NEOSMELT™

Eco-cultural Buffer Zone Management Plan

BlueScope Future Technologies Pty Ltd

Report

170,754 | 68929 (Rev 0)

30 April 2026

BHP | BlueScope | MITSUI IRON ORE DEVELOPMENT | RioTinto | Woodside Energy

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Abbreviations

Term	Definition
ASS	Acid sulfate soils
CEMP	Construction Environmental Management Plan
DRI	Direct Reduced Iron
DRI-ESF	Direct Reduced Iron- Electric Smelting Furnace
DWER	Department of Water and Environmental Regulation
ECBZ	Eco-Cultural Buffer Zone
EP Act	*Environmental Protection Act* 1986
EPA	Environmental Protection Authority
EPBC Act	*Environment Protection Biodiversity Conservation Act* 1999
ESF	Electric Smelting Furnace
GHG	Greenhouse Gas
GKB	Gnaala Karla Booja Aboriginal Corporation
JV	Joint venture
mAHD	Metres above Australian Height Datum
mg/L	Milligrams per litre

MNES	Matters of National Environmental Significance
MP	Management Plan
MS	Ministerial Statement
PEC	Priority Ecological Community
RIZ	Rockingham Industrial Zone
SEA	Strategic Environment Assessment
TEC	Threatened Ecological Community
WA	Western Australia
WTC	Western Trade Coast

1. Introduction

1.1 Background

BlueScope Future Technologies Pty Ltd (the Proponent), in joint venture (JV) partnership with BHP, Rio Tinto, Mitsui Iron Ore Development and Woodside (NeoSmelt), is working to transition towards a lower-emission steelmaking process. NeoSmelt has selected Direct Reduced Iron (DRI) technology coupled with an Electric Smelting Furnace (ESF), referred to as the DRI-ESF process that will have the capacity to produce up to 49,380 tonnes of granulated iron per annum year. The initiative will enable the utilisation of typically medium grade Pilbara iron ores (usually confined to more emission-intensive steelmaking methodology) and significantly reduce greenhouse gas emissions (GHG) compared to the incumbent Blast Furnace – Basic Oxygen process.

The Proposal is to construct and operate a pilot DRI-ESF plant approximately 35 kilometres (km) south of Perth in the City of Rockingham (Figure 1-1). It comprises a Development Envelope of approximately 30.5 hectares (ha) located in the Western Trade Coast (WTC), within the Rockingham Industrial Zone (RIZ) Strategic Environment Assessment area (SEA). The Development Envelope is vacant industrial land to be leased from DevelopmentWA, the Western Australian (WA) Government's central land and development agency.

In 2004, areas of the RIZ with significant environmental features were referred by Landcorp (now Development WA) to the Environmental Protection Authority (EPA) as a SEA under Section 38 of the *Environmental Protection Act 1986* (EP Act). The EPA assessed the referral as a strategic proposal, and the RIZ SEA was approved by the Minister for the Environment (the Minister) in May 2011, via Ministerial Statement (MS) 863. Since the original publication of MS 863, five derived proposals for subdivision have been assessed by the EPA and approved by the Minister. Derived Proposal 5 was declared by the EPA on 3 April 2024, which encompasses the Development Envelope, and is valid for a five-year period following the declaration.

Due to the presence of Matters of National Environmental Significance (MNES) within the RIZ, the proposed RIZ SEA development was also referred to the then Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC), now Department of Climate Change, Energy, the Environment, and Water (DCCEEW), under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) in 2010. The RIZ was assessed as a 'Controlled Action' (EPBC 2010/5337) and approved in November 2011 with conditions. DevelopmentWA is the holder of the EPBC approval, and the Proposal will be required to be compliant with any relevant EPBC 2010/5337 conditions.

All development in the RIZ SEA will be undertaken in a manner consistent with EPBC 2010/5377 and MS 863 conditions, including consideration of the approved Water Management Strategy, Construction Environmental Management Plan (CEMP) and Environmental Management Plan (EMP). This includes measures to retain native vegetation where possible.

1.2 Scope

The Proposal will result in the clearing of up to 21.4 ha of native vegetation within the Development Envelope of 30.5 ha. However, the Proponent has committed to retaining vegetation of the highest value within a designated Eco-cultural Buffer Zone (ECBZ) that covers up to (Figure 1-2).

Values of the ECBZ include:

- 98 Tuart trees, which make up 4.94 ha of Tuart woodlands and forests of the Swan Coastal Plain Threatened Ecological Community (TEC);
- Forest Red-tailed Black Cockatoo foraging habitat; and
- Carnaby's Black Cockatoo foraging habitat.

A Construction Environmental Management Plan (CEMP) has also been developed to ensure impacts to the ECBZ are minimised or avoided during the construction period of the Proposal. This ECBZ Management Plan (ECBZ MP) has been prepared for ongoing management of the area with the objective of protecting and, where practicable, improving the retained environmental values.

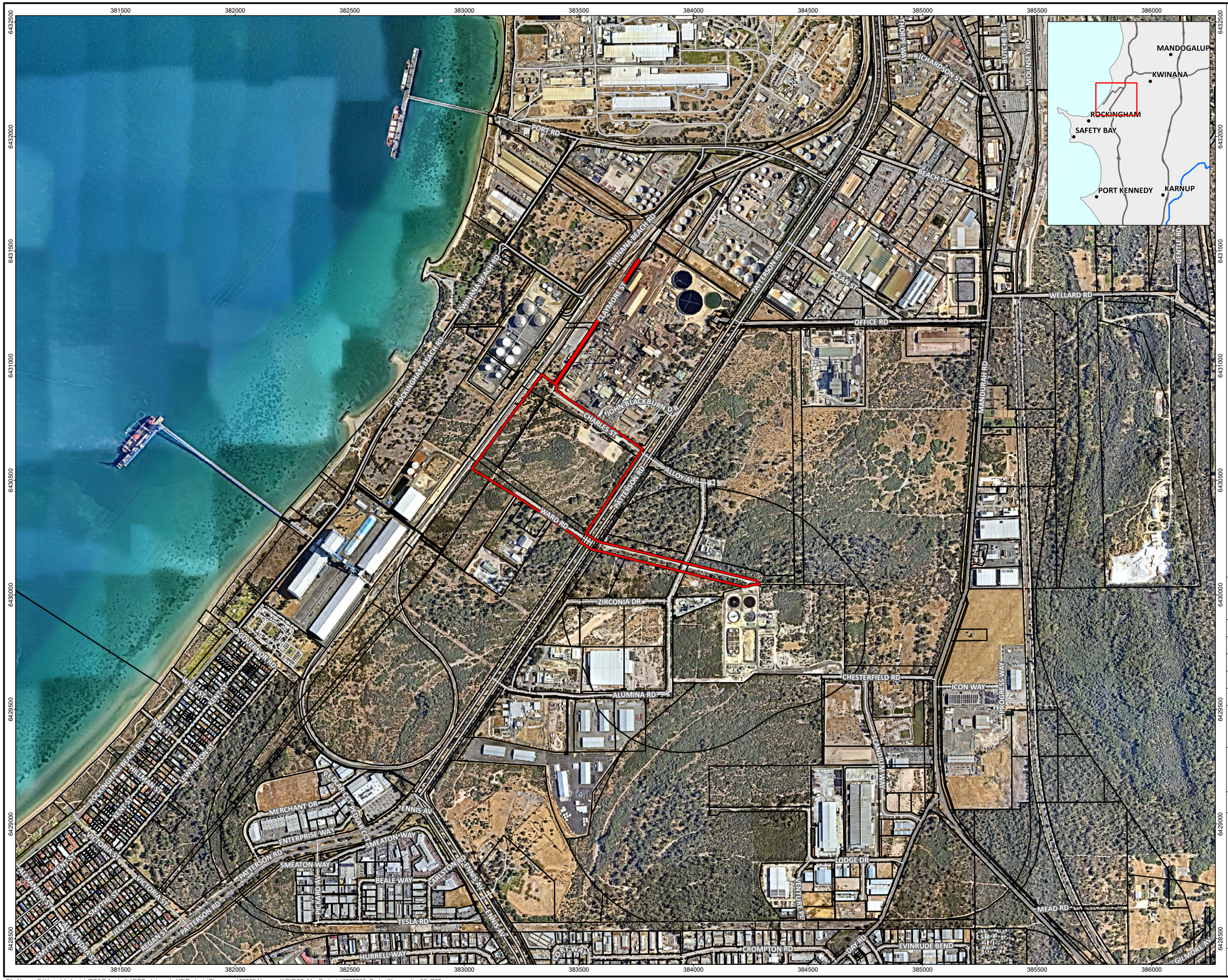
1.3 Objectives

The objectives of this ECBZ MP are to:

- Provide measures to physically delineate the ECBZ;
- Define the nature of access to and within the ECBZ;
- Identify appropriate access, weed and dieback, waste, fauna and bushfire management measures;
- Develop an environmental monitoring program;
- Outline trigger criteria for the implementation of contingency actions;
- Establish roles and responsibilities; and
- Provide indicative timeframes for the implementation of the above objectives.

All management actions contained within the ECBZ MP have been designed with consideration of the SMART criteria, in that all actions are;

- Specific,
- Measurable,
- Attainable,
- Relevant, and
- Timebound.



Legend

- Development Envelope
- Cadastral boundary (LGATE-002)
- Highway
- Major road
- Minor road
- Track

JBS&G

Job No: 6892903	
Client: BlueScope Future Industries Pty Ltd	
Version: A	Date: 29-Apr-2026
Drawn By: droberts	
Checked By: JBailes	

Scale 1:15,000 at A3

0 250 500
metres

Coord. Sys. GDA2020 MGA Zone 50

Project NeoSmelt, East Rockingham WA 6168

REGIONAL LOCATION

FIGURE 1-1

File Name: C:\Users\droberts\JBS&G Australia\DCS - Internal - V2\Projects\Bluescope\68929 Neosmelt\GIS\02_MapProjects\6892903_ProjectNeosmelt_s38_R02.aprx
Image Reference: www.nearmap.com© - Imagery Date: 21. January 2025.
Layout: 6892903_A3L_01_01_Regional location

382600 382800 383000 383200 383400 383600 383800 384000 384200 384400 384600

6431400 6431200 6431000 6430800 6430600 6430400 6430200 6430000

KWINANA BEACH RD
ROCKINGHAM BEACH RD
CLAYMORE ST
OCEAN ST
OFFICE RD
JOHN BLACKBURN DR
PATTERSON RD
CHARLES ST
L9008
L109
WARD RD
ALLOY AV
ALUMINA RD
L503
ZIRCONIA DR

Legend

- Development Envelope
- Cadastral boundary (LGATE-002)
- Indicative Disturbance Footprint
- Eco-cultural Buffer Zone (ECBZ)
- Highway
- Minor road

JBS&G

Job No: 6892903	
Client: BlueScope Future Industries Pty Ltd	
Version: A	Date: 30-Apr-2026
Drawn By: droberts	
Checked By: JBailes	

Scale 1:6,000 at A3

0 100 200
metres

Coord. Sys. GDA2020 MGA Zone 50

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SITE LOCATION

FIGURE 1-2

File Name: C:\Users\droberts\JBS&G Australia\DCS - Internal - V2\Projects\Bluescope\68929 Neosmelt\GIS\02_MapProjects\6892903_ProjectNeosmelt_s38_R02.aprx
Image Reference: www.nearmap.com© - Imagery Date: 21. January 2025.
Layout: 6892903_A3L_01_03_The Proposal

2. Environment management framework

BlueScope's Manufacturing Management System Manual (MM.BZ-MS-M-01-01) describes the organisation's established EMS that meets the requirements of and is certified to *ISO 14001:2015 Environmental management systems — Requirements with guidance for use.*

The EMS utilises BlueScope's Safety, Environment and Quality system (SEQ System), which is aligned with the 14 BlueScope Health, Safety and Environment (HSE) Standards and provides information related to managing risks, monitoring legal compliance, and maintaining the systems and documentation associated with health, safety, environment, and quality.

The SEQ System fits into the hierarchy of BlueScope's HSE documents as depicted in Plate 1. The ECBZ MP fits into the Sub-Business Policies, Procedures and Guidelines section of the hierarchy.

Plate 1: BlueScope's HSE document hierarchy

3. Existing environment

3.1 Topography, geology and soils

The Proposal is located on the coastal fringe of the Swan Coastal Plain, within the Quindalup Dune system, comprising relic foredunes of calcareous sands. The topography of the Proposal area is relatively flat with a variation in elevation from 3.5 m to 4.5 m Australian Height Datum (mAHD; Worley 2025).

Three geological units underlie the Proposal:

1. The Superficial Formation:
    a. Safety Bay Sand – white, unlithified, calcareous fine- to medium-grained quartz sand and shell fragments originating from stable and mobile aeolian dunes (Davidson, 1995).
    b. Becher Sand/Becher Clay – grey, fine-grained, quartz and skeletal sand with lenses of silty calcareous clay rich in shell fragments and seagrass peat and mud layers.

   c. Tamala Limestone – creamy, white to yellow aeolian calcarenite, varying from limestone to calcareous sand (fine to medium grained shell fragments), with minor siltstone and marl with various proportions of predominantly medium-grained quartz and sand (Davidson, 1995; Commander, 2003).

2. Rockingham Sand defined by brown to pale grey, silty and slightly feldspathic, medium to coarse-grained subangular quartz sand of shallow marine origin, occupying a deep eroded channel incised into the underlying Wanneroo member of the Leederville Formation.

3. The Leederville Formation comprising of:

   a. Wanneroo Member – interbedded sandstones, siltstones and shales; the siltstones are typically dark grey, micaceous and the sandstone interbeds are weakly consolidated pale grey and fine- to very-coarse-grained.

   b. Pinjar Member – grey and olive-green discontinuous interbedded sandstones, siltstones and shales of both marine and non-marine origin.

Acid sulfate soil (ASS) risk mapping for the Swan Coastal Plain (DWER, 2017) shows the Development Envelope as having no risk of ASS being present, which is consistent with assessments undertaken by Worley Consultants (2025).

3.2 Hydrology

The nearest surface water feature to the Proposal area is the non-perennial Lake Cooloongup, 3.5 km south of the Development Envelope. There are no surface water features within or that drain into the Development Envelope, which is relatively flat with sandy soils and shallow groundwater, conditions that favour infiltration rather than stormwater runoff.

The nearest mapped wetlands to the Development Envelope are unmade Conservation and Resource Enhance category wetlands, located approximately 0.6 km south and 1.5 km southeast of the Development Envelope, respectively. However, these features are hydrologically upgradient of the Development Envelope.

The Proposal is located in the Cockburn Groundwater Area and the Wellard Groundwater and Cockburn confined subareas. Groundwater flows towards Cockburn Sound, west of the Proposal. Groundwater in the area is alkaline with pH ranging from 8.30 to 8.77, and predominately fresh with salinity mapped as 500-1,000 mg per litre (mg/L).

Groundwater monitoring identified groundwater levels are relatively shallow (less than 3 m) (Worley 2025). A nearby DWER bore (DR1A CSGS) recorded maximum groundwater levels over the last 20 years range between 1.55 mAHD and 2.25 mAHD, decreasing towards the coast.

A search of the DWER Water Register (DWER, 2019a) identified there are no groundwater licences intersecting the Development Envelope.

Due to the industrial nature of the RIZ and history of industrial-related pollution of groundwater throughout the area, groundwater abstracted under licences in the immediate vicinity of the Proposal is used for non-potable purposes such as industrial process water.

The nearest public drinking water source area is the Jandakot Underground Water Pollution Control Area, located around 10 km east of the Development Envelope.

3.3 Flora and vegetation

The Proposal sits within an industrial and urban setting, with significant historical disturbance to vegetation. Throughout the Development Envelope there is a network of unauthorised tracks and illegal domestic waste dumping sites.

Within the Development Envelope, JBS&G (2025) confirmed the presence of 98 Tuart trees with a diameter at breast height (DBH) greater than 150 mm. The Tuart trees within the Development Envelope are in Moderate condition, with almost 80% in slightly stressed condition (75-90% foliage present; Figure 3-1). The patch of Tuart trees is considered part of the Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain Priority Ecological Community (PEC) in accordance with the condition categories and thresholds in the Approved Conservation Advice (JBS&G, 2025). The Tuart PEC is in Moderate condition (TSSC, 2019) and covers 4.94 ha (including the 30 m canopy buffer and the additional 30 m patch buffer), forming a narrow strip running north to south adjacent to Patterson Road (Figure 3-2). This area is proposed for retention as an Eco-Cultural Buffer Zone (ECBZ) which covers 6 ha.

A number of Tuart trees were also identified outside of the ECBZ, within the Water Corporation effluent pipeline corridor lot (Lot 503) and alongside Claymore Street where the potential connection to KWRP will run. The trees within Lot 503 are inferred to be part of the Tuart TEC, whilst the Claymore Street trees are mote isolated and not considered to be representative of the TEC. Notwithstanding, these trees will not be impacted by works which will be undertaken in existing cleared areas. Potential indirect impacts for retained native vegetation outside of the ECBZ will be managed by the CEMP.

No threatened flora species listed under the EPBC Act or gazetted as Threatened pursuant to the *Biodiversity Conservation Act 2016* (BC Act) were opportunistically observed within the Development Envelope during the JBS&G (2025) ecological inspection.

Four significant weeds were identified in Development Envelope during an ecological inspection conducted in October 2025 (JBS&G, 2025):

- Bridal Creeper (*Asparagus asparagoides*) - listed as a Declared Pest;
- Narrow Leaf Cotton Bush (*Gomphocarpus fruticosus*): listed as a Declared Pest;
- Century Plant (*Agave americana*) – listed as a Permitted Organism; and
- Brazilian Pepper Tree (*Schinus terebinthifolia*) – listed as a Permitted Organism.

3.4 Fauna

The established Tuart trees and associated vegetation within the Development Envelope may provide foraging and breeding sites for threatened Carnaby's Cockatoo (*Calyptorhynchus latirostris*) and the Forest Red-tailed Black Cockatoo (*Calyptorynchus banksii naso)* (Commonwealth of Australia, 2019). Harewood (2025) recorded 82 trees with a DBH greater than 30 cm as potential breeding trees within the Development Envelope; however, no suitable hollows were observed (Figure 3-3). Notwithstanding, the Tuart trees, which provide the highest value habitat within the Development Envelope, will be retained within the ECBZ.

Additional Tuart trees identified outside of the ECBZ that may be potential breeding trees for black cockatoos will also be retained within the Development Envelope and managed via implementation of the CEMP.

The native vegetation within the Development Envelope may also have some value to Quenda (*Isodon fusciventer* – P4), which have been previously recorded. Peregrine Falcon (*Falco peregrinus*) is known to occur in the broader area (Harewood, 2025).

3.5 Cultural heritage and social values

3.5.1 Aboriginal heritage

An archaeological and ethnographic heritage survey was undertaken on 15 October 2025 by seven Noongar Consultants and two Aboriginal Land Services (ALS) Heritage Consultants, with the assistance of four NeoSmelt representatives. The survey identified the following:

- No registered sites are located within the Development Envelope;

- No lodged heritage places are located within the Development Envelope;
- No historic heritage places are located within the Development Envelope;
- No previously unreported heritage places were identified; and
- No isolated artefacts were identified.

While no culturally significant sites or artefacts were identified, Gnaala Karla Booja (GKB) recognise the value in retaining mature Tuart trees and grass trees within the ECBZ, as well as future opportunities the Proposal may present, as identified through the Social Value Plan.

3.5.2 European heritage

A desktop review of heritage registers via the InHerit database was conducted for any registered sites within 500 m of the Development Envelope. One location was identified approximately 500 m southwest of the Development Envelope – the Kwinana Grain Terminal, Granary Museum & Jetty (ID: 18482).

382600 382800 383000 383200 383400 383600 383800 384000 384200 384400 384600

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ROCKINGHAM BEACH RD
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CLAYMORE ST
OCEAN ST
OFFICE RD
JOHN BLACKBURN DR
CHARLES ST
PATTERSON RD
ALLOY AV
WARD RD
ALUMINA RD
ZIRCONIA DR

Legend

- Development Envelope
- Cadastral boundary (LGATE-002)
- Eco-cultural Buffer Zone (ECBZ)
- Highway
- Minor road

Tuart tree condition

- healthy (90% foliage present)
- slightly stressed (75-90% foliage present)
- very stressed (< 50% foliage present)
- stressed (50-75% foliage present)
- dead medium (foliage absent, bark and fine twigs still present)
- Unknown

JBS&G

Job No: 6892903	
Client: BlueScope Future Industries Pty Ltd	
Version: A	Date: 29-Apr-2026
Drawn By: droberts	
Checked By: JBailes	

Scale 1:6,000 at A3

0 50 100
metres

Coord. Sys. GDA2020 MGA Zone 50

Project NeoSmelt, East Rockingham WA 6168

TUART TREE CONDITION

FIGURE 3-1

File Name: C:\Users\droberts\JBS&G Australia\DCS - Internal - V2\Projects\Bluescope\68929 Neosmelt\GIS\02_MapProjects\6892903_ProjectNeosmelt_s38_R02.aprx
Image Reference: www.nearmap.com© - Imagery Date: 21. January 2025.
Layout: 6892903_A3L_07_01_Tuart tree condition

Legend

- Development Envelope
- Cadastral boundary (LGATE-002)
- Eco-cultural Buffer Zone (ECBZ)

Tuart Threatened Ecological Community

- TEC buffer
- Tuart TEC patch buffer
- Highway
- Minor road

JBS&G

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Scale 1:6,000 at A3

0 50 100
metres

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THREATENED ECOLOGICAL COMMUNITIES

FIGURE 3-2

File Name: C:\Users\droberts\JBS&G Australia\DCS - Internal - V2\Projects\Bluescope\68929 Neosmelt\GIS\02_MapProjects\6892903_ProjectNeosmelt_s38_R02.aprx
Image Reference: www.nearmap.com© - Imagery Date: 21. January 2025.
Layout: 6892903_A3L_07_02_TEC

382600 382800 383000 383200 383400 383600 383800 384000 384200 384400 384600

6431400 6431200 6431000 6430800 6430600 6430400 6430200 6430000

ROCKINGHAM BEACH RD
KWINANA BEACH RD
CLAYMORE ST
CHARLES ST
OCEAN ST
OFFICE RD
JOHN BLACKBURN DR
PATTERSON RD
ALLOY AV
WARD RD
ALUMINA RD
ZIRCONIA DR

Legend

- Development Envelope
- Eco-cultural Buffer Zone (ECBZ)
- Cadastral boundary (LGATE-002)
- Highway
- Minor road
- Habitat Tree (DBH >30cm) [Harewood 2025]
- Habitat Tree (DBH >30cm) [JBS&G 2026]

JBS&G

Job No: 6892903	
Client: BlueScope Future Industries Pty Ltd	
Version: A	Date: 29-Apr-2026
Drawn By: droberts	
Checked By: JBailes	

Scale 1:6,000 at A3

0 50 100
metres

Coord. Sys. GDA2020 MGA Zone 50

Project NeoSmelt, East Rockingham WA 6168

BLACK COCKATOO HABITAT TREES (DBH >30CM)

FIGURE 3-3

File Name: C:\Users\droberts\JBS&G Australia\DCS - Internal - V2\Projects\Bluescope\68929 Neosmelt\GIS\02_MapProjects\6892903_ProjectNeosmelt_s38_R02.aprx
Image Reference: www.nearmap.com© - Imagery Date: 21. January 2025.
Layout: 6892903_A3L_08_01_BC habitat trees

4. Potential impacts

Activities associated with the Proposal have the potential to impact the ECBZ. These activities include:

- Native vegetation clearance,
- Ground disturbance, and topsoil movements,
- Vehicle movements,
- Demarcation activities (fencing) that creates barriers to fauna movement or pathways for pest species,
- Potential spills of hazardous waste materials,
- Noise and dust emissions,
- Bushfires associated with increased human activities, and
- Generation and storage of waste.

An assessment of the potential impacts and risks to the ECBZ resulting from the Proposal has been undertaken as per Table 4-4. Results of the risk assessment have been used to develop management measures that form part of this ECBZ MP.

The proponent has also prepared a CEMP, which includes relevant provisions as they relate to potential impacts on the ECBZ throughout the construction phase of the Proposal.

4.1 Risk assessment

A qualitative risk assessment as conducted, whereby each environmental risk identified has been provided a likelihood and consequence rating using the criteria in Table 4-1 and Table 4-2. These rating were then combined using Table 4-3 to generate a risk rating of low, medium, high or severe, the results of which are provided in Table 4-4.

Table 4-1: Likelihood

Qualitative measures for likelihood (how likely is it that this event/issue occurs after control strategies have been put in place)	
Highly likely	Is expected to occur in most circumstances
Likely	Will probably occur during the life of the project
Possible	Might occur during the life of the project =
Unlikely	Could occur but considered unlikely or doubtful
Rare	May occur in exceptional circumstances

Table 4-2: Consequence

Qualitative measures for consequence rating (what will be the consequence/result if this issue does occur)	
Minor	Minor incident of environmental damage that can be reversed.
Moderate	Isolated but substantial instances of environmental damage that could be reversed with intensive efforts.
High	Substantial instances of environmental damage that could be reversed with intensive efforts.
Major	Major loss of environmental amenity and real danger continuing.
Critical	Severe widespread loss of environmental amenity and irrecoverable environmental damage.

Table 4-3: Risk rating

Likelihood	Consequence				
	Minor	Moderate	High	Major	Critical
Highly	Medium	High	High	Severe	Severe
Likely	Low	Medium	High	High	Severe
Possible	Low	Medium	Medium	High	Severe
Unlikely	Low	Low	Medium	High	High
Rare	Low	Low	Low	Medium	High

Table 4-4: Risk assessment

Value	Potential Impacts	Inherent Risk Rating			Management Measures	Residual Risk Rating		
		Likelihood	Consequence	Risk		Likelihood	Consequence	Risk
Access and security	Uncontrolled access within the ECBZ may result in vandalism or damage to native vegetation as a result of waste discharge or soil contamination.	Possible	Moderate	**Medium**		Rare	Moderate	**Low**
Weeds and Pathogens	Introduction and/or spread of weed species and pathogens leading to reduced flora species and system diversity.	Likely	Moderate	**Medium**		Possible	Moderate	**Low**
Vegetation	Poor management and/or supervision during construction activities may lead to the loss of remnant and native vegetation outside of the clearing boundaries.	Possible	Moderate	**Medium**		Unlikely	Moderate	**Low**
Fauna	Poor management and/or supervision during construction activities may lead to the loss of habitat for threatened fauna and migratory species.	Possible	Moderate	**Medium**		Unlikely	Moderate	**Low**
	Vehicle interactions resulting in injury or death.	Possible	Moderate	**Medium**		Unlikely	Moderate	**Low**
Fire	Site activities have the potential to cause bushfires in the ECBZ, leading to damage or death to local flora, fauna and/or communities.	Possible	High	**Medium**		Unlikely	High	**Medium**
Waste	Uncontrolled release of waste may result in pollution to nearby sensitive receptors and could release contaminants into areas accessed by the public and/or fauna.	Unlikely	Moderate	**Low**		Unlikely	Moderate	**Low**

5. Management measures

Management measures identified for the ECBZ prioritise protection of the Tuart TEC and associated fauna habitat for native species of conservation significance (Black Cockatoos and Quenda), which may result in improved vegetation condition. Management measures have been prepared in consideration of approved conservation advise for Tuart TEC (TSSC, 2019).

In addition to these measures, a CEMP has also been prepared to manage environment risks throughout the construction phase of works.

As noted in Section 8, all personnel involved in the implementation of the Proposal (i.e., construction and operation) will complete inductions, training and engage in toolbox talks to ensure environmental aspects and impacts are understood and appropriately mitigated.

5.1 Delineation and access

Delineation of and access to the ECBZ is important during the construction and operating phase of the Proposal. During construction, fencing will be installed around the ECBZ to ensure no unauthorised clearing of retained vegetation occurs within the ECBZ. If the ECBZ is not effectively delineated, then degrading processes such as unapproved clearing and unmitigated vehicle/pedestrian access may become prevalent.

Delineation and access measures will be the same during construction and operation, whereby unauthorised access will be restricted within the ECBZ, with access measures put in place for further monitoring and/or management of the area, such as weed and bushfire management and activities aligned with the Social Value Plan. These measures are further detailed in Table 5-1.

Table 5-1: Delineation and access measures

Reference No.	Action	Target	Timing	Responsibility
Action 1.	Install chain link, or similar, fencing around the boundary of the ECBZ	To ensure no authorised access or clearing of vegetation occurs within the ECBZ	Prior to ground disturbing activities commencing	Project Manager
Action 2.	Clearly demarcate the boundary of the ECBZ at the interface within the Disturbance Footprint	To ensure no clearing of vegetation occurs within the ECBZ, whilst still allowing for the movement of ground dwelling fauna into the ECBZ during ground disturbance	Prior to ground disturbing activities commencing	Project Manager
Action 3.	Install signage on the boundary fencing of the ECBZ detailing access restrictions	To discourage unauthorised access to the ECBZ	Following installation of boundary fencing	Project Manager

5.2 Weed and pathogen management

Appropriate management measures will be implemented prior to, during and following construction works to minimise potential spread of weed and dieback infestation to vegetation within the ECBZ (Table 5-3), in accordance with the completion criteria Table 5-2.

As noted in Section 3.3, vegetation was assessed as being in Degraded condition, with several weed species of national significance (WONS) listed under the BAM Act identified during surveys undertaken by JBS&G (2025). One species in particular, Bridal Creep (*Asparagus asparagoides*), is known to affect Tuart TEC, whereby it can almost entirely smother native vegetation (TSSC 2019).

Weed management will commence annually in winter/spring primarily targeting listed weed species. Methods of weed management may include:

- Spot spraying – where hand-spraying apparatus is applied directly to target plant; and
- Hand weeding – physical removal of the weed.

The dieback status of the Development Envelope is unknown at this stage; however, dieback is prevalent on the Swan Coastal Plain. Consequently, management strategies incorporating dieback mitigation measures within the ECBZ have been considered, and completion criteria applies as per Table 5-2.

Table 5-2: Weed and dieback completion criteria

Parameter	Completion criteria
Weeds	No increase of weed coverage within the ECBZ
	No weeds of national significance
Dieback	No signs of dieback spread (if any dieback is identified opportunistically during annual monitoring)

Table 5-3: Weed and pathogen management measures

Reference No.	Action	Target	Timing	Responsibility
Action 4.	All vehicles and machinery entering the Development Envelope are to be free of mud and soil that may have been brought onto site from outside of the Development Envelope	To prevent the introduction of weeds and dieback into the ECBZ	During construction and operation	All personnel
Action 5.	If required, based on monitoring, develop a weed control program and appoint an experienced contractor to manage weeds within the ECBZ	To ensure weed densities do not increase and to eradicate WONS from the ECBZ	In the weed growing season (winter/spring) during construction and operation	Project Manager / Environmental Consultant

5.3 Waste management

The increased use of areas surrounding the ECBZ could result in unregulated waste disposal. Unregulated waste can have adverse impacts on flora and fauna within the ECBZ through the introduction of pests, weeds and dieback, contamination of soils, and by physically endangering native fauna. Waste management actions are presented in Table 5-4.

Table 5-4: Waste management measures

Reference No.	Action	Target	Timing	Responsibility
Action 6.	Increased awareness regarding waste management and environmental sustainability through installation of signage demonstrating clear waste disposal practices	To reduce waste impacting native vegetation and fauna within the ECBZ	Following installation of boundary fencing	Project Manager
Action 7.	Maximize distance between storage of chemicals, hydrocarbons and other environmentally hazardous material and the boundary of the ECBZ	To prevent spills of hazardous materials impacting native vegetation and fauna within the ECBZ	During construction and operation	Project Manager
Action 8.	Portable ablution blocks must be stored at a minimum of 50 m from the boundary of the ECBZ	To prevent sewage spills impacting native vegetation and fauna within the ECBZ.	During construction	Project Manager
Action 9.	Undertake a waste removal programme within the ECBZ, as per the contingency actions	To prevent the build-up of waste within the ECBZ	During construction and operation	Project Manager

5.4 Vegetation, fauna and pest management

The ECBZ was strategically chosen for retention based on its environmental and cultural heritage values, in particular a patch of Tuart TEC noted as being in Moderate condition (JBS&G 2025), which could provide suitable foraging habitat for Forest Red-tailed Black Cockatoo and Carnaby's Black Cockatoo (Harewood 2025; Section 3.4). Therefore, opportunities to maintain and, where possible, enhance vegetation and fauna habitat have been considered in this ECBZ MP, including weed and pest management.

Remnant vegetation within the ECBZ has limited connection to undeveloped lots in the surrounding area; however, it is not considered to provide ecological linkage due to the surrounding industrial land use, noting the Development Envelope is located within the RIZ. Adjacent barriers, such as Patterson Road, eliminate connectivity for ground-dwelling fauna not already present within the ECBZ and connecting undeveloped lots.

The CEMP includes management measures to be implemented during construction works within the wider Development Envelope, such as directional clearing towards the ECBZ ensuring fauna has the opportunity to move into the area away from disturbance.

Table 5-5: Vegetation, fauna and pest management measures

Reference No.	Action	Target	Timing	Responsibility
Action 10.	Engage a suitably qualified subcontractor to undertake pest fauna control/ removal as per the contingency actions stipulated within Table 7-1, based on monitoring	To ensure pest competition and threat to local native fauna is mitigated and to mitigate the impacts of herbivory on vegetation	During construction and operation	Project Manager/ Environmental Consultant
Action 11.	Provide educational signage on the boundary fencing of the ECBZ detailing importance of conservation efforts for the ecological community	To decrease risks of degraded vegetation	During construction and operation	Project Manager

Reference No.	Action	Target	Timing	Responsibility
Action 12.	Reduce speed limits within the Development Envelope, by installing speed signs.	To decrease risk of vehicle strike to fauna local to the ECBZ	During construction and operation	Project Manager
Action 13.	Conduct weed management within the ECBZ in a staged approach, avoiding the clearing of weeds at one time	To remove listed weed species from the ECBZ, whilst reducing the risk of exposure and predation to ground dwelling fauna (i.e., Quenda)	During construction and operation	Project Manager/ Environmental Consultant
Action 14.	Allow dead trees/ fallen logs to remain	To provide habitat to native fauna	During construction and operation	Project Manager

5.5 Bushfire management

The Development Envelope is currently designated as bushfire prone on the WA map of bushfire prone areas, according to mapping by the Department of Fire and Emergency Services (DFES 2020).

Activities associated with the operation of the Project may increase the risk of fire within the ECBZ through:

- The operation of equipment and machinery;
- Handling and storage of flammable liquids;
- Inappropriate storage of waste materials, including cigarette butts, and
- The presence of vegetation stockpiles, which can act as fuel sources.

Subsequently, a Bushfire Management Plan (BMP) will be prepared to address the above risks.

Bushfire mitigation measures are presented in Table 5-6.

Table 5-6: Bushfire mitigation measures

Reference No.	Action	Target	Timing	Responsibility
Action 15.	Maximize distance between storage of all flammable materials (as specified by the manufacturers' instructions) and the boundary of the ECBZ	To prevent the likelihood and severity of fire within the ECBZ	During construction and operation	Project Manager
Action 16.	Maximise distance between vegetation stockpiles and the boundary of the ECBZ			Project Manager
Action 17.	No parking of vehicles on areas of dry grasses			All personnel
Action 18.	No smoking within proximity of retained vegetation			All personnel

6. Monitoring and assessment

The following monitoring actions have been developed to enable an assessment of the effectiveness of the management actions (Table 6-1). Monitoring and assessment criteria will be managed on an annual basis for the life of the Proposal.

Table 6-1: Monitoring actions

Parameter	Timing/ frequency	Location	Purpose	Responsibility
Delineation and access				
Condition of delineation infrastructure	Quarterly during construction and operation	At the perimeter of the ECBZ, where delineation infrastructure has been installed	To ensure that delineation infrastructure is in good condition and there has been no unauthorised access into the ECBZ	Project Manager
Weed and pathogen management				
Assessment of distribution, species, and density/cover of weed species	Annually during construction and operation	Within the ECBZ	To minimise the spread, or introduction of weeds within the ECBZ.	Project Manager / Environmental Consultant
Inspection of vehicles and machinery within proximity of the ECBZ.	Prior to entering the Development Envelope	Perimeter of the ECBZ.	To ensure appropriate dieback/ weed hygiene measures are being undertaken to reduce the spread, or introduction	Vehicle operators
Waste management				
Assessment of unauthorised waste within the ECBZ	Annually during construction and operation	Within the ECBZ	To ensure the ECBZ is free of waste	Project Manager
Vegetation, fauna and pest management				
Evidence/presence of pests/feral animals and associated damage to native vegetation/fauna	Opportunistically during construction and operation	Within the ECBZ	To determine the presence of pests/ feral animals within the ECBZ and whether damage is occurring to native vegetation or fauna as a result	Project Manager/ Environmental Consultant

7. Contingency actions

Contingency actions will be initiated if monitoring indicated that management measures and objectives have not been met (Table 7-1).

Table 7-1: Contingency actions

Parameter	Trigger criteria	Action	Responsibility
Delineation and access	Damage has been reported to delineation infrastructure, including fencing and/or signage Unauthorised vehicle/ personnel reported within the ECBZ	1. Determine cause of damage. 2. Prevent recurrence of damage. 3. Take necessary steps to repair damaged infrastructure and install additional signage	Project Manager
Weed and pathogen management	Identification of a "Declared Pest" weed species within the ECBZ Vehicles that have not been inspected for mud and soil prior to access to the Development Envelope	1. Determine potential cause of weed/dieback introduction or spread. 2. Implement remedy, which may include undertaking weed/dieback management and removal, as required. 3. Direct vehicles off-site for cleaning.	Project Manager/ Environmental Consultant
Waste	Monitoring indicated that waste is present within the ECBZ	1. Identify cause. 2. Undertake waste removal from ECBZ, as required.	Project Manager
Vegetation, fauna and pests	Monitoring indicates a decline in vegetation condition/stress Evidence of feral predators and/ or domesticated pets observed within or surrounding the ECBZ	1. Investigate cause. 2. Undertake intervention or remediation works if required (i.e., move bins, fencing, trapping, baiting, hive removal).	Project Manager/ Environmental Consultant
Bushfire	Fire incident within the ECBZ	1. Investigate cause. 2. Consult with local fire authorities in relation to improvements in fire mitigation measure. 3. Amend and update mitigation measures following consultation. 4. Communicate outcomes to all personnel.	Project Manager

8. Training and awareness

All personnel involved in the construction works (including contractors and sub-contractors) must complete the project induction program, which will advise them of the requirements of the ECBZ MP and other associated management plans including the CEMP, as well as any other specific site requirements, prior to commencing work.

A project-specific environment induction will include key environmental aspects, impacts, risks and controls associated with the Proposal, as well as relevant legislative responsibilities and penalties for failing to meet

these responsibilities. A copy of this ECBZ will be made available prior to commencement of training and throughout the life of the construction program.

Training needs and competency records are managed through BlueScope's training system, SAP.

Routine toolbox talks will also be conducted on-site, prior to the commencement of work each day, to ensure personnel are aware of project progress, planned works, incidents and other general matters relating to the project, including task outcomes, review of risks specific to the task and ensure necessary safety and environmental controls are understood.

9. Reporting

Any non-conformances will be recoded in BlueScope HSE incident management system MARS. Along with any corrective actions required.

10. Plan implementation

10.1 Roles and responsibilities

All contractors and staff are required to operate in accordance with this ECBZ MP. Key personnel and responsibilities are described in the following sections.

10.1.1 Project Manager

The primary responsibilities of the Project Manager include:

- Overall compliance with the ECBZ MP;
- Act as primary liaison between regulatory agencies (i.e., DWER) and contractors;
- Engage suitably qualified contractors to implement the ECBZ MP, as required; and
- Maintain appropriate records that demonstrate compliance with the requirements of the ECBZ MP (to support annual audit).

10.1.2 Environmental Consultant

The primary responsibilities of the Environmental Consultant include:

- Undertake required monitoring within the ECBZ and implement any associated contingency actions; and
- Provide environmental advice to the Project Manager, as requested,

11. Review.

The document will be reviewed in line with BlueScope document management system and/or if there are any significant changes in the risk profile.

12. References

Commander, D.P., 2003. *Outline of the hydrogeology of the Perth Region*. Australian Geomechanics 38 (3).

Davidson, W.A., 1995. Hydrogeology and groundwater resources of the Perth Region, Western Australia: Western Australia Geological Survey, Bulletin 142, 257p.

Department of Water and Environmental Regulation (DWER), 2017. *Acid Sulfate Soil Risk Map – Swan Coastal Plain* (DWER-055). GIS dataset.

Environmental Protection Authority (2011) *Report and Recommendations of the EPA (Report 1390) Rockingham Industrial Zone Strategic Environmental Assessment*. Western Australia, April 2011.

Environmental Protection Authority (EPA), 2016a. *Environmental Factor Guideline: Flora and Vegetation.* EPA, Western Australia.

Environmental Protection Authority (EPA), 2016b. *Environmental Factor Guideline: Terrestrial Fauna.* EPA, Western Australia.

Environmental Protection Authority (EPA), 2018. *Statement of Environmental Principles, Factors and Objectives.* EPA, Western Australia.

Environmental Protection Authority (EPA), 2020. *Environmental Factor Guideline: Air Quality*. EPA, Western Australia.

Environmental Protection Authority (EPA), 2023. *Environmental Factor Guideline: Social Surroundings.* EPA, Western Australia

Environmental Protection Authority (EPA), 2023. *Technical Guidance – Environmental impact assessment of Social Surroundings – Aboriginal cultural heritage*. EPA, Western Australia.

Environmental Protection Authority (EPA), 2024. *Instructions: How to prepare Environmental Protection Act 1986 Part IV environmental management plans*. Government of Western Australia.

Harewood, G., 2025. *Fauna Assessment, Miscellaneous Lots, Patterson Road – East Rockingham*, Prepared for BlueScope Future Technologies Pty Ltd, October 2025 V1.

JBS&G, 2025. *Project NeoSmelt – Ecology Site Inspection.* Memo to BlueScope. 27 August 2025

Threatened Species Scientific Committee (TSSC), 2019. Approved Conservation Advice (incorporating listing advice) for the Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain ecological community.

Worley Consulting, 2025. *NeoSmelt DRI-ESP Pilot Plant: Baseline Contamination Assessment*. Prepared for BlueScope Future Technologies.