



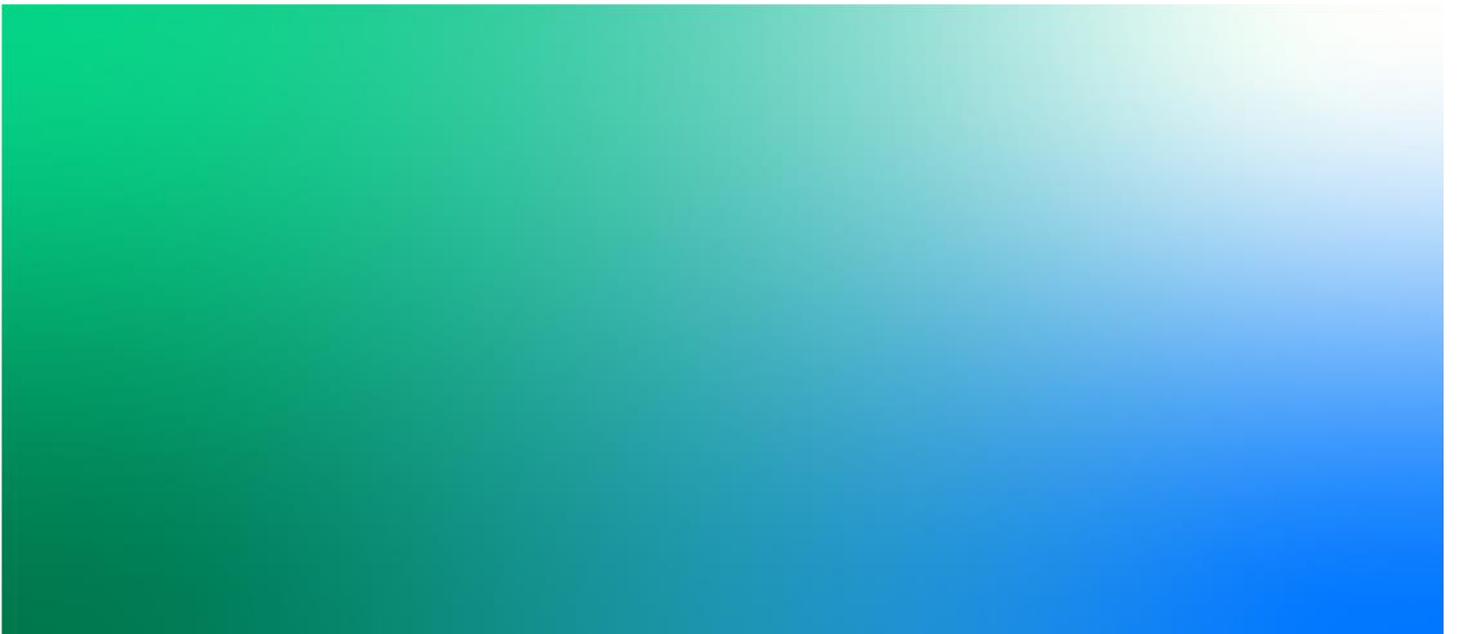
Victoria Murray Floodplain Restoration Project

Desktop Land Use Planning Assessment - Gunbower National Park Floodplain Restoration Project

IS297712-AP-AP-RP-0004 | REV 1

19 August 2020

Lower Murray Urban and Rural Water Corporation



Victoria Murray Floodplain Restoration Project

Project No: IS297712
Document Title: Desktop Land Use Planning Assessment - Gunbower National Park Floodplain Restoration Project
Document No.: IS297712-AP-AP-RP-0004
Revision: REV 1
Date: 19 August 2020
Client Name: Lower Murray Urban and Rural Water Corporation
Program Manager: John Myers
Author: Diana Savenake
File Name: IS297712-AP-AP-RP-004

Jacobs Group (Australia) Pty Limited and GHD Pty Ltd trading as R8 Joint Venture
Floor 11, 452 Flinders Street
Melbourne VIC 3000
PO Box 312, Flinders Lane
Melbourne VIC 8009 Australia
T +61 3 8668 3000
F +61 3 8668 3001

© Copyright 2019 The concepts and information contained in this document are the property of Jacobs Group (Australia) Pty Ltd and GHD Pty Ltd trading as R8 Joint Venture. Use or copying of this document in whole or in part without the written permission of R8 Joint Venture constitutes an infringement of copyright.

Limitation: This document has been prepared on behalf of, and for the exclusive use of R8 Joint Venture's client, and is subject to, and issued in accordance with, the provisions of the contract between R8 Joint Venture and the client. R8 Joint Venture accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this document by any third party.

Document history and status

Revision	Date	Description	Author	Reviewed	Approved
A	16 June 2020	Draft for review	D. Savenake	D. Neumann / S. Hale / D. Lavery	M. Shaw
B	5 August 2020	Final draft	D. Savenake	N. Bull	E. Lichkus
0	11 August 2020	Final	D. Savenake	N. Bull	M. Shaw
1	19 August 2020	Final (minor updates to op plan and land tenure)	D. Savenake	N. Bull	M. Shaw

Contents

Acronyms and abbreviations	iv
1. Introduction	1
1.1 Project overview	1
1.1.1 Main project components.....	1
1.1.2 Pumping Infrastructure	3
1.1.3 Ancillary components.....	4
1.1.4 Inundation activities.....	4
1.1.5 Fish Passage.....	5
1.1.6 Decommissioned structures.....	5
1.2 Area of Investigation, development footprint and construction footprint	5
1.3 Purpose of this report	5
1.4 Limitations.....	5
2.1 Commonwealth legislation	8
2.2 Victorian legislation	9
2.3 New South Wales legislation	11
3. Existing conditions	14
3.1 Land use and development	14
3.2 Land tenure.....	15
3.3 Instruments on Title.....	23
3.3.1 Section 173 Agreements.....	23
3.3.2 General encumbrances.....	23
3.3.3 Reserved Crown land.....	23
3.3.4 Crown Grants	23
3.4 Access.....	24
3.5 Native title interests.....	24
3.6 Other land use.....	26
4. Victorian Planning Framework	28
4.1 Planning policy	28
4.2 Land use definitions.....	33
4.3 Relevant zones and overlays.....	34
4.4 Particular and general exemptions.....	45
4.5 Zone and overlay exemptions	45
4.6 Planning triggers.....	56
4.7 Referral requirements.....	58
4.8 Incorporated documents	59
4.9 Other relevant strategies and policies.....	60
5. NSW planning framework	62
5.1 NSW Environmental Planning and Assessment Act 1979.....	62

5.2	State environmental planning policies	62
5.2.1	State Environmental Planning Policy (Infrastructure) 2007	62
5.2.2	State Environmental Planning Policy No. 44 – Koala Habitat Protection	63
5.2.3	Murray Regional Environmental Plan No.2 – Riverine Land	63
5.3	Murray Local Environmental Plan 2011	64
6.	Potential impacts and mitigation	66
7.	Conclusion	68
8.	References	70

Acronyms and abbreviations

Acronym / Abbreviation	Definition
BMO	Bushfire Management Overlay
CMA	Catchment Management Authority
DAWE	Commonwealth Department of Agriculture, Water and the Environment (formerly DoEE)
DELWP	Victorian Department of Environment, Land, Water and Planning
DoEE	Commonwealth Department of the Environment and Energy (now DAWE)
EPBC Act	Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>
ESO	Environmental Significance Overlay
Ha	Hectares
HO	Heritage Overlay
Km	kilometre
LMW	Lower Murray Urban and Rural Water Corporation
LPPF	Local Planning Policy Framework
LSIO	Land Subject to Inundation Overlay
M	Metres
Mallee CMA	Mallee Catchment Management Authority
mm	Millimetres
MNES	Matters of national environmental significance as defined under the Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>
MPS	Municipal Planning Strategy
North Central CMA	North Central Catchment Management Authority
PCRZ	Public Conservation and Resource Zone
planning scheme	Mildura Planning Scheme
PPF	Planning Policy Framework
Project	Gunbower National Park Floodplain Restoration Project
RDZ1	Road Zone, Category 1
VCAT	Victorian Civil and Administrative Tribunal
VHR	Victorian Heritage Register
VMFRP	Victorian Murray Floodplain Restoration Project
VPP	Victoria Planning Provisions

Important note about your report

The purpose of R8's engagement under the Victorian Murray Floodplain Restoration Project (VMFRP) is to design infrastructure for the VMFRP including regulators, levees, roads, access tracks and culverts. The designs are required to be suitable for construction pricing to inform business case prioritisation. The purpose of this infrastructure is to allow floodplains to be watered at the hydraulic design levels nominated by VMFRP. R8 are also engaged to provide Regulatory Approvals and Cultural Heritage Services. The purpose of these services is to support VMFRP to lodge the necessary approvals documents for the project with the relevant approval authorities.

The sole purpose of this report and the associated services performed by R8 is to complete a Desktop Land Use Planning Assessment for VMFRP in accordance with the scope of services agreed between R8 and VMFRP.

R8 has prepared this report in accordance with the usual care and thoroughness of the consulting profession, for the sole purpose described above and by reference to applicable standards, guidelines, procedures and practices at the date of issue of this report. However, no other warranty or guarantee, whether expressed or implied, is made as to the data, observations and findings expressed in this report, to the extent permitted by law.

In preparing this report, R8 has relied on the information provided by VMFRP at the commencement of the project and others (government agencies). In particular R8 is reliant on VMFRP's prior flood modelling work to define inundation levels and extents. R8 is not responsible for achievement of the project's desired operational ecological outcomes.

This report should be read in full and no excerpts are to be taken as representative of the findings. No responsibility is accepted by R8 for use of any part of this report in any other context. This report has been prepared on behalf of, and for the exclusive use of VMFRP, and is subject to, and issued in accordance with, the provisions of the contract between R8 and VMFRP. R8 accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this report by any third party.

1. Introduction

The Gunbower National Park Floodplain Restoration Project (the project) is one of nine discrete environmental works projects being undertaken as part of the Victorian Murray Floodplain Restoration Project (VMFRP), which is being implemented as part of Victoria's obligations under the Murray Darling Basin Plan. The VMFRP aims to restore a more natural inundation regime across more than 14,000 ha of high ecological value Murray River floodplain in Victoria through the construction of new infrastructure and modification of existing infrastructure.

The VMFRP is being implemented in partnership between Lower Murray Urban and Rural Water Corporation (LMW), Goulburn Murray Rural Water Corporation (GMW), Mallee Catchment Management Authority (Mallee CMA), North Central Catchment Management Authority (North Central CMA), Parks Victoria and the Department of Environment, Land, Water and Planning (DELWP), and is funded by the Commonwealth Department of Agriculture, Water and Environment (DAWE). LMW has been nominated by the partnership as the project proponent for the purpose of submitting referrals and approval applications.

R8 is a joint venture formed between Jacobs and GHD, which has engaged by LMW to deliver design, cultural heritage and approvals services for the VMFRP. This desktop land use planning assessment has been prepared for the project to support the preparation of referrals under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and Victorian *Environment Effects Act 1978*.

1.1 Project overview

Through the construction of new infrastructure and the modification of existing infrastructure, the project aims to provide a natural inundation regime across approximately 704 ha of high-ecological value Gunbower Forest on the mid-Murray floodplain in Northern Victoria. The project area is on land that is part of the Gunbower-Koondrook-Perricoota Forest Icon site under the Living Murray Initiative.

The project is designed to facilitate managed inundation to address the hydrological deficit in the inundation regime caused by river regulation, particularly the reduced frequency of flooding. The inundation aims to replicate a natural inundation and is planned to require a much lower volume of water than involved in a natural inundation event. The works are designed to provide a combination of pumped inflows from the Murray River and the National Channel via Camerons Creek into the Forest, resulting in inundation of approximately 457 ha in Middle Gunbower Forest and 247 ha in Upper Gunbower Forest.

There are existing environmental watering works in place for the Lower Gunbower Forest undertaken as part of The Living Murray Project which, while complementary, are separate to this project.

The project extends over the following three water management areas:

- Upper Gunbower Forest – 247 ha of floodplain forest and wetlands containing Upper Camerons Creek, Camerons Creek Lagoon 1, 2, 3 and 4, Black Charlie Lagoon and Baggots Swamp.
- Middle Gunbower Forest (upstream Deep Creek) – 336 ha of floodplain forest and wetlands containing Deep Creek, Middle forest floodplain area, Pig Swamp and Emu Hole Lagoon.
- Middle Gunbower Forest (downstream of Deep Creek) – 121 ha of floodplain forest and wetlands including Red Rise Swamp wetlands containing Broken Axle Creek, Spur Creek, and associated floodrunners

The project is located within the municipal areas of the Shires of Gannawarra and Campaspe in Victoria and Murray in NSW (Figure 1.1 Regional Context).

1.1.1 Main project components

The proposed works will support a flood regime that has the flexibility to operate under a range of flow conditions which will trigger various ecological responses across a representative area of flood dependent communities. Functional design of these areas will include a primary option to target widespread flooding across

much of the floodplain, as well as secondary options which will focus on improving the efficiency of flow being disturbed across the floodplain and works that target specific areas for additional flooding opportunities.

The project involves construction of environmental watering infrastructure to facilitate inundation. The current design involves the construction of 12 small regulators, one fishway, three pipelines, two pump stations, one channel upgrade, one drop structure, one bridge, three culvert crossings, two drainage outlets, access track upgrades, erosion control works and a series of containment banks to divert, retain and release water in the Gunbower National Park.

The design, number and location of project structures and extent of levees and access track upgrades will be refined through the project design process, however generally the project works will be similar in nature to those described in the sections below. The area of investigation provides a buffer around the current design of the development footprint and access tracks recognising the potential for future changes. To the extent practicable, changes to the design and construction footprints of the main components of the project would be within the area of investigation. Any changes occurring outside of this area of investigation would require assessment to identify their potential to impact on land use values.

Key design elements that are subject to change include the design and location of levees/ containment banks and power supply as these have not yet been confirmed. The containment banks are subject to further risk assessment to confirm if works are required. Potential locations for these have been included in the areas of investigation and current land use and land tenure considered in this report. VMFRP are currently working with Powercor to confirm the preferred alignment for the power supply. The location of the new poles, stays and cables associated with the pump station power supply are yet to be confirmed and therefore are not included in the project footprints assessed in this report.

The design of the proposed environmental water delivery infrastructure is evolving as part of the design and approvals process. Findings from on-site assessments, particularly ecology fieldwork and cultural heritage complex assessment (undertaken for the Cultural Heritage Management Plan), have and will continue to be progressively fed into the design, with modifications made to avoid and minimise environmental impacts.

Upper Gunbower

Upper Gunbower is expected to water 247 ha of land including permanent and semi-permanent wetlands to a level of between approximately 84.8 and 85.0 m Australian Height Datum (AHD).

The following environmental work areas include:

- 3 small regulators located at Camerons Creek River Track, Camerons Mid Creek and Dry Creek. The regulators at Camerons Creek River Track and Camerons Mid Creek are replacing old regulators that leak and are potentially hazardous.
- 1 combined fishway at Camerons Mid Creek regulator. This will be cone type consisting of a simple channel and precast cones.
- One spillway located within Baggots Creek Track adjacent to the Dry Creek Outlet Regulator to maintain flow distribution across the floodplain during high river flows, and a spillway located within Baggots Creek Track.
- Camerons Creek Pump Station located on Goulburn Murray Water's (GMW) National Channel, which forms part of Gunbower Creek, and associated power supply. This will deliver pumped water supply to Black Charlie Lagoon and Baggots Swamp.
- 5,158 m long pressure pipeline (Camerons Creek Pipeline) along with associated offtakes for irrigation and environmental water delivery to Camerons Creek.
- 1 main containment bank which will support the Camerons Mid Creek regulator and a series of levees around the southern and western perimeter of the project area.

Mid Gunbower Forest (upstream of Deep Creek)

Mid Gunbower (upstream) is expected to water 336 ha of land including floodplain forest and semi-permanent wetlands to approximately 83.7 m to 84.4 mAHD.

The following main works components or this area include:

- 1 pump station (Brereton Road Pump Station) located on the Murray River and associated power supply. The pump station will allow pumping of water from the river to Pig Swamp, Emu Hole Lagoon and the Middle Forest floodplain.
- 200 m long pump station discharge pipeline for Brereton Pump Station to Old Straight Cut Channel. Includes riser pit and erosion protection works at pipe outlet.
- 5 small regulators located at Pig Swamp Offtake, Emu Hole Lagoon, Middle Forest Offtake, Deep Creek Return and Dalley Bend Inlet.
- 40 m long Emu Hole Lagoon pipeline that services the Emu Hole Lagoon Offtake regulator.
- Minor upgrade to 1,000 m of existing Old Straight Cut Channel including the removal of sapling growth and clearing of debris at the base of the channel. These works will improve flow control in the channel.
- Raising of Brereton Road at Middle Forest Offtake Regulator outlet over a length of approximately 400 m and realignment in the vicinity of the pump station and power supply point.
- Work on the existing riverside car parking area in the vicinity of the boat ramp (Masters Landing).
- Levees (if required) around the southern and western perimeter of the project area.

Mid Gunbower Forest (downstream of Deep Creek)

Mid Gunbower (downstream) is expected to water 121 ha of land including floodplain forest and semi-permanent wetlands to a level of up to 83.0 mAHD.

The following main works components or this area include:

- 3 access culverts, including two along Munroe Track and one at Broken Axle Creek to maintain access during environmental water events for maintenance, operation and public access.
- 4 small regulators located at Broken Axle Creek, Tickells Track, Spur Creek River Return and Spur Creek Forest.
- 3 spillways, 1 at Broken Axle Creek and 2 at Munroe Track.
- Spur Creek drop structure in Spur Creek, designed to transfer flows between the Spur Creek and the Murray River.
- Bridge over Broken Axle Creek to maintain access during environmental water events for maintenance, operation and public access.
- A series of containment banks (if required) on Munroe Track, Tickells Track, River Track and Spur Creek.
- 2 small drainage outlets installed within containment banks (if required).

1.1.2 Pumping Infrastructure

Permanent pump infrastructure is included in the design for this Project.

The Brereton Road Pump Station design is a submersible pump and motor wheel and extended structure in to the river. Construction would occur within the Murray River including excavation and structural works for the pump. Current design is for a reinforced concrete open structure on the bank extending into the river. To enable pumping at varying water levels in the Murray River, multiple pumps will be required.

Fish protection measures will be required in the river in the form of fish screens below the water level.

The pumps will be electrically powered with the power supply extending from the nearby Powercor supply system to the new pump stations.

The Camerons Creek Pump Station is still in preliminary design. The pump station will be designed in accordance with GMW's pump design guidelines. The location will consider land tenure and include assessment of a potential bored pipeline as opposed to direct trenching.

1.1.3 Ancillary components

Ancillary components of the project include:

- Where possible, containment bank alignments will be designed to correspond to existing access tracks to minimise disturbance to vegetation and areas of potential cultural heritage significance. New sites will also be required. Once containment banks/levees have been constructed, tracks will be reinstated or new tracks developed on top of the bank/levee.
- Access will be via existing tracks where possible. Existing tracks will be upgraded for operational or construction purposes. Access track dimensions on levee crests are to be consistent with Parks Victoria access track design and maintenance guidelines. Maintenance will be undertaken so that tracks are suitable for use during construction and operation.
- Location of levee banks will be confirmed on completion of a levee risk assessment process. These have not been included in the construction footprint.
- Construction sites and laydown areas. A working area of approximately 3 m is included around proposed laydown areas. Details of laydown areas will be confirmed as the detailed design process evolves. Sites will however, avoid and minimise impacts to ecological and cultural values.
- Commercially sourced concrete for construction of the proposed works will be transported to site to avoid the need for on-site concrete batching facilities.
- Materials will be imported from possible borrow pits on private land outside of Gunbower National Park. Rock will be sourced from an existing commercial quarry. As the locations of borrow pits are not yet known, potential land use impacts and approval requirements, such as under the *Mineral Resources (Sustainable Development) Act 1990* have not been assessed as part of this report.

Construction would involve use of light vehicles and large machinery such as trucks, cranes, excavators, roller compactors, pile drivers and access equipment.

1.1.4 Inundation activities

The proposed works are intended to inundate the project area with inflows from the Murray River and with additional pumping when required. Three separate operating scenarios have been identified for water delivery to the Gunbower National Park:

- Permanent wetland watering (Camerons Creek and Black Charlie Lagoon)
- Forest floodplain watering (including water delivery to River Red Gum floodplain, temporary wetlands (Emu Hole and Red Rise Swamp) and semi-permanent wetlands (Pig Swamp))
- Hybrid events aimed at topping up natural inundation events for the forest floodplain, temporary wetlands and semi-permanent wetlands due to natural inundation duration deficits.

The method of draining the floodplain is through managed release from regulators at specified/controlled release rates.

1.1.5 Fish Passage

The project includes provision for fish passage through a fishway at Camerons Creek mid Regulator, regulator bays, across the spillways and across the containment banks and natural ground when submerged.

1.1.6 Decommissioned structures

The existing Camerons Mid Creek Regulator and Camerons Creek River Track Regulator will be replaced as part of the project. The existing infrastructure will be removed to prevent obstacles to fish passage.

1.2 Area of Investigation, development footprint and construction footprint

The following terms are used throughout this report to describe the project:

- Area of investigation - this includes the development footprint, as well as a buffer around the construction footprint and access tracks. Buffers include 20 m around the Development Footprint of proposed infrastructure, 15 m around the Development Footprint for minor work sites, 10 m buffer around laydown areas and 20 m (10 m either side) along access tracks proposed for construction and / or operation of the project. Buffers also allow for possible design changes to avoid significant assets. The area also includes potential levee locations which are currently subject to further risk assessment.
- Development footprint - this is the area that the project infrastructure (e.g. regulators, drop structures, pump hardstands, containment banks, spillways) will occupy based on the current design, along with proposed construction laydown areas. The footprint also includes proposed containment banks, power supply infrastructure but does not include power poles, stays or cables, levees or tracks used for access during construction and operation.
- Construction footprint - this includes the project infrastructure as well as the land required to construct the infrastructure based on the current design. This includes access tracks. The construction footprint is the area that will be directly impacted / disturbed by the proposed works.
- Inundation area - area of land subject to flooding during managed events, up to a specific design water level

Design is currently being refined as part of the design process and in response to environmental and heritage studies. The area of investigation that has been established and assessed in this report provides a buffer around the current design of the development footprint and access tracks to allow for future changes. Any changes occurring outside of this area of investigation would require further assessment to identify their potential to impact on land use.

The majority of the area of investigation lies within the State of Victoria. A small portion of the area does, however extend into the southern bank of the Murray River within the State of NSW.

Reference to 'the project area' includes both the construction footprint and the inundation area.

1.3 Purpose of this report

This report documents a desktop land use assessment associated with the Gunbower National Park Floodplain Restoration Project and will support the referral documentation being prepared under the *Environment Effects Act 1978* (EE Act) and *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The report is based on the level of design at the time of investigation, and aligns with the design level used for the referral documentation issued under the EE Act and EPBC Act.

1.4 Limitations

The report relies on public information and data available online. The following limitations apply to the assessment:

- This report has been prepared using desktop sources of information. No site visit has been undertaken.
- No discussions with state and local government planning departments.
- A review of land use planning applications or recently issued land use and planning permits has not been undertaken for the purposes of this report.
- Design is currently being refined as part of the design process and in response to environmental and heritage studies. The area of investigation that has been established and assessed in this report provides a buffer around the current design of the development footprint and access tracks to allow for future changes. Any changes occurring outside of this area of investigation would require further assessment to identify their potential to impact on land use.

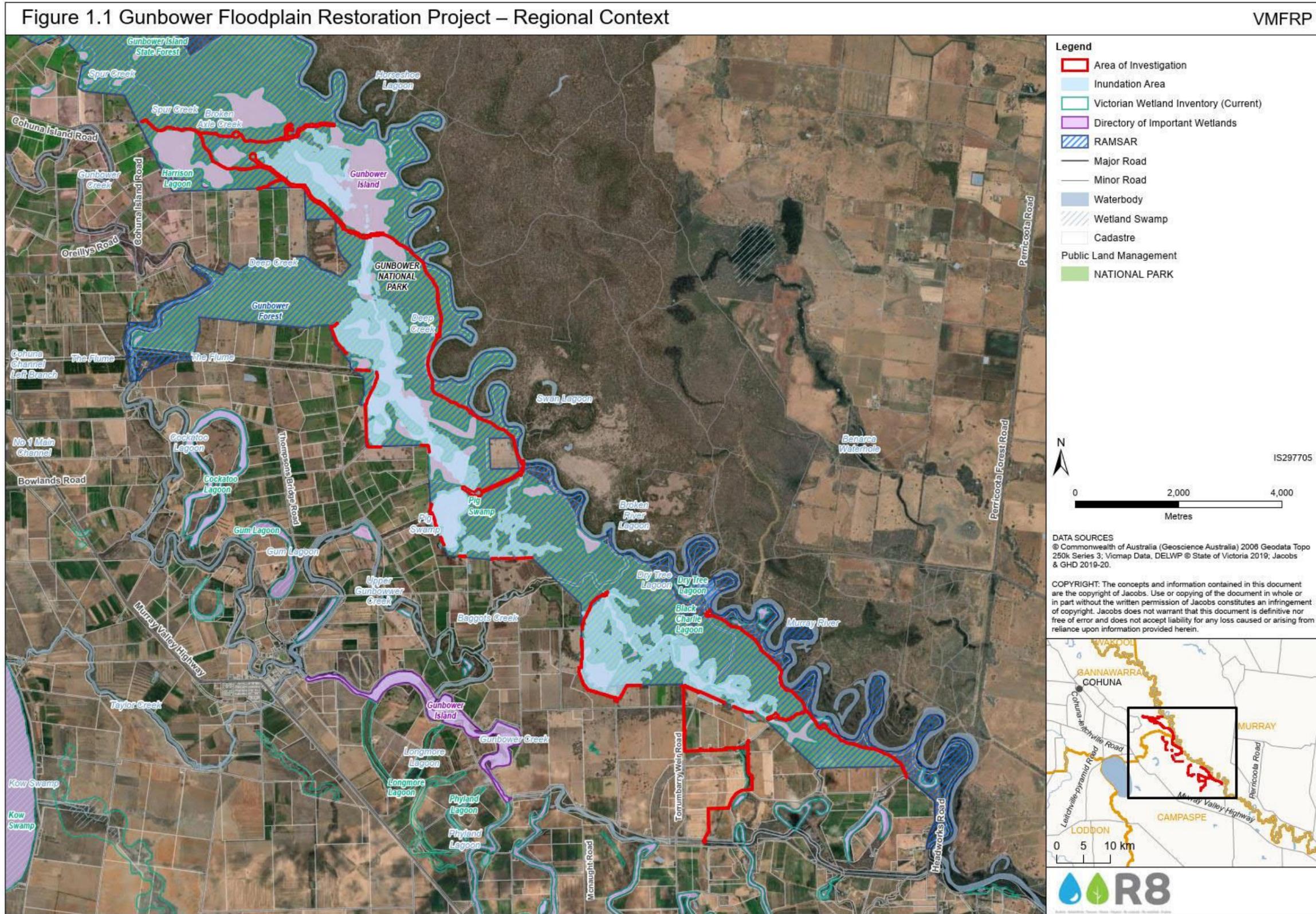


Figure 1.1: Regional context of the project

2. Key Legislation

2.1 Commonwealth legislation

Table 2.1 provides an overview of key Commonwealth legislation relevant to this land use planning assessment.

Other environmental and heritage legislation relevant to the project is considered in other technical reports including the Flora and Fauna Assessment and the Historical Heritage Assessment.

Table 2.1: Summary of relevant Commonwealth legislation

Description	Relevance to this project
Environment Protection and Biodiversity Conservation Act 1999	
<p>The <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) provides the legal framework to protect and manage nine matters of national environmental significance (MNES) - world heritage properties; national heritage places; wetlands of international importance (Ramsar); listed threatened species and communities; listed migratory species; Commonwealth marine areas; the Great Barrier Reef Marine Park; nuclear actions; and water resources, in relation to coal seam gas and large coal mining development.</p> <p>Any project that is likely to have a significant impact on MNES, must be referred to the Commonwealth Minister for Environment via the Department of Agriculture, Water and the Environment (DAWE) for a decision on whether the project is a 'controlled action' requiring assessment and approval under the EPBC Act.</p>	<p>The Gunbower Floodplain Restoration Project Flora and Fauna Assessment (R8 2020) provides a current assessment of the potential presence and impacts on MNES. In addition, the Gunbower Forest is a Ramsar Wetland. A referral to the Commonwealth Minister for Environment via the DAWE will be prepared for a decision on whether the project is a 'controlled action' requiring assessment and approval under the EPBC Act.</p>
Native Title Act 1993	
<p>The <i>Native Title Act 1993</i> provides for the recognition and protection of the traditional rights and interests to the land and waters of the Aboriginal and Torres Strait Islander people. Victorian Crown Land is subject to compliance with either the land Use Activity Regime (LUAR) under the Traditional Owner Settlement Act 2010 or the future act regime of the <i>Native Title Act 1993</i>. Any dealings with Crown land must follow government policies in respect of Native Title and the provisions of the <i>Native Title Act 1993</i> and any agreements or court orders made under that act.</p> <p>If the land is outside a determination area under the Act it is required that an extinguishment assessment be undertaken in accordance with the Victorian Native Title Future Act Assessment Manual. Even if land is retained in the Crown estate but a change in land status is sought, procedural rights under a LUAR or the future act regime of the <i>Native Title Act 1993</i> may apply.</p>	<p>The project is located on Crown land therefore must follow Commonwealth government policies for native title.</p> <p>Live public data from the National Native Title Tribunal shows there is one Native Title determinations over the area of investigation (VID6001/1995). However, it was determined on 9/10/2019 that Native title on the land does not exist.</p> <p>The project will require further assessment to determine requirements to comply with the <i>Native Title Act 1993</i>.</p>
Aboriginal and Torres Strait Islander Heritage Protection Act 1984	
<p>The <i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984</i> protects areas and objects that are of particular significance to Aboriginal people. The Act allows the Environment Minister, on application of an Aboriginal person or persons, to make declaration to protect an area, object or class of objects from a threat of injury or desecration.</p>	<p>Significant Aboriginal cultural heritage exists within the area of investigation. This Act allows the Commonwealth to intervene in any decision for the protection of this heritage.</p>

2.2 Victorian legislation

Table 2.2 provides an overview of key Victorian legislation relevant to this land use planning assessment.

Other environmental and heritage legislation relevant to the project is considered in other technical reports including the Flora and Fauna Assessment and the Historical Heritage Assessment.

Table 2.2: Relevant Victorian legislation

Description	Relevance
<i>Environment Effects Act 1978</i>	
<p>The <i>Environment Effects Act 1978</i> provides for the assessment of projects that are capable of having a significant effect on the environment</p> <p>The process is called an Environment Effects Statement (EES) - It is not an approval process itself, rather it is an assessment process that enables statutory decision-makers to make decisions about whether a project with potentially significant environmental effects should proceed.</p> <p>If a project requires assessment under the Act and the EPBC Act, the EES process can be accredited under the Assessment Bilateral Agreement between the Commonwealth and Victoria. This means that two separate assessment processes are not required.</p> <p><i>'Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978'</i> (the Guidelines) (DSE, 2006) outline the triggers for referral of a project to the Minister for Planning and describes the process of preparing an EES.</p>	<p>A referral to the Minister for Planning under the Act will be undertaken as the project may trigger criteria listed in the Guidelines in relation to the potential for significant effects of regional or State significance on the environment.</p>
<i>Planning and Environment Act 1987</i>	
<p>The <i>Planning and Environment Act 1987</i> regulates the use and development of land in Victoria. It sets out the framework and procedures for preparing and amending planning schemes, obtaining planning permits, settling disputes, enforcing compliance with planning schemes, and other administrative procedures.</p>	<p>The construction footprint and area of investigation are on land that is subject to the provisions of both the Gannawarra Planning Scheme north of Deep Creek, and the Campaspe Planning Scheme, south of Deep Creek. The planning schemes are enforced under the <i>Planning and Environment Act 1987</i>. Use and development of the project works must meet the requirements of the planning scheme that apply to the land.</p> <p>The Act provides for two processes for obtaining planning approval that are relevant to this project, including:</p> <ul style="list-style-type: none"> • Amendment of the planning scheme under Part 3 • Application for a planning permit under Part 4. <p>Section 4 describes the planning policy and provisions, including permit triggers, referral and notice requirements that will need to be addressed in the application for planning approval.</p>
<i>Crown Land (Reserves) Act 1978</i>	
<p>The Crown Land (Reserves) Act 1978 (CLRA) provides for reservation of Crown land for a variety of public purposes without foregoing the intrinsic natural values, and for leasing and licensing of reserves for purposes approved by the Minister for Environment and Climate Change. The CLRA authorises a range of leases and licences for commercial and non-commercial purposes on Crown land.</p>	<p>Title information identifies land within the area of investigation reserved for public purpose and managed by Parks Victoria. It is expected that this land has been reserved under the CLRA. Parks Victoria will need to confirm the most current reservation and the consents required in relation to the appropriate act that applies. It is expected that consent will be required from Parks Victoria under section 17 of the CLRA to authorise the use and development of land for the project.</p> <p>VMFRP will need to consult with any licence-holders to ensure any existing rights of licences issued under the CLRA are not adversely affected by the project.</p>

Description	Relevance
Environment Protection Act 1970	
<p>The Environment Protection Act 1970 (EP Act) provides the legal framework for protecting the environment in Victoria, having regard to the principles of environment protection as set out in the Act. The Act establishes the powers, duties and functions of the Environment Protection Authority (EPA), which include administration and enforcement of the Act, recommending State Environment Protection Policies (SEPPs) and industrial waste management policies, issuing works approvals, licences, permits, pollution abatement notices and implementing National Environment Protection Measures.</p> <p>SEPPs are subordinate legislation made under the provisions of the EP Act to provide more detailed requirements and guidance. The SEPPs seek to safeguard environmental values and human activities (beneficial uses) from the effect of pollution and waste, including values relating to surface waters, groundwaters, air quality, noise and contamination of land.</p>	<p>The project is not likely to require works approval or licensing under the EP Act.</p> <p>However, discharges and emissions in Victoria during construction, operation and decommissioning of the project must comply with the applicable SEPPs, including:</p> <ul style="list-style-type: none"> ▪ State Environment Protection Policy (Waters) ▪ State Environment Protection Policy (Prevention and Management of Contamination of Land) ▪ Noise from industry in regional Victoria: Recommended maximum noise levels from commerce, industry and trade premises in regional Victoria (NIRV; EPA publication 1411) ▪ State Environment Protection Policy (Ambient Air Quality) ▪ State Environment Protection Policy (Air Quality Management). <p>The Environment Protection Amendment Act 2018 will fully come into effect on 1 July 2021 and will establish a new general environmental duty introduced through the Environment Protection Amendment Act 2018. The new general environmental duty will require that:</p> <p style="padding-left: 40px;">“A person who is engaging in an activity that may give rise to risks of harm to human health or the environment from pollution or waste must minimise those risks, so far as reasonably practicable.”</p> <p>Design, construction, operation and decommissioning of the project will need to implement measures to comply with the new general environmental duty and any new Regulations that are introduced to support the 2018 Act.</p>
National Parks Act 1975	
<p>The <i>National Parks Act 1975</i> and associated National Parks Regulations 2013 seeks to preserve and protect the natural environment and wilderness areas, its indigenous flora and fauna, its scenic and archaeological features and remote nature areas. This is achieved through the development of certain protected areas, which include national parks, state parks, marine national parks and coastal parks. In these areas activities and access are restricted and require specific written approval in the form of leases, licences and agreements from Parks Victoria, declared management authority under the Parks Victoria Act 2018.</p> <p>Under s27 of the <i>National Parks Act 1975</i> and clause 184 of the associated regulations, Parks Victoria can give consent to a public authority to perform its function in a park.</p>	<p>The majority of the area of investigation is within a ‘national park’ described in a part of Schedule Two of the Act’, and under the ownership and management of Parks Victoria. Section 17(2) of the Act identifies the controls and management of a National Park.</p> <p>Land consent under s27 of the Act will be required from Parks Victoria for the proposed works to occur.</p>
Parks Victoria Act 2018	
<p>The <i>Parks Victoria Act 2018</i> is a new act which re-creates Parks Victoria as an independent statutory authority and strengthens Park Victoria’s role of protecting, conserving and enhancing Victoria’s parks and waterways.</p>	<p>Parks Victoria is the land manager of the national park area and regional park which supports most of the project works. Consents will be required from Parks Victoria.</p> <p>Parks Victoria is responsible for preparing management strategies and management plans for the land it manages. The project will be required to comply with these management strategies and management plans as relevant.</p>

Description	Relevance
Forests Act 1958	
<p>The Forests Act 1958 reserves and protects forest for timber production on Crown land. The Act outlines that all forest produce in state forest is the property of the Crown. The Act prohibits the removal of produce from state forest except in accordance with regulations that apply to Forests. The Department of Environment, Land, Water and Planning (DELWP) manages the State Forest.</p>	<p>The Gunbower Island State Forest is located within the area of investigation and subject to project works and inundation. This area is reserved for State Forest purposes.</p>
Road Management Act 2004	
<p>The <i>Road Management Act 2004</i> establishes the statutory framework for management of the Victorian road network by Regional Roads Victoria and councils to facilitate the coordination of the various uses of road reserve for roadways, pathways, infrastructure and similar purposes, for the purpose of delivering safe and efficient state and local public road networks.</p> <p>Under the RM Act, Regional Roads Victoria is the responsible road authority for declared arterial roads and freeways, while councils are the responsible road authority for municipal roads within their local government area.</p> <p>Consent may be required from the relevant responsible road authority for development and use of and within a road reserve, including occupation and/or construction works in, on or under a road.</p>	<p>The main access to the site from the east and west is via the Murray Valley Highway Road. This is managed by the Regional Roads Victoria. Any required works within this road or within the road easement will require approval from the Regional Roads Victoria. Any required alterations to council roads leading to the site may require approval from the council. Proposed works to existing tracks within the Park will be undertaken in accordance with Parks Victoria requirements.</p>
Traditional Owner Settlement Act 2010	
<p>The <i>Traditional Owner Settlement Act 2010</i> provides for an out-of-court settlement of native title. The Act allows the Victorian Government to recognise traditional owners and certain rights in Crown land. In return for entering into a settlement, traditional owners must agree to withdraw any native title claim, pursuant to the <i>Native Title Act 1993</i> (Cth) and not to make any future native title claims.</p>	<p>No Traditional Owner Settlement Agreements apply to the area of investigation.</p>
Water Act 1989	
<p>The <i>Water Act 1989</i> allows for management of the state's water resources. The main purpose of the Act is to promote the equitable and efficient use of water resources, make sure water resources are conserved and properly managed for the benefit of all Victorians and increase community involvement in conserving and managing our water resources.</p> <p>The administration of the Act is shared between CMAs and water authorities. Any works in declared waterways under the Act requires either a licence under section 67 or a works on waterways permit, administered by CMAs under by-law. A licence under section 51 is required to take and use water</p>	<p>Works on declared waterways are proposed as part of this project. Application for a licence to construct and operate works on a waterway will be sought.</p>

2.3 New South Wales legislation

Table 2.3 provides an overview of key NSW legislation relevant to this land use planning assessment, including identifying likely approvals for the project. This assessment is based on the understanding that activities to be undertaken in NSW are limited to infrastructure for a permanent pump station (Brereton Road Pump Station) within the Mid Gunbower Forest (upstream of Deep Creek). The pump station design is a submersible pump and motor wheel extending into the Murray River. Current design is for a reinforced concrete open structure on the bank extending into the river. To enable pumping at varying water levels in the Murray River, multiple pumps will be required.

Table 2.3: Summary of relevant NSW legislation

Description	Relevance to this project
<p><i>Environmental Planning and Assessment Act 1979</i></p> <p>Development in NSW is assessed in accordance with the <i>Environmental Planning and Assessment Act 1979</i> (EP&A Act), which institutes a system for environmental assessment, including approvals and environmental impact assessment. It requires the relevant planning authority to take into consideration the impacts to the environment (both natural and built) and the community of proposed development or land-use change.</p> <p>The three parts relating to planning approval requirements are:</p> <ul style="list-style-type: none"> ▪ Part 4 provides for control of 'local development' that requires development consent from the local Council. State significant development is also assessed under Part 4 (Division 4.7). ▪ Part 5 provides for control of 'activities' that do not require approval or development consent under Part 4. ▪ Part 5 Division 5.2 provides for control of State significant infrastructure. <p>The need or otherwise for development control is set out in environmental planning instruments – state environmental planning policies (SEPP (NSW)), regional environmental plans (now deemed SEPPs (NSW)) or local environmental plans (LEPs).</p>	<p>The project works in NSW are limited to a permanent pump station that would be part of a water reticulation system. This would be permissible with consent under Part 4 of the EP&A Act due to the application of clause 126A of State Environmental Planning Policy (Infrastructure) 2007.</p> <p>A development application would need to be submitted to the consent authority which is the Murray River Shire Council. The development application is 'integrated development' because a permit is also required under section 201 of the Fisheries Management Act 1994.</p> <p>The development application would need to include a Statement of Environmental Effects that would consider the provisions of relevant environmental planning instruments, including the Murray Regional Environmental Plan No.2 – Riverine Land, and the Murray Local Environmental Plan 2011.</p>
<p><i>Crown Lands Management Act 2016</i></p> <p>The <i>Crown Lands Management Act 2016</i> sets out how Crown land is to be managed in NSW. The Act is administered by Crown Lands Division within the NSW Department of Planning, Industry and Environment (NSW DPIE).</p> <p>Under the Crown Lands Management Act 2016, it is an offence to erect a structure, clear or dig up public land without a lawful authority.</p>	<p>NSW DPIE Crown Lands has advised that the proposed works in NSW would be undertaken on Crown land. Works on NSW Crown land would require authorisation by a lease, license or other permit to allow the use of Crown land.</p> <p>NSW DPIE Crown Lands has advised that: A Crown Lands License will be required for the pump station.</p>
<p><i>Water Management Act 2000</i></p> <p>The <i>Water Management Act 2000</i> (WM Act) controls extracting and using water, constructing works such as dams and weirs, and carrying out activities in or near water sources in NSW. 'Water sources' are defined very broadly and include any river, lake, estuary or place where water occurs naturally on or below the surface of the ground, and NSW coastal waters.</p>	<p>R8 consulted with the NSW Natural Resources Access Regulator (NSW NRAR), who advised that the project would not require a Controlled Activity Approval because the work would be undertaken on Crown land.</p> <p>NSW NRAR also confirmed that the take of water relating to the pump station located on the Victorian side of the border would not require a licence under the WM Act because NRAR does not licence pumps that are located in Victoria. NRAR confirmed that the project does not require a Water Access Licence or a Water Supply Work Approval.</p>
<p><i>National Parks and Wildlife Act 1974</i></p> <p>The <i>National Parks and Wildlife Act 1974</i> (NPW Act) promotes and regulates the management of national parks and historic sites or places of cultural value within the landscape and the conservation of certain fauna, native plants and Aboriginal objects and places.</p> <p>The NPW Act provides the basis for legal protection and management of Aboriginal sites in NSW. All Aboriginal objects within NSW are protected under Part 6 of the NPW Act. The implementation of the Aboriginal heritage provisions is the responsibility of the NSW DPIE.</p>	<p>An Aboriginal heritage assessment will need to be undertaken in accordance with the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW to confirm whether the proposal would impact on any items of heritage significance and whether an Aboriginal Heritage Impact Permit (AHIP) is required under Section 90 of the NPW Act.</p>

Description	Relevance to this project
<p>Section 87 of the NPW Act states that a permit may be issued to disturb or excavate archaeological sites or objects. Under section 90 of the NPW Act, it is an offence to knowingly destroy, deface or damage an object, except in accordance with an approval granted under that section.</p>	
<p><i>Biodiversity Conservation Act 2016</i></p>	
<p>The <i>Biodiversity Conservation Act 2016</i> (BC Act) provides the statutory framework for the conservation of biota of significance in NSW. The BC Act aims to, amongst other things, 'conserve biological diversity and promote ecologically sustainable development'. It provides for:</p> <ul style="list-style-type: none"> ▪ The listing of threatened species under Schedule 1 ▪ The listing of threatened ecological communities listed under Schedule 2 ▪ The preparation and implementation of Recovery Plans and Threat Abatement Plans ▪ Requirements or otherwise for the preparation of a Species Impact Statement. <p>The above factors assist within determining whether a proposal is likely to significantly impact on threatened species, populations or ecological communities or their habitats. If a proposal is likely to have a significant impact on a threatened species, population or ecological community, a Species Impact Statement is required.</p>	<p>The project will involve works on only a very small area of land on the southern bank of the Murray River. As such, the project is not likely to significantly impact on a threatened species, population or ecological community.</p>
<p><i>Local Land Services Act 2013</i></p>	
<p>The Local Land Services Act 2013 regulates the clearing of native vegetation on rural land in NSW. However, the Act does not apply to any clearing that is authorised under other legislation, including clearing authorised by a development consent under Part 4 of the EP&A Act after compliance with that Part (section 600(a)).</p>	<p>As this project would be authorised by a development consent under Part 4 of the EP&A Act, clearing of native vegetation does not require authorisation under the Local Land Services Act 2013.</p>
<p><i>Heritage Act 1977</i></p>	
<p>The Heritage Act 1977 identifies and protects heritage items and is administered by the Heritage Council of NSW and NSW Heritage Office (part of NSW Office of Environment and Heritage). Any development that would impact on an item listed on the State Heritage Register requires approval from the Heritage Council under section 60 of the Act.</p> <p>The relic provisions in the Act also require that an excavation permit be obtained from the Heritage Council prior to commencement of works if disturbance to a site with known or potential archaeological relics is proposed.</p>	<p>The proposed works within NSW are not located on land containing any known heritage items.</p> <p>Potential impacts on heritage items would be considered during the environmental assessment required under the EP&A Act.</p>
<p><i>Protection of the Environment Operations Act 1997</i></p>	
<p>The Protection of the Environment Operations Act 1997 (POEO Act) regulates noise, air, land and water pollution. Schedule 1 of the POEO Act defines Scheduled Activities that require an Environment Protection Licence (EPL) under the POEO Act. Section 120 of the POEO Act makes it an offence to pollute waters.</p>	<p>The project does not involve a Scheduled Activity. Provided the construction and operation of the project is able to be carried out without causing water pollution, an EPL will not be required, although this will need to be confirmed with the EPA.</p>

3. Existing conditions

3.1 Land use and development

3.1.1 Area of investigation, construction footprint and inundation area

The project is located within the municipal areas of the Gannawarra and Campaspe in Victoria and Murray in NSW. The relevant floodplain management authority is the North Central CMA. The Gunbower National Park is located within the Loddon Mallee region of Victoria.

Gunbower National Park covers approximately 9,330 ha and is within the Gunbower Forest and is part of the Gunbower-Koondrook-Perricoota Forest icon site under The Living Murray Initiative. The forest is bounded to the north by the Murray River and along its southern edge by private land and Gunbower Creek.

The forest comprises a system of natural drainage paths, creeks, permanent and temporary wetlands, Black Box and Grey Box woodlands and River Red Gum forest. The forest is also listed as a wetland of international importance under the Ramsar Convention.

The National Park is part of the Gunbower-Koondrook-Perricoota Forest Icon Site, one of six icon sites identified under the Murray-Darling Basin Ministerial Councils, 'The Living Murray Initiative'. The Living Murray Environmental Works and Measures Program aims to improve the health of the River Murray system by making the best use of water for the environment.

The proposed works for the Gunbower National Park floodplain and wetlands are designed to provide a combination of pumped inflows from the Murray River and the National Channel via Camerons Creek into the Forest. The works have been split into two areas – Upper Gunbower Forest area and Middle Gunbower Forest area. These two areas reflect the distinct change in elevation and therefore determine differing target water levels.

The majority of the area of investigation, is public land associated with national park and state forest and wetland areas, managed by Parks Victoria and DELWP. The Gunbower Island State Forest forms part of the area of investigation. The forest supports River Red Gum which has a long history in the timber industry of the area. For much of the 19th century, there were no effective restrictions on timber cutting in the forest, and it was not until the adoption of the *Forest Act 1958* that restrictions were implemented. DELWP manage the state forest area with the objectives to conserve plant and animal life, and also provide the community with timber, water and recreational opportunities.

The project area lies adjacent to the Perricoota State Forest on the NSW side of the Murray River. This forest area is managed by the Forestry Corporation NSW. Most of the area is under a General Management zone in accordance with the Riverina Forest Management Plan. Some areas within the forest are within a Harvesting Exclusion zone.

Gunbower Creek, which diverges from the Murray River is managed as an irrigation carrier and supplies the Torrumbarry Irrigation Area from the Murray River.

3.1.2 Surrounding area

The project is located approximately 25 km north-west of the regional town of Echuca, Victoria. Echuca has a population of around 14,043 people (ABS, 2016) and has a strong connection with the township of Moama directly across the border in NSW.

Directly west / south-west of Gunbower National Park is the local town Gunbower. The town has a population of approximately 550 people (ABS, 2016) and is located within a dairy farming area of the region. Its proximity to Gunbower National Park is a major attraction for visitors to the town.

The project is accessible from the Murray Valley Highway which is the main arterial road running north-south from Swan Hill to Echuca. The road is managed by the Regional Roads Victoria.

3.2 Land tenure

The project comprises of both Crown land and freehold land. Crown land is associated with the Gunbower National Park, under ownership and management of Parks Victoria. A number of Crown land parcels are also privately held under Crown grants. Proposed works and infrastructure are located on Crown land as well as freehold land.

A summary of land parcels per area affected by the area of investigation and area of inundation is provided in Table 3.1 and illustrated in Figure 3.1.

Desktop Land Use Planning Assessment - Gunbower National Park Floodplain Restoration Project

Table 3.1: Land Tenure

SPI	Tenure	Description	Instruments on Title	Owner/land manager	Project component
Victoria					
<i>Upper Gunbower Forest</i>					
1\TP91203	Freehold	82 McGillivray Road, Gunbower	Nil	Private Ownership	Access track
2040\PP3378	Crown Land	Hall Road, Torrumbarry	Reservation Permanent National Park	Parks Victoria	Camerons Mid Creek Regulator, Upper Gunbower Levee, Camerons Mid Creek Containment bank, inundation area, access track
2053\PP3378	Crown Land	837 Torrumbarry Weir Road, Patho	Reservation Permanent National Park	Parks Victoria	Dry Creek Outlet Regulator, Dry Creek Outlet Spillway, inundation area
61A~E\PP3378	Freehold	Sternberg Road, Patho	Reservations, exception conditions limitations and powers as shown on the Crown grant shown on plan TP488017U	Private Ownership	Upper Gunbower Levee, inundation area, access track
61B~E\PP3378	Freehold	McPhail Road, Patho	Reservations, exception conditions limitations and powers as shown on the Crown grant shown on plan TP355560Q	Private Ownership	Upper Gunbower Levee, inundation area, access track
36~D\PP3378	Freehold	59 Hall Road, Torrumbarry	Nil	Private Ownership	Upper Gunbower Levee, inundation area, access track
35~D\PP3378	Freehold	59 Hall Road, Torrumbarry	Nil	Private Ownership	Outlet, Outlet Pipeline
1\TP104980	Freehold	583 Torrumbarry Weir Road, Patho	Nil	Private Ownership	Camerons Creek Pipeline, Upper Gunbower Levee, Outlet, inundation area, access track

Desktop Land Use Planning Assessment - Gunbower National Park Floodplain Restoration Project

SPI	Tenure	Description	Instruments on Title	Owner/land manager	Project component
1\LP110720	Freehold	Torrumbarry Weir Road, Torrumbarry	<u>Encumbrances</u> E-1 E-2 Water supply	Private Ownership	Upper Gunbower Levee, Outlet, Outlet Pipeline, inundation area, access track
24~D\PP3378	Freehold	103 Hall Road, Torrumbarry	<u>Encumbrances</u> E-1 Water supply Reservations, exception conditions limitations and powers as shown on the Crown grant shown on plan TP425501U	Private Ownership	Camerons Creek Pipeline
1\PS626817	Freehold	N/A	<u>Encumbrances</u> E-1, E-2 Water supply Section 173 Agreement (AK154398W) between Campaspe Shire Council and the Owners	Private Ownership	Outlet, Outlet Pipeline
2\PS626817	Freehold	33 Steel Road, Torrumbarry	<u>Encumbrances</u> E-1, E-2 Water supply	Private Ownership	Outlet, Outlet Pipeline
26~D\PP3378	Freehold	59 Hall Road, Torrumbarry	<u>Encumbrances</u> Water supply easement	Private Ownership	Camerons Creek Pipeline
2\LP112195	Freehold	59 Hall Road, Torrumbarry	<u>Encumbrances</u> E-1 Carriageway and drainage	Private Ownership	Camerons Creek Pipeline
1\LP112195	Freehold	87 Hall Road, Myall	<u>Encumbrances</u> E-1 Carriageway and drainage	Private Ownership	Outlet, Outlet Pipeline
30A~D\PP3378	Crown Land	Headworks Road, Torrumbarry	Nil	DELWP	Camerons Creek Pipeline, Outlet
2\LP110720	Freehold	110 Hall Road, Torrumbarry	Nil	Private Ownership	Outlet, Outlet Pipeline

Desktop Land Use Planning Assessment - Gunbower National Park Floodplain Restoration Project

SPI	Tenure	Description	Instruments on Title	Owner/land manager	Project component
30~D\PP3378	Freehold	Headworks Road, Torrumbarry	Reservations, exception conditions limitations and powers as shown on the Crown grant shown on plan TP350438P	Private Ownership	Camerons Creek Pipeline, Outlet
2052\PP3378	Crown Land	Headworks Road, Torrumbarry	Reservation Permanent Public Purposes	Parks Victoria	Access Track
21~D\PP3378	Freehold	364 Torrumbarry Weir Road, Torrumbarry	Reservations, exception conditions limitations and powers as shown on the Crown grant shown on plan TP770766C	Private Ownership	Camerons Creek Pipeline
20~D\PP3378	Freehold	364 Torrumbarry Weir Road, Torrumbarry	<u>Encumbrances</u> E-1 Water supply Reservations, exception conditions limitations and powers as shown on the Crown grant shown on plan TP788425F	Private Ownership	Camerons Creek Pipeline
19~D\PP3378	Freehold	364 Torrumbarry Weir Road, Torrumbarry	<u>Encumbrances</u> E-1 Water supply Section 173 Agreement (AN328615X) between Campaspe Shire Council and the Owners Reservations, exception conditions limitations and powers as shown on the Crown grant shown on plan TP526990M	Private Ownership	Camerons Creek Pipeline
1\TP214488	Freehold	Torrumbarry Weir Road, Torrumbarry	<u>Encumbrances</u> E-1 Water supply	Private Ownership	Inundation area, Upper Gunbower Levee
33~D\PP3378	Freehold	Torrumbarry Weir Road, Torrumbarry	<u>Encumbrances</u> Water supply easement	Private Ownership	Inundation area, Upper Gunbower Levee, access track

Desktop Land Use Planning Assessment - Gunbower National Park Floodplain Restoration Project

SPI	Tenure	Description	Instruments on Title	Owner/land manager	Project component
			Reservations, exception conditions limitations and powers as shown on the Crown grant shown on plan TP361443K		
2021\PP3378	Crown Land	Torrumbarry Weir Road, Torrumbarry	Government Road	Campaspe Shire Council	Access track
2073\PP3378	Crown Land	N/A	Reservation Permanent Public Purposes	Campaspe Shire Council	Camerons Creek Pipeline
19A~D\PP3378	Crown Land	National Channel Road, Patho	Nil	DELWP	Camerons Creek Pump Station, Camerons Creek Pipeline
2049\PP3378	Crown Land	River Track, Torrumbarry	Reservation Temporary Reserved Forest	Parks Victoria	River Track Regulator, access track
2049\PP3378	Crown Land	River Track, Torrumbarry	Reservation Temporary Reserved Forest	Parks Victoria	Access track
2051\PP3378	Crown Land	River Track, Torrumbarry	Reservation Temporary Reserved Forest	Park Victoria	Access track
2020\PP2732	Crown Land	River Track, Gunbower	Reservation Permanent Public Purposes	Parks Victoria	Access track
2021\PP2732	Crown Land	River Track, Gunbower	Reservation Permanent Public Purposes	Parks Victoria	Access track
Middle Gunbower Forest (upstream)					
2062\PP2732	Crown Land	River Track, Gunbower	Reservation Permanent National Park	Parks Victoria	Dalley Bend Inlet Regulator, Brereton Pump Station, Brereton Pump Station Discharge Pipeline, access track
2023\PP2732	Crown Land	N/A	Government Road	Campaspe Shire Council	Middle Forest Offtake Regulator, Brereton Pump Station Discharge Pipeline, Brereton Road Raising, access track

Desktop Land Use Planning Assessment - Gunbower National Park Floodplain Restoration Project

SPI	Tenure	Description	Instruments on Title	Owner/land manager	Project component
2019\PP2732	Crown Land	River Track, Gunbower	Reservation Permanent Public Purposes	Parks Victoria	Brereton Pump Station, Brereton Pump Station Discharge Pipeline, access track
2025\PP2732	Crown Land	Frees Road, Leitchville	Reservation Temporary Reserved Forest	Parks Victoria	Discharge Pipeline, access track
2024\PP2732	Crown Land	Frees Road, Leitchville	Reservation Permanent National Park	Parks Victoria	Pig Swamp Offtake Regulator, Pig Swamp Western Levee, Emu Hole Lagoon Southern Levee, Old Straight Cut Channel, Emu Hole Outlet, Emu Hole Pipeline, Brereton Pump Station Discharge Pipeline, access track
48C~7\PP2732	Freehold	87 Brereton Road, Gunbower	Reservations, exception conditions limitations and powers as shown on the Crown grant shown on plan TP314740U	Private Ownership	Access track
51B~7\PP2732	Freehold	62 Brereton Road, Gunbower	Section 173 Agreement (AJ996188U)	Private Ownership	Pig Swamp Western Levee, access track
2003\PP2732	Crown Land	6 Fenn Road, Gunbower	Nil	DELWP	Pig Swamp Western Levee
48B~7\PP2732	Freehold	Island School Road, Gunbower	Reservations, exception conditions limitations and powers as shown on the Crown grant shown on plan TP701859K	Private Ownership	Access track
53A~7\PP2732	Freehold	524 Gunbower Island Road, Gunbower	Reservations, exception conditions limitations and powers as shown on the Crown grant shown on plan TP353407K	Private Ownership	Access track
<i>Middle Gunbower Forest (downstream)</i>					
2015\PP2732	Crown Land	Frees Road, Leitchville	Reservation Permanent National Park	Parks Victoria	Broken Axle Creek Bridge, Broken Axle Creek, Tickells Track, Spur Creek Forest,

SPI	Tenure	Description	Instruments on Title	Owner/land manager	Project component
					Spur Creek River and Deep Creek Return Regulator, River Track, Spur Creek, Tickells and Munroe Track Containment bank, Outlet 1, 2 and 3, Munroe Track No.1 and No.2, Spur Creek Drop Structure, Middle Forest Western Levee, inundation area, access track
NSW					
<i>Middle Gunbower Forest (upstream)</i>					
NA	Crown land – waterway	Unallocated/unreserved Crown land	Nil	Murray-Darling Basin Authority	Brereton Pump Station infrastructure

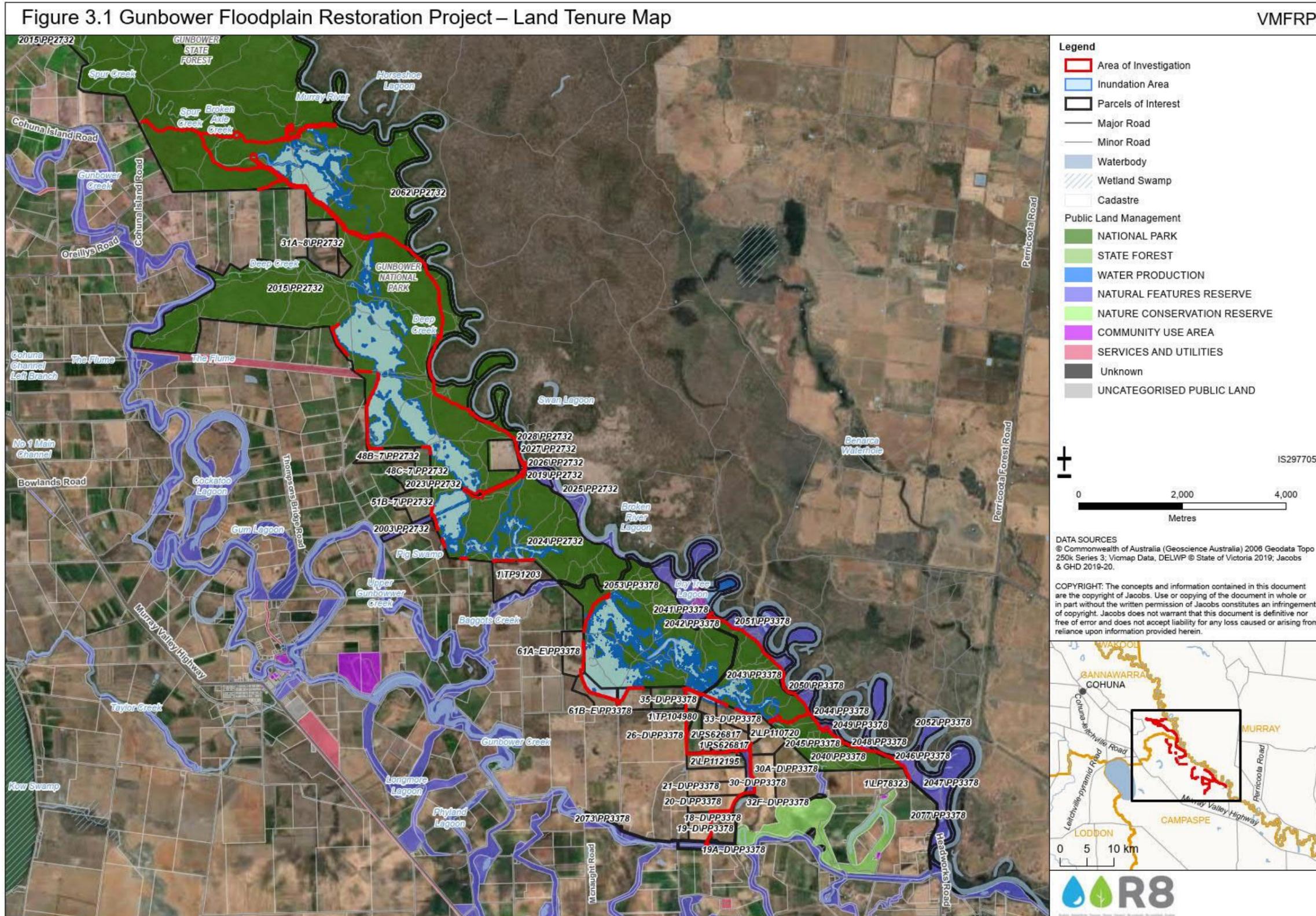


Figure 3.1: Land Tenure

3.3 Instruments on Title

Section 173 Agreements and general encumbrances exist on land within the area of investigation and inundation area.

3.3.1 Section 173 Agreements

Three (3) allotments of freehold land within the area of investigation area subject to the following Section 173 Agreements (copies of relevant documentation can be provided upon request):

- 1) **Instrument AK154398W:** Section 173 Agreement between the landowner and the Campaspe Shire Council. The following actions form part of the agreement:
 - Allow the re-subdivision of the land into two lots and removal of an easement
- 2) **Instrument AN328615X:** Section 173 Agreement between the landowner and the Campaspe Shire Council. The following forms part of the agreement:
 - Allows for works within a road reserve, conditions on maintenance and risk allocation, and ownership of an irrigation pipeline asset within Headworks Road, a road and road reserve where Campaspe Shire Council is the road authority.
- 3) **Instrument AJ996188U:** Section 173 Agreement between the landowner and the Campaspe Shire Council. The following forms part of the agreement:
 - Allows for works to an asset within a road reserve, conditions on maintenance and risk allocation, and ownership of a cattle underpass and associated infrastructure asset within Brereton Road, a road and road reserve where Campaspe Shire Council is the road authority.

Further assessment as part of detailed design will be required to ensure the project will not contravene the intentions of these instruments. All affected parties must be notified to determine any level of impact.

3.3.2 General encumbrances

Two (2) freehold land parcels associated with the area of investigation contain easements on title relating to carriageways and drainage, and four (4) freehold land parcels relate to water supply.

Location of easements and reserved land in relation to proposed works will be considered and avoided where relevant and if practicable as part of detailed design.

3.3.3 Reserved Crown land

Crown land parcels associated with the area of investigation are reserved under either the *Crown Land (Reserves) Act 1978*, *National Parks Act* and the *Forests Act 1958*. The majority of the land is reserved as 'Permanent National Park' associated with Gunbower Forest National Park. A number of parcels are reserved as 'Temporary Forest and the remainder of the Crown land is reserved as 'Permanent Public Purpose' for uses such as camping grounds, parks and other public purposes.'. Two parcels are reserved as 'Government Road'. Parks Victoria will need to confirm the most current reservation and the consents required in relation to the appropriate act that applies.

3.3.4 Crown Grants

Crown grants apply to some freehold land where Crown land is transferred to private ownership, as it is no longer providing benefit to users or a public purpose. All Crown grants are generally subject to reservations to the Crown of the minerals in the land to a limited depth (Victorian Government Solicitor's Office, 2008). These encumbrances are listed on the title plan.

3.4 Access

Access roads for works will use the following existing local council roads and tracks where possible:

- Tickells Track
- Camerons Creek River Track
- River Track
- Munroe Track
- Baggots Creek Track
- Brereton Road
- Straight Road.

No new access tracks are proposed at this stage. However, the majority of the tracks identified for use will require upgrade works, the extent of which will be confirmed following outcomes of geotechnical investigations, complex cultural heritage assessment and ecology ground truthing. Necessary maintenance of these access tracks will also be conducted during construction and operation of the project.

3.5 Native title interests

A search of the National Native Title Tribunal online register and maps shows:

- Native title Determination VID6001/1995 under the *Native Title Act 1993* applies to the area of investigation (Figure 3.2: Native Title Claim Figure 3.2). The claim was lodged by the Members of the Yorta Yorta Aboriginal Community. A determination was given on 9/10/2019 determining that Native Title does not exist on the land.
- There are no current native title claims lodged under the *Native Title Act 1993* in relation to land within or adjacent to the area of investigation
- No Indigenous Land Use Agreements cover the area of investigation.

A search of the Victorian Department of Justice and Community Safety website indicates that no current applications or registered agreements under the *Traditional Owner Settlement Act 2010* (Vic) apply over land within or adjacent to the area of investigation (DoJCS, 2020).

An Aboriginal heritage assessment will need to be undertaken in accordance with the Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW to confirm whether the proposal would impact on any items of heritage significance and whether an Aboriginal Heritage Impact Permit (AHIP) is required under Section 90 of the NPW Act.

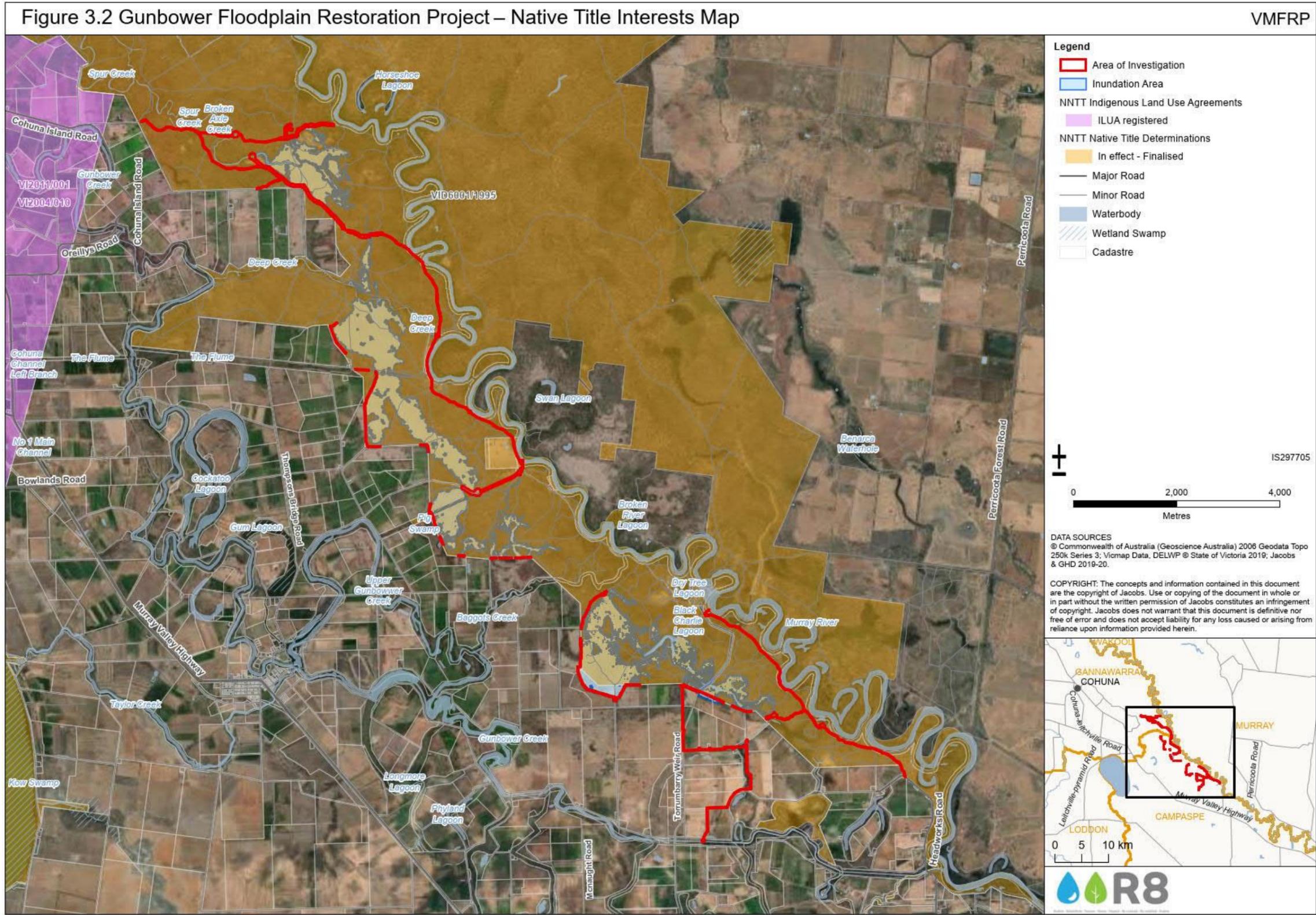


Figure 3.2: Native Title Claim

3.6 Other land use

3.6.1 Irrigation

The project is located within the Torrumbarry Irrigation Area (TIA) as defined by the DELWP (Figure 3.3).

The TIA lies directly to the west of the project inundation area and is part of the largest irrigation system in Victoria – the Goulburn-Murray Irrigation District (GMID) managed by Goulburn Murray Water. The GMID accounts for more than 70% of water storages and some 90% of water used in irrigation across the state. Approximately 2000 landowners rely on this system for farming within the area

3.6.2 Apiary

Current public data from DataVic (DELWP 2019) indicates the location of 14 apiary sites located in close proximity to the area of investigation (Figure 3.3). The buffer areas of 6 of the sites lie within the area of investigation and inundation within two apiary sites located less than 100 m from the construction footprint and another two sites located less than 50 m (one site less than 20 m) from the area of inundation.

The hives are part of annual licence agreements that are dependent on seasonal flowering of River Red Gum forests. Bees rely on adequate water source to thrive, and it is expected that the objectives of the project will increase the regularity and reliability of flowering. Consultation with owners of apiary sites may be required to determine measures for management of potential impacts during construction and inundation.

3.6.3 Farming

The area of Koondrook has a long history of timber harvesting and dairy farming, from as far back as the 1800's. The early settlers took advantage of the abundance of nearby reg gum forests to support growing settlements. Timber harvesting in the area is now focused on selective harvesting of local forests to produce high quality building products.

Dairy and cropping are currently the prominent agricultural activities of the region. Dairy comprises 50% of the agricultural activity within the Gannawarra Shire with cropping making up 21% (Shire of Gannawarra, 2020). The Gannawarra Shire has a diverse agricultural economy that is supported by the waters of the Murray River and Goulburn River systems via a network of automated channels and natural lakes and creeks. Kilter Rural is a major landholder and producer in the region and is utilising under-performing land for a number of agricultural enterprises including tomatoes, cotton and organic wheat.

Solar farming is a growing activity within the region. The Gannawarra Shire Council has approved building permits for seven solar farm projects, and currently supports a network of infrastructure including a large capacity terminal station and connecting transmission lines. The proposed new farms are located around the area of Kerang in the vicinity of the current 220 kV transmission line.

3.6.4 Recreational activities

The Gunbower National Park is a popular recreational area for tourists to the region as well as for its local communities. Recreational use includes fishing, camping, boating, canoeing, bird and wildlife watching, photography, horse riding, motor biking and four-wheel driving.

The area also forms part of the Murray River Trail for tourism and recreation purposes and provides direct access to the Murray River for water-based activities and river camping or caravanning. It forms part of the Murray River Trail for tourism purposes.

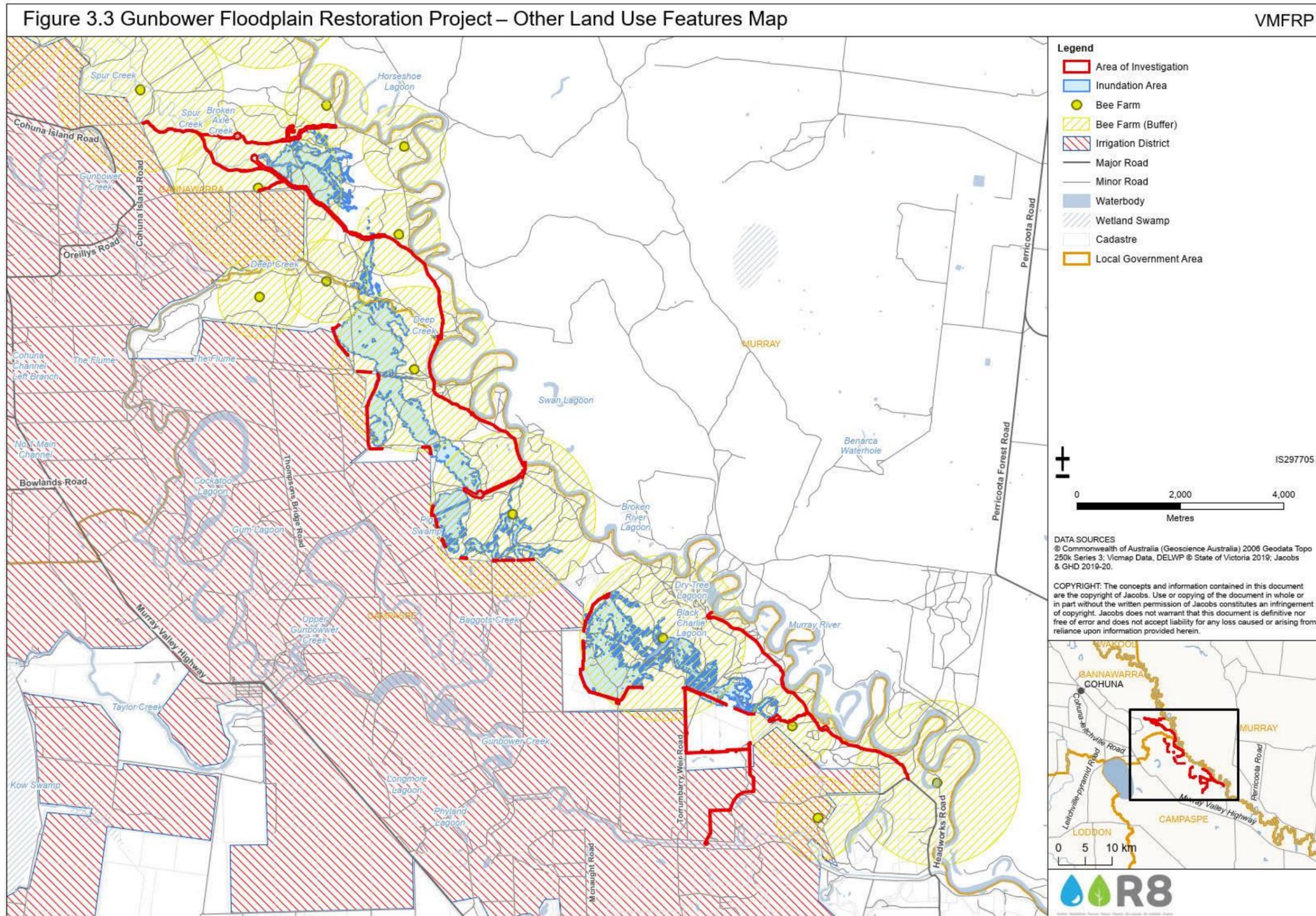


Figure 3.3: Other Land Use

4. Victorian Planning Framework

Project land within the Upper Gunbower and Mid Gunbower (upstream) environmental works areas are subject to the Campaspe Planning Scheme. Project land within the Mid Gunbower (downstream) environmental works area is subject to the Gannawarra Planning Scheme. This section provides a brief assessment of the area of investigation and proposed works against state and local policy and provisions of the planning schemes.

4.1 Planning policy

Table 4.1 lists the relevant clauses of the Planning Policy Framework of the scheme in relation to the project. State Planning policy applies across the whole project, while local policy applies to specific planning schemes.

Table 4.1: Relevant Planning Policy

Relevant clause		Objectives
State Planning Policy		
Clause 12 – Environmental and Landscape Values	Clause 12.01 Biodiversity	<p>Clause 12.01-1S – Protection of Biodiversity Take account of impact of land use and development on biodiversity.</p> <p>Clause 12.01-2S Native Vegetation Management The removal, destruction or lopping of native vegetation, apply the three-step approach in accordance with the Guidelines for the removal, destruction or lopping of native vegetation (Department of Environment, Land, Water and Planning, 2017).</p>
	Clause 12.03 Water Bodies and Wetlands	<p>Clause 12.03-1S River Corridors, Waterways, Lakes and Wetland Ensure development responds to and respects the significant environmental, conservation, cultural, aesthetic, open space, recreation and tourism assets of water bodies and wetlands.</p>
	Clause 12.05 Significant Environments and Landscapes	<p>Clause 12.05-2S Landscapes Ensure development does not detract from the natural qualities of significant landscape areas.</p>
Clause 13 Environmental Risks and Amenity	Clause 13.01 Climate Change Impacts	<p>Clause 13.01-1S Natural Hazards and Climate Change Integrate strategic land use planning with emergency management decision making.</p>
	Clause 13.02 Bushfire	<p>Clause 13.02-1S Bushfire Planning Ensuring the bushfire risk to existing and future residents, property and community infrastructure will not increase as a result of future land use and development.</p>
	Clause 13.03 Floodplains	<p>Clause 13.03-1S Floodplain Management Avoid intensifying the impact of flooding through inappropriately located use and development.</p>
	Clause 13.04 Soil Degradation	<p>Clause 13.04-3S Salinity Prevent inappropriate development in areas affected by groundwater salinity. Any applicable regional catchment strategy and any associated implementation plan or strategy (particularly salinity management plans and regional vegetation plans). Any special area plan approved under the Catchment and Land Protection Act 1994.</p>
Clause 13.07 Amenity and Safety	<p>Clause 13.07-1S Land Use Compatibility Ensure the compatibility of a use or development as appropriate to the land use functions and character of the area by directing land uses to appropriate locations.</p>	

Relevant clause		Objectives
Clause 14 Natural Resource Management	Clause 14.01 Agriculture	<p>Clause 14.01-3S Forestry and Timber Production</p> <p>Identify areas that may be suitably used and developed for plantation timber production in accordance with the Code of Practice for Timber Production (Department of Environment and Primary Industries, 2014).</p>
	Clause 14.02 Water	<p>Clause 14.02-1S Catchment Planning and Management</p> <p>Ensure planning is coordinated with the activities of catchment management authorities.</p>
		<p>Clause 14.02-2S Water Quality</p> <p>Discourage incompatible land use activities in areas subject to flooding, severe soil degradation, groundwater salinity or geotechnical hazards where the land cannot be sustainably managed to ensure minimum impact on downstream water quality or flow volumes.</p>
Clause 15 Built Environment and Heritage	Clause 15.01 Built Environment	<p>Clause 15.01-1S Urban Design</p> <p>Require development to respond to its context in terms of character, cultural identity, natural features, surrounding landscape and climate.</p>
		<p>Clause 15.01-2S Building Design</p> <p>Ensure development is designed to protect and enhance valued landmarks, views and vistas.</p>
		<p>Clause 15.01-6S Design for Rural Areas</p> <p>To ensure development respects valued areas of rural character.</p>
	Clause 15.02 Sustainable Development	<p>Clause 15.02-1S Energy and Resource Efficiency</p> <p>To encourage land use and development that is energy and resource efficient, supports a cooler environment and minimises greenhouse gas emissions.</p>
Clause 15.03 Heritage	<p>Clause 15.03-1S Heritage Conservation</p> <p>Encourage appropriate development that respects places with identified heritage values.</p>	
	<p>Clause 15.03-2S Aboriginal Cultural Heritage</p> <p>Identify, assess and document places of Aboriginal cultural heritage significance, in consultation with relevant Registered Aboriginal Parties, as a basis for their inclusion in the planning scheme.</p>	
Clause 17 Employment	Clause 17.04 Tourism	<p>Clause 17.04-1R Tourism – Loddon Mallee North</p> <p>Support nature-based tourism and protect these activities from urban encroachment.</p>
Clause 19 Infrastructure	Clause 19.02 Community Infrastructure	<p>Clause 19.02.-06S Open space</p> <p>Ensure that land use adjoining conservation reserves complements the open space in terms of visual and noise impacts, preservation of vegetation and treatment of waste water to reduce turbidity and pollution.</p>
Local Planning Policy – Campaspe Planning Scheme		
Municipal Strategic Statement		
Clause 21.01 Campaspe Shire Key Issues and Strategic Vision	Clause 21.02-3 Key issues	<p>The key issues facing Campaspe are focused around seven strategic themes:</p> <ul style="list-style-type: none"> ▪ Settlement and Housing ▪ Environmental and Landscape Values ▪ Environmental Risks ▪ Natural Resource Management ▪ Built Environment and Heritage ▪ Economic Development ▪ Transport and Infrastructure

Relevant clause		Objectives
Clause 21.03 Environmental and Landscape Values	Clause 21.03-1 Significant environments and landscapes	Objective 1 – To protect the river and environs of the Murray River, recognising its importance for nature conservation, flooding, economic development, recreation and tourism.
	Clause 21.03-2 Biodiversity	Objective 2 – To protect, manage and restore native vegetation, including grasslands and wetland vegetation. Objective 3 – To increase the extent and quality of native vegetation and biodiversity across the shire. Objective 4 – To avoid and minimise impacts on environmental and biodiversity values.
Clause 21.06 Built Environment and Heritage	Clause 21.06-2 Heritage	Objective 5 – To protect and enhance heritage places, including buildings, trees and structures of natural or cultural significance, for present and future generations.
Clause 21.07 Economic Development	Clause 21.07-4 Tourism	Objective 8 – To provide for growth in rural based tourism that complements existing agricultural production.
Local Planning Policies		
Clause 22.04 Non-Agricultural Uses in the Farming Zone Policy		Applies to all applications on land within the Farming Zone Objectives: To identify a preferred mix of land uses in rural areas. To promote appropriate land use and development within rural areas. To discourage non-agricultural use and development in all rural areas, other than those that support agriculture.
Local Planning Policy – Gannawarra Planning Scheme		
Municipal Strategic Statement		
Clause 21.01 Gannawarra Shire Key issues and Strategic Vision		The Murray River corridor accommodates most of the region's population and irrigated agriculture. The municipality is part of a wider region which features an extensive agricultural area and one of the most productive areas of the Murray Darling Basin. The North Central Catchment Management Authority (CMA) in partnership with the local councils and water authorities are responsible for the resource management of the basin. The Regional Catchment Strategy (RCS) is the key document for the North Central Region. This strategy is expected to be replaced soon. Coordination of strategic and land use planning with the State and local governments in New South Wales is particularly important within the Murray River Corridor, including land within the floodplain. Protecting the Murray River's water quality and riverine habitat are major issues for all Murray River Corridor municipal councils.
	Clause 21.01-2 Key Influences	<u>Settlement</u> <ul style="list-style-type: none"> About 55% of the population live in urban areas. This figure is increasing at the expense of population in the rural balance. <u>Environment and landscape</u> <ul style="list-style-type: none"> The protection of the environmental values of the Murray River corridor. The river and its wetland provide significant habitat values for flora and fauna. Flooding is a significant environmental risk, particularly along the Murray River. <u>Natural resource management</u> <ul style="list-style-type: none"> The continued growth of the horticulture industry. The need to support dry land agriculture

Relevant clause	Objectives
	<ul style="list-style-type: none"> ▪ Access to good quality water is central to the ongoing growth of the farming economy. Any action to reduce agricultural water entitlements could stifle long term horticultural growth. ▪ Salinity levels need to be managed to ensure ongoing agricultural growth. <p><u>Built environment and heritage</u></p> <ul style="list-style-type: none"> ▪ The protection of Aboriginal and European heritage is critical to the growth in tourism and sense of place. <p><u>Economic development</u></p> <ul style="list-style-type: none"> ▪ Farms on both dryland and irrigated land are increasing in size to provide better economies of scale. ▪ Tourism should be based on the natural environment, farming history, soldier settlement, river trade, timber processing, Aboriginal heritage and rivers and lakes. <p><u>Infrastructure</u></p> <ul style="list-style-type: none"> ▪ Community plans have been developed throughout the municipality and should be considered in planning decisions wherever relevant.
<p>Clause 21.01-3 Key Issues</p>	<p><u>Settlement</u></p> <ul style="list-style-type: none"> ▪ Flooding and stormwater management is a major consideration when planning for urban development. ▪ Improvements in road access and wastewater management may allow additional land to be considered for development in the future. <p><u>Environment and landscape</u></p> <ul style="list-style-type: none"> ▪ Native vegetation coverage has reduced significantly since post-contact settlement <p><u>Environmental risks</u></p> <ul style="list-style-type: none"> ▪ Flooding remains a major hazard in the municipality <p><u>Natural resource management</u></p> <ul style="list-style-type: none"> ▪ Access to adequate good quality water is central to the ongoing growth of the farming economy. Any action to reduce agricultural water entitlements could stifle long term horticultural growth. ▪ Salinity levels need to be managed to ensure ongoing agricultural growth <p><u>Built environment and heritage</u></p> <ul style="list-style-type: none"> ▪ The protection of Aboriginal and European heritage is critical to the growth in tourism and sense of place. ▪ Koondrook has significant potential for tourism development <p><u>Housing</u></p> <ul style="list-style-type: none"> ▪ Rural living development has the potential to attract new residents to the municipality ▪ Suitable land exists for further residential and rural residential development <p><u>Economic development</u></p> <ul style="list-style-type: none"> ▪ Water frontages provide a focus and further potential for tourism development ▪ Tourism should be based on the natural environment, farming history, soldier settlement, river trade, timber processing, Aboriginal heritage and rivers and lakes <p><u>Transport</u></p> <ul style="list-style-type: none"> ▪ A well-maintained road network is essential for access to properties and to support the agricultural and manufacturing sectors <p><u>Infrastructure</u></p> <ul style="list-style-type: none"> ▪ Solar generation is a major opportunity

Relevant clause		Objectives
	Clause 21.01-4 Strategic Vision	The Gannawarra Shire community is aiming to increase opportunities for local employment and investment, sustainable natural resource management, protection of the natural environment and cultural heritage and a high quality of lifestyle for urban and rural residents.
	Clause 21.01-5 Land use framework plan	<ul style="list-style-type: none"> ▪ Provides a basis for the preparation of zones and overlay provisions ▪ Identifies environmental and physical constraints to development and areas of environmental significance ▪ Indicates urban centres for which Township Structure Plans have been prepared. <p>The plan identifies south of the project area as 'Irrigated Agriculture'</p>
Clause 21.02 Settlement	Clause 21.02-1 Town development	<p>Koondrook performs the complementary roles of heritage, tourist, retiree and rural retreat town. It is one of the few urban areas in the municipality to experience recent population growth</p> <p>Murrabit performs an important service role to the surrounding rural community and has unique small town character related to its proximity to the Murray River.</p>
Clause 21.03 Environmental and Landscape Values	Clause 21.03-1 Native vegetation	Objective 1: To protect and enhance remnant native vegetation and native flora and fauna habitat and promote development of linkages between areas containing remnant vegetation.
	Clause 21.03-2 Natural assets	<p>Objective 1: To protect and maintain natural assets including soil and water for farming, landscape values and amenity with facilitating sensitive development.</p> <p>Objective 2: To protect and enhance areas of public land, including forests, stream environments, lakesides and reserves</p> <p>Objective 3: Recognise the important functions of rivers, lakes, and wetland areas, including flora and fauna habitat, recreation, landscape, water supply, water filtration, water storage and drainage.</p>
	Clause 21.03-3 Murray River Environs	Objective 1: To manage the Murray River corridor's environmental values and resource capacity
Clause 21.04 Environmental risks	Clause 21.04-2 Flooding	Objective 1: To manage flooding and floodplains so as to minimise loss and damage to property and infrastructure, and to preserve the function of the floodplains to convey and store floodwater
Clause 21.05 Natural Resource Management	Clause 21.05-2 Catchment planning	Objective 1: To protect the environmental values and water quality of the land and waters of the Murray – Darling catchment and ensure the sustainable development of the natural resources of the catchment.
Local Planning Policies		
Clause 22.01 Flooding		<p>Applies to all land affected by the Land Subject to Inundation Overlay.</p> <p>Objectives:</p> <ul style="list-style-type: none"> ▪ To maintain the unobstructed passage of floodwaters. ▪ To recognise appropriate public and community based flood management organisations and their role in maintenance and development of existing flood protection levee banks. ▪ To provide suitable flood plain management which will ensure that any new development is suitably designed to ensure that development is compatible with the identified flood hazard and local drainage characteristics. ▪ To protect and encourage the rural and riverine character of the area.

Relevant clause	Objectives
	<ul style="list-style-type: none"> To recognise the agricultural value of land within levee protected areas and to support the continued use of these areas for agricultural production.

The project supports both state and local planning policy, particularly in relation to the protection and enhancement of biodiversity, waterbodies and wetlands and significant landscapes of the area. The objectives of Clause 21.05 in the Campaspe Municipal Strategic Statement and the Gannawarra Municipal Strategic Statement relate to the management of the environmental values and resource capacity of the Murray River and are particularly relevant to the project.

The intention of improving on the health of these riverine environments will also support the economic development of the region which is already focused on tourism-based nature-based activities associated with ecological value. There are also key objectives around ensuring the economic viability of surrounding agricultural land is not jeopardised by adjoining land use. This includes the need to maintain and enhance extensive irrigation infrastructure that supports the agricultural and horticultural industry – the primary land use key economic driver of the region. Any impact to this primary land use from inundation activities should be minimised and managed.

4.2 Land use definitions

Land use of proposed works are defined in Clause 73 of the scheme and summarised in Table 4.2. These definitions will be used in the assessment of the applications under the planning scheme.

Table 4.2: Planning scheme land use definitions

Project works	Clause 73 General term/ use	Definition
Spillway Containment bank Inundation Pumping station infrastructure Pipeline infrastructure	Utility Installation	Land used: <ul style="list-style-type: none"> for telecommunications to transmit or distribute gas or oil to transmit, distribute or store power, including battery storage to collect, treat, transmit, store or distribute water; or to collect, treat, or dispose of storm or flood water, sewage, or sullage It includes any associated flow measurement device or a structure to gauge waterway flow
Regulator Culvert Power supply	Minor Utility Installation	Land used for a utility installation comprising any of the following: <ul style="list-style-type: none"> Sewerage or water mains Storm or flood water drains or retarding basins Flow measurement device or a structure to gauge waterway flow Siphons, water storage tanks, disinfection booster stations and channels Gas mains providing gas directly to consumers A sewerage treatment plant, and any associated disposal works, required to serve a neighbourhood A pumping station required to serve a neighbourhood Powerlines designed to operate at less than 220,000 volts but excluding any power lines directly associated with an Energy generation facility or Geothermal energy extraction; or An electrical sub-station designed to operate at no more than 66,000 volts but excluding any sub-station directly associated

Project works	Clause 73 General term/ use	Definition
		with an Energy generation facility or Geothermal energy extraction
Access tracks Roadworks Containment bank / levees Temporary construction laydown areas	Earthworks	Land forming, laser grading, levee banks, raised access road and tracks, building pads, storage embankments, channel banks and drain banks and associated structures
Native Vegetation	Native Vegetation	Plants that are indigenous to Victoria, including trees, shrubs, herbs and grasses.

Conservation is the primary purpose of the area of investigation. Current use of the area of investigation already includes the use of utilities to assist in the management of water for the primary purpose of conservation. The proposed works will however, significantly increase the use of utilities to achieve a much larger inundation area that may introduce new impacts on surrounding land use. The approach is therefore to consider a new use in the planning assessment of this project.

4.3 Relevant zones and overlays

The following zones and overlays from the Campaspe Planning Scheme apply to the area of investigation:

- Public Conservation and Resource Zone (PCRZ)
- Farming Zone (FZ1)
- Environmental Significance Overlay (Schedule 1 – Murray River Corridor) (ESO1)
- Floodway Overlay (FO)
- Land Subject to Inundation Overlay (LSIO)
- Bushfire Management Overlay (BMO)

The following zones and overlays from the Gannawarra Planning Scheme apply to the area of investigation:

- Public Conservation and Resource Zone (PCRZ)
- Environmental Significance Overlay (Schedule 1 – Waterway Environs)
- Land Subject to Inundation Overlay (LSIO)
- Bushfire Management Overlay (BMO)

A summary of zones and overlays applying to the proposed project components is provided in Table 4.3.

Table 4.3: Summary of zones and overlays relevant to project components

Zone ID	Zone Name	Project component
Campaspe		
PCRZ	Public Conservation and Resource Zone	Broken Axle Creek Bridge, Broken Axle Creek, Tickells Track, Spur Creek Forest, Spur Creek River, Deep Creek Return, Pig Swamp Offtake Regulator River Track, Spur Creek, Tickells and Munroe Track Containment bank Outlet 1, 2 and 3 and Emu Hole Outlet Munroe Track No.1 and No.2 Spur Creek Drop Structure Middle Forest Western, Pig Swamp Western, Emu Hole Lagoon Southern Levee Old Straight Cut Channel Emu Hole, Brereton Pump Station Discharge, Camerons Creek Pipeline Camerons Creek Pump Station Inundation area Access track
FZ1	Farming Zone	Pig Swamp Western Levee Upper Gunbower Levee Camerons Creek Pipeline Outlet Pipeline Outlet Inundation area Access track
ESO 1	Environmental Significance Overlay, Schedule 1	Broken Axle Creek Bridge, Broken Axle Creek, Tickells Track, Spur Creek Forest, Spur Creek River, Deep Creek Return, Pig Swamp Offtake Regulator River Track, Spur Creek, Tickells and Munroe Track Containment bank Outlet 1, 2 and 3 and Emu Hole Outlet Munroe Track No.1 and No.2 Spur Creek Drop Structure Middle Forest Western, Pig Swamp Western, Emu Hole Lagoon Southern, Pig Swamp Western, Upper Gunbower Levee Old Straight Cut Channel Emu Hole, Brereton Pump Station Discharge, Outlet, Camerons Creek Pipeline Inundation area Access track
FO	Floodway Overlay	Middle Forest Western, Pig Swap Western, Emu Hole Lagoon Southern, Upper Gunbower Levee Middle Forest Offtake, Camerons Mid Creek, River Track Regulator Emu Hole Outlet, Outlet Brereton Pump Station Old Straight Cut Channel Brereton Road Raising Camerons Creek Pipeline Camerons Mid Creek Containment Bank Inundation area Access track
LSIO	Land Subject to Inundation	Broken Axle Creek Bridge Broken Axle Creek, Spur Creek Return, Spur Creek Forest Regulator Tickells and Munroe Track, River Track Containment Bank Spur Creek Drop Structure

Zone ID	Zone Name	Project component
		Outlet 1, 2 and 3, Outlet Munroe Track No. 1 and 2 Culvert Middle Forest Western, Upper Gunbower Levee Camerons Creek, Outlet Pipeline Inundation area Access track
BMO	Bushfire Management Overlay	Broken Axle Creek Bridge, Broken Axle Creek, Tickells Track, Spur Creek Forest, Spur Creek River, Deep Creek Return, Pig Swamp Offtake, Middle Forest Offtake, Camerons Mid Creek, River Track Regulator River Track, Spur Creek, Tickells and Munroe Track Containment bank Outlet 1, 2 and 3 and Emu Hole Outlet Munroe Track No.1 and No.2 Spur Creek Drop Structure Middle Forest Western, Pig Swamp Western, Emu Hole Lagoon Southern Levee Old Straight Cut Channel Brereton Road Raising Emu Hole, Brereton Pump Station Discharge, Camerons Creek Pipeline Inundation area Access track
Gannawarra		
PCRZ	Public Conservation and Resource Zone	Broken Axle Creek Bridge, Broken Axle Creek, Spur Creek Forest, Spur Creek River Return, Tickells Track and Deep Creek Return Regulator Spur Creek Drop Structure Tickells and Munroe Track Containment bank River Track, Spur Creek Containment Bank Outlet 1, 2 and 3 Munroe Track No.1 and No.2 Inundation area Access track
ESO1	Environmental Significance Overlay (Schedule 1 Waterway Environs)	Buffer to the Deep Creek Regulator Roads/ tracks
LSIO	Land Subject to Inundation	Broken Axle Creek Bridge, Broken Axle Creek, Spur Creek Forest, Spur Creek River Return, Tickells Track and Deep Creek Return Regulator Spur Creek Drop Structure Tickells and Munroe Track Containment bank River Track, Spur Creek Containment Bank Outlet 1, 2 and 3 Munroe Track No.1 and No.2 Inundation area Access track
BMO	Bushfire Management Overlay	Broken Axle Creek Bridge, Broken Axle Creek, Spur Creek Forest, Spur Creek River Return, Tickells Track and Deep Creek Return Regulator Spur Creek Drop Structure Tickells and Munroe Track Containment bank River Track, Spur Creek Containment Bank Outlet 1, 2 and 3 Munroe Track No.1 and No.2 Inundation area

Zone ID	Zone Name	Project component
		Access track

Figure 4.1, Figure 4.2: Planning Overlays: Land Subject to Inundation Overlay and Floodway Overlay and Figure 4.3: Planning Overlay: Environment Significance Overlay and Bushfire Management Overlay illustrate zones and overlays in relation to the project components.

A review of the purpose of the zones and overlays associated with the area of investigation is provided in Table 4.4.

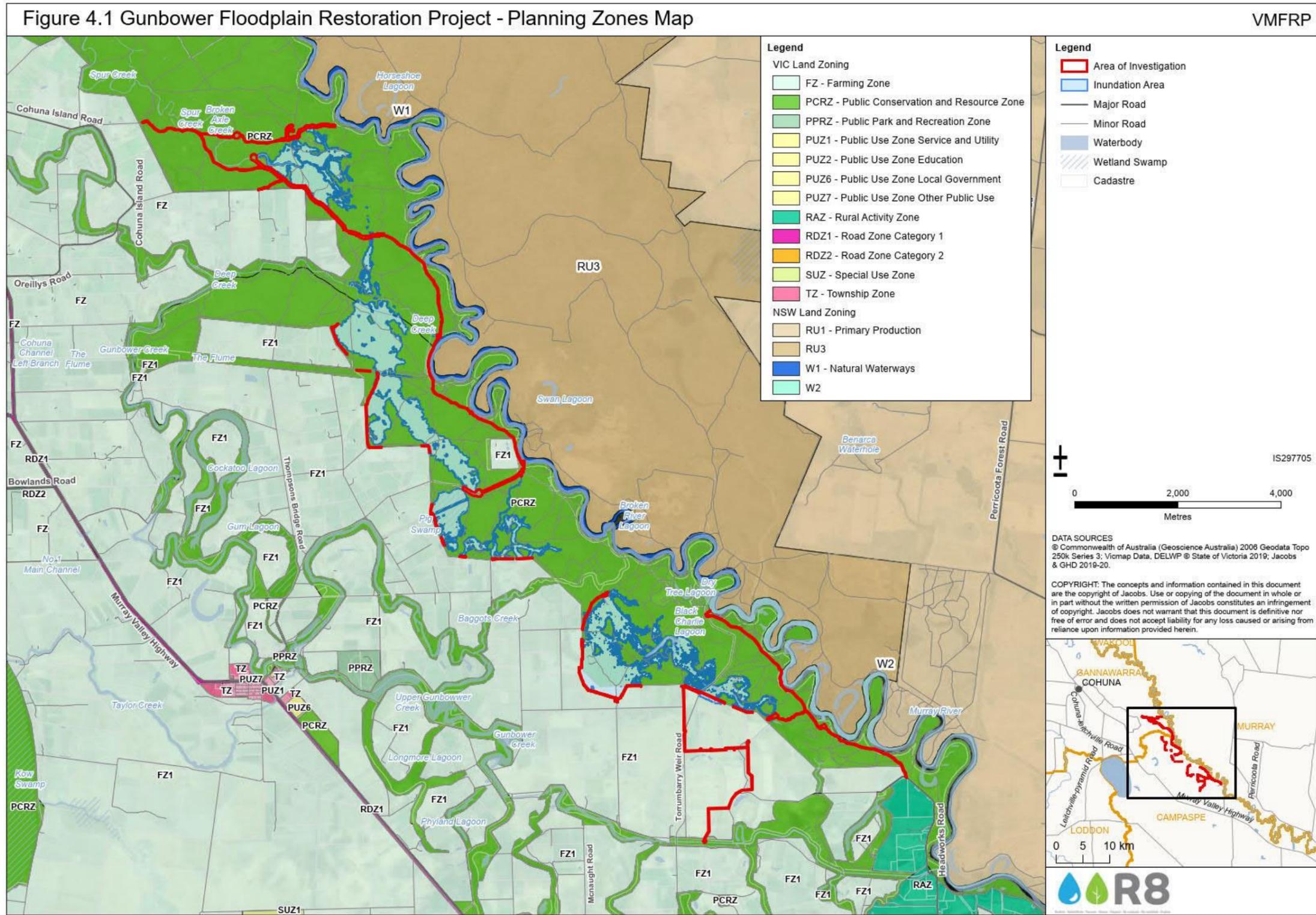


Figure 4.1: Planning Zones

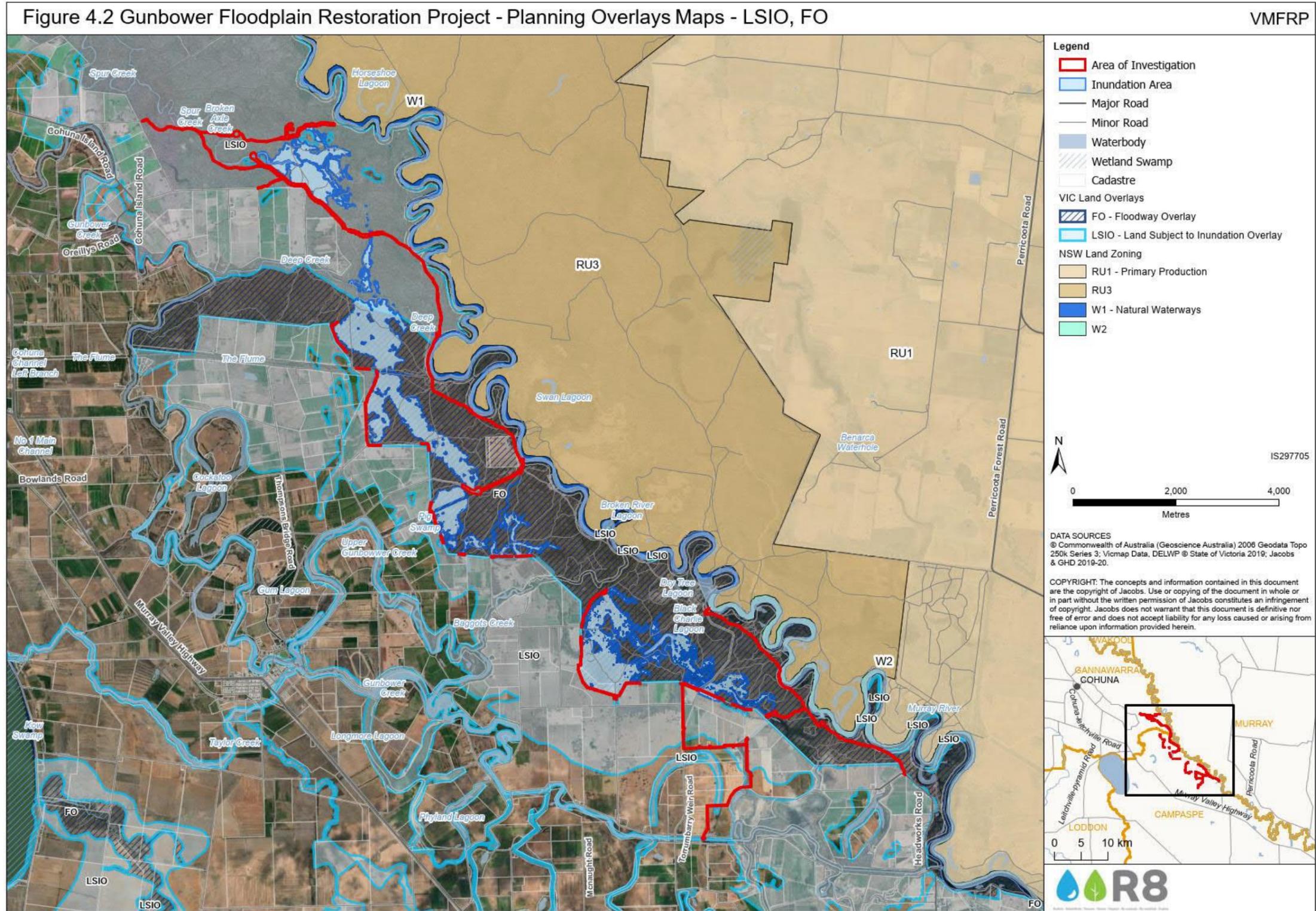


Figure 4.2: Planning Overlays: Land Subject to Inundation Overlay and Floodway Overlay

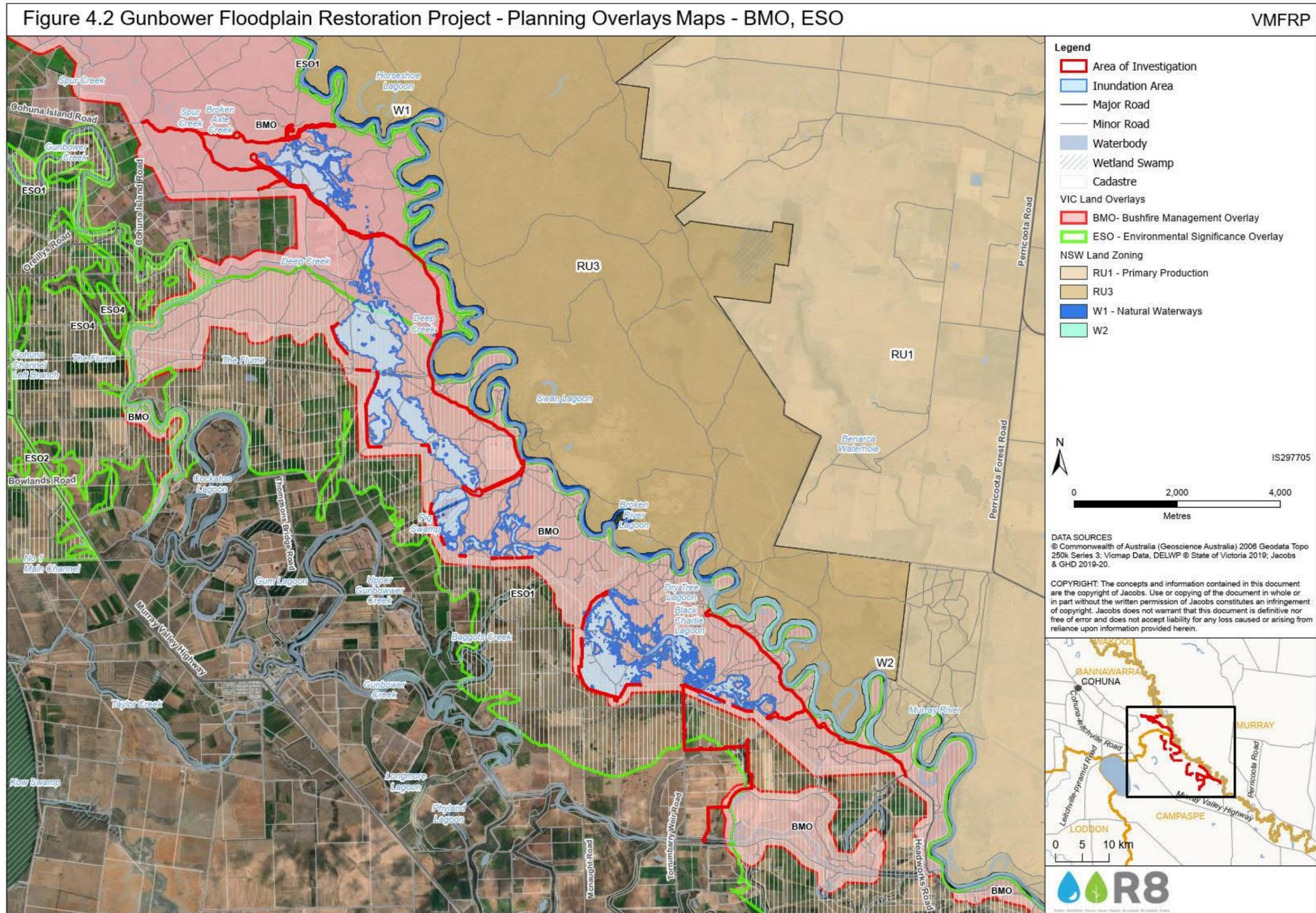


Figure 4.3: Planning Overlay: Environment Significance Overlay and Bushfire Management Overlay

Desktop Land Use Planning Assessment - Gunbower National Park Floodplain Restoration Project

Table 4.4 Purpose of zones and overlays

Relevant zone/overlay	Purpose	Project response
<p>Campaspe Planning Scheme and Gannawarra Planning Scheme Clause 36.03 Public Conservation and Resource Zone (PCRZ)</p>	<ul style="list-style-type: none"> ▪ To implement the Municipal Planning Strategy and the Planning Policy Framework. ▪ To protect and conserve the natural environment and natural processes for their historic, scientific, landscape, habitat or cultural values. ▪ To provide facilities which assist in public education and interpretation of the natural environment with minimal degradation of the natural environment or natural processes. ▪ To provide for appropriate resource-based uses. 	<p>The PCRZ covers the majority of the area of investigation and the proposed inundation area.</p> <p>The project is considered to be consistent with the purpose of the PCRZ "to protect and conserve the natural environment and natural processes".</p> <p>The aim of the project is to restore a more natural inundation regime to improve the ecological condition of high ecological value floodplain and anabranch habitats mostly located within national parks and natural features reserves that are managed primarily for conservation and recreational purposes by Parks Victoria.</p>
<p>Campaspe Planning Scheme Clause 35.07 Farming Zone (FZ)</p>	<ul style="list-style-type: none"> ▪ To implement the Municipal Planning Strategy and the Planning Policy Framework. ▪ To provide for the use of land for agriculture. ▪ To encourage the retention of productive agricultural land. ▪ To ensure that non-agricultural uses, including dwellings, do not adversely affect the use of land for agriculture. ▪ To encourage the retention of employment and population to support rural communities. ▪ To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision. ▪ To provide for the use and development of land for the specific purposes identified in a schedule to this zone. 	<p>Project works and inundation areas mostly avoid land zoned as Farming.</p> <p>The Camerons Creek Pipeline does however traverse boundaries of a small number of land parcels within the Farming Zone. Easements for the pipeline will need to be negotiated with landowners of the farming land. It is not expected that the pipeline works will affect use of the land.</p> <p>Areas of inundation are modelled to extend into several parcels of freehold land. Existing (and upgraded) levee banks are expected to manage this potential inundation into the Farming Zone. No inundation on privately-owned land will occur without prior consent with private land owners.</p> <p>The project can be operated to manage any inundation of privately-owned land within the FZ through existing and upgraded levee banks, and through control of the proposed regulating structures and pumping rates. Any inundation of privately-owned land within the FZ will only be undertaken in accordance with agreements with affected landowners. On this basis, the project is considered to be consistent with the purpose of the FZ in that managing inundation in accordance with landowner agreements should ensure that any current use of the land will not be adversely affected by the project.</p>
<p>Campaspe Planning Scheme Clause 42.01 Environmental Significance Overlay (Schedule 1 – Murray River Corridor) (ESO1)</p>	<ul style="list-style-type: none"> ▪ To implement the Municipal Planning Strategy and the Planning Policy Framework. ▪ To identify areas where the development of land may be affected by environmental constraints. ▪ To ensure that development is compatible with identified environmental values. <p><u>Schedule 1 Environmental objectives</u></p>	<p>The ESO1 covers the entire area of investigation of the Mid Gunbower (upstream) and Upper Gunbower areas. Due to the nature of their role in diverting, retaining and releasing floodwaters, construction of these proposed infrastructure components within the ESO1 is unavoidable. The location of some structures such as tracks and containment backs / levees are however is more flexible and would be located in areas of less impact.</p> <p>The project aims to restore a more natural inundation regime to improve the ecological condition of high ecological value floodplain and anabranch habitats, mostly located within national parks and nature features reserves that is managed for conservation and</p>

Desktop Land Use Planning Assessment - Gunbower National Park Floodplain Restoration Project

Relevant zone/overlay	Purpose	Project response
	<ul style="list-style-type: none"> ▪ To promote consistent planning and management along the Murray River corridor. ▪ To protect the environs of the Murray River recognising its importance for nature conservation, flooding, economic development, recreation and tourism ▪ To protect and enhance the biodiversity, ecological and cultural values of waterways. ▪ To prevent development of land adjoining the river from degrading water quality. ▪ To prevent the loss of riparian flora and fauna, biodiversity, habitat and wetland environments. ▪ To protect the values and role of the Murray River reserves and other public land as floodplains. ▪ To restrict inappropriate use and development on land adjoining and near the River ▪ To assess the use and development of land adjoining the Murray River corridor according to the capacity of the proposal to protect the environmental and landscape qualities of the River environs in accordance with sustainable development principles ▪ To specifically address land degradation processes including erosion, native vegetation decline, pollution of ground or surface water, groundwater accession, salinization and soil acidity, and adverse effects on the quality of land and water habitats 	<p>recreational purposes by Parks Victoria. As such, the project is considered to be consistent with the purpose and objectives of the ESO1, specifically those aiming to:</p> <ul style="list-style-type: none"> ▪ protect and enhance the natural environment and cultural heritage qualities of the Murray River and its anabranches ▪ protect and enhance the biodiversity, ecological, and cultural values of waterway, wetland and lake environments ▪ maintain the ability of waterways to carry natural flows ▪ protect and enhance the biodiversity, ecological, and cultural values of waterway, wetland and lake environments.
<p>Gannawarra Planning Scheme Clause 42.01 Environmental Significance Overlay (Schedule 1 – Waterway Environs)</p>	<p><u>Schedule 1 Environmental objectives</u></p> <ul style="list-style-type: none"> ▪ To maintain the quality and quantity of the water within the waterway. ▪ To protect and enhance the natural environment of the Murray River and its tributaries. ▪ To ensure that the use of the land and the construction and carrying out of any building and works in waterway environs are of a scale, character and form which is compatible with the high environmental quality of the waterway system and surrounds. ▪ To maintain the ability of streams and waterways to carry natural flows. ▪ To prevent erosion of banks, streambeds and adjoining land and the siltation of waterways, drains and other features. 	<p>The area of investigation intrudes into only a small part of the overlay where the access tracks to the Deep Creek Regulator are located. The construction footprint of the Deep Creek Regulator does not appear to fall under the ESO1 however the buffer area may be affected. As such, the project is considered to be consistent with the purpose and objectives of the Waterway Environs ESO.</p>

Desktop Land Use Planning Assessment - Gunbower National Park Floodplain Restoration Project

Relevant zone/overlay	Purpose	Project response
	<ul style="list-style-type: none"> ▪ To protect and encourage the long term future of flora and fauna habitats along waterways. ▪ To prevent pollution and increased turbidity of water in natural waterways. ▪ To prevent increased surface run-off or concentration of surface water run-off leading to erosion or siltation of waterways. ▪ To conserve existing wildlife habitats close to natural waterways and, where appropriate, to allow for generation and regeneration of habitats. ▪ To ensure that waterway environments maintain a volume, quality and seasonal pattern of water flow that conserves natural processes and conditions. 	
<p>Campaspe Planning Scheme Clause 44.03 Floodway Overlay</p>	<ul style="list-style-type: none"> ▪ To identify waterways, major floodpaths, drainage depressions and high hazard areas which have the greatest risk and frequency of being affected by flooding. ▪ To ensure that any development maintains the free passage and temporary storage of floodwater, minimises flood damage and is compatible with flood hazard, local drainage conditions and the minimisation of soil erosion, sedimentation and silting. ▪ To protect water quality and waterways as natural resources in accordance with the provisions of relevant State Environment Protection Policies, and particularly in accordance with Clauses 33 and 35 of the State Environment Protection Policy (Waters of Victoria). ▪ To ensure that development maintains or improves river and wetland health, waterway protection and flood plain health. 	<p>All works and inundation associated with the Upper Gunbower and Mid Gunbower (upstream) areas are located within a Floodway Overlay.</p> <p>The purpose of the project is to restore a more natural inundation regime to the creeks and wetland areas associated with the floodplain as well as provide controlled passage and storage of water without causing damage. Erosion measures are incorporated in the design of works. Improving floodplain health is the primary objective of the project.</p>
<p>Campaspe Planning Scheme and Gannawarra Planning Scheme Clause 44.04 Land Subject to Inundation Overlay (LSIO)</p>	<ul style="list-style-type: none"> ▪ To implement the Municipal Planning Strategy and the Planning Policy Framework ▪ To identify land in a flood storage or flood fringe area affected by the 1 in 100 year flood or any other area determined by the floodplain management authority. ▪ To ensure that development maintains the free passage and temporary storage of floodwaters, minimises flood damage, is compatible with the flood hazard and local drainage conditions and will not cause any significant rise in flood level or flow velocity. 	<p>The area of investigation associated with Mid Gunbower (downstream) is entirely located on land affected by the LSIO. Mid Gunbower (upstream) is not located within the LSIO with only the Camerons Creek Pipeline of Upper Gunbower within the overlay.</p> <p>The project aims to restore a more natural inundation regime to the creeks and wetland areas associated with the floodplain, including the installation of regulators to manage the frequency and duration of managed inundation events to more closely align with natural conditions. The project is designed to provide for erosion protection where necessary based on modelled flow velocities.</p> <p>The project is designed to facilitate changes to flood levels and velocities compared to existing conditions. As long as the works are operated in accordance with private and public</p>

Desktop Land Use Planning Assessment - Gunbower National Park Floodplain Restoration Project

Relevant zone/overlay	Purpose	Project response
<p>Campaspe Planning Scheme and Gannawarra Planning Scheme Clause 44.06 Bushfire Management Overlay (BMO)</p>	<ul style="list-style-type: none"> ▪ To implement the Municipal Planning Strategy and the Planning Policy Framework. ▪ To ensure that the development of land prioritises the protection of human life and strengthens community resilience to bushfire. ▪ To identify areas where the bushfire hazard warrants bushfire protection measures to be implemented. ▪ To ensure development is only permitted where the risk to life and property from bushfire can be reduced to an acceptable level. 	<p>land manager agreements and consents with affected land and infrastructure owners, the project should not pose a threat to the overall purpose of the LSIO.</p> <p>Almost the entire area of investigation falls within the BMO. Only sections of the Camerons Creek Pipeline lies outside the overlay area.</p> <p>The project does not conflict with the primary purpose of the BMO which is to minimise risk of bushfire to life and property. The project is consistent with the purpose of the BMO.</p>

4.4 Particular and general exemptions

Table 4.5 provides a summary of particular and general provision exemptions under both planning schemes that apply to works for the project.

Exemptions for use and development under Clause 62.01, Clause 62.02-1 and Clause 62.02-2 of the planning scheme do not apply to the majority of project components as they are located within the PCRZ but do apply to project components in the FZ.

There is some potential for small-scale exemptions listed in Clause 52.17-7 to apply to the removal, destruction or lopping of native vegetation for the project (e.g. regrowth, weeds, planted vegetation). Some wide-scale exemptions may also apply in relation to 'Conservation Work', 'Crown Land' and 'Utility Installations', however the application of these exemptions would require written agreement from the Secretary to DELWP.

Exemptions under 'Utility Installation' requires the works to be done by or on behalf of a utility service provider.

Clause 72 of the planning scheme defines utility service provider as:

A person, other than a public authority or municipal council, having responsibility under an Act for the generation, transmission, distribution or supply of electricity, gas, power, telecommunications, water supply, drainage and sewerage services.

All native vegetation removal must comply with the *Guidelines for the removal, destruction or lopping of native vegetation* (Department of Environment, Land, Water and Planning, 2017) (the Guidelines).

4.5 Zone and overlay exemptions

Table 4.6 identifies the relevant zone and overlay approval exemptions from each planning scheme that apply or may apply to the proposed project works.

Table 4.5: Approval exemptions

Relevant land use/activity	Clause of the planning scheme	Exemption	Relevant condition
Minor utility installation	Clause 62.01 Uses not Requiring a Permit	Use	Does not apply to use of land in the PCRZ.
Minor utility installation	Clause 62.02-1 Buildings and works not requiring a permit	Buildings and works/earthworks	Does not apply to buildings and works within the PCRZ.
Roadworks	Clause 62.02-2 Buildings and works not requiring a permit unless specifically required by the planning scheme	Buildings and works	Does not apply to buildings and works within the PCRZ.
Native vegetation	Clause 52.17-1 Permit requirement	Remove, destroy or lop native vegetation	If the table to Clause 52.17-7 specifically states that a permit is not required. To the removal, destruction or lopping of native vegetation specified in the schedule to this clause.
	Clause 52.17-2 Application requirements	Remove, destroy or lop native vegetation	An application to remove, destroy or lop native vegetation must comply with the application requirements specified in the <i>Guidelines for the removal, destruction or lopping of native vegetation</i> (DELWP, 2017)
	Clause 52.17-7 Table of exemptions	Remove, destroy or lop native vegetation	<p>Conservation work</p> <p>To the minimum extent necessary to enable the carrying out of conservation work:</p> <ul style="list-style-type: none"> Which provides and overall improvement for biodiversity; and With written agreement of the Secretary to the DELWP (as constituted under Part 2 of the Conservation, Forests and Lands Act 1987) <p>Crown land</p> <p>To the minimum extent necessary to manage Crown land:</p> <ul style="list-style-type: none"> By or on behalf of the Secretary to the DELWP (as constituted under Part 2 of the Conservation, Forests and Lands Act 1987), or Parks Victoria, and in accordance with the Procedure for the removal, destruction or lopping of native vegetation on Crown land; or With written permission from the Secretary to the DELWP (as constituted under Part 2 of the Conservation, Forests and Lands Act 1987). <p>Dead native vegetation</p> <p>Native vegetation that is dead. This exemption does not apply to a standing dead tree with a trunk diameter of 40 cm or more at a height of 1.3 m above ground level</p>

Relevant land use/activity	Clause of the planning scheme	Exemption	Relevant condition
			<p>Grasses Native grass that is to be mowed or slashed for maintenance only, provided that the grass is:</p> <ul style="list-style-type: none"> ▪ Located within a lawn, garden or other landscaped area; or ▪ Maintained at a height of at least 10 cm above ground level. <p>Lopping or pruning native vegetation, for maintenance only provided no more than 1/3 of the foliage of each individual plant is lopped or pruned. This exemption does not apply to:</p> <ul style="list-style-type: none"> ▪ The pruning or lopping of the trunk of a native tree; or ▪ Native vegetation on a roadside or railway reservation. <p><u>New buildings and works in the Farming Zone and Rural Activity Zone</u> Native vegetation that is to be removed, destroyed or lopped to the minimum extent necessary to enable the construction of a building or works used for Agricultural production, including a dam, utility service, bore and accessway, in the Farming Zone or the Rural Activity Zone. New buildings and works in the Farming Zone and Rural Activity Zone. The maximum extent of native vegetation that may be removed, destroyed or lopped under this exemption on contiguous land in the same ownership in a five year period must not exceed any of the following:</p> <ul style="list-style-type: none"> ▪ 1 ha of native vegetation which does not include a tree. ▪ 15 native trees with a trunk diameter of less than 40 cm at a height of 1.3 m above ground level. ▪ 5 native trees with a trunk diameter of 40 cm or more at a height of 1.3 m above ground level. <p>This exemption does not apply to the construction or operation of a pivot irrigation system or horticultural trellising.</p> <p>Pest animal burrows Native vegetation that is to be removed, destroyed or lopped to the minimum extent necessary to enable the removal of pest animal burrows in the Farming Zone or the Rural Activity Zone:</p> <ul style="list-style-type: none"> ▪ In accordance with written agreement of an officer of the department responsible for administering the Flora and Fauna Guarantee Act 1988; or ▪ Provided the maximum extent of native vegetation removed, destroyed or lopped on contiguous land in the same ownership in a five year period does not exceed any of the following: ▪ 1 ha of native vegetation which does not include a tree; or ▪ 15 native trees with a trunk diameter of less than 20 cm at a height of 1.3 m above ground level.

Relevant land use/activity	Clause of the planning scheme	Exemption	Relevant condition
			<p>Planted vegetation Native vegetation that is to be removed, destroyed or lopped that was either planted or grown as a result of direct seeding. This exemption does not apply to native vegetation planted or managed with public funding for the purpose of land projection or enhancing biodiversity unless the removal, destruction or lopping of the native vegetation is in accordance with written permission of the agency (or its successor) that provided the funding.</p> <p>Regrowth Native vegetation this is to be removed, destroyed or lopped that has naturally established or regenerated on land lawfully cleared of naturally established native vegetation, and is:</p> <ul style="list-style-type: none"> ▪ Less than 10 years old; or ▪ Bracken (<i>Pteridium esculentum</i>); or ▪ Within the boundary of a timber production plantation, as indicated on a Plantation Development Notice or other documented record, and has established after the plantation; or ▪ Less than ten years old at the time of a property vegetation plan being signed by the Secretary to the DELWP (as constituted under Part 2 of the Conservation Forests and Lands Act 1987), and is: <ul style="list-style-type: none"> ▪ Shown on that plan as being 'certified regrowth'; and ▪ On land that is to be used or maintained for cultivation or pasture during the term of that plan. <p>This exemption does not apply to land where native vegetation has been destroyed or otherwise damaged as a result of flood, fire or other natural disasters.</p> <p>Road Safety Native vegetation that is to be removed, destroyed or lopped to the minimum extent necessary by and on behalf of a public authority or municipal council to maintain the safe and efficient function of an existing road in accordance with the written agreement of the Secretary to the DELWP (as constituted under Part 2 of the <i>Conservation, Forests and Lands Act 1987</i>).</p> <p>Site area Native vegetation that is to be removed, destroyed or lopped on land, together with all contiguous land in one ownership, which has an area of less than 0.4 ha. This exemption does not apply to native vegetation on a roadside or rail reservation.</p> <p>Surveying</p>

Relevant land use/activity	Clause of the planning scheme	Exemption	Relevant condition
			<p>Native vegetation that is to be removed, destroyed or lopped to the minimum extent necessary by, or on behalf of, a licenced surveyor (with the meaning of section 3 of the Surveying At 2004) using hand-held tools to establish a sightline for the measurement of land.</p> <p>Traditional owners Native vegetation that is to be removed, destroyed or lopped by a person acting under, and in accordance with:</p> <ul style="list-style-type: none"> ▪ A natural resource agreement under Part 6 of the <i>Traditional Owner Settlement Act 2010</i>; or ▪ An authorisation order made under sections 82 or 84 of the <i>Traditional Owner Settlement Act 2010</i> as those sections were in force immediately before the commencement of section 24 of the <i>Traditional Owner Settlement Amendment Act in 2016</i> (1 May 2017). <p>Utility Installations Native vegetation that is to be removed, destroyed or lopped to the minimum extent necessary:</p> <ul style="list-style-type: none"> ▪ To maintain the safe and efficient function of a Minor Utility Installation; or ▪ By or on behalf of a utility service provider to maintain or construct a utility installation in accordance with the written agreement of the Secretary to the DELWP (as constituted under Part 2 of the <i>Conservation, Forests and Lands Act 1987</i>). <p>Vehicle access from public roads</p> <ul style="list-style-type: none"> ▪ Native vegetation that is to be removed, destroyed or lopped to the minimum extent necessary to enable the construction or maintenance of a vehicle access across a road reserve from a property boundary to a public road. ▪ This exemption only applies to properties which share a common boundary with the road reserve, and the total width of clearing must not exceed 6m. ▪ This exemption does not apply where there is a practical opportunity to site the accessway to avoid the removal, destruction or lopping of native vegetation. ▪ In this exemption, roadside and public road have the same meanings as in section 3 of the <i>Road Management Act 2004</i>. ▪ <i>Note: Under the Road Management Act 2004, the written consent of the coordinating road authority is required to conduct any works, including removing a tree or other vegetation, in, on, under or over a road.</i> <p>Weeds</p>

Relevant land use/activity	Clause of the planning scheme	Exemption	Relevant condition
			<p>Native vegetation that is to be removed, destroyed or lopped to the minimum extent necessary to enable the removal or destruction of a weed listed in the schedule to Clause 52.17.</p> <p>The maximum extent of native vegetation that may be removed, destroyed or lopped under this exemption on contiguous land in the same ownership in a five year period must not exceed any of the following:</p> <ul style="list-style-type: none"> ▪ 1 hectare of native vegetation which does not include a tree. ▪ 15 native trees with a trunk diameter of less than 20 cm at a height of 1.3 m above the ground level.

Table 4.6: Zone and overlay exemptions

Relevant Zone / Overlay	Exemption	Relevant condition
Campaspe Planning Scheme		
Clause 36.03 Public Conservation and Resource Zone (PCRZ) Clause 36.03-2 Permit requirement	Buildings and works	<p>A building or works shown in an Incorporated plan which applies to the land.</p> <p>A building or works specified in Clause 62.02-1 or 62.02-2 carried out by or on behalf of a public authority or municipal council, if the public authority or municipal council is carrying out functions, powers or duties conferred by or under the <i>Local Government Act 1989</i>, the <i>Reference Areas Act 1978</i>, the <i>National Parks Act 1975</i>, the <i>Fisheries Act 1995</i>, the <i>Wildlife Act 1975</i>, the <i>Forests Act 1958</i>, the <i>Water Industry Act 1994</i>, the <i>Water Act 1989</i>, the <i>Marine Act 1988</i>, the <i>Port of Melbourne Authority Act 1958</i> or the <i>Crown Land (Reserves) Act 1978</i>.</p> <p>A building or works carried out by or on behalf of a public land manager or Parks Victoria under the <i>Local Government Act 1989</i>, the <i>Reference Areas Act 1978</i>, the <i>National Parks Act 1975</i>, the <i>Fisheries Act 1995</i>, the <i>Wildlife Act 1975</i>, the <i>Forests Act 1958</i>, the <i>Water Industry Act 1994</i>, the <i>Water Act 1989</i>, the <i>Marine Act 1988</i>, the <i>Port of Melbourne Authority Act 1958</i> or the <i>Crown Land (Reserves) Act 1978</i>.</p>
Clause 32.07 Farming Zone (FZ1) Clause 32.07-1 Table of uses, Section 1 Permit not required	Use (minor utility installation)	Any use listed in Clause 62.01
Clause 35.07 Farming Zone (FZ1) Clause 35.07-4 Buildings and works	Buildings and works (earthworks)	Earthworks specified in a schedule to this zone, if on land in a schedule (see below).
Schedule 1 to the Farming Zone	Buildings and works for a use in Section 2 of Clause 35.07-1	Minimum setback from a road (metres) <ul style="list-style-type: none"> ▪ 100 m from a Road Zone Category 1 or land within a Public Acquisition Overlay to be acquired for a road, Category 1.

Relevant Zone / Overlay	Exemption	Relevant condition
		<ul style="list-style-type: none"> 40 m from a Road Zone Category 2 or land within a Public Acquisition Overlay to be acquired for a road, Category 2 20 m from any other road
Schedule 1 to the Farming Zone	Buildings and works (earthworks)	<p>Permit required for the following earthworks on all land, excluding earthworks carried out in accordance with an approved whole farm plan:</p> <ul style="list-style-type: none"> Earthworks which change the rate of flow or the discharge point of water across a property boundary Earthworks which increase the discharge of saline groundwater.
Clause 42.01 Environmental Significance Overlay (ESO1) Clause 42.01-2 Permit requirement	Buildings and works	If a schedule to this overlay specifically states that a permit is not required (see below for Schedule 1 to the Environmental Significance Overlay).
	Remove, destroy or lop any vegetation, including dead vegetation	If a schedule to this overlay specifically states that a permit is not required (no exemptions apply in Schedule 1 to the Environmental Significance Overlay).
		If the table to Clause 42.01-3 specifically states that a permit is not required (see below for Table of exemptions to Clause 42.01-3) To the removal, destruction or lopping of native vegetation in accordance with a native precinct plan specified in the schedule to Clause 52.16 (No precinct plan specified in the Schedule to Clause 52.16)
Schedule 1 to the Environmental Significance Overlay – Murray River Corridor Clause 3.0 Permit requirement	Buildings and works	<ul style="list-style-type: none"> A pump shed Open type fencing (not including solid fences such as wooden or metal paling fences, cyclone mesh fences or brick, stone or concrete wall) Roadworks carried out by a public authority
Clause 42.01 Environmental Significance Overlay (ESO1) Clause 42.01-3 Table of exemptions	Remove, destroy or lop any vegetation, including dead vegetation	<u>Noxious weeds</u> Vegetation that is a noxious weed subject of a declaration under section 58 or section 58A of the Catchment and Land Protection Act 1994. This exemption does not apply to the Australian Dodder (<i>Cuscuta australis</i>).
		<u>Pest animal burrows</u> Vegetation that is to be removed, destroyed or lopped to the minimum extent necessary to enable the removal of pest animal burrows. In the case of native vegetation the written agreement of an officer of the department responsible for administering the <i>Flora and Fauna Guarantee Act 1988</i> is required before the vegetation can be removed, destroyed or lopped.
		<u>Planted vegetation</u>

Relevant Zone / Overlay	Exemption	Relevant condition
		<p>Vegetation that is to be removed, destroyed or lopped that was either planted or grown as a result of direct seeding for Crop raising or Grazing animal production.</p> <p><u>Regrowth</u> Vegetation that is to be removed, destroyed or lopped that has naturally established or regenerated on land lawfully cleared of naturally established vegetation, and is:</p> <ul style="list-style-type: none"> ▪ Bracken (<i>Pteridium esculentum</i>) <p>This exemption does not apply to land on which vegetation has been destroyed or otherwise damaged as a result of flood, fire or other natural disaster.</p> <p><u>Road safety</u> Vegetation that is to be removed, destroyed or lopped to the minimum extent necessary by or on behalf of a public authority of municipal council to maintain the safe and efficient function of an existing public road in accordance with the written agreement of the Secretary to DELWP (as constituted under Part 2 of the <i>Conservation, Forests and Lands Act 1987</i>).</p> <p><u>Surveying</u> Vegetation that is to be removed, destroyed or lopped to the minimum extent necessary by, or on behalf of, a licenced surveyor (within the meaning of section 3 of the <i>Surveying Act 2004</i>) using hand-held tools to establish a sightline for the measurement of land.</p>
<p>Clause 44.03 Floodway Overlay (FO) Clause 44.03-2 Buildings and works</p>	<p>Buildings and works</p>	<ul style="list-style-type: none"> ▪ If a schedule to the overlay specifically states that a permit is not required (see Schedule to the Floodway Overlay below). ▪ To flood mitigation works carried out by the responsible authority or floodplain management authority.
<p>Clause 44.03 Floodway Overlay (FO) Schedule to Clause 44.03 Floodway Overlay</p>	<p>Buildings and works</p>	<ul style="list-style-type: none"> ▪ A pump shed ▪ An accessway constructed at general natural surface elevations ▪ Roadworks carried out by a public authority ▪ Earthworks/dam in accordance with the Earthworks Controls in the Shire of Campaspe, City of Greater Shepparton and Moira Shire – August 2010 at Clause 81 and approved by the responsible authority and the floodplain management authority.
<p>Clause 44.04 Land Subject to Inundation Overlay (LSIO) 44.04-2 Buildings and works</p>	<p>Buildings and works</p>	<p>If a schedule to this overlay specifically states that a permit is not required (see Schedule to the Land Subject to Inundation Overlay below).</p> <p>To flood mitigation works carried out by the responsible authority or floodplain management authority.</p>

Relevant Zone / Overlay	Exemption	Relevant condition
Clause 44.04 Land Subject to Inundation Overlay (LSIO) Schedule to the Land Subject to Inundation Overlay 1.0 Permit requirement	Buildings and works	<ul style="list-style-type: none"> A pump shed An accessway constructed at general natural surface elevations Roadworks carried out by a public authority Earthworks/dam in accordance with the Earthworks Controls in the Shire of Campaspe, City of Greater Shepparton and Moira Shire – August 2010 at Clause 81 and approved by the responsible authority and the floodplain management authority.
Clause 44.06 Bushfire Management Overlay 44.06-2 Permit requirement	Buildings and works	<ul style="list-style-type: none"> If a schedule to this overlay specifically states that a permit is not required A building or works consistent with an agreement under Section 173 of the Act prepared in accordance with a condition of permit issued under the requirements of Clause 44.06-5. An alteration or extension to an existing building (excluding a dwelling and a dependent person's unit) that is less than 10 % of the gross floor area of the existing building.
Gannawarra Planning Scheme		
Clause 36.03 Public Conservation and Resource Zone (PCRZ) Clause 36.03-2 Permit requirement	Buildings and works	<p>A building or works shown in an Incorporated plan which applies to the land.</p> <p>A building or works specified in Clause 62.02-1 or 62.02-2 carried out by or on behalf of a public authority or municipal council, if the public authority or municipal council is carrying out functions, powers or duties conferred by or under the <i>Local Government Act 1989</i>, the <i>Reference Areas Act 1978</i>, the <i>National Parks Act 1975</i>, the <i>Fisheries Act 1995</i>, the <i>Wildlife Act 1975</i>, the <i>Forests Act 1958</i>, the <i>Water Industry Act 1994</i>, the <i>Water Act 1989</i>, the <i>Marine Act 1988</i>, the <i>Port of Melbourne Authority Act 1958</i> or the <i>Crown Land (Reserves) Act 1978</i>.</p> <p>A building or works carried out by or on behalf of a public land manager or Parks Victoria under the <i>Local Government Act 1989</i>, the <i>Reference Areas Act 1978</i>, the <i>National Parks Act 1975</i>, the <i>Fisheries Act 1995</i>, the <i>Wildlife Act 1975</i>, the <i>Forests Act 1958</i>, the <i>Water Industry Act 1994</i>, the <i>Water Act 1989</i>, the <i>Marine Act 1988</i>, the <i>Port of Melbourne Authority Act 1958</i> or the <i>Crown Land (Reserves) Act 1978</i>.</p>
Clause 42.01 Environmental Significance Overlay (ESO1) Clause 42.01-2 Permit requirement	Buildings and works	If a schedule to this overlay specifically states that a permit is not required. (see schedule to the Environmental Significance Overlay below).
	Remove, destroy or lop any vegetation, including dead vegetation	<p>If a schedule to this overlay specifically states that a permit is not required (no exemptions apply in Schedule 1 to the Environmental Significance Overlay)</p> <p>If the table to Clause 42.01-3 specifically states that a permit is not required (see below for Table of exemptions to Clause 42.01-3)</p> <p>To the removal, destruction or lopping of native vegetation in accordance with a native precinct plan specified in the schedule to Clause 52.16 (No precinct plan specified in the Schedule to Clause 52.16)</p>

Relevant Zone / Overlay	Exemption	Relevant condition
<p>Schedule 1 to the Environmental Significance Overlay – Waterway environs Clause 3.0 Permit requirement</p>	<p>Buildings and works</p>	<ul style="list-style-type: none"> ▪ Any buildings or works located more than 100 m from the bank of the waterway, drainage line or channel. ▪ Repairs and routine maintenance to existing buildings and works ▪ Works undertaken by a public authority to: <ul style="list-style-type: none"> ▪ Regulate flooding ▪ Construct or redirect a waterway ▪ Buildings or works associated with a minor utility installation or passive recreation
<p>Clause 42.01 Environmental Significance Overlay Clause 42.01-3 Table of exemptions</p>	<p>Remove, destroy or lop any vegetation, including dead vegetation</p>	<p><u>Noxious weeds</u> Vegetation that is a noxious weed subject of a declaration under section 58 or section 58A of the Catchment and Land Protection Act 1994. This exemption does not apply to the Australian Dodder (<i>Cuscuta australis</i>).</p> <p><u>Pest animal burrows</u> Vegetation that is to be removed, destroyed or lopped to the minimum extent necessary to enable the removal of pest animal burrows. In the case of native vegetation the written agreement of an officer of the department responsible for administering the <i>Flora and Fauna Guarantee Act 1988</i> is required before the vegetation can be removed, destroyed or lopped.</p> <p><u>Planted vegetation</u> Vegetation that is to be removed, destroyed or lopped that was either planted or grown as a result of direct seeding for Crop raising or Grazing animal production.</p> <p><u>Regrowth</u> Vegetation that is to be removed, destroyed or lopped that has naturally established or regenerated on land lawfully cleared of naturally established vegetation, and is: <ul style="list-style-type: none"> ▪ Bracken (<i>Pteridium esculentum</i>) This exemption does not apply to land on which vegetation has been destroyed or otherwise damaged as a result of flood, fire or other natural disaster.</p> <p><u>Road safety</u> Vegetation that is to be removed, destroyed or lopped to the minimum extent necessary by or on behalf of a public authority of municipal council to maintain the safe and efficient function of an existing public road in accordance with the written agreement of the Secretary to DELWP (as constituted under Part 2 of the <i>Conservation, Forests and Lands Act 1987</i>).</p> <p><u>Surveying</u></p>

Relevant Zone / Overlay	Exemption	Relevant condition
		Vegetation that is to be removed, destroyed or lopped to the minimum extent necessary by, or on behalf of, a licenced surveyor (within the meaning of section 3 of the <i>Surveying Act 2004</i>) using hand-held tools to establish a sightline for the measurement of land.
Clause 44.04 Land Subject to Inundation Overlay 44.04-2 Buildings and works	Buildings and works	If a schedule to this overlay specifically states that a permit is not required (see Schedule to the Land Subject to Inundation Overlay below). To flood mitigation works carried out by the responsible authority or floodplain management authority.
Schedule to the Land Subject to Inundation Overlay 1.0 Permit requirement	Buildings	A single non-habitable agricultural building with a floor area less than 200 square metres Open type fencing (not including solid fences such as wooden or metal paling fences, cyclone mesh fences or brick, stone or concrete walls)
	Works (earthworks)	Earthworks that do not raise ground level topography by more than 300 mm. Earthworks greater than 300 mm in height created during the construction of a dam of less than 3000 cubic metres capacity
Clause 44.06 Bushfire Management Overlay 44.06-2 Permit requirement	Buildings and works	If a schedule to this overlay specifically states that a permit is not required

4.6 Planning triggers

Table 4.7 and Table 4.8 identifies the planning approval triggers for the project under the Campaspe Planning Scheme and Gannawarra Planning Scheme. Relevant exemptions identified in report sections 4.4 and 4.5 may apply.

Table 4.7: Summary of potential planning permit triggers, Campaspe Planning Scheme

Campaspe Planning Scheme	Planning approval trigger (Y/N/NA)		
	Use	Buildings and works	Vegetation removal
Planning control			
Clause 36.03 Public Conservation and Resource Zone (PCRZ)	Y	Y	NA
Clause 35.07 Farming Zone (FZ1)	Y	Y	NA
Overlays			
Clause 42.01 Environmental Significance Overlay (Schedule 1 - Murray River Corridor) (ESO1)	NA	Y	Y
Clause 44.03 Floodway Overlay (Schedule to clause 44.03 Floodway Overlay) (FO)	NA	Y	N
Clause 44.04 Land Subject to Inundation Overlay (Schedule to the Land Subject to Inundation Overlay) (LSIO)	NA	Y	N
Clause 44.06 Bushfire Management Overlay (BMO)	NA	N	N
Particular provisions			
Clause 52.17 Native Vegetation	NA	NA	Y

Table 4.8: Summary of Potential Planning Triggers, Gannawarra Planning Scheme

Gannawarra Planning Scheme	Planning approval trigger (Y/N/NA)		
	Use	Buildings and works	Vegetation removal
Planning control			
Clause 36.03 Public Conservation and Resource Zone (PCRZ)	Y	Y	NA
Overlays			
Clause 42.01 Environmental Significance Overlay (Schedule 1 - Waterway Environs) (ESO1)	NA	N	Y
Clause 44.04 Land Subject to Inundation Overlay (Schedule to the Land Subject to Inundation Overlay) (LSIO)	NA	Y	N
Clause 44.06 Bushfire Management Overlay (BMO)	NA	N	N
Particular provisions			
Clause 52.17 Native Vegetation	NA	NA	Y

In accordance with the triggers identified in Table 4.7 and Table 4.8, the project will require planning approval in relation to;

- Use
- Buildings and works, including earthworks
- Removal, destruction or lopping of native vegetation, and
- Removal, destruction or lopping of any vegetation, including dead vegetation in ESO1.

Clause 36.03 (Public Conservation and Resource Zone)

A planning permit is required for:

- Use as a utility installation (including minor utility installation) in accordance with Clause 36.03-1 Table of Uses of the Public Conservation and Resource Zone. The use does not meet the Section 1 (Permit not required) condition requiring the work to be conducted by or on behalf of a public land manager or Parks Victoria. It therefore falls into a Section 2¹ use triggering a planning permit.
- Buildings and works for a utility installation in the PCRZ triggered under Clause 36.03-2 as the proposed use does not meet the exemption condition for this use requiring the buildings and works to be conducted by or on behalf of a public land manager or Parks Victoria. However, no planning approval is required for buildings and works associated with a minor utility installation and roadworks, or any other buildings and works specified in Clause 62.02-1 or Clause 62.02-2 in the PCRZ, as the proposed works will be undertaken by a public authority (i.e. LMW) carrying out its functions under the *Water Act 1989*.

Clause 35.07 (Farming Zone)

Planning approval will be required for:

- Use of land for a utility installation in the FZ as it is specified as a Section 2 (Permit required) use in Clause 35.07-1. Planning approval will not be required for the use of land for a minor utility installation in the FZ in accordance with the general exemption in Clause 62.01 (Uses not requiring a permit).
- Building and works for a utility installation in the FZ under Clause 35.07-4 as a utility installation is a Section 2 use and no relevant exemptions apply. Planning approval will not be required for buildings and works for a minor utility installation in the FZ in accordance with the general exemption in Clause 62.02-1.
- Buildings and works for earthworks in the FZ under Clause 35.07-4 if the earthworks will change the rate of flow or the discharge point of water across a property boundary or increase the discharge of saline groundwater

Clause 42.01 (Environmental Significance Overlay)

Planning approval will be required for:

- Building and works and vegetation removal in the ESO1 under Clause 42.01-2 unless an exemption in Schedule 1 to this overlay applies. Most relevantly under Schedule 1 of Clause 42.01 of the Gannawarra Planning Scheme, no planning approval will be required for buildings and works in the ESO1 associated with a minor utility installation or the removal, works undertaken by a public authority, including public roads and water authority works. As the works are considered public works this exemption applies. This exemption does not apply under the Campaspe Planning Scheme. A permit is required for works associated with a utility installation and for vegetation removal under the ESO1.

Clause 44.04 (Floodway Overlay)

Planning approval will be required for:

- Building and works in the FO under Clause 44.03-2 unless an exemption in the schedule to this overlay applies. The only exemption would be for construction of a pump shed. The proposed works are not considered as flood mitigation works.

Clause 44.04 (Land Subject to Inundation Overlay)

Planning approval will be required for:

- Building and works in the LSIO under Clause 44.04-2 unless an exemption in the schedule to this overlay applies. There are no exemptions under the schedule.

Clause 44.06-1 (Bushfire Management Overlay)

¹ 'Utility installation' is not described as 'Any other use not in Section 2 or 3' under Section 3 Prohibited use as it is listed separately in Section 1 of the use table.

Planning approval will be required for:

- Building and works for uses listed in the BMO under Clause 44.06-2 unless an exemption in the schedule to this overlay applies. The proposed use associated with the works is not listed under Clause 44.06-2 and there are no exemptions in the schedule that apply to the works.

Clause 52.17 (Native Vegetation)

Planning approval will be required:

- To remove, destroy or lop native vegetation under Clause 52.17 unless all native vegetation to be removed, destroyed or lopped is subject to an exemption. An exemption from planning approval for all native vegetation impacted by the project would only be available if the written agreement of the Secretary to the DELWP (as constituted under Part 2 of the *Conservation, Forests and Lands Act 1987*) is obtained in relation to the conservation work or utility installation exemption.

4.7 Referral requirements

Referral to a determining referral authority² and/or recommending referral authority³ may be required.

Table 4.9 lists the referral and notice requirements that apply to the works in accordance with the relevant provisions of the planning schemes, and what this means for the planning approvals process.

Table 4.9: Referral and Notice Requirements

Planning controls	Notice and referral requirements	Referral body
Clause 42.01 Environmental Significance Overlay (ESO1)	An application for removal or destruction of native vegetation	Secretary to the DELWP as a determining referral authority
Clause 3.0 of Schedule 2 to Clause 42.01 (ESO)	All applications	Coliban Water as a determining referral authority
Clause 42.01 Schedule 1 or the Environmental Significance Overlay (ESO1)	<ul style="list-style-type: none"> 100 m of the Murray River (Goulburn Murray Water) 	Goulburn Murray Water and DELWP as determining referral authorities
4.0 Referral of permit applications	<ul style="list-style-type: none"> 50 m of any public land managed by the Department of Sustainability and Environment (now DELWP) 	DELWP as a determining referral authority
Clause 44.03 Floodway Overlay (FO)	An application under the overlay outside the waterway management district of Melbourne Water Corporation	North Central CMA as a recommending referral authority
Clause 44.04 Land Subject to Inundation Overlay (LSIO)	An application must be referred to the relevant floodplain management authority under Section 55 of the Act ⁴ unless in the opinion of the responsible authority, the proposal satisfies requirements or conditions previously agreed in writing between the responsible authority and the floodplain management authority.	North Central CMA as a recommending referral authority
Clause 44.06 Bushfire Management Overlay (BMO)	An application to be referred under Clause 66.03 of the planning scheme referring to an application other than an application to	Country Fire Authority as a determining referral authority

² Determining referral authority: If a determining referral authority objects then the responsible authority must refuse to grant a permit, and if a determining referral authority specifies conditions, those conditions must be included in any permit granted.

³ A responsible authority must consider the recommending referral authority's advice but is not obliged to refuse the application or to include any recommended conditions.

⁴ In this case The Act refers to the *Planning and Environment Act 1987*.

Planning controls	Notice and referral requirements	Referral body
	construct a building or carry out works associated with a dwelling.	
<i>Particular provisions</i>		
Clause 52.17 Native Vegetation	In accordance with Section 52(1)(c) of the Act, notice of an application to remove, destroy or lop native vegetation under Clause 52.17 of this scheme.	Secretary to DELWP as a recommending referral authority
Clause 66.02-2 Native vegetation	An application must be referred to the Secretary to DELWP to: <ul style="list-style-type: none"> ▪ Remove, destroy or lop native vegetation in the Detailed Assessment Pathway as defined in the guidelines for the removal, destruction or lopping of native vegetation (DELWP 2017). ▪ Remove, destroy or lop native vegetation if a property vegetation plan applies to the site. ▪ Remove, destroy or lop native vegetation on Crown land which is occupied or managed by the responsible authority. 	Secretary to the DELWP (as constituted under Part 2 of the <i>Conservation, Forests and Lands Act 1987</i>) as a recommending referral authority
Clause 67.03 Notice Requirements – Native Vegetation	Notice on an application for a permit to remove, destroy or lop native vegetation under Clause 52.17, which, except for the provisions of Clause 67, would be made to the Minister in accordance with section 96 of the Act. This does not apply if the application is of a kind which must be referred to the Secretary under section 55 of the Act.	The Secretary to the DELWP administering the <i>Flora and Fauna Guarantee Act 1988</i> .

4.8 Incorporated documents

The following documents incorporated at Clause 72.04 of the Campaspe Planning Scheme are likely to be relevant to the planning, design and operation of the project:

- Apiary Code of Practice, May 2011
- Construction Techniques for Sediment Pollution Control, Environment Protection Authority, May 1991
- Code of Practice for Bushfire Management on Public Land, 2012
- Guidelines for the removal, destruction or lopping of native vegetation (DELWP, 2017)
- Local Government Planning Guide for Dry Land Salinity - Department Conservation and Natural Resources, 1995

The following documents incorporated at Clause 72.04 of the Gannawarra Planning Scheme are likely to be relevant to the planning, design and operation of the project:

- Apiary Code of Practice, May 2011
- Building in Bushfire prone areas – CSIRO & Standards Australia (SAA HB36-1993), May 1993
- Code of Practice for Bushfire Management on Public Land, 2012
- Construction Techniques for Sediment Pollution Control, Environment Protection Authority, May 1991

4.9 Other relevant strategies and policies

A review of relevant regional strategies that apply to the area of investigation is provided in Table 4.10. Key messaging of these strategies/policies are relevant to future land use planning for the region.

Table 4.10: Relevant regional strategies

Regional strategy	Purpose	Relevant messages
Shire of Campaspe Environment Strategy 2018-22	<p>To describe the environmental programs that Council engages in and aligns with state government direction.</p> <p>Documents Council's commitment to voluntary environmental management (activities Council chooses to do)</p> <p>Focuses on Conservation, Climate change adaptation and mitigation, community engagement and partnerships and Council responsibilities</p>	<p>Council has responsibilities to protect and maintain water quantity and quality. Water security for the agricultural sector remains a key issue.</p> <p>Council adopts the practice of Integrated Water Management to describe the collaborative approach to planning that brings together the elements of the water cycle. It considered environmental, economic and social benefits.</p> <p>Council recognises the importance of effective management of public land, including road reserves, parks, bushland reserves and recreation spaces.</p>
North Central Regional Floodplain Management Strategy, 2018 - 2028	<p>To provide a regional planning document for floodplain management within the North Central CMA region and a high-level Regional Work Plan to guide future investment.</p>	<p>A main priority is to construct a new flood mitigation infrastructure, resolving ownership and maintenance accountabilities, and improving floodplain options.</p> <p>The vision of the strategy is to manage floodplains and waterways sustainably to protect and enhance their diversity and ecological function while also supporting the regional community's recreational use.</p>
North Central Waterway Strategy 2014-2022	<p>To provide an integrated strategy for managing and improving the region's waterways (rivers, streams and wetlands)</p>	<p>Gunbower National Park is identified as 'Priority Wetlands' of the strategy. Part of the Gunbower Program Area which specifies the following relevant long-term Resource Condition Management Outcome Targets:</p> <ul style="list-style-type: none"> ▪ Removal of willows to improve in-stream habitat and bank stability ▪ Improve vegetation structure and diversity ▪ Increase landholder skills and awareness in riparian management practices ▪ Monitoring of fish populations through partnerships with angling clubs
DRAFT North Central CMA Regional Catchment Strategy (for consultation)	<p>To provide a long-term vision for Natural Resource Management of its assets within the North Central Catchment Management Authority region. Provide a framework for integrated and co-ordinated management of its catchments to maintain and enhance biodiversity, land and water</p>	<p>The Gunbower National Park is a Ramsar wetland and identified as part of 'Wetland' assets under the strategy, protected for nature conservation with a bioregion conservation status considered as 'presumed extinct'.</p> <p>The CMA region is projected to see significant population growth in townships along the Calder Freeway corridor and the Murray River, bringing challenges on how to balance urban growth and environmental protection. There has been a population shift away from agricultural areas towards provincial towns with Rural living or small hobby farms increasing in numbers.</p>

Regional strategy	Purpose	Relevant messages
		<p>The following key impacts of this shift are recognised:</p> <ul style="list-style-type: none"> ▪ Increased salinity levels ▪ Changed vegetation structure and species composition ▪ Reduced regeneration of native vegetation ▪ Reduced input of organic matter and structural woody habitat to rivers ▪ Reduction or loss of floodplain linkages ▪ Disrupted longitudinal and lateral linkages to waterways ▪ Changes in flow patterns leading to loss of biological cues for aquatic species, reduced linkages, changes to habitat availability and changed geomorphic processes. <p>The strategy identifies the need to consider the implications of climate change on environmental, economic and social values of the region.</p> <p>The strategy identifies the need to work with regional local councils to ensure better alignment of objectives with local government planning.</p>
<p>North Central CMA Regional Catchment Strategy 2013-19</p>	<p>To provide a long-term vision for Natural Resource Management of its assets within the North Central Catchment Management Authority region. Provide a framework for integrated and co-ordinated management of its catchments to maintain and enhance biodiversity, land and water</p>	<p>The Gunbower National Park is identified as part of 'Wetland' assets under the strategy, protected for nature conservation with a bioregion conservation status considered as 'presumed extinct'. The Forests exist in a region that is agriculturally diverse with extensive areas of irrigation. Rural living is an emerging and expanding land use. Focus on the development of Regional Growth Plans for the area.</p>

5. NSW planning framework

5.1 NSW Environmental Planning and Assessment Act 1979

Development in NSW is assessed in accordance with the provisions of the NSW *Environmental Planning and Assessment Act 1979* (NSW EP&A Act) and the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation). The EP&A Act institutes a system for environmental assessment, including approvals and environmental impact assessment for proposed developments. The need or otherwise for development control is set out in environmental planning instruments. The key environmental planning instruments that are relevant to the proposed works are discussed below and indicate that the project is permissible with the development consent of the Murray River Council under clause 126A of the State Environmental Planning Policy (Infrastructure) 2007. It therefore requires approval under Part 4 of the EP&A Act and a Statement of Environmental Effects must be submitted as part of the development application.

Integrated development

Under section 4.46 of the EP&A Act, development that requires both development consent and one or more listed approvals or licences is 'integrated development'. This proposal is classified as integrated development as the project requires a permit under section 201 of the *Fisheries Management Act 1994* (refer to section 2.3) in addition to development consent under the EP&A Act. The EP&A Act provides that, upon receipt of an application for integrated development, copies of the application must be forwarded by the consent authority to each 'approval body'. The integrated approval bodies will review the development application and Statement of Environmental Effects and advise the consent authority whether they will grant the relevant approval or licence and identify any general terms of approval. Any development consent granted must be in accordance with the general terms of approval given by the integrated approval bodies.

5.2 State environmental planning policies

5.2.1 State Environmental Planning Policy (Infrastructure) 2007

The following sections indicate that the proposal would be permissible with development consent due to the application of Division 4 of State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP (NSW)).

The proposed works will involve installing a permanent pump station on the Murray River which is referred to as the Brereton Road Pump Station. Works within the Murray River and its banks will include excavation and structural works for the pump station on the southern bank and infrastructure extending into the river. A water reticulation system is a type of water supply system and is defined as *a building or place used for the transport of water, including pipes, tunnels, canals, pumping stations, related electricity infrastructure and dosing facilities*.

Under clause 126A of Division 4 of the Infrastructure SEPP (NSW), development for the purpose of water reticulation systems may be carried out by any person with consent on any land.

Under clause 125(5) of Division 4 of the Infrastructure SEPP (NSW), *a reference to development for the purpose of a water supply system of any kind includes a reference to development for any of the following purposes if the development is in connection with the water supply system—*

(e) water intakes, pumping stations, pipelines, channels, tunnels, canals and aqueducts,

(k) environmental management works,

The pump station will be used to transport water and would be part of a water reticulation system (clause 125(5)(e)) and be permissible with development consent due to the application of clause 126A.

The proposed work would be undertaken in the Murray River Shire and the consent authority is Murray River Council.

A development application would need to be submitted to the Murray River Council and this would need to be supported by a Statement of Environmental Effects that addresses section 4.15 of the NSW EP&A Act.

5.2.2 State Environmental Planning Policy No. 44 – Koala Habitat Protection

State Environmental Planning Policy No. 44 – Koala Habitat Protection (SEPP (NSW) 44) aims to encourage conservation and management of areas of natural vegetation that provide habitat for koalas. As the Murray River Shire is included in Schedule 1 of the SEPP (NSW), SEPP (NSW) 44 potentially applies to the project. SEPP (NSW) 44 does not apply to land dedicated under the *National Parks and Wildlife Act 1974* or *Forestry Act 1916* (refer to Clause 5(2)).

SEPP (NSW) 44 only applies to development that requires consent. The provisions of SEPP (NSW) 44 would need to be considered when preparing the Statement of Environmental Effects.

5.2.3 Murray Regional Environmental Plan No.2 – Riverine Land

The proposal would be undertaken on land that is subject to the Murray Regional Environmental Plan No.2 (MREP). The MREP aims to conserve and enhance the riverine environment of the River Murray for the benefit of all users. Under the MREP, the term 'River Murray' refers to the river and its tributaries and this includes the land in NSW upon which the proposed works would be undertaken.

Clause 5 of MREP states that it does not permit development which is prohibited by another environmental planning instrument. Section 5.2.1 indicates that the proposed works are permissible with consent under the Infrastructure SEPP (NSW). It is also permissible with consent in the W1 Natural Waterways zone under the Murray Local Environmental Plan.

The Statement of Environmental Effects would address relevant provisions of the MREP, including but not limited to those listed in Table 5.1.

Table 5.1: Relevant clauses in the Murray Regional Environmental Plan No.2 Riverine Land to be addressed in the Statement of Environmental Effects

Clause in the MREP	Relevance to the project
12 – General provisions for consultation	<p>This clause lists consultation that is required for certain development and is additional to consultation required under other clauses in the MREP. Consultation is potentially required under this clause for the following reasons:</p> <ul style="list-style-type: none"> ▪ If the development would impact on endangered fauna under the <i>NSW National Parks and Wildlife Act 1974</i> consultation with the Department of Planning, Industry and Environment, Biodiversity Conservation Division is required. ▪ If the development would affect boating safety consultation with the NSW Roads and Maritime Services is required.
13 – Planning Control and Consultation Table	<p>This clause identifies the planning controls for development that is subject to the MREP. The project may trigger planning controls under this clause including:</p> <ul style="list-style-type: none"> ▪ 13(3) – Bank and/or bed work. This relates to work that involves excavation, dredging or alteration of the alignment of shape of the bank or bed of the River Murray. ▪ 13(8) – De-snagging operations (including snag maintenance). This relates to any work to move or remove trees of woody debris from the water of the River Murray. ▪ 13(10) Flood control works. This relates to works which change the natural or existing condition or topography of land (such as the construction or alteration of levees, channels and mounds) and which are likely to affect the hydrology of the River Murray system.

Clause in the MREP	Relevance to the project
	This clause lists consultation requirements and clause 11 details how that consultation is to be undertaken.

5.3 Murray Local Environmental Plan 2011

The Gunbower National Park Floodplain Restoration Project is located on land that is zoned W1 Natural Waterways under the Murray Local Environmental Plan 2011 (Murray LEP). No activities are permitted without development consent within the W1 zone.

Activities that are permitted with consent in the W1 zone are Aquaculture Boat launching ramps; Boat sheds; Building identification signs; Business identification signs; Community facilities; Environmental facilities; Environmental protection works; Flood mitigation works; Information and education facilities; Jetties; Mooring pens; Moorings; Research stations; Roads; Water recreation structures; Water supply systems; Wharf or boating facilities.

Activities are prohibited in the W1 zone if they are not permissible with consent or without consent. A water reticulation system is part of a water supply system and is permissible with consent in the W1 zone. Clause 5.12 states that the LEP does not restrict or prohibit, or enable the restriction or prohibition of, the carrying out of any development, by or on behalf of a public authority, that is permitted to be carried out with or without development consent, or that is exempt development, under State Environmental Planning Policy (Infrastructure) 2007. The project is therefore also permissible with consent under clause 126A of the Infrastructure SEPP (NSW).

The Statement of Environmental Effects would address relevant provisions of the Murray LEP, including but not limited to those listed in Table 5.2.

Table 5.2: Relevant clauses in the Murray LEP to be addressed in the Statement of Environmental Effects

Clause in the Murray LEP	Relevance to the project
2.3 – Zone objectives and Land Use Table	The Statement of Environmental Effects would need to address the land use objectives for the W1 Natural Waterways zone.
7.2 – Earthworks	Earthworks are required within the River bank. Development consent is required for ‘earthworks’
7.3 – Biodiversity protection	This clause applies to land identified as ‘Key Fish Habitat’ or ‘Terrestrial Biodiversity’ on the Biodiversity Map. The proposed works would impact on land that is mapped as Key Fish Habitat and the matters in clause 7.3(3) would need to be considered before granting development consent
7.4 – Development on River Front Areas	The project would be undertaken on river front areas. The clause lists matters that Council must consider before granting appropriate development on riverfront areas.
7.5 – Riparian land and Murray River and other watercourses – general principles	This clause applies to land identified as ‘Riparian Land and Waterways’ on the Waterways Map that is part of the LEP and is within 40 m of the top of the bank of that waterway. The project is located on land that is mapped as a waterway on this map. This clause lists matters that Council must consider before granting consent to development on land mapped as a watercourse.
7.6 - Additional provisions – development on river bed and banks of the Murray and Wakool Rivers	This clause applies to land comprising the bed of the river and up to the top of the bank of the river and is relevant because the project would involve development on the bed and bank of the Murray River. This clause lists matters to be considered before is granted.
7.7 - Wetlands	This clause applies to land identified as ‘Wetlands and Freshwater Lakes’ on the Wetlands Map that is part of the LEP. The project is located on land that is mapped as a wetland area. This clause lists matters that Council must consider before granting consent to development on land mapped as a Wetland.

Clause in the Murray LEP	Relevance to the project
7.8 – Flood Planning	The project would be undertaken on land that is shown as ‘Flood planning area’ on the Flood Planning Map. Development is permissible on flood liable land in the river front area if it complies with the requirements of section (3) of this clause.

6. Potential impacts and mitigation

A summary of potential land use related impacts and proposed mitigation measures is provided in Table 6.1. Potential land use related impacts associated with the project would generally be associated with:

- Temporary disruptions to access to private land and infrastructure, recreational areas and commercial activities (apiary) during construction and managed environmental watering.
- Damage or losses associated with inundation of private land and infrastructure during managed environmental watering events.

Mitigation measures are proposed for each of the identified potential impacts.

Table 6.1: Summary of potential land use impacts and proposed mitigation measures

Potential impacts	Proposed mitigation measures
Construction phase	
Possible disruptions to access to private infrastructure (e.g. irrigation pump sites and channels) during construction, including during maintenance of access tracks (Note: No access tracks proposed to be used during construction of the project appear to provide sole access to residential dwellings).	<p>If required review access limitations during construction and identify opportunities to maintain or provide alternative access, where practicable.</p> <p>Engage with private land and infrastructure owners potentially affected by construction works and ensure construction management plans include appropriate measures to avoid or minimise access disruptions to private land and infrastructure.</p> <p>Prepare and implement a stakeholder management strategy to ensure potentially affected private land and infrastructure owners are aware of the extent and timing of construction works and establish communication protocols to provide adequate notification prior to any access disruptions.</p>
Possible disruptions to farming land from construction of pipeline infrastructure, particularly with the Cameron's Creek Pipeline, traversing private property boundaries	<p>Engage with private land and infrastructure owners potentially affected by construction works and ensure construction management plans include appropriate measures to avoid or minimise access disruptions to private land and infrastructure.</p> <p>Prepare and implement a stakeholder management strategy to ensure potentially affected private land and infrastructure owners are aware of the extent and timing of construction works and establish communication protocols to provide adequate notification prior to any access disruptions.</p>
Possible disruptions to recreational access to the Gunbower National Park and Murray River and other parts of the state forest during construction.	<p>Conduct further assessment to predict access limitations during construction and in consultation with the public land manager (Parks Victoria) identify opportunities to maintain or provide alternative access, where practicable.</p> <p>Engage with Parks Victoria to ensure construction management plans include appropriate measures to manage access disruptions within the National Park and River Murray Reserve.</p> <p>Prepare and implement a stakeholder management strategy to ensure the public land manager (Parks Victoria) is aware of the extent and timing of construction works, and can plan accordingly (e.g. signage, notification to park users).</p>
Displacement of apiary sites located within the construction footprint and possible disruption to other apiary activities during construction.	Engage with apiary licence holders in conjunction with Parks Victoria as the public land manager, to identify opportunities to minimise potential impacts on apiary sites in close proximity to the construction footprint and inundation area.
Potential for temporary amenity effects (increased noise, dust etc) on residents and flora and fauna in close proximity to work sites or access tracks during construction.	Prepare and implement a construction environmental management plan including appropriate noise and dust management measures in accordance with EPA Publication 480: Environmental guidelines for major construction sites.
Operational phase	
Possible inundation of private land zoned for farming purposes during managed inundation	Maintain levee banks to manage inundation. No inundation on privately-owned land to occur without consent from private land owners.

Potential impacts	Proposed mitigation measures
<p>events causing possible damage or loss of crops, or property improvements.</p>	<p>Continue to engage with potentially affected private landowners regarding planned environmental watering events and outcomes, to obtain flood easements or agreements prior to commencing operations that may involve flooding of private land during managed events.</p> <p>Where required, operate regulating structures to maintain inundation within the maximum design levels.</p>
<p>Possible damage or disruption to access to any private pump infrastructure during managed inundation events that affects freehold land.</p>	<p>Where required, operate regulating structures to hold water, minimising inundation to less than the maximum design level.</p> <p>Engage with potentially affected private infrastructure owners, to ensure operating plans include appropriate measures to avoid or minimise impacts to infrastructure during managed inundation events.</p> <p>Prepare and implement a stakeholder management strategy, to ensure private infrastructure owners are aware of the extent and timing of upcoming watering events and can plan accordingly.</p>
<p>Possible disruptions to recreational access to the Murray River and other parts of the River Murray Reserve during managed inundation events, which may reduce opportunities for active and passive recreation, potentially reducing tourism opportunities in rural communities.</p>	<p>Conduct further assessment of access limitations during planned operating scenarios and in consultation with the public land manager (Parks Victoria), identify opportunities to maintain or provide alternative access, where practicable.</p> <p>Liaise with Parks Victoria as the public land manager to ensure operating plans include appropriate measures to avoid or minimise access disruptions during managed inundation events.</p> <p>Prepare and implement a stakeholder management strategy, including Parks Victoria, DELWP and tourism operators, to ensure they are aware of the extent of upcoming watering events and can plan accordingly (e.g. signage / notification of park users).</p>
<p>Possible inundation or disruption to access to apiary sites during managed inundation events.</p>	<p>Where required, operate regulating structures to hold water, minimising inundation to less than the maximum design level where apiary sites may be impacted.</p> <p>Engage with apiary licence holders in conjunction with Parks Victoria as the public land manager, to ensure operating plans include appropriate measures to avoid or minimise disruption to apiary activities during managed inundation events.</p> <p>Prepare and implement a stakeholder management strategy, to ensure potentially affected commercial operators, are aware of the extent and timing of upcoming watering events and can plan accordingly.</p>

7. Conclusion

Gunbower National Park covers approximately 465 ha of the Gunbower Forest and is part of the Gunbower-Koondrook-Perricoota Forest icon site under The Living Murray Initiative. The forest is bounded to the north by the River Murray and along its southern edge by private land and Gunbower Creek. The forest comprises a system of natural drainage paths, creeks, permanent and temporary wetlands, Black Box and Grey Box woodlands and River Red Gum forest. The forest is also listed as a wetland of international importance under the Ramsar Convention.

The project is located within the municipal areas of the Campaspe Shire Council and Gannawarra Shire Council in Victoria and Murray River Council in NSW. The relevant floodplain management authority is the North Central CMA. The national park is located within the Loddon Mallee region of Victoria.

An assessment of the potential permit triggers under the Campaspe Planning Scheme and the Gannawarra Shire Council has identified that the project will require planning approval in relation to:

- Use
- Buildings and works, including earthworks
- Removal, destruction or lopping of native vegetation

In addition, the proposed works involve installing a pump station referred to as the Brereton Pump Station. The majority of this structure will be built on the southern bank of the Murray River in Victoria and extend into the Murray River in NSW, within the Murray River Shire. A development application would need to be submitted to the Murray River Shire Council and this would need to be supported by a Statement of Environmental Effects that addresses section 4.15 of the NSW EP&A Act.

The purpose of the project is for conservation, specifically to restore a more natural inundation regime to improve the ecological condition of high ecological value floodplain and anabranch habitats mostly located within national parks and natural features reserves that are managed primarily for conservation and recreational purposes by Parks Victoria. Potential land use impacts associated with these works have been assessed and mitigation measures proposed. These potential impacts include:

- Restrictions / limitations to access to private land and recreational users as a result of construction activities and inundation from operations. Access to the project area during construction and operation will mostly be via existing roads and tracks. This may limit access for private land owners and recreational users of the area when the tracks are used during construction and / or affected by inundation during operations.
- Potential impact to the objectives of Section 173 Agreements on land titles and other encumbrances supporting project infrastructure and / or inundation
- Possible disruption to the operation of and access to apiary sites during construction and inundation activities
- Possible damage to any pumping infrastructure or private infrastructure that may exist on private land
- Possible damage to farming crops from construction of some infrastructure (pipelines) and inundation, affecting land productivity and economic viability

To mitigate the likelihood and consequence of these potential impacts, construction of the project would be undertaken in accordance with a CEMP. This CEMP will require the development of a risk management process to use throughout the construction phase. Engagement with private land and infrastructure owners is critical prior to works occurring and ensuring construction management plans include appropriate measures to avoid or minimise access disruptions to private land and infrastructure as much as possible. Notification and engagement is also required with all parties to covenants and caveats on affected land parcels to ensure impacts to the objectives of these instruments are avoided where possible.

Inundation of any privately held land would only occur with prior consent and if flooding agreements can be established with the affected private landowners. Consultation with affected water licence holders, commercial apiary operators, recreational operators and Parks Victoria is recommended in relation to operational plans to minimise or address impact on current land use activities in the project area.

In addition is recommended that a stakeholder management strategy be adopted to ensure appropriate engagement prior and during construction, with mechanisms in place for ongoing engagement prior to and during inundation events that will feed into the CEMP and EWMP. This would include early and ongoing engagement with Parks Victoria so that construction and operational management plans include appropriate measures to manage access disruptions within the Gunbower National Park.

Overall, and with implementation of these measures, the project will not have a significant adverse effect on land use values. The project supports both state and local planning policy, particularly in relation to the protection and enhancement of biodiversity, waterbodies and wetlands and significant landscapes of the area. The intention of improving on the health of these riverine environments will also support the economic development of the region which is already focused on tourism-based nature-based activities associated with ecological value.

8. References

Department of Environment, Land, Water and Planning (2019). Data on apiary buffer zones and licences. Sourced from DataVic, available at: <https://discover.data.vic.gov.au/dataset/apiary-buffer-zones>, and <https://discover.data.vic.gov.au/dataset/apiary-rights-and-bee-farm-and-range-licences>. Accessed: 9th October 2019.

Department of Environment, Land, Water and Planning (2020). *Interactive maps online*. Available: <https://www2.delwp.vic.gov.au/maps/maps-and-services/interactive-maps>. Accessed: 14 April 2020.

Department of Justice and Community Safety (2020). *Native Title*. Available: <https://www.justice.vic.gov.au/your-rights/native-title>. Accessed: 14 April 2020.

Ecological Associates, 2014. SDL Floodplain Watering Projects: Rationale and Outcomes. Report prepared for the Mallee CMA.

Environment Australia, 2001. A directory of important wetlands in Australia: Third edition. Accessed via <http://www.environment.gov.au/water/wetlands/publications/directory-important-wetlands-australia-third-edition> on 10 May 2020.

National Native Title Tribunal (2020). *NNTT Online Register and Maps*. Available: <http://www.nntt.gov.au/Pages/Home-Page.aspx>. Accessed: 6 April 2020.

R8 (2020). *Flora and Fauna Assessment – Gunbower National Park Floodplain Management Project*. Report prepared for the Victorian Murray Floodplain Restoration Project.