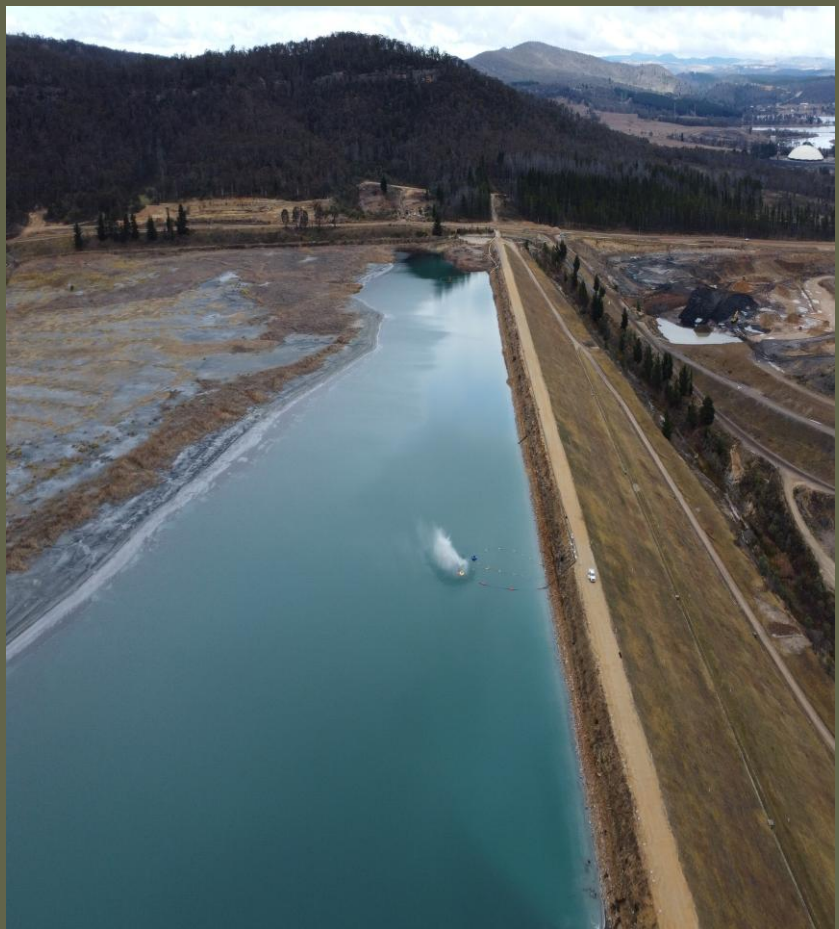



Operational Landscape / Revegetation Plan

Lidsdale Ash Repository 2026



GPM

Document control

Title	Operational Landscape/Revegetation 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 01	27/8/2024	Draft	Laurence Smith	Verity Blair	John Pola
Rev 02	26/11/2024	Draft	Sofia Stergio	Philip Towler	John Pola
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Rev 04	05/10/2025	Updated for DPHI comments	Zainab Ahmed	Nadia Eisenlohr	John Pola
Rev 05	31/03/2026	Final	Zainab Ahmed	Nadia Eisenlohr	John Pola

List of emergency and key contacts

Position	Name	Phone
EPA pollution hotline	General Number	131 555
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Lithgow Hospital	General Number	02 6350 2300
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Glossary/Abbreviations

Abbreviation	Expanded text
Approval	Approval Modification MP07_005-Mod 2
ASS	Acid Sulphate Soils
BVA	Biodiversity Values Assessment (EMM 2025)
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)
DPE	Department of Planning and Environment (now DPHI)
DPHI	NSW Department of Planning, Housing and Infrastructure
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.
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
Roads and Maritime	Roads and Maritime Services
ROL	Road occupancy licence
SAP	Sensitive Area Plan

Secretary	Secretary of the Department of Planning or their Nominee
SSCAD	Sawyers Swamp Creek Ash Dam
SEARs	Secretary's Environmental Assessment Requirements
SPIR	Submission and Preferred Infrastructure Report
SWMS	Safety & Environmental work method statement
TfNSW	Transport for New South Wales
WPS	Wallerawang Power Station

1 Introduction

The Lidsdale Ash Dam Repository (LADR), formerly known as the Wallerawang Ash Repository, is located at Skelly Road, Lidsdale NSW (the Site) and is approximately 15 kilometres (km) northwest of Lithgow and 2.5 km north-east of Wallerawang Power Station. 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 (WPS). 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 Landscape/Revegetation Management Plan (OLRMP) has been developed to ensure the care and maintenance of the site are carried out responsibly and in accordance with the relevant Conditions of Approval (CoAs) and any other requirements. It forms part of the Site's Operational Environmental Management Plan (OEMP) and will be staged. Further details related to the staging of this Plan have been provided in Section 1.3.

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 capping 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 1.1.

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 requiring detailed and extensive investigations that will guide long term works on the SSCAD 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 repository 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 capped.
- Stage 2: Comprises the remainder the repository 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 of 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 to allow the structural earthworks required to achieve an acceptable factor of safety against failure of the 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.

1.3 Staged rehabilitation strategy

As a result of the declaration of the site under the Contaminated Land Act, detailed studies are required to be undertaken to define the extent of contamination and required remediation. As a result the final landforms are not known. Therefore to achieve final rehabilitation of the site, a progressive strategy of short-term (Stage 1) and long-term (Stage 2) objectives has been developed:

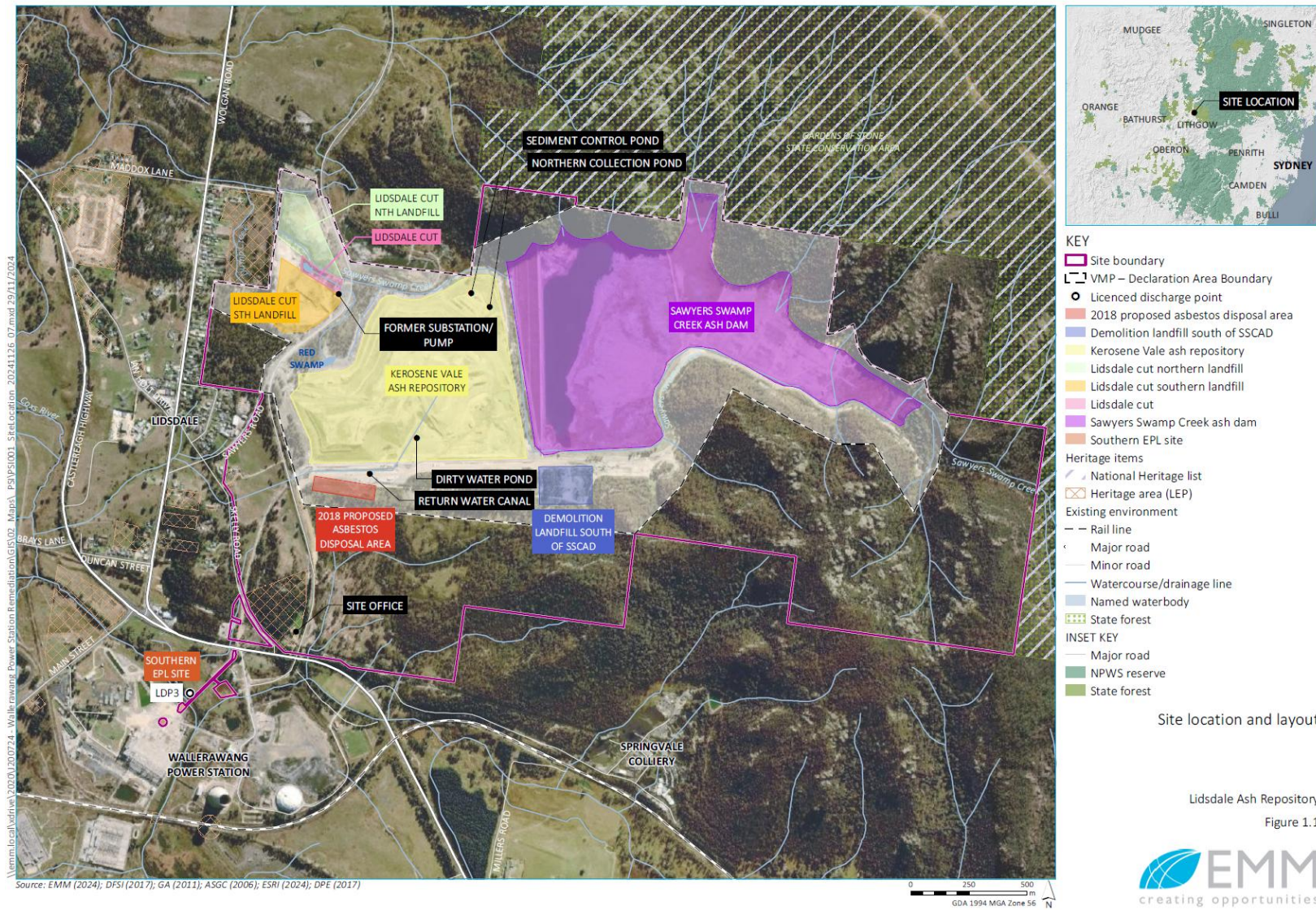
- Stage 1 – Short term rehabilitation for the care and maintenance phase of the site until remediation plans are finalised:
 - Weed management
 - Short term stabilisation
- Stage 2 – Long term rehabilitation for the closure of the site:
 - Determined by remediation and closure plan
 - Long term revegetation strategy
 - Final landform and landuse

A review of how the conditions of consent are to be addressed progressively in this plan is provided in Table 3.1.

This plan will cover the required Stage 1 works, with the long-term final rehabilitation plan (Stage 2) currently under development and pending the outcomes of a number of investigations.

Ongoing investigations that will inform the update of this plan include:

- Closure Strategy
- Voluntary Management Plan (VMP)
- Remedial Options Assessment (ROA) and Remedial Action Plan(s) (RAP)



Site location and layout

Lidsdale Ash Repository
Figure 1.1



Figure 1.1 Site location and layout

1.4 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 construction, 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 impacts
- **Operational Landscape/Revegetation Plan (OLRMP)** - 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
- **Operational Surface Water Management Plan (OSWMP)** – identifies the management measures to minimise surface water 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 OEMP.

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
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

1.5 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 standards ensure 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 OLRMP 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 1.2.

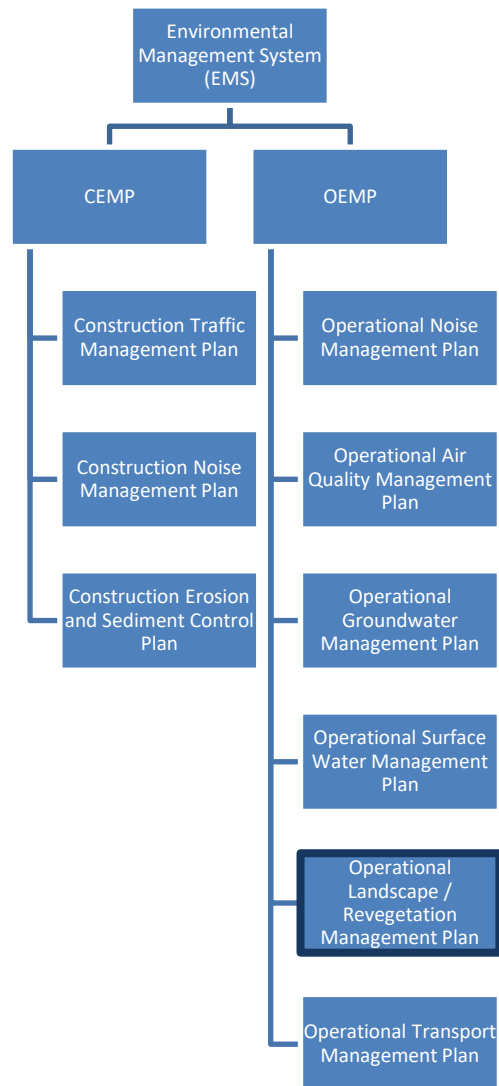


Figure 1.2 Environmental Management System flowchart

1.6 Interactions with other management plans and strategies

This OLRMP (as outlined in Figure 1.2 above) is a sub-plan to the OEMP and interrelates with the other (sub) management plans set out in section 1.2 and 1.4 above.

1.7 Reference documents

This OLRMP incorporates the obligations and criteria outlined in the following documents:

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

1.8 Endorsement and approval

1.8.1 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 DPHI and the Environmental Representative (ER) for review prior to undertaking external consultation, review and approval processes described below.

1.8.2 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.

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 latest ER Endorsement of the OEMP is included in Appendix A of this Plan.

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

The OLRMP does not require consultation.

2 Purpose and Objectives

2.1 Purpose

Schedule 1 of the Planning Approval defines rehabilitation as “The restoration of land disturbed by the development to a good condition, having regard to its condition prior to commencement of construction, to ensure it is safe, stable and non-polluting.”

Given the long history of the site, pre-existing conditions are not known, and the large amount of ash and other materials deposited on the site do not allow ‘pre-existing’ landforms to be returned to the site. Rehabilitation therefore has the following aims:

- return the site to a stable landform in disturbed areas
- provide a long lasting and non-invasive vegetative cover which allows the continued management of the site (including SSCAD wall, asbestos landfills and ash repositories)
- rehabilitate areas outside of continuous management areas to native bushland areas (where bordering on existing native vegetation) or grazing land (where these areas currently occur)
- control priority weeds across the site.

Following the completion of capping and landform shaping across the site, the following broad actions will be undertaken:

- establish a topsoil or topsoil substitute across shaped areas
- establish vegetative growth via seeding and planting
- monitor rehabilitated areas for erosion, growth and weeds
- maintain areas by slashing, mowing and weed control.

This OLRMP for the Lidsdale Ash Repository primarily outlines strategies and actions to mitigate environmental impacts during the care and maintenance phase of the site (Stage 1 as outlined in Section 1.3). It is designed to set clear protocols and responsibilities around the implementation of landscaping and management of vegetation during works required to get the site ready for closure, and to thereby ensure that risks are managed, and sustainable practices are upheld.

Details of the final rehabilitation outcomes for the site will be updated following completion of contamination studies, risk assessments and agreed outcomes of the Voluntary Management Plan with NSW EPA under the CLM Act. This process is not due to be finalised until 2027. At that point, this OLRMP will be updated to include objectives and requirements for the long-term rehabilitation and eventual closure of the site. The update of this OLRMP for Stage 2 will include landscape plans outlining the strategy for progressive final rehabilitation, in accordance with CoA 6.5(e)iv.

This sub-plan supports the OEMP and should be read in conjunction with the OEMP.

2.2 Objectives

Key issues include:

- potential damage to the existing high value vegetation, including disturbance to threatened biodiversity by operations on the Site
- potential introduction of and spread of weeds and soil pathogens within and around the vicinity of the Lidsdale Ash Repositories.

The key objectives of the Stage 1 OLRMP are to:

- avoid or minimise disturbance wherever possible to high value biodiversity identified in the Biodiversity Values Assessment (EMM 2025) and the Niche (2021) biodiversity constraints study.
- avoid the introduction spread of weeds and soil pathogens in and around the Lidsdale Ash Repository site area

As indicated in Section 2.1, this OLRMP will be updated to provide further details of the long-term rehabilitation and closure at the site. Key objectives of the updated OLRMP will be to:

- enhance wherever possible the high value biodiversity identified in the Biodiversity Values Assessment (EMM 2025) and the Niche (2021) biodiversity constraints study, and any subsequent biodiversity studies
- align with the values, vistas and land uses of the local environment surrounding the site
- fulfill the objectives identified in the VMP, ROA, RAP(s), Closure Strategy and other documentation related to the closure of the site

All vegetation management works are to be undertaken in accordance with this OLRMP and supporting documentation identified below.

2.3 Targets

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

Targets:

- Manage vegetation in the vicinity of the Lidsdale Ash Repositories and ensure environmental values are not degraded.
- Manage and protect identified threatened biodiversity (including their habitats) within the project area.

Indicators:

- Negligible changes to identified high value vegetation areas.
- Decrease in weed infestations.

Supporting documentation:

- Biodiversity Values Assessment (EMM 2025)
- Lidsdale Ash Repository Constraints Assessment (Biodiversity) (Niche 2021)
- Weed Management Plan Wallerawang Ash Dam Areas (Total Earth Care 2022)
- Weed Management Plan for Lidsdale Ash Repository (New Era Total)
- Central Tablelands Regional Strategic Weed Management Plan 2023-2027

3 Environmental requirements

3.1 Relevant Conditions of Approval

The relevant CoAs, and where they are addressed in this sub-plan are provided in Table 3.1.

Table 3.1 Relevant Conditions of Approval

Relevant CoA	Condition of Approval	Where addressed in this plan	When addressed	
			Stage 1	Stage 2
6.5(e)	a Landscape/Revegetation Plan to outline measures to minimise the visual impacts of the repository and ensure the long-term stabilisation of the Site and compatibility with the surrounding land fabric and land use. The Plan shall include, but not necessarily be limited to:	Throughout this OLRMP, Table 4.1 (mitigation measures) and Appendix B(Site Weed Management Plan)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(i)	identification of design objectives and standards based on local environmental values, vistas, and land uses;	Table 4.1		<input checked="" type="checkbox"/> To be determined once requirements from Closure Strategy and VMP are finalised
(ii)	a description of short- and long-term revegetation measures;	Table 4.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(iii)	a schedule of species to be used in revegetation;	Table 4.5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
(iv)	timing and progressive implementation of revegetation works as placement areas are completed, including landscape plans; and	Table 4.1		<input checked="" type="checkbox"/> To be determined once requirements from Closure Strategy and VMP are finalised
(v)	procedures and methods to monitor and maintain revegetated areas during the establishment phase and long-term.	Table 4.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Revegetation works must incorporate the use of local native species.	Table 4.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

3.2 Compliance tracking

CoA 4.2 mandates a compliance tracking program to track compliance with the requirements before commencing operations. A compliance tracking program has been prepared for internal use by GPM to ensure effective and efficient tracking of compliance (refer section 3.7 of the OEMP for further details on compliance tracking).

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

4 Environmental management

4.1 Management measures

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

Two columns have been included to indicate whether mitigation measures apply to Stage 1 or Stage 2 of the site's rehabilitation. The Stage 2 mitigation measures will be further updated once the outcomes of additional investigations and the objectives of the closure strategy are finalised.

Table 4.1 Environmental Management Measures

Relevant aspect	Management and mitigation measures	Source of requirement	Frequency	Relevant records	Responsibility	Stage 1 (Short term)	Stage 2 (Long term)
General requirements	Site induction to provide information on threatened vegetation/communities, no-go areas and responsibilities associated management plans for individual species.	This OLRMP	Ongoing	Training records / Toolbox talks	GPM / Specialised Consultant / Site Contractors	<input checked="" type="checkbox"/>	
	All vehicles, machinery and plant are to be free of excess mud, plant propagules or vegetative matter prior to entering the site	This OLRMP	Ongoing	Site inspection checklist Toolbox talks / Training records	GPM / Specialised Consultant / Site Contractors	<input checked="" type="checkbox"/>	
	All vehicles to travel along designated roads/tracks where appropriate. Any vehicles travelling off these designated routes will need to be washed down before and after entry to the area, to prevent introduction to new areas and spread between site areas.	This OLRMP	Ongoing	Toolbox talks / Training records	GPM / Specialised Consultant / Site Contractors	<input checked="" type="checkbox"/>	
	Measures to reduce the visual impact of the repository, including capping and re-vegetation, shall be implemented as soon as practicable after final capping of each section. Further details will be outlined in the site's closure plan.	CoA 6.5(e) SoC Table 7.1 'Erosion and Sediment Control'	After completion of each area and final capping	Site inspection checklist	Contractor		<input checked="" type="checkbox"/>
	As far as practicable and without jeopardising the safety of the operation, lighting associated with the operations shall be directed away from residential properties in the vicinity and towards Sawyers Swamp Creek Ash Dam and comply with AS4282.	CoA 2.35 SoC Table 7.1 'Erosion and Sediment Control'	Ongoing	Site inspection checklist	Contractor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Weed management	Staff to be adequately trained and/or certified in identification of targeted weed species when undertaking weed control activities such as chemical use to ensure off-target harm.	This OLRMP	Ongoing	Training records / Contractor qualification documentation	Weed Management Contractor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Relevant aspect	Management and mitigation measures	Source of requirement	Frequency	Relevant records	Responsibility	Stage 1 (Short term)	Stage 2 (Long term)
	Use weed-free topsoil for landscaping and revegetate disturbed sites with locally indigenous species	This OLRMP CoA 6.5(e)	Ongoing	Soil classification or testing records	GPM / Specialised Consultant / Site Contractors	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Introduction of weeds species	<p>Plant, machinery and site vehicles to be washed prior to entering and leaving Site to ensure weed propagules are not transported.</p> <p>Soil disturbance will be avoided as much as possible to minimise the potential for spreading weeds and generating sediment.</p> <p>On-site topsoil to be retained and reused to revegetate disturbed areas where possible.</p> <p>All imported fill and topsoil will be weed-free.</p>	This OLRMP	Ongoing		GPM / Site Contractors	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Spread of weed species.</p> <p>Identified declared priority weeds under the <i>NSW Biosecurity Act 2015</i> include:</p> <ul style="list-style-type: none"> • Fireweed • Blackberry • Tortured Willow <p>Montpellier/Cape Broom, Scotch/English broom</p>	<p>Refer to Figure 4.3 for locations of management zones associated with declared priority weeds:</p> <ul style="list-style-type: none"> • WMZ 1 - <i>Senecio madagascariensis</i> (Fireweed) • WMZ 1, WMZ 2, WMZ 4, WMZ 6, WMZ 7, WMZ 8, WMZ 10, WMZ 12, WMZ 13, & WMZ 15 – <i>Rubus anglocandicans</i> (Blackberry) • WMZ 3 – <i>Salix matsudana 'Tortuosa'</i> (Tortured Willow) • WMZ 7, WMZ 10, WMZ 14 & WMZ 15 – <i>Genista monspessulana</i> (Montpellier Broom) <i>Cytisus scoparius</i> (Scotch/English broom) <p>Progressive site weed management to be undertaken in accordance with Management Priority plan as outlined in Total Earth Care 2022 (replicated in Appendix B).</p>	This OLRMP (Appendix B Weed Management Plan)	Ongoing	ER reports	GPM / Specialised Consultant / Site Contractors	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Relevant aspect	Management and mitigation measures	Source of requirement	Frequency	Relevant records	Responsibility	Stage 1 (Short term)	Stage 2 (Long term)
Vegetation clearing	Areas of vegetation not to be removed will be clearly marked prior to specific works occurring adjacent to the retained vegetation. Site exclusion fencing will be erected along threatened vegetation/habitat to ensure no accidental clearing or damage.	This OLRMP	Ongoing	Site inspection checklist / Sensitive Area Plan	GPM / Specialised Consultant / Site Contractors	<input checked="" type="checkbox"/>	
	Minimise vegetation clearing and disturbance to existing vegetation. Without prior assessment and approval, no vegetation clearing to be undertaken outside of the clearly marked areas. Clearance in areas of high and very high biodiversity constraints (EMM 2025, Niche 2021) will require an ecologist (licensed to handle fauna and pick flora) whilst clearance works being undertaken to ensure no threatened species are harmed during the clearance works.	This OLRMP	Ongoing	Vegetation Removal Procedure and Permit	GPM / Specialised Consultant / Site Contractors	<input checked="" type="checkbox"/>	
	Avoid impacts to hollow bearing trees. Without prior assessment and approval, no impact to hollow bearing trees. Buffer areas are to be applied to known breeding areas in accordance with recovery plans where they exist (i.e. White-breasted sea eagle nests). Clearance in areas of high and very high biodiversity constraints (EMM 2025, Niche 2021) will require an ecologist (licensed to handle fauna and pick flora) whilst clearance works being undertaken to ensure no threatened species are harmed during the clearance works.	This OLRMP	Ongoing	Vegetation Removal Procedure and Permit	GPM / Specialised Consultant / Site Contractors	<input checked="" type="checkbox"/>	
Site rehabilitation objectives, standards and procedures	All new batters shall be r stabilised as soon as practicably possible generally in accordance with the Blue Book (Managing Urban Stormwater - Soils and Construction 2004)	OEMP	Ongoing	Site inspection checklist	Contractor		<input checked="" type="checkbox"/>

Relevant aspect	Management and mitigation measures	Source of requirement	Frequency	Relevant records	Responsibility	Stage 1 (Short term)	Stage 2 (Long term)
	<p>A re-vegetation procedure which outlines the methods that would be used to revegetate the batters, including type of grass, small shrubs, sowing rate, fertilisers/ground treatment and irrigation plan will be developed as part of the closure and rehabilitation plan.</p> <p>Note: The procedure shall ensure that locally native species are used in the revegetation activities, where possible or feasible depending on soil conditions.</p>	OEMP CoA 6.5e	Prior to revegetation capping layer	Revegetation procedure	Contractor		<input checked="" type="checkbox"/>
	<p>A summary of the long term rehabilitation objectives include:</p> <ul style="list-style-type: none"> developing a broad acre planting strategy on slopes at a 1 vertical to 4 horizontal ratio. using small shrubs and groundcovers to control soil movement planting or seeding of grasses as a base soil conditioner, providing soil organic matter and establishing native perennial grass species to facilitate a long-term functional soil profile (erosion control, soil health, nutrient cycling). 	CoA 6.5e) i	Prior to long term revegetation	Revegetation procedure	GPM / Contractor		<input checked="" type="checkbox"/>
	The revegetation procedure will incorporate design objectives and standards based on local environmental values, vistas and land uses as identified in the closure plan	CoA 6.5e) i	Prior to long term revegetation	Revegetation procedure	GPM / Contractor		<input checked="" type="checkbox"/>
	The re-vegetated areas shall be watered twice weekly as required during dry periods until the vegetation is established to GPM's satisfaction. Watering will not be required during periods of wet weather. The revegetation procedure will contain a watering protocol which will ensure plants receive adequate watering during establishment as well as ensuring run-off due to overwatering is prevented.	OEMP	Twice weekly until vegetation is established	Revegetation procedure	Contractor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Relevant aspect	Management and mitigation measures	Source of requirement	Frequency	Relevant records	Responsibility	Stage 1 (Short term)	Stage 2 (Long term)
	GPM shall ensure the revegetated zone continues to control erosion and dust impacts and runoff quality, while providing adequate visual amenity to the area.	CoA 6.5e	During vegetation establishment and beyond	Site inspection checklist	GPM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	The ash shall be capped to a minimum depth of 0.75 m (subject to final closure requirements of the Remedial Action Plan), with the capping material to be spread with a dozer blade and then contour ripped to preclude soil movement during rainfall or other erosion events. Other soil stabilisation methods may be utilised including broom brushing or silt fencing as required.	OEMP, RAP	Capping initiated once final height is reached	Revegetation procedure	Contractor		<input checked="" type="checkbox"/>
	While total vegetation cover on finished surfaces will be difficult to achieve in the short term, the development of site biodiversity (grasses, shrubs, trees) over the longer term will enable this goal to be achieved.	CoA 6.5e) ii	As required	Revegetation procedure	GPM / Contractor		<input checked="" type="checkbox"/>
	The soil capping shall be conditioned to facilitate revegetation. If capping material does not contain stockpiled topsoil or is inappropriate to foster revegetation, appropriate soil conditioning methods shall be implemented. These may include the addition of organic matter through compost products such as green-waste or a cover crop such as annual grass species. Excavated Natural Material (ENM) or Virgin ENM and / or soil amendment products as defined by the EPA waste Classification Guideline dated 2014 may be used if required. Grass species will include various ratios of ryegrass, tall fescue and blue grass..	CoA 6.5e) ii, iii, v. OEMP	During capping and prior to soil stabilisation	Revegetation procedure	Contractor	<input checked="" type="checkbox"/>	

Relevant aspect	Management and mitigation measures	Source of requirement	Frequency	Relevant records	Responsibility	Stage 1 (Short term)	Stage 2 (Long term)
	Grass species shall be sown in the beginning of autumn or during spring and shall be grown for a season before being incorporated into the soil using harrows or dozer tynes (where accessible). This will provide a conditioned base for oversewing with perennial native grasses and other species.	CoA 6.5e)iv	Post capping and in the beginning of autumn or during spring	Revegetation procedure	Contractor	<input checked="" type="checkbox"/>	
	Seed will generally be applied as part of a hydromulch.	OEMP	As required	Revegetation procedure	Contractor	<input checked="" type="checkbox"/>	
	The second stage of grass cover revegetation shall include the sowing of a mix of perennial grasses, in either autumn or spring. Native perennial species to be used include Microlaena and Poa.	CoA 6.5e) iii. iv	Either autumn or spring	Revegetation procedure	Contractor		<input checked="" type="checkbox"/>
	Batters shall be shaped through the use of a tracked vehicle to prepare the capping and to provide rip lines along the contour.	CoA 6.5e ii	After stabilisation and conditioning	Revegetation procedure	Contractor	<input checked="" type="checkbox"/>	
	Irrigation shall be undertaken at establishment and as required thereafter, to ensure revegetation occurs. Fertilisers may also need to be applied on an ongoing basis as required. Previous results indicate that a suitable fertiliser will most likely include standard nitrogen, phosphorous, potassium and sulphur application, with the use of specialist bio dynamic products that include humic acids, liquid lime products, sea weed kelp based products and a hot-mix NPK blend (10-10-10) with chelated trace elements and potent organic fertilisers.	CoA 6.5e) ii, iv, v	Post seeding and as required	Revegetation procedure	Contractor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Relevant aspect	Management and mitigation measures	Source of requirement	Frequency	Relevant records	Responsibility	Stage 1 (Short term)	Stage 2 (Long term)
	Threats to revegetation such as grazing by hares, rabbits, wombats and kangaroos shall be managed through the maintenance of fencing and through other means as appropriate.	CoA 6.5e) ii	Post seeding and as required	Monthly site inspection checklist	GPM/Contractor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Soil testing shall be undertaken to assess the ongoing ability of the soil to support revegetation.	CoA 6.5e) I, ii, iv	As advised	Soil testing record	GPM / Contractor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	The plant establishment, growth and species diversity shall be assessed annually. Assessments are to be based on visual monitoring and reported in the AEMR.	CoA 6.5e) v	Annually	Vegetation assessment record	GPM / Contractor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	The long term revegetation shall be undertaken using tube stock after the establishment of the perennial grass species where possible (outside of capped ash areas). The tube stock shall be sourced from locally gathered provenance or shall be selected from types found within the region.	CoA 6.5e) i, ii, iii	Conduct after establishment of perennial grass species in winter months	Site inspection checklist	Contractor		<input checked="" type="checkbox"/>
	Tree species trials were undertaken in July 2008 from a regional selection to establish suitability for the area. Trials involved: Apple box, Long leaved box, Argyle apple, Red box, Western scribbly gum, Candle-bark gum, Red ironbark, Honey Myrtle and Sydney Golden Wattle	CoA 6.5e) i, ii, iii, iv	Complete	Site inspection checklist	GPM / Contractor	<input checked="" type="checkbox"/>	

Relevant aspect	Management and mitigation measures	Source of requirement	Frequency	Relevant records	Responsibility	Stage 1 (Short term)	Stage 2 (Long term)
	<p>Trials of local provenance tree species were performed in July 2009 and included: Red stringy bark, Narrow leaved peppermint, Western scribbly gum, Silver wattle and Red stem wattle.</p> <p>Note: while planting may occur before these trial species have reached maturity, the result of these trials will provide insight into the success rates for growth at the most critical, early age.</p>	CoA 6.5e) i, ii, iii, iv	Complete	Site inspection checklist	GPM / Contractor	<input checked="" type="checkbox"/>	
	The tube stock shall be planted 5-10m apart to ensure the maintenance of ground cover after establishment. Measures such as guards shall be used as protection against grazing.	CoA 6.5e) ii	Conduct after establishment of perennial grass species in winter months	Revegetation procedure	Contractor		<input checked="" type="checkbox"/>
Reporting	The Annual Environmental Management Review (AEMR) will be submitted to the Secretary complete with landscape and revegetation progress assessed throughout the year where applicable.	CoA 7.3	Annually	Annual review	GPM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Relevant aspect	Management and mitigation measures	Source of requirement	Frequency	Relevant records	Responsibility	Stage 1 (Short term)	Stage 2 (Long term)
Harm to identified threatened ecological communities (TEC)	<p>Plant Community Type (PCT) 3945 Newnes Plateau Shrub Swamp, is associated with Newnes Plateau Shrub Swamp, which is identified as Endangered under the NSW Biodiversity Conservation Act 2016 (BC Act) and Temperate Highland Peat Swamps on Sandstone, listed as Endangered under the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act).</p> <p>Avoid or minimise clearing of PCT 3945..</p> <p>Refer to Figure 4.1 for mapped location of PCT 3945.</p> <p>Threatened fauna, flora and plant communities</p> <p>Threatened flora, fauna and plant communities are outlined in Table 4.2 and Table 4.3 below.</p> <p>Table 4.2 provides details on PCT 3945.</p> <p>If avoidance is not feasible, install an exclusion zone around impacted areas of PCT 3945, which are to be retained to reduce the risk of accidental disturbance.</p> <p>Engagement of a qualified flora expert/arborist to conduct pre-clearing surveys as required. Vegetation clearing procedure to be followed.</p> <p>Weed management undertaken to ensure regeneration of PCT 3945 is not inhibited.</p>	This OLRMP	Ongoing	<p>Sensitive area map</p> <p>Site inspections during works in the vicinity of PCT 3945</p>	GPM / Specialised Consultant / Site Contractors	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Harm to identified vulnerable Black Gum individuals.	<p>Refer to Figure 4.1 for locations of Black Gum locations.</p> <p>Threatened fauna, flora and plant communities</p> <p>Threatened flora, fauna and plant communities are outlined in Table 4.2 and Table 4.3 below.</p> <p>Table 4.2provides details on Black Gum.</p> <p>If vegetation work is to be undertaken in the vicinity of Black Gum individuals, ensure individuals and stands are identified and an exclusion zone installed around areas to reduce the risk of accidental disturbance.</p> <p>Weed management undertaken to ensure regeneration of Black Gum is not inhibited.</p>	This OLRMP	Ongoing	<p>Sensitive area map</p> <p>Site inspections during works in the vicinity of Black Gum locations</p>	GPM / Specialised Consultant / Site Contractors	<input checked="" type="checkbox"/>	

Relevant aspect	Management and mitigation measures	Source of requirement	Frequency	Relevant records	Responsibility	Stage 1 (Short term)	Stage 2 (Long term)
<p>Harm to habitat associated with identified threatened fauna species, in particular:</p> <ul style="list-style-type: none"> the Dusky Woodswallow the Flame Robin the Scarlet Robin the White-bellied Sea-Eagle Gang-gang Cockatoo Purple Copper Butterfly. 	<p>Avoid or minimise clearing of PCTs 3369, 3385, 3687, 3694, 3696 and 3865 where possible.</p> <p>Refer to Figure 4.2 for the locations of threatened flora and fauna identified in the 2025 Biodiversity Values Assessment (EMM 2025), and refer to Figure 4.3 for an overview of mapped management zone locations for habitat associated with the Purple Copper Butterfly (WMZ 13) and identified location of a White-bellied Sea-Eagle nest (WMZ 11).</p> <p>Avoid disturbance to habitat associated with the Dusky Woodswallow, Flame Robin, White-bellied Sea-Eagle Gang-gang Cockatoo and the Purple Copper Butterfly. Refer to Threatened fauna, flora and plant communities</p> <p>Threatened flora, fauna and plant communities are outlined in Table 4.2 and Table 4.3 below.</p> <p>Table 4.2 for details on each of these species and associated habitat.</p> <p>If avoidance is not feasible, install exclusion zones around areas to be retained of threatened species habitat to reduce the risk of accidental encroachment. Refer to the EMM (2025) BVA or any subsequent ecological assessments for recommended buffer zones for threatened species identified onsite.</p> <p>Avoid areas containing Native Blackthorn <i>Bursaria spinosa</i> forming Purple Copper Butterfly habitat where possible.</p> <p>Weed management within these habitat areas to be undertaken to ensure regeneration is not inhibited.</p> <p>Weed management techniques such as spot spraying with a knapsack with care to reduce off-target spraying especially in the case of <i>Bursaria spinosa</i> subsp. <i>lasiophylla</i> (Native Blackthorn) which is associated with Purple Copper Butterfly habitat.</p>	This OLRMP	Ongoing	<p>Sensitive area map</p> <p>Site inspections during works in the vicinity of identified fauna habitat</p>	GPM / Specialised Consultant / Site Contractors	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Relevant aspect	Management and mitigation measures	Source of requirement	Frequency	Relevant records	Responsibility	Stage 1 (Short term)	Stage 2 (Long term)
<p>Harm to identified Blazed Tree</p> <p>The Blazed Tree forms an official survey boundary marking and is protected under the NSW <i>Surveying and Spatial Information Act 2002</i>.</p>	<p>Refer to Figure 4.3 for location of the blazed tree</p> <p>The blazed tree should be clearly marked to ensure accidental removal is minimised.</p> <p>The location of the blazed tree should be included in pre-start meetings prior to vegetation management works in its vicinity</p> <p>In the event that removal is required, an application to the Surveyor General for approval will be completed.</p>	This OLRMP	Ongoing	<p>Sensitive area map</p> <p>Site inspections during works in the vicinity of the Blazed tree</p>	GPM / Specialised Consultant / Site Contractors	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

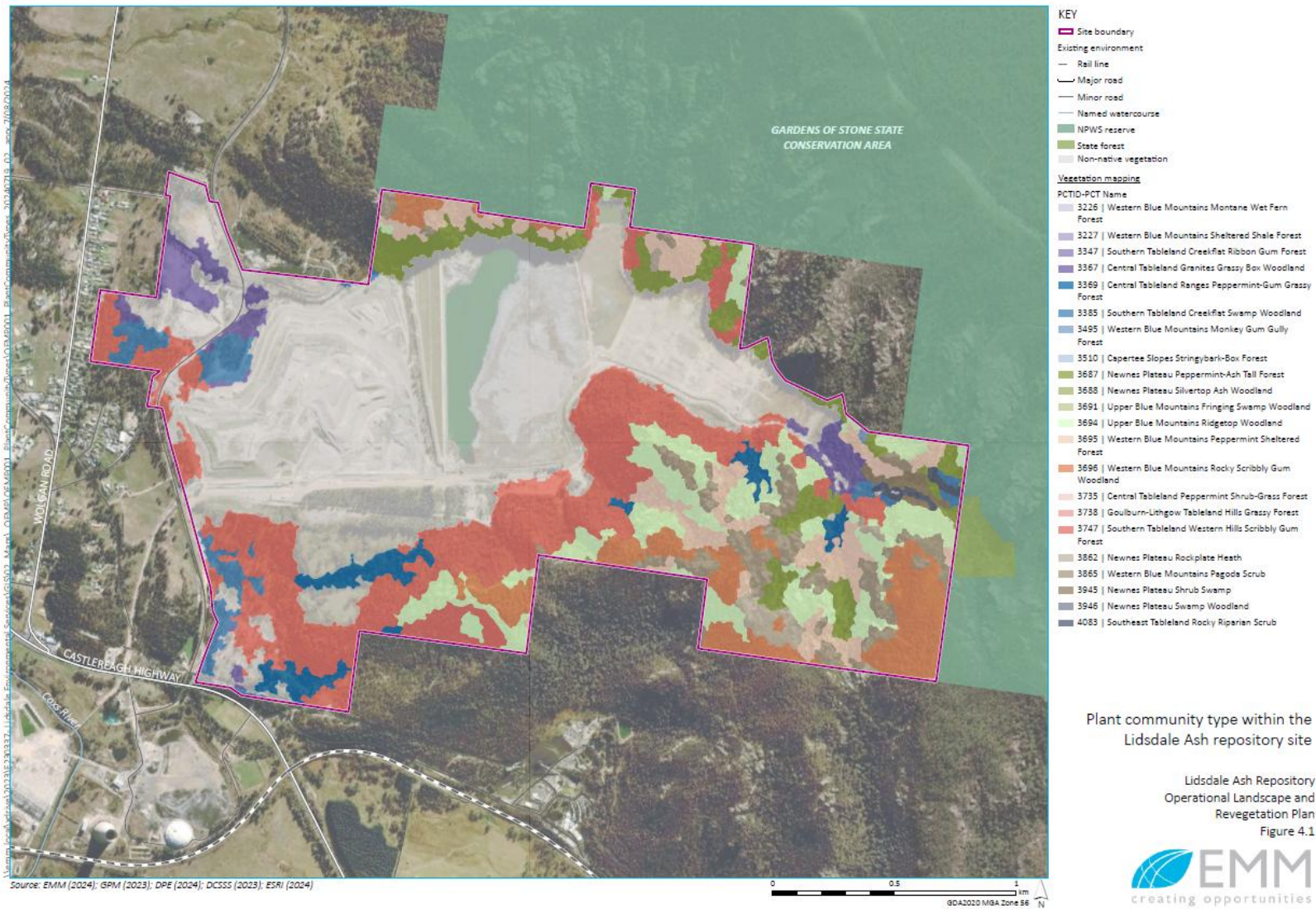


Figure 4.1 Plant Community Types within the Lidsdale Ash Repository Site

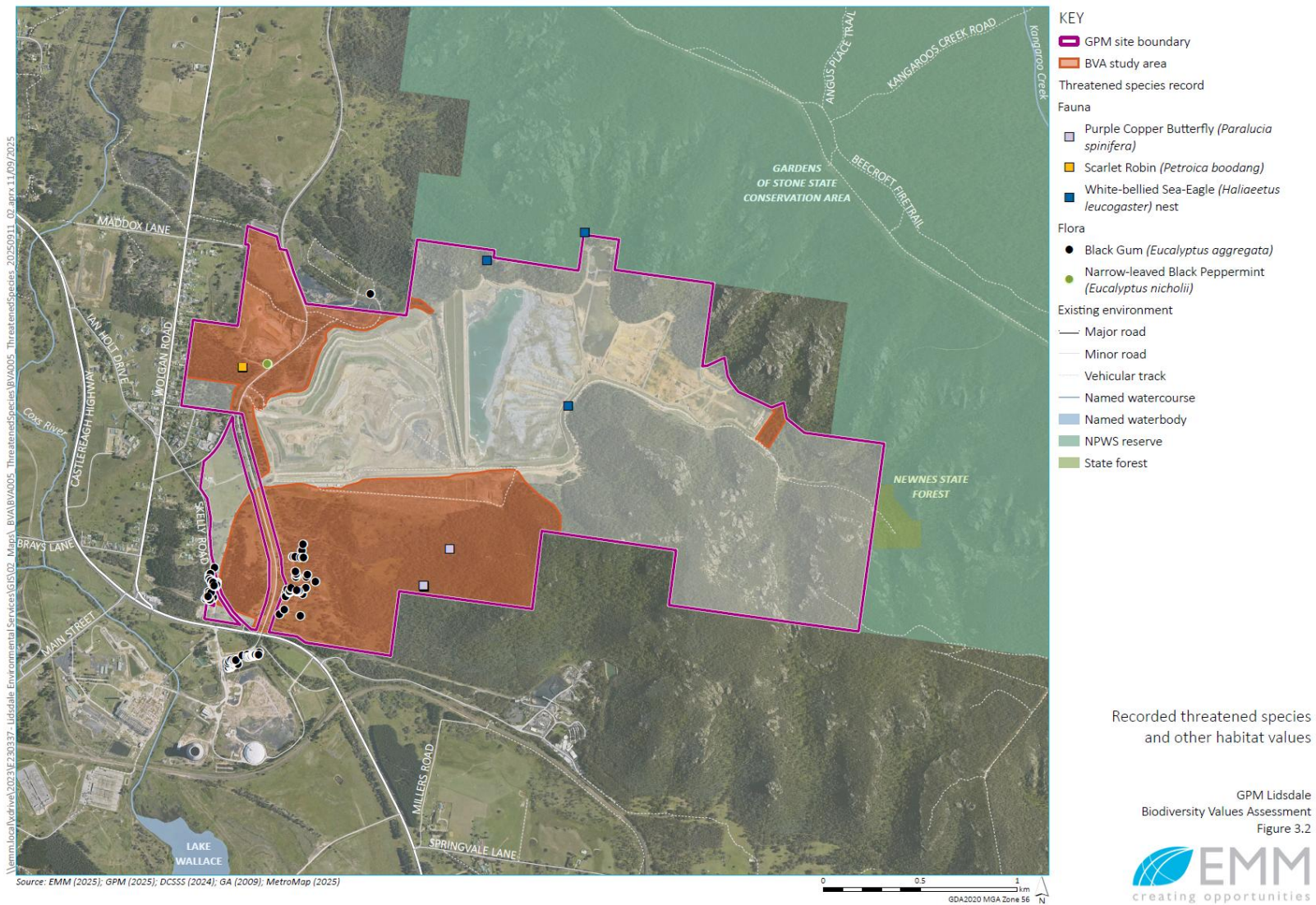


Figure 4.2 Threatened flora and fauna within the Lidsdale Ash Repository Site (EMM 2025)

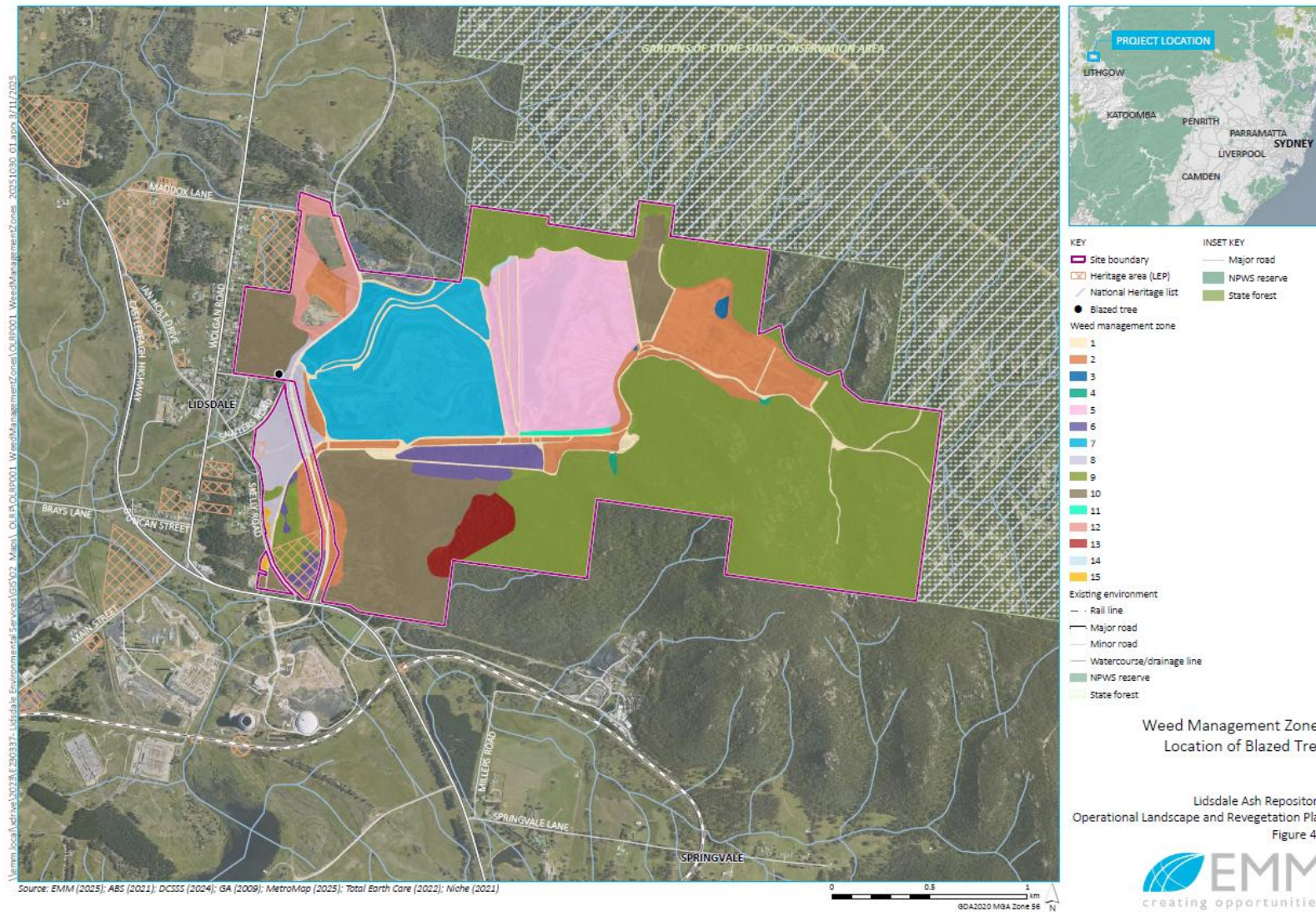



Figure 4.3 Weed Management Zones of the Lidsdale Ash Repository Site and the location of the Blazed Tree

Note: Refer to full Niche (2021) report for more detailed map indicating location of blazed tree

4.2 Threatened fauna, flora and plant communities

Threatened flora, fauna and plant communities are outlined in Table 4.2 and Table 4.3 below.

Table 4.2 Threatened flora and plant communities

Plant Community Type (PCT) or species	Conservation Status	Description	
<p>PCT 3945: Newnes Plateau Shrub Swamp –</p> <p><i>The ecological community dominated by shrubs and sedges that occurs on sites with impeded drainage in low slope headwater valleys on the Newnes Plateau in the upper Blue Mountains.</i></p>	<p>PCT 3945 can be associated with an endangered ecological community in Part 3 of Schedule 1 of the BC Act and is listed under as Endangered under the EPBC Act (where it occurs at elevations above 1100m above sea level).</p>	<p>A mid-high to tall heathland or closed heathland, occasionally with eucalypt emergents, with an unevenly-textured tussock sedge ground layer found on long gently sloping open drainage lines on the Newnes Plateau in the upper Blue Mountains. This PCT forms one of a suite of PCTs known broadly as hanging swamps or sandstone sedge swamps across the Blue Mountains.</p> <p>Where eucalypt trees are present, they are typically emergents on the margins of, or overhanging, the swamp. <i>Eucalyptus mannifera</i> is occasionally recorded however is the most frequently occurring eucalypt species. The shrub canopy very frequently includes a high cover of both <i>Leptospermum grandifolium</i> and <i>Grevillea acanthifolia</i> together with <i>Baeckea linifolia</i>, <i>Boronia deanei</i> and <i>Epacris paludosa</i>. The ground layer is a dense cover of sedges.</p>	








Plant Community Type (PCT) or species	Conservation Status	Description	
<p>Black Gum (<i>Eucalyptus aggregata</i>)</p>	<p>Vulnerable: BC Act Vulnerable: EPBC Act</p>	<p>Black Gum is a small to medium-sized woodland tree growing to 18 m tall. The bark on the trunk and main branches is dark greyish-black, deeply fibrous or flaky. The bark does not shed annually. Only the uppermost branches and twigs have smooth whitish, cream or greyish bark that sheds yearly.</p>	



Table 4.3. Identified threatened fauna

Identified Species	Habitat	Description	
<p>Dusky Woodswallow <i>Artamus cyanopterus cyanopterus</i> (Vulnerable, BC Act)</p>	<p>Primary habitat is dry open eucalypt forests and woodlands. The Dusky Woodswallow can be found in shrublands and farmlands, usually on the edges of forest or woodland. Nests are usually found in a tree fork and comprise of a loose bowl-like shape made from twigs, grass and roots.</p>	<p>The Dusky Woodswallow is a medium sized bird ranging from 16-19.5cm. They have a longish tale and are mostly dark grey-brown merging to blackish on the tail, with a small black-brown mask.</p>	

Identified Species	Habitat	Description	
<p>Flame Robin <i>Petroica phoenicea</i> (Vulnerable, BC Act)</p>	<p>Flame Robins prefer forests and woodlands, with clearing or areas with open understoreys. In winter, the Flame Robin lives in dry forests, open woodlands and in pastures and native grasslands, with or without scattered trees.</p> <p>The Flame Robin will breed in upland tall moist eucalypt forests and woodlands, often on ridges and slopes. Nests are open cup chapes made of plant materials and spider webs, and can be found near the ground in sheltered sites such as shallow cavities in trees, stumps or banks.</p>	<p>The Flame Robin is a small robin that reaches 14 cm in length. The male Flame Robin has a bright orange-red throat, breast and upper belly. The male has a dark grey head and upper parts with a small white forehead patch and white wing stripes and white tail edges. The female is brown, darker above, and has a whitish throat and lower belly.</p>	


Identified Species	Habitat	Description	
<p>White-bellied Sea Eagle <i>Haliaeetus leucogaster</i> (Vulnerable, BC Act)</p>	<p>Habitats are characterised by the presence of large areas of open water including larger rivers, swamps, lakes, and the sea.</p> <p>Canopy trees within the Site may form potential breeding habitat for White-bellied Sea Eagles. White-bellied Sea Eagle nests are usually found in large eucalypts and often have emergent dead branches or large dead trees nearby which are used as 'guard roosts'. Nests are large structures built from sticks and lined with leaves or grass.</p> <p>No canopy stick nests were identified and no traces of were detected (i.e. whitewash, discarded prey items, feathers). Therefore, it is highly unlikely that the Site forms breeding habitat for Little Eagle and instead, consists of foraging habitat only.</p> 	<p>The White-bellied Sea Eagle is a large eagle that has long broad wings and a short, wedge-shaped tail. It measures 75–85 cm in length, and has a wingspan of 180–220 cm.</p> <p>Adults are predominantly white and grey. The head, breast and belly, and the feathering on the legs, are white. The back and upper surfaces of the wings are grey, and the undersides are greyish-black with a smaller area of white along the leading edge. The tail is grey at the base and has a white tip.</p>	


Identified Species	Habitat	Description	
<p>Gang-gang Cockatoo <i>Callocephalon fimbriatum</i> (Endangered: BC Act, Endangered: EPBC Act)</p>	<p>In summer, Gang-gang Cockatoos occur in tall mountain woodlands and forests with thick shrubby understories. In winter, they move to the lower altitudes and drier, more open woodlands and forests. They can be seen at roadsides and in the gardens and parks of urban areas. These cockatoos need tall trees for their nest hollows.</p> 	<p>Gang-gang Cockatoos are primarily slate-grey, with the males easily identified by their scarlet head and wispy crest, while females have a grey head and crest and feathers edged with salmon pink on the underbelly. They range in length from 32 to 37 cm, with a wingspan of 62 to 76 cm.</p>	



Identified Species	Habitat	Description	
<p>Purple Copper Butterfly <i>(Paralucia spinifera)</i> Endangered: BC Act Vulnerable: EPBC Act</p>	<p>The Purple Copper Butterfly is only found in the Central Tablelands of NSW. Its habitat is restricted to elevations above 900 metres. The butterflies generally remain in the vicinity of <i>B. spinosa</i> subsp. <i>lasiophylla</i>, and are rarely observed more than 10 - 40 m distant from the plant.</p> <p>Larvae can be found crawling up blackthorn stems and feeding on the leaves from 10 pm to 5 am between November and January.</p> <p><i>Bursaria spinosa</i> subsp. (<i>Lasiophylla</i>)</p> 	<p>The purple copper butterfly is one of Australia's rarest butterfly species.</p> <p>The Purple Copper Butterfly is a small butterfly with a thick body, and a wingspan of only 20-30 millimetres. The upper sides of its wings are black or deep brown, with a bronze or green iridescence when they're sunning. The undersides of its wings are patterned with subtle brown, black, and grey. Its black antennae are dotted with white spots, and terminate with a black tip.</p> <p>Adult males fly rapidly at about 1 metre from the ground and rest in the sun with their wings parted. Females fly less rapidly and tend to stay closer to the host plant. Adults usually fly on warm cloudless days in September, around the middle of the day.</p>	



4.3 Declared weeds

Table 4.4. Declared weeds

Declared Weeds	Weed Management Zone (refer Figure 4.3)	Description	
<p>Fireweed <i>Senecio madagascariensis</i></p>	<p>WMZ 1 Weed density varies greatly and is more prevalent in areas of high disturbance.</p>	<p>Fireweed (<i>Senecio madagascariensis</i>) is a highly invasive and opportunistic weed native to southeastern Africa. It quickly colonises disturbed areas.</p> <p>Fireweed is a daisy-like plant that grows from 10 to 60 cm high. It has a variable growth habit and leaf structure, but the most common form of fireweed is a low, heavily branched, annual or short-lived perennial plant.</p>	

Declared Weeds	Weed Management Zone (refer Figure 4.3)	Description	
<p>Blackberry <i>Rubus anglocandicans</i></p>	<p>WMZ 1, WMZ 2, WMZ 4, WMZ 6, WMZ 7, WMZ 8, WMZ 10, WMZ 12, WMZ 13, & WMZ 15.</p> <p>Infestation in these areas is worse in drainage lines, with the overall zones degrading rapidly with dense established juvenile growth.</p>	<p>Blackberry is a shrub with tangled, prickly stems. Blackberry stems are erect, or semi-erect, canes that arch or trail up to 7 m long. They can be green, purplish or red, smooth or moderately hairy, round or angled, with numerous curved or straight prickles of different sizes and sometimes with small, stalked glands.</p>	

Declared Weeds	Weed Management Zone (refer Figure 4.3)	Description	
<p>Tortured Willow <i>Salix matsudana</i></p>	<p>WMZ 3 These areas contain Mature <i>Salix matsudana</i> 'Tortuosa' (Tortured Willow) and multiple juveniles within Sawers Swamp</p>	<p>Willows are deciduous trees or shrubs. They have small seeds with long, silky hairs attached to one end like a parachute, which help them spread. The seeds are usually short-lived, from days to a few weeks. Leaves are long and narrow, with finely toothed edges and usually a paler underside. Upright catkins (flower stalks) carry numerous tiny flowers. The trees form large, dense root-mats on the surface of the soil or in shallow water and slow-moving streams</p>	
<p>Montpellier Broom & Scotch/English broom <i>Genista monspessulana</i> & <i>Cytisus scoparius</i></p>	<p>WMZ 7, WMZ 10, WMZ 14 & WMZ 15.</p>	<p>Broom species are a large shrub, up to 4 m, with bright yellow flowers. Plants usually have numerous straight young branches which gives the weed its common name</p>	

Declared Weeds	Weed Management Zone (refer Figure 4.3)	Description	
<p>Pampas grass <i>Cortaderia sp.</i></p>	<p>WMZ 5</p>	<p>Pampas grass is a perennial grass that grows in clumps up to 1.5 m wide. There are two species in NSW:</p> <ul style="list-style-type: none"> • Common pampas grass (<i>Cortaderia selloana</i>), which is up to 6 m tall when in flower. • Pink pampas grass (<i>Cortaderia jubata</i>) is up to 4.5 m tall when in flower. <p>Pampas grass has naturalised in bushland on the Central Coast and in some areas of the Central Tablelands. It is a major weed in Sydney. There are lots of small populations on the coastal plains of the north coast of NSW. It is spreading across land disturbed by coal mining to the west of Newcastle. Pampas grass prefers open, sunny locations and can grow in low-fertility soil. It tolerates waterlogging and can infest mangroves, riverbanks, and heathlands. It tends to establish in roadsides, quarries, sand dunes, mine spoil, new forest plantations, and burnt and disturbed bushland.</p>	
<p>St Johns Wort <i>Hypericum perforatum</i></p>	<p>WMZ10 & WMZ 12</p>	<p>There are two main strains of St John's wort in NSW - broad-leaf and narrow-leaf strains. The strains have different toxicity levels at different times of the year. See the section on grazing timing below for more information on when to graze each variety.</p> <p>Measure the leaves to tell them apart. Measure leaves at the 6th node (bump) on the flowering stem when the plant is growing well in spring. The narrow-leaf strain has leaves 7 – 9 mm wide. The broad-leaf strain has leaves 10 – 12 mm wide.</p> <p>The heaviest NSW infestations are in the central and southern tablelands and slopes. The narrow-leaf strain is more widespread.</p> <p>St John's wort is native to Europe, Asia and North Africa. It was brought to Australia in 1875 as a garden plant. It is used in herbal medicine.</p>	

4.4 Short term stabilisation

Short term stabilisation will use a range of species, species considered are listed in Table 4.5 below. These are to be used for stabilisation and erosion control purposes. Species for long term rehabilitation will be identified for Stage 2 of this plan.

Table 4.5 Stabilisation species list

Botanical name	Common Name
-	Japanese millet
Festuca arundinacea	Fescue
Lolium perenne	Perennial ryegrass
Lolium arundinaceum	Tall fescue
Phalaris aquatica	Phalaris
Dactylis glomerata	Cocksfoot
Microlaena sp.	Weeping grass
Poa pratensis	Kentucky blue grass
Dichanthium sp.	Bluegrass
Rytiodperma sp.	Wallaby grass

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 OLRMP, 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 OLRMP 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.

Vegetation management will be monitored during environmental inspections and ER inspections, to ensure that unauthorised clearing does not occur and that stabilisation and rehabilitation are ongoing. Additional ecological assessments are planned for the site which will provide further detail on the native vegetation condition at the site.

Weed management is carried out year-round, with actions planned to align with the best seasonal conditions for each treatment and in consideration of the management priorities identified in the Site Weed Management Plan in Appendix B. Each month, a summary of weed areas sprayed and targeted weed species is reported in the Monthly Environmental Compliance reports.

Rehabilitation, vegetation and weed management are reported in the Annual Environmental Management Report (AEMR), which will be submitted to the Secretary each year.

5.3 Review

A review of the OEMP, sub-plans (including this OLRMP) 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
Environmental Manager
Generator Property Management - Lidsdale
110 Skelly Road
Lidsdale NSW 2790

**Re: MP07_0005 - Wallerawang Ash Dam Areas - Environmental Representative Endorsement -
Operational Landscape/Revegetation Management Plan Rev 5**

Dear John,

Following a review of the documents provided for the Operational Landscape/Revegetation Management Plan (OLRMP) Rev 3, I can provide the following endorsement.

The OLRMP Rev 3 has been reviewed against the Mod 2 Consolidated Conditions of Approval, in particular Condition 6.5e. No consultation was undertaken or required to be undertaken for this plan.

All conditions of approval and mitigation measures are contained in the OLRMP Rev 3.

The document is endorsed for submission to DPHI for approval.

Yours sincerely



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

Appendix B: Site weed management plan

Management Priorities	Key WMZ	Specifications	Target
Protect threatened species habitat	13 11 15	Prioritise retention and protection of habitat. Follow special considerations and management actions in Table 3.1.	Majority native cover in zone 13 (>95%) Significant reduction of weed cover in zone 15 (<5% cover)
Protect top of catchment in east.	1 (east) 2 (east)	Target areas of high dispersal potential.	Create buffer of <5% weed cover on interface of Sawyers Swamp and WMZ 9.
Reduce biomass of large patches of <i>Rubus anglocandicans</i> (Blackberry) east to west.	2 7	Target areas of high dispersal potential. Prioritise large patches of <i>Rubus anglocandicans</i> (Blackberry) in the southwest.	Significant reduction in large patches of <i>Rubus anglocandicans</i> (Blackberry).
Control <i>Rubus anglocandicans</i> (Blackberry) east to west.	2 7	Focus treatment on infrastructure, drainage lines and interfaces between native vegetation and disturbed areas starting in the east and moving west.	No large patches on site.
Reduce Broom (<i>Genista monspessulana</i>)	7 10 14	Prevent infestation by reducing biomass	Significant reduction by closure (<5% cover)
Reduce <i>Cortaderia selloana</i> (Pampas grass) east to west	5	Target reproduction and recruitment to prevent further infestation.	Significant reduction by closure (<5% cover)
Remove <i>Salix matsudana</i> 'Tortuosa' (Tortured Willow)	3	Remove all individuals Monitor for regrowth and perform secondary weeding if required	100% reduction by closure
Reduce Pines (<i>Pinus radiata</i> and <i>Pinus halepensis</i>)	6 9	Focus on interface between WMZ 6 and 9 targeting individuals (<30 m tall) and juvenile individuals (DBH <10cm) encroaching into native vegetation. Pine trees over 30 m tall are considered significant and shall not be removed or harmed.	100% reduction of juvenile (DBH <20 cm) individuals. 70% reduction of <i>Pinus radiata</i> and <i>Pinus halepensis</i> by closure
Contain/reduce the spread of St Johns Wort (<i>Hypericum perforatum</i>)	10 and 11 (or where found)	Target reproduction and recruitment to prevent further infestation.	Significant reduction by closure (<5% cover)
Maintenance	All Zones	Maintain sites for a minimum 5% weeds except for significant pine trees	<5% weed cover in in all zones except for 11 and 6.