



Department of
**ENVIRONMENT, PARKS AND
WATER SECURITY**

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Our ref: DEPWS2024/0051

Ms Mandy Trueman
Department of Environment, Parks and Water Security
PO Box 3675
DARWIN NT 0801

Dear Ms Trueman

Re: Invitation to comment on Referral - Imperial Oil & Gas Pty Ltd - Carpentaria Pilot Project

The Department of Environment, Parks, and Water Security (DEPWS) has assessed the information submitted for the above proposal and provides the following comments.

Flora and Fauna Division

The Carpentaria Pilot Project (CPP) is located within the Barkly region, approximately 150km southwest of Borroloola.

The Flora and Fauna Division have reviewed the EMP and provides advice in **Attachment 1**.

The Flora and Fauna Division provides the following recommendations:

- Updated spatial information should be provided to resolve discrepancies between existing cleared areas, proposed cleared areas and permitted clearing footprints to enable an accurate cumulative vegetation assessment to be undertaken.
- The 'Infrastructure Movement Zones' should be refined to the minimum area practicable, so that potential impacts can be accurately assessed.
- Areas mapped as 'high value' Sensitive Vegetation Communities should be avoided during any future works.
- Measures to reduce the risk of road-strike on fauna during dawn, dusk and night should be included in the list of controls and management measures to reduce impacts to as low as reasonably practicable (ALARP).

Bushfires NT

Bushfires NT have reviewed the CPP EMP and are satisfied that the Bushfire Management Plan (BMP) provided is adequate for the existing site layout and land use. The proponent is advised to update their BMP on an annual basis.

The proponents BMP may benefit from the following additions:

- Awareness of, and reference to trigger points within the existing BMP for any days that the Australian Fire Danger Rating System (AFDRS) and the Fire Danger Ratings (FDR) exceed EXTREME or CATASTROPHIC, including for enacted fire ban days.
- Make reference within the BMP as to how many resources are available for fire suppression on site (tankers, fire units, water trucks, etc.).
- The CPP falls within the Savanna Fire Management Zone. As a requirement of the *Bushfires Management Act 2016*, the owner or occupier is responsible for managing fire on the land in addition to preventing fire spreading from their land to other land. If the proponent is unable to control a fire on the land, they must take reasonable steps to notify a Bushfires NT Fire Control Officer or Fire Warden and the occupier of any land to which the fire is likely to spread. Notification to Bushfires NT personnel should be made through Triple Zero.

When a Fire Danger Period is declared, no burning may take place except where a Permit to Burn has been obtained from a Fire Management Officer. A Permit to Burn is required at all times of year when conducting aerial burning. To enquire about a Permit to Burn, please contact the Bushfires NT Katherine Office 08 8973 8870.

Environment Division

An assessment of the action indicates that it will not require an approval and/or licence under the *Water Act 1992* (NT) or *Waste Management and Pollution and Control Act 1998* (NT) (WMPC Act).

If the proponent engages an entity to collect, transport, store, recycle or treat listed wastes on a commercial or fee for service basis, then that entity must hold an Environment Protection Licence under the WMPC Act.

These comments are made on the basis that the legislation referred to above (section 6 of WMPC Act and section 7 of *Water Act 1992*) does not apply, as the activity is a Regulated Activity under the *Petroleum Act 1984*.

Water Resources Division

The Water Resources Division has reviewed the EMP and provides advice in **Attachment 2**.

Rangelands Division

Weed Management Branch

The Weed Management Branch has reviewed the EMP and provides advice in **Attachment 3**.

Vegetation Assessment Unit

The Vegetation Assessment Unit has reviewed the EMP and provides advice in **Attachment 4**.

Should you have any further queries regarding these comments, please contact the Development Coordination Branch by email DevelopmentAssessment.DEPWS@nt.gov.au or phone (08) 8999 4446.

Yours sincerely



Maria Wauchope
Executive Director Rangelands

24 April 2024

Attachment 1 – Flora and Fauna Division
Attachment 2 – Water Resources Division
Attachment 3 – Weed Management Branch
Attachment 4 – Vegetation Assessment Unit

Attachment 1

Submission on the referral

Imperial Oil & Gas Pty Ltd – Carpentaria Pilot Project

This submission is made under regulation 53 of the Environment Protection Regulations 2020

Government authority: Department of Environment, Parks and Water Security – Flora and Fauna Division

Section of Referral	Theme or issue	Comment																																				
Threatened species		Based on a search of DEPWS databases (using a 20km buffer), expert knowledge of species' habitat requirements, and information about habitats occurring within the parcels, the following threatened species may occur within, or immediately adjacent to, the search area.																																				
		<table border="1"> <thead> <tr> <th>Common Name</th> <th>Scientific Name</th> <th>*TWPC Act Status</th> <th>**EPBC Act Status</th> </tr> </thead> <tbody> <tr> <td>Crested Shrike-tit</td> <td><i>Falcunculus frontatus whitei</i></td> <td>-</td> <td>Vulnerable</td> </tr> <tr> <td>Gouldian Finch</td> <td><i>Chloebia gouldiae</i></td> <td>Vulnerable</td> <td>Endangered</td> </tr> <tr> <td>Grey Falcon</td> <td><i>Falco hypoleucos</i></td> <td>Vulnerable</td> <td>Vulnerable</td> </tr> <tr> <td>Painted Honeyeater</td> <td><i>Grantiella picta</i></td> <td>Vulnerable</td> <td>Vulnerable</td> </tr> <tr> <td>Red Goshawk</td> <td><i>Erythrotriorchis radiatus</i></td> <td>Vulnerable</td> <td>Endangered</td> </tr> <tr> <td>Ghost Bat</td> <td><i>Macroderma gigas</i></td> <td>-</td> <td>Vulnerable</td> </tr> <tr> <td>Mertens' Water Monitor</td> <td><i>Varanus mertensi</i></td> <td>Vulnerable</td> <td>Endangered</td> </tr> <tr> <td>Northern blue-tongued skink</td> <td><i>Tiliqua scincoides intermedia</i></td> <td>-</td> <td>Critically Endangered</td> </tr> </tbody> </table>	Common Name	Scientific Name	*TWPC Act Status	**EPBC Act Status	Crested Shrike-tit	<i>Falcunculus frontatus whitei</i>	-	Vulnerable	Gouldian Finch	<i>Chloebia gouldiae</i>	Vulnerable	Endangered	Grey Falcon	<i>Falco hypoleucos</i>	Vulnerable	Vulnerable	Painted Honeyeater	<i>Grantiella picta</i>	Vulnerable	Vulnerable	Red Goshawk	<i>Erythrotriorchis radiatus</i>	Vulnerable	Endangered	Ghost Bat	<i>Macroderma gigas</i>	-	Vulnerable	Mertens' Water Monitor	<i>Varanus mertensi</i>	Vulnerable	Endangered	Northern blue-tongued skink	<i>Tiliqua scincoides intermedia</i>	-	Critically Endangered
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		<p>Yellow-spotted Monitor <i>Varanus panoptes</i> Vulnerable -</p> <hr/> <p>* Territory Parks and Wildlife Conservation Act 1976 ** Environment Protection and Biodiversity Conservation Act 1999</p> <p><u>Crested Shrike-tit</u>: This species occurs sparsely in eucalypt woodlands in the Top End. The majority of records are known from the northern Sturt Plateau and Katherine region. A Species Distribution Model (SDM) for this species was prepared during the SREBA but does not cover the project area or EP187 more broadly. Updated spatial information outlining existing cleared areas and where works are proposed is required to accurately quantify impacts to suitable nesting and foraging habitat for the species. While suitable habitat likely occurs on the site, the area proposed to be cleared is relatively small compared to the area of available habitat within EP187 and the broader region, so risks to the species are considered to be low.</p> <p><u>Gouldian Finch</u>: This species has specific requirements including suitable nesting trees (generally <i>Eucalyptus leucophloia</i> or <i>E. tintinnans</i>) and appropriate sources of grass seed and water. A SDM prepared during the SREBA has identified areas with a high likelihood of being suitable for the species in the northern part of the proposed works (Carpentaria 2/3). Interpretation of aerial imagery suggests that these areas appear to be associated with hillier terrain which may support suitable <i>E. leucophloia</i> which is known to provide suitable nesting habitat for the species.</p> <p>The proponent has provided a map at Figure 4.13 of the EMP to demonstrate that the proposed infrastructure has been largely sited to avoid potential roosting habitat and perennial waterholes. The Environmental Assessment has identified that suitable foraging habitat with vegetation and an understorey of <i>Chrysopogon fallax</i> is present onsite. A quantitative assessment of the impact to these vegetation communities can only be provided once updated spatial files have been provided by the proponent.</p> <p><u>Grey Falcon</u>: The Grey Falcon occurs sparsely across the NT and is highly mobile. Given the relatively small area of clearing proposed and the very large area of similar habitat within the region, the proposal does not pose a significant risk to regional populations of this species. Nesting Grey Falcons are susceptible to disturbance from the presence of people or vehicles. If a Grey Falcon nest (or suspected nest) is encountered, impacts can be reduced to ALARP by implementing a minimum buffer of 300m around the nest tree.</p> <p><u>Painted Honeyeater</u>: This species typically inhabits well-developed <i>Acacia</i> or eucalypt dominated woodlands which support higher densities of mistletoes, their preferred food. The species occurs in the lower rainfall parts of the Top End</p>

Section of Referral	Theme or issue	Comment
		<p>and semi-arid zones of the NT, however there is no evidence of a breeding population in the NT. Given the relatively small area of clearing proposed and the very large area of similar habitat within the region, the proposal does not pose a significant risk to regional populations of this species.</p> <p><u>Red Goshawk</u>: The Red Goshawk typically occurs at low densities and is reliant upon tall nesting trees associated with watercourses. There is a low likelihood of suitable nesting habitat occurring within EP187 or the proposal area. This is due to a lack of larger more permanent waterways that would support tall riparian vegetation. While the presence of suitable nesting habitat is considered low, any impacts to the species would likely be avoided through the proponent's commitment to implement riparian buffers in accordance with the NT Planning Scheme Land Clearing Guidelines (NTPSLCG).</p> <p><u>Ghost Bat</u>: This species has been recorded within EP187 and may use the area for foraging. The proposal is unlikely to disturb or impact on important habitat for Ghost Bats (maternal or diurnal roosts). Updated spatial information about the proposed works is required for an accurate assessment of the potential impact to foraging habitat at local and regional scale.</p> <p><u>Mertens' Water Monitor, Northern blue-tongued skink, Yellow-spotted Monitor</u>: These species are likely to occur within the tenement, particularly around wetlands and riparian habitats. The proponent has committed to ensuring tracks and infrastructure are sited in a manner that maintains the watercourse buffers recommended in the NTPSLCG. The Flora and Fauna Division reiterates that these buffers should be measured from the outer edge of any riparian vegetation, consistent with the NTPSLCG. With appropriate riparian vegetation buffers, the Flora and Fauna Division considers that the proposed works pose a low risk to these species.</p>
		<p>The EMP has assessed the risk to fauna due to road-strike as low, but has not specifically identified any 'control measures' in its risk assessment. The Flora and Fauna Division recommends that the EMP is updated to identify 'controls' for driving at dawn, dusk and night when the likelihood of road-strike is greatest. Avoiding non-essential travel and reducing speed limits during these periods would further reduce the risk to native fauna and threatened species to ALARP.</p>

Section of Referral	Theme or issue	Comment
Significant and/or Sensitive Vegetation		<p>The SREBA Program identified and modelled 25 'Significant Vegetation Communities' from a total of 51 communities identified across the Beetaloo Basin. These vegetation communities/groups were considered to have at least one of the following characteristics:</p> <ul style="list-style-type: none"> a) classified as sensitive or significant vegetation types according to the NTPSLCG (e.g. rainforest, riparian vegetation) b) associated with features subject to protective measures in the NTPSLCG (e.g. as a wetland, floodplain or drainage depression) c) groundwater-dependent ecosystems d) ecosystems other than (a), (b) or (c) that have relatively high values for some components of biodiversity, as identified in SREBA studies (e.g., run-on areas) e) extensive ecosystems that are endemic to the Northern Territory. <p>The vegetation types were also attributed as being of 'high' or 'moderate' ecological value based on their importance for supporting biodiversity in the regions, spatial extent, and sensitivity to disturbance. Mapping covering the proposal site has identified the following 'high value' Significant Vegetation Communities as potentially occurring within the proposal area:</p> <ul style="list-style-type: none"> • Riparian woodland (ephemeral streams) (Ground Water Dependent Ecosystem) • Melaleuca forests (springs, river channels) (Ground Water Dependent Ecosystem) <p>The EMP does not propose any new works within 'high value' vegetation communities.</p> <p>A review of the proposal against vegetation mapping suggests that the existing Carpentaria 2/3 track intersects two patches of the 'Riparian woodland (ephemeral streams)' map unit in the northern part of the proposal area, with the proposed 'infrastructure movement zones' covering additional areas outside of the road footprint. As this vegetation community is considered 'high value' within the SREBA basin, the Flora and Fauna Division recommends that no future works occur outside of the current Carpentaria 2/3 road footprint where this vegetation community occurs.</p>

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		<p>A single patch of Melaleuca forest (springs, river channels) has been mapped to the west of the Carpentaria 2/3 well pad. No works or impacts are proposed near the vegetation community.</p> <p>Other mapped vegetation communities present within the proposal area were considered in the SREBA reports to have 'moderate' ecological value. It is recommended that the EMP is updated to identify where these vegetation communities occur and how impacts from future works would be minimised as far as reasonably practicable.</p>
		<p>The proponent has proposed to site tracks and infrastructure consistent with the buffers recommended in the NTPSLCG (Figure 4.9-2 of the EMP) and also proposes to "maintain buffer distances from waterways in accordance with the NTPSLCG (Table 8.2-2)". The Flora and Fauna Division recommends that the proponent updates the EMP to identify that buffer distances would be measured from the outer edge of riparian vegetation as outlined in the NTPSLCG.</p>
Cumulative Impact Assessment		<p>The spatial files provided with the application appear to have inconsistencies with what has been previously cleared under permitted activities. Without accurate spatial information about the current state of native vegetation, and what is proposed to be cleared under this EMP, the Flora and Fauna Division is unable to provide an accurate assessment of the cumulative vegetation at local and regional scales. The following inconsistencies were identified with the spatial information provided:</p> <ul style="list-style-type: none"> • clearing data used by DEPWS to assess applications (including applications and permits) does not appear to correspond with the shapefile provided, in particular: <ul style="list-style-type: none"> ○ two of the pads have no corresponding data in the applications/permits layers ○ one pad has an area in the permit information (DP19/0008-3) but it only covers about one-quarter of what has actually been cleared. • Permits were granted for well pads at six locations: <ul style="list-style-type: none"> ○ one well pad (DP19/0008-3) was constructed in the permitted locations (although the construction footprint exceeds the permit) ○ the other five permitted locations do not appear to have had any construction in the ESRI base map imagery.

Section of Referral	Theme or issue	Comment
		<p>To ensure the Flora and Fauna Division can undertake an accurate cumulative impact assessment, it is recommended that the proponent is requested to provide further information to accurately define the current areas that are cleared, approved for clearing and proposed to be cleared under the EMP.</p> <p>The inclusion of broad areas identified as 'infrastructure movement zones' in the EMP limits the ability to accurately quantify the cumulative impacts to native vegetation from a local and regional perspective. To ensure that assessment is as accurate as possible, it is recommended that the 'infrastructure movement zones' are as refined as tightly as possible in the updated spatial information.</p>

Attachment 2

Submission on the referral

Imperial Oil & Gas Pty Ltd – Carpentaria Pilot Project

This submission is made under regulation 53 of the Environment Protection Regulations 2020

Government authority: Department of Environment, Parks and Water Security – Water Resources Division

Section of Referral	Theme or issue	Comment
EMP, 2 Legislative Requirements, Table 2.1-1 Summary of Legislation Requirements, p.65	Legislative requirements <i>Water Act 1992 and Water Regulations 1992</i>	<p>The EMP, in Table 2.1-1 outlines the requirements under the <i>Water Act 1992</i> and <i>Water Regulations 1992</i>.</p> <ul style="list-style-type: none"> • Prior to increasing the quantity extracted from groundwater, Imperial Oil and Gas Pty Ltd will need to apply to the Water Resources Division to increase their entitlement under water extraction licence GRF10316. An application to increase the entitlement will then be reviewed, advertised and assessed. The Controller of Water Resources will then make a decision on whether to grant an increase to entitlements. • Prior to drilling new bores, a bore work application is required.

Attachment 3

Submission on the referral

Imperial Oil & Gas Pty Ltd – Carpentaria Pilot Project

This submission is made under regulation 53 of the Environment Protection Regulations 2020

Government authority: Department of Environment, Parks and Water Security – Rangelands Division/Weed Management Branch

Section of Referral	Theme or issue	Comment
1.3 Legal Requirements p.4	Weed Management Plan/Section 1.3.1	<p>Requirement: <i>Weeds Management Act 2001</i></p> <p>Issue: Amendments were made to the Weeds Management Act in January 2023.</p> <p>Feedback: Update with current purpose of <i>Weeds Management Act 2001</i> as follows:</p> <p>(a) to prevent the spread of weeds in, into and out of the Territory:</p> <ul style="list-style-type: none"> ○ to minimise the impact of weeds in the Territory; ○ to ensure that the management of the spread of weeds is an integral component of land management; ○ to ensure that the management of the impact of weeds is an integral component of land management; and <p>(b) to ensure there is community consultation in the creation of weed management plans; and</p> <p>(c) to ensure that there is community responsibility in implementing weed management plans.</p>
Introduction p.2 and 1.3 Legal Requirements p.4	1.3.1 Weeds Management Act	<p>Requirement: <i>Weeds Management Act 2001</i>.</p> <p>Issue: Update wording of declared weed classes and include the new Class D weed</p> <p>Feedback: New wording in <i>Weeds Management Act 2001</i> as follows:</p> <p>(a) it is necessary to eradicate the plant;</p> <p>(b) it is necessary to prevent the growing and spreading of the plant;</p>

	<p>(c) it is necessary to prevent the introduction of the plant into the Territory or a part of the Territory;</p> <p>(d) it is necessary to prevent the plant being spread by the actions of persons.</p>
<p>3.1 Regional Priorities p.7-9</p>	<p>Requirement: Katherine Regional Weed Management Plan 2015-2020 has now been superseded; this section requires updating with current information.</p> <p>Issue: The correct document is the Katherine Regional Weeds Strategy 2021-2026. Weed species that are listed as requiring priority management attention within the Region were determined by consensus during the Katherine Regional Weed Reference Group (KRWRG) meetings with input from the NT Weed Management Branch using one or more of the following criteria:</p> <ul style="list-style-type: none"> (a) subject to a statutory weed management plan; (b) listed as a Weed of National Significance; (c) weed risk assessment concluded the species to be a high or very high risk to the Northern Territory; (d) weed risk at the regional level confirmed by local expert knowledge; (e) strategic management of isolated or core infestations regarded as feasible by local expert knowledge. <p>There are now 5 categories for priority management Table 3 and 4 require updating to reflect the Katherine Regional Weeds Strategy priority lists.</p> <p>Feedback: The current strategy can be found using the following link. https://nt.gov.au/__data/assets/pdf_file/0006/269286/Katherine-Regional-Weeds-Strategy-2021-2026.pdf</p>

Attachment 4

Submission on the referral

Imperial Oil & Gas Pty Ltd – Carpentaria Pilot Project

This submission is made under regulation 53 of the Environment Protection Regulations 2020

Government authority: Department of Environment, Parks and Water Security – Rangelands Division/Vegetation Assessment Unit

Section of Referral	Theme or issue	Comment
Appendix 5 – Erosion and Sediment Control Plan (ESCP)		<p>Requirement: Code of Practice – A.3.1 Site selection and planning</p> <p>Issue: Areas of slope greater than 2% have been identified within the project area. The Northern Territory Planning Scheme Land Clearing Guidelines (NTPS LCG) do not recommend clearing slope >2% as it presents a high to very high erosion risk.</p> <ul style="list-style-type: none"> The Erosion and Sediment Control Plan (ESCP) refers to the Department of Environment and Natural Resources (DENR), it should instead refer to Department of Environment, Parks and Water Security (DEPWS) <p>Feedback: It is recommended that areas of slope >2% are avoided in the first instance, where these areas are unavoidable, appropriate erosion and sediment controls measures, such as those described in the EMP (e.g. in the ESCP) should be implemented. Update DENR to DEPWS.</p>
4.9 – Surface Water		<p>Requirement: Code of Practice – A.3.1 Site selection and planning</p> <p>Issue: There are several 1st and 2nd order streams and one 3rd order stream within the proposal area. Access tracks are shown to cross a number of these streams.</p> <p>Feedback: The NTPS LCG recommends a buffer of 25m is applied to first order streams, 50m for second order streams and 100m for 3rd order streams.</p>