objectives and targets
- provision of environmental training aligned to skill requirements
- review of EMS performance for continual improvement.

This OGMP has been developed to be consistent with the relevant provisions of GPM’s EMS, including approvals and license as noted above.

A summary of the EMS and its interaction with the CEMP and OEMP is provided in Figure 1.3.

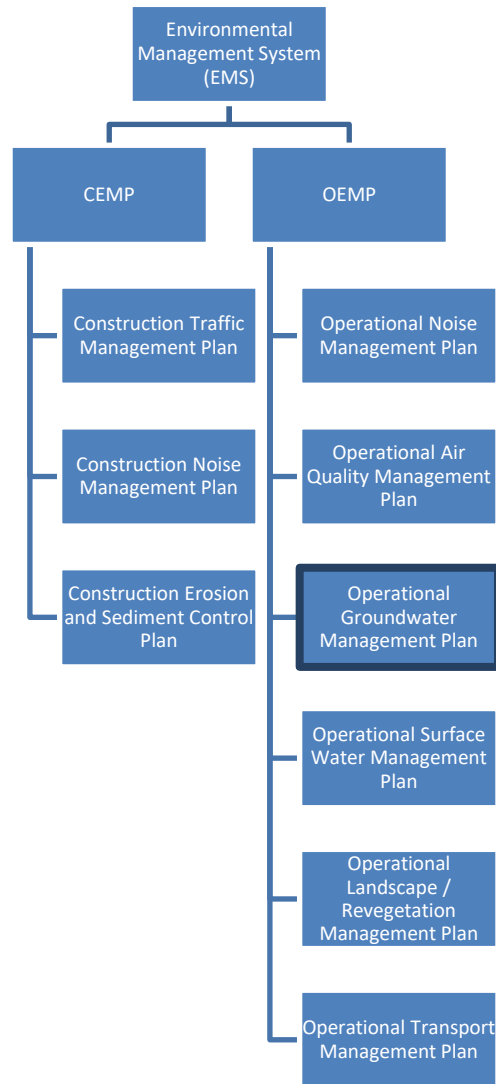


Figure 1.3 Environmental Management System flowchart

1.5 Interactions with other management plans and strategies

This OGMP (outlined in Figure 1.3 above) is a sub-plan to the OEMP and interrelates with the other (sub) management plans set out in section 1.3 and 1.4 above.

1.6 Reference documents

The OEMP incorporates the obligations and criteria outlined in the following documents:

- Project Approval 07_0005 (NSW Department of Planning)
- Submission Report – Statement of Commitments (Parsons Brinckerhoff 2008)
- Modification application 07_0005 Mod 1
- Modification application 07_0005 Mod 2
- Wallerawang Power Station to Submissions Report (EA 2018)
- Environment Protection Licence 21185 (NSW Environment Protection Authority)
- Works Approval (Water Mgt Act 2000)

1.7 Endorsement and approval

1.7.1 Internal approval of OEMP and sub-plans

The OEMP and associated sub-plans, strategies and monitoring programs undergo ongoing review by the GPM team. Following the ongoing review and revision process, internal signoff will be provided.

Once internal approval is received, the documents will be provided to the Environmental Representative (ER) for review prior to undertaking external consultation, review and approval processes described below.

1.7.2 External endorsement and approval of OEMP and sub-plans

Table 1.2 below provides a summary of the relevant authority(s), Council(s) and agencies that require consultation during preparation of the OEMP sub-plans and monitoring programs in accordance with the conditions of approval.

External distribution for consultation and approval of the OEMP, sub-plans and monitoring programs will be undertaken and updated in consultation with the relevant external parties (refer Table 1.2) and will then be endorsed by the ER in accordance with CoA 6.5. After this external consultation and endorsement process is complete the required documents will be submitted to the Secretary for approval, in accordance with CoA 6.4.

This will occur no later than four weeks prior to the commencement of operation of the project (unless otherwise agreed by the Secretary).

A copy of the ER Endorsement of the OGMP is included in Appendix A of this Plan.

Consultation outcomes are detailed in Table 1.3 and consultation records are provided in Appendix E.

Table 1.2 Consultation requirements for the OEMP and sub-plans

Report	Relevant CoA	Condition of Approval	Consultation required
Operational Environmental Management Plan	6.4	The plan shall be submitted for the approval of the Secretary no later than four weeks prior to the commencement of operation of the project, unless otherwise agreed by the Secretary.	Secretary (DPHI)
Operational Noise Management plan	6.5a	The plan shall be prepared in consultation with, and to the satisfaction of, the EPA.	EPA
Groundwater Management Plan	6.5b	The plan shall be prepared in consultation with, and to the satisfaction of WaterNSW.	WaterNSW
Surface Water Management Plan	6.5c	The plan shall be based on best environmental practice and shall be prepared in consultation with, and to the satisfaction of, WaterNSW and Fisheries NSW.	WaterNSW Fisheries NSW
Air Quality Management Plan	6.5d	The plan shall be prepared in consultation with, and to the satisfaction of, the EPA.	EPA
Operational Transport Management Plan	6.5f	The plan must be prepared in consultation with TfNSW and Council.	TfNSW Lithgow Council

Table 1.3 Consultation outcomes for OGMP

Agency	Date provided	Comments	Where addressed
WaterNSW	04/02/2025	Chrome 6+ (Cr6+), Mercury (Hg) and Silver (Ag) should be included in groundwater monitoring given historic data at the site	Aluminium (Al), Mercury (Hg) and Silver (Ag) have been added to the list of analytes sampled in Table B1. Speciation of chromium, which includes Cr6+, will be undertaken in the following sampling round if significant chromium contamination is measured in the dissolved metals and metalloid concentrations from groundwater samples.
		Table B2 should be updated to include sampling for Aluminium (Al), Chrome 6+ (Cr6+), Mercury (Hg) and Silver (Ag) given historic issues identified	Aluminium (Al), Mercury (Hg) and Silver (Ag) have been added to the list of analytes sampled in Table B1. Speciation of chromium, which includes Cr6+, will be undertaken in the following sampling round if significant chromium contamination is measured in the dissolved metals and metalloid concentrations from groundwater samples.
		There is no discussion as to what the four groundwater monitoring sites (A9, A17, GW10 & GW11) identified in Figure B1 as “extra water quality and water level sites – not part of OEMP” are for, and why they aren’t included in the OEMP. WaterNSW considers that more detail regarding these monitoring sites should be included as part of the site’s OGMP, even if non-routine sites	These bores are not part of the OEMP monitoring program and have been removed from the figure to avoid confusion.
		Section 6.2 of the OGMP notes that monitoring shall be conducted 6 monthly at 11 locations whereas, Appendix B of the OGMP suggests 13 water quality monitoring locations. The OGMP should be updated for consistency	Section 6.2 has been updated to note 13 groundwater monitoring locations. Note: In Revision 3 of this document, Section 6.2 is now Section 5.2, and this statement has been moved to the Groundwater Monitoring Program in Appendix B. Section 5.2 refers directly to Appendix B. Based on the recommendation of the EPA and GPM water management objectives an additional eight (8) locations have been added to the program and Appendix B has been updated to reflect the updated total of 21 groundwater monitoring locations
		Clarification should be included in Table B4 on when relevant agencies shall be notified if Low Hazard (Stage 1) trigger continues, and where Stage 2 is not triggered.	Table B4 has been updated to clarify when relevant agencies shall be notified if Low Hazard (Stage 1) trigger continues, and where Stage 2 is not triggered. Note: In Revision 3 of this document, as part of the update of the Groundwater Monitoring Program, the TARP has been changed to a figure (Figure B2) and this update carried over to the figure.
WaterNSW	21/07/2025	Thank you very much for sending through the updated plans. Water NSW has now reviewed the and have no further comments. Just a quick note, the flow gauge upstream of LDP 3 operated by Water NSW is 212054 (Coxs River @ Wallerawang Power Station), probably mistakenly reported as 12054.	Reference to LDP3 flow gauge updated.

Agency	Date provided	Comments	Where addressed
NSW EPA	22/10/2025	Water quality monitoring of groundwater bores within irrigation areas proposed to be undertaken to confirm contaminate pathways.	MW102S, MW102D and MW109D added to the 6-monthly program. An additional 5 wells within Sawyer Swamp Creek Ash Dam (CA1, CA2, CB1, CB2 and CB3) have also been added to the 6-monthly program, the OEMP and this document due to GPM water management objectives.

2 Purpose and objectives

2.1 Purpose

This OGMP for the Lidsdale Ash Repository outlines strategies and actions to mitigate environmental impacts during the project's operational phase. It is designed to set clear protocols and responsibilities, and to thereby ensure that risks are managed, and sustainable practices are upheld. This sub-plan supports the OEMP and should be read in conjunction with the OEMP.

2.2 Objectives

The use of monitoring locations up and down-gradient of the ash placement area(s) allows a comparison between groundwater quality in the ash deposits and the (regional) bedrock groundwater system. The monitoring of groundwater quality at regular intervals provides a clear indication of trends and allows mitigation and remediation measures to be implemented (if required).

Specialist consultants have established the groundwater monitoring bores and continue to undertake the prescribed monitoring and analysis of groundwater results, as per this plan.

Groundwater quality monitoring will be undertaken on regular cycle in accordance with the Groundwater monitoring program in Appendix B.

2.3 Targets

This sub-plan seeks to establish targets and indicators as follows.

Targets:

- To characterise groundwater by monitoring the water quality and water levels in groundwater systems underlying and within the Ash repository and surrounding area.
- To ensure natural groundwater quality and beneficial uses/environmental values are not degraded, and to ensure negligible contaminants are not migrating offsite in the regional groundwater system or via connected surface water systems.

Indicators:

- Negligible groundwater quality changes by comparing results from monitoring with historical background and upgradient regional groundwater levels and concentrations.
- Supporting documentation, including groundwater monitoring analytes and methods, are presented in Appendix B and baseline data is provided in Appendix C and Appendix D.

3 Environmental requirements

3.1 Relevant Conditions of Approval

The relevant CoAs, and where they are addressed in this OGWMP are provided in Table 3.1.

Table 3.1 Relevant Conditions of Approval and where they are addressed

Relevant CoA	Condition of Approval	Where addressed in this plan
3.4	<p>The Applicant shall prepare and implement a Groundwater Monitoring Program to monitor the impacts of ash placement activities on local groundwater quality and hydrology. The Program shall be developed in consultation with, and to the satisfaction of, WaterNSW, and shall describe the location, frequency, rationale and procedures and protocols for collecting groundwater samples as well as the parameters analysed and methods of analysis. The monitoring program shall be ongoing for the life of the project and include, but not be limited to:</p> <ul style="list-style-type: none"> a) monitoring at established bore sites (or replacement bore sites in the event that existing sites are damaged or lost) as described in the document referred to under condition 1.1 of this approval; and b) a schedule for periodic monitoring of groundwater quality, depth and flow at all monitoring sites, at an initial frequency of no less than once every month for the first 12 months of operation. <p>The monitoring program shall form part of the Groundwater Management Plan referred to in condition 6.5b) of this approval.</p>	<p>Appendix B Appendix C</p>
6.5 (b)	<p>A Groundwater Management Plan to detail measures to mitigate and manage groundwater impacts. The Plan shall be prepared in consultation with, and to the satisfaction of, WaterNSW and include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> i) baseline data on groundwater quality, depth and flow in the project area ii) groundwater objectives and impact assessment criteria iii) a program to monitor groundwater flows and groundwater quality in the project area as required by condition 3.4 of this approval iv) a protocol for the investigation of identified exceedances of the groundwater impact assessment criteria v) a response plan to address potential exceedances and groundwater quality impacts vi) provisions for periodic reporting of results to WaterNSW. 	<p>Table 4.1 Appendix C Table 4.1 Table 4.1, Appendix B Table 4.1, Appendix B Appendix B Section 5.2</p>

3.2 Compliance tracking

CoA 4.2 mandates a compliance tracking program to track compliance with the requirements before commencing operations. A compliance tracking tool was developed by Energy Australia in 2005 and has been reviewed and updated for use by GPM following Modification 2 approval. The program is contained in the OEMP and is used to ensure effective and efficient tracking of compliance.

Details on compliance management, including roles and responsibilities, are provided throughout Section 3 of the OEMP.

4 Environmental management

4.1 Management measures

Management actions to minimise operational impacts are provided in Table 4.1.

Table 4.1 Environmental Management Measures

Relevant aspect	Management and mitigation measures	Source of requirement	Frequency	Relevant records	Responsibility
Groundwater quality monitoring	Monitoring to be undertaken in accordance with the OGMP, attached as Appendix B. Water quality monitoring results shall be assessed by a suitably qualified professional and compared to the Site Specific Trigger Values (refer to Appendix B, Figure B2).	CoA 3.4	6-monthly (unless advised otherwise)	Groundwater monitoring records	GPM / Specialised Consultant
Groundwater level monitoring	Monitoring to be undertaken in accordance with the OGMP, attached as Appendix B. Water level monitoring results shall be assessed by a suitably qualified professional and compared to the Site Specific Trigger Values (refer to Appendix B, Figure B2).	CoA 3.4	6-monthly	Groundwater monitoring records	GPM / Specialised Consultant
Groundwater flow monitoring	Meters will be monitored at areas of known groundwater seepage, at: <ul style="list-style-type: none"> SSCAD dam wall outflow KVAD seepage collection system 	CoA 3.4	Daily with 6-monthly download	Flow monitoring records	GPM / Specialised Consultant
Reporting	The results and analysis of the monitoring data will be included as part of the Annual Environmental Management Report (AEMR) and assessed against the relevant recent data, relevant upgradient data, and the Site Specific Trigger Values presented in the OGMP. Results and analysis will include interpretations and discussion by a suitably qualified person. Any exceedance of Site Specific Trigger Values will be reported as per the TARP (refer Appendix B, Figure B2).	CoA 7.3 CoA 6.4(b)	Annually	AEMR Stage 1 Trigger Exceedance Reports Stage 2 Trigger Rectification Reports	GPM / Specialised Consultant

5 Administrative requirements

5.1 Incidents and non-compliances

5.1.1 Incidents

All incidents will be reported and investigated, and corrective actions assigned to prevent future occurrences in accordance with the OEMP Section 3.8.

The approval defines an incident as:

A set of circumstances that causes or threatens to cause material harm to the environment, and/or breaches or exceeds the limits or performance measures/criteria in this approval.

Material harm (which includes actual or potential harm) to the health or safety of human beings or to ecosystems that is not trivial or that results in actual or potential loss or property damage exceeding a threshold dollar value as identified by the POEO Act.

The Secretary must be notified in writing via the Major Projects website immediately after the Project team becomes aware of an incident in accordance with CoA 7.1. The notification must identify the development (including the application number and the name of the development if it has one) and set out the location and nature of the incident.

Section 3.8 of the OEMP details environmental incidents and the response to environmental emergencies for the Project. This includes the reporting, notification and investigation of environmental incidents. Emergency contact details are also provided. In the event of an environmental incident or emergency related to the implementation of this OGMP, the responses detailed in the OEMP are to be implemented.

5.1.2 Non-compliance

The approval defines non-compliance as:

An occurrence, set of circumstances or development that is a breach of the approval but is not an incident.

The Secretary must be notified in writing via the Major Projects website within seven days after the Project team becomes aware of any non-compliance in accordance with CoA 7.2. A non-compliance notification must identify the development and the application number for it, set out the condition of approval that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

Section 3.8.1 of the OEMP details the Project team's response following the identification of a non-compliance with the CoA, the OEMP and associated sub-plans. This includes the reporting, investigation and notification of non-compliances. Non-compliance with this OGMP will be addressed as required by the OEMP.

5.2 Reporting

Environmental monitoring for the Lidsdale Ash Repository area is designed to comply with the requirements of statutory approvals and provide an analysis of the condition of the environment surrounding the works.

An overview of the environmental monitoring activities for the project area specified under Section 5.2 of the OEMP.

Groundwater monitoring frequency and locations are specified in the Groundwater Monitoring Program in Appendix B.

Groundwater monitoring data will be incorporated into the Annual Environmental Management Report (AEMR) which will be submitted to the Secretary each year. In accordance with CoA 6.5(b)vi, the groundwater component of the AEMR will also be provided to WaterNSW.

5.3 Review

A review of the OEMP, sub-plans (including this OGMP) and monitoring programs will be undertaken during operations as required. These reviews will be completed to determine the efficiency of the plans and monitoring programs and whether any changes are required to ensure compliance.

Circumstances which may trigger a review include:

- changes to design, construction, work methods, legislation, or policy
- incidents, complaints or non-compliance
- changes identified by continuous improvement
- changes to key management plans that are relevant
- where additional monitoring measures are identified in annual reviews or audits.
- where monitoring or numerical modelling demonstrates a change to the conceptual hydrogeological understanding.

In addition and in accordance with CoA 6.6, GPM will review and, if necessary, revise the studies, strategies and plans required under the conditions of approval to the satisfaction of the Secretary within three months of:

- the submission of an incident report under CoA 7.1
- the submission of an Annual Review under CoA 7.3
- the submission of an Independent Environmental Audit under CoA 4.2
- the modification of the conditions of this approval (unless the CoAs require otherwise).

Where this review leads to revisions in any such document, then within 4 weeks of the review, GPM will submit the revised document to the Secretary for approval, unless otherwise agreed with the Secretary.

In accordance with CoA 6.5A, this plan, this OGMP has been updated prior to the importation of capping material to the site from sources outside of the Lithgow local government area.

Appendix A ER Letter of Endorsement

31 March 2026

John Pola
Environment Manager
Generator Property Management
110 Skelly Road
Lidsdale NSW 2790

Re: MP07_0005 - Wallerawang Ash Dam Areas - Environmental Representative Endorsement - Operational Groundwater Quality Management Plan Rev 5

Dear John,

Following a review of the documents provided for the Operation Groundwater Quality Management Plan (GWQMP) Rev 5, I can provide the following endorsement.

The GWQMP Rev 5 has been reviewed against the Mod 2 Consolidated Conditions of Approval, in particular Condition 6.5b. Consultation with WaterNSW and DPHI has been undertaken for this plan and has all comments have been addressed in the revised document. All comments from DPHI have been closed.

All conditions of approval and mitigation measures are contained in the GWQMP Rev 5.

The document is endorsed for submission to DPHI for approval.

Yours sincerely



David Bone
Independent Environmental Representative
dbone@emmconsulting.com.au

Appendix B Groundwater Monitoring Program

Introduction

This Groundwater Monitoring Program has been developed in accordance with CoA 3.4 and will be ongoing for the life of the project.

Elected monitoring locations provide spatial coverage of the Site, target relevant groundwater systems and understand the potential for off-site contaminant migration, and are as described in the documents referred to under CoA 1.1.

Monitoring locations will be assessed for functionality during each monitoring round, and in the event that monitoring locations are damaged or lost, replacement locations will be established.

The groundwater monitoring program comprises a well network of 34 locations across the site. Twenty-one (21) locations monitored for both groundwater level and groundwater quality, with thirteen (13) locations monitored for groundwater level only. A summary of the monitoring bores elected for groundwater monitoring is provided in Table B2.

Groundwater quality monitoring

Groundwater quality data is to be collected every six-months at twenty-one (21) monitoring bores. Elected monitoring bores provide spatial coverage of the Site, target relevant groundwater systems and understand the potential for off-site contaminant migration.

Groundwater quality monitoring will be undertaken by suitably qualified and experienced site personnel as follows:

1. Groundwater samples will be retrieved from dedicated Hydrasleeves™ installed in the monitoring bores.
2. Physico-chemical parameters will be measured using a calibrated water quality meter.
3. Samples will be collected in laboratory supplied containers, stored immediately in chilled eskies and submitted to a National Association of Testing Authorities (NATA) accredited laboratory for analysis.

Analytes have been elected based on potential analytes present across the site, either naturally occurring or introduced via anthropogenic activities. A schedule of testing analytes is provided in Table B1.

Table B1 Groundwater monitoring parameters and analytes

Category	Analytes	Sampling and analysis methods
Physio-chemical parameters	pH, dissolved oxygen (DO), temperature, specific conductance (SPC), total dissolved solids (TDS), redox potential (ORP)	Analysis is to be undertaken during fieldworks using a calibrated water quality meter.
	Total dissolved solids (TDS)	Analysis is to be undertaken by a NATA-certified laboratory.
Anions	Bicarbonate, carbonate, chloride, fluoride, sulfate	Analysis is to be undertaken by a NATA- certified laboratory.
Cations	Sodium, potassium, calcium, magnesium	Analysis is to be undertaken by a NATA- certified laboratory.
Dissolved metals and metalloids	Aluminium (Al), arsenic (As) ^α , boron (B), cadmium (Cd), chromium (Cr) ^α , copper (Cu), lead (Pb), manganese (Mn), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), and zinc (Zn)	Samples are to be filtered using a 0.45 µm filter. Analysis is to be undertaken by a NATA-certified laboratory.
PAHs	Benzo(a)pyrene	Analysis is to be undertaken by a NATA- certified laboratory.

Note: α – speciation of arsenic and chromium will be undertaken in the following sampling round if arsenic or chromium is detected above the guideline limit for 95% Freshwater species protection (ANZECC 2000)

In general accordance with Groundwater Sampling and Analysis – A Field Guide (Geoscience Australia 2009), groundwater quality monitoring will include the following Quality Controls:

1. Dedicated sampling equipment will be installed in the monitoring bores to prevent cross contamination.
2. Dedicated single use consumables (i.e. gloves, field filters, syringes and Hydrasleeves™) will be used for sample collection, minimising the potential for cross contamination.
3. Calibration certificates for hired equipment will be retained. Subsequent calibrations will be undertaken daily and documented.
4. One pair of field duplicates and a triplicate sample will be collected at a frequency of 1 sample per 20 primary samples. These are to be analysed for equivalent analytes as per the primary sample (refer Table B1).
5. Rinsate blanks will be collected by running de-ionised water over sampling equipment and collected in sample bottles
6. A set of trip blanks and trip spikes are to be transported to Site with empty laboratory samples bottles and transported back to the laboratory with the collected water samples.

A summary of the monitoring bores is provided in Table B2. Figure B1 shows the location of all groundwater monitoring bores.

Groundwater level monitoring

Groundwater level monitoring will be undertaken twice yearly (i.e. 6-monthly) at thirty-four (34) monitoring bores as follows:

1. Groundwater levels will be measured using a hand-held dip meter at all thirty-four (34) locations, prior to the retrieval of sampling equipment (i.e. Hydrasleeves or loggers). The date and time will also be recorded.
2. Automated dataloggers and barometric loggers will be checked for functionality and downloaded at thirteen (13) locations. Loggers will be redeployed as soon as possible after download has completed and set to record groundwater level and temperature at a 6-hourly frequency.

A summary of the monitoring bores elected for groundwater monitoring is provided in Table B2. Figure B1 shows the location of all groundwater monitoring bores.

Table B2 Groundwater monitoring bores

Bore	Easting	Northing	Top of Casing ('mAHD)	Screen interval (² mbgl)		Target groundwater system	Groundwater monitoring		
				Top	Base		Quality	Level (³ automated)	Level (⁴ manual)
WGM1/D1	231988	6301410	954.91	2.6	9.0	Regolith & Illawarra Coal Measures	X		X
WGM1/D2	229680	6301388	929.06	5.6	18.0	Illawarra Coal Measures	X		X
WGM1/D3	230276	6301753	930.30	4.1	17.5	Illawarra Coal Measures	X		X
WGM1/D4	230160	6302350	907.42	4.1	6.0	Regolith of Illawarra Coal Measures	X		X
WGM1/D5	229642	6302206	904.76	4.1	14.3	Illawarra Coal Measures	X		X
WGM1/D6	229412	6302028	907.39	2.5	14.9	Illawarra Coal Measures	X		X
WH_MW02	229246	6301826	924.41	24.0	27.0	Illawarra Coal Measures	X		X
WH_MW03	229272	6301492	921.23	16.0	19.0	Illawarra Coal Measures	X		X
WJ_MW03	229257	6302482	897.03	4.5	7.5	Illawarra Coal Measures	X		X
WK_MW01	230445	6301466	945.05	5.0	9.0	Illawarra Coal Measures	X		X
WK_MW04	230290	6301459	937.24	3.0	6.0	Illawarra Coal Measures	X		X
WK_MW06	230279	6301346	948.91	26.0	30.0	Illawarra Coal Measures	X		X
WWD1A	231654	6301882	943.60	11.5	14.5	Sawyers Swamp Creek Ash Dam		X	X
WWD1B	231645	6301881	944.45	20.5	23.5	Illawarra Coal Measures		X	X

Table B2 Groundwater monitoring bores

Bore	Easting	Northing	Top of Casing ('mAHD)	Screen interval (²mbgl)		Target groundwater system	Groundwater monitoring		
				Top	Base		Quality	Level (³automated)	Level (⁴manual)
WWD2A	230974	6302184	943.71	20.5	23.5	Sawyers Swamp Creek Ash Dam		X	X
WWD2B	230974	6302187	943.80	29.0	32.0	Illawarra Coal Measures		X	X
WWD5A	230026	6302165	918.46	4.5	7.5	Kerosene Vale Ash Repository		X	X
WWD5B	230015	6302148	921.70	17.5	20.5	Illawarra Coal Measures		X	X
WWD6A	229672	6301674	943.11	26.7	29.7	Kerosene Vale Ash Dam		X	X
WWD6B	229667	6301680	942.76	30.3	34.3	Illawarra Coal Measures		X	X
WWD10	229287	6302149	906.17	8.9	11.9	Illawarra Coal Measures		X	X
WWD12	229476	6302519	902.30	6.6	9.6	Illawarra Coal Measures		X	X
WWD14A	229847	6301909	941.42	17.6	20.6	Kerosene Vale Ash Dam		X	X
WWD14B	229845	6301905	941.34	22.6	25.6	Regolith of Illawarra Coal Measures		X	X
WH_MW04	229080	6301944	909.04	49.0	55.0	Illawarra Coal Measures		X	X
MW102S	229625	6300714	905.10	5.9	8.9	Siltstone	X		X
MW102D	229627	6300704	905.03	19.7	25.7	Siltstone	X		X
MW109D	229061	6301498	898.73	23.2	29.2	Siltstone	X		X

Table B2 Groundwater monitoring bores

Bore	Easting	Northing	Top of Casing (¹ mAHD)	Screen interval (² mbgl)		Target groundwater system	Groundwater monitoring		
				Top	Base		Quality	Level (³ automated)	Level (⁴ manual)
MW118 ⁵	229237	6302344	902.66	6.5	9.5	Regolith & Illawarra Coal Measures	X		X
CA1	230919	6301963	941.46	0.5	3.5	Sawyers Swamp Creek Ash Dam	X		X
CA2	230818	6302012	941.84	0.5	3.5	Sawyers Swamp Creek Ash Dam	X		X
CB1	231088	6302060	942.85	1.5	4.5	Sawyers Swamp Creek Ash Dam	X		X
CB2	231134	6302152	942.74	1.25	4.25	Sawyers Swamp Creek Ash Dam	X		X
CB3	231173	6302242	942.70	0.8	3.8	Sawyers Swamp Creek Ash Dam	X		X

Note: 1. Metres above Australian Height Datum; 2. Metres below ground level; 3. As recorded by installed automated dataloggers; 4. As measured using a hand-held dip meter, 5. Replacement of EPL well WI_MW03.

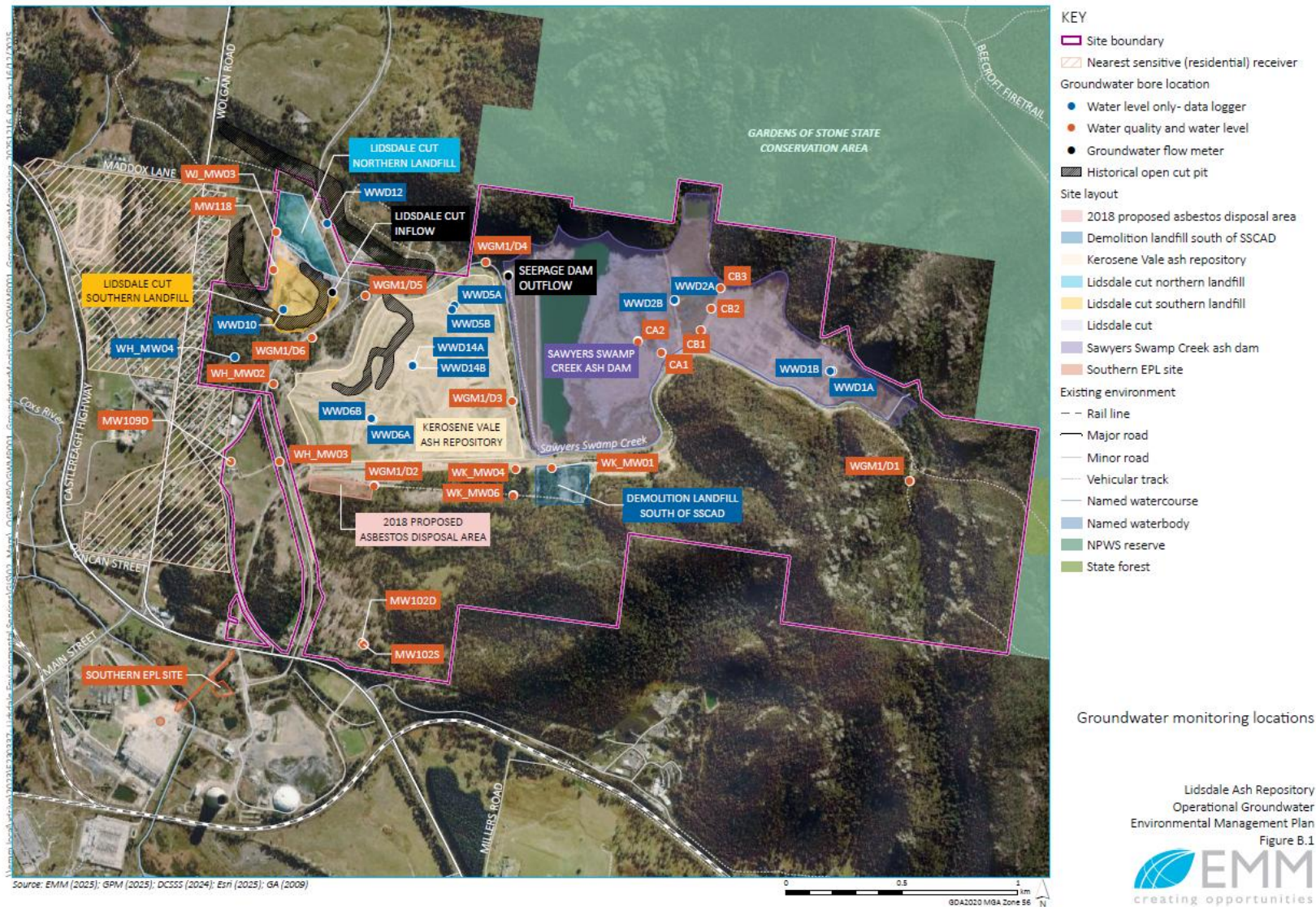


Figure B1 OEMP monitoring locations

Groundwater flow monitoring

Groundwater seepage volumes are collected at two metered locations within the Site. Metered flow data will be used to understand the potential for groundwater flow changes across the site.

Metered data will be used to calibrate a numerical model (set to be completed in early 2026). The numerical model will support quantification of flow within the site, and will be used to determine trigger values (in tandem with baseline flow data).

Table B3 Groundwater flow monitoring sites

Monitoring ID	Easting	Northing	Recording frequency	Key Site monitoring
Seepage Dam Outflow	6302294.7	230258.4	Daily	Seepage from the SSCAD wall
Lidsdale Cut Inflow	6302264.0	229495.6	Daily	KVAD seepage collection system

Site Specific Trigger Values

Based on historical data collected prior to development of this OGMP (baseline data), Site Specific Trigger Values (SSTVs) have been derived at:

- 13 monitoring locations for water quality (comprising WGM1/D1, WGM1/D2, WGM1/D3, WGM1/D4, WGM1/D5, WGM1/D6, WH_MW02, WH_MW03, WI_MW03, WJ_MW03, WK_MW01, WK_MW04, WK_MW06),
- 26 monitoring locations for water quality (comprising WGM1/D1, WGM1/D2, WGM1/D3, WGM1/D4, WGM1/D5, WGM1/D6, WH_MW02, WH_MW03, WH_MW04, MW118, WJ_MW03, WK_MW01, WK_MW04, WK_MW06, WWD10, WWD12, WWD14A, WWD14B, WWD1A, WWD1B, WWD2A, WWD2B, WWD5A, WWD5B, WWD6A, WWD6B).

It is recognised that a pre-disturbance (i.e. prior to construction or deposition of ash at the Site) dataset does not exist however, the SSTVs provide a framework to assess potential deterioration of water quality, flow or volume at the Site.

Insufficient baseline data was available at the 8 remaining locations (comprising CA1, CA2, CB1, CB2, CB3, MW102S, MW102D and MW109D) and two groundwater flow monitoring sites (Seepage Dam Outflow and Lidsdale Cut Inflow), noting that groundwater changes arising from external stressors (i.e. climate and nearby coal extraction) have not yet been adequately monitored to develop meaningful SSTVs. SSTVs will be developed at the remaining locations in a subsequent review of this OGMP.

Groundwater quality SSTVs were based on the maximum recorded concentrations during the groundwater quality baseline monitoring period, comprising seven (7) monitoring events between October 2022 and May 2025 (refer Appendix C). Maximum groundwater quality baseline data concentration values were compared to the 95% level of species protection (LOSP) default guideline values (DGVs), as presented in the ANZG 2018 Australian and New Zealand guidelines for Fresh and Marine Water Quality (ANZG 2018). The higher concentration value was adopted as the primary groundwater quality SSTV. As additional baseline data becomes available, or as new information on DGVs becomes available, groundwater quality SSTVs may be updated in subsequent OGMP reviews. Water quality SSTVs are presented in Table B4.

Groundwater level SSTVs are based on the 5th and 95th percentiles of the groundwater level baseline dataset, comprising water level loggers installed in each well and monitoring events between November 2001 and May 2025. As additional baseline data becomes available, groundwater level SSTVs may be updated in subsequent OGMP reviews. Groundwater level SSTVs are presented in Table B.4..

At the time of compiling this document, a numerical model is being developed to understand the volumetric groundwater flow between Site components. Following completion of the numerical model (set for early 2026), groundwater flow SSTVs can be developed at the gauging locations (refer Table B3) for ongoing monitoring. This will be captured in a subsequent update of this OGMP.

Table B4 Site Specific Trigger Values – Groundwater quality

Parameters	Units	WGM1/D1	WGM1/D2	WGM1/D3	WGM1/D4	WGM1/D5	WGM1/D6	WH_MW02	WH_MW03	MW118 ³	WJ_MW03	WK_MW01	WK_MW04	WK_MW06
pH	-	4.0-5.6	3.7-5.5	4.8-5.7	5.8-6.2	5.1-5.9	3.8-5.1	5.4-5.9	4.3-6.0	5.6-6.0	3.9-5.1	6.2-6.6	6.2-6.5	6.3-6.7
EC	µS/cm	210	523	725	1,600	1,473	1,016	476	299	512	1,328	1,980	2,910	1,115
Aluminium	mg/L	0.22	2.96	0.6	¹ 0.055	1.15	8.82	¹ 0.055	0.16	0.06	1.22	¹ 0.055	0.02	0.02
Arsenic (III)	mg/L	¹ 0.024	¹ 0.024	¹ 0.024	¹ 0.024	¹ 0.024	¹ 0.024	¹ 0.024	¹ 0.024	¹ 0.024	¹ 0.024	¹ 0.024	¹ 0.024	0.062
Arsenic (IV)	mg/L	¹ 0.013	¹ 0.013	¹ 0.013	¹ 0.013	¹ 0.013	¹ 0.013	¹ 0.013	¹ 0.013	¹ 0.013	¹ 0.013	¹ 0.013	¹ 0.013	0.062
Boron	mg/L	¹ 0.94	¹ 0.94	¹ 0.94	1.44	3.07	¹ 0.94	¹ 0.94	¹ 0.94	¹ 0.94	¹ 0.94	¹ 0.94	¹ 0.94	¹ 0.94
Cadmium	mg/L	¹ 0.0055	¹ 0.0055	¹ 0.0055	¹ 0.0055	¹ 0.0055	¹ 0.0055	¹ 0.0055	¹ 0.0055	¹ 0.0055	¹ 0.0055	¹ 0.0055	¹ 0.0055	¹ 0.0055
Chromium (VI)	mg/L	0.002	0.001	0.002	¹ 0.001	¹ 0.001	0.001	¹ 0.001	¹ 0.001	¹ 0.001	¹ 0.001	¹ 0.001	¹ 0.001	0.003
Copper	mg/L	0.008	0.01	0.006	0.002	¹ 0.0014	0.013	¹ 0.0014	0.004	0.002	0.015	¹ 0.0014	0.005	¹ 0.0014
Lead	mg/L	¹ 0.0034	¹ 0.0034	0.004	¹ 0.0034	¹ 0.0034	0.006	¹ 0.0034	0.002	¹ 0.0034	0.008	¹ 0.0034	¹ 0.0034	¹ 0.0034
Manganese	mg/L	¹ 1.9	¹ 1.9	¹ 1.9	7.98	8.14	¹ 1.9	2.61	1.96	¹ 1.9	2.4	¹ 1.9	¹ 1.9	¹ 1.9
Mercury	mg/L	¹ 0.0006	¹ 0.0006	¹ 0.0006	¹ 0.0006	¹ 0.0006	¹ 0.0006	¹ 0.0006	¹ 0.0006	¹ 0.0006	¹ 0.0006	¹ 0.0006	¹ 0.0006	¹ 0.0006
Nickel	mg/L	0.037	0.089	0.277	0.042	0.229	0.472	¹ 0.011	0.038	0.106	0.178	0.025	0.029	¹ 0.011
Selenium	mg/L	¹ 0.011	¹ 0.011	¹ 0.011	¹ 0.011	¹ 0.011	¹ 0.011	¹ 0.011	¹ 0.011	¹ 0.011	¹ 0.011	¹ 0.011	¹ 0.011	¹ 0.011
Silver	mg/L	² 0.001	² 0.001	² 0.001	² 0.001	² 0.001	² 0.001	² 0.001	² 0.001	² 0.001	² 0.001	² 0.001	² 0.001	² 0.001
Zinc	mg/L	0.199	0.136	0.315	0.046	0.017	1.42	0.01	0.142	0.27	1.03	0.01	0.072	¹ 0.008
Benzoapyrene	µg/L	¹ 0.2	¹ 0.2	¹ 0.2	¹ 0.2	¹ 0.2	¹ 0.2	¹ 0.2	¹ 0.2	¹ 0.2	¹ 0.2	¹ 0.2	¹ 0.2	¹ 0.2

Note: 1. Value has been amended to 95% Default Guideline Value (DGV), noting baseline concentrations were lower than DGV. 2. Contaminant concentration is unlikely given site history, trigger value set to limit of reporting. 3. WI_MW03 was damaged and has been replaced by MW118, the SSTV considers the dataset from both locations.

Table B5 Site Specific Trigger Values – Groundwater levels (mAHD)

Location	95 th percentile	5 th percentile
WGM1/D1	953.51	² NA
WGM1/D2	926.04	918.69
WGM1/D3	922.3	919.09
WGM1/D4	906.42	905.82
WGM1/D5	898.81	² NA
WGM1/D6	896.6	895.76
WH_MW02	902.98	901.32
WH_MW03	904.87	903.34
WH_MW04	889.48	888.60
MW118	¹ 893.77	¹ 892.08
WJ_MW03	893.8	892.18
WK_MW01	940.51	938.84
WK_MW04	933.74	932.12
WK_MW06	925.4	923.55
WWD10	895.06	893.91
WWD12	895.86	893.67
WWD14A	920.75	² NA
WWD14B	919.20	918.16
WWD1A	943.21	942.35
WWD1B	942.81	942.12
WWD2A	942.12	940.72
WWD2B	941.29	940.38
WWD5A	911.36	² NA
WWD5B	912.60	911.82
WWD6A	917.72	917.48

Location	95 th percentile	5 th percentile
WWD6B	913.22	912.73

Note: 1. WI_MW03 was damaged and has been replaced by MW118, the SSTV considers the dataset from both locations.
2. 5th percentile trigger not applicable as bore has previously been dry.

Trigger Action Response Plan

A trigger action response plan (TARP) has been developed to provide an adaptive monitoring and response approach, whereby:

- Potential exceedances are explored, prior to alerting regulators / Departments to ensure that exceedances are legitimate and not as a result of external influences (i.e. climatic stressors) or internal error handling (i.e. laboratory reporting errors or incorrect monitoring), overall reducing administrative burden.
- A mechanism is included to update the TARP in response to a further developed understanding (i.e. the baseline period has been a relatively 'wet' period, and the effects of a drier period can still be understood through the collection of additional baseline data as monitoring continues).

The TARP is described in Figure B2.

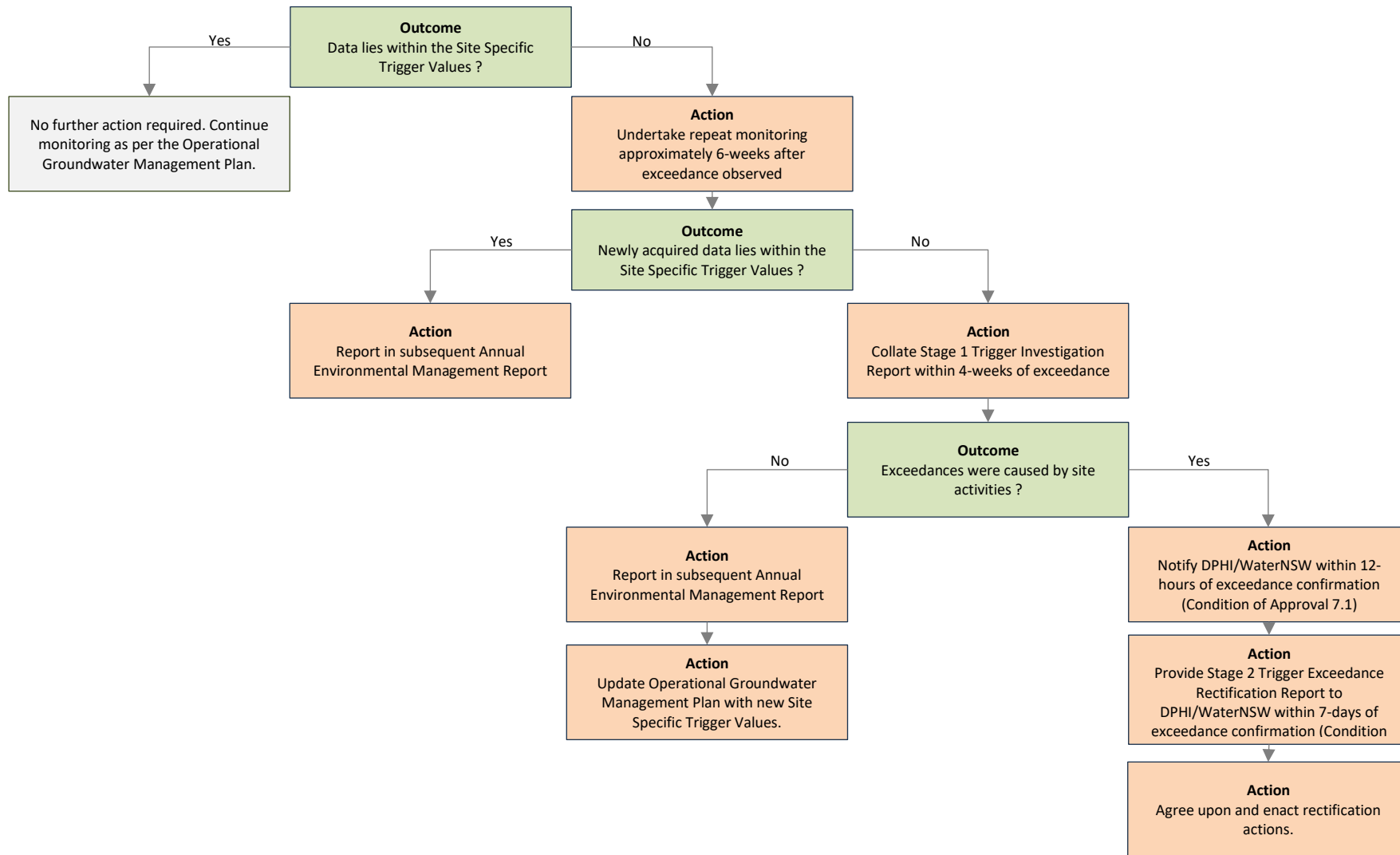


Figure B2 Trigger action response plan

Reporting

An Annual Environmental Management Report (AEMR) is prepared annually, and includes a summary of the monitoring data, exceedances and rectifications undertaken over the previous year.

Beyond the routine AEMR reporting, and in accordance with the TARP (refer Figure B2), reporting may also include:

- Stage 1 Trigger Investigation Reports, as may be required following a confirmed exceedance of water level or water quality.
- Stage 2 Trigger Exceedance Rectification Report, as may be required in the event that a Stage 1 Trigger Investigation Report indicated that an exceedance was caused by site activities.

Appendix C Baseline groundwater quality data set

EQL	Field				Analytical results – alkalinity				Inorganics									PAH
	EC (field)	pH	TDS (Field)	TDS	Alkalinity (Bicar-bonate as CaCO ₃)	Alkalinity (Car-bonate as CaCO ₃)	Alkalinity (Hydroxide) as CaCO ₃	Alkalinity (total) as CaCO ₃	Calcium	Calcium (filtered)	Chloride	Fluoride	Sodium (filtered)	Magnesium	Magnesium (filtered)	Potassium (filtered)	Sulfate as SO ₄ - Turbidimetric (filtered)	Benzo(a) pyrene
	uS/cm	-	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L
				5	1	1	1	1	0.5	0.5	1	0.1	0.5	0.5	0.5	0.5	1	0.5

Location Code Date

CA1	27 Nov 2024	940	6	-	760	90	<5	<5	90	44	49	36	6.7	120	22	23	49	-	-
CA1	18 Dec 2024	909	5.6	-	720	71	<5	<5	71	54	46	28	6.4	110	24	20	42	-	-
CA1	14 Jan 2025	922	5.1	-	660	16	<5	<5	16	45	53	9	4.6	91	14	17	43	-	-
CA2	14 Jan 2025	994	5.9	-	690	110	<5	<5	110	38	39	35	6.6	120	18	18	43	-	-
CB1	27 Nov 2024	449	5.4	-	320	23	<5	<5	23	16	17	24	1.8	49	6.8	7.0	30	-	-
CB1	18 Dec 2024	403	5.6	-	270	32	<5	<5	32	14	13	17	1.5	37	5.6	5.3	23	-	-
CB1	14 Jan 2025	579	5.8	-	420	29	<5	<5	29	18	18	24	1.9	65	7.9	7.9	31	-	-
CB2	27 Nov 2024	208	5.7	-	180	15	<5	<5	15	6.1	6.3	14	0.3	19	3	3	17	-	-
CB2	18 Dec 2024	229	5.5	-	160	16	<5	<5	16	5	4	10	0.2	19	2	2	16	-	-
CB2	14 Jan 2025	269	5.4	-	180	18	<5	<5	18	6.0	6.3	13	0.3	22	3	3	19	-	-
CB3	27 Nov 2024	400	6	-	310	22	<5	<5	22	15	16	23	1.2	39	6.3	6.5	25	-	-
CB3	18 Dec 2024	369	6.1	-	220	25	<5	<5	25	12	11	20	0.9	32	5	4	19	-	-
CB3	14 Jan 2025	465	5.8	-	300	24	<5	<5	24	14	14	22	1.3	38	5.6	5.5	22	-	-
D1	17 Oct 2022	59.3	3.96	51.35	635	7	<1	<1	7	-	2	22	<0.1	14	-	2	8	11	<0.5
D1	29 Nov 2022	191	4.76	-	124.15	9	<1	<1	9	-	2	22	<0.1	13	-	2	3	11	<1.6
D1	23 May 2023	209.6	4.42	175.5	196	12	<1	<1	12	-	3	20	<0.1	12	-	2	4	12	<0.5
D1	13 Nov 2023	134.3	4.69	87.1	108	5	<1	<1	5	-	2	21	<0.1	12	-	2	4	12	<0.5
D1	25 Jun 2024	82.7	5.43	74.1	90	10	<1	<1	10	-	2	16	<0.1	16	-	2	3	13	<0.5
D1	11 Nov 2024	107.9	5.13	70.2	86	9	<1	<1	9	-	2	16	<0.1	16	-	3	4	13	<0.5
D1	14 May 2025	120.9	5.59	78.65	73	13	<1	<1	13	-	2	15	<0.1	14	-	2	3	11	<0.5
D1B	13 Nov 2023	-	-	-	81	45	<5	<5	45	-	4	10	<0.1	5	-	3	7.6	-	<1
D1B	13 Nov 2023	215.3	5.64	139.75	86	40	<1	<1	40	-	4	9	<0.1	4	-	3	9	12	<0.5
D1B	14 Nov 2023	-	-	-	444	5	<1	<1	5	-	20	61	<0.1	47	-	22	6	226	<0.5
D1B	25 Jun 2024	-	-	-	-	37	<1	<1	37	-	5	9	0.1	4	-	3	9	9	<0.5

EQL	Field				Analytical results – alkalinity				Inorganics								PAH	
	EC (field)	pH	TDS (Field)	TDS	Alkalinity (Bicarbonate as CaCO ₃)	Alkalinity (Carbonate as CaCO ₃)	Alkalinity (Hydroxide) as CaCO ₃	Alkalinity (total) as CaCO ₃	Calcium	Calcium (filtered)	Chloride	Fluoride	Sodium (filtered)	Magnesium	Magnesium (filtered)	Potassium (filtered)	Sulfate as SO ₄ - Turbidimetric (filtered)	Benzo(a) pyrene
	uS/cm	-	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L
				5	1	1	1	1	0.5	0.5	1	0.1	0.5	0.5	0.5	0.5	1	0.5

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D2	18 Oct 2022	171.3	5.35	139.1	274	1	<1	<1	1	-	6	19	<0.1	32	-	21	4	142	<0.5
D2	29 Nov 2022	349	5.27	-	226.85	3	<1	<1	3	-	2	19	<0.1	30	-	17	4	118	<1.4
D2	23 May 2023	352.2	5.45	269.1	235	<1	<1	<1	<1	-	2	32	<0.1	38	-	16	3	116	<0.5
D2	15 Nov 2023	523	3.68	339.95	409	<1	<1	<1	<1	-	2	37	<0.1	53	-	18	3	174	<0.5
D2	24 Jun 2024	398.9	4.06	371.8	208	4	<1	<1	4	-	1	23	<0.1	32	-	17	4	94	<0.5
D2	11 Nov 2024	217	5.1	155.5	282	7	<1	<1	7	-	2	32	<0.1	45	-	19	4	152	<0.5
D2	14 May 2025	362.9	5.07	235.95	268	<1	<1	<1	<1	-	2	31	<0.1	42	-	15	4	120	<0.5
D3	18 Oct 2022	346.2	5.07	281.1	629	4	<1	<1	4	-	32	30	0.5	62	-	33	13	320	<0.5
D3	29 Nov 2022	671	4.78	-	435.5	4	<1	<1	4	-	24	38	0.4	58	-	27	10	258	<1.4
D3	22 May 2023	528	5.32	416	440	40	<1	<1	40	-	25	37	0.2	60	-	26	14	239	<0.5
D3	13 Nov 2023	560.7	5.54	364	575	111	<1	<1	111	-	57	38	0.2	59	-	22	10	273	<0.5
D3	24 Jun 2024	577	5.72	455	444	61	<1	<1	61	-	39	28	0.3	55	-	23	10	254	<0.5
D3	11 Nov 2024	506	5.37	397	413	25	<1	<1	25	-	25	42	0.2	58	-	23	9	217	<0.5
D3	14 May 2025	725	5.47	468	388	26	<1	<1	26	-	26	44	0.2	64	-	24	8	219	<0.5
D4	29 Nov 2022	1,600	5.81	-	1,040	202	<1	<1	202	-	145	46	<0.1	176	-	76	6	769	<1.7
D4	22 May 2023	941	5.82	780	1,150	57	<1	<1	57	-	79	36	<0.1	87	-	45	7	749	<0.5
D4	13 Nov 2023	1,480	6	962	1,010	6	<1	<1	6	-	70	32	<0.1	105	-	46	8	558	<0.5
D4	24 Jun 2024	663	6.03	591	974	<1	<1	<1	<1	-	102	41	<0.1	111	-	52	8	720	<0.5
D4	11 Nov 2024	989	6.16	839.5	924	58	<1	<1	58	-	70	38	<0.1	104	-	42	8	528	<0.5
D4	15 May 2025	1,270	6.09	825.5	800	31	<1	<1	31	-	71	37	<0.1	119	-	45	9	473	<0.5
D5	19 Oct 2022	169.4	5.37	239	584	41	<1	<1	41	-	30	59	<0.1	54	-	30	6	333	<0.5
D5	29 Nov 2022	671	5.59	-	435.5	38	<1	<1	38	-	28	51	<0.1	56	-	29	6	308	<1.5
D5	23 May 2023	622	5.5	494	478	34	<1	<1	34	-	23	60	<0.1	52	-	25	6	235	<0.5
D5	13 Nov 2023	-	-	-	97	35	<1	<1	35	-	4	10	<0.1	4	-	3	9	14	<0.5

	Field				Analytical results – alkalinity				Inorganics									PAH
	EC (field)	pH	TDS (Field)	TDS	Alkalinity (Bicarbonate as CaCO ₃)	Alkalinity (Carbonate as CaCO ₃)	Alkalinity (Hydroxide) as CaCO ₃	Alkalinity (total) as CaCO ₃	Calcium	Calcium (filtered)	Chloride	Fluoride	Sodium (filtered)	Magnesium	Magnesium (filtered)	Potassium (filtered)	Sulfate as SO ₄ - Turbidimetric (filtered)	Benzo(a) pyrene
	uS/cm	-	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L
EQL				5	1	1	1	1	0.5	0.5	1	0.1	0.5	0.5	0.5	0.5	1	0.5

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D5	14 Nov 2023	-	-	-	380	15	<5	<5	15	-	18	68	<0.1	49	-	20	5.3	-	<1
D5	14 Nov 2023	380.7	5.42	247	494	7	<1	<1	7	-	21	67	<0.1	49	-	23	6	233	<0.5
D5	25 Jun 2024	642	5.72	525	578	38	<1	<1	38	-	28	55	0.1	57	-	29	6	320	<0.5
D5	11 Nov 2024	692	5.86	546	532	11	<1	<1	11	-	30	65	<0.1	58	-	28	7	306	<0.5
D5	13 May 2025	1,473	5.14	962	940	<1	<1	<1	<1	-	72	24	1.1	94	-	54	43	574	<0.5
D6	19 Oct 2022	549	3.77	416	912	<1	<1	<1	<1	-	11	32	1.0	113	-	71	6	609	<0.5
D6	29 Nov 2022	902	4.16	-	585	<1	<1	<1	<1	-	8	24	0.5	94	-	60	6	508	<1.6
D6	29 Nov 2022	-	-	-	-	<1	<1	<1	<1	-	7	24	0.5	95	-	61	6	510	<1.2
D6	23 May 2023	811	4.5	643.5	752	<1	<1	<1	<1	-	9	22	0.6	94	-	56	5	480	<0.5
D6	15 Nov 2023	1,016	3.88	663	712	<1	<1	<1	<1	-	9	22	0.4	85	-	49	5	435	<0.5
D6	25 Jun 2024	801	5.13	650	682	<1	<1	<1	<1	-	9	22	0.6	74	-	52	5	442	<0.5
D6	11 Nov 2024	731	4.43	572	646	<1	<1	<1	<1	-	12	22	0.4	80	-	49	5	444	<0.5
D6	11 Nov 2024	-	-	-	669	<1	<1	<1	<1	-	12	22	0.4	78	-	49	5	434	<0.5
D6	13 May 2025	-	-	-	660	<5	<5	<5	<5	-	13	33	0.4	51	-	28	5.6	-	<1
D6	13 May 2025	176	4.53	115	456	<1	<1	<1	<1	-	14	26	0.4	60	-	30	6	296	<0.5
MW102D	10 Dec 2024	854	5.52	-	579	135	<1	<1	135	-	75	12	-	19	-	33	10	236	<2
MW102S	10 Dec 2024	1526	5.54	-	1,620	94	<1	<1	94	-	149	33	-	53	-	130	10	991	<2
MW109D	12 Dec 2024	794	6.62	-	560	320	<1	<1	320	-	99	41	-	47	-	37	14	111	<2
WH_MW02	18 Oct 2022	235.3	5.57	186.55	292	96	<1	<1	96	-	12	28	<0.1	20	-	18	5	92	<0.5
WH_MW02	29 Nov 2022	420.4	5.44	-	273	90	<1	<1	90	-	12	28	<0.1	19	-	17	5	86	<1.6
WH_MW02	22 May 2023	337.6	5.76	263.9	252	62	<1	<1	62	-	12	28	<0.1	20	-	18	5	88	<0.5
WH_MW02	15 Nov 2023	475.7	5.55	309.4	310	96	<1	<1	96	-	11	30	<0.1	18	-	16	5	78	<0.5
WH_MW02	24 Jun 2024	366	5.89	306	275	78	<1	<1	78	-	13	28	<0.1	20	-	17	5	103	<0.5
WH_MW02	11 Nov 2024	465.7	5.82	302	292	81	<1	<1	81	-	13	28	<0.1	21	-	19	5	108	<0.5

EQL	Field				Analytical results – alkalinity				Inorganics									PAH
	EC (field)	pH	TDS (Field)	TDS	Alkalinity (Bicarbonate as CaCO ₃)	Alkalinity (Carbonate as CaCO ₃)	Alkalinity (Hydroxide) as CaCO ₃	Alkalinity (total) as CaCO ₃	Calcium	Calcium (filtered)	Chloride	Fluoride	Sodium (filtered)	Magnesium	Magnesium (filtered)	Potassium (filtered)	Sulfate as SO ₄ - Turbidimetric (filtered)	Benzo(a) pyrene
	uS/cm	-	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L
				5	1	1	1	1	0.5	0.5	1	0.1	0.5	0.5	0.5	0.5	1	0.5

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WH_MW02	13 May 2025	447.1	5.93	290.55	240	46	<1	<1	46	-	14	29	<0.1	20	-	19	5	116	<0.5
WH_MW03	18 Oct 2022	-	-	-	160	12	<5	<5	12	-	4	11	<0.1	19	-	9.2	4	-	<1
WH_MW03	18 Oct 2022	110.3	4.27	86.45	259	13	<1	<1	13	-	6	13	<0.1	22	-	11	5	86	<0.5
WH_MW03	29 Nov 2022	257.3	4.44	-	167.05	<1	<1	<1	<1	-	4	14	<0.1	20	-	10	5	94	<1.4
WH_MW03	22 May 2023	161.8	4.88	127.5	176	10	<1	<1	10	-	11	15	<0.1	16	-	7	4	80	<0.5
WH_MW03	15 Nov 2023	299	5.12	194	162	21	<1	<1	21	-	18	12	0.3	16	-	7	5	88	<0.5
WH_MW03	25 Jun 2024	53	5.95	45	358	8	<1	<1	8	-	14	13	0.2	16	-	11	5	94	<0.5
WH_MW03	11 Nov 2024	147	5.6	117	309	<1	<1	<1	<1	-	8	19	<0.1	20	-	12	5	116	<0.5
WH_MW03	13 May 2025	175.1	5.14	112	118	6	<1	<1	6	-	9	10	0.2	12	-	6	4	66	<0.5
WH_MW04	19 Oct 2022	416.9	6.68	320.4	367	329	<1	<1	329	-	72	28	0.5	20	-	27	21	14	<0.5
WH_MW04	23 May 2023	553	6.96	435.5	385	323	<1	<1	323	-	79	26	0.4	17	-	23	20	13	<0.5
WI_MW03	19 Oct 2022	293.4	5.72	221.3	274	136	<1	<1	136	-	20	6	0.4	24	-	23	10	97	<0.5
WI_MW03	29 Nov 2022	437	5.59	-	284.05	153	<1	<1	153	-	21	5	0.2	16	-	27	8	58	<1.7
WI_MW03	23 May 2023	394	5.99	306.5	247	159	<1	<1	159	-	22	6	0.3	19	-	27	9	64	<0.5
WI_MW03	13 May 2025	512.1	5.9	332.8	276	72	<1	<1	72	-	23	11	0.8	30	-	24	14	147	<0.5
WI_MW03R	26 Jun 2024	-	-	-	260	91	<5	<5	91	-	21	9	0.7	31	-	23	15	-	<1
WI_MW03R	26 Jun 2024	-	-	-	340	80	<1	<1	80	-	25	10	0.7	29	-	23	14	170	<0.5
WI_MW03R	26 Jun 2024	426	5.86	403	338	72	<1	<1	72	-	25	9	0.7	29	-	23	14	170	<0.5
WI_MW03R	26 Jun 2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WI_MW03R	11 Nov 2024	383	5.9	302	308	97	<1	<1	97	-	22	9	0.6	24	-	24	13	129	<0.5
WJ_MW03	19 Oct 2022	546	3.99	474.5	800	<1	<1	<1	<1	-	45	125	<0.1	113	-	41	9	489	<0.5
WJ_MW03	29 Nov 2022	1,142	4.51	-	741	6	<1	<1	6	-	42	108	0.1	118	-	42	9	494	<1.6
WJ_MW03	23 May 2023	999	4.55	793	821	<1	<1	<1	<1	-	41	187	0.1	122	-	38	10	384	<0.5
WJ_MW03	15 Nov 2023	1,328	4.08	864	781	<1	<1	<1	<1	-	44	133	<0.1	106	-	44	10	425	<0.6

EQL	Field				Analytical results – alkalinity				Inorganics									PAH
	EC (field)	pH	TDS (Field)	TDS	Alkalinity (Bicarbonate as CaCO ₃)	Alkalinity (Carbonate as CaCO ₃)	Alkalinity (Hydroxide) as CaCO ₃	Alkalinity (total) as CaCO ₃	Calcium	Calcium (filtered)	Chloride	Fluoride	Sodium (filtered)	Magnesium	Magnesium (filtered)	Potassium (filtered)	Sulfate as SO ₄ - Turbidimetric (filtered)	Benzo(a) pyrene
	uS/cm	-	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L
				5	1	1	1	1	0.5	0.5	1	0.1	0.5	0.5	0.5	0.5	1	0.5

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WJ_MW03	26 Jun 2024	720	3.88	624	834	<1	<1	<1	<1	-	56	122	0.1	99	-	45	11	446	<0.5
WJ_MW03	26 Jun 2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WJ_MW03	11 Nov 2024	954	5.1	786	896	<1	<1	<1	<1	-	68	40	<0.1	81	-	54	11	577	<0.5
WJ_MW03	13 May 2025	-	-	-	758	<1	<1	<1	<1	-	57	98	<0.1	96	-	49	12	409	<0.5
WK_MW01	17 Oct 2022	-	-	-	1,000	370	<5	<5	370	-	150	110	0.2	88	-	98	17	-	<1
WK_MW01	17 Oct 2022	570	6.43	468	1,410	347	<1	<1	347	-	158	137	0.2	87	-	100	18	548	<0.5
WK_MW01	29 Nov 2022	1,699	6.23	-	1,105	354	<1	<1	354	-	156	137	0.2	90	-	102	19	539	<1.2
WK_MW01	23 May 2023	1,540	6.4	1,189.5	1,350	361	<1	<1	361	-	147	183	0.2	94	-	99	18	473	<0.5
WK_MW01	13 Nov 2023	1,980	6.41	1,287	1,470	345	<1	<1	345	-	150	153	0.2	92	-	105	18	497	<0.5
WK_MW01	24 Jun 2024	1,021	6.46	851	1,180	339	<1	<1	339	-	186	133	0.2	92	-	104	19	559	<0.5
WK_MW01	11 Nov 2024	1,526	6.52	1,209	1,440	356	<1	<1	356	-	174	150	0.2	94	-	102	19	536	<0.5
WK_MW01	14 May 2025	1,861	6.58	1,209	1,290	359	<1	<1	359	-	168	161	0.2	105	-	108	20	425	<0.5
WK_MW04	18 Oct 2022	610	6.47	507	1,740	419	<1	<1	419	-	92	622	0.2	219	-	138	17	133	<0.5
WK_MW04	18 Oct 2022	-	-	-	1,690	428	<1	<1	428	-	93	626	0.2	216	-	139	17	130	<0.5
WK_MW04	29 Nov 2022	-	-	-	-	414	<1	<1	414	-	96	659	0.2	228	-	144	18	134	<1.4
WK_MW04	23 May 2023	2,631	6.17	1,988	1,900	373	<1	<1	373	-	82	858	0.2	292	-	142	19	134	<0.5
WK_MW04	13 Nov 2023	2,910	6.4	1,891.5	1,910	349	<1	<1	349	-	83	679	0.2	239	-	138	17	136	<0.5
WK_MW04	24 Jun 2024	888	6.27	702	1,620	344	<1	<1	344	-	97	614	0.2	247	-	137	19	109	<0.5
WK_MW04	11 Nov 2024	2,054	6.38	1,645	1,720	344	<1	<1	344	-	88	635	0.2	236	-	131	17	133	<0.5
WK_MW04	13 May 2025	2,672	6.26	1,735	1,690	353	<1	<1	353	-	99	584	0.2	255	-	143	19	116	<0.5
WK_MW06	18 Oct 2022	335.8	6.56	109.2	582	519	<1	<1	519	-	122	40	0.3	13	-	47	23	4	<0.5
WK_MW06	29 Nov 2022	1,028	6.27	-	669.5	476	<1	<1	476	-	120	56	0.3	14	-	47	22	15	<1.9
WK_MW06	23 May 2023	901	6.47	708.5	588	493	<1	<1	493	-	119	50	0.3	13	-	46	21	10	<0.5
WK_MW06	13 Nov 2023	1,115	6.5	721.5	589	504	<1	<1	504	-	118	46	0.3	12	-	48	22	10	<0.5

	Field				Analytical results – alkalinity				Inorganics									PAH
	EC (field)	pH	TDS (Field)	TDS	Alkalinity (Bicarbonate as CaCO ₃)	Alkalinity (Carbonate as CaCO ₃)	Alkalinity (Hydroxide) as CaCO ₃	Alkalinity (total) as CaCO ₃	Calcium	Calcium (filtered)	Chloride	Fluoride	Sodium (filtered)	Magnesium	Magnesium (filtered)	Potassium (filtered)	Sulfate as SO ₄ - Turbidimetric (filtered)	Benzo(a) pyrene
	uS/cm	-	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L
EQL				5	1	1	1	1	0.5	0.5	1	0.1	0.5	0.5	0.5	0.5	1	0.5

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WK_MW06	24 Jun 2024	677	6.53	617.5	549	465	<1	<1	465	-	134	42	0.3	12	-	46	21	13	<0.5
WK_MW06	11 Nov 2024	784	6.68	624	581	457	<1	<1	457	-	127	41	0.2	13	-	46	22	12	<0.5
WK_MW06	14 May 2025	1,002	6.66	650	527	458	<1	<1	458	-	126	33	0.3	14	-	48	22	6	<0.5
WWD1A	17 Oct 2022	378.6	5.48	302.6	322	300	<1	<1	300	-	55	15	<0.1	15	-	13	7	9	<0.5
WWD1A	23 May 2023	-	-	-	340	230	<5	<5	230	-	36	17	<0.1	24	-	7.9	6.4	-	<1
WWD1A	23 May 2023	258.2	5.51	244.4	286	125	<1	<1	125	-	29	15	0.1	17	-	8	5	1	<0.5
WWD1A	25 Jun 2024	-	-	-	-	254	<1	<1	254	-	38	19	0.2	17	-	9	7	13	<0.5
WWD1B	17 Oct 2022	429.4	6.53	325.55	396	192	<1	<1	192	-	45	22	2.1	40	-	14	24	77	<0.5
WWD1B	17 Oct 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
WWD1B	23 May 2023	-	-	-	570	190	<5	<5	190	-	48	40	4.9	73	-	18	44	-	<1
WWD1B	23 May 2023	682	6.57	598	575	164	<1	<1	164	-	47	37	4.7	79	-	19	46	236	<0.5
WWD1B	25 Jun 2024	-	-	-	-	185	<1	<1	185	-	49	32	3.6	67	-	18	40	173	<0.5
WWD2A	17 Oct 2022	320.9	6.28	256.75	392	231	<1	<1	231	-	32	36	2.2	32	-	16	37	12	<0.5
WWD2A	23 May 2023	505	6.53	403	337	242	<1	<1	242	-	39	36	2.3	33	-	17	36	6	<0.5
WWD2A	04 Jul 2023	-	-	-	418	202	<1	<1	202	-	33	37	2.3	28	-	16	32	21	<0.5
WWD2A	25 Jun 2024	-	-	-	-	220	<1	<1	220	-	36	35	1.8	32	-	16	36	4	<0.5
WWD2B	17 Oct 2022	443.8	6.68	351.65	273	130	<1	<1	130	-	32	39	0.2	10	-	12	5	8	<0.5
WWD2B	04 Jul 2023	-	-	-	386	136	<1	<1	136	-	42	60	0.1	9	-	16	5	8	<0.5
WWD2B	25 Jun 2024	-	-	-	-	50	<1	<1	50	-	46	25	0.8	34	-	15	17	196	<0.5
WWD5A	19 Oct 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.6
WWD5B	18 Oct 2022	1,261	6.46	942.5	1,490	455	<1	<1	455	-	98	248	0.3	250	-	100	10	474	<0.5
WWD5B	22 May 2023	1,927	6.31	1,514.5	1,560	443	<1	<1	443	-	100	355	0.3	292	-	113	9	442	<0.5
WWD6A	18 Oct 2022	758	5.3	559	1,220	15	<1	<1	15	-	103	46	10.0	87	-	30	108	607	<0.5
WWD6A	22 May 2023	1,068	5.38	832	1,050	8	<1	<1	8	-	113	224	10.7	83	-	29	91	250	<0.5

	Field			TDS	Analytical results – alkalinity				Inorganics								PAH	
	EC (field)	pH	TDS (Field)		Alkalinity (Bicarbonate as CaCO ₃)	Alkalinity (Carbonate as CaCO ₃)	Alkalinity (Hydroxide) as CaCO ₃	Alkalinity (total) as CaCO ₃	Calcium	Calcium (filtered)	Chloride	Fluoride	Sodium (filtered)	Magnesium	Magnesium (filtered)	Potassium (filtered)	Sulfate as SO ₄ - Turbidimetric (filtered)	Benzo(a) pyrene
	uS/cm	-	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L
EQL				5	1	1	1	1	0.5	0.5	1	0.1	0.5	0.5	0.5	0.5	1	0.5

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WWD6A	22 May 2023	-	-	-	1,070	7	<1	<1	7	-	100	48	10.9	81	-	29	100	700	<0.6
WWD6A	14 Nov 2023	1,181	5.16	767	880	12	<1	<1	12	-	71	46	7.7	68	-	23	83	499	<0.5
WWD6A	24 Jun 2024	-	-	-	-	1	<1	<1	1	-	90	46	6.4	72	-	25	80	535	<0.5
WWD6B	18 Oct 2022	650	5.45	468	906	33	<1	<1	33	-	8	164	0.3	195	-	33	5	330	<0.5
WWD6B	22 May 2023	937	5.53	689	776	41	<1	<1	41	-	6	194	0.2	213	-	10	<1	226	<0.5
WWD6B	22 May 2023	-	-	-	834	41	<1	<1	41	-	5	226	0.2	214	-	11	<1	247	<0.5
WWD6B	14 Nov 2023	875	5.41	572	804	30	<1	<1	30	-	6	192	0.2	208	-	13	1	294	<0.5
WWD6B	24 Jun 2024	-	-	-	-	48	<1	<1	48	-	6	176	0.3	210	-	11	<1	250	<0.5
WWD10	19 Oct 2022	276.9	4.07	202.7	301	<1	<1	<1	<1	-	13	15	0.3	31	-	14	9	155	<0.5
WWD10	23 May 2023	350.9	4.49	271.05	295	<1	<1	<1	<1	-	13	14	0.2	31	-	13	7	159	<0.5
WWD12	19 Oct 2022	142.4	4.96	104.65	104	10	<1	<1	10	-	5	32	<0.1	21	-	6	3	35	<0.5
WWD12	23 May 2023	422.3	5.05	323.7	148	37	<1	<1	37	-	4	22	<0.1	18	-	5	3	28	<0.5
WWD14A	18 Oct 2022	430.3	4.52	212.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5
WWD14A	22 May 2023	2,749	3.61	2,099.5	7,120	<1	<1	<1	<1	-	510	18	1	337	-	69	330	4,620	<0.5
WWD14A	15 Nov 2023	6,437	3.76	4,186	7,010	<1	<1	<1	<1	-	443	18	0.7	320	-	75	346	4,810	<0.6
WWD14B	18 Oct 2022	3,498	3.82	2,658.5	7,740	<1	<1	<1	<1	-	360	59	0.7	313	-	131	236	4,580	<0.5
WWD14B	22 May 2023	1,828	3.83	1,423.8	6,280	<1	<1	<1	<1	-	349	33	0.8	297	-	123	223	3,860	<0.5
WWD14B	22 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	Metals																				
	Aluminium (filtered)	Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Antimony (filtered)	Cadmium (filtered)	Chromium (III+VI) (filtered)	Cobalt (filtered)	Copper (filtered)	Strontium (filtered)	Iron (filtered)	Lead (filtered)	Manganese (filtered)	Mercury (filtered)	Molybdenum (filtered)	Nickel (filtered)	Selenium (filtered)	Silver (filtered)	Vanadium (filtered)	Zinc (filtered)
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
EQL	0.01	0.001	0.001	0.0005	0.02	0.001	0.0001	0.001	0.001	0.001	0.001	0.01	0.001	0.001	0.00005	0.001	0.001	0.001	0.001	0.001	0.001

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CA1	27 Nov 2024	1.7	0.003	0.021	0.002	2.4	0.002	0.0004	<0.001	0.038	<0.001	2	16	<0.001	2.3	<0.00005	0.33	0.15	<0.001	<0.001	<0.001	0.17
CA1	18 Dec 2024	1.6	<0.001	0.023	0.003	2.2	0.002	0.0009	<0.001	0.037	<0.001	1.9	9.6	<0.001	2	<0.00005	0.21	0.12	<0.001	<0.001	<0.001	0.11
CA1	14 Jan 2025	4.2	<0.001	0.081	0.003	1.8	0.003	0.0069	<0.001	0.11	0.001	1.8	0.05	<0.001	3.2	<0.00005	0.002	0.26	0.003	<0.001	0.004	0.71
CA2	14 Jan 2025	1.1	0.002	0.03	0.002	1.8	0.001	0.0004	<0.001	0.028	<0.001	1.6	11	<0.001	2.2	<0.00005	0.28	0.13	<0.001	<0.001	<0.001	0.14
CB1	27 Nov 2024	0.35	0.001	0.028	0.0009	1.2	0.007	0.0007	<0.001	0.022	<0.001	1.7	1.5	<0.001	0.85	<0.00005	0.33	0.058	<0.001	<0.001	0.015	0.14
CB1	18 Dec 2024	0.32	<0.001	0.03	0.0007	0.8	0.004	0.0005	<0.001	0.018	<0.001	1.3	0.42	<0.001	0.77	<0.00005	0.22	0.034	<0.001	<0.001	0.003	0.1
CB1	14 Jan 2025	0.52	0.002	0.029	0.0009	1.1	0.007	0.0007	<0.001	0.024	<0.001	1.8	2.8	<0.001	1.2	<0.00005	0.34	0.051	<0.001	<0.001	0.023	0.18
CB2	27 Nov 2024	0.08	<0.001	0.031	<0.0005	0.42	0.006	0.0001	<0.001	0.004	<0.001	0.27	<0.01	<0.001	0.38	<0.00005	0.11	0.022	0.014	<0.001	0.018	0.024
CB2	18 Dec 2024	0.07	<0.001	0.032	<0.0005	0.42	0.003	0.0001	<0.001	0.003	<0.001	0.18	<0.01	<0.001	0.25	<0.00005	0.04	0.005	0.008	<0.001	0.006	0.014
CB2	14 Jan 2025	0.07	<0.001	0.038	<0.0005	0.39	0.005	0.0002	<0.001	0.004	0.001	0.31	0.01	<0.001	0.37	<0.00005	0.072	0.016	0.013	<0.001	0.011	0.057
CB3	27 Nov 2024	0.13	0.092	0.029	<0.0005	1.1	<0.001	<0.0001	<0.001	0.02	<0.001	0.92	9.7	<0.001	0.97	<0.00005	0.25	0.057	<0.001	<0.001	<0.001	0.07
CB3	18 Dec 2024	0.13	0.028	0.039	<0.0005	0.69	<0.001	<0.0001	<0.001	0.014	<0.001	0.6	3	<0.001	0.67	<0.00005	0.11	0.027	<0.001	<0.001	<0.001	0.029
CB3	14 Jan 2025	0.08	0.053	0.03	<0.0005	0.73	<0.001	<0.0001	<0.001	0.016	<0.001	0.71	8.6	<0.001	0.89	<0.00005	0.17	0.038	<0.001	<0.001	<0.001	0.064
D1	17 Oct 2022	0.09	<0.001	0.041	<0.001	<0.05	0.011	<0.0001	<0.001	<0.001	0.007	0.031	0.06	<0.001	0.016	-	<0.001	0.037	<0.01	<0.001	<0.01	0.179
D1	29 Nov 2022	-	<0.001	-	-	<0.05	-	<0.0001	<0.001	-	0.005	-	-	<0.001	0.023	-	-	<0.001	<0.01	-	-	0.127
D1	23 May 2023	0.11	<0.001	0.056	<0.001	<0.05	0.019	<0.0001	<0.001	<0.001	0.008	0.033	0.56	<0.001	0.03	<0.0001	<0.001	<0.001	<0.01	<0.001	<0.01	0.182
D1	13 Nov 2023	0.05	<0.001	0.038	-	<0.05	-	<0.0001	<0.001	-	0.004	-	0.09	<0.001	0.022	-	-	<0.001	<0.01	-	-	0.199
D1	25 Jun 2024	0.06	<0.001	0.036	-	<0.05	-	<0.0001	<0.001	-	0.002	-	<0.05	<0.001	0.007	-	-	<0.001	<0.01	-	-	0.111
D1	11 Nov 2024	0.22	<0.001	0.036	-	<0.05	-	0.0002	0.002	-	0.006	-	0.22	<0.001	0.014	-	-	0.002	<0.01	-	-	0.168
D1	14 May 2025	0.08	<0.001	0.037	-	<0.05	-	<0.0001	<0.001	-	0.002	-	0.22	<0.001	0.088	<0.0001	-	<0.001	<0.01	<0.001	-	0.190
D1B	13 Nov 2023	0.03	<0.001	0.3	<0.0005	<0.02	<0.001	0.0001	<0.001	<0.001	0.001	0.035	15	<0.001	0.78	<0.00005	<0.001	<0.001	<0.001	<0.001	<0.001	0.01
D1B	13 Nov 2023	<0.01	<0.001	0.294	-	<0.05	-	<0.0001	<0.001	-	<0.001	-	15.1	<0.001	0.823	-	-	<0.001	<0.01	-	-	<0.005
D1B	14 Nov 2023	0.02	<0.001	0.047	-	0.29	-	<0.0001	<0.001	-	<0.001	-	28.4	<0.001	1.64	-	-	0.033	<0.01	-	-	0.016
D1B	25 Jun 2024	<0.01	<0.001	0.262	-	0.14	-	<0.0001	<0.001	-	<0.001	-	11.9	<0.001	0.666	-	-	<0.001	<0.01	-	-	<0.005

	Metals																				
	Aluminium (filtered)	Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Antimony (filtered)	Cadmium (filtered)	Chromium (III+VI) (filtered)	Cobalt (filtered)	Copper (filtered)	Strontium (filtered)	Iron (filtered)	Lead (filtered)	Manganese (filtered)	Mercury (filtered)	Molybdenum (filtered)	Nickel (filtered)	Selenium (filtered)	Silver (filtered)	Vanadium (filtered)	Zinc (filtered)
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
EQL	0.01	0.001	0.001	0.0005	0.02	0.001	0.0001	0.001	0.001	0.001	0.001	0.01	0.001	0.001	0.00005	0.001	0.001	0.001	0.001	0.001	0.001

Location Code	Date	Aluminium (filtered)	Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Antimony (filtered)	Cadmium (filtered)	Chromium (III+VI) (filtered)	Cobalt (filtered)	Copper (filtered)	Strontium (filtered)	Iron (filtered)	Lead (filtered)	Manganese (filtered)	Mercury (filtered)	Molybdenum (filtered)	Nickel (filtered)	Selenium (filtered)	Silver (filtered)	Vanadium (filtered)	Zinc (filtered)
D2	18 Oct 2022	2.96	<0.001	0.028	0.002	<0.05	<0.001	0.0004	<0.001	0.049	0.010	0.018	<0.05	<0.001	0.876	-	<0.001	0.089	<0.01	<0.001	<0.01	0.136
D2	29 Nov 2022	-	<0.001	-	-	<0.05	-	0.0002	<0.001	-	<0.001	-	-	<0.001	0.452	-	-	0.043	<0.01	-	-	0.052
D2	23 May 2023	0.18	<0.001	0.027	0.001	0.1	<0.001	0.0002	<0.001	0.032	<0.001	0.01	0.2	<0.001	0.465	<0.0001	<0.001	0.049	<0.01	<0.001	<0.01	0.055
D2	15 Nov 2023	0.21	<0.001	0.028	-	0.14	-	0.0002	<0.001	-	<0.001	-	0.13	0.003	0.632	-	-	0.058	<0.01	-	-	0.070
D2	24 Jun 2024	0.11	<0.001	0.030	-	0.07	-	0.0002	<0.001	-	<0.001	-	<0.05	<0.001	0.410	-	-	0.044	<0.01	-	-	0.050
D2	11 Nov 2024	0.21	<0.001	0.031	-	0.08	-	0.0002	0.001	-	0.003	-	0.14	0.001	0.523	-	-	0.057	<0.01	-	-	0.065
D2	14 May 2025	0.12	<0.001	0.034	-	0.05	-	0.0002	<0.001	-	<0.001	-	<0.05	<0.001	0.431	<0.0001	-	0.044	<0.01	<0.001	-	0.052
D3	18 Oct 2022	0.51	0.002	0.027	0.002	0.52	<0.001	0.0012	<0.001	0.090	0.006	0.214	10.6	<0.001	1.73	-	<0.001	0.277	<0.01	<0.001	<0.01	0.315
D3	29 Nov 2022	-	<0.001	-	-	0.29	-	0.0035	<0.001	-	0.006	-	-	<0.001	0.922	-	-	0.150	<0.01	-	-	0.176
D3	22 May 2023	0.24	<0.001	0.046	0.001	0.4	<0.001	0.0014	<0.001	0.032	<0.001	0.126	0.67	<0.001	0.926	<0.0001	<0.001	0.109	<0.01	<0.001	<0.01	0.117
D3	13 Nov 2023	0.12	<0.001	0.033	-	0.31	-	0.0005	<0.001	-	<0.001	-	11.7	<0.001	0.932	-	-	0.110	<0.01	-	-	0.077
D3	24 Jun 2024	0.60	<0.001	0.020	-	0.42	-	0.0012	<0.001	-	0.003	-	0.14	<0.001	0.828	-	-	0.161	<0.01	-	-	0.134
D3	11 Nov 2024	0.32	<0.001	0.022	-	0.26	-	0.0005	0.002	-	0.001	-	3.19	0.004	0.671	-	-	0.069	<0.01	-	-	0.103
D3	14 May 2025	0.12	<0.001	0.026	-	0.24	-	0.0004	<0.001	-	<0.001	-	8.50	0.002	0.737	<0.0001	-	0.076	<0.01	<0.001	-	0.028
D4	29 Nov 2022	-	<0.001	-	-	0.58	-	<0.0001	<0.001	-	<0.001	-	-	<0.001	7.98	-	-	0.007	<0.01	-	-	0.026
D4	22 May 2023	<0.01	<0.001	0.042	<0.001	0.58	<0.001	<0.0001	<0.001	0.042	0.001	0.213	89.3	<0.001	5.55	<0.0001	<0.001	0.042	<0.01	<0.001	<0.01	0.045
D4	13 Nov 2023	<0.01	<0.001	0.041	-	1.11	-	<0.0001	<0.001	-	<0.001	-	72.0	<0.001	6.25	-	-	0.029	<0.01	-	-	0.022
D4	24 Jun 2024	<0.01	<0.001	0.021	-	0.72	-	<0.0001	<0.001	-	<0.001	-	36.4	<0.001	5.39	-	-	0.036	<0.01	-	-	0.046
D4	11 Nov 2024	0.04	<0.001	0.015	-	1.34	-	<0.0001	<0.001	-	<0.001	-	66.2	<0.001	5.81	-	-	0.030	<0.01	-	-	0.034
D4	15 May 2025	<0.01	<0.001	0.024	-	1.44	-	<0.0001	<0.001	-	0.002	-	44.4	<0.001	7.66	<0.0001	-	0.021	<0.01	<0.001	-	0.027
D5	19 Oct 2022	<0.01	0.002	0.040	<0.001	0.69	<0.001	<0.0001	<0.001	0.026	<0.001	0.163	39.8	<0.001	2.16	<0.0001	<0.001	0.040	<0.01	<0.001	<0.01	<0.005
D5	29 Nov 2022	-	<0.001	-	-	0.48	-	<0.0001	<0.001	-	<0.001	-	-	<0.001	1.93	-	-	0.028	<0.01	-	-	0.006
D5	23 May 2023	<0.01	<0.001	0.059	<0.001	0.27	<0.001	<0.0001	<0.001	0.021	0.001	0.116	31.8	<0.001	1.59	<0.0001	<0.001	0.03	<0.01	<0.001	<0.01	0.008
D5	13 Nov 2023	<0.01	<0.001	0.301	-	0.08	-	<0.0001	<0.001	-	<0.001	-	16.7	<0.001	0.852	-	-	<0.001	<0.01	-	-	<0.005

	Metals																					
	Aluminium (filtered)	Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Antimony (filtered)	Cadmium (filtered)	Chromium (III+VI) (filtered)	Cobalt (filtered)	Copper (filtered)	Strontium (filtered)	Iron (filtered)	Lead (filtered)	Manganese (filtered)	Mercury (filtered)	Molybdenum (filtered)	Nickel (filtered)	Selenium (filtered)	Silver (filtered)	Vanadium (filtered)	Zinc (filtered)	
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
EQL	0.01	0.001	0.001	0.0005	0.02	0.001	0.0001	0.001	0.001	0.001	0.001	0.01	0.001	0.001	0.00005	0.001	0.001	0.001	0.001	0.001	0.001	0.001

Location Code	Date	Aluminium (filtered)	Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Antimony (filtered)	Cadmium (filtered)	Chromium (III+VI) (filtered)	Cobalt (filtered)	Copper (filtered)	Strontium (filtered)	Iron (filtered)	Lead (filtered)	Manganese (filtered)	Mercury (filtered)	Molybdenum (filtered)	Nickel (filtered)	Selenium (filtered)	Silver (filtered)	Vanadium (filtered)	Zinc (filtered)
D5	14 Nov 2023	0.23	<0.001	0.041	<0.0005	0.22	<0.001	<0.0001	<0.001	0.022	<0.001	0.13	27	<0.001	1.6	<0.00005	<0.001	0.031	<0.001	<0.001	<0.001	0.018
D5	14 Nov 2023	0.02	<0.001	0.065	-	0.37	-	<0.0001	<0.001	-	<0.001	-	30.7	<0.001	1.61	-	-	0.032	<0.01	-	-	0.017
D5	25 Jun 2024	<0.01	<0.001	0.031	-	0.52	-	<0.0001	<0.001	-	<0.001	-	42.1	<0.001	1.89	-	-	0.032	<0.01	-	-	<0.005
D5	11 Nov 2024	0.05	<0.001	0.034	-	0.49	-	<0.0001	<0.001	-	0.001	-	40.1	<0.001	1.88	-	-	0.036	<0.01	-	-	0.012
D5	13 May 2025	1.15	0.004	0.095	-	3.07	-	0.0001	<0.001	-	<0.001	-	15.5	<0.001	8.14	<0.0001	-	0.229	<0.01	<0.001	-	0.012
D6	19 Oct 2022	8.82	<0.001	0.017	0.011	0.61	<0.001	0.0008	<0.001	0.225	0.013	0.123	2.15	0.006	0.671	<0.0001	<0.001	0.472	<0.01	<0.001	<0.01	1.42
D6	29 Nov 2022	-	<0.001	-	-	0.44	-	0.0008	<0.001	-	0.003	-	-	0.004	0.583	-	-	0.386	<0.01	-	-	0.983
D6	29 Nov 2022	-	<0.001	-	-	0.45	-	0.0008	<0.001	-	0.007	-	-	0.004	0.567	-	-	0.388	<0.01	-	-	0.998
D6	23 May 2023	3.87	<0.001	0.035	0.008	0.34	<0.001	0.0009	<0.001	0.256	0.004	0.085	0.99	0.003	0.835	<0.0001	<0.001	0.398	<0.01	<0.001	<0.01	1.21
D6	15 Nov 2023	3.63	<0.001	0.011	-	0.34	-	0.0007	<0.001	-	<0.001	-	11.5	0.002	1.33	-	-	0.426	<0.01	-	-	1.29
D6	25 Jun 2024	4.96	<0.001	0.019	-	0.63	-	0.0004	<0.001	-	<0.001	-	1.71	0.002	0.556	-	-	0.447	<0.01	-	-	0.884
D6	11 Nov 2024	3.16	<0.001	0.018	-	0.54	-	0.0002	0.001	-	<0.001	-	18.6	<0.001	1.26	-	-	0.428	<0.01	-	-	0.635
D6	11 Nov 2024	3.14	<0.001	0.018	-	0.58	-	0.0002	<0.001	-	<0.001	-	18.8	<0.001	1.24	-	-	0.421	<0.01	-	-	0.625
D6	13 May 2025	1.9	<0.001	0.015	-	0.44	-	0.0007	<0.001	-	0.001	-	1.4	0.003	0.43	<0.00005	-	0.24	<0.001	<0.001	-	0.66
D6	13 May 2025	2.02	<0.001	0.018	-	0.56	-	0.0007	<0.001	-	<0.001	-	1.42	0.003	0.485	<0.0001	-	0.244	<0.01	<0.001	-	0.685
MW102D	10 Dec 2024	-	0.003	0.066	<0.001	0.09	-	<0.0001	<0.001	0.027	<0.001	-	-	<0.001	1.46	<0.0001	-	0.029	<0.01	-	<0.01	0.044
MW102S	10 Dec 2024	-	0.002	0.019	<0.001	<0.05	-	<0.0001	<0.001	0.265	<0.001	-	-	<0.001	15.0	<0.0001	-	0.313	<0.01	-	<0.01	0.420
MW109D	12 Dec 2024	-	0.003	0.121	<0.001	0.18	-	<0.0001	0.003	0.002	<0.001	-	-	0.002	0.478	<0.0001	-	0.003	<0.01	-	<0.01	0.015
WH_MW02	18 Oct 2022	<0.01	<0.001	0.026	<0.001	<0.05	<0.001	<0.0001	<0.001	<0.001	<0.001	0.072	36.8	<0.001	2.42	-	<0.001	<0.001	<0.01	<0.001	<0.01	<0.005
WH_MW02	29 Nov 2022	-	<0.001	-	-	<0.05	-	<0.0001	<0.001	-	<0.001	-	-	<0.001	2.30	-	-	0.003	<0.01	-	-	0.007
WH_MW02	22 May 2023	0.02	<0.001	0.036	<0.001	<0.05	<0.001	<0.0001	<0.001	<0.001	<0.001	0.062	32.8	<0.001	2.32	<0.0001	<0.001	<0.001	<0.01	<0.001	<0.01	0.01
WH_MW02	15 Nov 2023	<0.01	<0.001	0.009	-	0.07	-	<0.0001	<0.001	-	<0.001	-	28.7	<0.001	2.54	-	-	0.003	<0.01	-	-	<0.005
WH_MW02	24 Jun 2024	<0.01	<0.001	0.022	-	<0.05	-	<0.0001	<0.001	-	<0.001	-	36.1	<0.001	2.36	-	-	<0.001	<0.01	-	-	<0.005
WH_MW02	11 Nov 2024	0.04	<0.001	0.025	-	<0.05	-	<0.0001	<0.001	-	<0.001	-	38.3	<0.001	2.40	-	-	<0.001	<0.01	-	-	0.006

	Metals																					
	Aluminium (filtered)	Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Antimony (filtered)	Cadmium (filtered)	Chromium (III+VI) (filtered)	Cobalt (filtered)	Copper (filtered)	Strontium (filtered)	Iron (filtered)	Lead (filtered)	Manganese (filtered)	Mercury (filtered)	Molybdenum (filtered)	Nickel (filtered)	Selenium (filtered)	Silver (filtered)	Vanadium (filtered)	Zinc (filtered)	
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
EQL	0.01	0.001	0.001	0.0005	0.02	0.001	0.0001	0.001	0.001	0.001	0.001	0.01	0.001	0.001	0.00005	0.001	0.001	0.001	0.001	0.001	0.001	0.001

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WH_MW02	13 May 2025	<0.01	<0.001	0.024	-	<0.05	-	<0.0001	<0.001	-	<0.001	-	37.8	<0.001	2.61	<0.0001	-	<0.001	<0.01	<0.001	-	<0.005
WH_MW03	18 Oct 2022	0.74	<0.001	0.071	0.0007	0.03	<0.001	0.0001	0.001	0.011	0.003	0.031	13	0.001	1.6	<0.00005	<0.001	0.024	<0.001	<0.001	<0.001	0.12
WH_MW03	18 Oct 2022	0.02	<0.001	0.054	<0.001	<0.05	<0.001	<0.0001	<0.001	0.009	<0.001	0.031	19.1	<0.001	1.69	-	<0.001	0.020	<0.01	<0.001	<0.01	0.094
WH_MW03	29 Nov 2022	-	<0.001	-	-	<0.05	-	0.0002	<0.001	-	0.004	-	-	0.002	1.57	-	-	0.034	<0.01	-	-	0.142
WH_MW03	22 May 2023	0.04	<0.001	0.075	<0.001	<0.05	<0.001	<0.0001	<0.001	0.018	0.001	0.043	5.08	<0.001	1.63	<0.0001	<0.001	0.02	<0.01	<0.001	<0.01	0.087
WH_MW03	15 Nov 2023	0.15	<0.001	0.072	-	0.18	-	0.0002	<0.001	-	<0.001	-	0.08	<0.001	1.47	-	-	0.024	<0.01	-	-	0.058
WH_MW03	25 Jun 2024	0.16	<0.001	0.073	-	0.07	-	0.0001	<0.001	-	0.002	-	0.87	<0.001	1.67	-	-	0.034	<0.01	-	-	0.080
WH_MW03	11 Nov 2024	0.16	<0.001	0.048	-	<0.05	-	0.0001	<0.001	-	0.002	-	9.23	<0.001	1.96	-	-	0.038	<0.01	-	-	0.134
WH_MW03	13 May 2025	0.09	<0.001	0.062	-	0.06	-	0.0002	<0.001	-	<0.001	-	0.16	<0.001	0.907	<0.0001	-	0.016	<0.01	<0.001	-	0.060
WH_MW04	19 Oct 2022	<0.01	<0.001	0.665	<0.001	<0.05	<0.001	<0.0001	<0.001	<0.001	0.380	2.40	<0.001	0.034	<0.0001	<0.001	<0.001	<0.01	<0.001	<0.01	<0.005	
WH_MW04	23 May 2023	<0.01	<0.001	0.196	<0.001	<0.05	<0.001	<0.0001	0.001	<0.001	<0.001	0.302	0.05	<0.001	0.046	<0.0001	<0.001	<0.001	<0.01	<0.001	<0.01	<0.005
WI_MW03	19 Oct 2022	<0.01	0.003	0.039	<0.001	0.41	<0.001	<0.0001	<0.001	0.031	0.002	0.149	7.61	<0.001	0.980	<0.0001	<0.001	0.061	<0.01	<0.001	<0.01	0.033
WI_MW03	29 Nov 2022	-	0.001	-	-	0.13	-	<0.0001	<0.001	-	<0.001	-	-	<0.001	0.960	-	-	0.053	<0.01	-	-	0.015
WI_MW03	23 May 2023	<0.01	0.002	0.06	<0.001	0.22	<0.001	<0.0001	<0.001	0.022	0.002	0.117	7.36	<0.001	0.852	<0.0001	<0.001	0.045	<0.01	<0.001	<0.01	0.021
WI_MW03	13 May 2025	0.04	<0.001	0.042	-	0.61	-	<0.0001	<0.001	-	<0.001	-	16.0	<0.001	1.62	<0.0001	-	0.106	<0.01	<0.001	-	0.012
WI_MW03R	26 Jun 2024	0.08	<0.001	0.04	-	0.66	-	<0.0001	<0.001	-	<0.001	-	8.4	<0.001	1.5	-	-	0.11	<0.001	-	-	0.22
WI_MW03R	26 Jun 2024	0.04	<0.001	0.037	-	0.65	-	<0.0001	<0.001	-	<0.001	-	8.14	<0.001	1.53	-	-	0.104	<0.01	-	-	0.229
WI_MW03R	26 Jun 2024	0.05	<0.001	0.036	-	0.62	-	<0.0001	<0.001	-	<0.001	-	8.68	<0.001	1.54	-	-	0.106	<0.01	-	-	0.270
WI_MW03R	26 Jun 2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WI_MW03R	11 Nov 2024	0.06	<0.001	0.037	-	0.45	-	<0.0001	<0.001	-	<0.001	-	9.52	<0.001	1.39	-	-	0.102	<0.01	-	-	0.107
WJ_MW03	19 Oct 2022	0.94	<0.001	0.012	0.001	0.09	<0.001	<0.0001	<0.001	0.297	0.015	0.293	14.1	0.008	1.74	<0.0001	<0.001	0.165	<0.01	<0.001	<0.01	1.03
WJ_MW03	29 Nov 2022	-	0.001	-	-	0.05	-	<0.0001	<0.001	-	<0.001	-	-	0.002	1.82	-	-	0.154	<0.01	-	-	0.847
WJ_MW03	23 May 2023	0.54	0.001	0.032	<0.001	<0.05	<0.001	<0.0001	<0.001	0.237	0.001	0.242	24	0.007	1.58	<0.0001	<0.001	0.131	<0.01	<0.001	<0.01	0.617
WJ_MW03	15 Nov 2023	1.22	<0.001	0.037	-	0.09	-	<0.0001	<0.001	-	0.005	-	17.6	0.004	1.88	-	-	0.157	<0.01	-	-	0.996

	Metals																					
	Aluminium (filtered)	Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Antimony (filtered)	Cadmium (filtered)	Chromium (III+VI) (filtered)	Cobalt (filtered)	Copper (filtered)	Strontium (filtered)	Iron (filtered)	Lead (filtered)	Manganese (filtered)	Mercury (filtered)	Molybdenum (filtered)	Nickel (filtered)	Selenium (filtered)	Silver (filtered)	Vanadium (filtered)	Zinc (filtered)	
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
EQL	0.01	0.001	0.001	0.0005	0.02	0.001	0.0001	0.001	0.001	0.001	0.001	0.01	0.001	0.001	0.00005	0.001	0.001	0.001	0.001	0.001	0.001	0.001

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WJ_MW03	26 Jun 2024	1.11	<0.001	0.013	-	0.09	-	<0.0001	<0.001	-	0.004	-	14.6	0.007	1.79	-	-	0.164	<0.01	-	-	0.924
WJ_MW03	26 Jun 2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WJ_MW03	11 Nov 2024	0.30	0.001	0.011	-	0.10	-	<0.0001	<0.001	-	0.001	-	41.9	0.002	2.40	-	-	0.178	<0.01	-	-	0.922
WJ_MW03	13 May 2025	0.64	0.002	0.024	-	0.11	-	0.0001	<0.001	-	0.013	-	31.4	0.006	2.12	<0.0001	-	0.169	<0.01	<0.001	-	0.972
WK_MW01	17 Oct 2022	<0.01	<0.001	0.038	<0.0005	0.74	<0.001	<0.0001	<0.001	0.002	0.002	0.38	0.04	<0.001	0.98	<0.00005	<0.001	0.022	<0.001	<0.001	<0.001	0.004
WK_MW01	17 Oct 2022	<0.01	<0.001	0.056	<0.001	0.85	<0.001	<0.0001	<0.001	0.002	<0.001	0.360	0.15	<0.001	0.936	-	<0.001	0.025	<0.01	<0.001	<0.01	<0.005
WK_MW01	29 Nov 2022	-	<0.001	-	-	0.70	-	<0.0001	<0.001	-	<0.001	-	-	<0.001	0.330	-	-	0.014	<0.01	-	-	<0.005
WK_MW01	23 May 2023	<0.01	<0.001	0.035	<0.001	0.56	<0.001	<0.0001	<0.001	0.018	<0.001	0.3	1.77	<0.001	1.63	<0.0001	<0.001	0.019	<0.01	<0.001	<0.01	0.007
WK_MW01	13 Nov 2023	<0.01	<0.001	0.036	-	0.73	-	<0.0001	<0.001	-	<0.001	-	0.07	<0.001	0.135	-	-	0.008	<0.01	-	-	<0.005
WK_MW01	24 Jun 2024	<0.01	<0.001	0.024	-	0.83	-	<0.0001	<0.001	-	<0.001	-	4.09	<0.001	1.10	-	-	0.011	<0.01	-	-	<0.005
WK_MW01	11 Nov 2024	0.04	0.001	0.020	-	0.80	-	<0.0001	<0.001	-	<0.001	-	11.3	<0.001	1.78	-	-	0.015	<0.01	-	-	0.009
WK_MW01	14 May 2025	<0.01	<0.001	0.034	-	0.74	-	<0.0001	<0.001	-	0.001	-	5.12	<0.001	1.00	<0.0001	-	0.016	<0.01	<0.001	-	0.010
WK_MW04	18 Oct 2022	0.02	<0.001	0.063	<0.001	0.06	<0.001	<0.0001	<0.001	0.003	0.005	0.253	0.12	<0.001	0.393	-	<0.001	0.014	<0.01	<0.001	<0.01	0.030
WK_MW04	18 Oct 2022	<0.01	<0.001	0.061	<0.001	0.07	<0.001	<0.0001	<0.001	0.002	0.001	0.258	0.07	<0.001	0.389	-	<0.001	0.014	<0.01	<0.001	<0.01	0.030
WK_MW04	29 Nov 2022	-	<0.001	-	-	<0.05	-	<0.0001	<0.001	-	<0.001	-	-	<0.001	0.565	-	-	0.009	<0.01	-	-	0.034
WK_MW04	23 May 2023	<0.01	<0.001	0.09	<0.001	<0.05	<0.001	<0.0001	<0.001	0.022	<0.001	0.222	0.75	<0.001	1.49	<0.0001	<0.001	0.029	<0.01	<0.001	<0.01	0.072
WK_MW04	13 Nov 2023	<0.01	<0.001	0.063	-	<0.05	-	<0.0001	<0.001	-	<0.001	-	<0.05	<0.001	0.303	-	-	0.010	<0.01	-	-	0.029
WK_MW04	24 Jun 2024	<0.01	<0.001	0.060	-	0.07	-	<0.0001	<0.001	-	<0.001	-	<0.05	<0.001	0.337	-	-	0.008	<0.01	-	-	0.034
WK_MW04	11 Nov 2024	0.02	<0.001	0.064	-	0.08	-	<0.0001	<0.001	-	0.002	-	<0.05	<0.001	0.165	-	-	0.006	<0.01	-	-	0.032
WK_MW04	13 May 2025	<0.01	<0.001	0.078	-	0.07	-	<0.0001	<0.001	-	<0.001	-	0.78	<0.001	0.895	<0.0001	-	0.008	<0.01	<0.001	-	0.031
WK_MW06	18 Oct 2022	<0.01	0.036	0.956	<0.001	<0.05	<0.001	<0.0001	0.003	0.001	<0.001	0.503	2.95	<0.001	0.136	-	<0.001	0.004	<0.01	<0.001	<0.01	<0.005
WK_MW06	29 Nov 2022	-	0.062	-	-	<0.05	-	<0.0001	0.001	-	<0.001	-	-	<0.001	0.074	-	-	<0.001	<0.01	-	-	<0.005
WK_MW06	23 May 2023	<0.01	0.054	0.775	<0.001	<0.05	<0.001	<0.0001	<0.001	<0.001	<0.001	0.429	2.27	<0.001	0.07	<0.0001	<0.001	<0.001	<0.01	<0.001	<0.01	<0.005
WK_MW06	13 Nov 2023	<0.01	0.048	0.804	-	<0.05	-	<0.0001	<0.001	-	<0.001	-	2.18	<0.001	0.090	-	-	<0.001	<0.01	-	-	<0.005

	Metals																				
	Aluminium (filtered)	Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Antimony (filtered)	Cadmium (filtered)	Chromium (III+VI) (filtered)	Cobalt (filtered)	Copper (filtered)	Strontium (filtered)	Iron (filtered)	Lead (filtered)	Manganese (filtered)	Mercury (filtered)	Molybdenum (filtered)	Nickel (filtered)	Selenium (filtered)	Silver (filtered)	Vanadium (filtered)	Zinc (filtered)
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
EQL	0.01	0.001	0.001	0.0005	0.02	0.001	0.0001	0.001	0.001	0.001	0.001	0.01	0.001	0.001	0.00005	0.001	0.001	0.001	0.001	0.001	0.001

Location Code Date

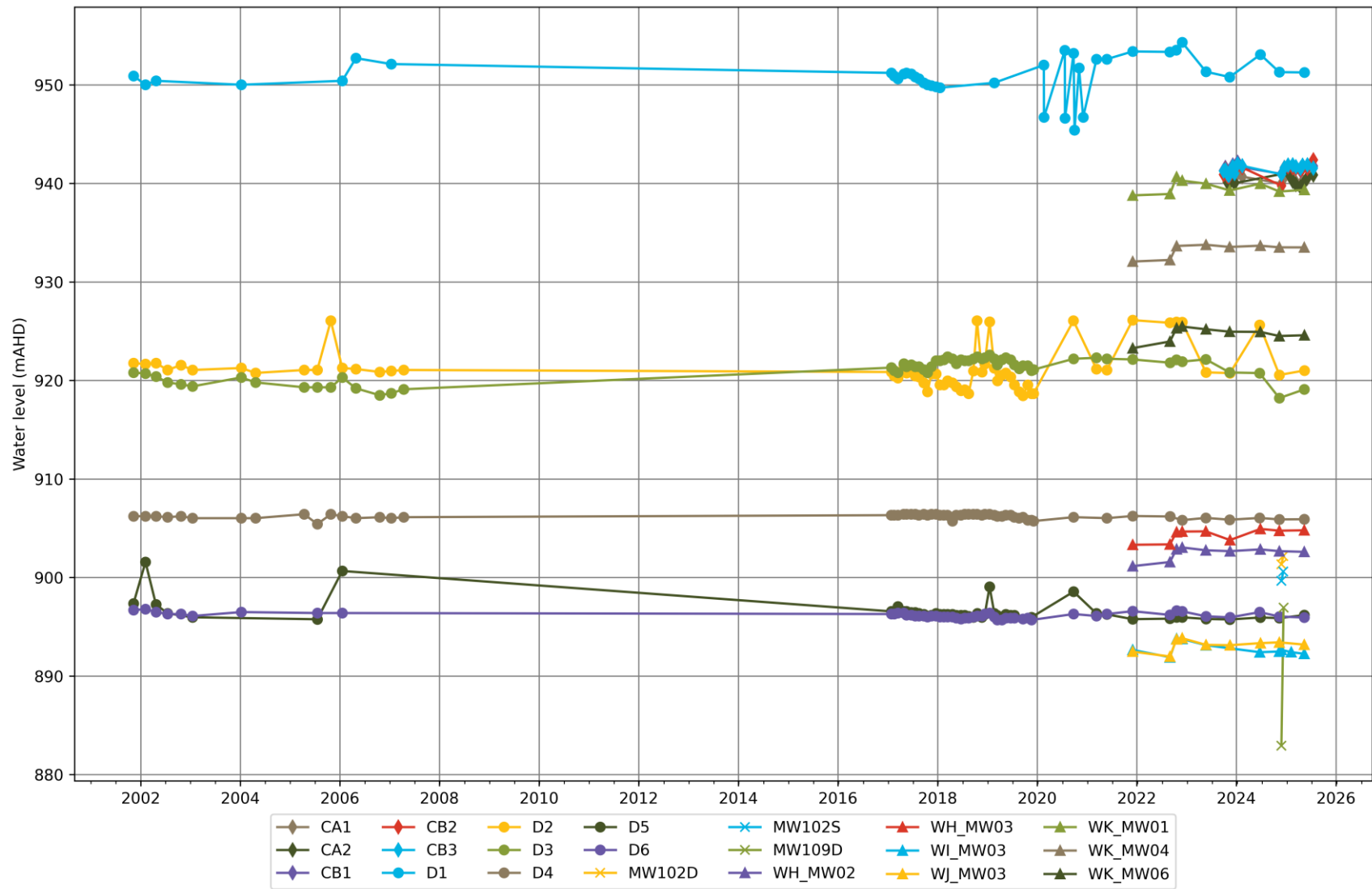
WK_MW06	24 Jun 2024	<0.01	0.042	0.664	-	<0.05	-	<0.0001	<0.001	-	<0.001	-	1.35	<0.001	0.058	-	-	<0.001	<0.01	-	-	<0.005
WK_MW06	11 Nov 2024	0.02	0.047	0.756	-	<0.05	-	<0.0001	<0.001	-	<0.001	-	2.48	<0.001	0.073	-	-	<0.001	<0.01	-	-	<0.005
WK_MW06	14 May 2025	<0.01	0.002	0.823	-	<0.05	-	<0.0001	<0.001	-	<0.001	-	2.00	<0.001	0.059	<0.0001	-	<0.001	<0.01	<0.001	-	<0.005
WWD1A	17 Oct 2022	<0.01	0.008	0.309	<0.001	0.13	<0.001	<0.0001	<0.001	0.006	<0.001	0.164	74.4	<0.001	0.233	-	<0.001	0.006	<0.01	<0.001	<0.01	0.005
WWD1A	23 May 2023	0.02	0.007	0.25	<0.0005	0.05	<0.001	<0.0001	<0.001	0.006	0.003	0.11	49	<0.001	0.19	<0.00005	<0.001	0.004	<0.001	<0.001	<0.001	0.008
WWD1A	23 May 2023	0.52	0.007	0.234	<0.001	0.43	<0.001	0.0001	<0.001	0.007	0.002	0.102	49	<0.001	0.287	<0.0001	<0.001	0.007	<0.01	<0.001	<0.01	0.016
WWD1A	25 Jun 2024	<0.01	0.003	0.103	-	0.17	-	<0.0001	<0.001	-	<0.001	-	20.7	<0.001	0.089	-	-	0.002	<0.01	-	-	<0.005
WWD1B	17 Oct 2022	0.03	0.009	0.597	<0.001	1.58	<0.001	<0.0001	<0.001	<0.001	<0.001	0.645	16.6	<0.001	1.33	-	0.084	0.002	<0.01	<0.001	<0.01	<0.005
WWD1B	17 Oct 2022	0.03	0.008	0.580	<0.001	1.57	<0.001	<0.0001	<0.001	<0.001	<0.001	0.622	15.6	<0.001	1.29	-	0.082	0.002	<0.01	<0.001	<0.01	<0.005
WWD1B	23 May 2023	0.05	0.01	0.22	<0.0005	3.1	<0.001	<0.0001	<0.001	<0.001	<0.001	1.2	38	<0.001	2.4	<0.00005	0.2	0.003	<0.001	<0.001	<0.001	<0.001
WWD1B	23 May 2023	0.13	0.009	0.205	<0.001	2.49	<0.001	<0.0001	<0.001	<0.001	0.002	1.05	35.7	<0.001	2.35	<0.0001	0.155	0.003	<0.01	<0.001	<0.01	<0.005
WWD1B	25 Jun 2024	0.08	0.010	0.180	-	3.31	-	<0.0001	<0.001	-	<0.001	-	36.3	<0.001	2.46	-	-	<0.001	<0.01	-	-	<0.005
WWD2A	17 Oct 2022	0.04	<0.001	0.335	<0.001	3.90	<0.001	<0.0001	<0.001	<0.001	<0.001	1.09	8.88	<0.001	1.63	-	<0.001	<0.001	<0.01	<0.001	<0.01	<0.005
WWD2A	23 May 2023	0.07	<0.001	0.336	<0.001	3.13	<0.001	<0.0001	<0.001	<0.001	<0.001	1.04	11.4	<0.001	2.19	<0.0001	0.004	<0.001	<0.01	<0.001	<0.01	<0.005
WWD2A	04 Jul 2023	0.05	0.005	0.932	<0.001	2.84	<0.001	<0.0001	<0.001	<0.001	<0.001	1.23	14.8	<0.001	1.99	<0.0001	0.001	<0.001	<0.01	<0.001	<0.01	<0.005
WWD2A	25 Jun 2024	0.07	<0.001	0.997	-	3.29	-	<0.0001	<0.001	-	<0.001	-	23.9	<0.001	1.72	-	-	<0.001	<0.01	-	-	<0.005
WWD2B	17 Oct 2022	0.02	0.006	0.360	<0.001	0.20	<0.001	<0.0001	<0.001	<0.001	0.001	0.146	9.88	<0.001	0.187	-	0.005	0.003	<0.01	<0.001	<0.01	<0.005
WWD2B	04 Jul 2023	<0.01	0.004	0.488	<0.001	0.05	<0.001	<0.0001	<0.001	<0.001	<0.001	0.125	9.61	<0.001	0.191	<0.0001	<0.001	<0.001	<0.01	<0.001	<0.01	<0.005
WWD2B	25 Jun 2024	0.69	0.012	0.142	-	0.64	-	0.0002	<0.001	-	<0.001	-	17.4	<0.001	2.10	-	-	0.044	<0.01	-	-	0.164
WWD5A	19 Oct 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWD5B	18 Oct 2022	<0.01	0.009	0.026	<0.001	0.08	<0.001	<0.0001	<0.001	0.016	<0.001	0.358	2.53	<0.001	0.383	-	0.002	0.048	<0.01	<0.001	<0.01	<0.005
WWD5B	22 May 2023	<0.01	0.009	0.048	<0.001	<0.05	<0.001	<0.0001	<0.001	0.008	<0.001	0.364	3.37	<0.001	0.498	<0.0001	<0.001	0.025	<0.01	<0.001	<0.01	<0.005
WWD6A	18 Oct 2022	6.05	0.008	0.026	0.009	5.31	0.004	<0.0001	<0.001	0.154	<0.001	5.74	19.2	<0.001	3.31	-	0.420	0.643	<0.01	<0.001	<0.01	1.09
WWD6A	22 May 2023	6.35	0.012	0.056	0.008	4.1	0.011	0.0009	<0.001	0.145	0.005	5.42	17.8	<0.001	3.08	<0.0001	0.353	0.63	0.02	<0.001	<0.01	1.08

	Metals																					
	Aluminium (filtered)	Arsenic (filtered)	Barium (filtered)	Beryllium (filtered)	Boron (filtered)	Antimony (filtered)	Cadmium (filtered)	Chromium (III+VI) (filtered)	Cobalt (filtered)	Copper (filtered)	Strontium (filtered)	Iron (filtered)	Lead (filtered)	Manganese (filtered)	Mercury (filtered)	Molybdenum (filtered)	Nickel (filtered)	Selenium (filtered)	Silver (filtered)	Vanadium (filtered)	Zinc (filtered)	
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
EQL	0.01	0.001	0.001	0.0005	0.02	0.001	0.0001	0.001	0.001	0.001	0.001	0.01	0.001	0.001	0.00005	0.001	0.001	0.001	0.001	0.001	0.001	0.001

Location Code Date

WWD6A	22 May 2023	5.92	0.01	0.043	0.007	4.03	0.012	0.0008	<0.001	0.138	<0.001	5.14	18.4	<0.001	2.87	<0.0001	0.329	0.602	0.02	<0.001	<0.01	1.06
WWD6A	14 Nov 2023	5.37	0.006	0.076	-	3.25	-	0.0023	<0.001	-	0.001	-	12.6	<0.001	2.28	-	-	0.534	<0.01	-	-	1.48
WWD6A	24 Jun 2024	5.07	0.006	0.034	-	3.45	-	0.0052	<0.001	-	<0.001	-	11.1	<0.001	2.27	-	-	0.613	0.02	-	-	2.00
WWD6B	18 Oct 2022	0.28	0.002	0.017	0.002	0.76	<0.001	<0.0001	<0.001	0.123	<0.001	0.171	25.3	<0.001	0.849	-	0.010	0.111	<0.01	<0.001	<0.01	0.020
WWD6B	22 May 2023	0.09	0.006	0.042	0.001	0.65	<0.001	<0.0001	0.001	0.029	0.002	0.079	4.72	<0.001	0.093	<0.0001	0.008	0.038	<0.01	<0.001	<0.01	0.026
WWD6B	22 May 2023	0.11	0.005	0.033	0.001	0.78	<0.001	<0.0001	0.001	0.028	<0.001	0.069	3.8	<0.001	0.097	<0.0001	0.001	0.036	<0.01	<0.001	<0.01	0.022
WWD6B	14 Nov 2023	0.09	0.005	0.052	-	0.72	-	<0.0001	<0.001	-	<0.001	-	6.14	<0.001	0.182	-	-	0.043	<0.01	-	-	0.027
WWD6B	24 Jun 2024	0.12	0.004	0.024	-	0.87	-	<0.0001	0.001	-	<0.001	-	3.96	<0.001	0.113	-	-	0.036	<0.01	-	-	0.025
WWD10	19 Oct 2022	0.60	<0.001	0.021	0.003	0.25	<0.001	0.0004	<0.001	0.081	0.011	0.167	0.12	0.004	1.09	<0.0001	<0.001	0.133	<0.01	<0.001	<0.01	0.438
WWD10	23 May 2023	0.5	<0.001	0.017	0.002	0.12	<0.001	0.0003	0.006	0.07	<0.001	0.135	0.67	0.002	1.06	<0.0001	<0.001	0.155	<0.01	<0.001	<0.01	0.35
WWD12	19 Oct 2022	0.04	<0.001	0.105	<0.001	0.09	<0.001	<0.0001	<0.001	0.031	0.002	0.042	8.15	<0.001	0.517	<0.0001	<0.001	0.096	<0.01	<0.001	<0.01	0.101
WWD12	23 May 2023	<0.01	<0.001	0.086	<0.001	0.08	<0.001	<0.0001	<0.001	0.026	<0.001	0.032	9.73	<0.001	0.5	<0.0001	<0.001	0.087	<0.01	<0.001	<0.01	0.098
WWD14A	18 Oct 2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WWD14A	22 May 2023	389	0.107	0.031	0.19	21.8	0.003	0.116	0.062	0.358	0.065	11.9	23.7	<0.001	10.3	<0.0001	0.032	1.2	0.7	<0.001	0.14	4.16
WWD14A	15 Nov 2023	408	0.066	0.045	-	26.3	-	0.141	0.076	-	0.085	-	38.4	<0.001	11.6	-	-	1.26	0.34	-	-	4.55
WWD14B	18 Oct 2022	260	0.046	0.029	0.158	20.2	<0.001	0.0400	0.042	0.997	0.008	8.41	256	0.040	82.7	-	0.008	1.54	1.90	<0.001	0.15	4.14
WWD14B	22 May 2023	275	0.083	0.028	0.13	13.8	0.001	0.067	0.086	0.934	0.004	7.78	233	0.034	78.8	<0.0001	0.02	1.5	0.53	<0.001	0.16	3.93
WWD14B	22 May 2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix D Baseline groundwater level data



Appendix E Consultation records



4 February 2025

Generator Property Management Pty Ltd
PO Box 132
Budgewoi NSW 2262

Attention: Stephen Saladine

Dear Stephen

Subject: Wallerawang Power Station Ash Dam – WaterNSW’s Advice on proposed Operational Groundwater (MP07_0005-PA-29) and Surface Water (MP07_0005-PA-30) Management Plan

WaterNSW appreciates the opportunity to provide advice on the proposed Operational Groundwater and Surface Water Management Plan (OGWMP and OSWMP) prepared by Generator Property Management Pty Ltd (GPM). The existing consent conditions for MP07_0005, conditions 6.5(b) and (c), requires an Operational Groundwater and Surface Water Management Plan (OGWMP and OSWMP) to be prepared in consultation with WaterNSW, and implemented as part of the Operation Environmental Management Plan for the project.

As the development is located within the Sydney Drinking Water Catchment (SDWC), Section 6.61(1) and 6.63 of the *State Environmental Planning Policy (Biodiversity and Conservation) 2021* (the SEPP) apply.

WaterNSW has reviewed the information in the proposed OGWMP and OSWMP (both dated 19 December 2024) prepared by GPM and requests that the reports include the following matters:

- For OGWMP:
 - Chrome 6+ (Cr6+), Mercury (Hg) and Silver (Ag) should be included in groundwater monitoring given historic data at the site
 - Table B2 should be updated to include sampling for Aluminium (Al), Chrome 6+ (Cr6+), Mercury (Hg) and Silver (Ag) given historic issues identified
 - There is no discussion as to what the 4 groundwater monitoring sites (A9, A17, GW10 & GW11) identified in Figure B1 as “extra water quality and water level sites – not part of OEMP” are for, and why they aren’t included in the OEMP. WaterNSW considers that more detail regarding these monitoring sites should be included as part of the sites OGWMP, even if non-routine sites
 - Section 6.2 of the OGWMP notes that monitoring shall be conducted 6 monthly at 11 locations whereas, Appendix B of the OGWMP suggests 13 water quality monitoring locations. The OGWMP should be updated for consistency, and
 - Clarification should be included in Table B4 on when relevant agencies shall be notified if Low Hazard (Stage 1) trigger continues, and where Stage 2 is not triggered.
- For OSWMP:
 - The OSWMP should include a detailed water balance for the site to demonstrate that storage volumes can effectively manage contaminated water on site

- Little information is provided in the OSWMP regarding the Caustic Injection Plant (CIP). WaterNSW considers the potential impacts of this activity are relevant and should also be included in the OSWMP including specific details of the current water quality within the SSCAD (including heavy metals and metalloids) and details of the treatment process and the expected quality of treated water discharges for all parameters. The OSWMP should also include when use of the CIP is triggered (i.e., anticipated rainfall thresholds, water quality exceedances), and monitoring is required prior to treatment, and prior to discharge to ensure compliance with the EPL
- WaterNSW considers detailed baseline monitoring data for each sample site be provided as an appendix similar to that provided in the OGWMP
- WaterNSW considers baseline values for all parameters proposed for monitoring should be included in Table A.2 – particularly given the site has a history for exceedances of Boron, Fluoride, Filterable Iron and Filterable Manganese which present a risk to the local aquatic ecology of the receiving waters that would not have been exposed to these contaminants on a regular basis. We also note that treatment through the CIP would not address these contaminants
- WaterNSW also considers that the 80th percentile values be provided for each monitoring site, for each parameter to identify potential spatial trends
- In Table B3 - Stage 2 notification, WaterNSW should also be included as a relevant agency to be notified, and
- In the Trigger Action Response Plans (Table B3 in the OSWMP and Table B4 in the OGWMP), recommend notifying the relevant agencies if a Stage 1 (Low Hazard) trigger continues for greater than 6 weeks, even if Stage 2 is not triggered.

WaterNSW also requests to remain as a stakeholder in any further assessment and consultation on this project. If you have any questions, please contact Rizwana Rumman via email at environmental.assessments@waternsw.com.au.

Yours sincerely



JURI JUNG
Catchment Protection Manager

Nadia Eisenlohr

From: Nadia Eisenlohr
Sent: Monday, 8 September 2025 8:34 AM
To: Nadia Eisenlohr
Subject: RE: Attention Rizwana Rumman: Subject: Wallerawang Power Station Ash Dam – WaterNSW’s Advice on proposed Operational Groundwater (MP07_0005-PA-29) and Surface Water (MP07_0005-PA-30) Management Plan

From: Rizwana Rumman <Rizwana.Rumman@waternsw.com.au>
Sent: Thursday, 7 August 2025 2:25 PM
To: Julian MacPhee <julian.macphee@gpmco.com.au>
Cc: John Pola <john.pola@gpmco.com.au>
Subject: RE: Attention Rizwana Rumman: Subject: Wallerawang Power Station Ash Dam – WaterNSW’s Advice on proposed Operational Groundwater (MP07_0005-PA-29) and Surface Water (MP07_0005-PA-30) Management Plan

You don't often get email from rizwana.rumman@waternsw.com.au. [Learn why this is important](#)

Hi Julian,

Thank you very much for sending through the updated plans. Water NSW has now reviewed the and have no further comments.

Just a quick note, the flow gauge upstream of LDP 3 operated by Water NSW is 212054 (Coxs River @ Wallerawang Power Station) , probably mistakenly reported as 12054.

Kind regards,

Rizwana Rumman
Catchment Assessment Officer



Level 14, 169 Macquarie St (1PSQ)
Parramatta NSW 2150
Work location: remote, please reach via email
E: rizwana.rumman@waternsw.com.au

Follow us on socials:



My work day may look different than your work day. Feel free to read, act on or respond during your working hours.

WaterNSW acknowledges the Traditional Custodians of the land and water on which we work and recognises the continuing cultural and spiritual connections that Aboriginal and Torres Strait Islander People have to Country. We pay our respects to Elders past and present.

From: Julian MacPhee <julian.macphee@gpmco.com.au>
Sent: Monday, 21 July 2025 9:44 AM
To: Environmental Assessments <Environmental.Assessments@waternsw.com.au>

Cc: John Pola <john.pola@gpmco.com.au>

Subject: [EXTERNAL] Attention Rizwana Rumman: Subject: Wallerawang Power Station Ash Dam – WaterNSW’s Advice on proposed Operational Groundwater (MP07_0005-PA-29) and Surface Water (MP07_0005-PA-30) Management Plan

This message is from an External Sender. Be careful opening emails, attachments and links from unknown senders.

Dear Rizwana,

I am contacting you regarding consultation advice for Wallerawang Power Station – Lidsdale Ash Dam – Operational Groundwater (MP07_0005-PA-29) and Surface Water (MP07_0005-PA-30) Management Plan.

Consultation was received on 4/2/2025 from WaterNSW which included several amendments to be made in the OGWMP and SWMP for Lidsdale Ash dam (attached).

DPHI have indicated there was no subsequent consultation after the requested amendments were made as the updated OGWMP and SWMP may not have been provided on the DPHI portal to WaterNSW.

I have attached the current version’s of the OGWMP and SWMP to review and endorse if satisfied with the document updates made in response to the comments received on 4/2/2025.

Many thanks.

Regards,

Julian MacPhee
Engineering Project Officer

GPM - Generator Property Management Pty Ltd

ABN: 73 615 047 295

Mobile: 0427 094 014

Julian.MacPhee@gpmco.com.au

110 Skelly Road, Lidsdale NSW 2790

301 Scenic Drive, Colongra NSW 2262

PO Box 132 Budgewoi NSW 2262

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