# Regulatory Approvals Strategy

### **Goulburn Constraints Management Project**





© The State of Victoria Department of Environment, Land, Water and Planning 2015



This work is licensed under a Creative Commons Attribution 4.0 International licence. You are free to re-use the work under that licence, on the condition that you credit the State of Victoria as author. The licence does not apply to any images, photographs or branding, including the Victorian Coat of Arms, the Victorian Government logo and the Department of Environment, Land, Water and Planning (DELWP) logo. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/

Printed by (insert printing company name, suburb)

ISBN XXXXXXXXXXXXXXXXXX

#### Disclaimer

This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication.

#### Accessibility

If you would like to receive this publication in an alternative format, please telephone DELWP Customer Service Centre 136 186, email customer.service@delwp.vic.gov.au (or relevant address), via the National Relay Service on 133 677 www.relayservice.com.au. This document is also available on the internet at www.delwp.vic.gov.au

### Contents

Introduction	3
Background	3
Purpose	3
Project Description	4
Objective	4
Location	4
Proposed works and activities	4
Progress	5
Proponent	5
Statutory Framework	6
Commonwealth legislation	6
Victorian legislation	7
Indicative Program	12
Supporting Documentation Required	14
Supporting Documentation Required	14
Environmental Management Framework	14
Offset Strategy	14
Threatened Species Management Plan	15
Cultural Heritage Management Plan	15
Agency and Stakeholder Consultation	16
Commonwealth Agencies	16
Victorian Agencies and Stakeholders	16
Preliminary Findings	19
	15
Land tenure	19
Planning schemes, zones and overlays	20
Potential impacts on Matters of National Environmental Significance (EPBC Act)	20
Assessment against EE Act referral criteria	22
Requirement to prepare a CHMP (Aboriginal Heritage Act 2006)	22
Recommendations	25
Areas of potential risk	25
Opportunities for efficiencies	26
Appendix 1 — Criterio for referrel under the Victorian Equipmental Effects Act 1979	20
Appendix 1 Criteria for referral under the Victorian Environmental Effects Act 1978	26

Appendix 2	Protected Matters Search Tool results	29

### Introduction

#### Background

The Victorian Government is developing a business case for the Goulburn Constraints Management Project ('the project') to support implementation of the Murray Darling Basin Plan. This project aims to ease physical and operational constraints in the Goulburn River system, improving the environmental outcomes that can be achieved under the Basin Plan.

With regard to regulatory approvals, business cases for constraint measures need to provide:

- Details of regulatory or legal requirements, including Commonwealth, state and local government planning, environmental and heritage regulations;
- Details of legislative and policy amendments required including, but not limited to, state legislation; and
- A desktop Aboriginal cultural heritage assessment.

Business cases also need to include a management strategy for these items, detailing steps already undertaken; the processes required; timeframes; risks and possible impediments; and roles and responsibilities.

In 2014, the Murray Darling Basin Ministerial Council (MDBMC) agreed that constraint measure business cases would be submitted by 30 November 2015 for assessment by the Sustainable Diversion Limit Adjustment Assessment Committee (SDLAAC). The MDBMC will agree on a suite of proposals for implementation in June 2016. The Commonwealth Government will allocate funding to projects at this stage. Proposals must be operational by mid-2024.

#### Purpose

The purpose of this strategy is to map out a broad approvals pathway for the project under State and Commonwealth legislation to support the development of the business case. *Approvals* refers to all environmental and planning consents, endorsements and agreements required from Government agencies by legislative or other statutory obligations to conduct works. This strategy identifies the approvals, permits or licences likely to be required for this project, as well as the supporting documentation to be prepared. This is intended to provide a framework for approvals around which the detailed design and construction schedule can be built, to identify opportunities for efficiencies and highlight areas of potential risk. While the strategy will highlight the issues that need to be considered for approvals purposes, based on currently available information, it does not address specific construction issues (e.g. concrete batch plants, fuel storage) and these will need to be considered once the project is further developed.

This strategy represents the potential approvals required at time of writing. The timelines set out above highlight at least a seven month delay between the time the business case is submitted until further funding is available (after June 2016). In addition, the project is at the feasibility stage; a number of technical investigations are required to confirm the location and nature of all works. A general description of the types of works that would be required is provided in the next section.

This document will therefore need to be reviewed prior to commencing the approvals process in light of any changes to the proposed project activities and construction areas, or relevant legislation and policy.

### **Project Description**

#### **Objective**

The Goulburn Constraints Management Project aims to enable flows of 40,000 ML/day to be delivered at Shepparton. This will enable more than 18,000 ha of red gum communities and more than 3,000 ha of wetlands to be watered, providing benefits to flood-dependent plants and animals.

#### Location

The project is located in Victoria, within the Goulburn Broken Catchment Management Authority (CMA) region. The project area covers the mid and lower reaches of the Goulburn River floodplain, from Eildon Dam to the River Murray (see Figure 1).

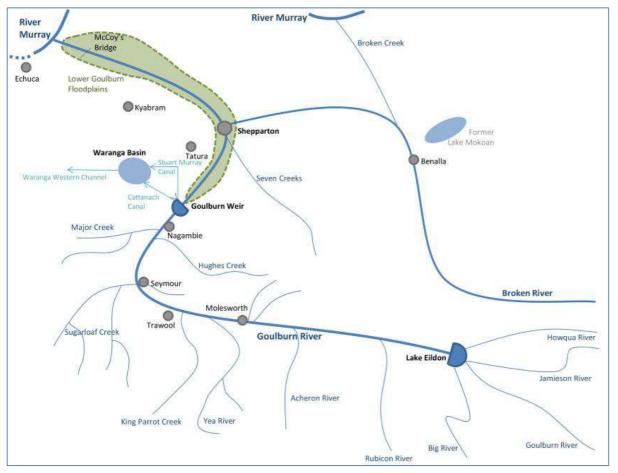


Figure 1. The area affected by the Goulburn River Constraints Management Project area, showing key tributaries and features (source: MDBA, 2015)

#### **Proposed works and activities**

A general description of the proposed works and activities is provided below to give some context to the required approvals. As noted on the previous page, technical investigations are ongoing, and the location and scope of most works are still to be confirmed. Works have been divided into two geographic areas: the Mid-Goulburn (Eildon Dam to Shepparton) and Lower Goulburn (Shepparton to the River Murray).

#### Mid-Goulburn

Works within the Mid-Goulburn area will be carried out on public and private land to maintain access and minimise impacts of higher flows. Works are likely to include building new bridges and upgrading existing

crossings. Customised works (still to be determined) will be required to manage impacts to specialist private businesses, such as trout farms and turf farms.

#### Lower Goulburn

Within the Lower Goulburn area, works will be carried out to maintain access, drainage and recreational assets (e.g. walking tracks), and to avoid flooding private land. At this stage, it is anticipated that works will be required on around 23 km of roads, one km of bridges and maintenance/upgrades to the network of floodplain levees. Levee works will also include the construction of small regulators ( $\leq 2$  m high) on four existing outlets at Deep Creek, Hancocks Creek, Wakati Lagoon and Hagans Lane.

#### Progress

The project is currently in the feasibility stage and technical investigations to confirm the final project details are ongoing. Concept designs are currently being developed for proposed works and a business case is being finalised for submission in November 2015.

Table 1 gives an overview of the project details for approvals purposes, based on available information.

#### **Proponent**

The proponent for approvals has not been confirmed but it is expected to be the agency responsible for delivery of the construction phase (also still to be confirmed). Most approvals applications must be made by or on behalf of the person or organisation proposing to undertake the action.

Table 1	Overview of project details	for approval purposes		
River reach	CMA region	Local Government Area	Proponent for approvals*	Land manager for works sites
Mid Goulburn	Goulburn Broken	Murrundindi	ТВС	Private
		Mitchell		Parks Victoria
		Strathbogie		
		Greater Shepparton		
Lower	Goulburn Broken	Greater Shepparton	ТВС	Private
		Moira		Parks Victoria
		Campaspe		

\*still to be confirmed

### **Statutory Framework**

This section provides a brief overview of the various approvals and permits that must be obtained prior to undertaking major construction works in Victoria. The information provided focuses on the relevant sections and clauses of Commonwealth and Victorian legislation. Table 2 shows the supporting documentation required, process for approval, responsible agency, timing of submission and timeframe for decision for each approval.

#### **Commonwealth legislation**

#### Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

This Act is the Commonwealth Government's central piece of environmental legislation. It is administered by the federal Department of the Environment (DoE) on behalf of the Minister for the Environment. The aim of this Act is to protect the environment and, in particular, matters of national environmental significance (MNES), which include:

- World heritage properties;
- National heritage places;
- Wetlands of international importance (often called 'Ramsar' wetlands after the international treaty under which such wetlands are listed);
- Nationally threatened species and ecological communities;
- Migratory species;
- Commonwealth marine areas;
- The Great Barrier Reef Marine Park;
- Nuclear actions (including uranium mining); and
- A water resource, in relation to coal seam gas development and large coal mining development.

The MNES of relevance to this project are:

- Declared Ramsar wetlands of international importance
- Listed threatened species and ecological communities; and
- Listed migratory species.

Part 3 of this Act requires the proponent to obtain approval from the Minister to undertake an activity that has the potential to have a significant impact on matters of national environmental significance. The Minister will then make a determination as to whether or not the action is to be a "controlled action".

An assessment bilateral agreement currently exists between the Commonwealth and Victorian governments. It came into effect in 2015 and allows the Commonwealth Minister for the Environment to rely on specified environmental impact assessment processes of the State of Victoria in assessing actions under the *EPBC Act*. The proposed action will still require approval from the Commonwealth Environment Minister under the *EPBC Act*.

#### Native Title Act 1993

The purpose of this Act is to establish a framework for the protection and recognition of Native Title. Administration of this Act is the responsibility of the Attorney-General of Australia.

Under section 24KA, the proponent is required to notify native title claimants of any future act that permits or requires the construction, operation, use, maintenance or repair of a pipeline or other water supply or reticulation facility including a drainage facility, a levee or other device for management of water flows.

Section 233 defines a "future act" as being a proposed activity or development on land or of waters that may affect native title either by extinguishing it or creating interests that are inconsistent with the existence or exercise of native title.

#### **Victorian legislation**

#### Environment Effects Act 1978 (EE Act)

The Minister for Planning is responsible for administration of this Act. The Department of Environment, Water, Land and Planning (DELWP) is responsible for managing procedural requirements. This Act applies to works that are declared public works which are deemed to have or are capable of having a significant effect on the environment. Projects that are likely to have environmental effects of regional or State significance should be referred to the Minister for a decision as to whether:

- a) An Environment Effects Statement (EES) is required;
- b) An Environment Effects Statement is not required; or
- c) An Environment Effects Statement is not required if conditions specified by the Minister are met.

A referral under the EE Act can be made by the proponent or decision-maker in accordance with the referral criteria. The referral decision must be made before any public works can commence. If an EES is required the matters to be investigated will be set out in the 'scoping requirements' issued by the Minister. If an EES is not required, projects must refer to the requirements of the *Planning and Environment Act 1987* (*P&E Act*). The *Ministerial Guidelines*<sup>1</sup> for environmental assessment under the Act list referral criteria for individual types of potential effects and combined types of potential effects that would warrant referral of a project (Appendix 1).

#### Flora and Fauna Guarantee Act 1988 (FFG Act)

The Minister for Environment, Climate Change and Water is responsible for administration of this Act with support of DELWP. The Act is the key piece of legislation in Victoria for the conservation of threatened species and communities and for the management of potentially threatening processes. The handling of protected flora is regulated by DELWP to ensure that any harvesting or loss is ecologically sustainable. A Protected Flora License or Permit from DELWP is required to collect protected native plants or to do works or other activities on public land which might kill, injure or disturb protected native plants.

#### Planning and Environment Act 1987

The Minister for Planning is responsible for administering the *P&E Act*, supported by DELWP. The Act sets out procedures for preparing and amending the Victoria Planning Provisions and planning schemes, obtaining permits under schemes and other administrative procedures.

The Act's planning provisions are implemented via the local government planning scheme. Permits are issued under the planning scheme for specific activities, including, but not limited to planning permits:

- For the use or development of private, public or Crown land; and
- To remove, destroy or lop native vegetation.

Prior to applying for a planning permit for works on land in public land zones, consent is required from the public land manager (i.e. Public Land Manager Consent (PLMC)). Public land includes that owned or managed by a government department or other public land manager, including national parks, state forests, coastal crown land and land reserved under the *Crown Land (Reserves) Act 1978.* It is important to note that in the case of Crown land, consent granted by DELWP to an application being made should not be taken as agreement to the use or development of the land as proposed. This must be negotiated through the appropriate lease or licence agreements.

#### Land Act 1958

This Act makes provision for sale and occupation of unreserved Crown lands, and authorises the issue of various types of leases and licences. The Act is administered by the Minister for Environment, Climate

<sup>&</sup>lt;sup>1</sup> Ministerial Guidelines for Assessment of Environmental Effects under the Environment Effects Act 1978, Victorian Department of Sustainability and Environment (2006)

Change and Water except for certain specified areas of land managed by other agencies such as the Office of Corrections, Courts Services and the Department of Health and Human Services. Section 138 allows for the issue of a licence up to ten years in duration.

#### Crown Land (Reserves) Act 1978

This Act provides for reservation of Crown land for a variety of public purposes without foregoing the intrinsic natural values, the appointment of committees of management to manage those reserves and for leasing and licensing of reserves for purposes approved by the Minister for Environment, Climate Change and Water. Section 17B allows for the issue of a licence up to ten years in duration.

#### Forests Act 1958

This Act outlines that all forest produce in state forest is the property of the Crown and prohibits the removal of produce from state forest, except in accordance with the regulations. Provisions are also made in relation to the development and implementation of working plans for state forest with respect to control, maintenance, protection and taking of produce; fire management in state forests; and outlines offences in state forests. This Act is administered by the Minister for Environment, Climate Change and Water except for section 99 (19C) which is administered by the Minister for Agriculture. Licences and permits are issued under section 52 for specific activities within state forest.

#### National Parks Act 1975

This Act is administered by the Minister for Environment and Climate Change with the support of Parks Victoria and DELWP. The Act 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. Section 27 of this Act enables the Secretary of DELWP to give consent to a public authority to perform its function in a national park provided the approved function does not affect the park. A scientific permit is required to conduct research in areas managed under the *National Parks Act 1975*.

#### Traditional Owner Settlement Act 2010

The *Traditional Owner Settlement Act 2010* provides for an out-of-court settlement of native title. It 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 *Native Title Act 1993* (Cth) and not to make any future native title claims. Under the Act, a settlement package can include a:

- Recognition and Settlement Agreement to recognise a traditional owner group and certain traditional owner rights over Crown land;
- Land Agreement which provides for grants of land in freehold title for cultural or economic purposes, or as Aboriginal title to be jointly managed in partnership with the state;
- Land Use Activity Agreement which allows traditional owners to comment on or consent to certain activities on public land;
- Funding Agreement to enable traditional owner corporations to manage their obligations and undertake economic development activities; and
- Natural Resource Agreement to recognise traditional owners' rights to take and use specific natural resources and provide input into the management of land and natural resources.

#### Aboriginal Heritage Act 2006

The *Aboriginal Heritage Act 2006* provides protection for places and objects significant to Aboriginal people in Victoria. It recognises the interests of Traditional Owners in decision-making regarding their cultural heritage through the appointment of registered Aboriginal parties (RAPs) by the Victorian Aboriginal Heritage Council. RAP areas now cover over 60% of the state.

The Minister for Aboriginal Affairs and the Secretary to the Department of Premier and Cabinet (DPC) have significant roles under this legislation. The Office of Aboriginal Affairs Victoria, which is within DPC, is responsible for administering the Act.

The requirement to prepare a cultural heritage management plan (CHMP) can be triggered under the Aboriginal Heritage Regulations 2007 (Regulations) for certain high impact activities in areas identified in the Regulations as sensitive for Aboriginal cultural heritage.

#### Heritage Act 1995

The Victorian *Heritage Act 1995* is administered by Heritage Victoria. It is the Victorian Government's key cultural heritage legislation. The Act identifies and protects heritage places and objects that are of significance to Victoria, including:

- historic archaeological sites and artefacts
- historic buildings, structures and precincts
- gardens, trees and cemeteries
- cultural landscapes
- shipwrecks and relics
- significant objects.

The Act establishes the <u>Victorian Heritage Register</u>, the <u>Heritage Inventory</u> and the <u>Heritage Council of</u> <u>Victoria</u>. The Act establishes a legislative framework for heritage protection in Victoria, replacing the *Historic Buildings Act 1981*, the *Historic Shipwrecks Act 1981* and part of the *Archaeological and Aboriginal Relics Preservation Act 1971*.

#### Water Act 1989

This Act is the responsibility of the Minister for Environment, Climate Change and Water who is supported by DELWP. The day to day administration of the Act is shared across a range of statutory authorities and corporations. This Act establishes the administrative framework governing the management and use of water resources in Victoria. This Act requires authorisation to carry out works and activities – *either* a licence under section 67 or a works on waterways permit, administered by CMAs under a by-law. A licence under section 51 is required to take and use water.

#### Wildlife Act 1975

This Act establishes procedures to protect and conserve Victoria's wildlife. It specifically seeks to prohibit and regulate the conduct of persons engaged in activities concerning or related to wildlife. Section 28A of this Act empowers the Secretary of DELWP (or delegate) to provide an individual written authorisation to capture and release wildlife. Such authorisation generally comes with strict terms and conditions which the individual must comply with.

#### Table 2Approvals requirements

Legislation and approval or permit	Supporting documentation required	Process	Responsible agency	Timing of submission	Timeframe for decision	Associated costs
Commonwealth						
EPBC Act 1999 Impacts on MNES	Referral form to be submitted with maps, photos, latitudinal and longitudinal coordinates of the impact area, mitigation measures and relevant supporting documentation, e.g. ecological surveys, hydrological and hydraulic investigations.	<ul> <li>Referral form submitted. Minister determines if the project is a controlled action or not.</li> <li>If deemed not to be a "controlled action" conditions can still be imposed on the project. There is a 10 day public comment period within this time.</li> <li>If there is insufficient information the clock will be stopped while the applicant provides the information.</li> </ul>	DoE	Ideally, submitted at the same time as the EE referral, otherwise, submit afterwards.	20 business days (4 weeks)	Fee of \$7,352 applied to both for referral and assessment stages.
Native Title Act 1993 Notification of future act related to any activity on Crown Land that may affect native title rights and interests	<ul> <li>To be enclosed with pro-forma letter:</li> <li>Map clearly indicating the location of the proposal (i.e. Vicroads, CFA, Melways)</li> <li>Map clearly showing the Crown land involved (i.e. Mapshare)</li> <li>Aerial photograph clearly indicating the location of the proposal</li> <li>Site photographs (if available)</li> <li>Technical drawings etc. (if available)</li> </ul>	<ul> <li>The process is set out within the Act.</li> <li>Proponent writes to Native Title claimants or representative advising of proposed works and inviting comment (pro-forma letter).</li> <li>Where no Native Title claim has been granted:</li> <li>Proponent does assessment (outcome: future act related to the management or regulation of water).</li> <li>Standard pro-forma reply with comments.</li> </ul>	Native Title claimants	Prior to submission of NPA s27 consent as it will be considered in due diligence assessment. No other dependencies.	28 days for claimants to comment	
Victorian						
EE Act 1978 Significant environmental effects at the regional or state scale	Referral form to be submitted with supporting documentation, e.g. ecological surveys, design reports, hydrological and hydraulic investigations, possible impacts and mitigation measures (risk).	<ul> <li>Proponent assesses project against referral criteria.</li> <li>If these are met, proponent organises a meeting with DELWP's Environmental Assessment Unit</li> <li>Draft referrals are welcome to ensure no major issues that would delay assessment and recommendation to the Minister.</li> <li>Referral form is submitted to determine whether the project can be dealt with through the normal planning process or if further assessment (and possibly an EES) is required.</li> <li>Decision is made by the Minister for Planning.</li> </ul>	Minister for Planning DELWP	Prior to submission of the planning permit application. Should be completed before EPBC referral – advice of DELWP can be sought by Commonwealth during assessment of EPBC referral. <sup>2</sup>	20 business days (non-statutory)	
FFG Act 1988 Permit to take protected flora	Targeted surveys for threatened/protected species considered likely to be present at the site and impacted by the proposed works.	Apply to the DELWP Regional Office for approval to take protected flora within that region from public land for non-commercial purposes	DELWP	With planning permit application	4 to 6 weeks for application to be assessed	
<i>P&amp;E Act 1987</i> Planning permit	<ul> <li>Planning permit application form.</li> <li>Public Land Manager or Land Owner consent.</li> <li>Ideally, Environmental Management Framework (EMF) and supporting documents (i.e. Offset Strategy, Threatened Species Management Plan) are also submitted with the application.</li> </ul>	<ul> <li>Planning permit application submitted with supporting documentation.</li> <li>Local council refers applications and plans to the appropriate authorities for advice.</li> <li>Responses are collated and council either issues permit (usually with conditions) or refuses permit.</li> </ul>	Local council, based on advice from DELWP and other referral authorities.	After PLMC is received. Note that a planning permit will not be approved until the CHMP has been approved and an EPBC referral assessed.	60 days	To develop land if the cost is included in the application: \$1M-\$7M (\$1,153) \$7M-\$10M (\$4,837) \$10M-\$50M (\$8,064)
P&E Act 1987 Public Land Manager's Consent (PLMC) where Crown land is zoned as 'public land' or Land Manager's Consent where Crown land is <b>not</b> zoned as 'public land'	<ul> <li>Full detail of proposal for consent to make application and approval of development.</li> <li>Information on the proposed works, locality map and detailed map of work sites for consent to making a planning permit application only.</li> </ul>	<ul> <li>Applicant writes to the public land manager (DELWP) requesting permission to apply for a planning permit for works on public land.</li> <li>DELWP responds in writing.</li> <li>NOTE: some areas of private land are zoned for Public Conservation and Recreation (PCRZ). This is generally a mapping anomaly however in such cases permission from the DELWP Secretary is needed to apply for a planning permit:</li> <li>Applicant writes to the Secretary (DELWP) requesting permission to apply for a planning permit for works on private land.</li> <li>Secretary DELWP responds in writing (any 'referral authority' commentary is made at the same time).</li> </ul>	DELWP	Prior to submission of the planning permit application.	None specified (DELWP internal process is 28 days)	
<i>P&amp;E Act 1987</i> (Native vegetation permitted clearing regulations)	<ul> <li>There is standard information required for all applicants. Moderate and high risk projects must have habitat hectare assessment and other details.</li> <li>Offset strategy required for moderate and high risk based applications.</li> <li>Refer to <i>Permitted clearing of native vegetation – Meeting the moderate and high risk based pathway application requirements</i> (<i>DELWP 2013</i>).</li> </ul>	<ul> <li>Applicant submits shapefiles showing proposed clearing areas to DELWP for assessment of offset requirements. DELWP prepares Biodiversity Impact and Offset Requirements (BIOR) report for applicant.</li> <li>BIOR report also specifies the level of information required to support permit application, based on one of three risk-based pathways; low, moderate, high.</li> <li>Permit application submitted with supporting information including offset strategy.</li> <li>Offsets to be secured prior to native vegetation being removed.</li> </ul>	Local council, based on advice from DELWP (for applications >0.5 ha or high risk). DELWP to approve offset strategy.	Information to be submitted with the PLMC so that comments are incorporated before submission through the planning permit. Offset strategy for projects with moderate and high risk based pathways.	60 days, in line with planning permit timelines	

<sup>2</sup> Ideally, EPBC and EE Act referrals should be submitted at the same time. If the Commonwealth deem the works to be a "controlled action" the Victorian process can be accredited by the Commonwealth so only one assessment process is required.

Legislation and approval or permit	Supporting documentation required	Process	Responsible agency	Timing of submission	Timeframe for decision	Associated costs
National Parks Act 1975 Approval for a public authority under s27 to carry out its functions in a national park and other parks included in the schedules of the Act (referred to as 'Section 27 consent')	<ul> <li>Environmental Management Plan (EMP) (as approved by Council as part of planning permit)</li> <li>Detailed designs (attached to final consent document) and relevant maps</li> <li>Installation and site plans.</li> <li>CHMP</li> <li>Traffic Management Plan</li> <li>Rehabilitation Plan</li> </ul>	<ul> <li>Parks Victoria carries out due diligence assessment (to determine the proposed construction, operation and maintenance of water management infrastructure will not substantially affect the Park/s).</li> <li>Parks Victoria then briefs the Minister for Environment, Climate Change and Water who, prior to finalising the Consent, must agree that the purpose for which the Consent will be issued will not substantially detriment or affect the park/s.</li> <li>Once consent conditions are negotiated between the proponent and Parks Victoria the consent is signed by both parties<sup>3</sup>.</li> </ul>	<ul> <li>Parks Victoria</li> <li>Minister for Environment &amp; Climate Change</li> <li>DELWP Secretary</li> </ul>	Process can commence after concept design, when footprint is clear. A consolidated Ministerial Briefing can be prepared to cover several sites. Consent cannot be issued until detailed designs and EMP are completed as these are to be attached to the consent document. <sup>4</sup>	None specified	Non-commercial use \$104 (ex GST) annually. Document preparation fee \$500 (ex GST)
Aboriginal Heritage Act 2006 Cultural Heritage Management Plan	<ul> <li>Surveys of activity area. CHMP prepared by an approved Cultural Heritage Adviser.</li> </ul>	<ul> <li>Indigenous cultural heritage assessment carried out to determine if a CHMP is required and whether it is a standard or complex plan. A decision to undertake a complex plan may be made during the development of the CHMP, based on the results of the desktop/standard assessment and in consultation with the RAP.</li> <li>CHMP developed.</li> <li>The plan must be approved by the relevant RAP.</li> </ul>	RAP	After concept design when footprint is known.	30 days	RAPs charge annually indexed fees for evaluation, depending on size and complexity (2015-16 fee/CHMP is up to \$4,787.2 incl. GST) depending on size and complexity.
Water Act 1989 Licence to take and use water (including authority to enter Crown land) <sup>5</sup> (Section 51 permit)	<ul> <li>Land title</li> <li>Description of land, its location and intended use of water</li> <li>Map indicating location of diversion point</li> </ul>	<ul> <li>Proponent submits application for the issue of a water use licence.</li> <li>Water corporation considers whether there are any issues to be addressed. Licence issued.</li> </ul>	Water corporation	Prior to works commencing	None specified	
Water Act 1989 Licence to carry out works (section 67)	<ul> <li>Vic Roads map reference, site GPS coordinates</li> <li>Detail of proposed works (sketch and location plan)</li> <li>Description of sediment control measures</li> <li>Description of measures to protect bed and banks</li> </ul>	<ul> <li>Proponent submits application for the issue of a works licence.</li> <li>Be made in a form and manner approved by the Minister</li> <li>Water corporation considers whether there are any issues to be addressed. Licence issued.</li> </ul>	Water corporation	Prior to works commencing	None specified	
Water Act 1989 Works on waterways permit	<ul> <li>Application for a licence to construct and operate works on a waterway.</li> <li>Sketch plans of the works are needed</li> <li>An EMP is required if assessed as major works</li> </ul>	Application is submitted directly to the relevant CMA.	Catchment Management Authority	Once details of the works are confirmed	None specified	
Crown Land (Reserves) Act 1978 Licence under s17B	<ul> <li>EMP (as approved by Council as part of Planning permit)</li> <li>Detailed designs (attached to final consent document) and relevant maps</li> <li>Installation and site plans</li> <li>CHMP</li> <li>Traffic Management Plan</li> <li>Rehabilitation Plan</li> </ul>	<ul> <li>Apply for PLMC to carry out works.</li> <li>Any conditions on use are resolved at this stage and license issued by delegate.</li> </ul>	DELWP	When PLMC submitted	None specified	
<i>Wildlife Act 1975</i> Permit to take protected fauna	<ul> <li>A full description of the project including methods, localities, species.</li> <li>A copy of the detailed project proposal as submitted to the Animal Ethics Committee if appropriate).</li> <li>Evidence of relevant experience for each researcher</li> </ul>	Proponent submits an 'Application For A Scientific Permit'	DELWP	Prior to works commencing	Allow 4 to 6 weeks for the processing of the application	

<sup>&</sup>lt;sup>3</sup> Note the current process is for Parks Victoria (as delegate of the Secretary) to execute the document in its own right as a party to the consent, followed by the Public Authority. <sup>4</sup> The Section 27 consent issued by Parks Victoria is a "living document" so any change in the design, construction, footprints and operating procedures are required to be provided to Parks Victoria to ensure the Section 27 consent is up to date.

<sup>&</sup>lt;sup>5</sup> Note that all may not be required and that the appropriate permit/licences should be determined on a project-by-project basis.

### **Indicative Program**

An indicative program for regulatory approvals has been developed (Figure 2) based on the timeframes for the referrals, approvals and permits set out in Table 2. The program shows that it will take at least 31 weeks (around seven months) to obtain all required approvals. This timeframe assumes that:

- An EES is not required and normal *Planning and Environment Act* processes are followed;
- All applications and supporting documents are prepared; and
- There are no significant delays during the assessment process.

This is perhaps a best case scenario because many approvals have no statutory timeframe. Even for those that do, delays can occur when further information is requested or project modifications required.

Figure 2 also sets out the:

- Supporting documentation that is required for submission (also covered in *Supporting Documentation* below);
- Indicative timeframes for each stage of the approval process; and
- Linkages and dependencies within the approval process.

As noted above, the program does not include the preparation of applications and supporting documents, which can take longer than the assessment and determination process. The additional time needed to do this will need to be considered for project-specific approvals programs, including any specialist studies required and critical information gaps.

It is recommended that the approvals process is integrated into the overall project delivery schedule (design and construction) to ensure project proponents have identified:

- Critical dates and timeframes for statutory approvals that will influence the delivery schedule;
- Potential design changes that could assist with the approvals process;
- Potential licence conditions that may impact on the design and would form a hold point; and
- The licences, permits and approvals required before construction can commence.

When planning for submission of approvals, note that some can be submitted with the construction footprint whereas others require detailed designs.

There are also a number of linkages and dependencies between approvals, which are captured in the indicative program and set out in Table 2. Potential scenarios are:

- Applications that cannot be <u>submitted</u> until another assessment is made, e.g. an application for a Planning Permit cannot be submitted until there is an *EE Act* decision.
- Approvals that cannot be <u>issued</u> until another is approved i.e. the Planning Permit is not granted until there is an approved CHMP.

In all circumstances, it is advisable to maintain contact with relevant agencies throughout the assessment process to track progress.

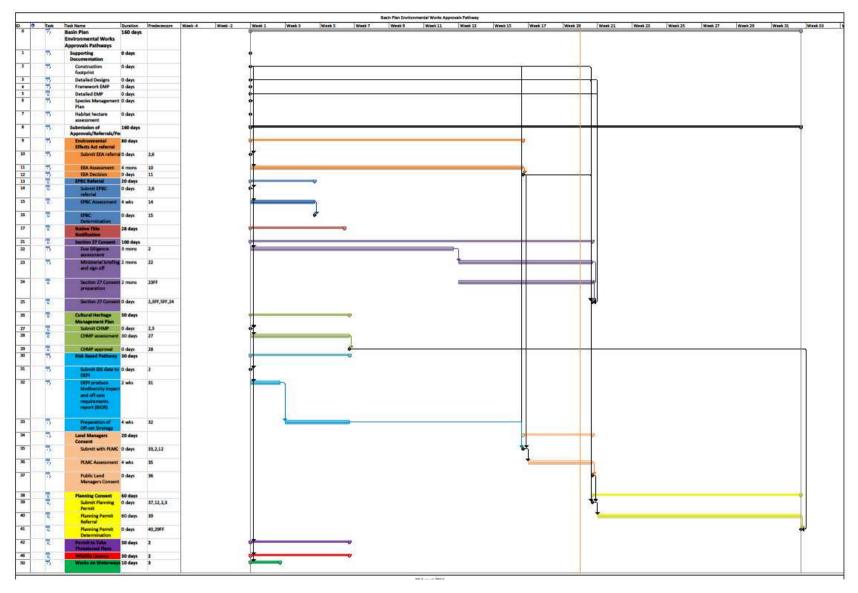


Figure 2. Indicative program for Victorian and Commonwealth approvals

### **Supporting Documentation Required**

In addition to specific applications, there are a number of supporting documents that will be required or are likely to be requested through referral decisions or planning permit conditions. These include:

- An environmental management framework;
- An offset strategy for native vegetation losses;
- A threatened species management plan; and
- A cultural heritage management plan.

The proponent should ensure time and costs for preparation of these documents is incorporated into the project program and budget. More information about each document is provided below.

#### **Environmental Management Framework**

The EMF provides the overarching environmental management information relevant to the project/s. It should include the information usually described in 'Background' and 'Environmental Management', at a high level and also include:

- Risk assessment and mitigation measures
- Responsibilities for implementation and works
- Document structure and relationship to sub-plans, Environmental Management Plans (EMPs) and Contractor EMPs
- Matrix of issue-specific sub-plans, EMPs and Contractor EMPs
- Timeframes for preparation, implementation, review and completion of sub-plans, EMPs, etc.
- Details of the community consultation process, roles and responsibilities
- 'Secondary consent' elements
- Monitoring, review and audit requirements and include corrective actions, document control and EMP review if necessary.

Training/qualification requirements (of staff implementing the EMF and contractors) should be documented in the EMPs for the project/s.

#### **Offset Strategy**

If removal of native vegetation is approved, an offset which makes an equivalent contribution to Victoria's biodiversity will be required. Offset requirements are determined in accordance with the *Permitted clearing of native vegetation – Biodiversity assessment guidelines* (DELWP 2013<sup>6</sup>) and require Habitat Hectare assessments. Specific offset requirements for each project will be set out in the Biodiversity Impact and Offset Requirements (BIOR) report prepared by DELWP. Proponents must develop an offset strategy that explains how the offset requirements will be met and should identify potential offsets that can be bought or secured if a permit is granted to remove native vegetation. Offset strategies should be submitted with planning permit applications and offsets must be secured before native vegetation can be removed.

<sup>&</sup>lt;sup>6</sup> (DELWP 2013) *Permitted clearing of native vegetation - Biodiversity assessment guidelines*. Victorian Government Department of Environment and Primary Industries, Melbourne, September 2013

#### **Threatened Species Management Plan**

If a project is likely to impact on threatened species, a threatened species management plan may be required by an *EPBC Act* or *EE Act* decision, or planning permit condition. Threatened Species Management Plans can cover more than one species and are specialist documents, sometimes requiring targeted surveys. They provide information on species management through all phases of construction, timing and responsibilities for management and rehabilitation, mitigation measures and monitoring requirements. There are no guidelines for threatened species management plans, however examples are available from the Hattah Lakes (GHD 2011<sup>7</sup>).and Lindsay Island (GHD 2012<sup>8</sup>) Living Murray projects.

#### **Cultural Heritage Management Plan**

A CHMP will be required if a project is considered to be a high impact activity located within an area of cultural heritage sensitivity, as defined under the *Aboriginal Heritage Act* 2006 and *Regulations* 2007. CHMPs can also be developed voluntarily as an act of due diligence by the proponent. The proponent is responsible for preparing a CHMP and must engage a cultural heritage advisor to assist in its preparation. Consultation with the relevant RAPs is a critical part of the process. CHMPs are approved by the relevant RAPs.

<sup>&</sup>lt;sup>7</sup> GHD (2011) Report for The Living Murray Hattah Lakes Environmental Flows Project- Threatened Species Management Plan. Report for Goulburn Murray Water. April 2011.

<sup>&</sup>lt;sup>8</sup> GHD (2012) Report for Upper Lindsay Watercourse Enhancement Program Project – Threatened Species Management Plan. Report for Mallee CMA. May 2012.

### Agency and Stakeholder Consultation

This section provides guidance on the consultation with approvals agencies and other stakeholders that should be carried out prior to submitting referrals and permit applications.

#### **Commonwealth Agencies**

#### **Department of Environment**

The proponent should speak to the DoE prior to submitting the referral. Coordination of the process for EE and EPBC referrals can occur if they are ready for submission at the same time. This should be discussed with both the DoE and DELWP (Victoria).

#### **Victorian Agencies and Stakeholders**

#### Department of Environment, Land, Water and Planning

All correspondence with DELWP is to be through a single point of contact. At the time of writing this role is the Program Manager Regional Planning and Approvals, Hume Region or, in their absence, the Senior Statutory Planner, Hume Region. The Program Manager Regional Planning and Approvals, in most instances has delegation from both the Minister and Secretary for matters relating to the *P&E Act*. Any other matters where the Program Manager Regional Planning and Approvals is not the authorised person, they will seek the approval from the appropriately delegated person.

When seeking approvals advice from Parks Victoria, DELWP, through the Program Manager Regional Planning and Approvals, should be copied in to maintain consistency.

#### Program Manager Regional Planning & Approvals

Land, Planning and Approvals, Hume Region Department of Environment, Land, Water and Planning 15 Hume And Hovell Road, Seymour, Victoria 3660 **T:** 13 61 86 **E:** <u>humeregion.planning@delwp.vic.gov.au</u>

#### **Parks Victoria**

The single point of contact for advice regarding Parks Victoria is the Regional Statutory Planning Officer, Martin Woodward. He will seek the appropriate approval and advice where necessary. As stated above, all correspondence seeking advice on approvals with Parks Victoria should be copied to DELWP through the Program Manager Regional Planning and Approvals.

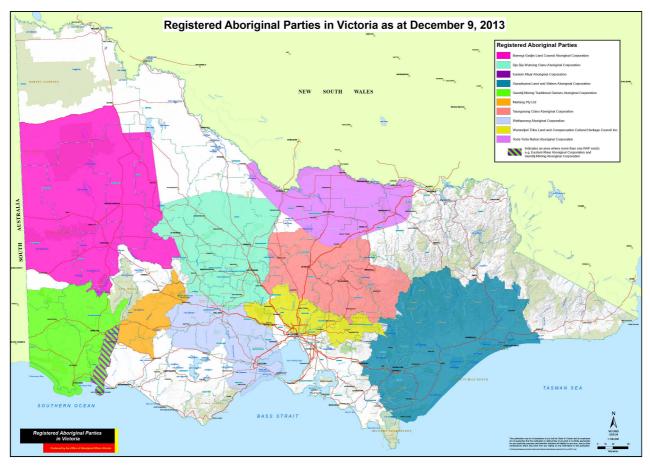
Martin Woodward Regional Statutory Planning Officer Parks Victoria, Northern Region Cnr Midland Highway and Taylor Street Epsom Victoria, 3551 T (03) 5430 4472 I M 0408 805 179 E martin.woodward@parks.vic.gov.au

#### Office of Aboriginal Affairs Victoria and Registered Aboriginal Parties

A Notice of Intention to prepare a CHMP must be lodged by a cultural heritage advisor to the Victorian Aboriginal Heritage Register. The proponent must also notify the relevant RAP of the intention to prepare a CHMP. Consultation with the relevant RAP commences immediately upon

that notification, if not before. Consultation and field/site investigations (including survey and excavation) with the RAP are used to identify and assess cultural heritage values in relation to a proposed development or activity, and develop management recommendations.

There are two RAPs for the project area, the Yorta Yorta Aboriginal Corporation and the Taungurung Clans Aboriginal Corporation (see Figure 3).



**Figure 3. Registered Aboriginal Parties in Victoria** (source: http://www.dpc.vic.gov.au/index.php/aboriginal-affairs/registered-aboriginal-parties)

#### **Traditional Owners**

There is a requirement to negotiate or consult with traditional owner groups regarding activities on Crown land that is subject to a settlement under the *Traditional Owner Settlement Act 2010*. The Yorta Yorta Co-operative Management Agreement was established in 2004 and relates to a number of areas that will be affected by this project, either through works or inundation. Schedule 5, Part A of this agreement sets out the matters that are to be referred to the Yorta Yorta Joint Body (YYJB) for consideration. Project activities within the designated areas of Crown land may require referral to the YYJB; this will need to be confirmed once the location and nature of works, and inundation footprint are finalised. An agency referral form is available on the DELWP website.

At the time of writing, the State (via the Department of Justice) is actively in negotiations with the Taungurang people to reach settlement under the *Traditional Owner Settlement Act 2010*. Once an agreement is in place, consultation or negotiation with the Taungurang Clans is also likely to be required.

#### **Catchment Management Authorities**

The proponent must consult with the Floodplain Manager of the Goulburn Broken CMA prior to submission of an application for a Works on Waterways permit.

#### **Local Councils**

Planning schemes are administered by local councils. Discussion should occur with the local council's planning department to confirm that a permit is required and to get advice on application requirements.

#### **Private Landholders**

Consultation with affected landholders must occur where works are proposed on private land, where project outcomes could affect private land, or where access to private land is required to deliver the project. In such cases, landholders must sign the planning permit application or the proponent must demonstrate that formal notification of the proposed works has occurred.

There are numerous Crown land licences within the project footprint that enable specific activities to be carried out on Crown land. These include general licences (for non-agricultural purposes) licensing of unused roads for agricultural uses and Crown water frontage licences (for grazing or riparian management purposes). These licences and are managed by DELWP.

The proponent will need to notify affected licence holders regarding any proposed works.

#### **Committees of Management**

At least one Committee of Management<sup>9</sup> operates within the project area, for the Molesworth Caravan Park. As DELWP is the land manager, only notification of the committee is required.

Other Committees of Management may be council-run and, as such, would require specific consultation with the relevant local council.

<sup>9</sup> Committees of Management manage crown land reserves for the public benefit, on behalf of the Victorian government. CoM are accountable to the Minister for Environment, Climate Change and Water.

### **Preliminary Findings**

The specific approvals required for proposed works will depend on the land tenure, planning scheme zones and overlays, and potential impacts on environmental and cultural values. Assessments of the relevant issues have been carried out based on the preliminary project footprint and current understanding of potential construction impacts.

Please note that it is not possible to consider all permit requirements at this stage as the project is not developed sufficiently. Further consideration of the need for permits and licenses under the *FFG Act 1988, Water Act 1989, Forests Act 1958, Lands Act 1958, Crown Land (Reserves) Act 1978* and *Wildlife Act 1975* will be needed once the project is in the detailed design stage.

Based on this preliminary assessment, the project will require referral under the EPBC and EE Acts, and a mandatory CHMP. Consents and permits under the P&E Act and Works on Waterways permits will also be required.

Further details regarding the preliminary findings are below. More detailed assessments will be needed when preparing referrals, approvals applications and supporting documentation.

#### Land tenure

Specific permits and approvals are required for works on public and private land, as set out in Table 2. An assessment of the land tenure across the preliminary project footprint has been carried out to inform the permits and approvals required. Works are proposed across a variety of tenures, including freehold. Issues to consider during the approvals process are identified for each project in Table 3.

#### Table 3 Land tenure and land manager of works sites

Site	LGA	Land tenure	Land manager	Possible issues
Deep Creek	Moira	National park	Parks Victoria	
outlet regulator				
Wakiti Lagoon	Moira	National park	Parks Victoria	
outlet regulator				
Hagans Lane	Moira	National park or	Parks Victoria	
outlet regulator		Reserved Forest*		
Hancocks Creek	Moira	National park	Parks Victoria	
outlet regulator				
Priority works on	Greater Shepparton	Freehold	Private	Works on private
lower Goulburn	Moira	National park	Parks Victoria	land will require
levee**	Campaspe	Road	Vic Roads	agreement of
				landholder.
				Works on roads may
				require approval
				under the Road
				Management Act
				2004 (further
				investigation
				needed).

\* Land status needs to be clarified

\*\* Exact location of works still to be confirmed

#### Planning schemes, zones and overlays

Planning schemes set out the policies and requirements for the use, development and protection of land. There is a planning scheme for every municipality in Victoria. Zones set out the type of land use and development allowed within that area. Specific uses are listed for each zone that do not require a permit, require a permit or are prohibited within that zone. There are additional requirements for subdivisions, buildings and works on land that is affected by an overlay. Overlays generally concern environmental, landscape, heritage, built form, and land and site management issues, and apply in addition to zones. Table 4 sets out the relevant planning schemes, zones and overlays for this project.

The proposed works for this project may or may not trigger permit requirements under these zones and overlays. For example, the Bushfire Management Overlay requires that new developments implement appropriate bushfire protection measures however the project does not involve the specified types of development.

Works site	Planning Scheme	Overlays	Zones
Deep Creek outlet regulator	Moira	Environmental Significance (ESO2) Rural Flood	Public Conservation & Resource
Wakiti Lagoon outlet regulator	Moira	Environmental Significance (ESO2) Rural Flood	Public Conservation & Resource
Hagans Lane outlet regulator	Moira	Environmental Significance (ESO2) Rural Flood	Public Conservation & Resource
Hancocks Creek outlet regulator	Moira	Environmental Significance (ESO2) Rural Flood	Public Conservation & Resource
Priority works on lower Goulburn levee	Greater Shepparton Moira Campaspe	Environmental Significance (ESO1, ESO2) Rural Flood Flood	Farming (private land) Public Conservation & Resource (public land)
		Wildfire Management	

#### Table 4. Relevant planning schemes, overlays and zones

## Potential impacts on Matters of National Environmental Significance (EPBC Act)

A preliminary search using the Protected Matters Search Tool found a number of potentially affected MNES present within the project footprint (

Table 5). These include Ramsar sites (either directly affected, in the vicinity or downstream), multiple threatened species and ecological communities, and migratory species. Based on the preliminary assessment, the project would require a referral under the EPBC Act (see Appendix 2).

It is recommended that a refined search is carried out once the location and nature of works is confirmed, based on refined construction footprints and consideration of the significant impact guidelines. This is likely to reduce the number of MNES affected but the project may still require referral.

As referral of the project under the Victorian *EE Act* is also anticipated (see below), further discussion should occur with DELWP regarding the applicability of the assessment bilateral agreement with the Commonwealth.

 Table 5
 Overview of PMST results

Potential MNES affected	Description
Ramsar wetlands	Six sites identified in close proximity or downstream:
	<ul> <li>Within 10 km of Barmah Forest and NSW Central Murray State Forests</li> </ul>
	Within 30-40 km of Gunbower Forest
	200-300 km upstream of Hattah-Kulkyne Lakes
	<ul> <li>400-500 km upstream of Banrock Station Wetland Complex, Riverland, and the Coorong and Lakes Alexandrina and Albert Wetland</li> </ul>
Threatened ecological	One community known to occur within area:
communities	<ul> <li>Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregions</li> </ul>
	Four communities likely to occur within area:
	<ul> <li>Grey Box (<i>Eucalyptus microcarpa</i>) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia</li> </ul>
	Natural Grasslands of the Murray Valley Plains
	<ul> <li>Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains</li> </ul>
	Two communities may occur within area:
	Weeping Myall Woodlands
	White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland
Threatened species	35 species (see Appendix 2 for list)
Migratory species	11 species (see Appendix 2 for list)

#### Assessment against EE Act referral criteria

The project has been assessed against the referral criteria for individual potential environmental effects (listed in Appendix 1) and was found to meet at least one criterion: potential clearing of 10 ha or more of native vegetation (Table 6). At this stage, it is likely that the project will need to be referred under the *EE Act*. Confirmation of the proposed location and nature of works is required before a final assessment can be made.

#### Requirement to prepare a CHMP (Aboriginal Heritage Act 2006)

A CHMP is required when a proposal is a listed high impact activity that will cause significant ground disturbance and is in an area of cultural heritage sensitivity as defined by the Aboriginal Heritage Regulations 2007. CHMPs can also be prepared voluntarily.

Areas of Cultural Heritage Sensitivity are mapped at a scale of 1:100 000 and have been assessed for the project sites. Relevant areas of cultural heritage sensitivity include:

- The Activity Area is located within 200 m of a named waterway (Regulation 23);
- The Activity Area is located within 50 m of registered cultural heritage places (Regulation 22); and
- The Activity Area is located within a Park (Regulation 29).

High impact activities are specified in the Aboriginal Heritage Regulations 2007 (Part 2, Division 5); relevant activities include:

(xxiii) a utility installation, other than a telecommunications facility, if-

(C) the works are a linear project with a length exceeding 100 metres (other than the construction of an overhead power line or a pipeline with a pipe diameter not exceeding 150 millimetres).

Referral criteria	Met?	Comments
<ol> <li>Potential clearing of 10 ha or more of native vegetation from an area that:</li> </ol>	Likely	Construction footprint of regulator and levee outlet works likely to be <10 ha combined.
<ul> <li>Is of an ecological vegetation class identified as endangered by DELWP (in accordance with Appendix 2 of Victoria's native vegetation management framework); or</li> <li>Is, or is likely to be, of very high conservation significance (as defined in accordance with Appendix 3 of Victoria's native vegetation management framework); and</li> <li>Is not authorised under an approved forest management plan or fire protection plan.</li> </ul>		If levee works are included in the final project scope, clearing is likely to exceed 10 ha.
2. Potential long-term loss of a significant proportion (e.g. 1 to 5 percent depending on the conservation status of the species) of known remaining habitat or population of a threatened species within Victoria.	Unlikely	While short-term construction impacts will occur, project impacts on threatened species anticipated to be largely positive.
3. Potential long-term change to the ecological character of a wetland listed under the Ramsar convention or in 'A Directory Of Important Wetlands In Australia'.	No	See <b>Table 5</b> for relevant Ramsar sites. Two Directory-listed wetlands could also be affected (Broken River and Lower Goulburn Floodplain) however works or operation will not have negative impacts in the long-term.
4. Potential extensive or major effects on the health or biodiversity of aquatic, estuarine or marine ecosystems, over the long term.	No	Works or operation will not have extensive or major negative impacts in the long-term.
<ol> <li>Potential extensive or major effects on the health, safety or well-being of a human community, due to emissions to air or water or chemical hazards or displacement of residences.</li> </ol>	No	Project will have no emissions to air or water, no chemical hazards. No displacement of residences will occur.
6. Potential greenhouse gas emissions exceeding 200,000 tonnes of carbon dioxide equivalent per annum, directly attributable to the operation of the facility.	No	Project will not result in excessive greenhouse gas emissions.

Regulatory Approvals Strategy: Goulburn Constraints Management Strategy

### Recommendations

The recommendations below aim to provide further guidance for those managing the approvals process for this project. The recommendations focus on opportunities for efficiencies in the approvals process and areas of potential risk that may need close management.

#### Areas of potential risk

• Time lag between the submission of the business case and confirmation of funding for construction: There could be a number of changes to relevant legislation and the associated permit/licence requirements, which may impact on project timelines and budget.

**Recommendations:** 

- Review any changes to legislation or planning schemes prior to commencing the approvals process for each project.
- Build contingencies into the approvals budget to account for possible changes.
- A number of large environmental works projects are likely to receive funding approval as part of the package of Basin Plan SDL adjustment measures at the same time: This means that numerous referrals/permit applications are likely to be submitted at similar times, creating resourcing issues for approvals agencies and potentially causing significant delays in the approvals process.

#### Recommendations:

- Discuss timeframes for submission with approvals agencies to allow them to organise resources.
- Consider staging the approvals process where possible (note: this should be discussed with approvals agencies).
- Requests for further information after referrals or permit applications are submitted: This could delay the approvals process and potentially delay construction.

#### Recommendations:

- Establish an approvals coordinating group for the project to engage and communicate with approvals agencies during the approvals process.
- Submit draft applications/documentations for review prior to submission to ensure that relevant issues are covered and the appropriate level of detail provided.
- Ensure all relevant documentation and letters of support are submitted with planning permit(s).
- Develop a register of all supporting documentation so that further information is easily accessed by project managers.
- The requirement to secure vegetation offsets prior to clearing (see Table 2): This will be an issue as the primary offsetting mechanism will be the gains from watering, i.e. the outcomes from the project.

#### Recommendation:

 Investigate alternative offsetting arrangements, such as a planning scheme amendment (turning off clause 52.17) or planning permit conditions enabling a staged offsetting process. • Discovery of Aboriginal ancestral remains within the designated areas to be impacted and significant disruption to critical paths.

**Recommendations:** 

- Assess the likelihood for the presence of ancestral remains in each project area;
- o Identify variations to project impacts to avoid harm to ancestral remains;
- Engage early with Traditional Owners and OAAV to manage risk.

#### **Opportunities for efficiencies**

• Ensure adequate consultation with relevant agencies and stakeholders during the approvals process.

**Recommendations:** 

- Establish an approvals coordinating group for the project to engage and communicate with approvals agencies during the approvals process.
- Submit draft applications/documentations for review prior to submission to ensure that relevant issues are covered and the appropriate level of detail provided.
- Identifying the likelihood and / or known presence of significant Aboriginal cultural heritage (including ancestral remains) to be present within the areas to be impacted by development and plan for harm management, avoidance and minimisation at the earliest stages of design.

**Recommendations:** 

- Engage appropriately experienced cultural heritage advisor/s to undertake heritage assessments prior to final design considerations; and
- Ensure that process includes appropriate engagement of Traditional Owners and OAAV.

### Appendix 1 Criteria for referral under the Victorian Environmental Effects Act 1978

#### Referral criteria: individual potential environmental effects

Individual types of potential effects on the environment that might be of regional or State significance, and therefore warrant referral of a project, are:

- Potential clearing of 10 ha or more of native vegetation from an area that:
  - Is of an ecological vegetation class identified as endangered by the department of sustainability and environment (in accordance with Appendix 2 of Victoria's native vegetation management framework); or
  - Is, or is likely to be, of very high conservation significance (as defined in accordance with Appendix 3 of Victoria's native vegetation management framework); and
  - Is not authorised under an approved forest management plan or fire protection plan.
- Potential long-term loss of a significant proportion (e.g. 1 to 5 percent depending on the conservation status of the species) of known remaining habitat or population of a threatened species within Victoria.
- Potential long-term change to the ecological character of a wetland listed under the Ramsar convention or in 'A Directory Of Important Wetlands In Australia'.
- Potential extensive or major effects on the health or biodiversity of aquatic, estuarine or marine ecosystems, over the long term.
- Potential extensive or major effects on the health, safety or well-being of a human community, due to emissions to air or water or chemical hazards or displacement of residences.
- Potential greenhouse gas emissions exceeding 200,000 tonnes of carbon dioxide equivalent per annum, directly attributable to the operation of the facility.

#### Referral criteria: a combination of potential environmental effects

A combination of two or more of the following types of potential effects on the environment that might be of regional or State significance, and therefore warrant referral of a project, are:

- Potential clearing of 10 ha or more of native vegetation, unless authorised under an approved Forest Management Plan or Fire Protection Plan.
- Matters listed under the Flora and Fauna Guarantee Act 1988:
  - o Potential loss of a significant area of a listed ecological community; or
  - Potential loss of a genetically important population of an endangered or threatened species (listed or nominated for listing), including as a result of loss or fragmentation of habitats; or
  - o Potential loss of critical habitat; or
  - Potential significant effects on habitat values of a wetland supporting migratory bird species.
- Potential extensive or major effects on landscape values of regional importance, especially where recognised by a planning scheme overlay or within or adjoining land reserved under the *National Parks Act 1975*.

- Potential extensive or major effects on land stability, acid sulphate soils or highly erodible soils over the short or long term.
- Potential extensive or major effects on beneficial uses of waterbodies over the long term due to changes in water quality, streamflows or regional groundwater levels.
- Potential extensive or major effects on social or economic well-being due to direct or indirect displacement of non-residential land use activities.
- Potential for extensive displacement of residences or severance of residential access to community resources due to infrastructure development.
- Potential significant effects on the amenity of a substantial number of residents, due to extensive or major, long-term changes in visual, noise and traffic conditions.
- Potential exposure of a human community to severe or chronic health or safety hazards over the short or long term, due to emissions to air or water or noise or chemical hazards or associated transport.
- Potential extensive or major effects on Aboriginal cultural heritage.
- Potential extensive or major effects on cultural heritage places listed on the Heritage Register or the archaeological inventory under the *Heritage Act 1995*.

### Appendix 2 Protected Matters Search Tool results



#### EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about <u>Environment Assessments</u> and the EPBC Act including significance guidelines, forms and application process details.

Report created: 16/10/15 20:10:03

Summary Details Matters of NES Other Matters Protected by the EPBC Act Extra Information Caveat Acknowledgements



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2010

Coordinates Buffer: 0.0Km



#### Summary

#### Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the <u>Administrative Guidelines on Significance</u>.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	7
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities;	6
Listed Threatened Species:	35
Listed Migratory Species:	11

#### Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at http://www.environment.gov.au/heritage

A <u>permit</u> may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Land:	3
Commonwealth Heritage Places:	1
Listed Marine Species:	14
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Commonwealth Reserves Marine:	None

#### Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

State and Territory Reserves:	37
Regional Forest Agreements:	3
Invasive Species:	42
Nationally Important Wetlands:	2
Key Ecological Features (Marine)	None

#### Details

#### Matters of National Environmental Significance

Wetlands of International Importance (Ramsar)	[Resource Information]
Name	Proximity
Banrock station wetland complex	400 - 500km upstream
Barmah forest	Within 10km of Ramsar
Gunbower forest	30 - 40km upstream
Hattah-kulkyne lakes	200 - 300km upstream
Nsw central murray state forests	Within 10km of Ramsar
Riverland	400 - 500km upstream
The coorong, and lakes alexandrina and albert wetland	400 - 500km upstream

Listed Threatened Ecological Communities		[Resource Information ]
For threatened ecological communities <u>Ecological Communities</u> <u>Ecologi</u>		
Name	Status	Type of Presence
Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregions Grey Box (Eucalyptus microcarpa) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia	Endangered Endangered	Community known to occur within area Community likely to occur within area
Natural Grasslands of the Murray Valley Plains	Critically Endangered	Community likely to occur within area
Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains	Critically Endangered	Community likely to occur within area
Weeping Myall Woodlands	Endangered	Community may occur within area
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Community likely to occur within area
Listed Threatened Species		[Resource Information]
Name	Status	Type of Presence
Birds		
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Breeding known to occur within area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area
<u>Grantiella picta</u> Painted Honeyeater [470]	Vulnerable	Species or species habitat known to occur within area
Lathamus discolor Swift Parrot [744]	Endangered	Species or species habitat likely to occur within area
<u>Pedionomus torquatus</u> Plains-wanderer [906]	Critically Endangered	Species or species habitat likely to occur within area
Pezoporus occidentalis Night Parrot (59350) Polytelis swainsonii	Endangered	Extinct within area
Superb Parrot [738]	Vulnerable	Species or species

Name	Status	Type of Presence
Rostratula australis		habitat known to occur within area
Australian Painted Snipe [77037]	Endangered	Species or species habitat
Australian Faillied Shipe [77037]	Endangered	likely to occur within area
Fish		
Bidvanus bidvanus		
Silver Perch, Bidyan [76155]	Critically Endangered	Species or species habitat known to occur within area
Craterocephalus fluviatilis		
Murray Hardyhead [56791]	Endangered	Species or species habitat may occur within area
Maccullochella macquariensis		
Trout Cod [26171]	Endangered	Species or species habitat likely to occur within area
Maccullochella peelii		
Murray Cod [66633]	Vulnerable	Species or species habitat may occur within area
Macquaria australasica		
Macquarie Perch [00632]	Endangered	Species or species habitat may occur within area
Frogs		
Litoria raniformis		
Growling Grass Frog, Southern Bell Frog, Green and Golden Frog, Warty Swamp Frog [1828]	Vulnerable	Species or species habitat likely to occur within area
Insects		
Synemon plana		
Golden Sun Moth [25234]	Critically Endangered	Species or species habitat likely to occur within area
Mammals		
Dasyurus maculatus maculatus (SE mainland populati		
Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat may occur within area
Nyctophilus corbeni		
Corben's Long-eared Bat, South-eastern Long-eared Bat [83395]	Vulnerable	Species or species habitat may occur within area
Phascolarctos cinereus (combined populations of Qld.	NSW and the ACT)	
Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Vulnerable	Species or species habitat likely to occur within area
Pseudomys fumeus		
Konoom, Smoky Mouse [88]	Endangered	Species or species habitat likely to occur within area
Pteropus poliocephalus		
Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Plants		
Amphibromus fluitans River Swamp Wallaby-grass, Floating Swamp Wallaby-grass [19215]	Vulnerable	Species or species habitat may occur within area
Brachyscome muelleroides		
Mueller Daisy [15572]	Vulnerable	Species or species habitat likely to occur within area
Caladenia tensa		
Greencomb Spider-orchid, Rigid Spider-orchid [24390]		Species or species habitat

Name	Status	Type of Presence
Caladenia versicolor		
Candy Spider-orchid [24392]	Vulnerable	Species or species habitat may occur within area
Dianella amoena	<b>_</b>	
Matted Flax-lily [64886]	Endangered	Species or species habitat likely to occur within area
Glycine latrobeana		
Clover Glycine, Purple Clover [13910]	Vulnerable	Species or species habitat likely to occur within area
Myriophyllum porcatum		
Ridged Water-milfoil [19919]	Vulnerable	Species or species habitat likely to occur within area
Pimelea spinescens subsp. spinescens		
Plains Rice-flower, Spiny Rice-flower, Prickly Pimelea [21980]	Critically Endangered	Species or species habitat may occur within area
Prasophyllum morganii		
Mignonette Leek-orchid, Cobungra Leek-orchid, Dense Leek-orchid [13804]	Vulnerable	Species or species habitat may occur within area
Pterostylis cucullata		
Leafy Greenhood [15459]	Vulnerable	Species or species habitat may occur within area
Sclerolaena napiformis		
Turnip Copperbur [11742]	Endangered	Species or species habitat likely to occur within area
Swainsona murrayana		
Slender Darling-pea, Slender Swainson, Murray Swainson-pea [6765]	Vulnerable	Species or species habitat likely to occur within area
Thelymitra matthewsii		
Spiral Sun-orchid [4168]	Vulnerable	Species or species habitat may occur within area
Reptiles		
Aprasia parapulchella		
Pink-tailed Worm-lizard, Pink-tailed Legless Lizard [1865]	Vulnerable	Species or species habitat likely to occur within area
<u>Delma impar</u>		
Striped Legless Lizard [1649]	Vulnerable	Species or species habitat known to occur within area
Listed Migratory Species		[Resource Information
* Species is listed under a different scientific name on t		
Name Migratory Marine Birds	Threatened	Type of Presence
Migratory Marine Birds Apus pacificus		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Hirundapus caudacutus		
White-throated Needletail [682]		Species or species habitat known to occur within area
Merops ornatus		
Rainbow Bee-eater [670]		Species or species habitat may occur within area
Monarcha melanopsis		
Black-faced Monarch [609]		Species or species habitat known to occur within area

#### Name

Motacilla flava Yellow Wagtail [644]

Myiagra cyanoleuca Satin Flycatcher [612]

Rhipidura rufifrons Rufous Fantail [592]

#### Migratory Wetlands Species

Ardea alba Great Egret, White Egret [59541]

Ardea ibis Cattle Egret [59542]

<u>Gallinago hardwickii</u> Latham's Snipe, Japanese Snipe [863]

Pandion haliaetus Osprey [952] Threatened

#### Type of Presence

Species or species habitat may occur within area

Species or species habitat known to occur within area

Species or species habitat known to occur within area

Breeding known to occur within area

Species or species habitat may occur within area

Species or species habitat may occur within area

Species or species habitat likely to occur within area

#### Other Matters Protected by the EPBC Act

	I.	
Commonwealth Land The Commonwealth area listed below may indicate the unreliability of the data source, all proposals sho Commonwealth area, before making a definitive deo department for further information.	the presence of Commonwealth I ould be checked as to whether it in	mpacts on a
Name		
Commonwealth Land - Defence - Ordnance Depot Defence - SOMME BARRACKS - SHEPPARTON		
Commonwealth Heritage Places	1	Resource Information ]
Name	State S	tatus
Natural		
Puckapunyal Military Area	VIC Li	sted place
Listed Marine Species * Species is listed under a different scientific name of		Resource Information ]
Name		ype of Presence
Birds		,,
<u>Apus pacificus</u> Fork-tailed Swift [678]		pecies or species habitat sely to occur within area
Ardea alba Great Egret, White Egret [59541]		reeding known to occur ithin area
	w	
Great Egret, White Egret [59541] Ardea ibis	w s m	ithin area pecies or species habitat
Great Egret, White Egret [59541] Ardea ibis Cattle Egret [59542] Gallinago hardwickii	w s m s	ithin area pecies or species habitat ay occur within area pecies or species habitat

Regulatory Approvals Strategy: Goulburn Constraints Management Strategy

Name	Threatened	Type of Presence
Lathamus discolor		habitat known to occur within area
Swift Parrot [744]	Endangered	Species or species habitat likely to occur within area
Merops ornatus		
Rainbow Bee-eater [670]		Species or species habitat may occur within area
Monarcha melanopsis		
Black-faced Monarch [609]		Species or species habitat known to occur within area
Motacilla flava		
Yellow Wagtail [644]		Species or species habitat may occur within area
Myiagra cyanoleuca		
Satin Flycatcher [612]		Species or species habitat known to occur within area
Pandion haliaetus		
Osprey [952]		Species or species habitat likely to occur within area
Rhipidura rufifrons		
Rufous Fantail [592]		Species or species habitat known to occur within area
Rostratula benghalensis (sensu lato)		
Painted Snipe [889]	Endangered*	Species or species habitat likely to occur within area

#### Extra Information

State and Territory Reserves	[Resource Information]
Name	State
Alexandra G56 B.R	VIC
Arcadia H59 B.R.	VIC
Arcadia SS.R.	VIC
Baileston B.R	VIC
Dargalong SS.R.	VIC
Gemmill Swamp W.R	VIC
Ghin Ghin G115 B.R.	VIC
Goulburn River H.R	VIC
Goulburn River K45 SS.R.	VIC
Goulburn River K49 SS.R.	VIC
Goulburn River, Killingworth Rd SS.R.	VIC
Homewood N.C.R	VIC
Horseshoe Lagoon F.F.R.	VIC
Hughes Creek Hill B.R.	VIC
Kaarimba H25 B.R.	VIC
Kotupna B.R.	VIC
Kotupna School B.R.	VIC
Lake Eildon	VIC
Lake Eildon NP (Thornton)	VIC
Loch Gary W.R.	VIC
Lower Goulburn	VIC
Mangalore N.C.R.	VIC
McKenzie N.C.R.	VIC

Name	State
Mitchellstown SS.R.	VIC
Molesworth N.C.R	VIC
Murchison B.R.	VIC
Murchison Lagoon W.R.	VIC
Murray Valley	NSW
Reedy Lake, Nagambie W.R	VIC
River Murray Reserve	VIC
Snobs Creek W.R	VIC
St Germains B.R.	VIC
Switzerland Range N.C.R	VIC
Tabilk Lagoon W.R	VIC
Wahring SS.R.	VIC
Wyndham SS.R.	VIC
Wyuna N.C.R.	VIC

Regional Forest Agreements	[Resource Information]
Note that all areas with completed RFAs have been included.	
Name	State
Central Highlands RFA	Victoria
North East Victoria RFA	Victoria
West Victoria RFA	Victoria
Invasive Species	[Resource Information]

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resouces Audit, 2001.

Name	Status	Type of Presence
Birds		
Acridotheres tristis		
Common Myna, Indian Myna [387]		Species or species habitat likely to occur within area
Alauda arvensis		
Skylark [656]		Species or species habitat likely to occur within area
Anas platyrhynchos		
Mallard [974]		Species or species habitat likely to occur within area
Carduelis carduelis		
European Goldfinch [403]		Species or species habitat likely to occur within area
Carduelis chloris		
European Greenfinch [404]		Species or species habitat likely to occur within area
Columba livia		
Rock Pigeon, Rock Dove, Domestic Pigeon [80]	3]	Species or species habitat likely to occur within area
Passer domesticus		
House Sparrow [405]		Species or species habitat likely to occur within area
Passer montanus		
Eurasian Tree Sparrow [408]		Species or species habitat likely to occur within area
Streptopelia chinensis		
Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
Sturnus vulgaris		
Common Starling [389]		Species or species habitat likely to occur within area

Regulatory Approvals Strategy: Goulburn Constraints Management Strategy

#### Name

Turdus merula Common Blackbird, Eurasian Blackbird [598]

Turdus philomelos Song Thrush [597]

#### Mammals

Bos taurus Domestic Cattle [16]

Canis lupus familiaris Domestic Dog [82654]

Capra hircus Goat [2]

Felis catus Cat, House Cat, Domestic Cat [19]

Feral deer Feral deer species in Australia [85733]

Lepus capensis Brown Hare [127]

Mus musculus House Mouse [120]

Oryctolagus cuniculus Rabbit, European Rabbit [128]

Rattus norvegicus Brown Rat, Norway Rat [83]

Rattus rattus Black Rat, Ship Rat [84]

Sus scrofa Pig [6]

Vulpes vulpes Red Fox, Fox [18]

#### Plants

Asparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]

Asparagus scandens Asparagus Fern, Climbing Asparagus Fern [23255]

Cabomba caroliniana Cabomba, Fanwort, Carolina Watershield, Fish Grass, Washington Grass, Watershield, Carolina Fanwort, Common Cabomba [5171] Cenchrus ciliaris Buffel-grass, Black Buffel-grass [20213]

#### Status

Species or species habitat likely to occur within area

Type of Presence

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat may occur within

Regulatory Approvals Strategy: Goulburn Constraints Management Strategy

#### Name

Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]

Cytisus scoparius Broom, English Broom, Scotch Broom, Common Broom, Scottish Broom, Spanish Broom [5934]

Eichhornia crassipes Water Hyacinth, Water Orchid, Nile Lily [13466]

Genista linifolia Flax-leaved Broom, Mediterranean Broom, Flax Broom [2800]

Genista monspessulana Montpellier Broom, Cape Broom, Canary Broom, Common Broom, French Broom, Soft Broom [20126]

Lycium ferocissimum African Boxthorn, Boxthorn [19235]

Nassella neesiana Chilean Needle grass [67699]

Nassella trichotoma Serrated Tussock, Yass River Tussock, Yass Tussock, Nassella Tussock (NZ) [18884]

Opuntia spp. Prickly Pears [82753]

Rubus fruticosus aggregate Blackberry, European Blackberry [68406]

Sagittaria platyphylla Delta Arrowhead, Arrowhead, Slender Arrowhead [68483]

Salix spp. except S.babylonica, S.x calodendron & S.x reichardtii Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]

Solanum elaeagnifolium Silver Nightshade, Silver-leaved Nightshade, White Horse Nettle, Silver-leaf Nightshade, Tomato Weed, White Nightshade, Bull-nettle, Prairie-berry, Satansbos, Silver-leaf Bitter-apple, Silverleaf-nettle, Trompillo [12323] Ulex europaeus Gorse, Furze [7693] Type of Presence area

Status

Species or species habitat may occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Species or species habitat likely to occur within area

Nationally Important Wetlands	[Resource Information]
Name	State
Lower Broken River	VIC
Lower Goulburn River Floodplain	VIC

#### Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1990. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

For species where the distributions are well known, maps are digitised from sources such as recovery plans and detailed habitat studies. Where appropriate, core breeding, foraging and roosting areas are indicated under 'type of presence'. For species whose distributions are less well known, point locations are collated from government wildlife authorities, museums, and non-government organisations; bioclimatic distribution models are generated and these validated by experts. In some cases, the distribution maps are based solely on expert knowledge.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

#### - migratory and

- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers
- The following groups have been mapped, but may not cover the complete distribution of the species:
  - non-threatened seabirds which have only been mapped for recorded breeding sites
  - seals which have only been mapped for breeding sites near the Australian continent

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

#### Coordinates

-37.22744 145.934947,-37.24384 145.93632,-37.268981 145.892375,-37.282094 145.847056,-37.266795 145.798991,-37.254772 145.772898,-37.253679 145.705607,-37.246027 145.672648,-37.216505 145.669902,-37.21213 145.528703,-37.201192 145.595744,-37.184783 145.586131,-37.172747 145.44862,-37.173841 145.40211,-37.189159 145.378764,-37.191347 145.333445,-37.153048 145.266154,-37.09611 145,171387,-37.103777 145.138438,-37.079677 145.119212,-37.051186 145.127452,-37.039129 145.105479,-37.028166 145.083506,-37.005139 145.099986,-36.995269 145.110972,-36.95248 145.121958,-36.921746 145.108226,-36.885507 145.094493,-36.660239 145.091746,-36.817375 145.040934,-36.774487 145.06428,-36.639067 145.151513,-36.581745 145.223582,-36.548655 145.204493,-36.660239 145.091746,-36.817375 145.040934,-36.455928 145.349925,-36.432728 145.332072,-36.408417 145.349925,-36.377464 145.358165,-36.307776 145.334819,-36.278997 145.329325,-36.25353 145.270274,-36.1252216 145.246928,-36.12598 145.244161,-36.11559 144.9017,-36.512853 144.947561,-36.119416 144.919955,-36.10555 144.904979,-36.107212 144.870646,-36.123853 144.854167,-36.103884 144.828074,-36.07503 144.850047,-36.05837 144.919955,-36.10555 144.904979,-36.107212 144.870646,-36.123853 144.854167,-36.103884 144.828074,-36.07503 144.850047,-36.05837 144,933818,-36.10555 144.904979,-36.150271 144.96128,-36.102774 144.988749,-36.1228453,-36.13798 145.071147,-36.150471 145,113719,-36.274569 145.33458,-36.302242 145.037677,-36.342075 145.421336,-36.367513 145.421336,-36.403396 145.07714,145,313439,-36.526587 145.33818,-36.697481 145.207103,-36.50271 145.150173,-36.302771 144.988749,-36.12281445,-36.161784,-36.1878 145,071145,33483,-36.560571 145,334819,-36.274569 145.33458,-36.302242 145.037677,-36.342075 145.421336,-36.367513 145.421336,-36.403396 145.071147,-36.150471 145,113719,-36.74552 145.355418,-36.50571 145,1513,-36.50771 144,5154917,-37.161803 145,32571,-37.14869 145,413096,-37.133343 145,484507,-37.144291 145.544932,-37.357188 145.37967,-37.27077 145,167277,-37.161803 14

#### Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Office of Environment and Heritage, New South Wales -Department of Environment and Primary Industries, Victoria -Department of Primary Industries, Parks, Water and Environment, Tasmania -Department of Environment, Water and Natural Resources, South Australia -Parks and Wildlife Commission NT. Northern Territory Government -Department of Environmental and Heritage Protection. Queensland -Department of Parks and Wildlife, Western Australia -Environment and Planning Directorate. ACT -Birdlife Australia -Australian Bird and Bat Banding Scheme -Australian National Wildlife Collection -Natural history museums of Australia -Museum Victoria -Australian Museum -South Australian Museum -Queensland Museum -Online Zoological Collections of Australian Museums -Queensland Herbarium -National Herbarium of NSW -Royal Botanic Gardens and National Herbarium of Victoria -Tasmanian Herbarium -State Herbarium of South Australia -Northern Territory Herbarium -Western Australian Herbarium -Australian National Herbarium. Atherton and Canberra -University of New England -Ocean Biogeographic Information System -Australian Government, Department of Defence Forestry Corporation, NSW -Geoscience Australia -CSIRO -Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the Contact Us page.

© Commonwealth of Australia Department of the Environment GPO Box 787 Canberra ACT 2801 Australia +61 2 6274 1111

### www.delwp.vic.gov.au