



**VICTORIAN MURRAY FLOODPLAIN  
RESTORATION PROJECT**  
HEALTHY LANDSCAPES, STRONG COMMUNITIES

# Construction Environmental Management Plan

Hattah Lakes North Floodplain Restoration Project



<b>Construction Environmental Management Plan</b>	<b>1</b>
<b>Document Control</b>	<b>4</b>
<b>Abbreviations</b>	<b>5</b>
<b>1. Plan Overview</b>	<b>6</b>
1.1 Purpose of this Plan	6
1.2 Project and approval context	6
1.3 Scope of this CEMP	7
1.4 Objectives	8
1.5 Key environmental documentation	11
1.6 Consultation	14
<b>2. Project Overview</b>	<b>15</b>
2.1 Project location	15
2.2 Project boundaries	17
2.3 Project works	17
2.4 Construction phases	18
<b>3. Environmental Risk Management</b>	<b>19</b>
3.1 Environmental risk assessment	19
3.2 Risk management during construction	20
3.3 Key risks	20
<b>4. Legislative and policy obligations</b>	<b>23</b>
4.1 Environmental policy	23
4.2 Legislation and approvals	23
4.3 General Environmental Duty	24
4.4 Obligations	25
<b>5. Implementation</b>	<b>32</b>
5.1 Environmental Management System	32
5.2 Non-conformances	32
5.3 Roles and responsibilities	32
5.4 External stakeholders	38
5.5 Subcontractor management	40
5.6 Site Environmental Control Plans	40
5.7 Training and awareness	42
5.8 Contingency measures	43
<b>6. Change Management Process</b>	<b>44</b>
6.1 Management Plan review	44
6.2 Construction footprint	45
<b>7. Environmental assurance</b>	<b>46</b>
7.1 Environmental inspections	46
7.2 Environmental monitoring program	46
7.3 Environmental audit program	49
7.4 Environmental reporting	50
<b>8. Environmental event management</b>	<b>53</b>
8.1 Compliance reporting (EPBC Act Approval Conditions)	54

8.2	Corrective and preventative action	55
8.3	Continuous improvement	55
<b>Appendix A: Environmental Responsible, Accountable, Support, Consult, Inform (RASCI) Chart</b>		<b>56</b>
<b>Appendix B: Environmental Policy</b>		<b>59</b>
<b>Appendix C: Unexpected find protocol (Historic Heritage)</b>		<b>60</b>
<b>Appendix D: Environmental event response procedure</b>		<b>61</b>
<b>Appendix E: Construction Change request and Assessment Form</b>		<b>64</b>

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# Document Control

## Document status and revision control

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# Abbreviations

Abbreviation	Definition
Basin Plan	Murray-Darling Basin Plan
CEO	Chief Executive Officer
CEMP	Construction Environmental Management Plan (this document)
CHMP	Cultural Heritage Management Plan
CFA	Country Fire Authority
CMA	Catchment Management Authority
DCCEEW	Department of Climate Change, Energy, the Environment and Water.
DEECA	Department of Energy, Environment and Climate Action
DEECA RECAFP	Department of Energy, Environment and Climate Action - Regions, Environment, Climate Action and First Peoples
DEECA WCG	Department of Energy, Environment and Climate Action - Water and Catchments Group
EDS	Environmental Delivery Standard
EES	Environment Effects Statement
EMF	Environmental Management Framework
EMS	Environmental Management System
EPA	Environment Protection Authority
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth)
EVC	Ecological Vegetation Classes
FFG Act	<i>Flora and Fauna Guarantee Act 1988</i> (Vic)
FP-SR	First People- State Relations
GED	General Environmental Duty
GMW	Goulburn Murray Water
ha	Hectares
HIRAC	Hazard Identification, Risk Assessment and Control
IEA	Independent Environmental Auditor
IMS	Integrated Management System
LMW	Lower Murray Water
Mallee CMA	Mallee Catchment Management Authority
MNES	Matters of National Environmental Significance
PSA	Planning Scheme Amendment
SDL	Sustainable Diversion Limit
SDLAM	Sustainable Diversion Limit Adjustment Mechanism (Murray-Darling Basin Plan)
SDS	Safety Data Sheet
SECPs	Site-Specific Environmental Control Plans
VMFRP	Victorian Murray Floodplain Restoration Project

# 1. Plan Overview

## 1.1 Purpose of this Plan

This Construction Environmental Management Plan (CEMP) has been prepared by Civil and Earth Australia Pty Ltd (Civil and Earth) and the Victorian Murray Floodplain Restoration Project (VMFRP) to detail how potential environmental impacts will be minimised and managed by Civil and Earth during the construction phase of the Hattah Lakes North Floodplain Restoration Project (Hattah Lakes North Project). The CEMP has been developed to comply with the VMFRP requirements, all relevant environmental laws, approvals and approval conditions, the applicable Environmental Delivery Standards (EDS) of the Environmental Management Framework (EMF), and industry best practice. It has been prepared in accordance with Civil and Earth's ISO -14001-certified *Environmental Management System* (EMS).

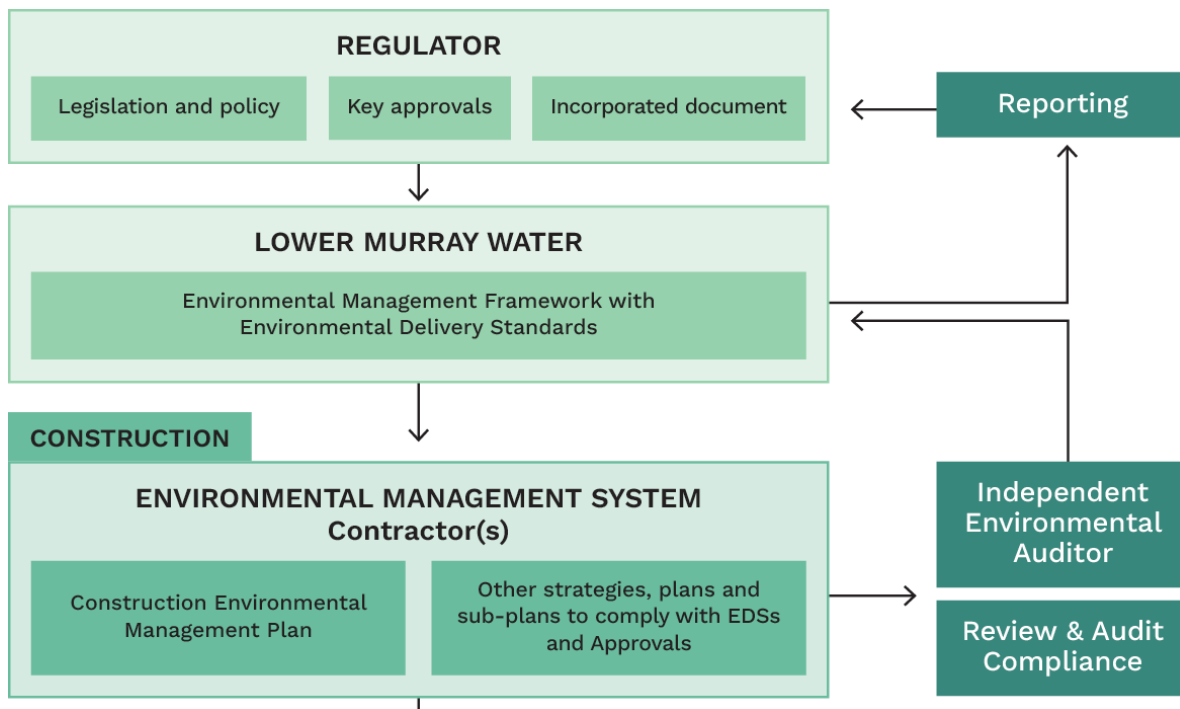
## 1.2 Project and approval context

The Hattah Lakes North Project was subject to environmental assessment via an Environment Effects Statement (EES) under the *Environment Effects Act 1978*. The EES process concluded with the release of the Minister's Assessment in July 2023. The key planning and environmental approvals which have been obtained for the Hattah Lakes North Project include:

- Planning approval under the *Planning and Environment Act 1987*, granted through Planning Scheme Amendment (PSA) GC202
- Approval with conditions under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (EPBC: 2020/8632)
- Approved Cultural Heritage Management Plan (CHMP) (No.14330) under *Aboriginal Heritage Act 2006*.

Environmental obligations for the Hattah Lakes North Project include compliance with planning, environment and heritage approvals, their associated approval conditions, including EDS outlined in the EMF, relevant environmental legislation (including the General Environmental Duty (GED) under the *Environment Protection Act 2017*), and applicable policy and guidelines.

Figure 1 provides an overview of the key environmental management documents, including the CEMP and key approvals, for the construction phase.



**Figure 1 Environmental management documents (construction)**

### 1.3 Scope of this CEMP

The scope of the CEMP applies to activities under Civil and Earth’s control for the Hattah Lakes North Project, including surface works, spoil management, relevant environmental monitoring requirements, and associated construction activities carried out by Civil and Earth personnel. The CEMP outlines the overarching environmental objectives of the Hattah Lakes North Project, in alignment with project approval requirements, including the EMF and EDS.

Specifically, this CEMP:

- Sets out roles and responsibilities for ongoing development and implementation of the CEMP, reviewing compliance before construction commences and monitoring its effectiveness during construction
- Details the commitments, mitigation measures, contingency measures and monitoring, which will be implemented during construction
- Details procedures and actions for meeting the requirements of the EMF, all relevant approvals, approval conditions, and the relevant EDSs for works.

### 1.4 Statutory Context

This CEMP has been prepared to comply with the requirements of Clause 4.5.7 for the Hattah Lakes North Project of the *Victorian Murray Floodplain Restoration Project - Belsar-Yungera Floodplain Restoration Project and Hattah Lakes North Floodplain Restoration Project*, Incorporated Document (dated May 2024).

Clause 4.5.7 requires that before development starts (excluding preparatory works), a CEMP must be approved and endorsed by the Secretary to DEECA. This requirement aligns with Section 8.1 of the EMF which affirms that it is the responsibility of the Secretary to DEECA to approve the CEMP and all major revisions to the approved CEMP.

Further to the CEMP, a range of stand-alone sub-plans are being prepared by Civil and Earth to meet specific EDSs. These sub-plans will be developed in consultation with the stakeholders identified in Section 1.7 below and require approval by LMW in accordance with Section 8.2 of the EMF and EDS EMF2.

## 1.5 Objectives

### 1.5.1 Project Objectives

Civil and Earth, in partnership with VMFRP, is committed to upholding the highest standards of environmental management and compliance. Table 1 outlines the VMFRP project objectives, with corresponding targets for Civil and Earth.

**Table 1 Project objectives and targets**

VMFRP Objective	
Protect and restore floodplain ecosystem biodiversity values, function and habitat components including for key species and communities by: <ul style="list-style-type: none"> <li>• better aligning the frequency, duration and timing of managed inundation events with the ecological needs of the floodplain</li> <li>• Improving resilience to threats such as climate change</li> </ul>	<ul style="list-style-type: none"> <li>• Construct infrastructure to support managed inundation events that meet ecological timing, frequency, and duration requirements</li> <li>• Maintain construction timelines to avoid delays to planned environmental watering events.</li> </ul>
Avoid, minimise or otherwise appropriately manage potential environmental, cultural, and socio-economic impacts during the construction, commissioning, operation and maintenance of VMFRP	<ul style="list-style-type: none"> <li>• Ensure environmental mitigation and management measures outlined in the CEMP and sub-plans are implemented</li> <li>• Conduct weekly site inspections (at minimum) to monitor environmental performance</li> <li>• Avoid or otherwise minimise environmental impacts so far as reasonably practicable through proactive risk management.</li> </ul>

### 1.5.2 CEMP objectives

The key objectives and targets for this CEMP are outlined below in Table 2.

**Table 2 CEMP objectives and targets for Civil and Earth**

CEMP Objective	Targets	Responsibility	Key indicator (s)	Timeframe (s)
Construction of the Hattah Lakes North Project in accordance with relevant legislation, approvals, and approval conditions	Demonstrate ongoing compliance with statutory approvals through scheduled internal and external audits, and timely resolution of identified issues	Environment Manager (Civil and Earth)	Number of non-conformances / non-compliances raised during internal and external audits.	<ul style="list-style-type: none"> <li>Pre-construction audit</li> <li>Audit(s) during construction</li> <li>Post-construction audit</li> </ul>
	Prevent non-conformances during six-monthly environmental audits	Environment Manager (Civil and Earth)	Number of non-conformances	<ul style="list-style-type: none"> <li>Pre-construction audit</li> <li>Audit(s) during construction</li> <li>Post-construction audit</li> </ul>
	Where non-conformances are identified, ensure corrective actions are implemented within agreed timeframes.	Environment Manager (Civil and Earth)	Number of non-conformances. Percentage of corrective actions implemented within agreed timeframes.	<ul style="list-style-type: none"> <li>Pre-construction</li> <li>Construction</li> <li>Post-construction</li> </ul>
Construction of the Hattah Lakes North Project in accordance with approved CEMP, sub-plans, and other management plans	Ensure environmental mitigation and management measures outlined in the CEMP and sub-plans are implemented and verified through weekly site inspections (at minimum)	Environment Manager (Civil and Earth)	Completion of weekly environmental inspections each week	<ul style="list-style-type: none"> <li>Construction</li> </ul>
	Maintain adherence to documented environmental procedures, with regular trainings to ensure compliance	Environment Manager (Civil and Earth)	Training delivered as per Training Plan	<ul style="list-style-type: none"> <li>Pre-construction</li> <li>Construction</li> </ul>
	Minimise environmental incidents through proactive risk management.	Environment Manager (Civil and Earth)	Number of incidents reported, investigated, and corrective actions implemented within	<ul style="list-style-type: none"> <li>Construction</li> <li>Post-construction</li> </ul>

	Report, investigate, and address any incidents within required timeframes.		required timeframes (refer to Section 8).	
	Ensure compliance with regulatory requirements, with any potential breaches promptly identified and addressed to prevent formal	Environment Manager (Civil and Earth)	Non-compliances raised relating to breaches of approval conditions, legislation, regulatory requirements, prosecutions, or fines.	<ul style="list-style-type: none"> <li>• Pre-construction</li> <li>• Construction</li> <li>• Post-construction</li> </ul>
Implementation of an Environmental Management System (EMS) that meets the requirements of AS/NZS ISO 14001	Identify and resolve non-conformances and implement corrective actions within agreed timeframes.	Environment Manager (Civil and Earth)	<p>Number of non-conformances</p> <p>Percentage of corrective actions implemented within agreed timeframes.</p>	<ul style="list-style-type: none"> <li>• Pre-construction</li> <li>• Construction</li> <li>• Post-construction</li> </ul>
Continuously improve environmental performance	Deliver regular environmental trainings including site inductions and toolbox talks to all relevant personnel	Environment Manager (Civil and Earth)	Training delivered as per Training Plan	<ul style="list-style-type: none"> <li>• Pre-construction</li> <li>• Construction</li> </ul>
	Capture lessons learnt from environmental incidents as required to minimise likelihood of recurrence	Environment Management (Civil and Earth)	Lessons learnt being undertaken as required (refer to Table 23)	<ul style="list-style-type: none"> <li>• Construction</li> <li>• Post-construction</li> </ul>
	Recognise and promote innovative environmental practices across the workforce	<p>Environment Management (Civil and Earth)</p> <p>Project Manager (Civil and Earth)</p> <p>All Project personnel</p>	Number of innovative environmental practises promoted	<ul style="list-style-type: none"> <li>• Pre-construction</li> <li>• Construction</li> <li>• Post-construction</li> </ul>

## 1.6 Key environmental documentation

The CEMP provides details of environmental management during construction.

The following sub-plans and other management plans will be prepared and implemented by Civil and Earth:

- Native Flora and Fauna Management Sub-plan
- Water, Soils and Waste Management Sub-plan, including:
  - Erosion and Sediment Control Plan
  - Acid Sulfate Soil Management Plan
- Environmental Emissions Management Sub-plan
- Bushfire and Emergency Response Plan
- Traffic Management Plan
- Community and Stakeholder Management Plan.

The sub-plans (Native Flora and Fauna Management; Water, Soils and Waste Management; Environmental Emission Management) will include the following key sections:

- Scope
- Objectives
- Legislation and policy
- Obligations (refer to Table 12 for obligations to be addressed within each sub-plan)
- Key Risks
- Implementation
- Environmental assurance
- Environmental event management
- Management Plan review.

The sub-plans will include the required obligations as detailed in Table 12 below. Figure 2 illustrates how the CEMP integrates with the sub-plans and other management plans.

Table 3 lists the key environmental control documentation and management tools, and Table 4 outlines the environmental aspects covered in the supporting sub-plans and associated management plans.

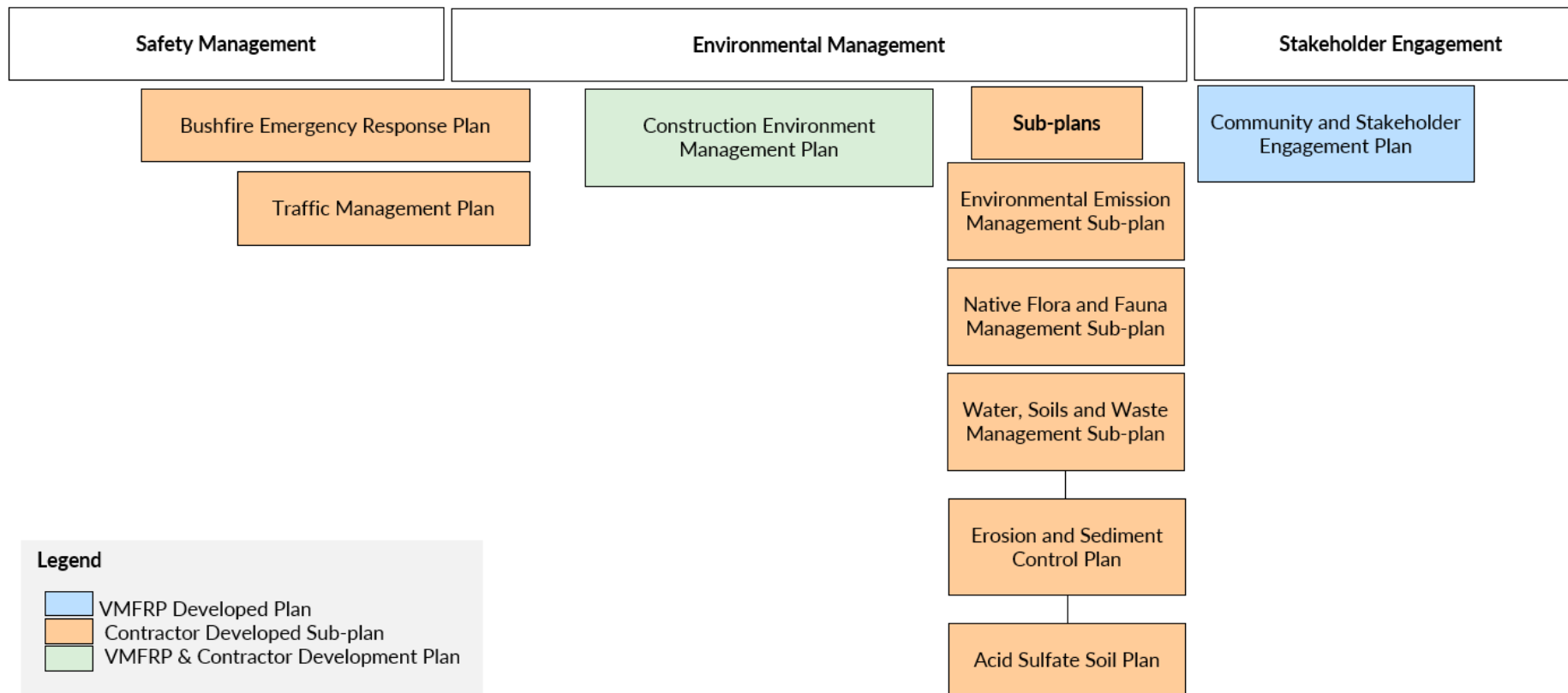
**Table 3 Key environmental management documentation**

Required project documentation	Responsibility	Tool to be used by the project to manage documentation
<i>Hattah Lakes North Project - Risk Register</i>	Civil and Earth Environment Manager	Live register (described further in Section 3) maintained on a centralised digitised platform
<i>Hattah Lakes North Project - Obligations Register (Construction Phase)</i>	Civil and Earth Environment Manager	Live register (described further in Section 4.3) maintained on a centralised digitised platform
<i>Hattah Lakes North Project - Corrective and Preventative Actions Register</i>	Civil and Earth Environment Manager	Live register (described further in Section 8.2) maintained on a centralised digitised platform
CEMP	VMFRP & Civil and Earth Environment Manager to develop the CEMP  Civil and Earth Environment Manager to implement the CEMP	Centralised digital platform to manage, store, and track environmental documentation, including the CEMP

Required project documentation	Responsibility	Tool to be used by the project to manage documentation
Sub-plans	Civil and Earth Environment Manager	Centralised digital platform to manage, store, and track environmental documentation, including the sub-plans
Site Environmental Control Plans	Civil and Earth Environment Manager	Centralised digital platform to manage, store, and track environmental documentation
Traffic Management Plan	Civil and Earth Environment Manager	Centralised digital platform to manage, store, and track environmental documentation, including the Traffic Management Plan
Community and Stakeholder Engagement Management Plan (CSEP)	VMFRP to develop the CSEP VMFRP & Civil and Earth Environment Manager to implement the CSEP	Centralised digital platform to manage, store, and track environmental documentation, including the Community and Stakeholder Engagement Management Plan
Bushfire Emergency Response Plan	Civil and Earth Environment Manager	Centralised digital platform to manage, store, and track environmental documentation, including the Bushfire Emergency Response Plan

**Table 4 Sub-plans and other management plans, associated environmental aspects**

Sub-plans and other management plans	Aspects
Native Flora and Fauna Management sub-plan	<ul style="list-style-type: none"> <li>• Terrestrial ecology</li> <li>• Aquatic ecology</li> <li>• Matters of National Environmental Significance</li> </ul>
Water, Soils and Waste Management sub-plan	<ul style="list-style-type: none"> <li>• Groundwater</li> <li>• Surface water</li> <li>• Geology, soils and contamination</li> <li>• Waste</li> </ul>
Environmental Emissions Management sub-plan	<ul style="list-style-type: none"> <li>• Noise and vibration</li> <li>• Air Quality</li> </ul>
Community and Stakeholder Engagement Plan	<ul style="list-style-type: none"> <li>• Social and Business</li> <li>• Complaints management</li> </ul>
Traffic Management Plan	<ul style="list-style-type: none"> <li>• Traffic and transport</li> </ul>
Bushfire and Emergency Response Management Plan	<ul style="list-style-type: none"> <li>• Bushfire</li> <li>• Emergency response/ site evacuation</li> </ul>



**Figure 2 Hierarchy of plans and sub-plans to manage environmental risks and compliance for Hattah Lakes North Project**

## 1.7 Consultation

Consultation will be undertaken with the following agencies to inform both the preparation of the CEMP and any major amendments to it:

- Parks Victoria
- Department of Energy, Environment and Climate Action (DEECA) - Regions, Environment, Climate Action and First Peoples (RECAFP)
- DEECA Bushfire and Forest Services (BFS)
- Environment Protection Authority (EPA) Victoria.

Consultation on sub-plans and other plans, is required to occur as specified by the EDS according to Section 8.2 of the approved EMF. Table 5 summarises the consultation proposed for each plan, which is consistent with or exceeds these requirements.

**Table 5. Consultation on sub-plans and associated management plans**

Plan	Consultation
Native Flora and Fauna Management Sub-plan	<ul style="list-style-type: none"> <li>• DEECA</li> <li>• Parks Victoria</li> </ul>
Water, Soils and Waste Management Sub-plan Acid Sulfate Soils Management Plan Erosion and Sediment Control Plan	<ul style="list-style-type: none"> <li>• DEECA</li> <li>• EPA</li> <li>• Parks Victoria</li> </ul>
Environmental Emissions Management Sub-plan	<ul style="list-style-type: none"> <li>• DEECA</li> <li>• EPA</li> <li>• Parks Victoria</li> </ul>
Community and Stakeholder Engagement Plan	<ul style="list-style-type: none"> <li>• Swan Hill Rural City Council</li> <li>• Mildura Rural City Council</li> <li>• Parks Victoria</li> </ul>
Traffic Management Plan	<ul style="list-style-type: none"> <li>• Swan Hill Rural City Council</li> <li>• Mildura Rural City Council</li> <li>• Parks Victoria</li> <li>• DTP</li> </ul>
Bushfire and Emergency Response Management Plan	<ul style="list-style-type: none"> <li>• Relevant emergency management and fire authorities</li> <li>• Parks Victoria</li> <li>• DEECA</li> </ul>

Consultation will be in the form of providing draft documents to stakeholders for review. Stakeholders will have up to 10 business days to provide initial comments, and comments will be responded to in a register and used to inform the development of the plan where appropriate. Extensions to the review timing may be mutually agreed upon by VMFRP and relevant stakeholder, where required.

The CEMP will be approved by the Secretary of DEECA (or delegate) and Lower Murray Water (LMW) before construction commences (excluding preparatory works).

The CEMP, sub-plans and associated management plans will be reviewed and verified by the Independent Environmental Auditor (IEA).

## 2. Project Overview

The Hattah Lakes North Project is one of the sites which makes up the VMFRP. VMFRP is an environmental watering project undertaken by the Victorian Government in partnership with the Australian Government under the Murray-Darling Basin Plan (Basin Plan).

The Basin Plan was adopted in 2012 by the Commonwealth, state and territory governments of the Murray Darling Basin. Implementation of the Basin Plan was originally scheduled over twelve years to 2024. The aim of the plan is to bring the basin back to a healthier and sustainable level, while continuing to support farming and other industries for the benefit of the Australian community.

The Basin Plan ensures that a proportion of water in the system is preserved for the environment. Sustainable diversion limits (SDLs) specify how much water, on average, can be consumed from the basin to leave enough to keep rivers and the environment healthy. The Basin Plan allows the SDL to be reduced (SDL Adjustment Mechanism) using measures that improve environmental outcomes using less water.

VMFRP is an SDLAM project to manage environmental water at eight floodplain ecosystems of high conservation significance in northern Victoria. The projects all aim to protect and restore floodplain ecosystem biodiversity values, function, and habitat components, including for key species and communities by:

- Better aligning the frequency, duration, and timing of managed watering events with the ecological needs of the floodplain
- Improving resilience to threats such as climate change.

### 2.1 Project location

The Hattah Lakes North Project is located in the northernmost part of the Hattah Lakes Floodplain Complex, which comprises approximately 20 lakes and surrounding woodlands that receive water from the Murray River via Chalka Creek.

The Hattah Lakes North Project is located on the western side of the Murray River in north-west Victoria, between Robinvale and Red Cliffs, approximately 75km south of Mildura (Figure 3). The Hattah Lakes North Project Area includes the Construction Footprint and Maximum Inundation Area.

The Hattah Lakes North project would involve works to facilitate inundation of approximately 1,130ha of high ecological value Murray River floodplain, including the Chalka North area and Lake Boolca Water Management Areas. The Hattah Lakes North project is located entirely in the Rural City of Mildura local government area and the Mallee Catchment Management Authority (CMA) region.

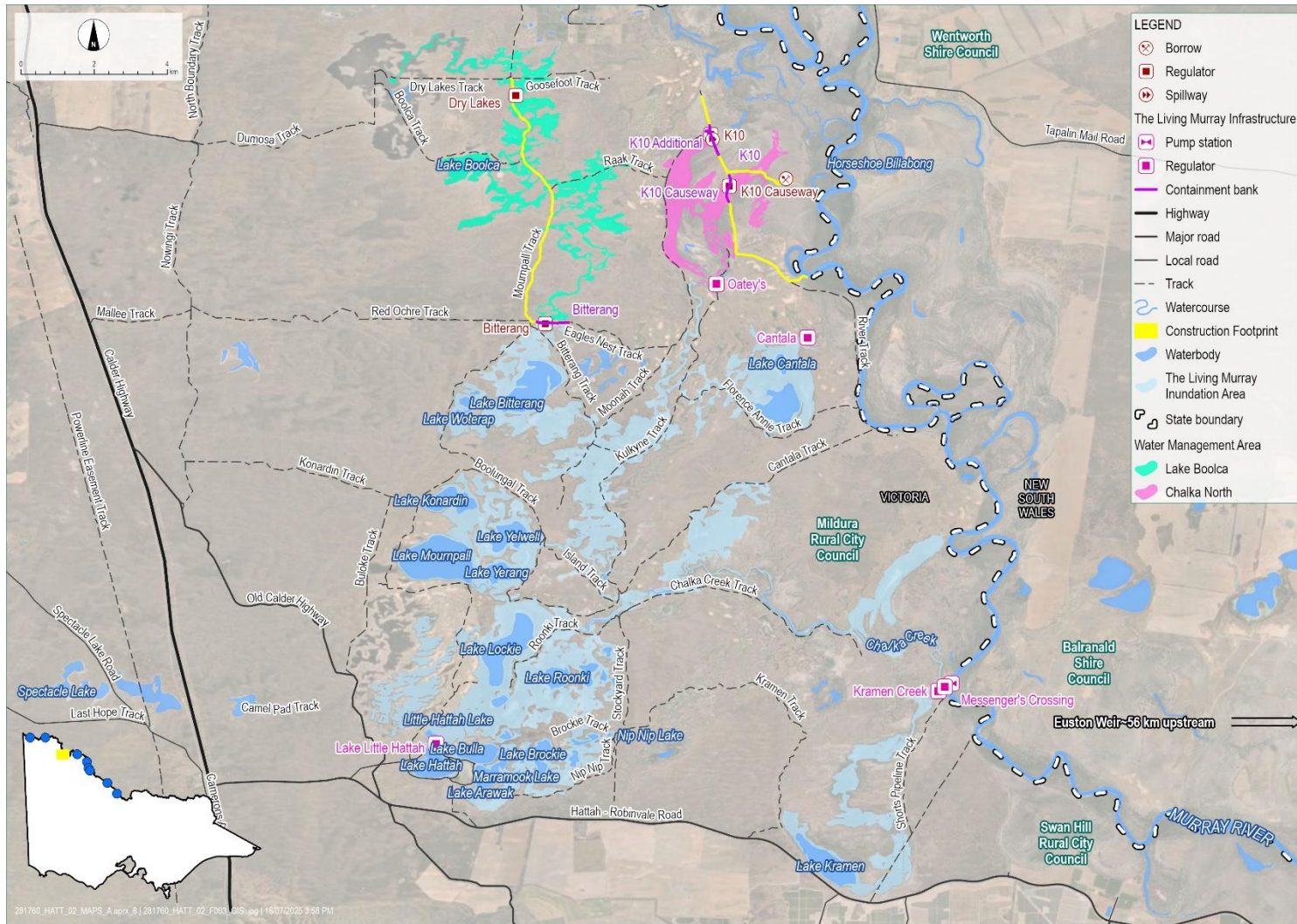


Figure 3 Hattah Lakes North Project

## 2.2 Project boundaries

Table 6 describes the project boundaries relevant to the construction phase of the Hattah Lakes North Project. These boundaries will be illustrated on the Site Environmental Control Plans (SECPs), which are detailed further in Section 5.6.

**Table 6 Project boundaries relevant to the construction phase of the Hattah Lakes North Project**

Area	Description
<b>Specific Control Overlay (SCO2)</b>	PSA GC202 allows for the use and development of the Hattah Lakes North Project, subject to specific controls set out in the <i>Victorian Murray Floodplain Restoration Project - Belsar-Yungera Floodplain Restoration Project and Hattah Lakes North Floodplain Restoration Project</i> (the Incorporated Document), which apply to all land within Schedule 2 to the Specific Controls Overlay (SCO2). SCO2 defines the spatial extent of the planning approval for the Hattah Lakes North Project, referred to as Project Land. The Project Land includes the Maximum Inundation Area and construction footprint.
<b>Construction footprint</b>	The construction footprint is the boundary approved for physical works and construction movements. The construction footprint includes all infrastructure and associated construction activities, including laydown areas, site compounds, workforce facilities, site access and borrow sites.
<b>CHMP Activity Area</b>	The activity (including ancillary activities) is required to be contained within the Activity Area of the approved CHMP (No. 14330).
<b>Area of Investigation</b>	The Area of Investigation (AOI) defines the area within which physical site information (existing conditions) has been collected to: <ul style="list-style-type: none"> <li>• Determine the potential direct adverse effects of construction activity for applicable specialist assessments</li> <li>• Ensure that sufficient data is collected to enable refinements to project footprints to be made to further avoid or reduce adverse effects.</li> </ul>

## 2.3 Project works

The structures to be constructed as part of the Hattah Lakes North Project are described in Table 7. The Hattah Lakes North Project will not require the construction of new tracks or the upgrade of existing tracks. Construction activities will rely solely on existing tracks, with maintenance undertaken as necessary.

**Table 7 Hattah Lakes North structures**

Structure type	Description
Large regulator	<b>K10 Regulator</b>
Small regulator	<b>Bitterang Regulator</b>
Sheet pile regulator	<b>Dry Lake Regulator and Containment Bank</b>
Containment Banks	<b>K10 River Track Containment Bank</b>

## **2.4 Construction phases**

Construction of the Hattah Lakes North Project will be delivered in the following general stages below:

- Preparatory works
- Earthworks
- Civil and structure works
- Reinstatement and rehabilitation
- Dry commissioning.

### **2.4.1 Preparatory works**

Preparatory works include:

- Works, including vegetation removal, where a planning permit would not be required under the provisions of the planning schemes.
- Investigation, testing and preparatory works to determine the suitability of land, and property condition surveys except where a planning permit for vegetation removal would ordinarily be required under the provisions of the planning schemes.
- Salvage and relocation of Aboriginal cultural heritage and other management actions required to be undertaken in compliance with the relevant cultural heritage management plan approved under the Aboriginal Heritage Act 2006 or other compliance with that Act.

### **2.4.2 Earthworks**

The following activities will be undertaken during earthworks:

- Establishment of construction compounds as a base for construction activities.
- Broader vegetation removal
- Excavation of borrow sites and the stockpiling or conditioning of material, which will be used to construct earthen structures.

### **2.4.3 Civil and structure works**

Civil and structure works include construction of infrastructure including regulators, containment banks and spillways, hardstands and drop structures.

### **2.4.4 Reinstatement and rehabilitation**

During reinstatement and rehabilitation, the following activities will be undertaken:

- Rehabilitation of all areas (excluding borrow sites) in accordance with the Native Flora and Fauna Management Plan.
- Rehabilitation of borrow sites in accordance with the Property Management Plan agreed with the relevant landowner.

### **2.4.5 Dry commissioning**

Dry commissioning includes a program of activities to test and run-in the infrastructure to prepare for operation.

## 3. Environmental Risk Management

### 3.1 Environmental risk assessment

Environmental risk assessment is a key requirement for the construction phase of the Hattah Lakes North Project.

AS/NZS ISO 31000:2018 *Risk management – Guidelines* defines risk as the effect of uncertainty on objectives.

A preliminary screening analysis of environmental risk was undertaken during the planning and design phase as part of the EES to identify the potential for VMFRP to impact assets, values and uses and prioritise issues for further investigation. This screening analysis considered the findings of preliminary investigations, discussions with key stakeholders, early engagement with the community and relevant legislation, policy and guidelines.

The objective of this risk assessment was to identify the potential environmental risks associated with the project activities, to inform the assessment of effects and to develop measures to reduce these risks so far as reasonably practicable.

The environmental risk assessment undertaken for the Hattah Lakes North EES identified 12 key risks for the construction phase, that following the application of EDS had a residual risk rating of medium or above during the construction phase. This included:

- No environmental risks with extreme residual risk rating;
- Three environmental risks with a high residual risk rating; and
- Nine environmental risks with a medium residual risk rating.

Table 8 summarises the aspects with high residual risks from the EES.

**Table 8. Summary of impact pathways with ‘high’ residual risks ratings for the Hattah Lakes North Project**

Impact Pathway	Initial Risk Rating	EDS	Residual Risk rating
<b>Arboriculture</b> – Potential direct or indirect impacts on Large Trees as a result of construction (including from the removal of native vegetation)	High	E1, E2a, E2b, E2e, E4b, EMF1, EMF2, CM1a, CM1b, CM1c, GS2, SW1	High
<b>Native vegetation</b> – Potential removal, destruction or lopping of native vegetation (including patches of native vegetation and scattered trees)	Extreme	E1, E2a, E2b, E2e, E4b, EMF1, EMF2, SW2	High
<b>Weeds, pest species and pathogens</b> – Potential introduction or spread of weeds, pest species or pathogens from construction activities including vegetation removal, earthworks and civil and structural works	High	E1, E2a, E2b, E2c, E2e, E2g, E4b, EMF1, EMF2, AQ1, CM1a, CM1b, CM1c, LV3, NV1, RU1, SW1, TT2	High

### 3.2 Risk management during construction

Civil and Earth will prepare a detailed assessment of risks and impacts associated with the design and specific construction work methods, building on the environmental risk and impact assessment undertaken as part of the EES.

Risk management during construction will be undertaken in accordance with the Civil and Earth *CEAMS-0000-MS-PR-006 Risk Management Procedure*, which outlines the systematic process for identifying, assessing, and controlling risks that may impact health, safety, environment, quality, or project delivery.

All project-related risks will be managed through the Hazard Identification, Risk Assessment and Control (HIRAC) process. This process ensures that hazards are identified early, risks are appropriately assessed, and effective control measures are implemented and monitored throughout the duration of the works.

A Risk Workshop will be conducted jointly with LMW prior to the commencement of construction activities. The purpose of the workshop is to:

- Identify project-specific hazards and potential environmental, health, and safety risks associated with construction activities.
- Assess the likelihood and consequence of identified risks.
- Determine measures to minimise and /or manage risks so far as reasonably practicable
- Evaluate residual risk following implementation of measures to minimise and/or manage risks
- Assign ownership and responsibilities for implementing risk controls.
- Establish monitoring and review processes to ensure ongoing risk control effectiveness.

VMFRP will also be requested to provide details of any known contractor or operator related risks identified during the design phase. These risks will be reviewed and incorporated into the construction risk register as applicable.

During construction, environmental risks will be managed as part of a project wide *risk register Hattah Lakes North Project - Risk Register*, which will sit outside of the CEMP so it can be updated through regular reviews and in response to changes in activities, work methods, legislation, policy, or the occurrence of incidents and complaints. This project wide risk register will be managed by Civil and Earth.

### 3.3 Key risks

The key environmental risks requiring management during the construction phase of the Hattah Lakes North Project include those presented in Table 9.

**Table 9 Key environmental risks requiring management during construction**

Aspect	Key risks requiring management during construction	Key EDS	Key documentation
<b>Aboriginal Cultural Heritage</b>	<ul style="list-style-type: none"> <li>Disturbance of known or previously unrecorded Aboriginal Ancestral remains</li> <li>Disturbance of known or previously unrecorded Aboriginal cultural heritage potentially impacting on heritage values</li> <li>Loss of past, present and future cultural connection to Country</li> </ul> <p><i>Refer to the approved CHMP (No.14330) for the Hattah Lakes North Project for information on conditions and contingency measures.</i></p>	ACH1	This CEMP  CHMP
<b>Agriculture</b>	<ul style="list-style-type: none"> <li>Loss of agricultural production or adverse impacts on farming operations as a result of construction</li> </ul>	AG1	Native Flora and Fauna Management Sub-plan
<b>Terrestrial Ecology</b>	<ul style="list-style-type: none"> <li>Potential impacts on Large trees as a result of construction such as from vegetation removal</li> <li>Potential impact on native species, or their habitat such as from vegetation removal and land clearing</li> <li>Potential removal, destruction or lopping of native vegetation (including patches of native vegetation and scattered trees)</li> <li>Potential impacts on Commonwealth and/or Victorian listed threatened ecological communities, or their habitat, as a result of construction activities including vegetation removal, earthworks and civil and structural works</li> <li>Potential direct or indirect impacts on Commonwealth and/or Victorian listed threatened species, or their habitat, as a result of construction activities including vegetation removal, earthworks and civil and structural works</li> <li>Potential introduction or spread of weeds, pest species or pathogens from construction activities including vegetation removal, earthworks and civil and structural works</li> </ul>	E1, E2a - E2g	Native Flora and Fauna Management Sub-plan
<b>Aquatic Ecology</b>	<ul style="list-style-type: none"> <li>Potential impact on aquatic species, or their habitat such as from removal of habitat, changes to fauna passage and barriers, water quality and flow and impacts from noise and vibration during construction</li> </ul>	E2a, E2c, E2f, SW1, GS2, GW1	Native Flora and Fauna Management Sub-plan  Water, Soils and Waste Management Sub-plan
<b>Groundwater</b>	<ul style="list-style-type: none"> <li>Potential changes to groundwater levels or flows from construction impacting on environmental values including groundwater-dependent ecosystems</li> <li>Potential impacts on groundwater quality from construction impacting on environmental values including groundwater-dependent ecosystems</li> </ul>	GW1	Water, Soils and Waste Management Sub-plan
<b>Surface water</b>	<ul style="list-style-type: none"> <li>Potential changes to fluvial processes leading to adverse impacts on environmental values including waterway health and listed Wetlands (where applicable)</li> <li>Potential changes to water quality leading to adverse impacts on environmental values including waterway health and listed Wetlands (where applicable)</li> </ul>	SW1, SW5	Water, Soils and Waste Management Sub-plan
<b>Bushfire</b>	<ul style="list-style-type: none"> <li>Fire initiated onsite spreads offsite resulting in impacts to human life, property, businesses, community assets, environmental and/or heritage values</li> </ul>		Bushfire Emergency Response Plan

	<ul style="list-style-type: none"> <li>• Fire initiated offsite spreads onsite, resulting in impacts to human life, assets environmental and/or heritage values</li> </ul>		
<b>Air Quality</b>	<ul style="list-style-type: none"> <li>• Generation of air emissions from construction transport effecting sensitive receptors, including ecological values</li> <li>• Generation of air emissions from on-site construction affecting sensitive receptors, including ecological values</li> </ul>	AQ1, AQ2	Environmental Emission Management Sub-plan
<b>Noise and Vibration</b>	<ul style="list-style-type: none"> <li>• Noise and/or vibration from construction transport (e.g., deliveries) exceeding thresholds/limits, potentially affecting sensitive receivers, including ecological values.</li> <li>• Noise and/or vibration from on-site construction exceeding thresholds/limits, potentially affecting sensitive receivers, including ecological values.</li> <li>• Noise and/or vibration from construction outside standard hours exceeding thresholds/limits, potentially affecting sensitive receivers, including ecological values</li> </ul>	NV1	Environmental Emission Management Sub-plan
<b>Social and business</b>	<ul style="list-style-type: none"> <li>• Potential impacts on businesses such as from displacement, acquisition, or to business operation or access</li> <li>• Potential impacts on public open space or recreational facilities due to displacement or changes to access or amenity</li> <li>• Potential impacts on social and cultural values such as community, educational or religious facilities due to displacement or changes to access or amenity</li> <li>• Potential non-business impacts on private property owners and occupiers</li> </ul>	SB1, SB2	Community and Stakeholder Engagement Management Plan
<b>Traffic and transport</b>	<ul style="list-style-type: none"> <li>• Construction activities impede the safe and efficient movement of traffic on local roads, active transport, restrict access to private land, or create safety risks by their presence and operation</li> </ul>	TT1, TT2	Traffic Management Plan
<b>Geology, soils and contamination</b>	<ul style="list-style-type: none"> <li>• Potential adverse effect of construction activities on landform stability or soils</li> <li>• Excavation, stockpiling, transport, use and/or disposal of contaminated material, acid sulfate soils or contaminating substances leading to potential adverse effects on human health and the environment</li> </ul>	CM1a, CM1b, CM1c, CM2, GW1, GS2, SW1	Water, Soils and Waste Management Sub-plan  Acid Sulphate Management Plan  Erosion and Sediment Control Plan
<b>Historic heritage</b>	<ul style="list-style-type: none"> <li>• Disturbance of, destruction of, removal of or indirect impact (such as visual impact) on unidentified built and archaeological historical sites and values</li> </ul>	HH1	This CEMP
<b>Landscape and visual</b>	<ul style="list-style-type: none"> <li>• Potential adverse effects from construction on landscape character</li> <li>• Potential adverse effects from construction on views experienced from sensitive receptors including residential areas, recreational and open spaces, and community facilities</li> </ul>	LV1, LV2, LV3	This CEMP
<b>Land use planning</b>	<ul style="list-style-type: none"> <li>• Potential changes as a result of construction activities inconsistent with current or planned land use, due to land acquisition, severance, occupation or changes to amenity</li> </ul>	LU1	This CEMP

## 4. Legislative and policy obligations

### 4.1 Environmental policy

Civil and Earth will operate in accordance with their *Environmental Policy* (Appendix B).

Commitment to the Environmental Policy will be demonstrated by:

- Communication of the policy intent to all staff through inductions, notice board displays and project meetings
- Provision of adequate resources and assigning responsibilities to implement and maintain the CEMP
- Achievement of the project targets/objectives and regular reviews to manage their suitability and effectiveness
- Provision of the Environmental Policy on public request.

### 4.2 Legislation and approvals

Civil and Earth will meet, as a minimum, the requirements of all relevant environmental laws, approvals and approval conditions and the relevant EDS for which the Contractor is responsible during the construction phase of the Hattah Lakes North Project. The applicable federal and state legislative requirements grouped by environmental are described below in Table 10. Obligations are summarised below in Section 4.4.

**Table 10 Hattah Lakes North Project legislative requirements**

Aspect	Legislation
Planning & Environment	<i>Environment Effects Act 1978</i> (Vic)
	<i>Planning and Environment Act 1987</i> (Vic)
	<i>Local Government Act 1989</i> (Vic)
	<i>Environmental Planning and Assessment Act 1979</i> (NSW)
	<i>Environment Protection Act 2017</i> (Vic)
National Parks, Reserves, Forests and Crown Land Management	<i>National Parks Act 1975</i> (Vic)
	<i>National Parks and Wildlife Act 1967</i> (NSW)
	<i>Conservation, Forests and Lands Act 1987</i> (Vic)
	<i>Forest Act 1958</i> (Vic)
	<i>Crown Land (Reserves) Act 1978</i> (Vic)
	<i>Crown Land Management Act 2016</i> (NSW)
Matters of National Environmental Significance (MNES)	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth) (EPBC Act)
Ecology (terrestrial and aquatic)	<i>Flora and Fauna Guarantee Act 1988</i> (Vic) (FFG Act)
	<i>Wildlife Act 1975</i> (Vic)
	<i>Fisheries Act 1995</i> (Vic)
	<i>Fisheries Management Act 1994</i> (NSW)

Aspect	Legislation
	<i>Biodiversity Conservation Act 2016 (NSW)</i>
	<i>Fisheries Management Act 1994 (NSW)</i>
Marine Safety	<i>Marine Safety Act 1998 (NSW)</i>
	<i>Marine Safety Act 2010 (Vic)</i>
	<i>Marine Safety Regulations 2012 (Vic)</i>
	<i>Marine Safety (Fees) Regulations 2021 (Vic)</i>
Aboriginal Cultural Heritage	<i>Native Title Act 1993 (Cth)</i>
	<i>Aboriginal Heritage Act 2006 (Vic)</i>
	<i>Traditional Owner Settlement Act 2010 (Vic)</i>
Water (surface and groundwater)	<i>Water Act 2007 (Cth)</i>
	<i>Water Act 1989 (Vic)</i>
	<i>Water Management Act 2000 (NSW)</i>
Traffic	<i>Road Management Act 2004 (Vic)</i>
	<i>Local Government Act 1989 (Vic)</i>
Material extraction (borrow sites)	<i>Mineral Resources (Sustainable Development) Act 1990 (Vic)</i>
Historic heritage	<i>Heritage Act 2017 (Vic)</i>

### 4.3 General Environmental Duty

Civil and Earth are committed to fulfilling its General Environmental Duty (GED) under the *Environment Protection Act 2017*. This requires that all entities and individuals involved in construction activities minimise the risk of harm to human health or the environment from pollution or waste so far as reasonably practicable. The CEMP has been developed to help ensure compliance with this GED, as it sets out the risk assessment process, compliance with project approvals, monitoring and training requirements. Duties relating to pollution incidents (ss. 31 and 32), contaminated land (ss. 39 and 40), and waste (ss. 133–143) complement the GED and are the responsibility of Civil and Earth during the construction phase, as outlined in Table 11.

**Table 11. Environment Protection Act 2017 duties and obligations during construction**

EP Act Duties	Action
GED (s25)	Adopt a risk-based approach and apply the hierarchy of controls (eliminate and reduce).
Duty to take action to respond to harm caused by pollution incident (s31)	Take reasonably practicable measures to restore the environment if a pollution incident occurs because of a spill, leak or other unintended deposit or escape of a substance.

Duty to notify Authority of notifiable incidents (s32)	Contact the EPA Victoria as soon as practicable if a pollution incident happens that causes or threatens material harm to human health or the environment.
Duty to manage contaminated land (s39)	Manage or control contaminated land (vacant or occupied), including groundwater.
Duty to notify of contaminated land (s40)	Contact the EPA Victoria as soon as practicable if the land is contaminated in any of the circumstances set out in the regulations.
Duties relating to industrial waste (s133-137)	Dispose of industrial waste at a 'lawful place'.
Duties and controls relating to priority waste (s138-141)	Take all reasonable steps to ensure priority waste is contained and is isolated to ensure resource recovery remains practicable. Develop appropriate measures to manage priority waste.
Duties and controls relating to reportable priority waste (s142-143)	Record and notify transaction details relating to reportable priority waste in accordance with the proposed regulations via the EPA Victoria Interaction Portal.

#### 4.4 Obligations

Civil and Earth will maintain a live *Hattah Lakes North Project - Obligations Register (Construction Phase)*, which will capture all relevant approvals and associated conditions to be complied with by the Contractor during the construction phase. This register will include, but is not limited to, the relevant requirements from the following:

- EPBC Approval with conditions (EPBC: 2020/8632)
- EDS from the approved EMF
- PSA GC202, Incorporated Document
- Approved CHMP (No. 14330)
- Any conditions of contract relating to environmental management
- Any other commitments or conditions from regulatory permits or local council relating to environmental management.

Table 12 summarises the key compliance documentation for each of the approvals and associated conditions or requirements.

**Table 12 Hattah Lakes North – Obligations**

Reference No.	Description	Key compliance documentation
<b>Environmental Delivery Standard</b>		
ACH1	Cultural Heritage Management Plan	This CEMP (including Sections 7.1, 7.2, 7.3) CHMP <i>Hattah Lakes North Project - Obligations Register (Construction Phase)</i>
ACH2	Connection to Country	<i>Responsibility of CMA and Parks Victoria.</i> CHMP <i>Hattah Lakes North Project - Obligations Register (Construction Phase)</i>
ACH4	Aboriginal Cultural Heritage Inundation Assessment	<i>Responsibility of LMW.</i> Aboriginal Cultural Heritage Inundation Assessment <i>Hattah Lakes North Project - Obligations Register (Construction Phase)</i>
AG1	Avoid and minimise impacts on agricultural productivity	Native Flora and Fauna Management Sub-plan
AQ1	Construction air quality management: dust	Environmental Emissions Management Sub-plan
AQ2	Dust nuisance and complaints	Environmental Emissions Management Sub-plan Community and Stakeholder Management Plan
CM1a	Contaminated land duties	Water, Soils and Waste Management Sub-plan (includes Unexpected Finds Protocol)
CM1b	Water, Soils and Waste Management Sub-plan	Water, Soils and Waste Management Sub-plan
CM1c	Soil characterisation	Water, Soils and Waste Management Sub-plan
CM2	Acid sulfate soils	Water, Soils and Waste Management Sub-plan
E1	Native vegetation and habitat design minimisation	Native Flora and Fauna Management Sub-plan
E2a	Construction biodiversity administrative processes	Native Flora and Fauna Management Sub-plan
E2b	Construction vegetation management	Native Flora and Fauna Management Sub-plan
E2c	Construction fauna management	Native Flora and Fauna Management Sub-plan
E2d	Construction weed and pest management	Native Flora and Fauna Management Sub-plan
E2e	Construction rehabilitation management	Native Flora and Fauna Management Sub-plan
E2f	Aquatic fauna management	Water, Soils and Waste Management Sub-plan Native Flora and Fauna Management Sub-plan
E2g	Site specific additional measures – Regent Parrot	Native Flora and Fauna Management Sub-plan
E2h	Site specific additional measures (Hattah Lakes North) – Mildura Ogyris Butterfly	<i>Responsibility of LMW.</i> <i>Hattah Lakes North Project - Obligations Register (Construction Phase)</i>
E5	Mildura Ogyris Butterfly - Hattah Lakes North	<i>Responsibility of LMW.</i> <i>Hattah Lakes North Project - Obligations Register (Construction Phase)</i>

Reference No.	Description	Key compliance documentation
E7	Post-2022 floods targeted surveys	Responsibility of LMW. <i>Hattah Lakes North Project - Obligations Register (Construction Phase)</i>
E8	Hollow replacement	Responsibility of LMW (during pre-construction and construction), and CMA (during operation) Hollow Replacement Plan
EMF1	Environmental Management System	This CEMP (Section 5.1)
EMF2	Construction Environmental Management Plan	This CEMP
GS1	Minimising erosion and sedimentation through design	Water, Soils and Waste Management Sub-plan
GS2	Erosion and Sediment Control Plan	Water, Soils and Waste Management Sub-plan Traffic Management Plan
GW1	Construction groundwater management	Water, Soils and Waste Management Sub-plan
HH1	Management of Historical Heritage during construction	CEMP (Appendix C:
LU1	Land use effects - Construction	<i>Hattah Lakes North Project - Obligations Register (Construction Phase)</i>
LV1	Avoid and minimise visual impacts through design	Community and Stakeholder Management Plan
LV2	Avoid and minimise visual impacts through construction	Native Flora and Fauna Management Sub-plan
LV3	Minimise construction and operation lighting impacts	Environmental Emissions Management Sub-plan
NV1	Construction noise and vibration management	Environmental Emissions Management Sub-plan
RU1	Waste management	Responsibility of LMW (as asset owner / operator), GMW (as State Construction Authority) and CMA (as preparer of Operating Plan). Water, Soils and Waste Management Sub-plan <i>Hattah Lakes North Project - Obligations Register (Construction Phase)</i>
SB1	Community and Stakeholder Engagement Management Plan	Community and Stakeholder Engagement Management Plan
SB2	Minimise social and business impacts- Construction	Community and Stakeholder Engagement Management Plan
SW1	Surface water management	Water, Soils and Waste Management Sub-plan
SW5	Surface water design – regulators, containment banks and spillways	Water, Soils and Waste Management Sub-plan
TT1	Safety in road design	Traffic Management Plan
TT2	Traffic Management Plan	Traffic Management Plan
<b>EPBC Approvals with conditions (EPBC: 2020/8632)</b>		
4) To avoid and mitigate injury or death of protected fishes during construction, the approval holder must:		
4a	undertake the construction of any coffer dam during no-flow conditions or outside a breeding and spawning period for protected fishes.	

Reference No.	Description	Key compliance documentation
4b	not commence the construction of any coffer dam unless a suitably qualified fish ecologist has, within the previous two weeks, undertaken fish surveys, in accordance with the Survey Guidelines or another survey methodology approved in advance by the department in writing, to identify the presence of any protected fishes in the vicinity of that coffer dam's footprint.	Native Flora and Fauna Management Plan SECPs (where relevant)
4c	ensure the construction of each coffer dam is undertaken in stages to allow all protected fish to passively relocate away from the coffer dam.	
4d	if necessary, have a suitably qualified fish ecologist with the authority to pause dewatering, relocate protected fishes more than 20 metres from the coffer dam's footprint.	
4e	publish the results of each fish survey and details of the relocation of protected fishes (date, time of day, numbers for each species, locations from and to) on the website within 3 months of completion of construction of that coffer dam.	
4f	notify the department within five business days of having published fish survey information on the website and keep the results published on the website until the expiry of this approval.	
To minimise the risk of injury or death of protected matters from clearing or construction, the approval holder must:		
5a	not undertake any construction until a suitably qualified field ecologist has undertaken surveys during the nesting and breeding season, in accordance with the Survey Guidelines or another survey methodology endorsed by the department in writing, of hollows in trees within 350 metres of the disturbance footprint to identify the presence and location of any nest that may be used by Regent Parrot and identify the location of any Regent Parrot active flyways.	Native Flora and Fauna Management Plan SECPs (where relevant)
5b	have a suitably qualified field ecologist undertake surveys during the nesting and breeding season, in accordance with the Survey Guidelines or another survey methodology endorsed by the department in writing, of tree hollows in trees to be cleared within the disturbance footprint where clearing is due to start within 48 hours to identify the presence and location of any Regent Parrot or Corben's Bat prior to the commencement of clearing.	

Reference No.	Description	Key compliance documentation
	<i>*Corben's Bat means the EPBC Act listed threatened species Nyctophilus corbeni (South-eastern long-eared bat/Corben's Long-eared Bat).</i>	
5c	not undertake clearing or construction during nesting or breeding season within 350 metres of where Regent Parrot: i) is or has previously been observed to be actively nesting, or ii) is or has previously been observed to be routinely moving and a flyway has been identified.	
5d	if Corbens Bat is identified in the disturbance footprint, engage a suitably qualified field ecologist with the authority to pause clearing to enable all present Corbens Bats to be relocated to appropriate nearby habitat and the hollow they occupied blocked to prevent use.	
5e	publish the results of each survey undertaken by the suitably qualified field ecologist on the website within 3 months of its completion, notify the department within five business days of its publication and retain it on the website until the expiry of this approval.	
To avoid and mitigate harm to Winged Peppercreep, the approval holder must:		
6a	ensure that a suitably qualified botanist undertakes pre-clearance surveys of the disturbance footprint at least two weeks prior to construction activities to ensure the location of all Winged Peppercreep has been mapped	Native Flora and Fauna Management Plan SECPs (where relevant)
6b	mark and, where necessary, delineate no-go zones, to prevent any access of vehicles or construction materials where Winged Peppercreep occurs	
6c	ensure that clearing or construction activities and the associated movements of personnel and vehicles do not impact Winged Peppercreep.	
To avoid and mitigate harm for protected matters during construction, the approval holder must:		
7a	a) not commence the Action, until the approval holder has: i. submitted to the department for review a copy of the CEMP and associated sub-plans approved by the Secretary to the Victorian Department of Energy, Environment and Climate Action, and ii. submitted to the department a cross-reference table informing	

Reference No.	Description	Key compliance documentation
	the department how conditions 4 to 6 have been addressed in the CEMP, and iii. received written approval by the Minister that conditions 4 to 6 have been addressed.	This CEMP <i>Hattah Lakes North Project - Obligations Register (Construction Phase)</i>
7b	comply with all conditions of any approval related to this Action issued by the Minister for Planning as constituted under the <i>Planning and Environment Act</i> to the extent that they relate to protected matters.	
7c	comply with all requirements of the Victorian approved Construction Environmental Management Plan where they relate to monitoring, managing, mitigating, avoiding, offsetting, recording or reporting impacts to protected matters.	
7d	publish the Construction Environmental Management Plan approved on the website within 10 business days of it being approved by the Secretary to the Victorian Department of Energy, Environment and Climate Action and retain it on the website until the expiry of this approval.	
34	Revisions of Plans	This CEMP (Section 6) <i>Hattah Lakes North Project - Obligations Register (Construction Phase)</i>
46-49	Annual Compliance Reporting	This CEMP (Section 8.1) <i>Hattah Lakes North Project - Obligations Register (Construction Phase)</i>
50-52	Reporting a non-compliance	This CEMP (Section 8.1) <i>Hattah Lakes North Project - Obligations Register (Construction Phase)</i>
53-56	Independent Audit	This CEMP (Section 7.4) <i>Hattah Lakes North Project - Obligations Register (Construction Phase)</i>
<b>PSA GC202, Incorporated Document</b>		
4.5.7	Construction Environmental Management Plan	This CEMP <i>Hattah Lakes North Project - Obligations Register (Construction Phase)</i>
<b>Approved CHMP (No. 14330)</b>		
1	Condition 1- Adherence to the Cultural Heritage Management Plan (CHMP) before, during and after the activity	This CEMP (Section 7.1, 7.2, 7.3) SECPS (Section 5.6) <i>Hattah Lakes North Project - Obligations Register (Construction Phase)</i>
2	Condition 2 - Cultural heritage induction	
3	Condition 3 - Importation and exportation of material during construction	
4	Condition 4 - Protocol for handling sensitive information	
5	Condition 5 - Storage and Repatriation of Aboriginal Cultural Heritage	

Reference No.	Description	Key compliance documentation
6-20	Specific Conditions (Conditions 6 to 20)	
1	Contingency 1 - The discovery of human remains	
2	Contingency 2 - Aboriginal cultural heritage (excluding Aboriginal Ancestral Remains)	
3	Contingency 3 - Custody and Management	
4	Contingency 4 - Dispute Resolution	
5	Contingency 5 - Compliance	

# 5. Implementation

## 5.1 Environmental Management System

This CEMP has been developed within the framework of the Civil and Earth EMS which is independently certified in accordance with AS/NZS: ISO 14001 *Environmental Management System*.

The EMS provides a structured framework for managing environmental responsibilities to ensure compliance with legal and contractual obligations, approvals and approval conditions (including the EDS), continual improvement of environmental performance, and prevention of pollution. The system is integrated into all aspects of project planning and delivery, ensuring that environmental risks and opportunities are identified, assessed, and effectively managed throughout the lifecycle of the works.

The ISO 14001-certified EMS underpins the procedures and controls outlined within this CEMP. It defines processes for environmental risk assessment, incident management, training and awareness, monitoring, auditing, and review. Compliance with the EMS ensures that all construction activities are carried out in a manner that minimises environmental impact, protects natural and built environments, and aligns with the principles of sustainable development. Regular audits verify that the system remains effective, relevant, and aligned with both regulatory requirements and corporate environmental objectives.

The incorporation of requirements including from approvals, and approvals conditions, such as the EDS from the EMF into the CEMP, sub-plans, and other management plans will ensure continued compliance with ISO 14001:2015 certification.

## 5.2 Non-conformances

Non-conformances represent a variance from the Civil and Earth EMS which requires a system improvement action. These do not constitute a non-compliance with approvals conditions or legislation.

Non-conformances may be identified through inspections, monitoring or audits. Non-conformance reports will be raised, tracked and closed out in accordance with the Civil and Earth EMS and *VMFRP-MP-04 Quality Management Plan* specifically the *CEAMS-0000-MS-PR-005 - Corrective and Preventative Action Procedure*. Civil and Earth Environment Manager (or delegate) will determine if corrective and preventative actions are required to address non-conformance and assigning them as appropriate. Non-conformances will also be summarised in Civil and Earth's monthly reports provided to the Independent Environmental Auditor (IEA) and LMW.

## 5.3 Roles and responsibilities

The VMFRP is being delivered by LMW in collaboration with organisations that have statutory responsibilities for environmental protection, public land management and waterway management. These organisations are:

- Parks Victoria
- North Central CMA
- Mallee CMA
- Goulburn-Murray Water (GMW)
- DEECA – Water and Catchments (DEECA WCG).

LMW is responsible for the construction of the projects and the physical operation of the infrastructure (once constructed) to enable the delivery of environmental water.

Civil and Earth have been engaged by LMW under a Construction contract for the delivery of the construction phase of the Hattah Lakes North Project. Key roles and responsibilities of Civil and Earth and VMFRP partners during the construction phase are summarised in Table 13 below.

**Table 13 Contractor and Partner Organisations – Summary of Key Roles and Responsibilities (construction)**

Internal stakeholder	Roles and Responsibilities
<p><b>Primary Contractor (Civil and Earth)</b></p>	<ul style="list-style-type: none"> <li>• Comply with the EMF, contract specification and all legislative requirements, approvals, approval conditions and EDSs.</li> <li>• Comply with all statutory approvals and approval conditions regarding approvals obtained by LMW and obtain any other necessary approvals and consents for the Hattah Lakes North Project.</li> <li>• Ensure that all sub-contractors similarly comply with such requirements and take corrective action as necessary.</li> <li>• Prepare and implement the CEMP and sub-plans.</li> <li>• Address all comments made by LMW on proposed changes to the CEMP prior to approval of the amended CEMP by LMW for minor changes and prior to submission of the amended CEMP to Secretary to DEECA for major changes</li> <li>• Conduct internal compliance audits, receive audit reports from the IEA and take any necessary corrective action to address issues raised in audit reports.</li> </ul>
<p><b>Lower Murray Water</b></p>	<ul style="list-style-type: none"> <li>• Responsible for construction of the projects and the physical operation of the infrastructure (once constructed) to enable the delivery of environmental water.</li> <li>• Obtaining key statutory approvals for the Hattah Lakes North Project.</li> <li>• Review and approve sub-plans.</li> <li>• Mandating Contractor compliance with the EMF including the EDSs.</li> <li>• Ensuring that the requirements of the EMF and the EDSs have been addressed and are complied with in environmental management documentation prepared by the Contractor.</li> <li>• Monitoring compliance with the CEMP and all plans required by the EDSs and corrective action to be taken as necessary.</li> <li>• Liaise with regulators and other agencies as required.</li> <li>• Conduct stakeholder engagement and community consultation activities.</li> <li>• Address the concerns of stakeholders and community as required.</li> <li>• Prepare Construction Environmental Performance Reports every three months, which include a summary of the findings of the IEA for the relevant reporting period.</li> <li>• Prepare and provide to the Minister for Planning every three months the Construction Environmental Performance Report for the relevant reporting period.</li> </ul>
<p><b>Parks Victoria</b></p>	<ul style="list-style-type: none"> <li>• Land manager for the Crown land under the <i>National Parks Act 1975 (Vic)</i> and <i>Crown Land (Reserves) Act 1978 (Vic)</i>, in this case, the Hattah-Kulkyne National Park the Murray River Park and Lake Powell and Carpul Wildlife Reserve where infrastructure will be constructed and operated and the wetlands, waterways and floodplain where the environmental water will be delivered.</li> <li>• Issue consent for project works under Section 27 of the <i>National Parks Act 1975 (Vic)</i>.</li> <li>• Submit the Native Title Future Act notification/s under the <i>Native Title Act 1993 (Cth)</i> to First Nations Legal &amp; Research Services, for activities on Crown land that may affect native title rights and interests, as there is no native title holder for the project areas.</li> <li>• Consultation on the CEMP, sub-plans and other management plans as required by the EMF.</li> <li>• Consultation on the Development Plan.</li> </ul>
<p><b>Project Control Group</b> LMW GMW Mallee CMA</p>	<p>On behalf of the LMW Board and DEECA WCG, responsible for the overall efficient and effective delivery of the projects through to construction completion and handover. The Project Control Group consists of the following members and representatives:</p> <ul style="list-style-type: none"> <li>• Independent Project Control Group Chair</li> <li>• LMW – Managing Director</li> </ul>

North Centra CMA Parks Victoria	<ul style="list-style-type: none"> <li>• GMW – General Manager, Infrastructure Delivery Services</li> <li>• Mallee CMA – Chief Executive Officer (CEO)</li> <li>• North Central CMA – CEO</li> <li>• Parks Victoria – Regional Director, Northern Victoria</li> <li>• Independent Advisor – Traditional Owner engagement and project management.</li> </ul>
<b>Mallee CMA</b>	Consider, approve and endorse plans and hydraulic assessment regarding works on land subject to a Land Subject to Inundation Overlay, in accordance with Clause 4.9.1 of the GC202 Incorporated Document.
<b>DEECA WCG</b>	VMFRP sponsor and, on behalf of the Minister for Water, sets the strategic direction of the VMFRP and oversees the delivery of the VMFRP as part of Victoria's obligations under the Basin Plan.

Project governance between Civil and Earth, LMW and other partner organisations will be managed by LMW. Civil and Earth will report to LMW, and LMW will liaise with other project partners as required. In addition, LMW will generally be responsible (unless otherwise specified) for liaising with government agencies in both a project partner (internal stakeholder management) and regulator (external stakeholder management) capacity.

### 5.3.1 Civil and Earth roles and environmental responsibilities

The roles and environmental responsibilities of key personnel within Civil and Earth for delivery of the Hattah Lakes North Project are summarised in Table 14. Further detail on the roles, responsibilities, and accountabilities of personnel and organisations in delivering the Hattah Lakes North Project is provided in the Environmental RASCI (Responsible, Accountable, Support, Consult, Inform) Chart RASCI Chart in Appendix A.

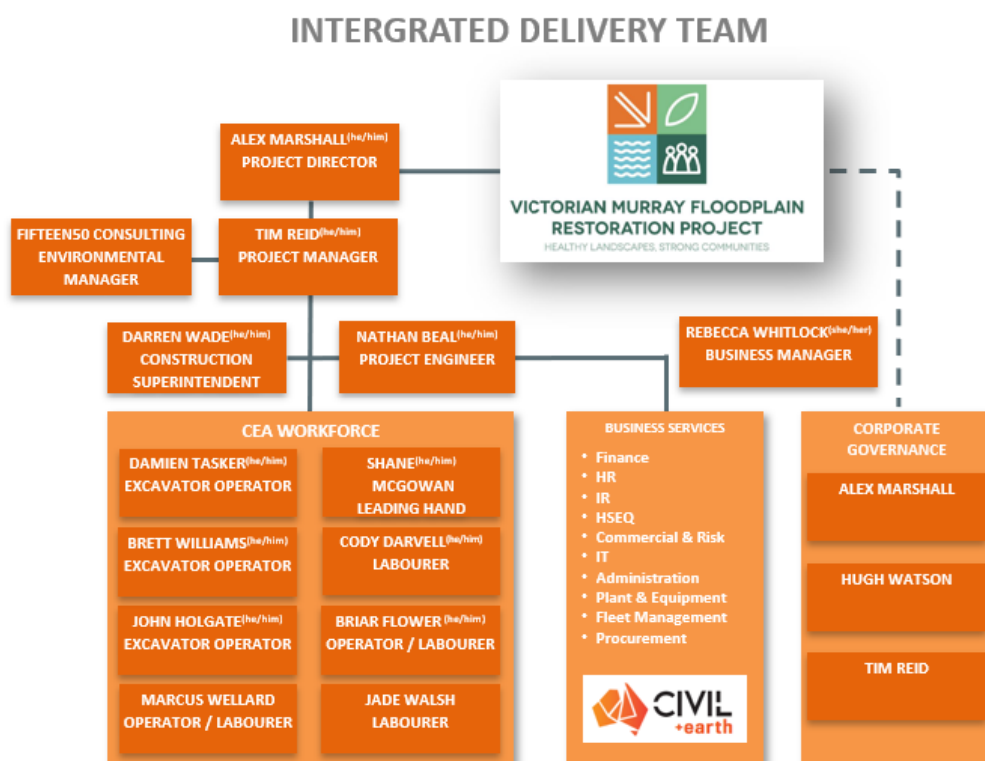


Figure 4 Roles and Responsibilities – Civil and Earth

**Table 14 Roles and responsibilities**

Position	Environmental Responsibilities	Person reporting to
<b>Civil and Earth Project Director - Alex Marshall</b>	<ul style="list-style-type: none"> <li>• Ensure environmental management and performance is central to construction of the Hattah Lakes North Project</li> <li>• Challenge performance and drive positive environmental outcomes</li> <li>• Provide necessary resources for effective environmental management</li> <li>• Accountable for project construction and implementation of the CEMP, sub-plans and management plans</li> </ul>	Civil and Earth Managing Director
<b>Civil and Earth Project Manager - Tim Reid</b>	<ul style="list-style-type: none"> <li>• Responsible for environmental management performance for construction of the Hattah Lakes North Project</li> <li>• Provide resources to enable effective environmental management</li> <li>• Implement and maintain the CEMP</li> <li>• Identify and deliver environmental training to project personnel</li> <li>• Report near misses, non-conforming incidents, and practices</li> <li>• Ensure corrective actions for environmental non-conformances, incidents, and inspections are actioned and closed out promptly</li> <li>• Prepare monthly project reports</li> <li>• Manage and track compliance with statutory requirements (including the GED), environmental approvals, licences, and permits</li> <li>• Support and participate in the audit program</li> <li>• Communicate CEMP requirements to all personnel under their control</li> <li>• Understand approval and contractual conditions relevant to the Hattah Lakes North Project</li> <li>• Comply with all project approval and environmental management conditions</li> </ul>	Civil and Earth Project Director
<b>Civil and Earth Construction Superintendent - Darren Wade</b>	<ul style="list-style-type: none"> <li>• Ensure environmental management and performance is central to construction of the Hattah Lakes North Project</li> <li>• Challenge performance and drive positive environmental outcomes</li> <li>• Provide necessary resources for effective environmental management</li> <li>• Accountable for project construction and implementation of the CEMP, sub-plans and management plans</li> <li>• Liaise with project staff for ongoing monitoring and maintenance of environmental controls</li> <li>• Report near misses, non-conforming incidents, and practices</li> <li>• Verify that corrective action is taken when required for non-conforming work</li> <li>• Be aware of approval and contractual conditions relevant to their area of work</li> <li>• Comply with all project approval and environmental management conditions</li> </ul>	Civil and Earth Project Manager

Position	Environmental Responsibilities	Person reporting to
<b>Civil and Earth Environment Manager</b>	<ul style="list-style-type: none"> <li>• Provide overall project leadership for environmental matters across the project team</li> <li>• Assign environmental responsibilities to project personnel</li> <li>• Identify and provide appropriate environmental training to project personnel</li> <li>• Implement and maintain EMS, CEMP, sub-plans, management plans, and SECPs, and assist with updates as required</li> <li>• Monitor onsite environmental performance and liaise with project staff to maintain environmental controls</li> <li>• Conduct and document regular inspections and surveillance of environmental controls to ensure they are established and maintained</li> <li>• Report near misses, non-conforming incidents and practices</li> <li>• Ensure corrective actions for environmental non-conformances, incidents, and inspections are actioned and closed out promptly</li> <li>• Prepare monthly project reports</li> <li>• Liaise with VMFRP/LMW environmental representatives</li> <li>• Manage and track compliance with statutory requirements, environmental approvals, licences, and permits</li> <li>• Support and participate in the audit program</li> <li>• Manage environmental complaints in consultation with the Community and Stakeholder Manager</li> <li>• Communicate CEMP requirements to all personnel under their control</li> <li>• Understand and comply with approval and contractual conditions relevant to the Hattah Lakes North Project</li> <li>• Ensure rectification of environmental controls is carried out as required</li> <li>• Ensure no reuse of materials into a receiving environment without prior approval</li> <li>• Exercise delegated authority from the Project Director to stop tasks or construction activities where environmental controls are absent, ineffective, or inadequate.</li> </ul>	Civil and Earth Project Manager
<b>Civil and Earth Supervisor</b>	<ul style="list-style-type: none"> <li>• Implement EMS, CEMP, sub-plans, management plans, and SECPs</li> <li>• Liaise with project staff for ongoing monitoring and maintenance of environmental controls</li> <li>• Report near misses, non-conforming incidents, and practices</li> <li>• Verify that corrective action is taken when required for non-conforming work</li> <li>• Be aware of approval and contractual conditions relevant to their area of work</li> <li>• Perform surveillance and monitoring of environmental controls to ensure they are established and maintained</li> <li>• Ensure rectification of environmental controls is carried out as required</li> <li>• Comply with all project approval and environmental management conditions</li> <li>• Ensure no reuse of any materials into a receiving environment without prior approval.</li> </ul>	Civil and Earth Construction Superintendent

Position	Environmental Responsibilities	Person reporting to
Civil and Earth Project Engineer	<ul style="list-style-type: none"> <li>• Implement EMS, CEMP, sub-plans, management plans, and SECPs</li> <li>• Liaise with project staff for ongoing monitoring and maintenance of environmental controls</li> <li>• Provide appropriate environmental training to project personnel</li> <li>• Report near misses, non-conforming incidents, and practices</li> <li>• Verify that corrective action is taken when required for non-conforming work</li> <li>• Be aware of approval and contractual conditions relevant to their area of work</li> <li>• Perform surveillance and monitoring of environmental controls to ensure they are established and maintained</li> <li>• Help prepare monthly project reports</li> <li>• Track compliance with statutory requirements (including the GED), environmental approvals, licences, and permits</li> <li>• Communicate CEMP requirements to all personnel under their control</li> <li>• Understand approval and contractual conditions relevant to the Hattah Lakes North Project</li> <li>• Ensure rectification of environmental controls is carried out as required</li> <li>• Comply with all project approval and environmental management conditions</li> <li>• Ensure no reuse of any materials into a receiving environment without prior approval.</li> </ul>	Civil and Earth Project Manager

### 5.3.2 Subcontractor environmental responsibilities

Subcontractors are accountable for delivering their services in alignment with the CEMP and the associated Management Plans. This includes:

- Ensuring sufficient resources are available to meet applicable environmental requirements
- Reporting environmental incidents and environmental monthly reporting as per project requirements
- Effectively implementing corrective actions
- Managing environmental risks while working onsite
- Participating in all pre-start meetings, training sessions, and toolbox talks related to their work
- Engaging in site inspections and audits as needed.

## 5.4 External stakeholders

### 5.4.1 Government agencies

Table 15 summarises some of the key government agencies (excluding project partners) and relevance to the Hattah Lakes North Project construction phase. Engagement with these external government agencies will be undertaken by LMW, its nominated agents or Civil and Earth via delegation. Extensive consultation occurred during the environmental assessment phase, and will continue to occur as required throughout construction, and post-construction.

**Table 15 Key project stakeholders (government agencies)**

Organisation	Relevant legislation	Responsibilities
<i>Commonwealth</i>		
Commonwealth Minister for Environment DCCEEW (Department of Climate Change, Energy, the Environment and Water)	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>	<ul style="list-style-type: none"> <li>• Oversight during the construction phase of compliance with relevant EPBC approval conditions applicable to the construction of the Hattah Lakes North Project, including approvals of plans required by the conditions such as the CEMP.</li> </ul>
Murray-Darling Basin Authority (Cth)	<i>Water Act 2007 (Cth)</i>	<ul style="list-style-type: none"> <li>• Assess proposals that may affect the flow, use, control or quality of any water in the upper Murray River under Clause 49 of Schedule 1 of the <i>Water Act 2007 (Cth)</i></li> </ul>
<i>Victoria</i>		
Secretary to DEECA DEECA	<i>Planning and Environment Act 1987</i>  <i>Flora and Fauna Guarantee Act 1988</i>  <i>Wildlife Act 1975</i>  <i>Catchment and Land Protection Act 1994</i>  <i>Environment Effects Act 1978</i>  <i>Crown Land (Reserves) Act 1978</i>	<ul style="list-style-type: none"> <li>• Approve the CEMP in accordance with Clause 4.5.7 of the Incorporated Document.</li> <li>• Consider any assessment of overall improvement for biodiversity application in lieu of native vegetation offsets in accordance with Clause 4.6 of the GC202 Incorporated Document.</li> <li>• Consider, approve and endorse a fire access road plan in accordance with Clause 4.10.3 and 4.10.4 of the GC202 Incorporated Document</li> <li>• Issue a licence or permit to take protected flora under Section 48 of the <i>Flora and Fauna Guarantee Act 1988 (Vic)</i>.</li> <li>• Issue a licence or permit to handle fish under Section 53 of the <i>Flora and Fauna Guarantee Act 1988 (Vic)</i>.</li> </ul>

Organisation	Relevant legislation	Responsibilities
		<ul style="list-style-type: none"> <li>Give written authorisation to take, handle and disturb wildlife that may be at risk of harm during construction works under Section 28A of the <i>Wildlife Act 1975 (Vic)</i></li> </ul>
EPA	<i>Environment Protection Act 2017</i>	<ul style="list-style-type: none"> <li>Victoria's environmental regulator with the primary role of protecting human health and the environment from pollution and waste.</li> <li>Receive and assess notifications of notifiable incidents, including pollution incidents that have caused or threaten to cause material harm to human health or the environment.</li> <li>Issue permissions (licences, permits and registrations), authorisations, exemptions and designations, where required for prescribed activities.</li> <li>Consultation on the CEMP and sub-plans as required by the EMF.</li> </ul>
Victorian Fisheries Authority	<i>Fisheries Act 1995 (Vic)</i>	<ul style="list-style-type: none"> <li>Provide authorisation to create obstructions to fish passage (Section 119) and/or a permit to take fish (Section 49)</li> </ul>
First Peoples State Relations	<i>Aboriginal Heritage Act 2006</i>	<ul style="list-style-type: none"> <li>Ensure compliance with the approved CHMP Hattah Lakes North (No. 14330)</li> </ul>
Heritage Victoria	<i>Heritage Act 1995</i>	<ul style="list-style-type: none"> <li>Provide consent under Sections 123 and 124 of the <i>Heritage Act 2017 (Vic)</i> to deface, damage or otherwise interfere with an archaeological site for the Hattah Lakes North Project, if required.</li> </ul>
Minister for Planning (Vic)	<i>Planning and Environment Act 1987</i>	<ul style="list-style-type: none"> <li>Consider, approve and endorse a Development Plan in accordance with Clause 4.4.1 and 4.4.2 of the GC202 Incorporated Document.</li> <li>Receive three-monthly Construction Environmental Performance Reports</li> <li>The Minister for Planning is the responsible authority for the project on land subject to the SCO2 in the Mildura and Swan Hill Planning Schemes, as such the Minister is responsible for administering and enforcing the controls introduced by planning scheme amendment GC202 through both the construction and operation phases.</li> </ul>
Department of Transport	<i>Road Management Act 2004</i> <i>Planning and Environment Act 1987</i>	<ul style="list-style-type: none"> <li>Provide consent to construct works on state roads</li> </ul>
Mildura Rural City Council	<i>Road Management Act 2004</i>	<ul style="list-style-type: none"> <li>Provide consent to construct works on a local road</li> </ul>
Minister for resources (Vic)	<i>Mineral Resources (Sustainable Development) Act 1990</i>	<ul style="list-style-type: none"> <li>Issue exemption from licence for borrow sites if required under the <i>Mineral Resources (Sustainable Development) Act 1990</i>.</li> </ul>
Minister for Water (Vic)	<i>Water Act 1989 (Vic)</i>	<ul style="list-style-type: none"> <li>Issue a licence to construct, alter, operate, remove or decommission any works on a waterway under Section 67 of the <i>Water Act 1989 (Vic)</i>.</li> </ul>

Organisation	Relevant legislation	Responsibilities
NSW		
Minister for Planning and Public Spaces	<i>Environmental Planning and Assessment Act 1979 (NSW)</i>	<ul style="list-style-type: none"> <li>Undertake an assessment and provide consent for the Hattah Lakes North Project under the Balranald Planning Scheme, pursuant to Part 4 of the <i>Environmental Planning and Assessment Act 1979 (NSW)</i>. Approval of a development consent under the Balranald LEP 2010 may also be required.</li> </ul>
Minister for Agriculture and Western New South Wales	<i>Fisheries Management Act 1994 (NSW)</i>	<ul style="list-style-type: none"> <li>Provide permission for dredging or reclamation under Part 7, Division 3 of the <i>Fisheries Management Act 1994 (NSW)</i> for the Hattah Lakes North Project, unless these activities are covered by an exemption, such as for an artificial water body or farm dam (as defined in the Division).</li> </ul>
Minister for Energy and Environment	<i>National Parks and Wildlife Act 1974 (NSW)</i>	<ul style="list-style-type: none"> <li>Issue an Aboriginal Heritage Impact Permit under Part 6, Division 2 of the <i>National Parks and Wildlife Act 1974 (NSW)</i>, if required, for the Hattah Lakes North project.</li> </ul>

### 5.4.2 Community engagement

Community engagement during the construction phase of the Hattah Lakes North Project will occur in accordance with the Community and Stakeholder Engagement Management Plan. This will include processes for providing advance notification to the relevant Council and land managers of upcoming construction activities and establishing communication protocols to ensure adequate notifications are issued. Responsibility for community engagement will be shared between LMW and Civil and Earth, as outlined in the Community and Stakeholder Engagement Plan.

The Community and Stakeholder Engagement Management Plan will also include details for managing community complaints, including a project-specific hotline for queries or complaints, as well as the processes for complaint investigation, close-out, reporting, and escalation. The *Hattah Lakes North Project Complaints Register*, maintained on SharePoint, will record all complaints received by Civil and Earth during the construction phase.

### 5.5 Subcontractor management

All subcontractor personnel share responsibility with Civil and Earth's project team for environmental management and performance and must comply with this CEMP and sub-plans. Civil and Earth will ensure that relevant plans, procedures and other documentations associated with the EMS are made available to subcontractors as required to fulfil any responsibilities they may have, and to communicate any requirements or responsibilities to subcontractors.

### 5.6 Site Environmental Control Plans

The Site Environmental Control Plans (SECP), prepared by Civil and Earth, will be key documents guiding environmental management at each work area, they will be:

- Informed by the key environmental aspects and mitigation/ management measures outlined in the risk register and obligations register
- Show the environmental values present within and surrounding the construction footprint
- Developed for each discrete work area prior to commencement of construction activities
- Identify relevant components and specific environmental aspects within the vicinity of the construction site at each work area
- Outline environmental controls and management measures to be installed, maintained, and monitored at the discrete work area

- Displayed at crib huts, site offices, and other accessible locations
- Communicated to all personnel during site inductions and relevant toolbox talks
- Maintained as a live document, updated periodically and as construction activities, site conditions, and environmental risks change
- Developed by Civil and Earth's Environmental Manager and then reviewed and approved by Civil and Earth's Project Manager prior to implementation.

The review and approval of initial drafts of the SECPs by VMFRP will serve as a hold point prior to construction commencement at the specific work area. These documents will remain dynamic and be subject to revision to reflect changing site conditions or environmental controls.

Each SECP will contain a map that will identify, at a minimum, the following **aspects** within and in the vicinity of the discrete work area:

- The construction footprint and approved CHMP Activity Area
- Location of any existing infrastructure
- Location of all known Aboriginal Places and historic heritage sites
- Location of no-go zones around Aboriginal Places as required by the approved CHMP (No. 14330)
- Locations where harm is permitted and not-permitted to occur within the extent of Aboriginal Places as per the approved CHMP (No. 14330).
- Location of no-go zone fencing to be installed around significant ecological values to be retained (including populations of EPBC Act-listed flora within the Area of Investigation, FFG Act listed flora and Large or Very Large Trees on the edge of the construction footprint)
- Location of any chemical storage
- Location of any dewatering activities
- Location of any water extraction points for construction water (or any other sources proposed for use e.g., mains water)
- Location of areas of high potential for acid sulfate soil
- Location of facilities such as toilets, cribs rooms and parking in relation to the discrete work area
- Location of any waste facilities
- Location of exit (or shelter in place) in instance of emergency (such as a bushfire).

The SECP will contain a map that would identify, at a minimum, the following **management measures** at the discrete construction site:

- Location of any no-go zones to be installed around any of the values outlined above, including any TPZs to be installed
- Any areas of the construction footprint that will be demarcated physically in the field
- Location of all erosion and sediment controls and type of control (e.g., sediment fence), consistent with the Erosion and Sediment Control Plan
- Location of any spill kits or other measures to manage accidental spills (e.g., bunding)
- Details of how water from dewatering will be managed (if relevant), including any testing, storage or discharge measures.
- Contact details for the relevant site personnel in case of emergency (safety and environmental).

## 5.7 Training and awareness

As outlined in the GED, all individuals involved in the Hattah Lakes North Project, including Civil and Earth staff, subcontractors, and other personnel, are responsible for understanding and managing environmental aspects and impacts through appropriate training and awareness programs.

Civil and Earth have a competency and training procedure which applies to all personnel performing works on the Hattah Lakes North Project site. This will be implemented alongside the environmental training and awareness requirements outlined in Table 16.

Environmental training needs for the Hattah Lakes North Project will be identified through a training needs analysis based on identified competency requirements for relevant project personnel. The analysis will consider environmental risks, obligations, and will assess existing skills, qualifications, and experience to identify competency gaps. The outcomes will inform the level and type of environmental training required and will be documented in a project-specific training plan. The training plan will be reviewed and updated as required, including when project activities or personnel roles change, new environmental risks are identified, or incidents occur.

**Table 16 Training and awareness requirements**

Training	Outcomes
Site Induction	<p>Project personnel (including subcontractors) will undergo a Site Induction prior to commencement onsite. Inductions will include but are not limited to:</p> <ul style="list-style-type: none"> <li>• CEMP and sub-plans</li> <li>• EDS and the GES</li> <li>• Approved CHMP</li> <li>• Approvals and approval conditions</li> <li>• Emergency response procedures and reporting processes for environmental incidents</li> <li>• Responsibilities and key contacts</li> </ul> <p>Induction records will be maintained to confirm that all relevant personnel have been appropriately inducted. Inductions will be regularly reviewed and updated as required. The completion of inductions is monitored in accordance with the Civil and Earth EMS. A project specific training plan will be implemented and updated as required.</p>
Pre-start meetings	<p>Pre-start meetings will be undertaken at the beginning of each day before work commences with Civil and Earth project personnel and any subcontractors. Environmental aspect (s) relevant to the day's work will be raised and discussed as required.</p>
Toolbox talks	<p>Toolbox talks will be held weekly or as required to address environmental performance, incidents, and improvements.</p> <p>Topics may include erosion and sediment control, waste segregation, dust and noise management, and compliance with CEMP requirements. Records of personnel attendance at toolbox talks will be kept.</p>
Specialised environmental training	<p>Specialised environmental training requirements will be identified based on the training needs analysis and associated competency requirements. Personnel involved in activities with high environmental risks (e.g., working near waterways, vegetation clearance, fuel handling) will complete task-specific environmental training or hold relevant competency certificates. Training will include spill response, flora/fauna management, and hazardous materials handling as required.</p>
Internal training	<p>All staff will undertake internal trainings such as the site induction covering for example environmental controls, regulatory obligations, incident reporting</p>

Training	Outcomes
	requirements, and emergency response procedures. Refresher training will be provided where competency gaps are identified, procedures change, or environmental risks are updated.

## 5.8 Contingency measures

Contingency measures may be implemented during the construction phase of the Hattah Lakes North Project because of:

- A significant risk to environmental or heritage values, not previously identified in the EES for the Hattah Lakes North Project, is discovered during construction; or
- The risk profile of an environmental value previously identified during the assessment phase of the Hattah Lakes North Project, is significantly increased due to a change in process, a project modification, or an unexpected discovery.

Where the need for the implementation of contingency measures has been identified, the following processes will be followed to minimise potential impacts:

- Works will cease in the immediate area, and the area will be temporarily fenced off where required
- Civil and Earth will notify LMW of the discovery as soon as practicable (e.g. within 2 hours)
- A suitably qualified specialist (e.g., ecologist, archaeologist, or contaminated land consultant) will confirm the discovery and advise on appropriate management measures including buffer of discovery to ensure work can safely continue in other areas of the construction footprint
- For unexpected historical heritage finds, the protocol outlined in Appendix C:
- In the event of an unexpected discovery of Aboriginal cultural heritage, the contingencies set out within the approved CHMP (No. 14330) will be followed and implemented
- LMW and Civil and Earth will review approval and consent requirements and confirm whether any further planning, environment, or heritage approvals apply to the find identified
- The appropriate regulatory authority will be consulted as necessary to confirm further approvals and proposed management measures
- Regulatory authority (if required) will give written approval for works to recommence within works the area affected. If Regulatory authority not required, LMW will provide written approval to Civil and Earth to recommence works within the area affected.

## 6. Change Management Process

Civil and Earth is responsible for reviewing and updating the CEMP at least every six months and more frequently as necessary, to take account of events or circumstances which may affect the way the Hattah Lakes North construction activities are to be carried out, including in response to audit findings or additional approvals.

The change management process for amendments to the CEMP is detailed in Section 6.1, and amendments that require a change to the construction footprint in Section 6.2. All amendments requiring a change to the Construction Footprint, EMF or EDSs would need to be approved by the Minister for Planning in accordance with the Incorporated Document.

### 6.1 Management Plan review

Civil and Earth's Environment Manager (or delegate) will be responsible for updating the CEMP. Three types of revisions may be made to these documents, which are detailed Table 17 below.

**Table 17 Document change management processes in construction phase**

Revision Type	Definition / Criteria	Notification / Consultation / Approval / Reporting required
Administrative	<ul style="list-style-type: none"> <li>General changes such as updates to formatting, references and readability.</li> </ul>	<ul style="list-style-type: none"> <li>No notification, consultation, approvals or reporting required, however version control must be applied.</li> </ul>
Minor	<ul style="list-style-type: none"> <li>Changes to clarify or improve environmental management practices, to add new obligations and associated controls or minor change of work practices. No increase in, or introduction of, new environmental risks.</li> </ul>	<ul style="list-style-type: none"> <li>Approval from LMW required for minor changes on the CEMP</li> <li>Notification to Secretary to DEECA prior to change being implemented.</li> <li>Reporting as part of Construction Environmental Performance Report</li> </ul>
Major	<ul style="list-style-type: none"> <li>Significant change to environmental management practices on site, work methods or scope that result in increased or new environmental risks or practices</li> <li>Changes during construction but still within the approved construction footprint that require an update to the approved avoid and minimise statement, in accordance with the <i>Guidelines for removal, destruction or lopping of native vegetation</i> (Department of Environment, Land, Water and Planning, 2017)</li> </ul>	<ul style="list-style-type: none"> <li>Consultation and approval required by relevant agency as outlined in Section 1.7.</li> <li>Reporting as part of Construction Environmental Performance Report</li> <li>Any changes to the avoid and minimise statement must be prepared to the satisfaction of the Secretary of DEECA</li> </ul>

In order to determine the classification of a proposed change and assess the impact of the change during the construction phase, the following process will be undertaken:

- Civil and Earth or LMW will raise a change request via the Construction Change Request and Assessment Form (refer to Appendix E: )
- An Assessment of the revision type (Administrative, Minor or Major) will be completed and agreed by the Contractor and LMW and where considered Minor or Major recorded in a Construction Change Request and Assessment Form.
- Assessment of the impact of the change and the subsequent outcome will be recorded in the Construction Change Request and Assessment Form.

In summary, no notification, consultation, approval or reporting is required for the CEMP for administrative changes. Minor changes are required to be approved by LMW, and there will be a Notification to Secretary to DEECA prior to change being implemented. Major amendments to the CEMP are to be approved by the Secretary of DEECA, and LMW, and consultation will occur with the stakeholders listed in Section 1.6.

This change management process is in accordance with Condition 34 of the EPBC Act Approval (EPBC: 2020/8632), which states that LMW may apply at any time to the Minister for a variation to any plan required under the EPBC Approval, including this CEMP, by submitting an application consistent with section 143A of the EPBC Act. If the Minister approves a revised plan, then from the specified date the revised plan must be implemented in place of the previous version.

## **6.2 Construction footprint**

All amendments requiring a change to the Construction Footprint would need to be approved by the Minister for Planning in accordance with the Incorporated Document.

Civil and Earth will engage with LMW early regarding the rationale for any required works outside of the construction footprint. LMW will be responsible for amending, if required, primary environment, planning and heritage approvals. Responsibility for obtaining secondary approvals will be determined based on the scope of works.

During construction, if the construction footprint is proposed to be amended, the following will be required for the submission and approval from the Minister for planning:

- Amended plans and a schedule explaining the proposed amendment/s.
- A written statement explaining and supporting the proposed amendment, including:
  - A description of the form and extent of any consultation undertaken with relevant councils, government agencies and other stakeholders concerning the proposed amendment
  - Any written comments from relevant councils, government agencies and other stakeholders
  - A written response to comments from relevant councils, government agencies and other stakeholders.

## 7. Environmental assurance

Civil and Earth will undertake environmental assurance activities including environmental monitoring, inspections, auditing and reporting which will track the environmental performance of the project. Details of the environmental assurance activities to be undertaken during the construction phase of the project are outlined below.

### 7.1 Environmental inspections

Environmental inspections will be a key part of monitoring environmental performance during the construction phase. Civil and Earth will complete at least one weekly inspection of construction works, with additional inspections undertaken as required based on the environmental risk profile of the relevant works and activities. A checklist will be used during the weekly inspections to conduct the inspections and capture relevant information. The weekly inspections will include, but not be limited to, a review of the below:

- CHMP compliance (Refer to Contingency 5 of the Approved CHMP)
- Sediment
- Drainage
- Watercourse
- Flora and fauna
- Dust
- Waste (excavated material, groundwater and other materials)
- Noise and vibration controls
- Historic heritage
- Weeds

The date and time of inspections will be recorded, and comments on any non-compliance with the CEMP and any corrective or remedial actions taken. Copies of inspection records will be provided to LMW, who will share any issues with relevant project partners. Table 18 below summarises responsibilities and frequencies of the environmental inspections.

**Table 18 Summary of environmental inspection details**

Inspection / audit activity	Outcomes	Frequency	Responsibility
Site Environmental Inspections	Review of site conditions against approvals, CEMP and sub-plans	Weekly (minimum)	Environment Manager (or delegate)

### 7.2 Environmental monitoring program

Environmental monitoring activities play a key role in providing environmental assurance during the construction phase of the Hattah Lakes North Project. These activities will help protect the sensitive environments in which the Hattah Lakes North Project is located, ensure compliance with relevant obligations and support the maintenance of a social licence within the local communities. The monitoring program for the construction phase which has been developed following the outcomes of the EES Assessment process, to address relevant approval conditions, is detailed in Table 19, excluding those which will be detailed in sub-plans, which are cross referenced in Table 20. The checklist used during weekly site inspections (refer to Section 7.1) will support this process and ensure the capture of all relevant information, including (but not limited to) the requirements outlined below.

**Table 19 Environmental monitoring requirements (construction phase) (AI – Auditing / Inspection, M – Monitoring, I - Investigation)**

#	Performance objective	Indicator	Monitoring requirement details	Location	Frequency
<b>Aboriginal Cultural Heritage</b>					
AI ACH1	Verify compliance with the CHMP	Compliance check with EDS requirements	Monitoring and compliance in accordance with approved CHMP No. 14330 under the <i>Aboriginal Heritage Act 2006</i> , including by reviewing weekly (at minimum) the Compliance Check list in Contingency 5.	As required in accordance with approved CHMP No. 14330	CHMP Compliance to be reviewed weekly (at minimum) with site inspections using the checklist.  Compliance audits to be undertaken as per Section 7.3.
AI ACH2	Verify compliance with EDS GS2 and SW1	Compliance check with EDS requirements	Compliance with GS2 and SW1	Construction Footprint	CHMP Compliance to be reviewed weekly (at minimum) with site inspections using the checklist.  Compliance audits to be undertaken as per Section 7.3.
<b>Historic heritage</b>					
AI HH1	Minimise risk of harm to historical heritage values at Crawford's Home Station historical site	Establishment of physical barrier protection and/or exclusion zones	Checks to confirm that appropriate barrier protection or exclusion zones (as detailed in the CEMP) have been established prior to construction commencing	Crawford's Home Station historical site and Kulkynne Drop Log Stockyards	Prior to construction commencing and during weekly environmental inspections using the checklist, while work is being undertaken in proximity to these sites. Compliance audits to be undertaken as per Section 7.3.
AI HH2	Verify compliance with EDS HH1.	Compliance with <i>Heritage Act 2017</i> for discovery of archaeological sites	Check compliance with EDS HH2 and specifically requirements for implementation of an unexpected archaeological finds protocol during construction (Appendix C: )	Construction Footprint	Weekly with site inspections (at minimum) using the checklist. Compliance audits to be undertaken as per Section 7.3.

**Table 20 Monitoring programs to be detailed in sub-plans (AI – Auditing / Inspection, M – Monitoring, I - Investigation)**

#	Performance objective	Indicator	Monitoring requirement details	Location	Frequency
<b>Air quality</b>					
AI AQ1	Minimise dust during construction	Refer to Environmental Emissions Management Sub-plan			
M AQ1	Minimise dust within 20 m of stationary human sensitive receiver				
EDS AQ1	Construction air quality management: dust				
<b>Agriculture</b>					
AI AG1	Confirm implementation and effectiveness of measures implemented in EDS AG1 and assess the need for additional measures to minimise the impact of Biosecurity issues on agricultural land and farming operations during construction	Refer to Native Flora and Fauna Management Sub-plan			
<b>Terrestrial ecology</b>					
M TE1	To confirm that construction has been undertaken in accordance with EDS E1 and no unapproved vegetation is removed	Refer to Native Flora and Fauna Management Sub-plan			
M TE2	To meet land manager and landowner post-construction requirements.				
AI TE1	To confirm that construction has been undertaken in accordance with EDS E1 and no unapproved vegetation is removed				
AI TE2	To avoid and minimise increased weed cover during construction				
AI TE3	To avoid and minimise increased presence of pests during construction				
EDS E2a	Construction biodiversity administrative processes				
EDS E2b	Construction vegetation management				
EDS E2c	Construction fauna management				
EDS E2d	Construction weed and pest management				
EDS E2f	Aquatic fauna management				
EDS E2g	Site specific additional measures – Regent Parrot				
<b>Geology soils and contamination</b>					
EDS CM1a	Contaminated land duties	Refer to the Water, Soils and Waste Management Sub-plan			
EDS CM1b	Water, Soils and Waste Management Sub-plan				
EDS CM1c	Soil characterisation				
EDS CM2	Acid sulfate soils				
AI GSC1	Confirm implementation and effectiveness of management of use of chemicals, fuels and materials during construction and assess need for additional measures				
AI GSC2	Confirm implementation and effectiveness of management of dispersive/sodic/unstable soils during construction as outlined in the CEMP and ESCP and assess the need for additional measures.				
AI GSC3	Confirm implementation and effectiveness of management of soil related wastes during construction and assess need for additional measures				
I GSC1	Confirm suitability of soil for use				
I GSC2	Confirm presence/absence of acid sulfate soils				
<b>Noise and vibration</b>					

#	Performance objective	Indicator	Monitoring requirement details	Location	Frequency
AI NV1	Assess timeliness and actions taken in response to noise and vibration complaints.	Refer to Environmental Emissions Management Sub-plan			
<b>Waste</b>					
EDS RU1	Waste management	Refer to the Water, Soils and Waste Management Sub-plan			
<b>Social and business</b>					
AI SB1	Minimise the impact of the project on businesses and the community	Refer to Community and Stakeholder Engagement Management Plan			
EDS SB1	Community and Stakeholder Engagement Management Plan				
<b>Surface water</b>					
SW1	Assess the effect of the project's construction on surface water quality.	Refer to the Water, Soils and Waste Management Sub-plan			
EDS SW1	Surface water management - Construction				
<b>Traffic and transport</b>					
TT1	Verify compliance with EDS TT2 to avoid and minimise impacts on the road network	Refer to the Traffic Management Plan			
TT2	Assess impact on pavement condition of public roads				
EDS TT1	Safety in road design				
EDS TT2	Traffic Management Plan				

### 7.3 Environmental audit program

LMW has appointed the Independent Environmental Auditor (IEA), who is primarily responsible for auditing compliance prior to and during construction. This IEA will be a person, or body of persons that:

- Has sufficient qualifications or experience to discharge its responsibilities under the EMF
- Meet the criteria specified in AS/NZS ISO 19011:2014 *Guidelines for auditing management systems*
- Is independent of the project and Contractor, has no conflicts of interest and no involvement in the development of the Contractor's EMS and EMP(s) for the works of the specific project.

Prior to commencement of works, the IEA will review Civil and Earth's environmental management documentation, CEMP, sub-plans and other documents required by the EDSs to verify they comply with the EMF, relevant EDS, statutory approvals and approval conditions.

The IEA will conduct audits prior to commencement of works, six monthly during construction and at the completion of the construction phase to assess compliance with the EMF (including the construction specific EDSs, the CEMP, relevant sub-plans, relevant legislation, statutory approvals and approval conditions). These audits will consider:

- Compliance with the EMF
- Compliance with EDS, mitigation measures, environmental management plans and documents
- Responses to non-conformances, incidents and complaints received
- The environmental effects caused by any non-conformances
- Application of the change management process where relevant
- Effective implementation of monitoring programs
- Previous audit outcomes
- Changes to regulations and environmental standards
- Compliance with approval conditions.

The IEA will conduct a close-out audit at the completion of the construction works to ensure all relevant obligations have been met prior to completion of the construction phase. Civil and Earth will also undertake internal audits to assess compliance with the EMF (including the construction specific EDSs, the CEMP, relevant sub-plans, relevant

legislation, statutory approvals and approval conditions). These would be completed every six months – offset by three months with the external audits.

LMW must also ensure that an independent audit of compliance with the conditions of the EPBC Act approval (EPBC: 2020/8632) is conducted for every five-year period following the commencement of the Action, until the approval expires. This is a requirement of Conditions 53–56 of the EPBC Act approval (EPBC: 2020/8632). Each audit report must cover the five-year period preceding that audit report and must be completed to the satisfaction of the Minister and be consistent with the EPBC Act *Independent Audit and Audit Report Guidelines*, Commonwealth of Australia 2019.

The audit program is summarised below in Table 21. Results from the audits will be included in the Construction Environmental Performance Reports.

**Table 21 Summary of environmental auditing program**

Audit	Outcomes	Frequency
Internal audit	Internal audit against compliance with EMF	6 monthly
External audit by IEA	External audit against compliance with EMF	Prior to commencement of works, six monthly during construction and at the completion of the construction phase.
Independent audit of compliance with conditions of the EPBC Act approval	Independent audit of compliance with the conditions of the EPBC Act approval	Every five-year period following the commencement of the Action

## 7.4 Environmental reporting

### 7.4.1 Record and data management

All environmental records and data will be managed in accordance with the Civil and Earth *CEAMS-0000-MS-PR-007 Document and Records Control Procedure* and project-specific requirements. Civil and Earth will maintain accurate and up-to-date environmental documentation, including but not limited to:

- Daily pre-start records
- Environmental monitoring data (e.g., dust, noise, water quality)
- Incident and non-conformance reports
- Waste tracking documentation and disposal docket
- Training and induction records
- Toolbox and meeting minutes.

Records will be stored electronically in DashPivot and made available to LMW upon request. All records will be retained for the duration of the project and archived in accordance with the project’s document retention schedule. Periodic internal audits will be undertaken to verify compliance with the CEMP and the Document and Records Control Procedure.

A register and distribution list will identify the current revision of particular documents or data.

### 7.4.2 Internal reporting

The information in Table 22 will be managed through DashPivot and included as required in monthly reports.

**Table 22 Internal reporting requirements**

Record type	Tool for management of documentation
Toolbox and Pre-Start Meeting Records	DashPivot / Monthly Report - Maintained in the DashPivot, and summary provided in monthly reports
Training and Induction Records	DashPivot / Monthly Report - Maintained in the DashPivot, and summary provided in monthly reports
Environmental Incidents and Near Miss Reports	DashPivot / Monthly Report - Managed through the Incident Reporting System (DashPivot), and summary included in monthly reports
Non-Conformance and Corrective Action Reports	DashPivot / Monthly Report - Managed through the Reporting System (DashPivot); summary included in monthly reports
Environmental Monitoring Data (e.g., dust, noise, water quality)	DashPivot - Logged and trended using an Environmental Monitoring system; stored within the Document Control System
Environmental Site Inspection Checklists	DashPivot - Managed through the DashPivot
Audit and Inspection Reports	DashPivot - Managed through the DashPivot

### 7.4.3 Contractor reporting

Environmental management for the Hattah Lakes North Project will be communicated to LMW, predominantly through the monthly project reports and meetings.

Civil and Earth Environment Manager will be responsible for preparing the environmental information for monthly project reports including:

- Summary of all environmental activities that have occurred onsite since the last monthly project report. This would include information such as, but not limited to:
  - Any environmental controls installed onsite
  - Any dewatering activities undertaken
  - Proposed out-of-hours work
  - All environmental inspections, monitoring, auditing and reporting
  - All pre-clearance assessments and vegetation clearing (areas of Ecological Vegetation Classes (EVC) cleared)
  - Any environmental test results that been received since the last monthly project report
  - Any environmental events (non-conformances, administrative non-compliances and/or environment incidents)
  - Any unexpected finds identified onsite and how these were managed
  - Summary of complaints received from stakeholders and how these were managed
  - Table showing the total and monthly waste disposal material as well as receipts and material tracking information
  - Any other environmental site issues.

Civil and Earth Project Manager (or delegate) will be responsible for attending weekly progress meetings in which any relevant environmental issues including monitoring results, impacting or likely to impact the project, will be discussed.

### 7.4.4 External Reporting

LMW will prepare a Construction Environmental Performance Report every three months once construction commences. The Construction Environmental Performance Report will include:

- Outcomes of the contractor monthly project reports including environmental reporting

- Updates on the following:
  - Status of current and planned works, key environmental issues and management measures
  - Advice on any proposed changes to the EDSs or the CEMP
  - Records of compliance with relevant EDSs and approval conditions and environmental legislation, policies and standards
  - Copies of applications for consents, licences and approvals and the responses from authorities
  - Details of complaints or incidents and corrective and preventative actions taken
  - Summary of any consultation with regulatory authorities or other stakeholders and communities, including a summary of key issues raised and how they have been responded to, ensuring they are captured in the approved consultation database
  - A copy of any environmental studies, monitoring results and analysis
  - A summary of contingency measures implemented to address adverse effects not permitted, predicted or anticipated
- A summary of any revisions undertaken to construction documents in accordance with the change management process
- A copy of audit reports undertaken during the reporting period and any review of the CEMP.

LMW will distribute copies of the Construction Environmental Performance Report to relevant stakeholders including VMFRP project partners and the Minister for Planning. There is no external reporting requirements during construction required to be prepared by Civil and Earth.

Reporting of non-compliances, and annual non-compliances reporting, are described below in Section 8.1.

## 8. Environmental event management

Environmental events / incidents are defined as events that deviate from standard operating conditions and that may or do have an impact on human health or the environment.

Civil and Earth classify incidents based on the severity levels detailed in Table 23, in accordance with the Civil and Earth *CEAMS-0000-MS-PR-001 Incident Management Plan*. The Civil and Earth Environment Manager will work with the Project Manager and Site Supervisor regarding the classification of an incident where required. After the severity level has been determined, the incident management process shall proceed in accordance with the requirements of the procedure. Civil and Earth require that all environmental incidents are reported, recorded, investigated, and, where necessary, corrective and preventative actions are implemented.

Site personnel must report incidents as soon as possible to the Civil and Earth Environment Manager, who will, in turn, report any potential incidents to LMW within the timeframe specified in Table 23. The Site Supervisor and Project Manager are accountable for the plant/equipment, personnel (employees and contractors), and/or environment associated with the incident, and are responsible for working with Civil and Earth's Environment Manager to manage incident reporting, investigation, and implementation of corrective actions.

The Civil and Earth Project Manager will establish an investigation team to investigate environmental incidents, where applicable. Completion of corrective actions identified through the investigation will be verified via follow-up checks by Civil and Earth and formally signed off in the investigation report. Upon completion of all corrective actions, the Project Manager will sign off the incident report in Civil and Earth's EMS as completed and closed.

Relevant stakeholders, including project partners, will be notified of incidents by LMW where appropriate. All incidents will be summarised in monthly reports prepared by Civil and Earth and provided to LMW.

Refer to Appendix D for further guidance on the Civil and Earth *Environmental Event Response Procedure*.

**Table 23 Incident classifications**

Classification	Severity (Environment)	Description (Environment)	Responsibility	Notification timeline to LMW	Additional actions
5	Catastrophic	Actual material harm to the environment, long term or irreparable impact	Project Manager, Site Supervisor Environment Manager	Immediately (within 2 hours)	Lessons learnt Investigation team (where applicable)
4	Major	Actual material harm to the environment, on site or off-site, short-term effects, rectification difficult		Immediately (within 2 hours)	Lessons learnt Investigation team (where applicable)
3	Moderate	Discharge of substance off site which poses potential harm to the environment, moderate rectification		Immediately (within 2 hours)	Lessons learnt Investigation team (where applicable)
2	Minor	Spillage, leak or escape with local environmental effect, easily rectified		48 hours	As required
1	Very Low	Spillage, leak or escape with no environmental effect		7 days	As required

A Bushfire and Emergency Response Plan has been prepared separately for the Hattah Lakes North Project and is required to be approved and endorsed by the Minister for Planning. This plan will outline all necessary procedures for managing bushfire risk during construction, including (but not limited to) the locations of site offices and combustible liquids, training and equipment requirements for on-ground personnel, and emergency response measures such as evacuation routes and shelter-in-place locations.

## 8.1 Compliance reporting (EPBC Act Approval Conditions)

The EPBC Act Approval for the Hattah Lakes North Project has conditions around reporting of non-compliances (Condition 50-52) and annual compliance reporting (Condition 46-49).

LMW is required to notify DCCEEW electronically, within 2 business days of becoming aware of any incident and/or potential non-compliance and/or actual non-compliance with the conditions or commitments made in the CEMP. Civil and Earth will be required to provide the following information to LMW within 2 business day of becoming aware of the incident, for submission to DCCEEW:

- Any condition or commitment made in the CEMP which has been or may have been breached.
- A short description of the incident and/or potential non-compliance and/or actual non-compliance.
- The location (including co-ordinates), date and time of the incident and/or potential non compliance and/or actual non-compliance.

LMW is then required to provide to DCCEEW in writing, within 12 business days of becoming aware of any incident and/or potential non-compliance and/or actual non-compliance, the details of that incident and/or potential non-compliance and/or actual non-compliance with the conditions or commitments made in the CEMP. Civil and Earth will be required to provide the following information to LMW within 12 business day of becoming aware of the incident, for submission to DCCEEW:

- Any corrective action or investigation which the approval holder has already taken.
- The potential impacts of the incident and/or non-compliance.
- The method and timing of any corrective action that will be undertaken by the approval holder.

LMW must also prepare a compliance report for each 12-month period following the date of the EPBC Act approval decision (or as otherwise agreed to in writing by the Minister). The compliance report must be consistent with the *Annual Compliance Report Guidelines*, Commonwealth of Australia 2014. Each compliance report will include:

- Accurate and complete details of compliance and any non-compliance with the conditions and the plans, and any incidents
- One or more shapefile showing all clearing of protected matters, and/or their habitat, undertaken within the 12-month period at the end of which that compliance report is prepared
- A schedule of all plans in existence in relation to the EPBC Act approval conditions and accurate and complete details of how each plan is being implemented (including this CEMP).

LMW must:

- Publish each compliance report on the website within 60 business days following the end of the 12-month period for which that compliance report is required
- Notify DCCEEW electronically, within 5 business days of the date of publication that a compliance report has been published on the website
- Provide the weblink for the compliance report in the notification to DCCEEW
- Keep all published compliance reports required by these conditions on the website until the expiry date of this approval
- Exclude or redact sensitive ecological data from compliance reports published on the website or otherwise provided to a member of the public
- If sensitive ecological data is excluded or redacted from the published version, submit the full compliance report to DCCEEW within 5 business days of its publication on the website and notify DCCEEW in writing what exclusions and redactions have been made in the version published on the website.

## 8.2 Corrective and preventative action

Corrective and preventative actions may be identified from inspections, monitoring, audits, non-conformances, incidents, management reviews or complaints.

Environmental events / incidents, non-conformances, non-compliances and any corresponding corrective and preventative actions will be managed in accordance with the Civil and Earth *CEAMS-0000-MS-PR-005 Corrective and Preventative Action Procedure* within agreed timeframes.

Corrective and preventive actions shall be designed and assigned to be specific, measurable, achievable realistic and time-bound and take into consideration the application of the hierarchy of control. Corrective and Preventive Action shall be raised by using the *CEAMS-0000-MS-FM-005-A Corrective and Preventive Action Form*. Corrective and preventative actions will be logged, assigned, tracked and closed out via DashPivot by the Environment Manager (or delegate).

The corrective action process aims to:

- Prevent recurrence of similar incidents by addressing root causes and system gaps.
- Strengthen environmental controls and procedures.
- Promote awareness and shared learning across all project teams.
- Support compliance with regulatory and contractual obligations.

Following the occurrence of any environmental event / incident, Civil and Earth will review and document to identify key findings, causes, and improvement opportunities. This process will be completed as part of incident reporting which will be completed for environmental incidents.

Corrective and preventative actions will also be summarised in the *Hattah Lakes North Project - Corrective and Preventative Actions Register*. This will be used to track implementation of corrective and preventative actions where there is non-compliance with an EDS or other obligations.

## 8.3 Continuous improvement

Continuous improvement of this CEMP will be achieved by the ongoing evaluation of environmental management performance against environmental policies, objectives and targets, with the aim of identifying opportunities for improvement.

The continuous improvement process will be designed to:

- Identify areas of opportunity for improving environmental management and performance
- Determine the cause or causes of non-conformances, non-compliances, and/or deficiencies
- Develop and implement a plan of corrective and preventative actions to address any non-conformances, non-compliances, and/or deficiencies
- Verify the effectiveness of the corrective and preventative actions
- Document any changes in procedures resulting from process improvement
- Assess performance with objectives and targets.

Incident reports will include lessons learnt, where required for the relevant incident category as per Table 23, and will outline any proposed measures to prevent similar incidents in the future.

# Appendix A: Environmental Responsible, Accountable, Support, Consult, Inform (RASCI) Chart

**Table A1: RASCI abbreviations**

Abbreviation	Abbreviation definition
R	<b>Responsible</b> – responsible for completion of the task
A	<b>Accountable</b> - Ultimately answerable for the outcome of the task
S	<b>Support</b> - Provides resources and assists
C	<b>Consult</b> - views must be considered
I	<b>Inform</b> - Those who must be kept up to date

**Table A2: Organisational abbreviations used in RASCI**

Abbreviation	Title/ Organisation
PD/ PM / SP	Civil and Earth Project Director / Project Manager / Superintendent
EM	Civil and Earth Environment Manager
SFE	Civil and Earth Supervisor / Foreman / Project Engineer / Site Engineer
PT	Wider project team
VMFRP	Victorian Murray Floodplain Restoration Project
NCCMA	Mallee CMA
LMW	Lower Murray Water
PV	Parks Victoria
W&C	DEECA Water & Catchments

**Table A3: RASCI Environmental RASCI Chart**

Responsibilities and accountabilities	PD/PM /SP	EM	SFE	PT	VMFRP	NCCMA	LMW	PV	W&C
Ultimately responsible for environmental management performance of the Project.	A				R				S
Review and ensure implementation of the CEMP	A				R				
Authorise CEMP	R				A	I	C	I	I

Responsibilities and accountabilities	PD/PM /SP	EM	SFE	PT	VMFRP	NCCMA	LMW	PV	W&C
Assign environmental responsibilities to project personnel		R			A				
Ensure appropriate environmental training is identified and training is provided to project personnel where required	A	R			I		I		
Monitor onsite environmental performance to ensure compatibility and continued effectiveness with the policy and objectives	A	R			S				
Audit of environmental performance against legal obligations (CEMP etc)					A		I		S
Participate in the review of the Contractors Environmental Management System.	A	R		S					
Ensure correct and ongoing implementation of CEMP	A	R		S	I				
Liaise with project staff for ongoing monitoring and maintenance of environmental controls		A	R	S					
Ensure reporting of near misses, non-conforming incidents and practices	A	R	R	R					
Conduct and report regular inspections and monitoring requirements		A/R		S	S				
Ensure actions relating to environmental non-conformances, incidents and / or inspections are actioned and closed out in a timely manner	A	R		S	S				
Actively participate in and facilitate SQE Risk Management workshops	A	R		C	C				
Assist with updating of CEMP as required		A			S				
Prepare Project monthly project reports	A	R		S	C				
Liaise with client environmental representative		A		S	R				
Manage and track compliance with all statutory requirements, environmental approvals, licences, and permits relating to the project.	A	R							

Responsibilities and accountabilities	PD/PM /SP	EM	SFE	PT	VMFRP	NCCMA	LMW	PV	W&C
Implement the audit program	S	S			A/ R				
Complaints management in consultation with Community and Stakeholder Manager, where it related to complaints of an environmental nature.		A			S	I	I	I	
Ensure EM participates in the preparation of SQE Risk Management documentation	A	R							
Identify and report environmental non-conformance		A		R		S/ C			
Ensure and verify that corrective action is taken when required for non-conforming work.	A	R	S				I		
Participate in the audit program	A	R	S	R					
Ensure that CEMP requirements are communicated to all personnel under their control	A	R							
Be aware of all approval/contractual conditions relating to their area of work	A	R	R	R	I		I		
Perform surveillance and monitoring of environmental controls to ensure that they are established and maintained		A	R	S					
Ensure rectifications of environmental controls are carried out as required.		A	R	S					
Comply with project approval and environmental management conditions	A	R	R	R					
Ensure no reuse of any materials into a receiving environment without prior approval.		A	R						

# Appendix B: Environmental Policy



## ENVIRONMENT POLICY

*Civil and Earth Australia value the natural environment and is committed to minimising impact from our operations and enhancing the environment through our work.*

### LAW

We will:

- Comply with legislative requirements applicable to our works.

### LEADERSHIP

We will:

- Provide leadership to ensure accountability for our environmental performance.
- Implement systems to minimise impact of our operations on the environment.
- Educate employees and contractors to improve our environmental performance.

### IMPROVEMENT

We will:

- Openly consult with our people, clients and regulators to improve the effectiveness of our environmental systems.
- Establish and review measurable objective and targets that promote continuous improvement.

### COMMITMENT

We will:

- Commit to the protection of the environment, including prevention of pollution

A handwritten signature in black ink, appearing to read 'Alex Marshall', is positioned above the printed name.

**Alex Marshall**

**October 2024**

# Appendix C: Unexpected find protocol (Historic Heritage)

## Introduction

This unexpected find protocol has been developed to provide a procedure for managing any unexpected historic heritage that may be encountered during the construction of the Hattah Lakes North Project.

If suspected human remains are discovered during any activity, all works in the area must cease immediately and the procedures outlined in Contingency 1 of the approved CHMP (No.14330) must be followed and implemented. If any suspected Aboriginal cultural heritage (excluding Aboriginal Ancestral Remains) is discovered, the procedures outlined in Contingency 2 of the approved CHMP (No.14330) must be followed and implemented.

The *Heritage Act 2017* provides blanket protection to all known and unknown historical archaeological sites in Victoria. Under Section 123 of the *Heritage Act 2017* it is an offence to knowingly or negligently deface, damage or otherwise interfere with or carry out an act likely to endanger an archaeological site whether it is or is not recorded on the Victoria Heritage Inventory, without the appropriate approvals from Heritage Victoria.

## What is a Historic Heritage Unexpected Find?

Unexpected historic heritage finds may include historic heritage sites, values or objects. These were not identified or predicted in the Hattah Lakes North Project's historic heritage assessment and will likely fall outside the scope of current approvals and permits.

## Historic Heritage Unexpected Finds Procedure

Civil and Earth Project personnel will follow the below procedure in the event there is an unexpected historic heritage find on site:

- a) FIND:** Suspected historic heritage site, value, or object are discovered during works.
- b) STOP:** All work in the vicinity shall cease. Advise the Site Supervisor and Civil and Earth's Environment Manager.
- c) NOTIFY:** Civil and Earth's Environment Manager will submit photos, location information, descriptions, and dimensions of any unexpected find to LMW and an archaeologist. The archaeologist will provide guidance on management measures, which may include physical barrier protection, exclusion zones, and any additional investigation or reporting as required.
- d) REPORT:** After the archaeologist has made a professional assessment, Heritage Victoria will be contacted if required as soon as possible.
- e) LODGE:** Consent application to be lodged (if required)
- f) RECOMMENCE WORKS:** Recommence works on site in accordance with the Consent (if required), and / or Archaeologist Advice.

# Appendix D: Environmental event response procedure

## Introduction

Civil and Earth will implement this *Environmental Event Response Procedure* during construction to guide the response to environmental incidents / events. This outlines key definitions, emergency contact details, emergency incident preparedness, incident notification and reporting requirements, pollution incident response procedures.

## Definitions

Environmental events / incidents are defined as an event that deviates from standard operating conditions and that may or do have an impact on human health or the environment. This can include (but is not limited to):

- 1 Pollution incidents, which are events that cause a leak, spill or other unintended or unauthorised deposit or escape of a substance, resulting in pollution occurring or having occurred.
- 2 Potential non-compliance, and / or non-compliances with legislation, approvals, or approval conditions (e.g. clearing of native vegetation outside the approved construction footprint).

## Emergency contact details

Emergency contact details for key emergency services and project personnel are listed in Table D1.

**Table D1 Emergency contact details for the Project**

Name / organisation	Contact
Project Manager	Tim Reid 0408 335 175
Emergency (Police, Fire, Ambulance)	000
VIC SES	132 500
EPA Victoria	1300 372 842
Mildura Base Public Hospital	03 5022 333
Wildlife Victoria	(03) 8400 7300
RSPCA VIC	03 9224 2222
Mildura Veterinary hospital	03 5023 3838
Mildura Rural City Council	03 5018 8100

## Emergency and incident preparedness

Preventative strategies including (but not limited to) the below will be implemented by Civil and Earth during the construction phase:

- 3 Completion of weekly environmental Inspections
- 4 Issue and prompt close-out of non-compliance notices and corrective actions (as required)
- 5 Timely maintenance and repairs
- 6 Inventory of pollutants and safety equipment to be kept onsite
- 7 Environmental trainings for relevant personnel
- 8 Maintained access for emergency services vehicles.

Environmental audits will occur prior to the commencement of works, six-monthly during construction and at completion, to assess compliance as detailed in Section 7.3.

Spill kits will be at key locations as detailed in the SECPs (refer to Section 5.6). All relevant personnel which may be involved in emergency response activities will be provided with specific training.

Consulting with emergency services and Victorian Police will occur as required throughout construction to ensure that any potential impacts to emergency services are identified early and appropriately managed.

Main offices and site compounds will have an up-to-date list of emergency response personnel and relevant organisations (emergency services, EPA Victoria, etc.).

All relevant staff will be trained on how to respond to an emergency and incidents onsite through training sessions such as the site induction, safety trainings and toolboxes talks.

#### **Event notification**

All site personnel are responsible for prompt reporting of environmental events / incidents that they are involved in or witness to Civil and Earth's Environment Manager.

Civil and Earth's Environment Manager will notify LMW of any environmental incidents / events in accordance with the timeframes outlined in Table 23. Environmental incident reports will be prepared and will include proposed corrective and preventative actions, as well as lessons learned, where required, depending on the incident classification.

Civil and Earth's Environment Manager will ensure that any notifiable incident, which are pollution incidents that cause or threatened to cause 'material' harm to human health or the environment, will be notified to the EPA Victoria (1300 372 842) as soon as practicable after becoming aware of the incident. Incidents that trigger notification include where:

- There is an adverse effect on human health or the environment
- There is an adverse effect on an area of high conservation value or of special significance
- The cleanup or management of the pollution or cost of restoration would cost \$10,000 or more.

EPA Victoria has outlined the following as examples of the types of incidents that need to be reported:

- The release is uncontrolled or unplanned and could cause material harm
- The substances are harmful to water or land in large quantities, such as milk or organic materials
- The substances are dangerous or toxic and threaten the environment or people – for example, the WorkSafe safety data sheet indicates risk to the environment or to people.

Following the reporting of the incident to the EPA Victoria, an email will be sent to Civil and Earth with a notification form. This form must be completed and returned to the EPA within five business days, and the notification process will not be considered complete until this has been undertaken.

LMW will be responsible for notifying other stakeholder or regulatory authorities as required (unless this is an emergency). Where spills or pollution incidents have far reach or consequences incident notification may also be required to:

- Fire and Rescue Victoria – 1300 367 617
- WorkSafe Victoria – 1800 136 089
- Parks Victoria – 13 1963
- Mildura Base Public Hospital – 03 5022 333
- Mildura Rural City Council – 03 5018 8100

For environmental incidents involving wildlife emergencies, such as injured or orphaned native animals, Wildlife Victoria will be notified on (03) 8400 7300.

The Approved CHMP (No. 14330) for the Hattah Lakes North Project includes Contingency 5 – *Compliance* which has specific requirements in the event of a suspected non-compliance with the Approved CHMP. In such cases, all relevant works must stop, and the procedure detailed in the relevant Approved CHMP must be followed.

Responsibility for ensuring compliance with this procedure will be with Civil and Earth's Environment Manager.

#### **Spill Response Procedure**

Pollution incidents will be managed in accordance with the Civil and Earth *CEAMS-0000-MS-PR-001 Incident Management Procedure*. This will involve the following general steps:

- **Step 1: Immediate Action & Assess the Conditions**
  - All works in the immediate area to cease, and workers to take action to respond:
  - *Control* - If safe to do so, control the source of the spill
  - *Containment* – If safe to do so, prevent the spill from entering drains, cable ducts or unsealed areas
  - *Clean up* – Clean the spill using available spill kit materials. Review the Safety Data Sheet (SDS) (if applicable) for spill clean-up advice
  - *Report* – In required, immediately call Emergency Services on “000”. Notify the Site Supervisor and Civil and Earth’s Environment Manager as soon as possible.
- **Step 2: Notification**
  - Civil and Earth’s Environment Manager will notify LMW, and the EPA Victoria if this is a notifiable incident (refer to definitions and examples above) on 1300 372 842 (24hrs). LMW will be responsible for notifying other stakeholder or regulatory authorities as required (unless it is an emergency).
- **Step 3: Response**
  - Civil and Earth will plan clean-up and implement a strategy, which may involve specialist external spill subcontractors as required.
  - Undertake incident investigation to determine cause and include measures to minimise potential for incident reoccurrence

#### **Incident investigation and reporting**

Within 12 business days of an environmental event occurring, or a timeframe agreed with LMW, an investigation report must be provided to LMW.

The investigation report must include (if relevant) the requirements of reporting a non-compliance by the EPBC Approval conditions (refer to Section 8.1).

# Appendix E: Construction Change request and Assessment Form

## Construction Change Request and Assessment Form

This form is part of Civil and Earth’s process to determine if any proposed changes during construction are consistent with the Hattah Lakes North Project as assessed in the EES and comply with approval conditions and requirements. Any proposed changes will be classified in accordance with the change management process outlined in Section 6 of the CEMP.

<b>Project Name:</b>		<b>Date created:</b>	
<b>Project Manager:</b>		<b>Version No.</b>	
<b>Author:</b>		<b>Date sent to LMW:</b>	

Requirement	Assessment
<b>Detail the proposed change to the Project?</b> Include map of proposed changes	
<b>What is the justification for the change?</b>	
<b>Is the proposed change fully contained within the construction footprint?</b>	<b>Yes or No</b> If yes, does it occur within area of investigation or CHMP Activity Area? (refer to Site Specific Environmental Control Plans)
<b>Is the change considered administrative, minor or major?</b> Refer to Section 6 for definitions.	
<b>HOLDPOINT – An Assessment of the revision type (Administrative, Minor or Major) will be completed and agreed by the Contractor and LMW and where considered Minor or Major recorded in a Construction Change Request and Assessment Form. Civil and Earth will wait from written approval from LMW before implementing the change.</b>	
<b>Has further assessment of potential impacts of the change been undertaken?</b>	<b>Yes or No or NA</b> If yes, provide assessments and summarise outcomes here. If no, provide justification on why it’s not required.
<b>Has any landholder engagement, or engagement with partner organisations or external government agencies been undertaken?</b>	<b>Yes or No or NA</b> If yes, provide evidence If no, provide justification as to why this is not required, or outline the plan for consultation to be undertaken with relevant authorities by the responsible party.

