Land clearing for broadacre farming

Application Number: 01615 Commencement Date: Status: Locked

06/01/2023

1. About the project

1.1 Project details

1.1.1 Project title * Land clearing for broadacre farming 1.1.2 Project industry type * Agriculture and Forestry 1.1.3 Project industry sub-type Agriculture 1.1.4 Estimated start date * 01/07/2025 1.1.4 Estimated end date *

1.2 Proposed Action details

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

The proponent intends to destroy an area of native vegetation and replace it with annual cropping. The native vegetation includes areas of the EPBC-listed Endangered Ecological Community Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions.

The clearing of vegetation is within an agricultural landscape, with areas managed for farming (i.e. growing crops) and rangeland grazing. Prior to clearing, the area to be cleared will be clearly marked on the ground, based on the mapping within this referral. The clearing will be done using a bulldozer to remove trees and shrubs and push the woody debris into windrows. Once dry the windrows will be burnt. When the windrows are gone, the ground layer vegetation will be removed using herbicide or cultivation and the soil will be cultivated prior to sowing the first crop. A fence will be erected around the cleared cropping area to separate it from adjacent rangeland grazing areas. There are no other direct or indirect impacts.

The project area is 4427.14 ha, including a disturbance area (clearing) of 596.12 ha (366ha of EEC) and an avoidance area of 1445.08 ha. An area of 1694.48 ha is proposed to be set aside to offset the impact of the clearing.

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? *

EPBC Act - the action will affect a Matter of National Environmental Significance (the Endangered Ecological Community Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow belt South Bioregions).

Threatened Species Scientific Committee (TSSC) (2011). Commonwealth Listing Advice on Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions. Department of Sustainability, Environment, Water, Population and Communities. Canberra, ACT: Department of Sustainability, Environment, Water, Population and Communities. http://www.environment.gov.au/biodiversity/threatened/communities/pubs/66-listing-advice.pdf. (see attached link)

A Conservation Advice for Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions, in effect under the EPBC Act from 01-Mar-2011, is available at: http://www.environment.gov.au/biodiversity/threatened/communities/pubs/66-conservation-advice.pdf (see attached link).

Local Land Services Act (NSW) - the action has been assessed and managed under the LLS Act by Claire Bergin from the North West Local Land Services. Recategorisation of land set aside for a Part 5 Division 4 mandatory certificate under the Land Management (Native Vegetation) Code 2018

In accordance with section 60K of the *Local Land Services Act 2013*, the set aside area (as would be shown in a Part 5 Division 4 Certificate Set Aside Area Map) will be re-categorised as Category 2 – sensitive regulated land.

Set aside requirements under Part 5, Division 4 of the Land Management (Native Vegetation) Code 2018, include the requirement that on landholdings with Category 2- regulated land comprising 40% or more of the total area of the landholding to which Part 5A of the Local Land Services Act 2013 applies, for each unit area of land in a treatment area that contains vegetation that forms part of an endangered ecological community (as identified in Part 2 of Schedule 2 of the Biodiversity Conservation Act 2016, e.g._Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions), four unit areas of the same endangered ecological community must be established as set aside area (4 unit areas set aside of the same ECC for each unit of EEC vegetation cleared). A set aside area larger than the minimum requirements may be negotiated, at the written request of the landholder.

A set aside area is mapped as category 2 – sensitive regulated land in perpetuity, and cannot be treated (cleared) under the Land Management (Native Vegetation) Code 2018.

As noted in Clause 6 of Part 1 of the *Land Management (Native Vegetation) Code 2018* and outlined in Clause 124 of Division 3 of Part 14 of the *Local Land Services Regulation 2014* and the attached current copy of the fact sheet entitled *Land categories and the Land Management Framework*, clearing authorized under the Code is not permitted on land designated as Category 2 – sensitive regulated land.

Limited clearing for allowable activities on category 2 – sensitive regulated land.

Clearing of native vegetation that is authorized on category 2-sensitive regulated land is set out in Part 4 of Schedule 5A of the *Local Land Services Act 2013*.

The clearing of native vegetation for allowable activities, in a manner that minimizes soil erosion, authorized for the area of category 2 – sensitive regulated land includes:

- clearing of native vegetation that is reasonably necessary to remove or reduce an imminent risk of serious personal injury or damage to property;
- clearing native vegetation for the purpose of environmental protection works (on land not subject to a private native forestry plan), with environmental protection works being works associated with the rehabilitation of land towards its natural state or any work to protect land from environmental degradation, including re-vegetation or bush regeneration works, wetland protection works, erosion protection works, dune restoration works and the like, but not including coastal protection works (within the meaning of the Coastal Protection Act 1979);
- clearing of native vegetation for the maintenance of public utilities associated with the transmission of electricity, with restrictions, to the minimum extent necessary up to a specified maximum width distance (up to 20 70 m, depending on nominal line operating voltage);

- clearing of native vegetation specifically for the purpose of the construction or maintenance of reasonably-required fences (permanent boundary, permanent internal or temporary) or farm access tracks, to the minimum extent necessary up to a maximum of 6 metres width distance;
- clearing of native vegetation during the course of sustainable grazing, which is defined as grazing by livestock, and the management of grasslands used for grazing, that is not likely to result in the substantial long-term decline in the structure and composition of native vegetation (with management of grasslands including (without limitation) the over-sowing or fertilisation of grasslands);
- collection of firewood for the landholders' personal use (on land not within a buffer distance from a water body as set out in the Code or subject to a private native forestry plan) that does not cause land degradation (e.g. soil erosion) or involve clearing of a threatened species, habitat of a threatened species or part of a threatened ecological community under the *Biodiversity Conservation Act 2016* or *Fisheries Management Act 1994*;
- clearing of native vegetation that has been planted, and was not planted with the assistance of public funds or as part of stocking or regeneration requirements as outlined in Clause 17 of Part 2 of the *Local Land Services Act 2013*; and
- clearing of native vegetation (by the infrastructure owner or landholder) for the maintenance of public utilities associated with water or gas supply infrastructure or the maintenance of telecommunications infrastructure.

As indicated in a Part 5 Division 4 mandatory certificate under the *Land Management* (*Native Vegetation*) Code 2018, there are standard set aside conditions and management obligations.

When the landholders provide consent for clearing and the establishment of a set aside area under the Land Management (Native Vegetation) Code 2018, as set out in the Part 5 Division 4 Certificate Set Aside Ara Map, this involves agreeing to manage the set aside area accordance with the following standard management obligations:

The landholder of land on which the set aside has been established must:

- (1)(a) make reasonable efforts to manage the set aside area in a manner expected to promote vegetation integrity in the set aside area;
- (1)(b) keep records of all management actions undertaken in the set aside area including the timing and location of management actions; and
- (1)(c) on request by Local Land Services, provide records of management actions undertaken in the set aside area.

- (2) In meeting the general management requirement under paragraph (1)(a), a landholder may only undertake management actions consistent with set aside area management strategies and tactics set out in Schedule 3 of the Land Management (Native Vegetation) Code 2018 under the Local Land Services Act 2013.
- (3) If Local Land Services forms the view that a landholder has not met the general management requirement under paragraph (1)(a) or any management actions set out in

the mandatory code compliant certificate, Local Land Services may, after consultation with the landholder, amend this certificate to prescribe or preclude specific management actions.

Additionally, treatment (clearing) authorised under a Part 5 Division 4 mandatory certificate cannot be carried out until the set aside area is registered on the public register of set aside areas maintained by Local Land Services.

Further, it is specified that clearing is not permitted in the set aside area except for:

- i. clearing that is required to improve vegetation condition and
- ii. allowable activities as set out in Schedule 5A Part 4 of the Local Land Services Act 2013.

(and where relevant for a particular set aside area, a third purpose can be included)

- iii. thinning of trees and shrubs to improve native vegetation towards its natural state where:
- a. the clearing is to protect or improve the biodiversity of the set aside area; and
- b. the plants to be cleared are regenerating densely or invading plant communities, which is causing decline in the structure or composition of the vegetation community on the land to be cleared; and
- c. the clearing is undertaken in a manner that minimizes the risk of soil erosion.

The set aside area also has some negotiated environmental management actions, that are outlined in a set aside area management plan accompanying the certificate, such as total grazing pressure management (with the aim of maintaining or exceeding a certain groundcover percentage, and incorporating rest periods and stock numbers adjustment/destocking as required), pest animal and weed monitoring and control, the retention of standing and fallen dead timber and depending on the landscape features and condition of the set aside area, possibly thinning towards benchmark of a specific, limited number of native tree and shrub species with minimized disturbance to soil and groundcover).

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. *

No consultation has been undertaken regarding the project area. The project is entirely within the private property owned by the proponent.

1.3.1 Identity: Referring party

Privacy Notice:

1/24/25, 2:31 PM

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.

Personal information may be disclosed to other Australian government agencies, persons or organisations where necessary for the above purposes, provided the disclosure is consistent with relevant laws, in particular the Privacy Act 1988 (Privacy Act). Your personal information will be used and stored in accordance with the Australian Privacy Principles.

See our Privacy Policy to learn more about accessing or correcting personal information or making a complaint. Alternatively, email us at privacy@awe.gov.au.

Confirm that you have read and understand this Privacy Notice *

1.3.1.1 Is Referring party an organisation or business? *

No

Referring party details

Name Peter Knight

Job title Owner/Manager

Phone 0428259140

Email knightcommodities@bigpond.com

Address 'Langoora' 1025 Pine Park Road Thallon QLD 4497

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? *

Yes

Person proposing to take the action details

Name Peter Knight

Job title Owner/Manager

Phone 0428259140

Email knightcommodities@bigpond.com

Address 'Langoora' 1025 Pine Park Road Thallon QLD 4497

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. *

In partnership with my father who until recently was the owner of the property 'Cockilgil', on which this development is proposed, I have developed since 2004, 670 hectares of land for cultivation in line with approvals from Local Land Services and the Western Lands Department. In addition to this a Property Vegetation Management Plan has been put in place in cooperation with Local Land Services to manage Invasive Native Species and improve biodiversity. The details of this PVP are set out in the attached documents: Att8_LMC00839 - Cockilgil -Certificate - Part 5 Division 4.pdf; Att9_LMC00839 - Cockilgil - Certificate Set-Aside Area Map.PDF; Att10_LMC00839 - Cockilgil - Certificate Treatment Area Map.PDF; Att11_LMC01560 - Cockilgil - Certificate - Part 2 Division 2 (1).pdf; Att13_LMC01560 - Cockilgil - Certificate Treatment Area Map (1).PDF

During this time all development has been undertaken to the satisfaction of all parties and no proceedings under Commonwealth, State or Territory Law has been undertaken.

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

I am undertaking this action as an individual. Peter Charles Knight.						

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 details

Name Peter Knight

Job title Owner/Manager

Phone 0428259140

Email knightcommodities@bigpond.com

Address 'Langoora' 1025 Pine Park Road Thallon QLD 4497

1.3.4 Identity: Summary of allocation

Confirmed Referring party's identity

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

Name Peter Knight

Job title Owner/Manager

Phone 0428259140

Email knightcommodities@bigpond.com

Address 'Langoora' 1025 Pine Park Road Thallon QLD 4497

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.

Same as Referring party information.

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)?

Yes

1.4.2 Select reason for exemption

An Individual

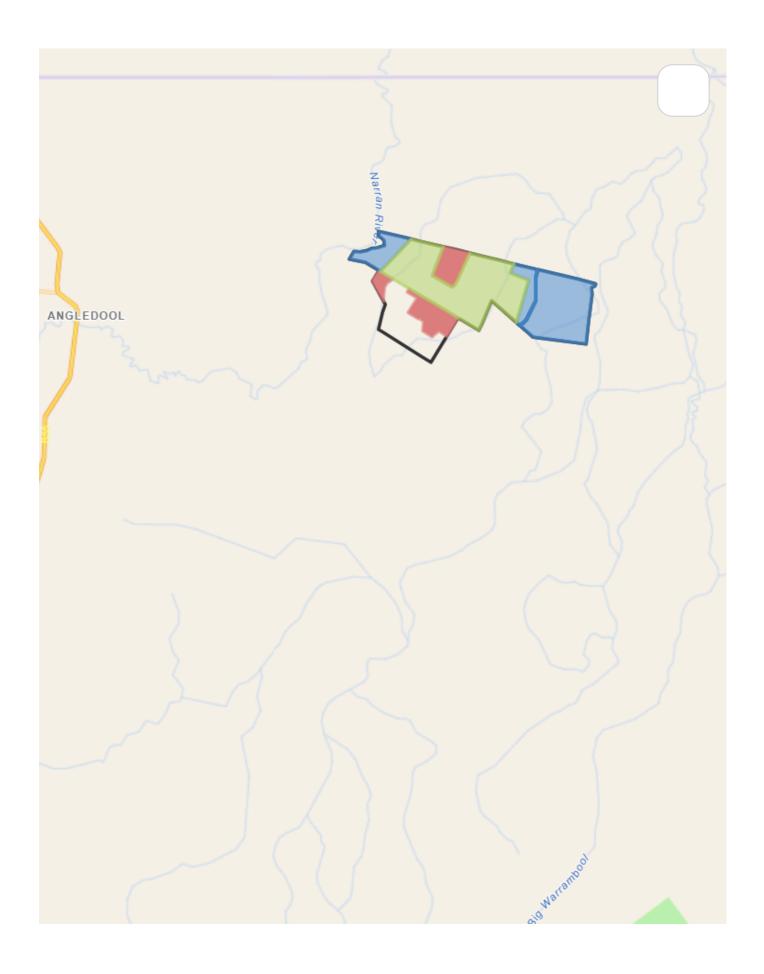
1.4 Payment details: Payment allocation

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

Person proposing to take the action

2. Location

2.1 Project footprint



Maptaskr © 2025 -29.138775, 148.521677

Powered By Esri - Sources: Esri, TomTom, Gar...

Disturbance Footprint (596.1Ha) Project Area (4427.14 Ha) Retention Area (1694.48 Ha)

2.2 Footprint details

2.2.1 What is the address of the proposed action? *				
4057 Koomalah Rd, Lightning Ridge, NSW				
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? *				
Western Lands Lease, 4215 and 3592.				

3. Existing environment

3.1 Physical description

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

The project area is part of a grazing property which has been owned and operated by the current management since 2004 and grazed by sheep in a self-replacing merino flock. Breeding ewe numbers have averaged approximately 2000 head with lambing percentages averaging around 80% over this time. Lambs are weaned at four to five months old, with the male portion being sold and the females grown out on another property.

From 2011 to 2013, 440 hectares of the property was developed for dryland cropping. Winter cereal and pulse crops have been grown using zero till farming practices since that time. Livestock have also been grazed on this country as part of the weed management and rotational grazing program.

Grazing has affected the condition of the vegetation, particularly the diversity and cover of ground layer vegetation and the regeneration of canopy species. The property is adjacent to the Narran River and subject to periodic flooding in some parts. Drought is a regular feature of the climate in this area, with the most recent (2018-19) being one of the most severe on record.

The soils in the project area include alluvial grey clays in the disturbance area, and areas of sandy soils derived in situ from underlying sedimentary geology.

See Section 3.2 for more details on the assessment of vegetation condition.

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

The property is currently used for the grazing of sheep for the production of wool and dryland cereal and pulse cropping. There are no plans to change the current use of the property other than to increase, if possible, the area used for dryland cropping.

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

The property includes large areas of intact native vegetation including the Endangered Ecological Community Coolibah-Black Box Woodland.
The Narran River forms the western boundary of the project area and is a significant natural feature and habitat.
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 project area includes alluvial flood plain of the Narran River at approximately 150m asl in the western two thirds. The eastern third of the property is a sandy ridge approximately 175m asl. Across the Development Area, there is micro-variation in an otherwise flat plain, due to swelling and cracking of the clay soil to form 'gilgais' or 'melon-holes'.

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.

We engaged Stringybark Ecological to undertake detailed ecological surveys in the project area to determine the vegetation communities, plant species and likely fauna habitat. In January 2022, two ecologists surveyed 21 plots using the Biodiversity Assessment Methodology outlined in the NSW Biodiversity Conservation Act. This method uses a 20 x 20m full floristics plot nested within a 20 x 50m plot to measure plant diversity, structure and function. The location of these plots is shown in the shapefiles in Att1_Plot Locations.pdf

Using the plot data, the ecologists were able to accurately map the extent of the Plant Community Types. The extent of the EEC *Coolibah-Black Box Woodland* was determined using the EPBC Listing Advice and mapped. Two PCTs occur in the area surveyed (disturbance and retention areas): PCT 40 (Coolabah open woodland wetland with chenopod/grassy ground cover on grey and brown clay floodplains) and 55 (Belah woodland on alluvial plains and low rises in the central NSW wheatbelt to Pilliga and Liverpool Plains regions.) Attachment 4 shows the extent of the TECs in relation to the disturbance and retention footprints (Att 4 Cockilgil TECs.pdf)

We used the BAM Calculator set up for the NSW Biodiversity Offset Scheme to calculate Vegetation Integrity Scores (VIS) for these PCTs, using plot data from the plot surveys. 14 plots were used for PCT 40 and 5 plots for PCT 55. The VIS is an indication of the condition of the vegetation compared to a benchmark, with a maximum score of 100. A score close to 100 indicates good condition, while a score close to 0 indicates poor condition. The VIS for PCT 40 was 86.4 and for PCT 55 it was 78.1. **The BAM data sheets for the 21 plots are attached.** These include a full list of flora species recorded in the plots. The plot data sheets are labelled with the prefix "Att2_Plot_" followed by the plot number.

Prior to visiting the site, we carried out a Bionet search for fauna and flora species listed as Matters Of National Significance under the EPBC Act. A search of an area 50 x 100km centred over the project area found records of five fauna species: Koala (Endangered), South-eastern Hooded Robin (Endangered), Brown Treecreeper (eastern) (Vulnerable), Blue-winged Parrot (Vulnerable) and Grey Falcon (Vulnerable) (Att 7_Cockilgil_Bionet search records map.jpg). Given that there are very large holdings of private land in the region, it is unlikely that many fauna surveys will have been carried out or records submitted to Bionet. Therefore we also looked at other species which may occur in the area and may be impacted by the clearing. We reviewed the likelihood of these species occurring within the Development Area and found that none were likely to occur, or if they occur, to be significantly impacted by the clearing (see 4.1).

The Bionet map shows that koalas have been recorded in the region and within 20km of the property, however only two records within this radius have been recorded in the last 18 years, or three koala generations.

It is likely that koalas still occur in the region and occasionally move through Cockilgil, including the area to be cleared. However, the vegetation along the Narran River, within the proposed offset area, will be more likely to have koalas as it has better water and the trees will be in better condition as a result. While undertaking the vegetation surveys on Cockilgil, we did not see any koalas, nor any signs such as scats. We are experienced in surveying for koalas in a range of habitats.

It is therefore possible that koalas will be impacted by the proposed clearing at Cockilgil. We considered whether this will be a significant impact as defined by the EPBC Significant Impact Guidelines 1.1 and decided that the impact was not significant (Att 5_Cockilgil_Assessment of Significance of Impact Koala Phascolarctos cinereus.pdf).

In addition to the threatened species records shown in Att 7_Cockilgil_Bionet search records map.pdf we also considered the likelihood of occurrence and the impact of Corbens Long-eared Bat (*Nyctophilus corbeni*)) and Painted Honeyeater (*Grantiella picta*).

The SPRAT database lists Painted Honeyeaters as 'the most specialised of Australia's honeyeaters'. They require high cover of mistletoes and prefer 'Black Box and river red gum, boxironbark-yellow gum woodlands, acacia-dominated woodlands, paperbarks, casuarinas, callitris, and trees on farmland or gardens'. They are known to prefer *Acacia pendula* woodlands with high mistletoes cover. Both the Coolabah and belah vegetation communities have very low levels of mistletoe cover. While suitable habitat is found along the Narran River and in *Acacia pendula* woodland patches nearby, this habitat will not be impacted by the proposed clearing.

Correspondence from Jennifer Pearson, Dept of Environment and Energy (Att 8_Cockilgil_Lttr re species impacts.pdf) in February 2019 indicated that the project should assume the presence of Corbens Long-eared Bat and that the impact on this species would be mitigated by the offset for the Threatened Ecological Community *Coolibah Black Box Woodland*. As the proposed offset has a larger area of similar quality habitat, which will be protected and enhanced, the impact on the species will be minor.

We noted some fauna on site while doing vegetation surveys - red kangaroos, emus, Byer's dragon, Bearded dragon, red-bellied black snake and numerous common bird species.

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

As described in Section 3.2.1, the vegetation in the project area is part of the Vegetation Class *Northwest Floodplain Woodlands*. This vegetation class occurs on areas either regularly or occasionally inundated by floodwater, which then sits on the land for long periods. The PCT 55 tends to occur where there is more alluvial sand on top of the grey clay. The two PCTs (40 and 55) are dominated by *Eucalyptus coolabah* and/or *Casuarina cristata* with a very sparse shrub layer and the groundlayer vegetation dominated by perennial tussock grasses and chenopod shrubs.

Where *C. cristata* is dominant, the understorey has very low groundcover and very high cover of bare ground. In some areas, the tree cover is very low (<5%) and the vegetation is effectively a derived native grassland.

Most of the Coolibah trees have many hollows including branch stubs and hollow trunks.

There was a range of tree sizes ranging from seedlings to large over-mature trees. There were also many logs on the ground and high litter cover.

In some areas there is very dense growth of trees of both Coolibah and Belah, resulting from dense seedling regeneration after floods. In these areas, most stems are small (<15cm dbh) and there is low groundcover due to the dense canopy.

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.

No heritage places have been identified on the subject land.			

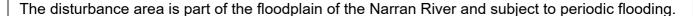
3.3.2 Describe any Indigenous heritage values that apply to the project area.

We carried out an AHIMS search over the property including a 10km buffer around the boundary.
(Area Lat, Long From : -29.104, 148.1036 - Lat, Long To : -29.0953, 148.119,) See Att
6_Cockilgil_AHIMSSearchResult.pdf

No declared Aboriginal Sites or Places have been recorded within this area.

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. *



The disturbance will not alter the hydrology of the site and the proposed action does not include extraction of ground or surface water, nor the installation of drains or levees to redirect flood flow.

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	No	Yes
S18	Threatened Species and Ecological Communities	Yes	Yes
S20	Migratory Species	No	Yes
S21	Nuclear	No	Yes
S23	Commonwealth Marine Area	No	Yes

EPBC Act section	Controlling provision	Impacted	Reviewed
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. *

The project does not have a direct or indirect impact on any World heritage Area because there are none anywhere near the site.

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. *

The project will not have a direct or indirect impact on any National Heritage Place because none are located anywhere near the site.				

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	Narran Lake Nature Reserve	
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? *

No

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

Narran Lakes Nature Reserve is approximately 50km downstream of the proposed development, so there is no direct impact.

The development will not change the flood pattern or volume of water in the Narran River, so is unlikely to have an indirect impact.

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	Aphelocephala leucopsis	Southern Whiteface
No	No	Botaurus poiciloptilus	Australasian Bittern
No	No	Calidris ferruginea	Curlew Sandpiper
No	No	Calyptorhynchus lathami lathami	South-eastern Glossy Black- Cockatoo
No	No	Erythrotriorchis radiatus	Red Goshawk
No	No	Falco hypoleucos	Grey Falcon
No	No	Grantiella picta	Painted Honeyeater
No	No	Hemiaspis damelii	Grey Snake
No	No	Lepidium monoplocoides	Winged Pepper-cress
No	No	Lophochroa leadbeateri leadbeateri	Major Mitchell's Cockatoo (eastern), Eastern Major Mitchell's Cockatoo
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
Yes	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	No	Rostratula australis	Australian Painted Snipe
No	No	Stagonopleura guttata	Diamond Firetail
No	No	Swainsona murrayana	Slender Darling-pea, Slender Swainson, Murray Swainson-pea

Ecological communities

Direct impact	Indirect impact	Ecological community
Yes	No	Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions
No	No	Poplar Box Grassy Woodland on Alluvial Plains
No	No	Weeping Myall Woodlands

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. *

As detailed in Section 3, the project will have a direct impact on an area of the Endangered Ecological Community (Coolibah Black Box Woodland), which will be completely destroyed and replaced by annual cereal and pulse cropping. We have conducted detailed field surveys in the disturbance area and identified and mapped areas of this TEC and other vegetation communities that are not part of a TEC. The total area of the TEC to be cleared is 366 ha.

While koalas have not been recorded on the site, it is possible that they use the site as they have been very rarely recorded in the region in the past. We have been advised by the Commonwealth Environment Department that any impacts on koalas would be reflected in the impacts on the Coolibah Black Box Woodland TEC, which is the possible habitat.

We did not locate any of the other listed TECs on the site, nor found any sign of the threatened plant species listed. We did not conduct surveys for the listed fauna species, as the correspondence with the Commonwealth Environment Department indicated that this was not necessary.

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

Yes

4.1.4.5 Describe why you consider this to be a Significant Impact. *

The action will result in the loss of approximately 370ha of the TEC Coolibah Black Box Woodland, while retaining and managing a further 1694ha of the TEC and other vegetation as an offset. At the scale of the Project Area, this is a significant loss of habitat and of the EEC.

While the pattern of clearing retains a corridor across the property from east to west, from the river to the ridge country and maintains the full suite of habitats and vegetation communities found in the district, it will remove large areas of high quality TEC including hollow-bearing trees.

Additionally, the cumulative impacts of future clearing proposals in this region may make the impact of small areas of clearing such as this significant. Clearing of Coolibah Black Box Woodland in this area has been increasing at a significant rate over the last twenty years and this maintains that trend.

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

Yes

4.1.4.8 Please elaborate why you think your proposed action is a controlled action. *

The project will have a significant impact on an area of an Endangered Ecological Community. It will replace the EEC with a monoculture of annual crops, modify the soil structure and displace fauna that depend on this community. It adds to the cumulative effects of clearing of this community in the local region.

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 maps we have supplied, show that the disturbance (clearing area) is fragmented and surrounded by the Retention Area. With our consulting ecologist, we have designed the clearing to avoid, as much as possible, large areas of high quality EEC, while retaining a corridor across the property. We have tried to optimise the design of the clearing paddocks to reduce the area of Coolibah-Black Box Woodland EEC cleared and target the more common Belah Forest (PCT 55). We went through several iterations of the clearing layout to minimise the impact on the EEC.

The final design leaves a mosaic of vegetation types across the property, including large areas of Coolibah-Black Box Woodland EEC. The location of the plots surveyed by Stringybark Ecological shows the extent of the survey effort.

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

We have used the "Offset Assessment Guide" tool supplied by the Department to calculate a suitable offset for the clearing. Attachment 3 ("Att3_Offset Calculator_20231219.xlsx") gives the calculation of the offset proposed.

We based the "Quality" score (8) on the Vegetation Integrity Score (VIS) from the BAM plots undertaken by our ecologist. The BAM and the VIS are methods used under the Biodiversity Offset Scheme in NSW and provide a consistent and repeatable measure of vegetation condition.

The Coolibah PCT (40) had a VIS of 86.4, while the Belah PCT (55), which includes some areas of the Coolibah-Black Box Woodland EEC, has a VIS of 78.1. The VIS is a score compared to the benchmark condition for that PCT, which will have a VIS of 100. Therefore a score of 80 is equivalent to a score for quality (in the offset tool) of 8/10.

We have used a risk horizon of 20 years, reflecting the cycle of changes in condition due to severe droughts and associated overgrazing (by livestock and native fauna). We anticipate that benefits of changed management in the offset area will take 2 years to realise. We have estimated that there is a 10% risk of loss of the community, mainly due to further expansion of clearing for farming. There is also a small risk of catastrophic fire as a result of extreme drought conditions.

Sheep grazing has a significant impact on native vegetation, as selective and preferential grazing depletes or eliminates some species, while favouring others. Other impacts include compaction of soil, particularly around trees; damage to trees through grazing of bark; loss of seedlings preventing regeneration; and localised changes to surface water movement due to sheep tracks. Macropod grazing in drought can have similar effects on plant survival, although soil compaction is not as significant.

Feral pigs, cats and foxes have a significant impact on local fauna through predation and damage to habitat. These animals occur on the project site and will be having an unknown effect on local fauna, which will be exacerbated in times of drought and flood.

We estimate that the ongoing impact of sheep and macropod grazing and feral animals, particularly in drought, will lead to a slight reduction in the condition of the TEC across the offset area. We have allocated a future score of 7/10 to indicate this small decline.

We are proposing an offset area of 1694ha, which will be managed to secure and improve the vegetation, including the TEC, in line with the EPBC Offsets Policy_2. The actions proposed for the offset include:

Registration of a secure covenant on the property title to prevent further clearing within the
offset area. It is hoped this can be covered by the existing Set Aside Area Management
Plan whereby management actions are expected to improve native vegetation integrity on

the set aside area as per the action schedule that is agreed to under the reasonable effort provision in the Land Management (Native Vegetation) Code 2018 (the Code). Attached certificates and Set Aside Area Management Plan show this.

- A reduction in the impacts of sheep grazing on the offset area, by removing stock from the
 offset area when groundcover falls below 50% (such as during drought), monitored
 according to an accepted standard:
 - Campbell, T and Hacker, R (2000) The Glove Box Guide to Tactical Grazing Management for the Semi-arid Woodlands. NSW Agriculture.
 - Soil Cover score <3, or
 - Perennial Plant Butt Cover Score <3, or
 - Standing Dry Matter <500kg/ha
- Active management to reduce feral pig numbers in the offset area through aerial shooting every 5 years and regular baiting.
- Active management of fox and cat numbers through an ongoing shooting and baiting program.
- No addition of fertiliser or seeds of non-native species.

As the Offset Calculator file shows, these actions will offset 117% of the impact, leaving a small margin for error.

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	No	Actitis hypoleucos	Common Sandpiper
No	No	Apus pacificus	Fork-tailed Swift
No	No	Calidris acuminata	Sharp-tailed Sandpiper
No	No	Calidris ferruginea	Curlew Sandpiper
No	No	Calidris melanotos	Pectoral Sandpiper
No	No	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
No	No	Motacilla flava	Yellow Wagtail

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

No

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

None of the listed migratory species use the habitats that will be affected by the clearing or do not occur in this area.						

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. *

— :							4.1	
Ihic	issue	10	$n \cap t$	rΔ	ומעמו	nt ta	a tha	CITA
11113	ISSUE	13	HUL	10	ıcvaı	ווו נע	Juic	SILE.

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. *

The site is not marine and not near the co	coast

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 site is not anywhere near the Great Barrier Reef
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 is not a gas field or coal mine

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. *

l	Not relevant as it is private 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	e proposed action	n likely to have a	ny direct and/o	r indirect imp	pact on
any of these	protected matters	s? *			

No

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

Not relevant as it is not overseas						

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:

• Threatened Species and Ecological Communities (S18)

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)
- 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 alternative is to not cultivate this area and continue to use for grazing livestock. There will however need to be a level of clearing carried out on the area to manage invasive native species as per the current property veg plan as the thickening vegetation is resulting in reduced stocking rates and increased grazing pressure from livestock and native wildlife and subsequent reductions in biodiversity.

The proposed increased cropping area increases the economic viability of the agricultural enterprise.

5. Lodgement

5.1 Attachments

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

	Type	Name	Date	Sensitiv@gnfiden
#1.	Link	Coolibah Black Box Endangered Ecological		High
		Community Conservation Advice		
		http://www.environment.gov.au/biodiversity/threa		
#2.	Link	Coolibah Black Box Endangered Ecological		High
		Community Listing Advice		
		http://www.environment.gov.au/biodiversity/threa		

1.3.2.17 (Person proposing to take the action) Proposer's history of responsible environmental management

	Туре	Name	Date	Sensi	ti ∕ûÿ nfiden
#1.	Docum	ne A tt10_LMC00839 - Cockilgil - Certificate Treatment Area Map.PDF PVP Treatment Area		Yes	High
#2.	Docum	neAtt11_LMC01560 - Cockilgil - Certificate - Part 2 Division 2 (1).pdf PVP Certificate Part 2 Div 2 LLS Act		Yes	High
#3.	Docum	ne A tt13_LMC01560 - Cockilgil - Certificate Treatment Area Map (1).PDF Treatment area map		Yes	High
#4.	Docum	neAtt8_LMC00839 - Cockilgil -Certificate - Part 5 Division 4.pdf LLS Act Pt5, Div 4		Yes	High
#5.	Docum	neAtt9_LMC00839 - Cockilgil - Certificate Set-Aside Area Map.PDF Map of set aside area for previous INS PVP		Yes	High

3.2.1 Flora and fauna within the affected area

	Type Name	Date	Sensitiv @ nfiden	ıc
#1.	Document			

_	Cockilgil TECs.pdf 19/12/2018	High	
	o of the proposal area shwing location of the oah Black Box TEC in relation to disturbance		
	etention areas.		
#2.	DocumeAtt 5_Cockilgil_Assessment of Significance of	No	High
	Impact Koala Phascolarctos cinereus.pdf		
	Assessment of significance of impact on koalas		
#3.	DocumeAtt 7_Cockilgil_Bionet search records map.pdf	No	High
	Map of threatened species records in the area		
#4.	DocumeAtt 8_Cockilgil_Lttr re species impacts.pdf	05/02/20 10	Medi
	Correspondence from Dept Environment and Energy		
	regarding threatened species		
#5.	DocumeAtt1_Plot Locations.pdf	26/09/2 02 8	High
	A map of the project area showing the location of		
	vegetation survey plots.		
#6.	DocumeAtt2_Plot_220119_01.pdf	18/01/2 012	High
	Plot data		
#7.	DocumeAtt2_Plot_220119_02.pdf	18/01/2 012	High
	Plot data		
#8.	DocumeAtt2_Plot_220119_03.pdf	18/01/2 012	High
	Plot data		
#9.	DocumeAtt2_Plot_220119_04.pdf	18/01/2 012	High
	Plot data		
#10.	DocumeAtt2_Plot_220119_05.pdf	18/01/2 012	High
	Plot data		
#11.	DocumeAtt2_Plot_220120_01.pdf	19/01/2 012 2	High
	Plot data		
#12.	DocumeAtt2_Plot_220120_02.pdf	19/01/2 012	High
	Plot data		3
#13.	DocumeAtt2_Plot_220120_03.pdf	19/01/2 012	High
,,	Plot data		9
#14.	DocumeAtt2_Plot_220120_04.pdf	19/01/2 02 2	High
,,	Plot data	10/01/2022	ı ngı
#15.	DocumeAtt2 Plot 220120 05.pdf	19/01/20 12	——— High
π 1 0 .	Plot data	I U/ U I / Z U A VZ	riigii
#16.	DocumeAtt2 Plot 220120 06.pdf	19/01/20 12	High
#10.	Plot data	13/U1/ZUX102	nıgrı
447		10/04/0000	1 1:1
#17.	DocumeAtt2_Plot_220120_07.pdf Plot data	19/01/2 012	High

#18.	DocumeAtt2_Plot_220120_08.pdf Plot data	19/01/2 02 @	High
#19.	DocumeAtt2_Plot_220120_09.pdf Plot data	19/01/2 02 @	High
#20.	DocumeAtt2_Plot_220120_10.pdf Plot data	19/01/2 02 @	High
#21.	DocumeAtt2_Plot_220120_11.pdf Plot data	19/01/2 02 @	High
#22.	DocumeAtt2_Plot_220120_12.pdf Plot data	19/01/2 01⁄2	High
#23.	DocumeAtt2_Plot_220120_13.pdf Plot data	19/01/2 01⁄2	High
#24.	DocumeAtt2_Plot_220120_14.pdf Plot data	19/01/2 01⁄2	High
#25.	DocumeAtt2_Plot_220120_15.pdf Plot data	19/01/2 02 @	High
#26.	DocumeAtt2_Plot_220122_16.pdf Plot data	19/01/2 02 @	High

3.3.2 Indigenous heritage values that apply to the project area

	Type Name	Date	Sens	iti vûÿ nfidend
#1.	DocumeAtt 6_Cockilgil_AHIMSSearchResult.pdf AHIMS Search of Cockilgil and surrounds	22/11/2	6 <u>1</u> 210	Medium

4.1.4.11 (Threatened Species and Ecological Communities) Proposed offsets relevant to avoidance or mitigation measures

	Type Name	Date	Sens	iti ∕ûÿ nfidend
#1.	DocumeATT 3 Offset Calculator_20231219.xlsx	18/12/2	20 1213	High
	Completed offset calculator template supplied by			
	EPBC			

5.2 Declarations

Completed Referring party's declaration

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

Name Peter Knight

Job title Owner/Manager

Phone 0428259140

Email knightcommodities@bigpond.com

Address 'Langoora' 1025 Pine Park Road Thallon QLD 4497

- 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, **Peter Knight**, 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.

Same as Referring party 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, **Peter Knight**, 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, **Peter Knight**, the Person proposing the action, consent to the designation of **Peter Knight** 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. *

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, **Peter Knight**, 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. *