INQUIRY INTO PLANNING SYSTEM AND THE IMPACTS OF CLIMATE CHANGE ON THE ENVIRONMENT AND COMMUNITIES

Organisation: SAM Consulting

Date Received: 5 March 2024



Public submission to proposed development located at Lot 2 DP1091323, Phillips Drive, South West Rocks, NSW, 2431

PUBLIC SUBMISSION – STRATEGY ASSESSMENT MANAGEMENT (SAM) CONSULTING 2024

This public submission presents independent findings by Strategy Assessment Management (SAM) Consulting regarding Development Applications 2300926 and 2400974 proposed for Lot 2 Deposited Plan 1091323, South West Rocks, New South Wales (the Proposal). On merit, the potential benefits of the Proposal do not outweigh the potential for significant long-term adverse, visual, environmental, cultural, and socio-economic risks and impacts. The scale of the Proposal is not in keeping with the existing coastal landform and is considered offensive by many residents. The Proposal contravenes current New South Wales environmental planning guidelines for coastal development and development on waterfront land. Development on this Lot is also development on existing flood prone land. Further qualitative and quantitative assessment of the Proposal via an Environmental Impact Statement is recommended So too, further engagement with the local community and representatives from cultural heritage organisations.



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Disclaimer

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Document Control

Document reference	Purpose and description	Version	Originated	Checked	Authorised	Date
SAM-REP-2024-001-Lot 2 Phillip Drive SWR	Public submission – draft for initial comment and review	А	RP	VS/WB	RP	19 Feb. 24
SAM-REP-2024-001-Lot 2 Phillip Drive SWR	Public submission – Final for submission	0	RP	VS / WB	RP	26 Feb. 24



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1 Context

1.1 INTRODUCTION

In Australia, medium density living refers to a type of residential development that sits between low-density (typically single-family homes) and high-density (such as high-rise apartment buildings) housing. Medium density housing is characterised by a more compact form of living while still providing adequate living space and access to amenities.

Medium density development applications are, considered by some Councils in Australia, essential in urban planning and development, especially in areas experiencing rapid population growth or seeking to maximise limited land resources. Medium density developments have both direct and indirect environmental and socio-economic risks. These risks can vary widely depending on the specifics of the proposal, the existing urban fabric, local policies, environmental themes, and factors.

This document is an independent public submission prepared on behalf of residents living in South West Rocks and Arakoon in relation to Development Application's (**DAs** or **the Proposal**) 2300926 and 2400974. Collectively, the DAs have been submitted to Kempsey Shire Council (**KSC**) by Rise Developments Pty Ltd (**the Proponent**). The Proposal is not considered medium density living by residents for this area of South West Rocks. It is considered high density living and not proportional to existing residential dwellings in the area.

1.2 HISTORICAL CONTEXT

Lot 2 Deposited Plan 1091323 is located on Phillip Drive, South West Rocks, New South Wales (**NSW**), 2431 (**the Site**). The Site is approximately five hectares and has been the subject of DAs for residential living and/or commercial purposes since the early 1990's. Under the KSC Local Environment Plan (**KLEP**) 2013, the Site is zoned R3 Medium Density Residential.

Original development consent (**T4-91-195**) for the Site was granted on 24 February 1993. Consent authorised built form of between 7 and 15 metres above natural ground level. However, T4-91-195 has been upheld by the NSW Land and Environment Court (**LEC**). Development consent allowed a construction certification to be issued (**CFT-78801**). This was granted on 3 April 2023 by the NSW Land and Environment Court (**CC2100097**). Under CFT-78801, clearing and grubbing of the Site occurred in April 2023.

Development application (DA2200404) was approved in 2023 by KSC. It permits 30 two-storey townhouses and units, and parking provisions. It also includes residential flat building, and mixed-use development. It also allows for a private road to be constructed through the Site. When constructed, this road would provide access to the proposed Stages 2 and 3 linked to DAs 2300926 and 2400974. These DAs are collectively herein referred to as **the Proposal** which were submitted by the Proponent in 2023 and 2024. Further work continued up to and including December 2023.

Due to the Proposal's proximity to waterfront land and wetland habitat, Integrated development approval for the Proposal is required under Section 4.46 of the NSW *Environmental Planning and Assessment Act 1979* (**EP&A Act**). Several NSW Government agencies are required to review the Proposal including NSW Rural Fire Service, Heritage NSW, Environment, Energy & Science Group,



National Parks and Wildlife Service and, the Natural Resource Assessment Regulator (**NRAR**) as a controlled waterfront activity under Section 91 of the NSW *Water Management Act 2000*.

1.3 DESCRIPTION OF THE PROPOSAL

The Proposal is to construct single level and multi-level, up to six storey apartments and shops that are designed to accommodate residential dwelling and to provide light commercial business opportunities. An artist impression of the Proposal was completed by the Proponent and is shown in Figure 1-1. The maximum height of the Proposal is almost 28 metres.



Figure 1-1 - Artist impression of the Proposal.

1.4 SUBMISSION OBJECTIVES

- I. Detail the basis of objection to multi-storey apartments.
- II. Describe environmental and socio-economic issues linked to the Proposal under the EP&A Act.

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February 18, 2024



2 Proposal location

The yellow polygon with a red outline in Figure 2-1 shows the location of the Proposal on Lot 2 Deposited Plan 1091323, Phillip Drive, South West Rocks, New South Wales, 2431. The Proponent targets high density residential living arrangements and commercial development within.



Figure 2-1 Proposal location *Figure source: Six Maps 2024 Google Chrome*

As can be seen in Figure 2-1, several established residential buildings surround the proposal. These dwellings are either one or two storeys. They do not exceed two storeys. A caravan park is located approximately 200 metres east of the Site. A 221 lot sub-division known as "Seabreeze" has commenced to the south of the Proponent 's site at the southern end of Waianbar Street. This subdivision is restricted to 2 storeys.

As shown in Figure 2-1, the Proposal is located immediately to the south of Saltwater Creek associated wetland ecosystem. In the northeast corner of the Site, the Proposal comes within 30 metres of Saltwater Creek, which, at this point, is ¹tidal when the entrance is open. It is mapped Coastal Wetland under the NSW Resilience & Hazards State Environmental Planning Policy (SEPP) shown in Figure 2-2.

Saltwater Lagoon is located to the southwest of the Proposal. The Site borders the Arakoon Conservation Park. Trial Bay Goal is located on the peninsula / headland to the northeast of the Site.

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Figure 2-2 – Excerpt of Coastal Wetlands and Proximity Area Mapping

Source: NSW ePlanning Spatial Viewer – accessed 16 February 2024.



3 Legal and Policy Framework

3.1 OVERVIEW

This Chapter outlines relevant environmental planning instruments that apply to the Proposal. It includes specific requirements for integrated development under the NSW *Environmental Planning and Assessment Act 1979* (**EP&A Act**).

3.2 APPLICABLE LEGISLATION, REGULATION, POLICY & GUIDELINES

3.2.1 Local Government

Local Government environmental planning instruments:

- KLEP 2013: It is noted that the Site is zoned R3 under the LEP. This zoning permits medium density residential development. However, the LEP is silent in relation to a height control. It is also noted that the KLEP zones are designed to manage land use in a way that balances growth with environmental protection, heritage conservation, and community needs.
- KSC Development Control Plan 2013.
- KSC Section 7.11 Contributions Plans.

3.2.2 State Government

NSW State Government environmental planning law and supporting instruments:

- Environmental Planning and Assessment Act 1979.
- Environmental Planning and Assessment Regulation 2021.
- Coastal Management Act 2016.
- NSW Coastal Design Guidelines 2023.
- NSW Resilience and Hazards State Environmental Planning Policy (SEPP).
- Water Management Act 2000.
- Biodiversity Conservation Act 2016.
- Rural Fires Act 1997.

3.2.3 Commonwealth Government

Australian Government environmental planning instruments:

- Environment Protection Biodiversity Conservation Act 1999.
- 3.2.4 NSW Coastal Design Guidelines



Chapter 2 outlines the recommended approach to understanding places in coastal zones. <u>This submission</u> concludes that Chapter 2 has not being adequately considered at this early stage of the Proposal because the design and intent to construct five and six storey buildings is not sensitive to natural and built coastal zones.

Chapter 2 should be used by the determining authority for this Proposal to inform many planning uses, including:

- scoping studies for local strategic planning strategies, regional plans, master plans and planning proposals.
- site analysis for large-scale developments such as coastal subdivisions, feasibility studies, business cases

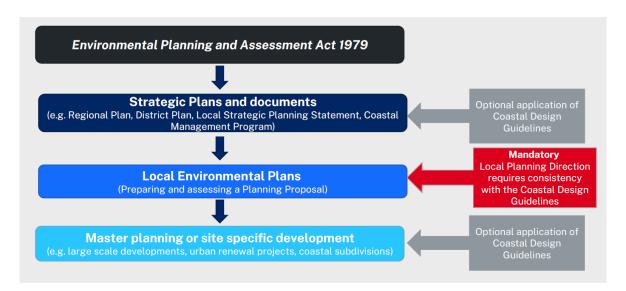


Figure 3-1 Appropriate inclusion of the NSW Coastal Design Guidelines in developments

Environmental Planning & Assessment Act 1979:

- Resilience and Hazards SEPP 2021
- s. 9.1 (2) Directions by the Minister
- Local Planning Direction 4.2 Coastal Management
- Regional Plans.
- Local Environmental Plans
- Local Strategic Planning Statements

Coastal Management Act 2016:

- Coastal Management Programs.
- Coastal Management Manual and Toolkit.

Marine Estate Management Act 2014:

Marine Estate Management Strategy



The purpose of the guideline is to improve the quality of planning and urban design on the NSW coast, specifically by:

- aligning contemporary coastal management and land use planning
- encouraging development and urban design that reflects and celebrates the local character of coastal communities
- ensuring development protects important coastal features and responds to coastal hazards
- promoting design that respects Country and Aboriginal cultural heritage
- making planning proposal requirements explicit
- retaining and updating coastal urban design principles to support high quality coastal development

The guidelines contain advice on understanding coastal places, including:

- natural landforms and systems.
- built form, spaces, and connectivity.
- social, economic, and cultural influences.
- common pressures on communities and opportunities.



4 Documents reviewed and referenced

In preparing this public submission, the following guidelines, legislation and/or documents were reviewed:

- Section 4.15(l) of the NSW Environmental Planning and Assessment Act 1979.
- NSW Environmental Planning and Assessment Regulation 2021.
- NSW Coastal Design Guidelines (2023).
- Two Statement of Environmental Effects and associated appendices²³.
- Kempsey Shire Council Development Consent.
- Kempsey Shire Council Local Environment Plan (2013).
- Kempsey Shire Council Development Control Plan (2013).
- South West Rocks Structure Plan 2023.
- North Coast Regional Plan 2041.
- Housing 2041 NSW Housing Strategy.
- Future McLeay Growth and Character Local Strategy Planning Statement.
- Kempsey Local Growth Management Strategy.
- NSW Government Aboriginal Heritage Information Management System search tool.
- NSW National Parks and Wildlife Service Aboriginal Sites Survey⁴.
- Australian Government Department of Climate Change, Energy, the Environment and Water EPBC Act Protected Matters Search Tool.

 $^{^2\,}State\ of\ Environmental\ Effects\ Key\ Urban\ Planning\ Development\ Application\ 30\ May\ 2023.$

³ Statement of Environmental Effects: Concept Development Application – Residential & Mixed Use Lot 2 Phillips Drive, South West Rocks, Lot 2 DP 1091323

⁴ NSW National Parks and Wildlife Service Aboriginal Sites Survey Berangutta to Gulgarng: Investigations of Aboriginal Sites of Significance From Point Lookout to South West Rocks. Report by Howard Creamer with information from Victor Shepherd August 1979 and October 1981.



5 Community Engagement

SAM Consulting has discussed the Proposal with several community leaders and key stakeholders. Their concerns are summarised in Figure 5-1. These concerns must be addressed and considered by the determining authority in conjunction with the information presented in Chapter 6 (Methodology) and Chapter 7 (Basis of Objection). SAM Consulting also notes that the Proposal does align with the principles and objectives of several KSC's adopted strategic plans and/or strategies. SAM Consulting strongly recommends more detailed and sustained community engagement is undertaken for the Proposal to the extent that it is completed via an Environmental Impact Statement.

Public concerns

Governance & lifecycle framework

Social & Economic impacts

- Resource pressures on education, health care, water resources.
- Rapid population expansion.
- · Affordability.

Legal & Policy Compliance

- Non-compliance with existing NSW Government coastal design guidelines.
- Non-compliance against soil & erosion plan.
- Inadequate conditions of consent.
- Adherence to conditions of consent.

Biodiversity

- Loss of wetland habitat (has already occurred by land clearing).
- · Loss of fauna habitat.
- · Ecosystem degradation.

Water Quality & Surface Water

- Long-term integrity of aquatic ecosystems.
- · Acid sulphate soils.
- Increased risk of point source pollution.
- · Reduced flood attenuation.
- Increased flood risk.



Figure 5-1 - Summary of public engagement to the Proposal



6 Basis of review

6.1 ENVIRONMENTAL ASPECTS

SAM Consulting adopted an assessment of the Proposal and its supporting documents that are listed in Chapter 4 against key environmental aspects (Table 6-1). This also included: Assessment checklist for urban design NSW Coastal Design Guidelines 2023 – Appendix 1: Assessment checklist for planning proposals

 Table 6-1
 Key environmental themes and factors reviewed in line with the Proposal.

Theme	Environmental	Environmental objective	Indicative environmental values and sensitivities relevant to
	factor		each environmental factor
LAND	Terrestrial environmental quality Terrestrial ecosystems	Conserve the variety and integrity of distinctive physical landforms. Protect the quality and integrity of land and soils so that environmental values are supported and maintained. Protect terrestrial habitats to maintain environmental values including biodiversity, ecological integrity and ecological functioning.	 Distinctive features in the landscape, either geological or anthropogenic. Subterranean karstic terrain and faults. Craters, gorges, ranges, caves, massifs, escarpments, plateaus. Tourism related to landforms Good quality soils, including chemical, physical, biological, & aesthetic qualities that support life. The biological processes that depend on soil quality. Sensitive or significant vegetation or buffers. Vegetation that provides an important ecological function. Listed threatened species and their habitat (NSW & Commonwealth). Listed migratory species and their habitat (Commonwealth). Listed threatened ecological communities
			 Commonwealth). Locally endemic species or species with restricted habitat. Species of social, cultural, livelihood and/or economic significance. Protected area or reserve, including Indigenous Protected Area. Existing conservation and management activities. Introduced species and/or invasive species. Integrity of terrestrial ecosystems and the ecological services they provide. Biological and functional diversity Provision of refuge.
WATER	Hydrological processes	Protect the hydrological regimes of groundwater and surface water so that environmental values including ecological health, land uses and the welfare and amenity of people are maintained.	The supply and quantity of water in surface water features including rivers, lakes, wetlands, swamps, creeks, billabongs, intermittent streams, floodplains, mangroves, and drainage lines. The supply and quantity of water in groundwater features including aquifers, aquitards, and water tables. Current or potential water supplies, including regional scale aquifers. Declared beneficial uses. Culturally important water features or other features affected by water level.
	Inland water environmental quality	Protect the quality of groundwater and surface water so that environmental values including ecological health, land uses and the welfare and amenity of people are maintained.	 The quality of water in surface water features including rivers, lakes, wetlands, swamps, creeks, billabongs, intermittent streams, floodplains, mangroves, and drainage lines The quality of water in groundwater features including aquifers and water tables Declared beneficial uses. Present and future uses and users of water



Theme	Environmental	Environmental objective	Indicative environmental values and sensitivities relevant to each environmental factor
	factor		Current or potential water supplies, including regional scale aquifers. Potability / drinkability. Culturally important water features.
	Aquatic ecosystems	Protect aquatic habitats to maintain environmental values including biodiversity, ecological integrity, and ecological functioning.	 The health of the biota in inland waterways. The habitats that support the lifecycle of aquatic biota. Groundwater dependent ecosystems. Ramsar wetlands. Species of social, cultural, livelihood and/or economic significance. Integrity of aquatic ecosystems and the ecological services they provide. Biological and functional diversity. Provision of refuge.
SEA	Coastal processes	Protect the geophysical and hydrological processes that shape coastal morphology so that the environmental values of the coast are maintained.	Processes that support marine ecosystems such as coral reefs, mangroves, salt marshes, seagrass meadows and sponge gardens. Nutrient cycling. Carbon storage. Climate regulation. Conservation significant low-lying areas including tidal creeks, deltas, and river mouths. Storm surge protection. Unique coastal landforms. Cultural and aesthetic values. Active or passive recreation.
	Marine Environmental Quality	Protect the quality and productivity of water, sediment and biota so that environmental values are maintained.	 Quality of the water, sediment, and biota. Ecosystem health condition. Physical parameters that support fishing and aquaculture. Physical parameters that support recreation and aesthetics. Cultural and spiritual values.
	Marine ecosystems	Protect marine habitats to maintain environmental values including biodiversity, ecological integrity and ecological functioning.	 Conservation significant marine and coastal fauna and critical habitat such as nesting, breeding, or foraging habitat. Conservation significant marine and coastal benthos, flora and vegetation (seagrass meadows, sponge gardens, coral reefs, mangrove communities, salt marshes and supratidal forest). Groups of species (species richness and assemblages of species). Ecological functions and processes. Species of social, cultural, livelihood and/or economic significance. Integrity of marine ecosystems and the ecological services they supply. Biological & functional diversity. Provision of refuge and food supply.
AIR	Atmospheric processes	Minimise greenhouse gas emission & help achieve net zero greenhouse gas emissions by 2050.	Adaptation to a changing climate.
SOCIO- ECONOMIC	Community and economy	Enhance communities and the economy for the welfare, amenity, and benefit of current and future generations of South West Rocks.	Dwellings, homelands, communities, towns and suburbs where people live. Liveable environment including: good amenity – air quality, noise, aesthetics; access to natural resources including bush food; recreational use of the natural or built environment; and access to social infrastructure and services including transport and logistics.



Theme	Environmental factor	Environmental objective	Indicative environmental values and sensitivities relevant to each environmental factor
			Financial security including: Affordable acceptate final water allocations.
			 affordable access to food, water, electricity, transport, and communication networks; and
			livelihoods.
			Participation in jobs, businesses, and education.
			Existing industries such as agriculture, pastoralism, tourism, fisheries
			Vulnerable sectors of the community.
			Connections to culture and community such as:
			cultural practices;
			 sense of belonging, inclusion, connectedness, and
			cohesion; and
			 healthy social relationships.
	Culture and	Protect sacred sites, culture, and	Sacred sites.
	heritage	heritage.	Historic heritage and places.
			World heritage.
	Human health	Protect the health of the	Drinking water and recreational water.
		residents.	Air quality.
			Bush tucker
			Biting insects

6.2 RISK ASSESSMENT

SAM Consulting adopted the following risk criteria (Table 6-2), ratings (Table 6-3) and scale (Table 6-4) when reviewing the Proposal against the key environmental themes and objectives described in Table 6-1.

Table 6-2 Risk acceptance criteria

LEVEL OF RISK	ACCEPTANCE OF CRITERIA
Slight	Acceptance with periodic review. Exposure to this level of risk is acceptable without additional risk elements.
Minor	Acceptance with periodic review. Exposure to this level of risk is acceptable, provided an assessment has been conducted.
Moderate	Acceptable with ongoing review. Exposure to this level of risk may only continue with a clear treatment / management plan in place which is reviewed regularly.
Major	Unacceptable risk without treatment. Exposure to this level of risk may only continue with a clear treatment / management plan to reduce the level of risk.
Catastrophic	Unacceptable. Exposure to this level of risk should be immediately stopped.

Table 6-3 Risk likelihood rating

	RATING	PROBABILITY	DESCRIPTION	TIMESCALE
5	ALMOST CERTAIN	>80%	Event is expected to occur.	Once or more during the next year.
4	LIKELY	51-80%	Event will probably occur.	Likely once or more in the next 1-2 years.
3	POSSIBLE	26-50%	Event may occur occasionally.	Possibly once or more in the next 2-3 years.
2	UNLIKELY	10-25%	Event is unlikely to occur but is a possibility.	At least once in the next 3-5 years.
1	RARE	<10%	Event is conceivable, but very unlikely to occur.	Potentially once in the next 5-10 years.



Table 6-4 Risk rating scale

	SLIGHT	MINOR	MODERATE	MAJOR	CATASTROPHIC
	1	2	3	4	5
Ϋ́	Minor (5)	Moderate (10)	Major (15)	Catastrophic (20)	Catastrophic (25)
RIS	Slight (4)	Minor (8)	Moderate (12)	Major (16)	Catastrophic (20)
O.	Slight (3)	Minor (6)	Minor (9)	Moderate (12)	Major (15)
ΛEΓ	Slight (2)	Slight (4)	Minor (6)	Minor (8)	Moderate (10)
Ë	Slight (1)	Slight (2)	Slight (3)	Slight (4)	Minor (5)



7 Specific grounds for objection

7.1 LEGAL AND POLICY FRAMEWORK

7.1.1 NSW Coastal Management Act 2016 and Coastal Design Guidelines 2023

Sources: Coastal Management Act 2016 s9(2); Resilience and Hazards SEPP s2.11(1).

7.1.1.1 Outcome B.1 is to ensure development protects and, where possible, enhances the natural beauty of coastal landforms, foreshores, and other unique coastal features.

Planning coastal design requirements:

a. Integrate development within the natural topography of the site and ensure land use, building scale and **height** respond sympathetically to coastal landforms.

In its current form, the Proposal does not meet requirement B.1(a) because:

- <u>nine six or five storey apartments are not in keeping with the natural topography of Saltwater Creek and surrounding wetland ecosystem.</u>
- <u>nine six or five storey apartments are not visually sympathetic to the existing coastal landform surrounding Saltwater Creek.</u>
- <u>nine six or five storey apartments are not at a scale that respond sympathetically to the</u> existing coastal landform along Saltwater Creek and associated wetland ecosystems.
- Two storey apartments would reflect a development that more appropriately integrates
 with the natural topography, is at a scale and height that is considered in keeping and
 sympathetic with existing domestic infrastructure surrounding the Site.
- b. Ensure the intended form and footprint of development does not dominate coastal elements, including foreshores, public spaces, and other areas of natural beauty.

The Proposal does not meet requirement B.1(b) because it represents a significant loss (i.e., 4 ha) of natural beauty associated with Saltwater Creek wetland ecosystem. The scale of the Proposal will dominate an untouched and pristine coastal landscape that are unique to this region.

c. Incorporate adaptive, water-sensitive urban design into the development footprint to reduce runoff and manage water quality within receiving environments.

The Proposal will significantly increase impervious surfaces over the 40,000 square metre development zone that lies within the Saltwater Creek wetland ecosystem. It is unclear from viewing drawing number SR-SUBD.01 as to what water-sensitive urban design methods within the development footprint will be utilised and implemented to reduce surface and stormwater run-off. Without adequate WSUD measures in place, the Proposal is likely to have direct and long-term adverse impacts on water quality within Saltwater Creek.

On this basis, the Proposal does not meet requirement B.1(c). Before the development application can be approved, it is recommended the Proponent demonstrate how it will adequately meet this planning requirement and avoid adverse environmental impacts on receiving waters within Saltwater Creek. It is also recommended that the Proposal has a reduced impervious surface area to accommodate flooding in low lying areas (i.e., in the northern zone).



d. Ensure that lot sizes, building **heights** and density are appropriate for the coastal settlement, and complement the existing or desired local character, supported by place-based strategies.

As previously mentioned, (refer to requirement B.1(a)), the proposed buildings heights are not appropriate for this location. So too, the proposed density of housing because it does not complement the existing or desired local character for this coastal setting.

On this basis, the Proposal in its current form does not meet the requirements B.1(d). It is recommended that the Proposal be limited to two story buildings and reduces its proposed density. The latter will offset the predicted negative socio-economic impacts discussed in Section 4.2.

e. Avoid development that would harm geological features and geo-heritage.

The Saltwater Creek and associated wetland is considered a geo-heritage feature. Geo-heritage refers to geological features of scientific, educational, cultural, or aesthetic value. Saltwater Creek are all these elements. Wetland ecosystems like Saltwater Creek is a unique ecosystem and landscape. It embodies significant geological, biodiversity, hydrological characteristics that contribute to cultural heritage connections between land and sea, and more recent understanding by Europeans of natural history and environmental processes.

Saltwater Creek plays a crucial role in local natural processes such as water purification, flood control, and carbon sequestration. It supports a wide variety of plant and animal species. Due to these attributes, Saltwater Creek wetland ecosystem is recognised by Aboriginal Australian's and European settlers for its geo-heritage value.

On this basis, the Proposal in its current form does not meet the requirements B.1(e). A more sustainable development proposal would consider the importance of conserving this area not just for its ecological benefits but also for its contribution to our geological and cultural heritage.

7.1.1.2 Outcome B.2 Ensure urban development complements coastal scenic values. Urban development does not compete with or erode coastal scenic values or reduce public access.

a. Limit ribbon development and urban sprawl wherever possible. In certain locations, place-based strategies may support increased development density and building heights as a better response to urban growth.

In isolation, the Proposal does not represent urban sprawl. However, if the Proposal is approved in its current form (i.e., development above two stories), it is possible (i.e., up to 50 % likelihood in the next two to three years) it may trigger similar proposals by other developers. If this were to occur, it would represent a catastrophic and unacceptable level of cumulative risk. In line with Outcome B.2(a), the Proposal should be limited to only two stories and the Kempsey Development Control Plan be restricted to such. This approach would complement the NSW Coastal Design Guidelines (2023).

b. Use greenbelts to create, maintain and mark out separation between settlements.

Prior to the construction certificate being approved, which triggered lawful clearing and grubbing of the Site, the Site was a functional wetland greenbelt. It did provide a buffer between existing residential development and proposed development immediately south of Phillip Drive. It also provided habitat and refuge for local fauna.



It is imperative that if development applications 2300926 and 2400974 are approved, their conditions of consent force the developer to:

- Limit the height of each dwelling to two-storeys and,
- Plant endemic wetland species within low-lying areas that would act as a buffer and assist in flood attenuation.
 - c. Consider effects on scenic values and maintain publicly accessible views to significant landmarks.

In their current form, the development applications would represent a major and long-term adverse risk local scenic values and views of the coastal landscape. A major risk without adequate controls in place, is considered unacceptable and, exposure to this level of risk should only continue with clear and transparent policy to reduce the level of risk.

d. Ensure that building heights consider the effect on views from different vantage points.

The URBIS visual analysis report (2023)⁵ was reviewed in response to the above requirement. SAM Consulting refer to this report as the Site's Landscape Visual Impact Analysis (**LVIA**).

Cultural heritage engagement and values

The LVIA makes a statement to acknowledge country and the contribution that Aboriginal and Torres Strait Islander people make in creating a strong and vibrant Australian society. It also acknowledges the Traditional Owners (Dunghutti peoples in Dunghutti Country). The LVIA also states "We recognise and respect the connection to their land, cultural heritage and community, and we pay respects t their Elder's past, present, and emerging".

A broader effort to consult with residents and key members of the South West Rocks community would better align with the consultant's corporate social responsibilities referenced on their website.

The LVIA fails to reference or provide any evidence of consultation with indigenous owners and/or representatives from Country. In addition, and with respect to visual aspects associated with the Proposal, the LVIA does not provide results of traditional owner consultation. Furthermore, the land on which the Proposal is located also includes the Ngaku people⁶. Representatives from this Family should be consulted before approval for either DA is granted.

Purpose of the LVIA

In the section titled "Purpose", the third paragraph states "the report is limited to an analysis of the potential visibility of the Concept DA and does not assess potential visual impacts of this change on the local visual context, scenic character or scenic quality of the site or its wider setting".

In its current form, the LVIA has not met requirement B2(d) of the NSW Coastal Design Guidelines - Ensure that building heights consider the effect on views from different vantage points. It is completely

 $^{^{5}}$ South West Rocks Visual Analysis Report prepared by URBIS for Rise Developments – Final, Version B, October 2023

⁶ National Parks & Wildlife Service NSW Aboriginal Sites Survey – Berangutta to Gulgarng Investigations of Aboriginal Sites of Significance from Point Lookout to South West Rocks 1979.



unreasonable for an approval to be granted in this instance when a detailed landscape visual impact assessment linked to stages 2 and 3 has not been completed.

In relation to requirement B2(d), it is recommended the Proponent undertake the following prior to any approvals be granted in respect to development applications

- A comprehensive LVIA for stages 2 and 3 proposed for the Site be completed and contained within an Environmental Impact Assessment before any decision is made in relation to development applications linked to stages 2 and 3.
- Traditional owner free, prior, and informed consent (FPIC) on a detailed landscape visual
 impact assessment. FPIC is a specific right granted to Indigenous Peoples recognised in the
 United Nations Declaration on the Rights of Indigenous Peoples. FPIC allows Indigenous
 Peoples to engage in negotiations to shape the design, implementation, and evaluation of
 proposals.
- 3. It is imperative that all community members in South West Rocks be granted the opportunity to review and comments on a detailed landscape visual impact assessment for development applications related to stages 2 and 3.

Analysis of potential visibility

It is recommended that:

A detailed landscape visual "impact" assessment be completed for stages 2 and 3. This should include the following:

- Traditional owner consultation.
- Broader community consultation.
- A viewshed analysis up to at least five kilometres which is made available for public comment.
- An increased scope of sensitive locations, including from the sea.
- Visual impact assessment findings that are unbiased and transparently communicated.

The conclusions reached in the LVIA are contradictory to the findings of the analysis findings covered in Sections 3 and 4. They are considered false and misleading statements. For example, the conclusions stated below are considered by many (local) residents as false and misleading statements:

- The site and proposed Concept DA will be of low or <u>nil visibility from all sensitive view</u> locations inspected, documented, and modelled.
- The height and scale of the Concept DA is not visible from sensitive public domain locations such as the town ship, beaches and Arakoon National Park or Trial Bay Gaol heritage item.
- The extent of visibility of the Concept DA is not significantly greater than the historic approval. Where only a minor to negligible extent of the upper-most parts of the Stage 3 envelopes, may be visible from isolated elevated locations.
- Most of these close views will be from moving viewing situations of short duration.

In its current form, the LVIA and DA's do not meet requirement B2(d).



f. Retain or create views from public spaces. Prioritise this over creating views from private property.

In its current form, the LVIA and DA's do not meet requirement B2(d) because, five and six storey buildings would represent an opportunity for residents in these private apartments to prioritise views over existing residential development in the immediate surrounding environment. Existing residential development is considered complimentary to the local coastal landscape and environment.

g. Provide for active transport links along foreshores, including along estuaries and coastal lakes, and between settlements to increase public access and amenity.

There are existing active transport links in the form of a public footpath / bike path and bus stop that would support any future residential development to the Site.

7.1.1.3 Outcome C.1 Protect and promote heritage values Protect heritage values, items and sites from the impacts of both development and climate change. Promote Aboriginal and non-Aboriginal heritage as appropriate⁷.

Requirements are:

a. Ensure development does not harm heritage values or sites.

There are no recorded sies of cultural heritage significance within the Site. However, Aboriginal sites exist to the northeast of the Site (refer to Appendix A). The SEE did not reference these sites or discuss their significance in relation to the Proposal.

Accordingly, it is recommended further consultation with the Dunghutti people and / or local Aboriginal land council representatives be undertaken to address requirement C1(a) of the NSW Coastal Design Guidelines.

b. Work collaboratively with local Aboriginal people before and throughout the planning proposal process.

It is acknowledged that an Aboriginal Cultural Assessment was undertaken to support the amended SEE. This submission agrees no items of cultural heritage sign occur within the Site. However, SAM Consulting completed an "extensive search" for potential items of cultural heritage on 16 February 2024 using the Aboriginal Heritage Information Management System (AHIMS) in Appendix A. The extensive search results show two Aboriginal sites are recorded to the northeast of the Site. This result is at odds of the findings in the SEE and supporting heritage assessment completed by Everick Heritage Pty Ltd. It is recommended that this discrepancy be further investigated.

c. With permission and guidance from local Traditional Custodians, identify and emphasise significant features of coastal land and sea Country.

In its current form, it is noted the South West Rocks Figtree Aboriginal Corporation do not support the proposal on the grounds of impact to the cultural landscape and environmental impacts. It is

⁷ Sources: Coastal Management Act s3(c) and s9(2)(a); Resilience and Hazards SEPP s2.11(1)(a); Local Planning Direction 3.2 (Heritage Conservation); Designing with Country.



recommended that further consultation with the Figtree Aboriginal Corporation be undertaken and, further consideration of Aboriginal sites recorded near the Site are addressed in an Environmental Impact Statement.

d. With permission and guidance from local Traditional Custodians, identify and protect sacred and significant areas through the appropriate siting of development.

Before any approvals are granted against the DA's, it is recommended the results of the AHIMS search result undertaken by SAM Consulting should be further investigated. This must include further consultation with the South West Rocks Figtree Aboriginal Corporation and/or any other relevant traditional custodians.

e. Ensure land use, building type, scale and height respond to heritage items and areas.

In its current form, it is noted the South West Rocks Figtree Aboriginal Corporation do not support the proposal on the grounds of impact to the cultural landscape and environmental impacts generally. It is recommended that further consultation be undertaken with the South West Rocks Figtree Aboriginal Corporation regarding building scale and height.

7.1.1.4 Resilience and Hazards SEPP s2. 10 & 11(1)

The SEPP requires that development consent must not be granted unless the approving authority has considered whether the Proposal is likely to cause and adverse impact on:

- Coastal environmental values.
- Natural coastal processes.
- Water quality of the marine environment.
- Marine vegetation.
- Native vegetation.
- Native fauna and their habitats.

7.1.2 EPBC Act

It is noted that the Site was cleared of vegetation in April 2023. This includes the loss of preferred koala habitat. Despite the Site being void of vegetation at the time of preparing this submission, A Protected Matters Search was completed by SAM Consulting on 16 February 2024 (Appendix B).

The results indicate there are no Matters of National Environmental Significance. This is consistent with the 2023 SEE findings. However, Threatened Ecological Communities (**TEC**) as listed under the EPBC Act are within proximity to the Site (Appendix C).

Accordingly, under section 68 of the EPBC Act, it is recommended the Proposal be referred to the Australian Government Minister for the Environment for indirect impacts on biodiversity values linked to the Saltwater Creek wetland ecosystem.

Section 68 requires that any person proposing to take an action that they think may have a significant impact on a matter protected by the EPBC Act, refer the action to the Australian Environment Minister. The referral process is the first step in determining whether a proposed action will need formal assessment and approval under the EPBC Act.



7.1.4 Water Management Act 2000

As shown in Figure 2-2, the Proposal is located within Waterfront Land due to its proximity near Saltwater Creek and, proposed stormwater discharge points within 40 metres of Saltwater Creek. Section 91 of the *Water Management Act* (**WMA**) relates to Activity Approvals and, it and outlines that a controlled activity approval confers a right on its holder to carry out a specified Controlled Activity at a specified location in, on or under Waterfront Land.

The Proposal would also require building foundations to be constructed below existing ground levels. This action is highly likely to interface with or, adversely affect the local water table and aquifer recharge potential in the area. This negative impact requires approval from NRAR under Section 91 of the WMA

7.1.5 Kempsey Shire Council Local Environmental Plan 2013

The Site is zoned R3 Medium Density Residential under the Kempsey Local Environmental Plan (**KLEP**). However, zone R3 is silent on height restrictions. It is recommended that the KLEP be reviewed, and a height restriction be included in line with the NSW Coastal Design Guidelines 2023.

This submission also recommends that Lot 2 be re-zoned to R2 - Low Density Residential. This zone is more appropriate for the area and its existing residents.

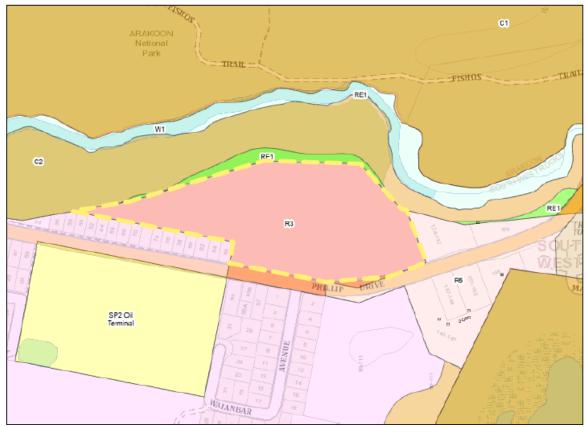


Figure 4-1 KLEP 2013 zoning map



7.2 ENVIRONMENTAL & SOCIO-ECONOMIC FACTORS

7.2.1 Overview

The SEE submitted to support the 2023 DA could have benefited from further discussion and quantification of impacts, both direct and indirect, the Proposal is likely to have on the receiving environment and peoples of South West Rocks and Arakoon.

Section 4.2.2 and 4.2.3 summarise the direct and indirect impacts that are likely to occur if multistorey apartments are approved for development. Managing these impacts requires careful planning and engagement with stakeholders to ensure that development meets economic needs while minimising negative social and environmental consequences.

7.2.2 Direct impacts

The direct impacts associated with a multi-storey development are:

- i. Increased traffic volume: Higher density developments, like this Proposal, increase traffic during construction and in operation as more people reside or work in a concentrated area. If approved in its current form, the DAs is highly likely to result in a change to the local level of service on Phillip Drive during construction and operation.
- ii. Increased pressure on existing public services and infrastructure: The Proposal is highly likely to increase a greater demand for public services, like schools and emergency services, and infrastructure such as water supply, sewage, and electricity. This will trigger the need for upgrades or expansions to accommodate the increased population.
- iii. Aesthetic and character changes: If approved in its current form, the character and aesthetic of the local area will change significantly. Multi-storey apartments are viewed negatively by a large majority of residents and stakeholders. The landscape and visual analysis that supported the SEE does not provide an adequate assessment and discussion of landscape and visual "impacts" linked to the DA's.

iv. Altered hydrology and flood risk:

The Proposal will alter the hydrological conditions across the Site to the extent that flood risk increases because of reduced flood attenuation. Reduced flood attenuation has already been triggered by land clearing.

Land in the northeast section of the Site is low-lying and prone to flooding, especially under the 1 in 100-year Annual Exceedance Probability (**AEP**) event as described and depicted in the 2022 flood assessment⁸. Under the existing1 in 100-year AEP event, flood depths across the northeastern corner of the site range from 0.8 metres to 1.6 metres (see Figure 4-1). These flood depths occur in the area in the Proposal called Stage 3. The existing 1 in 100-year AEP flood depths are significant and would represent a major risk to life and property. This area of

⁸ Lot 2 Phillip Drive Flood Impact Assessment March 2022 – Solutions Water Modelling



the Site should not be approved for development. Rather, the area should be approved as a constructed wetland to address flood risk and, an increase in surface water run-off volumes across the Site.

An increase in impervious surface area at the Site will be triggered by the Proposal. Impervious surfaces prevent rainwater from infiltrating into the ground, leading to increased surface runoff. The Proposal will result in more rapid and higher volumes of water flowing into Saltwater Creek during and after rain events, which could alter its natural flow regime and increase the risk of flooding.

The 2022 Flood Impact Assessment for the Site report noted that water velocity in Saltwater Creek will occur, and "minor impacts" are expected because of deflecting surface water away from the Site. The report also notes that minor flooding upstream of the Site will occur because of the Proposal. <u>SAM Consulting recommends the Stage 3 area be approved as a constructed wetland to:</u>

- Avoid any short and long-term adverse impacts, such as increased pollutant loads, erosion, and sedimentation, on Saltwater Creek
- Avoid increase flood risk to existing properties immediately west of the Site.
- Avoid flooding areas within Arakoon Nature Reserve.

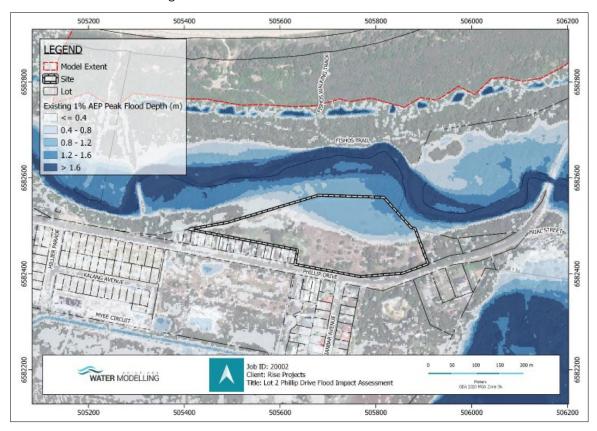


Figure 7-1 Existing AEP flood depth at the Site.

 $Figure\ source:\ Lot\ 2\ Phillip\ Drive\ Flood\ Impact\ Assessment\ March\ 2022-Solutions\ Water\ Modelling$



- v. **Increase pollutant loading:** Without the Proposal including a constructed wetland reserve, surface runoff over impervious surfaces will collect pollutants such as oils, heavy metals, sediments, and nutrients before discharging into Saltwater Creek. This can lead to water quality degradation, affecting both aquatic life and human use of river resources.
- vi. **Erosion and sedimentation:** The increased volume and speed of runoff can cause erosion along the banks and in stream channel of Saltwater Creek. The sediment carried by this runoff may accumulate in Saltwater Creek, affecting its morphology, reducing water depth, and impacting habitat quality.
- vii. Temperature changes: Impervious surfaces absorb and retain heat, and runoff from these surfaces can be significantly warmer than the natural river water. This thermal pollution can alter the temperature regime of Saltwater Creek, affecting species that are sensitive to temperature changes. The recommendation for a constructed wetland reserve within the Site and part of the Proposal would adequately mitigate this risk.
- viii. Changes in local environmental conditions: The increase in built area associated with medium density developments in this location has already led to changes in local environmental conditions. For example, clearing of almost five hectares has reduced green space that was an important ecological buffer zone for flora and fauna species, as well as an important flood attenuation zone. These changed conditions will lead to long-term and irreversible changes in local ecosystem function and condition.
 - v. Housing affordability: In some cases, medium and high-density developments can help address housing affordability by increasing the housing stock. However, the impact on affordability can vary greatly depending on market conditions. In this instance, the Proposal is not considered affordable for existing residents of South West Rocks / Arakoon. In addition those dwellings proposed as "affordable" by the Proponent average 50 square metres and therefore considered not suitable for local young families at any price.

4.2.3 Indirect impacts

The indirect and long-term risks associated with the Proposal are:

i. Economic development: High-density developments such as the Proposal, can stimulate local economies by attracting businesses and services to meet the needs of the increased population. This can lead to job creation and economic growth. However, given the fundamental synergy of the environment and the economy of South West Rocks there is a risk that the negative impact on the inherent character of South West Rocks caused by six and five story buildings in major tourist area and routes may result in reduced tourism and a consequent net loss of local jobs in the longer term.



- ii. **Social and cultural dynamics:** The Proposal could lead to changes in social and cultural dynamics, including increased diversity and potentially greater community engagement.
- iii. **Habit loss and fragmentation:** The modelled changes in flow to Saltwater Creek and, an increase in sedimentation levels because of increased surface run-off from impervious surfaces, can lead to the loss or degradation of habitats in Saltwater Creek for fish and other aquatic organisms.
- iv. **Reduced groundwater recharge:** Impervious surfaces limit the amount of water that infiltrates into the ground, reducing groundwater recharge. This can adversely affect groundwater levels and the availability of water for ecosystems surrounding the Site.
- v. Acid Sulphate Soils: As shown in Figure 4-2, the Site is identified as containing Class 2b and Class 4 Acid Sulfate Soils (ASS). Bulk earthworks have already commenced at the Site. The bunding of soil on the northern permitter of the Site does not meet the requirements of the ASS Management Plan or Sediment Erosion Control Plan. Therefore, likelihood of ASS leachate into Saltwater Creek are considered high. ASS contain iron sulfides (i.e., pyrite) that, when exposed to oxygen during excavation or drainage, oxidise to produce sulfuric acid. If left unmanaged or controlled, the adverse impacts on the natural and built environment are likely to include:
 - **a.** Water quality degradation due to a lowering of water pH. This can harm aquatic ecosystems, reduce biodiversity.
 - **b.** Soil stability problems due to acidification of soils. This could, over the long term, lead to subsidence or compaction of soils at the Site.
 - c. Corrosion of concrete and metals due to acidification of soils. This could lead to rapid corrosion of built materials including concrete and/or metal infrastructure.
 - **d. Increased construction costs** due to additional management measures as required under the ASS management plan.





Figure 7-2 – ASS exists across the Site. Source: KLEP



8 Conclusion

This document elucidates the developmental chronology of the site in question, the geographical positioning of the proposed initiative, the relevant environmental planning statutes, and the principles governing coastal architecture. The foundation and rationale of this submission have been meticulously articulated, as have the precise bases for contesting the envisaged multi-level construction

The contemplated multi-tiered construction at Lot 2 Phillip Drive, South West Rocks, contravenes the stipulations of the 2023 NSW Coastal Design Guidelines. Although the Kempsey Local Environmental Plan refrains from stipulating height restrictions within the R3 zone, it is incumbent upon the determining authority for this Proposal to consider the NSW Coastal Design Guidelines in its evaluation. Such an assessment would reveal that the project, as presently envisaged, fails to harmonise with the Site's natural topography, owing to the envisaged scale and elevation of the building. Consequently, the project does not exhibit congruity with the prevailing coastal landscape.

The project site is situated within a designated flood hazard area. It is advocated that development within the Stage 3 zone be confined to the establishment of a constructed wetland. This intervention would alleviate the modelled flood hazard intrinsic to the site and aid in the mitigation of surface water runoff, anticipated to escalate due to an increase in non-permeable surfaces. The proposal ought to incorporate measures to preserve or rehabilitate natural floodplain functionalities, thereby enhancing their capacity to sequester and detain floodwaters, which would, in turn, diminish the forecasted flood risk throughout the site.

While it is acknowledged that the proposed development promises to invigorate the local economy through investment, employment generation, and the creation of business opportunities, this document delineates the reasons why the proposal, in its current guise, necessitates a comprehensive re-evaluation concerning issues of cultural heritage, visual and landscape impacts, and the preservation of threatened ecological communities under Commonwealth legislation.

The zoning provisions under the KLEP are formulated to orchestrate land use in a manner that equilibrates developmental aspirations with the imperatives of environmental stewardship, heritage preservation, and the satisfaction of communal necessities. The zoning designation of Lot 2 is deemed unsuitable for the specified locale within South West Rocks.

The advancement of the proposal should be contingent upon the fulfillment of the following conditions:

- The preparation of an Environmental Impact Statement by the proponent, which shall be subjected to public scrutiny as prescribed under the NSW Environmental Planning and Assessment Act 1979.
- The referral of the proposal to the Australian Environment Minister pursuant to Section 68 of the EPBC Act, in consideration of its indirect and long-term ramifications on nearby threatened ecological communities.



- The re-zoning of Lot 2 Deposited Plan 1091323 by the Kempsey Shire Council from R3 Medium Density Residential to R2 Low Density Residential, to better align with the environmental and community values of the area.
- The grant of approval for development exclusively to single and two-storey townhouses and/or apartments, in alignment with the revised zoning classification.
- The mitigation of flood risks through the authorisation granted to the proponent for the construction of a wetland reserve within the proposed Stage 3 zone of the development application.
- The active monitoring of potential acid sulfate soil leachate, with the dissemination of monitoring outcomes to the public, ensuring transparency and community engagement in environmental management.



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APPENDIX A

Aboriginal Heritage Information Management System Search Results

Your Ref/PO Number: SAM-Rise Development

Client Service ID: 864941

Date: 16 February 2024

SAM Consulting

501 Old Coast Road

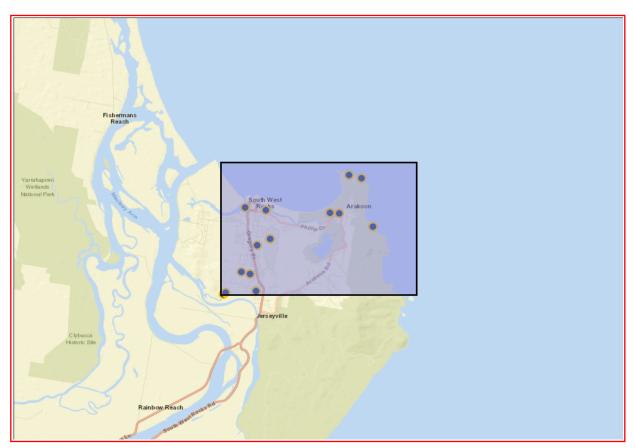
North Macksville New South Wales 2447

Attention: Richard Phillips Email: info@samadvice.net

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lat, Long From: -30.91, 153.0304 - Lat, Long To: -30.8732, 153.0922, conducted by Richard Phillips on 16 February 2024.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

14	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it.
 Aboriginal places gazetted after 2001 are available on the NSW Government Gazette
 (https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.

ABN 34 945 244 274

Email: ahims@environment.nsw.gov.au

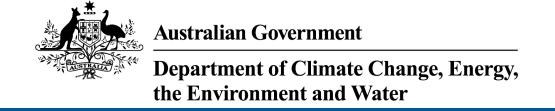
Web: www.heritage.nsw.gov.au

• This search can form part of your due diligence and remains valid for 12 months.



APPENDIX B

EPBC Protected Matters Search Tool Results



EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 16-Feb-2024

Summary

Details

Matters of NES
Other Matters Protected by the EPBC Act
Extra Information

Caveat

<u>Acknowledgements</u>

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the <u>Administrative Guidelines on Significance</u>.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	4
Listed Threatened Species:	81
Listed Migratory Species:	55

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at https://www.dcceew.gov.au/parks-heritage/heritage

A <u>permit</u> may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	1
Commonwealth Heritage Places:	None
Listed Marine Species:	74
Whales and Other Cetaceans:	11
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	2
Regional Forest Agreements:	1
Nationally Important Wetlands:	1
EPBC Act Referrals:	2
Key Ecological Features (Marine):	None
Biologically Important Areas:	3
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

[Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community	Endangered	Community may occu within area	ırln feature area
Lowland Rainforest of Subtropical Australia	Critically Endangered	Community may occu within area	ırln buffer area only
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	Community likely to occur within area	In feature area
Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions	Endangered	Community likely to occur within area	In feature area

Listed Threatened Species

[Resource Information]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act. Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Anthochaera phrygia			
Regent Honeyeater [82338]	Critically Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Ardenna grisea			
Sooty Shearwater [82651]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Botaurus poiciloptilus			
Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calyptorhynchus lathami lathami South-eastern Glossy Black-Cockatoo [67036]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Climacteris picumnus victoriae Brown Treecreeper (south-eastern) [67062]	Vulnerable	Species or species habitat may occur within area	In feature area
Cyclopsitta diophthalma coxeni Coxen's Fig-Parrot [59714]	Critically Endangered	Species or species habitat may occur within area	In feature area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea antipodensis gibsoni Gibson's Albatross [82270]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
<u>Diomedea epomophora</u> Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Erythrotriorchis radiatus Red Goshawk [942]	Endangered	Species or species habitat may occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat may occur within area	In feature area
Fregetta grallaria grallaria White-bellied Storm-Petrel (Tasman Sea), White-bellied Storm-Petrel (Australasian) [64438]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area	In feature area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u>Lathamus discolor</u> Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Limosa lapponica baueri Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit [86380]	Endangered	Species or species habitat known to occur within area	In feature area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In feature area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat known to occur within area	In feature area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In feature area
Pterodroma leucoptera leucoptera Gould's Petrel, Australian Gould's Petrel [26033]	Endangered	Species or species habitat may occur within area	In feature area
Pterodroma neglecta neglecta Kermadec Petrel (western) [64450]	Vulnerable	Foraging, feeding or related behaviour ma occur within area	
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area	In feature area
Stagonopleura guttata Diamond Firetail [59398]	Vulnerable	Species or species habitat may occur within area	In feature area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche bulleri platei Northern Buller's Albatross, Pacific Albatross [82273]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche cauta Shy Albatross [89224]	Endangered	Species or species habitat may occur within area	In feature area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In feature area
FISH			
Epinephelus daemelii Black Rockcod, Black Cod, Saddled Rockcod [68449]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Hippocampus whitei White's Seahorse, Crowned Seahorse, Sydney Seahorse [66240]	Endangered	Species or species habitat likely to occur within area	In feature area
Seriolella brama Blue Warehou [69374]	Conservation Dependent	Species or species habitat known to occur within area	In feature area
Thunnus maccoyii Southern Bluefin Tuna [69402]	Conservation Dependent	Species or species habitat known to occur within area	In feature area
FROG			

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Litoria aurea</u> Green and Golden Bell Frog [1870]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Mixophyes balbus Stuttering Frog, Southern Barred Frog (in Victoria) [1942]	Vulnerable	Species or species habitat known to occur within area	In feature area
INSECT			
Argynnis hyperbius inconstans Australian Fritillary [88056]	Critically Endangered	Species or species habitat may occur within area	In feature area
MAMMAL			
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area	In feature area
Chalinolobus dwyeri Large-eared Pied Bat, Large Pied Bat [183]	Endangered	Species or species habitat may occur within area	In feature area
Dasyurus maculatus maculatus (SE main Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	nland population) Endangered	Species or species habitat known to occur within area	In feature area
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area	In feature area
Petauroides volans Greater Glider (southern and central) [254]	Endangered	Species or species habitat likely to occur within area	In feature area
Petaurus australis australis Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Phascolarctos cinereus (combined popul Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	lations of Qld, NSW and the Endangered	he ACT) Species or species habitat known to occur within area	In feature area
Potorous tridactylus tridactylus Long-nosed Potoroo (northern) [66645]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pseudomys novaehollandiae New Holland Mouse, Pookila [96]	Vulnerable	Species or species habitat may occur within area	In feature area
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Roosting known to occur within area	In feature area
PLANT			
Acronychia littoralis Scented Acronychia [8582]	Endangered	Species or species habitat likely to occur within area	In feature area
Arthraxon hispidus Hairy-joint Grass [9338]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Cryptostylis hunteriana Leafless Tongue-orchid [19533]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Cynanchum elegans White-flowered Wax Plant [12533]	Endangered	Species or species habitat likely to occur within area	In feature area
Euphrasia arguta [4325]	Critically Endangered	Species or species habitat may occur within area	In feature area
Leichhardtia longiloba listed as Marsdeni	a longiloha		
Clear Milkvine [91911]	Vulnerable	Species or species habitat may occur within area	In feature area
Macadamia integrifolia Macadamia Nut, Queensland Nut Tree, Smooth-shelled Macadamia, Bush Nut, Nut Oak [7326]	Vulnerable	Species or species habitat may occur within area	In feature area
Persicaria elatior Knotweed, Tall Knotweed [5831]	Vulnerable	Species or species habitat may occur within area	In feature area
Phaius australis Lesser Swamp-orchid [5872]	Endangered	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Rhodamnia rubescens			
Scrub Turpentine, Brown Malletwood	Critically Endangered	Species or species	In feature area
[15763]		habitat known to occur within area	
		occur within area	
Rhodomyrtus psidioides			
Native Guava [19162]	Critically Endangered	Species or species	In feature area
		habitat known to occur within area	
		occur within area	
Thesium australe			
Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species	In feature area
		habitat likely to occur within area	
		Within Grod	
Vincetoxicum woollsii listed as Tylophora			
[40080]	Endangered	Species or species habitat may occur	In feature area
		within area	
REPTILE			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species	In feature area
Loggerriead Turtie [1705]	Liluangered	habitat known to	iii leature area
		occur within area	
Chelonia mydas			
Green Turtle [1765]	Vulnerable	Species or species	In feature area
		habitat known to	
		occur within area	
Dermochelys coriacea			
Leatherback Turtle, Leathery Turtle, Luth	Endangered	Species or species	In feature area
[1768]		habitat known to	
		occur within area	
Eretmochelys imbricata			
Hawksbill Turtle [1766]	Vulnerable	Species or species	In feature area
		habitat known to occur within area	
		Joodi Willin aroa	
Natator depressus			
Flatback Turtle [59257]	Vulnerable	Breeding likely to occur within area	In feature area
		occur within area	
SHARK			
Carcharias taurus (east coast population		_	
Grey Nurse Shark (east coast	Critically Endangered	Congregation or	In feature area
population) [68751]		aggregation known to occur within area	
Carcharodon carcharias	Made and by	On a si s s	In faction
White Shark, Great White Shark [64470]	vuinerable	Species or species habitat known to	In feature area
		occur within area	

Scientific Name	Threatened Category	Presence Text	Buffer Status
Galeorhinus galeus			
School Shark, Eastern School Shark, Snapper Shark, Tope, Soupfin Shark [68453]	Conservation Dependent	Species or species habitat may occur within area	In feature area
Rhincodon typus			
Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In feature area
Sphyrna lewini Scalloped Hammerhead [85267]	Conservation Dependent	Species or species habitat likely to occur within area	In feature area
Listed Migratory Species		[Res	source Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Anous stolidus			
Common Noddy [825]		Species or species habitat likely to occur within area	In feature area
Apus pacificus			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Ardenna carneipes			
Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Species or species habitat likely to occur within area	In feature area
Ardenna grisea			
Sooty Shearwater [82651]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Calonectris leucomelas			
Streaked Shearwater [1077]		Species or species habitat may occur within area	In feature area
Diomedea antipodensis			
Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area

Diomedea epomophora

Southern Royal Albatross [89221] Vulnerable Foraging, feeding or In feature area related behaviour

likely to occur within

area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat likely to occur within area	In feature area
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat likely to occur within area	
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In feature area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat may occur within area	In feature area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In feature area
Sternula albifrons Little Tern [82849]		Species or species habitat may occur within area	In feature area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Thalassarche cauta Shy Albatross [89224]	Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche impavida Campbell Albatross, Campbell Black- browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In feature area
Migratory Marine Species			
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In feature area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area	In feature area
Carcharhinus longimanus Oceanic Whitetip Shark [84108]		Species or species habitat may occur within area	In feature area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In feature area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In feature area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area	In feature area
Eubalaena australis as Balaena glacialis Southern Right Whale [40]	<u>australis</u> Endangered	Species or species habitat likely to occur within area	In feature area
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat may occur within area	In feature area
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area	In feature area
Mobula alfredi as Manta alfredi Reef Manta Ray, Coastal Manta Ray [90033]		Species or species habitat may occur within area	In feature area
Mobula birostris as Manta birostris Giant Manta Ray [90034]		Species or species habitat may occur within area	In feature area
Natator depressus Flatback Turtle [59257]	Vulnerable	Breeding likely to occur within area	In feature area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In feature area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In feature area
Migratory Terrestrial Species			
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area	In feature area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area	In feature area
Symposiachrus trivirgatus as Monarcha t Spectacled Monarch [83946]	<u>rivirgatus</u>	Species or species habitat known to occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat likely to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Limosa lapponica</u>			
Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area
Numenius madagascariensis			
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Pandion haliaetus			
Osprey [952]		Breeding known to occur within area	In feature area
Tringa nebularia			
Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In feature area

Other Matters Protected by the EPBC Act

Commonwealth Lands [Resource Information]

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

Commonwealth Land Name	State	Buffer Status
Communications, Information Technology and the Arts - Telstra Corporatio	n Limited	
Commonwealth Land - Australian Telecommunications Commission [1136]	1]NSW	In buffer area only

Listed Marine Species		[Res	source Information
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos			
Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Anous stolidus			
Common Noddy [825]		Species or species habitat likely to occur within area	In feature area
Apus pacificus			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Ardenna carneipes as Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Species or species habitat likely to occur within area	In feature area
Ardenna grisea as Puffinus griseus Sooty Shearwater [82651]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat likely to occur within area overfly marine area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat likely to occur within area overfly marine area	In feature area
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat may occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Diomedea antipodensis gibsoni as Diome</u> Gibson's Albatross [82270]	edea gibsoni Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
<u>Diomedea exulans</u> Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat likely to occur within area	In feature area
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat likely to occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In feature area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area overfly marine area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Pachyptila turtur Fairy Prion [1066]		Species or species habitat known to occur within area	In feature area
Pandion haliaetus Osprey [952]		Breeding known to occur within area	In feature area
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat may occur within area	In feature area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In feature area
Pterodroma cervicalis White-necked Petrel [59642]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area overfly marine area	In feature area
Rostratula australis as Rostratula bengha Australian Painted Snipe [77037]	alensis (sensu lato) Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Sterna striata White-fronted Tern [799]		Foraging, feeding or related behaviour likely to occur within area	In feature area
Sternula albifrons as Sterna albifrons Little Tern [82849]		Species or species habitat may occur within area	In feature area
Symposiachrus trivirgatus as Monarcha to Spectacled Monarch [83946]	trivirgatus	Species or species habitat known to occur within area overfly marine area	In feature area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche bulleri platei as Thalassarche Northern Buller's Albatross, Pacific Albatross [82273]	che sp. nov. Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Thalassarche cauta Shy Albatross [89224]	Endangered	Species or species habitat may occur within area	In feature area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Fish			
Acentronura tentaculata Shortpouch Pygmy Pipehorse [66187]		Species or species habitat may occur within area	In feature area
Festucalex cinctus Girdled Pipefish [66214]		Species or species habitat may occur within area	In feature area
Filicampus tigris Tiger Pipefish [66217]		Species or species habitat may occur within area	In feature area
Heraldia nocturna Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area	In feature area
Hippichthys heptagonus Madura Pipefish, Reticulated Freshwate Pipefish [66229]	r	Species or species habitat may occur within area	In feature area
Hippichthys penicillus Beady Pipefish, Steep-nosed Pipefish [66231]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Hippocampus whitei White's Seahorse, Crowned Seahorse, Sydney Seahorse [66240]	Endangered	Species or species habitat likely to occur within area	In feature area
Histiogamphelus briggsii Crested Pipefish, Briggs' Crested Pipefish, Briggs' Pipefish [66242]		Species or species habitat may occur	In feature area
Lissocampus runa		within area	
Javelin Pipefish [66251]		Species or species habitat may occur within area	In feature area
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area	In feature area
Solegnathus dunckeri Duncker's Pipehorse [66271]		Species or species habitat may occur within area	In feature area
Solegnathus spinosissimus Spiny Pipehorse, Australian Spiny Pipehorse [66275]		Species or species habitat may occur within area	In feature area
Solenostomus cyanopterus Robust Ghostpipefish, Blue-finned Ghost Pipefish, [66183]		Species or species habitat may occur within area	In feature area
Solenostomus paradoxus Ornate Ghostpipefish, Harlequin Ghost Pipefish, Ornate Ghost Pipefish [66184]		Species or species habitat may occur within area	In feature area
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area	In feature area
Syngnathoides biaculeatus Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area	In feature area
Trachyrhamphus bicoarctatus Bentstick Pipefish, Bend Stick Pipefish, Short-tailed Pipefish [66280]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area	In feature area
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area	In feature area
Reptile			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In feature area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u>Dermochelys coriacea</u> Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In feature area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area	In feature area
Hydrophis elegans Elegant Sea Snake, Bar-bellied Sea Snake [1104]		Species or species habitat may occur within area	In feature area
Hydrophis platurus as Pelamis platurus Yellow-bellied Sea Snake [93517]		Species or species habitat may occur within area	In feature area
Natator depressus Flatback Turtle [59257]	Vulnerable	Breeding likely to occur within area	In feature area
Whales and Other Cetaceans		[Re	source Information]
Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal Balaenoptera acutorostrata Minke Whale [33]		Species or species habitat may occur within area	In feature area

Current Scientific Name	Status	Type of Presence	Buffer Status
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In feature area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area	In feature area
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In feature area
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area	In feature area
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area	In feature area
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area	In feature area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In feature area
Stenella attenuata Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area	In feature area
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area	In feature area
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area	In feature area

Extra Information

State and Territory Reserves			[Resource Information]
Protected Area Name	Reserve Type	State	Buffer Status
Arakoon	National Park	NSW	In feature area
Hat Head	National Park	NSW	In feature area

Regional Forest Agreements

[Resource Information]

Note that all areas with completed RFAs have been included. Please see the associated resource information for specific caveats and use limitations associated with RFA boundary information.

RFA Name	State	Buffer Status
North East NSW RFA	New South Wales	In feature area

Nationally Important Wetlands		[Resource Information]
Wetland Name	State	Buffer Status
Clybucca Creek Estuary	NSW	In feature area

EPBC Act Referrals			[Resou	ce Information
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
Referral decision				
Breeding program for Grey Nurse Sharks	2007/3245	Referral Decision	Completed	In feature area

Biologically Important Areas			
Scientific Name	Behaviour	Presence	Buffer Status
Dolphins			
<u>Tursiops aduncus</u>			
Indo-Pacific/Spotted Bottlenose Dolphin [68418]	Breeding	Likely to occur	In feature area
Sharks			
Carcharias taurus			
Grey Nurse Shark [64469]	Foraging	Known to occur	In feature area
Whales			
Megaptera novaeangliae			
Humpback Whale [38]	Foraging	Known to occur	In feature area

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- -Office of Environment and Heritage, New South Wales
- -Department of Environment and Primary Industries, Victoria
- -Department of Primary Industries, Parks, Water and Environment, Tasmania
- -Department of Environment, Water and Natural Resources, South Australia
- -Department of Land and Resource Management, Northern Territory
- -Department of Environmental and Heritage Protection, Queensland
- -Department of Parks and Wildlife, Western Australia
- -Environment and Planning Directorate, ACT
- -Birdlife Australia
- -Australian Bird and Bat Banding Scheme
- -Australian National Wildlife Collection
- -Natural history museums of Australia
- -Museum Victoria
- -Australian Museum
- -South Australian Museum
- -Queensland Museum
- -Online Zoological Collections of Australian Museums
- -Queensland Herbarium
- -National Herbarium of NSW
- -Royal Botanic Gardens and National Herbarium of Victoria
- -Tasmanian Herbarium
- -State Herbarium of South Australia
- -Northern Territory Herbarium
- -Western Australian Herbarium
- -Australian National Herbarium, Canberra
- -University of New England
- -Ocean Biogeographic Information System
- -Australian Government, Department of Defence
- Forestry Corporation, NSW
- -Geoscience Australia
- -CSIRO
- -Australian Tropical Herbarium, Cairns
- -eBird Australia
- -Australian Government Australian Antarctic Data Centre
- -Museum and Art Gallery of the Northern Territory
- -Australian Government National Environmental Science Program
- -Australian Institute of Marine Science
- -Reef Life Survey Australia
- -American Museum of Natural History
- -Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
- -Tasmanian Museum and Art Gallery, Hobart, Tasmania
- -Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the **Contact us** page.

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