



Environmental  
Protection  
Authority

# Cockatoo Island Multi-user Supply Base

Crestlink Pty Ltd (ACN 91 615 631 386)

Report 1790

September 2025

This assessment report has been prepared by the Environmental Protection Authority (EPA) under s. 44 of the *Environmental Protection Act 1986* (WA). It describes the outcomes of the EPA's assessment of the Cockatoo Island Multi-User Supply Base proposal by Crestlink Pty Ltd.

The Cockatoo Island Multi-User Supply Base was determined under the Commonwealth *Environment Protection and Biodiversity Act 1999* to be a controlled action and to be assessed by the EPA under an accredited process. This document is also the result of the EPA's assessment for the Commonwealth process.

This assessment report is for the Western Australian Minister for Environment and sets out:

- what the EPA considers to be the key environmental factors identified in the course of the assessment;
- the EPA's recommendations as to whether or not the proposal may be implemented and, if it recommends that implementation be allowed, the conditions and procedures, if any, to which implementation should be subject; and,
- other information, advice and recommendations as the EPA thinks fit.



**Darren Walsh**  
Chair  
Environmental Protection Authority

1 September 2025

ISSN 1836-0491 (Online)  
Assessment No. 2314

# Contents

Summary .....	3
1 Proposal.....	8
2 Assessment of key environmental factors .....	13
2.1 Marine fauna.....	13
2.2 Marine environmental quality.....	18
2.3 Benthic communities and habitats.....	22
2.4 Terrestrial fauna.....	25
2.5 Flora and vegetation .....	29
2.6 Social surroundings.....	33
3 Holistic assessment.....	36
4 Matters of national environmental significance .....	38
5 Recommendations .....	41
6 Other advice .....	42

## Figures

Figure 1: Project location .....	11
Figure 2: Development envelope and disturbance footprint.....	12

## Tables

Table 1: Proposal content elements (based on information supplied by Crestlink).....	8
Table 2: Assessment of marine fauna.....	14
Table 3: Assessment of marine environmental quality.....	19
Table 4: Assessment of benthic communities and habitats.....	23
Table 5: Assessment of terrestrial fauna .....	26
Table 6: Assessment of flora and vegetation .....	30
Table 7: Assessment of social surroundings.....	34
Table B1: Identified relevant decision-making authorities for the proposal .....	64

## Appendices

Appendix A: Recommended conditions.....	43
Appendix B: Decision-making authorities.....	64
Appendix C: Regulation under other statutory processes .....	66
Appendix D: Environmental Protection Act principles.....	68
Appendix E: Other environmental factors .....	71
Appendix F: List of submitters.....	74
Appendix G: Assessment timeline .....	75
Appendix H: Relevant policy, guidance, procedures and references.....	76

# Summary

## Proposal

The proposal is for the development of a multi-user supply base, comprising an upgraded airfield, a wharf and a subsea workshop. The proposal is located on Cockatoo Island which is an island in the Buccaneer Archipelago off the coast of Western Australia, and within the Shire of Derby, Western Australia.

The proponent for the proposal is Crestlink Pty Ltd (formerly Kimberley Technology Solutions Pty Ltd).

The disturbance footprint for the proposal is 25.41 ha within a development envelope of 52.81 ha. The proposal will have a maximum 64-year life including the construction phase.

## Assessment of key environmental factors

The EPA has assessed the key environmental factors listed below for consistency with the EPA environmental factor objectives. The EPA assessed the residual impacts of the proposal on the environmental values and considered whether the environmental outcomes are likely to be consistent with the EPA environmental factor objectives.

Environmental factor: Marine fauna	
Residual impact on key value	Assessment finding/ environmental outcome (summary)
Behavioural responses associated with underwater noise, artificial light, and changes in water quality, including sedimentation and sediment resuspension	<p>Rock dumping for land reclamation and wharf construction will generate underwater noise, potentially causing temporary or permanent hearing impacts or behavioural changes in marine fauna. Modelling indicates permanent threshold shifts for low-frequency cetaceans may occur within 10 m, with temporary shifts up to 430 m. To manage potential impacts, the EPA recommends conditions B1-2(3) and B1-2(4) which requires the proponent to implement a 1 km exclusion zone and a 2 km observation zone during the humpback whale calving period (June – September). Additionally, the EPA recommends outcomes-based condition B1-2 requiring industry-standard marine noise protocols, including soft starts and vessel speed limits.</p> <p>Artificial light from the proposal may affect marine turtles and migratory shorebirds by disrupting navigation and natural behaviours. To mitigate impacts lighting controls aligned with the <i>National Light Pollution Guidelines for Wildlife</i> are recommended, with an outcome-based condition requiring no disturbance to significant marine fauna from project related artificial light.</p> <p>Subject to these recommended conditions, the environmental outcome is likely to be consistent with the EPA's objective for marine fauna.</p>
Potential injury, entrapment, death associated with rock dumping during construction or vessel strike during construction and operations	
Permanent loss, degradation, or modification of habitat	
Introduction of invasive marine species from vessel movement.	

Environmental factor: Marine environmental quality	
Residual impact on key value	Assessment finding/ environmental outcome (summary)
<p>Temporary reduction in marine environmental quality from increased turbidity and sedimentation during land reclamation and rock dumping.</p> <p>Reduction in marine environmental quality due to seabed disturbance which may mobilise contaminants</p> <p>Risk of unplanned spills during construction and operations</p> <p>Hydrodynamic impacts from reclamation</p>	<p>Rock dumping will increase turbidity and sedimentation. However, impacts will be localised, temporary in nature and limited to the 12 month construction period.</p> <p>Preliminary investigations suggest low contamination risk from reclamation fill, and the proponent is committed to staged sediment monitoring, including pre-construction surveys and batch testing. As such, the EPA recommends an outcomes-based condition to ensure benign fill material is used and relevant levels of ecological protection are adhered to.</p> <p>Hydrodynamic modelling indicates minor, highly localised changes to current velocities near the wharf, with no significant disruption to longshore currents or coastal processes. Residual impacts on sediment transport and flow patterns are expected to remain confined to the disturbance footprint.</p> <p>The supply base will support vessel operations with essential services including fuel, water, cargo handling, crew transfer, and waste management. Offshore waste will be temporarily stored at Cockatoo Island before transfer to licensed facilities in Derby or Broome in line with Controlled Waste regulations. Additionally, all vessels must comply with the requirements of the International Convention for the Prevention of Pollution from Ships (MARPOL).</p> <p>Subject to these recommended conditions, and other statutory decision-making processes, the environmental outcome is likely to be consistent with the EPA's objective for MEQ.</p>

Environmental factor: Benthic communities and habitats	
Residual impact on key value	Assessment finding/ environmental outcome (summary)
<p>Loss of up to 5.75 ha of benthic habitat comprising 5.21 ha of sand and rocky substrate, and 0.54 ha of hard coral and macroalgae from reclamation activities</p> <p>Direct disturbance, sedimentation, smothering and increased turbidity associated with land reclamation, and wharf construction</p>	<p>The proposed wharf is expected to result in minor losses of hard coral (0.03%) and macroalgae (0.06%) within the Local Assessment Unit. The EPA considers that the predicted direct loss of hard coral and macroalgae is unlikely to result in a significant residual impact on benthic communities and habitats (BCH).</p> <p>Modelling predicts temporary increases in suspended sediments during wharf construction, with levels exceeding ambient concentrations by more than 3 mg/L for up to 5% of the total construction period. These impacts are expected to be localised and confined to small areas near the reclamation structure, with minor</p>

	sedimentation effects on BCH due to reduced light and potential smothering. Sedimentation impacts in two undisturbed bays to the south-east are initially expected to be minimal but may increase as construction progresses and turbidity shifts toward the neighbouring bay. The EPA considers these indirect impacts to be minor and localised, and the environmental outcome for BCH is likely to be consistent with the EPA's objective by applying reasonable conditions including recommended conditions B3-1(1) and B3-1(2) to ensure no irreversible loss of BCH in the Moderate Ecological Protection Area and no detectable change in the High Ecological Protection Area.
--	---

Environmental factor: Terrestrial fauna	
Residual impact on key value	Assessment finding/ environmental outcome (summary)
<p>Clearing of up to 7.37 ha of ghost bat and northern leaf-nosed bat foraging/hunting habitat and potential SRE habitat</p> <p>Increased noise, dust, vibration, and light emissions during construction and operation</p> <p>Increase risk of vehicle strike during construction and bat strikes from aviation traffic during operations</p> <p>Increase in feral animal abundance</p>	<p>The proponent mapped one broad habitat type within the development envelope, <i>Eucalyptus</i> open woodland habitat (with some rocky ridgelines and exposed rocky areas). The woodland habitat provides foraging and hunting habitat for the ghost bat (<i>Macroderma gigas</i>, VU), and northern leaf-nosed bat (<i>Hipposideros stenotis</i>, P2).</p> <p>Ghost and northern leaf-nosed bats were recorded within the development envelope, and no roosts were found. A potentially suitable cave for ghost bats lies ~800 m northwest of the development envelope. The proposal area comprises widespread <i>Eucalyptus</i> open woodland, providing foraging habitat. Given the habitat's regional abundance, the species' broad foraging range, and limited proposed clearing, significant impacts are unlikely.</p> <p>The proponent's mitigation measures are considered sufficient to address indirect impacts, in combination with the recommended condition enforcing a 40 km/hr speed limit which is consistent with other EPA assessments (e.g. Koolan Island MS 715).</p> <p>Despite Cockatoo Island's history of operations, invasive species remain a key threat due to its ecological sensitivity, and the increased risk of pest incursion due to the supply base receiving goods from multiple source localities. To address this, the EPA recommends an environmental outcome relating to feral animal abundance. Subject to the recommended conditions, the environmental outcome for terrestrial fauna is likely to be consistent with the EPA's objective for this factor.</p>

Environmental factor: Flora and vegetation	
Residual impact on key value	Assessment finding/environmental outcome (summary)

<p>Clearing of up to 7.37 ha of native vegetation in 'Good' to 'Very Good' condition.</p> <p>Clearing of up to 145 individuals of priority species <i>Triodia</i> Hidden Island (P1)</p> <p>Vegetation degradation due to the introduction and/ or spread of weeds and increased dust deposition</p> <p>Changes in local hydrology due to alteration of surface water flows.</p>	<p>The proposal is situated in the Mitchell subregion of the Northern Kimberley bioregion (IBRA). While Cockatoo Island has been subject to historical disturbance from mining and development, remaining undeveloped areas contain remnant native vegetation largely in 'Good' to 'Very Good' condition. No Threatened or Priority Ecological Communities listed under the <i>Biodiversity Conservation Act 2016</i> (BC Act), or the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) occur within the development envelope. Nor any threatened flora listed under the BC Act.</p> <p>Of the 500 <i>Triodia</i> sp. Hidden Island (P1) individuals recorded within the development envelope, 145 (29%) are proposed for clearing. The species' broader distribution across Cockatoo and Hidden Islands, and its tolerance to disturbance, suggest it's unlikely to affect the viability and conservation status. With over 1,300 individuals recorded regionally and other erosion-controlling vegetation present, the EPA considers implementation of the proposal will not result in a significant residual impact, reduce the ecosystem function provided by the species or affect the viability or conservation status of the species.</p> <p>The introduction of weed species poses a threat to native vegetation and ecosystem integrity on Cockatoo Island, heightened by the supply base's receipt of goods from diverse locations. The EPA recommends an environmental outcome associated with weed species abundance is appropriate.</p> <p>The aerodrome infrastructure may alter surface water flows and affect nearby vegetation. The proponent has proposed a drainage design with sediment controls and runoff management to maintain hydrological integrity. The EPA considers these measures, alongside an outcomes-based condition, to be adequate.</p> <p>Subject to the recommended conditions, the environmental outcome for flora and vegetation is likely to be consistent with the EPA's objective for this factor.</p>
--	--

Environmental factor: Social surroundings	
Residual impact on key value	Assessment finding/ environmental outcome (summary)
Potential removal or disturbance of unknown Aboriginal heritage sites or places	<p>No Aboriginal heritage sites were recorded during a survey within the development envelope. Additionally, a search of the Department of Planning, Lands and Heritage (DPLH) Aboriginal Cultural Heritage Inquiry System confirmed that no registered sites or other heritage places are recorded within the development envelope.</p> <p>Given the absence of known heritage sites, the existence of an ILUA, and the proponent's commitment to ongoing consultation with the Dambimangari people; significant</p>

	<p>impacts to Aboriginal cultural heritage values are considered unlikely. The EPA considers that any potential impacts can be appropriately managed under the <i>Aboriginal Heritage Act 1972</i> and has recommended the inclusion of conditions.</p> <p>Subject to the recommended conditions, the environmental outcome for social surroundings is likely to be consistent with the EPA's objective for the factor.</p>
--	---

## Holistic assessment

The EPA considered the connections and interactions between relevant environmental factors and values to inform a holistic view of impacts to the whole environment. The EPA formed the view that the holistic impacts would not alter the EPA's conclusions about consistency with the EPA factor objectives.

## Conclusion and recommendations

The EPA has taken the following into account in its assessment of the proposal:

- environmental values which may be significantly affected by the proposal
- residual impacts and effects in relation to the key environmental factors, separately, holistically, and cumulatively
- likely environmental outcomes (taking into account the EPA's recommended conditions) and the consistency of these outcomes with the EPA objectives for the key environmental factors
- the EPA's confidence in the proponent's proposed mitigation measures
- whether other statutory decision-making processes can mitigate the potential impacts of the proposal on the environment
- principles of the *Environmental Protection Act 1986*.

The EPA has recommended that the proposal may be implemented subject to conditions recommended in Appendix A.



# 1 Proposal

The proposal is located on Cockatoo Island where the development of a multi-user supply base, comprising an upgraded airfield, a wharf and a subsea workshop is proposed. The disturbance footprint for the proposal is 25.41 ha within a development envelope of 52.81 ha, with a proposed 64-year life. The proposal is within the Shire of Derby, Western Australia (see Figure 1).

The proponent for the proposal is Crestlink Pty Ltd (formerly Kimberley Technology Solutions Pty Ltd).

The proponent referred the proposal to the Environmental Protection Authority (EPA) on 5 July 2017. The EPA requested additional information on the referral which was received on 27 April 2021. The referral information was published on the EPA website for seven days public comment. On 20 October 2021, the EPA decided to assess the proposal at the level Information with addition information. The EPA also published the additional information on its website for public review for six weeks (from 26 November 2024 to 7 January 2025).

The proposal was determined under the *Environment Protection and Biodiversity Conservation Act 1999* to be a controlled action and to be assessed by the EPA under an accredited process.

The elements of the proposal which have been subject to the EPA's assessment are included in Table 1.

**Table 1: Proposal content elements (based on information supplied by Crestlink)**

Proposal element	Location	Maximum extent or range
<i>Physical elements</i>		
Airfield, apron and support infrastructure	Figure 2	No more than 18.84 ha within a 52.81 ha development envelope
Wharf		No more than 5.75 ha and floating infrastructure of 0.82 ha within a 52.81 ha development envelope
<i>Construction elements</i>		
Land reclamation	Figure 2	Up to 700,000m <sup>3</sup> of fill (benign mine waste).
<i>Proposal elements with greenhouse gas emissions</i>		
<i>Construction elements</i>		
Scope 1	Scope 1 GHG emissions associated with construction are expected to be no more than 50,000 tonnes CO <sub>2</sub> -e per annum (assuming 1 year construction period), which places the proposal below the 100,000 tonnes CO <sub>2</sub> -e per annum threshold as defined under the Australian Government's Safeguard Mechanism.	
Scope 2	NA	

Proposal element		Location	Maximum extent or range
Scope 3		Emissions during manufacturing and construction of facility and equipment are expected to be less than 100,000 tCO2-e per annum.	
Operational elements			
Scope 1		Scope 1 GHG emissions associated with operation are expected to be no more than 5,000 tonnes CO <sub>2</sub> -e per annum (taking a conservative approach with respect to cleared vegetation and no rehabilitation following construction considered), which places the proposal below the 100,000 tonnes CO <sub>2</sub> -e per annum threshold as defined under the Australian Government's Safeguard Mechanism.	
Scope 2		Emissions during operation of facility and equipment are expected to be less than 100,000 tCO2-e per annum	
Scope 3		N/A	
Rehabilitation			
Final closure and rehabilitation following cessation of operations.			
Commissioning			
No commissioning operations are required.			
Decommissioning			
Removal of all above-surface infrastructure following cessation of operations.			
Timing elements			
Maximum proposal life		64 years	
Construction phase		1 year	
Operational phase		63 years	
Decommissioning phase		1 year	

**Units and abbreviations**

ha – hectare

m<sup>3</sup> –cubic metretCO<sub>2</sub>-e – tonnes carbon dioxide equivalent

## Proposal amendments and alternatives

The original proposal is set out in section 2 of the proponent's referral supporting report (GHD 2025c), which is available on the EPA website. During the assessment process the EPA encouraged the proponent to identify avoidance and mitigation measures for the proposal in addition to those included in the original proposal.

The proponent requested changes to the original proposal during the assessment under s.43A of the *Environmental Protection Act 1986*. The changes were assessed to be unlikely to significantly increase any impacts of the proposal and the proposal substantially the same character as the existing referred proposal. The EPA Chair's approval of the amended referral was issued on 7 November 2023.

The consolidated and updated elements of the proposal which has been subject to the EPA's assessment is included in Table 1.

Due to the nature of the activity, the location of the proposal was largely constrained. Therefore, the proponent did not consider alternative locations for the proposal.

### Proposal context

The proposal is within the West Kimberley, a National Heritage listed place under the EPBC Act. The West Kimberley Heritage Area covers more than 19 million ha, including the coastal area from Cape Leveque to the Cambridge Gulf and inland to encompass the Fitzroy River and the Kimberley plateau. The West Kimberley National Heritage Place is valued for its intact ecosystems, ancient landforms, and unique biodiversity, supporting species and habitats of national environmental significance (DCCEEW 2022).

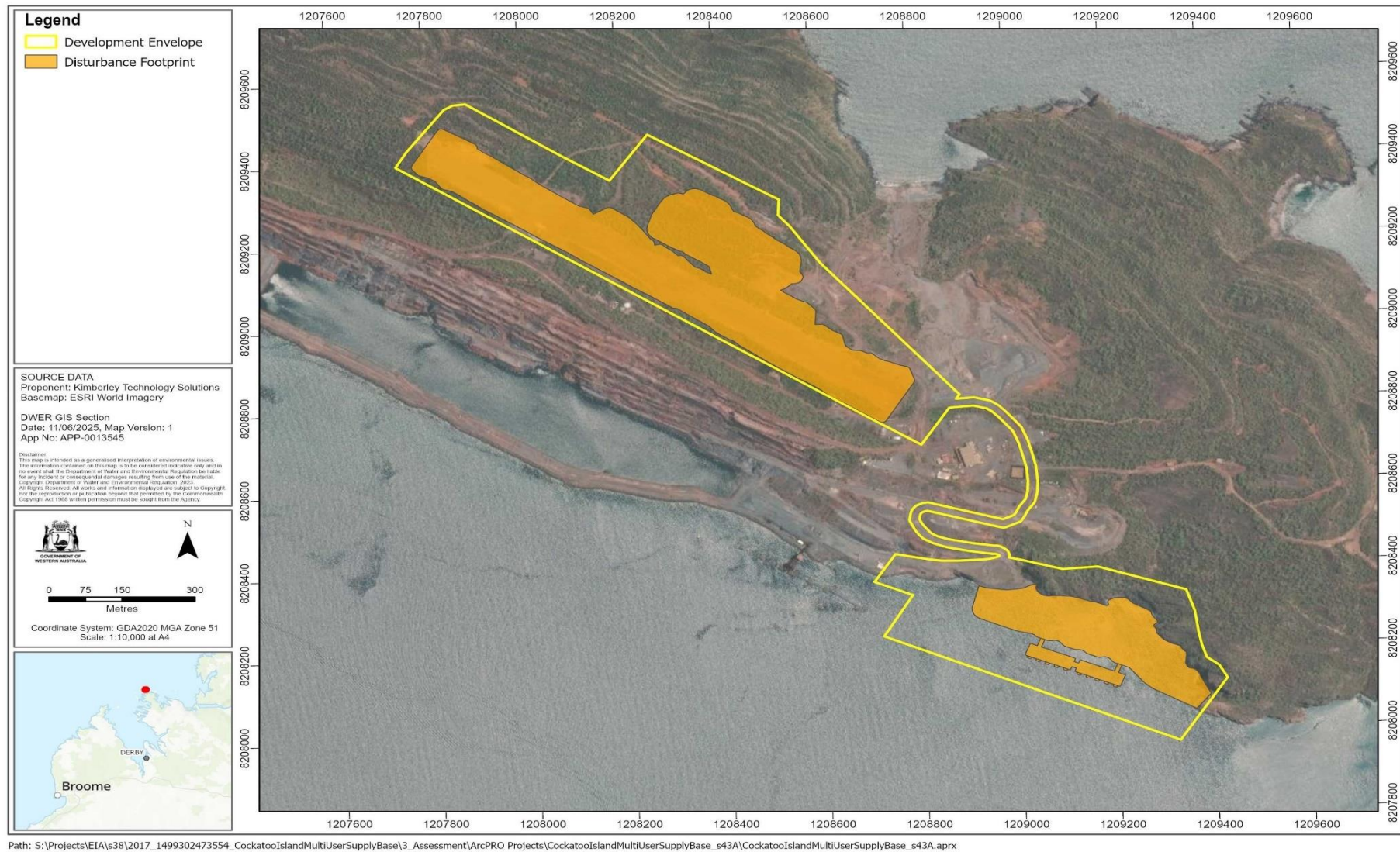
Cockatoo Island has had a long history of development with the first iron ore mining occurring in 1951, until its suspension in the 1980's. Tourism operations started on the island following the suspension of mining. Mining operations were intermittently initiated with retreatment of previous waste-rock and the formation of a seawall and the commencement mining below sea. More recently Cockatoo Island Mining Pty Ltd and Pearl Gull Iron Ltd hold mining leases on the island.

Cockatoo Island is located in Dambimangari country, north of Derby, adjacent to two marine parks (Mayala and Lalang-gaddam) and within the Port of Yampi Sound. It is considered an important migration route for humpback whales.



**Figure 1: Project location showing the development envelope on Cockatoo Island.**





**Figure 2: Development envelope and disturbance footprint of the Cockatoo Island MUSB proposal**

## 2 Assessment of key environmental factors

This section reports on the outcome EPA's assessment of the key environmental factors against its environmental objectives and its recommendations on conditions that the proposal should be subject to if it is implemented. The EPA has considered the principles of the EP Act (see Appendix D) in assessing whether the residual impacts will be consistent with its environmental factor objectives. The EPA evaluated the impacts of the proposal on other environmental factors and concluded these were not key factors for the assessment. This evaluation is included in Appendix E.

### 2.1 Marine fauna

The EPA environmental objective for marine fauna is *to protect marine fauna so that biological diversity and ecological integrity are maintained* (EPA 2016e).

The proponent submitted the following investigations for the assessment:

- Kimberley Technology Solutions Pty Ltd Cockatoo Island Multi-User Supply Base Technical Study - Marine Flora and Fauna (appendix A10 of the supporting document dated 8 October 2024) (GHD 2017a)
- Kimberley Supply Chain Cluster EIA Marine Flora and Fauna appendix A1 of the supporting document dated 28 March 2025) (GHD 2025b)
- Crestlink Pty Ltd Cockatoo Island Multi-Use Supply Base Supporting Document (GHD 2025c)
- Kimberley Supply Chain Cluster Underwater Noise Impact Assessment (appendix A16 of the supporting document dated 28 March 2025) (GHD 2025d)

The EPA notes that the information presented in relation to marine fauna was largely consistent with the EPA's Technical guidance – *Environmental Factor Guideline: Marine Fauna* (EPA 2016e). The EPA sought advice from DBCA and DWER in relation to the marine fauna survey that was considered as part of this assessment. The EPA determined it could proceed with its assessment as sufficient information has been provided to inform the assessment.

**Table 2: Assessment of marine fauna**

<b>Key environmental values and context</b>	
<p>The marine environment surrounding the proposal area includes a range of habitat types, including intertidal reef platforms, subtidal soft sediment areas, discrete patches of hard coral, and macroalgal communities. These habitats provide important ecological functions such as foraging, resting, and movement corridors for conservation significant marine fauna. No critical habitats, such as turtle nesting beaches or sawfish nursery areas are known to occur within the development envelope or more broadly for Cockatoo Island.</p> <p>To inform the environmental baseline, the proponent has primarily relied on desktop assessments rather than targeted field surveys. A variety of fauna are known to utilise the waters within the proposal area, several of which are protected under State and Commonwealth legislation. Conservation significant marine fauna species known or considered likely to occur within the development envelope and surrounding area include the humpback whale (<i>Megaptera novaeangliae</i>) (conservation dependent), green sawfish (<i>Pristis zijsron</i>) (critically endangered), Australian humpback dolphin (<i>Sousa sahalensis</i>) (vulnerable), Australian snubfin dolphin (<i>Orcaella heinsohni</i>) (vulnerable), flatback turtle (<i>Natator depressus</i>) (vulnerable), green turtle (<i>Chelonia mydas</i>) (vulnerable), hawksbill turtle (<i>Eretmochelys imbricata</i>) (vulnerable) and olive ridley turtle (<i>Lepidochelys olivacea</i>) (vulnerable). Biologically important areas for these species, particularly humpback whales, dolphins, marine turtles, and sawfish, coincide with the proposal area (GHD 2025b).</p> <p>Six species listed as Migratory under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) were recorded within the survey area, which encompasses the development envelope: eastern osprey (<i>Pandion cristatus</i>), lesser frigatebird (<i>Fregata ariel</i>), common sandpiper (<i>Actitis hypoleucos</i>), Whimbrel (<i>Numenius phaeopus</i>), Common Greenshank (<i>Tinga nebularia</i>) and Gull-billed Tern (<i>Gelochelidon nigricans</i>). The lesser frigatebird, osprey and common sandpiper were observed in flight during surveys and considered to use the area opportunistically for foraging. The whimbrel, common greenshank and gull-billed tern were recorded foraging along the tidal flats and adjacent shoreline of the island, outside the development envelope (GHD 2017a).</p>	
<b>Impacts from the proposal</b>	<b>Assessment finding, environmental outcome and recommended conditions</b>
<p><b>Potential impacts</b></p> <p>The proposal has the potential to impact on marine fauna from:</p> <ul style="list-style-type: none"> <li>behavioural responses associated with underwater noise, artificial light, and changes in water quality, including sedimentation and sediment resuspension</li> <li>potential injury, entrapment, death associated with rock dumping during construction or</li> </ul>	<p><b>Assessment finding and environmental outcomes</b></p> <p>Rock dumping activities, to support the land reclamation and wharf construction, will generate underwater noise during construction which may either have a physiological impact to an animal's hearing (which can be either permanent or temporary) or a behavioural response (such as fleeing or moving away).</p> <p>Underwater noise modelling indicates that the permanent threshold shift to low-frequency cetaceans may occur within 10 m of construction activities, while temporary threshold shift may extend up to 430 m. In considering appropriate mitigation measures, the EPA notes that a 500-metre exclusion zone has been applied in recent</p>



<p>vessel strike during construction and operations</p> <ul style="list-style-type: none"> <li>• permanent loss, degradation, or modification of habitat</li> <li>• introduction of invasive marine species from vessel movement and infrastructure development.</li> </ul> <p><b>Avoidance and minimisation measures (including regulation by other DMAs)</b></p> <ul style="list-style-type: none"> <li>• the use of marine fauna observation, and exclusion zones during reclamation construction</li> <li>• start up and stop work procedures in the event marine fauna are observed in proximity to vessels and construction activities</li> <li>• in accordance with the <i>Commonwealth Biosecurity Act 2015</i>, all vessels entering Australian waters must submit information through the Marine Arrivals Reporting System (MARS), which includes mandatory ballast water and biofouling management protocols to reduce the risk of introducing invasive marine species</li> </ul> <p><b>Other decision-making processes</b></p> <p>The EPA also notes vessel collision risk during operation of the proposal will be managed through adherence to safe navigation practices and any applicable vessel requirements, as designated by the Department of Transport and the Kimberley Ports Authority for the Port of Yampi Sound.</p>	<p>approvals such as the Optimised Mardie Project (Ministerial Statement 1211) and reflects current best practice in environmental management for similar proposals. Accordingly, the EPA has recommended condition B1-2, requiring the implementation of industry standard noise management protocols, including soft start procedures, observation zones and exclusion zones. The migratory corridor of humpback whales along the Western Australian coastline includes the waters of the Buccaneer Archipelago, with the Kimberley region recognised as a potential calving ground for the species (WAMSI 2018). The EPA recognises the ecological significance of this area for humpback whale calving and has recommended conditions B1-2(3) and B1-2(4) which requires the proponent to implement a 1 km exclusion zone and a 2 km observation zone during the June – September period, whereby industry standard noise management protocols must be implemented.</p> <p>While the proponent's desktop study indicates that significant marine fauna, including marine turtles, dolphins and sawfish, are likely to occur in the area, the EPA notes there are no confirmed nesting beaches for marine turtles nor documented pupping areas for sawfish known at Cockatoo Island. However, given the limited supporting surveys conducted by the proponent the EPA recommended conditions B1-1(1) through to B1-1(4) to ensure that potential impacts to these species can be appropriately managed to ensure the EPAS objectives are met.</p> <p>The volume and frequency of vessel movements is likely to increase as the supply base becomes operational. To manage potential impacts on significant marine fauna, the proponent has committed to implement measures including use of marine fauna observers and caution zones. Additionally, the EPA recommends condition B1-1(9), requiring all project related vessels to operate at a maximum of 8 knots within the high ecological protection zone to ensure the EPA's objective for marine fauna.</p> <p>Increased artificial light emissions from the proposal has the potential to impact on marine turtles and migratory shorebirds, and may result in the disorientation of turtle hatchlings, disruption adult turtle navigation during foraging, and alter the natural behaviour of migratory shorebirds. To minimise potential impacts the proponent has committed to implementing lighting controls consistent with the <i>National Light Pollution Guidelines for Wildlife</i> (DCCEEW, 2023). The EPA has recommended outcome-based condition B1-2(10) which requires no disturbance to significant marine fauna from</p>
--	--



<p><b>Consultation</b></p> <p>During the public comment period, concerns were raised regarding the currency and adequacy of the supporting technical data and documentation, as well as the preliminary nature of the risk-based assessment for marine fauna.</p>	<p>project related artificial light. The EPA considers the application of industry standard light mitigation and management procedures, combined with recommended outcome-based conditions, that the EPA's objective for marine fauna would be met.</p> <p>The six migratory shorebird species are currently assessed as Least Concern under the International Union for Conservation of Nature (IUCN) Red List of Threatened Species. While Cockatoo Island may provide suitable or opportunistic habitat for foraging or roosting, particularly in surrounding coastal and marine areas, it is not identified as supporting critical habitat for these species under current national or international conservation listings. Given the transient nature of habitat use and absence of breeding activity, the proposal is unlikely to result in a significant impact on these species. Accordingly, the EPA considers its objective for this factor is likely to be met.</p> <p>The EPA notes that increased turbidity may temporarily reduce the feeding efficiency of certain marine fauna; however, these effects are expected to be localised, of limited duration and minor. Further discussion on water quality is provided in greater detail in Section 2.2 (Marine Environmental Quality).</p> <p><b>Cumulative impact</b></p> <p>The EPA considered the successive, incremental and interactive impacts to marine fauna from the proposal in the context of past, present and reasonably foreseeable future activities. The surrounding area is subject to limited development, with Koolan Island (currently regulated under Ministerial Statement 715) representing the closest active operation. Cone Bay, associated with ocean barramundi aquaculture, is the nearest other potential source of impact. The presence of adjacent marine protected areas (MPAs) provides an additional layer of protection and management. The EPA considers residual impacts to marine fauna to be minimal and unlikely to contribute to existing or foreseeable pressures, subject to implementation of recommended conditions.</p> <p><b>Recommended conditions to ensure consistency of environmental outcome with EPA objective</b></p> <p>Condition A1</p> <ul style="list-style-type: none"> <li>• Limits and extents on proposal</li> </ul>
---	--

---

	<p>Condition B1</p> <ul style="list-style-type: none"><li>• Implement noise management procedures</li><li>• Implement exclusion and observation zones during marine construction</li><li>• Minimise behaviour changes, health impacts and physical injury</li><li>• Implement lighting design consistent with the <i>National Light Pollution Guidelines for Wildlife</i> (2023)</li></ul>
--	--

## 2.2 Marine environmental quality

The EPA environmental objective for marine environmental quality is *to maintain the quality of water, sediment and biota so that environmental values are protected* (EPA 2016d).

The proponent submitted the following investigations for the assessment:

- Crestlink Pty Ltd Cockatoo Island Multi-Use Supply Base Supporting Document (GHD 2025c)
- Kimberley Technology Solutions Pty Ltd Kimberley Supply Chain Cluster EIA – Phase 2 Marine Modelling of Coastal Processes and Construction Impacts (appendix A6 of the supporting document dated 28 March 2025) (GHD 2021)
- Kimberley Supply Chain Cluster Marine Environmental Quality Survey (appendix A13 of the supporting document dated 28 March 2025) (GHD, 2025a)
- Kimberley Supply Chain Cluster – Final Approvals Documentation (appendix A14 of the supporting document dated 28 March 2025) (GHD 2025e)

The EPA notes that the information presented in relation to marine environmental quality was partly consistent with the EPA's Technical guidance – *Environmental Factor Guideline: Marine Environmental Quality* (EPA 2016i). The EPA sought advice from DBCA and DWER in relation to the marine environmental quality survey that was considered as part of this assessment. The EPA determined it could proceed with its assessment as sufficient information has been provided to inform the assessment.

**Table 3: Assessment of marine environmental quality**

<b>Key environmental values and context</b>	
<p>The proposal is situated within a naturally turbid marine environment characterised by dynamic hydrodynamic conditions and strong tidal influences. Cockatoo Island experiences a macrotidal regime, with semi-diurnal tidal cycles resulting in two high and two low tides within a typical 24-hour period. The tidal range exceeds 10 metres, contributing to significant water movement and sediment resuspension across the development envelope (GHD 2021). Approximately 700,000 cubic metres (m<sup>3</sup>) of fill material is required for the proposed reclamation. The proposal does not involve dredging or dredge discharge to the marine environment.</p>	
<b>Impacts from the proposal</b>	<b>Assessment finding, environmental outcome and recommended conditions</b>
<p><b>Potential impacts</b></p> <p>The proposal has the potential to impact on marine environmental quality from:</p> <ul style="list-style-type: none"> <li>• temporary reduction in marine environmental quality from increased turbidity and sedimentation during land reclamation and rock dumping.</li> <li>• reduction in marine environmental quality due to seabed disturbance which may mobilise contaminants</li> <li>• risk of unplanned spills during construction and operations</li> <li>• hydrodynamic impacts from reclamation</li> </ul> <p><b>Avoidance and minimisation measures (including regulation by other DMAs)</b></p> <ul style="list-style-type: none"> <li>• undertake a pre-construction sediment quality survey</li> </ul>	<p><b>Assessment finding and environmental outcomes</b></p> <p>The rock dumping activities will result in a temporary increase in turbidity and sedimentation during construction, which is expected to be up to 12 months.</p> <p>Reclamation fill will be sourced from quarry material located on Cockatoo Island, supplied by a third party. Preliminary results suggest low contamination risk, but further investigation is required given the Cockatoo Island was classified under the <i>Contaminated Sites Act 2003</i> (CS Act) on 17 June 2014 as Contaminated – remediation required (C–RR). The proponent has committed to implement a staged sediment quality monitoring program to manage potential contamination risks from reclamation fill material. A pre-construction sediment quality survey will be conducted. In addition, progressive sampling and analysis of the fine fraction of each fill batch will be undertaken prior to use to confirm the material is chemically benign. Accordingly, the EPA has recommended condition B2-1(2) ensuring the reclamation fill material does not result in contamination of the marine environment.</p> <p>Baseline marine water and sediment quality within the development envelope were generally consistent with the guiding values outlined in the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG 2018). Slight elevations in turbidity and nutrients were observed at some sites but remained within acceptable ecological thresholds. No exceedances of metals or hydrocarbons in sediments were recorded. The EPA considers residual impacts to MEQ are likely to be low provided construction and operational controls are</p>

<ul style="list-style-type: none"> <li>• undertake progressive detailed sampling and analysis of the fines in the proposed fill material to ensure it does not contain contaminants</li> <li>• water quality and sediment quality monitoring</li> <li>• implement the EMP</li> <li>• implement waste management procedures on the wharf during operations and comply with EP Act Controlled Waste Regulations 2004.</li> <li>• marine vessels must comply with the International Convention for the Prevention of Pollution from Ships (MARPOL) requirements, including those for oil and sewage</li> <li>• compliance with Dangerous Goods and Safety Act 2004 when transferring hazardous waste</li> </ul> <p><b>Consultation</b></p> <p>During the referral comment period, concerns were raised about the potential impacts on marine environmental quality from waste disposal and the lack of information presented.</p>	<p>implemented and supported by ongoing monitoring. To ensure the EPA's objective for MEQ is achieved and maintained, the EPA recommends condition B2-1(1), which requires the proponent to meet the relevant levels of ecological protection.</p> <p>Hydrodynamic modelling predicts minor, highly localised changes to current velocities, confined to the immediate vicinity of the wharf. The proposal is not expected to disrupt longshore currents or significantly alter coastal processes. Residual impacts on sediment transport, geomorphology, and flow patterns will remain spatially limited to the disturbance footprint.</p> <p><b>Cumulative impact</b></p> <p>Impacts to marine environmental quality from the proposal in the context of past, present and reasonably foreseeable future activities, including potential increases in vessel movements, contamination, waste handling and fuel and chemical storage were considered by the EPA. The EPA is not aware of other proposals near Cockatoo Island or in the locality of Yampi Sound. Additionally, the controlled nature of the Port of Yampi Sound, such as restrictions on vessel size and other safety requirements, helps minimise vessel related risks. Subject to implementation of the proponent's mitigation measures and compliance with the EPA's recommended conditions, impacts from the proposal to marine environmental quality are unlikely and the EPA recognises that the proposal is not expected to contribute to existing or foreseeable threats or pressures in the locality.</p> <p><b>Recommended conditions to ensure consistency of environmental outcome with EPA objective</b></p> <p>Condition B2</p> <ul style="list-style-type: none"> <li>• No adverse impacts on marine environmental values</li> <li>• Levels of ecological protection to be achieved inside the Moderate Ecological Protection Area (MEPA) and High Ecological Protection Area (HEPA)</li> <li>• Reclamation fill material does not result in chemical contamination to the marine environment</li> </ul> <p>Condition B6</p>
--	--

---

	<ul style="list-style-type: none"><li>• Revise and implement the EMP</li></ul>
--	--

## 2.3 Benthic communities and habitats

The EPA environmental objective for benthic communities and habitats is *to protect benthic communities and habitats so that biological diversity and ecological integrity are maintained* (EPA 2016a).

The proponent submitted the following investigations for the assessment:

- Crestlink Pty Ltd Cockatoo Island Multi-Use Supply Base Supporting Document (GHD 2025c)
- Kimberley Technology Solutions Pty Ltd Kimberley Supply Chain Cluster EIA – Phase 2 Marine Modelling of Coastal Processes and Construction Impacts (appendix A6 of the supporting document dated 28 March 2025) (GHD 2021)
- Kimberley Technology Solutions Pty Ltd Desktop BCH LAU Assessment and Bay 1 Visual Assessment (appendix A2 of the supporting document dated 28 March 2025) (GHD 2024)
- Cockatoo Island barge Wharf benthic habitat survey (appendix A4 of the supporting document dated 28 March 2025) (MScience 2013)

The EPA notes that the information presented in relation to benthic communities and habitats was largely consistent with the EPA's Technical guidance – *Protection of Benthic Communities and Habitats* (EPA 2016j). The EPA sought advice from DBCA and DWER in relation to the benthic community and habitat survey's information presented by the proponent as part of this assessment. The EPA determined it could proceed with its assessment as sufficient information has been provided to inform the assessment.

**Table 4: Assessment of benthic communities and habitats**

<b>Key environmental values and context</b>	
<p>The EPA uses local assessment units (LAUs) to map and assess impacts to benthic habitats on an appropriate scale, and to assist in assessing cumulative impacts at a regional scale. The proposal's LAU encompasses Cockatoo, Irvine and Bathurst Islands, based on shared geomorphic features, ecological connectivity through coral larvae dispersal, and similar environmental conditions. It is adjacent to two A Class marine parks, Mayala and Lalang-gaddam, which support ecologically significant benthic communities. Benthic communities in the Kimberley region play a critical role in supporting ecosystem productivity, with macroalgae and seagrass beds contributing significantly to primary production in intertidal and subtidal zones (WAMSI 2016). The nearshore environment is characterised by a shallow sandy substrate extending approximately 120 metres from the shoreline transitioning into a steep drop-off where benthic communities are dominated by hard corals, interspersed with patches of macroalgae (GHD 2025b).</p> <p>The EPA considered that the key environmental values associated with BCH for this proposal are hard coral assemblages and macroalgae communities, which contribute to nutrient cycling, primary productivity, and habitat for marine fauna.</p>	
<b>Impacts from the proposal</b>	<b>Assessment finding, environmental outcome and recommended conditions</b>
<p><b>Potential impacts</b></p> <ul style="list-style-type: none"> <li>loss of up to 5.75 ha of benthic habitat comprising 5.21 ha of sand and rocky substrate, and 0.54 ha of hard coral and macroalgae from reclamation activities</li> <li>direct disturbance, sedimentation, smothering and increased turbidity associated with land reclamation, and wharf construction</li> </ul> <p><b>Avoidance and minimisation measures (including regulation by other DMAs)</b></p> <ul style="list-style-type: none"> <li>floating wharf structures will be located in deeper water to minimise shading impacts on benthic primary producers.</li> </ul>	<p><b>Assessment finding and environmental outcomes</b></p> <p>The proposed wharf development is expected to result in the complete loss of existing hard coral and macroalgae communities due to direct impacts, which represents a loss of 0.03% of hard coral and 0.06% of macroalgae within the LAU. Historic losses within the LAU are estimated at 0.1% for hard coral and 0.8% for macroalgae, primarily attributed to past mining activities on Cockatoo Island. The EPA considers that the predicted direct loss of hard coral and macroalgae is unlikely to result in a significant residual impact on BCH.</p> <p>Modelling undertaken by the proponent indicates that temporary increases in suspended solid concentrations are expected during the construction phase of the wharf. These concentrations are predicted to exceed ambient levels by more than 3 mg/L for up to 5% of the total construction period. The reduced water quality in the immediate area from elevated turbidity levels and associated sedimentation, may impact benthic primary producers by reducing light availability or causing smothering. Elevated suspended sediment concentrations are predicted to be confined to the western most edge near the wharf reclamation (GHD 2021). While sedimentation impacts in adjacent bays to the south-east are expected to be minimal during early construction, they are predicted to</p>



<ul style="list-style-type: none"> <li>• permanent moorings will be used when the wharf reaches capacity, avoiding routine anchoring</li> </ul> <p><b>Consultation</b></p> <p>During the public comment period, concerns were raised regarding the currency and adequacy of the supporting technical data and documentation.</p>	<p>increase as works progress and the turbidity source shifts closer to immediately adjacent southeastern bay. The EPA considers indirect impacts are expected to be localised and minor in nature.</p> <p>Given the minor scale and extent of the predicted loss and noting the application of recommended conditions B3-1(1) and B3-1(2) which ensure no irreversible loss of BCH in the MEPA and no detectable change in the HEPA, the EPA considers the proposal to be consistent with the environmental objective for benthic communities and habitats, ensuring the maintenance of biological diversity and ecological integrity.</p> <p><b>Cumulative impact</b></p> <p>Within the LAU, the cumulative loss of 0.03% of hard coral and 0.06% of macroalgae is not considered to pose a significant risk to the ecological integrity and biological diversity of benthic communities. The broader region has few developments approved or proposed with the nearby Koolan Island Iron Ore mine being the closest proposal of note. While the EPA recognises that the proposal has the potential to increase development in the region, the adjacent gazetted marine parks and the remoteness of the area is likely to mitigate reasonably foreseeable cumulative impacts. The EPA notes that subject to implementation of the proponent's mitigation measures and the EPA's recommended conditions, cumulative impacts from the proposal to benthic communities and habitats are unlikely.</p> <p><b>Recommended conditions to ensure consistency of environmental outcome with EPA objective</b></p> <p>Condition A1</p> <ul style="list-style-type: none"> <li>• Limits and extents on proposal</li> </ul> <p>Condition B3</p> <ul style="list-style-type: none"> <li>• No irreversible loss of benthic communities and habitats within the Moderate Ecological Protection Area</li> <li>• No detectable change from the baseline state of benthic communities and habitats within the High Ecological Protection Area</li> </ul>
--	---

## 2.4 Terrestrial fauna

The EPA environmental objective for terrestrial fauna is *to protect terrestrial fauna so that biological diversity and ecological integrity are maintained* (EPA 2016g).

The proponent submitted the following investigations for the assessment:

- Pluton Resources Ltd Cockatoo Island Flora, Fauna and SRE surveys (appendix A9 of the supporting document dated 28 March 2025) (GHD 2014)
- Kimberley Technology Solutions Pty Ltd Cockatoo Island Multi-User Supply Base – Technical Study – Terrestrial Flora and Fauna (appendix A10 of the supporting document dated 28 March 2025) (GHD 2017b)
- Crestlink Pty Ltd Cockatoo Island Multi-Use Supply Base Targeted Fauna and Flora Survey (appendix A15 of the supporting document dated 28 March 2025) (Ecologia 2025)
- Crestlink Pty Ltd Cockatoo Island Multi-Use Supply Base Supporting Document (GHD 2025c)

The EPA notes that the information presented in relation to terrestrial fauna was mostly in accordance with the EPA's Technical guidance – *Terrestrial vertebrate fauna surveys for environmental impact assessment* (EPA 2020b). The EPA sought advice from DBCA and DWER in relation to the terrestrial fauna survey information as part of this assessment. The EPA determined it could proceed with its assessment as sufficient information has been provided to inform the assessment.

**Table 5: Assessment of terrestrial fauna**

<b>Key environmental values and context</b>	
<p>The proponent mapped one broad habitat type within the development envelope, <i>Eucalyptus</i> open woodland habitat (with some rocky ridgelines and exposed rocky areas). The woodland habitat provides foraging and hunting habitat for the ghost bat (<i>Macroderma gigas</i>, VU), and northern leaf-nosed bat (<i>Hipposideros stenotis</i>, P2).</p> <p>No permanent waterbodies are present within the development envelope or broader survey area. However, ephemeral pooling occurs seasonally in rocky depressions and within the historic tailings dam. Minor drainage lines traverse gullies across the site, transporting surface water runoff following seasonal rainfall (GHD 2017b).</p> <p>Three likely and 15 potential short-range endemic (SRE) species were recorded in the survey area in the <i>Eucalyptus</i> woodland habitat.</p> <p>The masked owl (northern subspecies) (<i>Tyto novaehollandiae kimberli</i>, VU EPBC Act, P1 BC Act) was recorded once, in 2014 approximately 1400 metres east of the airstrip. Targeted surveys conducted in 2017 and 2025 did not detect the presence of this species within the development envelope. Nine trees with large hollows were identified, which may provide habitat, but no signs of current or past use were observed. Based on these findings, the likelihood of the species occurring within the site is considered low. Considering this, the EPA is satisfied that no further assessment is required for the species.</p>	
<b>Impacts from the proposal</b>	<b>Assessment finding, environmental outcome and recommended conditions</b>
<p><b>Potential impacts</b></p> <p>The proposal has the potential to impact on terrestrial fauna from:</p> <ul style="list-style-type: none"> <li>clearing of up to 7.37 ha of ghost bat and northern leaf-nosed bat foraging/hunting habitat and potential SRE habitat</li> <li>increased noise, dust, vibration, and light emissions during construction and operation</li> <li>increase risk of vehicle strike during construction and bat strikes from aviation traffic during operations</li> </ul>	<p><b>Assessment finding and environmental outcomes</b></p> <p>The ghost bat (<i>Macroderma gigas</i>, Vulnerable) and northern leaf-nosed bat (<i>Hipposideros stenotis</i>, Priority 2) were recorded within the development envelope. While the northern leaf-nosed bat is known from Cockatoo, Koolan, Irvine, and Bathurst Islands, no suitable roosting habitat were identified during the targeted survey. No ghost bat roosts were detected, although a potentially suitable cave was observed approximately 800 metres northwest of the development envelope.</p> <p>The development envelope comprises a single broad habitat type, <i>Eucalyptus</i> open woodland with rocky ridgelines and exposed areas, which is likely to provide foraging habitat for both species. This habitat type is widespread across Cockatoo Island and neighbouring islands of the northwestern Kimberley coast. Given the widespread availability of suitable habitat, the foraging range of both species, and the small-scale of</p>

<ul style="list-style-type: none"> <li>• increase in feral animal abundance</li> </ul> <p><b>Avoidance and minimisation measures (including regulation by other DMAs)</b></p> <ul style="list-style-type: none"> <li>• a suitably qualified fauna spotter will be present during land clearing activities</li> <li>• implement dust suppression measures</li> <li>• construction vehicle movements, including clearing activities, will occur during daylight, where possible, which will minimise interactions with nocturnal species</li> <li>• land clearing will be undertaken on one front and in one direction, where practicable, to allow fauna to exit the area</li> <li>• reduced speed limits</li> <li>• lighting will be designed to minimise intensity and duration</li> </ul> <p><b>Consultation</b></p> <p>During the public comment period, concerns were raised regarding the currency and adequacy of the supporting technical data and the lack of cumulative impact assessment.</p>	<p>clearing, the EPA considers the proposal is unlikely to result in a significant residual impact or affect the viability or conservation status of either species. Notwithstanding this, the EPA has recommended condition B4-1(1) to limit the extent of clearing of <i>Eucalyptus</i> open woodland habitat type.</p> <p>The proponent has committed to mitigation measures including dust suppression, lighting controls, and reduced vehicle speeds to minimise impacts on terrestrial fauna. The EPA considers these measures sufficient to address potential emissions of noise, dust, vibration, and light. Additionally, the EPA has recommended condition B4-2, requiring a maximum speed limit of 40 km/hr within the development envelope during construction and operational phases which is consistent with measures employed at Koolan Island (MS 715) for significant fauna.</p> <p>Island ecosystems are particularly susceptible to ecological disruption from invasive species, and this risk is relevant by the supply base receiving goods from multiple source localities. Although Cockatoo Island has a history of long-term operations, to address the pest incursion risk, the EPA has recommended an environmental outcome of no detectable increase in feral animal abundance, consistent with its objective to protect and maintain the ecological integrity of the island.</p> <p>Subject to the recommended conditions, the environmental outcome for terrestrial fauna is likely to be consistent with the EPA's objective for this factor.</p> <p><b>Cumulative impact</b></p> <p>Notably, Koolan Island, located nearby, has been subject to significant land use under Ministerial Statement 715, which permits disturbance of up to 670 hectares out of a total island area of approximately 2,580 hectares. The island shares similar woodland habitat characteristics with Cockatoo Island. The EPA notes there are currently no other proposed developments in the region. Historical mining has cleared approximately 109 ha of <i>Eucalyptus</i> open woodland habitat on Cockatoo Island. The proposal would increase this by an additional 7.37 ha, increasing the cumulative total to 116.37 ha. Based on vegetation mapping (GHD 2014), this equates to approximately 65.7% of <i>Eucalyptus</i> open woodland remaining on the island.</p>
---	---

	<p>No further vegetation clearing is proposed according to the Cockatoo Island Mining Pty Ltd mining proposal (2024), and no additional development is planned for adjacent Irvine Island. In the context of past, present and reasonably foreseeable future activities, the EPA considered the successive, incremental and interactive impacts to terrestrial fauna values from the proposal. Given the limited scale of non-critical habitat for conservation significant fauna likely to be impacted by the proposal, the EPA concluded the impacts to terrestrial fauna from the proposal are unlikely to significantly contribute to, or exacerbate, potential future impacts to similar environmental values in the locality.</p> <p><b>Recommended conditions to ensure consistency of environmental outcome with EPA objective</b></p> <p>Condition A1</p> <ul style="list-style-type: none"><li>• limits and extents on proposal</li></ul> <p>Condition B4</p> <ul style="list-style-type: none"><li>• disturbance limits on <i>Eucalyptus</i> open woodland habitat type</li><li>• no increase in feral animal abundance</li><li>• speed limits</li></ul>
--	---

## 2.5 Flora and vegetation

The EPA environmental objective for flora and vegetation is *to protect flora and vegetation so that biological diversity and ecological integrity are maintained* (EPA 2016c).

The proponent submitted the following investigations for the assessment

- Pluton Resources Ltd Cockatoo Island Flora, Fauna and SRE surveys (appendix A9 of the supporting document dated 28 March 2025) (GHD 2014)
- Kimberley Technology Solutions Pty Ltd Cockatoo Island Multi-User Supply Base – Technical Study – Terrestrial Flora and Fauna (appendix A10 of the supporting document dated 28 March 2025) (GHD 2017)
- Crestlink Pty Ltd Cockatoo Island Multi-Use Supply Base Targeted Fauna and Flora Survey (appendix A15 of the supporting document dated 28 March 2025) (Ecologia 2025)
- Crestlink Pty Ltd Cockatoo Island Multi-Use Supply Base Supporting Document (GHD 2025c)
- Cockatoo Island Supply Base Aerodrome Concept Drainage Design (Hallbridge 2024)

The EPA notes that the flora and vegetation information provided by the proponent was aligned with the EPA's Technical guidance – *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA 2016h). The EPA sought advice from DBCA and DWER in relation to the flora and vegetation survey information considered in this assessment, and the EPA determined it could proceed with its assessment as sufficient information has been provided to inform the assessment.

**Table 6: Assessment of flora and vegetation**

Key environmental values and context	
<p>The proposal is located in the Mitchell subregion of the Northern Kimberley bioregion as defined by the Interim Biogeographic Regionalisation for Australia (IBRA). Historical land use activities on Cockatoo Island have been disturbed by past mining, infrastructure, and development activities. The remaining undeveloped areas of the island support remnant native vegetation, most of which is in 'Good' to 'Very Good' condition (GHD 2017b).</p> <p>No Threatened Ecological Communities (TECs) listed under the EPBC Act or BC Act, or Priority Ecological Communities (PECs) as listed by the Department of Biodiversity, Conservation and Attractions (DBCA) were recorded within the development envelope. No species listed as threatened flora under the EPBC Act or BC Act have been recorded within the development envelope.</p> <p>One priority flora listed under the BC Act, <i>Triodia sp.</i> Hidden Island (P1), was recorded within the development envelope.</p> <p>Three vegetation types were mapped within the survey area. Small, isolated patches of <i>Dioscorea vinela</i> and <i>Eucalyptus</i> open woodland mosaic exhibit restricted distribution and are locally endemic (GHD 2017b). These patches are located approximately two kilometres outside the development envelope and will not likely be impacted by the proposal. As such, no further assessment has been undertaken.</p>	
Impacts from the proposal	Assessment finding, environmental outcome and recommended conditions
<p><b>Potential impacts</b></p> <p>The proposal has the potential to impact on flora and vegetation from:</p> <ul style="list-style-type: none"> <li>clearing up to 7.37 ha of 'Good' to 'Very Good' condition native vegetation</li> <li>clearing up to 145 individuals of <i>Triodia sp.</i> Hidden Island (P1)</li> <li>vegetation degradation due to the introduction and/ or spread of weeds and increased dust deposition</li> <li>changes in local hydrology due to alteration of surface water flows.</li> </ul>	<p><b>Assessment finding and environmental outcomes</b></p> <p>A total of 500 individuals of <i>Triodia sp.</i> Hidden Island (P1) were recorded from 17 locations within the development envelope. Of these, 145 individuals are proposed to be cleared, representing 29% of individuals in the development envelope. <i>Triodia sp.</i> Hidden Island has been recorded on both Cockatoo Island and Hidden Island from a variety of landforms, indicating a broader local and regional distribution. Its occurrence on rocky outcrops and previously disturbed areas suggests a degree of tolerance to disturbance and capacity for recolonisation. Surveys across the broader region have recorded over 1,300 individuals from 34 locations outside the development envelope. Its ecosystem function in erosion control is unlikely to be affected, given the presence of other erosion-reducing vegetation such as spinifex tussock grasslands and associated shrubland associations. As such, the EPA considers implementation of the proposal will not result in a significant residual impact or affect the viability and conservation status of <i>Triodia sp.</i> Hidden Island.</p>

<p><b>Avoidance and minimisation measures (including regulation by other DMAs)</b></p> <ul style="list-style-type: none"> <li>the proposal has been redesigned to avoid and minimise disturbance to watercourses, riparian vegetation and floodplains</li> <li>undertake baseline weed survey, develop a weed management procedure and implement vehicle hygiene practices</li> <li>implement dust suppression measures</li> <li>implement drainage design.</li> </ul> <p><b>Consultation</b></p> <p>During the public comment period, concerns were raised regarding the currency and adequacy of the supporting technical data.</p>	<p>A heightened risk of introduction and or spread of weed species presents a risk of vegetation degradation on Cockatoo Island, given the receipt of goods from multiple source localities. The EPA considers that this can be adequately addressed through an outcome-based condition (recommended condition B5-2) to ensure there is no increase in the baseline extent of weed populations within the development envelope as a result of the proposal.</p> <p>The EPA recognises the existing airstrip infrastructure on Cockatoo Island has been in place for an extended period. Notwithstanding this, the aerodrome may alter surface water flows, potentially disrupting natural hydrological regimes and impacting adjacent vegetation. The proponent proposes to implement a drainage design that incorporates sediment control structures and manages runoff volumes to preserve hydrological integrity. The EPA has considered the proponent's mitigation measures, in combination with recommended outcome-based condition B5-1(3) ensuring no detectable change in the condition, extent or ecological function of native vegetation and condition B4-1(1) disturbance limit for <i>Eucalyptus</i> open woodland habitat. On this basis, the EPA concludes that its objective for this factor is likely to be achieved.</p> <p><b>Cumulative impact</b></p> <p>The proponent has assessed the cumulative impacts by evaluating the extent of Vegetation Association 8001 across the State, Bioregion, Subregion, and Local Government Area. This association remains well represented, with approximately 85.81% of its pre-European extent retained at the state level, 91.17% within the Northern Kimberley bioregion and Mitchell subregion, and 86.03% within the Shire of Derby–West Kimberley.</p> <p>Given the vegetation within the disturbance area is not regionally or locally significant and is well represented on and beyond Cockatoo Island, the clearing of 7.37 ha is unlikely to result in a significant impact on biodiversity or ecological integrity, either individually or cumulatively. Impacts to vegetation can be regulated through reasonable conditions including A1 (limits and extents) and condition B4 (disturbance limit for '<i>Eucalyptus</i> open woodland habitat).</p> <p><b>Recommended conditions to ensure consistency of environmental outcome with EPA objective</b></p>
---	--



	<p>Condition A1</p> <ul style="list-style-type: none"><li>• limits and extents on the proposal</li></ul> <p>Condition B4</p> <ul style="list-style-type: none"><li>• disturbance limit on <i>Eucalyptus</i> open woodland habitat</li></ul> <p>Condition B5</p> <ul style="list-style-type: none"><li>• disturbance limits on <i>Triodia sp.</i> Hidden Island (P1)</li><li>• no increase in the baseline extent of weed populations or new populations of weed species</li><li>• no detectable change in the condition, extent or ecological function of native vegetation</li></ul> <p>Condition B8</p> <ul style="list-style-type: none"><li>• rehabilitation</li></ul>
--	--

## 2.6 Social surroundings

The EPA environmental objective for social surroundings is *to protect social surroundings from significant harm* (EPA 2023a)

The proponent submitted the following investigations for the assessment:

- Kimberley Technology Solutions Pty Ltd Proposed Development of a Deep-Water Offshore Supply Base Cockatoo Island Pre-ILUA Survey June 2023 (CONFIDENTIAL – NOT FOR PUBLIC RELEASE) (Dambimangari Aboriginal Corporation, 2023)
- Crestlink Pty Ltd Cockatoo Island Multi-Use Supply Base Supporting Document (GHD 2025c)

The EPA considered that the relevant studies are appropriate to inform the assessment of the potential impacts to the above environmental factor. The EPA determined it could proceed with its assessment as the information presented was largely consistent with the EPA's *Technical Guidance – Environmental impact assessment of Social Surroundings – Aboriginal cultural heritage* (EPA 2023c).

**Table 7: Assessment of social surroundings**

Key environmental values and context	
<p><u>Aboriginal cultural heritage</u></p> <p>The proposal is situated within the Dambimangari Native Title Determination Area (WC1999/007). The proponent has negotiated and entered into an Indigenous Land Use Agreement (ILUA) (WI2024/009) with both the Dambimangari Aboriginal Corporation (DAC) and the Wanjina-Wunggurr (Native Title) Aboriginal Corporation RNTBC (PBC).</p> <p>The proponent has undertaken proposal specific consultation with DAC representatives of the Dambimangari people. This engagement included a joint heritage survey conducted in July 2023.</p>	
Impacts from the proposal	Assessment finding, environmental outcome and recommended conditions
<p><b>Potential impacts</b></p> <p>The proposal has the potential to impact on social surroundings from:</p> <ul style="list-style-type: none"> <li>potential removal or disturbance of unknown Aboriginal heritage sites or places</li> </ul> <p><b>Avoidance and minimisation measures (including regulation by other DMAs)</b></p> <ul style="list-style-type: none"> <li>direct impacts to Aboriginal cultural heritage sites can be adequately managed under the <i>Aboriginal Heritage Act 1972</i></li> <li>site induction and cultural awareness training</li> <li>ongoing consultation with Traditional Owner representatives.</li> </ul>	<p><b>Assessment finding and environmental outcomes</b></p> <p><u>Aboriginal cultural heritage</u></p> <p>A pre-ILUA heritage survey conducted in 2023, involving Traditional Owners and the proponent, did not identify any Aboriginal heritage sites within the proposed ILUA area (area broader than the development envelope). Additionally, a search of the Department of Planning, Lands and Heritage (DPLH) Aboriginal Cultural Heritage Inquiry System confirmed that no registered sites or other heritage places are recorded within the development envelope.</p> <p>The EPA acknowledges that the proponent has taken reasonable steps to consult with the DAC and PBC regarding potential impacts associated with implementation of the proposal, and the EPA has used this information to inform its assessment.</p> <p>Given the absence of known heritage sites or areas of cultural significance to the Dambimangari people, the existence of an ILUA, and the proponent's commitment to ongoing consultation, it is considered unlikely that the implementation of the proposal will result in significant impacts to Aboriginal cultural heritage values. The EPA considers that impacts to Aboriginal heritage sites can be adequately addressed through the regulatory process under the <i>Aboriginal Heritage Act 1972</i> and has recommended standard condition B7-1(1) to reflect this.</p> <p><b>Cumulative impact</b></p>

<p><b>Consultation</b></p> <p>During the referral comment period, concerns were raised about the potential impacts on the coastal environmental values and marine parks.</p>	<p>The EPA considered the successive, incremental and interactive impacts to Aboriginal heritage values from the proposal, in the context of past, present and reasonably foreseeable future activities. The EPA noted that subject to implementation of the proponent's mitigation measures and compliance with the EPA's recommended conditions, direct impacts from the proposal to Aboriginal heritage values are unlikely. The EPA concluded that the proposal is unlikely to contribute to existing or foreseeable threats or pressures to Aboriginal heritage values in the locality.</p> <p>Additionally, the proposal involves vessel transit through existing shipping channels within the Mayala and Lalang-gaddam A Class reserve marine parks. The EPA acknowledges the <i>Lalang-gaddam Marine Park Joint Management Plan and Mayala Marine Park Joint Management Plan (DBCA 2022a and DBCA 2022b)</i> vessel transit is a permitted activity across all designated zones, subject to relevant operational controls. The EPA notes that the proponent intends to use established routes and has not proposed any new infrastructure or deviation from current navigational pathways. Given the use of existing channels and absence of direct interaction with sensitive marine habitats. The EPA considers the proposal is unlikely to significantly impact on the physical or biological surroundings of the marine parks and thus unlikely have a subsequent effect on the aesthetic or cultural aspects of the marine parks.</p> <p><b>Recommended conditions to ensure consistency of environmental outcome with EPA objective</b></p> <p>Condition A1</p> <ul style="list-style-type: none"> <li>• Limits and extents on proposal</li> </ul> <p>Condition B7</p> <ul style="list-style-type: none"> <li>• no disturbance to Aboriginal cultural heritage unless consent is granted under the <i>Aboriginal Heritage Act 1972</i></li> <li>• no loss of access to country</li> <li>• minimise impacts to Aboriginal cultural heritage</li> <li>• ongoing consultation</li> </ul> <p>Condition B8</p> <ul style="list-style-type: none"> <li>• rehabilitation</li> </ul>
--	--

### 3 Holistic assessment

While the EPA assessed the impacts of the proposal against the key environmental factors and environmental values individually in the key factor assessments above, given the link between marine fauna, marine environmental quality, benthic communities and habitat, terrestrial fauna, flora and vegetation, social surroundings, and greenhouse gas emissions, the EPA also considered connections and interactions between them to inform a holistic view of impacts to the whole environment.

#### Marine fauna, marine environmental quality, and benthic communities and habitats

It is recognised that there is an established scientific link between MEQ and the condition for the environment for BCH and marine fauna. Benthic habitats, including hard coral and macroalgae, provide foraging, shelter, and breeding grounds for a range of marine fauna. These habitats are sensitive to changes in MEQ, particularly turbidity, nutrient enrichment, and sedimentation, which may be influenced by construction and operational activities. Through the proponent's application of appropriate minimisation measures, and the implementation of reasonable conditions, such as restricting marine construction activities during sensitive ecological windows, it is expected that potential impacts to these factors can be managed such that they continue to provide key environmental values.

The EPA considers that the proposed mitigation and management measures and recommended conditions for impacts to benthic communities and habitat, and marine environmental quality will also mean the inter-related impacts to the health of other factors of the environment including the values associated with marine fauna would be consistent with the EPA environmental factor objectives.

#### Flora and vegetation and terrestrial fauna

There is a high-level of connectivity between flora and vegetation and terrestrial fauna. Flora and vegetation provide habitat for significant fauna, including the ghost bat and northern leaf-nosed bat. Minimising impacts to flora and vegetation will minimise impacts to terrestrial fauna.

The EPA considers that the proposed mitigation and management measures and recommended conditions for managing impacts to flora and vegetation will also mean the interrelated impacts to values of terrestrial fauna are likely to be consistent with the EPA environmental factor objective.

#### Social surroundings

There is a direct link between Aboriginal culture and the physical or biological aspects of the environment. Access to land, ability to carry out traditional Aboriginal customs and areas of cultural importance may be impacted through impacts to environmental factors of flora and vegetation and terrestrial fauna are important to the Dambimangari Traditional Owners, and the EPA recognises the strong cultural links between the Dambimangari People and values flora and vegetation and terrestrial fauna.

The EPA considers that the proposed mitigation and management measures and recommended conditions and management via other regulatory processes for impacts to flora and vegetation and terrestrial fauna will also mean the interrelated impacts to the

values of social surroundings will likely to be consistent with the EPA environmental factor objective.

#### Summary of holistic assessment

When the separate environmental factors and values affected by the proposal were considered together in a holistic assessment, the EPA formed the view that the impacts from the proposal would not alter the EPA's views about consistency with the EPA's factor objectives as assessed in section 2.

## 4 Matters of national environmental significance

The Commonwealth Minister for the Environment has determined that the proposal is a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) as it is likely to have a significant impact on one or more Matters of National Environmental Significance (MNES). It was determined that the proposed action is likely to have a significant impact on the following matters protected by the EPBC Act:

- National Heritage places (sections 15B & 15C)
- Listed threatened species and communities (sections 18 and 18A)
- Listed migratory species (sections 20 and 20A)
- Commonwealth marine area (sections 23 and 24A)

The EPA has assessed the controlled action on behalf of the Commonwealth as an accredited assessment under the EPBC Act.

This assessment report is provided to the Commonwealth Minister for Environment who will decide whether or not to approve the proposal under the EPBC Act. This is separate from any Western Australian approval that may be required.

### Commonwealth policy and guidance

The EPA had regard to the following relevant Commonwealth guidelines, policies and plans during its assessment:

- Commonwealth of Australia 2015. Wildlife Conservation Plan for Migratory Shorebirds, Department of the Environment, Canberra, ACT.
- Department of the Environment 2015. EPBC Act Policy Statement 3.21 - Industry guidelines for avoiding, assessing and mitigating impacts on EPBC Act listed migratory shorebird species, Department of the Environment, Canberra, ACT.
- Department of the Environment and Energy 2017. National Strategy for Mitigating Vessel Strike of Marine Mega-fauna.
- Department of Environment and Energy 2017. Recovery Plan for Marine Turtles in Australia.
- Department of the Environment and Energy 2020. Light Pollution Guidelines: National Light Pollution Guidelines for Wildlife Including Marine Turtles, Seabirds and Migratory Shorebirds.

### EPA assessment

Impacts to the environment relating to MNES are also covered under the key environmental factor's marine fauna and terrestrial fauna of this report.

#### National Heritage places (sections 15B & 15C)

The proposal is within the West Kimberley, a National Heritage listed place under the EPBC Act. The West Kimberley Heritage Area covers more than 19 million ha, including the coastal area from Cape Leveque to the Cambridge Gulf and inland to encompass the Fitzroy River and the Kimberley plateau. The West Kimberley National Heritage Place is valued for its

intact ecosystems, ancient landforms, and unique biodiversity, supporting species and habitats of national environmental significance (DCCEEW 2022).

The proposal will result in the disturbance of up to 7.37 ha of native vegetation and 5.75 ha of benthic habitat within the West Kimberley National Heritage Area. Given the relatively small terrestrial and marine disturbance footprints, and the presence of existing mining-related activities in the region, the EPA considers it likely that impacts to social surroundings, specifically National Heritage Places, can be managed consistent with the EPA's objective for this factor.

Listed threatened species and communities (sections 18 and 18A) and listed migratory species (sections 20 and 20A)

Listed threatened species and communities and listed migratory species that occur or may occur in the proposal area include:

- humpback whale (conservation dependent)
- green sawfish (critically endangered)
- Australian humpback dolphin (vulnerable)
- Australian snubfin dolphin (vulnerable)
- flatback turtle (vulnerable)
- green turtle (vulnerable)
- hawksbill turtle (vulnerable)
- olive ridley turtle (vulnerable)

To inform the environmental baseline, the proponent has primarily relied on desktop assessments rather than targeted field surveys. The EPA notes that the proposal may result in behavioural responses in marine fauna due to underwater noise, artificial light, and changes in water quality, including sedimentation and resuspension. Additional potential impacts include injury or mortality from rock placement and vessel strike, as well as permanent loss or degradation of habitat.

While the proponent's desktop study indicates that significant marine fauna, including marine turtles, dolphins and sawfish, are likely to occur in the area. The EPA notes there are no confirmed nesting beaches for marine turtles nor documented pupping areas for sawfish are known at Cockatoo Island. However, given the limited supporting surveys conducted by the proponent the EPA has recommended conditions B1-1(1) through to B1-1(4) to ensure that potential impacts to these species can be appropriately managed to ensure the EPAS objectives are met.

The EPA has assessed the impacts and has recommended conditions B1-2(3) and B1-2(4) which requires the proponent to implement a 1 km exclusion zone and a 2 km observation zone during the June – September period, whereby industry standard noise management protocols must be implemented.

## Summary

The EPA recommends the following environmental conditions to minimise impacts on MNES:



- condition A1 (Limitations and Extent of Proposal)
- Condition B1 (marine fauna) implement noise management procedures
- Condition B1 (marine fauna) implement exclusion and observation zones during marine construction
- Condition B1 (marine fauna) minimise behaviour changes, health impacts and physical injury
- Condition B1 (marine fauna) Implement lighting design consistent with the *National Light Pollution Guidelines for Wildlife* (2023)
- Condition B6 Revise and implement the EMP for marine environmental quality.

The EPA's view is that the impacts from the proposal on the above-listed MNES are not expected to result in an unacceptable or unsustainable impact on the listed threatened species and communities.

## 5 Recommendations

The EPA has taken the following into account in its assessment of the proposal:

- environmental values which may be significantly affected by the proposal
- assessment of key environmental factors, separately and holistically (this has included considering cumulative impacts of the proposal where relevant)
- likely environmental outcomes which can be achieved with the imposition of conditions
- consistency of environmental outcomes with the EPA's objectives for the key environmental factors
- EPA's confidence in the proponent's proposed mitigation measures
- whether other statutory decision-making processes can mitigate the potential impacts of the proposal on the environment
- principles of the EP Act.

The EPA recommends that the proposal may be implemented subject to the conditions recommended in Appendix A.

## 6 Other advice

The EPA may, if it sees fit, include other information, advice or recommendations relevant to the environment in its assessment reports, even if that information has not been taken into account by the EPA in its assessment of a proposal.

The EPA provides the following information for consideration by the Minister.

- The EPA notes that the proposed Cockatoo Island Multi-User Supply Base may contribute to increased commercial activity along the Kimberley coast, potentially intensifying cumulative environmental pressures. While the current proposal is limited in scope, its enabling role warrants consideration of future impacts, particularly on sensitive marine and coastal values. The EPA advises that future proposals be subject to appropriate environmental assessment, with a focus on cumulative impacts and regional environmental capacity.
- The EPA notes the presence of a historical seawall adjacent to the development envelope, associated with legacy mining activities. While not part of the current proposal, the structure has previously experienced significant geotechnical and hydraulic challenges, including seepage and structural instability. These issues may influence local coastal processes and warrants consideration in the broader environmental context.

The Cockatoo Island Iron Ore Mine is subject to a substantial environmental bond (as confirmed via the Mineral Titles Online database for tenement M04/488-I (Bond Requirement 589726; accessed 29/08/2025)), which was established by the State Government in recognition of potential risks associated with infrastructure failure. A similar structure on Koolan Island was compromised in 2014, resulting in operational and environmental challenges. The EPA advises that:

- Operational planning should consider the combined impacts of increased traffic and infrastructure use on the island, particularly when in close proximity to legacy structures such as the seawall.
- Government agencies involved in monitoring the implementation of the proposal should remain cognisant of the potential risks associated with structural failure and ensure appropriate monitoring, compliance audits and risk management. The condition of legacy infrastructure remains an environmental concern requiring ongoing inter-agency coordination.

# Appendix A: Recommended conditions

## Recommended Environmental Conditions

### STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED (*Environmental Protection Act 1986*)

#### COCKATOO ISLAND MULTI-USER SUPPLY BASE

**Proposal:** The proposal is to construct and operate a multi-user supply base and logistics facility on Cockatoo Island within the Buccaneer Archipelago, approximately 130 km north of Derby

**Proponent:** Crestlink Pty Ltd  
Australian Company Number 615 631 386

**Proponent address:** Unit 2, 76 Hasler Road,  
Osbourne Park, WA 6017

**Assessment number:** 2314

**Report of the Environmental Protection Authority:** 1790

**Introduction:** Pursuant to section 45 of the *Environmental Protection Act 1986*, it has been agreed that the proposal entitled Cockatoo Multi User Supply Base described in the 'Proposal Content Document' attachment of the referral of 20 October 2021, as amended by the change to proposal approved under s. 43A on 7 November 2023, may be implemented and that the implementation of the proposal is subject to the following implementation conditions and procedures:

#### Conditions and procedures

##### Part A: Proposal extent

##### Part B: Environmental outcomes, prescriptions and objectives

##### Part C: Environmental management plans and monitoring

##### Part D: Compliance and other conditions

## PART A: PROPOSAL EXTENT

### A1 Limitations and Extent of Proposal

A1-1 The proponent must ensure that the proposal is implemented in such a manner that the following limitations or maximum extents / capacities / ranges are not exceeded:

Proposal element	Location	Maximum extent
Physical elements		
Development envelope	Figure 1	No more than 52.81 ha.
<b>Disturbance</b> footprint	Within the development envelope shown in Figure 1	No more than 25.41 ha within a 52.81 ha <b>development envelope</b>
Land reclamation area and floating wharf	Within the <b>disturbance</b> footprint shown in Figure 1	No more than 5.75 ha within the <b>disturbance footprint</b> .
Construction elements		
Land reclamation	Within the <b>disturbance</b> footprint shown in Figure 1	Up to 700,000 m <sup>3</sup> of benign fill supplied by a <b>third party</b> .
Wharf – floating	Within the <b>disturbance</b> footprint shown in Figure 1	No more than 0.82 ha of floating infrastructure
Timing elements		
Project life		Up to 64 years from the date of <b>ground disturbing activities</b> (closure not included)

## PART B – ENVIRONMENTAL OUTCOMES, PRESCRIPTIONS AND OBJECTIVES

### B1 Marine fauna

B1-1 The proponent must implement the proposal to achieve the following environmental **outcomes**:

- (1) **significant marine fauna** must not be prevented or deterred from undertaking critical behaviours in **High Ecological Protection Zone**.
- (2) no mortality, injury or **disturbance** of **significant marine fauna** due to proposal related vessel strike;
- (3) no **disturbance** of **significant marine fauna** from proposal related artificial light; and
- (4) no physical injury or mortality of **significant marine fauna** from underwater noise emissions during **marine construction activities**.

B1-2 The proponent must undertake the following activities:

- (1) implement noise management procedures to avoid temporary and permanent changes to hearing sensitivity in **significant marine fauna** and minimise behavioural responses during **marine construction activities**
- (2) soft start-up procedures for a period of at least thirty (30) minutes prior to the commencement of **marine construction activities**;
- (3) implement a **significant marine fauna** observation zone whereby an observer must undertake **significant marine fauna** observation for a minimum of thirty (30) minutes prior to the commencement of **marine construction activities**. The observation zone must meet the following temporal specifications as shown in Figure 3:
  - (a) during the period of 1 October and 31 May, at least one (1) kilometre radius from the noise emitting source; and
  - (b) during the period of 1 June and 30 September, at least two (2) kilometre radius from the noise emitting source;
- (4) implement an exclusion zone from the **marine construction activities**, within the following temporal specifications as shown in Figure 3:
  - (a) during the period of October - May consisting of at least a 500 metre radius from the noise emitting source; and
  - (b) during the period of June to September consisting of at least a one (1) kilometre radius from the noise emitting source;
- (5) within the exclusion zones:
  - (a) **marine construction activities** must not commence if **significant marine fauna** are within the exclusion zone; and

- (b) **marine construction activities** must cease if **significant marine fauna** enter the exclusion zone during **marine construction activities** and must not recommence until the **significant marine fauna** have moved outside the exclusion zone;
- (c) **project related vessels** must cease all activities, excluding **emergency operations**, should a **significant marine fauna** enter the exclusion zone;
- (6) engage a suitably trained, **independent** and experienced **marine fauna observer** who has a demonstrated knowledge of **significant marine fauna** in the North-West region to undertake continuous observations in the observation zone required by condition B1-2(3) and exclusion zone required by condition B1-2(4);
- (7) maintain a log of recorded sightings, locations and behaviours indicative of stress or **disturbance** of cetaceans and submit these to **National Marine Mammal Data Portal**, and the **CEO**;
- (8) document and report to the **CEO**, **DCCEEW** and **DBCA** any incidents relating to **significant marine fauna** injury/mortality;
- (9) implement a maximum speed limit of eight (8) knots on all **project related vessels** within the **High Ecological Protection Zone** unless adhering to **EPBC Regulations 2000**; and
- (10) implement best practice lighting design for all artificial lighting as described in the *National Light Pollution Guidelines for Wildlife*, excluding where artificial lighting is required for maritime navigation.

## **B2 Marine environmental quality**

B2-1 The proponent must ensure the implementation of the proposal achieves the following environmental **outcomes**:

- (1) the levels of ecological protection to be achieved inside of the:
  - (a) **Moderate Ecological Protection Area**; and
  - (b) **High Ecological Protection Area**;

are consistent with the corresponding level of ecological protection described in Appendix 1, Table 1 of the **Marine Water Quality Technical Guidance**, including the method used to derive **Environmental Quality Guidelines** and **Environmental Quality Standards**;
- (2) sediment quality of fill material to be used for reclamation does not exceed **sediment quality standards and criteria**.

## **B3 Benthic communities and habitats**

B3-1 The proponent must ensure the implementation of the proposal achieves the following environmental **outcomes**:

- (1) no **irreversible loss** of **benthic communities and habitats** within the **Moderate Ecological Protection Area**, as shown in Figure 2;
- (2) no **detectable** change from the **baseline** state of **benthic communities and habitats** within the **High Ecological Protection Area**, as shown in Figure 2; and
- (3) **irreversible** loss of **benthic communities and habitats** must not exceed 0.54 ha within the **disturbance** footprint, as shown in Figure 2.

#### **B4 Terrestrial fauna**

B4-1 The proponent must ensure the implementation of the proposal achieves the following environmental **outcomes**:

- (1) **disturb** no more than 7.37 ha of ***Eucalyptus* open woodland habitat**; and
- (2) no **detectable** increase in feral animal abundance in the **development envelope** from **baseline** levels during the life of the proposal relative to suitable reference sites.

B4-2 During **construction activities** and **operations**, vehicle and machinery speed limits within the **development envelope** shall not exceed 40 km/hr.

#### **B5 Flora and vegetation**

B5-1 The proponent must implement the proposal achieves the following environmental **outcomes**:

- (1) **disturb** no more than 12% of *Triodia* sp. Hidden Island (P1) within the **development envelope**;
- (2) no **detectable** increase in the **baseline** extent of weed populations or new populations of weed species within the **development envelope** as a result of the implementation of the proposal; and
- (3) no **detectable** change in the condition, extent or ecological function of native vegetation in the **development envelope** as a result of the implementation of the proposal.

#### **B6 Environmental Management Plan**

B6-1 The proponent must prepare an Environmental Management Plan which covers both construction and operational phase, that satisfies the requirements of condition C4 and demonstrates how achievement of the outcomes in condition B2-1(1) will be monitored and substantiated and submit it to the **CEO**.

#### **B7 Aboriginal cultural heritage**

B7-1 The proponent must ensure the implementation of the proposal achieves the following environmental **outcomes**:



- (1) no **disturbance** to **Aboriginal cultural heritage** in the proposal **disturbance** footprint, unless consent is granted to **disturb** that site under the *Aboriginal Heritage Act 1972* and has involved reasonable steps to consult with the **relevant Traditional Owners**; and
- (2) subject to reasonable health and safety requirements, no interruption of ongoing access to land utilised for traditional use or custom by the **relevant Traditional Owners**.

B7-2 The proponent must ensure the implementation of the proposal achieves the following environmental **objective**:

- (1) avoid, and where unavoidable minimise **adverse impacts** to **Aboriginal cultural heritage** within and surrounding the **development envelope**.

B7-3 The proponent must take reasonable steps to **consult** with the **relevant Traditional Owners** about the achievement of the **outcomes** in condition B1-1, condition B2-1, condition B3-1, condition B4-1, condition B5-1 and B7-1(2) and objectives in condition B7-2 for the life of the proposal.

## **B8 Rehabilitation**

B8-1 The proponent must ensure the implementation of the proposal achieves the following environmental outcomes:

- (1) rehabilitated vegetation and fauna habitat are **self-sustaining**;
- (2) rehabilitated areas are consistent with the species diversity and abundance of native vegetation within comparative analogue or reference sites; and
- (3) rehabilitated landforms are stable and do not cause **pollution** or **environmental harm**.

B8-2 The proponent must ensure:

- (1) rehabilitation includes the use of native seeds and propagated material collected from native vegetation within the proposal **disturbance** footprint; and
- (2) rehabilitation is undertaken in a **progressive manner** consistent with achievement of the above **outcomes** during operations, where practicable, and as soon as practicable upon closure.

## PART C – ENVIRONMENTAL MANAGEMENT PLANS AND MONITORING

### C1 Environmental Management Plans: Conditions Related to Commencement of Implementation of the Proposal

C1-1 The proponent must not undertake:

- (1) **marine construction activities** until the **CEO** has confirmed in writing that the environmental management plan required by condition B6 meets the requirements of that condition and condition C4.

### C2 Environmental Management Plans: Conditions Relating to Approval, Implementation, Review and Publication

C2-1 Upon being required to implement an environmental management plan under Part B, or after receiving notice in writing from the **CEO** under condition C1-1 that the environmental management plan(s) required in Part B satisfies the relevant requirements, the proponent must:

- (1) implement the most recent version of the **confirmed** environmental management plan; and
- (2) continue to implement the **confirmed** environmental management plan referred to in condition C2-1(1), other than for any period which the **CEO** confirms by notice in writing that it has been demonstrated that the relevant requirements for the environmental management plan have been met, or are able to be met under another statutory decision-making process, in which case the implementation of the environmental management plan is no longer required for that period.

C2-2 The proponent:

- (1) may review and revise a **confirmed** environmental management plan provided it meets the relevant requirements of that environmental management plan, including any consultation that may be required when preparing the environmental management plan;
- (2) must review and revise a **confirmed** environmental management plan and ensure it meets the relevant requirements of that environmental management plan, including any consultation that may be required when preparing the environmental management plan, as and when directed by the **CEO**; and
- (3) must revise and submit to the **CEO** the **confirmed** Environmental Management Plan if there is a material risk that the outcomes or objectives it is required to achieve will not be complied with, including but not limited to as a result of a change to the proposal.

C2-3 Despite condition C2-1, but subject to conditions C2-4 and C2-5, the proponent may implement minor revisions to an environmental management plan if the revisions will not result in new or increased **adverse impacts** to the environment or result in a risk to the achievement of the limits, outcomes or objectives which the environmental management plan is required to achieve.

- C2-4 If the proponent is to implement minor revisions to an environmental management plan under condition C2-3, the proponent must provide the **CEO** with the following at least twenty (20) business days before it implements the revisions:
- (1) the revised environmental management plan clearly showing the minor revisions;
  - (2) an explanation of and justification for the minor revisions; and
  - (3) an explanation of why the minor revisions will not result in new or increased **adverse impacts** to the environment or result in a risk to the achievement of the limits, outcomes or objectives which the environmental management plan is required to achieve.
- C2-5 The proponent must cease to implement any revisions which the **CEO** notifies the proponent (at any time) in writing may not be implemented.
- C2-6 **Confirmed** environmental management plans, and any revised environmental management plans under condition C2-4(1), must be published on the proponent's website and provided to the **CEO** in electronic form suitable for on-line publication by the Department of Water and Environmental Regulation within twenty (20) business days of being implemented, or being required to be implemented (whichever is earlier).

### **C3 Conditions Related to Monitoring**

- C3-1 The proponent must undertake monitoring capable of:
- (1) substantiating whether the proposal limitations and extents in Part A are exceeded; and
  - (2) **detecting** and substantiating whether the environmental outcomes identified in Part B are achieved (excluding any environmental outcomes in Part B where an environmental management plan is expressly required to monitor achievement of that outcome).
- C3-2 The proponent must submit as part of the Compliance Assessment Report required by condition D2, a compliance monitoring report that:
- (1) outlines the monitoring that was undertaken during the implementation of the proposal;
  - (2) identifies why the monitoring was capable of substantiating whether the proposal limitation and extents in Part A are exceeded;
  - (3) for any environmental outcomes to which condition C3-1(2) applies, identifies why the monitoring was scientifically robust and capable of **detecting** whether the environmental outcomes in Part B are met;
  - (4) outlines the results of the monitoring;
  - (5) reports whether the proposal limitations and extents in Part A were exceeded and (for any environmental outcomes to which condition C3-1 (2) applies)

whether the environmental outcomes in Part B were achieved, based on analysis of the results of the monitoring; and

- (6) reports any actions taken by the proponent to remediate any potential non-compliance.

#### **C4 Environmental Management Plans: Conditions Relating to Monitoring and Adaptive Management for Outcomes Based Conditions**

C4-1 The environmental management plan required under condition B6 must contain provisions which enable the substantiation of whether the relevant outcomes of those conditions are met, and must include:

- (1) **threshold criteria** that provide a limit beyond which the environmental outcomes are not achieved;
- (2) **trigger criteria** that will provide an early warning that the environmental outcomes are not likely to be met;
- (3) relevant to condition B6 the **Environmental Quality Standards** and **Environmental Quality Guidelines** to protect the marine environmental values and levels of ecological protection, including the methodology used to derive site-specific **Environmental Quality Standards** and **Environmental Quality Guidelines**;
- (4) monitoring parameters, sites, control/reference sites, methodology, timing and frequencies which will be used to measure **threshold criteria** and **trigger criteria**. Include methodology for determining alternate monitoring sites as a contingency if proposed sites are not suitable in the future;
- (5) baseline data;
- (6) data collection and analysis methodologies;
- (7) adaptive management methodology;
- (8) **contingency measures** which will be implemented if **Environmental Quality Standards** or **threshold criteria** and **Environmentally Quality Guidelines** or **trigger criteria** are not met; and
- (9) reporting requirements.

C4-2 Without limiting condition C3-1, failure to achieve an environmental outcome, or the exceedance of a **threshold criteria**, regardless of whether threshold **contingency measures** have been or are being implemented, represents a non-compliance with these conditions.

**PART D – COMPLIANCE, TIME LIMITS, AUDITS AND OTHER CONDITIONS****D1 Non-compliance Reporting**

**D1-1** If the proponent becomes aware of a potential non-compliance, the proponent must:

- (1) report this to the **CEO** within seven (7) days;
- (2) implement **contingency measures**;
- (3) investigate the cause;
- (4) investigate environmental impacts;
- (5) advise rectification measures to be implemented;
- (6) advise any other measures to be implemented to ensure no further impact;
- (7) advise timeframe in which contingency, rectification and other measures have and/or will be implemented; and
- (8) provide a report to the **CEO** within twenty-one (21) days of being aware of the potential non-compliance, detailing the measures required in conditions D1-1(1) to D1-1(7) above.

**D1-2** Failure to comply with the requirements of a condition, or with the content of an environmental management plan required under a condition, constitutes a non-compliance with these conditions, regardless of whether the **contingency measures**, rectification or other measures in condition D1-1 above have been or are being implemented.

**D2 Compliance Reporting**

**D2-1** The proponent must provide an annual Compliance Assessment Report to the **CEO** for the purpose of determining whether the implementation conditions are being complied with.

**D2-2** Unless a different date or frequency is approved by the **CEO**, the first annual Compliance Assessment Report must be submitted within fifteen (15) months of the date of this Statement, and subsequent reports must be submitted annually from that date.

**D2-3** Each annual Compliance Assessment Report must be endorsed by the proponent's Chief Executive Officer, or a person approved by proponent's Chief Executive Officer to be delegated to sign on the Chief Executive Officer's behalf.

**D2-4** Each annual Compliance Assessment Report must:

- (1) state whether each condition of this Statement has been complied with, including:
  - (a) exceedance of any proposal limits and extents;
  - (b) achievement of environmental outcomes;

- (c) achievement of environmental objectives;
  - (d) requirements to implement the content of environmental management plans;
  - (e) monitoring requirements;
  - (f) implement **contingency measures**;
  - (g) requirements to implement adaptive management; and
  - (h) reporting requirements;
- (2) include the results of any monitoring (inclusive of any raw data) that has been required under Part C in order to demonstrate that the limits in Part A, and any outcomes or any objectives are being met;
  - (3) provide evidence to substantiate statements of compliance, or details of where there has been a non-compliance;
  - (4) include the corrective, remedial and preventative actions taken in response to any potential non-compliance;
  - (5) be provided in a form suitable for publication on the proponent's website and online by the Department of Water and Environmental Regulation; and
  - (6) be prepared and published consistent with the latest version of the Compliance Assessment Plan required by condition D2-5 which the **CEO** has confirmed by notice in writing satisfies the relevant requirements of Part C and Part D.
- D2-5 The proponent must prepare a Compliance Assessment Plan which is submitted to the **CEO** at least six (6) months prior to the first Compliance Assessment Report required by condition D2-2, or prior to implementation of the proposal, whichever is sooner.
- D2-6 The Compliance Assessment Plan must include:
- (1) what, when and how information will be collected and recorded to assess compliance;
  - (2) the methods which will be used to assess compliance;
  - (3) the methods which will be used to validate the adequacy of the compliance assessment to determine whether the implementation conditions are being complied with;
  - (4) the retention of compliance assessments;
  - (5) the table of contents of Compliance Assessment Reports, including audit tables; and
  - (6) how and when Compliance Assessment Reports will be made publicly available, including usually being published on the proponent's website within sixty (60) days of being provided to the **CEO**.

**D3 Contact Details**

- D3-1 The proponent must notify the **CEO** of any change of its name, physical address or postal address for the serving of notices or other correspondence within twenty-eight (28) days of such change. Where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State.

**D4 Time Limit for Proposal Implementation**

- D4-1 The proposal must be **substantially commenced** within five (5) years from the date of this Statement.
- D4-2 The proponent must provide to the **CEO** documentary evidence demonstrating that they have complied with condition D4-1 no later than thirty(30) days after days after **substantial commencement**.
- D4-3 If the proposal has not been **substantially commenced** within the period specified in condition D4-1, implementation of the proposal must not be commenced or continued after the expiration of that period.

**D5 Public Availability of Data**

- D5-1 Subject to condition D5-2, within a reasonable time period approved by the **CEO** upon the issue of this Statement and for the remainder of the life of the proposal, the proponent must make publicly available, in a manner approved by the **CEO**, all validated environmental data collected before and after the date of this Statement relevant to the proposal (including sampling design, sampling methodologies, monitoring and other empirical data and derived information products (e.g. maps)), environmental management plans and reports relevant to the assessment of this proposal and implementation of this Statement.

D5-2 If:

- (1) any data referred to in condition D5-1 contains trade secrets; or
- (2) any data referred to in condition D5-1 contains particulars of confidential information (other than trade secrets) that has commercial value to a person that would be, or could reasonably be expected to be, destroyed or diminished if the confidential information were published,

the proponent may submit a request for approval from the **CEO** to not make this data publicly available and the **CEO** may agree to such a request if the **CEO** is satisfied that the data meets the above criteria.

- D5-3 In making such a request the proponent must provide the **CEO** with an explanation and reasons why the data should not be made publicly available.

**D6 Independent Audit**

- D6-1 The proponent must arrange for an independent audit of compliance with the conditions of this statement, including achievement of the environmental outcomes and/or the



environmental objectives and/ or environmental performance with the conditions of this statement, as and when directed by the **CEO**.

- D6-2 The independent audit must be carried out by a person with appropriate qualifications who is nominated or approved by the **CEO** to undertake the audit under condition D6-1.
- D6-3 The proponent must submit the independent audit report with the Compliance Assessment Report required by condition D2, or at any time as and when directed in writing by the **CEO**. The audit report is to be supported by credible evidence to substantiate its findings.
- D6-4 The independent audit report required by condition D6-1 is to be made publicly available in the same timeframe, manner and form as a Compliance Assessment Report, or as otherwise directed by the **CEO**.

Table 1: Abbreviations and definitions

Acronym or abbreviation	Definition or term
<b>Aboriginal cultural heritage</b>	Means the tangible and intangible elements that are important to the Aboriginal people of the State, and are recognised through social, spiritual, historical, scientific or aesthetic values, as part of Aboriginal tradition to the extent they directly affect or are affected by physical or biological surroundings.
<b>Adverse impact / adversely impacted</b>	Negative change that is neither trivial nor negligible that could result in a reduction in health, diversity or abundance of the receptor/s being impacted, or a reduction in <b>environmental value</b> . Adverse impacts can arise from direct or indirect impacts, or other impacts from the proposal. In relation to flora and vegetation, includes but is not limited to, a definable change in spatial coverage or a change in the health, species diversity, structure and plant density of vegetation, vegetation and flora mortality, spread or introduction of environmental weeds, introduction or spread of disease, and edge effects. In relation to terrestrial fauna, includes but is not limited to, habitat fragmentation, vehicle strike, collision with fencing, artificial light and vibration, noise emissions, and predation
<b>Baseline</b>	Initial conditions measured before <b>disturbance</b> associated with the proposal, as captured in the environmental management plans required by condition B6, which is used for comparison with data collected during and after <b>disturbance</b> to identify and measure changes in conditions.
<b>Benthic communities and habitats</b>	In relation to the biological and physical components of the seabed environment, including hard corals and macroalgae, the health and spatial extent of which are critical to maintaining marine ecological integrity and biodiversity.
<b>CEO</b>	The Chief Executive Officer of the Department of the Public Service of the State responsible for the administration of section 48 of the <i>Environmental Protection Act 1986</i> , or the <b>CEO's</b> delegate.
<b>Clearing</b>	Has the same meaning as in section 51A of the <i>Environmental Protection Act 1986</i> .
<b>Confirmed</b>	In relation to a plan required to be made and submitted to the <b>CEO</b> , means, at the relevant time, the plan that the <b>CEO</b> confirmed, by notice in writing, meets the requirements of the relevant condition. In relation to a plan required to be implemented without the need to be first submitted to the <b>CEO</b> , means that plan until it is revised, and then means, at the relevant time, the plan that the <b>CEO</b> confirmed, by notice in writing, meets the requirements of the relevant condition.
<b>Consult</b>	Enter into discussions and seek opinions and advice from, and keep a written record of any discussions, opinions and advice given, in relation to relevant outcomes and objectives of the proposal, and associated management plans.
<b>Contamination</b>	Having a substance present at above background concentrations that presents, or has the potential to present, a risk or harm to human health, the environment or any <b>environmental value</b> .
<b>Contingency measures</b>	Planned actions for implementation if it is identified that an environmental outcome, environmental objective, threshold criteria, Environmental Quality Standard or management target are likely to be,

	or are being, exceeded. Contingency measures include changes to operations or reductions in <b>disturbance</b> or <b>adverse impacts</b> to reduce impacts and must be decisive actions that will quickly bring the impact to below any relevant threshold, management target and to ensure that the environmental outcome and/or objective can be met.
<b>Construction activities</b>	Activities that are associated with the substantial implementation of a proposal including but not limited to, earthmoving, vegetation <b>clearing</b> , grading or construction of right of way. Construction activities do not include Geotechnical investigations (including potholing for services and the installation of piezometers) and other preconstruction activities where no <b>clearing</b> of vegetation is required.
<b>DBCA</b>	The government agency responsible for the administration of the <i>Biodiversity Conservation Act 2016</i> , which at the time of publication of this Ministerial Statement is the Department of Biodiversity, Conservation and Attractions.
<b>DCCEEW</b>	Department of Climate Change, Energy, the Environment and Water.
<b>Detecting/ Detectable</b>	The smallest statistically discernible effect size that can be achieved with a monitoring strategy designed to achieve a statistical power value of at least 0.8 or an alternative value as determined by the <b>CEO</b> .
<b>Development envelope</b>	The spatial area as depicted in Figure 1 and defined by geographic coordinates in Schedule 1.
<b>Disturb/disturbance</b>	Means directly has or materially contributes to the disturbance effect on health, diversity or abundance of the receptor/s being impacted or on an <b>environmental value</b> .  In relation to flora, vegetation or fauna habitat, includes to result in the death, destruction, removal, severing or doing substantial damage to. In relation to fauna, includes to have the effect of altering the natural behaviour of fauna to its detriment.  In relation to Aboriginal cultural heritage, includes direct physical or biological effects on the tangible and intangible elements that are important to Aboriginal people, and are recognised through social, spiritual, historical, scientific or aesthetic values, as part of Aboriginal tradition.
<b>Emergency Operations</b>	Activities and operations associated with responding to an emergency, as defined by section 5 of the <i>Emergency Management Act 2005</i> .
<b>Environmental value</b>	A beneficial use, or ecosystem health condition.
<b>Environmental harm</b>	Has the meaning provided by section 3A(2) of the <i>Environmental Protection Act 1986</i> .
<b>EPBC Regulations 2000</b>	Environment Protection and Biodiversity Conservation Regulations 2000
<b><i>Eucalyptus</i> open woodland habitat</b>	As described in the <i>Cockatoo Island Multi-User Supply Base Targeted Fauna and Flora Survey, Ecological Environment, 2025</i> .
<b>Ground disturbing activities</b>	Any activity or activities undertaken in the implementation of the proposal, including any clearing, civil works or construction.
<b>Ha(s)</b>	Hectare(s).

<b>High Ecological Protection Zone</b>	The area shown in blue in Figure 2 as, 'Cockatoo Island Multi-User Supply Base <b>High Ecological Protection Area</b> ', and defined in spatial data in schedule 1.
<b>High water mark</b>	In relation to tidal waters, means ordinary high water mark at spring tides as defined in the <i>Land Administration Act 1997</i> .
<b>Independent</b>	A person or organisation that is not employed by, contracted to, or otherwise affiliated with the proponent or any entity responsible for implementing the proposal, and who can demonstrate impartiality in undertaking the required tasks.
<b>Irreversible loss</b>	<b>Adverse impact</b> which is unlikely to or does not return to pre-impact state within five (5) years following the completion of proposal related activities that are likely to have an impact on <b>benthic communities and habitats</b> .
<b>Km/hr</b>	Kilometre(s) per hour.
<b>Management action</b>	The identified actions implemented with the intent of to achieving the environmental objective.
<b>Management target</b>	A type of indicator to evaluate whether an environmental objective is being achieved.
<b>Marine construction activities</b>	Activities involving the dumping or placing of soil, rocks or fill material below the <b>high water mark</b> .
<b>Marine fauna observer</b>	In the context of Marine Fauna Observers (MFO) it is expected that at least one MFO will hold an Internationally recognised MFO qualification in accordance with industry standards and at least five (5) years' experience in Australian waters.
<b>Moderate Ecological Protection Area</b>	The area shown in green in Figure 2 as 'Cockatoo Island Multi-User Supply Base <b>Moderate Ecological Protection Area</b> ' and defined in spatial data in schedule 1.
<b>National Marine Mammal Data Portal</b>	National Marine Mammal Data Portal, including the Cetacean Sightings Application, maintained by the Commonwealth Department of Climate Change, Energy, the Environment and Water.
<b>Objective(s)</b>	An objective is the proposal-specific desired state for an environmental factor/s to be achieved from the implementation of <b>management actions</b> .
<b>Operations</b>	Operation of the plant infrastructure for the proposal and includes pre-commissioning, commissioning, start-up and operation of the plant infrastructure for the proposal.
<b>Outcome(s)</b>	A proposal-specific result to be achieved when implementing the proposal.
<b>Project related vessels</b>	Vessels related to the construction and operations of the project.
<b>Pollution</b>	Has the meaning provided by section 3A(1) of the <i>Environmental Protection Act 1986</i> .
<b>Progressive manner</b>	In relation to rehabilitation, the stage treatment of <b>disturbed</b> areas during exploration, <b>construction</b> , development, and <b>operations</b> as soon as these areas become available.

<b>Recoverable (adverse impact)</b>	<p><b>Adverse impact</b> which is likely to or does return to pre-impact state within five (5) years following the completion of proposal related activities that are likely to have an impact on <b>benthic communities and habitats</b>.</p> <p>May be able to be adapted for other values, however the EPA's technical guidance specifies the 5 year term.</p>
<b>Relevant traditional owners</b>	<p>In relation to the land subject to the proposal, means one or more of the following:</p> <ul style="list-style-type: none"> <li>- a registered native title body corporate for the land; or</li> <li>- a registered native title claimant for the land; or</li> <li>- a group of persons with Aboriginal traditional and cultural associations with the land; or</li> <li>- a body prescribed in the <i>Aboriginal Heritage Regulations 1974</i>.</li> </ul>
<b>sediment quality standards and criteria</b>	<p>The assessment of fill contamination carried out by applying the <i>National Environment Protection (Assessment of Site Contamination) Measure 1999</i> in relation to sediment quality standards and criteria as described in ANZECC &amp; ARMCANZ 2000, <i>Australian and New Zealand Guidelines for Fresh and Marine Water Quality</i>, and as revised by Simpson SL, Batley GB and Chariton AA (2013). <i>Revision of the ANZECC/ARMCANZ Sediment Quality Guidelines</i>. CSIRO Land and Water Science Report 08/07.</p>
<b>Self-sustaining</b>	<p>Refers to vegetation that can survive (continue indefinitely) without on-going management actions such as watering, weed control or in-fill planting.</p>
<b>Significant marine fauna</b>	<p>Includes turtles, cetaceans, sawfish and other marine fauna species listed under state or Commonwealth legislation.</p>
<b>Substantially commenced/substantial commencement</b>	<p>Substantial commencement is more than the preparatory works for a proposal and generally includes ground <b>disturbance</b> activities which are solely attributed to proposal elements described in the proposal content document, and a substantial portion of the total <b>disturbance</b> and infrastructure works physically commenced.</p>
<b>Third party</b>	<p>An external entity or organisation that is not directly affiliated with the proponent of the project.</p>
<b>Trigger criteria</b>	<p>Indicators that have been selected for monitoring to provide a warning that, if exceeded, the environmental outcome may not be achieved. They are intended to forewarn of the approach of the threshold criteria and trigger response actions.</p>
<b>Threshold criteria</b>	<p>The indicators that have been selected to represent limits of impact beyond which the environmental outcome is not being met.</p>

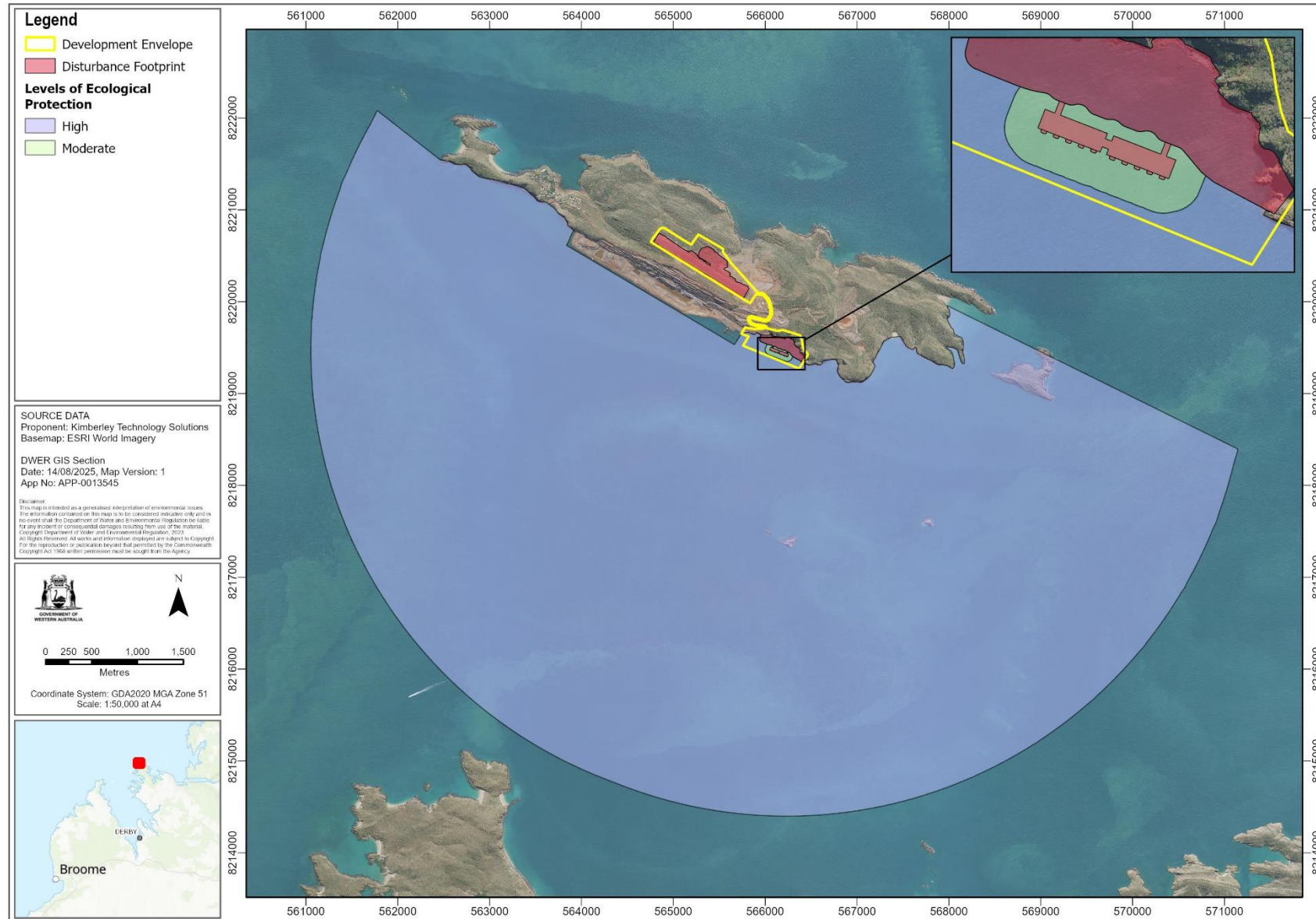
#### Figures (attached)

- Figure 1 Cockatoo Island Multi-User Supply Base development envelope and **disturbance** footprint (This figure is a representation of the co-ordinates referenced in Schedule 1)
- Figure 2 Cockatoo Island Multi-User Supply Base **disturbance** footprint and levels of ecological protection (This figure is a representation of the co-ordinates referenced in Schedule 1)
- Figure 3 Cockatoo Island Multi-User Supply Base Observation and Exclusion Zones (This figure is a representation of the co-ordinates referenced in Schedule 1)





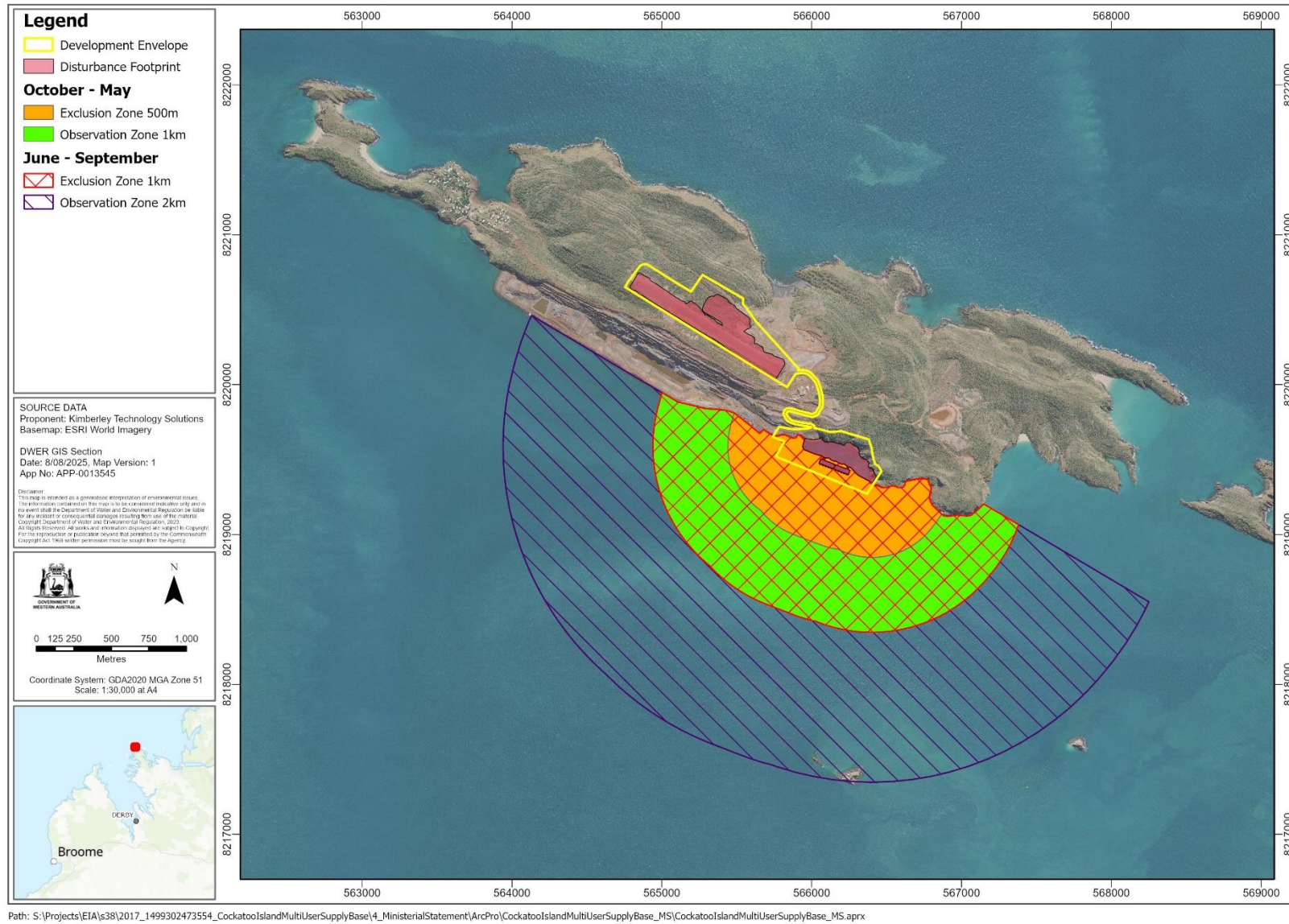
**Figure 1 Cockatoo Island Multi-User Supply Base development envelope and disturbance footprint**



Path: S:\Projects\EIA\638\2017\_1499302473554\_CockatooIslandMultiUserSupplyBase\4\_MinisterialStatement\ArcPro\CockatooIslandMultiUserSupplyBase\_MS\CockatooIslandMultiUserSupplyBase\_MS.aprx

**Figure 2 Cockatoo Island Multi-User Supply Base disturbance footprint and levels of ecological protection**





**Figure 3 Cockatoo Island Multi-User Supply Base Observation and Exclusion Zones**

## Schedule 1

All co-ordinates are in metres, listed in Map Grid of Australia Zone 50 (MGA Zone 50), datum of Geocentric Datum of Australia 2020 (GDA20).

Spatial data depicting the figures are held by the Department of Water and Environmental regulation. Record no. APP-0013545.

## Appendix B: Decision-making authorities

**Table B1: Identified relevant decision-making authorities for the proposal**

Decision-Making Authority	Legislation (and approval)
1. Minister for Aboriginal Affairs	<i>Aboriginal Heritage Act 1972</i> - section 18 consent to impact a registered Aboriginal heritage site)
2. Minister for Environment	<i>Biodiversity Conservation Act 2016</i> - section 40 authority to take or disturb threatened species <i>Contaminated Sites Act 2003</i> - section 58 disturbance of contaminated sites
3. Minister for Lands	<i>Land Administration Act 1997</i> - section 28(1) compulsory acquisition of land - section 91 licence to access crown land - creation of easements and other land access for proposal
4. Minister for Ports	<i>Port Authorities Act 1999</i>
5. Minister for Transport	<i>Marine and Harbours Act 1981</i> - seabed lease
6. Chief Executive Officer, Department of Biodiversity, Conservation and Attractions	<i>Biodiversity Conservation Act 2016</i> - authority to take flora and fauna (other than threatened species)
7. Chief Dangerous Goods Officer, Department of Mines, Petroleum and Exploration	<i>Dangerous Goods Safety Act 2004</i> - storage and handling of dangerous goods
8. Chief Executive Officer, Department of Planning Lands and Heritage	<i>Land Administration Act 1997</i> - licence to access crown land
9. Director General, Department of Transport	<i>Marine Navigational Aids Act 1973</i> - miscellaneous license
10. Chief Executive Officer, Shire of Derby / West Kimberley	<i>Health Act 1911</i> and Health (Treatment of Sewage and Disposal of Effluent and Liquid Waste) Regulation 1974 - permit for treatment of sewage <i>Building Act 2011</i> - permit for worker accommodation <i>Planning and Development Act 2005</i> - planning approval / development approval <i>Local Government Act 1995</i> (and relevant local by law)

Decision-Making Authority	Legislation (and approval)
	<ul style="list-style-type: none"> <li>- development approval and scheme amendment</li> </ul>
11. Harbour master, Kimberley Ports Authority	<i>Port Authorities Act 1999</i> <ul style="list-style-type: none"> <li>- s. 28 lease/licence/easement of land within control of Port Authority (term of 5 years or less)</li> </ul>

## Appendix C: Regulation under other statutory processes

**Table B1: Identified relevant decision-making authorities for the proposal**

Statutory decision-making process	Environmental outcome
<i>Aboriginal Heritage Act 1972</i>	No disturbance to Aboriginal cultural heritage, unless consent is granted to disturb that site under the <i>Aboriginal Heritage Act 1972</i> and has involved reasonable steps to consult with relevant Traditional Owners.
<i>Biodiversity Conservation Act 2016</i>	The taking of threatened flora, fauna and ecological communities does not result in any species or community being listed under a higher conservation status.
<i>Contaminated Sites Act 2003</i>	Cockatoo Island is classified under the <i>Contaminated Sites Act 2003</i> (CS Act) on 17 June 2014 as Contaminated – remediation required (C–RR). Where a change in the contamination status of the facility occurs, the CS Act is the primary legislation responsible for its assessment and management.
<i>Dangerous Goods Safety Act 2004</i>	Regulation and licencing of the safe storage, handling, and transport of dangerous goods.
<i>Environmental Protection Act 1986</i> – Part V works approval and licence	Regulate emissions and discharges from construction and operations to achieve the following outcomes: <ul style="list-style-type: none"> <li>- minimise and manage noise and dust emissions to protect environmental values and amenity at sensitive receptors</li> <li>- maintain air quality and minimise emissions so that environmental values are protected</li> <li>- no adverse impacts to soil, surface water and groundwater quality.</li> </ul>
<i>Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)</i>	The EPA has recommended conditions in relation to impacts on listed threatened species and communities protected by the EPBC Act. The Department of Climate Change, Energy, the Environment and Water may impose additional conditions under the EPBC Act.
<i>National Greenhouse and Energy Reporting Act 2007 (Commonwealth)</i>	The reduction of scope 1 GHG emissions to meet Australian emission targets of 43% below 2005 levels by 2030 and net zero by 2050. The potential environmental effects of the proposal associated with the emissions of scope 1 GHG emissions are likely to be mitigated to achieve consistency with the environmental factor objective for GHG emissions through the obligations required under the <i>National</i>

	<i>Greenhouse and Energy Reporting Act 2007</i> and the Commonwealth Safeguard Mechanism.
--	---

## Appendix D: Environmental Protection Act principles

**Table C1: Consideration of principles of the *Environmental Protection Act 1986***

EP Act principle	Consideration
<p><b>1. The precautionary principle</b></p> <p><i>Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.</i></p> <p><i>In application of this precautionary principle, decisions should be guided by –</i></p> <p>(a) <i>careful evaluation to avoid, where practicable, serious or irreversible damage to the environment; and</i></p> <p>(b) <i>an assessment of the risk-weighted consequences of various options.</i></p>	<p>The EPA has considered the precautionary principle in its assessment and has had particular regard to this principle in its assessment of marine fauna, marine environmental quality, benthic communities and habitats, terrestrial fauna, flora and vegetation and social surroundings.</p> <p>The proponent has investigated the biological and physical environment to identify environmental values of the proposal area. The EPA notes that the proponent has undertaken minimisation measures to avoid potential serious or irreversible damage to the environment by:</p> <ul style="list-style-type: none"> <li>designing the proposal to incorporate previously disturbed areas for the terrestrial disturbance footprint.</li> </ul> <p>The EPA has applied conditions to impose limits on the disturbance of environmental values and has applied conditions where there is uncertainty to prevent and avoid environmental impacts from occurring. The EPA has concluded that subject to the recommended implementation conditions, the proposal is unlikely to pose a threat of serious or irreversible harm.</p>
<p><b>2. The principle of intergenerational equity</b></p> <p><i>The present generation should ensure that the health, diversity and productivity of the environment is maintained and enhanced for the benefit of future generations.</i></p>	<p>The EPA has considered the principle of intergenerational equity in its assessment and has had particular regard to this principle in its assessment of marine fauna, marine environmental quality, benthic communities and habitats, terrestrial fauna, flora and vegetation and social surroundings.</p> <p>The EPA considers consistency with this principle could be achieved with the implementation of its recommended conditions, which requires the proponent to:</p> <ul style="list-style-type: none"> <li>not disturb benthic communities and habitats beyond the authorised extent to protect habitat for marine fauna species and maintain ecological function</li> <li>maintain a high level of ecological protection in the marine environment surrounding the proposal</li> <li>not impact marine fauna during construction or operation of the proposal</li> </ul>



EP Act principle	Consideration
	<ul style="list-style-type: none"> <li>ensure ongoing access to land used for traditional use or custom by the Traditional Owners</li> <li>rehabilitate landforms, vegetation, and fauna habitat to an appropriate state, including consideration of species diversity and abundance.</li> </ul> <p><u>Greenhouse gas emissions</u></p> <p>The EPA has noted that GHG emissions pose a risk to future generations, however, also notes that the proponent has committed to following a linear trajectory to net zero emissions by 2050 consistent with the Paris Agreement and IPCC 1.5 report, and to use offsets should these targets not be met by continuous improvement. The EPA has recommended conditions to ensure this.</p>
<p><b>3. The principles of the conservation of biological diversity and ecological integrity</b></p> <p><i>Conservation of biological diversity and ecological integrity should be a fundamental consideration.</i></p>	<p>The EPA has considered the principle of conservation of biological diversity and ecological integrity in its assessment and has had particular regard to this principle in its assessment of marine fauna, marine environmental quality, benthic communities and habitats, terrestrial fauna, and flora and vegetation.</p> <p>To ensure biodiversity and ecological integrity of environmental values within the development envelope, the EPA has recommended conditions including disturbance limits for marine fauna, marine environmental quality, benthic communities and habitats, terrestrial fauna habitat and priority flora species.</p> <p>The EPA has concluded that the actions to avoid and minimise impacts to environmental values, which are also recommended as conditions, would likely ensure that environmental outcomes are achieved. The application of limits on disturbance and any associated conditions are to ensure there is no significant residual impact on the biodiversity diversity and ecological integrity of these values.</p>
<p><b>4. Principles relating to improved valuation, pricing and incentive mechanisms</b></p> <p>(1) <i>Environmental factors should be included in the valuation of assets and services.</i></p> <p>(2) <i>The polluter pays principle — those who generate pollution and waste should bear the cost of containment, avoidance or abatement.</i></p>	<p>In considering this principle, the EPA notes that the proponent will bear the costs relating to implementing the proposal to achieve environmental outcomes, and management and monitoring of environmental impacts during construction, operation and decommissioning of the proposal. The EPA has had particular regard to this principle in considering marine fauna, marine environmental quality, benthic communities and habitats, terrestrial fauna, flora and vegetation and social surroundings.</p>

EP Act principle	Consideration
<p>(3) <i>The users of goods and services should pay prices based on the full life cycle costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any wastes.</i></p> <p>(4) <i>Environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, which enable those best placed to maximise benefits and/or minimise costs to develop their own solutions and responses to environmental problems.</i></p>	
<p><b>5. The principle of waste minimisation</b></p> <p><i>All reasonable and practicable measures should be taken to minimise the generation of waste and its discharge into the environment.</i></p>	<p>The EPA has considered the principle of waste minimisation in its assessment and has had particular regard to this principle in its assessment of marine fauna, marine environmental quality, benthic communities and habitats, terrestrial fauna, and flora and vegetation.</p> <p>The proponent has considered the principle of waste minimisation by:</p> <ul style="list-style-type: none"> <li>• putrescible waste will be disposed of at the existing licensed landfill on the Island</li> <li>• metal waste will be deposited at the designated metal dump</li> <li>• waste hydrocarbons will be transported off the Island for reprocessing.</li> <li>• waste that cannot be managed onsite will be transferred to the mainland by barge for appropriate disposal</li> </ul>

## Appendix E: Other environmental factors

**Table D1: Evaluation of other environmental factors**

Environmental factor	Description of the proposal's likely impacts on the environmental factor	Government agency and public comments	Evaluation of why the factor is not a key environmental factor
<b>Land</b>			
Landforms	The proposal will not impact landforms.	<u>Public comments</u> <ul style="list-style-type: none"> <li>No public comments were received.</li> </ul> <u>Agency comments</u> <ul style="list-style-type: none"> <li>No agency comments were received.</li> </ul>	The EPA did not identify landforms as a preliminary key environmental factor when the decision to assess the proposal was made. The proposal will not have a significant impact on landforms and no associated public comments were received, therefore the EPA did not consider landforms to be a key environmental factor at the conclusion of its assessment.
Terrestrial environmental quality	Risk of soil contamination and acidification from chemical or hydrocarbon spills	<u>Public comments</u> <ul style="list-style-type: none"> <li>No public comments were received.</li> </ul> <u>Agency comments</u> <ul style="list-style-type: none"> <li>No agency comments were received.</li> </ul>	<p>Terrestrial Environmental Quality was identified as a preliminary key environmental factor when the EPA decided to assess the proposal; however, the EPA considers it to not be a key factor at the conclusion of its assessment.</p> <p>Having regard for:</p> <ul style="list-style-type: none"> <li>engineering controls and water management structures will be implemented to maintain natural hydrological regimes.</li> <li>the drainage design to prevent erosion of soils and mobilisation of potential contaminants</li> <li>refueling, servicing, and maintenance of plant, vehicles, and equipment will be conducted in designated, bundled areas.</li> <li>spill kits will also be accessible during any refueling, maintenance, or chemical transfer activities.</li> <li>hydrocarbon leaks and spills can be regulated by other DMAs, as can contaminated sites (CS Act 2003).</li> </ul>

Environmental factor	Description of the proposal's likely impacts on the environmental factor	Government agency and public comments	Evaluation of why the factor is not a key environmental factor
			the EPA considers that it is unlikely that the proposal would have a significant impact on terrestrial environmental quality. Accordingly, the EPA did not consider terrestrial environmental quality to be a key environmental factor at the conclusion of its assessment.
<b>Sea</b>			
Coastal processes	Modification of coastal erosion and accretion due to wharf infrastructure.	<u>Public comments</u> <ul style="list-style-type: none"> <li>No public comments were received.</li> </ul> <u>Agency comments</u> <ul style="list-style-type: none"> <li>No agency comments were received.</li> </ul>	<p>Coastal processes were not identified as a preliminary key environmental factor when the EPA set the level of assessment. Having regard to:</p> <ul style="list-style-type: none"> <li>the wharf has been designed to run almost parallel to the shoreline, thereby minimising disruption to longshore currents and associated sediment transport processes.</li> <li>the 3D hydrodynamic modelling conducted by GHD (2021) assessed the potential impacts of the proposed wharf on coastal processes. The modelling predicted that any changes to water currents would be minor, highly localised, and confined to the immediate area around the wharf.</li> <li>the study concluded that the proposal is not expected to interrupt longshore currents or significantly alter existing coastal processes.</li> </ul> <p>The EPA considers that it is unlikely that the proposal would have a significant impact on coastal processes. Accordingly, the EPA did not consider coastal processes to be a key environmental factor at the conclusion of its assessment.</p>
<b>Air</b>			
Greenhouse gas emissions		<u>Public comments</u> <ul style="list-style-type: none"> <li>No public comments were received.</li> </ul> <u>Agency comments</u> <ul style="list-style-type: none"> <li>No agency comments were received.</li> </ul>	<p>The EPA did not identify greenhouse gas emissions as a preliminary key environmental factor when the decision to assess the proposal was made.</p> <p>Generally, GHG emissions from a proposal will be considered by the EPA where they are reasonably likely to exceed:</p>

Environmental factor	Description of the proposal's likely impacts on the environmental factor	Government agency and public comments	Evaluation of why the factor is not a key environmental factor
			<ul style="list-style-type: none"><li>• 100,000 tonnes CO<sub>2</sub>-e of scope 1 emissions in any year; or</li><li>• 100,000 tonnes CO<sub>2</sub>-e of scope 2 emissions in any year.</li></ul> <p>The proposal is predicted to emit significantly less than 100,000 tonnes CO<sub>2</sub>-e in any year. The majority of the project's emissions are during construction phase with a low level of emissions during operation.</p> <p>The EPA considers it unlikely that the proposal would be a significant contributor to greenhouse gas emissions. Accordingly, the EPA did not consider greenhouse gas emissions to be a key environmental factor at the conclusion of its assessment.</p>

## Appendix F: List of submitters

### 7-day comment on referral

#### Organisations and public

- Two (2) public submissions were received from individuals
- Four (4) public submissions were received from organisations

#### Government agencies

- None

### Public review of proponent information

#### Organisations and public

- Two (2) submissions were received from the public during the 6-week public review period.

#### Government agencies

- Department of Biodiversity, Conservation and Attractions
- Department of Climate Change, Energy the Environment and Water
- Department of Water and Environmental Regulation

## Appendix G: Assessment timeline

Date	Progress stages	Time (weeks)
20 October 2021	EPA decided to assess – level of assessment set	
20 October 2021	EPA requested additional information	0
23 November 2023	EPA reiterated initial request for additional information	109
23 February 2024	EPA received additional information but sought further clarification from proponent	13
04 June 2024	EPA requested additional information	14
08 October 2024	EPA received additional information but sought further clarification from proponent.	18
05 November 2024	EPA accepted additional information	4
26 November 2024	EPA released additional information for public review	3
7 January 2025	Public review period for additional information closed	6
28 March 2025	EPA received final Response to submissions	11
18 April 2025	EPA accepted proponent's Response to Submissions	3
24 July 2025	EPA completed its assessment (s.44(2b))	12
2 September 2025	EPA provided report to the Minister for Environment	6
5 September 2025	EPA report published	3 days
26 September 2025	Appeals period closed	3

Timelines for an assessment may vary according to the complexity of the proposal and are usually agreed with the proponent soon after the EPA decides to assess the proposal and records the level of assessment.

In this case, the EPA did not meet its timeline objective to complete its assessment and provide a report to the Minister due to a higher than usual volume of complex assessments at the time. As a result, additional time was required to ensure the proposal received adequate consideration and to complete the assessment.

## Appendix H: Relevant policy, guidance, procedures and references

The EPA had particular regard to the policies, guidelines and procedures listed below in the assessment of the proposal.

Dambimangari Aboriginal Corporation 2023, *Kimberley Technology Solutions Pty Ltd Proposed Development of a Deep-Water Offshore Supply Base Cockatoo Island Pre-ILUA Survey*, June 2023.

Department of Climate Change, Energy, the Environment and Water (DCCEEW) 2015, *Safeguard Mechanism: Prescribed production variables and default emissions intensities*, DCCEEW, Canberra, ACT.

Department of Climate Change, Energy, the Environment and Water (DCCEEW) 2022, *National Heritage Places – West Kimberley*, DCCEEW, Canberra, ACT.

Department of Climate Change, Energy, the Environment and Water (DCCEEW) 2023, *National Light Pollution Guidelines for Wildlife*, DCCEEW, Canberra, ACT.

Ecologia Environment 2025, *Cockatoo Island Multi-Use Supply Base Targeted Fauna and Flora Survey*, prepared for Crestlink Pty Ltd, March 2025.

EPA 2016a, *Environmental factor guideline – Benthic communities and habitats*, Environmental Protection Authority, Perth, WA.

EPA 2016b, *Environmental factor guideline – Coastal processes*, Environmental Protection Authority, Perth, WA.

EPA 2016c, *Environmental factor guideline – Flora and vegetation*, Environmental Protection Authority, Perth, WA.

EPA 2016d, *Environmental factor guideline – Marine environmental quality*, Environmental Protection Authority, Perth, WA.

EPA 2016e, *Environmental factor guideline – Marine fauna*, Environmental Protection Authority, Perth, WA.

EPA 2016f, *Environmental factor guideline – Social surroundings*, Environmental Protection Authority, Perth, WA.

EPA 2016g, *Environmental factor guideline – Terrestrial fauna*, Environmental Protection Authority, Perth, WA.

EPA 2016h, *Technical guidance – Flora and vegetation surveys for environmental impact assessment*, Environmental Protection Authority, Perth, WA.

EPA 2016i, *Technical guidance – Protecting the quality of Western Australia's marine environment*, Environmental Protection Authority, Perth, WA.

EPA 2016j, *Technical guidance – Protection of benthic communities and habitats*, Environmental Protection Authority, Perth, WA.



EPA 2016k, *Technical guidance – Sampling of short-range endemic invertebrate fauna*, Environmental Protection Authority, Perth, WA.

EPA 2020b, *Technical guidance – Terrestrial vertebrate fauna surveys for environmental impact assessment*, Environmental Protection Authority, Perth, WA.

EPA 2021a, *Interim Guidance - Environmental outcomes and outcomes-based conditions*, Environmental Protection Authority, Perth WA.

EPA 2021b, *Interim Guidance – Taking decision making processes into account in EIA*, Environmental Protection Authority, Perth WA.

EPA 2023a, *Environmental factor guideline – Social surroundings*, Environmental Protection Authority, Perth, WA.

EPA 2023b, *Statement of environmental principles, factors, objectives and aims of EIA*, Environmental Protection Authority, Perth, WA.

EPA 2023c, *Technical guidance – Environmental impact assessment of social surroundings - Aboriginal cultural heritage*, Environmental Protection Authority, Perth, WA.

EPA 2024a, *Environmental factor guideline – Greenhouse gas emissions*, Environmental Protection Authority, Perth, WA.

EPA 2024b, *Environmental impact assessment (Part IV Divisions 1 and 2) procedures manual*, Environmental Protection Authority, Perth, WA.

GHD 2014, *Pluton Resources Ltd Cockatoo Island Flora, Fauna and SRE surveys*, prepared for Crestlink Pty Ltd, August 2014.

GHD 2017a, *Kimberley Technology Solutions Pty Ltd Cockatoo Island Multi-User Supply Base Technical Study - Marine Flora and Fauna*, prepared for Crestlink Pty Ltd, June 2017.

GHD 2017b, *Kimberley Technology Solutions Pty Ltd Technical Study – Terrestrial Flora and Fauna*, prepared for Crestlink Pty Ltd, June 2017

GHD 2021, *Kimberley Supply Chain Cluster EIA – Phase 2 Marine Modelling of Coastal Processes and Construction Impacts*, prepared for Crestlink Pty Ltd, April 2021.

GHD 2024, *Kimberley Technology Solutions Pty Ltd Desktop BCH LAU Assessment and Bay 1 Visual Assessment*, prepared for Crestlink Pty Ltd, 22 January 2024.

GHD 2025a, *Kimberley Supply Chain Cluster Marine Environmental Quality Survey*, prepared for Crestlink Pty Ltd, 22 March 2025.

GHD 2025b, *Kimberley Supply Chain Cluster EIA Marine Flora and Fauna*, prepared for Crestlink Pty Ltd, 22 March 2025.

GHD 2025c, *Kimberley Supply Chain Cluster EIA Supporting Document*, prepared for Crestlink Pty Ltd, 28 March 2025.

GHD 2025d, *Kimberley Supply Chain Cluster Underwater Noise Impact Assessment*, prepared for Crestlink Pty Ltd, 28 March 2025.

GHD 2025e, *Kimberley Supply Chain Cluster – Final Approvals Documentation*, prepared for Crestlink Pty Ltd, 28 March 2025.

Government of Western Australia 2011, *WA Environmental Offsets Policy*, Government of Western Australia, Perth, WA.

Government of Western Australia 2014, *WA Environmental Offsets Guidelines*, Government of Western Australia, Perth, WA.

Hallbridge 2024, *Cockatoo Island Supply Base Aerodrome Concept Drainage Design*, prepared for Crestlink Pty Ltd, 25 July 2024.

State of Western Australia 2021, *Western Australia Government Gazette, No. 153, Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2024*, 10 December 2024.

Western Australian Marine Science Institution 2018, *Humpback whale use of the Kimberley: understanding and monitoring spatial distribution*, July 2018

Western Australian Marine Science Institution, 2016, *Benthic community production and response to environmental forcing*, November 2016.