

New Intercity Fleet Maintenance Facility – Kangy Angy NSW

Biodiversity Offset Strategy – EPBC Approval 2016/7681

Transport for NSW

Date August 2021

Author TfNSW

Table of contents

Glossary and Abbreviations.....	4
1. Introduction & Project Description	5
2. Document Purpose and Scope	5
3. Biodiversity Offset Requirements	6
4. Final Biodiversity Offset Strategy.....	7
Attachment A – Varied EPBC Approval 2016/7681 biodiversity offsetting conditions (dated June 2021)	8

Document History

Document Version	Release Date	Author	Comment
F	August 2021	P. Hendy	Plan revised to address EPBC biodiversity offsetting requirements; including a revised strategy / description on how biodiversity offsets have been met for the project. Note: a separate Biodiversity Offset Package is being prepared to fulfil the NSW requirements.

Glossary and Abbreviations

Term	Meaning
BAM	Biodiversity Assessment Method
BBAM	BioBanking Assessment Methodology
BC Act	NSW <i>Biodiversity Conservation Act 2016</i>
BCD	Biodiversity and Conservation Division of Department of Planning, Industry and Environment
DAWE	Federal Department of Agriculture, Water and the Environment
DPIE	Department of Planning, Industry and Environment
Ecosystem Credit	Measure the offset requirement for impacts on threatened ecological communities, threatened species habitat for species that can be reliably predicted to occur with a plant community type and other plant community types. These are created or required for all impacts on biodiversity values (including threatened species that can be reliably predicted by habitat surrogates), except the threatened species or populations that require species credits.
EPBC Act	Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>
Mariyung	New fleet of intercity trains
REF	Review of Environmental Factors
SIS	Species Impact Statement
Species credit	These measure the offset requirement for impacts on threatened species individuals or their area of habitat. These are created or required for impacts on threatened species that cannot be reliably predicted to use an area of land based on habitat surrogates.
TfNSW	Transport for NSW

1. Introduction & Project Description

Transport for NSW (TfNSW) is the NSW Government's lead public transport agency that ensures planning and policy is fully integrated across all modes of transport in NSW. It manages a multi-billion dollar budget allocation for rail, bus, ferry and taxi services and related infrastructure in NSW.

TfNSW is delivering the New Intercity (Mariyung) Fleet to replace trains carrying customers from Sydney to the NSW Central Coast, Newcastle, Blue Mountains, South Coast and the Illawarra.

A purpose-built maintenance facility has been constructed to service and maintain the Mariyung fleet at Kangy Angy on the NSW Central Coast. The approved project includes a fleet maintenance building, approximately 6 kilometres of electrified railway, auxiliary workshops, material storage, wheel lathe, automatic train wash and site access roads.

A Review of Environmental Factors (REF) assessing the construction and operation of the New Intercity Fleet Maintenance Facility Project (the Project), prepared in accordance with the requirements of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act), was determined in 2017. To support the project determination, a Species Impact Statement (SIS) and Additional SIS were prepared to address impacts on biodiversity. In addition, an approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC) was obtained due to impacts to Matters of National Environmental Significance.

Where impacts could not be avoided during the design and construction of the maintenance facility, the Project is required to provide biodiversity offsets for the residual biodiversity impacts in accordance with the project conditions of approval, including the preparation of a Biodiversity Offset Strategy and Biodiversity Offset Package.

2. Document Purpose and Scope

The Biodiversity Offset Strategy (BOS) was submitted to the Biodiversity and Conservation Division (BCD) of the NSW Department of Planning, Industry and Environment (DPIE) and the Federal Department of Agriculture, Water and the Environment (DAWE) for approval in 2018. The BOS (Rev E) was approved by the BCD and DAWE prior to the commencement of construction.

As a result of a recent variation to the EPBC Approval biodiversity offsetting conditions, the BOS requires updating to meet the requirements of the EPBC conditions. Note: a Biodiversity Offset Package (BOP) will be submitted to the BCD as required by the SIS concurrence conditions. The BOP will outline how the final credit obligations required under the NSW legislation have been met and will be consistent with the details contained in this strategy.

3. Biodiversity Offset Requirements

The biodiversity credit requirements for the project were initially calculated using the former BioBanking Assessment Methodology (BBAM) in accordance with the NSW Biodiversity Offset Scheme. With the introduction of the NSW *Biodiversity Conservation Act 2016* (BC Act) in 2017, the Project was required to seek a *statement of assessment reasonable equivalence of biodiversity credits* from DPIE, which determined the number of biodiversity credits required to be retired under the former NSW *Threatened Species Conservation Act 1995* were reasonably equivalent to the number and class of biodiversity credits under the NSW BC Act.

Table 1 outlines the biodiversity credit requirements for the New Intercity Fleet Maintenance Facility Project as outlined in the *statement of assessment of reasonable equivalence of biodiversity credits* granted by DPIE in 2019.

Table 1 – biodiversity credit requirements for the New Intercity Fleet Maintenance Facility Project

Biodiversity credit	Plant Community Type / Name	BC Act and/or EPBC Act offset requirement	No. biodiversity credits required
Ecosystem credit	PCT 1723 (HU937) Melaleuca biconvexa - Swamp Mahogany - Cabbage Palm swamp forest of the Central Coast	BC and EPBC Acts	1023
Ecosystem credit	PCT 1528 (HU742) Jackwood - Lily Pilly - Sassafras Riparian Warm Temperate Rainforest of the Central Coast	BC and EPBC Acts	34
Ecosystem credit	PCT 1568 (HU782) Blackbutt - Turpentine - Sydney Blue Gum Mesic Tall Open Forest on Ranges of the Central Coast	BC and EPBC Acts	127
Species credit	<i>Melaleuca biconvexa</i>	BC and EPBC Acts	177
Species credit	Mahony’s Toadlet	BC Act	684
Species Credit	Wallum Froglet	BC Act	31

The biodiversity credit requirements applicable to the EPBC 2016/7681 approval include the retirement of the following biodiversity credits under the BC Act:

1. 873 ecosystem credits for *Melaleuca biconvexa* – Swamp Mahogany – Cabbage Palm swamp forest of the Central Coast PCT1723 (HU937), containing hollow bearing trees; and
2. 150 ecosystem credits for *Melaleuca biconvexa* – Swamp Mahogany – Cabbage Palm swamp forest of the Central Coast PCT1723 (HU937)
3. 34 ecosystem credits for Jackwood – Lily Pilly – Sassafras riparian warm temperate rainforest of the Central Coast – PCT 1528 (HU742); and
4. 127 ecosystem credits for Blackbutt – Turpentine – Sydney Blue Gum mesic tall open forest on ranges of the Central Coast – PCT 1568 (HU782), containing hollow bearing trees

Alternatively a payment, equivalent to the retirement of biodiversity credits listed above, can be made into the NSW Biodiversity Conservation Fund, administered by the Biodiversity Conservation Trust, in accordance with the BC Act. Please refer to Attachment A for the EPBC Approval 2016/7681 conditions.

4. Final Biodiversity Offset Strategy

The biodiversity offsetting requirements for the Project under the EPBC and BC Acts will be met through the following:

- The retirement of 220 ecosystem credits and 31 species credits from the biodiversity credit market (purchased from the Lake Macquarie and Hunter Valley regions). Note: 152 swamp mahogany credits purchased from Lake Macquarie contained hollows as confirmed by ecologist from WSP (on 6 August 2021) who prepared BioBanking Agreement on behalf of the landowner.
- Financial contribution made to the Mahony's Toadlet Saving Our Species Program administered by the NSW DPIE
- Payment into the NSW Biodiversity Conservation Fund for the following credits:
 - 803 PCT 1723 *Melaleuca biconvexa* - Swamp Mahogany - Cabbage Palm swamp forest of the Central Coast ecosystem credits (containing hollows)
 - 127 PCT 1568 *Blackbutt* - Turpentine - Sydney Blue Gum mesic tall open forest on ranges of the Central Coast ecosystem credits
 - 34 PCT 1528 *Jackwood* - Lily Pilly - sassafras riparian warm temperate rainforest of the Central Coast ecosystem credits
 - 177 *Melaleuca biconvexa* species credits.

Attachment A – Varied EPBC Approval 2016/7681 biodiversity offsetting conditions (dated June 2021)



**VARIATION OF CONDITIONS ATTACHED TO APPROVAL
New Intercity Fleet Maintenance Facility, Kangy Angy, NSW
(EPBC No 2016/7681)**

This decision to vary conditions of approval is made under section 143 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Approved action

Person to whom the approval is granted	Transport for NSW ABN: 18 804 239 602
---	--

Approved action	To construct and operate a new train maintenance facility at a site in Kangy Angy, NSW (See EPBC Act referral 2016/7681).
------------------------	---

Variation

Variation of conditions attached to approval	The variation is: Delete condition 4 and 6 attached to the approval and substitute with the conditions specified in the table below. Revoke condition 5 attached to the approval Add new definitions for Biodiversity Conservation Act , Biodiversity Conservation Fund , Biodiversity credits , OEH and Retire and retirement
---	---

Date of effect	This variation has effect on the date the instrument is signed
-----------------------	--

Person authorised to make decision

Name and position	Kim Farrant Assistant Secretary Environment Assessments (Vic, Tas) and Post Approvals Branch
--------------------------	--

Signature

Date of decision

22 June 2021

Date of decision	Conditions attached to approval
Variation dated 7/11/2017	1. The person taking the action must implement conditions 1, 11, 13, 14, 30, 34, 36, 37 of the state conditions of approval , as they relate to avoiding and mitigating the impacts of the action on protected matters .
Variation dated 7/11/2017	<p>2. To minimise the impacts of the action on Groundwater Dependent Ecosystems that support or may support Biconvex Paperbark located onsite and offsite, the person taking the action must implement conditions 56 and 57 of the state conditions of approval and must prepare and implement a Groundwater Management Plan as described in section 7.10.4 of the review of environmental factors, and:</p> <p>The Groundwater Management Plan must be submitted to the Department at least 1 month before construction commences, and construction cannot commence until the plan is approved by the Minister.</p>
Original dated 5/5/2017	3. The person taking the action must not clear more than 19.6ha of high quality swamp forest and 3.6ha of wet open forest that is foraging habitat for the Swift Parrot and Regent Honeyeater within the impact area, as identified in Annexures 1 and 2.
As varied on the date this instrument was signed	<p>4. To compensate for the impacts to foraging habitat for the Swift Parrot (<i>Lathamus discolor</i>) and the Regent Honeyeater (<i>Anthochaera phrygia</i>), the person taking the action must:</p> <ol style="list-style-type: none"> a. retire the following biodiversity credits under the Biodiversity Conservation Act: <ol style="list-style-type: none"> i. 873 ecosystem credits for <i>Melaleuca biconvexa</i> – Swamp Mahogany – Cabbage Palm swamp forest of the Central Coast PCT1723 (HU937), containing hollow bearing trees; and ii. A further 150 ecosystem credits for <i>Melaleuca biconvexa</i> – Swamp Mahogany – Cabbage Palm swamp forest of the Central Coast PCT1723 (HU937); and iii. 34 ecosystem credits for Jackwood – Lily Pilly – Sassafras riparian warm temperate rainforest of the Central Coast – PCT 1528 (HU742); and iv. 127 ecosystem credits for Blackbutt – Turpentine – Sydney Blue Gum mesic tall open forest on ranges of the Central Coast – PCT 1568 (HU782), containing hollow bearing trees; OR b. make payments into the Biodiversity Conservation Fund in accordance with the Biodiversity Conservation Act equivalent to retirement of the biodiversity credits listed at Condition 4(a) of this approval; OR c. retire a portion of the biodiversity credits listed at Condition 4(a) of this approval and make payments into the Biodiversity Conservation Fund in accordance with the Biodiversity Conservation Act equivalent to retirement of the residual biodiversity credits not retired.
As varied on the date this instrument was signed	5. Revoked
As varied on the date this instrument was signed	<p>6. To quantify the offset requirements under BioBanking and the equivalent offset package for the protected matters referred to in condition 4, the person taking the action must implement conditions 2 and 3 of the OEH conditions of concurrence, and:</p> <ol style="list-style-type: none"> a. the Biodiversity Offset Strategy must be submitted to the Department at least 1 month before construction commences, and construction cannot commence until the strategy is approved by the Minister; b. the Biodiversity Offset Strategy must: <ol style="list-style-type: none"> i. demonstrate how the proposed offset package will meet the requirements of condition 4;

Date of decision	Conditions attached to approval
	<ul style="list-style-type: none"> ii. identify and describe the proposed offset sites, and include maps clearly depicting Swift Parrot and Regent Honeyeater habitat within the offset sites; iii. identify how the offset sites will be legally secured in perpetuity; iv. identify the long term objectives for future condition of the offset sites, management and monitoring actions, and timeframes for implementation; v. provide details of proposed supplementary measures, and the monetary value of each component of the offset package; vi. be implemented if approved.
Original dated 5/5/2017	7. The person taking the action must notify the Department in writing of any proposed change to the state conditions of approval referred to in conditions 1 and 2, or the OEH conditions of concurrence referred to in condition 6, within 14 days of proposing a change, and notify the Department of any change to the state conditions of approval referred to in conditions 1 and 2, or the OEH conditions of concurrence referred to in condition 6, within 14 days of a change to conditions being finalised.
Original dated 5/5/2017	8. Within 30 days after the commencement of the action, the person taking the action must advise the Department in writing of the actual date of commencement .
Original dated 5/5/2017	9. The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of this approval, including measures taken to implement the management plans and strategies required by this approval, and make them available upon request to the Department . Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval.
Original dated 5/5/2017	10. Within three months of every 12 month anniversary of the commencement of the action, the person taking the action must publish a report on their website addressing compliance with each of the conditions of this approval and provide documentary evidence providing proof of the date of publication to the Department . The person taking the action must continue to publish the reports until such time as agreed to in writing by the Minister.
Original dated 5/5/2017	11. The person taking the action must notify the Department by email (to EPBCMonitoring@environment.gov.au or an email advised by the Department) of any actual or potential non-compliance with the conditions of this approval, including any plan or strategy required by the conditions of this approval, within 7 days of the person taking the action becoming aware of the actual or potential non-compliance.
Original dated 5/5/2017	12. Upon the direction of the Minister , the person taking the action must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the Minister . The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit criteria must be agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister .
Original dated 5/5/2017	<p>13. The person taking the action may choose to revise a management plan or strategy approved by the Minister under conditions 2 and 6 without submitting it for approval under section 143A of the EPBC Act, if the taking of the action in accordance with the revised plan or strategy would not be likely to have a new or increased impact. If the person taking the action makes this choice they must notify the Department in writing that the approved plan or strategy has been revised and provide the Department, at least four weeks before implementing the revised plan, with:</p> <ul style="list-style-type: none"> a. an electronic copy of the revised management plan showing changes to the plan; b. an explanation of the differences between the revised management plan and the approved management plan;

Date of decision	Conditions attached to approval
	the reasons the person taking the action considers that taking the action in accordance with the revised management plan would not be likely to have a new or increased impact .
Original dated 5/5/2017	14. The person taking the action may revoke their choice under condition 13 at any time by notice to the Department . If the person taking the action revokes the choice to implement a revised plan or strategy, without approval under section 143A of the Act, the plan or strategy approved by the Minister must be implemented.
Original dated 5/5/2017	15. Condition 13 does not apply if the revisions to the approved strategy include changes to environmental offsets provided under the strategy in relation to a matter protected by a controlling provision for the action, unless otherwise agreed in writing by the Minister . This does not otherwise limit the circumstances in which the taking of the action in accordance with a revised plan or strategy would, or would not, be likely to have new or increased impacts .
Original dated 5/5/2017	<p>16. If the Minister gives a notice to the person taking the action that the Minister is satisfied that the taking of the action in accordance with the revised plan or strategy would be likely to have a new or increased impact, then:</p> <ul style="list-style-type: none"> a. Condition 13 does not apply, or ceases to apply, in relation to the revised plan or strategy; and b. The person taking the action must implement the plan or strategy approved by the Minister. <p>To avoid any doubt, this condition does not affect any operation of conditions 13, 14 and 15 in the period before the day the notice is given.</p> <p>At the time of giving the notice the Minister may also notify that for a specified period of time that condition 13 does not apply for one or more specified plans or strategies required under the approval.</p>
Original dated 5/5/2017	17. Conditions 13 to 16 are not intended to limit the operation of section 143A of the EPBC Act which allows the person taking the action to submit a revised plan or strategy to the Minister for approval.
Original dated 5/5/2017	18. If, at any time after 5 years from the date of this approval, the person taking the action has not substantially commenced the action, then the person taking the action must not substantially commence the action without the written agreement of the Minister .
Original dated 5/5/2017	19. Unless otherwise agreed to in writing by the Minister , the person taking the action must publish all plans and strategies referred to in these conditions of approval on their website. Each plan or strategy must be published on the website within 1 month of being approved by the Minister or being submitted under condition 13a.

Date of decision	Definitions attached to approval
As varied on the date this instrument was signed	Biodiversity Conservation Act means the <i>Biodiversity Conservation Act 2016</i> (NSW) as in force and amended from time to time.
As varied on the date this instrument was signed	Biodiversity Conservation Fund has the meaning used in the Biodiversity Conservation Act .
As varied on the date this instrument was signed	Biodiversity credits has the meaning used in the Biodiversity Conservation Act .
Original dated 5/5/2017	Commencement means any works associated with the action, other than surveys, acquisitions, fencing and signage.

Date of decision	Definitions attached to approval
Original dated 5/5/2017	Construction means any bulk earthworks (including levelling, cut and fill, or excavation that causes major disturbance to the ground surface) and/or clearance of native vegetation (including the cutting down, removing, killing, destroying, poisoning, ringbarking, uprooting or burning of native vegetation), excluding investigative works and service/utility relocation works (and associated construction compounds).
Original dated 5/5/2017	Department means the Australian Government Department or any other agency administering the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth) from time to time.
Original dated 5/5/2017	Minister means the Minister administering the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth) and includes a delegate of the Minister.
Original dated 5/5/2017	National recovery plan for the Swift Parrot means the document cited as Saunders, D.L. & C.L. Tzaros (2011). <i>National Recovery Plan for the Swift Parrot</i> (<i>Lathamus discolor</i>), Birds Australia, Melbourne or as replaced from time to time.
Original dated 5/5/2017	National recovery plan for the Regent Honeyeater means the document cited as Department of the Environment (2016). <i>National Recovery Plan for the Regent Honeyeater</i> (<i>Anthochaera phrygia</i>), Commonwealth of Australia, Canberra or as replaced from time to time.
Original dated 5/5/2017	New or increased impact means a new or increased impact on any matter protected by the controlling provisions for the action, when compared to the plan or strategy that has been approved by the Minister.
As varied on the date this instrument was signed	OEH means the New South Wales Office of Environment and Heritage, or a successor agency responsible for regulatory activities associated with the OEH conditions of concurrence and section 112C of the <i>Environmental Planning and Assessment Act 1979</i> (NSW) as in force or existing from time to time.
As varied on the date this instrument was signed	OEH conditions of concurrence means the concurrence conditions attached to the Threatened Species Concurrence for the Proposed New Intercity Fleet Maintenance Facility Project granted under section 112C of the <i>Environmental Planning and Assessment Act 1979</i> (NSW) as in force or existing from time to time.
Original dated 5/5/2017	Protected matters means the threatened species protected by the controlling provisions for the action that the Department has considered impacts to, namely the Swift Parrot (<i>Lathamus discolor</i>), Regent Honeyeater (<i>Anthochaera phrygia</i>), and Biconvex Paperbark (<i>Melaleuca biconvexa</i>).
As varied on the date this instrument was signed	Retire and retirement have the meanings used in Part 6 of the Biodiversity Conservation Act .
Original dated 5/5/2017	Review of environmental factors means the document titled <i>New Intercity Fleet Maintenance Facility Project – Review of Environmental Factors</i> authored by WSP Parsons Brinckerhoff dated June 2016.
As varied on the date this instrument was signed	State conditions of approval means the conditions attached to the approval under Part 5 of the <i>Environmental Planning and Assessment Act 1979</i> (NSW) for the New Intercity Fleet Maintenance Facility Project as in force or existing from time to time.
Original dated 5/5/2017	Supplementary measures means actions that do not directly offset the impacts on the protected matter but are anticipated to lead to benefits for the protected matter, for example funding for research or educational programs.

Date of decision	<u>Annexures</u>
Original dated 5/5/2017	Annexure 1 – New Intercity Fleet Maintenance Facility Project Swift Parrot habitat
Original dated 5/5/2017	Annexure 2 - New Intercity Fleet Maintenance Facility Project Regent Honeyeater habitat



