

Rockingham Strategic Centre Environment Assessment Report

Rockingham Strategic Centre
Precinct Structure Plan (RPSP)

CW1181500

Prepared for
Hames Sharley

11 July 2025



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Our report is based on information made available by the client. The validity and comprehensiveness of supplied information has not been independently verified and, for the purposes of this report, it is assumed that the information provided to Cardno is both complete and accurate. Whilst, to the best of our knowledge, the information contained in this report is accurate at the date of issue, changes may occur to the site conditions, the site context or the applicable planning framework. This report should not be used after any such changes without consulting the provider of the report or a suitably qualified person.

Executive Summary

Cardno was engaged by Hames Sharley to provide environmental services to support the review of local planning framework and preparation of a Precinct Plan for the Rockingham Strategic Centre (RSC). The objective of the assessment is to gather relevant environmental data associated with the RSC to support the review of local planning framework and the preparation of a Precinct Structure Plan.

The scope of works comprised a

review of background information and data through government agency database searches, requests and other publicly available information sources.

- > Surface geology comprises Calcareous Sand of the Safety Bay Sand (section 2.2.3).
- > No area of the site is mapped as having a known risk of acid sulfate soil (ASS) occurring within 3m of ground surface (Section 2.2.4).
- > Conservation category wetlands were identified within the planning envelope (Section 2.2.6)
- > Priority and Threatened species are likely to occur within the planning envelope (Section 2.2.8)
- > Most of the planning envelope is within an environmentally sensitive area (ESA) due to the presence of threatened ecological communities (TECs) and a significant wetland across the area (Section 0).
- > No Bush Forever site is located on the planning envelope. A Bush Forever site is located directly to the east of the planning envelope (Section 2.2.10).
- > An historical aerial photography review did not identify any areas of potential environmental concern (Section 2.3)
- > No registered aboriginal heritage sites are located within the planning envelope. The RSC is on land within the Gnaala Karla Booja Indigenous Land Use Agreement (ILUA) (Section 2.4).
- > Several heritage listed sites under the Heritage Council WA are present within the RSC (Section 2.4.3).
- > Five land parcels within a 1km radius of the RSC have been assigned a contaminated sites classification by the Department of Environmental Regulation (DWER) (Section 2.5).

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1 Introduction

Cardno was engaged by Hames Sharley to provide environmental services to support the review of local planning framework and preparation of a Precinct Structure Plan for the Rockingham Strategic Centre (RSC). The planning envelope covers an area of approximately 600 hectares (ha) and is situated within the City of Rockingham. The RSC is bordered by Ennis Avenue to the east, Rae Road to the south, Read Street to the west and the Rockingham foreshore to the north (Figure 1-1).

Figure 1-1 Rockingham Strategic Metropolitan Centre Planning Envelope



1.1 Background

Rockingham is considered a Strategic Metropolitan Centre in the Perth and Peel Region. A review of the local planning framework for the RSC, triggered by Policies updates, is being progressed by the City of Rockingham. As part of this process, a Precinct Structure Plan must be prepared for the RSC and approved by the State Government.

1.2 Objectives

The objective of the assessment is to gather relevant environmental data associated with the RSC to support the review of local planning framework and the preparation of a Precinct Structure Plan.

The specific objectives of the assessment, subject to the limitations stated in Section 1.5 are to:

1. Identify the site and surrounding landholding characteristics and current conditions.
2. Assess the potential for current and past activities to impact the environment, health and safety conditions, or result in liability upon review of all reasonably available desk-based information;
3. Prepare a report detailing the findings of the assessment.

1.3 Scope of Works

Cardno carried out a review of background information and data through government agency database searches, requests and other publicly available information sources, including:

- > A review of historical aerial photographs and site plans to ascertain historical land use and determine the timeline for historical development;
- > A search of the Department of Water and Environmental Regulations (DWER) Contaminated Sites Database;
- > Department of Water (DoW) and Water Information Network (WIN) database and summary records as applicable (data pertaining to the water table);
- > Historical local government records; and
- > Existing shire plans.
- > Review of information pertaining to the environmental setting of the site, including (but not limited to):
 - Geological, hydrogeological and hydrological setting, including surface and groundwater drainage conditions;
 - Acid Sulfate Soils (ASS) risk mapping and desktop investigation;
 - Relevant environmental values of the site and its surrounds (wetlands, Bush Forever sites, significant flora and fauna); and
 - Determine the environmental value of the site and surrounding environment.
- > Review of information pertaining to the social and cultural setting of the site, including (not limited to):
 - Aboriginal heritage; and,
 - European heritage.

1.4 Relevant Guidelines

This assessment has been prepared in general accordance with the applicable industry standards and guidelines to the extent relevant to an assessment of this type. Key industry standards and guidelines applicable include (but are not limited to) the following:

- > **Contaminated Sites Act 2003 (CS Act).**
- > **Biodiversity Conservation Act 2016.**
- > Department of Environment and Regulation (DER), 2014, **Assessment and Management of Contaminated Sites.**
- > **Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).**
- > National Environment Protection Council (NEPC), 1999, **National Environmental protection (Assessment of Site Contamination) Measure** (as amended), registered May 2013.

1.5 Standards of Assessment and Limitations

This assessment has been undertaken in general accordance with the current “industry standards” for the purpose, objectives and scope identified in this report.

The agreed scope of this assessment has been limited for the current purposes of the Client. This assessment report is not any of the following:

- > A Mandatory Audit Report (MAR) or Voluntary Audit Report (VAR) as defined under the **Contaminated Sites Act** 2003 (CS Act).
- > A Preliminary Site Investigation (PSI) or Detailed Site Investigation (DSI).
- > A Geotechnical Report, and the soil descriptions may not be suitable as the basis for geotechnical advice.
- > A detailed Hydrogeological Assessment.
- > An assessment of the groundwater contaminants potentially arising from other sites or sources nearby.

An overview of Environmental Site Assessments is included in Appendix C.

2 Site Condition and Surrounding Environment

2.1 Site Description and Planning

The RSC is bordered by Ennis Avenue to the east, Rae Road to the south, Read Street to the west and the Rockingham foreshore to the north. A summary of the approximate site boundaries as determined by Cardno is presented in Table 2-1.

Table 2-1 Approximate Site coordinates

Site Boundary	Easting (m)	Northing (m)
North-East	381,204.65	6,429,160.92
South-East	383,287.73	6,426,587.59
North-West	381,204.65	6,429,160.92
South-West	381,681.25	6,426,024.90
Note: Map Grid Area (MGA) 94, Zone 50		

2.1.2 Land uses and zoning

The Planning of the RSC is guided by the City of Rockingham Town Planning Scheme No.2 (Appendix B). Land uses of the RSC mainly include residential, light industrial and primary regional roads land use.

2.2 Environmental Setting

2.2.1 Climate

Rockingham has a Mediterranean climate, characterised by hot dry summers and cool wet winter. The Bureau of Meteorology (BoM) records (BoM, 2025) indicate mean monthly rainfall amount varies from 15mm in December to 150mm in July; and mean maximum temperature ranges from 18°C in July/August to 28°C in February.

2.2.2 Topography

The site topography is relatively flat with elevations ranging from 0 mAHD at the coastline to 20 mAHD towards the east.

2.2.3 Regional Geology

The WA Department of Mines, Industry Regulation and Safety (DMIRS) 1:50,000 geological map series indicates the surface is Calcareous Sand (S13), i.e. Safety Bay Sand, described as white medium grained rounded quartz and shell debris well sorted of eolian origin.

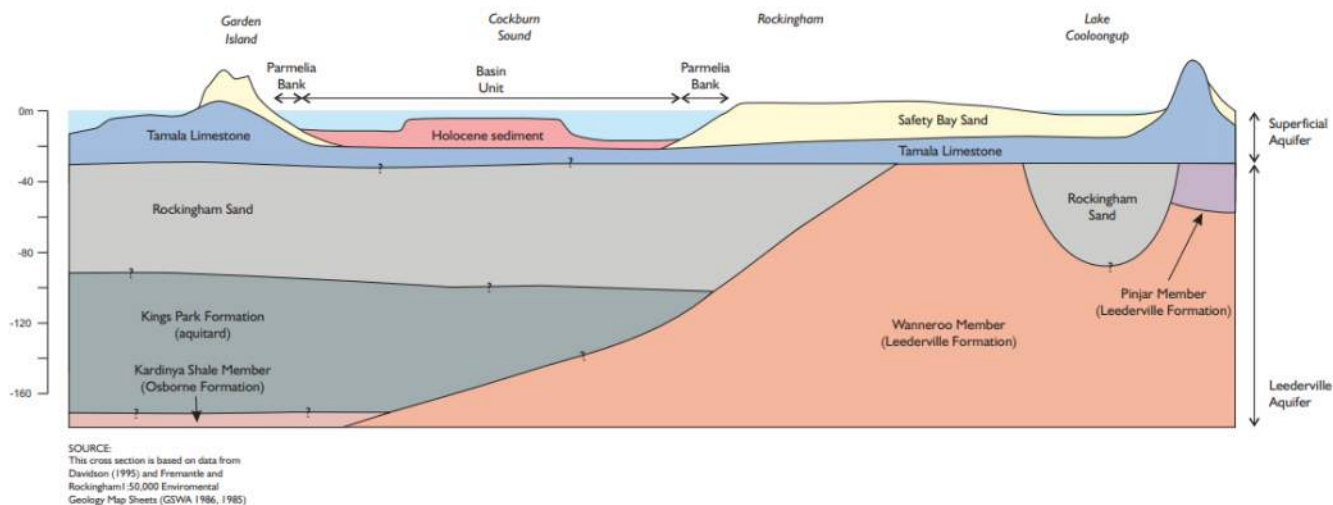
2.2.4 Acid Sulfate Soil

No area of the site is mapped as having a known risk of acid sulfate soil (ASS) occurring within 3m of ground surface.

2.2.5 Hydrogeology

The superficial formations (Tamala Limestone and Safety Bay Sand) overlie the Rockingham Sand to the Northwest of the site and the deeper Leederville formation (Wanneroo Member) to the southeast (Figure 2-1).

Figure 2-1 Hydrological cross section through the southern end of Garden Island and Cockburn Sound (CSIRO, 2001)



2.2.6 Wetlands and Surface Water Bodies

A Conservation category wetland (sumpland – ID 6321) occurs within the planning envelope (Figure 3, Appendix A). Conservation category wetlands support a high level of attributes and functions and are the highest priority wetlands. These are the most valuable wetlands, and any activity that may lead to further loss or degradation is inappropriate. The management objective for these wetlands is to preserve and protect the existing conservation values of the wetlands through various mechanisms, including:

- > Reservation in national parks, crown reserves and state-owned land;
- > Protection under Environmental Protection policies; and
- > Wetland covenanting by landowners.

No development or clearing of a conservation category wetland is considered appropriate. The Department of Biodiversity, Conservation and Attractions (DBCA) is the current custodian of the wetland mapping dataset for the Swan Coastal Plain. Justification (i.e. through a wetland identification and/or delineation investigation) must be provided to the DBCA for an existing mapped wetland area to be modified to '**No longer a wetland**'.

An artificial surface water body is present within the HMAS Warramunga Park (City Park).

2.2.7 Groundwater Uses

A search of the Department of Water (DoW) water register indicated the presence of a groundwater abstraction licence within the superficial aquifer beneath the RSC (issued 29/5/2020, expired 29/10/2024) held by the City of Rockingham for an allocation of 2,746,285 kL.

Groundwater depth is anticipated to be approximately 3 to 5 meters below ground level (mbgl) across the RSC. Groundwater flow direction is expected to be westerly, towards Cockburn Sound.

Registered groundwater bores are depicted on Figure 4, Appendix A.

The site is not located within a Priority Drinking Water Source Area (PDSA).

2.2.8 Priority and Threatened Flora and Fauna

On 1 January 2019 the provisions of the **Biodiversity Conservation Act 2016** (BC Act) relating to threatened ecological communities (TECs) came into effect replacing both the **Wildlife Conservation Act 1950** and the **Sandalwood Act 1929** and their associated regulations. TECs are ecological communities listed in the following categories under section 27 of the BC Act:

- > critically endangered, or
- > endangered, or
- > vulnerable.

Under section 45 of the BC Act the Minister may authorise a person to modify an occurrence of a TEC. Under provisions of the BC Act, significant penalties (up to \$500,000) are prescribed under section 48 where

a TEC is modified without authorisation. Modification results from an impact that will permanently alter the species composition and/or the structure of, or will destroy, the occurrence of the TEC.

The DBCA classifies specially protected flora and fauna into eight categories (conservation codes):

- > Threatened species (T);
- > Critically endangered species (CR);
- > Endangered species (EN);
- > Vulnerable (VU);
- > Presumed extinct species (EX);
- > Migratory birds protected under an international agreement (IA);
- > Conservation dependant fauna (CD); and
- > Other specially protected fauna (OS).

These categories also include potentially threatened species that do not meet survey criteria or are otherwise data deficient; such species are listed as Priority 1, 2 or 3. While species that are adequately known, are rare but not threatened, are listed as Priority 4 (P4).

Searches for Priority and Threatened species likely to occur within the planning envelope were performed using the Department of Biodiversity, Conservation and Attractions (DBCA) NatureMap and EPBC Act Protected Matters databases. Full reports are provided within Appendix B and a summary is provided in Table 2-2 below.

Table 2-2 Priority and Threatened Species

Name	Status	Details
Listed Threatened Ecological Communities (TEC)		
Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Community may occur within area.
Sedgeland in Holocene dune swales of the southern Swan Coastal Plain	Endangered	Community known to occur within area.
Thrombolite (microbial) community of coastal freshwater lakes of the Swan Coastal Plain (Lake Richmond)	Endangered	Community known to occur within area.
Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain ecological community	Critically Endangered	Community likely to occur within area.
Listed Threatened Species		
32 bird species	Vulnerable, endangered	§ Species or species habitat likely to occur within area. § Foraging, feeding or related behaviour known to occur within area.
6 mammals	Vulnerable, endangered, critically endangered	§ Species or species habitat likely to occur within area. § Breeding known to occur within area.
3 plants	Vulnerable, endangered	Species or species habitat likely to occur within area.
4 reptiles	Vulnerable, endangered	Species or species habitat likely to occur within area.
5 sharks	Vulnerable, conservation dependent	Species or species habitat likely to occur within area.

Name	Status	Details
Listed Migratory Species		
20 migratory birds	Vulnerable, endangered	§ Species or species habitat likely to occur within area. § Foraging, feeding or related behaviour known to occur within area.
18 migratory marine species	Vulnerable, endangered	§ Species or species habitat likely to occur within area. § Breeding known to occur within area.
1 migratory terrestrial species	N/A	Species or species habitat likely to occur within area.
10 migratory wetland species	Vulnerable, endangered, critically endangered	Species or species habitat likely to occur within area.

A flora and fauna survey may be required to confirm TEC occurrence within the area (if it is proposed for clearance) and should be conducted by a qualified ecologist/botanist in accordance with relevant guidelines.

The results of the flora/fauna surveys shall inform the development of Environmental Management Plans (as required) to be implemented during development phases, which will include mitigation strategies, triggers and contingency actions.

2.2.9 Environmental Sensitive Areas

The DWER maintains a dataset of Environmentally Sensitive Areas (ESA) prescribed and regulated under the **Environmental Protection (Clearing of Native Vegetation) Regulations 2004** (DEC, 2004). ESAs are areas of land deemed to support conservation, heritage or marine environment value, or an area protected through existing State Policy and includes the following:

- > Declared world Heritage Property;
- > An area that is registered on the Register of National Estate;
- > Within 50 m of a defined wetland;
- > The area covered by vegetation within 50 m of flora declared as Rare under the Biodiversity Conservation Act 2016 and Biodiversity Conservation Regulations 2018; and
- > An area covered by a Threatened Ecological Community (TEC).

ESAs are only applicable when a clearing permit is required under these regulations. Where a clearing permit is required for an area that is situated within an ESA, then none of the exemptions pursuant to the regulations apply. These areas have been identified to protect the native vegetation values of areas surrounding significant, threatened or scheduled ecosystems or communities. A review of the DWER Clearing Permit System (accessed July 2021) indicated that most of the planning envelope is within an ESA due to the presence of TECs and a wetland across the area. Any clearance permit application will require a Flora and Fauna survey to be conducted to ensure no TEC is disturbed by the proposed development.

ESA are depicted on Figure 3, Appendix A.

2.2.10 Bush Forever Sites

Bush Forever is a Western Australian Government initiative which aims to provide a policy and implementation framework to promote bushland protection and ensure known management issues, are appropriately addressed and integrated with broader land use planning and decision-making. Bush Forever sites cover a wide range of tenures and land use types nominated as part of an overall planning process that was undertaken over many years by the Department of Planning, Lands and Heritage (DPLH) and now overseen by the Western Australian Planning Commission (WAPC).

A review of the DPLH Bush Forever Sites online database (accessed 20 June 2025) indicates that there are no Bush Forever sites located on the planning envelope. A Bush Forever site is located directly to the east of the planning envelope (Figure 3, Appendix A).

2.3 Aerial Photography Review

A review of selected aerial photography of the RSC and surrounds between November 1953 (earliest available) and February 2021 (latest available) is provided within Appendix B.

Table 2-3 Historic Aerial Photograph Review

Date	Site	Surrounding Area
Plate 1 November 1953	Very limited residential development is present and most of what is visible occurs close to shoreline.	Surrounding area is composed of agricultural land and residential (Point Peron shoreline). Lake Cooloongup and Lake Richmond are visible.
Plate 2 July 1970	Further residential development is visible to the north, paved roads or gravel/dirt tracks are visible on the southern half of the site connecting a few small-scale residential developments surrounded by rural properties and agricultural land	Increased residential development is visible around Point Peron, Lake Richmond, Lake Cooloongup as well as the southern and eastern areas around the site (notably southeast of Lake Richmond).
Plate 3 September 1974	Site remains mostly unchanged since 1970 however some new roads are present as well as a what appears to be greater residential development for suburban housing just southeast of the coastline of the site area.	A new jetty has been constructed north of the site as well as what appears to be new construction of buildings at the jetty entrance. The road connecting Point Peron to Garden Island is evident. New developments can be seen directly south of the site in the agricultural areas
Plate 4 June 1977	Further residential development is visible to the south of site with several new roads connecting through former agricultural land	Site surrounds remain mostly unchanged however further residential development can be observed to have steadily increased in a south easterly direction.
Plate 5 August 1981	Further residential development visible notably along the southern boundary of the site where roads now connect these residential properties to those near the shoreline.	Increased residential development can be observed directly south and west of the site boundary. The Ennis Avenue main road can be observed connecting the residential developments inside the site boundary south towards Lake Walyungup and beyond.
Plate 6 June 1985	There is a small amount of increased in residential development inside the site however there seems to be small addition of open green spaces (such as parks, ovals etc) amongst the eastern side of the site	The Rockingham Golf club and associated green space is visible to the southeast directly adjacent to Lake Cooloongup. Further residential development is visible to the south.
Plate 7 December 1989	Inside the residential area adjacent to the shoreline in the northern edge of the site boundary there appears to be few new builds however an addition of four extra features which appear to be tennis courts can be observed near the northwest site boundary. New residential development is visible along the southwest site boundary with new roads appearing to connect soon to be developed land. The artificial water retention at City Park is visible and more agricultural land is seemingly in the process of being converted into open space for future residential developments.	Further industrial development is visible to the East adjacent to Lake Cooloongup along with increasing density of residential development in the surrounding areas west of the site
Plate 8 February 1995	Increased residential development can be observed along the western edge of the site boundary. The artificial water feature at City Park appears to have been altered with areas previously containing water appearing to have been reclaimed for future development.	Further industrial development is visible adjacent to the northeast boundary of the site.
Plate 9 January 2001	Site remains generally unchanged. Some new residential development visible as well as what appears to be the appearance of new open green spaces (parks, ovals, etc) directly south of the industrial area present in the northeastern corner of the site.	Site surrounds remain mostly unchanged.
Plate 20 February 2021	Site and surroundings remain mostly unchanged since 1995.	

The review of historical aerial photography did not identify any areas of potential environmental concern.

2.4 Cultural Heritage

2.4.1 Aboriginal Heritage

A search of the Department of Planning, Lands and Heritage (DPLH) controlled Aboriginal Heritage Inquiry System (AHIS) was conducted on 20 June 2025. This database incorporates both the Heritage Site Register and the Heritage Survey Database. The Heritage Site Register is held pursuant to Section 38 of the State's Aboriginal Heritage Act 1972 and contains information on over 22,000 Aboriginal sites throughout Western Australia. The Heritage Survey Database is a catalogue of the heritage survey reports held by the DPLH. It holds a description of each survey, its boundaries, proponents and participants.

The search of the AHIS Site Register database didn't identify a registered site within the planning envelope.

2.4.2 Native Title

An online search of the AHIS enquiry system was undertaken to determine the presence of Native Titles in the vicinity of the site. The search identified that the site occurs within one Native Title Application. A summary is provided in Table 2-4.

Table 2-4 Native Title Applications

Name	Number	Status	Area (km ²)
Gnaala Karla Booja	WC1998/058	Registered	30,415.3

It should be noted that an AHIS enquiry is a basic search for information pertaining to Native Title. If further information is required, a request for information should be submitted to the DPLH Native Title Branch (this is outside the scope of works for this Assessment).

It was also noted that the RSC is on land within the Gnaala Karla Booja Indigenous Land Use Agreement (ILUA).

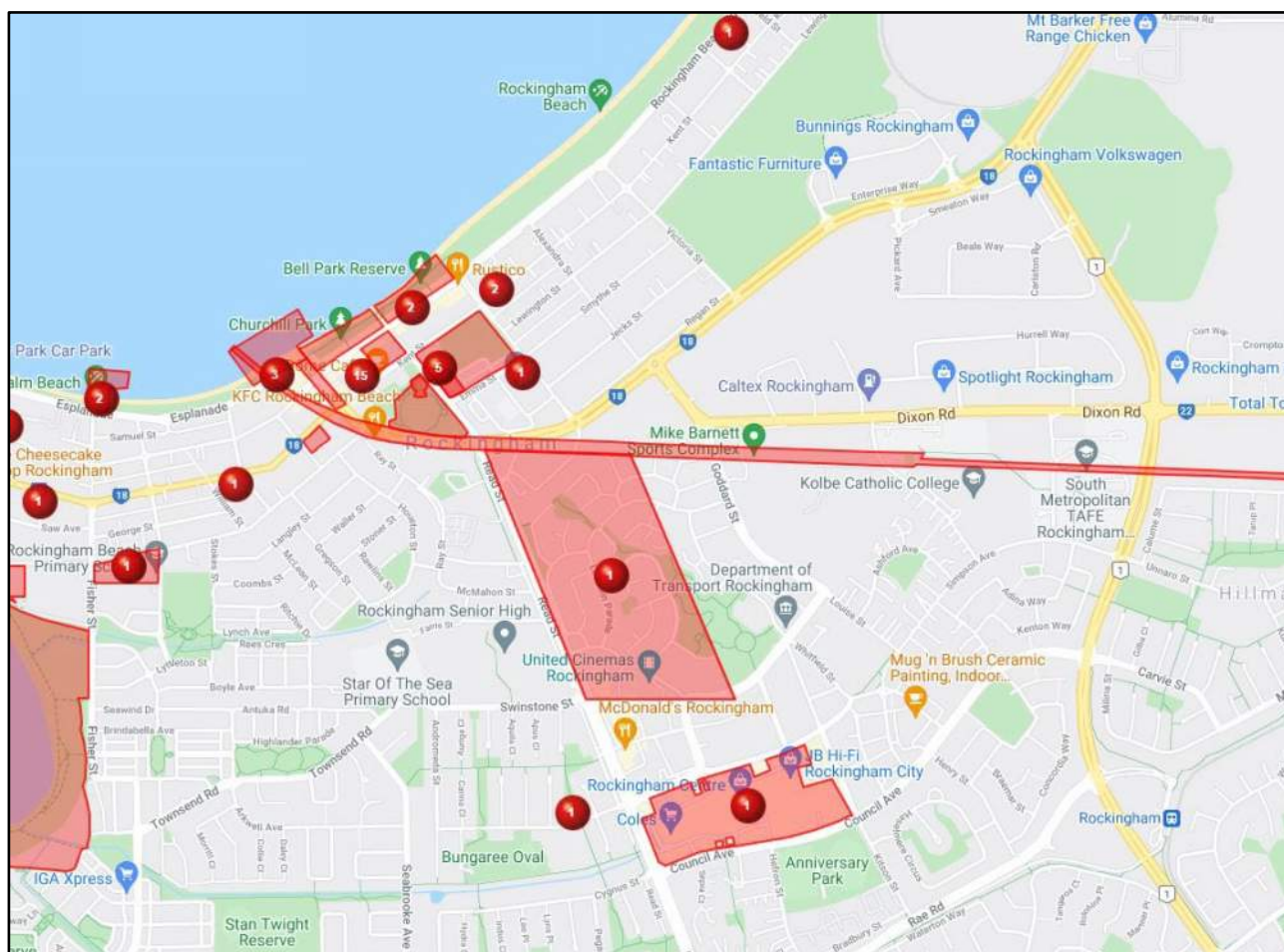
2.4.3 European Heritage

The presence of historical or current European Heritage sites was investigated using the Commonwealth Department of Agriculture Water and Environment (DAWE), Australian Heritage database and the State Heritage Council database. The Heritage Council WA database contains information regarding natural and historic places throughout Western Australia. The Australian Heritage Council database contains information regarding more than 20,000 natural, historic and indigenous places throughout Australia and includes sites recorded on the:

- > World Heritage List.
- > National Heritage List.
- > Commonwealth Heritage List.
- > Register of the National Estate.

Several listed heritage sites are present within or in proximity to the planning envelope (Figure 2-2). Further details are included in Appendix B.

Figure 2-2 Heritage Council WA listed places



2.5 Contaminated Sites Database

The State Government, through the Department of Environmental Regulation (DWER), has the overall responsibility for developing, administering and enforcing the CS Act and its associated procedures. Part of this responsibility includes maintenance of the Contaminated Sites Database. The Contaminated Sites Database holds information on known contaminated sites that have been classified by the DWER as:

- > Contaminated – remediation required.
- > Contaminated – restricted use.
- > Remediated for restricted use.

A search of the Contaminated Sites Database was conducted on 7 April 2022. The search identified seven (7) land parcels within a 1 km radius of RSC which were assigned a classification listed above. Registered contaminated Sites are depicted on Figure 2, Appendix A, further details are provided in Appendix B and summarised in Table 2-5.

Table 2-5 Registered Contaminated Sites

Site ID/ Address	Classification	Summary / Reason for Classification
12867 25 Rockingham Beach Rd, Rockingham (lot 99)	Contaminated – remediation required 31/02/2011	The site is currently used as a service station which has been in operation since the 1980s. Environmental investigations undertaken in 2000 detected the presence of hydrocarbons in both soil and groundwater beneath the site with free phase hydrocarbons as well as a dissolved phase hydrocarbon plume present. The investigations found that hydrocarbons (such as those from petrol) were present in soils at concentrations exceeding the health-based Investigation Levels for commercial and industrial land use and the

Site ID/ Address	Classification	Summary / Reason for Classification
		Ecological Investigation Levels in the vicinity of the remote fill points in the south-eastern corner of the site. Restrictions on Use: § Groundwater abstraction is not permitted other than for analytical testing or remediation due to the nature and extent of contamination in the groundwater.
64538, 64539, 64540 7 McNicholl Street, Rockingham (Lot 359 On Plan 17759)	Remediated for restricted use 16/06/2015	Asbestos-containing material is present in the soil within the site and is covered by an approximately 1-meter-thick capping layer. Restrictions on Use: Due to the presence of asbestos-impacted fill in containment cells below the geotextile warning barrier, the ongoing site management plan must be implemented to avoid any unnecessary disturbance of fill material beneath the warning barrier
46195 19 Crompton Rd, Rockingham (Lot 500 on Diagram 75014) ~1km east of the site	Remediated for restricted use 29/08/2016	Alkaline-impacted groundwater is present beneath the sump located in the north-east corner of the site. If alkaline water overflows into the sump in the future, groundwater monitoring should be reinstated and a risk assessment carried out to evaluate the risks to human health, the environment, and any environmental values. Restrictions on Use: § The land use is restricted to commercial/industrial land use, which excludes sensitive uses such as residential, childcare centres, kindergartens, pre-schools and primary schools and as such, the site should not be developed for a more sensitive land use without further contamination assessment and/or remediation. § Groundwater abstraction is not permitted other than for analytical testing or remediation.
78438 5 Market Street, Rockingham (Lot 9 on Diagram 86080)	Remediated for restricted use 02/02/2022	Asbestos-impacted fill material is present across the site below a geofabric warning barrier and a layer of clean capping material comprising orange/brown sand. The sand cap above the warning barrier is on average 0.55 metres thick, with a minimum thickness of 0.26 metres along the site's western boundary. Restrictions on Use: § Due to the presence of asbestos-contaminated fill material below the geofabric barrier and orange/brown sand cap, the existing SMP is required to be implemented. § Ground disturbance works are required to be undertaken in accordance with the SMP. § Any changes in land use will require revision of the SMP. § If redevelopment works require disturbance of the asbestos-contaminated fill beneath the geofabric barrier, a project-specific management plan (e.g. a Remediation Action Plan or Construction Environment Management Plan) will be required.
78439 5 Market Street, Rockingham (Lot 10 on Diagram 86080)		

3 RPSP Assessment

The following section presents an assessment of potential environmental impacts associated with the RPSP based on the findings of the desk-based review (**Section 2** of this report).

3.1 Potential Environmental Impacts of RPSP

The following potential environmental impacts of the proposed RPSP have been identified based on the findings of the assessment:

- > **Environmental Sensitive Areas** (refer to Section 2.2 for further details)
 - A conservation category wetland is mapped within an area proposed for clearing for the proposed development (mixed use).
 - Priority and threatened species are known to occur in the area and might be disturbed by the proposed development.
- > **Contaminated sites** (refer to Section 2.5 for further details)
 - The land parcel at 25 Rockingham Beach Road is classified '**Contaminated – remediation required**'. This site is proposed for a major development site, and it is anticipated that some level of environmental investigation/potential remediation will be required to ascertain that the site is suitable for the proposed land use.
 - The land parcels at 7 McNicholl Street are classified '**Remediated for restricted use**'. It is noted that the RPSP plans for a residential use (Major Development Site) at this location. The development is likely to involve earthworks and the disturbance of asbestos in the soil contained beneath the capping layer in place.

3.2 Mitigation Strategies

Mitigation strategies associated with the identified potential environmental impacts are presented in Table 3-1.

Table 3-1 Mitigation Strategies

Item	Potential impact	Mitigation
ESA	Clearing of a conservation category wetland	Conduct a wetland identification and/or delineation investigation to investigate and update the environmental significance of the mapped wetland. Development of an environmental management plan at the development stage, detailing mitigation strategies, triggers and contingency actions
	Disturbance of the endangered/critically endangered TEC	Conduct appropriate Flora and Fauna surveys and impact assessments prior to any clearing of vegetation and/or bushland. Development of an environmental management plan at the development stage, detailing mitigation strategies, triggers and contingency actions
Contaminated Sites	5 Market Street, Rockingham (Lot 9 and 10 on Diagram 86080) A works-specific RAP or CEMP, along with an updated SMP, must be developed and reviewed by an accredited contaminated sites auditor, as the proposed development works involve disturbing asbestos-contaminated fill beneath the geofabric barrier at the site. A DWER-accredited Contaminated Sites Auditor would need to be engaged to prepare a Mandatory Auditor's Report (MAR).	
	Disturbance of asbestos/contaminated soil	25 Rockingham Beach Rd, Rockingham (lot 99) Further risk assessment and management works is required to assess potential unacceptable risks to human health and evaluate suitability under its proposed Mixed Use.

Item	Potential impact	Mitigation
		7 McNicholl Street, Rockingham (Lot 359 On Plan 17759) Further risk assessment and management works may be required to assess potential unacceptable risks to human health and evaluate suitability under its proposed Mixed Use. The City of Rockingham should obtain information from DWER via a Detailed Summary of Records request to confirm that the site has been sufficiently remediated and is suitable for use under the amended scheme.

4 Conclusions

Cardno now Stantec was engaged by Hames Sharley to provide environmental services to support the review of local planning framework and preparation of a Precinct Structure Plan for the Rockingham Strategic Centre (RSC). The objective of the assessment was to gather relevant environmental data associated with the RSC to support the review of the local planning framework and the preparation of a Precinct Structure Plan.

Cardno carried out a review of background information and data through government agency database searches, requests and other publicly available information sources. A summary of findings is presented below:

- > Surface geology comprises the Calcareous Sand of the Safety Bay Sand formation.
- > No area of the site is mapped as having a known risk of ASS occurring within 3m of ground surface.
- > Conservation category wetlands were identified within the planning envelope.
- > Priority and Threatened species are likely to occur within the planning envelope.
- > Most of the planning envelope is within an ESA due to the presence of TECs and a conservation-significant wetland across the area.
- > No Bush Forever site is located on the planning envelope. A Bush Forever site is located directly to the east of the RSC.
- > A review of historical aerial photography did not identify any areas of potential environmental concern.
- > No registered Aboriginal heritage sites are located within the planning envelope. The RSC is on land within the Gnaala Karla Booja ILUA.
- > Several heritage-listed sites are present within the RSC.
- > Five land parcels within a 1 km radius of the RSC have been assigned a contaminated sites classification by the DWER.

Based on the above findings, Cardno carried out a high-level assessment of potential environmental impacts associated with the proposed RPSP. Findings are summarised below:

- > ESAs associated with a conservation category wetland and TECs cover most of the planning envelope. Any clearance permit application will require a flora and fauna survey or wetland investigation to be conducted.
- > The results of the flora/fauna surveys shall inform the development of Environmental Management Plans (as required) to be implemented during development phases, which will include mitigation strategies, triggers and contingency actions.
- > Land parcels classified by DWER under the **CS Act** have been identified as being proposed for 'major development site'. Further investigation is likely to be required at these sites to inform the development of SMPs/CEMPs and confirm suitability for the proposed land uses.
 - **5 Market Street, Rockingham (Lot 9 and 10 on Diagram 86080):** A works-specific RAP or CEMP and an updated SMP are required to be developed and reviewed by an accredited contaminated sites auditor, as the proposed development works require disturbance of asbestos-contamination fill beneath the geo-fabric barrier beneath the site. A DWER-accredited Contaminated Sites Auditor would need to be engaged to prepare a MAR.
 - **25 Rockingham Beach Rd, Rockingham (lot 99):** Further risk assessment and management works is required to assess potential unacceptable risks to human health and evaluate suitability under its proposed Mixed Use.
 - **7 McNicholl Street, Rockingham (Lot 359 On Plan 17759):** Further risk assessment and management works may be required to assess potential unacceptable risks to human health and evaluate suitability under its proposed Mixed Use. The City of Rockingham should obtain information from DWER via a Detailed Summary of Records request to confirm that the site has been sufficiently remediated and is suitable for use under the amended scheme.

5 References

1. Bureau of Meteorology, 2025, Climate Data online, <http://www.bom.gov.au/climate/data/?ref=fr>, accessed 19/05/2025.
2. Bureau of Meteorology, 2025, Groundwater Dependent Ecosystems Atlas, GDE Atlas Map: <http://www.bom.gov.au/water/groundwater/gde/map.shtml> accessed 20/07/2025
3. Commonwealth Department of the Environment, 2025, Australian Heritage Database. (<https://www.environment.gov.au/cgi-bin/ahdb/search.pl>)
4. City of Rockingham, <https://rockingham.wa.gov.au/planning-and-building/local-planning/rockingham-strategic-metropolitan-centre>, accessed 20/06/2025
5. City of Rockingham, 2016, Foreshore Management Plan.
6. CSIRO, 2001, Hydrogeology and Aquifer Tidal Propagation in Cockburn Sound, Western Australia.
7. Davidson, WA (1995) 'Hydrogeology and groundwater resources of the Perth region, Western Australia', Western Australia Geological Survey, Bulletin 142.
8. Department of Environment Regulation (DWER), 2021, Assessment and Management of Contaminated Sites.
9. Department of Environment Regulation, 2015, Treatment and Management of Soil and Water in Acid Sulfate Soil Landscapes.
10. Department of Water and Environment Regulation (DWER), 2025, Contaminated Sites Database, (<https://secure.dec.wa.gov.au/idelve/css>).
11. Department of Water and Environment Regulation (DWER), 2025, Perth Groundwater Atlas, (<https://maps.water.wa.gov.au/#/webmap/gwm>).
12. Department of Agriculture, Water and the Environment, Protected matters search tool, <http://www.environment.gov.au/webgis-framework/apps/pmst/pmst.jsf>, Accessed 22/07/2021.
13. Design WA, State Planning Policy 7.2, Precinct Design Guidelines, ***draft for public comment***, August 2019
14. Heritage Council 2025, State Heritage Register (<http://inherit.stateheritage.wa.gov.au/public>).
15. Landgate, 2025, WA Map Viewer online database (<https://maps.landgate.wa.gov.au/maps-landgate/registered/>).

APPENDIX

A

FIGURES

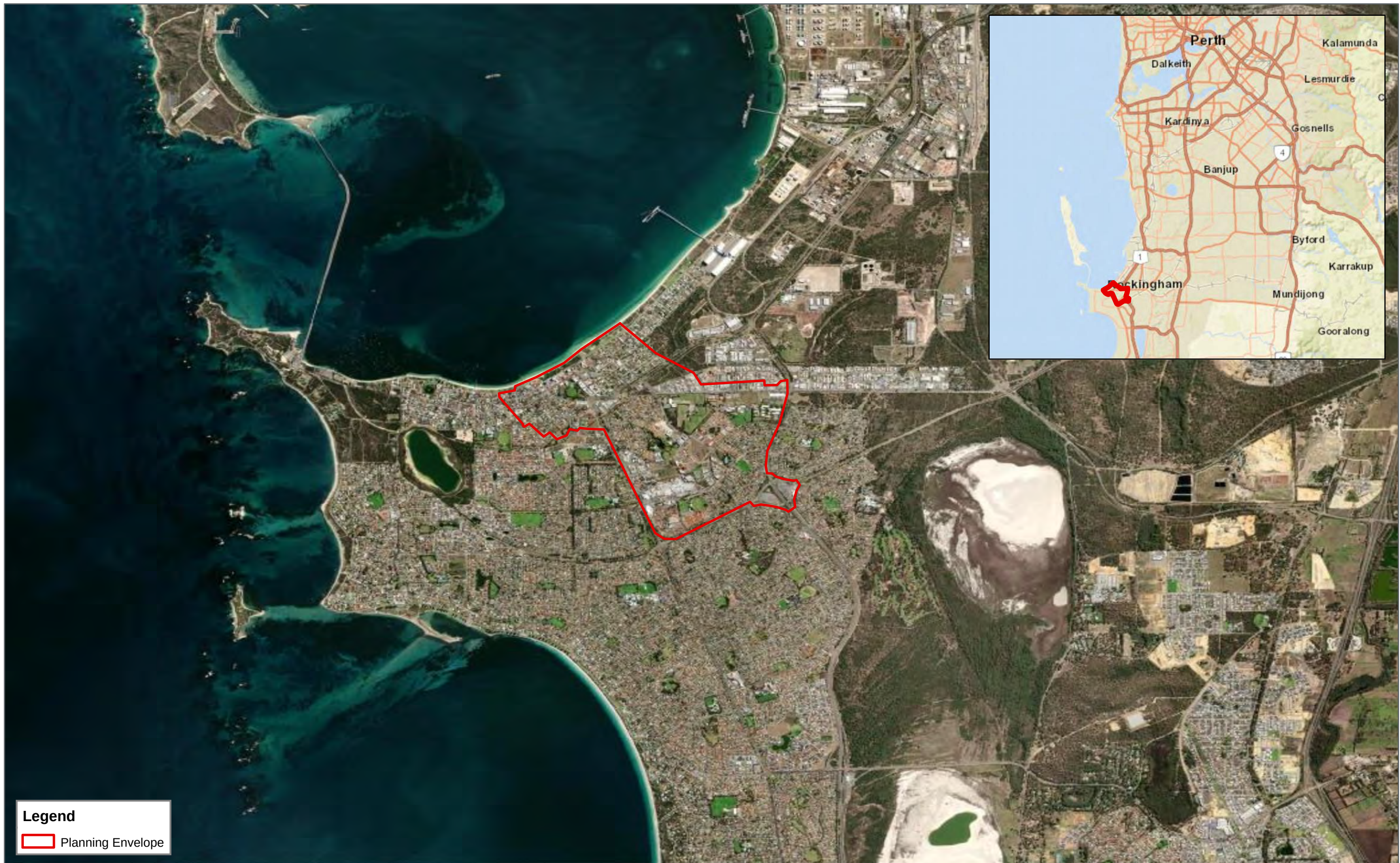


FIGURE 1
1:50,000 Scale at A3

Meters
0 625 1,250 1,875 2,500

Site Locality

ROCKINGHAM STRATEGIC METROPOLITAN CENTRE
HAMES SHARLEY



r Map Produced by Cardno WA
Date: 2021-12-07 | Project: CW1181500
Coordinate System: GCS GDA 1994
Map: CW1181500-EN-001_Site Locality 02.mxd 01
Aerial Imagery provided by Aerometrex



FIGURE 2
1:15,000 Scale at A3

Meters
0 190 380 570 760

DWER Registered Contaminated Sites

ROCKINGHAM STRATEGIC METROPOLITAN CENTRE
HAMES SHARLEY



Map Produced by Cardno WA
Date: 2021-12-07 | Project: CW1181500
Coordinate System: GCS GDA 1994
Map: CW1181500-EN-002_CS 02.mxd 01
Aerial Imagery provided by Aerometrex

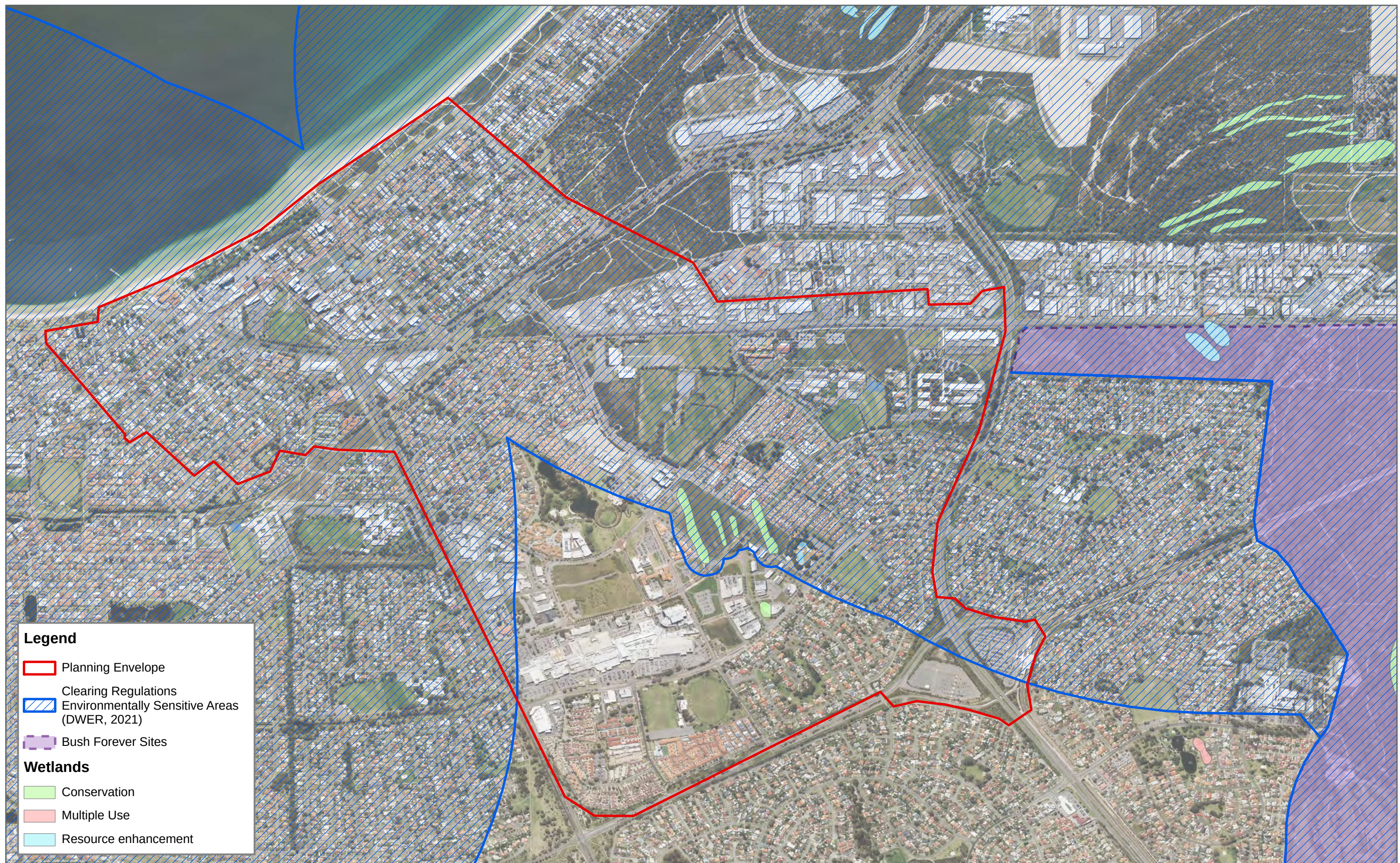


FIGURE 3
1:15,000 Scale at A3

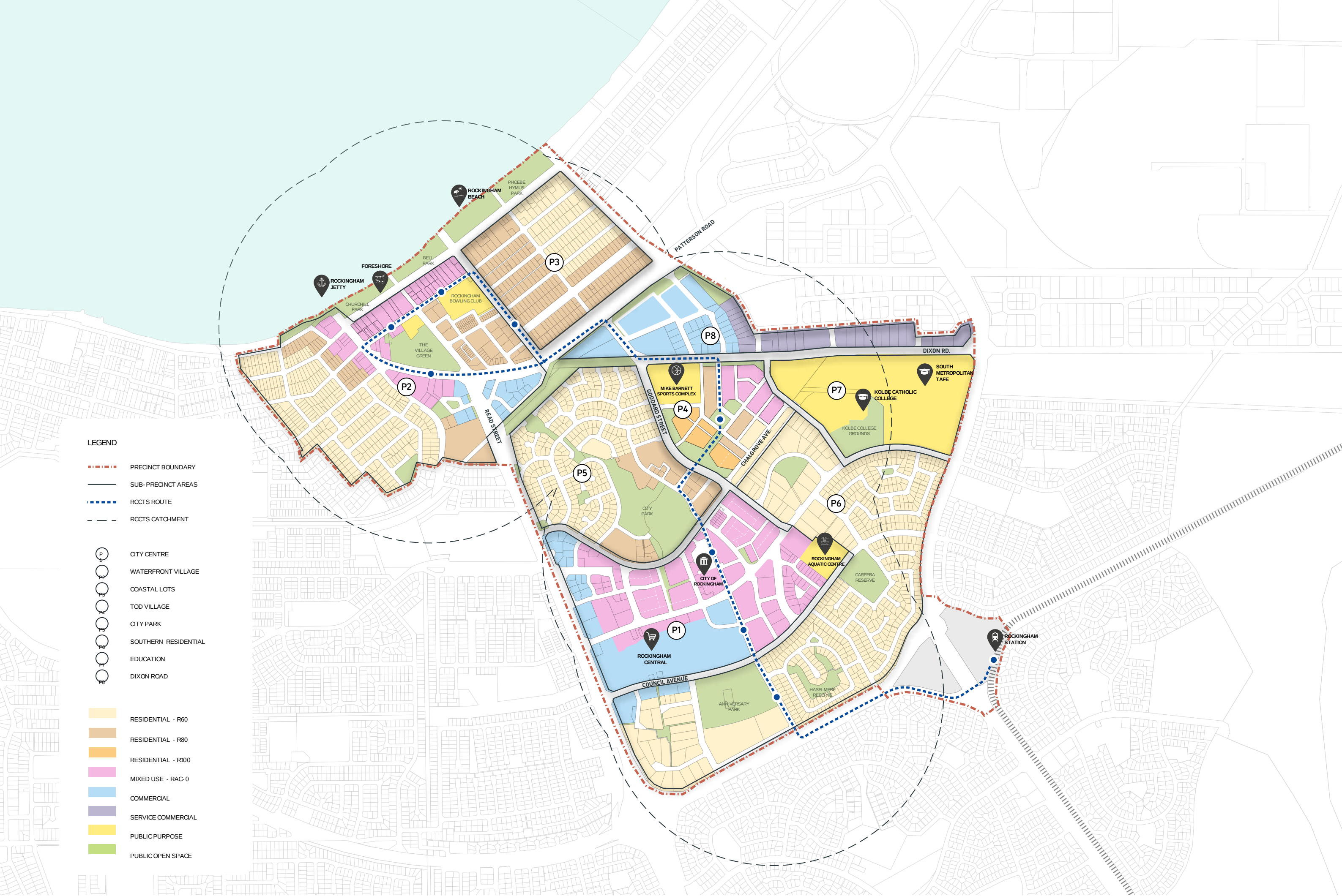
Meters
0 190 380 570 760

Environmentally Sensitive Areas

ROCKINGHAM STRATEGIC METROPOLITAN CENTRE HAMES SHARLEY



Map Produced by Cardno WA
Date: 2021-12-07 | Project: CW1181500
Coordinate System: GCS GDA 1994
Map: CW1181500-EN-003_ESA 02.mxd 01
Aerial Imagery provided by Aerometrex



LEGEND

- PRECINCT BOUNDARY
- SUB-PRECINCT AREAS
- ROCTS ROUTE
- ROCTS CATCHMENT

- P CITY CENTRE
- P2 WATERFRONT VILLAGE
- P3 COASTAL LOTS
- P4 TOD VILLAGE
- P5 CITY PARK
- P6 SOUTHERN RESIDENTIAL
- P7 EDUCATION
- P8 DIXON ROAD

- RESIDENTIAL - R60
- RESIDENTIAL - R80
- RESIDENTIAL - R100
- MIXED USE - RAC-0
- COMMERCIAL
- SERVICE COMMERCIAL
- PUBLIC PURPOSE
- PUBLIC OPEN SPACE





LEGEND

PRECINCT BOUNDARY

SUB- PRECINCT AREAS

P1 CITY CENTRE

P2 WATERFRONT VILLAGE

P3 COASTAL LOTS

P4 TOD VILLAGE

P5 CITY PARK

P6 SOUTHERN RESIDENTIAL

P7 EDUCATION

P8 DIXON ROAD

MAJOR DEVELOPMENT SITES (>1HA)

INFILL DEVELOPMENT SITES

PUBLIC OPEN SPACE NODES

LANDMARK

RCCTS ROUTE

RCCTS CATCHMENT

PRIMARY ROAD

SECONDARY ROAD

PROPOSED MIDBLOCK CONNECTIONS

Design Element 2 - Urban Structure Plan

Rockingham Strategic Centre Precinct Structure Plan



Status : Draft

Path : P:\44322 Local Planning Framework Review & Rockingham SRC Predict Plan



North:

Project Number: 44322
Revision: B
Date: 26/11/21

© Hames Sharley

B2B3B Rockingham Strategic Centre
Precinct Structure Plan (RSP)

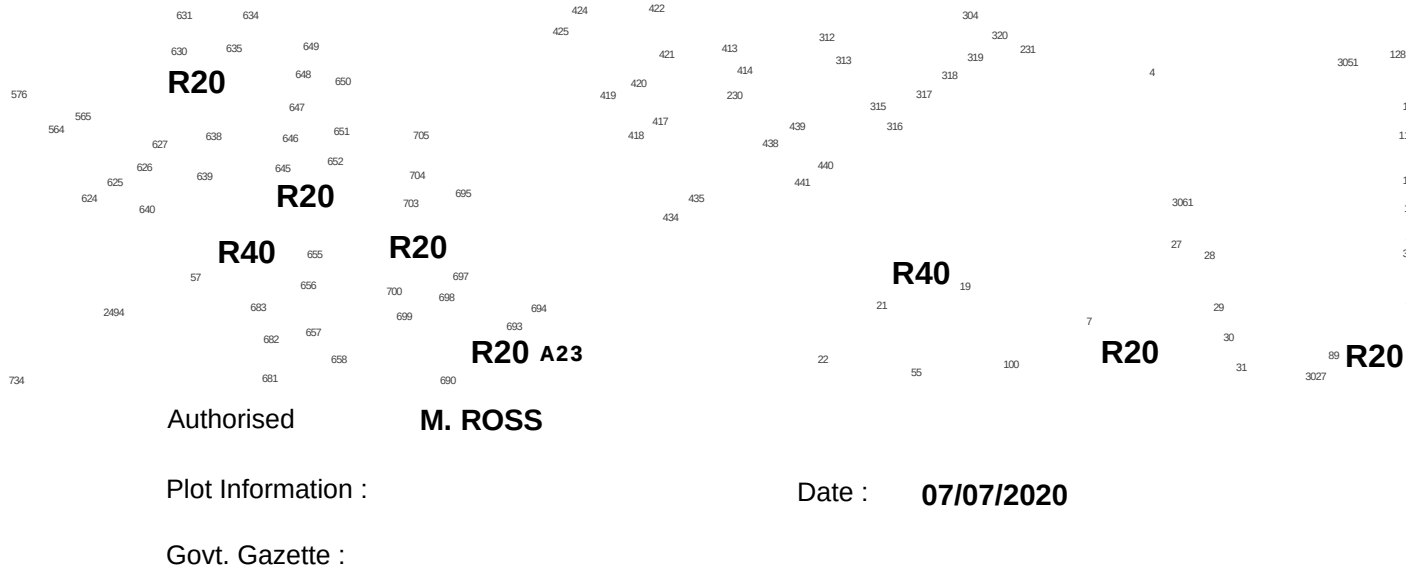
APPENDIX

DESKTOP SEARCHES

8
12
16
20

G:\GIS Data
Workspace\GIS_Planning\TPSIMaps\TPS Sheets\TPSz_A1.WO
R
19th
November
2004
Updated to
include
AMD 174
GG.
18/02/2020

TOWN PLANNING
SCHEME MAP
5 of 34



METROPOLITAN REGION SCHEME RESERVES

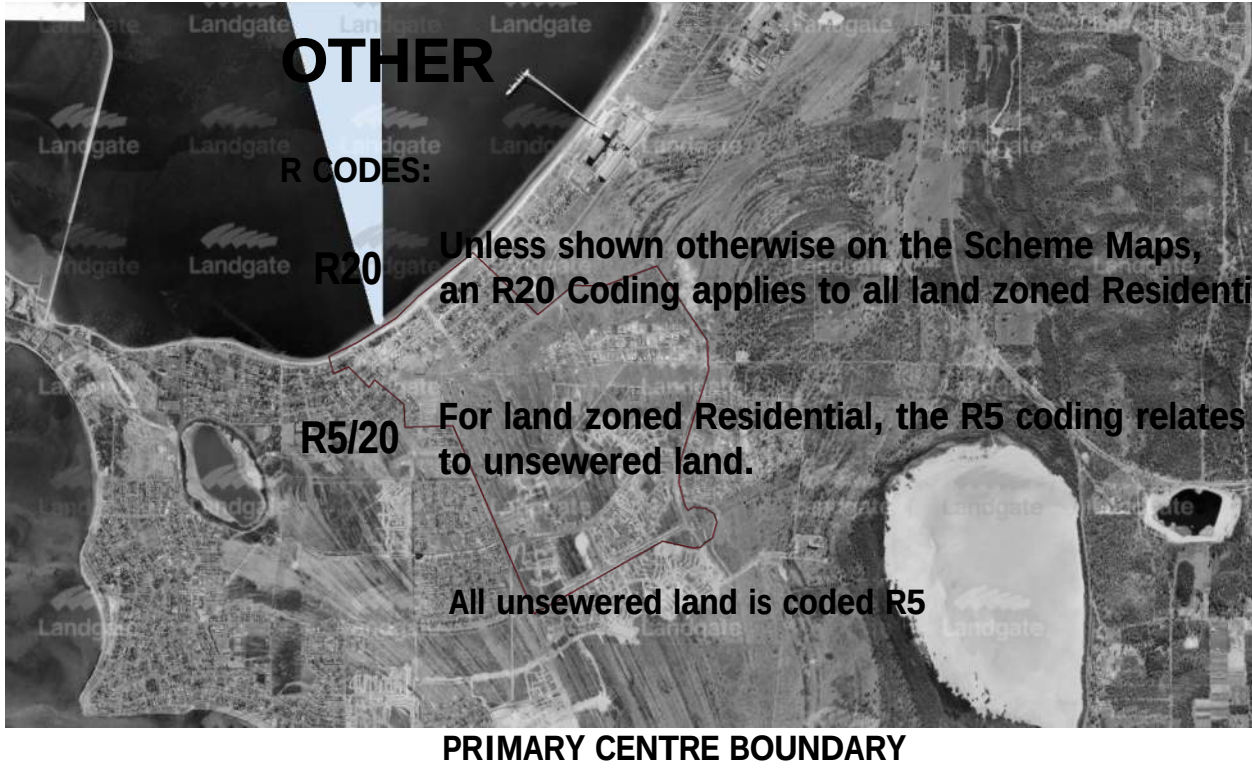
	PARKS AND RECREATION	PRIMARY REGIONAL ROADS	H	HOSPITAL
R	RESTRICTED PUBLIC ACCESS	OTHER REGIONAL ROADS	HS	HIGH SCHOOL
	RAILWAYS	PUBLIC PURPOSES	TS	TECHNICAL SCHOOL
	PORT INSTALLATIONS	WATER CATCHMENTS	CP	CAR PARK
	STATE FORESTS	CIVIC AND CULTURAL	U	UNIVERSITY
	WATERWAYS		CG	COMMONWEALTH GOVERNMENT
			SEC	WESTERN POWER
			SU	SPECIAL USES
			WSD	WATER CORPORATION

LOCAL SCHEME RESERVES

	CIVIC AND CULTURAL	PUBLIC OPEN SPACE	H	HOSPITAL
	LOCAL ROADS	PUBLIC PURPOSES	U	UNIVERSITY
			WSD	WATER CORPORATION
			SEC	WESTERN POWER

ZONES

RESIDENTIAL	COMMERCIAL	AP	AGED PERSONS ACCOMMODATION
SPECIAL RESIDENTIAL	SPECIAL USE	C	CEMETERY
DEVELOPMENT	SPECIAL COMMERCIAL	CB	COMMUNITY BUILDINGS
COMMUNITY PURPOSES	SERVICE COMMERCIAL	CH	CHURCH
DISTRICT TOWN CENTRE	PORT KENNEDY BUSINESS ENTERPRISE	CM	CHILD MINDING CENTRE
PRIMARY CENTRE CITY CENTRE	LIGHT INDUSTRY	D	DRAIN
PRIMARY CENTRE WATERFRONT VILLAGE	GENERAL INDUSTRY	FC	FAMILY CENTRE
PRIMARY CENTRE URBAN VILLAGE	SPECIAL INDUSTRY	FS	FIRE STATION
PRIMARY CENTRE CITY LIVING	RURAL	HA	HALL
PRIMARY CENTRE CAMPUS	SPECIAL RURAL	HI	HISTORICAL SITE
PRIMARY CENTRE URBAN LIVING		IHC	INFANT HEALTH CLINIC
		KG	KINDERGARTEN
		L	LIBRARY
		NH	NURSING HOME
		PS	PRIMARY SCHOOL
		RI	RELIGIOUS INSTITUTION
		T	TELECOM
		YC	YOUTH CAMP



A1	ADDITIONAL USES See Schedule 2 in Scheme Text
EC	ENVIRONMENTAL CONDITIONS See Schedule 8 in Scheme Text
DA	DEVELOPMENT AREA See Schedule 9 in Scheme Text
DCA	DEVELOPMENT CONTRIBUTION AREA See Schedule 10 in Scheme Text
	SCHEME BOUNDARY - DLI Cadastre
	METROPOLITAN REGIONAL SCHEME RESERVES BOUNDARY

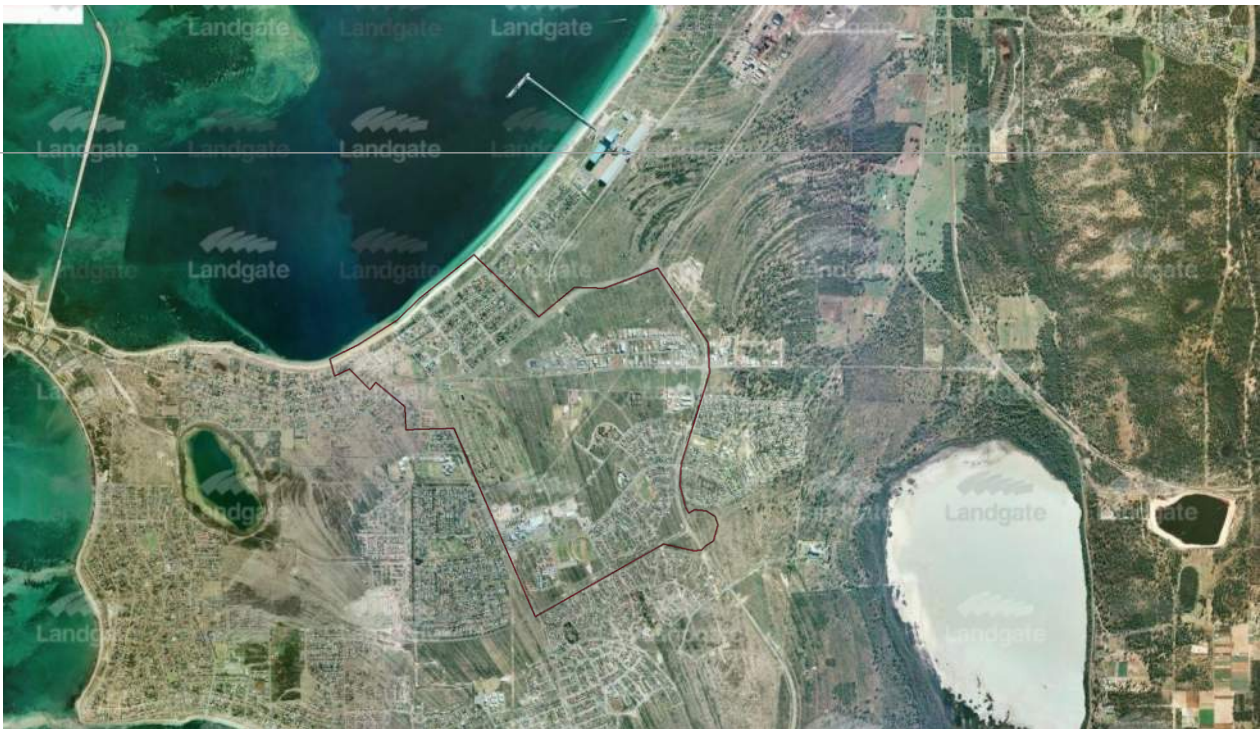


PLATE 1: Aerial image of the site – November 1953



PLATE 2: Aerial image of the site – July 1970

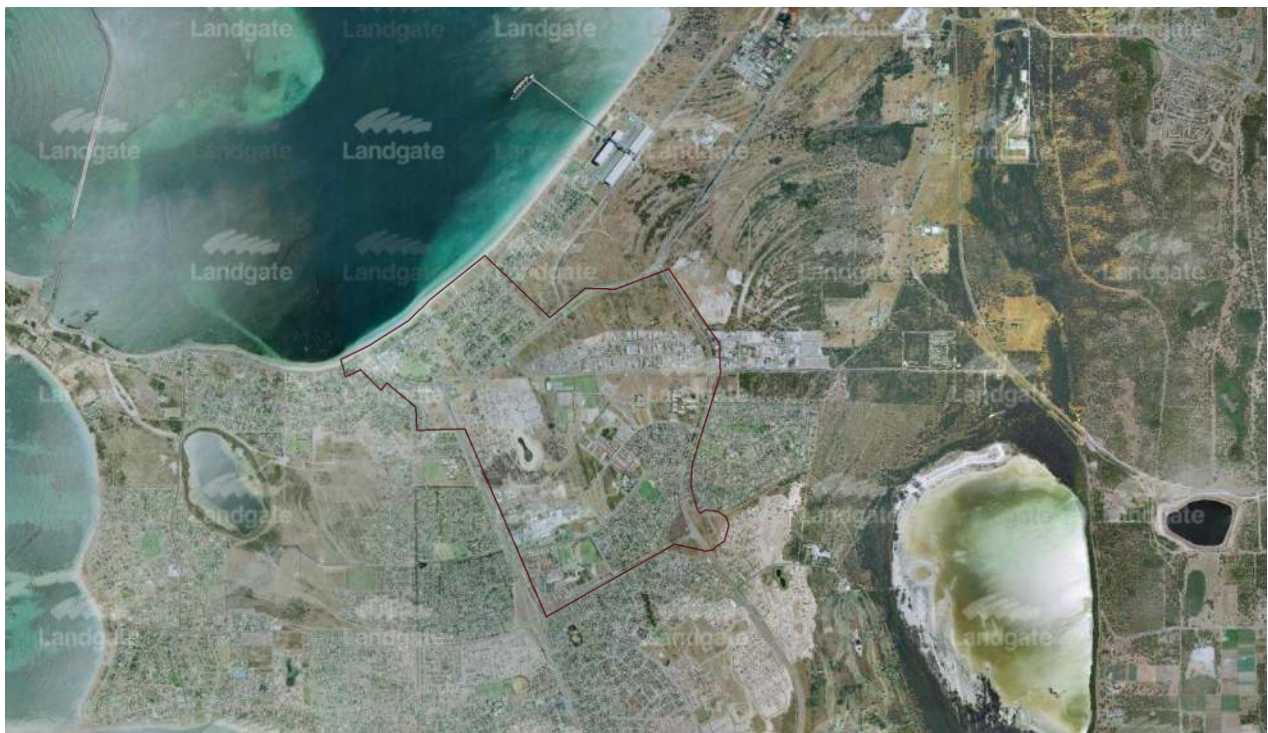


PLATE 3: Aerial image of the site – September 1974



PLATE 4: Aerial image of the site – June 1977

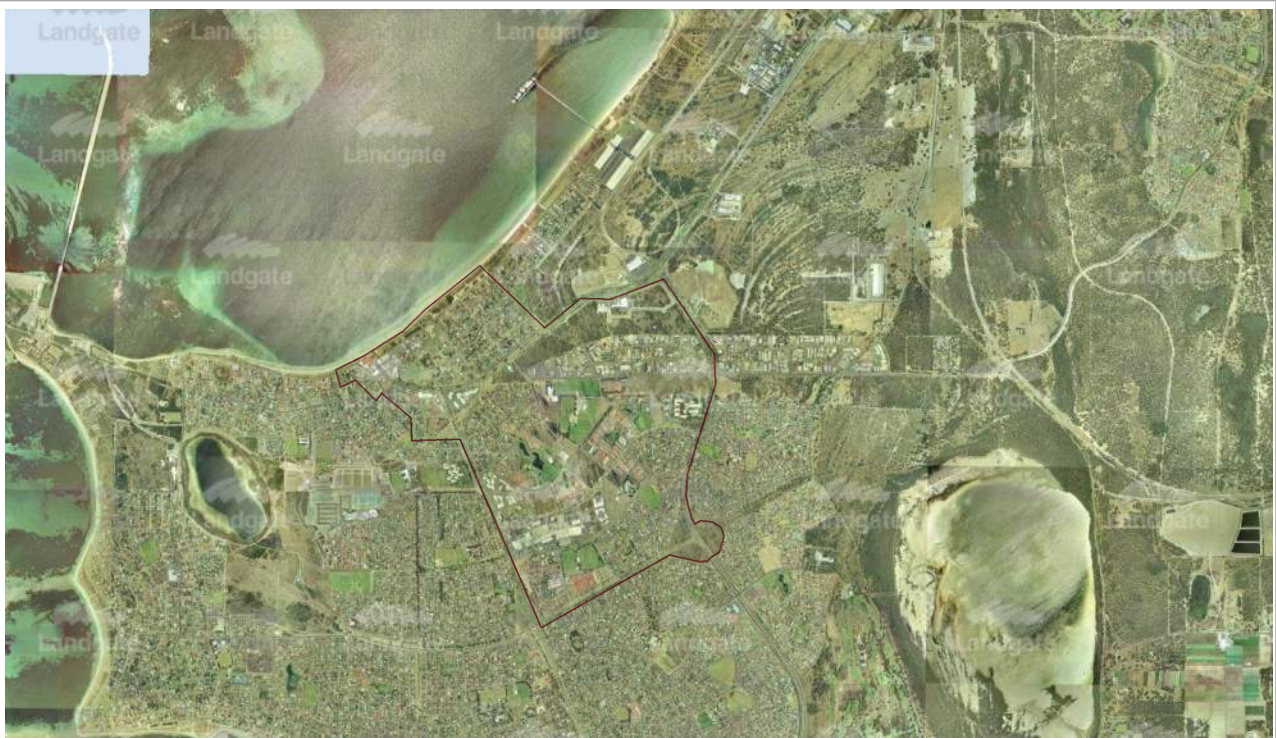


PLATE 5: Aerial image of the site – August 1981

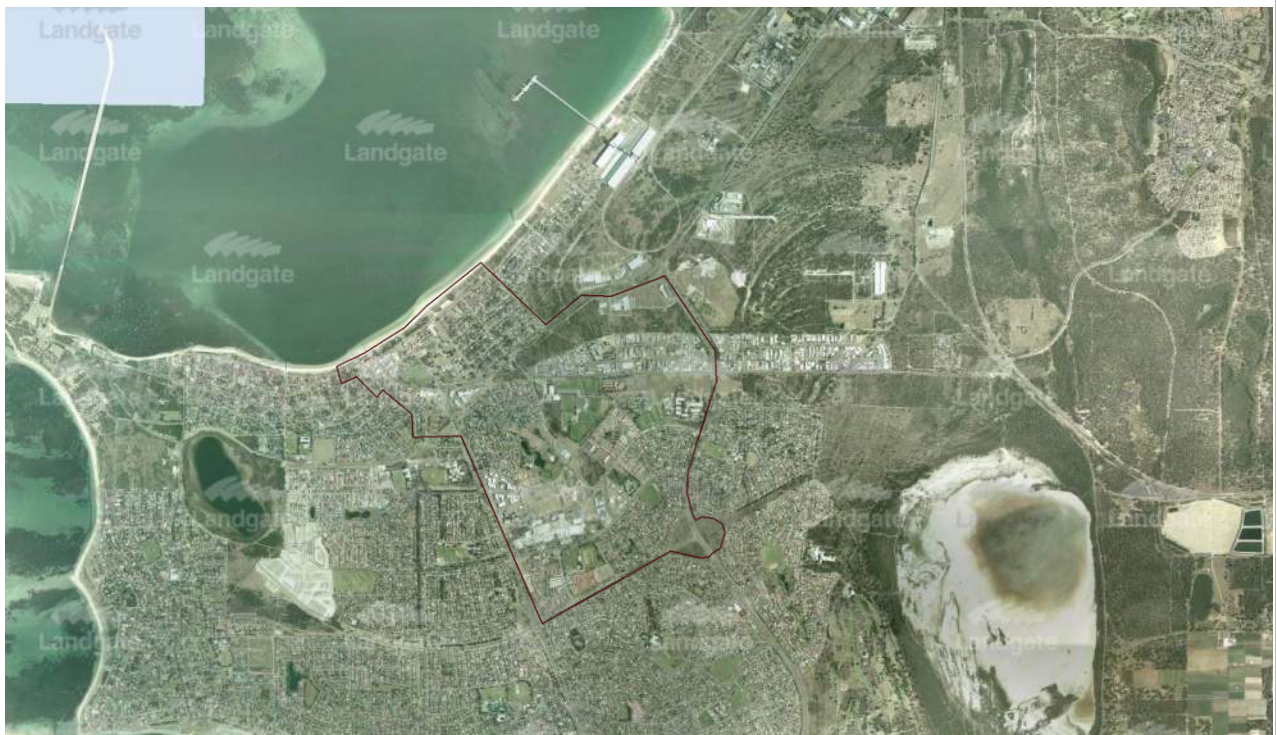


PLATE 6: Aerial image of the site – June 1985



PLATE 7: Aerial image of the site – December 1989

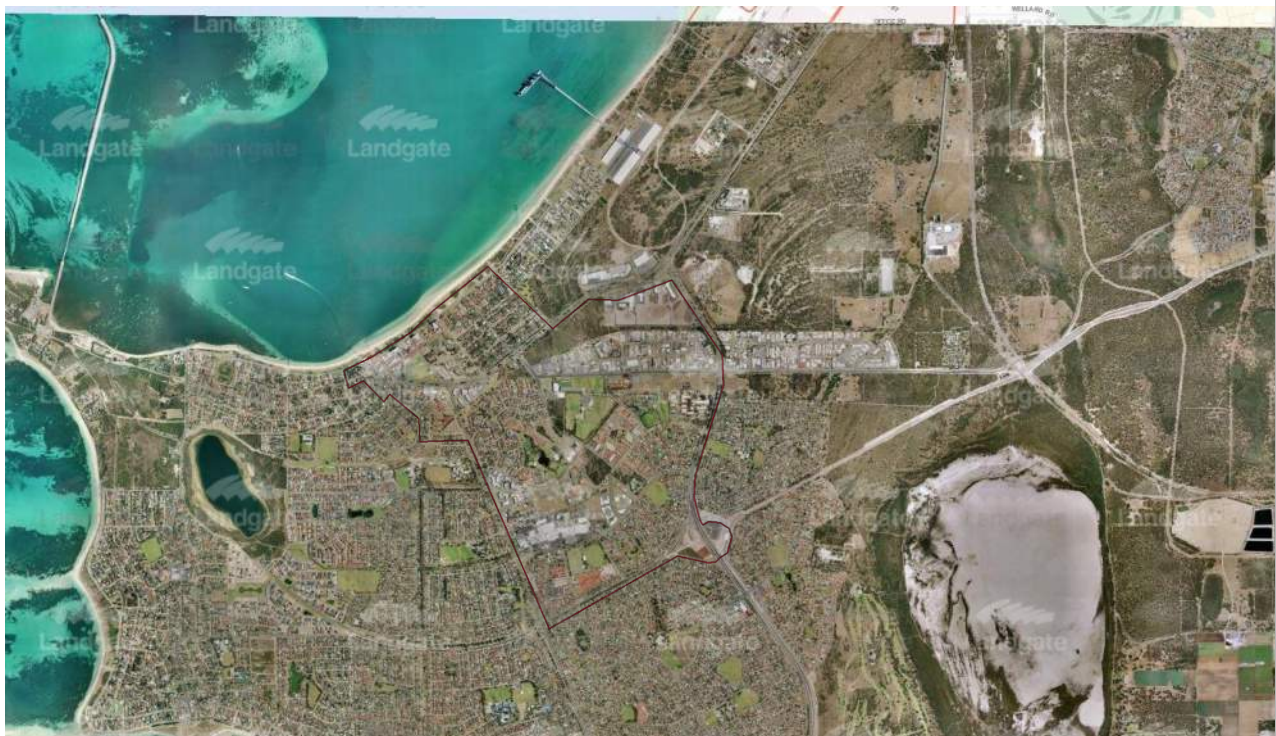


PLATE 8: Aerial image of the site – February 1995

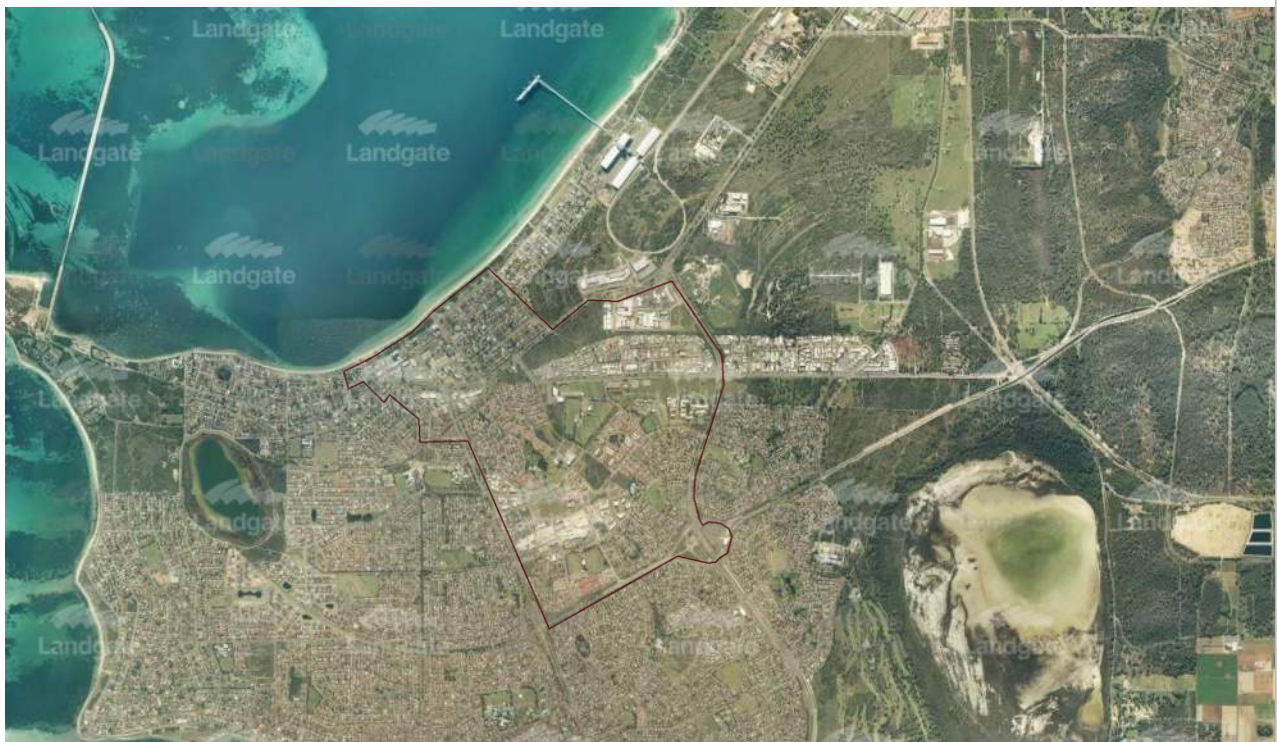


PLATE 9: Aerial image of the site – January 2001

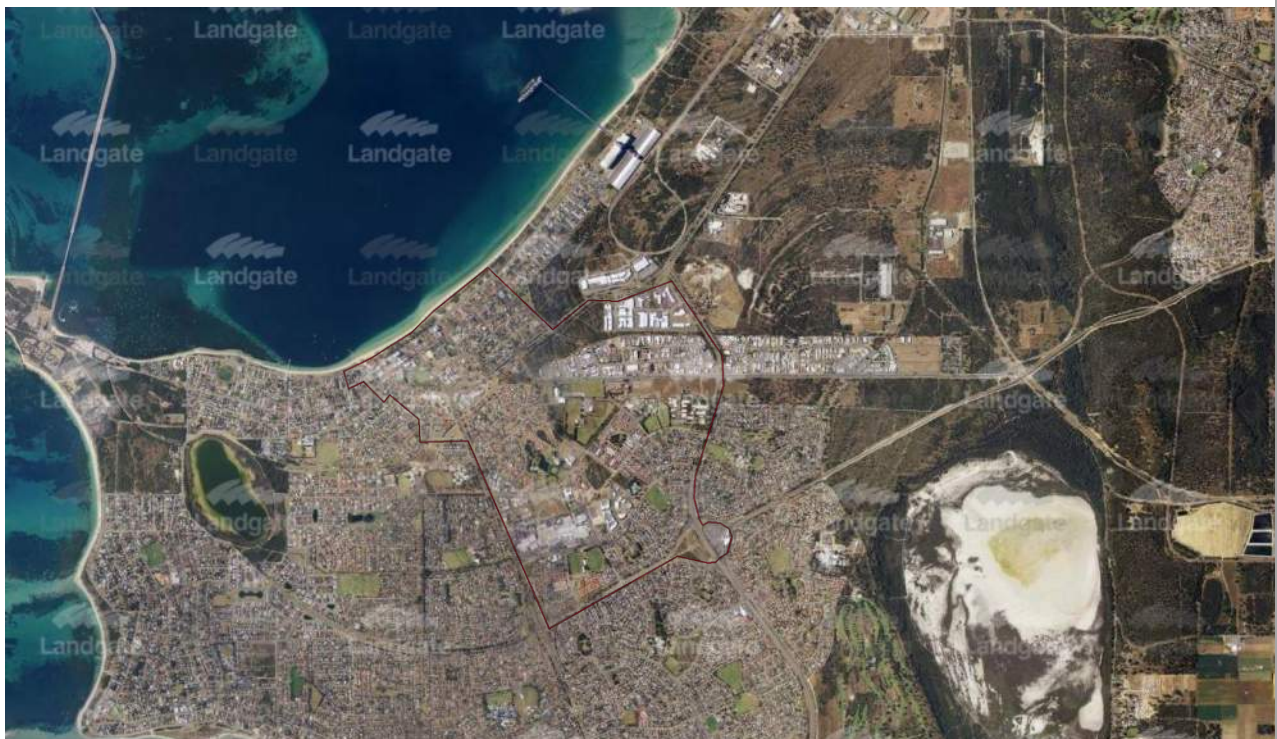


PLATE 10: Aerial image of the site – December 2003

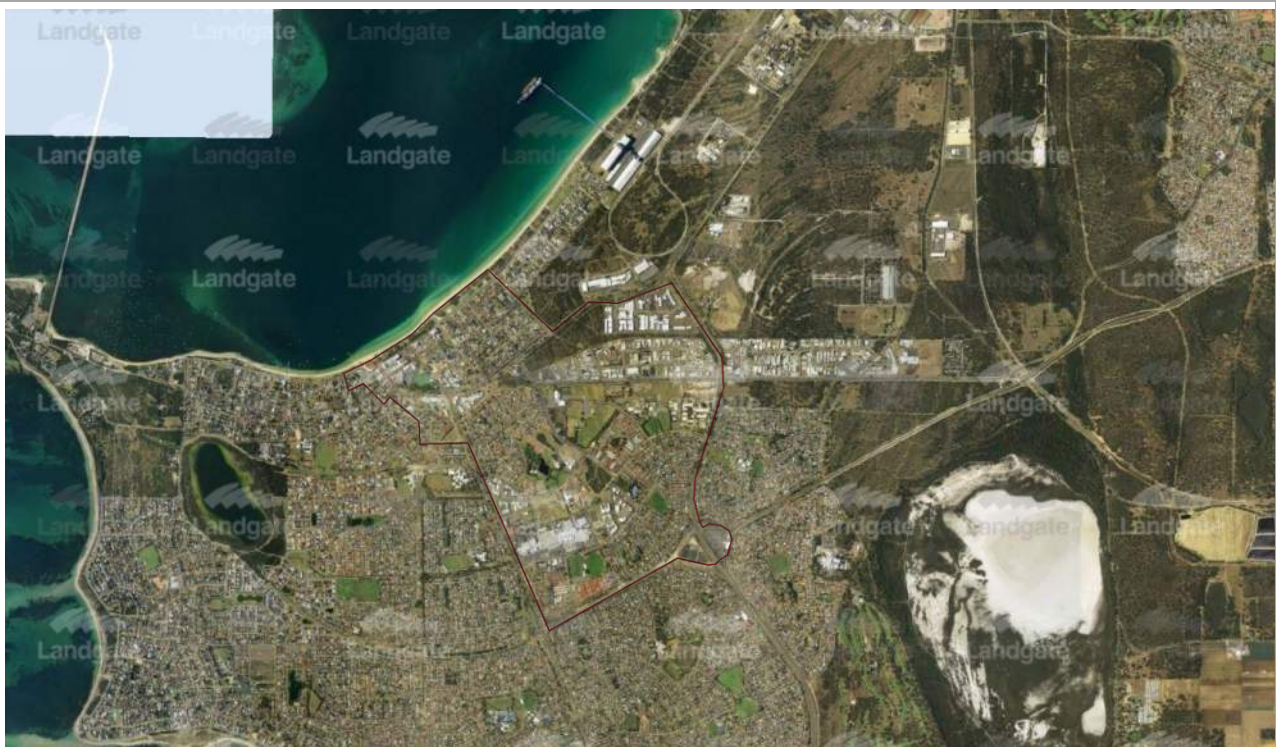


PLATE 11: Aerial image of the site – December 2005



PLATE 12: Aerial image of the site – December 2006

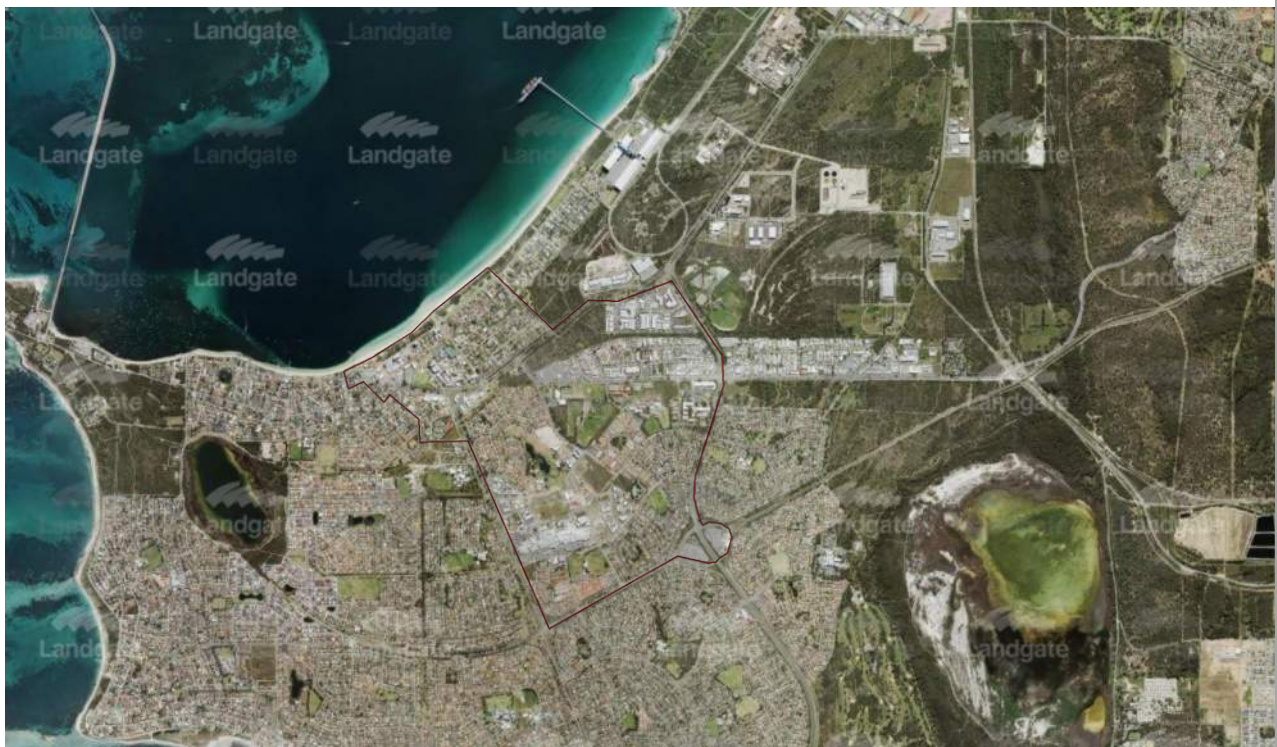


PLATE 13: Aerial image of the site – July 2008

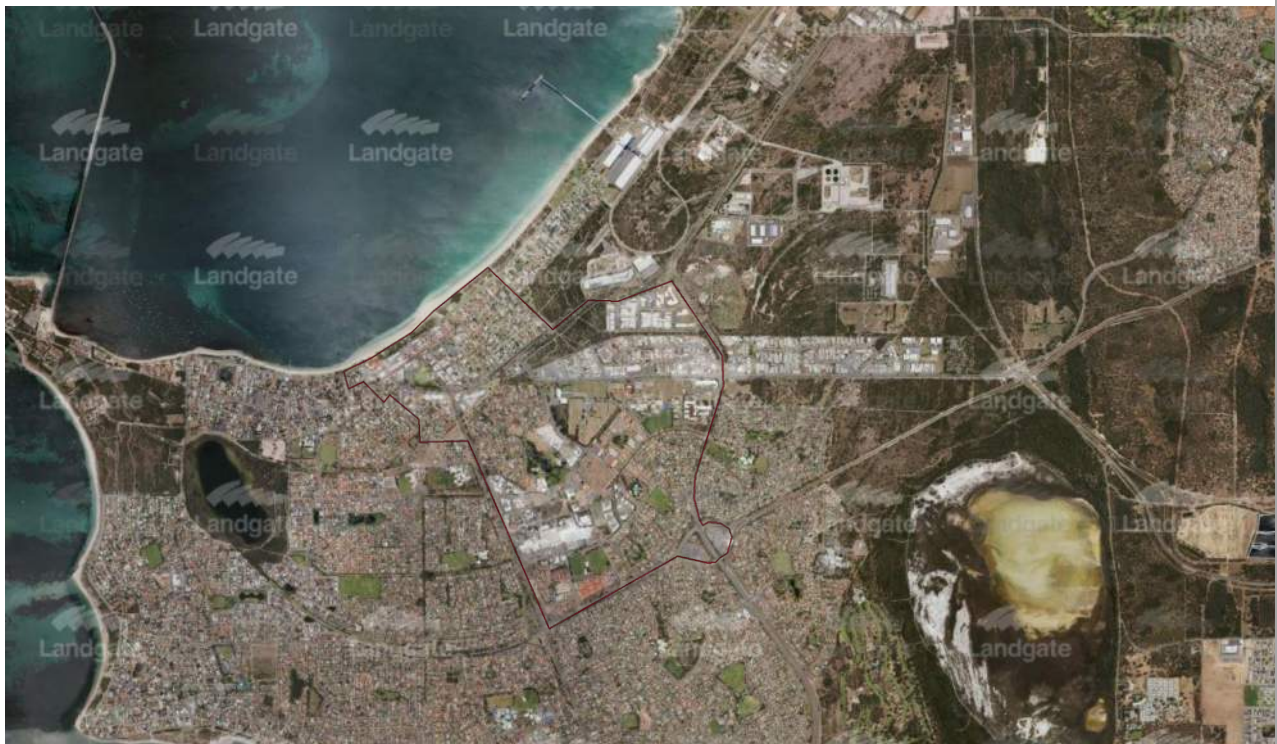


PLATE 14: Aerial image of the site – November 2010

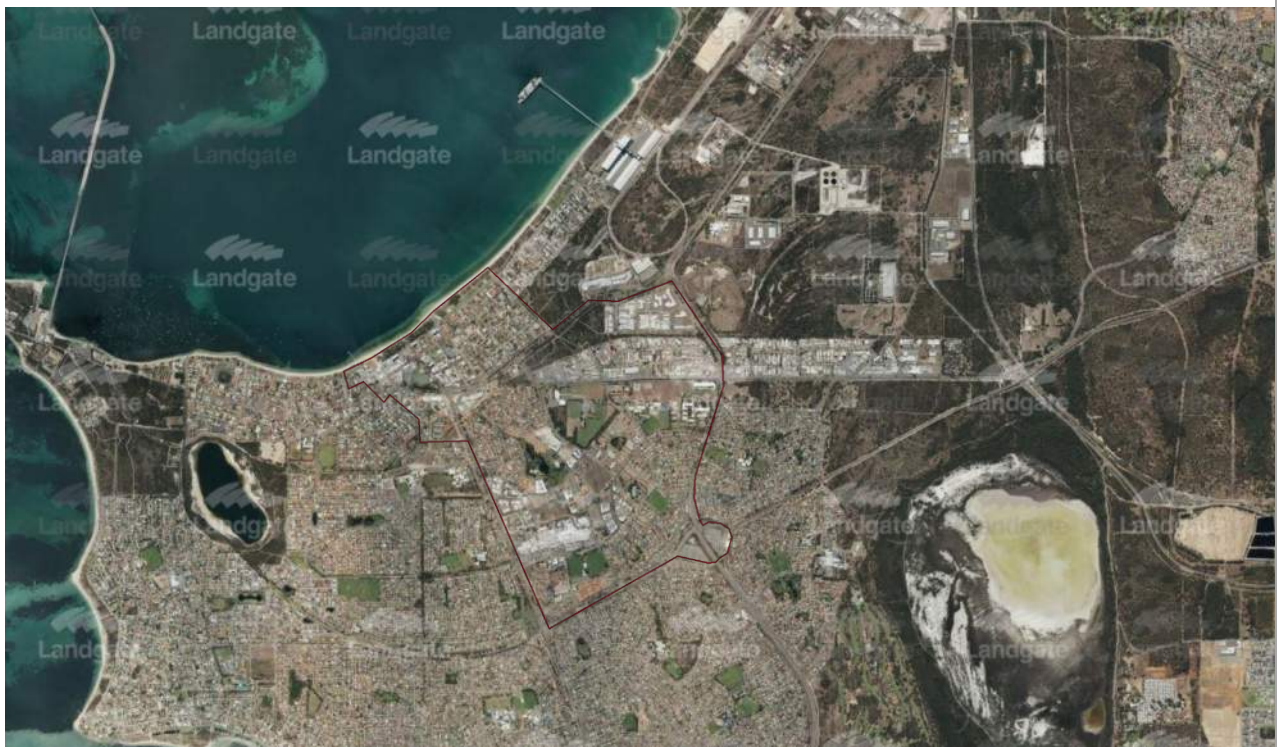


PLATE 15: Aerial image of the site – January 2013



PLATE 16: Aerial image of the site – January 2015



Dandjoo Species List Export

Created by Guest User on 04 Jul 2025

Source	Dandjoo – Department of Biodiversity, Conservation and Attractions
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Date time	2025-07-04T11:38:28.691903+08:00

PLATE 17: Aerial image of the site – September 2016

Conservation status summary	Count
CR	3
Cons code inherited from parent	1
EN	5
MI	7
None	42
OS	1
P1	1
P3	4
P4	9
Parent of conservation listed taxa	1
VU	7
Total	81

Kingdoms	Count
Animalia	45
Plantae	36
Total unique species	81

#	Class	Family	Name	Establishment	Conservation
---	-------	--------	------	---------------	--------------

PLATE 18: Aerial image of the site – February 2018

Animalia

1	None	None	Polycera hedgpethi Er. Marcus, 1964		
2	Arachnida	Idiopidae Simon, 1889	Idiosoma sigillatum O. P.-Cambridge, 1870 (Swan Coastal Plain shield-backed trapdoor spider)	native	P3
3	Arachnida	Lycosidae	Hogna crispipes (L. Koch, 1877)		
4	Astroidea	Astropectinidae	Astropecten preissi M�ller & Troschel, 1843		
5	Aves	Anatidae	Oxyura australis Gould, 1836	native	P4
6	Aves	Ardeidae	Botaurus dubius Mathews, 1912	native	P4
7	Aves	Cacatuidae	Calyptrorhynchus banksii naso Gould, 1837 (Forest Red-tailed	native	VU

			<i>Black Cockatoo</i>		
8	Aves	Cacatuidae	Zanda Mathews, 1913		Parent of conservation listed taxa
9	Aves	Cacatuidae	Zanda baudinii Lear, 1832 (<i>Baudin's Cockatoo</i>)	native	EN
10	Aves	Cacatuidae	Zanda latirostris Carnaby, 1948 (<i>Carnaby's Cockatoo</i>)	native	EN
11	Aves	Charadriidae	Charadrius cucullatus Vieillot, 1818 (<i>Hooded Plover</i>)	native	P4
12	Aves	Diomedidae	Thalassarche chrysostoma (J.R. Forster, 1785)	native	VU
13	Aves	Falconidae	Falco peregrinus Tunstall, 1771 (<i>Peregrine Falcon</i>)	native	OS
14	Aves	Laridae	Anous tenuirostris melanops Gould, 1846	native	EN
15	Aves	Laridae	Hydroprogne caspia (Pallas, 1770)	native	MI
16	Aves	Laridae	Onychoprion anaethetus (Scopoli, 1786) (<i>Bridled Tern</i>)	native	MI
17	Aves	Laridae	Onychoprion anaethetus anaethetus (Scopoli, 1786)		Cons code inherited from parent
18	Aves	Laridae	Sternula nereis nereis Gould, 1843	native	VU
19	Aves	Laridae	Thalasseus bergii (Lichtenstein, 1823)	native	MI
20	Aves	Procellariidae	Halobaena caerulea (Gmelin, 1789)	native	VU
21	Aves	Procellariidae	Macronectes giganteus (Gmelin, 1789)	native	MI
22	Aves	Rallidae	Porzana fluminea Gould, 1843	native	
23	Aves	Scolopacidae	Actitis hypoleucos (Linnaeus, 1758) (<i>Common Sandpiper</i>)	native	MI
24	Aves	Scolopacidae	Calidris ferruginea (Pontoppidan, 1763)	native	CR
25	Aves	Scolopacidae	Calidris ruficollis (Pallas, 1776)	native	MI
26	Aves	Scolopacidae	Calidris tenuirostris (Horsfield, 1821)	native	CR
27	Aves	Scolopacidae	Numerius madagascariensis (Linnaeus, 1766) (<i>Eastern Curlew</i>)	native	CR
28	Aves	Stercorariidae	Stercorarius maccormicki Saunders, 1893	native	MI
29	Bivalvia	Ostreidae Rafinesque, 1815	Dendostrea Swainson, 1835		
30	Demospongiae	Geodiidae Gray, 1867	Erylus lendenfeldi Sollas, 1888		
31	Gastropoda	Bullidae Gray, 1827	Bulla quoyii Gray & Dieffenbach, 1843		
32	Hexacorallia	Actiniidae Rafinesque, 1815	Dofleinia armata Wassilieff, 1908		
33	Insecta	Carabidae Latreille, 1802	Pheropsophus verticalis (Dejean, 1825)		
34	Mammalia	Macropodidae	Notamacropus irma (Jourdan, 1837) (<i>Western Brush Wallaby</i>)	native	P4
35	Mammalia	Muridae	Hydromys chrysogaster Geoffroy, 1804 (<i>Water-rat</i>)	native	P4
36	Mammalia	Otariidae	Neophoca cinerea (Peron, 1816)	native	EN
37	Mammalia	Peramelidae	Isoodon fusciventer (Gray, 1841) (<i>Southern Brown Bandicoot</i>)	native	P4
38	Mammalia	Peramelidae	Isoodon obesulus (Shaw, 1797)	native	
39	Polyplacophora	Ischnochitonidae Dall, 1889	Ischnochiton contractus (Reeve, 1847)		
40	Reptilia	Agamidae	Pogona minor minima (Loveridge, 1933)	native	VU
41	Reptilia	Cheloniidae	Caretta caretta Linnaeus, 1758 (<i>Loggerhead Turtle</i>)	native	EN
42	Reptilia	Cheloniidae	Chelonia mydas (Linnaeus, 1758) (<i>Green Turtle</i>)	native	VU
43	Reptilia	Dermochelyidae	Dermochelys coriacea (Vandelli, 1761) (<i>Leatherback Turtle</i>)	native	VU
44	Reptilia	Elapidae	Neelaps calonotos (A.M.C. Duméril, Bibron & A. Duméril, 1854) (<i>Black-striped Snake</i>)	native	P3
45	Reptilia	Scincidae	Lerista lineata Bell, 1883 (<i>Perth Slider</i>)	native	P3

PLATE 20: Aerial image of the site – February 2021

46	Florideophyceae	Areschougiaceae J.Agardh	Erythroclonium muelleri Sond.	native	
47	Florideophyceae	Ceramiaceae Dumort.	Antithamnion armatum (J.Agardh) G.De Toni	native	
48	Florideophyceae	Ceramiaceae Dumort.	Antithamnion hanovioides (Sond.) G.De Toni	native	
49	Florideophyceae	Claviclioniaceae Kraft & G.W.Saunders	Claviclonium ovatum (J.V.Lamour.) Kraft & Min-Thein	native	
50	Florideophyceae	Corallinaceae J.V.Lamour.	Jania rosea (Lam.) Decne.	native	
51	Florideophyceae	Cystocloniaceae K÷tz.	Craspedocarpus venosus (K÷tz.) Min-Thein & Womersley	native	
52	Florideophyceae	Cystocloniaceae K÷tz.	Hypnea ramentacea (C.Agardh) J.Agardh	native	

53	Florideophyceae	Delesseriaceae Bory	Hypoglossum revolutum (Harv.) J.Agardh	native	
54	Florideophyceae	Gracilariaceae N�geli	Gracilaria salicornia (C.Agardh) E.Y.Dawson	native	
55	Florideophyceae	Halymeniaceae Bory	Carpopeltis elata (Harv.) G.De Toni	native	
56	Florideophyceae	Halymeniaceae Bory	Gelinaria ulvoidea Sond.	native	
57	Florideophyceae	Hapalidiaceae J.E.Gray	Mesophyllum incisum (Foslie) W.H.Adey	native	
58	Florideophyceae	Kallymeniaceae Kylin	Callophyllis rangiferina (Turner) Womersley	native	
59	Florideophyceae	Lithophyllaceae Athanas.	Amphiroa anceps (Lam.) Decne.	native	
60	Florideophyceae	Nizymeniaceae	Nizymenia conferta (Harv.) Chiovitti, G.W.Saunders & Kraft	native	
61	Florideophyceae	Phacelocarpaceae	Phacelocarpus sessilis J.Agardh	native	
62	Florideophyceae	Placentophoraceae Dumilag, W.A.Nelson & Kraft	Callophycus harveyanus (J.Agardh) P.C.Silva	native	
63	Florideophyceae	Placentophoraceae Dumilag, W.A.Nelson & Kraft	Callophycus oppositifolius (C.Agardh) P.C.Silva	native	
64	Florideophyceae	Pterocladaceae G.P.Felicini & C.Perrone	Pterocladia lucida (Turner) J.Agardh	native	
65	Florideophyceae	Rhodomelaceae Horan.	Corynecladia clavata (Sond.) J.Agardh	native	
66	Florideophyceae	Rhodomelaceae Horan.	Corynecladia elata (C.Agardh) Cassano, M.C.Oliveira & M.T.Fujii	native	
67	Florideophyceae	Rhodomelaceae Horan.	Laurencia dendroidea J.Agardh	native	
68	Florideophyceae	Rhodymeniaceae Harv.	Leptosomia rosea (Harv.) Womersley	native	
69	Florideophyceae	Rhodymeniaceae Harv.	Rhodymenia foliifera Harvey	uncertain	
70	Florideophyceae	Solieriaceae J.Agardh	Sarconema filiforme (Sond.) Kylin	native	
71	Florideophyceae	Wrangeliaceae J.Agardh	Anotrichium crinitum (K�tzing) Baldock		
72	Florideophyceae	Wrangeliaceae J.Agardh	Wrangelia velutina (Sond.) Harv.	native	
73	Liliopsida	Poaceae Barnhart	Lachnagrostis nesomytica subsp. paralia A.J.Br.	native	P1
74	Magnoliopsida	Asteraceae Bercht. & J.Presl	Ambrosia psilostachya DC.	alien	
75	Magnoliopsida	Fabaceae Lindl.	Jacksonia sericea Benth.	native	P4
76	Magnoliopsida	Myrtaceae Juss.	Eucalyptus foecunda Schauer (<i>Fremantle Mallee, Narrow-leaved Red Mallee</i>)	native	
77	Magnoliopsida	Myrtaceae Juss.	Eucalyptus foecunda Schauer subsp. foecunda	native	P4
78	Magnoliopsida	Proteaceae Juss.	Adenanthos cygnorum Diels subsp. cygnorum (<i>Common Woollybush</i>)	native	
79	Magnoliopsida	Rubiaceae Juss.	Opercularia vaginata Juss.	native	
80	Magnoliopsida	Sapindaceae Juss.	Dodonaea hackettiana W.Fitzg. (<i>Hackett's Hopbush</i>)	native	P4
81	Magnoliopsida	Thymelaeaceae Juss.	Pimelea calcicola Rye (<i>Coastal Banjine</i>)	native	P3

Conservation status definitions

Threatened species

- CR – Critically Endangered
- EN – Endangered
- VU – Vulnerable
- EX – Extinct
- EW – Extinct in the Wild
- CD – Species of special conservation interest (conservation dependent)
- OS – Species otherwise in need of special protection (other specially protected)
- MI – Migratory
- SP – Specially protected species

Priority species

- P1 – Priority 1: Poorly-known species – known from few locations, none on conservation lands
- P2 – Priority 2: Poorly-known species – known from few locations, some on conservation lands
- P3 – Priority 3: Poorly-known species – known from several locations
- P4 – Priority 4: Rare, Near Threatened and other species in need of monitoring

Dandjoo specific codes

- Parent of conservation listed taxa
- Cons code inherited from parent, X

Read full definitions at <https://bio.wa.gov.au/guide/conservation-status-definitions>

Disclaimer

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Further note, precise locations of [conservation listed species](#) are considered sensitive. To protect this information, [obfuscation](#) has been applied to conservation-listed species records. For these species, the true location is ± 10 km from the search area used to generate this species list.

Place Number	Place Name(s)	Address	Local Government	
<u>24537</u>	Limestone Quarry	Chesterfield Rd East Rockingham	Rockingham	
<u>3148</u>	Freshwater Coral Site	2 Lodge Dr East Rockingham	Rockingham	
<u>18482</u>	Kwinana Grain Terminal, Granary Museum & Jetty	Lot 1304 & 1585 Rockingham Beach Rd East Rockingham	Rockingham	
<u>3145</u>	East Rockingham Cemetery	231 Mandurah Rd East Rockingham	Rockingham	
<u>2320</u>	Hymus House and Outbuildings  State Registered Place	303 Mandurah Rd East Rockingham	Rockingham	
<u>19937</u>	Rockingham Roads Board Site (Roads Boards Office and East Rockingham School - Site)	90 Office Rd East Rockingham	Rockingham	

<u>18488</u>	"Rockingham" Cairn	Lot 439 Rockingham Beach Rd East Rockingham	Rockingham	
<u>9250</u>	Jarrahdale to Rockingham Railway (1872 Heritage Railway, Jarrahdale to Rockingham)	Jarrahdale Road to Val Street Jarrahdale to Rockingham	Serpentine-Jarrahdale	
<u>3841</u>	East Rockingham Heritage Precinct	Rockingham	Rockingham	
<u>4375</u>	Tuart Tree	Ansty Swamp Rockingham	Rockingham	
<u>11613</u>	St Nicholas Church & Z-Force Memorial	Cnr Baralda Crt & Council Av Rockingham	Rockingham	
<u>3205</u>	Rockingham Beach Primary School (Heritage Building)	30 Bay View St Rockingham	Rockingham	
<u>16809</u>	Palm Beach Precinct	bounded by Hymus, Lake & Fisher Sts, & beach parallel to The Esplanade Rockingham	Rockingham	
<u>3243</u>	Rockingham Park Kindergarten (fmr) (Bungaree Kindergarten and Pre Primary)	Lot 716 Centaurus St Rockingham	Rockingham	

<u>19947</u>	Residence, 3 Chalwell Street	3 Chalwell St Rockingham	Rockingham	
<u>2325</u>	Chesterfield Inn (fmr), Rockingham (Chesterfield House, Rockingham Arms (fmr))  State Registered Place	Chesterfield Rd Rockingham	Rockingham	
<u>2326</u>	Chesterfield Inn Stables (fmr)	Chesterfield Rd Rockingham	Rockingham	
<u>4863</u>	Date Palm Tree	Civic Bvd Rockingham	Rockingham	
<u>18490</u>	Rockingham Beach Post Office - site	Cnr Kent St & Railway Tce Rockingham	Rockingham	
<u>16784</u>	Rockingham Police Station & Courthouse (fmr)	Cnr of Smythe St & Flinders Lane Rockingham	Rockingham	
<u>119</u>	Rockingham Infant Health Centre	Cnr Wanliss and Smythe Sts Rockingham	Rockingham	

<u>3245</u>	Rockingham Park Underpasses	1 Council Av Rockingham	Rockingham	
<u>4015</u>	Day Cottage (Ellendale, Rockingham Inn)  State Registered Place	Day Rd Rockingham	Rockingham	
<u>14638</u>	Rockingham Fire Station	Dixon Rd Rockingham	Rockingham	
<u>13053</u>	Flinder's Hall and Rose Garden (fmr)	1 Empress Cnr Rockingham	Rockingham	
<u>18494</u>	Palm Beach Jetty - site (Fisher Street Jetty, Naval Jetty (Site of), Pine Beach Jetty)	end of Fisher St, Palm Beach, Mangles Bay Rockingham	Rockingham	
<u>19932</u>	Carinya Court (Esplanade Flats)	153 Esplanade Rockingham	Rockingham	
<u>19936</u>	Racecourse - Site	Flinders Lane Rockingham	Rockingham	

<u>12990</u>	Rockingham Sunday Markets	Flinders Lane Rockingham	Rockingham	
<u>2328</u>	Uniting Church (Lutheran Church, Methodist Church)	11 Florence St Rockingham	Rockingham	
<u>4501</u>	Garden Island (Bauche Island, Meandip)	Garden Island N of Rockingham	Rockingham	
<u>13778</u>	Z-Force Memorial	Garden Island N of Rockingham	Rockingham	
<u>14639</u>	Rockingham Fire Station	Hefron St Rockingham	Rockingham	
<u>2323</u>	Anglican Church (fmr) (St Nicholas Church)	63-65 Kent Rockingham	Rockingham	
<u>3217</u>	Rockingham Hotel Walls	Kent St Rockingham	Rockingham	

<u>19938</u>	Rockingham Theatres - site	Kent St Rockingham	Rockingham	
<u>2321</u>	Rockingham Hotel (Port Hotel (fmr))	26 Kent St Rockingham	Rockingham	
<u>3218</u>	Rockingham Hotel Trees (4 pine trees)	26-40 Kent St Rockingham	Rockingham	
<u>2324</u>	Second Roads Board Office (fmr) (Rockingham Districts Historical Society, Rockingham Museum)	41 Kent St Rockingham	Rockingham	
<u>18486</u>	Rockingham Beach School - site	9 Kent St Rockingham	Rockingham	
<u>18485</u>	Police Station - site	Lot 8002 Kent St Rockingham	Rockingham	
<u>3225</u>	Rockingham Oval and Memorial (Showground, Village Green, War Memorial)	Kent St, Flinders Lane, Patterson St Rockingham	Rockingham	

<u>4502</u>	Paganoni Swamp & Adjacent Areas	Mandurah Rd Rockingham	Rockingham	
<u>2322</u>	Site of Old Chalwell House	Mandurah Rd Rockingham	Rockingham	
<u>2329</u>	Bell Cottage (ruin), Rockingham (Woodbine)  State Registered Place	371 Mandurah Rd Rockingham	Rockingham	
<u>18779</u>	Rockingham Jetty	Opposite Railway Rd Rockingham	Rockingham	
<u>18496</u>	Sites of Three Timber Jetties	Palm Beach, west of Railway Tce Rockingham	Rockingham	
<u>18487</u>	Fisher's Bakery - site	175 Parkin St Rockingham	Rockingham	
<u>3150</u>	Millars Cottages (fmr) - Site	196 Parkin St Rockingham	Rockingham	

<u>3370</u>	Lucy Saw Home (Lakeside, Saw Family Home, Serenity Lodge)	65 Parkin St Rockingham	Rockingham	
<u>19935</u>	Golf Course - Site	Cnr Patterson Rd and Read St Rockingham	Rockingham	
<u>4646</u>	Point Peron Recreational Camp	Point Peron Rd Rockingham	Rockingham	
<u>3365</u>	Cape Peron K Battery Complex (Cape Peron Battery Complex, Point Peron "K" Battery)  State Registered Place	End of Point Peron Rd, Cape Peron Rockingham	Rockingham	
<u>18489</u>	Founders' Memorial	Railway Tce Rockingham	Rockingham	
<u>18484</u>	Timber Railway - site	Railway Tce Rockingham	Rockingham	
<u>18483</u>	Lake Richmond  State Registered Place	Richmond Av Rockingham	Rockingham	

<u>17865</u>	Rockingham Hotel Site	25 Rockingham Beach Rd Rockingham	Rockingham	
<u>3258</u>	Trocadero Dance Hall - Site (Palais de Dance, The Hostel, Trocadero Dance Hall)	25 Rockingham Beach Rd Rockingham	Rockingham	
<u>17814</u>	Elanora - site (Bell House, Music House)	49 Rockingham Beach Rd Rockingham	Rockingham	
<u>3141</u>	Bell and Churchill Parks	Lot 148-149 Rockingham Beach Rd Rockingham	Rockingham	
<u>3174</u>	Pine Tree (site of) (Lone Pine)	Cnr Rockingham Beach Rd & Wanliss St Rockingham	Rockingham	
<u>26778</u>	Reverend Purdy's House (fmr)	67 Rockingham Beach Road Rockingham	Rockingham	
<u>3147</u>	Frank Churcher's Residence - site	163 Rockingham Rd Rockingham	Rockingham	

<u>3637</u>	Site of Bell Homestead and Pine Tree (Bell House, Lone Pine, Malibu Diving)	43 Rockingham Rd Rockingham	Rockingham	
<u>17316</u>	Rockingham Police Station & CIB	Smyth St Rockingham	Rockingham	
<u>13166</u>	Z-Force Memorial, Rockingham (Catalpa Park)	The Esplanade Rockingham	Rockingham	
<u>13651</u>	Iluka	13 The Esplanade Rockingham	Rockingham	
<u>3146</u>	Cruising Yacht Club (Friday Club)	2 Val St Rockingham	Rockingham	
<u>18491</u>	Masonic Hall	13 Wanliss St Rockingham	Rockingham	



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: 04-Jul-2025

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

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 [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar)	1
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	4
Listed Threatened Species:	50
Listed Migratory Species:	49

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 [permit](#) 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:	136
Commonwealth Heritage Places:	None
Listed Marine Species:	73
Whales and Other Cetaceans:	12
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:	3
Regional Forest Agreements:	None
Nationally Important Wetlands:	None
EPBC Act Referrals:	17
Key Ecological Features (Marine):	None
Biologically Important Areas:	9
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Wetlands of International Importance (Ramsar Wetlands) [Resource Information]

Ramsar Site Name	Proximity	Buffer Status
Becher point wetlands	Within 10km of Ramsar site	In feature area

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
Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Community may occur within area	In feature area
Sedgelands in Holocene dune swales of the southern Swan Coastal Plain	Endangered	Community known to occur within area	In feature area
Thrombolite (microbial) community of coastal freshwater lakes of the Swan Coastal Plain (Lake Richmond)	Endangered	Community known to occur within area	In feature area
Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain ecological community	Critically 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			
Anous tenuirostris melanops Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area	In feature area
Ardenna grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In feature area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat likely 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 likely to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Calyptorhynchus banksii naso Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	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
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In feature area
Diomedea dabbenena Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area	In feature area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In feature area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In feature area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Limosa lapponica menzbieri Northern Siberian Bar-tailed Godwit, Russkoye Bar-tailed Godwit [86432]	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
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Phaethon rubricauda westralis Red-tailed Tropicbird (Indian Ocean), Indian Ocean Red-tailed Tropicbird [91824]	Endangered	Species or species habitat may occur within area	In feature area
Pterodroma mollis Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area	In feature area
Sternula albifrons Little Tern [82849]	Vulnerable	Species or species habitat may occur within area	In feature area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
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	Foraging, feeding or related behaviour likely to 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 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
Zanda latirostris listed as Calyptorhynchus latirostris Carnaby's Black Cockatoo, Short-billed Black-cockatoo [87737]	Endangered	Species or species habitat known to occur within area	In feature area
MAMMAL			
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In feature area
Bettongia penicillata ogilbyi Woylie [66844]	Endangered	Species or species habitat may occur within area	In buffer area only
Dasyurus geoffroii Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat may occur within area	In feature area
Pseudocheirus occidentalis Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit [25911]	Critically Endangered	Species or species habitat may occur within area	In feature area
PLANT			
Andersonia gracilis Slender Andersonia [14470]	Endangered	Species or species habitat may occur within area	In feature area
Diuris micrantha Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat known to occur within area	In feature area
Diuris purdiei Purdie's Donkey-orchid [12950]	Endangered	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
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In feature area
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area	In feature area
SHARK			
Carcharias taurus (west coast population) Grey Nurse Shark (west coast population) [68752]	Vulnerable	Species or species habitat likely to 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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	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		[Resource Information]	
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Anous stolidus Common Noddy [825]		Species or species habitat may 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]		Foraging, feeding or related behaviour likely to occur within area	In feature area
Ardenna grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In feature area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In feature area
Diomedea dabbenena Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area	In feature area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may 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
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In feature area
Hydroprogne caspia Caspian Tern [808]		Foraging, feeding or related behaviour 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
Onychoprion anaethetus Bridled Tern [82845]		Foraging, feeding or related behaviour likely to occur within area	In feature area
Sterna dougallii Roseate Tern [817]		Foraging, feeding or related behaviour likely to occur within area	In feature area
Sternula albifrons Little Tern [82849]	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	Foraging, feeding or related behaviour likely to 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 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 likely to occur within area	In feature area
Caperea marginata Pygmy Right Whale [39]		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
Carcharias taurus Grey Nurse Shark [64469]		Species or species habitat likely to 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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In feature area
Eubalaena australis as Balaena glacialis australis Southern Right Whale [40]	Endangered	Breeding known 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	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
Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	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			
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat likely to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely 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
Limosa lapponica 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 likely to occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat 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
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Defence

Defence - ROCKINGHAM - NAVY CPSO [50135]	WA	In feature area
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Unknown

Commonwealth Land - [51123]	WA	In buffer area only
Commonwealth Land - [50570]	WA	In buffer area only
Commonwealth Land - [50461]	WA	In buffer area only
Commonwealth Land - [50462]	WA	In buffer area only
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Commonwealth Land - [50466]	WA	In buffer area only
Commonwealth Land - [50465]	WA	In buffer area only
Commonwealth Land - [50468]	WA	In buffer area only
Commonwealth Land - [50467]	WA	In buffer area only
Commonwealth Land - [50460]	WA	In buffer area only
Commonwealth Land - [50539]	WA	In buffer area only
Commonwealth Land - [50538]	WA	In buffer area only
Commonwealth Land - [50416]	WA	In buffer area only
Commonwealth Land - [50428]	WA	In buffer area only
Commonwealth Land - [50658]	WA	In buffer area only
Commonwealth Land - [50451]	WA	In buffer area only
Commonwealth Land - [50500]	WA	In buffer area only
Commonwealth Land - [50470]	WA	In buffer area only
Commonwealth Land - [50645]	WA	In buffer area only
Commonwealth Land - [50528]	WA	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [50643]	WA	In buffer area only
Commonwealth Land - [50450]	WA	In buffer area only
Commonwealth Land - [50422]	WA	In buffer area only
Commonwealth Land - [50452]	WA	In buffer area only
Commonwealth Land - [50639]	WA	In buffer area only
Commonwealth Land - [50636]	WA	In buffer area only
Commonwealth Land - [50635]	WA	In buffer area only
Commonwealth Land - [50633]	WA	In feature area
Commonwealth Land - [50638]	WA	In buffer area only
Commonwealth Land - [50657]	WA	In buffer area only
Commonwealth Land - [50498]	WA	In buffer area only
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Commonwealth Land - [50490]	WA	In buffer area only
Commonwealth Land - [50434]	WA	In buffer area only
Commonwealth Land - [50622]	WA	In feature area
Commonwealth Land - [50492]	WA	In buffer area only
Commonwealth Land - [50432]	WA	In buffer area only
Commonwealth Land - [50493]	WA	In buffer area only
Commonwealth Land - [50431]	WA	In buffer area only
Commonwealth Land - [50456]	WA	In buffer area only
Commonwealth Land - [50457]	WA	In buffer area only
Commonwealth Land - [50458]	WA	In buffer area only
Commonwealth Land - [50459]	WA	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [50454]	WA	In buffer area only
Commonwealth Land - [50455]	WA	In buffer area only
Commonwealth Land - [50491]	WA	In buffer area only
Commonwealth Land - [50425]	WA	In buffer area only
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Commonwealth Land - [50549]	WA	In buffer area only
Commonwealth Land - [50611]	WA	In buffer area only
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Commonwealth Land - [50545]	WA	In buffer area only
Commonwealth Land - [50543]	WA	In buffer area only
Commonwealth Land - [50441]	WA	In feature area
Commonwealth Land - [50646]	WA	In buffer area only
Commonwealth Land - [50446]	WA	In buffer area only
Commonwealth Land - [50443]	WA	In buffer area only
Commonwealth Land - [50437]	WA	In buffer area only
Commonwealth Land - [50438]	WA	In buffer area only
Commonwealth Land - [50628]	WA	In feature area
Commonwealth Land - [50640]	WA	In buffer area only
Commonwealth Land - [50445]	WA	In buffer area only
Commonwealth Land - [50444]	WA	In buffer area only
Commonwealth Land - [50447]	WA	In buffer area only
Commonwealth Land - [50567]	WA	In buffer area only
Commonwealth Land - [50568]	WA	In buffer area only
Commonwealth Land - [51436]	WA	In feature area
Commonwealth Land - [50629]	WA	In feature area
Commonwealth Land - [51117]	WA	In feature area

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [50433]	WA	In buffer area only
Commonwealth Land - [51113]	WA	In feature area
Commonwealth Land - [50569]	WA	In buffer area only
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Commonwealth Land - [50615]	WA	In buffer area only
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Commonwealth Land - [50617]	WA	In buffer area only
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Commonwealth Land - [50503]	WA	In buffer area only
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Commonwealth Land - [50613]	WA	In buffer area only
Commonwealth Land - [50614]	WA	In buffer area only
Commonwealth Land - [50478]	WA	In buffer area only
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Commonwealth Land - [50476]	WA	In buffer area only
Commonwealth Land - [50477]	WA	In buffer area only
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Commonwealth Land - [50475]	WA	In buffer area only
Commonwealth Land - [50472]	WA	In buffer area only
Commonwealth Land - [50473]	WA	In buffer area only
Commonwealth Land - [50661]	WA	In buffer area only
Commonwealth Land - [50471]	WA	In buffer area only
Commonwealth Land - [50572]	WA	In buffer area only
Commonwealth Land - [50479]	WA	In buffer area only
Commonwealth Land - [50602]	WA	In buffer area only
Commonwealth Land - [50605]	WA	In feature area
Commonwealth Land - [50604]	WA	In feature area

Commonwealth Land Name	State	Buffer Status
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Commonwealth Land - [50590]	WA	In buffer area only
Commonwealth Land - [50597]	WA	In buffer area only
Commonwealth Land - [50469]	WA	In buffer area only
Commonwealth Land - [50609]	WA	In feature area
Commonwealth Land - [50603]	WA	In buffer area only
Commonwealth Land - [50515]	WA	In buffer area only
Commonwealth Land - [50619]	WA	In buffer area only
Commonwealth Land - [50571]	WA	In buffer area only
Commonwealth Land - [50421]	WA	In buffer area only
Commonwealth Land - [50655]	WA	In buffer area only
Commonwealth Land - [50427]	WA	In feature area
Commonwealth Land - [50420]	WA	In buffer area only
Commonwealth Land - [50442]	WA	In buffer area only
Commonwealth Land - [50423]	WA	In buffer area only
Commonwealth Land - [50449]	WA	In buffer area only
Commonwealth Land - [50652]	WA	In buffer area only
Commonwealth Land - [50653]	WA	In buffer area only
Commonwealth Land - [50552]	WA	In buffer area only
Commonwealth Land - [50555]	WA	In buffer area only
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Commonwealth Land - [50551]	WA	In feature area
Commonwealth Land - [50659]	WA	In buffer area only
Commonwealth Land - [50488]	WA	In buffer area only
Commonwealth Land - [50480]	WA	In buffer area only
Commonwealth Land - [50481]	WA	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [50482]	WA	In buffer area only
Commonwealth Land - [50483]	WA	In buffer area only
Commonwealth Land - [50484]	WA	In buffer area only
Commonwealth Land - [50485]	WA	In buffer area only
Commonwealth Land - [50486]	WA	In buffer area only
Commonwealth Land - [50487]	WA	In buffer area only

Listed Marine Species	[Resource Information]		
Scientific Name	Threatened Category	Presence Text	Buffer Status

Bird			
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Actitis hypoleucos			
Common Sandpiper [59309]		Species or species habitat likely to occur within area	In feature area
Anous stolidus			
Common Noddy [825]		Species or species habitat may occur within area	In feature area
Anous tenuirostris melanops			
Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may 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
Ardenna carneipes as Puffinus carneipes			
Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In feature area
Ardenna grisea as Puffinus griseus			
Sooty Shearwater [82651]	Vulnerable	Species or species habitat may 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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely 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
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In feature area
Diomedea dabbenena Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area	In feature area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In feature area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Hydroprogne caspia as Sterna caspia Caspian Tern [808]		Foraging, feeding or related behaviour known to occur within area	In feature area
Larus pacificus Pacific Gull [811]		Foraging, feeding or related behaviour may occur within area	In feature area
Limosa lapponica Bar-tailed Godwit [844]		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
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Onychoprion anaethetus as Sterna anaethetus Bridled Tern [82845]		Foraging, feeding or related behaviour likely to occur within area	In feature area
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In feature area
Pterodroma mollis Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Puffinus assimilis Little Shearwater [59363]		Foraging, feeding or related behaviour known to occur within area	In feature area
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Stercorarius antarcticus as Catharacta skua Brown Skua [85039]		Species or species habitat may occur within area	In buffer area only
Sterna dougallii Roseate Tern [817]		Foraging, feeding or related behaviour likely to occur within area	In feature area
Sternula albifrons as Sterna albifrons Little Tern [82849]	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	Foraging, feeding or related behaviour likely to 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 steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In feature area
Thinornis cucullatus as Thinornis rubricollis Hooded Plover, Hooded Dotterel [87735]		Species or species habitat may occur within area overfly marine 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 australe Southern Pygmy Pipehorse [66185]		Species or species habitat may occur within area	In feature area
Campichthys galei Gale's Pipefish [66191]		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
Hippocampus angustus Western Spiny Seahorse, Narrow-bellied Seahorse [66234]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Hippocampus breviceps Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area	In feature area
Hippocampus subelongatus West Australian Seahorse [66722]		Species or species habitat may occur within area	In feature area
Histiogamphelus cristatus Rhino Pipefish, Macleay's Crested Pipefish, Ring-back Pipefish [66243]		Species or species habitat may occur within area	In feature area
Lissocampus caudalis Australian Smooth Pipefish, Smooth Pipefish [66249]		Species or species habitat may occur within area	In feature area
Lissocampus fatiloquus Prophet's Pipefish [66250]		Species or species habitat may occur within area	In feature area
Lissocampus runa 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
Mitotichthys meraculus Western Crested Pipefish [66259]		Species or species habitat may occur within area	In feature area
Nannocampus subosseus Bonyhead Pipefish, Bony-headed Pipefish [66264]		Species or species habitat may occur within area	In feature area
Phycodurus eques Leafy Seadragon [66267]		Species or species habitat may occur within area	In feature area
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pugnaso curtirostris Pugnose Pipefish, Pug-nosed Pipefish [66269]		Species or species habitat may occur within area	In feature area
Solegnathus lettiensis Gunther's Pipehorse, Indonesian Pipefish [66273]		Species or species habitat may occur within area	In feature area
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		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
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
Vanacampus phillipi Port Phillip Pipefish [66284]		Species or species habitat may occur within area	In feature area
Vanacampus poecilolaemus Longsnout Pipefish, Australian Long-snout Pipefish, Long-snouted Pipefish [66285]		Species or species habitat may occur within area	In feature area
Mammal			
Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area	In feature area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	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

Scientific Name	Threatened Category	Presence Text	Buffer Status
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
Hydrophis kingii as Disteira kingii Spectacled Sea Snake [93511]		Species or species habitat may occur within area	In feature area
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area	In feature area
Whales and Other Cetaceans [Resource 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
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 likely to occur within area	In feature area
Caperea marginata Pygmy Right Whale [39]		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	Breeding known 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

Current Scientific Name	Status	Type of Presence	Buffer Status
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	
Point Peron	Conservation Park	WA	In buffer area only	
Point Peron Reserve	5(1)(h) Reserve	WA	In buffer area only	
Shoalwater Islands	Marine Park	WA	In buffer area only	

EPBC Act Referrals			[Resource Information]	
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Commercial Development of Lots 12 and 13 Lodge Drive, East Rockingham, WA	2021/9069		Post-Approval	In buffer area only
Controlled action				
Industry Zone	2010/5337	Controlled Action	Post-Approval	In feature area
Mangles Bay Marina Based Tourist Precinct	2010/5659	Controlled Action	Post-Approval	In buffer area only
Not controlled action				
'Looping 10' gas transmission pipeline from Kwinana to	2005/2212	Not Controlled Action	Completed	In feature area

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Hopelands				
Expansion of existing Ammonium Nitrate Production Facility	2005/1941	Not Controlled Action	Completed	In feature area
Gas-fired Power Station	2005/2213	Not Controlled Action	Completed	In feature area
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed	In feature area
Kennedy Park Estate Residential Development	2003/1044	Not Controlled Action	Completed	In feature area
Kwinana Gas-Fired Power Station	2005/2101	Not Controlled Action	Completed	In feature area
Palm Beach Caravan Park Redevelopment, Rockingham, WA	2013/6853	Not Controlled Action	Completed	In feature area
Sepia Depression Ocean Outlet Landline Duplication	2012/6248	Not Controlled Action	Completed	In feature area
Not controlled action (particular manner)				
INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Lake Richmond Boardwalk installation, Rockingham, WA	2013/6977	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Multipurpose development stage 1 within 340ha	2004/1913	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
South West Metropolitan Railway Project	2003/1175	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Wastewater Treatment Plant	2009/4970	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Biologically Important Areas			[Resource Information]	
Scientific Name		Behaviour	Presence	Buffer Status

Scientific Name	Behaviour	Presence	Buffer Status
Seabirds			
Ardenna pacifica Wedge-tailed Shearwater [84292]	Foraging (in high numbers)	Known to occur	In feature area
Eudyptula minor Little Penguin [1085]	Foraging (provisioning young)	Known to occur	In feature area
Hydroprogne caspia Caspian Tern [808]	Foraging (provisioning young)	Known to occur	In feature area
Larus pacificus Pacific Gull [811]	Foraging (in high numbers)	Former Range	In feature area
Onychoprion anaethetus Bridled Tern [82845]	Foraging (in high numbers)	Known to occur	In feature area
Puffinus assimilis tunneyi Little Shearwater [59363]	Foraging (in high numbers)	Known to occur	In feature area
Sterna dougallii Roseate Tern [817]	Foraging	Known to occur	In feature area
Sternula nereis Fairy Tern [82949]	Foraging (in high numbers)	Known to occur	In feature area
Whales			
Megaptera novaeangliae Humpback Whale [38]	Migration (north and south)	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 is 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 on the contents of this report.

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 point locations and environmental data layers.

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 when time permits.

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 breeding sites; and
- 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.

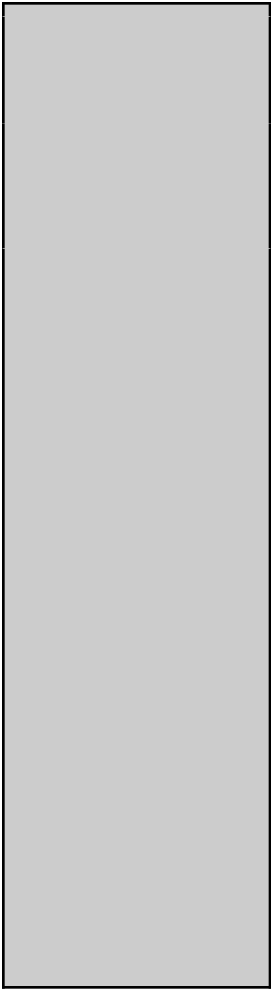
Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

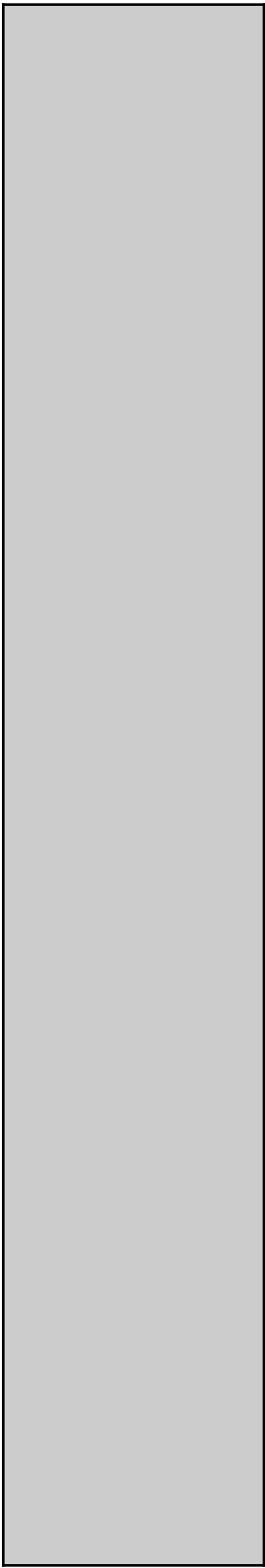
Acknowledgements

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.







Contaminated Sites Act 2003 Basic Summary of Records Search Response

Report generated at 02:20:16PM, 03/07/2025

Search Results

This response relates to a search request received for:

7 McNicholl Street
Rockingham, WA, null

Subject A On Deposited Plan 405099, part of Lot 359 On Plan 17759, Certificate of Title 2061/784 and 2061/785, 7-29
McNicholl St, Rockingham WA 6168

This parcel belongs to a site that contains 3 parcel(s).

According to Department of Water and Environmental Regulation records, this land has been reported as a known or suspected contaminated site.

Address

7 McNicholl Street
Rockingham, WA, null

Subject A On Deposited Plan 405099, part of Lot 359 On Plan 17759, Certificate of Title 2061/784

Receipt No:

ID No: 64538

Parcel Status

Classification: 16/06/2015 - **Remediated for restricted use**

Nature and Extent of Contamination:

Asbestos containing material within soil is present within the footprint of the site and is covered by an approximately 1m thick capping layer.

Restrictions on Use:

Due to the presence of asbestos-impacted fill in containment cells below geotextile warning barrier, the ongoing site management plan must be implemented to avoid any unnecessary disturbance of fill material beneath the warning barrier.

Reason for Classification:

A contamination assessment was carried out between 2011 and 2014 in order to comply with a condition that had been placed by the Western Australian Planning Commission (WAPC) on Lot 359 McNicholl Street, Rockingham as part of the planning approval process. This classification relates only to the three proposed development lots, Subject 'A', 'B', and 'C' on Interest Only Deposited Plan 405099 (the site).

An adjacent site to the east of Lot 359 was used as an uncontrolled landfill prior to 1980 which extended onto the south eastern portion of Lot 359 including this site. An uncontrolled landfill is a land use that has the potential to cause contamination, as specified in the guideline 'Assessment and Management of Contaminated Sites' (Department of Environment Regulation, 2014).

Site investigations and remediation which included soil and groundwater analysis, landfill gas survey, and soil remediation were undertaken between March 2011 and December 2014.

The soil investigations identified the metal zinc in soil at concentrations exceeding Ecological Investigation Levels, but below Health-based Investigation Levels as published in 'Assessment Levels for Soil, Sediment and Water' (Department of Environment and Conservation, 2010).

Disclaimer

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Contaminated Sites Act 2003

Basic Summary of Records Search Response

Report generated at 02:20:17PM, 03/07/2025

Soil investigations identifying potential asbestos containing material (PACM) were conducted between May 2011 and July 2012. Fragments of asbestos cement sheeting were present in soils at quantities in excess of residential use with minimal soil access levels as specified in 'Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia' (Department of Health, May 2009).

Remediation works were completed between September and December 2014. The remedial works involved removing the asbestos impacted fill layer down to virgin soil from across the site and the remainder of Lot 359, and placing it within containment cells within the footprint of the three proposed development lots. The containment cells were excavated to a depth of approximately 4.5m below surface level, filled with the asbestos impacted soil, covered with a geotextile membrane followed by an approximate 1 metre of clean natural virgin soils obtained from the excavation of the containment cells. Surplus asbestos impacted fill was disposed off-site to landfill.

Groundwater was investigated for the presence of nutrients between June 2012 and September 2012. A further groundwater investigation was completed in February 2013 to identify other chemicals of potential concern. No potential contaminants were detected in the groundwater above non-potable use of groundwater, as published in the 'Assessment and management of contaminated sites' (DER, 2014).

A landfill gas survey was conducted in February 2013, to assess the presence of landfill gas associated with the historic uncontrolled landfill. However, no landfill gas impacts were identified.

The investigations and site works were the subject of an independent review by an accredited contaminated sites auditor who provided a mandatory auditor's report (MAR) dated 23 February 2015. The MAR recommended that the site is suitable for the proposed medium-high density residential land use, and mixed use development land use. DER and the Department of Health accept the findings of the MAR.

Based on the information provided, the site is suitable for the proposed high-density residential land use provided as the endorsed Ongoing Site Management Plan for the site dated April 2015 is implemented, including managing any excavation below the geotextile warning barrier.

As the site is contaminated and has been remediated such that it is suitable for the proposed medium-high density residential land use, and mixed use development land use, subject to implementation of the Ongoing Site Management Plan, the site is classified as 'remediated for restricted use'.

No excavation may be undertaken in containment cell areas without a task/project specific risk assessment being first undertaken. In the event that the excavation will result in encountering the asbestos contaminated fill, then a health and asbestos management plan must be implemented. The asbestos management plan will be project specific and as such cannot be produced until such time as the proposed excavation in these areas is being planned.

DER, in consultation with the Department of Health, has classified this site based on the information available to DER at the time of classification. It is acknowledged that the contamination status of the site may have changed since the information was collated and/or submitted to DER, and as such, the usefulness of this information may be limited.

In accordance with Department of Health advice, if groundwater is being, or is proposed to be abstracted, DER recommends that analytical testing should be carried out to determine whether the

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Contaminated Sites Act 2003

Basic Summary of Records Search Response

Report generated at 02:20:17PM, 03/07/2025

groundwater is suitable for its intended use.

Action Required:

Due to the presence of asbestos-impacted fill in containment cells below geotextile warning barrier, the ongoing site management plan must be implemented to avoid any unnecessary disturbance of fill material beneath the warning barrier.

No excavation may be undertaken in containment cell areas without a task/project specific risk assessment being first undertaken. In the event that the excavation will result in encountering the asbestos contaminated fill, then a health and asbestos management plan must be implemented. The asbestos management plan will be project specific and as such cannot be produced until such time as the proposed excavation in these areas is being planned.

Certificate of Title Memorial

Under the Contaminated Sites Act 2003, this site has been classified as "remediated for restricted use". For further information on the contamination status of this site, please contact Contaminated Sites at the Department of Environment Regulation.

Current Regulatory Notice Issued

Type of Regulatory Notice: *Nil*

Date Issued: *Nil*

General

No other information relating to this parcel.

Disclaimer

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Contaminated Sites Act 2003 Basic Summary of Records Search Response

Report generated at 02:20:45PM, 03/07/2025

Search Results

This response relates to a search request received for:

5 Market St
Rockingham, WA, 6168

This parcel belongs to a site that contains 2 parcel(s).

According to Department of Water and Environmental Regulation records, this land has been reported as a known or suspected contaminated site.

Address

5 Market St
Rockingham, WA, 6168

Lot on Plan Address

Lot 9 On Diagram 86080

Parcel Status

Classification: 02/02/2022 - **Remediated for restricted use**

Nature and Extent of Contamination:

Asbestos-impacted fill material is present across the site below a geofabric warning barrier and a layer of clean capping material comprising orange/brown sand. The sand cap above the warning barrier is on average 0.55 metres thick, with a minimum thickness of 0.26 metres along the site's western boundary.

Restrictions on Use:

Due to the presence of asbestos-contaminated fill below the geofabric warning barrier and orange/brown sand cap, the site management plan dated 20 December 2021 (Environmental Site Services) is required to be implemented. The Site Management Plan can be requested from the department for a fee via a detailed summary of records request.

In accordance with the SMP, any change in land use or redevelopment of the site will require an update to the SMP.

Ground-disturbing works at the site are required to be undertaken in accordance with the management controls set out in the site management plan.

If redevelopment works require disturbance of the asbestos-contaminated fill beneath the geofabric warning barrier, a project-specific management plan (e.g. a 'remedial action plan' or a 'construction environmental management plan') will be required to be developed and implemented.

Reason for Classification:

This site comprises Lot 9 Market Street and Lot 10 on Diagram 86080, Rockingham, and was reported to the Department of Water and Environmental Regulation (the department) under section 11 of the 'Contaminated Sites Act 2003' (the Act), which commenced on 1 December 2006. The site was first classified under section 13 of the Act based on information submitted to the department by January 2021. The site has been classified again under section 13 of the Act to reflect additional

Receipt No:

ID No: 78438

Disclaimer

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Contaminated Sites Act 2003

Basic Summary of Records Search Response

Report generated at 02:20:45PM, 03/07/2025

technical information submitted to the department by December 2021.

The site was reported, along with adjacent land parcels, because fragments of asbestos-containing material (ACM) were found to be present in surface soils across the site. Anecdotal evidence indicates that the site was historically used as an uncontrolled landfill prior to 1953 and is therefore suspected of being the source of the ACM. Landfilling is a land use which has the potential to cause contamination, as specified in the guideline 'Assessment and management of contaminated sites' (Department of Water and Environmental Regulation, 2021). The site was vacant at the time of being reported, and remained vacant at the time of this classification, pending future redevelopment.

A soil investigation, carried out in January 2021, found that a layer of uncontrolled fill material was present across the site to a depth of one metre below ground level (bgl) and is underlain by natural sands. The uncontrolled fill layer was found to extend deeper in the northern portion (i.e. 0.9 to 1 metre bgl) compared to the southern and central portions (i.e. 0.4 to 0.7 metres bgl) of the site. The fill comprised mainly of sand with some inert waste such as concrete, gravel, brick and glass. Soil sampling also found that ACM fragments and asbestos fines were present within the uncontrolled fill layer at quantities exceeding the assessment criteria specified in 'Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia' (Department of Health, 2021) for all land uses.

A remedial action plan (RAP) was developed for the site in May 2021 that proposed the excavation and off-site disposal of asbestos-impacted fill material. Remedial works were commenced in June 2021 and comprised the excavation and offsite disposal of approximately 2620 cubic metres of fill material. A subsequent validation assessment found that ACM and asbestos fines remained at the site within deeper depositions of fill material. The depth of fill material remaining at the site was estimated to be up to 1.2 metres bgl. Due to the depth of fill remaining, further remedial works were ceased and an alternative remedial strategy developed.

An interim site management plan was developed for the site in July 2021 (finalised in September 2021) to mitigate potential risks posed by asbestos at the site pending further remediation and management works being completed.

A further RAP was developed for the site in July 2021 and, following consultation with Department of Health, finalised in September 2021.

Site remediation works were undertaken at the site during October and November 2021 in accordance with the September 2021 RAP. Remedial works comprised the removal of visible ACM from the soil surface prior to the installation of a grey-coloured geofabric warning barrier, followed by the placement of approximately 1814 cubic metres of capping fill material. The imported fill material overlying the warning barrier, an orange-brown coloured sand, was demonstrated to be free of contamination and suitable for use at the site.

Surveys completed prior to and post remedial works confirmed the sand cap above the warning barrier is on average 0.55 metres thick, with a minimum thickness of 0.26 metres along the site's western boundary. At the completion of remedial works the sand cap was 'hydroseeded' to stabilise the soil surface and minimise erosion.

No groundwater investigations have been undertaken at the site and the condition of groundwater beneath the site is unknown. However, based on the nature and extent of contamination identified at the site, there is no evidence to indicate that groundwater quality beneath the site has been impacted.

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Contaminated Sites Act 2003 Basic Summary of Records Search Response

Report generated at 02:20:45PM, 03/07/2025

Due to the presence of asbestos-contaminated fill material beneath the sand cap and geofabric warning barrier, a site management plan (SMP), dated 20 December 2021, has been prepared for the site. The SMP sets out management controls for ground-disturbing works at the site including disturbance beneath the geofabric warning barrier.

Provided the capping system remains undisturbed, and the SMP is implemented, the site appears suitable for potential residential and/or commercial uses consistent with the site's zoning. Any redevelopment of the site will require the SMP to be updated. As noted in the SMP, if future redevelopment of the site requires disturbance of the asbestos-contaminated fill beneath the geofabric warning barrier, a project-specific management plan (e.g. a 'remedial action plan' or a 'construction environmental management plan') will be required to be developed and implemented.

The site is contaminated and has been remediated such that it is suitable for future commercial and residential uses, subject to implementation of the SMP. Therefore, the site is classified as 'remediated for restricted use'.

The department, in consultation with the Department of Health, has classified this site based on the information available to the department at the time of classification. It is acknowledged that the contamination status of the site may have changed since the information was collated and/or submitted to the department, and as such, the usefulness of this information may be limited.

In accordance with Department of Health advice, if groundwater is being, or is proposed to be abstracted, the department recommends that analytical testing should be carried out to determine whether the groundwater is suitable for its intended use.

Other Relevant Information:

Additional information included herein is relevant to the contamination status of the site and includes the department's expectations for action that should be taken to address potential or actual contamination described in the Reasons for Classification.

Where the land is part of a transaction - sale, mortgagee or lease agreement, the land owners **MUST PROVIDE WRITTEN DISCLOSURE** (on the prescribed Form 6) of the site's status to any potential owner, mortgagee (e.g. financial institutions) or lessee at least 14 days before the completion of the transaction. A copy of the disclosure must also be forwarded to the department.

Action Required:

Please refer to the Restrictions on Use applicable to the site.

Certificate of Title Memorial

Under the Contaminated Sites Act 2003, this site has been classified as "remediated for restricted use". For further information on the contamination status of this site, please contact Contaminated Sites at the Department of Water and Environmental Regulation.

Current Regulatory Notice Issued

Type of Regulatory Notice: *Nil*

Date Issued: *Nil*

General

No other information relating to this parcel.

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Contaminated Sites Act 2003 Basic Summary of Records Search Response

Report generated at 02:21:01PM, 03/07/2025

Search Results

This response relates to a search request received for:

Lot 10 On Diagram 86080
Rockingham, WA, 6168

This parcel belongs to a site that contains 2 parcel(s).

According to Department of Water and Environmental Regulation records, this land has been reported as a known or suspected contaminated site.

Address

Lot 10 On Diagram 86080
Rockingham, WA, 6168

Lot on Plan Address

Lot 10 On Diagram 86080

Parcel Status

Classification: 02/02/2022 - **Remediated for restricted use**

Nature and Extent of Contamination:

Asbestos-impacted fill material is present across the site below a geofabric warning barrier and a layer of clean capping material comprising orange/brown sand. The sand cap above the warning barrier is on average 0.55 metres thick, with a minimum thickness of 0.26 metres along the site's western boundary.

Restrictions on Use:

Due to the presence of asbestos-contaminated fill below the geofabric warning barrier and orange/brown sand cap, the site management plan dated 20 December 2021 (Environmental Site Services) is required to be implemented. The Site Management Plan can be requested from the department for a fee via a detailed summary of records request.

In accordance with the SMP, any change in land use or redevelopment of the site will require an update to the SMP.

Ground-disturbing works at the site are required to be undertaken in accordance with the management controls set out in the site management plan.

If redevelopment works require disturbance of the asbestos-contaminated fill beneath the geofabric warning barrier, a project-specific management plan (e.g. a 'remedial action plan' or a 'construction environmental management plan') will be required to be developed and implemented.

Reason for Classification:

This site comprises Lot 9 Market Street and Lot 10 on Diagram 86080, Rockingham, and was reported to the Department of Water and Environmental Regulation (the department) under section 11 of the 'Contaminated Sites Act 2003' (the Act), which commenced on 1 December 2006. The site was first classified under section 13 of the Act based on information submitted to the department by January 2021. The site has been classified again under section 13 of the Act to reflect additional

Receipt No:

ID No: 78439

Disclaimer

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Contaminated Sites Act 2003

Basic Summary of Records Search Response

Report generated at 02:21:01PM, 03/07/2025

technical information submitted to the department by December 2021.

The site was reported, along with adjacent land parcels, because fragments of asbestos-containing material (ACM) were found to be present in surface soils across the site. Anecdotal evidence indicates that the site was historically used as an uncontrolled landfill prior to 1953 and is therefore suspected of being the source of the ACM. Landfilling is a land use which has the potential to cause contamination, as specified in the guideline 'Assessment and management of contaminated sites' (Department of Water and Environmental Regulation, 2021). The site was vacant at the time of being reported, and remained vacant at the time of this classification, pending future redevelopment.

A soil investigation, carried out in January 2021, found that a layer of uncontrolled fill material was present across the site to a depth of one metre below ground level (bgl) and is underlain by natural sands. The uncontrolled fill layer was found to extend deeper in the northern portion (i.e. 0.9 to 1 metre bgl) compared to the southern and central portions (i.e. 0.4 to 0.7 metres bgl) of the site. The fill comprised mainly of sand with some inert waste such as concrete, gravel, brick and glass. Soil sampling also found that ACM fragments and asbestos fines were present within the uncontrolled fill layer at quantities exceeding the assessment criteria specified in 'Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia' (Department of Health, 2021) for all land uses.

A remedial action plan (RAP) was developed for the site in May 2021 that proposed the excavation and off-site disposal of asbestos-impacted fill material. Remedial works were commenced in June 2021 and comprised the excavation and offsite disposal of approximately 2620 cubic metres of fill material. A subsequent validation assessment found that ACM and asbestos fines remained at the site within deeper depositions of fill material. The depth of fill material remaining at the site was estimated to be up to 1.2 metres bgl. Due to the depth of fill remaining, further remedial works were ceased and an alternative remedial strategy developed.

An interim site management plan was developed for the site in July 2021 (finalised in September 2021) to mitigate potential risks posed by asbestos at the site pending further remediation and management works being completed.

A further RAP was developed for the site in July 2021 and, following consultation with Department of Health, finalised in September 2021.

Site remediation works were undertaken at the site during October and November 2021 in accordance with the September 2021 RAP. Remedial works comprised the removal of visible ACM from the soil surface prior to the installation of a grey-coloured geofabric warning barrier, followed by the placement of approximately 1814 cubic metres of capping fill material. The imported fill material overlying the warning barrier, an orange-brown coloured sand, was demonstrated to be free of contamination and suitable for use at the site.

Surveys completed prior to and post remedial works confirmed the sand cap above the warning barrier is on average 0.55 metres thick, with a minimum thickness of 0.26 metres along the site's western boundary. At the completion of remedial works the sand cap was 'hydroseeded' to stabilise the soil surface and minimise erosion.

No groundwater investigations have been undertaken at the site and the condition of groundwater beneath the site is unknown. However, based on the nature and extent of contamination identified at the site, there is no evidence to indicate that groundwater quality beneath the site has been impacted.

Disclaimer

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Contaminated Sites Act 2003

Basic Summary of Records Search Response

Report generated at 02:21:01PM, 03/07/2025

Due to the presence of asbestos-contaminated fill material beneath the sand cap and geofabric warning barrier, a site management plan (SMP), dated 20 December 2021, has been prepared for the site. The SMP sets out management controls for ground-disturbing works at the site including disturbance beneath the geofabric warning barrier.

Provided the capping system remains undisturbed, and the SMP is implemented, the site appears suitable for potential residential and/or commercial uses consistent with the site's zoning. Any redevelopment of the site will require the SMP to be updated. As noted in the SMP, if future redevelopment of the site requires disturbance of the asbestos-contaminated fill beneath the geofabric warning barrier, a project-specific management plan (e.g. a 'remedial action plan' or a 'construction environmental management plan') will be required to be developed and implemented.

The site is contaminated and has been remediated such that it is suitable for future commercial and residential uses, subject to implementation of the SMP. Therefore, the site is classified as 'remediated for restricted use'.

The department, in consultation with the Department of Health, has classified this site based on the information available to the department at the time of classification. It is acknowledged that the contamination status of the site may have changed since the information was collated and/or submitted to the department, and as such, the usefulness of this information may be limited.

In accordance with Department of Health advice, if groundwater is being, or is proposed to be abstracted, the department recommends that analytical testing should be carried out to determine whether the groundwater is suitable for its intended use.

Other Relevant Information:

Additional information included herein is relevant to the contamination status of the site and includes the department's expectations for action that should be taken to address potential or actual contamination described in the Reasons for Classification.

Where the land is part of a transaction - sale, mortgagee or lease agreement, the land owners **MUST PROVIDE WRITTEN DISCLOSURE** (on the prescribed Form 6) of the site's status to any potential owner, mortgagee (e.g. financial institutions) or lessee at least 14 days before the completion of the transaction. A copy of the disclosure must also be forwarded to the department.

Action Required:

Please refer to the Restrictions on Use applicable to the site.

Certificate of Title Memorial

Under the Contaminated Sites Act 2003, this site has been classified as "remediated for restricted use". For further information on the contamination status of this site, please contact Contaminated Sites at the Department of Water and Environmental Regulation.

Current Regulatory Notice Issued

Type of Regulatory Notice: *Nil*

Date Issued: *Nil*

General

No other information relating to this parcel.

Disclaimer

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Contaminated Sites Act 2003

Basic Summary of Records Search Response

Report generated at 02:18:20PM, 03/07/2025

Search Results

This response relates to a search request received for:

25 Rockingham Beach Rd
Rockingham, WA, 6168

This parcel belongs to a site that contains 1 parcel(s).

According to Department of Water and Environmental Regulation records, this land has been reported as a known or suspected contaminated site.

Address

25 Rockingham Beach Rd
Rockingham, WA, 6168

Lot on Plan Address

Lot 99 On Diagram 88032

Parcel Status

Classification: 31/03/2011 - **Contaminated - remediation required**

Nature and Extent of Contamination:

Free-phase hydrocarbons (such as from petrol) are present in groundwater beneath the site and a dissolved phase hydrocarbon plume is present in groundwater.

Soil beneath remote fill points in the south eastern portion of the site is impacted with hydrocarbons.

Restrictions on Use:

Other than for analytical testing or remediation, groundwater abstraction is not permitted at this site because of the nature and extent of groundwater contamination.

Reason for Classification:

This site was reported to the Department of Environment and Conservation (DEC) as per reporting obligations under section 11 of the 'Contaminated Sites Act 2003', which commenced on 1 December 2006. The site classification is based on information submitted to DEC by October 2010.

This site is currently used as a service station, which has been operating since the 1980's. This is a land use that has the potential to cause contamination, as specified in the guideline 'Potentially Contaminating Activities, Industries and Landuses' (Department of Environment, 2004).

The site was reported because environmental investigations undertaken in 2000 detected the presence of hydrocarbons in the soil and groundwater beneath the site.

The investigations found that hydrocarbons (such as from petrol) were present in soils at concentrations exceeding Health-based Investigation Levels for commercial and industrial sites and Ecological Investigation Levels, as published in 'Assessment Levels for Soil, Sediment and Water' (Department of Environment and Conservation, 2010), in the vicinity of the remote fills points in the south eastern corner of the site.

Disclaimer

This Summary of Records has been prepared by Department of Water and Environmental Regulation (DWER) as a requirement of the Contaminated Sites Act 2003. DWER makes every effort to ensure the accuracy, currency and reliability of this information at the time it was prepared, however advises that due to the ability of contamination to potentially change in nature and extent over time, circumstances may have changed since the information was originally provided. Users must exercise their own skill and care when interpreting the information contained within this Summary of Records and, where applicable, obtain independent professional advice appropriate to their circumstances. In no event will DWER, its agents or employees be held responsible for any loss or damage arising from any use of or reliance on this information. Additionally, the Summary of Records must not be reproduced or supplied to third parties except in full and unabridged form.

Contaminated Sites Act 2003

Basic Summary of Records Search Response

Report generated at 02:18:20PM, 03/07/2025

DEC understands that some soil remediation involving excavation and off-site disposal works were carried out in 2004; however, impacted soil still remains on the site.

Several groundwater investigations conducted at the site between 2003 and 2010 identified hydrocarbons (such as from petrol or diesel) in groundwater at concentrations exceeding Groundwater Intervention Values (Netherlands Ministry for Housing, Spatial Planning and Environment, 2000). Additionally, free-phase hydrocarbons (such as pure petrol) were detected floating on the surface of the groundwater. Groundwater monitoring results from September 2010 indicate that the level of hydrocarbon impact in the groundwater may be naturally attenuating; however further monitoring is required to confirm this.

As an appropriate Health Risk Assessment has not been carried out, DEC cannot comment on the suitability of the site for continued use as a service station.

As free-phase hydrocarbons (from petrol) are present in the groundwater and hydrocarbons are present in the soil, acting as a significant source of dissolved-phase groundwater contamination, which may present a risk to human health, the environment, or environmental values, the site is classified as 'contaminated - remediation required'.

A memorial stating the site's classification has been placed on the Certificate of Title, and will notify any prospective owners of the contamination status of the site.

DEC understands that Monitored Natural Attenuation (MNA) has been proposed as a groundwater remediation technology. However, further investigations are required, in accordance with the guideline "Use of Monitored Natural Attenuation for Groundwater Remediation" (Department of Environment, April 2004), to determine whether MNA will be viable at the site.

DEC, in consultation with the Department of Health, has classified this site based on the information available to DEC at the time of classification. It is acknowledged that the contamination status of the site may have changed since the information was collated and/or submitted to DEC, and as such, the usefulness of this information may be limited.

Certificate of Title Memorial

Under the Contaminated Sites Act 2003, this site has been classified as "contaminated - remediation required". For further information on the contamination status of this site, please contact the Contaminated Sites section of the Department of Environment & Conservation.

Current Regulatory Notice Issued

Type of Regulatory Notice: *Nil*

Date Issued: *Nil*

General

No other information relating to this parcel.

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About Site Environmental Assessment Reports

1. Introduction

This document explains the Environmental Site Assessment (ESA) process and the context that applies to the use of Environmental Reports issued by Cardno.

2. What is an ESA?

Environmental Site Assessments (ESA) are undertaken for a range of purposes, specific to the brief issued by the client in each case. The scope may include one or a combination of any of the following:

- q A factual report of the condition of a portion of the site or one aspect of an entire site.
- q Assessment of the contamination levels in soil to be removed from a site – a waste classification assessment.
- q Validation of the success of remediation of a site or a portion of a site.
- q Provision of a professional opinion about the suitability of a site for one or more uses, in terms of its contamination status.

The scope of any ESA needs to be defined at the outset.

An ESA is not an Environmental Audit. Such audits are undertaken in accordance with the provisions of regulations enacted in various states of Australia, and are referred to as Site Audits in some jurisdictions. Statutory audits provide certification by EPA accredited auditors that a site is suitable for one or more uses. An ESA may provide similar advice but cannot be used in place of an audit if the latter is required by regulation in any instance. However in some circumstances and jurisdictions an ESA is sufficient to provide “environmental sign-off” of a site.

An ESA may be undertaken for due diligence purposes, to establish whether the site has been impacted to the extent that some beneficial uses of the site may be precluded. Due diligence audits in many cases may be completed as non-statutory Audits, although in some jurisdictions they can also be statutory audits, if defined as such at the outset.

3. The ESA Process

The Client generally initiates the ESA process by specifying a brief which identifies the specific objectives of the assessment. If not, it is the consultants' duty to so specify the ESA

In the case of an ESA to provide an opinion about the suitability of the site for use, it would be conducted in accordance with NEPM (Site Assessment). Such ESA would not commence until a thorough site history assessment (Phase 1 Assessment: to identify the potential for significant contamination at a site) is conducted. However, where the history is unclear, a broad screening of chemical parameters can be used to test environmental media. This normally includes a broad range of organic and inorganic compounds and elements, often referred to as an Environmental Screen.

(In the case of an ESA for a purpose other than to provide an opinion about the suitability of the site for use, it is not always necessary to undertake a Phase 1 assessment.)

The ESA requires sampling of soil at representative locations across the site. A NATA accredited laboratory performs the analysis of soil. It is impractical for all of the soil to be assessed. The ESA is often based on a statistical method of grid or random sampling, augmented by targeted sampling at locations known or suspected to be contaminated. Guidance on sampling strategy and density is provided in Australian Standard AS4482.1:2005. However, some considerable degree of judgement is still required in the application of any sampling and testing strategy. For example the blanket application of the “hot spot” method presented in this standard is often inappropriate given its limitations.

The field program also investigates the likelihood of contamination below the site surface. Field investigations must sample and test fill as well as the natural soils. If contamination is found then it is common for further work to be undertaken to characterise, to the extent practical, its vertical and horizontal extent. However, where fill is encountered and testing shows it to be uncontaminated, it must be realised that the heterogeneous nature of the material might mean that not all pockets of contaminated material can be detected using normal sampling regimes.

EPA guidelines for auditors, that may be relevant for an ESA, indicate the need in all cases to consider the potential for groundwater contamination in any site. This does not mean all sites need to be drilled to sample groundwater, but it is most often the case. Most hydrogeological settings and groundwater conditions are complex and vary in space and time. The condition of groundwater is investigated to identify if any beneficial use or environmental value of groundwater is precluded due to contamination.

As previously stated for soil, all groundwater at the site cannot be tested. The environmental investigations are conducted in accordance with industry standards and guidelines (e.g. EPA Vic Pub 668). This provides a level of confidence that a sufficiently comprehensive assessment of the groundwater at the site is achieved.

Where an investigation shows that groundwater is polluted, consideration should be given to assessing the risks and the need for and practicality of any clean up.

4. Environmental Assessment Report

The ESA Report details the findings of the ESA. It provides summary information on the site definition, the reasons for the assessment and other relevant facts. It reviews the scope and quality of the site investigations, laboratory testing and data analyses undertaken. These reports also present a review of the contamination status of the site, the need for any further clean up, and an opinion on the suitability of the site for a range of beneficial uses and land uses such as “residential – low density”, “commercial” etc, as appropriate.

However, as noted above, some ESA have a narrow scope such as for classification of waste soil for removal from site, and do not make conclusions on suitability of site for use.

The ESA Report generally includes copies of other documents and reports, necessary to support the assessment findings, presented as appendices. These can contain more detailed information than the body of the ESA Report. Care should be taken to also read the appended documents and the ESA report in full.

Cardno generally issues reports in electronic form (e-Report) on CD ROM. ESA Reports are issued in this format as Adobe Acrobat™ PDF files. However, a paper copy of the executive summary of the ESA Report is generally issued to the client, and others as required by the brief or by regulation.

5. Limitations of Environmental Assessment Report

The ESA Report is prepared in a manner that can be easily read by a lay person with a legitimate interest in the contamination status of the site, such as the site owner or occupier, EPA and Local Planning Authority. The ESA report is not intended for use by other parties or for other purposes. Anyone who uses the assessment report for purposes other than specified in the report, does so at their own risk.

The site should only be used for one or more of the beneficial uses and land uses identified in the ESA as suitable.

The conditions and qualifications may apply to the suitability of the site for use, and it is the responsibility of the Client to be cognizant of and accept these in accepting the report. Cardno are only responsible for the issuing of the ESA report but accepts no liability for the costs incurred in the implementation of ESA findings.

The ESA provides a “snapshot” of the site conditions at the time of the site investigation. Consequently, the report may not be valid at a later time if there has been any change to the contamination status of the site in that time. Verification of the status of the site may be required in cases where a significant time has elapsed, or site conditions have changed since the assessment and audit.

The ESA is necessarily limited by constraints such as time, cost and available information; although normal professional practice at the time has been applied with all due care to prepare the report. A necessary requirement of this process is the horizontal and vertical interpolation of data from discrete locations. However, site conditions are generally not homogenous and some discrepancies will occur between the actual and predicted results at locations not directly sampled. There is a risk that contamination may occur at the site and not be identified by a competent investigation and assessment. The approach adopted in sampling (a combination of statistically based grid and judgmental sampling) seeks to reduce, but cannot eliminate, this risk.

Where unexpected occurrences of contamination arise, subsequent to the issue of the ESA Report, Cardno should be permitted to make an interpretation of these facts in relation to the ESA Report findings. Consequently, the Client should inform Cardno and seek their opinion. Cardno accepts no liability for costs incurred due to such

unexpected occurrences, given the inherent uncertainties in the assessment process.

Cardno uses information provided by other parties as the basis for the ESA, and reliance on this information is at the discretion of Cardno. However, however Cardno cannot guarantee any of the facts, findings or conclusions presented by other parties. Cardno will not be liable for the use of information, provided by others that is subsequently found to be intentionally misleading.

The ESA Report is not and does not purport to be anything other than a contaminated land ESA. It is not a geotechnical report and bore logs reproduced are for interpretation of the likely distribution of contamination. They are not intended for geotechnical interpretations and may not be adequate for this purpose.

The ESA Report is not intended to be a comprehensive analysis of the presence and associated risk of asbestos in buildings and services. Where asbestos in buildings and services is known or likely, the report may only caution that an appropriately qualified person be engaged to undertake demolition to avoid contamination of the site.

Cardno

13 August 2015

About Cardno

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