

Werai Lands - Regulator Replacement

Application Number: **02810**

Commencement Date:
11/03/2025

Status: **Locked**

1. About the project

1.1 Project details

1.1.1 Project title *

Werai Lands - Regulator Replacement

1.1.2 Project industry type *

Natural Resources Management

1.1.3 Project industry sub-type

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1.1.4 Estimated start date *

01/06/2025

1.1.4 Estimated end date *

30/06/2027

1.2 Proposed Action details

1.2.1 Provide an overview of the proposed action, including all proposed activities. *

The NSW Department of Climate Change, Energy, the Environment, and Water (DCCEEW) Water Group – Infrastructure (DCCEEW Water) is proposing to demolish and replace four outdated and unsafe water management infrastructure (regulators) to improve flooding, improve fish passage and water flow regimes for the Werai Forest (the Project).

The Project is situated within the Werai Forest, which is 11,658 hectares of former State Forests and National Park now owned by the Werai Land and Water Aboriginal Corporation map in Attachment A (Reference: Att-A_Map Regulators whole_RRC Werai Forest) provides a map of the project overview.

Currently, water flows into Werai Forest via the Tumudgery Creek, Niemur River, Reed Bed Creek and Moonyah lagoon (pipe structure) regulators. The primary operating objective of these regulators is to prevent water from passing into these natural watercourses during periods of controlled flow mainly through the irrigation season. Map in Attachment B (Reference: Att-B_Map Hydrology_RRCP Werai Forest) provides a map of the river system.

The existing four regulators proposed to be replaced within the Werai Forest have reached end-of-life, are difficult to operate, do not meet current Work Health and Safety standards and are not suited to delivering improved environmental flows. The project will also include ancillary development such as solar panel and communication tower, minor upgrades to access tracks to ensure access to infrastructure, in addition to temporary works compounds and borrow pits.

The objectives of the Project include:

- Improved access and opportunities for First Nations people as owners of the Werai Forest
- Easier and safer operation of new regulators
- Improved river operations (control and efficiency)
- Improved local and regional environmental health of waterways and wetlands
- Improved environmental water delivery, in-line with Murray-Darling Basin Plan objective
- Improved river connectivity and fish passage

The proposed action will include the following activities:

- decommissioning, removal and replacement of the following regulators:
 - Tumudgery Creek regulator
 - Reed Beds Creek regulator
 - Niemur River regulator
 - Moonyah Lagoon regulator (pipe structure).

Each of the new regulators will be located within the vicinity of the existing regulator sites. An additional 100 m buffer is included around the regulator sites to capture the construction footprint, laydown areas, site compounds and parking. Maps of regulators locations and borrow site locations are found in the maps in the following Attachments E, F, G, H (Reference: Att-E_RRCP Werai_Map_Moonyah Regulator; Att-F_RRCP Werai_Map_Niemur Regulator; Att-G_RRCP Werai_Map_Reed Bed Regulator; Att-H_RRCP Werai_Map_Tumudgery Regulator).

Ancillary facilities will include

- Vegetation clearing and minor upgrading of existing access tracks and two creek crossings to support construction and maintenance.
- Solar panel frame to support a 2 m² solar panel; and a communications tower.
- Temporary site compounds associated with construction of the regulator sites.
- Cofferdams associated with construction of the new regulators.
- Borrow pits that would provide material for the construction of the regulators.

The new regulator gates are proposed to be double leaf (also known as combination gates), meaning that each bay has a top gate and bottom gate that can be operated independently of each other. The regulators will, when operated, be either fully open or fully closed. The gates will not be operated to regulate flows in

undershot or overshot modes as these modes of operation have potential impacts on fish passage. The benefit of having double leaf gates on the proposed structures is that the gates can be raised completely out of the water. Fully opened gates (clear of the water) will optimise fish passage through these structures when flow velocities are less than 0.3 metres per second in addition to allowing floating debris to pass through the structures. The gate sills will be lowered to stream bed level rather than the current 1 metre high sills and will further improve fish passage.

The Werai Forest is located within the traditional lands of the Wemba Wemba and Barapa Barapa nations and is part of an Indigenous Land Use Agreement (ILUA), which was registered with the National Native Title Tribunal (NNTT) on 8 December 2022 with freehold title transferred to the Werai Land and Water Aboriginal Corporation (Werai LWAC) in July 2023. The regulators and borrow pits of the project are generally on land vested in Water NSW and Werai LWAC.

The disturbance of approximately 15.94 hectares of native woodland and forest vegetation has been estimated for the regulators, borrow pits and associated access tracks for the project.

Potential direct impacts include vegetation removal, earthworks, vehicle movement and construction of infrastructure within the indicative disturbance footprint shown on map in Attachment I (Reference: Att-I_Map_WeraiRegsBorrowDisturbanceAccess_20240829). Potential indirect impacts include generation of noise, dust or water born sediments in the area adjoining the direct disturbance footprint. Much of the indicative disturbance footprint shown on Att-I_Map_WeraiRegsBorrowDisturbanceAccess_20240829 and would only be subject to partial or temporary impacts, including:

- In clearing areas for construction of the regulators, flood bypass channel and borrow pits, mature trees, topsoil and other habitat resources may be retained within this maximum impact area and, other than the regulator structures and their immediate vicinity, understory vegetation would be allowed to regenerate
- Contractor activity zones outside of clearing areas would be used for construction purposes only (e.g., laydown, site sheds, parking) and have been selected to minimise the amount of tree removal or trimming required and would be allowed to regenerate
- Upgrade of the access tracks would require vegetation removal and excavation of soil. Understory vegetation would be left undisturbed or would be allowed to regenerate where possible.

Construction of the proposal would start around Q4 2025 and continue for approximately 12 months. Construction would be weather dependent and pause during periods of high flow. Operation of the proposal would occur for the design life of the regulators of 100 years as the regulators contribute to the management of the Werai Forest in accordance with the Operating Plan-*Environmental water delivery into the Edward River (downstream from Stevens Weir), with a primary focus on the environmental water requirements for Werai Lands, Colligen Creek and the Niemur River (with reference to the Yallakool Creek and Wakool River)*. See Att-K_Operating Plan for Werai-Colligen-Niemur Regulators_Nov 2024

1.2.2 Is the project action part of a staged development or related to other actions or proposals in the region?

No

1.2.6 What Commonwealth or state legislation, planning frameworks or policy documents are relevant to the proposed action, and how are they relevant? *

The project is being assessed to satisfy the requirements of Division 5.1 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) and considers the factors listed in section 171 of the Environmental Planning & Assessment Regulation 2021 (EP&A Regs).

DCCEE Water is the proponent for the project and it is intended that Water NSW operate the new infrastructure once constructed. The new assets will be owned by Joint Venture River Murray Operations (RMO) under the Murray Darling Basin Agreement.

1. The *Environmental Planning and Assessment Act 1979* (EP&A Act) is the primary statutory instrument for the management and regulation of land use and development in NSW.
2. State Environmental Planning Policy (Transport and Infrastructure) 2021 (TI SEPP) is the principal environmental planning instrument (EPI) for this proposed activity.
3. Chapter 2 of the TI SEPP deals with infrastructure, and aims to facilitate the effective delivery of infrastructure across the State, and the TI SEPP generally prevails over other EPIs to the extent of any inconsistency.

Division 24 of the TI SEPP includes provisions for water supply systems.

Characterisation

The proposed activity is for the purpose of water storage facilities.

Under the TI SEPP, the definition of a *water storage facility* is a dam, weir or reservoir for the collection and storage of water, and includes associated monitoring or gauging equipment.

Components of the activity, which include borrow pits and road upgrade works, are ancillary to the dominant purpose of development for the purpose of a water storage facility.

Permissibility

Pursuant to subsection 2.159(2A) of the TI SEPP, development permitted without consent includes:

Development for the purposes of the maintenance or replacement of existing water storage facilities may be carried out by or on behalf of a public authority without consent on any land.

The proposed activity seeks to replace existing water storage assets and is therefore permitted without consent.

Development without consent is assessed through the preparation of a Review of Environmental Factors (REF) and self determination by NSW DCCEE. The draft REF for the project is contained in Att-N_Att-N_REF (draft)_Weraí Forest_REDACTED.

The *Biodiversity Conservation Act 2016* (BC Act) provides legal protection for biota of conservation significance in NSW. An assessment of the likelihood of threatened biota occurring within the Weraí Forest project area has been completed for flora and fauna along with an assessment of whether the project has potential to result in a significant effect to these species. Tests of Significance indicate that a significant effect is not likely to result from the project.

The flora and fauna assessment found in Att-L_Flora and Fauna Assessment_Weraí Forest regulators and borrow pits, Section 'Conclusion', pg. 116; includes consideration of the assessment and approval requirements of the *Commonwealth Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) including assessment of significance of impacts to threatened species that are known or likely to occur and that may be subject to direct or indirect impacts pursuant to the **Matters of National Environmental Significance Significant impact guidelines 1.1 Environment Protection and Biodiversity Conservation Act 1999** DotE 2013. See Att-L_Flora and Fauna Assessment_Weraí Forest regulators and borrow pits, Section 'Appendix 4', pg. 166.

The *Fisheries Management Act 1994* (FM Act) provides for the protection and assessment of impacts to matters protected by the FM Act, including protected marine vegetation and key fish habitat. The potential for impacts from the project has been assessed within the flora and fauna assessment. In addition, in accordance with Section 219 of the FM Act, passage of fish must not be blocked and flows in the Edward River (downstream from Stevens Weir) and Colligen Creek will be managed to optimise fish passage through the Werai Lands and Niemur River Offtake regulators, and the existing Stevens Weir and Colligen Creek fishways. Operating procedures are provided in the Operating Plan (*Operating Plan-Environmental water delivery into the Edward River (downstream from Stevens Weir), with a primary focus on the environmental water requirements for Werai Lands, Colligen Creek and the Niemur River (with reference to the Yallakool Creek and Wakool River)*) (See Att-K_ Operating Plan for Werai-Colligen-Niemur Regulators_Nov 2024, Section 'Operating scenarios', pg 12) to enable this outcome.

The *Biosecurity Act 2015* provides for risk-based management of biosecurity in NSW. It provides a statutory framework protect the NSW economy, environment and community from the negative impacts of pests, diseases and weeds. Priority weeds were not recorded in the study area. Legal requirements to minimise the potential for the introduction and / or spread of weeds as result of the project are discussed in the flora and fauna assessment.

The *Heritage Act 1977* provides protection to heritage items that have been identified, assessed, and listed on various registers including State government section 170 registers, Local Environmental Plans, and the State Heritage Register. The project would not involve impacts to identified heritage items or areas.

The *National Parks and Wildlife Act 1974* provides the basis for the legal protection and management of Aboriginal sites and objects in NSW. An archaeological survey of the project area has been conducted in February and August 2024 under the due diligence process as part of an Aboriginal Due Diligence Assessment report for the project in addition to November 2024 under the Code as part of the Aboriginal Cultural Heritage Assessment for the project. Test excavations have also been carried out for the project in January 2025.

Murray-Darling Basin Plan - The Commonwealth Water Act 2007 provides a legislative framework for the management of the Murray-Darling Basin in the national interest. The Act establishes the Murray-Darling Basin Authority as an independent authority that has functions and powers, including enforcement powers, to ensure that Murray-Darling Basin water resources are managed in an integrated and sustainable way. The Act requires the Murray-Darling Basin Authority to prepare the Murray-Darling Basin Plan.

Basin-wide Environmental Watering Strategy - The Basin-wide Environmental Watering Strategy is the long-term watering plan for the Murray-Darling Basin. It contains strategies to achieve improvements in river flows and connectivity, native vegetation, waterbirds and native fish with water recovered for the Murray-Darling Basin environment, and other measures to improve flows in the river system. The strategy supports environmental water holders, Basin state governments, water managers and river operators to plan and manage environmental watering at a Basin scale and over the long term, to achieve the environmental objectives of the Murray-Darling Basin Plan.

The **NSW Murray-Lower Darling Long Term Water Plan** guides local decision making on actions to support the ongoing health of the rivers and wetlands. Part B of the Long-Term Water Plan identifies a range of environmental watering requirements for the Edward River (Stevens Weir to Wakool River), and Colligen Creek and Niemur River. This provides long-term environmental watering plans and annual priorities for catchments that consider the Basin-wide environmental watering strategy and relevant international agreements (such as the Ramsar Convention). Some Basin state governments, including NSW, also own entitlements to water for the environment. They manage state river systems and water for the environment, provide local knowledge, monitor waterway health and conditions, and coordinate the delivery of water for the environment.

The *NSW Murray-Lower Darling Long Term Water Plan* describes the flow regimes that are required to maintain or improve environmental outcomes and identifies water management strategies for maintaining and improving the long-term health of the riverine and floodplain environmental assets and the ecological functions. The *NSW Murray-Lower Darling Long Term Water Plan* is used by water managers and advisory groups, to make decisions about where, when and how available water can be used to achieve the agreed long-term ecological objectives.

The ***Murray-Lower Darling Baaka Annual Environmental Water Plan*** identifies watering actions that aim to achieve the environmental outcomes and linkages to the Basin Watering Strategy, annual priorities, the NSW Murray-Lower Darling Long-Term Water Plan, and site objectives, whilst the ***Operating plan: Weraí Lands, Colligen Creek and Niemur River offtake regulators*** supports the *Weraí Water Management Plan* and outlines a range of operating scenarios and the environmental watering requirements needed to maintain the ecological character of the Ramsar-listed wetland area, and to achieve the cultural and environmental objectives in water management plans.

1.2.7 Describe any public consultation that has been, is being or will be undertaken regarding the project area, including with Indigenous stakeholders. Attach any completed consultation documentations, if relevant. *

Extensive consultation has occurred with affected landholders and stakeholders. In 2024, DCCEE Water developed a communications and engagement plan for the project. The broader community has generally supported the proposed upgrades to the regulators and environmental outcomes include RAPs for the project.

Ongoing engagement activities include the following:

- stakeholder information sessions about every three months or as required if new information is to be shared
- improved information products to facilitate community input and advice
- learn details about the outcomes of proposed options

Feedback received from stakeholders so far has highlighted:

- the importance of maintaining river flows for cultural, environmental, community and economic purposes
- the importance of adequately considering infrastructure solutions to ensure the best solution is progressed
- the strong desire to work collaboratively for the duration of the project
- ensuring reach by reach minimum baseflows are maintained
- impact during construction such as water quality and impact to private properties
- effects of regulator operations on upstream users and, effects on pumps and pumping costs
- reduced flows downstream will encourage vegetation encroachment
- ongoing desire and need for environmental monitoring and reporting.

In addition, we have met with Government agencies including Cth DCCEE as part of a pre-referral meeting for the project.

See Att-J for Communication and Engagement Plans. (Reference: Att-J_FINAL_RRCP_Early works and measures_communication and engagement subplan_Weraí Forest package_REDACTED).

1.3.1 Identity: Referring party

Privacy Notice:

Personal information means information or an opinion about an identified individual, or an individual who is reasonably identifiable.

By completing and submitting this form, you consent to the collection of all personal information contained in this form. If you are providing the personal information of other individuals in this form, please ensure you have their consent before doing so.

The Department of Climate Change, Energy, the Environment and Water (the department) collects your personal information (as defined by the Privacy Act 1988) through this platform for the purposes of enabling the department to consider your submission and contact you in relation to your submission. If you fail to provide some or all of the personal information requested on this platform (name and email address), the department will be unable to contact you to seek further information (if required) and subsequently may impact the consideration given to your submission.

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1.3.1.1 Is Referring party an organisation or business? *

Yes

Referring party organisation details

ABN/ACN	27578976844
Organisation name	NSW DEPARTMENT OF CLIMATE CHANGE, ENERGY, THE ENVIRONMENT AND WATER
Organisation address	L17, 12 Darcy Street, 4PSQ, Parramatta, NSW, 2150

Referring party details

Name	Elma Aguilera
Job title	Senior Project Officer
Phone	0458 637 805
Email	Elma.Aguilera@dpie.nsw.gov.au
Address	

1.3.2 Identity: Person proposing to take the action

1.3.2.1 Are the Person proposing to take the action details the same as the Referring party details? *

No

1.3.2.2 Is Person proposing to take the action an organisation or business? *

Yes

Person proposing to take the action organisation details

ABN/ACN	27578976844
Organisation name	NSW DEPARTMENT OF CLIMATE CHANGE, ENERGY, THE ENVIRONMENT AND WATER
Organisation address	2800 NSW

Person proposing to take the action details

Name	Lara Hess
Job title	Director Environment Planning and Land
Phone	0456 953 013
Email	lara.hess@dpie.nsw.gov.au
Address	L17, 12 Darcy St, 4PSQ, Parramatta, 2150

1.3.2.14 Are you proposing the action as part of a Joint Venture? *

No

1.3.2.15 Are you proposing the action as part of a Trust? *

No

1.3.2.17 Describe the Person proposing the action's history of responsible environmental management including details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against the Person proposing to take the action. *

The Infrastructure Delivery Division within the NSW DCCEEW Water Group (Water Group) was established in November 2020 (formerly Water Infrastructure NSW) as a capital works delivery arm of the former NSW Department of Planning and Environment (DPE), for the development and delivery of major water infrastructure projects for the State of NSW. The Infrastructure Delivery Division of the Water Group (Water Group) was created to provide safe, reliable and efficient water supplies for communities and industries while ensuring water is available for the environment and cultural purposes. The Water Group has a good record of responsible environmental management. It has delivered projects throughout NSW, including for example the Nimmie-Caira Project, Improving the Great Artesian Basin Drought Resilience Program and the Upper Darling Salt Interception Scheme. These projects have included appropriate environmental impact assessment, management plans and permits to successfully reduce environmental impacts.

The new assets will be owned by Joint Venture River Murray Operations (RMO) under the Murray Darling Basin Agreement. It is a State-Owned Corporation established under the *Water NSW Act 2014* and operates under an Operating License issued and monitored by the Independent Pricing and Regulatory Tribunal. Water NSW operate the state's rivers and water supply systems in accordance with the rules set out by regulators. This includes more than 40 dams across the state, which supply two-thirds of water used in NSW to regional towns, irrigators, Sydney Water Corporation and local water utilities. It also owns and operates the largest surface and groundwater monitoring network in the southern hemisphere, and builds, maintains and operates essential infrastructure. WaterNSW is the current operator of the regulated Billabong Creek.

The Water Group has previously referred the following actions:

- Replacement Pipeline between Dungowan Village and Calala (2021/9091)
- Dungowan Dam Detailed Design Geotechnical Investigations (2021/9012)
- Wyangala Dam Wall Raising (2020/8653)
- Dungowan Dam Project (2020/8655)
- Snowies Iconic Walk (2019/8558)
- Bullatale inlet regulator replacement project (2022/09390)
- Nyngan to Cobar Water Pipeline (2024/09815)
- Millewa Forest SDLAM Project (2023/09517)
- SDLAM Third Party Impact Mitigation at Shear Paddock (2023/09504).

1.3.2.18 If the person proposing to take the action is a corporation, provide details of the corporation's environmental policy and planning framework

NSW DCCEEW's vision is for "Thriving environment and communities for every generation." This vision is supported by NSW DCCEEW-Water Group's Environmental Policy and Environmental Management Framework, which has been developed to:

- Drive compliance with environmental legislation, codes of practice, and regulatory requirements applicable to NSW DCCEEW-Water Group projects and programs.
- Provide a structured and consistent approach to managing environmental issues throughout project and program development and delivery.

The Environmental Management Framework comprises guidelines, procedures, templates, and tools designed specifically for NSW DCCEEW Water Group – Infrastructure Delivery projects. It aligns with ISO 14001 Environmental Management Systems and aims to:

- Identify and manage environmental risks effectively.
- Provide tools and resources to mitigate these risks.
- Continuously enhance environmental protection throughout project and program lifecycles.

A copy of the environmental management framework is attached as Att-O_Project_Environmental_Framework

1.3.3 Identity: Proposed designated proponent

1.3.3.1 Are the Proposed designated proponent details the same as the Person proposing to take the action? *

Yes

Proposed designated proponent organisation details

ABN/ACN 27578976844**Organisation name** NSW DEPARTMENT OF CLIMATE CHANGE, ENERGY, THE ENVIRONMENT AND WATER**Organisation address** 2800 NSW

Proposed designated proponent details

Name Lara Hess**Job title** Director Environment Planning and Land**Phone** 0456 953 013**Email** lara.hess@dpie.nsw.gov.au**Address** L17, 12 Darcy St, 4PSQ, Parramatta, 2150

1.3.4 Identity: Summary of allocation

✔ Confirmed Referring party's identity

The Referring party is the person preparing the information in this referral.

ABN/ACN	27578976844
Organisation name	NSW DEPARTMENT OF CLIMATE CHANGE, ENERGY, THE ENVIRONMENT AND WATER
Organisation address	L17, 12 Darcy Street, 4PSQ, Parramatta, NSW, 2150
Representative's name	Elma Aguilera
Representative's job title	Senior Project Officer
Phone	0458 637 805
Email	Elma.Aguilera@dpie.nsw.gov.au
Address	

✔ Confirmed Person proposing to take the action's identity

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

ABN/ACN	27578976844
Organisation name	NSW DEPARTMENT OF CLIMATE CHANGE, ENERGY, THE ENVIRONMENT AND WATER
Organisation address	2800 NSW
Representative's name	Lara Hess
Representative's job title	Director Environment Planning and Land
Phone	0456 953 013
Email	lara.hess@dpie.nsw.gov.au
Address	L17, 12 Darcy St, 4PSQ, Parramatta, 2150

✔ Confirmed Proposed designated proponent's identity

The Person proposing to take the action is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

Same as Person proposing to take the action information.

1.4 Payment details: Payment exemption and fee waiver

1.4.1 Do you qualify for an exemption from fees under EPBC Regulation 5.23 (1) (a)? *

No

1.4.3 Have you applied for or been granted a waiver for full or partial fees under Regulation 5.21A? *

No

1.4.5 Are you going to apply for a waiver of full or partial fees under EPBC Regulation 5.21A?

No

1.4.7 Has the department issued you with a credit note? *

No

1.4.9 Would you like to add a purchase order number to your invoice? *

No

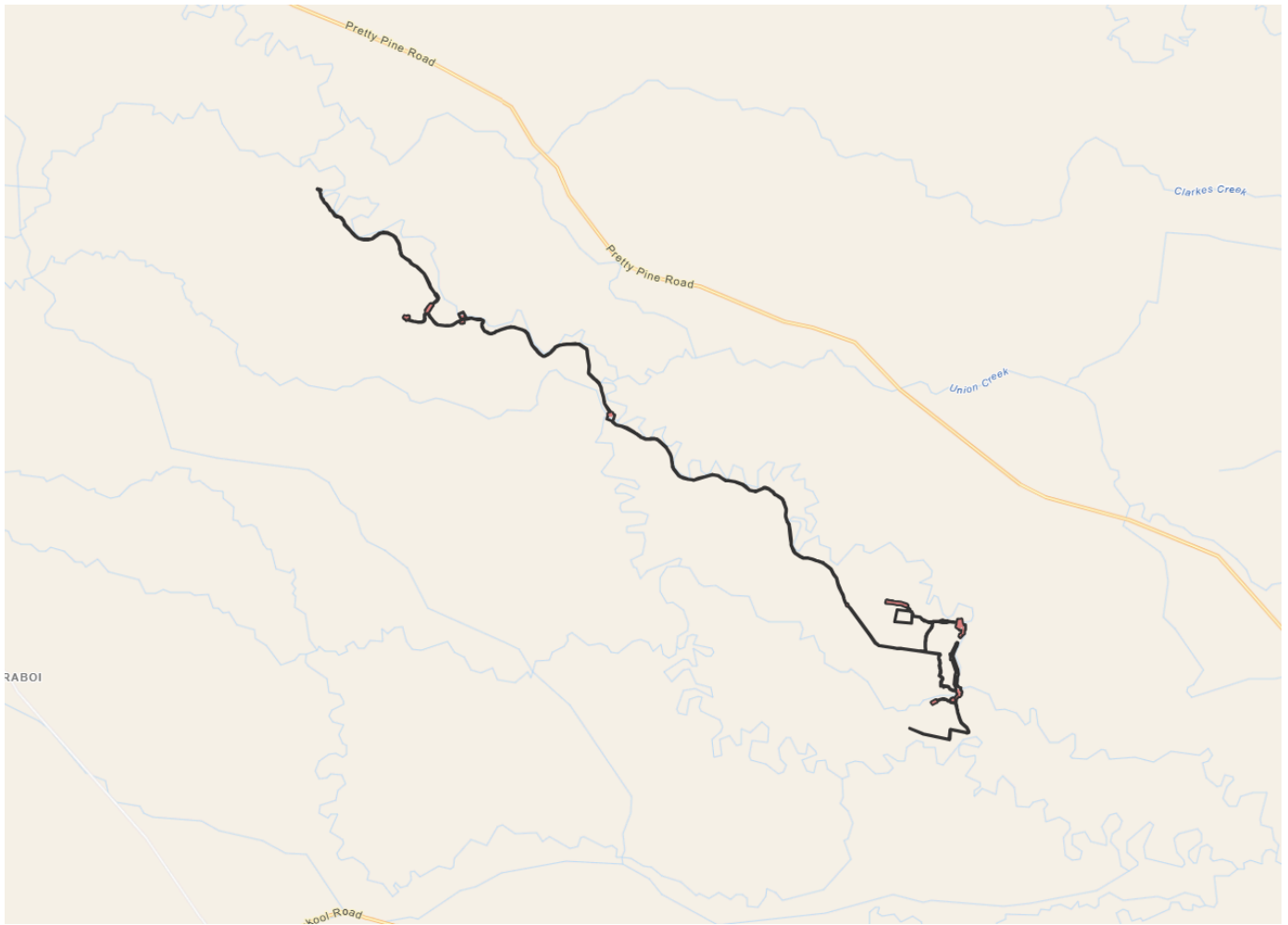
1.4 Payment details: Payment allocation

1.4.11 Who would you like to allocate as the entity responsible for payment? *

Referring party

2. Location

2.1 Project footprint



Project Area: 150.45 Ha **Disturbance Footprint:** 17.43 Ha

2.2 Footprint details

2.2.1 What is the address of the proposed action? *

Finn Rd, Calimo NSW 2710 (intersection with S River Rd) Coordinates (WGS84 format): -35.36

2.2.2 Where is the primary jurisdiction of the proposed action? *

New South Wales

2.2.3 Is there a secondary jurisdiction for this proposed action? *

No

2.2.5 What is the tenure of the action area relevant to the project area? *

The Werai Forest is located within the traditional lands of the Wemba Wemba and Barapa Barapa nations and is part of an Indigenous Land Use Agreement (ILUA), which was registered with the National Native Title Tribunal (NNTT) on 8 December 2022 with freehold title transferred to the Werai Land and Water Aboriginal Corporation (Werai LWAC) in July 2023.

The regulators and borrow pits of the project are generally on land vested in Water NSW and Werai LWAC.

3. Existing environment

3.1 Physical description

3.1.1 Describe the current condition of the project area's environment.

The Werai Forest is situated approximately 46 kilometres northwest of Deniliquin and is of great cultural significance to the Wamba Wamba and Perrepa Perrepa Traditional Owners with land use and occupancy mapping identified over 12,000 sites of cultural significance. The Werai Forest is 11,658 ha in area and comprise Werai (9,163 ha), Banagalite (1,223 ha), Barratta Creek (221 ha), Morago (627 ha) and Stevens Weir (92 ha).

The Werai Forest is hydrologically linked to the Edward River as during high Murray River flows, a significant portion of river flow passes through the Edward River system and onto the Werai Forest. (Reference: Att-M_Ramsar Ecological Character Description; pg 9)

The Werai Forest is dominated by river red gum *Eucalyptus camaldulensis* forest and woodland on the frequently inundated floodplains of the Edward River, Colligen Creek and Niemur River. Extensive areas of black box *E. largiflorens* woodland occur on the higher, less frequently flooded portions of the floodplain. Werai is also characterised by large oxbow lagoons, reed bed wetlands, and a braided network of ephemeral creeks. Water enters these creeks at relatively low river levels due to narrow ('choked') sections in the Edward and Niemur rivers.

Flooding of the Werai Forest is determined by flows in the Edward River downstream of Stevens Weir. Floodwater enters the forest via three effluents, all of which have regulator structures, as well as overbank flow. The effluents going from east to west are Tumudgery Creek, Neimer Creek and Reed Bed Creek.

Water enters the site, when flows in the Edward River at Deniliquin are above 1,500 megalitres a day, but at this level remain in channel. Flows of about 6,000 megalitres a day result in inundation of reed beds and low lying river red gums and flows above 18,000 megalitres a day are required for broad scale flooding of the forest.

The flows in the Edward River reflect seasonal water demands, with higher flows in the summer months during the irrigation season and lower flows during the winter months. Large flood events (above 18,000 megalitres a day) have occurred on a relatively frequent basis between 1952 and 1996. However, in the decade spanning the time of listing, there were no floods sufficient to inundate the forests. A moderate to large flood did occur in spring / summer 2010, with flows exceeding 18,000 megalitres a day in September 2010 and again in November – December 2010 with a peak of over 38,000 megalitres a day in the Edwards River at Deniliquin.

In 2003, Werai Forest was listed under the Ramsar convention as part of the NSW Central Murray Forests group, which covers approximately 83,992 ha. The Werai group of forests are also recognised as wetlands of national importance on the Directory of Important Wetlands in Australia.

The management principles for the Ramsar site are provided in the NSW Central Murray Forests Ramsar site Ecological Character Description (ECD) published in 2011 by the Australian Government and the Werai Water Management Plan. The ECD contains a description of critical components and processes, and the limits to acceptable change, for the Ramsar lands.

3.1.2 Describe any existing or proposed uses for the project area.

The project is proposing to replace the existing sheet pile regulators located on Tumudgery Creek, the Niemur River Offtake (to the Edward River) and Reed Bed Creek, and the pipe culvert on the natural inlet to Moonyah Lagoon that provide for the storage and management of water supplies within the Werai Forest. These existing four regulators are proposed to be replaced as they have reached end-of-life, are difficult to operate, do not meet current Work Health and Safety standards and are not suited to delivering improved environmental flows. Additionally, the old regulators are detrimental to fish populations and require lower sills to facilitate better fish passage.

The existing sheet pile regulators were constructed in 1983 to allow summer operating flows up to 2,700 megalitres per day (ML/day) to be delivered along the Edward River (downstream from Stevens Weir) without entering (and causing unseasonal flooding) in the Werai Forest. This flow rate is generally associated with 14,500 ML/day in the Murray River downstream from Yarrawonga Weir. Once Edward River flows are predicted to exceed 2,700 ML/day, the three structures are fully opened to allow a more natural passage of water into Werai Forest.

Tumudgery Creek, Niemur River Offtake and Reed Bed Creek

If the structures were not present, flows would enter the Tumudgery and Reed Bed creeks at around 800 ML/day and spread into the forest from 1,800 ML/day. The Niemur River Offtake would commence to flow at around 600 ML/day. Currently, 1.2-metre-high sheet pile sills on the Tumudgery Creek and Niemur River Offtake regulators act as additional barriers to low flows and fish passage entering these waterways. The sill level at Reed Bed Creek regulator is not significantly high. However, the Tumudgery Creek, Niemur River Offtake and Reed Bed Creek structures are currently restrictive to fish passage due to the narrow gates and high sills creating very high flow velocities. In the past, the regulators were only opened when Edward River levels were approaching bank full and flows were about to exceed 2,700 ML/day. The structures generally remained closed whenever the Edward River was in regulated conditions. Hence, low flows less than 2,700 ML/day that occurred over winterspring have been largely excluded from the forests over the past 40 years.

Moonyah Lagoon

The natural inlet to Moonyah Lagoon from the Edward River is blocked by a large earthen embankment with flows manipulated in and out of the lagoon by a pipe culvert. High water levels have been held in the lagoon over many years to allow water extraction for irrigation, and stock and domestic supply to adjoining properties.

The aims and objectives of the project and the proposed uses of the project area are to:

- Improve access and opportunities for First Nations people as owners of the Werai Forest
- Provide for easier and safer operation of new regulators
- Improved river operations (control and efficiency)
- Improved local and regional environmental health of waterways and wetlands
- Improved environmental water delivery, in-line with Murray-Darling Basin Plan objective
- Improved river connectivity and fish passage

3.1.3 Describe any outstanding natural features and/or any other important or unique values that applies to the project area.

Cultural connection to the Werai continues for the Wemba Wemba and Barapa Barapa nations through ongoing cultural use, kinship relations, story, and language. Physical evidence of Aboriginal occupation over thousands of years exists throughout the Werai forests, and along the Edward River, Colligen Creek and Niemur River, and their anabranh creeks, and includes scarred trees, artefacts, oven mounds, story sites, and burial sites. In 2023, Werai Forest was transferred to the Werai Land and Water Aboriginal Corporation as freehold title under an Indigenous Land Use Agreement. The project area does not include any land within national parks or nature reserves.

3.1.4 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area.

The region is generally flat to gently undulating comprising alluvial plains and most of the land sits at approximately 80 m Australian Height Datum. Variations in topography are limited to approximately 2 m within the project footprint.

3.2 Flora and fauna

3.2.1 Describe the flora and fauna within the affected area and attach any investigations of surveys if applicable.

Terrestrial ecology

A Flora and fauna assessment has been completed for the project by a specialist consultant. The assessment has identified the following in relation to terrestrial ecology. See attachment L (Reference: Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits, Section "Summary").

Within the study area habitat for the following threatened species was identified:

- Brown Treecreeper *Climacteris picumnus victoriae* (eastern subspecies),
- Superb Parrot *Polytelis swainsonii* and
- Diamond Firetail *Stagonopleura guttata*
- These species are all identified as vulnerable under the EPBC Act.
- In addition the project area includes terrestrial and floodplain habitat for Southern Bell Frog *Litoria raniformis* listed as vulnerable under the EPBC Act.
- The project area also has the potential to disturb waterways that provide habitat for Silver Perch *Bidyanus bidyanus*, Flathead Galaxias *Galaxias rostratus* and Murray Cod *Maccullochella macquariensis* listed under the EPBC Act.

Aquatic ecology

Edward River and Niemur River are mapped as Key Fish Habitat on the fisheries spatial data portal. An assessment against Section 3.2.2 of the **Policy Guidelines for Fish Habitat Conservation and Management (DPI 2013)** determined Edward River, Niemur River and Tumudgery Creek to be consistent with Class 1 definition of Major Key Fish Habitat due to its nature as a permanently flowing or flooded freshwater waterway.

Aquatic habitat features

The Edward River is 35-40 metres wide and less than 4 metres deep, with minimal aquatic vegetation due to erosion. Pooling and heavy siltation are present, and the water is turbid and generally dark brown. The surrounding land is used for agriculture and managed forest. Wetlands are mapped but not present during the survey. Numerous snags and fallen trees are present, with no key spawning areas identified. Natural barriers from erosion and siltation exist, but no artificial barriers were observed.

The Niemur River is 10-30 metres wide and less than 3 metres deep, with similar conditions to the Edward River. The water is turbid and dark green-brown, with heavy siltation and minimal aquatic vegetation. The surrounding land includes degraded nature reserves. Wetlands are mapped but not present during the survey. Numerous snags and fallen trees are present, with no key spawning areas identified. Natural barriers from erosion and siltation exist, but no artificial barriers were observed.

The Tumudgery Creek is less than 2 metres wide and less than 1 metre deep, with minimal aquatic vegetation and heavy siltation. The water is turbid and dark green-brown. The surrounding land is used for agriculture. Wetlands are mapped but not present during the survey. Numerous snags and fallen trees are present, with no key spawning areas identified. Natural barriers from erosion and siltation exist, but no artificial barriers were observed.

See Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits for reference.

3.2.2 Describe the vegetation (including the status of native vegetation and soil) within the project area.

Based on the field assessments completed for the project, the EPBC Act listed Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grassland and BC Act listed Inland Grey Box Woodland threatened ecological community was present within the study/project area, associated with PCT 237 *Riverina Western Grey Box grassy woodland of the semi-arid (warm) climate zone*. This community is present adjacent to an existing road and tracks of the project, however no direct impacts to this PCT or threatened community are expected to occur as a result of the project.

As identified in the Flora and Fauna report

- Much of the proposed vegetation removal will comprise understorey vegetation only, as impacts to the canopy have been avoided as much as possible.
- Much of this disturbance extent is temporary in nature. Areas used as machinery and stockpile laydown areas will experience minor disturbance however will recover quickly following removal of construction equipment. All vegetation within proposed borrow pits requires removal, however following construction these areas will also rehabilitate over time and provide habitat for native vegetation and fauna species.

Nine PCTs were recorded within the study area:

- PCT 2 - River Red Gum-sedge dominated very tall open forest in frequently flooded forest wetland along major rivers and floodplains in south-western NSW.
- PCT 5 - River Red Gum herbaceous-grassy very tall open forest wetland on inner floodplains in the lower slopes sub-region of the NSW South Western Slopes Bioregion and the eastern Riverina Bioregion.
- PCT 7 - River Red Gum – Warrego Grass – herbaceous riparian tall open forest wetland mainly in the Riverina Bioregion.
- PCT 10 - River Red Gum - Black Box woodland wetland of the semi-arid (warm) climatic zone (mainly Riverina Bioregion and Murray Darling Depression Bioregion).
- PCT 13 - Black Box – Lignum woodland wetland of the inner floodplains in the semi-arid (warm) climate zone (mainly Riverina Bioregion and Murray Darling Depression Bioregion).
- PCT 15 – Black Box open woodland wetland with chenopod understorey mainly on the outer floodplains in south-western NSW (mainly Riverina Bioregion and Murray Darling Depression Bioregion).
- PCT 70 – White Cypress Pine woodland on sandy loams in central NSW wheatbelt.
- PCT 216 – Black Roly Poly low open shrubland of the Riverina Bioregion and Murray Darling Depression Bioregion.
- PCT 237 – Riverina Western Grey Box grassy woodland of the semi-arid (warm) climate zone.

These vegetation communities were generally in a moderate to high condition. There was evidence of historical disturbance, including logging and livestock grazing practices. Groundcover within woodland areas was generally sparse due to the seasonal flooding conditions. Low condition vegetation occurred where the woodland had been predominantly cleared aside from scattered trees with the groundcover dominated by exotic groundcover species.

Within the east of the study area, the vegetation was cleared of trees and dominated by exotic vegetation. Where the groundcover was predominantly exotic, these areas were mapped as exotic vegetation. A key focus of the field investigation was to assess the vegetation of the study area against the final determinations for the above listed TECs to determine presence or absence.

See Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits for reference.

3.3 Heritage

3.3.1 Describe any Commonwealth Heritage Places Overseas or other places recognised as having heritage values that apply to the project area.

A search on publicly available heritage databases was undertaken to determine the presence of non-Aboriginal heritage items near the project area. The search returned with no non-Aboriginal heritage items with National, Commonwealth or State significance.

3.3.2 Describe any Indigenous heritage values that apply to the project area.

An Aboriginal Cultural Heritage Assessment Report is being completed to support the assessment and determination of the project. This is currently undergoing consultation with the Registered Aboriginal Parties (RAPs). Archaeological surveys and assessments of the project area have been undertaken with the participation of RAPs for the project in accordance and agreement with HeritageNSW.

An Aboriginal due diligence assessment report has previously been completed for the project identifying the test excavation program at the locations of the Niemer and Reed Bed regulators.

3.4 Hydrology

3.4.1 Describe the hydrology characteristics that apply to the project area and attach any hydrological investigations or surveys if applicable. *

Surface Water: Water flows into the Werai Forest via the Tumudgery Creek, Niemur River, and Reed Bed Creek regulators. These regulators are operated to prevent water from passing into these natural watercourses during periods of regulated flow (i.e., when flows measured downstream of Stevens Weir gauge are greater than 2,700 ML/day). The regulators are fully opened when flows are forecast to exceed 2,700 ML/day downstream from Stevens Weir. They are also used to deliver base flows and environmental flows, when required.

Groundwater: The project site overlies floodplain and channel deposits consisting of layered clays, sands, and silts belonging to unnamed alluvial formations. The age of the deposits spans from Tertiary to Quaternary. At least one 10 metre (m) deep geotechnical bore was drilled at each of the four regulator sites. The bores at Niemur River and Tumudgery Creek were dry. The water table was intercepted at Reed Bed Creek and Moonyah Lagoon. The depth of the water table at Reed Bed Creek was 7.7 metres below ground level (mbgl). A shallower water table was encountered at two boreholes, BH4 and BH5, at Moonyah Lagoon, with depths of 3.8 m and 4.0 m below ground level (bgl), respectively.

Hydrological Investigations and Surveys: A hydrological study of the Werai Forest has been conducted to characterise the relationship between river flows and inundation of the forest. Sentinel-2 satellite imagery was analysed for key flow events to determine the inundation pathways, maximum inundation area, and timing and duration of flows returning to Colligen Creek and the Edward/Kolety River. Additionally, loggers have been installed to document when flows arrive, peak, and recede.

See Att-B_Map Hydrology_RRCP Werai Forest.

4. Impacts and mitigation

4.1 Impact details

Potential Matters of National Environmental Significance (MNES) relevant to your proposed action area.

EPBC Act section	Controlling provision	Impacted	Reviewed
S12	World Heritage	No	Yes
S15B	National Heritage	No	Yes
S16	Ramsar Wetland	Yes	Yes
S18	Threatened Species and Ecological Communities	Yes	Yes
S20	Migratory Species	Yes	Yes
S21	Nuclear	No	Yes
S23	Commonwealth Marine Area	No	Yes
S24B	Great Barrier Reef	No	Yes
S24D	Water resource in relation to large coal mining development or coal seam gas	No	Yes
S26	Commonwealth Land	No	Yes
S27B	Commonwealth Heritage Places Overseas	No	Yes
S28	Commonwealth or Commonwealth Agency	No	Yes

4.1.1 World Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.1.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.1.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

No World Heritage properties occur within the project area. These protected matters are well beyond the maximum potential extent of direct or indirect impacts arising from the proposed action. Additionally, the project activities are confined to a localised area with no significant pathways to impact on World Heritage properties.

4.1.2 National Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.2.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.2.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

No National Heritage properties occur within a 20km radius of the project area. These protected matters are well beyond the maximum potential extent of direct or indirect impacts arising from the proposed action. Additionally, the project activities are confined to a localised area with no significant pathways for impact on National Heritage properties.

4.1.3 Ramsar Wetland

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Ramsar wetland
No	No	Banrock Station Wetland Complex
No	No	Hattah-Kulkyne Lakes
Yes	Yes	NSW Central Murray State Forests
No	No	Riverland
No	No	The Coorong, and Lakes Alexandrina and Albert Wetland

4.1.3.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

Yes

4.1.3.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. *

The project is located within Werai Forest which is listed under the Ramsar convention as part of the NSW Central Murray Forests group, which covers approximately 83,992 ha. The Werai group of forests are also recognised as wetlands of national importance on the Directory of Important Wetlands in Australia. The proposed action may impact temporarily the ecological character of these wetlands in habitat disturbance.

The proposed works involve replacement of water regulators, excavation of borrow pits and creation of passing bays and vegetation trimming along access tracks. The proposed works (regulator upgrades and associated infrastructure) are expected to have beneficial impacts by improving environmental flows. The flows are anticipated to: enhance riparian vegetation, restore natural flooding regime, providing better habitat conditions for threatened species. (Reference: Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits; Section 3.7 pg. 70; Section 5.1.1 pg. 112)

4.1.3.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact? *

*

No

4.1.3.6 Describe why you do not consider this to be a Significant Impact. *

While the project is located within the Werai Forest was listed under the Ramsar convention as part of the NSW Central Murray Forests group it is not considered likely to result in significant impacts to the ecological character (the biological, physical and chemical components) of the Ramsar wetlands during construction or operation. This conclusion is based on the Ramsar Listing criterion and the potential impacts assessed in the Flora and Fauna Assessment.

The NSW Central Murray Forests were listed under the Ramsar Convention because they meet the following Ramsar nomination criteria. Each criteria is listed below and addressed in terms of project impacts:

Criterion 1 - Representative or unique wetlands

Millewa Forests together with Barmah Forest in Victoria are Australia's largest area of river red gum (*Eucalyptus camaldulensis*) forest. Although the forests have been harvested for timber for 150 years, Millewa Forests retain trees aged greater than 200 years and areas which are structurally equivalent to undisturbed forest. There are also other wetland types such as floodplain lakes, moira grass plains, meadows and reed swamps. The project avoids canopy removal and focuses on understorey vegetation, with all impacts being localised and temporary. (Reference: Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits, Section "6 Conclusion", pg.116). The project will not impact upon Millewa Forests.

Criterion 2 - Threatened species or ecological communities

The Ramsar site supports eight threatened species listed at the national or international scale, including the Australasian bittern (*Botaurus poiciloptilus*), Australian painted snipe (*Rostratula australis*), superb parrot (*Polytelis swainsonii*), swamp wallaby grass (*Amphibromus fluitans*), trout cod (*Maccullochella macquariensis*), silver perch (*Bidyanus bidyanus*) and Murray cod (*Maccullochella peelii peelii*).

The project may temporarily affect small areas of habitat for species such as the Superb Parrot and native fish (e.g. Silver Perch, Murray Cod), but these impacts are minor relative to the scale of the Ramsar site. The Flora and Fauna Assessment (Reference: Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits, Section 3.5, pp. 62–70 and Appendix 4) concludes that no significant impact is expected, and the project will enhance fish passage and connectivity through improved regulator design.

Criterion 4 - Supports species at a critical stage of their life cycle or provides refuge in adverse conditions

NSW Central Murray Forests Ramsar site provides habitat for 11 species of migratory birds listed under **international agreements** and is important for colonial nesting waterbirds, supporting breeding of thousands of birds during times of inundation. It is also important for breeding of native fish and ducks. The permanent rivers and wetlands within the site are recognised as drought refuge for native fauna in this semi-arid region.

The project will not interfere with critical life stages of migratory birds or breeding fish. Instead, it supports ecological function by improving environmental water delivery and fish passage. The Flora and Fauna Assessment (Reference: Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits, Section 5.1.1, p. 112) confirms that the works are unlikely to significantly affect these values.

Criterion 8 - Food source, nursery or migration path for fish

The Ramsar site provides migratory routes between habitats in the Murray River, anabranches and floodplains. Native fish move into off-stream areas on rising flows, and seek refuge in deeper waters during low flow periods. Many species spawn on the floodplains.

The project seeks to optimise fish passage through the new regulator structures decreasing flow velocities for fish passage and providing for lower sills that will maintain environmental flows for native fish migration.

In addition, to the criterion above, it has also been identified that:

“The principal threat to the Ramsar site’s values is altered water regimes as a result of water resource development, which have caused a reduction in the frequency and duration of spring wetland inundation in all three forests and an alteration to the seasonality of inundation in Millewa Forests. The Office of Environment and Heritage, through its management of NSW’s licensed environmental water, is working with the Commonwealth... ..to improve the water regime in these forests... . The project is seeking to address and reduce this principal threat.

Furthermore, it is considered there will not be a significant impact due to

- The gentle topography at the project area, relatively small proposed clearing areas, and short construction period, meaning that the risk of erosion or sedimentation would be mitigated by the proposed construction methodology and erosion controls
- Small extent of changes to surface landforms and water flows in the project area which would result in a negligible effect on the many thousands of square kilometres of catchment feeding these Ramsar Wetlands and their tributaries

Overall, the impacts are generally minor and the project does not significantly alter the overall hydrological characteristics of the project area or the broader Werai Forest. Operation of the proposal will result in overall improvements, including:

- Improved access and opportunities for First Nations people as owners of the Werai Forest.
- Easier and safer operation of new regulators.
- Improved river operations (control and efficiency).
- Improved local and regional environmental health of waterways and wetlands.
- Improved environmental water delivery, in line with Murray-Darling Basin Plan objectives.
- Improved river connectivity and fish passage.

The project is designed to improve fish passage and maintain environmental flows through lower sill regulators. These enhancements are consistent with the ecological objectives of the Ramsar site. The Flora and Fauna Assessment (Reference: Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits, Section “Appendix 5”, p. 177) and the REF (Reference:Att-N_REF (draft)_Werai Forest_REDACTED) concludes that the aquatic ecological community will benefit from the proposed changes.

4.1.3.7 Do you think your proposed action is a controlled action? *

No

4.1.3.9 Please elaborate why you do not think your proposed action is a controlled action.

*

The Werai Forest regulators replacement project is not considered a controlled action because:

- **Negligible Impact on Ecological Character:** The project is expected to have negligible impacts on the ecological character of the Ramsar wetlands during construction or operation. This includes the biological, physical, and chemical components of the wetlands.
- **Mitigation Measures:** The project includes effective mitigation measures to manage potential impacts, such as erosion controls and construction methodologies that minimise the risk of erosion or sedimentation.
- **Minor Changes to Surface Landforms and Water Flows:** The project involves only minor changes to surface landforms and water flows, which are not expected to significantly affect the large catchment area feeding the Ramsar wetlands.
- **Overall Benefits:** The project aims to replace aging infrastructure to improve the efficiency of water management, which aligns with the objectives of the Murray-Darling Basin Plan. This includes improved river operations, environmental health, and fish passage.

Given these factors, the project is not likely to have a significant impact on protected matters, and therefore, it is not considered as a controlled action. For reference see Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits and Att-N_REF (draft)_Werai Forest_REDACTED

4.1.3.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

Standard environmental management practices will be implemented to minimise any potential minor impacts as outlined in the Werai Forest Review of Environmental Factors (Reference: Att-N_Att-N_REF (draft)_Werai Forest_REDACTED, Section 7.3) . These include erosion and sediment control measures, dust suppression techniques, and regular monitoring to ensure compliance with environmental regulations. Specific measures will be taken to protect the ecological character of the Ramsar Wetlands, such as maintaining natural water flow patterns and minimising habitat disturbance.

4.1.3.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

Given that the proposed action is not expected to have any significant impacts on protected matters, no offsets are proposed or required.

4.1.4 Threatened Species and Ecological Communities

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Threatened species

Direct impact	Indirect impact	Species	Common name
No	No	<i>Aphelocephala leucopsis</i>	Southern Whiteface
No	No	<i>Aprasia parapulchella</i>	Pink-tailed Worm-lizard, Pink-tailed Legless Lizard
No	No	<i>Austrostipa metatoris</i>	
No	No	<i>Austrostipa wakoolica</i>	
No	Yes	<i>Bidyanus bidyanus</i>	Silver Perch, Bidyan
No	No	<i>Botaurus poiciloptilus</i>	Australasian Bittern
No	No	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper
No	No	<i>Calidris ferruginea</i>	Curlew Sandpiper
No	Yes	<i>Climacteris picumnus victoriae</i>	Brown Treecreeper (south-eastern)
No	No	<i>Crinia sloanei</i>	Sloane's Froglet
No	No	<i>Euastacus armatus</i>	Murray Crayfish
No	No	<i>Falco hypoleucos</i>	Grey Falcon
No	Yes	<i>Galaxias rostratus</i>	Flathead Galaxias, Beaked Minnow, Flat-headed Galaxias, Flat-headed Jollytail, Flat-headed Minnow
No	No	<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe
No	No	<i>Grantiella picta</i>	Painted Honeyeater
No	No	<i>Hemiaspis damelii</i>	Grey Snake
No	No	<i>Lathamus discolor</i>	Swift Parrot
No	Yes	<i>Lepidium monoplacoides</i>	Winged Pepper-cress
No	Yes	<i>Litoria raniformis</i>	Southern Bell Frog,, Growling Grass Frog, Green and Golden Frog, Warty Swamp Frog, Golden Bell Frog

Direct impact	Indirect impact	Species	Common name
No	No	Lophochroa leadbeateri leadbeateri	Major Mitchell's Cockatoo (eastern), Eastern Major Mitchell's Cockatoo
No	Yes	Maccullochella macquariensis	Trout Cod
No	Yes	Maccullochella peelii	Murray Cod
No	No	Macquaria australasica	Macquarie Perch
No	No	Maireana cheelii	Chariot Wheels
No	No	Melanodryas cucullata cucullata	South-eastern Hooded Robin, Hooded Robin (south-eastern)
No	No	Neophema chrysostoma	Blue-winged Parrot
No	No	Nyctophilus corbeni	Corben's Long-eared Bat, South-eastern Long-eared Bat
No	No	Pedionomus torquatus	Plains-wanderer
No	No	Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)	Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)
No	Yes	Polytelis swainsonii	Superb Parrot
No	No	Rostratula australis	Australian Painted Snipe
No	No	Sclerolaena napiformis	Turnip Copperburr
No	Yes	Stagonopleura guttata	Diamond Firetail
No	No	Swainsona murrayana	Slender Darling-pea, Slender Swainson, Murray Swainson-pea
No	No	Swainsona plagiotropis	Red Darling-pea, Red Swainson-pea
No	No	Tringa nebularia	Common Greenshank, Greenshank

Ecological communities

Direct impact	Indirect impact	Ecological community
No	No	Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregions
No	No	Grey Box (Eucalyptus microcarpa) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia

Direct impact	Indirect impact	Ecological community
No	No	Natural Grasslands of the Murray Valley Plains
No	No	Plains mallee box woodlands of the Murray Darling Depression, Riverina and Naracoorte Coastal Plain Bioregions
No	No	Weeping Myall Woodlands
No	No	White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland

4.1.4.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

Yes

4.1.4.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. *

The Flora and Fauna assessment (Reference: Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pit) identifies the suite of threatened species that could occur at the project area based on the desktop assessment, habitat assessment and targeted surveys employed. The proposal would result in the disturbance of approximately 15.94 hectares of native woodland and forest vegetation has been estimated for the regulators, borrow pits and associated access tracks for the project.

The proposed action would result in a minor impact on habitat connectivity comprising: creation or maintenance of permanent gaps in understorey vegetation along access tracks and at the regulators, creation of partial gaps in vegetation cover and/or displacement of fauna from construction activity zones for a period of up to 12 months, and reduction in vegetation cover where trees have been removed or trimmed or groundcover has been disturbed until natural regeneration occurs.

Much of this disturbance extent is temporary in nature. Areas used as machinery and stockpile laydown areas will experience minor disturbance however will recover quickly following removal of construction equipment. All vegetation within proposed borrow pits requires removal, however following construction these areas will also rehabilitate over time and provide habitat for native vegetation and fauna species.

There is minor risk of additional indirect impacts that is likely to be substantially mitigated through standard environmental management measures.

4.1.4.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact? *

*

No

4.1.4.6 Describe why you do not consider this to be a Significant Impact. *

Terrestrial ecology

The disturbance of habitat for construction and periodic use of the project area by vehicles on access tracks during operation is largely consistent with the current uses of the project area. The project would result in removal or modification of up to 15.94 ha of native vegetation and associated threatened species habitat. A breakdown of the disturbance footprint into various proposed activities and the associated intensity and duration of impacts is provided in Att-I_Map_WeraiRegsBorrowDisturbanceAccess_20240829.

Much of the disturbance footprint shown on Att-I_Map_WeraiRegsBorrowDisturbanceAccess_20240829I would only be subject to partial or temporary impacts, noting:

- other than the regulator structures and their immediate vicinity, as few trees as possible would be trimmed or removed to allow construction and understorey vegetation would be allowed to regenerate
- Much of the proposed vegetation removal will comprise understorey vegetation only, as impacts to the canopy have been avoided as much as possible.
- operational access tracks are aligned with existing tracks and would require minimal upgrade or increases in traffic volumes.

Given the small scale and duration of proposed works there is a minor risk of additional indirect impacts that is likely to be substantially mitigated through standard environmental management measures.

See Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits for reference

4.1.4.7 Do you think your proposed action is a controlled action? *

No

4.1.4.9 Please elaborate why you do not think your proposed action is a controlled action.

*

Terrestrial species

The proposed action is unlikely to be a controlled action under the EPBC Act, as it is not expected to have a significant impact on listed threatened species or ecological communities. The Flora and Fauna Assessment (Reference: Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits) concluded that while approximately 15.94 hectares of native vegetation will be disturbed, this represents a small proportion of available habitat in the broader landscape. The affected areas do not constitute habitat critical to the survival of any listed species. Targeted surveys confirmed that species such as the Winged Peppercreep have a low likelihood of occurrence within the disturbance footprint. Additionally, no direct impacts are expected to the EPBC-listed Grey Box Grassy Woodlands or habitat for *Austrostipa wakoolica* (Reference: Att-N_Att-N_REF (draft)_Werai Forest, Section 6.5.2).

Aquatic species

Temporary impacts to aquatic habitats, including sections of Tumudgery Creek, Edward River, and Niemur River, are expected during construction. However, these impacts are localised and short-term. The REF and Flora and Fauna Assessment confirm that the aquatic ecological community of the lower Murray River catchment (listed under the Fisheries Management Act 1994) will not be significantly affected. Post-construction, aquatic habitat quality is expected to improve due to enhanced flow regimes and fish passage (Reference: Att-N_Att-N_REF (draft)_Werai Forest Sections 6.6.2–6.6.3). Mitigation measures, such as staged construction, erosion and sediment controls, and fish salvage protocols, will be implemented to minimise risks.

As noted above, the proposed works are not likely to significantly affect any Matters of National Environmental Significance. The project is expected to result in long-term ecological benefits through improved hydrological connectivity and habitat conditions, an overall improvement.

4.1.4.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

The proposed action has included measures to avoid or minimise impacts through all stages of conception and design. This includes consideration of multiple locations for borrow pits and access tracks, taking into consideration preliminary identification of environmental constraints that may be avoided.

Environmental management and impact mitigation measures would be implemented within the construction phase of the project. Construction would include, as a minimum, industry-standard measures for the management of soil, surface water, weeds and pollutants, as well as site-specific measures including the procedures outlined below. The proposed measures would include environmental safeguards for protection of downstream properties and waterways in accordance with relevant policy documentation and government guidelines. The minimum measures that would be included in Construction Environmental Management Plans (CEMPs) and implemented at the project area and would include such measures as:

- Clear demarcation of the limits of clearing and Tree Protection Zones
- Pre-clearing surveys for any fauna that may be resident in trees to be removed or trimmed
- Hygiene procedures to prevent the introduction and spread of weeds or pathogens in areas of native vegetation
- Supervision of clearing by an ecologist and implementation of measures to minimise risk of harm to resident fauna and salvage habitat resources.

Impacts on aquatic ecology due to construction potentially relate to entrapment of animals due to cofferdam construction, mobilisation of poor-quality runoff and erosion/sedimentation and the spread of aquatic weeds/pest species. As such the following safeguards will be implemented:

- Sediment control procedures and practices will be documented in a construction environmental management plan (CEMP) and associated subplans and implemented to prevent sediment laden runoff being transported downstream and minimise risk of poor water quality.
- Minimise and manage aquatic habitat disturbance by limiting amount of vegetation to be removed, relocating any large woody debris and instream snags and reinstatement of disturbed areas as soon as practicable.
- Where practicable, previously cleared areas are proposed for construction work sites. Additionally, all construction work sites will be delineated to prevent construction plant or equipment directly impacting riparian vegetation outside of this area.
- Preparation and implementation of a weed and pathogen control plan to mitigate the spread of weeds.
- Monitoring to detect and manage degradation of water quality during construction, to ensure suitable saturation levels and turbidity to determine effectiveness of erosion and sediment controls.

Some of the most prominent risks during operation of the proposal relate to fish passage through the new regulators. However, these risks have been accounted for in the proposal design phase and will be managed via the operating plan.

See Att-N_REF (draft)_Werai Forest_REDACTED for reference.

4.1.4.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

No offsets have been proposed.

4.1.5 Migratory Species

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Species	Common name
No	Yes	<i>Actitis hypoleucos</i>	Common Sandpiper
No	Yes	<i>Apus pacificus</i>	Fork-tailed Swift
No	Yes	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper
No	Yes	<i>Calidris ferruginea</i>	Curlew Sandpiper
No	Yes	<i>Calidris melanotos</i>	Pectoral Sandpiper
No	Yes	<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe
No	Yes	<i>Motacilla flava</i>	Yellow Wagtail
No	Yes	<i>Tringa nebularia</i>	Common Greenshank, Greenshank

4.1.5.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

Yes

4.1.5.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. *

Known habitats for migratory species have been considered. The value of Werai Forest to internationally and nationally migratory species will vary from year to year depending on the quality of resources available to them, but also substantially due to extrinsic factors across the broad range of their national and international distributional ranges.

The residual direct impacts to migratory species and their habitats are minor in extent, duration, and severity. This is due to the availability of alternative habitats in the surrounding area. The habitat to be removed or modified represents only a small portion of the potential habitat for migratory species in the locality and a negligible proportion of their overall area of occupancy. Consequently, the action is unlikely to have significant direct or indirect impacts on migratory species and their habitats.

See Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits for reference.

4.1.5.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact?

*

No

4.1.5.6 Describe why you do not consider this to be a Significant Impact. *

The action is not considered to have a significant impact because the residual direct impacts to migratory species and their habitats are minor in extent, duration, and severity. The habitat to be removed or modified has been assessed as only a small portion of the potential habitat for migratory species in the locality and a negligible proportion of their overall area of occupancy. Additionally, the gentle topography, relatively small proposed clearing areas, and short construction period further mitigate the risk of significant impacts. The proposed construction methodology and erosion controls will effectively manage any potential erosion or sedimentation. Overall, the action is unlikely to significantly alter the hydrological characteristics of the project area or the broader Werai Forest, ensuring minimal impact on the ecological character of the Ramsar wetlands.

See Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits for reference.

4.1.5.7 Do you think your proposed action is a controlled action? *

No

4.1.5.9 Please elaborate why you do not think your proposed action is a controlled action.

*

The proposed action is unlikely to be a controlled action as no important habitat for migratory species would be directly or indirectly affected and potential impacts to migratory species are not likely to be significant.

Residual direct impacts to migratory species and their habitats are minor in extent, duration and severity in the context of the extent of alternative habitat in the surrounding area. The habitat to be removed or modified would comprise a small portion of potential habitat for migratory species in the locality and a negligible proportion of the habitat in their overall area of occupancy.

See Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits for reference.

4.1.5.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

Environmental management and impact mitigation measures would be implemented within the construction phase of the project. The minimum measures that would be included in CEMPs and implemented at the project area and would include:

- Clear demarcation of the limits of clearing
- Hygiene procedures to prevent the introduction and spread of weeds or pathogens in areas of native vegetation

Supervision of clearing by an ecologist and implementation of measures to minimise risk of harm to resident fauna and salvage habitat resources.

For reference see Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits and Att-N_REF (draft)_Werai Forest_REDACTED

4.1.5.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

There are no proposed offsets for this project. The action is designed to minimise impacts through careful planning and implementation of mitigation measures, ensuring that the residual impacts are minor and do not warrant the need for offsets.

For reference see Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits and Att-N_REF (draft)_Werai Forest_REDACTED

4.1.6 Nuclear

4.1.6.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.6.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

This project does not involve a nuclear action.

The proposed action would not have any direct or indirect impact on:

- establishing or significantly modifying a nuclear installation or a facility for storing spent nuclear fuel
- transporting spent nuclear fuel or radioactive waste products arising from reprocessing
- establishing or significantly modifying a facility for storing radioactive waste products arising from reprocessing
- mining or milling uranium ore
- establishing or significantly modifying a large-scale disposal facility for radioactive waste
- de-commissioning or rehabilitating any facility or area in which an activity described above has been undertaken, or
- establishing, significantly modifying, decommissioning or rehabilitating a facility where radioactive materials at or above the activity level specified in regulation 2.02 of the Environment Protection and Biodiversity Conservation Regulations 2000 (EPBC Regulations) are, were, or are proposed to be stored.

4.1.7 Commonwealth Marine Area

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.7.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.7.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

There are no Commonwealth Marine Areas within the vicinity of the project. These protected matters are well beyond the maximum potential extent of direct or indirect impacts arising from the proposed action.

4.1.8 Great Barrier Reef

4.1.8.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.8.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

The project area is over 1,000 kilometres to the southwest of the Great Barrier Reef and does not drain to the waters surrounding this protected matter. This protected matter is well beyond the maximum potential extent of direct or indirect impacts arising from the proposed action.

4.1.9 Water resource in relation to large coal mining development or coal seam gas

4.1.9.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.9.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

The project does not involve coal seam gas or a large coal mining development.

4.1.10 Commonwealth Land

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.10.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.10.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

The proposed action is situated on land owned and managed by the NSW government. There is no Commonwealth land within the vicinity of the project site. Comprehensive environmental assessments have been conducted, confirming that there are no direct or indirect pathways for impacts on Commonwealth land. Additionally, the project includes robust mitigation measures to manage any potential environmental effects, ensuring compliance with all relevant state and local regulations. Therefore, it is concluded that the proposed action is unlikely to have any significant impact on Commonwealth land.

4.1.11 Commonwealth Heritage Places Overseas

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.11.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.11.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact.

*

These protected matters are well beyond the maximum potential extent of direct or indirect impacts arising from the proposed action.

4.1.12 Commonwealth or Commonwealth Agency

4.1.12.1 Is the proposed action to be taken by the Commonwealth or a Commonwealth Agency? *

No

4.2 Impact summary

Conclusion on the likelihood of significant impacts

You have indicated that the proposed action will likely have a significant impact on the following Matters of National Environmental Significance:

None

Conclusion on the likelihood of unlikely significant impacts

You have indicated that the proposed action will unlikely have a significant impact on the following Matters of National Environmental Significance:

- World Heritage (S12)
- National Heritage (S15B)
- Ramsar Wetland (S16)
- Threatened Species and Ecological Communities (S18)
- Migratory Species (S20)
- Nuclear (S21)
- Commonwealth Marine Area (S23)
- Great Barrier Reef (S24B)
- Water resource in relation to large coal mining development or coal seam gas (S24D)
- Commonwealth Land (S26)
- Commonwealth Heritage Places Overseas (S27B)
- Commonwealth or Commonwealth Agency (S28)

4.3 Alternatives

4.3.1 Do you have any possible alternatives for your proposed action to be considered as part of your referral? *

No

4.3.8 Describe why alternatives for your proposed action were not possible. *

The Water Group is replacing existing infrastructure that has reached the end of its design life with new and improved structures. The only alternative is to do nothing which would result in eventual failure of the infrastructure and impacts on the Ramsar Wetlands.

5. Lodgement

5.1 Attachments

1.2.1 Overview of the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-A_Map Regulators_RRCP Werai Forest.pdf High level map of Werai Forest, location of regulators	01/01/2025	No	High
#2.	Document	Att-B_Map Hydrology_RRCP Werai Forest.pdf High level map of Werai Forest river system	03/03/2025	No	High
#3.	Document	Att-E_RRCP Werai_Map_Moonyah Regulator.pdf Map of Moonyah Regulator Location + borrow site	27/03/2025	No	High
#4.	Document	Att-F_RRCP Werai_Map_Niemur Regulator.pdf Map of Niemur Regulator Location + borrow site	02/01/2025	No	High
#5.	Document	Att-G_RRCP Werai_Map_Reed Bed Regulator.pdf Map of Reed Bed Regulator Location + borrow site	02/01/2025	No	High
#6.	Document	Att-H_RRCP Werai_Map_Tumudgery Regulator.pdf Map of Tumudgery Regulator Location + borrow site	02/01/2025	No	High
#7.	Document	Att-I_Map_WeraiRegsBorrowDisturbanceAccess_20240829.pdf Map of Werai Disturbance Access	02/01/2025	No	High

1.2.5 Information about the staged development

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-C_Background_Werai 'The Forgotten Forest'.pdf Reconnecting River Country Program story	04/05/2023	No	High
#2.	Document	Att-D_Fact sheet_RRCP Overview_FinalOct2024.pdf Reconnecting River Country Program Factsheet	08/11/2022	No	High

1.2.6 Commonwealth or state legislation, planning frameworks or policy documents that are relevant to the proposed action

Type	Name	Date	Sensitivity	Confidence

#1.	Document	Att-K_Operating Plan for Werai-Colligen-Niemur Regulators_Nov 2024_Reduced size.pdf Operating Plan for the Regulators	05/11/2024	No	High
#2.	Document	Att-N_REF (draft)_Werai Forest.pdf Review of Environmental Factors for the Werai Lands Regulator Replacement	01/05/2025	Yes	High
#3.	Document	Att-N_REF (draft)_Werai Forest_REDACTED.pdf Review of Environmental Factors for Werai Lands Regulator Replacement	01/05/2025	No	High
#4.	Link	Significant Impact Guidelines 1.1 - Matters of National Environmental Significance https://www.dcceew.gov.au/environment/epbc/publications/significant-impact-guidelines-1.1-matters-of-national-environmental-significance			High

1.2.7 Public consultation regarding the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-J_FINAL_RRCP_Communication and engagement subplan_Werai Forest package_.pdf Stakeholder and Communications plan	02/01/2024	Yes	High
#2.	Document	Att-J_FINAL_RRCP_Communication and engagement subplan_Werai Forest package_REDACTED.pdf Redacted_Stakeholder and Communications plan	08/01/2024	Yes	High

1.3.2.18 (Person proposing to take the action) If the person proposing to take the action is a corporation, provide details of the corporation's environmental policy and planning framework

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-O_Project_Environmental_Framework.pdf Enviromental Management Framework	01/05/2025	No	High

3.1.1 Current condition of the project area's environment

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-M_Ramsar Ecological Character Description.pdf NSW Central Murray Forests Ramsar site, Ecological Character Description	01/06/2011	No	High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits.pdf Biodiversity assessment for the Werai Forest works	14/01/2025	No	High
#2.	Link	Policy and guidelines for fish habitat conservation and management https://www.dpi.nsw.gov.au/__data/assets/pdf_fil..			High

3.2.2 Vegetation within the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits.pdf Biodiversity assessment for the Werai Forest works	14/01/2025	No	High

3.4.1 Hydrology characteristics that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-B_Map Hydrology_RRCP Werai Forest.pdf High level map of Werai Forest river system	02/03/2025	No	High

4.1.3.2 (Ramsar Wetland) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits.pdf Biodiversity assessment for the Werai Forest works	15/01/2025	No	High

4.1.3.6 (Ramsar Wetland) Why you do not consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits.pdf Biodiversity assessment for the Werai Forest works	14/01/2025	No	High

#2.	Document	Att-N_REF (draft)_Werai Forest.pdf Review of Environmental Factors for the Werai Lands Regulator Replacement	30/04/2025	Yes	High
#3.	Document	Att-N_REF (draft)_Werai Forest_REDACTED.pdf Review of Environmental Factors for Werai Lands Regulator Replacement	30/04/2025	No	High

4.1.3.9 (Ramsar Wetland) Why you do not think your proposed action is a controlled action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits.pdf Biodiversity assessment for the Werai Forest works	14/01/2025	No	High
#2.	Document	Att-N_REF (draft)_Werai Forest.pdf Review of Environmental Factors for the Werai Lands Regulator Replacement	30/04/2025	Yes	High
#3.	Document	Att-N_REF (draft)_Werai Forest_REDACTED.pdf Review of Environmental Factors for Werai Lands Regulator Replacement	30/04/2025	No	High

4.1.3.10 (Ramsar Wetland) Avoidance or mitigation measures proposed for this action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-N_REF (draft)_Werai Forest.pdf Review of Environmental Factors for the Werai Lands Regulator Replacement	30/04/2025	Yes	High
#2.	Document	Att-N_REF (draft)_Werai Forest_REDACTED.pdf Review of Environmental Factors for Werai Lands Regulator Replacement	30/04/2025	No	High

4.1.4.2 (Threatened Species and Ecological Communities) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits.pdf Biodiversity assessment for the Werai Forest works	14/01/2025	No	High

4.1.4.6 (Threatened Species and Ecological Communities) Why you do not consider the direct and/or indirect impact to be a Significant Impact

Type	Name	Date	Sensitivity	Confidence
#1.	Document Att- I_Map_WeraiRegsBorrowDisturbanceAccess_20240829.pdf Map of Werai Disturbance Access	01/01/2025	No	High
#2.	Document Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits.pdf Biodiversity assessment for the Werai Forest works	14/01/2025	No	High

4.1.4.9 (Threatened Species and Ecological Communities) Why you do not think your proposed action is a controlled action

Type	Name	Date	Sensitivity	Confidence
#1.	Document Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits.pdf Biodiversity assessment for the Werai Forest works	14/01/2025	No	High
#2.	Document Att-N_REF (draft)_Werai Forest.pdf Review of Environmental Factors for the Werai Forest project works.	30/04/2025	Yes	High
#3.	Document Att-N_REF (draft)_Werai Forest_REDACTED.pdf Review of Environmental Factors for the Werai Forest works.	30/04/2025	No	High

4.1.4.10 (Threatened Species and Ecological Communities) Avoidance or mitigation measures proposed for this action

Type	Name	Date	Sensitivity	Confidence
#1.	Document Att-N_REF (draft)_Werai Forest.pdf Review of Environmental Factors for the Werai Lands Regulator Replacement	30/04/2025	Yes	High
#2.	Document Att-N_REF (draft)_Werai Forest_REDACTED.pdf Review of Environmental Factors for Werai Lands Regulator Replacement	30/04/2025	No	High

4.1.5.2 (Migratory Species) Why your action has a direct and/or indirect impact on the identified protected matters

Type	Name	Date	Sensitivity	Confidence
#1.	Document Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits.pdf Biodiversity assessment for the Werai Forest works	14/01/2025	No	High

4.1.5.6 (Migratory Species) Why you do not consider the direct and/or indirect impact to be a Significant Impact

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits.pdf Biodiversity assessment for the Werai Forest works	14/01/2025	No	High

4.1.5.9 (Migratory Species) Why you do not think your proposed action is a controlled action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits.pdf Biodiversity assessment for the Werai Forest works	14/01/2025	No	High

4.1.5.10 (Migratory Species) Avoidance or mitigation measures proposed for this action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits.pdf Biodiversity assessment for the Werai Forest works	14/01/2025	No	High
#2.	Document	Att-N_REF (draft)_Werai Forest.pdf Review of Environmental Factors for the Werai Lands Regulator Replacement	30/04/2025	Yes	High
#3.	Document	Att-N_REF (draft)_Werai Forest_REDACTED.pdf Review of Environmental Factors for Werai Lands Regulator Replacement	30/04/2025	No	High

4.1.5.11 (Migratory Species) Proposed offsets relevant to avoidance or mitigation measures

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att-L_Flora and Fauna Assessment_Werai Forest regulators and borrow pits.pdf Biodiversity assessment for the Werai Forest works	14/01/2025	No	High
#2.	Document	Att-N_REF (draft)_Werai Forest.pdf Review of Environmental Factors for the Werai Lands Regulator Replacement	30/04/2025	Yes	High
#3.	Document	Att-N_REF (draft)_Werai Forest_REDACTED.pdf	30/04/2025	No	High

Review of Environmental Factors for
Werai Lands Regulator Replacement

5.2 Declarations

✔ Completed Referring party's declaration

The Referring party is the person preparing the information in this referral.

ABN/ACN	27578976844
Organisation name	NSW DEPARTMENT OF CLIMATE CHANGE, ENERGY, THE ENVIRONMENT AND WATER
Organisation address	L17, 12 Darcy Street, 4PSQ, Parramatta, NSW, 2150
Representative's name	Elma Aguilera
Representative's job title	Senior Project Officer
Phone	0458 637 805
Email	Elma.Aguilera@dpie.nsw.gov.au
Address	

☒ Check this box to indicate you have read the referral form. *

☒ I would like to receive notifications and track the referral progress through the EPBC portal. *

☒ By checking this box, I, **Elma Aguilera of NSW DEPARTMENT OF CLIMATE CHANGE, ENERGY, THE ENVIRONMENT AND WATER**, declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. *

☒ I would like to receive notifications and track the referral progress through the EPBC portal. *

✔ Completed Person proposing to take the action's declaration

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

ABN/ACN	27578976844
Organisation name	NSW DEPARTMENT OF CLIMATE CHANGE, ENERGY, THE ENVIRONMENT AND WATER
Organisation address	2800 NSW

Representative's name	Lara Hess
Representative's job title	Director Environment Planning and Land
Phone	0456 953 013
Email	lara.hess@dpie.nsw.gov.au
Address	L17, 12 Darcy St, 4PSQ, Parramatta, 2150

☒ Check this box to indicate you have read the referral form. *

☒ I would like to receive notifications and track the referral progress through the EPBC portal. *

☒ I, **Lara Hess of NSW DEPARTMENT OF CLIMATE CHANGE, ENERGY, THE ENVIRONMENT AND WATER**, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf or for the benefit of any other person or entity. *

☒ I would like to receive notifications and track the referral progress through the EPBC portal. *

☒ Completed Proposed designated proponent's declaration

The Proposed designated proponent is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

Same as Person proposing to take the action information.

☒ Check this box to indicate you have read the referral form. *

☒ I would like to receive notifications and track the referral progress through the EPBC portal. *

☒ I, **Lara Hess of NSW DEPARTMENT OF CLIMATE CHANGE, ENERGY, THE ENVIRONMENT AND WATER**, the Proposed designated proponent, consent to the designation of myself as the Proposed designated proponent for the purposes of the action described in this EPBC Act Referral. *

☐ I would like to receive notifications and track the referral progress through the EPBC portal. *