



APPROVAL

Vickery Extension Project, Gunnedah, NSW (EPBC 2016/7649)

This decision is made under sections 130(1) and 133(1) of the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*. Note that section 134(1A) of the EPBC Act applies to this approval, which provides in general terms that if the approval holder authorises another person to undertake any part of the action, the approval holder must take all reasonable steps to ensure that the other person is informed of any conditions attached to this approval, and that the other person complies with any such condition.

Details

Person to whom the approval is granted (approval holder)	Vickery Coal Pty Ltd
ACN or ABN of approval holder	ACN: 626 224 495
Action	The extension of the open cut mining operations at the Vickery Coal Mine and related surface infrastructure and activities, 25 km north of Gunnedah, NSW (see EPBC Act referral 2016/7649 and the variations approved on 17 February 2017 and 17 July 2018).

Approval decision

My decision on whether or not to approve the taking of the action for the purposes of each controlling provision for the action is as follows.

Controlling Provisions

Listed Threatened Species and Communities	
Section 18	Approve
Section 18A	Approve
Coal seam gas or large coal mining development impact on water resources	
Section 24D	Approve
Section 24E	Approve

Period for which the approval has effect

This approval has effect until 31 December 2051

Decision-maker

Name and position	The Hon Sussan Ley MP Minister for the Environment
Signature	
Date of decision	15 th September 2021

Conditions of approval

This approval is subject to the conditions under the EPBC Act as set out in ANNEXURE A.

ANNEXURE A – CONDITIONS OF APPROVAL

Part A – Conditions specific to the action

Water Resources

The objective of Conditions 1 to 14 is to minimise the **impacts** of the **action** on a **Water Resource**.

1. For the protection of **water resources**, the **approval holder** must comply with **State development consent** conditions B39 to B54 and B101 to B106.
2. The **approval holder** must ensure that there is no **adverse effect** on the **function** of a **water resource** as a result of the **action**.
3. The **approval holder** must notify the **Department** in writing, within **2 business days**, if an application to modify **State development consent** conditions B39 – B54 and B101-B106 is made.
4. The **approval holder** must notify the **Department** in writing, within **10 business days**, where **State development consent** conditions B39 – B54 and B101-B106 have been modified.
5. The **approval holder** must include the following information in the Water Management Plan required by **State development consent** condition B53:
 - a. management and mitigation strategies to minimise potential **impacts** to the **EPBC Act** listed Murray Cod (*Maccullochella peelii*).
 - b. details of any chemical dust suppressants used. These details must include the chemicals proposed for use, typical application rates, and an assessment of the likelihood that the chemicals will enter the environment (e.g. soil, groundwater or surface water) and the potential persistence and toxicity to **protected matters** of these chemicals or their breakdown products. Furthermore, if data on chronic toxicity to aquatic organisms is not available in respect of any chemical proposed for use, the **approval holder** must include the results of direct toxicity assessments undertaken in accordance with the *Australian and New Zealand guidelines for fresh and marine water quality, 2018* or any subsequent revision.
6. The **approval holder** must provide the **Department** with the final version of the Water Management Plan required by condition B53 of the **State development consent** within **10 business days** of its approval by the NSW Planning Secretary.
7. The **approval holder** must notify the **Department** within **2 business days** of any proposed changes to the final version of the Water Management Plan. If the NSW Planning Secretary approves a revised version of the Water Management Plan, the **approval holder** must provide the **Department** with the approved revised Water Management Plan within **10 business days** of its approval by the NSW Planning Secretary.
8. In addition to the Groundwater Management Plan monitoring requirements specified in condition B53 of the **State development consent**, the **approval holder** must:
 - a. Establish and maintain a network of groundwater monitoring bores designed to detect changes in groundwater levels and include bores that are co-located or paired with surface water monitoring sites to allow monitoring and analysis of groundwater-surface water interactions. These monitoring bores must be installed prior to the commencement of **mining operations**.

- b. Monitor groundwater levels in each bore (required under condition 8.a) at least once every 3 months, starting within one week of the commencement of **mining operations** for the life of this approval.
 - c. Publish on the website all groundwater monitoring data from the bore network, updated at least once every 3 months to include the most recent readings available and maintain the data on the website for the life of this approval. The monitoring data must include hydrographs for the bore network and explain what the data means in relation to the groundwater **performance measures** specified in the **State development consent**.
9. The **approval holder** must submit performance criteria and **limits**, relevant to groundwater extraction impacts for the alluvial aquifer, for the **Minister's** approval. The submission of the **performance criteria** and **limits** must be accompanied by evidence-based justification of how they were derived from the results of monitoring, consider groundwater-surface water connectivity, and are suitable to demonstrate condition 2 is being achieved.
 10. The **approval holder** must not commence groundwater extraction from the water supply borefield until the **performance criteria** and **limits** have been approved by the **Minister** in writing.
 11. If, at any time during the period for which this approval has effect, the **approval holder** detects an exceedance of any approved limit required under condition 9 the **approval holder** must notify the **Department** of the exceedance within **2 business days** of detecting the exceedance.
 12. If, at any time during the period for which this approval has effect, the **approval holder** detects an exceedance of an approved **limit** required under condition 9, the **approval holder** must cease groundwater extraction from the **water supply bore field** within **2 business days**.
 13. If the **approval holder** has been required to cease groundwater extraction pursuant to condition 12, the **approval holder** must:
 - a. provide information including monitoring data that identifies the likely cause of the exceedance of the approved **limit**;
 - b. consider the effect of the current condition of the **water resource** on the utility of the **water resource** for **associated users**; and
 - c. if the likely cause is identified as a component of the action, propose measures to mitigate and manage any **impacts** to any **associated users**, ensuring that the utility of the **water resource** for **associated users** is not effected.
 14. The **approval holder** must not recommence groundwater extraction until the information required in condition 13 has been approved by the **Minister** in writing. The **approval holder** must implement the approved mitigation and management measures.

Listed Threatened Species

The objective of conditions 15 to 22 is to minimise the impacts and compensate for residual impacts of the **action** on **EPBC Act listed threatened species**.

15. Within the area designated 'Approximate Extent of Vickery Extension Project (EPBC 2016-7649) footprint' at **Attachment A**, the **approval holder** must not **clear** more than:
 - a. 75.2 hectares of Regent Honeyeater (*Anthochaera phrygia*) habitat,
 - b. 104.7 hectares of Swift Parrot (*Lathamus discolor*) habitat,
 - c. 80.9 hectares of Koala (*Phascolarctos cinereus*) (combined populations of Queensland, New South Wales and the Australian Capital Territory) habitat.

Note: Habitat for the Regent Honeyeater, Swift Parrot and Koala is based on the NSW plant community types (PCTs) **Attachment B and C**.

16. The **approval holder** must comply with the **State development consent** conditions B56 - B67, and B101 - B106 (to the extent these conditions relate to **EPBC Act** listed **threatened species**).
17. The **approval holder** must notify the Department in writing, within 2 **business days** if they apply to modify **State development consent** conditions B56 – B67 and B101-B106.
18. The **approval holder** must notify the Department in writing, within 10 **business days**, where **State development consent** conditions B56 – B67 and B101-B106 have been modified.
19. To compensate for **impacts** on threatened species and communities listed in condition 15, the **approval holder** must comply with **State development consent** conditions B56 and B57 and must retire the biodiversity credits specified in table 10 and 11 of **State development consent** conditions B58 and B59.
20. The approval holder must publish a credit retirement report within 10 **business days** of retiring the credits on the **approval holder's** website.
21. The **approval holder** must provide the Minister with a statement, prior to the **commencement of the action** validating that the approved land based offsets specified in Table 9 of the **State development consent** contain at least 293.9 ha of potential Regent Honeyeater (*Anthochaera phrygia*) habitat (the equivalent of 2087 species credits) and 112 ha of potential Koala (*Phascolarctos cinereus*) habitat (the equivalent of 795 species credits). The statement must be endorsed by an accredited assessor under the *NSW Biodiversity Conservation Act 2016* and must be published on the **approval holder's** website.

Note: The equivalent credits in condition 21 were calculated in accordance with the Framework for Biodiversity Assessment of the NSW Biodiversity Offset Policy for Major Projects (OEH, 2014).

22. If the **Minister** is not satisfied that the approved land based offsets specified in Table 9 of the **State development consent** contain the habitat specified in condition 21, the **approval holder** may be required by the Minister to retire specified biodiversity credits under the *NSW Biodiversity Conservation Act 2016* within the timeframes specified in condition B58 of the **State development consent**.

Part B – Standard administrative conditions

Notification of date of commencement of the action

23. The **approval holder** must notify the Department in writing of the date of **commencement of the action** within 10 **business days** after the date of commencement of the action.
24. If the **commencement of the action** does not occur within 5 years from the date of this approval, then the approval holder must not commence the action without the prior written agreement of the Minister.

Compliance records

25. The approval holder must maintain accurate and complete **compliance records**.
26. If the **Department** makes a request in writing, the approval holder must provide electronic copies of **compliance records** to the **Department** within the timeframe specified in the request.

Note: Compliance records may be subject to audit by the **Department** or an independent auditor in accordance with section 458 of the **EPBC Act**, and or used to verify compliance with the conditions. Summaries of the result of an audit may be published on the **Department's** website or through the general media.

Submission and publication of plans

27. The **approval holder** must:

- a. submit **plans** electronically to the **Department**;
- b. unless otherwise agreed to in writing by the **Minister**:
 - i. publish each **plan** on the website within 20 **business days** of the date the plan is approved by the **Minister** or of the date a revised action management plan is submitted to the **Minister** or the **Department**, unless otherwise agreed to in writing by the **Minister**;
 - ii. publish the Water Management **Plan** on the **website** within 20 **business days** of the date the **plan** is approved by the NSW Planning Secretary;
 - iii. exclude or redact **sensitive ecological data** from **plans** that are to be published on the **website** or provided to a member of the public; and
 - iv. keep **plans** published on the **website** until the end date of this approval.

Annual compliance reporting

28. The **approval holder** must prepare a **compliance report** addressing compliance with each of the conditions of this approval, including implementation of any management **plans** and strategies required under the **State development consent** conditions that are referred to in this approval, **at the end of March** every year, **and covering compliance for the previous calendar year** or otherwise in accordance with another annual date that has been agreed to in writing by the **Minister**. The **approval holder** must:

- a. publish each **compliance report** on the **website** within 20 **business days** following the end of March each year;
- b. notify the **Department** by email that a **compliance report** has been published on the **website** and provide the weblink for the **compliance report** within 5 **business days** of the date of publication;
- c. keep all **compliance reports** publicly available on the **website** until this approval expires;
- d. exclude or redact **sensitive ecological data** from **compliance reports** prior to publishing each **compliance report** on the **website**; and
- e. where any **sensitive ecological data** has been excluded from the version published, submit the full **compliance report** to the **Department** within 5 **business days** of publication.

Note: Compliance reports may be published on the **Department's** website.

Reporting non-compliance

29. The **approval holder** must notify the **Department** in writing of any: **incident**, or non-compliance with the conditions. The notification must be given as soon as practicable, and no later than two **business days** after becoming aware of the **incident** or non-compliance. The notification must specify:

- a. any condition which is or may be in breach;
- b. a short description of the **incident** and/or non-compliance; and

- c. the location (including co-ordinates), date, and time of the **incident** and/or non-compliance. In the event the exact information cannot be provided, provide the best information available.
30. The **approval holder** must provide to the **Department** the details of any **incident** or non-compliance with the conditions as soon as practicable and no later than 10 **business days** after becoming aware of the **incident** or non-compliance, specifying:
- a. any corrective action or investigation which the **approval holder** has already taken or intends to take in the immediate future;
 - b. the potential impacts of the **incident** or non-compliance; and
 - c. the method and timing of any remedial action that will be undertaken by the **approval holder**.

Independent audit

31. The **approval holder** must ensure that **independent audits** of compliance with the conditions are conducted as requested in writing by the **Minister**.
32. For each **independent audit**, the **approval holder** must:
- a. provide the name and qualifications of the independent auditor and the draft audit criteria to the **Department**;
 - b. only commence the **independent audit** once the audit criteria have been approved in writing by the **Department**; and
 - c. submit an audit report to the **Department** within the timeframe specified in the approved audit criteria.
33. The **approval holder** must publish the audit report on the **website** within 10 **business days** of receiving the **Department's** approval of the audit report and keep the audit report published on the **website** until the end date of this approval.

Completion of the action

34. The **approval holder** must comply with condition A7¹ in Schedule 2 of the **State development consent**.
35. Within 20 business days after the **completion of the action**, the **approval holder** must notify the **Department** in writing and provide **completion data**.

Changes to State development consent

36. The **approval holder** must notify the **Department** in writing of any proposed change to the **State development consent** that may relate to **protected matters** within 2 **business days** of formally proposing a change and within 5 **business days** of becoming aware of any proposed change.
37. The **approval holder** must notify the **Department** in writing of any change to the **State development consent** conditions that may relate to **protected matters**, within 10 **business days** of a change to conditions being finalised.

¹ Condition A7 in Schedule 2 states that mining operations may be carried out on the site until 12 August 2045.

Part C - Definitions

In these conditions, except where contrary intention is expressed, the following definitions are used:

Action means the Vickery Extension Project, Gunnedah, NSW (EPBC 2016/7649) as described in the NSW Assessment Report, the referral under the EPBC Act and the two variation requests dated 17 February 2017 and 17 July 2018 respectively.

Adverse effect means the occurrence of **impacts** greater than those predicted in the **assessment documentation** and is represented by the exceedance of an approved **limit** required under condition 9 of this approval.

Approval holder means the person to whom the approval is granted as identified on the approval notice for EPBC 2016/7649, or to whom the approval is transferred under section 145B of the **EPBC Act**, or a person who may take the **action** in accordance with section 133(2A) of the **EPBC Act**.

Approved disturbance area means the area defined as the "Approved disturbance area" in Schedule 1 of the **State development consent**.

Aquatic GDE means groundwater dependent ecosystems dependent on the surface expression of groundwater, including:

- River baseflow systems, aquatic and riparian ecosystems that exist in or adjacent to streams (including the hyporheic zone (subsurface interface between surface and groundwater bodies)) which are fed by groundwater; and
- **Wetlands** (aquatic communities and fringing vegetation dependent on groundwater-fed lakes and **wetlands**), including palustrine (non-tidal **wetlands** dominated by vegetation) and lacustrine (lake) **wetlands** that receive groundwater discharge, and can include spring and swamp ecosystems.

Assessment documentation means the documents listed in condition A2(c) of the **State development consent**.

Associated User means groundwater supply bores, **aquatic GDEs**, **terrestrial GDEs** and **subterranean GDEs**.

Business day means a day that is not a Saturday, a Sunday or a public holiday in the state or territory of the **action**.

Clear/ing means the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting or burning of vegetation within the **approved disturbance area**.

Commencement of the action means the first instance of any specified activity associated with the action including **clearing** and **construction**. **Commencement of the action** does not include:

- i. pre-clearance surveys or monitoring programs;
- ii. installation of signage and/or temporary fencing to prevent unapproved use of the project area;
- iii. protection of environmental and property assets from fire, weeds and pests, including erection of temporary fencing, and use of existing surface access tracks;
- iv. upgrades, diversions, removal or installation of utilities;
- v. installation of temporary site facilities (including temporary roads, offices, toilets and laydown facilities) for persons undertaking pre-commencement activities so long as these are located where they have no impact on the **protected matters**;
- vi. geotechnical investigations, site surveying activities and geological exploration drilling.

Completion data means an environmental report and spatial data clearly detailing how the conditions of this approval have been met. The **Department's** preferred spatial data format is **shapefile**.

Completion of the action means all specified activities associated with the **action** have permanently ceased.

Compliance records means all documentation or other material in whatever form required to demonstrate compliance with the conditions of approval in the approval holder's possession or that are within the approval holder's power to obtain lawfully.

Compliance reports means written reports:

- i. providing accurate and complete details of compliance, **incidents**, and non-compliance with the conditions and the **plans**;
- ii. consistent with the **Department's Annual Compliance Report Guidelines (2014)**;
- iii. include a **shapefile** of any clearance of any **protected matters**, or their habitat, undertaken within the relevant 12 month period; and
- iv. annexing a schedule of all **plans** prepared and in existence in relation to the conditions during the relevant 12 month period.

Construction means the erection of a building or structure that is or is to be fixed to the ground and wholly or partially fabricated on-site; the alteration, maintenance, repair or demolition of any building or structure; preliminary site preparation work which involves breaking of the ground (including pile driving); the laying of pipes and other prefabricated materials in the ground, and any associated excavation work; but excluding the activities that do not constitute **commencement of the action**.

Department means the Australian Government agency responsible for administering the **EPBC Act**.

Environmental offsets policy means the *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy (October 2012)*, or subsequent official revised version, including the Offsets Assessment Guide, available at:

<http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy>

EPBC Act means the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*.

EPBC Act listed threatened species and communities: Regent Honeyeater (*Anthochaera phrygia*), Swift Parrot (*Lathamus discolor*) and Koala (*Phascolarctos cinereus*) (combined populations of Queensland, New South Wales and the Australian Capital Territory).

Function means the ecosystem components, processes and benefits or services that characterise the **associated user** including support for biological diversity or species composition.

Impact (verb) means to cause any measurable direct or indirect disturbance or harmful change as a result of any activity associated with the **action**. **Impact/s** (noun) means any measurable direct or indirect disturbance or harmful change as a result of any activity associated with the **action**.

Incident means any event which has the potential to, or does, impact on one or more **protected matter(s)** other than as authorised by this approval.

Independent audit: means an audit conducted by an independent and **suitably qualified person** as detailed in the *Environment Protection and Biodiversity Conservation Act 1999 Independent Audit and Audit Report Guidelines (2019)*.

Limit/s means a specified numerical value for the **performance criteria**.

Listed threatened species: Regent Honeyeater (*Anthochaera phrygia*), Swift Parrot (*Lathamus discolor*) and Koala (*Phascolarctos cinereus*) (combined populations of Queensland, New South Wales and the Australian Capital Territory).

Mining operations means the carrying out of mining, including the extraction, processing, stockpiling and transportation of coal on the site and the associated removal, storage and/or emplacement of vegetation, topsoil, overburden and reject material.

Minister means the Australian Government Minister administering the **EPBC Act** including any delegate thereof.

NSW performance criteria means as specified in the approved Water Management Plan required under condition B53 of the **State development consent**.

Performance criteria means specific parameters, associated with and relevant to the **function** of a **water resource** that will be monitored to demonstrate that the outcome of no **adverse effect** is being achieved, measured at a specific time and place.

Performance measure means as specified in Table 8 of the **State development consent** and as defined in the Water Management **Plan** approved by the NSW Government.

Plan(s) means any of the documents required to be prepared, approved by the **Minister**, implemented by the approval holder and/or published on the **website** in accordance with these conditions (includes action management plans and/or strategies).

Protected matter means a matter protected under a controlling provision in Part 3 of the **EPBC Act** for which this approval has effect.

Sensitive ecological data means data as defined in the Australian Government Department of the Environment (2016) *Sensitive Ecological Data – Access and Management Policy V1.0*.

Shapefile means location and attribute information of the **action** provided in an Esri shapefile format. Shapefiles must contain '.shp', '.shx', '.dbf' files and a '.prj' file that specifies the projection/geographic coordinate system used. Shapefiles must also include an '.xml' metadata file that describes the shapefile for discovery and identification purposes.

State development consent means the Development Consent issued by the Independent Planning Commission of New South Wales for application number SSD-7480 dated 12 August 2020.

Subterranean GDEs means groundwater dependent ecosystems partially or wholly dependent on aquifer ecosystems, including stygofauna.

Suitably qualified expert means a person who has professional qualifications, training, skills and/or experience related to the nominated subject matter and can give authoritative independent assessment, advice and analysis on performance relative to the subject matter using the relevant protocols, standards, methods and/or literature.

Terrestrial GDEs means land-based groundwater dependent ecosystems that are partially or wholly dependent on the subsurface presence of groundwater.

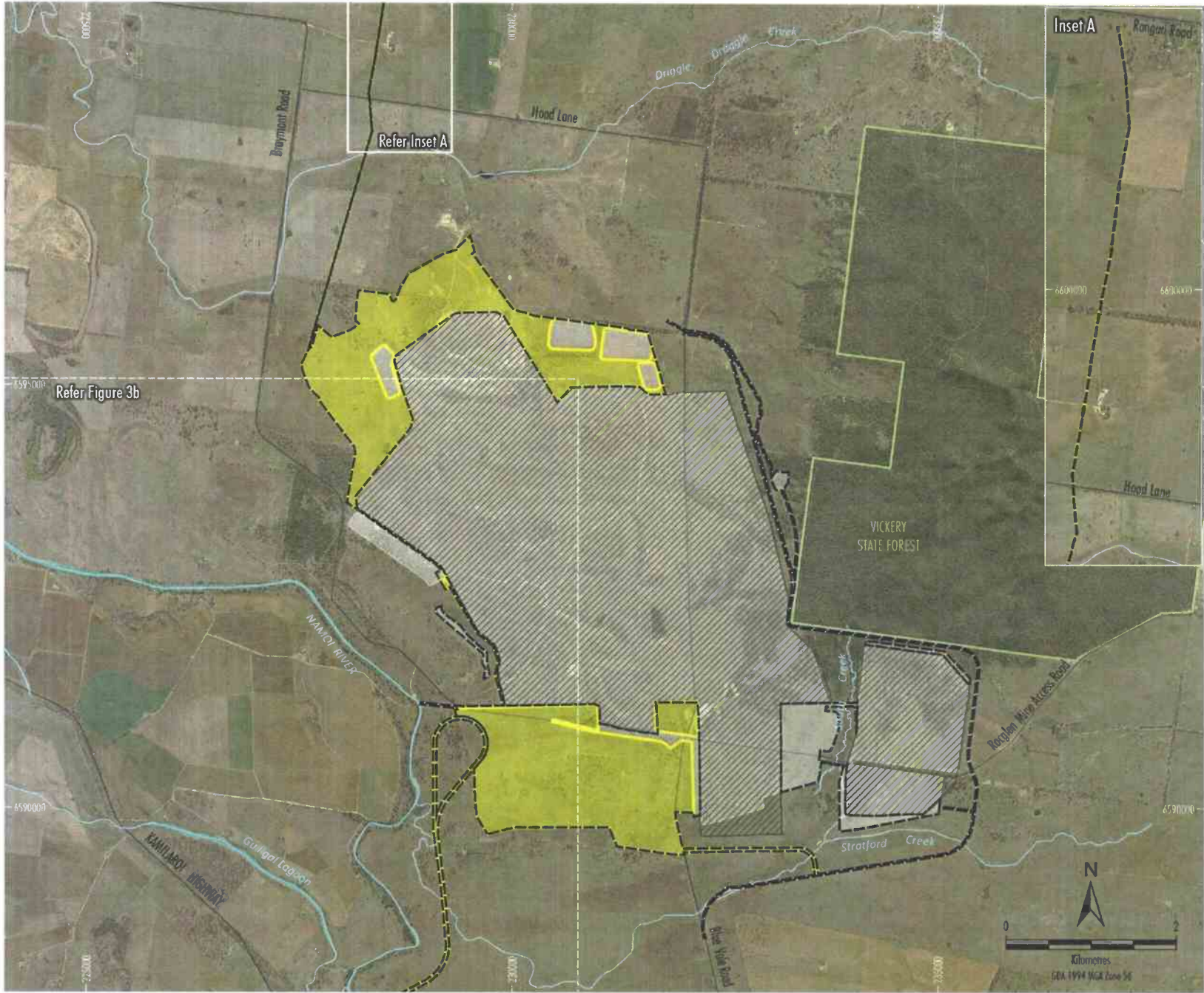
Water supply bore field means the water supply bore field identified in Attachment E.

Water Resource has the same meaning as in the Commonwealth *Water Act 2007*.

Website means a set of related web pages located under a single domain name attributed to the approval holder and available to the public.

Wetland/s means land intermittently or permanently inundated with water that is usually slow moving or stationary, shallow, can be fresh, brackish or saline, and where the inundation affects the plant and animal communities present and the type and productivity of soil.

Attachment A - Commonwealth areas within the action's footprint (Mine Site view)



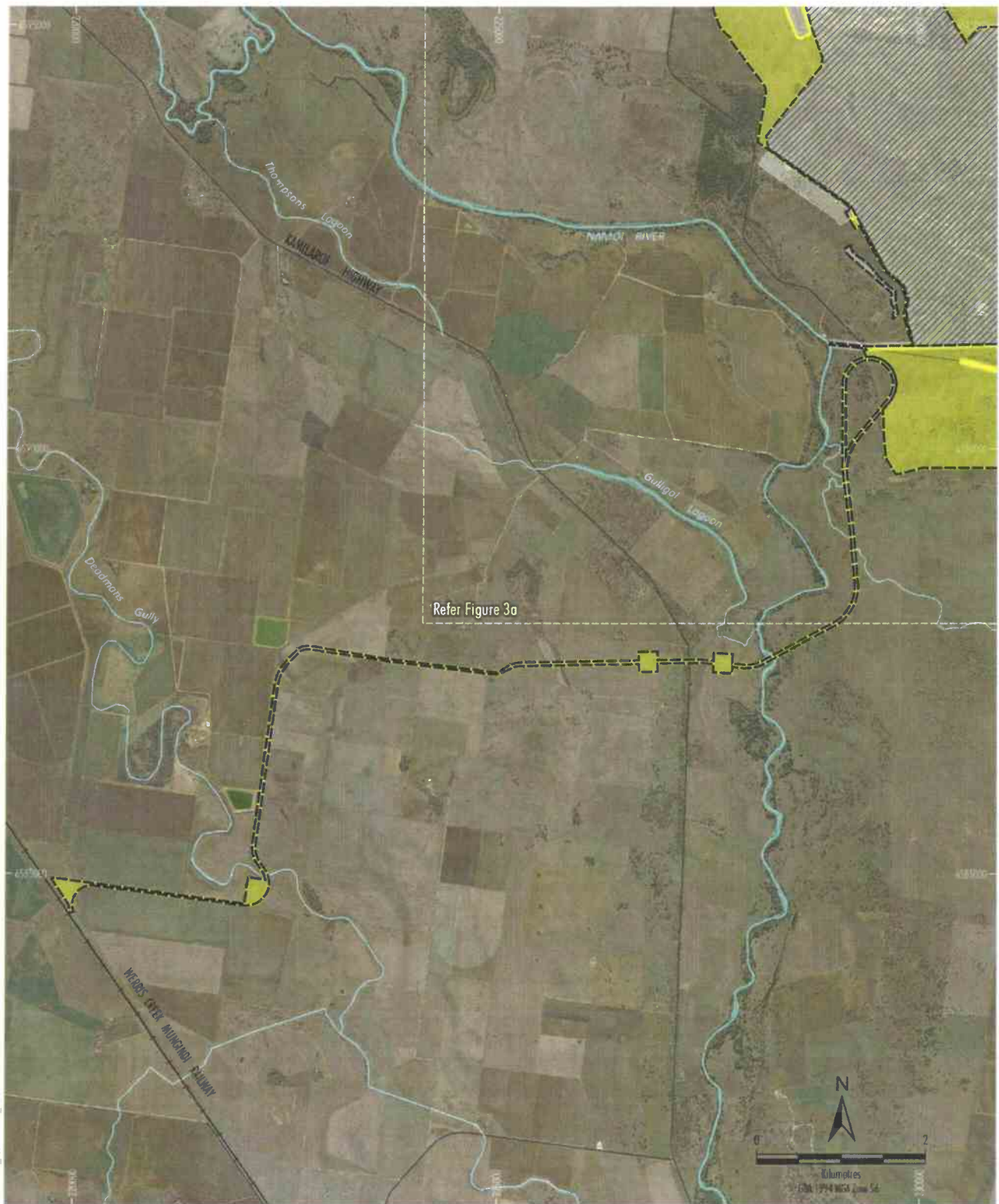
- LEGEND**
- State Forest
 - Approximate Extent of Approved Mine
 - Vickery Coal Project (EPBC 2012/6263) Footprint - Not a Controlled Action - Particular Manner
 - Approximate Extent of Vickery Extension Project (EPBC 2016/7649) Footprint
 - Biodiversity Assessment Report Development Site Footprint

Source: Orthophoto - Department of Land and Property Information, Aerial Photography (July 2011)



VICKERY EXTENSION PROJECT
 Vickery Extension Project Assessment Areas
 (Mining Area)

Figure 3a



- LEGEND**
-  Approximate Extent of Approved Mine
 -  Vickers Coal Project (EPBC 2012/6263) Footprint - Not a Controlled Action - Particular Manner
 -  Approximate Extent of Vickers Extension Project (EPBC 2016/7649) Footprint
 -  Biodiversity Assessment Report Development Site Footprint

Source: Orthophoto - Department of Land and Property Information, Aerial Photography (July 2011)


WHITEHAVEN COAL
VICKERY EXTENSION PROJECT
Vickers Extension Project Assessment Areas
(Project Rail Spur)

Figure 3b

Attachment B - Plant Community Types within the action area (project mining area).



- LEGEND**
- State Forest
 - Study Area
- Vegetation Communities**
- Semi-arid Woodlands (Grassy Sub-formation)**
 - 1 Weeping Myall Woodland (NA219)*
 - 2 Poplar Box Woodland on Alluvial Clay Soils (NA185)
 - 2a Poplar Box Woodland on Alluvial Clay Soils (Secondary/derived grassland) (NA185)
 - Dry Sclerophyll Forests (Shrub/Grass Sub-formation)**
 - 3 Pilliga Box – Poplar Box Shrubby Woodland (NA324)
 - 3a Pilliga Box – Poplar Box Shrubby Woodland (Secondary/derived grassland) (NA324)
 - 4 White Box – Silver-leaved Ironbark Shrubby Open Forest (NA349)
 - 4a White Box – Silver-leaved Ironbark Shrubby Open Forest (Secondary/derived grassland) (NA349)
 - Dry Sclerophyll Forests (Shrubby Sub-formation)**
 - 5 Narrow-leaved Ironbark – White Box Shrubby Forest (NA311)
 - 5a Narrow-leaved Ironbark – White Box Shrubby Forest (Secondary/derived grassland) (NA311)
 - Freshwater Wetlands**
 - 7 Mixed Marsh Sedgeland (NA201)
 - Forested Wetlands**
 - 8 River Red Gum Riparian Tall Woodland (NA193)
 - 8a River Red Gum Riparian Tall Woodland (Secondary/derived grassland) (NA193)
 - Cleared Land**
 - 9 Exotic Dominant Grasslands
 - DL Disturbed Land
- * Listed as the Weeping Myall Woodland EEC

Note: Vegetation community 6 is not present in this figure.

Source: Orthophoto - Department of Land and Property Information, Aerial Photography (July 2011)


WHITEHAVEN COAL
VICKERY EXTENSION PROJECT
Vegetation Communities
Project Mining Area

Figure 4a



LEGEND

- State Forest
- Study Area

Vegetation Communities

- Semi-arid Woodlands (Grassy Sub-formation)**
- 1 Weeping Myall Woodland (NA219)*
 - 2 Poplar Box Woodland on Alluvial Clay Soils (NA185)
 - 2a Poplar Box Woodland on Alluvial Clay Soils (Secondary/derived grassland) (NA185)
- Dry Sclerophyll Forests (Shrub/Grass Sub-formation)**
- 3 Pilliga Box – Poplar Box Shrubby Woodland (NA324)
 - 3a Pilliga Box – Poplar Box Shrubby Woodland (Secondary/derived grassland) (NA324)

- Dry Sclerophyll Forests (Shrub/Grass Sub-formation)**
- 4 White Box – Silver-leaved Ironbark Shrubby Open Forest (NA349)
 - 4a White Box – Silver-leaved Ironbark Shrubby Open Forest (Secondary/derived grassland) (NA349)
- Forested Wetlands**
- 8 River Red Gum Riparian Tall Woodland (NA193)
 - 8a River Red Gum Riparian Tall Woodland (Secondary/derived grassland) (NA193)
- Cleared Land**
- DL Disturbed Land
- * Listed as the Weeping Myall Woodland EEC

* Provisional vegetation mapping west of the Kamilaroi Highway based on airphoto interpretation

Note: Vegetation communities 1, 5, 6 and 7 are not present on this figure

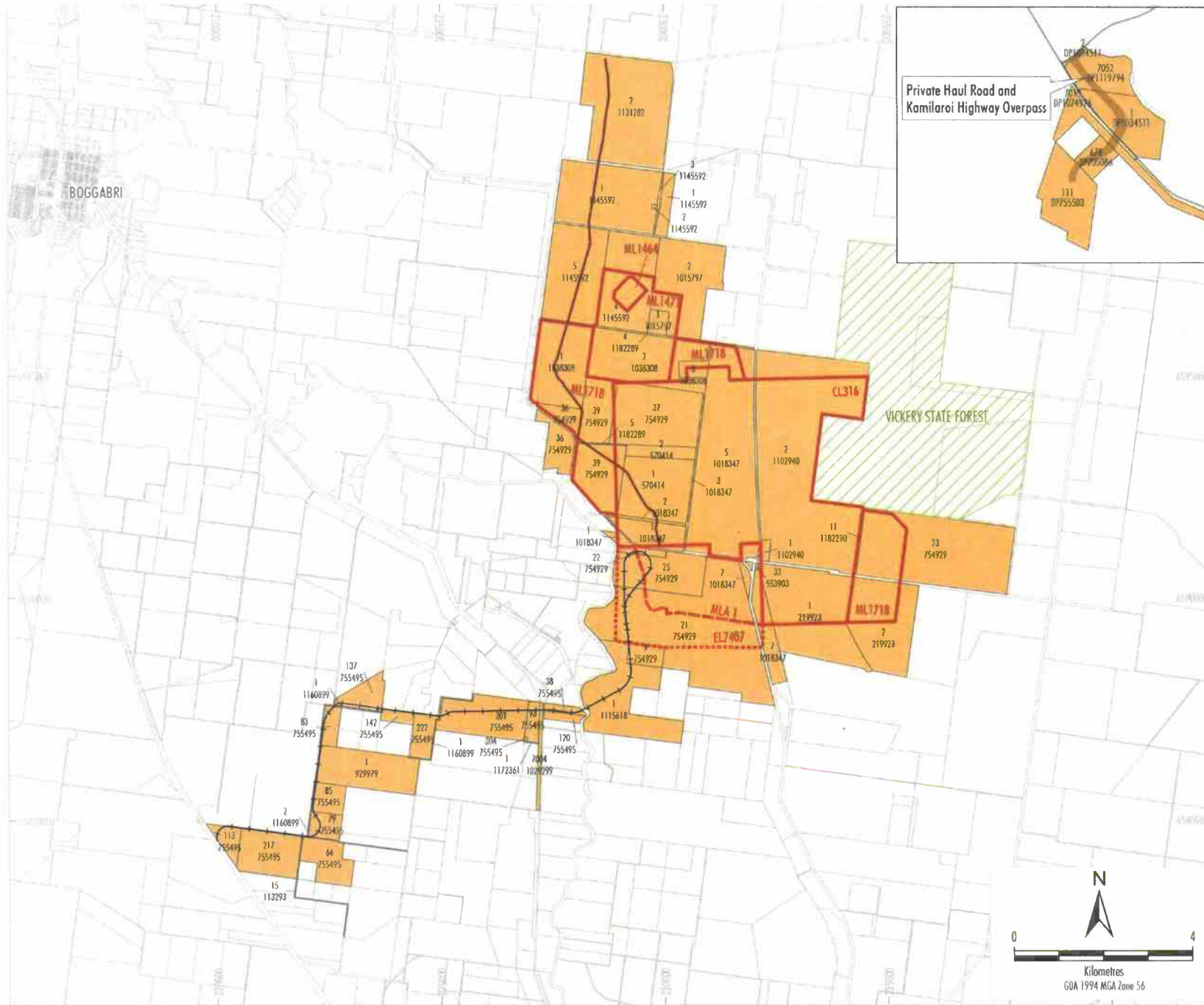
Source: Orthophoto - Department of Land and Property Information, Aerial Photography (July 2011)



VICKERY EXTENSION PROJECT
Vegetation Communities
Indicative Rail Spur Investigation Corridor

Figure 4b

Attachment D - Development Application Area State development consent



- LEGEND**
- Mining Tenement Boundary (ML and CL)
 - Mining Lease Application (MLA)
 - Exploration Licence Boundary (EL)
 - Development Application Area
 - Indicative Rail Spur Alignment
 - Indicative Location of Groundwater Pipeline
 - Indicative Extent of Private Haul Road and Kamilaroi Highway Overpass

Source: Department of Land and Property Information - Land Tenure (2016); Department of Industry (2016); Whitehaven Coal (2016)

WHITEHAVEN COAL
VICKERY EXTENSION PROJECT
Development Application Area



Figure A3-1

Attachment E - Water Supply Borefield



- LEGEND**
- Mining Tenement Boundary (ML and CL)
 - Exploration Licence Boundary (EL)
 - Mining Lease Application (MLA)
 - State Forest
 - Railway
- Project Components**
- Indicative Extent of Open Cut
 - Indicative Extent of Out of Pit Waste Rock Emplacement
 - Indicative Extent of Infrastructure Area
 - Indicative Extent of Soil Stockpile
 - Indicative Extent of Water Storage
 - Indicative Mine Access Road Alignment
 - Indicative Road Realignment
 - Indicative Namoi River Pump Station and Pipeline
 - Indicative Up-catchment Diversion and Dam Location
 - Indicative Rail Spur Alignment
 - Indicative Location of Groundwater Bores and Pipeline

Source: Aerialphoto - Department of Land and Property Information, Aerial Photography (July 2011); Department of Industry (2015)


WHITEHAVEN COAL
VICKERY EXTENSION PROJECT
Indicative Rail Spur Alignment and
Groundwater Bore Locations



Figure 2-3