

1. Application details and outcomes

1.1. Permit application details

Permit number:	8396/2
Permit type:	Purpose Permit
Applicant name:	EII Gas Transmission Service WA (Operations) Pty Ltd
Application received:	26 June 2024
Application area:	26.905 hectares
Purpose of clearing:	Pipeline maintenance
Method of clearing:	Mechanical Removal
Tenure:	Pipeline Licence 68
Location (LGA area):	Shire of East Pilbara
Colloquial name:	Nifty Gas Pipeline

1.2. Description of clearing activities

EII Gas Transmission Service WA (Operations) Pty Ltd proposes to clear up to 26.905 hectares of native vegetation within a boundary of approximately 26.92 hectares, for the purpose of gas pipeline maintenance. The gas pipeline is approximately 45 kilometres in length and the width of the application is six metres (APA, 2019). The project is located approximately 200 kilometres southeast of Marble Bar, within the Shire of East Pilbara.

The application is to allow for ongoing pipeline maintenance to comply with vegetation management requirements under Pipeline Licence and AS2885 for pipeline safety and integrity. The proposed clearing is to maintain of line of sight between pipeline markers, maintenance of access tracks and for integrity dig requirements along the Nifty Gas Pipeline, constructed in 2005 (APA, 2019). Operational activities include:

- general equipment and facility maintenance;
- filter changes;
- cathodic protection surveys;
- pipeline excavation;
- venting;
- pipeline pigging;
- pipeline patrols;
- easement, facility and equipment inspections; and
- breakdown and emergency response exercises.

Method of proposed clearing activities are generally not ground disturbing, with clearing and vegetation management involving rolling, slashing, pruning or mulching to a minimum of 300 millimetres and potential selective removal of trees where roots may damage pipeline (APA, 2019).

Clearing permit CPS 8396/1 was granted by the Department of Mines, Industry Regulation and Safety (now the Department of Energy, Mines, Industry Regulation and Safety) on 12 September 2019 and was valid from 5 October 2019 to 4 October 2024. The permit authorised the clearing of up to 26.91 hectares of native vegetation within a boundary of approximately 26.92 hectares, for the purpose of pipeline maintenance.

On 26 June 2024, the Permit Holder applied to amend CPS 8396/1 to extend the permit duration and to update the fauna management condition.

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	2 October 2024
Decision area:	26.905 hectares of native vegetation

1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed, and determined in accordance with sections 51O and 51KA(1) of the *Environmental Protection Act 1986* (EP Act). The Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) advertised the application for a public comment for a period of 7 days, and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix A), relevant datasets (Appendix D), supporting information provided by the applicant, including the results of a fauna survey, the clearing principles set out in Schedule 5 of the EP Act (Appendix B), proposed avoidance and minimisation measures (Section 3.1), relevant planning instruments and any other matters considered relevant to the assessment (Section 3.3). The Delegated Officer also took into consideration the purpose of the clearing to comply with statutory requirements for the Pipeline Licence and AS2885.

The assessment identified that the proposed clearing may result in:

- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values;
- potential impacts to riparian vegetation and surface water flow; and
- potential impacts to conservation significant fauna.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined the proposed clearing can be minimised and managed to be unlikely to lead to an unacceptable risk to environmental values.

The Delegated Officer decided to grant a clearing permit subject to conditions to:

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds;
- undertake slow, progressive one-directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity;
- watercourse management condition to avoid riparian vegetation and maintain surface water flow; and
- conduct pre-clearance surveys to avoid direct impacts to conservation significant fauna.

The assessment has not changed since the assessment for CPS 8396/1. The Delegated Officer determined that the proposed updating fauna management condition and extending the duration of the permit is not likely to lead to an unacceptable risk to environmental values.

2. Legislative context

The clearing of native vegetation in Western Australia is regulated under the EP Act and the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (Clearing Regulations).

In addition to the matters considered in accordance with section 51O of the EP Act (see Section 1.4), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:

- the precautionary principle
- the principle of intergenerational equity
- the principle of the conservation of biological diversity and ecological integrity.

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Biosecurity and Agriculture Management Act 2007* (BAM Act)
- *Conservation and Land Management Act 1984* (WA) (CALM Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *The Petroleum Pipelines Act 1969* (WA)

The key guidance documents which inform this assessment are:

- *A guide to the assessment of applications to clear native vegetation* (DER, December 2014)
- *Procedure: Native vegetation clearing permits* (DWER, October 2021)
- Technical guidance – *Terrestrial Fauna Surveys for Environmental Impact Assessment* (EPA, 2020)

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

The Delegated Officer was satisfied that the applicant has made a reasonable effort to avoid and minimise potential impacts of the proposed clearing on environmental values.

All clearing will be undertaken within the previously disturbed easement and will be minimised to the greatest extent. In most cases, there will be no ground disturbance, allowing vegetation to remain in situ and leaving rootstock intact. Hygiene procedures will be in place during clearing activities to prevent weed and disease infestations (APA, 2014). Vehicle patrols occur monthly by pipeline technicians and visual inspections of pipeline corridor to inspect vegetation growth, presence of weeds, erosion, pipe exposure, condition of signs and aerial markers (APA, 2019).

3.2. Assessment of impacts on environmental values

The assessment against the clearing principles identified that the impacts of the proposed clearing present a risk to biological values (fauna). The consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

A review of current environmental information (Appendix A) reveals that the assessment against the clearing principles has not changed significantly from the Clearing Permit Decision Report CPS 8396/1.

3.2.1. Biological values (fauna) - Clearing Principles (b)

Assessment

In order to comply with Condition 7 on Clearing Permit CPS 8396/1, APA Group commissioned Kingfisher Environmental to conduct field surveys over the application area to identify certain conservation significant fauna species. The Permit Holder has requested an amendment to Condition 7 to remove part 7(a) of the condition:

- 7(a) Within two weeks prior to undertaking any clearing authorised under this Permit, the Permit Holder shall engage a *fauna specialist* to undertake *clearance surveys* for greater bilby (*Macrotis lagotis*), mulgara (*Dasyercus* species), dampierland plain slider (*Lerista separanda*) and great desert skink (*Liopholis kintorei*).

The Permit Holder has requested the removal of the condition as a survey was undertaken in 2020 and given a fauna spotter will be present at the time of clearing believes that the risk to fauna species will be mitigated and the cost requirement to undertake clearance surveys is disproportionate to the environmental benefit gained (APA, 2024).

Below is a summary of the conservation significant species assessed during the fauna survey (Kingfisher, 2020).

Greater Bilby (*Macrotis lagotis*) Vulnerable

The Greater Bilby was recorded at several locations along the application area (Kingfisher, 2020). Burrows were classified as either active (currently in use as part of an animal's home range, with the presence of fresh tracks, diggings or by the use of motion cameras) or inactive (burrow abandoned, with no signs of recent use). At the time of clearing, burrows were also considered either occupied (fresh tracks, diggings or records from motion cameras), unoccupied (burrow collapsed and/or lacking a round entrance or cavity, or vegetation and cobwebs across the entrance), or potentially occupied (intact burrow with a round entrance and fresh tracks or diggings present in the local area). Regardless of occupancy, disturbances to Greater Bilby burrows were avoided, with machinery diverted around burrows by the zoologists present on site (Kingfisher, 2020). The observations recorded are summarised below.

- Active burrows = Nine
- Inactive burrows = 29
- Scat records = Three
- Diggings = 109
- Tracks = 34

While the Greater Bilby can be highly mobile, some individuals were recorded to persist along the pipeline corridor for over six weeks (on camera), and areas supporting fresh tracks in early May, still contained fresh sign in late July, 12 weeks later. Such records are indicative of resident, stable populations (Kingfisher, 2020).

Brush-tailed mulgara (*Dasyercus blythi*) Priority 4

The Brush-tailed Mulgara was sparsely recorded along application area from potential trace evidence. Tracks attributable to the species were recorded from several areas of spinifex dominated sandplain. Scats attributable to the species were also recorded from sandplain near Port Hedland. No occupied shelters of the Brush-tailed Mulgara were recorded within the pipeline corridor. Where potential Mulgara burrows were recorded within the pipeline corridor, machinery was directed around to minimise any potential impacts (Kingfisher, 2020). The observations recorded are summarised below.

- Inactive burrows = Six
- Diggings = Three
- Scat records = One
- Tracks = Six

Northern quoll (*Dasyurus hallucatus*) Endangered

The Northern Quoll was recorded at four locations during the 2020 field surveys. Northern Quoll tracks were recorded in sand along the Telfer Gas Pipeline, near the vicinity of low rocky hills, where the species is likely to den. While Northern Quolls den in rocky habitats, they can forage widely in adjacent habitats, and can also den in tree hollows along watercourses (Kingfisher, 2020). The observations recorded are summarised below.

- Scat records = One
- Tracks = Five

As the pipeline routes avoided most rocky habitats, and disturbances to large trees were avoided, impacts to the local northern quoll population appear to have been minimal during clearing activities, and the species was likely to occur in the area during foraging or transit (Kingfisher, 2020).

Ghost bat (*Macroderma gigas*) Vulnerable

Ghost Bats inhabit deep caves as they rely on underground roosts with warm, humid microclimates to maintain their heat and water balance, especially in the more arid regions or at drier times of the year. As such, roost availability is restricted to relatively few subterranean structures (typically deep caves and underground mines) (Kingfisher, 2020). The ghost bat was recorded during the 2020 field surveys with an individual observed foraging adjacent to a rocky range near Callawa Creek. The species has also been recorded adjacent to the pipeline corridor at Table Hill. The observations recorded are summarised below.

- Scat records = One
- Sightings = Five

Due to the presence of caves and rock crevices the species is likely to roost in the local area, however such rocky habitat is absent from the pipeline corridor. As such, the ghost bat is not considered to be present during clearing activities (Kingfisher, 2020).

Western pebble-mound mouse (*Pseudomys chapmani*) Priority 4

The species occurs on the crests and slopes of rocky hills where it uses small stones to construct one or more colonial mounds. The western pebble-mound mouse was recorded adjacent to the Telfer Gas Pipeline during the 2020 surveys. The observations recorded are summarised below.

- Mounds observed = Five

Several old, inactive mounds were located on the slopes of rocky hills, adjacent to the pipeline corridor. However, suitable habitat (rocky hills and slopes) were sparsely distributed along the pipeline, as the route avoids most rocky hills and slopes. No pebble mounds were recorded within the pipeline corridor during the surveys and therefore disturbances to this species during clearing appear minimal.

Spectacled hare-wallaby (*Lagorchestes conspicillatus leichardti*) Priority 4

The spectacled hare-wallaby was recorded during the 2020 surveys. This species occupies a wide variety of habitat types including open forests, open woodland, tall shrublands, tussock grasslands and hummock grasslands. In the drier southern parts of its range (such as within the Pilbara) it commonly occupies spinifex (*Triodia* spp.) sandplains interspersed with low shrubs (Kingfisher, 2020)

Tracks = Three

This taxa is now restricted to a few small isolated patches in the Pilbara, Great Sandy Desert and Kimberley (Kingfisher, 2020). Due to the low density of records and the linear impact of the proposed clearing, it is unlikely that this species will be significantly impacted by the proposed clearing.

Conclusion

Based on the above assessment, the proposed clearing will result in significant impacts to conservation significant fauna of the region. The survey identified that there are resident stable populations of bilby in the local area. Therefore, it is possible that they may be impacted by the proposed clearing. Based on the current information the removal of condition 7(a) is not supported as the areas to be cleared should still be searched appropriately to ensure conservation significant fauna are not significantly impacted by the proposed clearing. An amendment has been made to the condition to allow for individuals and burrows to be avoided which will reduce the requirements of the condition whilst still ensuring that individuals aren't impacted.

For the reasons set out above, it is considered that the impacts of the proposed clearing on conservation significant fauna species can be managed by taking steps to identify significant habitat features such as burrows and signs of wildlife such as scats, diggings, and tracks prior to clearing.

Conditions

To address the above impacts, the following management measures will be required as conditions on the clearing permit:

- Fauna management condition to conduct pre-clearance surveys and avoid identified burrows or translocate fauna as needed.

3.3. Relevant planning instruments and other matters

The clearing permit amendment application was advertised on 20 August 2024 by the Department of Energy, Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

There are two native title claims over the area under application (DPLH, 2024). These claims (WCD2013/002 and WCD2002/002) have been determined by the Federal Court on behalf of the claimant groups Martu and Ngurrara and Martu (Part B), Karnapyrri, and Martu #2. However, the pipeline licence has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are no registered Aboriginal Sites of Significance within the application area (DPLH, 2024). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

The application area is located within the Ministerial Statement 676 granted in April 2005. This approval was granted for the construction of a gas pipeline supply natural gas for on-site power generation at Nifty Copper Operations located in the eastern Pilbara region (EPA, 2005).

Other relevant authorisations required for the proposed land use include:

- An Environment Plan approved under the *Petroleum Pipelines Act 1969*.

It is the proponent's responsibility to liaise with the Department of Water and Environmental Regulation and the Department of Biodiversity, Conservation and Attractions, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

End

Appendix A. Site characteristics

A.1. Site characteristics

Characteristic	Details
Local context	The area proposed to be cleared is part of an expansive tract of native vegetation in the extensive land use zone of Western Australia (GIS Database). The predominant land use in the region is grazing of native pastures, conservation, mining activities and urban development.
Ecological linkage	According to available databases, the application does not contain any known or mapped ecological linkages (GIS Database).
Conservation areas	There are no conservation areas within the application area of local surrounds (10 kilometres) (GIS Database). The nearest conservation area is Karlamilyi National Park located approximately 70 kilometres south of the application area (GIS Database).
Vegetation description	<p>The application area occurs within the Mackay (GSD02) subregion of the Great Sandy Desert (GIS Database). The vegetation of the application area is broadly mapped as the following Beard vegetation association as 134: Great Sandy Desert described as: Mosaic: Hummock grasslands, open low tree steppe; desert bloodwood and feathertop spinifex on sandhills / Hummock grasslands, shrub steppe; mixed shrubs over spinifex between sandhills.</p> <p>A flora and vegetation survey was conducted over the application area by MBS Environmental during March, 2004. Nineteen vegetation associations (detailed in CPS 8396/2 decision report) were recorded across four major landforms within the application area (MBS Environmental, 2004).</p>
Vegetation condition	<p>Aerial imagery and the annual clearing report (APA, 2024) indicate the vegetation within the proposed clearing area is in good to completely degraded (Trudgen, 1991) condition. The full Trudgen (1991) condition rating scale is provided in Appendix C.</p> <p>The area proposed to be cleared has been previously cleared for pipeline installation and disturbed from ongoing pipeline maintenance (APA, 2024).</p>
Climate	The climate of the region is Mediterranean, with an annual average rainfall of approximately 363.8 millimetres recorded at Telfer Aero (BoM, 2024; CALM, 2002).
Soil description and land degradation risk	The application area lies within the Little Sandy land system (DPIRD, 2019). The Little Sandy land system is described as sandplains and swales; minor gravelly plains with thin sand cover over calcrete and isolated low hills (DPIRD, 2019). The sandplain and swales show some susceptibility to erosion after any disturbance which removes the vegetation (DPIRD, 2019).
Waterbodies	The desktop assessment and aerial imagery indicated that that no ephemeral or permanent watercourses or wetlands transect the area proposed to be cleared (GIS Database). A number of seasonal creek lines pass through the application area (APA, 2019).
Hydrogeography	The application area is located within the Canning-Kimberley Ground Water Area proclaimed under the <i>Rights in Water and Irrigation Act 1914</i> (GIS Database). The groundwater salinity is mapped as 1,000-3,000 milligrams per litre total dissolved solids which is described as brackish (GIS Database). The application is not within any legislated surface water areas or Public Drinking Water Source Areas (GIS Database).
Flora	There are no records of Threatened flora within the application area or local surrounds (10 kilometres) (GIS Database). A desktop assessment identified records of three Priority flora within 10 kilometres of the application area (GIS Database).
Ecological communities	There are no records of Threatened or Priority Ecological Communities within the application area or local surrounds (10 kilometres) (GIS Database). The nearest PEC is Stony saline clay plains of the Mosquito Land system, located approximately 92 kilometres southwest of the application area (GIS Database).
Fauna	Six fauna species of conservation significance were recorded during the field surveys conducted by Kingfisher Environmental (2020).
Fauna habitat	The following four fauna habitats have been recorded within the application area; sand dunes, sandplains, shallow sand/laterite plains and plains of shallow sand over exposed calcrete (APA, 2019; MBS Environmental, 2004).

A.2. Flora analysis table

Conservation significant flora species within 10 kilometres of the application area (GIS Database).

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)
<i>Goodenia hartiana</i>	2	Y	Y	0	26
<i>Thysanotus</i> sp. Desert East of Newman (R.P. Hart 964)	2	Y	Y	<2	7

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)
<i>Indigofera ammobia</i>	3	Y	Y	<5	18

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

A.3. Fauna analysis table

Species name	Conservation status	Suitable habitat features? [Y/N]	Distance of closest record to application area (km)	Number of records (survey)	Are surveys adequate to identify? [Y, N, N/A]
Greater bilby	VU	Y	0 km	184 records	Y
Northern quoll	EN	Y	0 km	6 records	Y
Ghost bat	VU	Y	0 km	6 records	Y
Brush-tailed mulgara	P4	Y	0 km	16 records	Y
Western pebble-mound mouse	P4	Y	0 km	5 records	Y
Spectacled hare-wallaby	P4	Y	0 km	3 records	Y

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
<p>Principle (a): "Native vegetation should not be cleared if it comprises a high level of biodiversity."</p> <p>Assessment:</p> <p>The area proposed to be cleared may contain conservation significant flora. The Priority flora species listed in Appendix A.2 are considered to have high likelihood to occur within the application area (Kingfisher, 2019). The maintenance clearing of a six metre corridor is unlikely to have significant impacts on the local populations.</p> <p>Kingfisher (2019) identified two invasive flora that may potentially occur within the application area that include buffel grass (<i>Cenchrus ciliaris</i>) and athel pine (<i>Tamarix aphylla</i>). Athel pine is listed as a Weed of National Significance and as a Declared Pest plant in Western Australia under the Biosecurity and Agriculture Management Act 2007. Weeds have potential to out-compete native flora and reduce biodiversity of an area. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.</p> <p>The Operations Environment Plan (APA, 2014) lists the Declared Pest species that have been detected along the Nifty Gas Pipeline easement:</p> <ul style="list-style-type: none"> • Mexican Poppy (<i>Argemone mexicana</i>) • Calotropis (<i>Calotropis procera</i>) • Bathurst Burr (<i>Xanthium spinosum</i>) • Parkinsonia (<i>Parkinsonia aculeata</i>) • Prickly Pear (<i>Opuntia</i> spp). <p>There were also weeds recorded that are not listed as Declared Pests (APA, 2014):</p> <ul style="list-style-type: none"> • Kapok Bush (<i>Aerva javanica</i>) • Saffron Thistle (<i>Carthamus lantanus</i>) • Horehound (<i>Marrubium vulgare</i>) • Buffel Grass (<i>Cenchrus ciliaris</i>) 	<p>May be at variance</p> <p>as per CPS 8396/1</p>	<p>No</p>
<p>Principle (b): "Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna."</p> <p>Assessment:</p> <p>The area proposed to be cleared contains habitat for conservation significant fauna. Furthermore, various conservation significant fauna species have been recorded in the application area.</p>	<p>May be at variance</p> <p>as per CPS 8396/1</p>	<p>Yes</p> <p>Refer to Section 3.2.1, above.</p>
<p>Principle (c): "Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."</p>	<p>Not likely to be at variance</p>	<p>No</p>

Assessment against the clearing principles	Variance level	Is further consideration required?
<p><u>Assessment:</u></p> <p>The area proposed to be cleared is unlikely to contain Threatened flora species listed under the BC Act.</p>	as per CPS 8396/1	
<p><u>Principle (d):</u> <i>“Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community.”</i></p> <p><u>Assessment:</u></p> <p>There are no known Threatened Ecological Communities (TECs) located within the application area or the Mackay subregion (GIS Database).</p>	Not likely to be at variance as per CPS 8396/1	No
Environmental value: significant remnant vegetation and conservation areas		
<p><u>Principle (e):</u> <i>“Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.”</i></p> <p><u>Assessment:</u></p> <p>The extent of the mapped vegetation type is consistent with the national objectives and targets for biodiversity conservation in Australia. The current extent of vegetation associations remaining for Great Sandy Desert 134 is 99 percent (13,593,950 ha) (Government of Western Australia, 2019). The vegetation proposed to be cleared is not considered to be part of a significant ecological linkage in the local area (GIS Database).</p>	Not at variance as per CPS 8396/1	No
<p><u>Principle (h):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.”</i></p> <p><u>Assessment:</u></p> <p>Given the distance to the nearest conservation area, the proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas (GIS Database).</p>	Not likely to be at variance as per CPS 8396/1	No
Environmental value: land and water resources		
<p><u>Principle (f):</u> <i>“Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.”</i></p> <p><u>Assessment:</u></p> <p>There are no permanent watercourses or wetlands within the application area, however, a number of seasonal creek lines pass through the application area (APA, 2019; GIS Database). Potential impacts to vegetation growing in association with a watercourse can be minimised with the implementation of a watercourse management condition.</p>	At variance as per CPS 8396/1	No
<p><u>Principle (g):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.”</i></p> <p><u>Assessment:</u></p> <p>The mapped soils are moderately susceptible to erosion (DPIRD, 2019). Noting the extent of the proposed clearing is a six metre wide pipeline easement, the proposed clearing is not likely to have an appreciable impact on land degradation.</p>	Not likely to be at variance as per CPS 8396/1	No
<p><u>Principle (i):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.”</i></p> <p><u>Assessment:</u></p> <p>Given no water courses or Public Drinking Water Sources Areas are recorded within the application area (GIS Database), the proposed clearing is unlikely to impact surface or ground water quality.</p>	Not likely to be at variance as per CPS 8396/1	No
<p><u>Principle (j):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.”</i></p> <p><u>Assessment:</u></p> <p>Given no permanent water courses or waterbodies are recorded within the application area (GIS Database), the proposed clearing is unlikely to contribute to increased incidence or intensity of flooding.</p>	Not at variance as per CPS 8396/1	No

Appendix C. Vegetation condition rating scale

Vegetation condition is a rating given to a defined area of vegetation to categorise and rank disturbance related to human activities. The rating refers to the degree of change in the vegetation structure, density and species present in relation to undisturbed vegetation of the same type. The degree of disturbance impacts upon the vegetation's ability to regenerate. Disturbance at a site can be a cumulative effect from a number of interacting disturbance types.

Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from Trudgen, M.E. (1991) *Vegetation condition scale* in National Trust (WA) 1993 Urban Bushland Policy. National Trust of Australia (WA), Wildflower Society of WA (Inc.), and the Tree Society (Inc.), Perth.

Measuring vegetation condition for the Eremaean and Northern Botanical Provinces (Trudgen, 1991)

Condition	Description
Excellent	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.
Very good	Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks.
Good	More obvious signs of damage caused by human activity since European settlement, including some obvious impact on the vegetation structure such as that caused by low levels of grazing or slightly aggressive weeds.
Poor	Still retains basic vegetation structure or ability to regenerate it after very obvious impacts of human activities since European settlement, such as grazing, partial clearing, frequent fires or aggressive weeds.
Very poor	Severely impacted by grazing, very frequent fires, clearing or a combination of these activities. Scope for some regeneration but not to a state approaching good condition without intensive management. Usually with a number of weed species present including very aggressive species.
Completely degraded	Areas that are completely or almost completely without native species in the structure of their vegetation; i.e. areas that are cleared or 'parkland cleared' with their flora comprising weed or crop species with isolated native trees or shrubs.

Appendix D. Sources of information

D.1. GIS databases

Publicly available GIS Databases used (sourced from www.data.wa.gov.au):

- Aboriginal Heritage Places (DPLH-001)
- Bush Forever (Regional Scheme) (DPLH-022)
- Clearing Regulations – Schedule One Areas (DWER-057)
- DBCA – Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Directory of Important Wetlands in Australia – Western Australia (DBCA-045)
- Environmentally Sensitive Areas (DWER-046)
- Groundwater Salinity Statewide (DWER-026)
- Hydrographic Catchments – Catchments (DWER-028)
- Hydrography – Inland Waters – Waterlines
- Hydrography, Linear (DWER-031)
- IBRA Vegetation Statistics
- Native Title (ILUA) (LGATE-067)
- Pre-European Vegetation Statistics
- Regional Parks (DBCA-026)
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Mapping – Best Available (DPIRD-027)
- Soil Landscape Mapping – Rangelands (DPIRD-064)
- WA Now Aerial Imagery

Restricted GIS Databases used:

- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)

D.2. References

- APA (2014) Nifty Gas Pipeline Operations Environment Plan. Report prepared by APA Group, February 2014.
- APA (2019) Clearing Permit Application Supporting Documentation: Nifty Gas Pipeline PL68. Report prepared by APA Group, February 2019.
- APA (2024) Annual Clearing Permit Report – Purpose Permit CPS 8396/1. Report prepared by APA Group, June 2024.
- Bureau of Meteorology (BoM) (2024) Bureau of Meteorology Website – Climate Data Online, Telfer Aero (013030). Bureau of Meteorology. <https://reg.bom.gov.au/climate/data/> (Accessed 29 August 2024).
- Conservation and Land Management (CALM) (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- Department of Environment Regulation (DER) (2014) *A guide to the assessment of applications to clear native vegetation*. Perth. https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf
- Department of Planning, Lands and Heritage (DPLH) (2024) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS> (Accessed 29 August 2024).
- Department of Primary Industries and Regional Development (DPIRD) (2019) Advice received in relation to Clearing Permit Application CPS 8396/1. Deputy Commissioner of Soil and Land Conservation, Department of Primary Industries and Regional Development, Western Australia, May 2019.
- Department of Water and Environmental Regulation (DWER) (2021) Procedure: Native vegetation clearing permits. Joondalup. https://dwer.wa.gov.au/sites/default/files/Procedure_Native_vegetation_clearing_permits_v1.pdf
- Environmental Protection Authority (EPA) (2005) Ministerial Statement 676 – Gas Pipeline to Nifty Copper Operations, Great Sandy Desert.
- Environmental Protection Authority (EPA) (2020) Technical Guidance – Terrestrial Fauna Surveys. https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/2020.09.17%20-%20EPA%20Technical%20Guidance%20-%20Vertebrate%20Fauna%20Surveys%20-%20Final.pdf
- Government of Western Australia (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions. <https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>
- Kingfisher Environmental (Kingfisher) (2019a) Desktop Assessment of Flora and Ecological Communities of the Nifty Gas Pipeline. Report prepared for APA Group, by Kelby Kennings on behalf of Kingfisher Environmental, July 2019.
- Kingfisher Environmental (Kingfisher) (2020) Telfer Gas Pipeline and Nifty Gas Lateral 2020 Fauna Assessment Summary Report. Report prepared for APA Group, by Kingfisher Environmental, September 2020.
- MBS Environmental (2004) Nifty Copper Operation: Power Supply and Infrastructure Corridor – Vegetation and Habitat Assessment. Report prepared for Birla (Nifty) Pty Ltd, by Martinick Bosch Sell Pty Ltd, July 2004.
- Trudgen, M.E. (1991) Vegetation condition scale in National Trust (WA) 1993 Urban Bushland Policy. National Trust of Australia (WA), Wildflower Society of WA (Inc.), and the Tree Society (Inc.), Perth.

4. Glossary

Acronyms:

BC Act	<i>Biodiversity Conservation Act 2016</i> , Western Australia
BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia (now DPLH)
DAFWA	Department of Agriculture and Food, Western Australia (now DPIRD)
DCCEEW	Department of Climate Change, Energy, the Environment and Water, Australian Government
DBCA	Department of Biodiversity, Conservation and Attractions, Western Australia
DEMIRS	Department of Energy, Mines, Industry Regulation and Safety
DER	Department of Environment Regulation, Western Australia (now DWER)
DMIRS	Department of Mines, Industry Regulation and Safety, Western Australia (now DEMIRS)
DMP	Department of Mines and Petroleum, Western Australia (now DEMIRS)
DoEE	Department of the Environment and Energy (now DCCEEW)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)
DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora (now known as Threatened Flora)
DWER	Department of Water and Environmental Regulation, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , Western Australia
EPA	Environmental Protection Authority, Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
PEC	Priority Ecological Community, Western Australia

Definitions:

{DBCA (2023) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia}:-

T Threatened species:

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the Biodiversity Conservation Act 2016 (BC Act).

Threatened fauna is the species of fauna that are listed as critically endangered, endangered or vulnerable threatened species.

Threatened flora is the species of flora that are listed as critically endangered, endangered or vulnerable threatened species.

The assessment of the conservation status of threatened species is in accordance with the BC Act listing criteria and the requirements of [Ministerial Guideline Number 1](#) and [Ministerial Guideline Number 2](#) that adopts the use of the International Union for Conservation of Nature (IUCN) [Red List of Threatened Species Categories and Criteria](#), and is based on the national distribution of the species.

CR Critically endangered species

Threatened species considered to be “*facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines.

EN Endangered species

Threatened species considered to be “*facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines.

VU Vulnerable species

Threatened species considered to be “*facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines.

Extinct Species:

EX Extinct species

Species where “*there is no reasonable doubt that the last member of the species has died*”, and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

EW Extinct in the wild species

Species that “*is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form*”, and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild.

Specially protected species:

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

MI Migratory species

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection

of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Migratory species include birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) or The Republic of Korea (ROKAMBA), and fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

CD Species of special conservation interest (conservation dependent fauna)
Species of special conservation need that are dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Currently only fauna are listed as species of special conservation interest.

OS Other specially protected species
Species otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Currently only fauna are listed as species otherwise in need of special protection.

P Priority species:

Priority is not a listing category under the BC Act. The Priority Flora and Fauna lists are maintained by the department and are published on the department's website.

All fauna and flora are protected in WA following the provisions in Part 10 of the BC Act. The protection applies even when a species is not listed as threatened or specially protected, and regardless of land tenure (State managed land (Crown land), private land, or Commonwealth land).

Species that may possibly be threatened species that do not meet the criteria for listing under the BC Act because of insufficient survey or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of prioritisation for survey and evaluation of conservation status so that consideration can be given to potential listing as threatened.

Species that are adequately known, meet criteria for near threatened, or are rare but not threatened, or that have been recently removed from the threatened species list or conservation dependent or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.

Assessment of priority status is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

P1 Priority One - Poorly-known species – known from few locations, none on conservation lands

Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, for example, agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation.

Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements for threatened listing and appear to be under immediate threat from known threatening processes. These species are in urgent need of further survey.

P2 Priority Two - Poorly-known species – known from few locations, some on conservation lands

Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, for example, national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation.

Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements for threatened listing and appear to be under threat from known threatening processes. These species are in urgent need of further survey.

P3 Priority Three - Poorly-known species – known from several locations

Species that are known from several locations and the species does not appear to be under imminent threat or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat.

Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. These species need further survey.

P4 Priority Four - Rare, Near Threatened and other species in need of monitoring

- (a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands.
- (b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as a conservation dependent specially protected species.
- (c) Species that have been removed from the list of threatened species or lists of conservation dependent or other specially protected species, during the past five years for reasons other than taxonomy.
- (d) Other species in need of monitoring.

Principles for clearing native vegetation:

- (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.
- (b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.
- (d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.
- (e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.
- (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
- (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
- (h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.
- (i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.
- (j) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.