

# Gnarabup Tourism Development: Resort and Beach Village

Assessment No: 2318 Environmental Scoping Document

Project No: EP20-008(16)

**Prepared for 5 Star Margaret River Pty Ltd and The Beach  
Village Pty Ltd  
February 2023**



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## 1 Introduction

Saracen Properties Pty Ltd representing 5 Star Margaret River Pty Ltd and The Beach Village Pty Ltd (the proponent) proposes a resort and village incorporating tourism, commercial and residential development, in the locality of Gnarabup, referred to as the 'Proposal'. The Proposal is located approximately eight kilometres (km) south west of Margaret River town in the south west of Western Australia within the Shire of Augusta Margaret River.

The Environmental Protection Authority (EPA) has decided to assess the Proposal under Part IV of the *Environmental Protection Act 1986* (EP Act). The decision to assess the Proposal was made on 10 December 2021 and the level of assessment was set at Public Environmental Review (PER).

A draft Environmental Scoping Document (ESD) was open to a public review period from 12 September 2022 for a period of 2 weeks, ending on 28 September 2022. A total of 96 submissions were received, which were summarised into 26 points. The key points raised in the submissions included:

- Additional modelling and survey work that may be required to determine hydrological pathways and provide confidence to coastal cliff stability.
- Considerations for cumulative impact assessment, including subsequent clearing for fire management and secondary access.
- Investigations that may be required to provide greater clarity around wastewater disposal and management options.
- Inadequacies of the proposed surveys to inform potential impacts to flora, vegetation, fauna, and the marine environment.

Accordingly, this final ESD has been prepared on behalf of the Proponent, by Emerge Associates considering submissions on the draft ESD, consultation with the EPA, decision-making authorities and interested agencies.

### 1.1 Content

The EPA advised the Proposal has the potential to have significant environmental impacts on nine factors. The EPA requires that the ERD address the requirements outlined in **Section 2** to **Section 8**.

### 1.2 Timing

**Table 1** sets out the indicative timeline for the assessment of the Proposal.

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Table 1: Indicative Assessment Timeline

Key Assessment Milestones	Completion Date
EPA approves ESD	December 2022
Proponent submits first draft ERD	March 2023
EPA provides comment on first draft ERD (6 weeks from receipt of ERD)	April 2023
Proponent submits revised draft ERD	May 2023
EPA authorises release of ERD for public review (2 weeks from EPA approval of ERD)	June 2023
Proponent releases ERD for public review for 4 weeks	July 2023
Close of public review period	August 2023
EPA provides Summary of Submissions (3 weeks from close of public review period)	September 2023
Proponent provides Response to Submissions	October 2023
EPA reviews the Response to Submissions (4 weeks from receipt of Response to Submissions)	November 2023
EPA finalises assessment report (including two weeks consultation on draft conditions) and gives report to Minister (6 weeks from completion of assessment)	February 2024

### 1.3 Form and procedure

The ERD will be prepared according to the procedures in the *Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2021* and the *EIA Procedures Manual (Version 4.1, October 2022)*.

### 1.4 Environment Protection and Biodiversity Conservation Act 1999 assessment

The Proposal has been referred to the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). It has been determined the proposal is a Controlled Action and will be separately assessed and approved based on referral information, pursuant to the EPBC Act.

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## 2 Background

### 2.1 History of the Proposal

The proposed development comprises two components which are shown in **Plate 1**:

- The Resort and Spa within Lot 783 Mitchell Drive (herein referred to as ‘the resort’)
- Gnarabup Beach Village within Lots 501, 502 and 504 Reef Drive and Lot 503 Seagrass Place, Gnarabup (herein referred to as ‘the village’).

The Proposal was part of the ‘Gnarabup Beach Development’, which was referred to the EPA in 1992. The land tenure/land parcels associated with the Proposal and surrounding public road network were created through historic approved subdivision applications arising from the implementation of the Gnarabup Beach Development.

The area associated with the Proposal area has been subject to extensive historic state and local planning and development approval processes, with development proposals previously approved, and elements of these approvals implemented. The Gnarabup Beach Structure Plan which encompassed Sussex Location 815 was originally adopted in 1993 and was subsequently revised in 2006. The village site was part of a 7.3 ha site, which was subdivided in 2003 in accordance with the approved structure plan to create Reef Drive, Seagrass Place, pedestrian pathway and drainage/servicing infrastructure, with a further 2.13 ha of land vested to the Crown as a ‘Reserve of Recreation and Drainage’.

In 2009, a development application was approved by the Shire of Augusta Margaret River to commence development within the resort site. While substantial commencement was confirmed, the proposal did not progress through to completion. In September 2015, a new development approval was sought for Lot 783 Wallcliffe Road (the resort site), and granted in February 2016, however, was not implemented. The current Proposal (and associated planning application) seeks to replace the historic approved development for the resort and village sites.

### 2.2 EPA referral

As part of the Part IV EP Act referral process, the Chair of the EPA approached the proponent following receipt of a third-party referral with a request for additional information to enable the EPA to adequately define the Proposal and its potential impacts. The proponent submitted the following technical reports to support the referral of the Proposal to the EPA:

- Margaret River Resort Coastal Hazard Assessment (MP Rogers & Associates Pty Ltd 2020)
- Detailed Flora and Vegetation Assessment (Emerge Associates 2021b)
- Basic Fauna and Targeted Western Ringtail Possum Assessment (Emerge Associates 2021a)
- Preliminary Assessment of Subterranean Fauna Habitat (Invertebrate Solutions Pty Ltd 2021)
- Due Diligence Heritage Assessment Advice (Brad Goode & Associates Pty Ltd 2020)
- Visual Impact Assessment (Emerge Associates 2021c)

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The referred Proposal was advertised over a seven-day public comment period between Tuesday 5 October 2021 to Monday 11 October 2021 whereby any person had the opportunity to comment on the level of assessment for the Proposal.

As part of setting the level of assessment, the EPA determined that the proponent should prepare this ESD. The purpose of this ESD is to define the form, content, timing and procedure of the environmental assessment, required by Section 40(3) of the EP Act.

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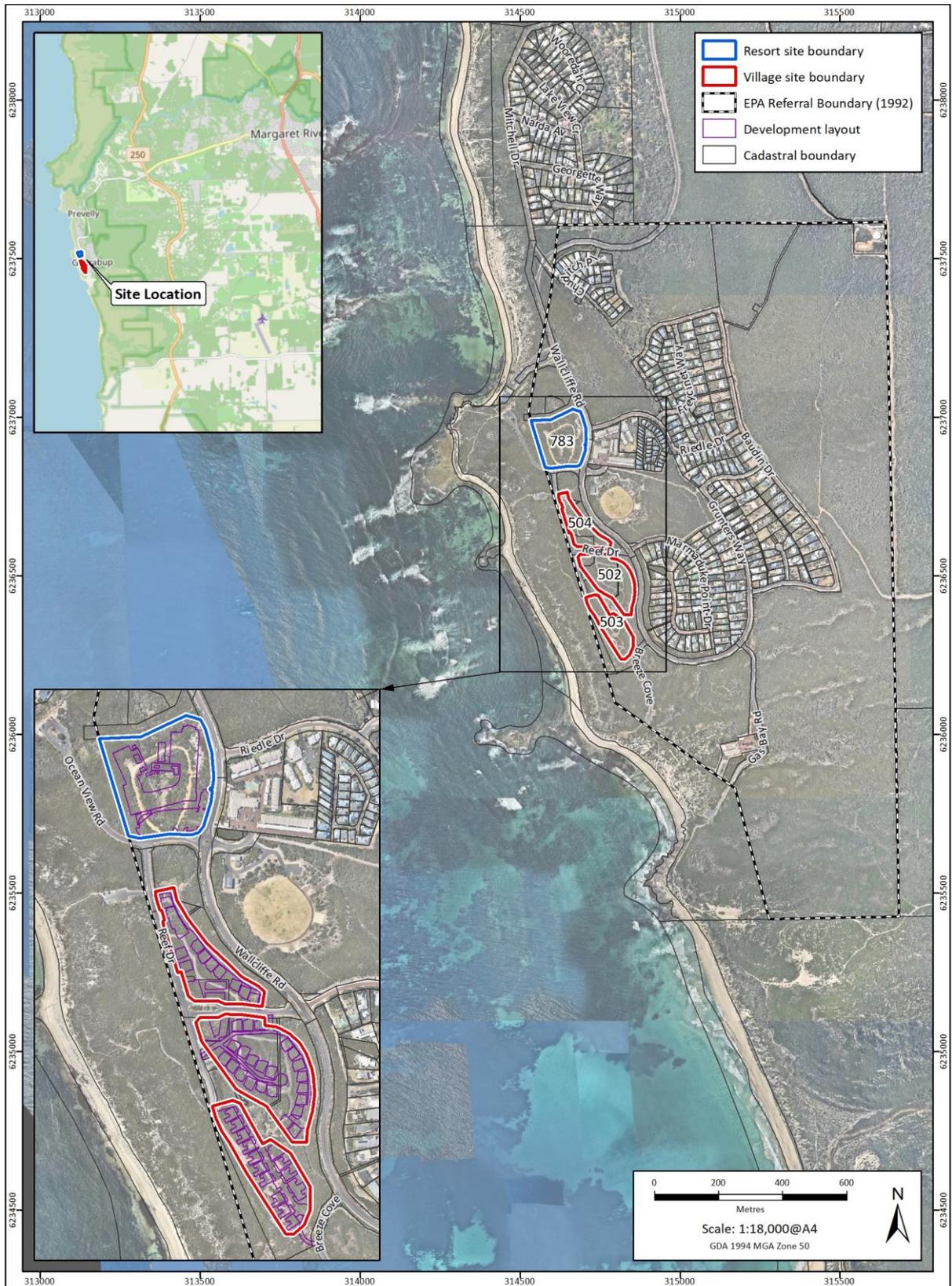


Plate 1: Location of Resort and Village

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### 3 The Proposal

The location and Proposal footprint is shown in **Plate 2**.

As outlined, the Proposal includes the development of two areas (6.67 ha) created via the Gnarabup Beach Development subdivision, that is:

- The Resort and Spa within Lot 783 Mitchell Drive (herein referred to as 'the resort')
- Gnarabup Beach Village within Lots 501, 502 and 504 Reef Drive and Lot 503 Seagrass Place, Gnarabup (herein referred to as 'the village').

The resort includes hotel rooms, function spaces, and food and beverage spaces. The village includes dwellings, comprising villas, apartments and townhouses, to be used for short-stay accommodation, unrestricted stay residential and commercial purposes.

The Proposal also includes areas (1.41 ha) outside the resort and village boundary, for firebreaks, public open space, access paths and civil infrastructure as shown in **Plate 2**.

The Proposal will involve construction and operation. For the purposes of impact assessment, it is assumed that construction will remove all native vegetation within the development footprint shown in **Plate 2**. Once cleared, construction will include bulk earthworks, construction of utilities and civil infrastructure (i.e. gas, electrical, water and sewer connection, stormwater and drainage, fencing, retaining walls, firebreaks and road, cycle or pedestrian assets), building construction, landscaping and access from the existing Gnarabup locality through the site to the existing beach/coast access (and vice versa) as well as public open space.

The Proposal has a total development footprint of 8.08 ha (**Plate 2** and **Table 3**).

The key characteristics of the Proposal are set out in **Table 2** and **Table 3** below.

The Proposal includes existing cleared areas (0.68 ha) and areas of native vegetation (7.40 ha). It is proposed that 0.25 ha of 'Very Good' native vegetation associated with a portion of Lot 783 to the north of the unconstructed Mitchell Drive is retained. This area extends over private freehold land, owned by the proponent and will be ceded to the Shire of Augusta Margaret River for conservation purposes.

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Table 2: Summary of Proposal

Item	Details
Proposal title	Gnarabup Tourism Development
Proponent name	5 Star Margaret River Pty Ltd and The Beach Village Pty Ltd
Assessment number:	2318
Location:	Lot 783 Mitchell Drive, Lots 501, 502 and 504 Reef Drive and Lot 503 Seagrass Place, Gnarabup and portions of Lot 701 on DP 31094, Lots 5484 and 5487 on Plan 33957 Mitchell Road reserve (PI 3648464), Gnarabup.
Short description	<p>Development of a resort and village (incorporating tourism, commercial, residential development and associated utilities and civil infrastructure), in the locality of Gnarabup.</p> <p>The resort will have various associated hotel and spa facilities. Surrounding and incorporated into the resort development will be landscaping and public infrastructure works to provide public access from the existing Gnarabup locality through the site to the beach, from the beach to the resort facilities to enable public use of hotel and spa facilities, and to integrate the resort into its local surrounds. The village includes short-stay accommodation, unrestricted stay residential dwellings and commercial units. Surrounding and incorporated into the village development will be landscaping, utilities and civil infrastructure works to provide public access from the existing Gnarabup locality through the site to the coast, to enable public use of the commercial/hospitality services and to integrate the village development into its local surrounds.</p>

Table 3: Location and proposed extent of physical and operational elements

Element	Location	Proposed Extent
<b>Physical Elements</b>		
Resort site	Lot 783 Mitchell Drive, Gnarabup. See Plate 1 and Plate 2.	2.35 ha
External to resort site boundary - landscape and public infrastructure works.	Surrounding and existing open space reserves created through the historic subdivision of Gnarabup Beach Estate, including Lot 502 on Plan P073501 and Mitchell Road reserve (PI 3648464). See <b>Plate 1</b> and <b>Plate 2</b> .	0.35 ha
Village site	Lots 501, 502 and 504 Reef Drive and Lot 503 Seagrass Place, Gnarabup. See <b>Plate 1</b> and <b>Plate 2</b> .	4.32 ha
External to village site boundary - landscaping, utilities and public infrastructure works.	Surrounding and existing open space reserves created through the historic subdivision of Gnarabup Beach Estate, including Lot 701 on DP 31094 and Lots 5484 and 5487 on Plan 33957. See <b>Plate 1</b> and <b>Plate 2</b> .	1.06 ha
<b>Operational Elements</b>		
Ongoing operation of the Westin Margaret River Resort and Spa and management of immediately surrounding areas landscaped areas.	Lot 783 Mitchell Drive, Lot 502 Reef Drive, Gnarabup and Mitchell Road reserve (PI 3648464). See <b>Plate 1</b> and <b>Plate 2</b> .	2.70 ha
Sale of individual Gnarabup Beach Village beach villas, apartments and commercial premises.	Lots 501, 502 and 504 Reef Drive and Lot 503 Seagrass Place, Gnarabup. See <b>Plate 1</b> and <b>Plate 2</b> .	4.32 ha

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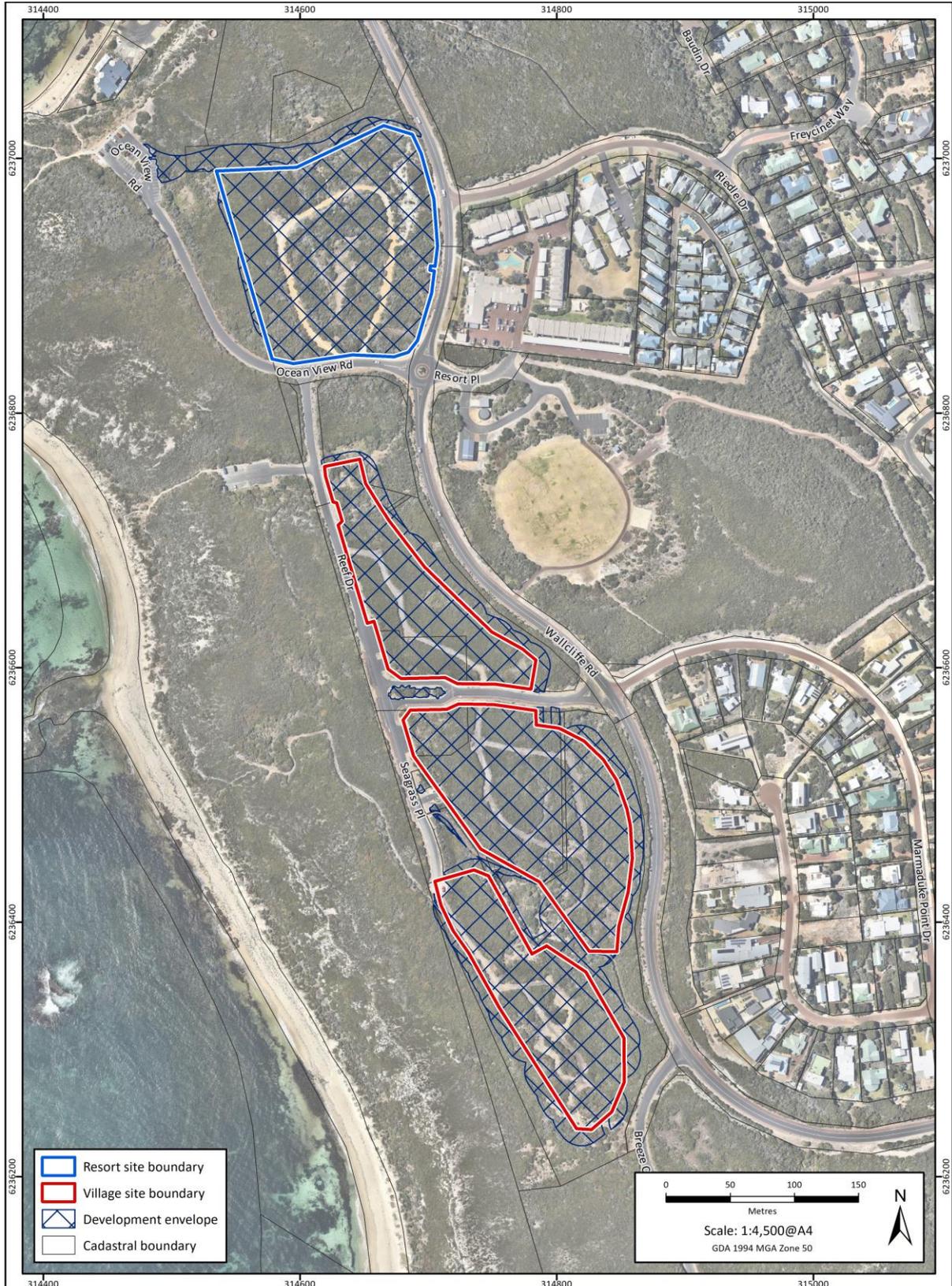


Plate 2: Proposal envelope/footprint

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## 4 Cumulative Impact

### 4.1 Background

Originally approved in the early 1990s via the Gnarabup Structure Plan and Town Planning Scheme amendments much of the land within the Gnarabup Structure Plan has already been developed, with the proposal being the last available large development sites in Gnarabup and Prevelly generally. The proposal is effectively the last area of orderly planned development at the Prevelly/Gnarabup coastal location. Gnarabup/Prevelly is surrounded by protected marine and terrestrial reserves and further major development proposals are very unlikely.

### 4.2 Potential Proposals

From a cumulative impact assessment perspective, potential future proposals will likely relate to the progressive upgrade of existing public infrastructure, to accommodate the full development of Prevelly/Gnarabup.

Relatively minor infrastructure proposals might include upgrades to carparks, shared paths, coastal protection works (e.g. fencing, signage or toilets) and coastal commercial/community facilities (e.g. surf club or cafes).

Two major infrastructure proposals have been canvassed over the years, including:

- Upgrade to the existing licenced (L6640/1994/11) Gnarabup WWTP on Gas Bay Road, which is licenced to treat up to 356 m<sup>3</sup> per day.
- Decommissioning of the existing Gnarabup WWTP and constructing wastewater pumping facilities and pipeline to convey wastewater from Gnarabup to the Margaret River Water Resource Recovery Facility (WRRF) for treatment; and
- Second access road to improve fire safety.

#### 4.2.1 Gnarabup WWTP

The Water Corporation has indicated:

- It is assessing tankering from Gnarabup WWTP to Margaret River WRRF during the peak summer season when and if inflows exceed existing wastewater treatment capacity.
- The current wastewater treatment plant is adequate until 2030 based on normal development activity within the town.
- A decision to make changes to the operations of the wastewater scheme will be considered when significant changes within the area causing an increase in wastewater volumes, such as approval of the proposal.
- Early flora and fauna and Aboriginal Heritage surveys are planned.

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The Department of Water and Environmental Regulation (DWER) granted a renewed licence on 1 May 2021 to the existing plant and advised:

- That the monitoring and reporting program is suitable for assessing potential impacts from current operations at the premises.
- Monitoring results show acceptable levels of treatment with concentrations of nutrients and metals in shore water samples and nutrients in groundwater at downgradient monitoring bores did not exceed the guidelines relevant to assessing water quality for recreational purposes.
- Should Water Corporation wish to make changes to the premises, such as constructing new infrastructure or increasing the daily treatment capacity, they will need to submit a works approval and/or licence application to DWER for assessment under Part V of the EP Act.

From a cumulative impact perspective, future proposals associated with the Gnarabup WWTP might involve the following values and potential impacts:

- Removal of native vegetation and fauna habitat for a potentially larger plant footprint, pipelines and pump stations.
- Removal of Aboriginal heritage for a larger plant footprint, pipelines and pump station.
- Increased visual impacts from a potentially larger plant.
- Increase in odour from a larger plant.
- Increase in volume and loads of contaminants in treated wastewater that is infiltrated to groundwater and enters the marine environment or increased discharges from the Margaret River WRRF.

Environmental factors might include, but is not limited to:

- Benthic communities and habitats
- Marine water quality
- Terrestrial Flora and vegetation
- Terrestrial fauna
- Air quality
- Social surroundings
- Human health

The boundary of this element of the cumulative assessment will likely include Gnarabup/Prevelly, which is the catchment of the WWTP and may extend to Margaret River WRRF, assuming a potential pipeline we be collocated with other pipelines and infrastructure in the Wallcliffe Road reserve.

### 4.2.2 Second Access Road

A possible second access road at Prevelly/Gnarabup was raised following fires in the district in 2011.

A working group considered this second access road and completed a report in 2013, recommending a 1.45 km extension of Rainbow Cave Road to connect to the southern end of Wallcliffe Road in Gnarabup. Via a steering group Main Roads WA then coordinated a feasibility study and undertook a range of environmental, heritage, engineering and stakeholder consultation studies. Five alignment

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options were assessed against a range of criteria and ultimately Option 2 was recommended in Main Roads WA's 2017 report, for the following reasons:

- It provides the shortest most direct link through the National Park out of the options available.
- It has limited environmental constraints whilst providing the best geometric solution of the five alignment options, including more desirable grades and intersection locations.
- It provides the most logical connection to the existing road network, in terms of both road hierarchy connections, and also safety and design.
- It minimises visual impacts at the western end in comparison to some of the other options.
- It does not require any acquisition of private land, and Parks and Wildlife have advised they are not opposed to excision of the approved road from the National Park.
- It was strongly supported by the respondents to the community consultation.

Since the 2017 feasibility study no further work has progressed. The project is not funded for delivery and there is no timeframe to do so.

Irrespective of that and from a cumulative impact perspective, future proposals associated with the second access road might involve the following values and potential impacts:

- Removal of native vegetation and fauna habitat (2.5 ha footprint for Option 2).
- Removal of Aboriginal heritage (no sites recorded by Main Roads WA).
- Visual impacts.
- Noise and amenity impacts.
- Construction impacts.
- Excision and severance of the Leeuwin-Naturaliste National Park.
- Impacts to Blackboy Hollow Cave.

Environmental factors might include, but is not limited to:

- Terrestrial Flora and vegetation
- Terrestrial fauna
- Landforms
- Social surroundings

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## 5 Preliminary Key Environmental Factors and Required Work

The preliminary key environmental factors for the environmental review are:

- Coastal Processes
- Marine Environmental Quality
- Flora and Vegetation
- Landforms
- Subterranean Fauna
- Terrestrial Fauna
- Inland Waters
- Social Surroundings
- Greenhouse Gas Emissions.

**Table 4** outlines the work required for each preliminary key environmental factor and contains the following aspects for each factor:

- EPA factor and EPA objective for that factor.
- Relevant activities – the development activities that may have a significant impact on that factor.
- Potential impacts and risks to that factor.
- Required work for that factor.
- Relevant policy and guidance – EPA (and other) guidance and policy relevant to the assessment.

*Table 4: Preliminary key environmental factors and required work.*

Coastal Processes	
<b>EPA objective</b>	To maintain the geophysical processes that shape coastal morphology so that the environmental values of the coast are protected.
<b>Relevant activities</b>	Development and operation of the resort and village in proximity to Gnarabup Beach and Gas Bay
<b>Potential impacts and risks</b>	<p>The Proposal has the potential to cause:</p> <ul style="list-style-type: none"> <li>• Increased erosion as a result of removal of native vegetation.</li> <li>• Alteration of drainage in extreme flooding events, with possible implications on the foreshore environment and dune stability.</li> <li>• Risk to public safety and future infrastructure due to coastal inundation, sea level rise, climate change and coastal erosion.</li> </ul>
<b>Required work</b>	<ol style="list-style-type: none"> <li>1. Characterise the environment by describing the current coastal processes in proximity to the Proposal area. This includes:               <ol style="list-style-type: none"> <li>a) spatially quantify the coastal morphology by presenting beach profiles and aerial imagery for the historic duration of available data which may include a present day more detailed representation (e.g. unmanned aerial vehicle survey); and</li> <li>b) characterise erosion and inundation provided by extreme events as well as during the required planning timeframe per <i>State Planning Policy 2.6</i> (SPP 2.6); including consideration of climate change.</li> </ol> </li> </ol>

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### Coastal Processes

The spatial and temporal scales must be adequate to address all coastal processes and patterns likely to be affected as a result of the Proposal. Assessment shall be undertaken in accordance with Schedule One of SPP 2.6, including assessment of climate change predictions.

2. Identify elements of the future development and associated infrastructure which may potentially affect coastal processes, including direct, indirect and cumulative impacts and for clearing, construction and operation. A geotechnical assessment will be undertaken to inform the stability and coastal processes factor information relevant to the proposal site.
3. Consider the requirements of SPP 2.6, particularly the coastal foreshore reserve requirements. The coastal foreshore reserve should include allowance for physical processes (as per Schedule One) and be an appropriate width to ensure a coastal foreshore reserve is maintained should the coastal physical process impacts be realised over the planning timeframe (SPP 2.6 cl. 5.9 (i) and (ii)). The assessment of potential impact will be considered based on maintaining existing values, uses and functions.

The relevant values, functions and uses prescribed include biodiversity and ecosystem integrity, visual landscape, public access, and recreation values. The location and size of the coastal foreshore reserve should be responsive to the environment. The coastal foreshore reserve should include landforms and landscapes of 'amenity value' and the resultant coastal foreshore reserve may vary in depth from the coastal processes allowance relative to the nature of coastal dunes and their relationship with topographic features.

Note:

- A Coastal Hazard Assessment (MP Rogers & Associates Pty Ltd 2020) has been undertaken in accordance with State Coastal Planning Policy (SPP 2.6, WAPC 2013).
- The results of the Coastal Hazard Assessment are to be included in the ERD.

4. Describe and justify any proposed mitigation to reduce the potential impacts of the Proposal. Identify the environmental outcome that will be achieved during clearing, construction and operation of the Proposal and the monitoring and/or management actions that will be undertaken to achieve the outcome. If plans are required to demonstrate how the environmental outcome will be achieved, they are to be presented in accordance with the relevant EPA Instructions.

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Table 4: Preliminary key environmental factors and required (continued)

Coastal Processes (continued)	
<b>Required work</b> (continued)	<p>5. Predict the residual impacts (direct, indirect and cumulative) from the Proposal after outlining any avoidance, mitigation and management options that will be applied. Impact predictions are to:</p> <ol style="list-style-type: none"> <li>Be informed by monitoring undertaken in the local area.</li> <li>Address the requirements of State Planning Policy 2.6.</li> </ol>
<b>Relevant policy and guidance</b>	<p><b>EPA Policy and Guidance</b></p> <ul style="list-style-type: none"> <li>Statement of Environmental Principles, Factors and Objectives (EPA 2018)</li> <li>Environmental Factor Guideline – Coastal Processes (EPA 2016d)</li> </ul> <p><b>Other policy and guidance</b></p> <ul style="list-style-type: none"> <li>Coastal Hazard Risk Management and Adaptation Plan (Shire of Augusta Margaret River 2015)</li> <li>State Planning Policy No. 2.6, State Coastal Planning Policy (WAPC 2013)</li> <li>State Coastal Planning Policy Guidelines (WAPC 2021).</li> <li>Sea Level Change in Western Australia – Application of Coastal Planning, Department of Transport Coastal Infrastructure (Coastal Engineering Group 2010)</li> <li>Coastal hazard risk management and adaptation planning guidelines (DPLH 2019)</li> </ul>
Marine Environmental Quality	
<b>EPA objective</b>	To maintain the quality of water, sediment, and biota so that environmental values are protected.
<b>Relevant activities</b>	Development and operation of the resort and village in proximity to Gnarabup Beach and Gas Bay.
<b>Potential impacts and risks</b>	<p>The Proposal has the potential to cause:</p> <ul style="list-style-type: none"> <li>Impacts to marine water quality through construction, clearing of vegetation and nutrient application.</li> <li>Impacts to benthic communities and habitats due to changes in water quality.</li> </ul>
<b>Required work</b>	<p>6. Conduct a desktop study to characterise the existing marine environmental quality (baseline water and sediment quality) in the area potentially affected by the future development. The characterisation needs to be informed by an assessment of threats and pressures to marine environmental values.</p> <p>7. Assess the extent, severity, and duration of any impacts from future development including potential impacts to water quality to Gnarabup Beach and Gas Bay and the Ngari Capes Marine Park after outlining any avoidance and mitigation options that will be applied. Predicted impacts should also be presented spatially.</p> <p>8. Describe and justify any proposed mitigation to reduce the potential impacts of the Proposal. Identify the environmental outcome that will be achieved during clearing, construction and operation of the Proposal and the monitoring and/or management actions that will be undertaken to achieve the outcome. If plans are required to demonstrate how the environmental outcome will be achieved, they are to be presented in accordance with the relevant EPA Instructions.</p> <p>9. Identify, describe and quantify the potential residual impacts (direct, indirect and cumulative) that may occur during construction, operation and following implementation of the Proposal after considering and applying avoidance and minimisation measures.</p>

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Table 4: Preliminary key environmental factors and required (continued)

<b>Relevant policy and guidance</b>	<b>EPA Policy and Guidance</b> <ul style="list-style-type: none"> <li>• Statement of Environmental Principles, Factors and Objectives (EPA 2018c)</li> <li>• Environmental Factor Guideline – Marine Environmental Quality (EPA 2016f)</li> <li>• Technical Guidance – Protecting the quality of Western Australia’s marine environment, (EPA 2016).</li> </ul>
<b>Landforms</b>	
<b>EPA objective</b>	To maintain the variety and integrity of significant physical landforms so that environmental values are protected.
<b>Relevant activities</b>	<ul style="list-style-type: none"> <li>• Clearing of vegetation and earthworks for the establishment of the Proposal.</li> <li>• Development and operation of the resort and village.</li> </ul>
<b>Potential impacts and risks</b>	<p>The Proposal has the potential to cause:</p> <ul style="list-style-type: none"> <li>• Filling, compaction and ground disturbance</li> <li>• Recreational pressure and damage over time</li> <li>• Structural alteration of limestone karst and/or coastal dune systems</li> <li>• Impacts to the ecological function and environmental values of limestone karst systems (if present)</li> <li>• Movement of unstable dunes (blowouts) owing to cut and fill works.</li> </ul>
<b>Required work</b>	<p>10. Characterise the landform system, including limestone karst and any dune systems, in terms of variety, integrity, ecological importance, scientific importance, rarity and social importance/cultural associations. Consult with appropriate professionals as necessary to assist in the identification of these systems.</p> <p>11. Describe and assess the significance of potential direct, indirect and cumulative impacts to the system within and directly adjacent to the Proposal area. Include an analysis of the nature, magnitude and duration of the impacts (temporary and permanent). Discuss cumulative impacts of the Proposal in the context of other existing or reasonably foreseeable development within the Gnarabup region.</p> <p>12. Apply the mitigation hierarchy to any identified significant landforms, including limestone karst and any dune systems. Discuss how future development may be designed to avoid and minimise impacts to the geomorphology and structure of the system through the design and location of future development. Detail proposed specific monitoring, management and mitigation measures.</p> <p>13. Predict the residual impacts and the significance on any identified landforms of importance after considering and applying the mitigation hierarchy.</p>
<b>Relevant policy and guidance</b>	<b>EPA Policy and Guidance</b> <ul style="list-style-type: none"> <li>• Statement of Environmental Principles, Factors and Objectives (EPA 2018)</li> <li>• Environmental Factor Guideline – Landforms (EPA 2018a)</li> </ul>
<b>Flora and Vegetation</b>	
<b>EPA objective</b>	To protect flora and vegetation so that biological diversity and ecological integrity are maintained.
<b>Relevant activities</b>	<ul style="list-style-type: none"> <li>• Clearing of up to 7.40 ha of native vegetation for future development, including for bushfire mitigation and the construction of buildings, internal roads, carparks and other infrastructure.</li> <li>• Development and operation of the resort and village.</li> </ul>

# Gnarabup Tourism Development: Resort and Beach Village

## Assessment No: 2318 Environmental Scoping Document



Table 4: Preliminary key environmental factors and required (continued)

Flora and Vegetation (continued)	
<b>Potential impacts and risks</b>	<p>The Proposal has the potential to cause:</p> <ul style="list-style-type: none"> <li>• Direct loss of flora and vegetation of up to 7.40 ha.</li> <li>• Indirect impacts on adjacent native vegetation resultant from:               <ul style="list-style-type: none"> <li>○ dust during construction;</li> <li>○ the introduction and spread of weeds;</li> <li>○ the introduction and spread of phytophthora;</li> <li>○ fragmentation of vegetation; and</li> <li>○ changes to surface water or groundwater hydrology and quality.</li> </ul> </li> </ul>
<b>Required work</b>	<p>14. Identify and characterise the flora and vegetation of areas that may be directly or indirectly impacted by the Proposal in accordance the EPA Guidance below. Demonstrate how surveys are relevant, representative and demonstrate consistency with current EPA policy and guidance set out below. Include a summary of survey findings in accordance with relevant guidelines set out below.</p> <p>15. Demonstrate how the guidance for the surveys has been followed. This will include consideration of EPA guidance and the following:</p> <ul style="list-style-type: none"> <li>• Survey in spring, considering yearly rainfall and optimal timing for targeted species.</li> <li>• Survey effort should include at least 3 quadrats per preliminary vegetation type, with additional sampling to occur adjacent to the survey area, should this be required, to inform indirect, direct, and cumulative impact assessment.</li> <li>• A targeted survey for significant flora and vegetation should be undertaken, including a search of the DBCA species and communities database.</li> <li>• If multiple surveys have been undertaken to support the assessment, a consolidated report should be provided including the integrated results of the surveys.</li> <li>• All survey reports and data are to be submitted via IBSA Submissions (DWER portal) with the IBSA number provided for verification.</li> </ul> <p>16. Identify and describe the vegetation and significant flora species present and likely to be present within the Proposal area, and any areas that may be indirectly impacted by the Proposal. Include an analysis of the significance of flora and vegetation in local, regional and state contexts as appropriate in accordance with the relevant guidance set out below. Provide a figure/map of the survey effort applied in relation to the Proposal area, identifying direct and indirect impact areas.</p> <p>17. Provide a map depicting the recorded locations of the significant flora, ecological communities and significant vegetation in relation to the Proposal area, the direct and indirect impact areas, and in the local and regional contexts.</p> <p>18. Assess the potential direct and indirect impacts of the clearing, construction and operational elements of the Proposal on identified environmental values. Include a quantitative assessment of levels of impact on significant flora, listed ecological communities and all vegetation units. Describe and assess the extent of any cumulative impacts within local, regional and state contexts as appropriate.</p> <p>19. Describe and justify any proposed mitigation to reduce the potential impacts of the Proposal. Identify the environmental outcome that will be achieved during clearing, construction and operation of the Proposal and the monitoring and/or management actions that will be undertaken to achieve the outcome. If plans are required to demonstrate how the environmental outcome will be achieved, they are to be presented in accordance with the relevant EPA Instructions.</p>

# Gnarabup Tourism Development: Resort and Beach Village

## Assessment No: 2318 Environmental Scoping Document



Table 4: Preliminary key environmental factors and required (continued)

Flora and Vegetation (continued)	
<p><b>Required work (continued)</b></p>	<p>20. Identify, describe and quantify the potential residual impacts (direct, indirect and cumulative) that may occur following implementation of the Proposal after considering and applying avoidance and minimisation measures. Provide tables with quantitative assessments of impact:</p> <p>a) For significant flora, this includes;</p> <ul style="list-style-type: none"> <li>• number of individuals and populations in a local and regional context;</li> <li>• numbers and proportions of individuals and populations directly or potentially indirectly impacted, and</li> <li>• numbers/proportions/populations currently protected within the conservation estate (where known).</li> </ul> <p>b) For all vegetation units (noting threatened and priority ecological communities and significant vegetation) this includes;</p> <ul style="list-style-type: none"> <li>• area (in hectares) and proportions directly or potentially indirectly impacted, and</li> <li>• proportions/hectares of the vegetation unit currently protected within conservation estate (where known).</li> </ul> <p>21. Determine the significance of any significant residual impacts on the identified environmental values by applying the Residual Impact Significance Model and WA Offset Template in the WA Environmental Offsets Guidelines (2014). Provide spatial data defining the area of significant residual impacts.</p> <p>22. Where significant residual impacts remain, propose an appropriate offsets package that is consistent with the WA Environmental Offsets Policy and Guidelines.</p>
<p><b>Relevant policy and guidance</b></p>	<p><b>EPA Policy and Guidance</b></p> <ul style="list-style-type: none"> <li>• Statement of Environmental Principles, Factors and Objectives (EPA 2018)</li> <li>• Environmental Factor Guideline – Flora and vegetation (EPA 2016e)</li> <li>• Technical Guidance: Flora and vegetation surveys for environmental impact assessment (EPA 2016h)</li> <li>• Instructions for the preparation of data packages for the Index of Biodiversity Surveys for Assessments (IBSA) (EPA 2021b)</li> <li>• Instructions on how to prepare <i>Environmental Protection Act 1986</i> Part IV Environmental Management Plans (EPA 2020b)</li> </ul> <p><b>Other policy and guidance</b></p> <ul style="list-style-type: none"> <li>• Western Australian Environmental Offsets Policy (GoWA 2011)</li> <li>• Western Australian Environmental Offsets Guidelines (GoWA 2014)</li> <li>• Relevant recovery plans, conservation advice and/or threat abatement plans for conservation significant species or communities that are known to occur or are likely to occur in the vicinity of the Proposal area.</li> </ul>

## Gnarabup Tourism Development: Resort and Beach Village

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Table 4: Preliminary key environmental factors and required (continued)

Terrestrial Fauna	
<b>EPA objective</b>	To protect terrestrial fauna so that biological diversity and ecological integrity are maintained.
<b>Relevant activities</b>	<ul style="list-style-type: none"> <li>• Clearing of up to 7.40 ha of native vegetation (i.e., potential fauna habitat)</li> <li>• Movement of machinery and vehicles</li> <li>• Development and operation of the resort and village</li> </ul>
<b>Potential impacts and risks</b>	<p>The Proposal has the potential to cause:</p> <ul style="list-style-type: none"> <li>• Direct loss of up to 7.40 ha fauna habitat, including habitat for conservation significant fauna species, resulting from clearing and ground disturbance.</li> <li>• Direct loss of fauna or Short-Range Endemic (SRE) individuals through impacts resulting from ground disturbance and machinery or vehicle movements.</li> <li>• Indirect impacts to fauna habitat as a result of: <ul style="list-style-type: none"> <li>○ barrier effects of the physical presence of development and fragmentation of habitat and populations;</li> <li>○ invasive species predation on, and competition with, native species and destruction of habitat</li> <li>○ degradation of habitat from introduction and increased spread of weeds/dust;</li> <li>○ alteration of fire regimes; and,</li> <li>○ altered fauna behaviour due to noise, light and human presence.</li> </ul> </li> </ul>
<b>Required work</b>	<p>23. In accordance with the requirements of EPA guidance conduct a desktop study to identify and characterise the fauna and fauna habitats to inform local and regional context; and based on the results of the desktop study:</p> <ul style="list-style-type: none"> <li>• conduct a basic survey and fauna habitat assessment; and/or</li> <li>• conduct a detailed survey; and/or</li> <li>• conduct targeted surveys for significant fauna that may be directly or indirectly impacted.</li> </ul> <p>Surveys should include sampling inside and outside the impact areas and consider cumulative impacts. For listed species, this must include information on:</p> <ul style="list-style-type: none"> <li>• the abundance, distribution, ecology, and habitat preferences, together with baseline information and mapping of local and regional occurrences.</li> <li>• population size and importance of the population from a local and regional perspective; and</li> <li>• information on conservation value of each habitat type (e.g. breeding, migration, feeding, resting etc.) from a local and regional perspective, including the percentage representation of each habitat site in relation to its local and regional extent.</li> </ul> <p>Note:</p> <ul style="list-style-type: none"> <li>• A terrestrial vertebrate fauna assessment to the standard required of a 'basic' fauna survey and a 'targeted' survey for <i>Pseudocheirus occidentalis</i> (Western Ringtail Possum) in accordance with the EPA's technical guidance has been undertaken by Emerge Associates (2021a).</li> <li>• A demonstration of how the guidance has been followed are to be included in the ERD.</li> </ul> <p>All survey reports and data are to be submitted via IBSA Submissions (DWER portal) with the IBSA number provided for verification.</p> <p>24. Provide a map of the survey effort applied in relation to the terrestrial fauna habitats, the Proposal area, identifying the direct and indirect impact areas.</p>

## Gnarabup Tourism Development: Resort and Beach Village

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Table 4: Preliminary key environmental factors and required (continued)

Terrestrial Fauna (continued)	
<b>Required work</b> (continued)	<p>25. Identify and describe the terrestrial fauna (including vertebrate and SRE invertebrate) habitats identified by the studies and surveys. Undertake a desktop study and habitat mapping of prospective SRE invertebrate habitats, consistent with the EPA guidance. If required, undertake further detailed surveys and/or targeted surveys for SRE and conservation significant invertebrate fauna, dependant on the outcomes of the desktop study and mapping. Describe significant fauna habitats, including but not limited to: SRE invertebrate microhabitats, refugia, breeding areas, key foraging habitat, movement corridors and linkages (refer to Environmental Factor Guideline – Terrestrial Fauna for definition of significant fauna habitat).</p> <p>26. Map the locations of significant/restricted fauna in relation to the terrestrial fauna habitats, the Proposal area and direct and indirect impact areas.</p> <p>27. Describe the values and significance of fauna and fauna habitat that may be impacted directly and indirectly by implementation of the Proposal during clearing, construction and operations and describe the significance of these values in a local and regional context.</p> <p>28. Describe, assess and quantify the extent of direct, indirect and cumulative impacts, including percentages, to habitats and significant species of terrestrial fauna as a result of implementation of the Proposal during clearing, construction and operations, taking into consideration cumulative impacts and the significance of fauna and fauna habitat.</p> <p>29. Predict the residual impacts to terrestrial fauna after considering and applying avoidance and minimisation measures.</p> <p>30. Discuss proposed management, monitoring and mitigation methods to be implemented to ensure residual impacts (direct and indirect) are not greater than predicted. Identify the environmental outcome that will be achieved during clearing, construction and operation of the Proposal and the monitoring and/or management actions that will be undertaken to achieve the outcome. If management plans are required to demonstrate how the environmental outcome will be achieved, they are to be presented in accordance with the relevant EPA Instructions.</p> <p>31. Determine and quantify any significant residual impacts by applying the Residual Impact Significance Model and WA Offset Template in the WA Environmental Offsets Guidelines (2014).</p> <p>32. Where significant residual impacts remain, propose an appropriate offsets package that is consistent with the <i>WA Environmental Offsets Policy and Guidelines</i>. Spatial data defining the area of significant residual impacts for each environmental value should be provided (e.g. specific fauna species habitat.)</p>
<b>Relevant policy and guidance</b>	<p><b>EPA Policy and Guidance</b></p> <ul style="list-style-type: none"> <li>• Statement of Environmental Principles, Factors and Objectives (EPA 2018)</li> <li>• Instructions on how to prepare an Environmental Review Document (EPA 2021a)</li> <li>• Environmental Factor Guideline – Terrestrial Fauna (EPA 2016b)</li> <li>• Technical Guidance: Terrestrial vertebrate fauna surveys for environmental impact assessment (EPA 2020).</li> <li>• Technical Guidance – Sampling of short range endemic invertebrate fauna (EPA 2016j)</li> <li>• Instructions for the preparation of data packages for the Index of Biodiversity Surveys for Assessments (IBSA) (EPA 2021b)</li> <li>• Instructions on how to prepare Environmental Protection Act 1986 Part IV Environmental Management Plans (EPA 2020b)</li> </ul>

## Gnarabup Tourism Development: Resort and Beach Village

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Table 4: Preliminary key environmental factors and required (continued)

Terrestrial Fauna (continued)	
<b>Relevant policy and guidance</b> (continued)	<b>Other policy and guidance</b> <ul style="list-style-type: none"> <li>Western Australian Environmental Offsets Guidelines (GoWA 2014)</li> <li>Survey guidelines for Australia's threatened mammals. EPBC Act survey guidelines 6.5. (DSEWPC 2011)</li> <li>Western Ringtail Possum (<i>Pseudocheirus occidentalis</i>) Recovery Plan, Western Australia (DBCA 2017)</li> <li>Western Ringtail Possum (<i>Pseudocheirus occidentalis</i>) Regional Surveys for Main Roads Western Australia (Biota Environmental Sciences, 2020) (Available on request from DBCA).</li> <li>Relevant recovery plans, conservation advices and/or threat abatement plans for conservation significant species that are known to occur, or are likely to occur, in the vicinity of the Proposal.</li> </ul>
Subterranean Fauna	
<b>EPA objective</b>	To protect subterranean fauna so that biological diversity and ecological integrity are maintained.
<b>Relevant activities</b>	<ul style="list-style-type: none"> <li>Development and operation of the resort and village on subterranean fauna habitat</li> <li>Indirect impacts associated with changes in groundwater or surface water quality, such as increased salinity and alteration to nutrient balance and contamination; resulting from development and operational activities.</li> </ul>
<b>Potential impacts and risks</b>	<p>The Proposal has the potential to cause:</p> <ul style="list-style-type: none"> <li>Mortality and loss of habitat from clearing of vegetation.</li> <li>Excavation for the establishment of resort and village development.</li> <li>Changes to hydrological regimes and water quality.</li> <li>Groundwater contamination.</li> </ul>
<b>Required work</b>	<p>33. Conduct a desktop study and, where identified as relevant undertake field surveys, to identify and characterise subterranean fauna (including listed threatened species and communities) and subterranean fauna habitat at a local and regional scale that may be impacted directly and indirectly by the implementation of the Proposal in accordance with the EPA guidance below. This should include sampling inside and outside the impact areas and assess cumulative impacts:</p> <p>Note:</p> <ul style="list-style-type: none"> <li>Invertebrate Solutions Pty Ltd (2021) undertook a preliminary desktop assessment for the presence of conservation significant subterranean invertebrates and associated threatened or priority subterranean communities.</li> <li>The results of the desktop survey and existing regional information is to be included in the ERD.</li> <li>All survey reports and data are to be submitted via IBSA Submissions (DWER portal) with the IBSA number provided for verification.</li> </ul> <p>34. Identify and describe the subterranean fauna habitats that may be impacted directly and indirectly by implementation of the Proposal during clearing construction and operations and describe the significance of these values in a local and regional context. Include relevant geological and hydrological information to determine habitat suitability and connectivity, including inside and outside the impact areas. Provide figure(s) showing the extent of subterranean fauna habitat in relation to the Proposal and species distributions.</p> <p>35. Provide a map of the survey effort applied in relation to the Proposal area, subterranean fauna habitats identifying the direct and indirect impact areas.</p> <p>36. Identify and describe the fauna assemblages present and likely to be present within the Proposal area that may be impacted by the Proposal. Identify significant or restricted fauna and describe in detail their known ecology, likelihood of occurrence, habitats and known threats.</p>

## Gnarabup Tourism Development: Resort and Beach Village

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Table 4: Preliminary key environmental factors and required (continued)

Subterranean Fauna (continued)	
<b>Required work</b> (continued)	<p>37. Predict the residual impacts from the future development and associated infrastructure on subterranean fauna after considering and applying avoidance and minimisation measures.</p> <p>38. Identify management measures for the Proposal to ensure residual impacts to subterranean fauna are not greater than predicted. Identify the environmental outcome that will be achieved during construction and operation of the Proposal and the monitoring and/or management actions that will be undertaken to achieve the outcome. If plans are required to demonstrate how the environmental outcome will be achieved, they are to be presented in accordance with the EPAs Instructions.</p>
<b>Relevant policy and guidance</b>	<p><b>EPA Policy and Guidance</b></p> <ul style="list-style-type: none"> <li>• Statement of Environmental Principles, Factors and Objectives (EPA 2018)</li> <li>• Instructions on how to prepare an Environmental Review Document (EPA 2021a)</li> <li>• Environmental Factor Guideline – Subterranean Fauna (EPA 2016c)</li> <li>• Technical Guidance – Subterranean fauna survey (EPA 2016i)</li> <li>• Technical Guidance – Sampling methods for subterranean fauna (EPA 2016g)</li> <li>• A review of subterranean fauna assessment in Western Australia (EPA 2012)</li> <li>• Instructions for the preparation of data packages for the Index of Biodiversity Surveys for Assessments (IBSA) (EPA 2021b)</li> <li>• Instructions on how to prepare Environmental Protection Act 1986 Part IV Environmental Management Plans (EPA 2020b)</li> </ul> <p><b>Other policy and guidance</b></p> <ul style="list-style-type: none"> <li>• Relevant recovery plans, conservation advice and/or threat abatement plans for conservation significant species that are known to occur or are likely to occur in the vicinity of the Proposal.</li> </ul>
Inland Waters	
<b>EPA objective</b>	To maintain the hydrological regimes and quality of groundwater and surface water so that environmental values are protected.
<b>Relevant activities</b>	<ul style="list-style-type: none"> <li>• Clearing of native vegetation.</li> <li>• Alteration of landscape for construction of resort and village including the excavation of up to four metres.</li> <li>• Introduction of hardstand areas where buildings and carparks are located, leading to distribution of infiltrated runoff of rainfall and stormwater.</li> <li>• Landscaping for turfed areas and gardens requiring nutrient inputs</li> </ul>
<b>Potential impacts and risks</b>	<p>The Proposal has the potential to cause:</p> <ul style="list-style-type: none"> <li>• Indirect impacts on surface water or groundwater dependent ecosystems due to changes to surface water flows or hydrological regimes.</li> <li>• Changes in surface water or groundwater quality associated with stormwater management and landscaping treatments causing increased nutrient runoff.</li> <li>• Changes in groundwater quality through infiltration of potentially contaminated stormwater.</li> </ul>
<b>Required work</b>	<p>39. Characterise the baseline hydrological and hydrogeological regimes and water quality and quantity, both in a local and regional context, including, but not limited to, groundwater levels, water chemistry, groundwater dependant ecosystems, aquifer characteristics and recharge potential and surface water features and flow.</p> <p>40. Provide a detailed description of the design and location of the Proposal with the potential to impact surface and groundwater.</p> <p>41. Provide evidence that groundwater interaction during construction activities will not be expected nor anticipated as a result of the Proposal.</p>

## Gnarabup Tourism Development: Resort and Beach Village

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Table 4: Preliminary key environmental factors and required (continued)

Inland Water (continued)	
<b>Required work</b> (continued)	<p>42. Undertake hydrological investigations to assess the impact from surface discharge and modified drainage on surface and ground water quality and quantity, including direct and indirect impacts.</p> <p>43. Predict the residual impacts on hydrological processes and inland waters environmental quality, for direct, indirect and cumulative impacts, after considering avoidance and minimisation measures.</p> <p>44. Provide maps of and justification for the location and number of any proposed drainage and stormwater infrastructure.</p> <p>45. Demonstrate how best practice water sensitive urban design principles will be implemented in the design of the infrastructure and in stormwater and drainage components to ensure hydrological regimes and groundwater quality are maintained.</p>
<b>Relevant policy and guidance</b>	<p><b>EPA Policy and Guidance</b></p> <ul style="list-style-type: none"> <li>• Statement of Environmental Principles, Factors and Objectives (EPA 2018)</li> <li>• Instructions on how to prepare an Environmental Review Document (EPA 2021a)</li> <li>• Environmental Factor Guideline – Inland Waters (EPA 2018b)</li> <li>• Instructions on how to prepare Environmental Protection Act 1986 Part IV Environmental Management Plans (EPA 2020b)</li> </ul> <p><b>Other Policy and Guidance</b></p> <ul style="list-style-type: none"> <li>• Better Urban Water Management (WAPC 2008)</li> <li>• State Planning Policy 2.7 - Public drinking water source</li> <li>• State Planning Policy 2.9 - Water resources</li> </ul>
Social Surroundings	
<b>EPA objective</b>	To protect social surroundings from significant harm.
<b>Relevant activities</b>	<ul style="list-style-type: none"> <li>• Clearing of up to 7.40 ha of native vegetation for future development and associated infrastructure.</li> <li>• Development and operation of the resort and village</li> <li>• Physical presence of future development and associated infrastructure.</li> </ul>
<b>Potential impacts and risks</b>	<p>The Proposal has the potential to cause:</p> <ul style="list-style-type: none"> <li>• Disturbance to Aboriginal heritage places and/or cultural associations within the Proposal.</li> <li>• Temporary and/or permanent constraint on access and traditional cultural activities.</li> <li>• Changes to the environment which may impact on Aboriginal heritage places.</li> <li>• Impacts to visual amenity and landscape values of the Proposal it supports.</li> </ul>
<b>Required work</b>	<p>46. Characterise the heritage and cultural values of the Proposal area, including areas that may be indirectly impacted, to identify sites of significance and their relevance within the Gnarabup region</p> <p>47. Conduct an ethnographic and archaeological site identification Aboriginal heritage survey with Traditional Owners, to ensure all heritage values are identified and managed prior to any ground disturbance.</p> <p>Note:</p> <ul style="list-style-type: none"> <li>• A Desktop Diligence Risk Assessment Advice (Brad Goode &amp; Associates Pty Ltd 2020) has been undertaken, including consultation and a site inspection with Traditional Owners to identify Aboriginal sites.</li> <li>• The results of desktop survey and historical ethnographic surveys conducted over the Proposal area is to be included in the ERD.</li> <li>• A demonstration of how the guidance has been followed are to be included in the ERD.</li> </ul>

## Gnarabup Tourism Development: Resort and Beach Village

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Table 4: Preliminary key environmental factors and required (continued)

Social Surrounding (continued)	
<b>Required work</b> (continued)	<p>48. Conduct appropriate ongoing consultation with local traditional owners to identify concerns in regard to environmental impacts as they affect Aboriginal heritage matters throughout implementation of the Proposal (clearing, construction and operations).</p> <p>49. Provide a detailed description and figure(s) of the proposed disturbance and impacts to heritage sites (if any), values and/or cultural associations associated with the Proposal.</p> <p>50. Assess the impacts on heritage sites, values and/or cultural associations as a direct result of the future development and associated infrastructure, including those resulting from changes to the environment which may impact on cultural and heritage significance or value.</p> <p>51. Identify management and mitigation measures for the Proposal to ensure residual impacts to Commonwealth and State legislated lands and waters adjacent to the Proposal will be minimised, and not greater than predicted.</p> <p>52. Outline the mitigation and management measures to ensure impacts to heritage sites, values and/or cultural associations (direct and indirect) are minimised, and not greater than predicted.</p> <p>53. Characterise the current, and any other reasonably foreseeable land and recreation uses and amenity and landscape values (including valued aspects of character and views) of the Proposal.</p> <p>54. Design and undertake a visual impact assessment (VIA) for the future development and associated infrastructure to assess the impacts of it on visual amenity in accordance with the Western Australian Planning Commission (2007) Visual Landscape Planning in Western Australia: a manual for evaluation, assessment, siting and design. Review the VIA provided with the referral documentation to ensure it is fully in accordance with the WAPC Manual.</p> <p>55. Demonstrate how the Proposal has been designed to minimise visual impacts and that the visual amenity impacts are consistent with the existing planning framework and suited to its location. This should include consideration of the following:</p> <ul style="list-style-type: none"> <li>• Reference to State Planning Policy 6.1 Leeuwin - Naturaliste Ridge, in particular in relation to the Visual Management Objectives. Ensure the ESD references sub-objectives that specifically relate to key viewing experiences and views, and character of the landscape units/components.</li> <li>• Description of the visual components of the existing and proposed natural and built character, including the visual components of the proposed development.</li> <li>• A overview of existing and proposed viewing experience and types of views available.</li> <li>• Identification of key important viewpoints from which the development would be visible, and Visual Management Objectives for each.</li> <li>• Provision of appropriate legible cross-sections.</li> <li>• Viewshed analysis should be undertaken using terrain data as a minimum. If the screening ability of vegetation has been assessed, this should be presented in a separate viewshed.</li> <li>• Outline the visual management measures or strategies that will be used to mitigate potential impacts by addressing visual management objectives for valued landscape character and views.</li> </ul> <p>56. The VIA will identify and describe the aspects of the future development and associated infrastructure which may potentially affect the visual landscape character and valued (key) views both temporarily and permanently, utilising previously agreed reference and vantage points of surrounding areas and use area's viewer positions and perceptions for approval for the EPA Services.</p> <p>57. Identify and discuss the potential sources and impacts of noise, dust, light-spill and alteration to landscape from the Proposal.</p>

## Gnarabup Tourism Development: Resort and Beach Village

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Table 4: Preliminary key environmental factors and required (continued)

Social Surrounding (continued)	
<b>Required work</b> (continued)	58. Predict the residual amenity and landscape impacts from the future development on the landscape, land and recreation use and amenity values after considering and applying avoidance and minimisation measures. Impact predictions are to include, but not be limited to: <ol style="list-style-type: none"> <li>the likely extent, severity and duration of the impacts; and</li> <li>simulations/modelling of the predicted residual impacts from the Proposal including changes to the landscape from the agreed reference and vantage points. Include the cumulative impacts on amenity and landscape from the Proposal and other currently approved developments.</li> </ol>
<b>Relevant policy and guidance</b>	<p><b>EPA Policy and Guidance</b></p> <ul style="list-style-type: none"> <li>Statement of Environmental Principles, Factors and Objectives (EPA 2018)</li> <li>Instructions on how to prepare an Environmental Review Document (EPA 2021a)</li> <li>Environmental Factor Guideline – Social Surroundings (EPA 2016a)</li> </ul> <p><b>Other policy and guidance</b></p> <ul style="list-style-type: none"> <li>State Planning Policy 6.1 Leeuwin-Naturaliste Ridge</li> <li>Environmental Protection (Noise) Regulations 1997</li> <li>Aboriginal Heritage Due Diligence Guidelines – Version 3.0 (Department of Aboriginal Affairs and Department of Premier and Cabinet 2013)</li> <li>Visual Landscape Planning in Western Australia: a manual for evaluation, assessment, siting and design (WAPC 2007)</li> </ul>
Greenhouse Gas Emissions	
<b>EPA objective</b>	To reduce net greenhouse gas emissions in order to minimise the risk of environmental harm associated with climate change.
<b>Relevant activities</b>	<ul style="list-style-type: none"> <li>Clearing of 7.40 ha of native vegetation for future development</li> <li>Development and operation of the resort and village</li> </ul>
<b>Potential impacts and risks</b>	<p>The Proposal has the potential to cause:</p> <ul style="list-style-type: none"> <li>Direct emissions from the clearing of native vegetation and operation of machinery and plant equipment (Scope 1 emissions)</li> <li>Indirect emissions from the consumptions of electricity (Scope 2 emissions)</li> </ul>
<b>Required work</b>	<p>59. Describe how greenhouse gas (GHG) emissions have been considered for the Proposal during clearing, construction and operations and provide a Scope 1 GHG emissions estimate and information why (if applicable) Scope 2 and Scope 3 GHG emissions are not a consideration.</p> <p>60. Outline the mitigation and management measures to be undertaken to avoid, reduce and offset (where relevant) GHG emissions associated with the Proposal.</p> <p>61. In consideration of the EPA's expectations for assessing future activities and developments in Gnarabup and its surrounds, describe how climate change is likely to interact with the pressures from implementation of the Proposal and demonstrate how the Proposal will adapt to climate change, including measures of resilience to a changing climate.</p>
<b>Relevant policy and guidance</b>	<p><b>EPA Policy and Guidance</b></p> <ul style="list-style-type: none"> <li>Statement of Environmental Principles, Factors and Objectives (EPA 2018)</li> <li>Instructions on how to prepare an Environmental Review Document (EPA 2021a)</li> <li>Environmental Factor Guideline – Greenhouse Gas Emissions (EPA 2020a)</li> </ul>

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These preliminary key environmental factors must be addressed by the ERD for the public to consider the impacts of future development resulting from the Proposal, and proposed management, and make comment to the EPA. The EPA anticipates addressing these factors in its report to the Minister for Environment. All technical reports, modelling, and referenced documents (not currently in the public domain) used in the preparation of the ERD document should be included as appendices to the ERD document. Documents used in the preparation of the ERD must not contain disclaimers that preclude their public availability.

## 6 Other Environmental Factors or Matters

The EPA has not identified any other environmental factors or matters relevant to the Proposal.

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## 7 Stakeholder Consultation

The Proponent will consult with stakeholders who are affected by or are interested in the Proposal. This includes the decision-making authorities (refer to **Section 8**), other relevant state (and Commonwealth) government agencies and local government authorities, the local community and environmental non-government organisations.

The following key stakeholders have been identified by the Proponent for consultation:

- Department of Climate Change, Energy, the Environment and Water (DCCEEW)
- Department of Biodiversity, Conservation and Attractions (DBCA)
- Department of Fire and Emergency Services (DFES)
- Department of Planning, Lands and Heritage (DPLH)
- Department of Water and Environmental Regulation (DWER)
- Gnarabup local residents and a range of local businesses
- Margaret River-Busselton Tourism Association
- Margaret River Coastal Residents Association
- Nature Conservation Margaret River Region
- Preserve Gnarabup
- Shire of Augusta Margaret River
- South West Aboriginal Land and Sea Council
- Tourism WA
- Undalup Association
- Wadandi people
- West Australian Planning Commission (WAPC)

The Proponent must document the following in the ERD:

- Identified stakeholders.
- The stakeholder consultation undertaken and the outcomes, including decision-making authorities' specific regulatory approvals and any adjustments to the Proposal as a result of consultation.
- Any future plans for consultation.

## 8 Decision-making Authorities

The proponent has identified the following the authorities listed in **Table 5** as decision-making authorities (DMAs) for the Proposal. Additional DMAs may be identified during the course of the assessment. The ERD will consider the EPA's (2021) *Interim Guidance: Taking decision making processes into account in EIA*, in discussion of whether and how statutory decision-making processes can mitigate impacts on the environment and whether or not the EPA's factor objectives can be met through those processes.

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Table 5: Decision-making authorities and processes

Decision making authority (DMA)	Legislation or Agreement regulating the activity	Approval required (and specify which proposal element the approval is related to)	Whether and how statutory decision-making process can mitigate impacts on the environment? (Yes/No and summary of reasons Include a separate line item for each relevant impact, and discuss how the EPA's factor objective will be met)		
			Relevant impact	Relevant key EPA Factor	Can the DMA mitigate impacts and how will the EPA's factor be met
Minister for Aboriginal Affairs	Aboriginal Heritage Act 1972 (AH Act) or Aboriginal Cultural Heritage Act 2021 (ACH Act)	To disturb Aboriginal heritage.  Proposal element: Construction	Disturbance of Aboriginal Heritage sites (in particular Aboriginal site ID 17093 (Gnamma Hole).	Social Surroundings	Yes, given the avoidance and protection measures, the disturbance of Aboriginal Heritage Site 17093 is not expected.  However, if disturbance cannot be avoided, either: <ul style="list-style-type: none"> <li>Approval under s18 of the AH Act will be required (during the transition period) where impact to an Aboriginal Heritage Site is unavoidable; OR</li> <li>Approval under Part 6 of the ACH Act will assess the significance of any proposed disturbance and determine what mitigation measures are required.</li> </ul> Compliance with the AH Act and ACH Act and any conditions of approval are expected to achieve the EPA's objective for this factor and will be discussed further in the ERD.
Minister for Environment  Chief Executive Officer (DWER)	Environmental Protection Act 1986 (Part V)  Environmental Protection Regulation 1987	To removal of native vegetation and fauna habitat  Proposal element: Construction	Clearing of native vegetation and fauna habitat	Flora and Vegetation  Terrestrial Fauna	Yes, the clearing of native vegetation, fauna habitat and loss of fauna for this proposal is being formally assessed under Part IV of the EP Act and will be exempt from a clearing permit (Schedule 6 exemptions) under Part V of the EP Act.  Provided the Minister for Environment adopts the EPA's Report and Recommendations, and native vegetation and fauna habitat removal is undertaken in accordance with the Minister's approval statement, conditions and proponent commitments, the EPA's objectives are expected to be met and will be discussed further in the ERD.
Minister for Environment  Chief Executive Officer (DBCA)	Biodiversity Conservation Act 2016 (WA)	To take or disturb listed ecology matters.  Proposal element: Construction	Taking and/or disturbance of listed ecology matters	Flora and vegetation  Terrestrial Fauna	Yes, the Biodiversity Conservation Act 2016 (BC Act) provides for the listing of flora, fauna and threatened ecological communities and Ministerial approval (Section 40) is required to 'take' or 'disturb' listed matters.  Provided approval to take or disturb listed matters is approved by the Minister, consistent with the EPA's Report and Recommendation, the EPA objectives for this factor are expected to be met and will be discussed further in the ERD.

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Decision making authority (DMA)	Legislation or Agreement regulating the activity	Approval required (and specify which proposal element the approval is related to)	Whether and how statutory decision-making process can mitigate impacts on the environment? (Yes/No and summary of reasons Include a separate line item for each relevant impact, and discuss how the EPA’s factor objective will be met)		
			Relevant impact	Relevant key EPA Factor	Can the DMA mitigate impacts and how will the EPA’s factor be met
Minister for Planning  WAPC  Shire of Augusta Margaret River	Planning and Development Act 2005 (PD Act)  Planning and Development (Local Planning Schemes) Regulations 2015  Shire of Augusta Margaret River Local Planning Scheme No.1  Local Government Act 1995 (LG Act)	Development approval  Proposal element: Construction Operation	Clearing of native vegetation and fauna habitat  Degradation to retained native vegetation and fauna habitat.  Degradation of the coastal reserve, foreshore setback and inter tidal zone.  Local flooding and inundation, and inadequate treatment of stormwater.  Visual impact  Loss of local amenity – noise, traffic congestion, construction noise, dust and disruption.  Increased bushfire risk  Increased solid waste generation and litter	Flora and Vegetation  Coastal processes  Landform  Terrestrial Fauna  Inland Waters  Social Surroundings	Yes, the PD Act and LG Act provide a range of statutory approval mechanisms to avoid, mitigate and manage environmental impacts when making decisions on changes in land use, subdivision, development applications, building and works and carrying out municipal activities.  Planning decisions must have due regard for statutory State Planning Policies (SPPs) pursuant to the PD Act. SPPs mostly have an environmental basis and those relevant to the proposal and the EPA factors include Environment and natural resources; State coastal planning; Water resources; Natural hazards and disasters; Planning in bushfire prone areas; and Leeuwin Naturaliste Ridge.  The proponent has lodged a development application under Part 17 of the PD Act and is being assessment by the SDAU. Through DPLH the SDAU assesses significant development applications and includes design review, public consultation and referrals to relevant stakeholders including the Shire of Augusta Margaret River, DBCA, DWER and the Department of Fire and Emergency Services. The SDAU makes recommendations to the WAPC, who is the decision-making authority. As it relates to the EPA’s objectives the WAPC must have due regard for: <ul style="list-style-type: none"> <li>• the purpose and intent of the local planning scheme;</li> <li>• orderly and proper planning;</li> <li>• preservation of amenity;</li> <li>• SPPs and any other relevant policies; and</li> <li>• any other matters in the public interest.</li> </ul> Conditions of WAPC approval will ensure development addresses environmental matters, including the development form (visual impact), retained native vegetation and fauna habitat, environmental management, provision of public open space, landscaping, materials, bush fire and coastal protection. It will also be necessary for the WAPC approval to be consistent with the Minister for Environment’s approval granted under Part IV, following the EPA’s assessment. Prior to approving this proposal the Minister for Environment will consult with the Minister for Planning (and

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Decision making authority (DMA)	Legislation or Agreement regulating the activity	Approval required (and specify which proposal element the approval is related to)	Whether and how statutory decision-making process can mitigate impacts on the environment? (Yes/No and summary of reasons Include a separate line item for each relevant impact, and discuss how the EPA’s factor objective will be met)		
			Relevant impact	Relevant key EPA Factor	Can the DMA mitigate impacts and how will the EPA’s factor be met
					<p>indirectly DPLH and WAPC) regarding proposed environmental conditions and proponent commitments.</p> <p>Likewise development approval by the Shire of Augusta Margaret River must be in accordance with Local Planning Scheme No.1 and have due regard for specific development controls for the resort site including setbacks and access, height, building material, coastal access, vegetation retention, landscape impact, density of development and other setbacks. Development of the village site will have due regard for the endorsed Gnarabup Beach Structure Plan which sets out specific development approval requirements including, building height limits, building materials (reflectiveness and colour), stormwater management, bushfire requirements and vegetation management. The Shire will also have due regard for the EPA’s report and recommendations and need to ensure any development approval conditions are consistent with the Minister for Environment’s approval and conditions for this proposal.</p> <p>Operationally under the LG Act the Shire is responsible for managing the coastal zone, coastal reserves, local reserves, municipal infrastructure, municipal waste management, litter management, local roads and drainage, some fire services and managing local amenity and health matters.</p> <p>If the Minister for Environment’s approval of this proposal is consistent with EPA’s report and recommendations, statutory planning decisions and local government operations are required to make decisions consistent with the Minister for Environment’s approval and therefore likely to achieve the EPA objectives.</p>

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Decision making authority (DMA)	Legislation or Agreement regulating the activity	Approval required (and specify which proposal element the approval is related to)	Whether and how statutory decision-making process can mitigate impacts on the environment? (Yes/No and summary of reasons Include a separate line item for each relevant impact, and discuss how the EPA's factor objective will be met)		
			Relevant impact	Relevant key EPA Factor	Can the DMA mitigate impacts and how will the EPA's factor be met
Minister for Lands  Chief Executive Officer - Shire of Augusta Margaret River	Land Administration Act 1997	Crown land enquiry  <b>Proposal element:</b> Construction and operation of the areas external to the resort and village site (and included in the development footprint)	Clearing of native vegetation and fauna habitat and/or fuel reduction measures to mitigate fire risk.	Flora and Vegetation  Landform  Subterranean Fauna  Terrestrial Fauna	<p>Yes. A number of Crown reserves are proposed to be subject to development as part of the proposal, to support provision of bushfire management and recreation areas. These include:</p> <ul style="list-style-type: none"> <li>Reserve 46749 for 'Recreation and Drainage' over Lot 701 on Deposited Plan (DP) 31094 and Lots 5484 and 5487 on DP 33957.</li> <li>Reserve 50757 for 'Drainage and Recreation' over Lot 8001 on DP 59375.</li> <li>Class 'A' Reserve 41545 over Lot 502 on DP 73501.</li> <li>Mitchell Road reserve.</li> </ul> <p>Given all reserves where external works are proposed are under management order held by the Shire, it will be the Shire of Augusta Margaret River who will be the responsible authority. The reserves have management orders and/or conditions which activities need to be in accordance with, or specific permission from the Minister/responsible authority is required to vary.</p> <p>If the Minister for Environment's approval of this proposal is consistent with EPA's report and recommendations, the Minister for Lands and Shire of Augusta Margaret River are required to make decisions consistent with the Minister for Environment's approval and therefore likely to achieve the EPA objectives.</p>

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## 9 References

### 9.1 General references

The references listed below have been considered as part of preparing this document.

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Emerge Associates 2021a, *Basic Fauna and Targeted Western Ringtail Possum Assessment - Lot 783 Mitchell Drive, Lots 501, 502 and 504 Reef Drive and Lot 503 Seagrass Place, Gnarabup*, EP20-008(07)--006 MS, Version 1.

Emerge Associates 2021b, *Detailed Flora and Vegetation Assessment - Lot 783 Mitchell Drive, Lots 501, 502 and 504 Reef Drive and Lot 503 Seagrass Place, Gnarabup*, EP20-008(06)--005 RAW, Version 1.

Emerge Associates 2021c, *Visual Impact Assessment - Lot 783 Mitchell Drive, Lots 501, 502 and 504 Reef Drive, Lot 503 Seagrass Place and Lot 5484 Wallcliffe Road, Gnarabup*, EP20-008(12)—007b, Version B.

Environmental Protection Authority (EPA) 2016a, *Environmental Factor Guideline - Social Surroundings*, Perth.

Environmental Protection Authority (EPA) 2016b, *Environmental Factor Guideline - Terrestrial Fauna*, Perth.

Environmental Protection Authority (EPA) 2016c, *Environmental Factor Guideline - Subterranean Fauna*, Western Australia.

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Environmental Protection Authority (EPA) 2016e, *Environmental Factor Guideline – Flora and Vegetation*, Perth.

Environmental Protection Authority (EPA) 2016f, *Environmental Factor Guideline – Marine Environmental Quality*, Perth.

Environmental Protection Authority (EPA) 2016g, *Technical Guidance - Sampling methods for subterranean fauna*, Western Australia.

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Environmental Protection Authority (EPA) 2021a, *Instruction – How to Prepare an Environmental Review Document*.

Environmental Protection Authority (EPA) 2021b, *Instructions for the preparation of data packages for the Index of Biodiversity Surveys for Assessments (IBSA)*, Perth.

Invertebrate Solutions Pty Ltd 2021, *Preliminary Assessment of Subterranean Fauna Habitat for the Gnarabup Tourism Development*.

MP Rogers & Associates Pty Ltd 2020, *Margaret River Resort Coastal Hazard Assessment*, Version 0.

Shire of Augusta Margaret River 2015, *Coastal Hazard Risk Management and Adaptation Plan* Perth.

Western Australian Planning Commission (WAPC) 2008, *Better Urban Water Management*, Perth.