Ferry Extension Project: Perth to Applecross

Biological Survey

Public Transport Authority

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Executive summary

The Public Transport Authority (PTA) is planning to expand the ferry public transport system within the Swan River. The project is expected to include the following elements:

– Expansion of the ferry fleet with new ferries, potentially using water jet propulsion and electric power.
– Ferry terminals, including:
  - extension of the existing Elizabeth Quay jetty.
  - new jetty at Matilda Bay with onshore electric charging infrastructure and public amenities.
  - new jetty at Applecross with associated pedestrian access.
– Operation of new ferry services between Elizabeth Quay, Matilda Bay and Applecross, GHD Pty Ltd was engaged by Public Transport Authority (PTA) to undertake the assessment of flora, vegetation and fauna values and diversity and abundance within the Survey Area that encompasses the project.

The biological survey involved a desktop assessment, basic reconnaissance flora and vegetation survey and basic reconnaissance-level fauna survey assessment. The flora and vegetation surveys and fauna surveys were conducted concurrently on the 7 March 2025 and 27 March 2025. The purpose of the surveys was to identify the flora, vegetation, fauna and values present within the area to inform the design, environmental assessment and approvals process.

In addition to the biological survey, recent mapping by the Department of Biodiversity, Conservation and Attractions (DBCA) identified approximately 590 hectares (ha) of seagrass communities within the Swan-Canning Estuary, classified into sparse, medium, and dense coverage zones (DBCA, 2025). While the current survey sites do not directly intersect mapped high-density seagrass beds, this updated spatial data provides important context for understanding benthic habitat values in adjacent estuarine areas and should be considered in the broader environmental approvals process.

Vegetation and flora

The background desktop assessment identified three main vegetation unit types with no wetlands or major conservation reserves or ecological communities directly intersecting or occurring within the four survey sites themselves, and a total of 167 significant listed threatened and priority flora species located within a 10 km radius Study Area of all four Survey Sites. However, no such species were found or recorded within the survey sites themselves and were confined to neighbouring ecological communities and established nature reserves and parks.

A small number of basic vegetation types were recorded within the three various Survey Sites of the Survey Area, varying from one to three vegetation types across the three sites, with the larger range of vegetation types and vegetation cover being observed at Matilda Bay. Across the Survey Area, the dominant vegetation types consisted of cleared parkland, scattered native Eucalypt, Melaleuca, and Peppermint, Shoreline and Estuarine Riparian, rehabilitation and re-plantings. The remaining areas consisted of sections completely devoid of vegetation. As a result, all three sites across the Survey Area were considered to be Cleared.

A total of 19 vascular flora species, were recorded across all three sites within the Survey Area. This total included 10 native and nine introduced species. As the Survey Area has previously been significantly cleared and altered, the flora of the area consisted of both planted exotic and native species, with scattered, significant individual trees from various *Agonis* (Peppermint), *Melaleuca*, Eucalypt and Marri species present in small numbers at the Matilda Bay sites. No observed flora species are listed as declared pest plants in WA under the BAM Act, or Weeds of National Significance (WoNS) (Australian Weeds 2012).

No EPBC or state listed TECs, or DBCA listed PECs were recorded within any of the three sites within the Survey Area, reinforcing the highly degraded, low ecological value of the Survey Area in the current state compared to historically occurring ecological diversity, value, and in comparison to the established higher value systems present in communities within the 10km radius of the desktop Study Area such as Banksia Woodlands of the Swan Coastal Plain, and in neighbouring nature reserves and conservation-listed parks.

Fauna

Database desktop searches across various state and federal records have identified a significant number (94 taxa of species and sub-species) of Threatened and Priority fauna species that had either been previously recorded or determined to be likely to occur within the Study Area, which includes a 10 km radius from all three sites across the Survey Area. However, such previous records were not located within the Survey Area in great frequency, and were concentrated within neighbouring areas of higher habitat value or established conservation reserves and parks.

A small number of basic fauna habitat types were recorded across the Survey Area, consisting of four basic habitat types to varying sizes and coverage across the three sites of the Survey Area. These fauna types were classified as Scattered Trees (Native and Exotic), Parkland over revegetation and re-planted flora, Riparian Rivers and shoreline wetlands and Completely Cleared. These fauna habitats are likely to support a comparatively small range of regionally common terrestrial fauna species, primarily birds, within the habitats available. Field surveys across all three Survey Sites of the Survey Area recorded small numbers of predominantly locally common bird species, ranging from as few as four species at Elizabeth Quay to 13 species at Matilda Bay. Furthermore, no conservation significant fauna species, listed under either *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) level or the WA *Biodiversity Conservation Act 2016* (BC Act), were recorded. A total of three potential black cockatoo breeding trees (with a diameter at breast height (DBH) of 500 mm) were identified at the Matilda Bay site. It is, however, unlikely that the current Survey Area contain enough habitat of sufficient quality to allow for persistent use in breeding, foraging or roosting activity when compared to the neighbouring recorded areas of higher quality and value for black cockatoos.

From an assessment of potentially significant trees that were deemed to be of notable importance in terms of size, significance to native fauna use and overall importance to the Survey Site, there were no significant trees observed at either the Applecross Survey Site or the Elizabeth Quay Survey Site. When including the suitable DBH trees in the assessment, a total of seven potentially significant tree groupings were identified and recorded across the remaining Survey Site, with all seven at Matilda Bay. The majority of these trees were isolated individuals with a small number of small groupings of three to four. Most of these trees were also native species of older ages and size and condition compared to other surrounding flora species observed, with each of them offering potential foraging, temporary resting and nesting habitat for locally common bird species as well as the identified black cockatoo trees offering the potential for lower value foraging and feeding and temporary resting habitat. The details of each group of potentially significant trees are provided in table format in Appendix D. It is noted that while other trees of smaller size and condition were observed at the Matilda Bay Survey Site, these were not deemed to have a significant size or condition to be assessed as of significance to the Survey Site as a source of fauna utilisation when compared to those identified and highlighted trees. While the majority of the previously identified significant species from desktop assessment were not assessed as likely to occur or known to occur, a small number of similar species across the Survey Area were deemed likely to occur or possibly occurring, ranging from eight species at the Elizabeth Quay and Applecross sites, to nine species at the Matilda Bay site. There was a higher number of such species at Matilda Bay assessed as being likely to occur as opposed to potentially occurring. This is due to the higher presence of re-planted and rehabilitated vegetation cover and the presence of a small number of clusters of scattered existing trees, of which a smaller number were assessed as being of lower value but potential feeding and foraging trees for the three local threatened Black Cockatoo species. These sites also contained greater potential for temporary resting or temporary foraging for species such as Osprey and Quenda.

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1. Introduction

1.1 Project background

The Public Transport Authority (PTA) is planning to expand the ferry public transport system within the Swan River. The Project is expected to include the following elements:

– Expansion of the ferry fleet with new ferries, potentially using water jet propulsion and electric power
– Ferry terminals, including:
  - extension of the existing Elizabeth Quay jetty
  - a new jetty at Matilda Bay with onshore electric charging infrastructure and public amenities
  - a new jetty at Applecross with associated pedestrian access
  - a new jetty at Canning Bridge, with pedestrian access provided through the Canning Bridge Bus Interchange project.
– Operation of new ferry services between Elizabeth Quay, Matilda Bay and Applecross.

1.2 Purpose of this report

PTA commissioned GHD to conduct a biological assessment to support the project approvals process. Specifically, the scope was to undertake terrestrial flora, vegetation, and fauna desktop assessment field surveys for the three proposed sites associated with the project.

1.3 Location

1.3.1 Study Area

The total Study Area for the desktop assessment and related database searches comprised of a 10 km buffer radius from all three proposed survey sites, which was compiled into a single Study Area for assessment. Figure 1, Appendix A maps the Study Area.

1.3.2 Survey Area

The Survey Area consisted of three separate sites across the Swan River Region. These locations were based at:

– Elizabeth Quay
– Applecross
– Matilda Bay

A figure outlining specifics of each survey site are provided in Appendix A, Figure 1.

1.4 Scope of works

The scope of works addressed the survey area and includes:

– A desktop review of publicly available information to determine the environmental values of the Survey Area
– A reconnaissance flora and vegetation field survey to verify/ground truth the desktop assessment findings through techniques in accordance with Environmental Protection Authority (EPA) flora and vegetation survey guidelines (EPA, 2016)
– A basic fauna survey including fauna habitat mapping based on vegetation units in accordance with EPA (2020)
– Preparation of a biological assessment report (this document) on the findings of the desktop assessment and field survey.

1.5 Relevant legislation, conservation codes and background information

In Western Australia (WA) significant communities, and flora and fauna are protected under both Federal and State Government legislation, including the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), *Environmental Protection Act 1986* (EP Act), *Biodiversity Conservation Act 2016* (BC Act) and the *Biosecurity and Agriculture Management Act 2007* (BAM Act).

In addition, regulatory bodies also provide a range of guidance and information on expected standards and protocols for environmental surveys. An overview of key legislation and guidelines, conservation codes and background information relevant to this Project are provided in Appendix B.

1.6 Report limitations and assumptions

This report has been prepared by GHD for and may only be used and relied on by PTA for the purpose agreed between GHD and PTA as set out in section 1.2 of this report.

GHD otherwise disclaims responsibility to any person other than arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

GHD has prepared this report on the basis of information provided by PTA and others who provided information to GHD (including Government authorities), which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

This report has assessed desktop environmental aspects and biological factors in the field for the survey sites. Should these areas change or be refined, further assessment may be required.

2. Methodology

2.1 Desktop Assessment

Prior to the commencement of the field survey, a desktop assessment was undertaken to identify relevant environmental information pertaining to the study area and to assist in survey design, with a 10 km radius buffer search around all three identified sites. Given the close proximity of the three sites together across the Perth Metropolitan area, one whole desktop analysis encompassing all three sites was undertaken. The desktop assessment involved a review of the following:

- The Department of Climate Change, Energy, Environment and Water (DCCEEW) Protected Matters Search Tool (PMST) to identify communities and species listed under the EPBC Act potentially occurring within the study area (Department of Climate Change, Energy, the Environment and Water 2022a) (Appendix C)
- The Department of Biodiversity, Conservation and Attractions (DBCA) *NatureMap* database for flora and fauna species previously recorded within the study area. (Note that the minimum buffer distance of the *NatureMap/Dandjoo* Search is 10 km, so this encompasses species beyond the 5 km study area) (DBCA 2025a), Appendix C)
- The BirdLife Australia's Atlas, Birdata datasets and Great Cocky Count dataset to identify Black Cockatoo roosts (Birdlife Australia 2016).
- The DBCA Threatened Ecological Community (TEC) and Priority Ecological Community (PEC) database to determine the potential for TECs or PECs to be present within the study area (Department of Biodiversity, Conservation and Attractions 2022b).
- The DBCA Threatened and Priority Flora database (TPFL) and the WA Herbarium database (WAHERB) for Threatened flora species listed under the EPBC Act and/or the BC Act and listed as Priority by DBCA, previously recorded within the study area (2025c).
- Broad vegetation mapping of the Survey Area (Beard 1979 and Heddle *et al* 1980), aerial photography, geology/soils and hydrology information to provide background information on the variability of the environment, likely vegetation units and fauna habitats and to identify areas with potential to contain TECs, PECs, and Threatened and Priority listed flora and fauna species.
- Atlas of Living Australia (ALA) Spatial Portal (Atlas of Living Australia 2025), due to the limitations of the *NatureMap* Search, the flora diversity section of the desktop assessment is informed by the ALA spatial portal database search.
- Data WA main database website (www.data.wa.gov.au) with access to specific state-based information relating to Hydrology, Wetlands, Landforms and Soils, Environmentally Sensitive Areas (ESA) and conservation reserves.

2.2 Field Survey

2.2.1 Vegetation and flora

The field surveys were undertaken to verify the results of the desktop assessment, identify and describe the dominant vegetation types, assess vegetation condition, and identify and record vascular flora taxa present at the time of survey. Searches for significant ecological communities and flora taxa were also undertaken during the field survey. A map depicting GPS track logs to attest to time and effort expended is included in Figure 2, Appendix A. GHD Zoologist Phil Patterson and Graduate Ecologist Rebecca Jarrold conducted the flora and vegetation survey over one and half days on 7th March 2025 and 27th March 2025.

The survey methodology employed by GHD was undertaken with reference to the EPA *Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment* (Environmental Protection Authority 2016).

2.2.1.1 Data collection

Given the highly disturbed nature of the site and lack of native vegetation, quadrat sampling was not deemed necessary, and effort was placed in traversing the Survey Area to identify native species, overall dominant

vegetation types and flora species, and potentially significant weeds (as shown in Table 1. This survey effort is considered suitable to meet the requirement of a reconnaissance survey.

Table 1 Data collected during the field survey

Aspect	Measurement
Physical features	Landform, slope, aspect, soil attributes, ground surface cover, leaf and wood litter.
Location	Coordinates recorded in GDA94 datum using a hand-held GPS tool.
Vegetation condition	Vegetation condition was assessed using the condition rating scale adapted by EPA (2016) for the South West Botanical Province.
Disturbance	Level and nature of disturbances (e.g. weed presence, fire and time since last fire, impacts from grazing, anthropogenic activities).
Flora	Broad flora species overview and description of dominant species present with positively identified significant flora species recorded and mapped where or if evident.

2.2.1.2 Vegetation types and mapping

Vegetation types were identified, and boundaries delineated using a combination of aerial photography, topographical features, and field data and observations.

Vegetation types were described based on structure, dominant taxa and cover characteristics as defined by relevé data and field observations. Vegetation type descriptions followed Native Vegetation Information System (NVIS) and consistent with NVIS level V (Association). At Level V up to three taxa per stratum are used to describe the association (NVIS Technical Working Group 2017).

2.2.1.3 Vegetation condition

Vegetation condition was assessed and mapped in accordance with the vegetation condition rating scale for the South West and Interzone Botanical Provinces (devised by Keighery (1994) and adapted by EPA (2016). The scale recognises the intactness of vegetation and consists of six rating levels. The vegetation condition rating scale is outlined in Appendix B.

2.2.1.4 Targeted surveys for significant flora

The results of the desktop assessment were reviewed, and a target list of significant flora taxa compiled. Ecological information (habitat, associated flora taxa and phenology) was sourced from *FloraBase* (Western Australian Herbarium 2022) and other relevant publications where available.

Habitat for significant flora taxa in the Survey Area was traversed on foot. The survey methods were undertaken with reference to EPA (2016). Figure 2 (Appendix A) presents survey effort through GPS track logs.

Where significant flora taxa were identified the locations and number of plants present were recorded using a GPS unit.

2.2.1.5 Taxonomy and Nomenclature

A flora inventory was compiled from taxa listed from opportunistic floristic records throughout the Survey Areas. Species that were well known to the survey ecologists were identified in the field. Species were identified by the use of taxonomic literature, electronic keys and online electronic databases.

The conservation status of all recorded flora was compared against the current lists available on *FloraBase* (Western Australian Herbarium 2022) and the EPBC Act Threatened species database provided by DCCEEW (2022b)

Nomenclature used in this report follows that used by the WA Herbarium as reported on *FloraBase* (Western Australian Herbarium 2022).

2.2.2 Vertebrate fauna survey

GHD Zoologist Phil Patterson and Graduate Ecologist Rebecca Jarrold conducted the fauna survey over one and half days day on 7 March 2025 and 27 March 2025.

The following guidance were referenced to conduct the survey:

– Technical Guidance – Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment (EPA 2020)
– Referral guideline for 3 WA threatened black cockatoo species: Carnaby's Cockatoo, Baudin's Cockatoo and the Forest Red-tailed Black Cockatoo (Department of Agriculture, Water and Environment (DAWE) 2022).

In the context of a Basic fauna survey, the guidance statement advises field observers to describe the fauna habitats of the Survey Area, which give a comprehensive list of fauna that can reasonably be expected to occur. Therefore, the aim of the fauna component of the survey included descriptions of fauna habitats in the Survey Area and a compilation of fauna species recorded opportunistically as the Survey Area was traversed. Significant fauna considered likely to occur were targeted during the traverses undertaken, through targeting and recording any secondary signs of fauna (mounds, tracks, feeding evidence) or visible/audible encounters of the target species in suitable habitat. Black Cockatoos known to occur locally, and their habitat were specifically targeted during the survey as detailed below.

2.2.2.1 Fauna habitat assessment

A fauna habitat assessment was undertaken to document the types, value, and extent of habitats within the Survey Area. Habitat delineation was aligned closely with the vegetation community types identified during the flora and vegetation survey. Specifically, the assessment included:

– Habitat structure (vegetation community type, structural layers such as ground cover and mid storey)
– Presence/absence of refuge including density of vegetation strata and ground debris, hollow-bearing trees and stags, and the type and extent of each refuge
– Presence/absence of waterways (natural or artificial)
– Location of the habitat within the Survey Area and local context with surrounding landscape
– Habitat connectivity and identification of wildlife corridors within and immediately adjacent to the Survey Area
– Current land use and disturbance history
– Evaluation of key habitat features, and types identified during the desktop assessment relevant to fauna of conservation significance
– Evaluation of the likelihood of occurrence of significant fauna, based on presence of suitable habitat
– Mapping of the broad habitat types identified
– A representative photograph of each broad habitat type.

2.2.2.2 Opportunistic fauna searches

Opportunistic fauna searches were undertaken across the Survey Area, involving:

– Species inventory based on observed fauna and recorded tracks, scats, and other evidence.
– Searching through microhabitats including turning over logs or rocks, turning over leaf litter and examining tree hollows and logs
– Visual and aural surveys, which accounted for many bird species potentially utilising the Survey Area
– Recording GPS locations of any significant fauna species observed.

2.2.2.3 Taxonomy and Nomenclature

Identification of fauna species was made in the field using available field guides and electronic guides. In accordance with the EPA technical guidance, nomenclature for herpetofauna and mammals follows that of the Western Australian Museum Checklist of the Vertebrates of Western Australia (Western Australia Museum 2021) and birds follows the Australian Faunal Directory (Department of Environment and Energy 2022).

2.3 Survey limitations

Following completion of the desktop assessment and field surveys, a review of any limitations that may have affected a complete assessment of the data collected was conducted.

The EPBC Act PMST is based on bioclimatic modelling for the potential presence of species. As such, this does not represent actual records of the species within the area. The records from the Department of Biodiversity, Conservation and attractions (DBCA) searches of Threatened flora and fauna provide more accurate information for the general area based on prior records. However, some records of collections, sightings or trappings cannot be dated and often misrepresent the current range of Threatened species. Notwithstanding, database records pertaining to significant taxa and plant communities are interrogated where possible anomalies or outlying records are found to ensure thoroughness and accuracy.

The limitations listed in Table 2 are based on those suggested as considerations in Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (Environmental Protection Authority 2016) and Technical Guidance – Terrestrial Fauna Surveys for Environmental Impact Assessment (Environmental Protection Authority 2020).

Table 2 Field survey limitations

Aspect	Constraint	Comment
Sources of information and availability of contextual information.	Nil	The vegetation types of the Swan Coastal Plain (SCP) were mapped by Beard at a scale of 1:250,000 in the 1960s and 1970s (later digitised) with the entire area later mapped at a scale of 1:1,000,000 (Beard 1979). Vegetation complexes of the SCP (south of Lancelin) have been mapped at a scale of 1:250,000 and compiled into a dataset (Department of Biodiversity, Conservation and Attractions 2018a). The majority of the SCP was described by Heddle, Loneragan and Havel (1980) with the far southern section completed by Webb et al (2016). Information at a local scale is available for Bush Forever Sites (Government of Western Australia 2000). All fauna databases such as DBCA, Dandjoo and Atlas of Living Australia have extensive current and historical recordings of both common and significant fauna and outlining of core and suitable habitat and were assessed in combination with the current field survey assessments.
Scope (what life forms were sampled etc.)	Minor	Vascular terrestrial flora and terrestrial vertebrate fauna were assessed during the survey. Non-vascular flora, aquatic flora, invertebrate and aquatic fauna were not surveyed. Furthermore, aquatic vertebrate fauna species were only observed on an opportunistic basis due to the small proportion of various survey sites that featured marine habitat.
Proportion of flora collected and identified (based on sampling, timing and intensity) Proportion of fauna identified, recorded and/or collected	Minor	The single season reconnaissance level flora and vegetation survey was undertaken in Autumn (March 2025), which is outside of the typically optimal timing for flora surveys in the Southwest Botanical Province (EPA 2016). However, due to the highly degraded and historically cleared nature of all four survey sites, this was not considered to significantly impact the diversity and abundance of species or their capacity to be identified. Given the small survey site sizes, low remnant vegetation and low remaining species diversity due to extensive clearing and land conversion, the reconnaissance level assessment required for the current project and brief overview of vegetation and flora species type was considered sufficient. The Basic fauna survey and habitat assessment was undertaken in March 2025. The fauna assessment was aimed at identifying broad habitat types and significant terrestrial vertebrate fauna utilising the Survey Area. The fauna assessment sampled those species that can be easily seen, heard or have distinctive signs, such as tracks, scats, diggings, etc. Many cryptic species would not have been identified during a Basic survey and seasonal variation within species often requires Targeted surveys at a particular time of the year. Of the fauna species recorded during the survey, all were identified to species level. The survey timing was considered appropriate for the purpose of the assessment.
Flora determination	Minor	Flora determination was undertaken by GHD ecologists and zoologists in the field and through further consultation with senior botanists and ecologists once back in the main GHD office from photos and GPS recordings. None of the species observed were potential significant flora. The taxonomy and conservation status of the WA flora is dynamic. This report was prepared with reliance on taxonomy and conservation status current at the time report development, but it should be noted

Aspect	Constraint	Comment
		this may change in response to ongoing research and review of International Union for Conservation Nature criteria.
Completeness and further work which might be needed (e.g. was the relevant area fully surveyed)	Nil	The Survey Area was considered adequately surveyed to compile a representative list of species, as well as to describe and map vegetation at a level appropriate for impact assessment and approval determination.
Mapping reliability	Minor	The survey was conducted using high-resolution aerial imagery obtained from Landgate, topographical features, previous vegetation mapping (Heddle *et al.* 1980 and Webb *et al.* 2016) and field data. Data was recorded in the field using hand-held GPS tools (e.g. Samsung tablet, Garmin GPS and Trimble). Certain atmospheric factors and other sources of error can affect the accuracy of GPS receivers, including tree canopies. The Garmin GPS units used for this survey are accurate to within ±5 metres on average, whereas the Trimble unit is capable of a <2 m accuracy. Therefore, the data points consisting of coordinates recorded from the GPS may contain minor inaccuracies.
Timing/weather/ season/cycle	Minor	The field survey was conducted during the early Autumn period (March, 2025 (Bureau of Meteorology 2025). In the three months prior to the survey (November 2024- January 2025) 19.6 mm of rainfall was recorded. This total is below the long-term average for the same period (November 2024 -January 2025; 50mm) (Bureau of Meteorology 2025), and represents the drier and hotter season for numerous species of flora and fauna. This may slightly reduce recordings of certain terrestrial vertebrate fauna species. However, due to the highly degraded and altered aspects of all three Survey Sites, it is unlikely that this would significantly impact the accuracy of findings in terms of representing flora and fauna presence at the Survey Sites.
Disturbances (e.g. fire, flood, accidental human intervention)	Minor	The Survey Sites have previously been completely cleared due to historic land use, and conversion to recreational parkland and infrastructure.
Intensity (in retrospect, was the intensity adequate)	Nil	The vascular flora of the Survey Area was sampled in accordance with EPA (2016) and terrestrial fauna sampled in accordance with EPA (2020). The survey intensity was of suitable intensity for the size, location and level of existing disturbances and development across the survey sites. A minimum of three flora sample sites were located within each identified vegetation type, where possible. In some instances, less than three sites were described per vegetation type, this was due to the limited area and geographic range of the vegetation type and/or the degraded condition of the vegetation. As the area has been completely cleared and replanted with a mixture of local and non-local native species, relevés were used to sample vegetation, and quadrats were subsequently not required as The Survey Area was sufficiently covered by the GHD ecologist and zoologist during the survey.
Resources	Nil	Adequate resources were employed during the field survey. Two days were spent undertaking the survey using a combination of one graduate ecologists and one zoologist. The relatively small sizes of each survey site and in proximity to one-another allowed for each site to be accessed and surveyed within a single day of fieldwork.
Access restrictions	Nil	No access restrictions were encountered for the survey sites in the field.
Experience levels	Minor	The zoologist and graduate ecologist who executed the survey are experienced practitioners with over 4 years of environmental consultancy experience, including assessment and research surrounding the Swan Coastal Plain.

3. Desktop assessment

3.1 Climate

The Study Area experiences a temperate climate with distinctly dry, hot summers and cool, wet winters.

The Bureau of Meteorology Perth Metro station (site number 009225) is the nearest weather station to the Study Area with continuous long-term data. Climatic data from this site indicates the mean maximum temperature of the area ranges from 19.0°C in July to 29.7 °C in December and the mean minimum temperature ranges from 8.7 °C in July to 19.4 °C in February (Bureau of Meteorology 2025). The mean annual rainfall is 726.9 mm (Bureau of Meteorology 2025). In the three months prior to the survey (November 2024- January 2025) 19.6 mm of rainfall was recorded. This total is below the long-term average for the same period (November 2024 -January 2025; 50mm) (Bureau of Meteorology 2025).

3.2 Landforms and soil

The Survey Area occurs on the Swan Coastal Plain and within two soil landscape systems:

– Spearwood System (211Sp): Comprises predominantly of sand dunes and plains with yellow deep sands, pale deep sands and yellow/brown shallow sands.
– Vasse System (211Va): Poorly drained estuarine flats, of the Swan Coastal Plain. Tidal flat soil, saline wet soil and pale deep sand. Samphire, sedges and paperbark woodland.

The DPIRD soil mapping indicates that there are two soil landscapes that intersect the Survey Area (Table 3) (Department of Primary Industries and Regional Development 2021).

Table 3 Landforms within the Survey Area

Unit	Name	Description	Area (ha)
211Sp S14	EnvGeol S14 phase	SAND - pale grey to white, medium-grained sub-angular, quartz and feldspar, well sorted, abundant whole and broken bivalves and gastropod shells, of alluvial origin	3.32
211Va C1	EnvGeol C1 phase	CLAY - mid to dark grey, soft, saturated, prominent 0.2 m thick oyster shell bed near surface of alluvial origin. Variable organic content	9.53

3.3 Hydrology

The DWER geographic data layers (Department of Water and Environmental Regulation 2023) identified the following hydrology and hydrogeology aspects proclaimed under the *Rights in Water and Irrigation Act 1914* (RIWI Act) within the Survey Area (Table 4).

Table 4 Department of Water and Environmental Regulation geographic data atlas queries for the Survey Area

Aspect	Details	Result
Groundwater area	Groundwater areas proclaimed under the RIWI Act.	The Survey Area is located within the Perth Groundwater Area.
Surface water areas	Surface water areas proclaimed under the RIWI Act.	None Present
Irrigation district	Irrigation Districts proclaimed under the RIWI Act.	None Present
Rivers	Rivers proclaimed under the RIWI Act.	The Survey Area intersects with the Swan River.
Public Drinking Water Source Areas (PDWSA)	PDWSAs is a collective term used for the description of Water Reserves, Catchment Areas and Underground Pollution Control Areas declared (gazetted) under the provisions of the *Metropolitan Water Supply, Sewage and Drainage Act 1909*.	None Present. The closest PDWSA is the Perth Coastal and Gwelup Underground Water Pollution Control Area located 12km to the North of the Survey Area.

Aspect	Details	Result
Waterway Management Areas	Areas proclaimed under the *Waterway Conservation Act 1976*.	None Present

3.3.1 Wetlands

The desktop search across the PMST MNES database and DBCA listed RAMSAR and Nationally Important Wetlands recorded one RAMSAR listed Wetland, this being the Forrestdale and Thompsons Lakes, and four (4) Nationally Important Wetlands, with these being Palmer Barracks, Herdsman Lake, Booragoon Swamp, and the Swan-Canning Estuary. Only one of the identified wetlands was located within the 10 km radius of the current Survey Area, that being the Swan-Canning Estuary, with all others more than 10 km away.

Based on the Geomorphic Wetlands of the Swan Coastal Plain mapping (Department of Biodiversity, Conservation and Attractions 2021a), one geomorphic wetland intersects the Survey Area. Geomorphic wetlands are detailed in Table 5 and mapped on Figure 3, Appendix A.

Table 5 Geomorphic wetlands within 250 m of the Survey Area

UFI	Wetland name	Wetland management	Wetland Type	Distance to Survey Area
13316	Swan River Estuary	Conservation	Estuary-Waterbody	Intersects the open water portion of all sites excluding Elizabeth Quay

In addition to geomorphic wetland mapping, recent seagrass distribution surveys conducted by the Department of Biodiversity, Conservation and Attractions (DBCA, 2025d) identified approximately 590 ha of seagrass communities within the Swan-Canning Estuary. These communities, dominated by *Halophila ovalis*, were classified into sparse, medium, and dense coverage zones. These seagrass communities provide important ecological functions, such as sediment stabilisation, nutrient cycling, and habitat for estuarine fauna, which supports the identification of benthic habitat values within the estuarine wetland system. As such, these seagrass communities should be considered in conjunction with geomorphic wetland data when assessing potential environmental impacts.

3.4 Land use

3.4.1 Region Schemes

The Survey Area intersected multiple Local Government Authorities (LGAs) including the City of Perth, City of South Perth and the City of Melville. The Metropolitan Region Scheme (MRS) indicated that the land parcels within the Survey Area are predominately zoned as “Waterways” and “Parks and Recreation” (Department of Planning, Lands and Heritage 2025). The general land uses surrounding the Study Area are mapped on Figure 4, Appendix A and land uses within the Survey Area sites are summarised in Table 6.

Table 6 Surrounding land use and zoning

Survey Area	LGA	Details
Applecross site	City of Melville	The site intersects the Canning River, attributing to the “Waterways“ MRS zoning. The southern end of the site is attributed to “Primary regional roads” due to intersecting the Canning Highway while the remainer of the site is “Parks and Recreation”. The area south of the site comprises urban land use.
Elizabeth Quay site	City of Perth	Elizabeth Quay is located in the Perth CBD and zoned as “Central city area”. It is adjacent to the Swan River, attributing to the “Waterways” land use.
Matilda Bay site	City of Perth	The Matilda Bay site intersects the Swan River, attributing to the “Waterways“ MRS zoning. A large portion of the site is located in the Matilda Bay Reserve, which is zoned as “Parks and Recreation”. The University of

Survey Area	LGA	Details
		Western Australia is located to the west of the site which is zoned as “Public purposes – university”.

3.4.2 Conservation Reserves

The Survey Area is partially located in DBCA managed areas, the Swan River and Canning River (R 48325 and R 48327) vested with the Swan River Trust for the purpose of Landscape Protection. As outlined below in Section 3.4.2.1, the Swan and Canning River Development Control Area extends along all survey sites excluding Elizabeth Quay. The Survey Area also intersects the Matilda Bay Reserve (R 17375), a Class A Conservation Park and DBCA managed reserve vested with the Conservation Commission Of WA. DBCA legislated lands are listed in Table 7 and mapped on Figure 5, Appendix A (Department of Biodiversity Conservation and Attractions 2022c).

Table 7 DBCA legislated lands or water within the Survey Area

Reserve name	Identifier	Class	Category	Act
-	R 48325	-	Crown Land	*Swan and Canning Rivers Management Act 2006*
-	R 48327	-	Crown Land	*Swan and Canning Rivers Management Act 2006*
Matilda Bay Reserve	R 17375	A	Crown Land	*Conservation and Land Management Act 1984* - Section 5(1)(g)

3.4.2.1 Development Control Area

The Swan and Canning Rivers, and adjoining parks and recreation reserves are contained within the Swan and Canning River Development Control Area (DCA). The Swan and Canning River DCA extends along all survey sites excluding Elizabeth Quay (Department of Biodiversity Conservation and Attractions 2019a).

The responsibility for the management of development within the Swan and Canning DCA sits with the Rivers and Estuaries Branch of the DBCA. Policies have been developed to ensure land use planning and development in the DCA protects and enhances the ecological health, community benefit, amenity and heritage value of the Swan and Canning River system. The process for development approvals in and around the rivers depends on the location of the proposed development with respect to the DCA.

Land use planning and development in the DCA is subject to the approval processes of Part 5 of the *Swan and Canning Rivers Management Act 2006* (SCRM Act) and the Swan and Canning Rivers Management Regulations 2007 (SCRM Regulations).

Section 3 of the SCRM Act defines development as:

a. the erection, construction, demolition, alteration or carrying out of any building, excavation, or other works in, on, over or under land or waters
b. a material change in use of land or waters
c. any other act or activity in relation to land or waters declared by the regulations.

Certain classes of works, acts and activities are excluded from the definition of development under the SCRM Regulations. For example, this may include investigative activities and temporary works.

Part 5 of the SCRM Act applies to development wholly within the DCA. DBCA prepare a report, the Swan River Trust endorse and make a recommendation, and the Minister for Environment is the decision maker. Where the development is partly in the DCA or abuts the DCA or may affect the DCA, it is dealt with under the planning approval process via clause 30A of the MRS. In this case Swan River Trust provides advice, often from the DBCA Rivers and Estuaries Branch to the planning authority (Western Australian Planning Commission (WAPC) or LGA).

3.4.3 Bush Forever Sites

No bush forever sites intersect the Survey Area. The nearest bush forever site is site number 402, located approximately 100m south of the Matilda Bay site. Bush forever is mapped on Figure 6, Appendix A.

3.4.4 Environmentally Sensitive Areas

The Survey Area intersects 10 Environmentally Sensitive Areas (ESAs) (Department of Water and Environmental Regulation 2021). These ESAs are associated with Important Wetlands in Australia (Swan-Canning Estuary), Swan Coastal Plain wetlands and Register of the National Estate and are mapped on Figure 6, Appendix A.

3.5 Regional biogeography

The Survey Area is situated in the Southwest Botanical Province of WA (Beard 1979) within the Swan Coastal Plain (SCP) bioregion and the Perth subregion as described by the Interim Biogeographic Regionalisation of Australia (IBRA) (Commonwealth of Australia 2012).

The SCP bioregion is a low lying coastal plain, mainly covered with woodlands. The Perth subregion is composed of colluvial and aeolian sands, alluvial river flats and costal limestone. Heath and/or Tuart woodlands occur on limestone, Banksia and Jarrah-Banksia woodlands on Quaternary marine dunes of various ages and Marri on colluvial and alluvial soils. The subregion also includes a complex series of seasonal wetlands (Mitchell et al. 2002).

3.5.1 Vegetation associations

Broad scale (1:250,000) pre-European vegetation mapping of the area has been completed by Beard (1979) at an association level. The mapping indicates that two vegetation associations intersect the Survey Area:

– Medium woodland; tuart & jarrah (association 6)
– Medium very sparse woodland; jarrah, with low woodland; banksia & casuarina (association 1001).

The pre-European mapping has been adapted and digitised by Shepherd et al. (2002). The extent of vegetation associations have been determined by the state-wide vegetation remaining extent calculations maintained by DBCA, most recently updated in 2019 (Department of Biodiversity Conservation and Attractions 2019b). The 2019 extent remaining of vegetation association 6 is 23.72% of pre-European extent at state, regional and subregional level, and less than 5% at Local Government Authority (LGA) levels in the City of Melville, City of South Perth and Town of Victoria Park while above 20% in the city of Perth. (Table 8). The extent remaining of vegetation association 1001 is 22.05% at state, regional and subregional level, and 0.66% at LGA level in the Town of Victoria Park (Table 8).

Regional vegetation complexes have been mapped by Heddle et al. (1980) with updates from Webb et al. (2016) based on major geomorphic units on the SCP. The mapping indicates that the Survey Area occurs within one vegetation complex:

– **Vasse Complex:** Mixture of the closed scrub of *Melaleuca* species fringing woodland of *Eucalyptus rudis* (Flooded Gum) - *Melaleuca* species and open forest of *Eucalyptus gomphocephala* (Tuart) - *Eucalyptus marginata* (Jarrah) - *Corymbia calophylla* (Marri). Will include areas dominated by *Tecticornia* and *Salicornia* species (Samphire) near Mandurah and south of the Capel River.

The DBCA and DWER have assessed the vegetation complexes against presumed pre-European extents within the SCP IBRA bioregion and the LGA level respectively (Table 9). At the bioregion and LGA level in the City of South Perth, the Bassendean Complex – Central and South has less than 30% and 3% pre-European extent remaining, respectively (Department of Biodiversity Conservation and Attractions 2019c). At the bioregion and LGA level in the City of Perth, City of South Perth and the Town of Victoria Park, the Vasse Complex has greater than 30% and less than 2% pre-European extent remaining, respectively (Department of Biodiversity Conservation and Attractions 2019c).

Table 8 Extent of pre-European vegetation associations mapped within the Survey Area

Vegetation association	Scale	Pre-European extent (ha)	Current extent (ha)	Remaining (%)	% Current extent in all DBCA managed land (proportion of Current Extent)
6	State: Western Australia	56,343.01	13,362.25	23.72	39.83
	IBRA bioregion: SCP	56,343.01	13,362.25	23.72	39.83
	IBRA Subregion: Perth	56,343.01	13,362.25	23.72	39.83
	LGA: City of Melville	3,687.84	155.72	4.22	4.62
	LGA: City of Perth	1,377.03	332.35	24.14	96.34
1001	State: Western Australia	57,410.23	12,660.76	22.05	14.19
	IBRA bioregion: SCP	57,410.23	12,660.76	22.05	14.19
	IBRA Subregion: Perth	57,410.23	12,660.76	22.05	14.19

Table 9 Extent of vegetation complex on the SCP and LGA level mapped within the Survey Area

Vegetation Complex	Scale	Pre–European Extent (ha)	Current Extent (ha)	% Remaining	Current percentage remaining within all DBCA managed land (%)
Vasse Complex	IBRA bioregion: SCP	15,691.63	4,926.97	31.40	14.62
	LGA: City of Perth	512.40	9.19	1.79	0

3.6 Vegetation and flora

3.6.1 Significant ecological communities

A review of the DBCA TEC and PEC database (Department of Biodiversity, Conservation and Attractions 2025) and the EPBC Act PMST (Department of Climate Change, Energy, the Environment and Water 2022a) identified the presence of listed communities previously recorded within the Study Area. Table 10 details TECs identified by the PMST report in the Study Area and the TECs/PECs identified by the DBCA TEC and PEC database within 250 m of the Survey Area.

The locations of the TECs and PECs in the vicinity of the Study Area are mapped in Figure 7, Appendix A.

Table 10 Threatened and Priority Ecological Communities surrounding the Survey Area

Community name	Status		Description	Distance from Survey Area
	EPBC Act	BC Act/ DBCA		
Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Priority 3	Canopy is most commonly dominated or co-dominated by *Banksia attenuata* and/or *B. menziesii*. Other Banksia species that can dominate in the community are *B. prionotes* or *B. ilicifolia*. It typically occurs on well drained, low nutrient soils on sandplain landforms, particularly deep Bassendean and Spearwood sands and occasionally on Quindalup sands; it is also common on sandy colluvium and aeolian sands of the Ridge Hill Shelf, Whicher Scarp and Dandaragan Plateau and can occur in other less common scenarios.	PMST: In feature area DBCA: 60 m south from Applecross site
Tuart (*Eucalyptus gomphocephala*) Woodlands and Forests of the	Critically Endangered	Priority 3	Mostly confined to Quindalup Dunes and Spearwood Dunes but can also occur on the Bassendean dunes and Pinjarra Plain. It can occur on the banks of rivers and wetlands. Tuart is the key upper canopy species although	PMST: In feature area

Community name	Status		Description	Distance from Survey Area
	EPBC Act	BC Act/ DBCA		
Swan Coastal Plain ecological community			it may co-occur with trees of other species. Trees commonly co-occurring with Tuart include *Agonis flexuosa* (peppermint), *Banksia grandis*, *Banksia attenuata*, *Eucalyptus marginata*; and less commonly, *Corymbia calophylla*, *Banksia menziesii* and *Banksia prionotes*. An understorey of native plants is typically present, which may include grasses, herbs and shrubs.	DBCA: 630 m north Matilda Bay site
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	Priority 3	Consists of the assemblage of plants, animals and micro-organisms associated with saltmarsh in coastal regions of sub-tropical and temperate Australia (south of 23ºS latitude). It occurs on the coastal margin, along estuaries and coastal embayments and on low wave energy coast in places with at least some tidal connection, including rarely-inundated supratidal areas, intermittently opened or closed lagoons, and groundwater tidal influences. The community occurs on sandy or muddy substrate and may include coastal clay pans and similar habitats. It consists of dense to patchy areas of characteristic coastal saltmarsh plant species that include salt- tolerant herbs, succulent shrubs or grasses, and may also include bare sediment as part of the mosaic. It can occur where the proportional cover by tree canopy such as mangroves, *Melaleucas* or *Casuarinas* or seagrass is not greater than 50%.	PMST: In buffer area only (10 km)
Honeymyrtle shrubland on limestone ridges of the Swan Coastal Plain Bioregion	Critically Endangered	N/A	The Honeymyrtle shrubland is the assemblage of plants, animals and other organisms associated with a type of warm temperate shrubland or heath, dominated by *Melaleuca huegelii* (chenille honeymyrtle), *M. systena* (coastal honeymyrtle), and/or *Banksia sessilis* (parrot bush). It occurs only in southwest Western Australia (WA). It is known from a small number of locations in the Swan Coastal Plain IBRA1 Bioregion (SWA). It is a shrub-dominated ecological community, with sclerophyll shrubs forming thickets or heaths, above a typically diverse ground layer of herbs, including sedges, Restionaceae and occasional grasses. Honeymyrtle shrubland only occurs on the slopes and tops of limestone ridges on the Swan Coastal Plain. Its plants provide food for a variety of nectar-, seed- and fruit-eating birds, and browsing for mammals. The associated rocky and sandy substrates provide ample reptile basking sites, and the shrub layer gives them cover.	PMST: In buffer area only (10 km) DBCA: N/A
Empodisma peatlands of southwestern Australia	Endangered	N/A	*Empodisma* peatlands is the assemblage of plants, animals and other organisms associated with a type of freshwater, peat-based wetland that is found in the High Rainfall Province of the south-west of Western Australia. It is typically a sedgeland to shrubland vegetation complex on peaty substrates that almost always includes the perennial grass-like twig rush *Empodisma gracillimum* (tanglefoot). *Empodisma* peatlands provide habitat for a diverse range of hydrophilic species, including threatened, regionally endemic, and relictual flora and fauna species.	PMST: In buffer area only (10 km) DBCA: N/A

[1]: (Department of Biodiversity, Conservation and Attractions 2021b); (Department of Biodiversity, Conservation and Attractions 2018b)

3.6.2 Flora diversity

The *NatureMap* and *Dandjoo* database search, featuring a 10 km buffer radius of the Survey Area, identified 2,095 flora taxa (both species and sub-species) previously recorded. These consisted of 674 species of Monocot, 1,392

species of Dicot, 13 species of Ferns, 10 species of Gymnosperms and six species of Liverworts. Due to the potential for duplications and minor inaccuracies with both *NatureMap* and *Dandjoo* searches, some exclusions and omissions were made from the original results. The species exclusions are based on lack or suitable habitat within the Survey Area. Other records have been omitted due to taxonomic errors within the DBCA database resulting in multiple listings of taxa under superseded names. The *NatureMap* and *Dandjoo* database search is provided in Appendix C.

3.6.3 Significant flora

The EPBC Act PMST, *NatureMap* database and DBCA TPFL and WAHERB databases identified the presence or potential presence of 167 significant flora taxa within the Study Area (10 km radius of the Survey Area). There were no significant flora records from the DBCA TPFL or WAHERB within the Survey Area. The desktop searches recorded the potential for the following listed species:

– Five species listed as Critically Endangered (CR) under the Federal EPBC Act and WA State DBCA BC Act.
– 30 species listed as Endangered (EN) under the Federal EPBC Act and WA State DBCA BC Act.
– Eight species listed as Vulnerable (VU) under the Federal EPBC Act and WA State DBCA BC Act.
– 17 species listed as Priority 1 (P1) under the WA State DBCA BC Act.
– 26 species listed as Priority 2 (P2) under the WA State DBCA BC Act.
– 51 species listed as Priority 3 (P3) under the WA State DBCA BC Act.
– 30 species listed as Priority 4 (P4) under the WA State DBCA BC Act.

The significant flora species identified in the desktop assessment are provided in the likelihood of occurrence table (Appendix D).

3.7 Fauna

3.7.1 Fauna diversity

The *NatureMap* database identified 479 terrestrial vertebrate fauna taxa (species and sub-species) within the Study Area comprising 13 amphibians, 48 mammals, 339 birds, and 79 reptiles. A number of these taxa namely marine species of mammals, reptiles and fish have been omitted from this likelihood of occurrence assessment in Appendix E**.** Species exclusions are based on lack or suitable habitat within the Survey Area. Other records have been omitted due to taxonomic errors within the DBCA database resulting in multiple listings of taxa under superseded names. The *NatureMap* database search is provided in Appendix C.

3.7.2 Significant fauna

Desktop searches of the EPBC Act PMST, *NatureMap*, DBCA Threatened Fauna databases identified the presence/potential presence of 94 significant fauna species. This number excludes non-relevant species including pelagic or marine mammals and reptiles that have had no recent records within the marine habitat aspects of the Study Area, historical records of regionally extinct taxa and erroneous database records. Specifically, the significant fauna species identified consisted of:

– Five species listed as Critically Endangered (CR) under the Federal EPBC Act and WA State DBCA BC Act.
– 13 species listed as Endangered (EN) under the EPBC Act and WA State DBCA BC Act.
– 23 species listed as Vulnerable (VU) under the EPBC Act and WA State DBCA BC Act.
– 35 species listed as Migratory (MI) under the EPBC Act and WA State DBCA BC Act.
– One species listed as Conservation Dependent (CD) under the WA State DBCA BC Act.
– One species listed as Other Special Protection Status (OS) under the under the WA State DBCA BC Act.
– Eight species listed as Priority 4 (P4) under the WA State DBCA BC Act.
– Eight species listed as Priority 3 (P3) under the WA State DBCA BC Act.

All significant fauna identified in the searches are presented in the likelihood of occurrence assessment (Appendix E).

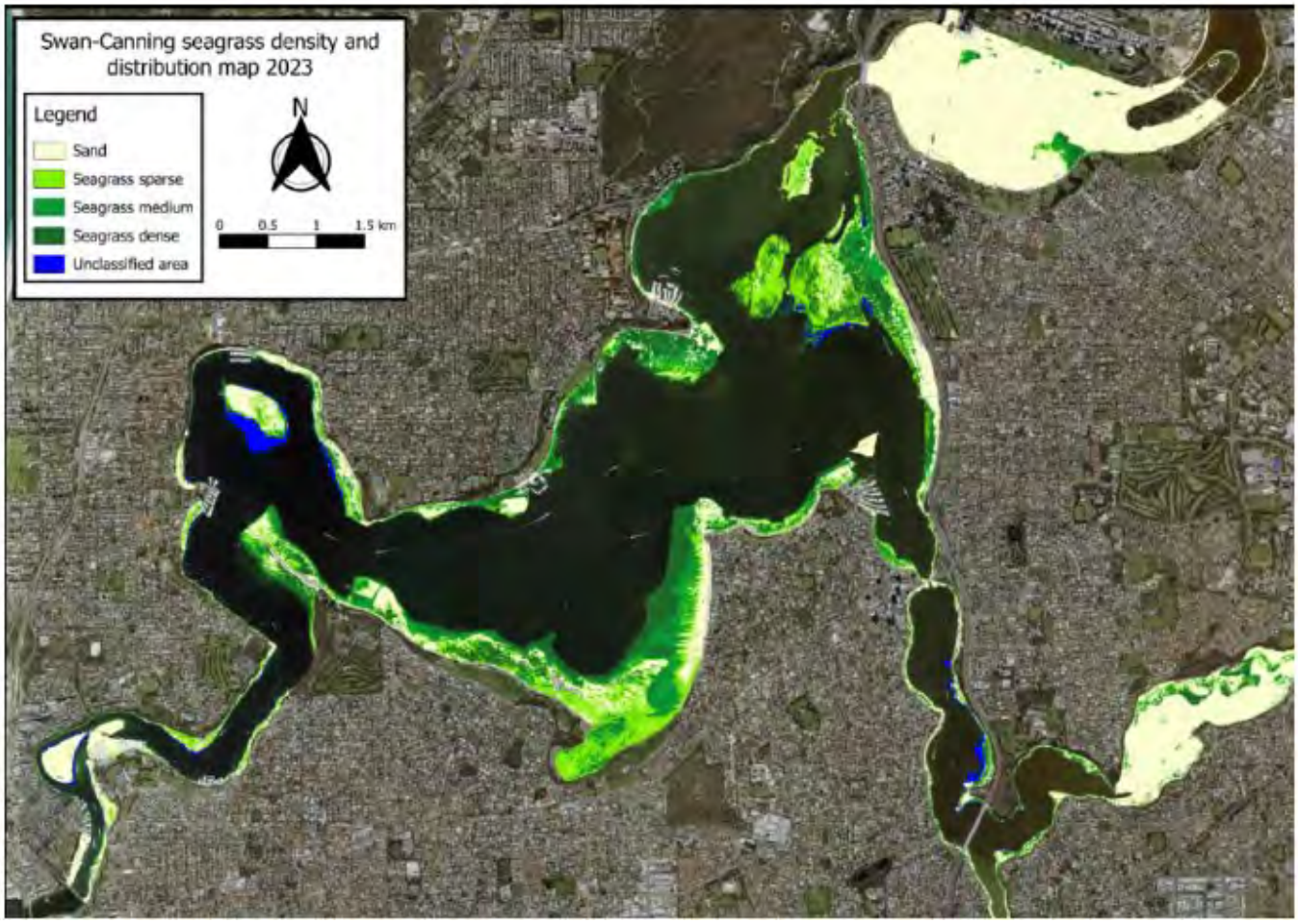
3.7.3 Black Cockatoos

A search of the DBCA database and Great Cockie Count Database (GCC) from Birdlife Australia (2023) identified numerous local records of Black Cockatoo roosting sites, (Department of Biodiversity, Conservation and Attractions 2019e). The Matilda Bay site intersects with buffers of confirmed sites – identified through both the GCC dataset the DBCA Black Cockatoo Roosting Sites (DBCA-064) dataset. These correspond with confirmed roosting sites approximately 800 m west of the Matilda Bay survey site. The nearest roosting site to Elizabeth Quay is 1250 m west while the nearest to the Applecross site is 700 m south west. Figure 8, Appendix A displays breeding and roosting sites in the study area.

No breeding sites from the Black Cockatoo Breeding Sites - Buffered (DBCA-063) dataset intersect with the Study Area, with the nearest being approximately 22 km north from Elizabeth Quay in Joondalup (Department of Biodiversity, Conservation and Attractions 2019d).

3.7.4 Significant benthic habitat

The recent (2023) mapping by DBCA (2025d) identified seagrass in the shallow areas of the Swan-Canning Estuary, with varying density classifications (Map 1). Mapping indicates that seagrass is present in the surrounding area of the Elizabeth Quay, Applecross, and Matilda Bay survey sites. This data should be considered in conjunction with field observations to assess potential benthic habitat impacts. Detailed seagrass mapping around the three survey sites is presented in Figure 8 (Appendix A).



Map 1 ***Swan-Canning seagrass density and distribution map (DBCA 2025d)***

4. Survey results – Applecross Site

4.1 Vegetation and flora

4.1.1 Vegetation types

Based on the structural and floristic characteristics observed in the field, three vegetation types, none of which are considered to be remnant vegetation were recorded in the Survey Site.

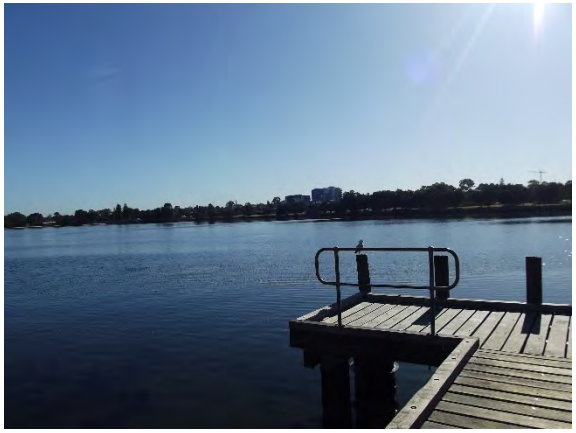
These vegetation types included:

– Replanting (VT01)
– Wetland/Shoreline (VT02)
– Parkland with Planted Trees (VT03)

The remaining areas have been mapped as Cleared. The vegetation types are described in Table 11 and mapped in Figure 10A (Appendix A).

Table 11 Recorded vegetation types for Applecross Survey Site

Vegetation type	Vegetation Type Description	Landform and Substrate	Extent (ha) and proportion of Survey Areas (%)	Photograph
VT01	Landscaped replanted areas consisting of mixed locally native and non-native species, typically patchy mixed native sedges and non-native palms, exotic flowering plants and shrubs.	Landscaped areas	0.15 ha (6.89%)	 Coordinates: -32.0109 115.8523 Photograph: Facing North-West
VT02	Wetland/Shore-bank vegetation consisting of highly modified previous shoreline wetland and estuarine vegetation communities with varying levels of reeds and *Melaleuca* species, and introduced River Oak (*Casuarina cunninghamiana*), as well as small sections of bulrush *(juncus kraussii).* Includes some native and exotic emergent aquatic plants.	Landscaped areas	0.07 ha (3.25%)	 Coordinates: -32.0099 115.8506 Photograph: Facing North

Vegetation type	Vegetation Type Description	Landform and Substrate	Extent (ha) and proportion of Survey Areas (%)	Photograph
VT03	Parkland areas consisting of planted trees over mown grass	Landscaped Areas	0.05 ha (2.75%)	 Coordinates: -32.0100 115.8512 Photograph: Facing North-West
Open Water	Open Water and Estuarine	-	1.66 ha (76.00%)	 Coordinates: -32.0102 115.8519 Photograph: Facing North-East

Vegetation type	Vegetation Type Description	Landform and Substrate	Extent (ha) and proportion of Survey Areas (%)	Photograph
Cleared	Completely devoid of vegetation	-	0.24 ha (11.00%)	 Coordinates: -32.0101 115.8519 Photograph: Facing North-West

4.1.2 Vegetation condition

The entire survey site has been cleared, with modifications carried out over time to the natural edge of the site, with artificial maritime structures bordering what would have historically been estuarine-based riparian shoreline and riverbank species or potentially *Banksia* and *Melaleuca* and *Eucalypt* species. Therefore, the vegetation types were not assigned a vegetation condition as they are not representative of native vegetation.

4.1.3 Significant ecological communities

No EPBC or state listed TECs, or DBCA listed PECs were recorded within the Survey Site.

4.1.4 Flora diversity

A total of six vascular flora species, were recorded in the Survey Site. Two of the flora species recorded were native taxa with the remaining four of not considered to be locally native to the area and classified as introduced. In the context of the current Survey Area and the vegetation types and descriptions, it is also important to note that the native species recorded were part of a re-planting activity. A species list by family type is presented in Appendix D.

4.1.5 Significant flora

No EPBC Act or BC Act listed flora were recorded within the Survey Site.

Likelihood of occurrence

A likelihood of occurrence assessment was conducted and post-field survey for significant flora taxa identified in the desktop assessment (Appendix D). The assessment took into account previous records, habitat requirements, efficacy of the survey, intensity of the survey, flowering times and the cryptic nature of species. The likelihood of occurrence assessment post-field survey concluded that no taxa identified by the desktop assessment are known to occur or likely to occur. This is due to a combination of known distribution, preferred habitat, visibility of the taxa during the field survey, and most significantly, the high level of disturbance and clearing throughout the Survey Site and conversion to artificial infrastructure and cleared sections of parkland.

4.1.6 Introduced flora

No observed flora species are listed as declared pest plants in WA under the BAM Act, or Weeds of National Significance (WoNS) (Australian Weeds 2012).

4.2 Fauna

4.2.1 Fauna habitat types

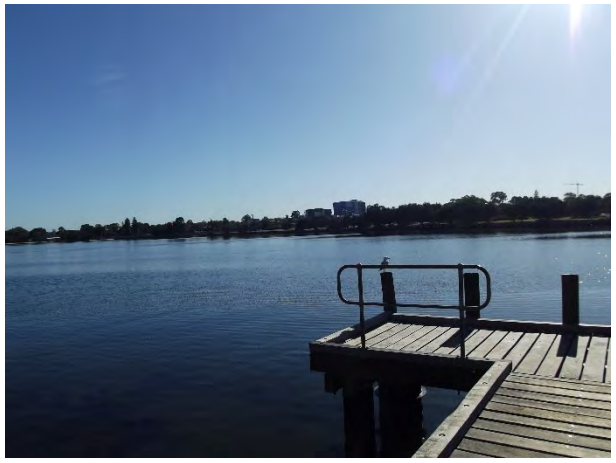
Three broad habitat types were identified within the Survey Site, based on the predominant vegetation structure and geography. These habitats generally align with the vegetation community types (VTs) described in 11, and mapped from the concurrent flora and vegetation assessment. The fauna habitats tend to be simple in structure and vegetation diversity as they are derived from relatively recent revegetation of trees, shrubs and wetlands plants comprising native and exotic species including *Melaleuca*, *Casuarina*, date palms, deciduous and evergreen trees. The habitat types include:

– Riparian, River and Shoreline
– Native and exotic plantings
– Parkland with planted trees
– Cleared areas
– Open water.

Fauna habitat are described in more detail in Table 12 and mapped in Figure 11A, Appendix A.

Table 12 Fauna habitat types within the Applecross Survey Site

Habitat Type	Description	Extent (ha) and proportion of Survey Areas (%)	Representative photograph
Native and exotic plantings (VT01)	This habitat type consists of areas of replanted native and exotic trees and some areas of scattered planted native shrubs. Exotic species include *Allocasuarina*, and exotic palm species. This habitat is very small in size and in representation of the overall Suver Area and lacked vegetation diversity and structure. The habitat provides very limited and small available foraging habitat for some common native perching bird species. Given the low overall quality and size of the habitat, no significant species are likely to use the habitat on a regular basis. However, the close proximity to open water sources and the Swan River may allow for occasional fly-over activity or temporary perching and resting from various migratory shorebirds and sea-birds.	0.13 ha (5.96%)	 Coordinates: -32.0101 115.8519 Photograph: Facing South
Riparian, River and Shoreline (VT02)	This habitat consists of waterbodies and shoreline systems with varying levels of reeds and *Melaleuca* species, and introduced River Oak (*Casuarina cunninghamiana*). Includes some native and exotic emergent aquatic plants. This habitat provides potential, temporary habitat for waterfowl and wading bird species such as black swans (*Cygnus atratus*), Pacific Black Ducks (*Anas superciliosus*) and locally common moorhens and swamphens. This habitat is not likely to be important for migratory birds due to lack of shallow open shoreline suitable as foraging habitat for waders, however they may occur occasionally as temporary foraging or resting-based visitation due to proximity to estuarine habitat of the Swan River. Furthermore, the highly degraded and altered state of the habitat type is unlikely to support wetland and shoreline mammalian species such as water rat (Rakali) (*Hydromys chrysogaster*).	0.07 ha (3.2%)	 Coordinates: -32.0099 115.8506 Photograph: Facing South

Habitat Type	Description	Extent (ha) and proportion of Survey Areas (%)	Representative photograph
Parkland	This habitat consists of landscaped areas or open parklands, garden beds, lawns with sections of recent native replanting and re-vegetation, which consists of both native and exotic species. The majority of these areas are regularly maintained and therefore weed presence and significant hollows, logs, leaf litter or rocks and crevices are few in number. The nature of the highly modified habitat with the lack of additional microhabitats and understory suggests that native mammal and reptile suitability is low, with the exception of possible use for brief foraging activity by Quenda (*Isoodon fusciventer).* Avian fauna species may utilise the area as part of brief, occasional foraging and resting activity. This may include significant-listed fauna species including Osprey (*Pandion haliaetus*), Peregrine Falcon (*Falco peregrinus*) and the three endemic Black Cockatoo Species.	0.05 ha (2.3%)	 Coordinates: -32.0100 115.8512 Photograph: Facing North-West
Open Water	Open Water and Estuarine Habitat featuring shallow and mid-level water systems close to shore. These areas are typically disturbed from persistent boating activity and previous infrastructure development but may allow for occasional foraging use by locally common marine mammal species such as bottlenose dolphins (*Tursiops aduncus*).	1.66 ha (76.00%)	 Coordinates: -32.0102 115.8519 Photograph: Facing North.
Completely Cleared Areas	Unmapped areas that include roads, cleared construction areas and lawn areas. These areas had little or no habitat value for fauna including significant species. May had some value for locally common birds.	0.24 ha (11.00%)	

4.2.2 Fauna diversity

The field survey recorded a total of eight birds, one mammal species, no reptiles and no fish species or frog species. This represents a small proportion of the total number of vertebrates that are likely or known to occur in the study area. One species across all vertebrate species groups recorded was introduced, that being the rainbow lorikeet (*Trichoglossus moluccanus)*. The full species list is provided in Appendix E.

With the exception of the recorded significant species, all are common widespread species known to utilise urban habitat in and modified wetlands and coastal and estuarine environments. From a species of cultural significance, black swans were recorded consistently across the Survey Site along shoreline sections and banks with or without the presence of riparian reedbed vegetation. Concentrations of the species were focussed on the outer edges of the Survey Areas where riparian vegetation and resting sections of shorelines were present. However, the majority of the Survey Areas does not contain habitat that would typically support a significant or persistent breeding population, which was reinforced by the absence of nesting activity, old or newly formed nesting mounds.

4.2.3 Significant fauna

During the field survey, no significant species were recorded. A further eight significant species, listed in Table 13 below, were assessed as Likely or Possibly occurring based on local occurrence and habitat availability.

Other significant fauna species include migratory birds that have historically been recorded locally due to the proximity of the Survey Site to neighbouring nature reserves and the Swan River, in most cases as vagrant visitors, or from rescued individual cases after heavy storm activity These species potentially occur within the Survey Areas as infrequent visitors on at least an occasional basis, although habitat value and quality are considered low for these species. Therefore, these migratory species have not been considered further in this assessment. The inclusion of certain migratory species and the exclusion of consideration of others stems from frequency of local occurrence and utilisation of shoreline and wetland habitats of the Swan Coastal Plain and Perth Metropolitan region. For example, numerous ocean-going seabirds (e.g. Albatross, prions) and shore-birds (plovers, sandpipers) have not typically been recorded or have breeding, nesting and core feeding habitats that are found in great abundance within the Survey Site or the surrounding environments. Furthermore, other migratory species such as Ospreys, Caspian terns and Crested Terns are known from consistent DBCA database records (DBCA 2025) and are known to utilise shoreline and artificial wetland and maritime habitats within the Survey Area and surrounding environments.

Table 13 Significant fauna identified as likely to occur or recorded within the Applecross Survey Site

Common name	Species Name	Status EPBC Act	Status DBCA BC Act	Likelihood of occurrence
Baudin's Black Cockatoo	*Zanda baudinii*	EN	EN	**Possible**
Carnaby's Black Cockatoo	*Zanda latirostris*	EN	EN	**Possible**
Forest Red-tailed Black Cockatoo	*Calyptorhynchus banksii naso*	VU	VU	**Possible**
Peregrine Falcon	*Falco peregrinus*	-	OS	**Possible**
Blue-billed duck	*Oxyura australis*	-	P4	**Possible**
Osprey	*Pandion haliaetus*	MI	MI	**Likely**
Caspian Tern	*Hydroprogne caspia*	MI	MI	**Possible**
Crested Tern	*Thalasseus bergii*	MI	MI	**Possible**

Peregrine Falcon (*Falco peregrinus*)

The Peregrine Falcon is listed by the DBCA as otherwise in need of special protection under section 18 of the BC Act. It is uncommon but wide ranging across Australia from woodlands to open grasslands and coastal cliffs, and occasionally in desert regions. It feeds almost entirely on other birds, although it occasionally eats rabbits and other moderate sized mammals, bats and reptiles. The Peregrine Falcon is very territorial during the breeding

season, the male courting the female with an impressive display of aerobatics (DEE 2019b, Morcombe 2004). Nest sites include tall trees, cliffs, and elevated artificial structures that provide a secluded and secure platform.

This species was not recorded during the survey and no nest sites were recorded. However, the species has been recorded as utilising urbanised areas along the Swan River and Swan Coastal Plain region, including coastal environments. Therefore, the species may possibly utilise the Survey Areas at least on an occasional basis for perching and resting periods or as part of fly-over activity.

Baudin's Cockatoo (*Zanda baudinii*)

The Baudin's Cockatoo is listed as Endangered under the EPBC Act and BC Act. This species is endemic to the south-west of WA. The range of Baudin's Cockatoo varies considerably between the breeding and non-breeding seasons. During the breeding season (from October to January), the species nests in isolated pockets of the far south-west of WA within Jarrah, Marri and Karri forests which receive an average of 750 mm of rainfall annually. In addition to the south-west, there is an isolated patch of known breeding recorded at Perth Hills, east of Armadale (Johnstone & Storr 1998, Johnstone & Kirkby 2008).

Breeding generally occurs in woodland or forest but may also occur in former woodland or forest now present as isolated trees withing partially cleared parkland or farmland. Nesting occurs in hollows of live or dead Karri, Marri, Wandoo and Tuart (*Eucalyptus gomphocephala*) trees (DSEWPaC 2012). During the breeding season feeding primarily occurs in native vegetation, particularly Marri (DSEWPaC 2012). The range then expands during the non-breeding season (from February) as flocks disperse to forage more widely, congregating on the central and northern parts of the Darling plateau, as far as Mundaring and Gidgegannup (DSEWPaC 2012; Saunders 1974 & 1979).

No birds were observed or recorded during the survey, no evidence of foraging or feeding evidence was recorded within the Survey Areas. However, the high number of confirmed recordings of the species throughout neighbouring locations to the current Survey Site suggests that the species may temporarily utilise the site for perching, resting or temporary fly-over activity, albeit for brief periods. The utilisation for long-term, significant persistence with regards to feeding, foraging or breeding, however, is highly unlikely.

Carnaby's Cockatoo (*Zanda latirostris*)

The Carnaby's Cockatoo is listed as Endangered under the EPBC Act and BC Act. This species is endemic to the south-west of WA from near Cape Arid on the south coast through the eastern Wheat Belt and north to about Kalbarri. Carnaby's Cockatoo nest in hollows of live or dead eucalyptus, primarily smooth-barked salmon gum (*Eucalyptus salmonophloia*) and Wandoo (*E. wandoo*) (Saunders 1979, 1982) though breeding has been reported in other Wheatbelt tree species and some tree species on the Swan Coastal Plain and Jarrah forest (Saunders 1979, 1982, Storr 1991, Johnstone & Storr 1998).

Success in breeding is dependent on sufficient high quality foraging habitat located in proximity of nesting and is nominally a radius of up to 12km of nesting sites (Saunders 1979, 1982, Saunders and Ingram 1987). High quality foraging habitat includes Kwongan heathlands and Banksia woodlands having abundant Banksia species and other proteaceous plants.

No birds were observed or recorded during the survey, no evidence of foraging or feeding evidence was recorded within the Survey Site. However, the high number of confirmed recordings of the species throughout neighbouring locations to the current Survey Areas suggests that the species may temporarily utilise the site for perching, resting or temporary fly-over activity, albeit for brief periods. The utilisation for long-term, significant persistence with regards to feeding, foraging or breeding, however, is highly unlikely.

Forest Red-tailed Black-Cockatoo (*Calyptorhynchus banksii naso*)

The Forest Red-tailed Black Cockatoo inhabits the dense jarrah, karri, and marri forests receiving more than 600 mm annual average rainfall but also occurs in a range of other forest and woodland types, including Blackbutt (*E. patens*), Wandoo (*E. wandoo*), Tuart (*E. gomphocephala*), Albany Blackbutt (*E. staeri*), Yate (*E. cornuta*), and Flooded Gum (E. rudis) (DEE 2017). Habitats tend to have an understorey or snottygobble (*Persoonia* spp.), holly-leaved mirbelia (*Mirbelia dilatata*), *Taxandria spp.* and sheoak (*Allocasuarina fraseriana*). They are most common in the jarrah forest region of the northern Darling Range from Collie north to Mundaring and are very local throughout the lower south-west. They can be found on the Swan Coastal Plain, mainly in search of food the

exotic white cedar (*Melia azedarach*). There are also several small, isolated populations in the eastern parts of its range (DAWE 2022).

No birds were observed or recorded during the survey, no evidence of foraging or feeding evidence was recorded within the Survey Site. However, the high number of confirmed recordings of the species throughout neighbouring locations to the current Survey Site suggests that the species may temporarily utilise the site for perching, resting or temporary fly-over activity, albeit for brief periods. The utilisation for long-term, significant persistence with regards to feeding, foraging or breeding, however, is highly unlikely.

Caspian Tern (*Hydroprogne caspia*)

The Caspian Tern is a migratory coastal and oceanic specialised species member of the gull family Laridae and is easily distinguished by its significantly larger size (the largest of all tern species globally) and its significant and prominent, elongated red bill. The species is currently listed as Migratory and under the EPBC Act and DBCA BC Act. This species is mostly associated with sheltered coasts such as harbours, bays, estuaries, etc. They can also be found in inland terrestrial wetlands (saline or fresh) or man-made bodies of water (lakes or reservoirs). (DCCEEW).

No recordings of the species were made during the survey of the Applecross Survey Site, and long-term, suitable habitat for the species is not readily present. However, the number of DBCA recordings within close proximity to the current Survey Areas and the additional close proximity of the Survey Areas to open water sources and nearby perching and resting sites suggest that the species may temporarily utilise the site for resting or minor foraging activity, or in a fly-over capacity.

Crested Tern (*Thalasseus bergii*)

The Crested Tern is a migratory coastal and oceanic specialised species member of the gull family Laridae, and is easily distinguished by its yellow- coloured bill and extended, mobile crest arrangement for head feathers. The species is currently listed as Migratory and under the EPBC Act and DBCA BC Act.

This species inhabits tropical and subtropical coastlines, foraging in the shallow waters of lagoons, coral reefs, estuaries, bays, harbours and inlets, along sandy, rocky, coral or muddy shores, on rocky outcrops in open sea, in mangrove swamps and also far out to sea on open water. It shows a preference for nesting on offshore islands, low-lying coral reefs, sandy or rocky coastal islets, coastal spits, lagoon mudflats, and artificial islets in saltpans and sewage works within 3 km of the coast. (BirdLife International, 2023).

No recordings of the species were made during the survey of the Survey Site , and long-term, suitable habitat for the species is not readily present. However, the number of DBCA recordings within close proximity to the current Survey Site and the additional close proximity of the Survey Areas to open water sources and nearby perching and resting sites suggest that the species may temporarily utilise the site for resting or minor foraging activity, or in a fly-over capacity.

Blue-billed Duck (*Oxyura australis)*

The blue-billed duck is a small Australian, almost entirely aquatic duck, with both the male and female growing to a length of 40 cm. The male has a slate-blue bill which changes to bright blue during the breeding season (Morcombe 2004). The species is listed as a Priority 4 (P4) significant species under the DBCA BC Act.

The blue-billed duck is endemic to Australia's temperate regions, ranging from the southwest of Western Australia, extending to southern Queensland, through New South Wales and Victoria, to Tasmania. The species is readily seen on freshwater lakes and billabongs where deep fresh water is present (Morcombe 2004).

No recordings of the species were made during the survey of the Applecross Survey Site, and long-term, suitable habitat for the species is not readily present. However, the number of DBCA recordings within close proximity to the current Survey Site and the additional close proximity of the Survey Areas to readily used lakes and remnant shores and banks of higher habitat value suggest that the species may temporarily utilise the site for resting or minor foraging activity, or in a fly-over capacity.

Osprey (*Pandion haliaetus)*

The Osprey is a medium to large bird of prey within the sea-hawk genus group of the Accipiteriformes order of larger raptor species, with specialised beak and talon properties for marine, coastal and inland freshwater predation and habitats. The species is currently listed as Migratory under the EPBC Act and the DBCA BC Act.

Ospreys occur in littoral and coastal habitats and terrestrial wetlands of tropical and temperate Australia and offshore islands. They are mostly found in coastal areas but occasionally travel inland along major rivers, particularly in northern Australia. They require extensive areas of open fresh, brackish or saline water for foraging (Marchant & Higgins 1993). They frequent a variety of wetland habitats including inshore waters, reefs, bays, coastal cliffs, beaches, estuaries, mangrove swamps, broad rivers, reservoirs and large lakes and waterholes. They exhibit a preference for coastal cliffs and elevated islands in some parts of their range, but may also occur on low sandy, muddy or rocky shores and over coral cays.

No recordings of the species were made during the survey of the Applecross Survey Site and long-term, suitable habitat for the species is not readily present. However, the number of DBCA recordings within close proximity to the current Survey Site and adjacent readily used lakes and remnant shores and banks of higher habitat value, suggest that the species may temporarily utilise the site for resting or minor foraging activity, or in a fly-over capacity. Furthermore, this species will readily utilise man-made infrastructure for short-term perching and even occasional nesting activity when bordering coastlines or the banks and shores of suitable marine and freshwater feeding areas. Therefore, the species is likely to occasionally utilise the current Survey Site for such purposes.

5. Survey results – Elizabeth Quay Site

5.1 Vegetation and flora

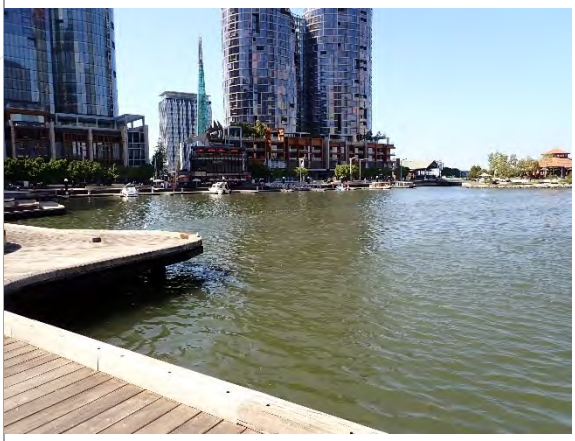
5.1.1 Vegetation types

Based on the structural and floristic characteristics observed in the field, one vegetation type, which is not considered to be remnant vegetation were recorded in the Survey Site:

– Replanting (VT01)

The remaining areas have been mapped as Cleared. The vegetation types are described in Table 13 and mapped in Figure 10B (Appendix A).

Table 14 Recorded vegetation types for Elizabeth Quay Survey Site

Vegetation type	Vegetation Type Description	Landform and Substrate	Extent (ha) and proportion of Survey Areas (%)	Photograph
VT01	Landscaped re-planted areas consisting mixed locally native and non-native species, typically *Melaleuca sp, Ficus sp.,* and non-native, exotic flowering plants and shrubs.	Landscaped areas	0.002 ha (2.05%)	 Coordinates: -31.9577 115.8575 Photograph: Facing North
Open Water	Open Water and Estuarine	-	0.046 ha (49.56%)	 Coordinates: -31.9577 115.8575 Photograph: Facing East
Cleared Areas	Completely devoid of vegetation	-	0.045 ha (48.39%)	

5.1.2 Vegetation condition

The entire Survey Site has been cleared, with modifications carried out over time to the natural edge of the site, with artificial maritime structures bordering what would have historically been estuarine-based riparian shoreline and riverbank species or potentially *Banksia* and *Melaleuca* and *Eucalypt* species. Therefore, the vegetation types were not assigned a vegetation condition as they are not representative of native vegetation.

5.1.3 Significant ecological communities

No EPBC or state listed TECs, or DBCA listed PECs were recorded within the Survey Site.

Vegetation recorded within the Survey Site does not meet the structural or compositional criteria to represent any of the TEC or PECs which have been identified within the desktop-based Study Area.

5.1.4 Flora diversity

A total of five vascular flora species, were recorded in the Survey Site. Three of the flora recorded were native taxa, with the remaining two species not considered to be locally native to the area and classified as introduced. In the context of the current Survey Site and the vegetation types and descriptions, it is also important to note that the native species recorded were part of a re-planting activity. A species list by family type is presented in Appendix D.

5.1.5 Significant flora

No EPBC Act or BC Act listed flora were recorded within the Survey Site, and no priority-listed species flora species were recorded within the Survey Site. Furthermore, no significant tree species of conservation significance for species such as black cockatoos or individual groupings of mature, higher ecological value were identified or recorded within the Survey Area.

Likelihood of occurrence

A likelihood of occurrence assessment was conducted post-field survey for significant flora taxa identified in the desktop assessment (Appendix D). The assessment took into account previous records, habitat requirements, efficacy of the survey, intensity of the survey, flowering times and the cryptic nature of species.

The likelihood of occurrence assessment post-field survey concluded that no taxa identified by the desktop assessment are known to occur or likely to occur. This is due to a combination of known distribution, preferred habitat, visibility of the taxa during the field survey, and most significantly, the high level of disturbance and clearing throughout the Survey Site and its conversion to maritime infrastructure.

5.1.6 Introduced flora

No observed flora species are listed as declared pest plants in WA under the BAM Act, or Weeds of National Significance (WoNS) (Australian Weeds 2012).

5.2 Fauna

5.2.1 Fauna habitat types

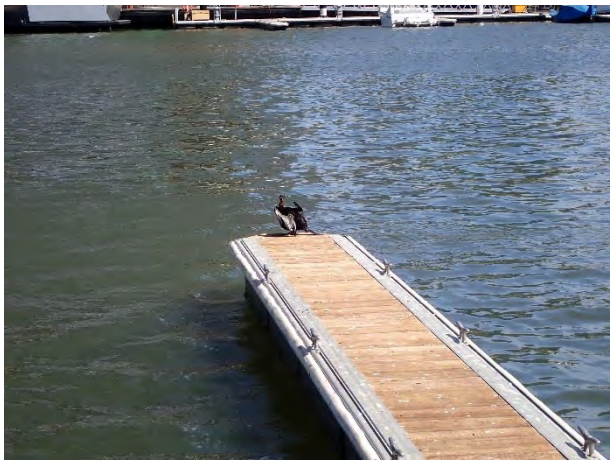
Two broad habitat types were identified within the Survey Site, based on the predominant vegetation structure and geography. These habitats generally align with the vegetation community types (VTs) described Table 14 and mapped from the concurrent flora and vegetation assessment. The fauna habitats tend to be simple in structure and vegetation diversity as they are all derived from relatively recent revegetation of trees and plants comprising native and exotic species including *Eucalyptus*, *Melaleuca*, *Casuarina*, palms, deciduous and evergreen trees. Consequently, much of the habitat types were largely artificial. The habitat types include:

– Native and exotic mixed plantings
– Cleared Areas.

Fauna habitat are described in more detail in Table 15 and mapped in Figure 11B (Appendix A).

Although not part of the scope of this terrestrial study, the recent mapping by the Department of Biodiversity, Conservation and Attractions (DBCA, 2025d) identified seagrass in the vicinity of the three study sites. While these areas are subject to frequent disturbance from boating and urban activity, the presence of seagrass may contribute to local benthic habitat value and support occasional foraging by marine fauna such as bottlenose dolphins (*Tursiops aduncus*) and migratory bird species. This mapping provides important context for assessing potential ecological connectivity for consideration in the broader environmental approvals process.

Table 15 Recorded Fauna Habitat Types for Elizabeth Quay Survey Site

Habitat Type	Habitat Description	Extent (ha) and proportion of Survey Areas (%)	Photograph
Native and exotic mixed plantings (VT01)	This habitat type consists of areas of replanted native and exotic trees and some areas of scattered planted native shrubs and wetland reed species. This habitat is very small in size and in representation of the overall Suver Area and lacked vegetation diversity and structure. The habitat provides very limited and small available foraging habitat for some common native perching bird species. Given the low overall quality and size of the habitat, no significant species are likely to use the habitat on a regular basis. However, the close proximity to open water sources and the Swan River may allow for occasional fly-over activity or temporary perching and resting from various migratory shorebirds and sea-birds.	0.002 ha (2.05%)	 Coordinates: -31.9577 115.8575 Photograph: Facing North
Open Water	Open Water and Estuarine Habitat featuring shallow and mid-level water systems close to shore. These areas are typically disturbed from persistent boating activity and previous infrastructure development but may allow for occasional foraging use by locally common marine mammal species such as bottlenose dolphins (*Tursiops aduncus*).	0.046 ha (49.56%)	 Coordinates: -31.9577 115.8575 Photograph: Facing East
Cleared Areas	Unmapped areas that include roads, cleared construction areas and lawn areas along with maritime infrastructure. These areas had little or no habitat value for fauna including significant species. May had some value for locally common birds.	0.045 ha (48.39%)	

5.2.2 Fauna diversity

The field survey recorded a total of four birds, no mammals, no reptile and no fish species. While this total represents a small proportion of the total number of vertebrates that have historically been recorded through previous desktop and database searches, the low total recorded in this instance reflects the level of disturbance

and cleared habitat of the Survey Site which does not provide habitat for a large abundance and diversity of vertebrate species. One of the species, was introduced, the domestic pigeon (*Columba livia*). The full species list is provided in Appendix E.

All recorded species are common, widespread species known to utilise urban habitat in and modified shoreline, coastal environments.

5.2.3 Significant fauna

During the field survey, no significant species were recorded. A further eight significant species, which are listed in Table 16, are considered either likely to occur or may possibly occur based on local occurrence and habitat availability suited to that particular species, with one such species assessed as likely, with the remaining seven assessed as possibly occurring.

Other significant fauna species may include migratory birds that have been recorded locally due to the proximity of the Survey Site to the estuarine habitat of the Swan River. However, these species are likely to be infrequent visitors from a purely fly-over activity basis, based on the small area size, highly cleared and altered state of the Survey Site. The Survey Site represents very low habitat value for these migratory species and they have therefore not been considered further in this assessment.

Table 16 Significant Fauna Species Assessment for Eliazbeth Quay Survey Site

Common Name	Species Name	Conservation Status EPBC Act	Conservation Status BC Act/DBCA	Likelihood
Baudin's Black Cockatoo	*Zanda baudinii*	EN	EN	Possible.
Carnaby's Black Cockatoo	*Zanda latirostris*	EN	EN	Possible.
Forest Red-tailed Black Cockatoo	*Calyptorhynchus banksii naso*	VU	VU	Possible.
Peregrine Falcon	*Falco peregrinus*	-	OS	Possible
Blue-billed duck	*Oxyura australis*	-	P4	Possible.
Osprey	*Pandion haliaetus*	MI	MI	Likely.
Caspian Tern	*Hydroprogne caspia*	MI	MI	Possible.
Crested Tern	*Thalasseus bergii*	MI	MI	Possible.

Peregrine Falcon (*Falco peregrinus*)

The Peregrine Falcon is listed by the DBCA as otherwise in need of special protection under section 18 of the BC Act. It is uncommon but wide ranging across Australia from woodlands to open grasslands and coastal cliffs, and occasionally in desert regions. It feeds almost entirely on other birds, although it occasionally eats rabbits and other moderate sized mammals, bats and reptiles. The Peregrine Falcon is very territorial during the breeding season, the male courting the female with an impressive display of aerobatics (DEE 2019b, Morcombe 2004). Nest sites include tall trees, cliffs, and elevated artificial structures that provide a secluded and secure platform.

This species was not recorded during the survey and no nest sites were recorded. However, the species has been recorded as utilising urbanised areas along the Swan River and Swan Coastal Plain region, including coastal environments. Therefore, the species may possibly utilise the Survey Site at least on an occasional basis for perching and resting periods or as part of fly-over activity.

Baudin's Cockatoo (*Zanda baudinii*)

The Baudin's Cockatoo is listed as Endangered under the EPBC Act and BC Act. This species is endemic to the south-west of WA. The range of Baudin's Cockatoo varies considerably between the breeding and non-breeding seasons. During the breeding season (from October to January), the species nests in isolated pockets of the far south-west of WA within Jarrah, Marri and Karri forests which receive an average of 750 mm of rainfall annually. In

addition to the south-west, there is an isolated patch of known breeding recorded at Perth Hills, east of Armadale (Johnstone & Storr 1998, Johnstone & Kirkby 2008).

Breeding generally occurs in woodland or forest but may also occur in former woodland or forest now present as isolated trees withing partially cleared parkland or farmland. Nesting occurs in hollows of live or dead Karri, Marri, Wandoo and Tuart (*Eucalyptus gomphocephala*) trees (DSEWPaC 2012). During the breeding season feeding primarily occurs in native vegetation, particularly Marri (DSEWPaC 2012). The range then expands during the non-breeding season (from February) as flocks disperse to forage more widely, congregating on the central and northern parts of the Darling plateau, as far as Mundaring and Gidgegannup (DSEWPaC 2012; Saunders 1974 & 1979).

No birds were observed or recorded during the survey, no evidence of foraging or feeding evidence was recorded within the Survey Site. However, the high number of confirmed recordings of the species throughout neighbouring locations to the current Survey Site suggests that the species may temporarily utilise the site for perching, resting or temporary fly-over activity, albeit for brief periods. The utilisation for long-term, significant persistence with regards to feeding, foraging or breeding, however, is highly unlikely.

Carnaby's Cockatoo (*Zanda latirostris*)

The Carnaby's Cockatoo is listed as Endangered under the EPBC Act and BC Act. This species is endemic to the south-west of WA from near Cape Arid on the south coast through the eastern Wheat Belt and north to about Kalbarri. Carnaby's Cockatoo nest in hollows of live or dead eucalyptus, primarily smooth-barked salmon gum (*Eucalyptus salmonophloia*) and Wandoo (*E. wandoo*) (Saunders 1979, 1982) though breeding has been reported in other Wheatbelt tree species and some tree species on the Swan Coastal Plain and Jarrah forest (Saunders 1979, 1982, Storr 1991, Johnstone & Storr 1998).

Success in breeding is dependent on sufficient high quality foraging habitat located in proximity of nesting and is nominally a radius of up to 12 km of nesting sites (Saunders 1979, 1982, Saunders and Ingram 1987). High quality foraging habitat includes Kwongan heathlands and Banksia woodlands having abundant Banksia species and other proteaceous plants.

No birds were observed or recorded during the survey, no evidence of foraging or feeding evidence was recorded within the Survey Site. However, the high number of confirmed recordings of the species throughout neighbouring locations to the current Survey Site suggests that the species may temporarily utilise the site for perching, resting or temporary fly-over activity, albeit for brief periods. The utilisation for long-term, significant persistence with regards to feeding, foraging or breeding, however, is highly unlikely.

Forest Red-tailed Black-Cockatoo (*Calyptorhynchus banksii naso*)

The Forest Red-tailed Black Cockatoo inhabits the dense jarrah, karri, and marri forests receiving more than 600 mm annual average rainfall but also occurs in a range of other forest and woodland types, including Blackbutt (*E. patens*), Wandoo (*E. wandoo*), Tuart (*E. gomphocephala*), Albany Blackbutt (*E. staeri*), Yate (*E. cornuta*), and Flooded Gum (E. rudis) (DEE 2017). Habitats tend to have an understorey or snottygobble (*Persoonia* spp.), holly-leaved mirbelia (*Mirbelia dilatata*), and sheoak (*Allocasuarina fraseriana*). They are most common in the jarrah forest region of the northern Darling Range from Collie north to Mundaring and are very local throughout the lower south-west. They can be found on the Swan Coastal Plain, mainly in search of food the exotic white cedar (*Melia azedarach*). There are also several small, isolated populations in the eastern parts of its range (DAWE 2022).

No birds were observed or recorded during the survey, no evidence of foraging or feeding evidence was recorded within the Survey Site. However, the high number of confirmed recordings of the species throughout neighbouring locations to the current Survey Site suggests that the species may temporarily utilise the site for perching, resting or temporary fly-over activity, albeit for brief periods. The utilisation for long-term, significant persistence with regards to feeding, foraging or breeding, however, is highly unlikely.

Caspian Tern (*Hydroprogne caspia*)

The Caspian Tern is a migratory coastal and oceanic specialised species member of the gull family Laridae, and is easily distinguished by its significantly larger size (the largest of all tern species globally) and its significant and prominent, elongated red bill. The species is currently listed as Migratory and under the EPBC Act and DBCA BC Act. This species is mostly associated with sheltered coasts such as harbours, bays, estuaries, etc. They can also

be found in inland terrestrial wetlands (saline or fresh) or man-made bodies of water (lakes or reservoirs). (DCCEEW).

No recordings of the species were made during the survey of the Survey Site, and long-term, suitable habitat for the species is not readily present. However, the number of DBCA recordings within proximity to the current Survey Areas and the additional close proximity of the Survey Areas to open water sources and nearby perching and resting sites suggest that the species may temporarily utilise the site for resting or minor foraging activity, or in a fly-over capacity.

Crested Tern (*Thalasseus bergii*)

The Crested Tern is a migratory coastal and oceanic specialised species member of the gull family Laridae and is easily distinguished by its yellow- coloured bill and extended, mobile crest arrangement for head feathers. The species is currently listed as Migratory and under the EPBC Act and DBCA BC Act.

This species inhabits tropical and subtropical coastlines, foraging in the shallow waters of lagoons, coral reefs, estuaries, bays, harbours and inlets, along sandy, rocky, coral or muddy shores, on rocky outcrops in open sea, in mangrove swamps and also far out to sea on open water. It shows a preference for nesting on offshore islands, low-lying coral reefs, sandy or rocky coastal islets, coastal spits, lagoon mudflats, and artificial islets in saltpans and sewage works within 3 km of the coast. (BirdLife International, 2023).

No recordings of the species were made during the survey of the Survey Site, and long-term, suitable habitat for the species is not readily present. However, the number of DBCA recordings within proximity to the current Survey Site and adjacent to open water sources and nearby perching and resting sites suggest that the species may temporarily utilise the site for resting or minor foraging activity, or in a fly-over capacity.

Blue-billed Duck (*Oxyura australis)*

The blue-billed duck is a small Australian almost entirely aquatic duck, with both the male and female growing to a length of 40 cm. The male has a slate-blue bill which changes to bright blue during the breeding season (Morcombe 2004). The species is listed as a Priority 4 (P4) significant species under the DBCA BC Act.

The blue-billed duck is endemic to Australia's temperate regions, ranging from the southwest of Western Australia, extending to southern Queensland, through New South Wales and Victoria, to Tasmania. The species is readily seen on freshwater lakes and billabongs where deep fresh water is present (Morcombe 2004).

No recordings of the species were made during the survey of the Survey Site, and long-term, suitable habitat for the species is not readily present. However, the number of DBCA recordings within proximity to the current Survey Areas and the additional proximity of the Survey Areas to readily used lakes and remnant shores and banks of higher habitat value suggest that the species may temporarily utilise the site for resting or minor foraging activity, or in a fly-over capacity.

Osprey (*Pandion haliaetus)*

The Osprey is a medium to large bird of prey within the sea-hawk genus group of the Accipitriformes order of larger raptor species, with specialised beak and talon properties for marine, coastal and inland freshwater predation and habitats. The species is currently listed as Migratory under the EPBC Act and the DBCA BC Act.

Ospreys occur in littoral and coastal habitats and terrestrial wetlands of tropical and temperate Australia and offshore islands. They are mostly found in coastal areas but occasionally travel inland along major rivers, particularly in northern Australia. They require extensive areas of open fresh, brackish or saline water for foraging (Marchant & Higgins 1993). They frequent a variety of wetland habitats including inshore waters, reefs, bays, coastal cliffs, beaches, estuaries, mangrove swamps, broad rivers, reservoirs and large lakes and waterholes. They exhibit a preference for coastal cliffs and elevated islands in some parts of their range, but may also occur on low sandy, muddy or rocky shores and over coral cays.

No recordings of the species were made during the survey of the Survey Site, and long-term, suitable habitat for the species is not readily present. However, the number of DBCA recordings within proximity to the current Survey Site and the additional close proximity of the Survey Site to readily used lakes and remnant shores and banks of higher habitat value suggest that the species may temporarily utilise the site for resting or minor foraging activity, or in a fly-over capacity. Furthermore, this species will readily utilise man-made infrastructure for short-term perching and even occasional nesting activity when bordering coastlines or the banks and shores of suitable

marine and freshwater feeding areas. Therefore, the species is likely to occasionally utilise the current Survey Site for such purposes.

6. Survey results – Matilda Bay Site

6.1 Vegetation and flora

6.1.1 Vegetation types

Based on the structural and floristic characteristics observed in the field, 3 vegetation types, none of which are considered native vegetation, were recorded in the two separate sections that comprised the overall Matilda Bay Survey Site.

These vegetation types included:

– Revegetation and Re-planting (VT01)
– Parkland areas consisting of planted trees over lawns. (VT02)
– Wetland/Waterline Shore-bank (VT03).

An additional section of the Survey Area has been mapped as Open Water. The remaining areas have been mapped as Cleared Areas. The vegetation types are described in Table 20 and mapped in Figure 10C (Appendix A).

Table 17 Recorded Vegetation Types for Matilda Bay Survey Site

Vegetation type	Vegetation Type Description	Landform and Substrate	Extent (ha) and proportion of Survey Areas (%)	Photograph
VT01	Replanted areas consisting of mixed locally native and non-native species, typically patchy mixed native sedges and non-native and native *Eucalypt* and *Melaleuca* species, exotic flowering plants and shrubs.	Landscaped areas	0.60 ha (11.93%)	 Coordinates: -31.978 115.8212 Photograph: Facing North
VT02	Parkland areas consisting of planted trees over mown grass consisting of *Melaleuca* sp., *Agonis* sp., individual Marri and Tuart *and Casuarina* sp. in low density.	Landscaped areas	0.17 ha (3.38%)	 Coordinates: -31.9773 115.8215 Photograph: Facing North

Vegetation type	Vegetation Type Description	Landform and Substrate	Extent (ha) and proportion of Survey Areas (%)	Photograph
VT03	Wetland/Shore-bank vegetation consisting of highly modified previous shoreline wetland and estuarine vegetation communities with varying levels of reeds and *Melaleuca* species, and introduced River Oak (*Casuarina cunninghamiana*), as well as small sections of bulrush *(Juncus kraussii).* Includes some native and exotic emergent aquatic plants.	Landscaped Areas	0.07 ha (1.39%)	 Coordinates: -31.9769 115.8219 Photograph: Facing North-East
Open Water	Open Water and Estuarine	-	3.29 ha (65.41%)	 Coordinates: -31.9806 115.821 Photograph: Facing South-East
Cleared Areas	Completely devoid of vegetation	-	0.89 ha (17.70%)	

6.1.2 Vegetation condition

The entire Survey Site has been cleared, with modifications carried out over time to the natural edge of the site, with artificial maritime structures bordering what would have historically been estuarine-based riparian shoreline and riverbank species or potentially *Banksia* and *Melaleuca* and *Eucalypt* species. Therefore, the vegetation types were not assigned a vegetation condition as they are not representative of native vegetation.

6.1.3 Significant ecological communities

No EPBC or state listed TECs, or DBCA listed PECs were recorded within the Survey Site.

Vegetation recorded within the Survey Area does not meet the structural or compositional criteria to represent any of the TEC or PECs which have been identified within the desktop Study Area.

6.1.4 Flora diversity

A total of 16 vascular flora species were recorded in the Survey Site. A total of 10 of the flora recorded were native taxa, with the remaining six not considered to be locally native to the area and were classified as introduced. A species list and species by family type are presented in Appendix D.

6.1.5 Significant flora

No EPBC Act or DBCA BC Act listed flora were recorded within the Survey Site.

Likelihood of occurrence

A likelihood of occurrence assessment was conducted post-field survey for significant flora taxa identified in the desktop assessment (Appendix D). The assessment took into account previous records, habitat requirements, efficacy of the survey, intensity of the survey, flowering times and the cryptic nature of species.

The likelihood of occurrence assessment post-field survey concluded that no taxa identified by the desktop assessment are either known to occur or are likely to occur. This is due to a combination of known distribution, preferred habitat, visibility of the taxa during the field survey, and most significantly, the high level of disturbance and clearing throughout the Survey Site and its conversion to public infrastructure and recreational parkland.

6.1.6 Introduced flora

No observed flora species are listed as declared pest plants in WA under the BAM Act, or Weeds of National Significance (WoNS) (Australian Weeds 2012).

6.2 Fauna

6.2.1 Fauna habitat types

Five broad habitat types were identified within the two separate sections of the Matilda BaySurvey Site based on the predominant vegetation structure and geography. These habitats generally align with the vegetation community types (VTs) described in Table 21, and mapped from the concurrent flora and vegetation assessment. The fauna habitats tend to be simple in structure and vegetation diversity as they are all derived from relatively recent revegetation of trees, shrubs and wetlands plants comprising native and exotic species including *Eucalyptus* sp., *Melaleuca* sp., *Casuarina* sp*., Agonis flexuosa*, deciduous and evergreen trees. Consequently, the habitat types were largely artificial. The habitat types include:

– Shoreline Wetlands, Riparian and River
– Scattered trees
– Parkland over revegetation and re-planted vegetation
– Cleared areas.

– Open Water.

Fauna habitat are described in more detail in Table 21 and mapped in Figure 11C (Appendix A).

Table 18 Recorded Fauna Habitat for Matilda Bay Survey Site

Habitat Type	Habitat Description	Extent (ha) and proportion of Survey Areas (%)	Photograph
Shoreline Wetlands, Riparian and River (VT03)	This habitat consists of waterbodies and shoreline systems with varying levels of reeds and *Melaleuca* species, and introduced River Oak (*Casuarina cunninghamiana*), as well as small sections of bulrush *(juncus kraussii).* Includes some native and exotic emergent aquatic plants. This habitat provides potential, temporary habitat for waterfowl and wading bird species such as black swans (*Cygnus atratus*), Pacific Black Ducks *(Anas superciliosus*) and locally common moorhens and swamphens. This habitat is not likely to be important for migratory birds due to lack of shallow open shoreline suitable as foraging habitat for waders, however they may occur occasionally as temporary foraging or resting-based visitation due to proximity to estuarine habitat of the Swan River. Furthermore, the highly degraded and altered state of the habitat type is unlikely to support wetland and shoreline mammalian species such as water rat (Rakali) (*Hydromys chrysogaster*). The small areas of marine system as a part of the extended open water sections of the Survey Areas may be used for brief foraging periods by locally common marine mammal species such as bottlenosed dolphins (*Tursiops aduncus*).	0.07 ha (1.39%)	 Coordinates: -31.9769 115.8219 Photograph: Facing North-East
Parkland over re-vegetation and re-planted vegetation (VT01)	This habitat consists of landscaped areas or open parklands, garden beds, lawns with sections of recent native replanting and re-vegetation, which consists of both native and exotic species. The majority of these areas are regularly maintained and therefore weed presence and significant hollows, logs, leaf litter or rocks and crevices are few in number. The nature of the highly modified habitat with the lack of additional microhabitats and understory suggests that native mammal and reptile suitability is low, with the exception of possible use for brief foraging activity by Quendas (*Isoodon fusciventer).* Avian fauna species may utilise the area as part of brief, occasional foraging and resting activity. This may include significant-listed fauna species including Osprey (*Pandion haliaetus*), Peregrine Falcon (*Falco peregrinus*) and the three endemic Black Cockatoo Species.	0.60 ha (11.93%)	 Coordinates: -31.978 115.8212 Photograph: Facing North

Habitat Type	Habitat Description	Extent (ha) and proportion of Survey Areas (%)	Photograph
Scattered Trees over Parkland (VT02)	This is a generally highly modified habitat containing isolated and small stands of native and introduced tree species over a virtually entirely cleared understorey. The trees present are located across mostly maintained lawns. Tree species identified include Paperbark species (Melaleuca sp.), Peppermint *(Agonis flexuosa*) and *Casuarina sp.* as well as isolated individual Jarrah, Marri and Tuart tree species. Sources of hollows and nesting opportunities are occasionally present but typically rare, with hollow logs, leaf litter and thick grass or bushes to provide additional microhabitat. The nature of the highly modified habitat with the lack of additional microhabitats and understory suggests that native mammal and reptile suitability is low, with the exception of possible use for brief foraging activity by Quendas (*Isoodon fusciventer).* Avian fauna species may utilise the area as part of brief, occasional foraging and resting activity. This may include significant-listed fauna species including Osprey (*Pandion haliaetus)* and the three endemic Black Cockatoo Species. Small numbers of isolated potential nesting size trees (DBH>500mm) were identified.	0.17 ha (3.38%)	 Coordinates: -31.9765 115.8219 Photograph: Facing West
Open Water	Open Water and Estuarine Habitat featuring shallow and mid-level water systems close to shore. These areas are typically disturbed from persistent boating activity and previous infrastructure development but may allow for occasional foraging use by locally common marine mammal species such as bottlenose dolphins (*Tursiops aduncus*).	3.29 ha (65.41%)	 Coordinates: -31.9806 115.821 Photograph: Facing South-East
Cleared Areas	Unmapped areas that include roads, cleared construction areas and lawn areas. These areas had little or no habitat value for fauna including significant species, but may occasionally be used by various	0.89 ha (17.69%)	

Habitat Type	Habitat Description	Extent (ha) and proportion of Survey Areas (%)	Photograph
	avian fauna species for temporary perching and resting activity given the proximity to open water bodies.		

6.2.2 Fauna diversity

The field survey recorded a total of 11 bird species, with no mammals, reptiles, fish or amphibian species recorded. This represents a small proportion of the total number of vertebrates that are likely or known to occur in the study area, based on desktop databases searches and assessments. Two species were introduced species, these being the Rainbow Lorikeet (*Trichoglossus moluccanus*) and the Long-billed Corella (*Cacatua tenuirostris*). The full species list is provided in Appendix E.

All of the fauna species identified are common, widespread species known to utilise urban habitat, modified wetlands, coastal shorelines and converted recreational parklands.

6.2.3 Significant fauna

During the field survey, no significant species were recorded. A further nine significant species, which are listed in Table 22, are likely to occur based on local occurrence and habitat availability. Of these nine species, five were assessed as being likely to occur, with a further four species assessed as possibly occurring.

Other significant fauna species may include migratory birds that have been recorded locally due to the proximity of the Survey Site to the estuarine habitat of the Swan River. However, these species are likely to be infrequent visitors from a purely fly-over activity basis, based on the small area size, highly cleared and altered state of the Survey Site. The Survey Site represents very low habitat value for these migratory species and they have therefore not been considered further in this assessment.

Table 19 Significant Fauna Species across Matilda Bay Survey Site

Common Name	Species Name	Status Listing EPBC Act	Status Listing DBCA BC Act	Likelihood
Baudin's Black Cockatoo	*Zanda baudinii*	EN	EN	**Likely.**
Carnaby's Black Cockatoo	*Zanda latirostris*	EN	EN	**Likely.**
Forest Red-tailed Black Cockatoo	*Calyptorhynchus banksii naso*	VU	VU	**Likely.**
Peregrine Falcon	*Falco peregrinus*	-	OS	**Likely.**
Blue-billed duck	*Oxyura australis*	-	P4	**Possible.**
Osprey	*Pandion haliaetus*	MI	MI	**Likely.**
Caspian Tern	*Hydroprogne caspia*	MI	MI	**Possible.**
Crested Tern	*Thalasseus bergii*	MI	MI	**Possible.**
Quenda	*Isoodon fusciventer*	-	P4	**Possible.**

Peregrine Falcon (*Falco peregrinus*)

The Peregrine Falcon is listed by the DBCA as otherwise in need of special protection under section 18 of the BC Act. It is uncommon but wide ranging across Australia from woodlands to open grasslands and coastal cliffs, and occasionally in desert regions. It feeds almost entirely on other birds, although it occasionally eats rabbits and other moderate sized mammals, bats and reptiles. The Peregrine Falcon is very territorial during the breeding season, the male courting the female with an impressive display of aerobatics (DEE 2019b, Morcombe 2004). Nest sites include tall trees, cliffs, and elevated artificial structures that provide a secluded and secure platform.

This species was not recorded during the survey and no nest sites were recorded. However, the species has been recorded as utilising urbanised areas along the Swan River and Swan Coastal Plain region, including coastal environments. Therefore, the species may possibly utilise the Survey Site at least on an occasional basis for perching and resting periods or as part of fly-over activity.

Baudin's Cockatoo (*Zanda baudinii*)

The Baudin's Cockatoo is listed as Endangered under the EPBC Act and BC Act. This species is endemic to the south-west of WA. The range of Baudin's Cockatoo varies considerably between the breeding and non-breeding seasons. During the breeding season (from October to January), the species nests in isolated pockets of the far south-west of WA within Jarrah, Marri and Karri forests which receive an average of 750 mm of rainfall annually. In addition to the south-west, there is an isolated patch of known breeding recorded at Perth Hills, east of Armadale (Johnstone & Storr 1998, Johnstone & Kirkby 2008).

Breeding generally occurs in woodland or forest but may also occur in former woodland or forest now present as isolated trees withing partially cleared parkland or farmland. Nesting occurs in hollows of live or dead Karri, Marri, Wandoo and Tuart (*Eucalyptus gomphocephala*) trees (DSEWPaC 2012). During the breeding season feeding primarily occurs in native vegetation, particularly Marri (DSEWPaC 2012). The range then expands during the non-breeding season (from February) as flocks disperse to forage more widely, congregating on the central and northern parts of the Darling plateau, as far as Mundaring and Gidgegannup (DSEWPaC 2012; Saunders 1974 & 1979).

No birds were observed or recorded during the survey, no evidence of foraging or feeding evidence was recorded within the Survey Site. However, the high number of confirmed recordings of the species throughout neighbouring locations to the current Survey Areas suggests that the species may temporarily utilise the site for perching, resting or temporary fly-over activity, albeit for brief periods. Furthermore, several potential nesting trees of sufficient DBH were recorded in scattered areas across the Survey Site, highlighting the potential for brief site utilisation. These specific individual trees are outlined in fauna habitat mapping in Appendix A. The utilisation for long-term, significant persistence with regards to feeding, foraging or breeding, however, is highly unlikely.

Carnaby's Cockatoo (*Zanda latirostris*)

The Carnaby's Cockatoo is listed as Endangered under the EPBC Act and BC Act. This species is endemic to the south-west of WA from near Cape Arid on the south coast through the eastern Wheat Belt and north to about Kalbarri. Carnaby's Cockatoo nest in hollows of live or dead eucalyptus, primarily smooth-barked salmon gum (*Eucalyptus salmonophloia*) and Wandoo (*E. wandoo*) (Saunders 1979, 1982) though breeding has been reported in other Wheatbelt tree species and some tree species on the Swan Coastal Plain and Jarrah forest (Saunders 1979, 1982, Storr 1991, Johnstone & Storr 1998).

Success in breeding is dependent on sufficient high quality foraging habitat located in proximity of nesting and is nominally a radius of up to 12km of nesting sites (Saunders 1979, 1982, Saunders and Ingram 1987). High quality foraging habitat includes Kwongan heathlands and Banksia woodlands having abundant Banksia species and other proteaceous plants.

No birds were observed or recorded during the survey, no evidence of foraging or feeding evidence was recorded within the Survey Site. However, the high number of confirmed recordings of the species throughout neighbouring locations to the current Survey Site suggests that the species may temporarily utilise the site for perching, resting or temporary fly-over activity, albeit for brief periods. Furthermore, several potential nesting trees of sufficient DBH were recorded in scattered areas across the Survey Site, highlighting the potential for brief site utilisation. These specific individual trees are outlined in fauna habitat mapping in Appendix A. The utilisation for long-term, significant persistence with regards to feeding, foraging or breeding, however, is highly unlikely.

Forest Red-tailed Black-Cockatoo (*Calyptorhynchus banksii naso*)

The Forest Red-tailed Black Cockatoo inhabits the dense jarrah, karri, and marri forests receiving more than 600 mm annual average rainfall but also occurs in a range of other forest and woodland types, including Blackbutt (*E. patens*), Wandoo (*E. wandoo*), Tuart (*E. gomphocephala*), Albany Blackbutt (*E. staeri*), Yate (*E. cornuta*), and Flooded Gum (E. rudis) (DEE 2017). Habitats tend to have an understorey or snottygobble (*Persoonia* spp.), holly-leaved mirbelia (*Mirbelia dilatata*), and sheoak *(Allocasuarina fraseriana*). They are most common in the jarrah forest region of the northern Darling Range from Collie north to Mundaring and are very local throughout the lower south-west. They can be found on the Swan Coastal Plain, mainly in search of food the exotic white cedar (*Melia azedarach*). There are also several small, isolated populations in the eastern parts of its range (DAWE 2022).

No birds were observed or recorded during the survey, no evidence of foraging or feeding evidence was recorded within the Survey Site. However, the high number of confirmed recordings of the species throughout neighbouring locations to the current Survey Areas suggests that the species may temporarily utilise the site for perching,

resting or temporary fly-over activity, albeit for brief periods. Furthermore, several potential nesting trees of sufficient diameter breast height (DBH) were recorded in scattered areas across the Survey Site, highlighting the potential for brief site utilisation. These specific individual trees are outlined in fauna habitat mapping in Appendix A. The utilisation for long-term, significant persistence with regards to feeding, foraging or breeding, however, is highly unlikely.

Caspian Tern (*Hydroprogne caspia*)

The Caspian Tern is a migratory coastal and oceanic specialised species member of the gull family Laridae and is easily distinguished by its significantly larger size (the largest of all tern species globally) and its significant and prominent, elongated red bill. The species is currently listed as Migratory and under the EPBC Act and DBCA BC Act. This species is mostly associated with sheltered coasts such as harbours, bays, estuaries, etc. They can also be found in inland terrestrial wetlands (saline or fresh) or man-made bodies of water (lakes or reservoirs). (DCCEEW).

No recordings of the species were made during the survey, and long-term, suitable habitat for the species is not readily present. However, the number of DBCA recordings within proximity to the current Survey Site and the additional close proximity of the Survey Site to open water sources and nearby perching and resting sites suggest that the species may temporarily utilise the site for resting or minor foraging activity, or in a fly-over capacity.

Crested Tern (*Thalasseus bergii*)

The Crested Tern is a migratory coastal and oceanic specialised species member of the gull family Laridae and is easily distinguished by its yellow- coloured bill and extended, mobile crest arrangement for head feathers. The species is currently listed as Migratory and under the EPBC Act and DBCA BC Act.

This species inhabits tropical and subtropical coastlines, foraging in the shallow waters of lagoons, coral reefs, estuaries, bays, harbours and inlets, along sandy, rocky, coral or muddy shores, on rocky outcrops in open sea, in mangrove swamps and also far out to sea on open water. It shows a preference for nesting on offshore islands, low-lying coral reefs, sandy or rocky coastal islets, coastal spits, lagoon mudflats, and artificial islets in saltpans and sewage works within 3 km of the coast. (BirdLife International, 2023).

No recordings of the species were made during the survey, and long-term, suitable habitat for the species is not readily present. However, the number of DBCA recordings within proximity to the current Survey Site and adjacent to open water sources and nearby perching and resting sites suggest that the species may temporarily utilise the site for resting or minor foraging activity, or in a fly-over capacity.

Blue-billed Duck (*Oxyura australis)*

The blue-billed duck is a small Australian, almost entirely aquatic duck, with both the male and female growing to a length of 40 cm. The male has a slate-blue bill which changes to bright blue during the breeding season (Morcombe 2004). The species is listed as a Priority 4 (P4) significant species under the DBCA BC Act.

The blue-billed duck is endemic to Australia's temperate regions, ranging from the southwest of Western Australia, extending to southern Queensland, through New South Wales and Victoria, to Tasmania. The species is readily seen on freshwater lakes and billabongs where deep fresh water is present (Morcombe 2004).

No recordings of the species were made during the survey, and long-term, suitable habitat for the species is not readily present. However, the number of DBCA recordings within proximity to the current Survey Site and the additional close proximity of the Survey Areas to readily used lakes and remnant shores and banks of higher habitat value suggest that the species may temporarily utilise the site for resting or minor foraging activity, or in a fly-over capacity.

Osprey (*Pandion haliaetus)*

The Osprey is a medium to large bird of prey within the sea-hawk genus group of the Accipitriformes order of larger raptor species, with specialised beak and talon properties for marine, coastal and inland freshwater predation and habitats. The species is currently listed as Migratory under the EPBC Act and the DBCA BC Act.

Ospreys occur in littoral and coastal habitats and terrestrial wetlands of tropical and temperate Australia and offshore islands. They are mostly found in coastal areas but occasionally travel inland along major rivers, particularly in northern Australia. They require extensive areas of open fresh, brackish or saline water for foraging

(Marchant & Higgins 1993). They frequent a variety of wetland habitats including inshore waters, reefs, bays, coastal cliffs, beaches, estuaries, mangrove swamps, broad rivers, reservoirs and large lakes and waterholes. They exhibit a preference for coastal cliffs and elevated islands in some parts of their range, but may also occur on low sandy, muddy or rocky shores and over coral cays.

No recordings of the species were made during the survey of the Matilda Bay Survey Site, and long-term, suitable habitat for the species is not readily present. However, the number of DBCA recordings within close proximity to the current Survey Site and the additional close proximity of the Survey Site to readily used lakes and remnant shores and banks of higher habitat value suggest that the species may temporarily utilise the site for resting or minor foraging activity, or in a fly-over capacity. Furthermore, this species will readily utilise man-made infrastructure for short-term perching and even occasional nesting activity when bordering coastlines or the banks and shores of suitable marine and freshwater feeding areas. Therefore, the species is likely to occasionally utilise the current Survey Site for such purposes.

Quenda (*Isoodon fusciventer*)

The quenda is a medium sized peramelid marsupial species reaching 1.5-2 kg in weight in mature adult males, with buff brown fur coating across the body, and with distinctive conical snout and small, protruding ears.

At present, the Quenda is listed by DBCA as a Priority 4 species. Its preferred habitat is low dense scrubby, often swampy, vegetation with dense cover up to one metre high. It also occurs in woodlands, and also known to utilise weedy low condition habitat adjacent higher quality bushland. The species often feeds in adjacent forest and woodland that is burnt on a regular basis and in areas of pasture and cropland close to dense cover (Van Dyck & Strahan 2008). The species will persist in semi-rural areas such as Swan Valley and occurs in some Perth urban areas where re-planted vegetation or small patches of remaining native vegetation allow linkages between suitable feeding and foraging sites.

No recordings of the species were made during the survey of the site and no digging evidence within the Survey Site was recorded. However, the known presence of the species in numerous neighbouring reserves and urban areas bordering the Survey Site, and the species' capacity to utilise urban gardens and partially replanted parklands despite the presence of human disturbance, suggests that the species may temporarily utilise the current Survey Site for occasional foraging or as a linkage-related pathway between more suitable feeding and foraging sites.

7. Discussion and Conclusions

7.1 Vegetation

A small number of basic vegetation types were recorded within the three survey sites across the Survey Area, varying from one to three vegetation types across the three sites, with the larger range of vegetation types and vegetation cover being observed at Matilda Bay.

Across the three survey sites, the dominant vegetation types consisted of cleared parkland, scattered native Eucalypt, Melaleuca, and Peppermint, Shoreline and Estuarine Riparian, native and exotic re-plantings, with remaining sections classified as open water and completely cleared. As a result, all three survey sites of the Survey Area are classified as Cleared Areas.

No EPBC or state listed TECs, or DBCA listed PECs were recorded within any of the three survey sites of the Survey Area. The absence of significant vegetation reflects the highly degraded, low ecological value of the overall Survey Area in its current state.

7.2 Flora

A total of 19 vascular flora species, were recorded across all three survey sites of the Survey Area, a total which included 10 native and seven introduced species. As the survey sites have previously been cleared and significantly altered, the flora of the area consisted both planted exotic and native species, with scattered, individual trees from various *Agonis* (Peppermint), *Melaleuca*, Eucalypt and Marri species present in small numbers at both the Matilda Bay site.

No EPBC Act or BC Act listed Threatened flora or DBCA-listed Priority Flora species were recorded within the three Survey Areas. Database desktop searches across various state and federal records identified a number of Threatened and Priority flora species previously recorded or likely to occur within the study area of a 10 km radius of all three survey sites, specifically 167 taxa of species and sub-species. However, all such identified species are considered either unlikely or highly unlikely to occur within any of the three survey sites post survey, due to historical disturbance, lack of suitable habitat, and distance of known records from the survey sites.

No recorded flora species were listed as declared pest plants in WA under the BAM Act, or Weeds of National Significance (WoNS) (Australian Weeds 2012).

7.3 Fauna

A small number of basic fauna habitat types were recorded across the three survey sites of the Survey Area, consisting of five basic habitat types (excluding Cleared Areas) to varying sizes and coverage across the three survey sites. These fauna types were classified as Scattered Trees, Parkland over revegetation and re-planted flora, Riparian Rivers and Shoreline Wetlands, Native and exotic mixed plantings and Open Water. These fauna habitats are likely to support a comparatively small range of regionally common terrestrial fauna species, primarily birds, within the habitats available.

The Open Water habitats are present across all three survey sites and are likely to provide brief foraging habitats for a range of locally common fish, crustacean and marine mammal species such as bottlenose dolphins, which were observed engaging in brief foraging behaviour at the Applecross site. However, specialised, environmentally significant marine and estuarine habitats are not present within these identified Open Water habitats, and their smaller size within the context of larger surrounding marine habitats suggests that these areas are not likely to support the persistence of large numbers of important marine fauna species. The majority of mapped areas of seagrass habitat is located outside of the survey site areas, with no evidence of mapped seagrass within the Applecross and Matilda Bay sites or within proximity to those Survey Sites. The Elizabeth Quay site contains small fragments of sparse-rated and medium-rated seagrass cover on the outer regions of these Open Water sections. These fragments represent a small percentage of the total seagrass recorded in surrounding marine and estuarine

habitats and thus are not likely to be used for significant sheltering and foraging activity by various marine species that may occur in the areas on a temporary basis.

A total of three suitable DBH (DBH of greater than 500 mm) were identified at across the Matilda Bay site as shown in Figure12C.. (Appendix A). Suitable DBH trees have the potential to support black cockatoo breeding when in proximity to moderate to high quality feeding and foraging habitat. In the context of the present Survey Area, neither the Applecross or Elizabeth Quay site contain any foraging habitat or roosting habitat of noted quality or for breeding purposes (DCCEEW, 2017). The small number of isolated suitable DBH trees at the Matilda Bay site may provide small sources of temporary roosting and foraging, albeit of low quality rating. However, given that no hollows were observed and that there are numerous recordings of confirmed roosting and higher quality foraging habitat in surrounding areas of all three survey sites, these recorded trees are not likely to provide high quality foraging or roosting habitat for any of the three black cockatoo species to persist in numbers or with consistent visitation.

From an assessment of potentially significant trees that were deemed to be of importance in terms of size, significance to native fauna use and overall importance to the Survey Site, there were no significant trees observed at either the Applecross site or the Elizabeth Quay site. When including the suitable DBH trees in the assessment, a total of seven potentially significant tree groupings were identified and recorded across the remaining two survey sites, with all seven at Matilda Bay. The majority of these trees were isolated individuals with a small number of small groupings of three to four. Most of these trees were also native species of older ages, size and condition compared to other surrounding flora species observed, with each of them offering potential foraging, temporary resting and nesting habitat for locally common bird species, as well as the identified black cockatoo trees offering the potential for lower value foraging and feeding and temporary resting habitat. The details of each group of potentially significant trees are provided in table format in Appendix D. It is noted that while other trees of smaller size and condition were observed at the Matilda Bay site, these were not deemed to have a significant size or condition to be assessed as of significance to each survey site as a source of fauna utilisation when compared to those identified and highlighted trees.

Database desktop searches across various state and federal records have identified a significant number of Threatened and Priority fauna species previously recorded or likely to occur within the Study Area, specifically 94 taxa of species and sub-species. However, such previous records were not located within the three survey sites themselves with great frequency and were concentrated within neighbouring areas of higher habitat value or established conservation reserves and parks.

Field surveys across all three survey sites recorded small numbers of predominantly locally common bird species, ranging from as few as four species at the Elizabeth Quay site to 13 species at the Matilda Bay site. No EPBC Act or BC Act listed Threatened fauna or DBCA-listed Priority fauna were recorded. While the majority of the previously identified significant species from desktop assessment were assessed as unlikely to occur, a small number of species across the four survey sites were deemed likely to occur or possibly occurring, ranging from eight species at the Elizabeth Quay and Applecross sites, to nine species at the Matilda Bay site. There were higher numbers of such species at Matilda Bay recorded as being likely to occur as opposed to possibly occurring. This is due to the higher density of re-planted native and exotic vegetation and scattered tree vegetation cover and the presence of small clusters of scattered existing trees. This may allow for species such as Osprey and Quenda to utilise this site on a more frequent basis for temporary resting or foraging activity or as a means of navigating between neighbouring habitats of higher quality. In comparison, both the Applecross and Elizabeth Quay sites are less likely to contain habitat of benefit to such significant species due to the very poor quality of the habitats present, and thus are most likely to be utilised for temporary resting behaviour by locally common sea-birds and waterfowl.

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Appendices

Appendix A

Figures

Paper Size ISO A3
at Scale: 1:100,000

0 0.5 1 1.5 2
Kilometres

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

N

GHD

Public Transport Authority
Swan River Ferry Expansion
Ecology and EIA Support

Project Location

Project No.	12658767
Revision No.	0
Date	16/05/2025

FIGURE 1

\\ghdnet.internal\ghd\AU\Perth\Projects\61\12658767\GIS\Maps\Working\12658767_SwanRiverFerryExpansion_BP_Working\12658767_SwanRiverFerryExpansion_BP_Working.aprx\12658767_001_ProjectLocation_Rev0
Print date: 16 May 2025 - 15:39

Data source: WANow: Landgate / SLIP
OpenStreetMap: Map data © OpenStreetMap contributors, Microsoft, Facebook, Google, Esri Community Maps contributors, Map layer by Esri
World Hillshade: Sources: Esri, Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap, and the GIS user

Paper Size ISO A3
at Scale: 1:100,000

0 0.5 1 1.5 2
Kilometres

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

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Public Transport Authority
Swan River Ferry Expansion
Ecology and EIA Support

Survey Effort

Project No.	12658767
Revision No.	0
Date	16/05/2025

FIGURE 2

\\ghdnet.internal\ghd\AU\Perth\Projects\61\12658767\GIS\Maps\Working\12658767_SwanRiverFerryExpansion_BP_Working\12658767_SwanRiverFerryExpansion_BP_Working.aprx\12658767_002_SurveyEffort_Rev0
Print date: 16 May 2025 - 15:41

Data source: WANow: Landgate / SLIP
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Paper Size ISO A3
at Scale: 1:100,000

0 0.5 1 1.5 2
Kilometres

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

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Public Transport Authority
Swan River Ferry Expansion
Ecology and EIA Support

Wetlands

Project No. 12658767
Revision No. 0
Date 16/05/2025

FIGURE 3

\\ghdnet.internal\ghd\AU\Perth\Projects\61\12658767\GIS\Maps\Working\12658767_SwanRiverFerryExpansion_BP_Working\12658767_SwanRiverFerryExpansion_BP_Working.aprx\12658767_003_Wetlands_Rev0
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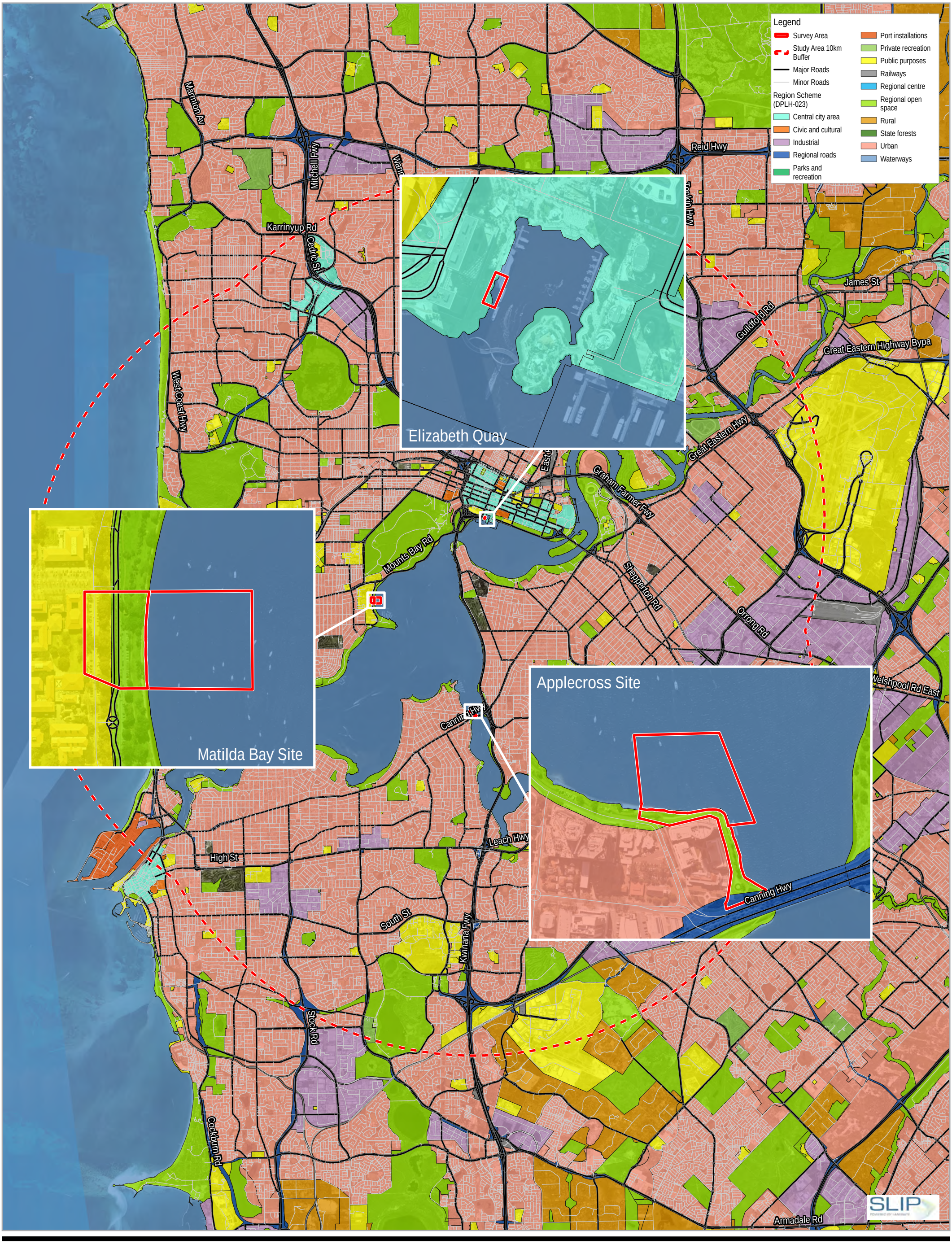

Paper Size ISO A3
at Scale: 1:100,000

0 0.5 1 1.5 2

Kilometres

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

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Public Transport Authority
Swan River Ferry Expansion
Ecology and EIA Support

Metropolitan Region Scheme

Project No.	12658767
Revision No.	0
Date	16/05/2025

FIGURE 4

\\ghdnet.internal\ghd\AU\Perth\Projects\61\12658767\GIS\Maps\Working\12658767_SwanRiverFerryExpansion_BP_Working\12658767_SwanRiverFerryExpansion_BP_Working.aprx\12658767_004_MetropolitanRegionScheme_Rev0
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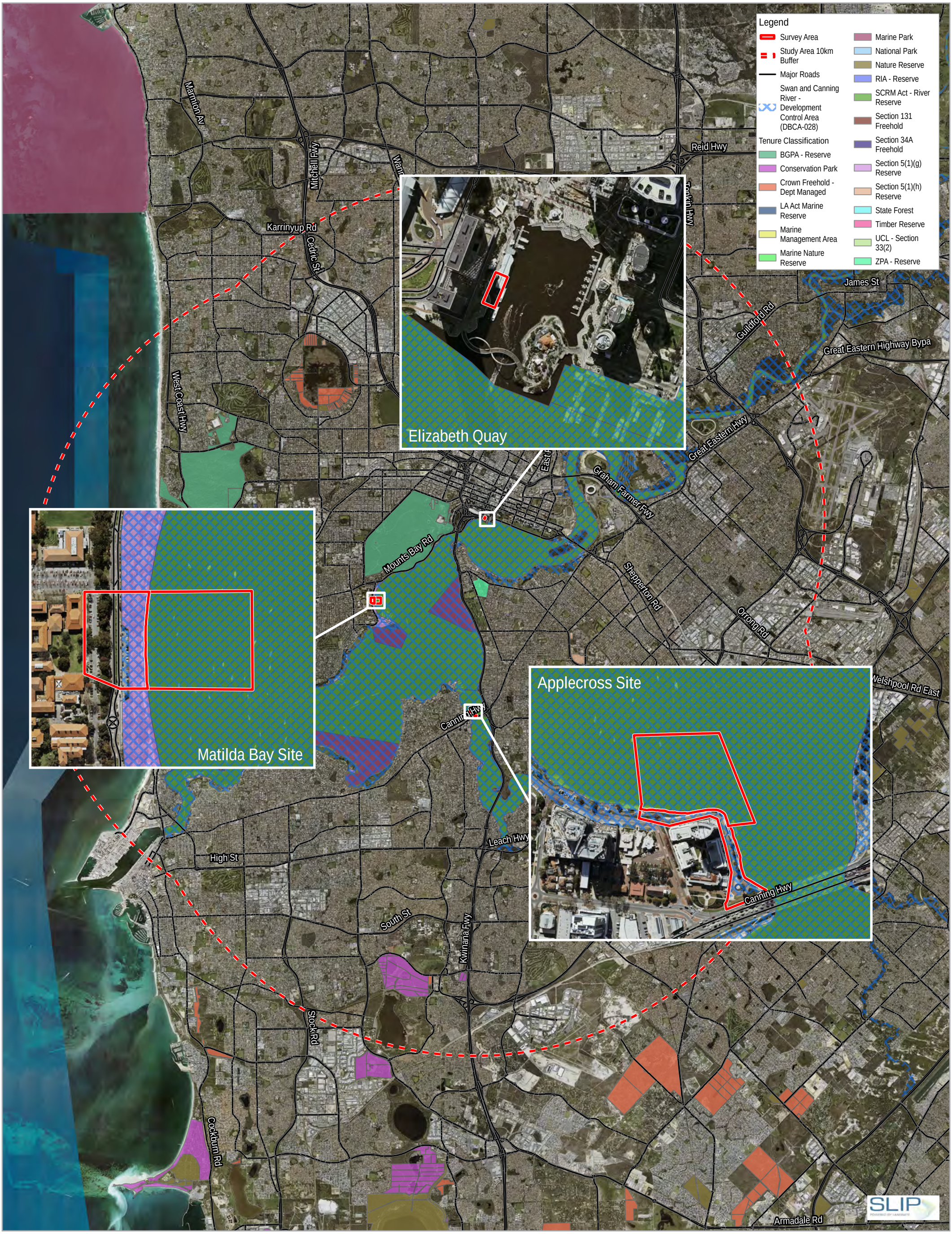

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at Scale: 1:100,000

0 0.5 1 1.5 2
Kilometres

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

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Public Transport Authority
Swan River Ferry Expansion
Ecology and EIA Support

Project No. 12658767
Revision No. 0
Date 16/05/2025

Conservation Reserves

FIGURE 5

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Paper Size ISO A3
at Scale: 1:100,000

0 0.5 1 1.5 2
Kilometres

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

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Public Transport Authority
Swan River Ferry Expansion
Ecology and EIA Support

Project No. 12658767
Revision No. 0
Date 16/05/2025

Environmentally Sensitive Areas

FIGURE 6

\\ghdnet.internal\ghd\AU\Perth\Projects\61\12658767\GIS\Maps\Working\12658767_SwanRiverFerryExpansion_BP_Working\12658767_SwanRiverFerryExpansion_BP_Working.aprx\12658767_006_EnvironmentallySensitiveAreas_Rev0
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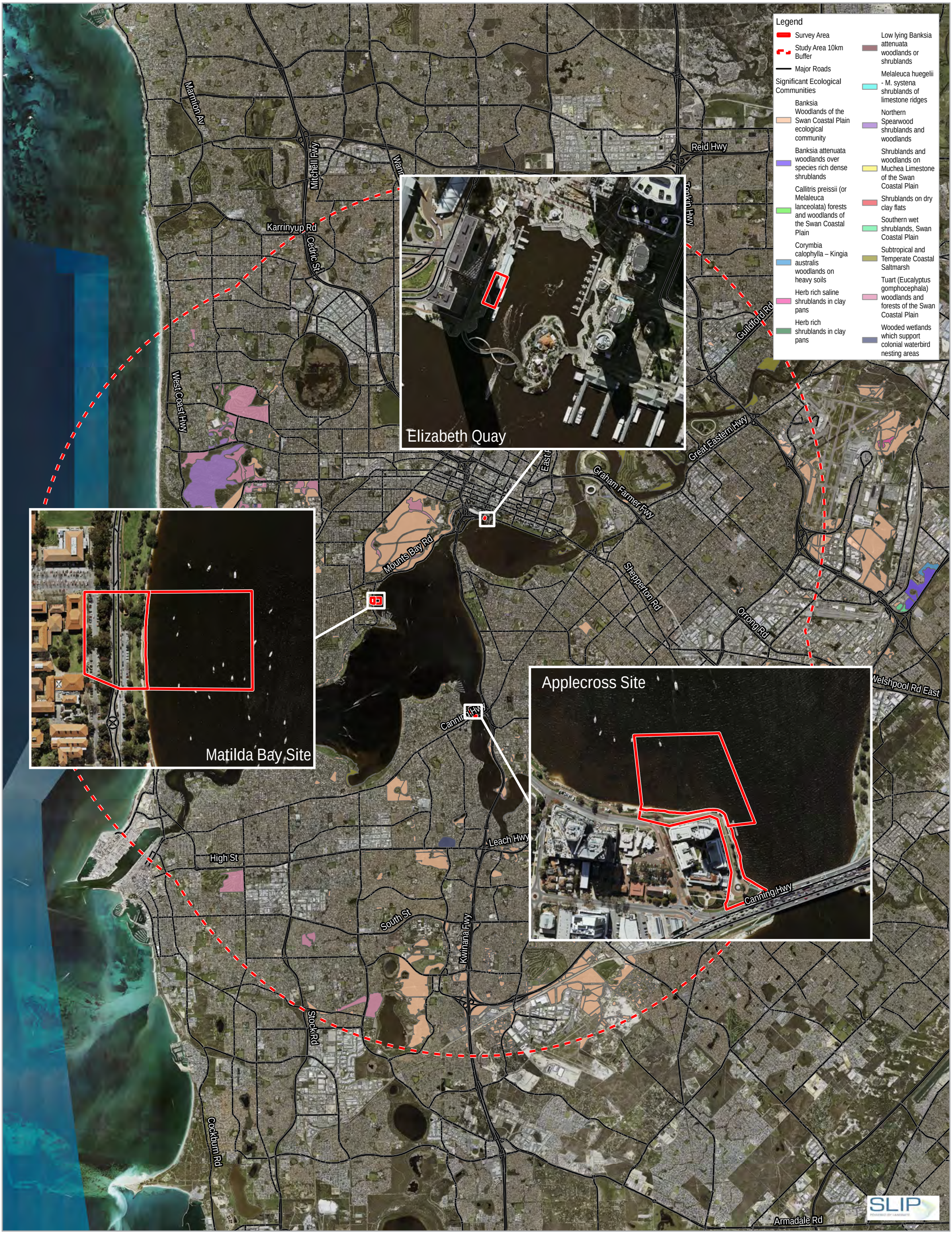

Paper Size ISO A3
at Scale: 1:100,000

0 0.5 1 1.5 2
Kilometres

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

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Public Transport Authority
Swan River Ferry Expansion
Ecology and EIA Support

Project No. 12658767
Revision No. 0
Date 16/05/2025

Significant Ecological Communities

FIGURE 7

\\ghdnet.internal\ghd\AU\Perth\Projects\61\12658767\GIS\Maps\Working\12658767_SwanRiverFerryExpansion_BP_Working\12658767_SwanRiverFerryExpansion_BP_Working.aprx\12658767_007_SignificantEcologicalCommunities_Rev0
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Data source: WANow: Landgate / SLIP
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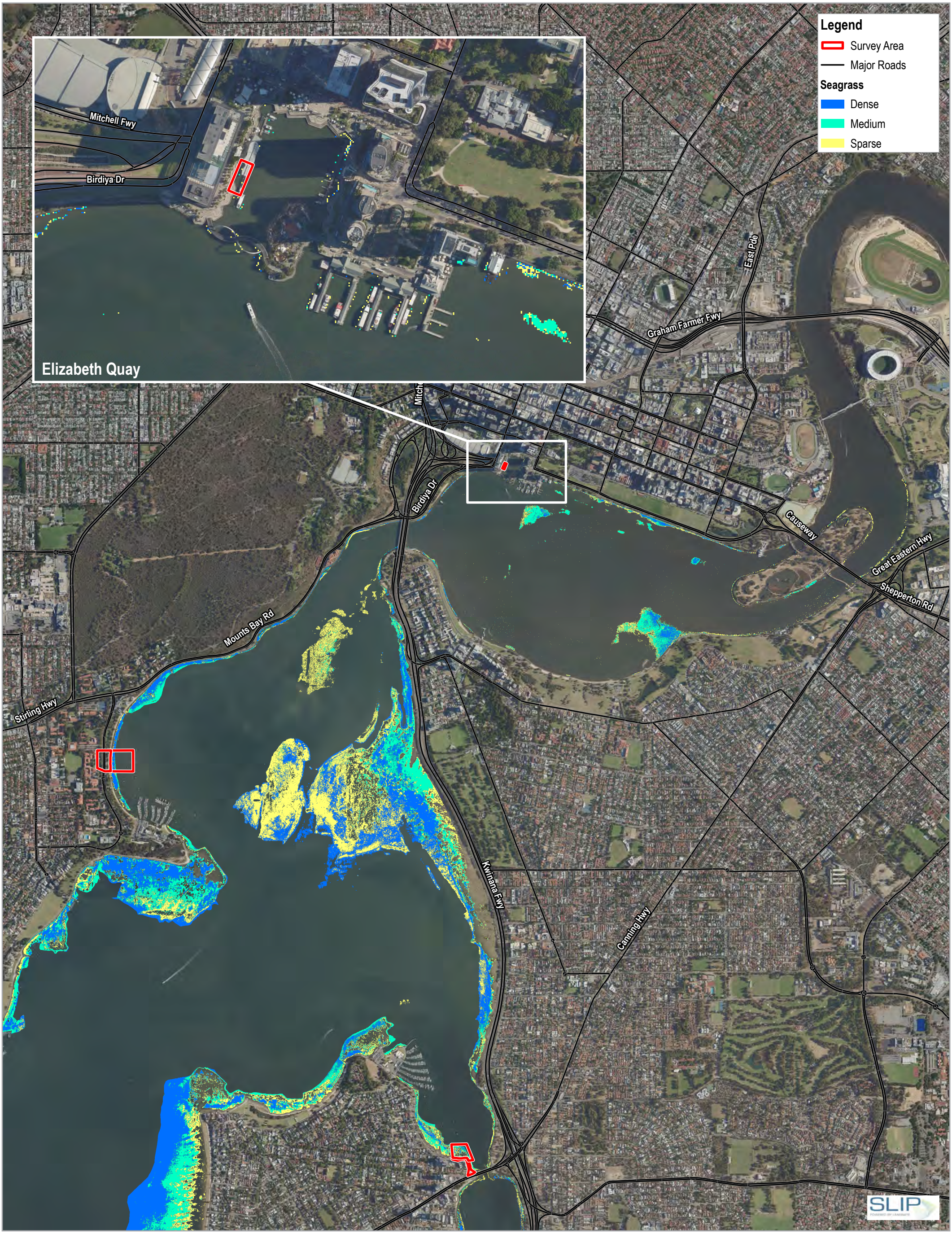

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0 0.5 1
Kilometres

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

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Public Transport Authority
Swan River Ferry Expansion
Ecology and EIA Support

Seagrass Mapping

Project No. **12658767**
Revision No. **1**
Date **25/09/2025**

FIGURE 8

\\ghdnet\ghd\AU\Perth\Projects\61\12658767\GIS\Maps\Working\12658767_SwanRiverFerryExpansion_BP_Working\12658767_SwanRiverFerryExpansion_BP_Working.aprx\12658767_008_Seagrass_Rev1
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Data source: WANow: Landgate / SLIP. Created by: shart2

Legend
- Great Cockie Count Roosting Sites
- Survey Area
- Study Area 10km Buffer
- Major Roads
- Black Cockatoo Breeding Sites (DBCA-063)
- Black Cockatoo Roosting Sites (DBCA-064)

Elizabeth Quay

Matilda Bay Site

Applecross Site

Paper Size ISO A3
at Scale: 1:150,000

0 0.5 1 1.5 2
Kilometres

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

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Public Transport Authority
Swan River Ferry Expansion
Ecology and EIA Support

Black Cockatoos

Project No. 12658767
Revision No. 0
Date 16/05/2025

FIGURE 9

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Paper Size ISO A3

0 5 10 15 20

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

N

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Public Transport Authority
Swan River Ferry Expansion
Ecology and EIA Support

Applecross Site Vegetation Types

Project No. **12658767**
Revision No. **0**
Date **4/06/2025**

FIGURE 10A

\\ghdnet.internal\ghd\AU\Perth\Projects\61\12658767\GIS\Maps\Working\12658767_SwanRiverFerryExpansion_BP_Working\12658767_SwanRiverFerryExpansion_BP_Working.aprx\12658767_010A_VegetationTypes_Rev0
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Paper Size ISO A3

0 1 2 3 4

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

N

GHD

Public Transport Authority
Swan River Ferry Expansion
Ecology and EIA Support

Elizabeth Quay Site
Vegetation Types

Project No. **12658767**
Revision No. **0**
Date **4/06/2025**

FIGURE 10B

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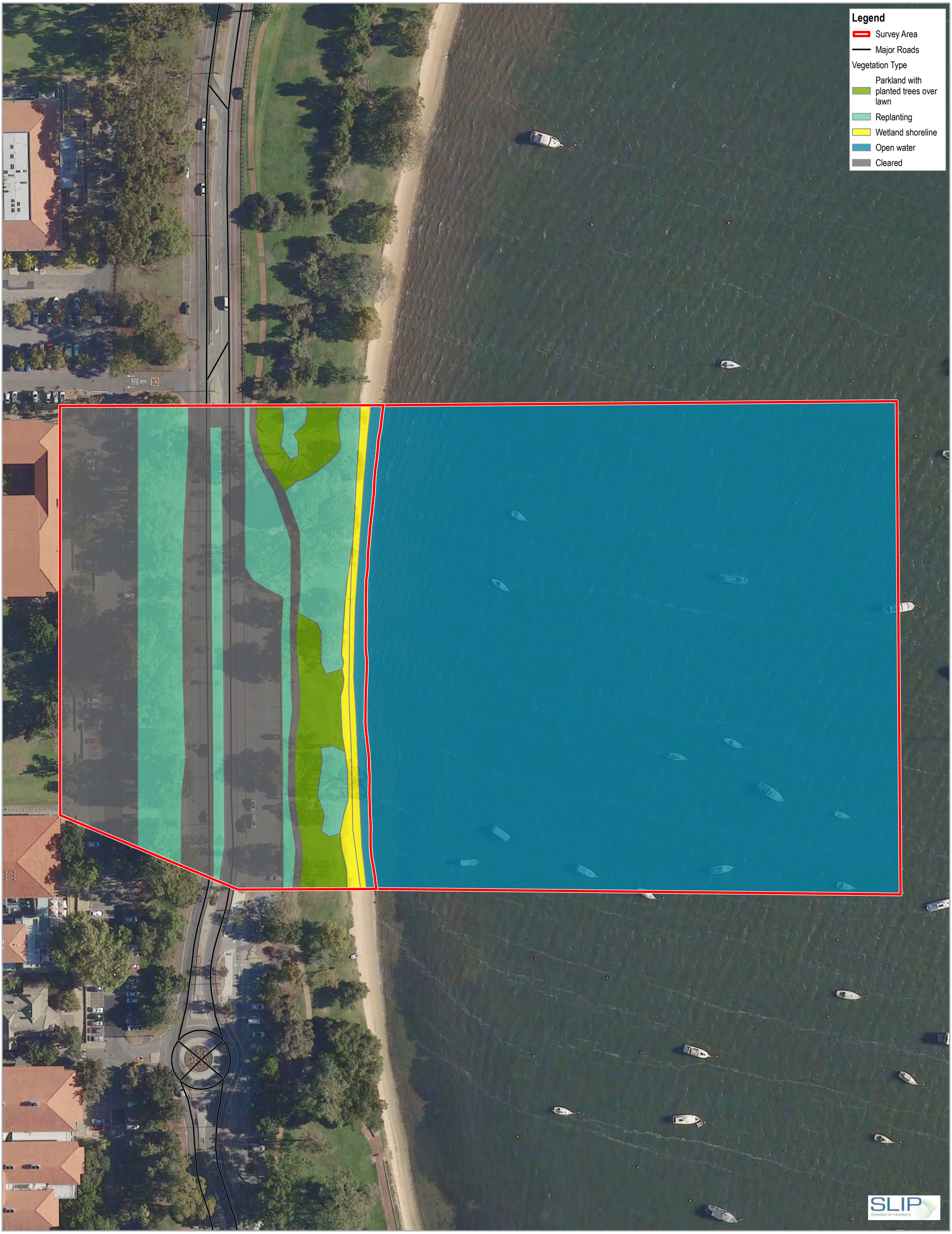

Paper Size ISO A3

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Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

N

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Public Transport Authority
Swan River Ferry Expansion
Ecology and EIA Support

Matilda Bay Site
Vegetation Types

Project No. **12658767**
Revision No. **0**
Date **4/06/2025**

FIGURE 10C

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Paper Size ISO A3

0 5 10 15 20

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

N

GHD

Public Transport Authority
Swan River Ferry Expansion
Ecology and EIA Support

Applecross Site
Fauna Habitats

Project No. 12658767
Revision No. 0
Date 16/05/2025

FIGURE 11A

\\ghdnet.internal\ghd\AU\Perth\Projects\61\12658767\GIS\Maps\Working\12658767_SwanRiverFerryExpansion_BP_Working\12658767_SwanRiverFerryExpansion_BP_Working.aprx\12658767_011A_FaunaHabitats_Rev0
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Data source: WANow: Landgate / SLIP. Created by: bpalm

Paper Size ISO A3

0 1 2 3 4

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

N

GHD

Public Transport Authority
Swan River Ferry Expansion
Ecology and EIA Support

Elizabeth Quay Site
Fauna Habitats

Project No. 12658767
Revision No. 0
Date 16/05/2025

FIGURE 11B

\\ghdnet.internal\ghd\AU\Perth\Projects\61\12658767\GIS\Maps\Working\12658767_SwanRiverFerryExpansion_BP_Working\12658767_SwanRiverFerryExpansion_BP_Working.aprx\12658767_011B_FaunaHabitats_Rev0
Print date: 16 May 2025 - 16:36

Data source: WANow: Landgate / SLIP. Created by: bpalm

Legend

- Suitable DBH Trees
- Survey Area

Fauna Habitats

- Scattered trees
- Parkland cover over revegetation and replanted
- Shoreline wetlands riparian river
- Open water
- Cleared
- Major Roads

Paper Size ISO A3

0 5 10 15 20

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

N

GHD

Public Transport Authority
Swan River Ferry Expansion
Ecology and EIA Support

Matilda Bay Site
Fauna Habitats

Project No. 12658767
Revision No. 0
Date 16/05/2025

FIGURE 11C

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Data source: WANow: Landgate / SLIP. Created by: bpalm

Paper Size ISO A3

0 5 10 15 20

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

N

GHD

Public Transport Authority
Swan River Ferry Expansion
Ecology and EIA Support

Applecross Site
Significant Tree Locations

Project No. 12658767
Revision No. 0
Date 16/05/2025

FIGURE 12A

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Print date: 16 May 2025 - 16:43

Data source: WANow: Landgate / SLIP. Created by: bpalm

Paper Size ISO A3

0 1 2 3 4

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

N

GHD

Public Transport Authority
Swan River Ferry Expansion
Ecology and EIA Support

Elizabeth Quay Site
Significant Tree Locations

Project No. 12658767
Revision No. 0
Date 16/05/2025

FIGURE 12B

\\ghdnet.internal\ghd\AU\Perth\Projects\61\12658767\GIS\Maps\Working\12658767_SwanRiverFerryExpansion_BP_Working\12658767_SwanRiverFerryExpansion_BP_Working.aprx\12658767_012B_SignificantTrees_Rev0
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Paper Size ISO A3

0 5 10 15 20

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 50

N

GHD

Public Transport Authority
Swan River Ferry Expansion
Ecology and EIA Support

Matilda Bay Site
Significant Tree Locations

Project No.	12658767
Revision No.	0
Date	16/05/2025

FIGURE 12C

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Data source: WANow: Landgate / SLIP. Created by: bpalm

Appendix B

Relevant legislation, conservation codes and background information

Relevant legislation

Federal *Environment Protection and Biodiversity Conservation Act 1999*

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is the Federal Government's central piece of environmental legislation. It provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places, which are defined in the EPBC Act as Matters of National Environmental Significance (MNES).

The biological aspects listed as MNES include:

Nationally threatened flora and fauna species and ecological communities

Migratory species

A person must not undertake an action that has, will have, or is likely to have a significant impact (direct or indirect) on MNES, without approval from the Federal Minister for the Environment.

The EPBC Act is administered by the Department of Climate Change, Energy, the Environment and Water (DCCEEW).

State *Environmental Protection Act 1986*

The *Environmental Protection Act 1986* (EP Act) is the primary legislative Act dealing with the protection of the environment in Western Australia. The Act allows the Environmental Protection Authority (EPA), to prevent, control and abate pollution and environmental harm, for the conservation, preservation, protection, enhancement and management of the environment and for matters incidental to or connected with the foregoing. Part IV of the EP Act is administered by the EPA and makes provisions for the EPA to undertake environmental impact assessment of significant proposals, strategic proposals and land use planning schemes.

The Department of Water and Environment Regulation (DWER) is responsible for administering the clearing provisions of the EP Act (Part V). Clearing of native vegetation in Western Australia requires a permit from the DWER, unless exemptions apply. Applications for clearing permits are assessed by the Department and decisions are made to grant or refuse the application in accordance with the Act. When making a decision the assessment considers clearing against the ten clearing principles as specified in Schedule 5 of the EP Act:

2. Native vegetation should not be cleared if it comprises a high level of biodiversity.
3. Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a significance habitat for fauna indigenous to Western Australia.
4. Native vegetation should not be cleared if it includes, or is necessary, for the continued existence of rare flora.
5. Native vegetation should not be cleared if it comprises the whole or part of native vegetation in an area that has been extensively cleared.
6. Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.
7. Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
8. Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.
9. Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
10. Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

11. Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.

Exemptions for clearing include clearing that is a requirement of a written law or authorised under certain statutory processes (listed in Schedule 6 of the EP Act) and exemptions for prescribed low impact day-to-day activities (prescribed in the Environmental Protection (Clearing of Native Vegetation) Regulations 2004); these exemptions do not apply in environmentally sensitive areas (ESAs).

State *Biodiversity and Conservation Act 2016*

The *Biodiversity Conservation Act 2016* (BC Act) provides for the conservation and protection of biodiversity and biodiversity components, as well as the promotion of the ecologically sustainable use of biodiversity components in Western Australia. The BC Act replaces both the repealed *Wildlife Conservation Act 1950* (WC Act) and the *Sandalwood Act 1929* (Sandalwood Act), as well as their associated regulations. To attain the objectives of the BC Act, principles of ecological sustainable development have been established:

– Decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations
– If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation
– The present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations
– The conservation of biodiversity and ecological integrity should be a fundamental consideration indecision-making
– Improved valuation, pricing and incentive mechanisms should be promoted.

The BC Act is administered by the Department of Biodiversity Conservation and Attractions (DBCA).

State Biosecurity and Agriculture Management Act 2007

The *Biosecurity and Agriculture Management Act 2007* (BAM Act) and associated regulations are administered by the Department of Primary Industries and Regional Development (DPIRD) and replace the repealed *Agriculture and Related Resources Protection Act 1976.* The main purposes of the BAM Act and its regulations are to:

– Prevent new animal and plant pests (vermin and weeds) and diseases from entering WA
– Manage the impact and spread of those pests already present in the state
– Safely manage the use of agricultural and veterinary chemicals
– Increased control over the sale of agricultural products that contain violative chemical residues.

The Western Australian Organism List (WAOL) provides the status of organisms which have been categorised under the BAM Act. A Declared Pest is a prohibited organism or an organism for which a declaration under Section 22(2) of the Act is in force. Declared Pests may be assigned a control category including: C1 (exclusion), C2 (eradication) and C3 (management). The category may apply to the whole of the State, LGAs, districts, individual properties or even paddocks, and all landholders are obliged to comply with the specific category of control. Categories of control are defined below.

DPIRD Categories for Declared Pests under the BAM Act

Control class code	Description
C1 (Exclusion)	Pests will be assigned to this category if they are not established in Western Australia and control measures are to be taken, including border checks, in order to prevent them entering and establishing in the State.
C2 (Eradication)	Pests will be assigned to this category if they are present in Western Australia in low enough numbers or in sufficiently limited areas that their eradication is still a possibility.
C3 (Management)	Pests will be assigned to this category if they are established in Western Australia but it is feasible, or desirable, to manage them in order to limit their damage. Control measures can prevent a C3 pest from increasing in population size or density or moving from an area in which it is established into an area which currently is free of that pest.

Background information

Environmentally Sensitive Areas

Environmentally Sensitive Areas (ESAs) are declared by the Minister for Environment under Section 51B of the EP Act. The Table below outlines the aspects of areas declared as ESA in the Environmental Protection (Environmentally Sensitive Areas) Notice 2005.

Aspects of ESAs

Aspects of Environmentally Sensitive Areas
A declared World Heritage property as defined in Section 13 of the EPBC Act.
An area that is included on the Register of the National Estate (RNE), because of its natural values, under the *Australian Heritage Commission Act 1975* of the Commonwealth (the RNE was closed in 2007 and is no longer a statutory list – all references to the RNE were removed from the EPBC Act on 19 February 2012).
A defined wetland and the area within 50 m of the wetland. Defined wetlands include Ramsar wetlands, conservation category wetlands and nationally important wetlands.
The area covered by vegetation within 50 m of rare flora, to the extent to which the vegetation is continuous with the vegetation in which the rare flora is located.
The area covered by a Threatened Ecological Community.
A Bush Forever Site listed in "Bush Forever" Volumes 1 and 2 (2000), published by the Western Australia Planning Commission, except to the extent to which the site is approved to be developed by the Western Australia Planning Commission.
The areas covered by the *Environmental Protection (Gnangara Mound Crown Land) Policy 1992*.
The areas covered by the *Environmental Protection (Western Swamp Tortoise Habitat) Policy 2002.*
The areas covered by the lakes to which the *Environmental Protection (Swan Coastal Plain Lakes) Policy 1992* (EPP Lakes) applies.
Protected wetlands as defined in the *Environmental Protection (South West Agricultural Zone Wetlands) Policy 1998*.

Reserves and conservation areas

Bush Forever

Bush Forever, which was released in December 2000 and proclaimed in 2010, is a Government initiate aimed to retain and protect regionally significant bushland on the Swan Coastal Plain within the Perth Metropolitan Region. Bush Forever aims to protect more than 51,000 ha of regionally significant bushland within 287 sites across the metropolitan portion of the Swan Coastal Plain (Government of Western Australia (GoWA) 2000). Bush Forever sites constitute ESAs as declared by a notice under Section 51B of the EP Act.

Department of Biodiversity, Conservation and Attractions managed land and waters

DBCA manages lands and waters throughout Western Australia to conserve ecosystems and species, and to provide for recreation and appreciation of the natural environment. DBCA managed lands and waters include national parks, conservation parks and reserves, marine parks and reserves, regional parks, nature reserves, State forest and timber reserves. Access to, or through, some areas of DBCA managed lands may require a permit or could be restricted due to management activities. Proposed land use changes and development proposals that abut DBCA managed lands will generally be referred to DBCA throughout the assessment process.

Wetlands

Wetlands include not only lakes with open water, but areas of seasonally, intermittently or permanently waterlogged soil.

Ramsar Wetlands (Wetlands of International Importance)

The Convention of Wetlands of International Importance was signed in 1971 at the Iranian town of Ramsar. The Convention has since been referred to as the Ramsar Convention. Ramsar Listed wetlands are “sites containing representative, rare or unique wetlands, or wetlands that are important for conserving biological diversity … because of their ecological, botanical, zoological, limnological or hydrological importance” (DAWE 2020b). Once a Ramsar Listed Wetland is designated, the country agrees to manage its conservation and ensure its wise use. Under the Convention, wise use is broadly defined as “maintaining the ecological character of a wetland” (DAWE 2020b).

Nationally important wetlands

Wetlands of national significance are listed under the Directory of Important Wetlands in Australia. Nationally important wetlands are wetlands which meet at least one of the following criteria (DAWE 2020a):

– It is a good example of a wetland type occurring within a biogeographic region in Australia
– It is a wetland which plays an important ecological or hydrological role in the natural functioning of a major wetland system/complex
– It is a wetland which is important as the habitat for animal taxa at a vulnerable stage in their life cycles, or provides a refuge when adverse conditions such as drought prevail
– The wetland supports one percent or more of the national populations of any native plant or animal taxa
– The wetland supports native plant or animal taxa or communities which are considered endangered or vulnerable at the national level
– The wetland is of outstanding historical or cultural significance.

Geomorphic wetlands

Categorisation of wetlands has been conducted by Hill et al. (1996), delineating Swan Coastal Plain wetlands into levels of protection and management categories. Conservation Category Wetlands are wetlands that support high levels of attributes and functions. Resource Enhancement Wetlands are those that have been partly modified but still support substantial functions and attributes. Multiple Use Wetlands are classified as those wetlands with few attributes that still provide important wetland functions. Multiple Use wetlands have few important ecological attributes and functions remaining.

The Geomorphic Wetlands Swan Coastal Plain dataset displays the location, boundary, geomorphic classification (wetland type) and management category of wetlands on the Swan Coastal Plain.

Vegetation extent and status

The National Objectives and Targets for Biodiversity Conservation 2001–2005 (Commonwealth of Australia 2001) recognise that the retention of 30 percent or more of the pre-clearing extent of each ecological community is necessary if Australia’s biological diversity is to be protected. This is the threshold level below which species loss appears to accelerate exponentially and loss below this level should not be permitted. This level of recognition is in keeping with the targets recommended in the review of the National Strategy for the Conservation of Australia’s Biological Diversity (ANZECC 2000).

The extent of remnant native vegetation in WA has been assessed by Shepherd et al. (2002) and the GoWA (2019), based on broadscale vegetation association mapping by Beard (various publications). The GoWA produces Statewide Vegetation Statistics Reports that are used for a number of purposes including conservation planning, land use planning and when assessing development applications. The reports are updated every 2-3 years.

Vegetation condition

The vegetation condition can be assessed in accordance with the vegetation condition rating scale for the South West and Interzone Botanical Provinces (EPA 2016a). The scale recognises the intactness of vegetation and consists of six rating levels as outlined below.

Vegetation condition rating scale for the South West and Interzone Botanical Provinces

Condition	South West and Interzone Botanical Provinces description
Pristine	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.
Excellent	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species. Damage to trees caused by fire, the presence of non-aggressive weeds and occasional vehicle tracks.
Very Good	Vegetation structure altered, obvious signs of disturbance. Disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. Disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. Disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds at high density, partial clearing, dieback and grazing.
Completely Degraded	The structure of vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as ‘parkland cleared’ with the flora comprising weed or crop species with isolated native trees or shrubs.

Conservation codes

Species of significant flora, fauna and communities are protected under both Federal and State Acts. The Federal EPBC Act provides a legal framework to protect and manage nationally important flora and communities. The State BC Act is the primary wildlife conservation legislation in Western Australia. Information on the conservation codes is summarised in the following sections.

Ecological communities

Significant communities

Ecological communities are defined as naturally occurring biological assemblages that occur in a particular type of habitat (English and Blyth 1997). Federally listed Threatened Ecological Communities (TECs) are protected under the EPBC Act. The BC Act provides for the Minister to list an ecological community as a TEC (section 27), or as a collapsed ecological community (section 31) statutory listing of State TECs by the Minister. The legislation also describes statutory processes for preparing recovery plans for TECs, the registration of their critical habitat, and penalties for unauthorised modification of TECs.

Possible TECs that do not meet survey criteria are added to the DBCA Priority Ecological Community (PEC) List under Priorities 1, 2 and 3. These are ecological communities that are adequately known; are rare but not threatened, or meet criteria for Near Threatened. PECs that have been recently removed from the threatened list are placed in Priority 4. These ecological communities require regular monitoring. Conservation dependent ecological communities are placed in Priority 5. PECs are not listed under any formal Federal or State legislation, however, may be listed as TECs under the EPBC Act.

Codes and definitions for TECs listed under the EPBC Act and/or BC Act

Categories	Definitions
Federal Government Conservation Categories (EPBC Act)	
Critically Endangered (CR)	An ecological community if, at that time, is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria (as outlined in Environment Protection and Biodiversity Conservation Regulations 2000).
Endangered *(EN)	An ecological community if, at that time: – is not critically endangered; and – is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria (as outlined in Environment Protection and Biodiversity Conservation Regulations 2000).
Vulnerable (VU)	An ecological community if, at that time: – is not critically endangered or endangered; and – is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria (as outlined in Environment Protection and Biodiversity Conservation Regulations 2000).
Western Australia Conservation Categories (BC Act)	
Threatened Ecological Communities	
Critically Endangered (CR)	An ecological community that has been adequately surveyed and found to have been subject to a major contraction in area and/or that was originally of limited distribution and is facing severe modification or destruction throughout its range in the immediate future, or is already severely degraded throughout its range but capable of being substantially restored or rehabilitated.
Endangered (EN)	An ecological community that has been adequately surveyed and found to have been subject to a major contraction in area and/or was originally of limited distribution and is in danger of significant modification throughout its range or severe modification or destruction over most of its range in the near future.
Vulnerable (VU)	An ecological community that has been adequately surveyed and is found to be declining and/or has declined in distribution and/or condition and whose ultimate security has not yet been assured

Categories	Definitions
	and/or a community that is still widespread but is believed likely to move into a category of higher threat in the near future if threatening processes continue or begin operating throughout its range.
Collapsed ecological communities	
An ecological community is eligible for listing as a collapsed ecological community at a particular time if, at that time, there is no reasonable doubt that the last occurrence of the ecological community has collapsed); or, the ecological community has been so extensively modified throughout its range that no occurrence of it is likely to recover – • its species composition or structure; or • its species composition and structure. Section 33 of the BC Act provides for a collapsed ecological community to be regarded as a threatened ecological community if it is discovered in a state that no longer makes it eligible for listing as a collapsed ecological community.	

Categories and definitions for PECs as listed by the DBCA

Category	Description
Priority 1	Poorly known ecological communities. Ecological communities that are known from very few occurrences with a very restricted distribution (generally ≤5 occurrences or a total area of ≤100 ha). Occurrences are believed to be under threat either due to limited extent, or being on lands under immediate threat (e.g. within agricultural or pastoral lands, urban areas, active mineral leases) or for which current threats exist. May include communities with occurrences on protected lands. Communities may be included if they are comparatively well-known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under immediate threat from known threatening processes across their range.
Priority 2	Poorly known ecological communities. Communities that are known from few occurrences with a restricted distribution (generally ≤10 occurrences or a total area of ≤200 ha). At least some occurrences are not believed to be under immediate threat of destruction or degradation. Communities may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under threat from known threatening processes.
Priority 3	Poorly known ecological communities. – Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation or: – communities known from a few widespread occurrences, which are either large or with significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat, or; – communities made up of large, and/or widespread occurrences, that may or may not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing by domestic and/or feral stock, and inappropriate fire regimes. Communities may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and/or are not well defined, and known threatening processes exist that could affect them.
Priority 4	Ecological communities that are adequately known, rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list. These communities require regular monitoring. – Rare. Ecological communities known from few occurrences that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These communities are usually represented on conservation lands. – Near Threatened. Ecological communities that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable. – Ecological communities that have been removed from the list of threatened communities during the past five years.
Priority 5	Conservation Dependent ecological communities. Ecological communities that are not threatened but are subject to a specific conservation program, the cessation of which would result in the community becoming threatened within five years.

Other significant vegetation

Vegetation may be significant for a range of reasons other than a statutory listing. The EPA (2016a, b) states that significant vegetation may include vegetation that includes the following:

– Restricted distribution
– Degree of historical impact from threatening processes
– A role as a refuge
– Providing an important function required to maintain ecological integrity of a significant ecosystem
– Local endemism in restricted habitats
– Novel combinations of taxa
– A role as a key habitat for Threatened species or large population representing a significant proportion of the local to regional total population of a species
– Being representative of a vegetation unit in 'pristine' condition in a highly cleared landscape, recently discovered range extensions, or isolated outliers of the main range.

This may apply at a number of levels, so the unit may be significant when considered at the fine-scale (intra-locality), intermediate-scale (locality or inter-locality) or broad-scale (local to region).

Flora and fauna

Significant flora and fauna

Species of significant flora are protected under both Federal and State legislation. Any activities that are deemed to have a significant impact on species that are recognised by the EPBC Act, and/or the BC Act can warrant referral to DAWE and/or the EPA.

The Federal conservation level of flora and fauna species and their significance status is assessed under the EPBC Act. The significance levels for flora and fauna used in the EPBC Act align with the International Union for Conservation of Nature (IUCN) Red List criteria, which are internationally recognised as providing best practice for assigning the conservation status of species. The EPBC Act also protects land and migratory species that are listed under International Agreements. The list of migratory species established under section 209 of the EPBC Act comprises:

– Migratory species which are native to Australia and are included in the appendices to the Bonn Convention (Convention on the Conservation of Migratory Species of Wild Animals Appendices I and II)
– Migratory species included in annexes established under the Japan-Australia Migratory Bird Agreement (JAMBA) and the China–Australia Migratory Bird Agreement (CAMBA)
– Native, migratory species identified in a list established under, or an instrument made under, an international agreement approved by the Minister, such as the republic of Korea–Australia Migratory Bird Agreement (ROKAMBA)

The State conservation level of flora and fauna species and their significance status also follows the IUCN Red List criteria. Under the BC Act flora and fauna can be listed as Threatened, Extinct and as Specially Protected species.

Threatened species are those are species which have been adequately searched for and are deemed to be, in the wild, either rare, under identifiable threat of extinction, or otherwise in need of special protection, and have been gazetted as such. The assessment of the conservation status of Threatened species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria. Specially protected species meet one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection. Species that are listed as Threatened or Extinct species under the BC Act cannot also be listed as Specially Protected species.

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority

for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened flora or fauna.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.

Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

For the purposes of this assessment, all species listed under the EPBC Act, BC Act and DBCA Priority species are considered significant.

Appendix C

Database Searches

TAXON	CLASS	CONS
Crinia georgiana	**AMPHIBIAN**	
Crinia glauerti	**AMPHIBIAN**	
Crinia insignifera	**AMPHIBIAN**	
Crinia pseudinsignifera	**AMPHIBIAN**	
Heleioporus eyrei	**AMPHIBIAN**	
Heleioporus psammophilus	**AMPHIBIAN**	
Limnodynastes dorsalis	**AMPHIBIAN**	
Litoria adelaidensis	**AMPHIBIAN**	
Litoria moorei	**AMPHIBIAN**	
Myobatrachus gouldii	**AMPHIBIAN**	
Neobatrachus pelobatoides	**AMPHIBIAN**	
Pseudophryne guentheri	**AMPHIBIAN**	
Pseudophryne occidentalis	**AMPHIBIAN**	
Acanthagenys rufogularis	**BIRD**	
Acanthiza apicalis	**BIRD**	
Acanthiza chrysorrhoa	**BIRD**	
Acanthiza inornata	**BIRD**	
Acanthiza uropygialis	**BIRD**	
Acanthorhynchus superciliosus	**BIRD**	
Accipiter cirrocephalus	**BIRD**	
Accipiter cirrocephalus subsp. cirrocephalus	**BIRD**	
Accipiter fasciatus	**BIRD**	
Accipiter fasciatus subsp. didimus	**BIRD**	
Accipiter fasciatus subsp. fasciatus	**BIRD**	
Acrocephalus australis	**BIRD**	
Acrocephalus australis subsp. gouldi	**BIRD**	
Actitis hypoleucos	**BIRD**	**MI**
Aegotheles cristatus	**BIRD**	
Aegotheles cristatus subsp. cristatus	**BIRD**	
Amazona auropalliata	**BIRD**	
Anas castanea	**BIRD**	
Anas clypeata	**BIRD**	
Anas gracilis	**BIRD**	

TAXON	CLASS	CONS
Anas platyrhynchos	**BIRD**	
Anas rhynchotis	**BIRD**	
Anas superciliosa	**BIRD**	
Anhinga melanogaster	**BIRD**	
Anhinga novaehollandiae	**BIRD**	
Anous tenuirostris subsp. melanops	**BIRD**	**EN**
Anser anser	**BIRD**	
Anthochaera carunculata	**BIRD**	
Anthochaera lunulata	**BIRD**	
Anthus australis	**BIRD**	
Apus pacificus	**BIRD**	**MI**
Aquila audax	**BIRD**	
Aquila morphnoides	**BIRD**	
Aquila morphnoides subsp. *morphnoides*	**BIRD**	
Ardea alba	**BIRD**	
Ardea garzetta	**BIRD**	
Ardea ibis	**BIRD**	
Ardea intermedia	**BIRD**	
Ardea modesta	**BIRD**	
Ardea novaehollandiae	**BIRD**	
Ardea pacifica	**BIRD**	
Ardea sacra	**BIRD**	
Ardenna carneipes	**BIRD**	**VU**
Ardeotis australis	**BIRD**	
Arenaria interpres	**BIRD**	**MI**
Argusianus argus	**BIRD**	
Artamus cinereus	**BIRD**	
Artamus cinereus subsp. melanops	**BIRD**	
Artamus cyanopterus	**BIRD**	
Artamus personatus	**BIRD**	
Aythya australis	**BIRD**	
Barnardius zonarius	**BIRD**	
Biziura lobata	**BIRD**	
Botaurus poiciloptilus	**BIRD**	**EN**

TAXON	CLASS	CONS
Burhinus grallarius	BIRD	
Cacatua galerita	BIRD	
Cacatua galerita subsp. galerita	BIRD	
Cacatua pastinator subsp. pastinator	BIRD	CD
Cacatua roseicapilla	BIRD	
Cacatua sanguinea	BIRD	
Cacatua sanguinea subsp. westralensis	BIRD	
Cacatua tenuirostris	BIRD	
Cacomantis flabelliformis	BIRD	
Cacomantis flabelliformis subsp. flabelliformis	BIRD	
Cacomantis pallidus	BIRD	
Calidris acuminata	BIRD	MI
Calidris alba	BIRD	
Calidris canutus	BIRD	EN
Calidris ferruginea	BIRD	CR
Calidris melanotos	BIRD	MI
Calidris ruficollis	BIRD	MI
Calidris subminuta	BIRD	MI
Calidris tenuirostris	BIRD	CR
Calonectris leucomelas	BIRD	MI
Calyptorhynchus banksii naso	BIRD	VU
Carduelis carduelis	BIRD	
Charadrius dubius	BIRD	MI
Charadrius leschenaultii	BIRD	VU
Charadrius melanops	BIRD	
Charadrius mongolus	BIRD	EN
Charadrius ruficapillus	BIRD	
Chenonetta jubata	BIRD	
Cheramoeca leucosterna	BIRD	
Chlidonias leucopterus	BIRD	MI
Chroicocephalus novaehollandiae	BIRD	
Chrysococcyx basalis	BIRD	
Chrysococcyx lucidus	BIRD	
Chrysococcyx lucidus subsp. plagosus	BIRD	

TAXON	CLASS	CONS
Cincloramphus cruralis	**BIRD**	
Cincloramphus mathewsi	**BIRD**	
Circus approximans	**BIRD**	
Circus assimilis	**BIRD**	
Cladorhynchus leucocephalus	**BIRD**	
Climacteris rufa	**BIRD**	
Collocalia esculenta	**BIRD**	
Colluricincla harmonica	**BIRD**	
Colluricincla harmonica subsp. rufiventris	**BIRD**	
Columba livia	**BIRD**	
Coracina maxima	**BIRD**	
Coracina novaehollandiae	**BIRD**	
Corvus bennetti	**BIRD**	
Corvus coronoides	**BIRD**	
Corvus splendens	**BIRD**	
Coturnix pectoralis	**BIRD**	
Coturnix ypsilophora	**BIRD**	
Cracticus nigrogularis	**BIRD**	
Cracticus torquatus	**BIRD**	
Cygnus atratus	**BIRD**	
Cygnus olor	**BIRD**	
Dacelo novaeguineae	**BIRD**	
Daphoenositta chrysoptera	**BIRD**	
Daption capense	**BIRD**	
Dasyornis longirostris	**BIRD**	**EN**
Dendrocygna arcuata	**BIRD**	
Dicaeum hirundinaceum	**BIRD**	
Dicrurus bracteatus subsp. bracteatus	**BIRD**	
Diomedea chlororhynchos	**BIRD**	
Diomedea chlororhynchos subsp. carteri	**BIRD**	
Diomedea chrysostoma	**BIRD**	**VU**
Diomedea exulans	**BIRD**	**VU**
Diomedea melanophris subsp. melanophris	**BIRD**	**VU**
Dromaius novaehollandiae	**BIRD**	

TAXON	CLASS	CONS
Egretta garzetta	**BIRD**	
Egretta novaehollandiae	**BIRD**	
Egretta sacra	**BIRD**	
Elanus axillaris	**BIRD**	
Elanus caeruleus	**BIRD**	
Elseyornis melanops	**BIRD**	
Eolophus roseicapilla	**BIRD**	
Eopsaltria australis subsp. *griseogularis*	**BIRD**	
Eopsaltria georgiana	**BIRD**	
Epthianura albifrons	**BIRD**	
Epthianura tricolor	**BIRD**	
Erythrogonys cinctus	**BIRD**	
Eudyptes chrysocome subsp. *moseleyi*	**BIRD**	
Eudyptula minor subsp. *novaehollandiae*	**BIRD**	
Eurostopodus argus	**BIRD**	
Eurystomus orientalis	**BIRD**	
Falco berigora	**BIRD**	
Falco cenchroides	**BIRD**	
Falco hypoleucos	**BIRD**	**VU**
Falco longipennis	**BIRD**	
Falco peregrinus	**BIRD**	**OS**
Fringilla coelebs	**BIRD**	
Fulica atra	**BIRD**	
Fulmarus glacialoides	**BIRD**	
Gallicolumba jobiensis	**BIRD**	
Gallinago hardwickii	**BIRD**	**MI**
Gallinago stenura	**BIRD**	**MI**
Gallinula tenebrosa	**BIRD**	
Gallinula ventralis	**BIRD**	
Gallirallus philippensis	**BIRD**	
Gallus gallus	**BIRD**	
Gavicalis virescens	**BIRD**	
Gelochelidon nilotica	**BIRD**	**MI**
Geopelia cuneata	**BIRD**	

TAXON	CLASS	CONS
Gerygone fusca	**BIRD**	
Glossopsitta concinna	**BIRD**	
Glossopsitta porphyrocephala	**BIRD**	
Gliciphila melanops	**BIRD**	
Gracula religiosa	**BIRD**	
Grallina cyanoleuca	**BIRD**	
Haematopus fuliginosus	**BIRD**	
Haematopus longirostris	**BIRD**	
Haliaeetus leucogaster	**BIRD**	
Haliastur sphenurus	**BIRD**	
Halobaena caerulea	**BIRD**	
Hamirostra isura	**BIRD**	
Hieraaetus morphnoides	**BIRD**	
Himantopus himantopus	**BIRD**	
Hirundo ariel	**BIRD**	
Hirundo neoxena	**BIRD**	
Hirundo nigricans	**BIRD**	
Hydroprogne caspia	**BIRD**	**MI**
Hylacola cauta subsp. *whitlocki*	**BIRD**	
Ixobrychus dubius	**BIRD**	**P4**
Ixobrychus flavicollis subsp. *australis*	**BIRD**	**P2**
Ixobrychus minutus subsp. *dubius*	**BIRD**	
Lalage tricolor	**BIRD**	
Larus dominicanus	**BIRD**	
Larus novaehollandiae	**BIRD**	
Larus pacificus	**BIRD**	
Leipoa ocellata	**BIRD**	**VU**
Leucosarcia melanoleuca	**BIRD**	
Lichenostomus leucotis	**BIRD**	
Lichenostomus ornatus	**BIRD**	
Lichenostomus virescens	**BIRD**	
Lichmera indistincta	**BIRD**	
Limosa lapponica	**BIRD**	**MI**
Limosa limosa	**BIRD**	**MI**

TAXON	CLASS	CONS
Limosa limosa subsp. *melanuroides*	**BIRD**	
Lonchura castaneothorax	**BIRD**	
Lophoictinia isura	**BIRD**	
Macronectes giganteus	**BIRD**	**MI**
Malacorhynchus membranaceus	**BIRD**	
Malurus elegans	**BIRD**	
Malurus lamberti	**BIRD**	
Malurus lamberti subsp. *assimilis*	**BIRD**	
Malurus leucopterus	**BIRD**	
Malurus leucopterus subsp. *leuconotus*	**BIRD**	
Malurus pulcherrimus	**BIRD**	
Malurus splendens	**BIRD**	
Manorina flavigula	**BIRD**	
Megalurus gramineus	**BIRD**	
Megalurus gramineus subsp. *gramineus*	**BIRD**	
Melanodryas cucullata	**BIRD**	
Melithreptus brevirostris	**BIRD**	
Melithreptus brevirostris subsp. *leucogenys*	**BIRD**	
Melithreptus chloropsis	**BIRD**	
Melithreptus lunatus	**BIRD**	
Melopsittacus undulatus	**BIRD**	
Merops ornatus	**BIRD**	
Microcarbo melanoleucos	**BIRD**	
Microeca fascinans	**BIRD**	
Milvus migrans	**BIRD**	
Morus serrator	**BIRD**	
Myiagra inquieta	**BIRD**	
Neophema elegans	**BIRD**	
Neophema petrophila	**BIRD**	
Ninox connivens	**BIRD**	
Ninox connivens subsp. *connivens (*southwest subpop.*)*	**BIRD**	**P3**
Ninox novaeseelandiae	**BIRD**	
Numenius madagascariensis	**BIRD**	**CR**
Numenius phaeopus	**BIRD**	**MI**

TAXON	CLASS	CONS
Nycticorax caledonicus	**BIRD**	
Nymphicus hollandicus	**BIRD**	
Oceanites marinus subsp. *dulciae*	**BIRD**	
Oceanites oceanicus	**BIRD**	**MI**
Ocyphaps lophotes	**BIRD**	
Oxyura australis	**BIRD**	**P4**
Pachycephala pectoralis	**BIRD**	
Pachycephala pectoralis subsp. *fuliginosa*	**BIRD**	
Pachycephala rufiventris	**BIRD**	
Pachycephala rufiventris subsp. *rufiventris*	**BIRD**	
Pachyptila belcheri	**BIRD**	
Pachyptila desolata	**BIRD**	
Pachyptila salvini	**BIRD**	
Pachyptila turtur	**BIRD**	
Pachyptila vittata	**BIRD**	
Padda oryzivora	**BIRD**	
Pandion cristatus	**BIRD**	**MI**
Pandion haliaetus	**BIRD**	**MI**
Pardalotus punctatus	**BIRD**	
Pardalotus punctatus subsp. *punctatus*	**BIRD**	
Pardalotus striatus	**BIRD**	
Pardalotus striatus subsp. *westraliensis*	**BIRD**	
Paroaria coronata	**BIRD**	
Passer domesticus	**BIRD**	
Pelecanoides urinatrix subsp. *exsul*	**BIRD**	
Pelecanus conspicillatus	**BIRD**	
Petrochelidon ariel	**BIRD**	
Petrochelidon nigricans	**BIRD**	
Petroica boodang	**BIRD**	
Petroica cucullata	**BIRD**	
Petroica goodenovii	**BIRD**	
Petroica multicolor subsp. *campbelli*	**BIRD**	
Phaethon rubricauda	**BIRD**	**MI, P4**
Phalacrocorax carbo	**BIRD**	

TAXON	CLASS	CONS
Phalacrocorax carbo subsp. *novaehollandiae*	**BIRD**	
Phalacrocorax fuscescens	**BIRD**	
Phalacrocorax melanoleucos	**BIRD**	
Phalacrocorax melanoleucos subsp. *melanoleucos*	**BIRD**	
Phalacrocorax sulcirostris	**BIRD**	
Phalacrocorax varius	**BIRD**	
Phalacrocorax varius subsp. *hypoleucos*	**BIRD**	
Phaps chalcoptera	**BIRD**	
Phoebetria fusca	**BIRD**	**EN**
Phylidonyris melanops	**BIRD**	
Phylidonyris nigra	**BIRD**	
Phylidonyris nigra subsp. *gouldii*	**BIRD**	
Phylidonyris novaehollandiae	**BIRD**	
Platalea flavipes	**BIRD**	
Platalea regia	**BIRD**	
Platycercus icterotis	**BIRD**	
Platycercus icterotis subsp. *icterotis*	**BIRD**	**P4**
Platycercus spurius	**BIRD**	
Platycercus zonarius	**BIRD**	
Platycercus zonarius subsp. *semitorquatus*	**BIRD**	
Plegadis falcinellus	**BIRD**	**MI**
Pluvialis fulva	**BIRD**	**MI**
Pluvialis squatarola	**BIRD**	**MI**
Podargus strigoides	**BIRD**	
Podiceps cristatus	**BIRD**	
Poephila bichenovii	**BIRD**	
Poephila cincta	**BIRD**	
Poliocephalus poliocephalus	**BIRD**	
Polytelis anthopeplus	**BIRD**	
Porphyrio porphyrio	**BIRD**	
Porzana fluminea	**BIRD**	
Porzana pusilla	**BIRD**	
Porzana tabuensis	**BIRD**	
Psephotus dissimilis	**BIRD**	

TAXON	CLASS	CONS
Psittacula eupatria	**BIRD**	
Psittacula krameri	**BIRD**	
Psittacus erithacus	**BIRD**	
Pterodroma brevirostris	**BIRD**	
Pterodroma lessonii	**BIRD**	
Pterodroma macroptera	**BIRD**	
Pterodroma macroptera subsp. *macoptera*	**BIRD**	
Pterodroma mollis	**BIRD**	
Ptilotula ornatus	**BIRD**	
Puffinus assimilis	**BIRD**	
Puffinus assimilis subsp. *assimilis*	**BIRD**	
Puffinus carneipes	**BIRD**	
Puffinus griseus	**BIRD**	
Puffinus huttoni	**BIRD**	**EN**
Puffinus pacificus	**BIRD**	
Purnella albifrons	**BIRD**	
Purpureicephalus spurius	**BIRD**	
Recurvirostra novaehollandiae	**BIRD**	
Rhipidura albiscapa	**BIRD**	
Rhipidura fuliginosa	**BIRD**	
Rhipidura leucophrys	**BIRD**	
Rostratula australis	**BIRD**	**EN**
Sericornis frontalis	**BIRD**	
Serinus canarius	**BIRD**	
Smicrornis brevirostris	**BIRD**	
Stagonopleura oculata	**BIRD**	
Stercorarius antarcticus	**BIRD**	
Sterna anaethetus subsp. *anaethetus*	**BIRD**	
Sterna bergii	**BIRD**	
Sterna caspia	**BIRD**	
Sterna dougallii	**BIRD**	**MI**
Sterna fuscata subsp. *nubilosa*	**BIRD**	
Sterna hybrida subsp. *javanica*	**BIRD**	
Sterna leucoptera	**BIRD**	

TAXON	CLASS	CONS
Sterna paradisaea	**BIRD**	
Sternula nereis	**BIRD**	
Sternula nereis subsp. *nereis*	**BIRD**	**MI**
Stictonetta naevosa	**BIRD**	
Strepera versicolor	**BIRD**	
Streptopelia chinensis	**BIRD**	
Streptopelia chinensis subsp. *tigrina*	**BIRD**	
Streptopelia senegalensis	**BIRD**	
Sturnus vulgaris	**BIRD**	
Sugomel niger	**BIRD**	
Sula serrator	**BIRD**	
Tachybaptus novaehollandiae	**BIRD**	
Tadorna radjah	**BIRD**	
Tadorna tadornoides	**BIRD**	
Taeniopygia guttata subsp. *castanotis*	**BIRD**	
Thalassarche carteri	**BIRD**	**EN**
Thalassarche chrysostoma	**BIRD**	**VU**
Thalassarche melanophris	**BIRD**	**EN**
Thalasseus bergii	**BIRD**	**MI**
Thinornis rubricollis	**BIRD**	**P4**
Threskiornis molucca	**BIRD**	
Threskiornis moluccus	**BIRD**	
Threskiornis spinicollis	**BIRD**	
Todiramphus sanctus	**BIRD**	
Todiramphus sanctus subsp. *sanctus*	**BIRD**	
Tribonyx ventralis	**BIRD**	
Trichoglossus haematodus	**BIRD**	
Trichoglossus moluccanus	**BIRD**	
Tringa brevipes	**BIRD**	**MI, P4**
Tringa glareola	**BIRD**	**MI**
Tringa guttifer	**BIRD**	
Tringa nebularia	**BIRD**	**MI**
Tringa stagnatilis	**BIRD**	**MI**
Turnix varia	**BIRD**	

TAXON	CLASS	CONS
Turnix varius	BIRD	
Turnix velox	BIRD	
Tyto alba	BIRD	
Vanellus miles	BIRD	
Vanellus tricolor	BIRD	
Xenus cinereus	BIRD	MI
Zanda baudinii	BIRD	EN
Zanda latirostris	BIRD	EN
Zosterops lateralis	BIRD	
Arctocephalus tropicalis	MAMMAL	VU
Austronomus australis	MAMMAL	
Balaenoptera physalus	MAMMAL	EN
Bos taurus	MAMMAL	
Canis lupus	MAMMAL	
Cercartetus concinnus	MAMMAL	
Chalinolobus gouldii	MAMMAL	
Chalinolobus morio	MAMMAL	
Dasyurus geoffroii	MAMMAL	VU
Equus caballus	MAMMAL	
Eubalaena australis	MAMMAL	VU
Felis catus	MAMMAL	
Funambulus pennanti	MAMMAL	
Globicephala macrorhynchus	MAMMAL	
Hydromys chrysogaster	MAMMAL	P4
Hydrurga leptonyx	MAMMAL	
Isoodon fusciventer	MAMMAL	P4
Macropus fuliginosus	MAMMAL	
Macrotis lagotis	MAMMAL	VU
Mus musculus	MAMMAL	
Mustela putorius	MAMMAL	
Myrmecobius fasciatus	MAMMAL	EN
Neophoca cinerea	MAMMAL	VU
Notamacropus irma	MAMMAL	P4
Nyctophilus geoffroyi	MAMMAL	

TAXON	CLASS	CONS
Nyctophilus gouldi	MAMMAL	
Nyctophilus major subsp. *major*	MAMMAL	
Oryctolagus cuniculus	MAMMAL	
Ovis aries	MAMMAL	
Ozimops kitcheneri	MAMMAL	
Phascogale tapoatafa subsp. *tapoatafa*	MAMMAL	
Phascogale tapoatafa subsp. *wambenger*	MAMMAL	CD
Pseudomys delicatulus	MAMMAL	
Rattus fuscipes	MAMMAL	
Rattus norvegicus	MAMMAL	
Rattus rattus	MAMMAL	
Setonix brachyurus	MAMMAL	VU
Sminthopsis griseoventer subsp. *griseoventer*	MAMMAL	
Sminthopsis murina	MAMMAL	
Stenella coeruleoalba	MAMMAL	
Sus scrofa	MAMMAL	
Tachyglossus aculeatus	MAMMAL	
Tadarida australis	MAMMAL	
Tarsipes rostratus	MAMMAL	
Trichosurus vulpecula	MAMMAL	
Tursiops aduncus	MAMMAL	
Tursiops truncatus	MAMMAL	
Vespadelus regulus	MAMMAL	
Vulpes vulpes	MAMMAL	
Acritoscincus trilineatus	REPTILE	
Acritoscincus trilineatus	REPTILE	
Anilios australis	REPTILE	
Antaresia stimsoni subsp. stimsoni	REPTILE	
Aprasia repens	REPTILE	
Brachyurophis fasciolatus subsp. *fasciolatus*	REPTILE	
Brachyurophis semifasciatus	REPTILE	
Caretta caretta	REPTILE	EN
Chelodina colliei	REPTILE	
Chelonia mydas	REPTILE	VU

TAXON	CLASS	CONS
Christinus marmoratus	**REPTILE**	
Cryptoblepharus buchananii	**REPTILE**	
Cryptoblepharus plagiocephalus	**REPTILE**	
Ctenophorus adelaidensis	**REPTILE**	
Ctenotus australis	**REPTILE**	
Ctenotus fallens	**REPTILE**	
Ctenotus gemmula	**REPTILE**	
Ctenotus impar	**REPTILE**	
Ctenotus labillardieri	**REPTILE**	
Ctenotus ora	**REPTILE**	**P3**
Cyclodomorphus celatus	**REPTILE**	
Delma fraseri	**REPTILE**	
Delma grayii	**REPTILE**	
Demansia psammophis	**REPTILE**	
Demansia psammophis subsp. *reticulata*	**REPTILE**	
Dendrelaphis punctulata	**REPTILE**	
Dermochelys coriacea	**REPTILE**	**VU**
Diplodactylus granariensis subsp. *granariensis*	**REPTILE**	
Diplodactylus lateroides	**REPTILE**	
Diplodactylus polyophthalmus	**REPTILE**	
Echiopsis curta	**REPTILE**	
Egernia kingii	**REPTILE**	
Egernia napoleonis	**REPTILE**	
Elapognathus coronatus	**REPTILE**	
Eretmochelys imbricata subsp. *bissa*	**REPTILE**	
Gehyra variegata	**REPTILE**	
Hemidactylus frenatus	**REPTILE**	
Hemiergis peronii	**REPTILE**	
Hemiergis quadrilineata	**REPTILE**	
Heteronotia binoei	**REPTILE**	
Hydrophis elegans	**REPTILE**	
Hydrophis ornatus	**REPTILE**	
Hydrophis platurus	**REPTILE**	
Lerista distinguenda	**REPTILE**	

TAXON	CLASS	CONS
Lerista elegans	**REPTILE**	
Lerista gerrardii	**REPTILE**	
Lerista lineata	**REPTILE**	**P3**
Lerista lineopunctulata	**REPTILE**	
Lerista praepedita	**REPTILE**	
Lialis burtonis	**REPTILE**	
Lissolepis luctuosa	**REPTILE**	
Lophognathus longirostris	**REPTILE**	
Lucasium alboguttatum	**REPTILE**	
Menetia greyii	**REPTILE**	
Morelia spilota subsp. *imbricata*	**REPTILE**	
Morethia lineoocellata	**REPTILE**	
Morethia obscura	**REPTILE**	
Neelaps bimaculatus	**REPTILE**	
Neelaps calonotos	**REPTILE**	**P3**
Notechis scutatus	**REPTILE**	
Parasuta gouldii	**REPTILE**	
Pletholax gracilis	**REPTILE**	
Pogona minor	**REPTILE**	
Pogona minor subsp. *minor*	**REPTILE**	
Pseudechis australis	**REPTILE**	
Pseudemydura umbrina	**REPTILE**	**CR**
Pseudonaja affinis	**REPTILE**	
Pseudonaja mengdeni	**REPTILE**	
Pseudonaja modesta	**REPTILE**	
Pygopus lepidopodus	**REPTILE**	
Ramphotyphlops australis	**REPTILE**	
Ramphotyphlops braminus	**REPTILE**	
Ramphotyphlops pinguis	**REPTILE**	
Ramphotyphlops waitii	**REPTILE**	
Simoselaps bertholdi	**REPTILE**	
Strophurus spinigerus	**REPTILE**	
Strophurus spinigerus subsp. *inornatus*	**REPTILE**	
Strophurus spinigerus subsp. *spinigerus*	**REPTILE**	

TAXON	CLASS	CONS
Tiliqua occipitalis	**REPTILE**	
Tiliqua rugosa	**REPTILE**	
Underwoodisaurus milii	**REPTILE**	
Varanus gouldii	**REPTILE**	
Varanus tristis	**REPTILE**	

Please note that *NatureMap and Dandjoo* data contains some inaccuracies.

Appendix D

Flora data

D-1 Naturemap and Dandjoo Database Search Flora Results

D-2 Flora species list by family

D-3 Flora likelihood of occurrence assessment guidelines

D-4 Flora likelihood of occurrence assessment

D–5 Significant Tree Data

Terrestrial Flora Nature Map Desktop Result for all Swan River Survey Area

TAXON	CLASS	CONS
Abutilon grandifolium	**DICOT**	
Acacia acuminata	**DICOT**	
Acacia applanata	**DICOT**	
Acacia barbinervis subsp. *barbinervis*	**DICOT**	
Acacia benthamii	**DICOT**	**P2**
Acacia blakelyi	**DICOT**	
Acacia cochlearis	**DICOT**	
Acacia consobrina	**DICOT**	
Acacia craspedocarpa	**DICOT**	
Acacia cyclops	**DICOT**	
Acacia dentifera	**DICOT**	
Acacia drewiana subsp. *drewiana*	**DICOT**	
Acacia drummondii subsp. *drummondii*	**DICOT**	
Acacia ericifolia	**DICOT**	
Acacia horridula	**DICOT**	**P3**
Acacia huegelii	**DICOT**	
Acacia incurva	**DICOT**	
Acacia iteaphylla	**DICOT**	
Acacia jibberdingensis	**DICOT**	
Acacia lasiocalyx	**DICOT**	
Acacia lasiocarpa	**DICOT**	**P1**
Acacia lasiocarpa var. *bracteolata long peduncle variant (G.J. Keighery 5026)*	**DICOT**	
Acacia lasiocarpa var. *lasiocarpa*	**DICOT**	
Acacia lasiocarpa var. *sedifolia*	**DICOT**	
Acacia littorea	**DICOT**	
Acacia longifolia	**DICOT**	
Acacia longifolia subsp. *longifolia*	**DICOT**	
Acacia longifolia subsp. *sophorae*	**DICOT**	
Acacia melanoxylon	**DICOT**	
Acacia microbotrya	**DICOT**	
Acacia nervosa	**DICOT**	
Acacia paradoxa	**DICOT**	
Acacia podalyriifolia	**DICOT**	

TAXON	CLASS	CONS
Acacia pulchella	**DICOT**	
Acacia pulchella var. *glaberrima*	**DICOT**	
Acacia pulchella var. *pulchella*	**DICOT**	
Acacia pycnocephala	**DICOT**	
Acacia restiacea	**DICOT**	
Acacia rostellifera	**DICOT**	
Acacia salicina	**DICOT**	
Acacia saligna	**DICOT**	
Acacia saligna subsp. *lindleyi*	**DICOT**	
Acacia saligna subsp. *saligna*	**DICOT**	
Acacia sessilis	**DICOT**	
Acacia stenoptera	**DICOT**	
Acacia subcaerulea	**DICOT**	
Acacia tetragonocarpa	**DICOT**	
Acacia trachyphloia	**DICOT**	
Acacia truncata	**DICOT**	
Acacia willdenowiana	**DICOT**	
Acacia xanthina	**DICOT**	
Acaena echinata	**DICOT**	
Acer negundo	**DICOT**	
Achillea millefolium	**DICOT**	
Acrotriche cordata	**DICOT**	
Actinotus glomeratus	**DICOT**	
Actinotus leucocephalus	**DICOT**	
Adenanthos barbiger	**DICOT**	
Adenanthos cygnorum	**DICOT**	
Adenanthos cygnorum subsp. *cygnorum*	**DICOT**	
Adenanthos obovatus	**DICOT**	
Aeonium arboreum	**DICOT**	
Aeonium haworthii	**DICOT**	
Ageratina adenophora	**DICOT**	
Agonis flexuosa	**DICOT**	
Agonis flexuosa var. *flexuosa*	**DICOT**	
Ailanthus altissima	**DICOT**	

TAXON	CLASS	CONS
Aizoon pubescens	**DICOT**	
Allocasuarina fraseriana	**DICOT**	
Allocasuarina huegeliana	**DICOT**	
Allocasuarina humilis	**DICOT**	
Allocasuarina lehmanniana subsp. *lehmanniana*	**DICOT**	
Allocasuarina microstachya	**DICOT**	
Alternanthera denticulata	**DICOT**	
Alternanthera nodiflora	**DICOT**	
Alyxia buxifolia	**DICOT**	
Amaranthus blitum	**DICOT**	
Amaranthus caudatus	**DICOT**	
Amaranthus cruentus	**DICOT**	
Amaranthus hybridus	**DICOT**	
Amaranthus lividus	**DICOT**	
Amaranthus powellii	**DICOT**	
Amaranthus viridis	**DICOT**	
Ambrosia psilostachya	**DICOT**	
Ammi majus	**DICOT**	
Amsinckia calycina	**DICOT**	
Amyema linophylla	**DICOT**	
Amyema linophylla subsp. *linophylla*	**DICOT**	
Amyema miquelii	**DICOT**	
Amyema preissii	**DICOT**	
Anagallis arvensis	**DICOT**	
Anagallis arvensis var. *caerulea*	**DICOT**	
Andersonia aristata	**DICOT**	
Andersonia gracilis	**DICOT**	**VU**
Andersonia involucrata	**DICOT**	
Andersonia lehmanniana	**DICOT**	
Angianthus cunninghamii	**DICOT**	
Angianthus micropodioides	**DICOT**	**P3**
Angianthus preissianus	**DICOT**	
Anisomeles farinacea	**DICOT**	
Anredera cordifolia	**DICOT**	

TAXON	CLASS	CONS
Anthocercis ilicifolia	**DICOT**	
Anthocercis ilicifolia subsp. *ilicifolia*	**DICOT**	
Anthocercis littorea	**DICOT**	
Anthotium junciforme	**DICOT**	
Aotus cordifolia	**DICOT**	
Aotus gracillima	**DICOT**	
Aotus procumbens	**DICOT**	
Aphanes arvensis	**DICOT**	
Apium annuum	**DICOT**	
Apium graveolens	**DICOT**	
Apium prostratum subsp. *prostratum var. prostratum*	**DICOT**	
Arctotheca calendula	**DICOT**	
Arctotheca populifolia	**DICOT**	
Arctotis stoechadifolia	**DICOT**	
Argemone albiflora subsp. albiflora	**DICOT**	
Argemone ochroleuca subsp. ochroleuca	**DICOT**	
Argyranthemum frutescens	**DICOT**	
Argyranthemum frutescens subsp. foeniculaceum	**DICOT**	
Astartea affinis	**DICOT**	
Astartea leptophylla	**DICOT**	
Astartea scoparia	**DICOT**	
Asteridea pulverulenta	**DICOT**	
Astroloma ciliatum	**DICOT**	
Astroloma foliosum	**DICOT**	
Astroloma macrocalyx	**DICOT**	
Astroloma microcalyx	**DICOT**	
Astroloma pallidum	**DICOT**	
Astroloma stomarrhena	**DICOT**	
Astroloma xerophyllum	**DICOT**	
Atriplex hypoleuca	**DICOT**	
Atriplex isatidea	**DICOT**	
Atriplex prostrata	**DICOT**	
Atriplex semibaccata	**DICOT**	
Auranticarpa rhombifolia	**DICOT**	

TAXON	CLASS	CONS
Babingtonia camphorosmae	**DICOT**	
Babingtonia pelloeae	**DICOT**	
Babingtonia urbana	**DICOT**	**P3**
Bacopa monnieri	**DICOT**	
Banksia armata var. armata	**DICOT**	
Banksia ashbyi	**DICOT**	
Banksia attenuata	**DICOT**	
Banksia dallanneyi	**DICOT**	
Banksia dallanneyi subsp. dallanneyi var. dallanneyi	**DICOT**	
Banksia fraseri var. fraseri	**DICOT**	
Banksia grandis	**DICOT**	
Banksia ilicifolia	**DICOT**	
Banksia incana	**DICOT**	
Banksia incana var. incana	**DICOT**	
Banksia littoralis	**DICOT**	
Banksia menziesii	**DICOT**	
Banksia nivea subsp. nivea	**DICOT**	
Banksia prionotes	**DICOT**	
Banksia pteridifolia subsp. vernalis	**DICOT**	**P3**
Banksia sceptrum	**DICOT**	
Banksia sessilis	**DICOT**	
Banksia sessilis var. cygnorum	**DICOT**	
Banksia sphaerocarpa	**DICOT**	
Banksia telmatiaea	**DICOT**	
Banksia undata var. undata	**DICOT**	
Banksia victoriae	**DICOT**	
Beaufortia elegans	**DICOT**	
Beaufortia squarrosa	**DICOT**	
Bellardia trixago	**DICOT**	
Bellardia viscosa	**DICOT**	
Berkheya rigida	**DICOT**	
Beyeria cinerea subsp. cinerea	**DICOT**	**P3**
Beyeria viscosa	**DICOT**	
Bidens pilosa	**DICOT**	

TAXON	CLASS	CONS
Billardiera fraseri	**DICOT**	
Billardiera fusiformis	**DICOT**	
Boronia alata	**DICOT**	
Boronia crenulata subsp. *crenulata* var. *crenulata*	**DICOT**	
Boronia crenulata subsp. *viminea*	**DICOT**	
Boronia cymosa	**DICOT**	
Boronia dichotoma	**DICOT**	
Boronia purdieana subsp. *purdieana*	**DICOT**	
Boronia ramosa	**DICOT**	
Boronia ramosa subsp. *anethifolia*	**DICOT**	
Boronia scabra subsp. *scabra*	**DICOT**	
Boronia tenuis	**DICOT**	**P4**
Bossiaea eriocarpa	**DICOT**	
Bossiaea modesta	**DICOT**	**P2**
Bossiaea ornata	**DICOT**	
Brachychiton acerifolius x discolor	**DICOT**	
Brachychiton populneus	**DICOT**	
Brachychiton populneus subsp. *populneus*	**DICOT**	
Brachyloma preissii	**DICOT**	
Brachyscome bellidioides	**DICOT**	
Brachyscome iberidifolia	**DICOT**	
Brachyscome pusilla	**DICOT**	
Brassica barrelieri subsp. *oxyrrhina*	**DICOT**	
Brassica fruticulosa	**DICOT**	
Brassica rapa	**DICOT**	
Brassica tournefortii	**DICOT**	
Brassica x napus	**DICOT**	
Brassica x napus x rapa	**DICOT**	
Buddleja dysophylla	**DICOT**	
Buddleja madagascariensis	**DICOT**	
Buglossoides arvensis	**DICOT**	
Byblis gigantea	**DICOT**	**P3**
Cakile maritima	**DICOT**	
Calandrinia brevipedata	**DICOT**	

TAXON	CLASS	CONS
Calandrinia calyptrata	**DICOT**	
Calandrinia corrigioloides	**DICOT**	
Calandrinia liniflora	**DICOT**	
Calceolaria tripartita	**DICOT**	
Callistemon citrinus	**DICOT**	
Callistemon linearis	**DICOT**	
Callistemon phoeniceus	**DICOT**	
Callitriche stagnalis	**DICOT**	
Calothamnus gilesii	**DICOT**	
Calothamnus graniticus	**DICOT**	
Calothamnus graniticus subsp. *leptophyllus*	**DICOT**	**P4**
Calothamnus hirsutus	**DICOT**	
Calothamnus homalophyllus	**DICOT**	
Calothamnus lateralis	**DICOT**	
Calothamnus macrocarpus	**DICOT**	**P2**
Calothamnus quadrifidus	**DICOT**	
Calothamnus quadrifidus subsp. *angustifolius*	**DICOT**	
Calothamnus quadrifidus subsp. *homalophyllus*	**DICOT**	
Calothamnus quadrifidus subsp. *quadrifidus*	**DICOT**	
Calothamnus rupestris	**DICOT**	
Calothamnus sanguineus	**DICOT**	
Calothamnus validus	**DICOT**	
Calycopeplus paucifolius	**DICOT**	
Calytrix angulata	**DICOT**	
Calytrix aurea	**DICOT**	
Calytrix flavescens	**DICOT**	
Calytrix flavescens x fraseri	**DICOT**	
Calytrix fraseri	**DICOT**	
Calytrix glutinosa	**DICOT**	
Calytrix leschenaultii	**DICOT**	
Calytrix sapphirina	**DICOT**	
Calytrix sylvana	**DICOT**	
Campsis radicans	**DICOT**	
Campsis x tagliabuana	**DICOT**	

TAXON	CLASS	CONS
Cannabis sativa	**DICOT**	
Capsella bursa-pastoris	**DICOT**	
Cardamine hirsuta	**DICOT**	
Cardamine occulta	**DICOT**	
Cardiospermum grandiflorum	**DICOT**	
Carduus pycnocephalus	**DICOT**	
Carpobrotus edulis	**DICOT**	
Carpobrotus virescens	**DICOT**	
Cassytha flava	**DICOT**	
Cassytha glabella	**DICOT**	
Cassytha glabella forma casuarinae	**DICOT**	
Cassytha pomiformis	**DICOT**	
Cassytha racemosa	**DICOT**	
Cassytha racemosa forma pilosa	**DICOT**	
Cassytha racemosa forma racemosa	**DICOT**	
Casuarina cunninghamiana	**DICOT**	
Casuarina equisetifolia	**DICOT**	
Casuarina glauca	**DICOT**	
Casuarina glauca x obesa	**DICOT**	
Casuarina obesa	**DICOT**	
Catha edulis	**DICOT**	
Centaurea calcitrapa	**DICOT**	
Centaurea melitensis	**DICOT**	
Centaurea solstitialis	**DICOT**	
Centaurium erythraea	**DICOT**	
Centaurium tenuiflorum	**DICOT**	
Centella asiatica	**DICOT**	
Centipeda cunninghamii	**DICOT**	
Centranthus macrosiphon	**DICOT**	
Cerastium glomeratum	**DICOT**	
Chamaecytisus palmensis	**DICOT**	
Chamelaucium axillare x uncinatum	**DICOT**	
Chamelaucium sp. Winchester (C. Chapman s.n. PERTH 07879180)	**DICOT**	
Chamelaucium uncinatum	**DICOT**	

TAXON	CLASS	CONS
Cheiranthera preissiana	**DICOT**	
Chenopodium album	**DICOT**	
Chenopodium giganteum	**DICOT**	
Chenopodium glaucum	**DICOT**	
Chenopodium macrospermum	**DICOT**	
Chenopodium murale	**DICOT**	
Chondrilla juncea	**DICOT**	
Chorizema dicksonii	**DICOT**	
Chrysanthemoides monilifera subsp. *monilifera*	**DICOT**	
Chrysocoma coma-aurea	**DICOT**	
Chthonocephalus pseudevax	**DICOT**	
Cicendia filiformis	**DICOT**	
Cicer arietinum	**DICOT**	
Cichorium intybus	**DICOT**	
Cinnamomum camphora	**DICOT**	
Cirsium arvense var. *arvense*	**DICOT**	
Cirsium vulgare	**DICOT**	
Citrullus lanatus	**DICOT**	
Clematis linearifolia	**DICOT**	
Clematis pubescens	**DICOT**	
Coleonema pulchellum	**DICOT**	
Comesperma calymega	**DICOT**	
Comesperma ciliatum	**DICOT**	
Comesperma confertum	**DICOT**	
Comesperma flavum	**DICOT**	
Comesperma integerrimum	**DICOT**	
Comesperma polygaloides	**DICOT**	
Comesperma virgatum	**DICOT**	
Commersonia corniculata	**DICOT**	
Conospermum acerosum subsp. *acerosum*	**DICOT**	
Conospermum canaliculatum subsp. *canaliculatum*	**DICOT**	
Conospermum capitatum subsp. *glabratum*	**DICOT**	
Conospermum huegelii	**DICOT**	
Conospermum incurvum	**DICOT**	

TAXON	CLASS	CONS
Conospermum stoechadis	**DICOT**	
Conospermum stoechadis subsp. *sclerophyllum*	**DICOT**	
Conospermum stoechadis subsp. *stoechadis*	**DICOT**	
Conospermum triplinervium	**DICOT**	
Conospermum triplinervium x undulatum	**DICOT**	
Conospermum undulatum	**DICOT**	**VU**
Conospermum undulatum hybrid	**DICOT**	
Conostephium minus	**DICOT**	
Conostephium pendulum	**DICOT**	
Conostephium preissii	**DICOT**	
Conothamnus trinervis	**DICOT**	
Convolvulus sabatius subsp. *mauritanicus*	**DICOT**	
Conyza albida	**DICOT**	
Conyza bonariensis	**DICOT**	
Conyza canadensis var. *canadensis*	**DICOT**	
Conyza parva	**DICOT**	
Conyza sumatrensis	**DICOT**	
Corrigiola litoralis	**DICOT**	
Corymbia calophylla	**DICOT**	
Corymbia calophylla x ficifolia	**DICOT**	
Corymbia citriodora	**DICOT**	
Corymbia maculata	**DICOT**	
Cosmos bipinnatus	**DICOT**	
Cotoneaster pannosus	**DICOT**	
Cotula australis	**DICOT**	
Cotula bipinnata	**DICOT**	
Cotula coronopifolia	**DICOT**	
Cotula cotuloides	**DICOT**	
Cotula turbinata	**DICOT**	
Crassocephalum crepidioides	**DICOT**	
Crassula alata	**DICOT**	
Crassula alata var. *alata*	**DICOT**	
Crassula arborescens	**DICOT**	
Crassula colorata	**DICOT**	

TAXON	CLASS	CONS
Crassula colorata var. *acuminata*	**DICOT**	
Crassula colorata var. *colorata*	**DICOT**	
Crassula decumbens	**DICOT**	
Crassula decumbens var. *decumbens*	**DICOT**	
Crassula exserta	**DICOT**	
Crassula glomerata	**DICOT**	
Crassula natans	**DICOT**	
Crassula natans var. *minus*	**DICOT**	
Crassula thunbergiana	**DICOT**	
Crassula thunbergiana subsp. *thunbergiana*	**DICOT**	
Crepis foetida subsp. *foetida*	**DICOT**	
Cristonia biloba subsp. *biloba*	**DICOT**	
Croninia kingiana	**DICOT**	
Cryptandra arbutiflora	**DICOT**	
Cryptandra arbutiflora var. *arbutiflora*	**DICOT**	
Cryptandra arbutiflora var. *tubulosa*	**DICOT**	
Cryptandra humilis	**DICOT**	
Cryptandra mutila	**DICOT**	
Cryptandra scoparia	**DICOT**	
Cuphea hyssopifolia	**DICOT**	
Cuscuta campestris	**DICOT**	
Cuscuta epithymum	**DICOT**	
Cuscuta planiflora	**DICOT**	
Cyclospermum leptophyllum	**DICOT**	
Cymbalaria muralis subsp. *muralis*	**DICOT**	
Dampiera alata	**DICOT**	
Dampiera linearis	**DICOT**	
Dampiera pedunculata	**DICOT**	
Dampiera trigona	**DICOT**	
Dampiera triloba	**DICOT**	**P3**
Darwinia citriodora	**DICOT**	
Datura innoxia	**DICOT**	
Datura metel	**DICOT**	
Datura stramonium	**DICOT**	

TAXON	CLASS	CONS
Datura wrightii	**DICOT**	
Daucus glochidiatus	**DICOT**	
Daviesia angulata	**DICOT**	
Daviesia brachyphylla	**DICOT**	
Daviesia decurrens	**DICOT**	
Daviesia decurrens subsp. *decurrens*	**DICOT**	
Daviesia divaricata	**DICOT**	
Daviesia divaricata subsp. *divaricata*	**DICOT**	
Daviesia hakeoides subsp. *hakeoides*	**DICOT**	
Daviesia horrida	**DICOT**	
Daviesia incrassata subsp. *incrassata*	**DICOT**	
Daviesia nudiflora subsp. *nudiflora*	**DICOT**	
Daviesia pedunculata	**DICOT**	
Daviesia physodes	**DICOT**	
Daviesia podophylla	**DICOT**	
Daviesia triflora	**DICOT**	
Dichondra repens	**DICOT**	
Dicrastylis micrantha	**DICOT**	**P3**
Dicrastylis soliparma	**DICOT**	
Dillwynia cinerascens	**DICOT**	
Dillwynia dillwynioides	**DICOT**	**P3**
Dillwynia sp. A Perth Flora (R. Coveny 8036)	**DICOT**	
Diplolaena angustifolia	**DICOT**	
Diplopeltis huegelii	**DICOT**	
Diplopeltis huegelii subsp. *huegelii*	**DICOT**	
Diplopeltis huegelii subsp. *lehmannii*	**DICOT**	
Diplopeltis huegelii var. *huegelii*	**DICOT**	
Diplotaxis muralis	**DICOT**	
Diplotaxis tenuifolia	**DICOT**	
Dischisma arenarium	**DICOT**	
Dischisma capitatum	**DICOT**	
Distimake dissectus	**DICOT**	
Dittrichia graveolens	**DICOT**	
Dodonaea aptera	**DICOT**	

TAXON	CLASS	CONS
Dodonaea hackettiana	**DICOT**	**P4**
Dodonaea sinuolata subsp. *sinuolata*	**DICOT**	
Drosanthemum candens	**DICOT**	
Drosera bulbigena	**DICOT**	
Drosera drummondii	**DICOT**	
Drosera erythrorhiza	**DICOT**	
Drosera erythrorhiza subsp. *erythrorhiza*	**DICOT**	
Drosera gigantea	**DICOT**	
Drosera glanduligera	**DICOT**	
Drosera helodes	**DICOT**	
Drosera heterophylla	**DICOT**	
Drosera hirsuta	**DICOT**	
Drosera macrantha	**DICOT**	
Drosera macrantha subsp. *macrantha*	**DICOT**	
Drosera menziesii	**DICOT**	
Drosera menziesii subsp. *penicillaris*	**DICOT**	
Drosera micrantha	**DICOT**	
Drosera microphylla	**DICOT**	
Drosera minutiflora	**DICOT**	
Drosera neesii	**DICOT**	
Drosera nitidula	**DICOT**	
Drosera occidentalis	**DICOT**	**P4**
Drosera paleacea subsp. *paleacea*	**DICOT**	
Drosera pallida	**DICOT**	
Drosera platystigma	**DICOT**	
Drosera porrecta	**DICOT**	
Drosera pulchella	**DICOT**	
Drosera ramellosa	**DICOT**	
Drosera rosulata	**DICOT**	
Drosera sp. Branched styles (S.C. Coffey 193)	**DICOT**	
Drosera sp. indet.	**DICOT**	
Drosera spilos	**DICOT**	
Drosera stolonifera	**DICOT**	
Drosera subhirtella	**DICOT**	

TAXON	CLASS	CONS
Drosera tubaestylis	**DICOT**	
Drosera zonaria	**DICOT**	
Dryandra armata	**DICOT**	
Dryandra lindleyana subsp. lindleyana var. lindleyana	**DICOT**	
Dryandra nivea	**DICOT**	
Dryandra sessilis	**DICOT**	
Dysphania ambrosioides	**DICOT**	
Dysphania glomulifera subsp. glomulifera	**DICOT**	
Dysphania multifida	**DICOT**	
Ecballium elaterium	**DICOT**	
Echium plantagineum	**DICOT**	
Eclipta prostrata	**DICOT**	
Elatine gratioloides	**DICOT**	
Epilobium billardiereanum subsp. cinereum	**DICOT**	
Epilobium billardiereanum subsp. intermedium	**DICOT**	
Epilobium ciliatum	**DICOT**	
Epilobium hirtigerum	**DICOT**	
Epilobium tetragonum	**DICOT**	
Epilobium tetragonum subsp. tetragonum	**DICOT**	
Eremaea asterocarpa	**DICOT**	
Eremaea asterocarpa subsp. asterocarpa	**DICOT**	
Eremaea fimbriata	**DICOT**	
Eremaea pauciflora	**DICOT**	
Eremaea pauciflora subsp. pauciflora	**DICOT**	
Eremaea pauciflora var. pauciflora	**DICOT**	
Eremophila glabra	**DICOT**	
Eremophila glabra subsp. albicans	**DICOT**	
Eremophila glabra subsp. chlorella	**DICOT**	**EN**
Erigeron karvinskianus	**DICOT**	
Eriostemon spicatus	**DICOT**	
Erodium botrys	**DICOT**	
Erodium cicutarium	**DICOT**	
Erodium cygnorum	**DICOT**	
Erodium moschatum	**DICOT**	

TAXON	CLASS	CONS
Eryngium pinnatifidum	**DICOT**	
Eryngium pinnatifidum subsp. *palustre*	**DICOT**	**P3**
Eryngium pinnatifidum subsp. *Palustre (G.J. Keighery 13459)*	**DICOT**	**P3**
Eryngium sp. Subdecumbens (G.J. Keighery 5390)	**DICOT**	
Erythrina crista-galli	**DICOT**	
Erythrina x sykesii	**DICOT**	
Eucalyptus arachnaea subsp. *arachnaea*	**DICOT**	
Eucalyptus camaldulensis subsp. *camaldulensis*	**DICOT**	
Eucalyptus camaldulensis subsp. *obtusa*	**DICOT**	
Eucalyptus cladocalyx subsp. *petila*	**DICOT**	
Eucalyptus decipiens	**DICOT**	
Eucalyptus educta	**DICOT**	**P2**
Eucalyptus erythrocorys	**DICOT**	
Eucalyptus foecunda	**DICOT**	
Eucalyptus gomphocephala	**DICOT**	
Eucalyptus lansdowneana	**DICOT**	
Eucalyptus marginata	**DICOT**	
Eucalyptus marginata subsp. *marginata*	**DICOT**	
Eucalyptus petrensis	**DICOT**	
Eucalyptus rudis	**DICOT**	
Eucalyptus rudis subsp. *rudis*	**DICOT**	
Eucalyptus todtiana	**DICOT**	
Eucalyptus utilis	**DICOT**	
Eucalyptus x mundijongensis	**DICOT**	**P1**
Euchilopsis linearis	**DICOT**	
Euphorbia arborea	**DICOT**	
Euphorbia cyathophora	**DICOT**	
Euphorbia dendroides	**DICOT**	
Euphorbia helioscopia	**DICOT**	
Euphorbia hyssopifolia	**DICOT**	
Euphorbia lathyris	**DICOT**	
Euphorbia lathyrus	**DICOT**	
Euphorbia maculata	**DICOT**	
Euphorbia marginata	**DICOT**	

TAXON	CLASS	CONS
Euphorbia paralias	**DICOT**	
Euphorbia peplus	**DICOT**	
Euphorbia prostrata	**DICOT**	
Euphorbia terracina	**DICOT**	
Eutaxia virgata	**DICOT**	
Exocarpos sparteus	**DICOT**	
Fallopia convolvulus	**DICOT**	
Ficus carica	**DICOT**	
Ficus macrophylla	**DICOT**	
Foeniculum vulgare	**DICOT**	
Frankenia pauciflora	**DICOT**	
Fumaria bastardii	**DICOT**	
Fumaria capreolata	**DICOT**	
Fumaria densiflora	**DICOT**	
Fumaria muralis	**DICOT**	
Fumaria muralis subsp. *muralis*	**DICOT**	
Galinsoga parviflora	**DICOT**	
Galium aparine	**DICOT**	
Galium divaricatum	**DICOT**	
Galium murale	**DICOT**	
Gamochaeta coarctata	**DICOT**	
Gamochaeta pensylvanica	**DICOT**	
Gastrolobium acutum	**DICOT**	
Gastrolobium capitatum	**DICOT**	
Gastrolobium celsianum	**DICOT**	
Gastrolobium ebracteolatum	**DICOT**	
Gastrolobium linearifolium	**DICOT**	
Gastrolobium nervosum	**DICOT**	
Gastrolobium praemorsum	**DICOT**	
Gastrolobium spinosum	**DICOT**	
Gazania linearis	**DICOT**	
Geranium molle	**DICOT**	
Geranium solanderi	**DICOT**	
Glandularia aristigera	**DICOT**	

TAXON	CLASS	CONS
Glebionis coronaria	**DICOT**	
Gleditsia triacanthos	**DICOT**	
Glischrocaryon angustifolium	**DICOT**	
Glischrocaryon aureum	**DICOT**	
Gnephosis angianthoides	**DICOT**	
Gnephosis drummondii	**DICOT**	
Gnephosis tenuissima	**DICOT**	
Gomphocarpus fruticosus	**DICOT**	
Gomphocarpus physocarpus	**DICOT**	
Gompholobium aristatum	**DICOT**	
Gompholobium confertum	**DICOT**	
Gompholobium polymorphum	**DICOT**	
Gompholobium scabrum	**DICOT**	
Gompholobium shuttleworthii	**DICOT**	
Gompholobium tomentosum	**DICOT**	
Gonocarpus nodulosus	**DICOT**	
Gonocarpus paniculatus	**DICOT**	
Gonocarpus pithyoides	**DICOT**	
Goodenia incana	**DICOT**	
Goodenia micrantha	**DICOT**	
Goodenia pinifolia	**DICOT**	
Goodenia pulchella	**DICOT**	
Goodenia pulchella subsp. *Coastal Plain A (M. Hislop 634)*	**DICOT**	
Goodenia pulchella subsp. *Coastal Plain B (L.W. Sage 2336)*	**DICOT**	
Goodenia scapigera	**DICOT**	
*Grammatotheca bergiana v*ar. *bergiana*	**DICOT**	
Gratiola peruviana	**DICOT**	
Gratiola pubescens	**DICOT**	
Grevillea bipinnatifida	**DICOT**	
Grevillea bipinnatifida subsp. *bipinnatifida*	**DICOT**	
Grevillea crithmifolia	**DICOT**	
Grevillea curviloba subsp. *incurva*	**DICOT**	**EN**
Grevillea endlicheriana	**DICOT**	
Grevillea manglesii subsp. *manglesii*	**DICOT**	**P2**

TAXON	CLASS	CONS
Grevillea manglesii subsp. *ornithopoda*	**DICOT**	
Grevillea obtusifolia	**DICOT**	
Grevillea pilulifera	**DICOT**	
Grevillea preissii subsp. *preissii*	**DICOT**	
Grevillea synapheae subsp. *synapheae*	**DICOT**	
Grevillea thelemanniana	**DICOT**	**CR**
Grevillea thelemanniana subsp. *preissii*	**DICOT**	
Grevillea vestita	**DICOT**	
Grevillea vestita subsp. *vestita*	**DICOT**	
Guichenotia sarotes	**DICOT**	
Gyrostemon ramulosus	**DICOT**	
Hakea bucculenta	**DICOT**	
Hakea candolleana	**DICOT**	
Hakea ceratophylla	**DICOT**	
Hakea conchifolia	**DICOT**	
Hakea costata	**DICOT**	
Hakea erinacea	**DICOT**	
Hakea incrassata	**DICOT**	
Hakea lissocarpha	**DICOT**	
Hakea myrtoides	**DICOT**	
Hakea petiolaris	**DICOT**	
Hakea prostrata	**DICOT**	
Hakea ruscifolia	**DICOT**	
Hakea sp. Eastern coastal plain (G.J. Keighery 8014)	**DICOT**	
Hakea sulcata	**DICOT**	
Hakea trifurcata	**DICOT**	
Hakea undulata	**DICOT**	
Hakea varia	**DICOT**	
Haloragis scoparia	**DICOT**	**P1**
Hardenbergia comptoniana	**DICOT**	
Hedypnois rhagadioloides	**DICOT**	
Hedypnois rhagadioloides subsp. *cretica*	**DICOT**	
Helianthus annuus	**DICOT**	
Helianthus debilis subsp. *cucumerifolius*	**DICOT**	

TAXON	CLASS	CONS
Helianthus tuberosus	**DICOT**	
Helichrysum cordatum	**DICOT**	
Helichrysum luteoalbum	**DICOT**	
Heliophila pusilla	**DICOT**	
Heliotropium amplexicaule	**DICOT**	
Heliotropium curassavicum	**DICOT**	
Helminthotheca echioides	**DICOT**	
Hemiandra glabra	**DICOT**	
Hemiandra linearis	**DICOT**	
Hemiandra pungens	**DICOT**	
Hemiandra pungens var. *glabra*	**DICOT**	
Hemiandra sp. Jurien (B.J. Conn & M.E. Tozer BJC 3885)	**DICOT**	
Hemigenia incana	**DICOT**	
Hemigenia sericea	**DICOT**	
Hemiphora bartlingii	**DICOT**	
Hemiphora uncinata	**DICOT**	
Hibbertia amplexicaulis	**DICOT**	
Hibbertia aurea	**DICOT**	
Hibbertia commutata	**DICOT**	
Hibbertia cuneiformis	**DICOT**	
Hibbertia diamesogenos	**DICOT**	
Hibbertia huegelii	**DICOT**	
Hibbertia huegelii complex	**DICOT**	
Hibbertia hypericoides	**DICOT**	
Hibbertia hypericoides subsp. *hypericoides*	**DICOT**	
Hibbertia perfoliata	**DICOT**	
Hibbertia racemosa	**DICOT**	
Hibbertia spicata subsp. *leptotheca*	**DICOT**	
Hibbertia stellaris	**DICOT**	
Hibbertia striata	**DICOT**	
Hibbertia subvaginata	**DICOT**	
Hibbertia vaginata	**DICOT**	
Hibiscus diversifolius	**DICOT**	
Hibiscus diversifolius subsp. *diversifolius*	**DICOT**	

TAXON	CLASS	CONS
Hibiscus mutabilis	**DICOT**	
Hibiscus tridactylites	**DICOT**	
Homalanthus novo-guineensis	**DICOT**	
Homalosciadium homalocarpum	**DICOT**	
Homalospermum firmum	**DICOT**	
Hovea pungens	**DICOT**	
Hovea trisperma	**DICOT**	
Hovea trisperma var. *trisperma*	**DICOT**	
Hyalosperma cotula	**DICOT**	
Hybanthus calycinus	**DICOT**	
Hydrocotyle alata	**DICOT**	
Hydrocotyle blepharocarpa	**DICOT**	
Hydrocotyle bonariensis	**DICOT**	
Hydrocotyle callicarpa	**DICOT**	
Hydrocotyle diantha	**DICOT**	
Hydrocotyle hispidula	**DICOT**	
Hydrocotyle lemnoides	**DICOT**	**P4**
Hydrocotyle pilifera var. *glabrata*	**DICOT**	
Hydrocotyle ranunculoides	**DICOT**	
Hydrocotyle scutellifera	**DICOT**	
Hydrocotyle striata	**DICOT**	**P1**
Hydrocotyle tetragonocarpa	**DICOT**	
Hypericum canariense	**DICOT**	
Hypericum gramineum	**DICOT**	
Hypocalymma angustifolium	**DICOT**	
Hypocalymma angustifolium subsp. Swan Coastal Plain (G.J. Keighery 16777)	**DICOT**	
Hypocalymma robustum	**DICOT**	
Hypochaeris glabra	**DICOT**	
Hypochaeris radicata	**DICOT**	
Ipomoea batatas	**DICOT**	
Ipomoea cairica	**DICOT**	
Ipomoea indica	**DICOT**	
Isopogon asper	**DICOT**	
Isopogon drummondii	**DICOT**	

TAXON	CLASS	CONS
Isopogon dubius	**DICOT**	
Isopogon sphaerocephalus	**DICOT**	
Isotoma hypocrateriformis	**DICOT**	
Isotoma pusilla	**DICOT**	
Isotoma scapigera	**DICOT**	
Isotropis cuneifolia	**DICOT**	
Isotropis cuneifolia subsp. *cuneifolia*	**DICOT**	
Ixiolaena viscosa	**DICOT**	
Jacksonia angulata	**DICOT**	
Jacksonia densiflora	**DICOT**	
Jacksonia floribunda	**DICOT**	
Jacksonia furcellata	**DICOT**	
Jacksonia gracillima	**DICOT**	**P3**
Jacksonia lehmannii	**DICOT**	
Jacksonia restioides	**DICOT**	
Jacksonia sericea	**DICOT**	**P4**
Jacksonia sternbergiana	**DICOT**	
Kennedia coccinea	**DICOT**	
Kennedia prostrata	**DICOT**	
Kennedia rubicunda	**DICOT**	
Kennedia stirlingii	**DICOT**	
Kickxia elatine subsp. *elatine*	**DICOT**	
Kickxia spuria	**DICOT**	
Kunzea glabrescens	**DICOT**	
Kunzea micrantha	**DICOT**	
Kunzea micrantha subsp. *micrantha*	**DICOT**	
Kunzea micrantha subsp. *petiolata*	**DICOT**	
Labichea lanceolata	**DICOT**	
Labichea punctata	**DICOT**	
Lablab purpureus	**DICOT**	
Lachnostachys verbascifolia var. *verbascifolia*	**DICOT**	
Lactuca saligna	**DICOT**	
Lactuca serriola	**DICOT**	
Lactuca serriola forma serriola	**DICOT**	

TAXON	CLASS	CONS
Lagenophora huegelii	**DICOT**	
Lagunaria patersonia	**DICOT**	
Lambertia multiflora	**DICOT**	
Lambertia multiflora var. *darlingensis*	**DICOT**	
Lantana camara	**DICOT**	
Lantana camara var. *camara*	**DICOT**	
Lasiopetalum bracteatum	**DICOT**	**P4**
Lasiopetalum glabratum	**DICOT**	
Lasiopetalum glutinosum subsp. *glutinosum*	**DICOT**	
Lasiopetalum membranaceum	**DICOT**	**P3**
Lathyrus tingitanus	**DICOT**	
Latrobea tenella	**DICOT**	
Lavandula dentata var. *candicans*	**DICOT**	
Lawrencella rosea	**DICOT**	
Lawrencia spicata	**DICOT**	
Lawrencia squamata	**DICOT**	
Lechenaultia biloba	**DICOT**	
Lechenaultia expansa	**DICOT**	
Lechenaultia floribunda	**DICOT**	
Lechenaultia linarioides	**DICOT**	
Leonotis leonurus	**DICOT**	
Leonotis nepetifolia	**DICOT**	
Leontodon rhagadioloides	**DICOT**	
Leontodon saxatilis	**DICOT**	
Lepidium didymum	**DICOT**	
Lepidium pseudohyssopifolium	**DICOT**	**P1**
Lepidium rotundum	**DICOT**	
Leptomeria empetriformis	**DICOT**	
Leptomeria pauciflora	**DICOT**	
Leptomeria preissiana	**DICOT**	
Leptospermum continentale	**DICOT**	
Leptospermum erubescens	**DICOT**	
Leptospermum laevigatum	**DICOT**	
Leptospermum spinescens	**DICOT**	

TAXON	CLASS	CONS
Leucaena leucocephala	**DICOT**	
Leucophyta brownii	**DICOT**	
Leucopogon aff. nutans	**DICOT**	
Leucopogon australis	**DICOT**	
Leucopogon conostephioides	**DICOT**	
Leucopogon glaucifolius	**DICOT**	
Leucopogon hirsutus	**DICOT**	
Leucopogon oliganthus	**DICOT**	
Leucopogon oxycedrus	**DICOT**	
Leucopogon parviflorus	**DICOT**	
Leucopogon polymorphus	**DICOT**	
Leucopogon propinquus	**DICOT**	
Leucopogon pulchellus	**DICOT**	
Leucopogon racemulosus	**DICOT**	
Leucopogon sprengelioides	**DICOT**	
Leucopogon squarrosus subsp. squarrosus	**DICOT**	
Leucopogon strictus	**DICOT**	
Leucopogon tenuis	**DICOT**	
Leucopogon verticillatus	**DICOT**	
Levenhookia preissii	**DICOT**	**P1**
Levenhookia pusilla	**DICOT**	
Levenhookia stipitata	**DICOT**	
Limonium hyblaeum	**DICOT**	
Linaria maroccana	**DICOT**	
Linum trigynum	**DICOT**	
Linum usitatissimum	**DICOT**	
Liparophyllum capitatum	**DICOT**	
Lobelia anceps	**DICOT**	
Lobelia gibbosa	**DICOT**	
Lobelia heterophylla	**DICOT**	
Lobelia rhombifolia	**DICOT**	
Lobelia rhytidosperma	**DICOT**	
Lobelia tenuior	**DICOT**	
Lobularia maritima	**DICOT**	

TAXON	CLASS	CONS
Logania vaginalis	**DICOT**	
Lotus angustissimus	**DICOT**	
Lotus hispidus	**DICOT**	
Lotus subbiflorus	**DICOT**	
Lotus uliginosus	**DICOT**	
Ludwigia repens	**DICOT**	
Lupinus angustifolius	**DICOT**	
Lupinus cosentinii	**DICOT**	
Lupinus luteus	**DICOT**	
Lycium ferocissimum	**DICOT**	
Lysiana casuarinae	**DICOT**	
Lysimachia arvensis	**DICOT**	
Lysimachia minima	**DICOT**	
Lysinema ciliatum	**DICOT**	
Lysinema elegans	**DICOT**	
Lysinema pentapetalum	**DICOT**	
Lythrum hyssopifolia	**DICOT**	
Lythrum junceum	**DICOT**	
Macarthuria australis	**DICOT**	
Macarthuria keigheryi	**DICOT**	**EN**
Macroptilium atropurpureum	**DICOT**	
Malleostemon tuberculatus	**DICOT**	
Malva arborea	**DICOT**	
Malva parviflora	**DICOT**	
Malva pseudolavatera	**DICOT**	
Malvaviscus arboreus	**DICOT**	
Marianthus erubescens	**DICOT**	
Matthiola incana	**DICOT**	
Mauranthemum paludosum	**DICOT**	
Medicago arabica	**DICOT**	
Medicago laciniata	**DICOT**	
Medicago littoralis	**DICOT**	
Medicago minima	**DICOT**	
Medicago polymorpha	**DICOT**	

TAXON	CLASS	CONS
Medicago sativa	**DICOT**	
Meionectes brownii	**DICOT**	
Melaleuca acerosa	**DICOT**	
Melaleuca acutifolia	**DICOT**	
Melaleuca armillaris subsp. armillaris	**DICOT**	
Melaleuca brevifolia	**DICOT**	
Melaleuca calothamnoides	**DICOT**	
Melaleuca cardiophylla	**DICOT**	
Melaleuca citrina	**DICOT**	
Melaleuca cuticularis	**DICOT**	
Melaleuca fulgens subsp. *fulgens*	**DICOT**	
Melaleuca huegelii	**DICOT**	
Melaleuca huegelii subsp. *huegelii*	**DICOT**	
Melaleuca incana subsp. *incana*	**DICOT**	
Melaleuca lanceolata	**DICOT**	
Melaleuca lateritia	**DICOT**	
Melaleuca linariifolia	**DICOT**	
Melaleuca megacephala	**DICOT**	
Melaleuca nervosa	**DICOT**	
Melaleuca nesophila	**DICOT**	
Melaleuca osullivanii	**DICOT**	
Melaleuca parviceps	**DICOT**	
Melaleuca pauciflora	**DICOT**	
Melaleuca pentagona var. *pentagona*	**DICOT**	
Melaleuca preissiana	**DICOT**	
Melaleuca quinquenervia	**DICOT**	
Melaleuca rhaphiophylla	**DICOT**	
Melaleuca ryeae	**DICOT**	
Melaleuca scabra	**DICOT**	
Melaleuca seriata	**DICOT**	
Melaleuca systena	**DICOT**	
Melaleuca teretifolia	**DICOT**	
Melaleuca thymoides	**DICOT**	
Melaleuca trichophylla	**DICOT**	

TAXON	CLASS	CONS
Melaleuca viminalis	**DICOT**	**P2**
Melaleuca viminea	**DICOT**	
Melaleuca viminea subsp. *viminea*	**DICOT**	
Melia azedarach	**DICOT**	
Melilotus albus	**DICOT**	
Melilotus indicus	**DICOT**	
Mentha spicata	**DICOT**	
Mentha x piperita var. *citrata*	**DICOT**	
Millotia myosotidifolia	**DICOT**	
Millotia tenuifolia	**DICOT**	
Minuartia mediterranea	**DICOT**	
Mirabilis jalapa	**DICOT**	
Mirbelia floribunda	**DICOT**	
Mirbelia spinosa	**DICOT**	
Misopates orontium	**DICOT**	
Mitrasacme paradoxa	**DICOT**	
Moenchia erecta	**DICOT**	
Momordica balsamina	**DICOT**	
Momordica charantia	**DICOT**	
Monoculus monstrosus	**DICOT**	
Monopsis debilis var. *depressa*	**DICOT**	
Monotaxis grandiflora	**DICOT**	
Monotaxis grandiflora var. *grandiflora*	**DICOT**	
Monotaxis occidentalis	**DICOT**	
Morus alba	**DICOT**	
Muehlenbeckia polybotrya	**DICOT**	
Myoporum caprarioides	**DICOT**	
Myoporum insulare	**DICOT**	
Myriocephalus occidentalis	**DICOT**	
Myriophyllum aquaticum	**DICOT**	
Myriophyllum crispatum	**DICOT**	
Myriophyllum tillaeoides	**DICOT**	
Needhamiella pumilio	**DICOT**	
Nemcia capitata	**DICOT**	

TAXON	CLASS	CONS
Nerium oleander	**DICOT**	
Nicandra physalodes	**DICOT**	
Nicotiana glauca	**DICOT**	
Nuytsia floribunda	**DICOT**	
Nymphaea odorata	**DICOT**	
Ocimum americanum	**DICOT**	
Oenothera affinis	**DICOT**	
Oenothera drummondii	**DICOT**	
Oenothera drummondii subsp. *drummondii*	**DICOT**	
Oenothera glazioviana	**DICOT**	
Oenothera jamesii	**DICOT**	
Oenothera laciniata	**DICOT**	
Oenothera mollissima	**DICOT**	
Oenothera speciosa	**DICOT**	
Oenothera stricta	**DICOT**	
Oenothera stricta subsp. *stricta*	**DICOT**	
Olax benthamiana	**DICOT**	
Olax scalariformis	**DICOT**	
Olea europaea	**DICOT**	
Olea europaea subsp. *europaea*	**DICOT**	
Olearia axillaris	**DICOT**	
Olearia elaeophila	**DICOT**	
Olearia paucidentata	**DICOT**	
Olearia rudis	**DICOT**	
Olearia sp. Kennedy Range (G. Byrne 66)	**DICOT**	
Opercularia apiciflora	**DICOT**	
Opercularia vaginata	**DICOT**	
Opuntia monacantha	**DICOT**	
Ornduffia albiflora	**DICOT**	
Ornduffia submersa	**DICOT**	**P4**
Ornithopus compressus	**DICOT**	
Ornithopus pinnatus	**DICOT**	
Ornithopus sativus	**DICOT**	
Orobanche minor	**DICOT**	

TAXON	CLASS	CONS
Osteospermum clandestinum	**DICOT**	
Osteospermum ecklonis	**DICOT**	
Oxalis bowiei	**DICOT**	
Oxalis caprina	**DICOT**	
Oxalis corniculata	**DICOT**	
Oxalis debilis var. *corymbosa*	**DICOT**	
Oxalis glabra	**DICOT**	
Oxalis perennans	**DICOT**	
Oxalis pes-caprae	**DICOT**	
Oxalis purpurea	**DICOT**	
Oxalis violacea	**DICOT**	
Ozothamnus cordatus	**DICOT**	
Papaver rhoeas	**DICOT**	
Papaver somniferum	**DICOT**	
Paraserianthes lophantha	**DICOT**	
Paraserianthes lophantha subsp. *lophantha*	**DICOT**	
Parentucellia latifolia	**DICOT**	
Parietaria cardiostegia	**DICOT**	
Parietaria debilis	**DICOT**	
Parietaria judaica	**DICOT**	
Parthenocissus quinquefolia	**DICOT**	
Parthenocissus tricuspidata	**DICOT**	
Passiflora filamentosa	**DICOT**	
Pastinaca sativa	**DICOT**	
Pavonia hastata	**DICOT**	
Pelargonium capitatum	**DICOT**	
Pelargonium havlasae	**DICOT**	
Pelargonium littorale	**DICOT**	
Pelargonium x asperum	**DICOT**	
Pelargonium x domesticum	**DICOT**	
Pericalymma ellipticum	**DICOT**	
Pericalymma ellipticum var. *ellipticum*	**DICOT**	
Pericalymma ellipticum var. *floridum*	**DICOT**	
Persicaria decipiens	**DICOT**	

TAXON	CLASS	CONS
Persicaria hydropiper	**DICOT**	
Persicaria lapathifolia	**DICOT**	
Persicaria maculosa	**DICOT**	
Persoonia elliptica	**DICOT**	
Persoonia macrostachya	**DICOT**	
Persoonia saccata	**DICOT**	
Petrophile axillaris	**DICOT**	
Petrophile biloba	**DICOT**	
Petrophile brevifolia	**DICOT**	
Petrophile brevifolia subsp. *brevifolia*	**DICOT**	
Petrophile juncifolia	**DICOT**	
Petrophile linearis	**DICOT**	
Petrophile macrostachya	**DICOT**	
Petrophile seminuda	**DICOT**	
Petrophile serruriae	**DICOT**	
Petrophile squamata subsp. *northern (J. Monks 40)*	**DICOT**	
Petrophile striata	**DICOT**	
Petrorhagia dubia	**DICOT**	
Petrorhagia velutina	**DICOT**	
Petunia axillaris	**DICOT**	
Petunia x atkinsiana	**DICOT**	
Phacelia tanacetifolia	**DICOT**	
Philotheca spicata	**DICOT**	
Phyla nodiflora	**DICOT**	
Phyla nodiflora var. nodiflora	**DICOT**	
Phyllangium paradoxum	**DICOT**	
Phyllanthus calycinus	**DICOT**	
Phyllanthus tenellus	**DICOT**	
Phyllopodium cordatum	**DICOT**	
Physalis angulata	**DICOT**	
Physalis peruviana	**DICOT**	
Phytolacca octandra	**DICOT**	
Picris compacta	**DICOT**	
Picris squarrosa	**DICOT**	

TAXON	CLASS	CONS
Pimelea angustifolia	**DICOT**	
Pimelea argentea	**DICOT**	
Pimelea calcicola	**DICOT**	**P3**
Pimelea ferruginea	**DICOT**	
Pimelea imbricata var. *major*	**DICOT**	
Pimelea imbricata var. *piligera*	**DICOT**	
Pimelea leucantha	**DICOT**	
Pimelea rosea	**DICOT**	
Pimelea rosea subsp. *rosea*	**DICOT**	
Pimelea spectabilis	**DICOT**	
Pimelea sulphurea	**DICOT**	
Pimelea sylvestris	**DICOT**	
Pithocarpa cordata	**DICOT**	
Pithocarpa pulchella	**DICOT**	
Pithocarpa pulchella var. *melanostigma / pulchella var. pulchella*	**DICOT**	
Pithocarpa pulchella var. *pulchella*	**DICOT**	
Pittosporum ligustrifolium	**DICOT**	
Pittosporum phylliraeoides	**DICOT**	
Pittosporum undulatum	**DICOT**	
Pityrodia axillaris	**DICOT**	
Pityrodia bartlingii	**DICOT**	
Plantago coronopus subsp. *commutata*	**DICOT**	
Plantago lanceolata	**DICOT**	
Plantago major	**DICOT**	
Platanus x hispanica	**DICOT**	
Platysace compressa	**DICOT**	
Platysace filiformis	**DICOT**	
Platysace juncea	**DICOT**	
Platysace ramosissima	**DICOT**	**P3**
Platytheca galioides	**DICOT**	
Podolepis capillaris	**DICOT**	
Podolepis gracilis	**DICOT**	
Podolepis lessonii	**DICOT**	
Podolepis nutans	**DICOT**	

TAXON	CLASS	CONS
Podotheca angustifolia	**DICOT**	
Podotheca chrysantha	**DICOT**	
Podotheca gnaphalioides	**DICOT**	
Pogonolepis stricta	**DICOT**	
Polycarpon tetraphyllum	**DICOT**	
Polygala myrtifolia	**DICOT**	
Polygonum arenastrum	**DICOT**	
Polygonum aviculare	**DICOT**	
Populus alba	**DICOT**	
Populus nigra cv. italica	**DICOT**	
Poranthera drummondii	**DICOT**	
Poranthera ericoides	**DICOT**	
Poranthera microphylla	**DICOT**	
Poranthera moorokatta	**DICOT**	**P2**
Proboscidea louisianica	**DICOT**	
Pseudognaphalium luteoalbum	**DICOT**	
Pterochaeta paniculata	**DICOT**	
Ptilotus declinatus	**DICOT**	
Ptilotus drummondii	**DICOT**	
Ptilotus drummondii var. *drummondii*	**DICOT**	
Ptilotus eremita	**DICOT**	
Ptilotus esquamatus	**DICOT**	
Ptilotus manglesii	**DICOT**	
Ptilotus polystachyus	**DICOT**	
Ptilotus sericostachyus subsp. *roseus*	**DICOT**	
Ptilotus sericostachyus subsp. *sericostachyus*	**DICOT**	**P1**
Ptilotus stirlingii subsp. *stirlingii*	**DICOT**	
Pultenaea ericifolia	**DICOT**	
Pultenaea reticulata	**DICOT**	
Quinetia urvillei	**DICOT**	
Ranunculus colonorum	**DICOT**	
Ranunculus muricatus	**DICOT**	
Ranunculus sessiliflorus var. *sessiliflorus*	**DICOT**	
Ranunculus trilobus	**DICOT**	

TAXON	CLASS	CONS
Raphanus raphanistrum	**DICOT**	
Raphanus sativus	**DICOT**	
Regelia ciliata	**DICOT**	
Regelia inops	**DICOT**	
Reseda lutea	**DICOT**	
Retama raetam	**DICOT**	
Rhagodia baccata	**DICOT**	
Rhagodia baccata subsp. *baccata*	**DICOT**	
Rhagodia baccata subsp. *dioica*	**DICOT**	
Rhagodia preissii subsp. *preissii*	**DICOT**	
Rhamnus alaternus	**DICOT**	
Rhodanthe chlorocephala subsp. *rosea*	**DICOT**	
Rhodanthe citrina	**DICOT**	
Rhodanthe corymbosa	**DICOT**	
Rhodanthe manglesii	**DICOT**	
Rhodanthe pyrethrum	**DICOT**	
Ricinocarpos glaucus	**DICOT**	
Ricinocarpos megalocarpus	**DICOT**	
Ricinocarpos undulatus	**DICOT**	
Ricinus communis	**DICOT**	
Robinia pseudoacacia	**DICOT**	
Roldana petasitis	**DICOT**	
Romneya coulteri	**DICOT**	
Rorippa nasturtium-aquaticum	**DICOT**	
Rosa chinensis x moschata	**DICOT**	
Rubus laudatus	**DICOT**	
Rumex acetosella	**DICOT**	
Rumex conglomeratus	**DICOT**	
Rumex crispus	**DICOT**	
Rumex hypogaeus	**DICOT**	
Rumex obtusifolius subsp. obtusifolius	**DICOT**	
Rumex pulcher	**DICOT**	
Rumex pulcher subsp. *woodsii*	**DICOT**	
Rumex sagittatus	**DICOT**	

TAXON	CLASS	CONS
Rumex vesicarius	**DICOT**	
Sagina apetala	**DICOT**	
Sagina procumbens	**DICOT**	
Salicornia quinqueflora	**DICOT**	
Salicornia quinqueflora subsp. *quinqueflora*	**DICOT**	
Salix babylonica	**DICOT**	
Salix cinerea	**DICOT**	
Salix humboldtiana	**DICOT**	
Salpichroa origanifolia	**DICOT**	
Salsola australis	**DICOT**	
Salvia reflexa	**DICOT**	
Salvia verbenaca	**DICOT**	
Samolus junceus	**DICOT**	
Samolus repens	**DICOT**	
Samolus repens var. *paucifolius*	**DICOT**	
Samolus repens var. *repens*	**DICOT**	
Santalum acuminatum	**DICOT**	
Santalum spicatum	**DICOT**	
Sarcocornia quinqueflora	**DICOT**	
Scabiosa atropurpurea	**DICOT**	
Scaevola anchusifolia	**DICOT**	
Scaevola canescens	**DICOT**	
Scaevola crassifolia	**DICOT**	
Scaevola glandulifera	**DICOT**	
Scaevola lanceolata	**DICOT**	
Scaevola nitida	**DICOT**	
Scaevola phlebopetala	**DICOT**	
Scaevola repens	**DICOT**	
Scaevola repens var. *angustifolia*	**DICOT**	
Scaevola repens var. *repens*	**DICOT**	
Scaevola thesioides	**DICOT**	
Scaevola thesioides subsp. *thesioides*	**DICOT**	
Schenkia australis	**DICOT**	
Schinus terebinthifolia	**DICOT**	

TAXON	CLASS	CONS
Schinus terebinthifolius	**DICOT**	
Schoenolaena juncea	**DICOT**	
Scholtzia capitata	**DICOT**	
Scholtzia involucrata	**DICOT**	
Scholtzia laxiflora	**DICOT**	
Senecio angulatus	**DICOT**	
Senecio condylus	**DICOT**	
Senecio diaschides	**DICOT**	
Senecio elegans	**DICOT**	
Senecio glossanthus x lautus	**DICOT**	
Senecio hispidulus	**DICOT**	
Senecio multicaulis subsp. *multicaulis*	**DICOT**	
Senecio pinnatifolius	**DICOT**	
Senecio pinnatifolius var. *latilobus*	**DICOT**	
Senecio pinnatifolius var. *maritimus*	**DICOT**	
Senecio ramosissimus	**DICOT**	
Senecio vulgaris	**DICOT**	
Senegalia rugata	**DICOT**	
Senna artemisioides	**DICOT**	
Senna artemisioides subsp. *helmsii*	**DICOT**	
Seringia integrifolia	**DICOT**	
Sida fallax	**DICOT**	
Sida hookeriana	**DICOT**	
Silene armeria	**DICOT**	
Silene calabrica	**DICOT**	
Silene gallica	**DICOT**	
Silene gallica var. *gallica*	**DICOT**	
Silene gallica var. *quinquevulnera*	**DICOT**	
Silene nocturna	**DICOT**	
Siloxerus filifolius	**DICOT**	
Siloxerus humifusus	**DICOT**	
Silybum marianum	**DICOT**	
Sisymbrium irio	**DICOT**	
Sisymbrium orientale	**DICOT**	

TAXON	CLASS	CONS
Solanum americanum	**DICOT**	
Solanum aviculare	**DICOT**	
Solanum giganteum	**DICOT**	
Solanum laciniatum	**DICOT**	
Solanum linnaeanum	**DICOT**	
Solanum lycopersicum	**DICOT**	
Solanum nigrum	**DICOT**	
Solanum sisymbriifolium	**DICOT**	
Solanum symonii	**DICOT**	
Solidago altissima var. *pluricephala*	**DICOT**	
Solidago canadensis	**DICOT**	
Solidago chilensis	**DICOT**	
Soliva sessilis	**DICOT**	
Sonchus asper	**DICOT**	
Sonchus hydrophilus	**DICOT**	
Sonchus oleraceus	**DICOT**	
Spergula arvensis	**DICOT**	
Spergularia brevifolia	**DICOT**	
Spergularia marina	**DICOT**	
Spergularia rubra	**DICOT**	
Sphaerolobium hygrophilum	**DICOT**	
Sphaerolobium linophyllum	**DICOT**	
Sphaerolobium macranthum	**DICOT**	
Sphaerolobium medium	**DICOT**	
Sphaerolobium vimineum	**DICOT**	
Spyridium globulosum	**DICOT**	
Spyridium tridentatum	**DICOT**	
Stachys arvensis	**DICOT**	
Stachystemon vermicularis	**DICOT**	
Stackhousia huegelii	**DICOT**	
Stackhousia monogyna	**DICOT**	
Stellaria media	**DICOT**	
Stellaria pallida	**DICOT**	
Stenanthemum humile	**DICOT**	

TAXON	CLASS	CONS
Stenanthemum notiale subsp. *chamelum*	**DICOT**	
Stenopetalum gracile	**DICOT**	
Stirlingia latifolia	**DICOT**	
Stirlingia simplex	**DICOT**	
Stylidium aceratum	**DICOT**	**P3**
Stylidium adpressum	**DICOT**	
Stylidium amoenum	**DICOT**	
Stylidium androsaceum	**DICOT**	
Stylidium araeophyllum	**DICOT**	
Stylidium asteroideum	**DICOT**	**P3**
Stylidium bicolor	**DICOT**	
Stylidium bindoon	**DICOT**	
Stylidium brunonianum	**DICOT**	
Stylidium carnosum	**DICOT**	
Stylidium cygnorum	**DICOT**	
Stylidium despectum	**DICOT**	
Stylidium dichotomum	**DICOT**	
Stylidium diuroides	**DICOT**	
Stylidium diuroides subsp. *diuroides*	**DICOT**	
Stylidium divaricatum	**DICOT**	
Stylidium eriopodum	**DICOT**	
Stylidium guttatum	**DICOT**	
Stylidium hesperium	**DICOT**	
Stylidium hispidum	**DICOT**	
Stylidium inundatum	**DICOT**	
Stylidium junceum subsp. *junceum*	**DICOT**	
Stylidium longitubum	**DICOT**	**P4**
Stylidium macrocarpum	**DICOT**	
Stylidium maritimum	**DICOT**	**P3**
Stylidium neurophyllum	**DICOT**	
Stylidium obtusatum	**DICOT**	
Stylidium paludicola	**DICOT**	**P3**
Stylidium perpusillum	**DICOT**	
Stylidium petiolare	**DICOT**	

TAXON	CLASS	CONS
Stylidium piliferum	**DICOT**	
Stylidium pubigerum	**DICOT**	
Stylidium pulchellum	**DICOT**	
Stylidium repens	**DICOT**	
Stylidium rigidulum	**DICOT**	
Stylidium roseoalatum	**DICOT**	
Stylidium scariosum	**DICOT**	
Stylidium schoenoides	**DICOT**	
Stylidium striatum	**DICOT**	**P4**
Stylidium thesioides	**DICOT**	
Stylidium utricularioides	**DICOT**	
Styphelia filifolia	**DICOT**	**P3**
Styphelia tenuiflora	**DICOT**	
Suaeda australis	**DICOT**	
Succowia balearica	**DICOT**	
Symphyotrichum squamatum	**DICOT**	
Synaphea acutiloba	**DICOT**	
Synaphea gracillima	**DICOT**	
Synaphea sp. Fairbridge Farm (D. Papenfus 696)	**DICOT**	**CR**
Synaphea spinulosa	**DICOT**	
Synaphea spinulosa subsp. spinulosa	**DICOT**	
Tagetes minuta	**DICOT**	
Taraxacum khatoonae	**DICOT**	
Taraxacum officinale	**DICOT**	
Taxandria linearifolia	**DICOT**	
Tecticornia halocnemoides	**DICOT**	
Tecticornia halocnemoides subsp. halocnemoides	**DICOT**	
Tecticornia indica subsp. *bidens*	**DICOT**	
Tecticornia lepidosperma	**DICOT**	
Tecticornia pergranulata	**DICOT**	
Tecticornia pergranulata subsp. *pergranulata*	**DICOT**	
Templetonia drummondii	**DICOT**	
Templetonia retusa	**DICOT**	
Tersonia cyathiflora	**DICOT**	

TAXON	CLASS	CONS
Tetragonia decumbens	**DICOT**	
Tetragonia nigrescens	**DICOT**	
Tetragonia tetragonoides	**DICOT**	
Tetratheca hirsuta subsp. *hirsuta*	**DICOT**	
Tetratheca hirsuta subsp. *viminea*	**DICOT**	
Tetratheca nuda	**DICOT**	
Thomasia cognata	**DICOT**	
Thomasia foliosa	**DICOT**	
Thomasia grandiflora	**DICOT**	
Thomasia macrocarpa	**DICOT**	
Thomasia paniculata	**DICOT**	
Thomasia pauciflora	**DICOT**	
Thomasia petalocalyx	**DICOT**	
Thomasia purpurea	**DICOT**	
Thomasia rulingioides	**DICOT**	
Thomasia triphylla	**DICOT**	
Threlkeldia diffusa	**DICOT**	
Thryptomene saxicola	**DICOT**	
Trachymene coerulea subsp. *coerulea*	**DICOT**	
Trachymene coerulea var. *coerulea*	**DICOT**	
Trachymene cyanopetala	**DICOT**	
Trachymene ornata	**DICOT**	
Trachymene pilosa	**DICOT**	
Tribulus terrestris	**DICOT**	
Trichocline spathulata	**DICOT**	
Trifolium angustifolium	**DICOT**	
Trifolium angustifolium var. *angustifolium*	**DICOT**	
Trifolium arvense	**DICOT**	
Trifolium arvense var. *arvense*	**DICOT**	
Trifolium campestre	**DICOT**	
Trifolium campestre var. *campestre*	**DICOT**	
Trifolium cernuum	**DICOT**	
Trifolium cherleri	**DICOT**	
Trifolium dubium	**DICOT**	

TAXON	CLASS	CONS
Trifolium fragiferum var. fragiferum	**DICOT**	
Trifolium glomeratum	**DICOT**	
Trifolium hirtum	**DICOT**	
Trifolium hybridum var. *hybridum*	**DICOT**	
Trifolium incarnatum var. *incarnatum*	**DICOT**	
Trifolium michelianum	**DICOT**	
Trifolium ornithopodioides	**DICOT**	
Trifolium pratense var. *sativum*	**DICOT**	
Trifolium repens	**DICOT**	
Trifolium repens var. *repens*	**DICOT**	
Trifolium resupinatum var. *majus*	**DICOT**	
Trifolium resupinatum var. *resupinatum*	**DICOT**	
Trifolium scabrum	**DICOT**	
Trifolium spumosum	**DICOT**	
Trifolium subterraneum	**DICOT**	
Trifolium suffocatum	**DICOT**	
Trifolium tomentosum	**DICOT**	
Trifolium tomentosum var. *tomentosum*	**DICOT**	
Tripterococcus brunonis	**DICOT**	
Tripterococcus sp. (A.S. George 14234)	**DICOT**	
Tripterococcus sp. Brachylobus (A.S. George 14234)	**DICOT**	**P4**
Trithuria bibracteata	**DICOT**	
Trithuria submersa	**DICOT**	
Tropaeolum majus	**DICOT**	
Tropaeolum pentaphyllum	**DICOT**	
Trymalium albicans	**DICOT**	
Trymalium floribundum	**DICOT**	
Trymalium ledifolium	**DICOT**	
Trymalium ledifolium var. *ledifolium*	**DICOT**	
Trymalium ledifolium var. *rosmarinifolium*	**DICOT**	
Trymalium odoratissimum subsp. *odoratissimum*	**DICOT**	
Ulex europaeus	**DICOT**	
Ulmus parvifolia	**DICOT**	
Urospermum picroides	**DICOT**	

TAXON	CLASS	CONS
Ursinia anthemoides	**DICOT**	
Ursinia anthemoides subsp. *anthemoides*	**DICOT**	
Urtica urens	**DICOT**	
Utricularia gibba	**DICOT**	
Utricularia inaequalis	**DICOT**	
Utricularia menziesii	**DICOT**	
Utricularia multifida	**DICOT**	
Utricularia tenella	**DICOT**	
Utricularia violacea	**DICOT**	
Utricularia volubilis	**DICOT**	
Velleia trinervis	**DICOT**	
Vellereophyton dealbatum	**DICOT**	
Verbascum thapsus subsp. *thapsus*	**DICOT**	
Verbascum virgatum	**DICOT**	
Verbena incompta	**DICOT**	
Verbena rigida var. *rigida*	**DICOT**	
Verbesina encelioides	**DICOT**	
Verbesina encelioides var. *encelioides*	**DICOT**	
Veronica aff. calycina (BJK & NG 235)	**DICOT**	
Veronica arvensis	**DICOT**	
Veronica distans	**DICOT**	
Veronica persica	**DICOT**	
Verticordia acerosa var. *acerosa*	**DICOT**	
Verticordia acerosa var. *preissii*	**DICOT**	
Verticordia densiflora	**DICOT**	
Verticordia densiflora var. *densiflora*	**DICOT**	
Verticordia drummondii	**DICOT**	
Verticordia eriocephala	**DICOT**	
Verticordia huegelii var. *huegelii*	**DICOT**	
Verticordia lindleyi subsp. *lindleyi*	**DICOT**	**P4**
Verticordia monadelpha	**DICOT**	
Verticordia monadelpha var. *monadelpha*	**DICOT**	
Verticordia nitens	**DICOT**	
Verticordia pennigera	**DICOT**	

TAXON	CLASS	CONS
Verticordia plumosa var. *brachyphylla*	**DICOT**	
Verticordia plumosa var. *plumosa*	**DICOT**	
Verticordia preissii	**DICOT**	
Verticordia venusta	**DICOT**	**P3**
Vicia benghalensis	**DICOT**	
Vicia hirsuta	**DICOT**	
Vicia sativa	**DICOT**	
Vicia sativa subsp. *cordata*	**DICOT**	
Vicia sativa subsp. *nigra*	**DICOT**	
Vicia sativa subsp. *sativa*	**DICOT**	
Vicia tetrasperma	**DICOT**	
Viminaria juncea	**DICOT**	
Wahlenbergia capensis	**DICOT**	
Wahlenbergia preissii	**DICOT**	
Waitzia citrina	**DICOT**	
Waitzia nitida	**DICOT**	
Waitzia suaveolens	**DICOT**	
Waitzia suaveolens var. *suaveolens*	**DICOT**	
Waltheria indica	**DICOT**	
Westringia dampieri	**DICOT**	
Wigandia urens var. *caracasana*	**DICOT**	
Wilsonia backhousei	**DICOT**	
Xanthium occidentale	**DICOT**	
Xanthium spinosum	**DICOT**	
Xanthosia ciliata	**DICOT**	
Xanthosia huegelii	**DICOT**	
Xylomelum occidentale	**DICOT**	
Youngia japonica	**DICOT**	
Zygophyllum fruticulosum	**DICOT**	
Adiantum capillus-veneris	**FERN**	**P2**
Anogramma leptophylla	**FERN**	
Azolla rubra	**FERN**	
Cheilanthes sieberi subsp. *sieberi*	**FERN**	
Cyathea cooperi	**FERN**	

TAXON	CLASS	CONS
Isoetes drummondii	**FERN**	
Marsilea mutica	**FERN**	
Phylloglossum drummondii	**FERN**	
Pleurosorus rutifolius	**FERN**	
Pteridium esculentum subsp. *esculentum*	**FERN**	
Salvinia molesta	**FERN**	
Schizaea fistulosa	**FERN**	
Selaginella gracillima	**FERN**	
Actinostrobus pyramidalis	**GYMNO**	
Callitris acuminata	**GYMNO**	
Callitris preissii	**GYMNO**	
Callitris pyramidalis	**GYMNO**	
Callitris roei	**GYMNO**	
Callitris verrucosa	**GYMNO**	
Macrozamia fraseri	**GYMNO**	
Macrozamia riedlei	**GYMNO**	
Pinus halepensis	**GYMNO**	
Anthoceros laevis	**LIVERWORT**	
Cephaloziella exiliflora	**LIVERWORT**	
Cephaloziella varians	**LIVERWORT**	
Chiloscyphus semiteres var. semiteres	**LIVERWORT**	
Marchantia berteroana	**LIVERWORT**	
Riccia bifurca	**LIVERWORT**	
Acanthocarpus canaliculatus	**MONOCOT**	
Acanthocarpus preissii	**MONOCOT**	
Agave americana	**MONOCOT**	
Agave angustifolia	**MONOCOT**	
Agrostocrinum hirsutum	**MONOCOT**	
Agrostocrinum scabrum subsp. scabrum	**MONOCOT**	
Aira caryophyllea	**MONOCOT**	
Aira cupaniana	**MONOCOT**	
Aira praecox	**MONOCOT**	
Albuca canadensis	**MONOCOT**	
Albuca flaccida	**MONOCOT**	

TAXON	CLASS	CONS
Alexgeorgea nitens	**MONOCOT**	
Allium ampeloprasum	**MONOCOT**	
Allium neapolitanum	**MONOCOT**	
Allium porrum	**MONOCOT**	
Allium triquetrum	**MONOCOT**	
Alocasia brisbanensis	**MONOCOT**	
Alopecurus myosuroides	**MONOCOT**	
Alstroemeria psittacina	**MONOCOT**	
Althenia australis	**MONOCOT**	
Althenia preissii	**MONOCOT**	
Amaryllis belladonna	**MONOCOT**	
Ammophila arenaria	**MONOCOT**	
Ammophila arenaria subsp. *arenaria*	**MONOCOT**	
Amphibolis antarctica	**MONOCOT**	
Amphibolis griffithii	**MONOCOT**	
Amphibromus nervosus	**MONOCOT**	
Amphipogon amphipogonoides	**MONOCOT**	
Amphipogon debilis	**MONOCOT**	
Amphipogon laguroides subsp. *laguroides*	**MONOCOT**	
Amphipogon turbinatus	**MONOCOT**	
Anarthria gracilis	**MONOCOT**	
Anigozanthos bicolor subsp. *bicolor*	**MONOCOT**	
Anigozanthos flavidus	**MONOCOT**	
Anigozanthos flavidus x manglesii	**MONOCOT**	
Anigozanthos humilis	**MONOCOT**	
Anigozanthos humilis subsp. *humilis*	**MONOCOT**	
Anigozanthos humilis x manglesii	**MONOCOT**	
Anigozanthos manglesii	**MONOCOT**	
Anigozanthos manglesii subsp. *manglesii*	**MONOCOT**	
Anigozanthos manglesii x viridis	**MONOCOT**	
Anigozanthos sp.	**MONOCOT**	
Anigozanthos viridis subsp. *viridis*	**MONOCOT**	
Aphelia cyperoides	**MONOCOT**	
Aphelia drummondii	**MONOCOT**	

TAXON	CLASS	CONS
Aponogeton hexatepalus	**MONOCOT**	**P4**
Arnocrinum preissii	**MONOCOT**	
Arrhenatherum elatius var. *bulbosum*	**MONOCOT**	
Arthropodium capillipes	**MONOCOT**	
Arundo donax	**MONOCOT**	
Asparagus aethiopicus	**MONOCOT**	
Asparagus asparagoides	**MONOCOT**	
Asparagus declinatus	**MONOCOT**	
Asparagus officinalis	**MONOCOT**	
Asparagus plumosus	**MONOCOT**	
Asphodelus fistulosus	**MONOCOT**	
Austrostipa campylachne	**MONOCOT**	
Austrostipa compressa	**MONOCOT**	
Austrostipa elegantissima	**MONOCOT**	
Austrostipa flavescens	**MONOCOT**	
Austrostipa hemipogon	**MONOCOT**	
Austrostipa mollis	**MONOCOT**	
Austrostipa mundula	**MONOCOT**	**P3**
Austrostipa nitida	**MONOCOT**	
Austrostipa semibarbata	**MONOCOT**	
Austrostipa variabilis	**MONOCOT**	
Avellinia michelii	**MONOCOT**	
Avena barbata	**MONOCOT**	
Avena fatua	**MONOCOT**	
Axonopus fissifolius	**MONOCOT**	
Babiana angustifolia	**MONOCOT**	
Babiana nana	**MONOCOT**	
Babiana tubulosa var. *tubiflora*	**MONOCOT**	
Baeometra uniflora	**MONOCOT**	
Baumea arthrophylla	**MONOCOT**	
Baumea articulata	**MONOCOT**	
Baumea juncea	**MONOCOT**	
Baumea laxa	**MONOCOT**	
Baumea preissii	**MONOCOT**	

TAXON	CLASS	CONS
Baumea rubiginosa	**MONOCOT**	
Baumea vaginalis	**MONOCOT**	
Blancoa canescens	**MONOCOT**	
Bolboschoenus caldwellii	**MONOCOT**	
Bolboschoenus fluviatilis	**MONOCOT**	**P1**
Borya scirpoidea	**MONOCOT**	
Borya sphaerocephala	**MONOCOT**	
Brachypodium distachyon	**MONOCOT**	
Briza maxima	**MONOCOT**	
Briza minor	**MONOCOT**	
Bromus alopecuros	**MONOCOT**	
Bromus arenarius	**MONOCOT**	
Bromus catharticus	**MONOCOT**	
Bromus diandrus	**MONOCOT**	
Bromus hordeaceus	**MONOCOT**	
Bromus madritensis	**MONOCOT**	
Bromus rubens	**MONOCOT**	
Burchardia bairdiae	**MONOCOT**	
Burchardia congesta	**MONOCOT**	
Burchardia multiflora	**MONOCOT**	
Burchardia umbellata	**MONOCOT**	
Caesia micrantha	**MONOCOT**	
Caesia occidentalis	**MONOCOT**	
Caladenia arenicola	**MONOCOT**	
Caladenia arenicola x georgei	**MONOCOT**	
Caladenia arenicola x huegelii	**MONOCOT**	
Caladenia arenicola x paludosa	**MONOCOT**	
Caladenia denticulata	**MONOCOT**	
Caladenia discoidea	**MONOCOT**	
Caladenia ferruginea	**MONOCOT**	
Caladenia flava	**MONOCOT**	
Caladenia flava subsp. *flava*	**MONOCOT**	
Caladenia georgei	**MONOCOT**	
Caladenia hirta subsp. *hirta*	**MONOCOT**	

TAXON	CLASS	CONS
Caladenia huegelii	**MONOCOT**	**CR**
Caladenia latifolia	**MONOCOT**	
Caladenia longicauda	**MONOCOT**	
Caladenia longicauda subsp. *calcigena*	**MONOCOT**	
Caladenia longicauda subsp. *longicauda*	**MONOCOT**	
Caladenia longicauda x paludosa	**MONOCOT**	
Caladenia longiclavata	**MONOCOT**	
Caladenia marginata	**MONOCOT**	
Caladenia nobilis	**MONOCOT**	
Caladenia paludosa	**MONOCOT**	
Caladenia pectinata	**MONOCOT**	
Caladenia reptans subsp. *reptans*	**MONOCOT**	
Caladenia vulgata	**MONOCOT**	
Caladenia x spectabilis	**MONOCOT**	
Caladenia xantha	**MONOCOT**	
Calectasia grandiflora	**MONOCOT**	**P2**
Calectasia narragara	**MONOCOT**	
Calochilus stramenicola	**MONOCOT**	
Canna x generalis	**MONOCOT**	
Carex appressa	**MONOCOT**	
Carex divisa	**MONOCOT**	
Carex fascicularis	**MONOCOT**	
Carex preissii	**MONOCOT**	
Carex tereticaulis	**MONOCOT**	**P3**
Carex thecata	**MONOCOT**	
Cartonema philydroides	**MONOCOT**	
Catapodium rigida	**MONOCOT**	
Catapodium rigidum	**MONOCOT**	
Caustis dioica	**MONOCOT**	
Cenchrus clandestinus	**MONOCOT**	
Cenchrus echinatus	**MONOCOT**	
Cenchrus longisetus	**MONOCOT**	
Cenchrus macrourus	**MONOCOT**	
Cenchrus purpureus	**MONOCOT**	

TAXON	CLASS	CONS
Cenchrus setaceus	**MONOCOT**	
Cenchrus spinifex	**MONOCOT**	
Centrolepis aristata	**MONOCOT**	
Centrolepis drummondiana	**MONOCOT**	
Centrolepis inconspicua	**MONOCOT**	
Centrolepis mutica	**MONOCOT**	
Centrolepis polygyna	**MONOCOT**	
Chaetanthus aristatus	**MONOCOT**	
Chamaescilla corymbosa	**MONOCOT**	
*Chamaescilla corymbosa v*ar. *corymbosa*	**MONOCOT**	
Chasmanthe floribunda	**MONOCOT**	
Chloris gayana	**MONOCOT**	
Chordifex sinuosus	**MONOCOT**	
Chorizandra enodis	**MONOCOT**	
Coix lacryma-jobi	**MONOCOT**	
Colocasia esculenta var. *esculenta*	**MONOCOT**	
Commelina benghalensis	**MONOCOT**	
Conostylis aculeata	**MONOCOT**	
Conostylis aculeata subsp. *aculeata*	**MONOCOT**	
Conostylis aculeata subsp. *cygnorum*	**MONOCOT**	
Conostylis aculeata subsp. *preissii*	**MONOCOT**	
Conostylis aculeata X candicans	**MONOCOT**	
Conostylis aurea	**MONOCOT**	
Conostylis bracteata	**MONOCOT**	**P3**
Conostylis candicans	**MONOCOT**	
Conostylis candicans subsp. *calcicola*	**MONOCOT**	
Conostylis candicans subsp. *candicans*	**MONOCOT**	
Conostylis caricina	**MONOCOT**	
Conostylis festucacea subsp. *festucacea*	**MONOCOT**	
Conostylis juncea	**MONOCOT**	
Conostylis setigera	**MONOCOT**	
Conostylis setigera subsp. *setigera*	**MONOCOT**	
Conostylis setosa	**MONOCOT**	
Conostylis sp.	**MONOCOT**	

TAXON	CLASS	CONS
Cortaderia selloana subsp. *selloana*	**MONOCOT**	
Corynotheca micrantha	**MONOCOT**	
Corynotheca micrantha var. *elongata*	**MONOCOT**	
Corynotheca micrantha var. *micrantha*	**MONOCOT**	
Cyanella hyacinthoides	**MONOCOT**	
Cyanicula gemmata	**MONOCOT**	
Cyanicula sericea	**MONOCOT**	
Cyathochaeta avenacea	**MONOCOT**	
Cyathochaeta clandestina	**MONOCOT**	
Cyathochaeta teretifolia	**MONOCOT**	**P3**
Cycnogeton huegelii	**MONOCOT**	
Cycnogeton lineare	**MONOCOT**	
Cynodon dactylon	**MONOCOT**	
Cyperus brevifolius	**MONOCOT**	
Cyperus congestus	**MONOCOT**	
Cyperus eragrostis	**MONOCOT**	
Cyperus gymnocaulos	**MONOCOT**	
Cyperus involucratus	**MONOCOT**	
Cyperus laevigatus	**MONOCOT**	
Cyperus papyrus	**MONOCOT**	
Cyperus polystachyos	**MONOCOT**	
Cyperus tenellus	**MONOCOT**	
Cyperus tenuiflorus	**MONOCOT**	
Cyperus vaginatus	**MONOCOT**	
Cyperus vorsteri	**MONOCOT**	
Cyrtostylis huegelii	**MONOCOT**	
Cyrtostylis robusta	**MONOCOT**	
Cyrtostylis tenuissima	**MONOCOT**	
Cytogonidium leptocarpoides	**MONOCOT**	
Dactyloctenium australe	**MONOCOT**	
Danthonia occidentalis	**MONOCOT**	
Dasypogon bromeliifolius	**MONOCOT**	
Dasypogon obliquifolius	**MONOCOT**	
Desmocladus asper	**MONOCOT**	

TAXON	CLASS	CONS
Desmocladus fasciculatus	**MONOCOT**	
Desmocladus flexuosus	**MONOCOT**	
Desmocladus lateriflorus	**MONOCOT**	
Deyeuxia quadriseta	**MONOCOT**	
Dianella revoluta	**MONOCOT**	
Dianella revoluta var. *divaricata*	**MONOCOT**	
Dichelachne crinita	**MONOCOT**	
Dichopogon capillipes	**MONOCOT**	
Dichopogon preissii	**MONOCOT**	
Dielsia stenostachya	**MONOCOT**	
Digitaria aequiglumis	**MONOCOT**	
Digitaria ciliaris	**MONOCOT**	
Digitaria didactyla	**MONOCOT**	
Digitaria eriantha	**MONOCOT**	
Digitaria sanguinalis	**MONOCOT**	
Digitaria violascens	**MONOCOT**	
Dioscorea hastifolia	**MONOCOT**	
Disa bracteata	**MONOCOT**	
Diuris corymbosa	**MONOCOT**	
Diuris decrementa	**MONOCOT**	
Diuris drummondii	**MONOCOT**	**EN**
Diuris laxiflora	**MONOCOT**	
Diuris longifolia	**MONOCOT**	
Diuris magnifica	**MONOCOT**	
Diuris purdiei	**MONOCOT**	**EN**
Drakaea elastica	**MONOCOT**	**CR**
Drakaea glyptodon	**MONOCOT**	
Drakaea livida	**MONOCOT**	
Drakaea micrantha	**MONOCOT**	**EN**
Echinochloa colona	**MONOCOT**	
Echinochloa crus-galli	**MONOCOT**	
Echinochloa crus-pavonis	**MONOCOT**	
Echinochloa pyramidalis	**MONOCOT**	
Echinochloa telmatophila	**MONOCOT**	

TAXON	CLASS	CONS
Egeria densa	**MONOCOT**	
Ehrharta brevifolia	**MONOCOT**	
Ehrharta brevifolia var. *brevifolia*	**MONOCOT**	
Ehrharta brevifolia var. *cuspidata*	**MONOCOT**	
Ehrharta calycina	**MONOCOT**	
Ehrharta longiflora	**MONOCOT**	
Eleocharis acuta	**MONOCOT**	
Eleocharis keigheryi	**MONOCOT**	**VU**
Eleusine indica	**MONOCOT**	
Elythranthera brunonis	**MONOCOT**	
Elythranthera emarginata	**MONOCOT**	
Empodisma gracillimum	**MONOCOT**	
Epiblema grandiflorum	**MONOCOT**	
Eragrostis cilianensis	**MONOCOT**	
Eragrostis curvula	**MONOCOT**	
Eragrostis elongata	**MONOCOT**	
Eragrostis tenuifolia	**MONOCOT**	
Eriachne ovata	**MONOCOT**	
Eriochilus dilatatus	**MONOCOT**	
Eriochilus dilatatus subsp. *multiflorus*	**MONOCOT**	
Eriochilus helonomos	**MONOCOT**	
Eriochilus scaber subsp. *scaber*	**MONOCOT**	
Eriochilus tenuis	**MONOCOT**	
Eustachys distichophylla	**MONOCOT**	
Ferraria crispa	**MONOCOT**	
Ferraria crispa subsp. *crispa*	**MONOCOT**	
Festuca arundinacea	**MONOCOT**	
Festuca rubra	**MONOCOT**	
Ficinia nodosa	**MONOCOT**	
Fimbristylis velata	**MONOCOT**	
Freesia aff. leichtlinii	**MONOCOT**	
Freesia alba x leichtlinii	**MONOCOT**	
Freesia leichtlinii	**MONOCOT**	
Furcraea foetida	**MONOCOT**	

TAXON	CLASS	CONS
Furcraea selloa	**MONOCOT**	
Gahnia decomposita	**MONOCOT**	
Gahnia trifida	**MONOCOT**	
Gladiolus angustus	**MONOCOT**	
Gladiolus carneus	**MONOCOT**	
Gladiolus caryophyllaceus	**MONOCOT**	
Gladiolus undulatus	**MONOCOT**	
Glyceria declinata	**MONOCOT**	
Haemodorum brevisepalum	**MONOCOT**	
Haemodorum laxum	**MONOCOT**	
Haemodorum loratum	**MONOCOT**	**P3**
Haemodorum paniculatum	**MONOCOT**	
Haemodorum simplex	**MONOCOT**	
Haemodorum spicatum	**MONOCOT**	
Hemarthria uncinata var. *uncinata*	**MONOCOT**	
Hensmania turbinata	**MONOCOT**	
Hesperantha falcata	**MONOCOT**	
Holcus lanatus	**MONOCOT**	
Hordeum glaucum	**MONOCOT**	
Hordeum leporinum	**MONOCOT**	
Hordeum marinum	**MONOCOT**	
Hordeum vulgare	**MONOCOT**	
Hydrilla verticillata	**MONOCOT**	
Hyparrhenia hirta	**MONOCOT**	
Hypolaena exsulca	**MONOCOT**	
Hypolaena fastigiata	**MONOCOT**	
Hypolaena pubescens	**MONOCOT**	
Hypolaena robusta	**MONOCOT**	**P4**
Isolepis cernua var. *cernua*	**MONOCOT**	
Isolepis cernua var. *setiformis*	**MONOCOT**	
Isolepis cyperoides	**MONOCOT**	
Isolepis hookeriana	**MONOCOT**	
Isolepis marginata	**MONOCOT**	
Isolepis oldfieldiana	**MONOCOT**	

TAXON	CLASS	CONS
Isolepis prolifera	**MONOCOT**	
Isolepis stellata	**MONOCOT**	
Ixia maculata	**MONOCOT**	
Ixia paniculata	**MONOCOT**	
Ixia polystachya	**MONOCOT**	
Johnsonia pubescens	**MONOCOT**	
Johnsonia pubescens subsp. *cygnorum*	**MONOCOT**	**P2**
Johnsonia pubescens subsp. *pubescens*	**MONOCOT**	
Juncus acutus	**MONOCOT**	
Juncus acutus subsp. *acutus*	**MONOCOT**	
Juncus amabilis	**MONOCOT**	
Juncus bufonius	**MONOCOT**	
Juncus capitatus	**MONOCOT**	
Juncus holoschoenus	**MONOCOT**	
Juncus kraussii	**MONOCOT**	
Juncus kraussii subsp. *australiensis*	**MONOCOT**	
Juncus microcephalus	**MONOCOT**	
Juncus oxycarpus	**MONOCOT**	
Juncus pallidus	**MONOCOT**	
Juncus pauciflorus	**MONOCOT**	
Juncus usitatus	**MONOCOT**	
Kingia australis	**MONOCOT**	
Lachenalia aloides	**MONOCOT**	
Lachenalia bulbifera	**MONOCOT**	
Lachenalia mutabilis	**MONOCOT**	
Lachenalia reflexa	**MONOCOT**	
Lachnagrostis filiformis	**MONOCOT**	
Lachnagrostis plebeia	**MONOCOT**	
Lagurus ovatus	**MONOCOT**	
Landoltia punctata	**MONOCOT**	
Laxmannia grandiflora subsp. *grandiflora*	**MONOCOT**	
Laxmannia ramosa	**MONOCOT**	
Laxmannia ramosa subsp. *ramosa*	**MONOCOT**	
Laxmannia sessiliflora subsp. *australis*	**MONOCOT**	

TAXON	CLASS	CONS
Laxmannia squarrosa	**MONOCOT**	
Lemna disperma	**MONOCOT**	
Lepidobolus preissianus	**MONOCOT**	
Lepidobolus preissianus subsp. *preissianus*	**MONOCOT**	
Lepidosperma angustatum	**MONOCOT**	
Lepidosperma asperatum	**MONOCOT**	
Lepidosperma calcicola	**MONOCOT**	
Lepidosperma costale	**MONOCOT**	
Lepidosperma gladiatum	**MONOCOT**	
Lepidosperma gladiatum x angustatum	**MONOCOT**	
Lepidosperma leptostachyum	**MONOCOT**	
Lepidosperma longitudinale	**MONOCOT**	
Lepidosperma oldhamii	**MONOCOT**	
Lepidosperma pubisquameum	**MONOCOT**	
Lepidosperma resinosum	**MONOCOT**	
Lepidosperma scabrum	**MONOCOT**	
Lepidosperma sp. (coastal terete varient) (BJK&NG 231)	**MONOCOT**	
Lepidosperma sp. Coastal Dunes (R.J. Cranfield 9963)	**MONOCOT**	
Lepidosperma squamatum	**MONOCOT**	
Lepidosperma striatum	**MONOCOT**	
Leporella fimbriata	**MONOCOT**	
Leptocarpus canus	**MONOCOT**	
Leptocarpus coangustatus	**MONOCOT**	
Leptocarpus decipiens	**MONOCOT**	
Leptocarpus kraussii	**MONOCOT**	
Leptocarpus laxus	**MONOCOT**	
Leptocarpus roycei	**MONOCOT**	
Leptocarpus scariosus	**MONOCOT**	
Leptocarpus tenax	**MONOCOT**	
Leptocarpus tephrinus	**MONOCOT**	
Leptoceras menziesii	**MONOCOT**	
Lepyrodia glauca	**MONOCOT**	
Lepyrodia macra	**MONOCOT**	
Lepyrodia muirii	**MONOCOT**	

TAXON	CLASS	CONS
Leucojum aestivum	**MONOCOT**	
Limnobium laevigatum	**MONOCOT**	
Lolium loliaceum	**MONOCOT**	
Lolium multiflorum	**MONOCOT**	
Lolium perenne	**MONOCOT**	
Lolium perenne x rigidum	**MONOCOT**	
Lolium remotum	**MONOCOT**	
Lolium rigidum	**MONOCOT**	
Lolium temulentum forma arvense	**MONOCOT**	
Lolium temulentum forma temulentum	**MONOCOT**	
Lolium x hybridum	**MONOCOT**	
Lomandra caespitosa	**MONOCOT**	
Lomandra hermaphrodita	**MONOCOT**	
Lomandra maritima	**MONOCOT**	
Lomandra micrantha subsp. *micrantha*	**MONOCOT**	
Lomandra nigricans	**MONOCOT**	
Lomandra odora	**MONOCOT**	
Lomandra preissii	**MONOCOT**	
Lomandra purpurea	**MONOCOT**	
Lomandra sericea	**MONOCOT**	
Lomandra sonderi	**MONOCOT**	
Lomandra spartea	**MONOCOT**	
Lomandra suaveolens	**MONOCOT**	
Loxocarya fasciculata	**MONOCOT**	
Loxocarya flexuosa	**MONOCOT**	
Luzula meridionalis	**MONOCOT**	
Lyginia barbata	**MONOCOT**	
Lyginia imberbis	**MONOCOT**	
Lyperanthus nigricans	**MONOCOT**	
Megathyrsus maximus var. maximus	**MONOCOT**	
Melinis minutiflora	**MONOCOT**	
Melinis repens	**MONOCOT**	
Mesomelaena pseudostygia	**MONOCOT**	
Mesomelaena tetragona	**MONOCOT**	

TAXON	CLASS	CONS
Microlaena stipoides	**MONOCOT**	
Microtis arenaria	**MONOCOT**	
Microtis atrata	**MONOCOT**	
Microtis cupularis	**MONOCOT**	
Microtis media	**MONOCOT**	
Microtis media subsp. *densiflora*	**MONOCOT**	
Microtis media subsp. *media*	**MONOCOT**	
Miscanthus sinensis	**MONOCOT**	
Moraea flaccida	**MONOCOT**	
Moraea lewisiae	**MONOCOT**	
Moraea ochroleuca	**MONOCOT**	
Moraea setifolia	**MONOCOT**	
Musa acuminata	**MONOCOT**	
Muscari comosum	**MONOCOT**	
Myrsiphyllum asparagoides	**MONOCOT**	
Najas marina	**MONOCOT**	
Narcissus papyraceus	**MONOCOT**	
Narcissus tazetta subsp. *aureus*	**MONOCOT**	
Narcissus tazetta subsp. *italicus*	**MONOCOT**	
Narcissus tazetta subsp. *tazetta*	**MONOCOT**	
Neurachne alopecuroidea	**MONOCOT**	
Nothoscordum gracile	**MONOCOT**	
Ornithogalum arabicum	**MONOCOT**	
Orthrosanthus laxus	**MONOCOT**	
Orthrosanthus laxus var. *laxus*	**MONOCOT**	
Ottelia ovalifolia	**MONOCOT**	
Ottelia ovalifolia subsp. *ovalifolia*	**MONOCOT**	
Panicum miliaceum	**MONOCOT**	
Panicum repens	**MONOCOT**	
Paracaleana hortiorum	**MONOCOT**	
Parapholis incurva	**MONOCOT**	
Paspalidium clementii	**MONOCOT**	
Paspalum dilatatum	**MONOCOT**	
Paspalum distichum	**MONOCOT**	

TAXON	CLASS	CONS
Paspalum notatum	**MONOCOT**	
Paspalum urvillei	**MONOCOT**	
Paspalum vaginatum	**MONOCOT**	
Patersonia juncea	**MONOCOT**	
Patersonia occidentalis	**MONOCOT**	
Patersonia occidentalis var. *angustifolia*	**MONOCOT**	
Patersonia occidentalis var. *occidentalis*	**MONOCOT**	
Pauridia glabella var. *glabella*	**MONOCOT**	
Pauridia occidentalis	**MONOCOT**	
Pauridia vaginata var. *vaginata*	**MONOCOT**	
Pennisetum setaceum	**MONOCOT**	
Pentameris pallida	**MONOCOT**	
Pentaschistis airoides	**MONOCOT**	
Phalaris angusta	**MONOCOT**	
Phalaris aquatica	**MONOCOT**	
Phalaris canariensis	**MONOCOT**	
Phalaris minor	**MONOCOT**	
Phalaris paradoxa	**MONOCOT**	
Pheladenia deformis	**MONOCOT**	
Philydrella drummondii	**MONOCOT**	
Philydrella pygmaea	**MONOCOT**	
Philydrella pygmaea subsp. *pygmaea*	**MONOCOT**	
Phlebocarya ciliata	**MONOCOT**	
Phlebocarya filifolia	**MONOCOT**	
Phleum arenarium	**MONOCOT**	
Phoenix canariensis	**MONOCOT**	
Piptatherum miliaceum	**MONOCOT**	
Poa annua	**MONOCOT**	
Poa bulbosa	**MONOCOT**	
Poa drummondiana	**MONOCOT**	
Poa homomalla	**MONOCOT**	
Poa poiformis	**MONOCOT**	
Poa porphyroclados	**MONOCOT**	
Poa pratensis	**MONOCOT**	

TAXON	CLASS	CONS
Polypogon monspeliensis	**MONOCOT**	
Posidonia australis	**MONOCOT**	
Posidonia ostenfeldii	**MONOCOT**	
Potamogeton crispus	**MONOCOT**	
Potamogeton ochreatus	**MONOCOT**	
Prasophyllum cyphochilum	**MONOCOT**	
Prasophyllum drummondii	**MONOCOT**	
Prasophyllum drummondii x regium	**MONOCOT**	
Prasophyllum elatum	**MONOCOT**	
Prasophyllum fimbria	**MONOCOT**	
Prasophyllum gibbosum	**MONOCOT**	
Prasophyllum giganteum	**MONOCOT**	
Prasophyllum gracile	**MONOCOT**	
Prasophyllum hians	**MONOCOT**	
Prasophyllum macrostachyum	**MONOCOT**	
Prasophyllum odoratissimum	**MONOCOT**	
Prasophyllum parvifolium	**MONOCOT**	
Prasophyllum plumiforme	**MONOCOT**	
Prasophyllum regium	**MONOCOT**	
Pterostylis aff. nana	**MONOCOT**	
Pterostylis aspera	**MONOCOT**	
Pterostylis atrosanguinea	**MONOCOT**	
Pterostylis barbata	**MONOCOT**	
Pterostylis brevisepala	**MONOCOT**	
Pterostylis dilatata	**MONOCOT**	
Pterostylis erubescens	**MONOCOT**	
Pterostylis glebosa	**MONOCOT**	
Pterostylis nana	**MONOCOT**	
Pterostylis orbiculata	**MONOCOT**	
Pterostylis pyramidalis	**MONOCOT**	
Pterostylis recurva	**MONOCOT**	
Pterostylis sanguinea	**MONOCOT**	
Pterostylis sp. crinkled leaf (G.J. Keighery 13426)	**MONOCOT**	
Pterostylis vittata	**MONOCOT**	

TAXON	CLASS	CONS
Pyrorchis nigricans	**MONOCOT**	
Romulea flava	**MONOCOT**	
Romulea flava var. *minor*	**MONOCOT**	
Romulea rosea	**MONOCOT**	
Romulea rosea var. *australis*	**MONOCOT**	
Romulea rosea var. *communis*	**MONOCOT**	
Rostraria cristata	**MONOCOT**	
Ruppia megacarpa	**MONOCOT**	
Ruppia polycarpa	**MONOCOT**	
Rytidosperma caespitosum	**MONOCOT**	
Rytidosperma occidentale	**MONOCOT**	
Rytidosperma setaceum	**MONOCOT**	
Sagittaria platyphylla	**MONOCOT**	
Schoenoplectus pungens	**MONOCOT**	
Schoenoplectus tabernaemontani	**MONOCOT**	
Schoenus andrewsii	**MONOCOT**	
Schoenus asperocarpus	**MONOCOT**	
Schoenus benthamii	**MONOCOT**	**P3**
Schoenus bifidus	**MONOCOT**	
Schoenus brevisetis	**MONOCOT**	
Schoenus caespititius	**MONOCOT**	
Schoenus capillifolius	**MONOCOT**	**P3**
Schoenus clandestinus	**MONOCOT**	
Schoenus curvifolius	**MONOCOT**	
Schoenus discifer	**MONOCOT**	
Schoenus efoliatus	**MONOCOT**	
Schoenus elegans	**MONOCOT**	
Schoenus grammatophyllus	**MONOCOT**	
Schoenus grandiflorus	**MONOCOT**	
Schoenus laevigatus	**MONOCOT**	
Schoenus lanatus	**MONOCOT**	
Schoenus latitans	**MONOCOT**	
Schoenus natans	**MONOCOT**	**P4**
Schoenus pedicellatus	**MONOCOT**	

TAXON	CLASS	CONS
Schoenus pennisetis	**MONOCOT**	**P3**
Schoenus plumosus	**MONOCOT**	
Schoenus rigens	**MONOCOT**	
Schoenus sculptus	**MONOCOT**	
Schoenus sp. Waroona (G.J. Keighery 12235)	**MONOCOT**	**P3**
Schoenus subbarbatus	**MONOCOT**	
Schoenus subbulbosus	**MONOCOT**	
Schoenus subfascicularis	**MONOCOT**	
Schoenus subflavus	**MONOCOT**	
Secale cereale	**MONOCOT**	
Setaria italica	**MONOCOT**	
Setaria palmifolia	**MONOCOT**	
Setaria parviflora	**MONOCOT**	
Setaria sphacelata	**MONOCOT**	
Sisyrinchium rosulatum	**MONOCOT**	
Sorghum bicolor	**MONOCOT**	
Sorghum halepense	**MONOCOT**	
Sorghum x drummondii	**MONOCOT**	
Sowerbaea laxiflora	**MONOCOT**	
Sparaxis bulbifera	**MONOCOT**	
Sparaxis pillansii	**MONOCOT**	
Spinifex hirsutus	**MONOCOT**	
Spinifex hirsutus x sericeus	**MONOCOT**	
Spinifex longifolius	**MONOCOT**	
Spinifex longifolius x sericeus	**MONOCOT**	
Spinifex sericeus	**MONOCOT**	
Spinifex sericeus x longifolius	**MONOCOT**	
Spinifex x alterniflorus	**MONOCOT**	
Sporobolus africanus	**MONOCOT**	
Sporobolus virginicus	**MONOCOT**	
Stenotaphrum secundatum	**MONOCOT**	
Stipa compressa	**MONOCOT**	
Stipa drummondii	**MONOCOT**	
Stipa elegantissima	**MONOCOT**	

TAXON	CLASS	CONS
Stipa flavescens	**MONOCOT**	
Stipa hemipogon	**MONOCOT**	
Stipa mollis	**MONOCOT**	
Stuckenia pectinata	**MONOCOT**	
Stypandra glauca	**MONOCOT**	
Tetraria australiensis	**MONOCOT**	
Tetraria octandra	**MONOCOT**	
Thalassodendron pachyrhizum	**MONOCOT**	
Thelymitra antennifera	**MONOCOT**	
Thelymitra benthamiana	**MONOCOT**	
Thelymitra campanulata	**MONOCOT**	
Thelymitra cornicina	**MONOCOT**	
Thelymitra crinita	**MONOCOT**	
Thelymitra flexuosa	**MONOCOT**	
Thelymitra flexuosa x vulgaris	**MONOCOT**	
Thelymitra macrophylla	**MONOCOT**	
Thelymitra mucida	**MONOCOT**	
Thelymitra spiralis	**MONOCOT**	
Thelymitra tigrina	**MONOCOT**	
Thelymitra variegata	**MONOCOT**	**CR**
Thelymitra villosa	**MONOCOT**	
Thelymitra vulgaris	**MONOCOT**	
Thinopyrum distichum	**MONOCOT**	
Thysanotus anceps	**MONOCOT**	**P3**
Thysanotus arbuscula	**MONOCOT**	
Thysanotus arenarius	**MONOCOT**	
Thysanotus asper	**MONOCOT**	
Thysanotus manglesianus	**MONOCOT**	
Thysanotus multiflorus	**MONOCOT**	
Thysanotus patersonii	**MONOCOT**	
Thysanotus sp. Badgingarra (E.A. Griffin 2511)	**MONOCOT**	**P2**
Thysanotus sp. Coastal plain (N.H. Brittan 66/63)	**MONOCOT**	
Thysanotus sp. manglesianus/patersonii group	**MONOCOT**	
Thysanotus sparteus	**MONOCOT**	

TAXON	CLASS	CONS
Thysanotus tenellus	**MONOCOT**	
Thysanotus thyrsoideus	**MONOCOT**	
Thysanotus triandrus	**MONOCOT**	
Trachyandra divaricata	**MONOCOT**	
Tradescantia fluminensis	**MONOCOT**	
Tremulina tremula	**MONOCOT**	
Tribolium uniolae	**MONOCOT**	
Tribonanthes australis	**MONOCOT**	
Tribonanthes australis x brachypetala	**MONOCOT**	
Tribonanthes australis x longipetala	**MONOCOT**	
Tribonanthes brachypetala	**MONOCOT**	
Tribonanthes longipetala	**MONOCOT**	
Tribonanthes violacea	**MONOCOT**	
Tricoryne elatior	**MONOCOT**	
Tricoryne humilis	**MONOCOT**	
Tricoryne tenella	**MONOCOT**	
Tricostularia neesii	**MONOCOT**	
Tricostularia neesii var. *neesii*	**MONOCOT**	
Triglochin isingiana	**MONOCOT**	
Triglochin minutissima	**MONOCOT**	
Triglochin mucronata	**MONOCOT**	
Triglochin muelleri	**MONOCOT**	
Triglochin nana	**MONOCOT**	
Triglochin striata	**MONOCOT**	
Triglochin trichophora	**MONOCOT**	
Trisetum flavescens	**MONOCOT**	
Triticum aestivum	**MONOCOT**	
Tritonia gladiolaris	**MONOCOT**	
Typha domingensis	**MONOCOT**	
Typha orientalis	**MONOCOT**	
Typhonium peltandroides	**MONOCOT**	**P1**
Urochilus sanguineus	**MONOCOT**	
Vallisneria australis	**MONOCOT**	
Vallisneria nana	**MONOCOT**	

TAXON	CLASS	CONS
Vulpia bromoides	**MONOCOT**	
Vulpia fasciculata	**MONOCOT**	
Vulpia membranacea	**MONOCOT**	
Vulpia myuros	**MONOCOT**	
Vulpia myuros forma megalura	**MONOCOT**	
Vulpia myuros forma myuros	**MONOCOT**	
Watsonia aletroides	**MONOCOT**	
Watsonia borbonica	**MONOCOT**	
Watsonia marginata	**MONOCOT**	
Watsonia meriana var. *bulbillifera*	**MONOCOT**	
Watsonia meriana var. *meriana*	**MONOCOT**	
Watsonia versfeldii	**MONOCOT**	
Wurmbea dioica	**MONOCOT**	
Wurmbea dioica subsp. *alba*	**MONOCOT**	
Wurmbea monantha	**MONOCOT**	
Xanthorrhoea brunonis	**MONOCOT**	
Xanthorrhoea brunonis subsp. *brunonis*	**MONOCOT**	
Xanthorrhoea brunonis subsp. *semibarbata*	**MONOCOT**	
Xanthorrhoea preissii	**MONOCOT**	
Zantedeschia aethiopica	**MONOCOT**	
Barbula calycina	**MOSS**	
Bryoerythrophyllum dubium	**MOSS**	
Bryum argenteum	**MOSS**	
Bryum lanatum	**MOSS**	
Campylopus flindersii	**MOSS**	
Campylopus introflexus	**MOSS**	
Ceratodon purpureus subsp. *convolutus*	**MOSS**	
Dicranoloma diaphanoneuron	**MOSS**	
Didymodon australasiae	**MOSS**	
Didymodon torquatus	**MOSS**	
Fabronia hampeana	**MOSS**	**P2**
Fissidens curvatus var. *curvatus*	**MOSS**	
Fissidens megalotis	**MOSS**	
Fissidens taylorii var. *taylorii*	**MOSS**	

TAXON	CLASS	CONS
Funaria hygrometrica	**MOSS**	
Gemmabryum dichotomum	**MOSS**	
Gemmabryum pachythecum	**MOSS**	
Gemmabryum preissianum	**MOSS**	
Gymnostomum calcareum	**MOSS**	
Leptobryum pyriforme	**MOSS**	
Leptodontium paradoxum	**MOSS**	
Pleuridium ecklonii	**MOSS**	
Pseudocrossidium hornschuchianum	**MOSS**	
Ptychostomum angustifolium	**MOSS**	
Racopilum cuspidigerum var. *convolutaceum*	**MOSS**	
Rosulabryum albolimbatum	**MOSS**	
Rosulabryum billarderi	**MOSS**	
Rosulabryum billarderii	**MOSS**	
Rosulabryum campylothecium	**MOSS**	
Rosulabryum torquescens	**MOSS**	
Sematophyllum homomallum	**MOSS**	
Syntrichia antarctica	**MOSS**	
Syntrichia pagorum	**MOSS**	
Tayloria octoblepharum	**MOSS**	
Tortella rubripes	**MOSS**	
Tortula muralis	**MOSS**	
Trichostomum eckelianum	**MOSS**	
Weissia controversa	**MOSS**	
Zygodon menziesii	**MOSS**	

Flora Species list by family across Applecross Survey Areas

Family	Species	Common Name	Status
Arecaceae	*Phoenix canariensis*	Canary Islands Date Palm	*
Asteraceae	*Cotula turbinata*		*
Casuarinaceae	*Casuarina cunninghamiana*	River Oak	*
Casuarinaceae	*Casuarina obesa*		
Juncaceae	*Juncus kraussii*		
Juncaceae	*Juncus pallidus*		
Poaceae	*Hordeum murinum*		*

Flora Species list by family across Elizabeth Quay Survey Areas

Family	Species	Common Name	Status
Chenopodiaceae	*Atriplex prostrata*		*
Juncaceae	*Juncus kraussii*		
Moraceae	*Ficus carica*	Common Fig	*
Myrtaceae	*Agonis flexuosa*	Peppermint	
Myrtaceae	*Melaleuca quinquenervia*	Broad-leaved Paperbark	*

Flora Species list by family across Matilda BaySurvey Areas

Family	Species	Common Name	Status
Arecaceae	*Phoenix canariensis*	Canary Islands Date Palm	*
Asteraceae	*Cotula turbinata*		*
Casuarinaceae	*Casuarina cunninghamiana*	River Oak	*
Casuarinaceae	*Casuarina obesa*		
Chenopodiaceae	*Atriplex prostrata*		*
Moraceae	*Ficus carica*	Common Fig	*
Myrtaceae	*Agonis flexuosa*	Peppermint	
Myrtaceae	*Corymbia calophylla*	Marri	
Myrtaceae	*Eucalyptus camaldulensis*	River Gum	*
Myrtaceae	*Eucalyptus gomphocephala*	Tuart	
Myrtaceae	*Melaleuca lanceolata*		
Myrtaceae	*Melaleuca quinquenervia*	Broad-leaved Paperbark	*
Myrtaceae	*Melaleuca viminalis*		
Plantanaceae	*Plantanus acerifolia*	London Plane	*
Poaceae	*Hordeum murinum*		*
Proteaceae	*Banksia attenuata*	Candle-stick Banksia	

Flora likelihood of occurrence assessment guidelines

Likelihood of occurrence	Guideline
Known	Species recorded within study area from field survey results.
Likely	Species previously recorded within 10 km and large areas of suitable habitat occur in the study area.
Possible	Species previously recorded within 10 km and areas of suitable habitat occur/may occur in the study area.
Unlikely	Species previously recorded within 10 km, but suitable habitat does not occur in the study area.
Highly unlikely	Species not previously recorded within 10 km, suitable habitat does not occur in the study area and/or the study area is outside the natural distribution of the species.
Other considerations	Intensity of survey, availability of access, growth form type, recorded flowering times, cryptic nature of species

Source information - desktop searches

PMST – MNES Protected Matters Search Tool (PMST) to identify flora listed under the EPBC Act potentially occurring within the study area

DBCA – DBCA (2025) Threatened and Priority flora database search within the Study Area.

NM – DBCA *NatureMap and Dandjoo Database search.*

Flora likelihood of occurrence assessment for significant flora

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Amanitaceae	*Amanita brunneola*	P2		Agaricoid species that reaches 42-52 mm diameter, 4-5 mm thick, convex becoming plane, buff to milky coffee, margin very slightly appendiculate when young, surface tacky. Favours Banksia Woodland predominantly.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	TPFL, Naturemap
Amanitaceae	*Amanita carneiphylla*	P3		Pileus species reaching 70 mm in diameter, 12 mm thick, white, plane with decurved margin, margin not appendiculate, and surface dry. The species typically prefers Eucalypt woodlands.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	TPFL, WAHerb, Naturemap
Amanitaceae	*Amanita cretaceaverruca*	P2		A species with pileus reaching 40-51 mm diameter, 3 mm thick, convex becoming plane with decurved margin, margin appendiculate, clay buff to fawn, paler at margin. Species has a preference for flooded gum and Melaleuca woodlands.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Amanitaceae	*Amanita drummondii*	P3		A species with Pileus 50 mm in diameter, hazel in centre, paler towards the margin, 4 mm thick, striate margin surface slightly tacky when moist, no smell on leaves. The species has a preference for Eucalypt woodlands.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Amanitaceae	*Amanita fibrillopes*	P3		Agaricoid species reaching 65 mm in diameter, 7 mm thick, plane with depressed centre and decurved margin, margin slightly striate. The species has a preference for wet Eucalypt woodlands	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Amanitaceae	*Amanita preissii*	P3		Agaricoid species with pileus reaching more than 80mm in diameter, cream plane, with decurved margin and slightly raised centre, and margin not striated. The species has a preference for a variety of Eucalypt and Agonis woodlands.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	TPFL, WAHerb, Naturemap
Amanitaceae	*Amanita quenda*	P1		Agaricoid species with pileus reaching more than 85mm wide, 3 mm thick, convex, pale clay buff to hazel at margin. The species has a preference for moist Marri-dominant woodlands.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Amanitaceae	*Amanita wadjukiorum*	P3		Agaricoid species with the pileus reaching 90 mm in diameter, milky coffee coloured plane with depressed centre and upturned margin, dry, and the margin not striated. The species has a preference for Eucalypt woodlands.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Amanitaceae	*Amanita wadulawitu*	P2		An Agaricoid species with a pileus reaching up to 60mm in diameter, white, plane with depressed centre, margin appendiculate, a distinct mushroom smell, and the context white and unchanging. The species has a preference for both Eucalypt and Marri woodlands.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Amaryllidaceae	*Proiphys kimberleyensis*	P1		A species of Geophyte lily growing up to 70 cm with flowers white and sweetly scented occurring from September to December. The species has a preference for Basalt terrain and has been found among open woodlands.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Apiaceae	*Platysace ramosissima*	P3		A perennially, clumping shrub species reaching 60cm in height, with white flowers occurring from September to January. The species has a preference for grey-white sands and along undulating plains.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Apiaceae	*Eryngium pinnatifidum subsp. Palustre*	P3		This is a little studied sprawling shrub species reaching a maximum of 30cm tall with pink flowers. Soil preference appears to be for sandy/loam.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Apiaceae	*Eryngium sp. Subdecumbens*	P3		This is a perennial herb species with tubular leaves and growing to 40cm tall. Flowers are pale-blue in colour, occurring from September to January, with soil preference for grey sands and clay soils, and typically found along flat, alluvial plains.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Aponogetonaceae	*Aponogeton hexatepalus*	P4		This is a perennial aquatic herb species with tuberous floating leaves and white and green flowers. Habitat preference is for brown clay soils along claypans.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	TPFL, WAHerb, Naturemap
Araceae	*Lazarum peltandroides*	P1		A Geophyte species growing up to 30 cm tall. The spathe is dark maroon-red adaxially, reddish green abaxially, and with flowers that are cream with a dark red apex, occurring between August and February.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	TPFL, Naturemap
Araceae	*Lazarum nudibaccatum*	P1		This is a tuberous, perennial species of geophyte growing up to 25 cm. Leaves vary entirely and ovate to linearly 3-lobed, and the flowers are reddish-brown, occurring between August and February. The species has a preference for darker clay soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Araliaceae	*Hydrocotyle lemnoides*	P4		This is an aquatic, annual floating herb species with red, brown and purple flowers. Habitat preference is for brown clay soils along established wetlands and swamps.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	TPFL, WAHerb, Naturemap
Araliaceae	*Hydrocotyle striata*	P1		This is a species of prostrate, annually occurring herb reaching 30cm in diameter with fleshy, lobed leaves. The species has a habitat and soil preference for black, sandy soils and undulating creek lines or open forests.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Asparagaceae	*Thysanotus anceps*	P3		This is a species of leafless, erect perennial monocot plant with purple flowers typically occurring between November to February. The species has a preference for gravel-like sandy soils in low, open heath and woodland.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Asteraceae	*Angianthus micropodioides*	P3		Erect or decumbent annual, herb, 0.03-0.15 m high. Fl. yellow-white, Nov to Dec or Jan to Feb. Saline sandy soils. River edges, saline depressions, claypans.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap TPFL

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Asteraceae	*Millotia tenuifolia var. laevis*	P2		A small species of upright, annual herb reaching 0.1m high with white-yellow flowers, occurring between September and December. The species has a preference for lighter coloured, sandy soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Asteraceae	*Schoenia filifolia subsp. subulifolia*	EN	EN	A small, rare species of annually occurring herb reaching a height to 50 mm, with flowers yellow, occurring between September and December. There is a particular preference for darker loam and clay soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Brassicaceae	*Lepidium pseudohyssopifoliu m*	P1		Erect annual or perennial, herb, to 0.4(-0.6) m high. Fl. Jun to Sep. Swampy ground.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Byblidaceae	*Byblis gigantea*	P3		Small, branched perennial, herb (or sub-shrub), to 0.45 m high. Fl. pink-purple/white, Sep to Dec or Jan. Sandy-peat swamps. Seasonally wet areas.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap,T PFL

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Celastraceae	*Tripterococcus sp. Brachylobus (A.S. George 14234)*	P4		This is an erect, perennially occurring herb species reaching 80cm in height with yellow flowers. The species has a preference for grey, sandy clay soils and can be found along flats and plains.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	TPFL, WAHerb, Naturemap
Centrolepidoceae	*Centrolepis milleri*	P3		A very small, erect, annually occurring herb growing to 6 cm tall, with plants a distinct red colour. The species has a particular preference for sandy soils and sandplains and has been observed after fire events.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Chenopodiaceae	*Dysphania congestiflora*	P3		A species of erect, annually occurring herb reaching 5 cm tall, with yellow flowers occurring between July and December. There is a species preference for floodplains and clay soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Chenopodiaceae	*Tecticornia mellarium*	P1		A low species of subshrub growing up to 25 cm high, with articles glaucous blue in colour. There is a particular species preference for salt-lakes.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Cyperaceae	*Bolboschoenus fluviatilis*	P1		Perennial, rhizomatous sedge to 2m high. Littoral zone of Swan River, floodplain, river banks in mud.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	Naturemap, WAHerb
Cyperaceae	*Carex tereticaulis*	P3		This is a species of erect, tufted sedge growing to 1.5m tall and with green flowers. The species prefers brown, sandy clay soils and is often found along creek banks and along the edge of water courses.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	TPFL, WAHerb, Naturemap
Cyperaceae	*Cyathochaeta teretifolia*	P3		Rhizomatous, clumped, robust perennial, grass-like or herb (sedge), to 2 m high, to 1.0 m wide. Fl. brown. Grey sand, sandy clay. Swamps, creek edges.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	Naturemap, WAHerb

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Cyperaceae	*Eleocharis keigheryi*	VU	VU	This is an erect, annual, aquatic sedge species growing up to 45cm tall, with green to yellow coloured flowers. It favours wet, grey clay soils and is typically found in wet, inundated flats and clay pans.	**Highly Unlikely.** No suitable habitat occurs, no DBCA records are present within 10km of the current Survey Areas and the Survey Areas is to the very outer limits of the species' known range.	**Highly Unlikely.** No suitable habitat occurs, no DBCA records are present within 10km of the current Survey Areas and the Survey Areas is to the very outer limits of the species' known range.	**Highly Unlikely.** No suitable habitat occurs, no DBCA records are present within 10km of the current Survey Areas and the Survey Areas is to the very outer limits of the species' known range.	PMST
Cyperaceae	*Lepidosperma rostratum*	EN	EN	This is a species of tufted perennial sedge growing up to 60cm tall with brown flowers and with low overall abundance in its known distribution. It has a preference for seasonal, grey clay soils and is found mostly in flat wetlands.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Cyperaceae	*Morelotia australiensis*	VU	VU	This is a species of rhizomatous, tufted perennial herb reaching a maximum height of 30cm. It prefers grey and brown sandy clay soils and is most often found on flat plains.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	PMST, WA Herb

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Cyperaceae	*Netrostylis sp. Chandala*	P2		A species of erect, clumping sedge, growing up to 1.2 m high with delicate brown flowers, and very fine leaves. The species has a preference for darker, peaty soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Cyperaceae	*Schoenus benthamii*	P3		This is a species of upright, tufted sedge growing to 20cm tall with brown/green flowers and in typically low abundance. It has a preference for damp, dark-coloured clay soils and is typically found along flat, seasonal wetland environments.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Cyperaceae	*Schoenus capillifolius*	P3		Semi-aquatic tufted annual, grass-like or herb (sedge), 0.05 m high. Fl. green, Oct to Nov. Brown mud. Claypans.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Cyperaceae	*Schoenus natans*	P4		This is a species of annually occurring semi-aquatic herb with filamentous leaves, white stigmas and red-brown flowers occurring between September and November. The species prefers brown clay sands and has often been found within seasonal wetlands and clay pans.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Cyperaceae	*Schoenus pennisetis*	P3		This is a species of small, low-growing, annual sedge with a green-brown inflorescence when in fruit. It has a preference for grey-brown sandy loam soils and is typically found on seasonally wet and flat terrain.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	TPFL, WA Herb, Naturemap
Cyperaceae	*Schoenus sp. Waroona*	P3		This is a species of small, annually occurring herb with green flowers that does not exceed 10cm in height. It has a preference for dark brown and grey clay soils and is typically found in wet clay pans.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Dasypogonaceae	*Calectasia grandiflora*	P2		Rhizomatous, perennial, herb (or undershrub), to 0.65 m high, without stilt roots. Fl. blue/purple, Jun to Nov. White, grey or yellow sand, sandy clay, gravel, laterite, granite. Swampy areas, rock outcrops, flats, slopes, ridges.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Dilleniaceae	*Hibbertia leptotheca*	P3		Small spreading shrub to 0.3 m high. Coastal and near coastal sites growing in sand over limestone in coastal heaths and thickets usually dominated by species of Melaleuca and Acacia (Thiele 2019).	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, TPFL, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Droseraceae	*Drosera occidentalis*	P4		This is a species of rosetted, perennial herb with white flowers. It has a preference for grey-brown sandy clay soils and is typically found in seasonally flooded flats and wetlands.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Ericaceae	*Andersonia gracilis*	VU	EN	Slender erect or open straggly shrub, 0.1-0.5(-1) m high. Fl. white-pink-purple, Sep to Nov. White/grey sand, sandy clay, gravelly loam. Winter-wet areas, near swamps.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	PMST, WAHerb, Naturemap
Ericaceae	*Leucopogon sp. Busselton*	P2		A larger species of spreading shrub growing to 1m tall, with single stems and white flowers occurring from September to November. The species has a preference for dark and wetter, moistened sandy soils, and is found typically within seasonal swamps and flooded flats.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Ericaceae	*Styphelia filifolia*	P3		This is a species of erect, well-branched shrub with white flowers and distinctive, asymmetric green fruit. It has a preference for deep, yellow sands and is typically found along flat sandplains.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Euphorbiaceae	*Beyeria cinerea* subsp. *cinerea*	P3		Dioecious or sometimes monoecious, open spreading, erect or prostrate shrubs to 0.7 m high (Halford and Henderson 2008).	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	TPFL WAHerb Naturemap
Fabaceae	*Acacia aphylla*	EN	EN	This is a larger species of blue-grey shrub reaching 2m tall with flowers that are more brightly yellow than other Acacia species. It has a preference for clay loam and laterite soils and is typically found along ridges and granite outcrops.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Fabaceae	*Acacia benthamii*	P2		Shrub, ca 1 m high. Fl. yellow, Aug to Sep. Sand. Typically on limestone breakaways.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Fabaceae	*Acacia declinata*	P4		A spreading, open shrub species growing up to 50 cm high and 1 m across, with anther filaments bright yellow and bright yellow flowers occurring between August and December. The species has a preference for loam-type soils as well as both flats and slopes.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Fabaceae	*Acacia denticulosa*	VU	VU	Erect, diffuse, spindly shrub, 1-4 m high. Fl. yellow, Sep to Oct. Sand, loam, clay. Granite outcrops, rarely on sandplains.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Fabaceae	*Acacia drummondii subsp. elegans Porongurup variant*	P4		A medium shrub species growing up to 3 m high, with flowers pale yellow and elongated, occurring from August and December. The species has a preference for clay-based soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Fabaceae	*Acacia horridula*	P3		Harsh, slender, single-stemmed shrub, 0.3-0.6(-1) m high. Fl. yellow, May to Aug. Gravelly soils over granite, sand. Rocky hillsides.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Fabaceae	*Acacia inophloia*	P3		A larger species of shrub growing up to 3.5 m tall, with red, straggly, minni ritchi bark, furry pods and small yellow flowers occurring between August and December. The species has a preference for sand and granite soil types.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Fabaceae	*Acacia lasiocarpa var. bracteolata long peduncle variant*	P1		This is an open, spiky and slender shrub species, growing up to 1.5m tall. The soil preference for this species varies from gravel-like sands to brown sandy loams and has been most often located along flat plains.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Fabaceae	*Acacia leptospermoides subsp. obovata*	P2		A medium sized erect shrub species growing up to 2m high and 0.75m wide with flowers yellow, occurring between July and December. The species has a preference for sandy soils and sandplain and hillside terrains.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Fabaceae	*Acacia pharangites*	EN	EN	A rare species of sparse, spindly, open shrub growing up to 2.5 m high and 0.5 m wide with yellow flowers occurring between August and December. The species has a preference for darker coloured, loamy soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Fabaceae	*Acacia sp. Yinnetharra*	P1		A medium-sized tree growing up to 12m, mostly 8m tall, with woody grey fissured bark, long and weeping phyllodes and bright yellow flowers with a preference for red clay soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Fabaceae	*Dillwynia dillwynioides*	P3		Decumbent or erect, slender shrub, 0.3-1.2 m high. Fl. red & yellow/orange, Aug to Dec. Sandy soils. Winter-wet depressions.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	Naturemap, WAHerb
Fabaceae	*Jacksonia gracillima*	P3		This is a species of low spreading shrub with distinct grey-green and pungent branchlets with orange flowers. The species has a preference for grey-brown sandy loam soils and has been recorded in both low-lying sandplains and floodplains.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	Naturemap, WAHerb
Fabaceae	*Jacksonia sericea*	P4		Low spreading shrub, to 0.6 m high. Fl. orange, usually Dec or Jan to Feb. Calcareous & sandy soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	TPFL WAHerb, Naturemap
Fabroniaceae	*Fabronia hampeana*	P2		A white species of fertile moss typically found on mid-sized tree trunks within Banksia woodlands. The stems of the tree species typically need to be well developed and large enough to provide shade for persistence.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	TPFL, WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Goodeniaceae	*Dampiera triloba*	P3		Erect perennial, herb or shrub, to 0.5 m high. Fl. blue, Aug to Dec. Dark brown/black peaty soils, edge of wetlands.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	Naturemap, WAHerb
Haemodoraceae	*Anigozanthos viridis* subsp. *terraspectans*	VU	VU	Rhizomatous, perennial, herb, 0.05-0.2 m high. Fl. green/yellow-green, Aug to Sep. Grey sand, clay loam. Winter-wet depressions.	**Highly Unlikely.** No suitable habitat occurs, no DBCA records are present within 10km of the current Survey Areas and the Survey Areas is to the very outer limits of the species' known range.	**Highly Unlikely.** No suitable habitat occurs, no DBCA records are present within 10km of the current Survey Areas and the Survey Areas is to the very outer limits of the species' known range.	**Highly Unlikely.** No suitable habitat occurs, no DBCA records are present within 10km of the current Survey Areas and the Survey Areas is to the very outer limits of the species' known range.	PMST
Haemodoraceae	*Conostylis bracteata*	P3		Rhizomatous, tufted or shortly proliferous perennial, grass-like or herb, 0.2-0.45 m high. Fl. yellow, Aug to Sep. Sand, limestone. Consolidated sand dunes.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Haloragaceae	*Haloragis scoparia*	P1		This is a species of perennial herb reaching up to 50cm tall and with noticeably red stems and bright red and green leaves. The species has a strong preference for clay loam soils and has most typically been found along plains and flats, particularly within Yalgorup National Park.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Hemerocallidaceae	*Johnsonia pubescens* subsp. *cygnorum*	P2		Tufted perennial, herb, 0.15-0.25 m high. Fl. white-green, Sep. Grey-white-yellow sand. Flats, seasonally-wet sites.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	Naturemap,TPFL,
Lamiaceae	*Dicrastylis micrantha*	P3		Spreading shrub, 0.4-1 m high, stem hairs dentritic, to 1.3 mm long, with a single terminal gland and sub-basal whorl of branches. Fl. white, Sep to Dec. Red sand. Sandplains.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Lamiaceae	*Hemigenia exilis*	P4		A sparsely leaved, erect, woody, divaricate open shrub species growing up to 1.5m tall and with purple flowers occurring between September and December. The species has a preference for red and brown clay soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Macarthuriaceae	*Macarthuria keigheryi*	EN	EN	Erect or spreading perennial, herb or shrub, 0.2-0.4 m high, 0.3-0.6 m wide. Fl. Sep to Dec or Feb to Mar. White or grey sand.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, PMST TPFL
Malvaceae	*Lasiopetalum bracteatum*	P4		This is a species of erect, single stemmed shrub with visibly bright pink flowers and growing to 1 metre tall. It has been shown to prefer sandy granite soil types and has most commonly been recorded along hilltop and outcrops.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Malvaceae	*Lasiopetalum glutinosum* subsp. *glutinosum*	P3		Shrub to 1.5 m. Fl. pink-purple. Granite outcrops, granitic soils, clayey sand with laterite.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Malvaceae	*Commersonia erythrogyna*	EN	EN	This is a rare species of erect, single stemmed shrub growing up to 1.5m tall and 2m wide with spindly plants and a preference for brown, peaty soils and hillsides and slopes.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Malvaceae	*Lasiopetalum membranaceum*	P3		Multi-stemmed shrub, 0.2-1 m high. Fl. pink-blue-purple, Sep to Dec. Sand over limestone.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	TPFL WAHerb, Naturemap
Menyathaceae	*Ornduffia submersa*	P4		An aquatic, perennial floating herb species typically found in shallow water with prominent white flowers. The species prefers seasonally inundated creeks and wetlands.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb
Montiaceae	*Calandrinia uncinella*	P1		A semi-erect succulent herb species with reddish fruits and white flowers. The species prefers silty loam and clay soils and is typically found in wet, seasonal inundated plains and flats.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Myrtaceae	*Babingtonia urbana*	P3		An open, sprawling shrub species reaching a maximum of 1m tall with numerous slender branches and pink flowers. It prefers dark, brown clay soils and has typically been found in swamps and seasonally wet flats.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Myrtaceae	*Calothamnus graniticus* subsp. *leptophyllus*	P4		Erect, multi-stemmed shrub, 1-2 m high. Fl. red, Jun to Aug. Clay over granite, lateritic soils. Hillsides.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Myrtaceae	*Calothamnus macrocarpus*	P2		Erect shrub, 0.4-2(-3) m high. Fl. red, Feb or Apr or Aug to Dec. Rocky quartzite soils, sand. Slopes.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Myrtaceae	*Calytrix breviseta subsp. breviseta*	EN	EN	A sprawling, open shrub species growing up to 40 cm high and 30 cm across, with tiny clubbed leaves 1 - 2 mm long, and purple flowers occurring from September to April. There is a species preference for lighter coloured sandy loam soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	PMST
Myrtaceae	*Calothamnus macrocarpus*	P4		A species of slender, erect shrub with single stem at base, growing up to 3-4 m high and 3 m wide, with red flowers occurring between July and January. The species has a preference for sandier soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Myrtaceae	*Chamelaucium erythrochlorum*	P4		An erect, compact, perennial shrub species growing up to 70 cm high and 80 cm wide, with red flowers occurring between September and February. The species prefers both sandy and gravel-type soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Myrtaceae	*Chamelaucium floriferum subsp. diffusum*	P2		A perennial compact shrub species growing up to 1.7m tall and 1.5m wide, with white flowers occurring between May and January. The species has a preference for darker sandy and gravel-type soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Myrtaceae	*Darwinia acerosa*	EN	EN	A rare species of low spreading shrub growing up to 0.5m high and 1.0m wide, with pink and green flowers occurring between August and December. The species has a preference for darker soils and has most often been found within hills and slopes.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Myrtaceae	*Darwinia leiostyla*	P4		A species of slender, erect shrub growing up to 0.5m-1 m tall. Flower heads nodding and varying in colour from pale to deep pink from September to December. The species has a preference for rocky and clay-based soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Myrtaceae	*Darwinia masonii*	EN	EN	This is rare, erect shrub species growing to between 0.5 to 1.6 m tall, with flowers red in colour occurring between September and December. The species has a preference for orange and brown loam-type soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Myrtaceae	*Darwinia sp. Gibson*	P1		A species of multi-stemmed, spreading shrub with erect new growth, growing up to 50cm tall and with yellow flowers occurring from June to December. The species has a preference for darker coloured loam soils and has often been located within salt-plains and salt-lakes.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Myrtaceae	*Darwinia sphaerica*	P2		A species of compact, low shrub, growing up to 30 cm high and 45 cm wide, with flowers white, and strongly and sweetly scented, that occur between August and December.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Myrtaceae	*Darwinia wittwerorum*	EN	EN	A rare species of 40cm tall, upright, bushy multi-stemmed woody shrub, with linear leaves deep green in colour, and flowers with red and cream bracts occurring between August and December. The species has a preference for clay and loam soils and has often been found along slopes and gullies.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Myrtaceae	*Eucalyptus caesia subsp. boodjin*	P2		An erect, open Mallee tree species, reaching 5m high and 3m wide, with bark that is minni-ritchi in type, and smooth upper trunk. The species has often been found within granite outcrops and granite-based terrain.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Myrtaceae	*Eucalyptus caesia subsp. caesia*	P4		A species of sprawling Mallee growing up to 11m tall. Bark is minni-ritchi in type throughout, with the leaves slightly glossy, and dark olive green in colour. The species has a preference for granite-based terrain and courser sandy soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Myrtaceae	*Eucalyptus caesia subsp. magna*	P4		A species of sprawling Mallee growing up to 16m tall, with bark amorphic at base of larger mallees, otherwise minni-ritchi in bark type and reddish in colour. The leaves are dull and blue-green in colour. The species has a preference for granite-based terrain and courser sandy soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Myrtaceae	*Eucalyptus educta*	P2		(Straggling & spreading mallee), 3-5 m high, bark rough, 'minni-ritchi'. Fl. cream-yellow, Apr. Shallow soils. Granite rocks.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Myrtaceae	*Eucalyptus foecunda* subsp. *foecunda*	P4		(Mallee) or tree (occasionally), to 5 m high, bark smooth above with rough flaky bark at base, grey over pale copper. Fl. white-cream, Aug or Jan to Feb. White, grey, yellow, brown, orange or red sand over limestone. Sand dunes and plains, limestone ridges, cliffs & hills, road verges.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Myrtaceae	*Eucalyptus kruseana*	P4		A species of open Mallee growing up to 5 m tall, with bark rougher in texture on lower stems. All parts glaucous, and flowers are yellow in colour with a species preference for red-brown loam-type soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Myrtaceae	*Eucalyptus rhodantha var. rhodantha*	EN	EN	A rare species of Mallee tree with silver grey leaves growing up to 5m tall with red flowers occurring between September and December. There appears to be a preference for darker coloured, sandy loam soils but it is relatively poorly studied.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Myrtaceae	*Eucalyptus x balanites*	EN	EN	An erect, open mallee species averaging 2-5m tall, with rough grey-brown bark and orange oil glands. The species prefers gravel-type, grey sands and has typically low abundance levels, with most recordings along gentle slopes of open woodland.	**Highly Unlikely.** No suitable habitat occurs, no DBCA records are present within 10km of the current Survey Areas and the Survey Areas is to the very outer limits of the species' known range.	**Highly Unlikely.** No suitable habitat occurs, no DBCA records are present within 10km of the current Survey Areas and the Survey Areas is to the very outer limits of the species' known range.	**Highly Unlikely.** No suitable habitat occurs, no DBCA records are present within 10km of the current Survey Areas and the Survey Areas is to the very outer limits of the species' known range.	PMST
Myrtaceae	*Eucalyptus x mundijongensis*	P1		Tree, to 25 m high, bark fibrous, fissured, grey; branchlets smooth. Loam. Paddocks.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	TPFL WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Myrtaceae	*Hypocalymma inopinatum*	P2		A species of spindly, erect shrub growing up to 1.5m tall with flowers pink in colour occurring between September and December. There appears to be a preference for white, shallow sandy soils, although records and studies are comparatively few.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Myrtaceae	*Hypocalymma magnificum*	EN	EN	A rare species of open, erect to spreading, woody multi-stemmed, medium sized shrub growing from up to 60 cm tall and 40cm wide with pink flowers occurring between August and December.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Myrtaceae	*Hypocalymma quadrangulare*	P3		A low-lying, erect shrub species growing up to 0.7m tall with yellow flowers occurring between September and December. The species has most often been found within Banksia woodlands.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Myrtaceae	*Malleostemon nephroideus*	P3		A species of low ,compact, rounded shrub, growing up to 0.5 m high and 1m wide with pink flowers occurring between September and December. The species has a preference for sandplains and lighter coloured sandy soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Myrtaceae	*Pileanthus bellus*	P3		This is an open, slender, branching shrub species growing up to 3m high and 1 m wide with flowers pink in colour occurring between September and December. The species has a preference for white and yellow, lighter coloured coloured sandy soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb
Myrtaceae	*Verticordia amphigia*	P3		An erect species of shrub growing up to 1m high, with frilly-edged petals and yellow flowers occurring between September and January. The species has a preference for darker coloured clay soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Myrtaceae	*Verticordia citrella*	P2		This is a species of erect, slender shrub growing uo to 70cm tall with a single stem and with flowers yellow in colour occurring from September to January. The species has a preference for gravel and loam-based soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Myrtaceae	*Verticordia dasystylis subsp. kalbarriensis*	P3		A species of dense, small shrub growing up to 50cm tall, compact in nature with small white flowers occurring between September to April. The species has a preference for heavy clay-based soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Myrtaceae	*Verticordia fragrans*	P3		An erect, sprawling shrub species growing up to 1.5m tall with pale pink flowers occurring between June and December. The species has shown a preference for deep, white and grey sandy soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WA Herb, Naturemap
Myrtaceae	*Verticordia galeata*	P2		A species of erect, rounded shrub growing up to 70 cm tall, with flowers yellow in colour, occurring between September and December. The species has a preference for red and brown sandy soils and sandstone-based terrain.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Myrtaceae	*Verticordia halophila*	P2		An erect, low-lying shrub species growing up to 75 cm high with flowers pink in colour, occurring between September and December. The species has a preference for open scrublands and white, sandy soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Myrtaceae	*Verticordia lindleyi* subsp. *lindleyi*	P4		A species of slender, erect, dwarf shrub with low-spreading twigs reaching 50cm tall and with pink and purple flowers. The species has a preference for deep, grey sandy soils and is most often found along flat sand-plains among Melaleuca and Eucalypt communities.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	Naturemap, TPFL, WAHerb

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Myrtaceae	*Verticordia polytricha*	P4		This is a multi-branched shrub species growing up to 1.4 m tall and with creamy-white flowers, occurring between September and December. The species has a particular preference for sandy soils.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb, Naturemap
Orchidaceae	*Caladenia huegelii*	CR	EN	Tuberous, perennial, herb, 0.25-0.6 m high. Fl. green & cream & red, Sep to Oct. Grey or brown sand, clay loam.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	WAHerb PMST, Naturemap 10km
Orchidaceae	*Diuris drummondii*	VU	VU	Tuberous, perennial, herb, 0.5-1.05 m high. Fl. yellow, Nov to Dec or Jan. Low-lying depressions, swamps.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	PMST, Naturemap PMST, WAHerb

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Orchidaceae	*Diuris micrantha*	VU	VU	Tuberous, perennial, herb, 0.3-0.6 m high. Fl. yellow & brown, Sep to Oct. Brown loamy clay. Winter-wet swamps, in shallow water.	**Highly Unlikely.** No suitable habitat occurs, no DBCA records are present within 10km of the current Survey Areas and the Survey Areas is to the very outer limits of the species' known range.	**Highly Unlikely.** No suitable habitat occurs, no DBCA records are present within 10km of the current Survey Areas and the Survey Areas is to the very outer limits of the species' known range.	**Highly Unlikely.** No suitable habitat occurs, no DBCA records are present within 10km of the current Survey Areas and the Survey Areas is to the very outer limits of the species' known range.	PMST
Orchidaceae	*Diuris purdiei*	EN	EN	Tuberous, perennial, herb, 0.15-0.35 m high. Fl. yellow, Sep to Oct. Grey-black sand, moist. Winter-wet swamps.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	PMST, WAHerb
Orchidaceae	*Drakaea elastica*	CR	EN	Tuberous, perennial, herb, 0.12-0.3 m high. Fl. red & green & yellow, Oct to Nov. White or grey sand. Low-lying situations adjoining winter-wet swamps.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	PMST, TPFL, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Orchidaceae	*Drakaea micrantha*	EN	VU	Tuberous, perennial, herb, 0.15-0.3 m high. Fl. red & yellow, Sep to Oct. White-grey sand.	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	**Unlikely** No suitable habitat present within Survey Areas	PMST, WAHerb
Orchidaceae	*Thelymitra stellata*	EN	EN	Tuberous, perennial, herb, 0.15-0.25 m high. Fl. yellow & brown, Oct to Nov. Sand, gravel, lateritic loam.	**Highly Unlikely.** Species habitat (sandy laterite substrates) does not occur within the Survey Areas. No previous record within 5 km.	**Highly Unlikely.** Species habitat (sandy laterite substrates) does not occur within the Survey Areas. No previous record within 5 km.	**Highly Unlikely.** Species habitat (sandy laterite substrates) does not occur within the Survey Areas. No previous record within 5 km.	PMST
Orchidaceae	*Thelymitra variegata*	P2		Tuberous, perennial, herb, 0.1-0.35 m high. Fl. orange & red & purple & pink, Jun to Sep. Sandy clay, sand, laterite.	**Unlikely**. Species habitat (sandy laterite substrates) unlikely to occur within the Survey Areas. No previous record within 5 km.	**Unlikely**. Species habitat (sandy laterite substrates) unlikely to occur within the Survey Areas. No previous record within 5 km.	**Unlikely**. Species habitat (sandy laterite substrates) unlikely to occur within the Survey Areas. No previous record within 5 km.	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Phyllanthaceae	*Poranthera moorokatta*	P2		Erect annual herb, 16 mm to 47 mm tall It grows in open Banksia menziesii -B. attenuata woodland on white silica sand in open spaces between shrubs, not in shaded areas or in areas of high litter cover (Barrett 2012)	**Unlikely.** Habitat required for this species was not recorded within the Survey Areas, additionally Survey Areas is too degraded to support this species.	**Unlikely.** Habitat required for this species was not recorded within the Survey Areas, additionally Survey Areas is too degraded to support this species.	**Unlikely.** Habitat required for this species was not recorded within the Survey Areas, additionally Survey Areas is too degraded to support this species.	WAHerb, Naturemap
Poaceae	*Austrostipa mundula*	P3		Perennial tufted grass to 0.7 m. In association with limestone.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	Naturemap, WAHerb
Proteaceae	*Adenanthos cygnorum subsp. chamaephyton*	P3		A species of decumbent, prostrate shrub, reaching and average of 50 cm high, with leaves dark green and flowers greenish in colour occurring between September and March. The species has a preference for laterite-type soils.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Proteaceae	*Banksia anatona*	EN	EN	A tall, upright and prickly-leaved shrub growing up to 2m tall, with dense light green leaves and yellow flowers occurring between September and April. The species has a preference for grey and white sandy soils, though is increasingly rare and uncommon.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Proteaceae	*Banksia arborea*	P4		A species or erect, tall shrub growing up to 5m tall with prominent yellow flowers occurring from September to April. The species appears to be tolerant of a number of different soil types as well as ironstone formations and outcrops.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Proteaceae	*Banksia bella*	P4		A species of erect, perennial, compact shrub growing up to 1m high and 1.5m wide, with yellow flowers occurring between September to April. The species has a preference for gravel-type soils and ironstone formations.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Proteaceae	*Banksia densa*	P2		A species of compact, upright shrub growing up to 80cm with several stems. The leaves more or less glaucous and the flowers are pale yellow, and scented, occurring between August and February.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Proteaceae	*Banksia epimicta*	P2		A species of prostrate, spreading shrub with underground stem, averaging 30m high and 50cm wide. Flower bracts are large up to 8 cm long, and yellow in colour, occurring between August and February. The species has a preference for brown, sandy loam soils.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Proteaceae	*Banksia fraseri var. oxycedra*	P3		A species of tall, erect spreading shrub growing up to 3m high and 2 m wide, with both yellow-to-orange flowers occurring between August and February. There is a species preference for gravel-type soils and laterite landscapes.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Proteaceae	*Banksia lepidorhiza*	EN	EN	This is a rare species of prostrate species of shrub growing up to 30cm, with underground stems and buds, dull-green leaves and yellow flowers typically occurring between August and November. The species has a particular preference for gravelly sands.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Proteaceae	*Banksia nivea subsp. uliginosa*	EN	EN	An erect, compact, underground stemmed, perennial shrub species reaching a height of 50 cm tall and width to 50 cm with prominent flowers yellowish-red in colour with a strong sweet smell, occurring between July and February. The species has a preference for clay soils over laterite formations.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Proteaceae	*Banksia oligantha*	EN	EN	An erect shrub species growing up to 3m tall with bark that is grey and fissured at the base and lower parts of branches, and becoming smooth in upper parts, and with yellowish flowers occurring between June and December. The species has a preference for grey and white sandy soils and sharing areas with other Banksia-dominated woodlands and shrublands.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Proteaceae	*Banksia pteridifolia subsp. vernalis*	P3		A prostrate shrub species reaching approximately 30cm high, with yellow inflorescences and blue-green leaves. It inhabits areas of varying dry sandy soils and has often been recorded on hillsides and slopes amongst other Banksia species.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Proteaceae	*Banksia serratuloides subsp. perissa*	EN	EN	A rare species of erect, compact shrub growing up to 1m high and 1m wide, with yellow flowers occurring between August and December. The species has a preference for white and grey sandy soils over laterite formations.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Proteaceae	*Banksia montana*	EN	EN	An increasingly rare species of erect, spindly shrub, growing up to 2.5m tall and 1m wide, with a long leafless stem and yellow flowers occurring between August and December. The species has a preference for darker coloured, sandy clay and can be found amongst rockier and hillier terrain.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Proteaceae	*Banksia shanklandiorum*	P4		A species of dense shrub growing to 1.5 m high and 1 m wide with large yellow flowers with brown bracts, occurring between July and December, and leaves that are prickly, large and long. There is a species preference for brown and white sandy soils.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Proteaceae	*Banksia squarrosa subsp. argillacea*	EN	EN	A rare species of large, sprawling shrub growing up to 3 m tall with yellow flowers occurring from May to December. The species has been recorded in a variety of soil types and has often been found within laterite and ironstone terrains.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Proteaceae	*Conospermum undulatum*	VU	VU	Erect, compact shrub, 0.6-2 m high. Fl. white-other, May to Oct. Grey or yellow-orange clayey sand.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	PMST, Naturemap TPFL, WAHerb
Proteaceae	*Grevillea asparagoides*	P3		A species of erect shrub growing up to 2m tall with leaves around 3.5cm long that are rigid, narrow, with divided inflorescence, and red flowers occurring between June and December. There is a species preference for yellow and brown sandy soils.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Proteaceae	*Grevillea batrachioides*	EN	EN	An increasingly rare and uncommon, erect shrub species averaging 1m tall, with large, pale red flowers, with leaves that are pungent, and deeply lobed. It has been most often recorded on sandstone outcrops and sloping terrain.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Proteaceae	*Grevillea curviloba*	EN	EN	Prostrate to erect shrub, 0.1-2.5 m high. Fl. white-cream, Aug to Oct. Grey sand, sandy loam. Winter-wet heath.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	Naturemap PMST, WAHerb
Proteaceae	*Grevillea granulosa*	P3		An erect, compact shrub species growing up to 1m tall and 1m across with red flowers occurring between August and November. The species has a preference for grey and sandy loam type soils.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Proteaceae	*Grevillea maxwellii*	EN	EN	A rare species of erect, spreading shrub growing up to 1m tall, with red flowers occurring between August and November. There is a preference for darker loam-clay soils and rocky terrains.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Proteaceae	*Grevillea pimeleoides*	P4		This is a comparatively rare single-stemmed Grevillia species growing to 2m in height. It has typically been found among powder-bark wandoo woodland communities, and more often in dry and gravel-type soils.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Proteaceae	*Grevillea thelemanniana*	CR	CR	This is a very rare, large, spreading shrub species, growing over 1.5 metres tall, with divided leaves and prominent red flowers. It has a preference for clay-type soils and is typically restricted to wet swamplands and seasonal wetlands.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	TPFL, WAHerb, Naturemap
Proteaceae	*Grevillea ornithopoda*	P2		Slender, erect shrub to 3 m. Riverbanks, dunes, creek edge in red brown loam over clay.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	Naturemap, WAHerb
Proteaceae	*Grevillea prostrata*	P4		A species of spreading, prostrate shrub reaching up to 1m in diameter, with stems partly buried in the ground and with white flowers with pink fringes and fern-like leaves. There is a species preference for brown and yellow sandy soils.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Proteaceae	*Grevillea pythara*	EN	EN	A rare, highly localised, root suckering shrub species reaching a maximum of 30cm tall, with flowers orange-pale red in colour occurring from August to November. The species has a preference for brown, sandy loam soils.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Proteaceae	*Hakea brachyptera*	P3		A species of low, dwarf-shrub species growing to a maximum of 1m high and 1m wide, and with pink flowers occurring between September and November. The species has a preference for white, sandy soils.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Proteaceae	*Isopogon autumnalis*	P3		A multi-stemmed open shrub species growing to 1m tall with pale yellow flowers. The species can be found typically in dry, yellow to grey sandy soils, and along flats and well drained plains.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Proteaceae	*Lambertia echinata subsp. echinata*	EN	EN	A prickly shrub species reaching a maximum of 1.5m tall with rough, fissured, grey bark, stems to 10 cm in diameter, and leaves that are trident shaped. The flowers are orange-red in colour and occur between September and November. The species has a preference for brown loam-type soils.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Proteaceae	*Lambertia echinata subsp. occidentalis*	EN	EN	A rare and increasingly uncommon, tall shrub species growing up to 2.5m, with pungent pointed leaves ranging from entire to trident shaped, and yellow flowers occurring from April to December. There is a species preference for grey and white sandy soils.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Proteaceae	*Persoonia chapmaniana*	P3		A species of slender, erect shrub growing to 2m high, with flowers that are yellow to orange in colour occurring between September and November. The species has a preference for sandy soils of varying colours and has mostly been recorded in open woodlands.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Proteaceae	*Synaphea* sp. Fairbridge Farm (D. Papenfus 696)	CR	CR	Dense, clumped shrub, to 0.3 m high, to 0.4 m wide. Fl. yellow, Oct. Sandy with lateritic pebbles. Near winter-wet flats, in low woodland with weedy grasses.	**Highly Unlikely.** Species habitat (sandy laterite substrates) does not occur within the Survey Areas. No previous record within 10 km.	**Highly Unlikely.** Species habitat (sandy laterite substrates) does not occur within the Survey Areas. No previous record within 10 km.	**Highly Unlikely.** Species habitat (sandy laterite substrates) does not occur within the Survey Areas. No previous record within 10 km.	PMST
Pteridaceae	*Adiantum capillus-veneris*	P2		Rhizomatous, perennial, herb or (fern), 0.1-0.2 m high, frond 1-2-pinnate; stipe blackish-brown, hard, glossy; sori marginal between sinuses, oblong. Moist, sheltered sites in gorges and on cliff walls.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	**Unlikely**. No suitable habitat recorded within the Survey Areas.	Naturemap, WAHerb

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Restionaceae	*Hypolaena robusta*	P4		Dioecious rhizomatous, perennial, herb, ca 0.5 m high. Fl. Sep to Oct. White sand. Sandplains.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Rutaceae	*Boronia clavata subsp. clavata*	EN	EN	A rare sub-species of erect shrub growing to 2m tall, with yellowish-green flowers occurring from September to December. The species prefers sandy loam soils and has been recorded often along alluvial plains.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Rutaceae	*Cyanothamnus tenuis*	P4		Procumbent to erect shrub to 0.4 m high. Granite, laterite.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	Naturemap, WAHerb
Sapindaceae	*Dodonaea hackettiana*	P4		Erect shrub or tree, 1-5 m high. Fl. yellow-green/red, mainly Jul to Oct. Sand. Outcropping limestone.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	TPFL WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Scrophulariaceae	*Eremophila glabra subsp. chlorella*	EN	EN	This is a rare, woody, dense shrub species growing to 60cm tall with green fruits and yellow-green flowers. It can be found in soils that are both sandy grey and clay-based, and have been sparsely recorded within seasonal wetlands and dampened flats and plains.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	PMST, TPFL, WAHerb, Naturemap
Scrophulariaceae	*Eremophila lucida*	P1		A species of tall, slender and spindly shrub growing up to 3m high and 2m wide, with bark that is rough and fissured at the base but otherwise smooth. Flowers are light pink in colour and occurring between September and November. The species has a preference for light brown sandy soils.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Stylidiaceae	*Stylidium aceratum*	P3		A small, erect, annually occurring herb species reaching up to 8cm tall with pink flowers. The species has a preference for lightly coloured clay soils and seasonal wetlands and seasonally inundated flats.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	WAHerb, Naturemap
Stylidiaceae	*Stylidium longitubum*	P4		A species of annually occurring, small erect shrub, not exceeding 10cm in height, and with white and purple flowers. The species has a preference for lightly coloured clay soils and seasonal wetlands and seasonally inundated flats.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	TPFL, WAHerb, Naturemap

Family	Taxon	BC Act/ DBCA	EPBC Act	Description	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
Stylidiaceae	*Stylidium maritimum*	P3		Caespitose perennial, herb, 0.3-0.7 m high. Occurs on sand over limestone. Dune slopes and flats. Coastal heath and shrubland, open Banksia woodland.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	Naturemap, WAHerb, TPFL
Stylidiaceae	*Stylidium paludicola*	P3		Reed-like perennial, herb, 0.35-1 m high, Inflorescence racemose. Fl. pink, Oct to Dec. Peaty sand over clay. Winter wet habitats. Marri and Melaleuca woodland, Melaleuca shrubland.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	Naturemap, WAHerb
Thymelaeaceae	*Pimelea calcicola*	P3		Erect to spreading shrub, 0.2-1 m high. Fl. pink, Sep to Nov. Sand. Coastal limestone ridges.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	Naturemap, WAHerb
Stylidiaceae	*Levenhookia preissii*	P1		Annual (ephemeral), herb, 0.03-0.17 m high. Fl. pink-red, Sep to Dec or Jan. Grey or black, peaty sand. Swamps.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	**Unlikely.** No suitable habitat recorded within the Survey Areas.	Naturemap, WAHerb

Significant Tree Data Across all Survey Sites of the Survey Area

Site Name	Tree ID	Classification (Native or Non-Native)	Species	Fauna Use/Fauna Significance	Latitude	Longitude	DBH (mm)	Datum	Accuracy
Matilda Bay	DBH18	Native	*Corymbia calophylla*	Potential Black Cockatoo Foraging/Feeding and Breeding Tree, native bird species resting and foraging habitat	-31.9800	115.8203	716	GDA2020	+/- 5m
Matilda Bay	DBH19	Native	*Corymbia calophylla*	Potential Black Cockatoo Foraging/Feeding and Breeding Tree, native bird species resting and foraging habitat	-31.9795	115.8208	670	GDA2020	+/- 5m
Matilda Bay	DBH20	Native	*Eucalyptus gomphocephala*	Potential Black Cockatoo Foraging/Feeding and Breeding Tree, native bird species resting and foraging habitat	-31.9796	115.821	764	GDA2020	+/- 5m
Matilda Bay	REPLANTED1	Native	*Melaleuca lanceolata*	Potential native bird resting, nesting and foraging habitat	-31.9799	115.8204	859	GDA2020	+/- 5m
Matilda Bay	REPLANT2	Native	*Agonis flexuosa x 2*	Potential native bird resting, nesting and foraging habitat	-31.9794	115.8205	878 ave	GDA2020	+/- 5m
Matilda Bay	REPLANT3	Native	*Melaleuca lanceolata*	Potential native bird resting, nesting and foraging habitat	-31.9801	115.8203	750	GDA2020	+/- 5m
Matilda Bay	SHORE1	Non-Native	*Plantanus x acerifolia x 4*	Potential native bird resting and nesting habitat	-31.9803	115.821	725 ave.	GDA2020	+/- 5m

Appendix E

Fauna data

E-1 Fauna species list

E-2 Fauna Likelihood of occurrence assessment

Opportunistic Fauna Species List by Species Group – Elizabeth Quay

Common name	Scientific name	Status	Record type	Frequency
Birds				
Darter	*Anhinga novaehollandiae*	Native	Observed	3
Domestic Pigeon	*Columba livia*	**Int.**	Observed	7
Pied Cormorant	*Microcarbo melanoleucos*	Native	Observed	1
Silver Gull	*Chroicocephalus novaehollandiae*	Native	Observed	12

Opportunistic Fauna Species List by Species Group – Applecross

Common name	Scientific name	Status	Record type	Frequency
Birds				
Australian Pelican	*Pelecanus conspicillatus*	Native	Observed	2
Australian Raven	*Corvus coronoides*	Native	Heard Calling	1
Black Swan	*Cygnus atratus*	Native	Observed	15
Darter	*Anhinga novaehollandiae*	Native	Observed	3
Rainbow Lorikeet	*Trichoglossus moluccanus*	**Int.**	Observed	4
Silver Gull	*Chroicocephalus novaehollandiae*	Native	Observed	7
Whistling Kite	*Haliastur sphenurus*	Native	Observed	1
White-faced Heron	*Egretta novaehollandiae*	Native	Observed	1
Mammals				
Indo-Pacific Bottlenose Dolphin	*Tursiops aduncus*	Native	Observed	4

Opportunistic Fauna Species List by Species Group – Matilda Bay

Common name	Scientific name	Status	Record type	Frequency
Birds				
Australian Magpie	*Gymnorhina tibicen*	Native	Observed	2
Australian Raven	*Corvus coronoides*	Native	Observed	4
Australian Wood Duck	*Chenonetta jubata*	Native	Observed	1
Black Swan	*Cygnus atratus*	Native	Observed	12
Long-billed Corella	*Cacatua tenuirostris*	**Int.**	Observed	20
Pacific Black Duck	*Anas superciliosa*	Native	Observed	61
Rainbow Lorikeet	*Trichoglossus moluccanus*	**Int.**	Observed	1
Red Wattlebird	*Anthochaera carunculata*	Native	Observed	10
Silvereye	*Zosterops lateralis*	Native	Observed	2

Common name	Scientific name	Status	Record type	Frequency
Silver Gull	*Chroicocephalus novaehollandiae*	Native	Observed	18
Willy Wagtail	*Rhipidura leucophrys*	Native	Observed	2

Fauna likelihood of occurrence assessment

Fauna likelihood of occurrence assessment guidelines

Assessment outcome	Description
Known	Species recorded during the field survey or from recent, reliable records from within or close proximity to the Survey Areas.
Likely	Species are **likely** to occur in the Survey Areas where there is suitable habitat within the Survey Areas and there are recent records of occurrence of the species in close proximity to the Survey Areas. OR Species known distribution overlaps with the Survey Areas and there is suitable habitat within the Survey Areas.
Possible	Species are **possible** to occur in the Survey Areas where there may be suitable habitat within the Survey Areas, or that suitable habitat does occur but in small quantities, and there are recent records of occurrence of the species in close proximity to the Survey Areas.
Unlikely	Species assessed as **unlikely** include those species previously recorded within 40 km of the Survey Areas however: There is limited (i.e. the type, quality and quantity of the habitat is generally poor or restricted) habitat in the Survey Areas. The suitable habitat within the Survey Areas is isolated from other areas of suitable habitat and the species has no capacity to migrate into the Survey Areas. OR Those species that have a known distribution overlapping with the Survey Areas however: There is limited habitat in the Survey Areas (i.e., the type, quality and quantity of the habitat is generally poor or restricted). The suitable habitat within the Survey Areas is isolated from other areas of suitable habitat and the species has no capacity to migrate into the Survey Areas.
Highly unlikely	Species that are considered highly unlikely to occur in the Survey Areas include: Those species that have no suitable habitat within the Survey Areas. Those species that have become locally extinct or are not known to have ever been present in the region of the Survey Areas.

Source information - desktop searches

NM – *DBCA NatureMap/Dandjoo* (accessed February 2025)

PMST – MNES Protected Matters Search Tool (PMST) to identify fauna listed under the EPBC Act potentially occurring within the Survey Areas (accessed February 2025).

Significant fauna – Likelihood of occurrence across Survey Area

Species name	Common name	Status		Habitat requirements	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
		State	Federal					
Actitis hypoleucos	Common Sandpiper	MI	MI	Habitat for the Common Sandpiper is varied: coastal and interior wetlands – narrow muddy edges of billabongs, river pools, mangroves, among rocks and snags, reefs or rocky beaches. Avoids wide open mudflats. This species is widespread and scattered, common on the north and west coasts and uncommon in the south-east and interior (Morcombe 2004).	**Unlikely.** Known to occur locally, within 5 km radius due to proximity to Lake Herdsman and Swan Rv estuarine habitat. However, Lake Monger lacks suitable shallow extensive shoreline. Any visitation would be infrequent vagrant occurrence.	**Unlikely.** Known to occur locally, within 5 km radius due to proximity to Lake Herdsman and Swan Rv estuarine habitat. However, Lake Monger lacks suitable shallow extensive shoreline. Any visitation would be infrequent vagrant occurrence.	**Unlikely.** Known to occur locally, within 5 km radius due to proximity to Lake Herdsman and Swan Rv estuarine habitat. However, Lake Monger lacks suitable shallow extensive shoreline. Any visitation would be infrequent vagrant occurrence.	PMST, DBCA
Anous stolidus	Common Noddy	MI	MI	The Common Noddy is found in tropical and sub-tropical seas off the west, north and east coasts of Australia, from the Abrolhos Islands in WA to the islands of the Great Barrier Reef in Qld, as well as Norfolk and Lord Howe Islands. Some are seen almost annually in NSW as far south as Sydney. It also ranges across tropical parts of the Pacific, Indian and Atlantic Oceans (DCCEEW 2022).	**Highly Unlikely.** No suitable habitat for the species occurs and records for the species are very few.	**Highly Unlikely.** No suitable habitat for the species occurs and records for the species are very few.	**Highly Unlikely.** No suitable habitat for the species occurs and records for the species are very few.	PMST, DBCA
Anous tenuirostris melanops	Australian Lesser Noddy	VU	VU	The Australian subspecies of the Australian lesser noddy *A. t. melanops* breeds only on three islands in the Houtman Abrolhos, off Western Australia, where it nests in mangroves. The birds remain near the breeding islands all year (Higgins and Davies 1996).	**Highly Unlikely.** No suitable habitat for the species occurs and records for the species are very few.	**Highly Unlikely.** No suitable habitat for the species occurs and records for the species are very few.	**Highly Unlikely.** No suitable habitat for the species occurs and records for the species are very few.	PMST
Arenaria interpres	Ruddy Turnstone	VU, MI	VU, MI	In Australia, Ruddy Turnstones are widespread around the coast of the mainland and off-shore islands. They breed on the northern coasts of Europe, Asia and North America. They are found on coastlines around the world, when not breeding or on passage. They are found singly or in small groups along the coastline and only occasionally inland. They are mainly found on exposed rocks or reefs, often with shallow pools, and on beaches. In the north, they are found in a wider range of habitats, including mudflats (DEE 2019b).	**Highly Unlikely.** No suitable habitat for the species occurs and records for the species are very few.	**Highly Unlikely.** No suitable habitat for the species occurs and records for the species are very few.	**Highly Unlikely.** No suitable habitat for the species occurs and records for the species are very few.	PMST, DBCA
Ardenna carneipes	Flesh-footed Shearwater	MI	MI	The Flesh-footed Shearwater is a large (length 40–47 cm; wingspan 99–107 cm; weight 510–750 g), broad-winged, blackish-brown shearwater with dark brown irides, a pale-horn bill (tipped black) and flesh-pink legs and feet (Johnstone & Storr 1998; Marchant & Higgins 1990). Individuals are typically solitary at sea, although flocks of hundreds of birds can form around sources of food, and at dusk when individuals raft together offshore from their breeding islands (Bartle 1974; Johnstone & Storr 1998; Marchant & Higgins 1990; Warham 1958). The Flesh-footed Shearwater mainly occurs in the subtropics over continental shelves and slopes and occasionally inshore waters. Individuals also pass through the tropics and over deeper waters when on migration (Brooke 2004; Marchant & Higgins 1990;). Pairs breed on islands in burrows on sloping ground in coastal forest, scrubland, shrubland or grassland (Marchant & Higgins 1990).	**Highly Unlikely.** No suitable habitat for the species occurs and records for the species are very few.	**Highly Unlikely.** No suitable habitat for the species occurs and records for the species are very few.	**Highly Unlikely.** No suitable habitat for the species occurs and records for the species are very few.	PMST, DBCA
Ardenna grisea	Sooty Shearwater	VU, MI	VU, MI	The Sooty Shearwater is a large, robust sea bird, with a wingspan up to 105 cm and a weight of up to 1 kg. The head, upper body, upper wing and tail of the Sooty Shearwater are uniformly dark brown-grey. The Sooty Shearwater is found in the southern hemisphere during summer, where the species breeds around New Zealand, southern Australia and southern South America. During winter (non-breeding season) most birds move to the North Pacific Ocean, but some move into the North Atlantic Ocean, or remain in the southern hemisphere (Marchant & Higgins 1990). During the southern hemisphere summer, the species ranges from breeding islands south to Antarctic waters (as far as the iceberg-belt), although some remain in northern hemisphere. The Sooty Shearwater breeds mainly on subtropical and sub-Antarctic islands, as well as on the mainland of New Zealand. Birds nest in burrows or rock crevices on coastal slopes, ridges and cliff tops, in herbfields, tussock grassland or forest. Areas with waterlogged or shallow soils and/or dense vegetation are avoided.	**Highly Unlikely.** No suitable habitat for the species occurs and records for the species are very few.	**Highly Unlikely.** No suitable habitat for the species occurs and records for the species are very few.	**Highly Unlikely.** No suitable habitat for the species occurs and records for the species are very few.	PMST, DBCA
Halobaena caerulea	Blue Petrel	VU	VU	The Blue Petrel has a global distribution throughout the southern oceans from the pack ice edge up to about 30 degrees south. Breeding sites include Macquarie Island (Australia); the Crozet and Kergeuelen Islands in the French Southern Territories; Marion and Prince Edward Islands (South Africa); South Georgia; Diego Ramirez Cape Horn, and the Hermite and Wollaston Groups of islands (Chile).	**Highly Unlikely.** No suitable habitat for the species occurs there are no species records within 10km of any of the Survey Areas.	**Highly Unlikely.** No suitable habitat for the species occurs there are no species records within 10km of any of the Survey Areas.	**Highly Unlikely.** No suitable habitat for the species occurs there are no species records within 10km of any of the Survey Areas.	PMST

Species name	Common name	Status		Habitat requirements	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
		State	Federal					
Ninox connivens connivens	Barking Owl (southwest population)	P3		The southwest subspecies of the Barking Owl is found in the lower south-west region and is very scarce. There is little known about the subspecies (Nevill 2008). Barking Owls are found in open woodlands and the edges of forests, often adjacent to farmland. They are less likely to use the interior of forested habitat. They are usually found in habitats that are dominated by eucalytpus species, particularly red gum, and, in the tropics, paperbark species. They prefer woodlands and forests with a high density of large trees and particularly sites with hollows that are used by the owls as well as their prey. Habitat preference is strongly biased towards areas that provide a high density of large trees greater than 60cm diameter and a high density of hollow trees of a range of sizes, including large hollows greater than 15cm diameter which are suitable nesting places for Barking Owls. Roost sites are often located near waterways or wetlands.	**Highly Unlikely.** The Survey Areas lacks suitable extensive forest or dense woodland scrub as it is located inner Perth metro area.	**Unlikely.** The Survey Areas lacks suitable extensive forest or dense woodland scrub as it is located inner Perth metro area.	**Unlikely.** The Survey Areas lacks suitable extensive forest or dense woodland scrub as it is located inner Perth metro area.	DBCA
Cacatua pastinator pastinator	Muir's Corella	CD		Muir's Corella lives in woodland on the drier, eastern side of the main forest block in the south west, in woodlands that are dominated by Wandoo (*E. wandoo*), Marri, (*Corymbia calophylla*), or Jarrah, (*Eucalyptus marginata*). Most suitable habitat for this species now consists of remnant patches that occur in or adjacent to farmland, or along roadsides, paddock boundaries or watercourses, and sometimes as a few, isolated shade trees in otherwise cleared paddocks (Garnett & Crowley 2000). The bird nests in large hollows in trees at least 160 years old. It now has a restricted distribution in the Tone Bridge, Rocky Gully, Frankland River and Lake Muir area (TSSC 2016a).	**Unlikely** Restricted to a localised area of the southern Jarrah forest, and recordings have been very rare and occasional as a vagrant occurrence.	**Unlikely.** Restricted to a localised area of the southern Jarrah forest, and recordings have been very rare and occasional as a vagrant occurrence.	**Unlikely.** Restricted to a localised area of the southern Jarrah forest, and recordings have been very rare and occasional as a vagrant occurrence.	DBCA, Naturemap
Calyptorhynchus banksia naso	Forest Red-tailed Black Cockatoo	Vu	Vu	Forest Red-tailed Black Cockatoo typically occurs in dense Jarrah (Eucalyptus marginata), Karri (E. diversicolor) and Marri (Corymbia calophylla) forests, however the species also occurs in a range of other forest and woodland types, including Blackbutt (E. patens), Wandoo (E. wandoo), Tuart (E. gomphocephala), Albany Blackbutt, Yate (E. cornuta), and Flooded Gum (E. rudis) (DSEWPaC, 2012). Habitats also tend to have an understorey of Banksia spp., Persoonia spp., Allocasuarina spp.The Forest red-tailed Black Cockatoo generally nests in hollows in live or dead trees of marri, karri, wandoo, bullich, blackbutt, tuart and jarrah (DSEWPaC 2012).	**Possible.** Numerous recordings within the Survey Areas with potentially suitable feeding and foraging trees nearby, and known roosting sites within 12km of the current Survey Areas.	**Possible.** Numerous recordings within the Survey Areas with potentially suitable feeding and foraging trees nearby, and known roosting sites within 12km of the current Survey Areas.	**Likely.** Numerous recordings within the Survey Areas with potentially suitable feeding and foraging trees nearby, and known roosting sites within 12km of the current Survey Areas.	PMST, DBCA
Zanda baudinii	Baudin's Cockatoo	En	En	Baudin's Black Cockatoo occurs in high-rainfall areas, usually at sites that are heavily forested and dominated by Marri (Corymbia calophylla) and Eucalyptus species, especially Karri (E. diversicolor) and Jarrah (E. marginata). The species also occurs in woodlands of Wandoo (E. wandoo), Blackbutt (E. patens), Flooded Gum (E. rudis), and Yate (E. cornuta) . Baudin's Black Cockatoo breeds in the Jarrah, Marri and Karri forests of the deep south-west in areas averaging more than 750 mm of rainfall annually. The range of the species extends from Albany northward to Gidgegannup and Mundaring (east of Perth), and inland to the Stirling Ranges and near Boyup Brook. Preferred roosts are in areas with a dense canopy close to permanent sources of water, that provide the birds with protection from weather conditions (DSEWPaC, 2012).	**Possible.** Known to occur locally at least on an occasional basis. Sometime as mixed flock with Carnaby's Cockatoo.	**Likely.** Known to occur locally at least on an occasional basis. Sometime as mixed flock with Carnaby's Cockatoo.	**Likely.** Known to occur locally at least on an occasional basis. Sometime as mixed flock with Carnaby's Cockatoo.	DBCA
Zanda latirostris	Carnaby's Cockatoo	En	En	This species mainly occurs in uncleared or remnant native eucalypt woodlands and in shrubland or kwongan heathland dominated by Hakea, Dryandra, Banksia and Grevillea species. The species also occurs in forests containing Marri (Corymbia calophylla), Jarrah (Eucalyptus marginata) or Karri (E. diversicolor). Breeding usually occurs in the Wheatbelt region of Western Australia, with flocks moving to the higher rainfall coastal areas to forage after the breeding season. Feeds on the seeds of a variety of native plants, including Allocasuarina, Banksia, Dryandra, Eucalyptus, Grevillea and Hakea, and some introduced plants (DSEWPaC, 2012).	**Possible.** Known to occur locally on a regular basis, although may not forage frequently due to paucity of foraging habitat. Numerous recordings within the Survey Areas with potentially suitable feeding and foraging trees nearby, and known roosting sites within 12km of the current Survey Areas.	**Likely.** Known to occur locally on a regular basis, although may not forage frequently due to paucity of foraging habitat. Numerous recordings within the Survey Areas with potentially suitable feeding and foraging trees nearby, and known roosting sites within 12km of the current Survey Areas.	**Likely.** Known to occur locally on a regular basis, although may not forage frequently due to paucity of foraging habitat. Numerous recordings within the Survey Areas with potentially suitable feeding and foraging trees nearby, and known roosting sites within 12km of the current Survey Areas.	DBCA

Species name	Common name	Status		Habitat requirements	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
		State	Federal					
Falco peregrinus	Peregrine Falcon	OS		The Peregrine Falcon is seen occasionally anywhere in the south-west of Western Australia. It is found everywhere from woodlands to open grasslands and coastal cliffs - though less frequently in desert regions. The species nests primarily on ledges of cliffs, shallow tree hollows, and ledges of building in cities. (Morcombe, 2004).	**Possible.** Known to occur locally based on nearby database records within urban and neighbourhood sites, though this will be more of a fly-over utilisation with regards to the current Survey Areas.	**Likely.** Known to occur locally based on nearby database records within urban and neighbourhood sites, though this will be more of a fly-over utilisation with regards to the current Survey Areas.	**Likely.** Known to occur locally based on nearby database records within urban and neighbourhood sites, though this will be more of a fly-over utilisation with regards to the current Survey Areas.	DBCA, Naturemap
Falco hypoleucos	Grey falcon	Vu		Usually restricted to shrubland, grassland and wooded watercourses of arid and semi-arid regions, although it is occasionally found in open woodlands near the coast. (Birdlife International, 2023)	**Highly Unlikely.** The survey area is beyond the known range. Any occurrence would be as vagrant.	**Highly Unlikely.** The survey area is beyond the known range. Any occurrence would be as vagrant.	**Unlikely.** The survey area is beyond the known range. Any occurrence would be as vagrant.	DBCA
Leipoa ocellata	Malleefowl	Vu	Vu & Mi	The Malleefowl generally occurs in semi-arid areas of Western Australia, from Carnarvon to southeast of the Eyre Bird Observatory (south-east Western Australia). It occupies shrublands and low woodlands that are dominated by mallee vegetation, as well as native pine Callitris woodlands, Acacia shrublands, Broombush Melaleuca uncinata vegetation or coastal heathlands. The nest is a large mound of sand or soil and organic matter (Jones and Goth 2008; Morcombe, 2004).	**Highly Unlikely.** Locally and regionally extinct. Survey Areas is beyond the current known range and lack of suitable habitat.	**Highly Unlikely.** Locally and regionally extinct. Survey Areas is beyond the current known range and lack of suitable habitat.	**Highly Unlikely.** Locally and regionally extinct. Survey Areas is beyond the current known range and lack of suitable habitat.	PMST, DBCA
Tyto novaehollandiae subsp. novaehollandiae	Masked Owl (southern subsp)	P3		The Masked Owl is found across a range of habitats from wet sclerophyll forest, dry sclerophyll forest, non-eucalypt dominated forest, scrub and cleared land with remnant old growth trees. There are however several aspects of habitat preference which appear to be common: the Masked Owl requires large hollows in old growth eucalypts for nesting; it often favours areas with dense understorey or ecotones comprising dense and sparse ground cover, they are often recorded foraging within 100-300m of the boundary of two vegetation types (Bell & Mooney, 2002).	**Unlikely.** The Survey Areas lacks suitable extensive forest or dense woodland scrub as it is located in inner Perth metro area, and records within 10km of the Survey Areas are comparatively few.	**Unlikely.** The Survey Areas lacks suitable extensive forest or dense woodland scrub as it is located in inner Perth metro area, and records within 10km of the Survey Areas are comparatively few.	**Unlikely.** The Survey Areas lacks suitable extensive forest or dense woodland scrub as it is located in inner Perth metro area, and records within 10km of the Survey Areas are comparatively few.	DBCA
Apus pacificus	Fork-tailed Swift	MI	Mi	In south-west WA there are sparsely scattered records along the south coast, ranging from the Eyre Bird Observatory and west to Denmark. They are widespread in coastal and sub-coastal areas between Augusta and Carnarvon, including some on nearshore and offshore islands. This species is almost exclusively aerial, flying less than 1 m to at least 300 m above ground. This species is considered rare in the south-west region (DSEWPaC 2013).	**Unlikely.** Wide-ranging and occasionally recorded locally within close proximity to current Survey Areas, however forages aerially and would not utilise habitat currently found.	**Unlikely.** Wide-ranging and occasionally recorded locally within close proximity to current Survey Areas, however forages aerially and would not utilise habitat currently found.	**Unlikely.** Wide-ranging and occasionally recorded locally within close proximity to current Survey Areas, however forages aerially and would not utilise habitat currently found.	DBCA
Botaurus poiciloptilus	Australasian Bittern	En	En	The Australasian Bittern occurs mainly in densely vegetated freshwater wetlands and, rarely, in estuaries or tidal wetlands. The species favours foraging in tall, dense vegetation in shallow permanent or seasonal fresh water. In the southwest of Western Australia the Bittern is now largely confined to coastal areas especially along the south coast where it is found in beds of tall rush mixed with or near short fine sedge or open pools (Burbridge 2004). It also occurs around swamps, lakes, pools, rivers and channels fringed with lignum Muehlenbeckia, canegrass Eragrostis or other dense vegetation (Marchant & Higgins 1990). It occasionally ventures into areas of open water or onto banks.	**Unlikely.** Wetland habitat within Survey Areas is not suitable to sustain any population for feeding, foraging or breeding behaviour and records within 10km of the Survey Areas are relatively few. Any occurrence would be as vagrant.	**Unlikely.** Wetland habitat within Survey Areas is not suitable to sustain any population for feeding, foraging or breeding behaviour and records within 10km of the Survey Areas are relatively few. Any occurrence would be as vagrant.	**Unlikely.** Wetland habitat within Survey Areas is not suitable to sustain any population for feeding, foraging or breeding behaviour and records within 10km of the Survey Areas are relatively few. Any occurrence would be as vagrant.	DBCA

Species name	Common name	Status		Habitat requirements	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
		State	Federal					
Calidris acuminata	Sharp-tailed Sandpiper	MI	MI	In Australasia, the Sharp-tailed Sandpiper prefers muddy edges of shallow fresh or brackish wetlands, with inundated or emergent sedges, grass, saltmarsh or other low vegetation. This includes lagoons, swamps, lakes and pools near the coast, and dams, waterholes, soaks, bore drains and bore swamps, saltpans and hypersaline saltlakes inland. They also occur in saltworks and sewage farms. They use flooded paddocks, sedgelands and other ephemeral wetlands, but leave when they dry. They use intertidal mudflats in sheltered bays, inlets, estuaries or seashores, and also swamps and creeks lined with mangroves. Sometimes they occur on rocky shores (DotE 2016). They are found throughout many wetlands on the Swan Coastal Plain, in Perth lakes with wet grassed margins and receding waters, Vasse and Harvey Estuaries, and the Busselton wetlands, but are less common on the south coast until the Esperance region (Nevill 2013).	**Unlikely.** Known to occur locally, with historical recordings within 5km of current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline. Any visitation would be infrequent vagrant occurrence.	**Unlikely.** Known to occur locally, with historical recordings within 5km of current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline. Any visitation would be infrequent vagrant occurrence.	**Unlikely.** Known to occur locally, with historical recordings within 5km of current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline. Any visitation would be infrequent vagrant occurrence.	DBCA
Calidris alba	Sanderling	MI	MI	In Australia, the species is almost always found on the coast, mostly on open sandy beaches exposed to open sea-swell, and also on exposed sandbars and spits, and shingle banks, where they forage in the wave-wash zone and amongst rotting seaweed. Sanderlings also occur on beaches that may contain wave-washed rocky outcrops. Less often the species occurs on more sheltered sandy shorelines of estuaries, inlets and harbours (DEE 2019b).	**Unlikely.** Known to occur locally, with historical recordings within 5km of current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline. Any visitation would be infrequent vagrant occurrence.	**Unlikely.** Known to occur locally, with historical recordings within 5km of current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline. Any visitation would be infrequent vagrant occurrence.	**Unlikely.** Known to occur locally, with historical recordings within 5km of current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline. Any visitation would be infrequent vagrant occurrence.	PMST
Calidris canutus	Red Knot	VU, MI	VU, MI	In Australasia, the Red Knot mainly inhabits intertidal mudflats, sandflats and sandy beaches of sheltered coasts, in estuaries, bays, inlets, lagoons and harbours; sometimes on sandy ocean beaches or shallow pools on exposed wave-cut rock platforms or coral reefs. They are occasionally seen on terrestrial saline wetlands near the coast, such as lakes, lagoons, pools and pans, and recorded on sewage ponds and saltworks, but rarely use freshwater swamps. They rarely use inland lakes or swamps (DCCEEW 2022).They are found near mudflats and estuaries from Murchison to Bunbury but are then uncommon from Wilson Inlet to Esperance. In the Perth region they are mainly found in Alfred Cove and Peel Inlet (Nevill 2013).	**Unlikely.** The Survey Areas lacks suitable shallow extensive shoreline. Any visitation would be infrequent vagrant occurrence.	**Unlikely.** The Survey Areas lacks suitable shallow extensive shoreline. Any visitation would be infrequent vagrant occurrence.	**Unlikely.** The Survey Areas lacks suitable shallow extensive shoreline. Any visitation would be infrequent vagrant occurrence.	PMST
Calidris pugnax	Ruff	MI	MI	In Australia, the Ruff is found on generally fresh, brackish of saline wetlands with exposed mudflats at the edges. It is found in terrestrial wetlands including lakes, swamps, pools, lagoons, tidal rivers, swampy fields and floodlands. They are occasionally seen on sheltered coasts, in harbours, estuaries, seashores and are known to visit sewage farms and saltworks. They are sometimes found on wetlands surrounded by dense vegetation including grass, sedges, saltmarsh and reeds. They have been observed on sand spits and other sandy habitats including shingles. The Ruff forages on exposed mudflats, in shallow water and occasionally on dry mud. They have been observed foraging in dry waterside plants and in swampy areas next to aeration tanks in sewage farms. They prefer to roost amongst shorter vegetation (Higgins & Davies 1996).	**Unlikely.** The Survey Areas lacks suitable shallow extensive shoreline. Any visitation would be infrequent vagrant occurrence.	**Unlikely.** The Survey Areas lacks suitable shallow extensive shoreline. Any visitation would be infrequent vagrant occurrence.	**Unlikely.** The Survey Areas lacks suitable shallow extensive shoreline. Any visitation would be infrequent vagrant occurrence.	PMST
Calidris ferruginea	Curlew Sandpiper	Cr & IA	Cr & Mi	Curlew Sandpipers mainly occur on intertidal mudflats in sheltered coastal areas, such as estuaries, bays, inlets and lagoons, and also around non-tidal swamps, lakes and lagoons near the coast, and ponds in saltworks and sewage farms. They are also recorded inland, though less often, including around ephemeral and permanent lakes, dams, waterholes and bore drains, usually with bare edges of mud or sand. They occur in both fresh and brackish waters. Occasionally they are recorded around floodwaters (DSEWPaC 2013).	**Unlikely**. Known to occur locally, with DBCA records within 5km of current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. Known to occur locally, with DBCA records within 5km of current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. Known to occur locally, with DBCA records within 5km of current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging. Any visitation would be infrequent vagrant occurrence.	DCBA

Species name	Common name	Status		Habitat requirements	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
		State	Federal					
Calidris melanotos	Pectoral Sandpiper	MI	MI	In Australasia, the Pectoral Sandpiper prefers shallow fresh to saline wetlands. The species is found at coastal lagoons, estuaries, bays, swamps, lakes, inundated grasslands, saltmarshes, river pools, creeks, floodplains and artificial wetlands. The species is usually found in coastal or near coastal habitat but occasionally found further inland. It prefers wetlands that have open fringing mudflats and low, emergent or fringing vegetation, such as grass or samphire. The species has also been recorded in swamp overgrown with lignum. They forage in shallow water or soft mud at the edge of wetlands (Higgins & Davies 1996).	**Unlikely**. Known to occur locally, with DBCA records within 5km of current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. Known to occur locally, with DBCA records within 5km of current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. Known to occur locally, with DBCA records within 5km of current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging. Any visitation would be infrequent vagrant occurrence.	PMST, DBCA
Calidris ruficollis	Red-necked Stint	IA	IA : Mi	The Red-necked Stint can be found in fresh and saline water, but primarily in coastal regions (Nevill 2013). It is mostly found in areas including sheltered inlets, bays, lagoons and estuaries with intertidal mudflats, often near spits, islets and banks and, sometimes, on protected sandy or coralline shores. Occasionally they have been recorded on exposed or ocean beaches, and on stony or rocky shores, reefs or shoals. They also occur in saltworks and sewage farms; saltmarsh; ephemeral or permanent shallow wetlands near the coast or inland, including lagoons, lakes, swamps, riverbanks, waterholes, bore drains, dams, soaks and pools in saltflats. They have occasionally been recorded on dry gibber plains, with little or no perennial vegetation (DotE 2016). They are common in many parts of the southwest, and can be found in the Murchison down to Busselton and Augusta to Cape Arid, and on islands, particularly Rottnest (Nevill 2013).	**Unlikely**. Known to occur locally, with DBCA records within 5km of current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. Known to occur locally, with DBCA records within 5km of current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. Known to occur locally, with DBCA records within 5km of current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging. Any visitation would be infrequent vagrant occurrence.	PMST, DBCA
Calidris subminuta	Long-toed Stint	MI	MI	In WA the species is found mainly along the coast, with a few scattered inland records. On the south coast the Long-toed Stint is found from Esperance to Albany and inland to Lake Cassencarry and Dumbleyung. On the south-west coast the species is known from the Vasse River estuary, Guraga Lake and the Namming Nature Reserve. The species has occasionally been recorded in the Gascoyne Region, around Lake Wooleen, Meeberrie Station and McNeill Claypan. It is widespread around the Pilbara region and the Kimberley Division between Karratha and Wyndham-Kununurra (DEE 2019b). It occurs in a variety of terrestrial wetlands. They prefer shallow freshwater or brackish wetlands including lakes, swamps, river floodplains, streams, lagoons and sewage ponds.	**Unlikely**. Known to occur locally, with DBCA records within 5km of current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. Known to occur locally, with DBCA records within 5km of current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. Known to occur locally, with DBCA records within 5km of current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging. Any visitation would be infrequent vagrant occurrence.	PMST, DBCA
Calidris tenuirostris	Great Knot	VU, MI	VU, MI	The Great Knot has been recorded around the entirety of the Australian coast, with a few scattered records inland. It is now absent from some sites along the south coast where it used to be a regular visitor (Garnett and Crowley 2000). The greatest numbers are found in northern Australia; where the species is common on the coasts of the Pilbara and Kimberley, from the Dampier Archipelago to the Northern Territory border, and in the Northern Territory from Darwin and Melville Island, through Arnhem Land to the south-east Gulf of Carpentaria. In Australasia, the species typically prefers sheltered coastal habitats, with large intertidal mudflats or sandflats. This includes inlets, bays, harbors, estuaries, and lagoons (DEE 2019b).	**Unlikely**. Known to occur locally, with DBCA records within 5km of current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. Known to occur locally, with DBCA records within 5km of current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. Known to occur locally, with DBCA records within 5km of current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging. Any visitation would be infrequent vagrant occurrence.	PMST, DBCA
Charadrius bicinctus	Double-banded Plover	MI	MI	The Double-banded Plover breeds only in New Zealand, where it is widespread. In the non-breeding season, part of the population remains in New Zealand, while the remainder migrates to Australia. The Double-banded Plover is found on littoral, estuarine and fresh or saline terrestrial wetlands and also saltmarsh, grasslands and pasture. It occurs on muddy, sandy, shingled or sometimes rocky beaches, bays and inlets, harbours and margins of fresh or saline terrestrial wetlands such as lakes, lagoons and swamps, shallow estuaries and rivers. The species is sometimes associated with coastal lagoons, inland salt lakes and saltworks. It is also found on seagrass beds, which, when exposed at low tide, remain heavily saturated or have numerous water-filled depressions (DEE 2018).	**Highly Unlikely**. The Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging, and no records confirmed within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	**Highly Unlikely**. The Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging, and no records confirmed within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	**Highly Unlikely**. The Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging, and no records confirmed within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	PMST

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		State	Federal					
Charadrius cucullatus	Hooded Plover	P4		The hooded plover is a small Australian beach nesting bird. It mainly occurs on wide beaches backed by dunes with large amounts of seaweed and jetsam, creek mouths and inlet entrances. Nests are found above the high water mark on flat beaches, on stony terraces, or on sparsely vegetated dunes. As the hooded plover occurs on beaches, it is easily disturbed by human activities, particularly off-leash domestic dogs.	**Highly Unlikely**. The Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging, and only four records confirmed within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	**Highly Unlikely**. The Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging, and only four records confirmed within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	**Highly Unlikely**. The Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging, and only four records confirmed within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	Naturemap, DBCA
Charadrius dubius	Little Ringed Plover	MI	MI	While the majority of the population of Little Ringed Plovers will spend the northern winters in Africa, southward of the Sahara desert, a small number will migrate to northern Australia. In Australia they are occasionally found along the coastline, mostly of the northern part of the continent. Outside the breeding season Little Ringed Plovers have a preference for beaches with sand dunes and marshes. They are also regularly found in sewage treatment plants (DECCEW, 2022).	**Highly Unlikely**. The Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging, and only one record confirmed within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	**Highly Unlikely**. The Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging, and only one record confirmed within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	**Highly Unlikely**. The Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging, and only one record confirmed within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	PMST, DBCA
Charadrius mongolus	Lesser Sand Plover	EN, MI	EN, MI	Within Australia, the Lesser Sand-Plover is widespread in coastal regions and has been recorded in all states. It mainly occurs in northern and eastern Australia, in southeastern parts of the Gulf of Carpentaria, western Cape York Peninsula and islands in Torres Strait, and along the entire east coast, though it occasionally also occurs inland. It is most numerous in Queensland and NSW. The species has also been recorded on Lord Howe Island, Norfolk Island and Christmas Island, Indian Ocean. In non-breeding grounds in Australia, this species usually occurs in coastal littoral and estuarine environments. It inhabits large intertidal sandflats or mudflats in sheltered bays, harbors and estuaries, and occasionally sandy ocean beaches, coral reefs, wave-cut rock platforms and rocky outcrops. It also sometime occurs in short saltmarsh or among mangroves. The species also inhabits saltworks and near-coastal saltpans, brackish swamps and sandy or silt islands in riverbeds (Marchant & Higgins 1993). In north-western Australia, the species appears to use the Port Hedland saltworks in preference to nearby beaches (DCCEW, 2022).	**Highly Unlikely**. The Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging, and no records confirmed within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	**Highly Unlikely**. The Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging, and no records confirmed within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	**Highly Unlikely**. The Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging, and no records confirmed within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	PMST
Charadrius leschenaultii	Greater Sand Plover	VU, MI	VU, MI	In Australia, the Greater Sand Plover occurs in coastal areas in all states, though the greatest numbers occur in northern Australia, especially the north-west (Marchant & Higgins 1993). In northern Australia, the species is especially widespread between North West Cape and Roebuck Bay in WA; there are sparsely scattered records from the largely inaccessible area between Roebuck Bay and Darwin, but it often occurs in the Top End of the Northern Territory, including on Groote Eylandt (DCCEEW 2022).	**Highly Unlikely**. The Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging, and only two records confirmed within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	**Highly Unlikely**. The Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging, and only two records confirmed within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	**Highly Unlikely**. The Survey Areas lacks suitable shallow extensive shoreline for consistent feeding and foraging, and only two records confirmed within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	PMST, DBCA
Chlidonias leucopterus	White-Winged Black Tern	MI	MI	White-winged Black Terns are non-breeding migrants to Australia from the North. They arrive anywhere along the tropical coast of Australia and disperse around basically the entire Australian seaboard, including the East coast of Tasmania and many small offshore islands. They can be found farther inland, in parts of the Great Dividing Range and in particular in the central part of the Murray-Darling Basin near the NSW/VIC border. There are also White-winged Black Terns in an area around Perth, WA. Elsewhere on the continent White-winged Black Terns are found only rarely, and never in the great deserts of WA/SA/NT or the Nullarbor. White-winged Black Terns live around lakes including ephemeral lakes, in estuaries and in coastal waters (DCCEEW 2022).	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km the Survey Areas in the last century.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km the Survey Areas in the last century.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km the Survey Areas in the last century.	DBCA

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		State	Federal					
Diomedea amsterdamensis	Amsteram Albatross	EN, MI	EN, MI	The Amsterdam Albatross is a huge, full-bodied albatross with extremely long wings (wing span 2.5–3.5 m) and a short, wedge-shaped tail. The bill is very large and pink, with a bulbous tip (Marchant & Higgins 1990). The subspecies is similar in appearance to the Wandering Albatross with uniform dark brown plumage, and a contrasting clown-like white mask extending from the top of the bill, behind the eyes, around the cheeks and under the chin, and white underwings (Pizzey & Knight 1999). The Amsterdam Albatross is a marine, pelagic seabird. It nests in open patchy vegetation (among tussocks, ferns or shrubs) near exposed ridges or hillocks (Weimerskirch et al. 1985). It sleeps and rests on ocean waters when not breeding (Marchant & Higgins 1990). The Amsterdam Albatross is a non-resident visitor to Australia, and may occur in south-west and south Australian waters (Pizzey & Knight 1999). The similarity of the Amsterdam Albatross to juvenile Wandering Albatross makes identification at sea difficult, and may obscure distribution information of this subspecies. There are a few records of this subspecies off New Zealand, and one bird was captured on a longline fishing vessel operating south of Tasmania (Gales 1998).	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST
Diomedea exulans	Wandering Albatross	VU, MI	VU, MI	The Wandering Albatross has the longest wing-span of any ocean bird, spanning 2.5 - 3.5 m. In flight, the Wandering Albatross may appear somewhat humpbacked, and with pink toes visible. Adults have a white or pale back, extending along the dorsal surface of the wings near the body, and white underwings. Except in fully mature old males, the white tail will have black edges. Up close, the bill is large, shapely, and pale-flesh coloured; and the white plumage of the head and body have very fine grey barring (Pizzey & Knight 1999). The Wandering Albatross is solitary or gregarious at sea. It breeds in colonies (Marchant & Higgins 1990). On breeding islands, the Wandering Albatross nests on coastal or inland ridges, slopes, plateaux and plains, often on marshy ground (Falla 1937; Warham & Bell 1979). Nests of the Wandering Albatross are sited on moss terraces, in dense tussocks, and often in loose aggregations on the west (windward) side of islands. It prefers open or patchy vegetation (tussocks, ferns or shrubs), and it requires nesting areas that are near exposed ridges or hillocks so that it can take off (Warham & Bell 1979). The Wandering Albatross breeds on Macquarie Island (Environment Australia 1999; Marchant & Higgins 1990). A single breeding pair has also been recorded on Heard Island (Woehler 1991). It feeds in Australian portions of the Southern Ocean (Nicholls et al. 1995, 1997).	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST
Diomedea epomophora	Southern Royal Albatross	VU, MI	VU, MI	Originally considered a polytypic species, the Royal Albatross was split into *D. epomophora* (Southern Royal Albatross) and *D. sanfordi* (Northern Royal Albatross) in 1998 by Robertson and Nunn based on several key morphological differences between the two taxa. The Southern Royal Albatross is a New Zealand endemic breeder, breeding only on Campbell Island (99% of the population) and in the Auckland Islands. However, migratory and foraging individuals have been sighted across both coasts of Southern Australia due to the species' wide-ranging feeding behaviour over wide open seas (DCCEEW 2022)..	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST
Diomedea sanfordi	Northern Royal Albatross	EN, MI	EN, MI	Adult Northern Royal Albatross have a white head, neck, body and tail, sharply contrasting against the black wings. The underwing is white except for a dark trailing edge and a large dark tip. Juvenile Northern Royal Albatrosses have indistinct brown mottling on the crown, and pronounced black mottling on the lower back and rump, and a narrow black terminal band on the tail. The bill is large, with a bulbous tip, pinkish coloured horn and a diagnostic black cutting edge on the upper mandible. In breeding birds, the bill may flush to a brighter pink. The iris is brown, and the feet and legs are pinkish to blueish-white, with blueish webs (Marchant & Higgins 1990). The Northern Royal Albatross is marine, pelagic and aerial. Its habitat includes subantarctic, subtropical, and occasionally Antarctic waters (Marchant & Higgins 1990). It occurs where the surface temperature of the water is between 6–20 °C (Barton 1977, 1980; Jehl 1973; Szijj 1967). The Northern Royal Albatross ranges widely over the Southern Ocean, with individuals seen in Australian waters off south-eastern Australia (Environment Australia 2001f).	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST
Gallinago megala	Swinhoe's Snipe	MI	MI	During the non-breeding season Swinhoe's Snipe occurs at the edges of wetlands, such as wet paddy fields, swamps, and freshwater streams. The species is also known to occur in grasslands, drier cultivated areas (including crops of rapeseed and wheat) and market gardens (Higgins & Davies 1996). Habitat specific to Australia includes the dense clumps of grass and rushes round the edges of fresh and brackish wetlands. This includes swamps, billabongs, river pools, small streams and sewage ponds. They are also found in drying claypans and inundated plains pitted with crab holes (Higgins & Davies 1996).	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST
Gallinago stenura	Pin-tail Snipe	MI	MI	In WA the species was reported at Pilbara, Port Headland, Myaree Pool, Maitland River and near Karratha. During non-breeding period the Pin-tailed Snipe occurs most often in or at the edges of shallow freshwater swamps, ponds and lakes with emergent, sparse to dense cover of grass/sedge or other vegetation (DEE 2019b).	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST

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		State	Federal					
Numenius minutus	Little Curlew	MI	MI	Little Curlews generally spend the non-breeding season in northern Australia from Port Hedland in WA to the Queensland coast (Minton 2002 pers. comm.). There are records of the species from inland Australia, and widespread but scattered records on the east coast. The Little Curlew is most often found feeding in short, dry grassland and sedgeland, including dry floodplains and blacksoil plains, which have scattered, shallow freshwater pools or areas seasonally inundated. Open woodlands with a grassy or burnt understory, dry saltmarshes, coastal swamps, mudflats or sandflats of estuaries or beaches on sheltered coasts, mown lawns, gardens, recreational areas, ovals, racecourses and verges of roads and airstrips are also used (Higgins & Davies 1996).	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST
Numenius madagascariensis	Eastern Curlew	CR, MI	CR, MI	The Eastern Curlew is most commonly associated with sheltered coasts, especially estuaries, bays, harbours, inlets and coastal lagoons, with large intertidal mudflats or sandflats, often with beds of seagrass. Occasionally, the species occurs on ocean beaches (often near estuaries), and coral reefs, rock platforms, or rocky islets. The birds are often recorded among saltmarsh and on mudflats fringed by mangroves, sometimes within the mangroves, and in coastal saltworks and sewage farms. In the South-West, Eastern Curlews are recorded from Eyre, and there are scattered records from Stokes Inlet to Peel Inlet (Marchant & Higgins 1993). They are uncommon further south of Geraldton, but can be spotted in Alfred Cove, Peel Inlet and the Albany region (Nevill 2013).	**Unlikely**. The Survey Areas lacks suitable shallow extensive shoreline, and only four confirmed DBCA records have been made within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. The Survey Areas lacks suitable shallow extensive shoreline, and only four confirmed DBCA records have been made within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. The Survey Areas lacks suitable shallow extensive shoreline, and only four confirmed DBCA records have been made within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	PMST, DBCA
Numenius phaeopus	Whimbrel	MI	MI	The Whimbrel is often found on the intertidal mudflats of sheltered coasts. It is also found in harbours, lagoons, estuaries and river deltas, often those with mangroves, but also open, un-vegetated mudflats. It is occasionally found on sandy or rocky beaches, on coral or rocky islets, or on intertidal reefs and platforms. It has been infrequently recorded using saline or brackish lakes near coastal areas. It also used salt flats with saltmarsh, or saline grasslands with standing water left after high spring-tides, and in similar habitats in sewage farms and salt fields (Higgins & Davies 1996). There are a small number of inland records from saline lakes and cane grass swamps. It has also been recorded in coastal dunes and a football field.	**Unlikely**. The Survey Areas lacks suitable mudflats and feeding habitat, and only four confirmed DBCA records have been made within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. The Survey Areas lacks suitable mudflats and feeding habitat, and only four confirmed DBCA records have been made within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. The Survey Areas lacks suitable mudflats and feeding habitat, and only four confirmed DBCA records have been made within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence..	PMST, DBCA
Limosa lapponica menzbieri	Northern Siberian Bar-tailed Godwit	EN & MI	EN & MI	The Bar-tailed godwit occurs mainly in coastal habitats such as large intertidal sandflats, banks, mudflats, estuaries, inlets, harbours, coastal lagoons and bays. It has also been recorded in coastal sewage farms and saltworks, saltlakes and brackish wetlands near coasts, sandy ocean beaches, rock platforms, and coral reef-flats. It is widespread around the coast, from Eyre to Derby (TSSC 2016b). They are uncommon in the south west, but can be sighted from Geraldton to Bunbury, at Alfred Cove, and then at a few estuaries on the south coast including Kalgan River Mouth and Oyster Harbour (Nevill 2013).	**Unlikely**. The Survey Areas lacks suitable mudflats and feeding habitat, although numerous DCBA recordings have been made historically at neighbouring sites.	**Unlikely**. The Survey Areas lacks suitable mudflats and feeding habitat, although numerous DCBA recordings have been made historically at neighbouring sites.	**Unlikely**. The Survey Areas lacks suitable mudflats and feeding habitat, although numerous DCBA recordings have been made historically at neighbouring sites.	PMST, DBCA
Limosa limosa	Black-tailed Godwit	EN & MI	EN & MI	Black-tailed Godwits arrive in Australia each year in August from breeding grounds in the northern hemisphere. Birds are more numerous in northern Australia. Black-tailed Godwits inhabit estuarine mudflats, beaches and mangroves. They are common in coastal areas around Australia. They are social birds and are often seen in large flocks and in the company of other waders (Birdlife Australia 2019).	**Unlikely**. The Survey Areas lacks suitable mudflats and feeding habitat, and only five confirmed DBCA records have been made within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. The Survey Areas lacks suitable mudflats and feeding habitat, and only five confirmed DBCA records have been made within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. The Survey Areas lacks suitable mudflats and feeding habitat, and only five confirmed DBCA records have been made within 10km of the Survey Areas. Any visitation would be infrequent vagrant occurrence..	PMST, DBCA
Macronectes halli	Northern Giant Petrel	VU, MI	VU, MI	The range of the Northern Giant-Petrel is circumpolar, encompassing all southern oceans and coastal waters around the southern continents. Northern Giant-Petrels reach the Australian coastline anywhere up to a few hundred km South of the tropic of Capricorn on both the East coast and the West coast. Northern Giant-Petrels breed on numerous offshore islands.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST

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		State	Federal					
Macronectes giganteus	Southern Giant Petrel	EN & MI	EN & MI	The Southern Giant Petrel is the largest petrel, and has been described as looking like a small, ungainly brown albatross with a massive greenish-tipped straw coloured bill, surmounted by a large single nostril-tube (Pizzey & Knight 1999). Mature adults are grey-brown with a faded and mottled-white head, neck and breast. The underwing has a pale leading edge, near the body, which should aid in discrimination from the Northern Giant Petrel, in which this area is dark brown (Pizzey & Knight 1999). The Southern Giant-Petrel is marine bird that occurs in Antarctic to subtropical waters. In summer, it mainly occurs over Antarctic waters, and it is widespread south as far as the pack-ice and onto the Antarctic continent (Marchant & Higgins 1990). The Southern Giant-Petrel breeds on the Antarctic Continent, Peninsula and islands, and on subantarctic islands and South America. The large nests are normally built in exposed areas of open vegetation (Voisin 1988) or, in Antarctic colonies, of no vegetation (E.J. Woehler, AAD 2002, pers. comm.). In the southern Antarctic zone, it nests in exposed snow- and ice-free coastal areas, open gravel areas rocky bluffs, outcrops, ridges, slopes, mounds, raised beaches, open flats, edges of plateaux or offshore rocks from five to 120 m above sea level. Colonies often nest near a steep drop or on slope. The Southern Giant-Petrel breeds on six subantarctic and Antarctic islands in Australian territory; Macquarie Island, Heard Island and McDonald Island in the Southern Ocean, and Giganteus Island, Hawker Island, and Frazier Island in the Australian Antarctic Territories (EABG 2001, Woehler et al. 2001; Woehler et al. in press).	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST, DBCA
Oxyura australis	Blue billed Duck	P4		The blue-billed duck is a small Australian almost entirely aquatic duck, with both the male and female growing to a length of 40 cm. The male has a slate-blue bill which changes to bright blue during the breeding season (Morcombe 2004). The blue-billed duck is endemic to Australia's temperate regions, ranging from the southwest of Western Australia, extending to southern Queensland, through New South Wales and Victoria, to Tasmania. The species is readily seen on freshwater lakes and billabongs where deep fresh water is present (Morcombe 2004).	**Possible.** Numerous records DBCA records and known to occur locally, although lack of core, lake and freshwater habitat suggests that occurrence would be temporary as fly-over or brief foraging behaviour.	**Possible.** Numerous records DBCA records and known to occur locally, although lack of core, lake and freshwater habitat suggests that occurrence would be temporary as fly-over or brief foraging behaviour.	**Possible.** Numerous records DBCA records and known to occur locally, although lack of core, lake and freshwater habitat suggests that occurrence would be temporary as fly-over or brief foraging behaviour.	DBCA
Pandion haliaetus	Osprey	MI	MI	Eastern Ospreys occur in littoral and coastal habitats and terrestrial wetlands of tropical and temperate Australia and offshore islands. They are mostly found in coastal areas but occasionally travel inland along major rivers, particularly in northern Australia. They require extensive areas of open fresh, brackish or saline water for foraging (Marchant & Higgins 1993). They frequent a variety of wetland habitats including inshore waters, reefs, bays, coastal cliffs, beaches, estuaries, mangrove swamps, broad rivers, reservoirs and large lakes and waterholes. They exhibit a preference for coastal cliffs and elevated islands in some parts of their range, but may also occur on low sandy, muddy or rocky shores and over coral cays.	**Likely.** Numerous records DBCA records and known to occur locally, and coastal, open brackish and saline waters mean that that occurrence is likely, although mostly temporary as fly-over or brief foraging behaviour.	**Likely.** Numerous records DBCA records and known to occur locally, and coastal, open brackish and saline waters mean that that occurrence is likely, although mostly temporary as fly-over or brief foraging behaviour.	**Likely.** Numerous records DBCA records and known to occur locally, and coastal, open brackish and saline waters mean that that occurrence is likely, although mostly temporary as fly-over or brief foraging behaviour.	PMST
Phaethon rubricauda westralis	Red-tailed Tropicbird (Indian Ocean), Indian Ocean Red-tailed Tropicbird	EN & M	EN & MI	In Australia, it nests on Queensland's coral islands (including Raine Island and Lady Elliot Island), and Ashmore Reef and Rottnest Island off Western Australia, as well as Sugarloaf Rock at Cape Naturaliste and Busselton on the Western Australian coastline itself, and the offshore territories of the Cocos (Keeling) Islands, Norfolk and Lord Howe islands. In New Zealand territory it breeds on the Kermadec Islands. It frequents areas of ocean with water temperatures from 24 to 30 °C (75 to 86 °F) and salinity under 35% in the southern hemisphere and 33.5% in the northern hemisphere. In the Pacific Ocean, the southern boundary of its range runs along the 22 °C (72 °F) summer surface isotherm The warm waters of the Leeuwin Current facilitate the species nesting at Cape Leeuwin in southwestern Australia, yet is only a rare visitor to New South Wales at corresponding latitudes on the Australian east coast (Higgens et al 1990).	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST
Phalaropus lobatus	Red-necked Pharalope	MI	MI	During non-breeding period the Red-necked Phalarope occurs mainly at sea. In Australia it is recorded at both inland and coastal lakes/swamps, including highly saline waters and artificial wetlands, notably saltfields (Higgins & Davies 1996).	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST

Species name	Common name	Status		Habitat requirements	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
		State	Federal					
Plegadis falcinellus	Glossy Ibis	MI	MI	Within Australia, the Glossy Ibis is generally located east of the Kimberley. The species is also known to be patchily distributed in the rest of Western Australia. Its preferred habitat for foraging and breeding are freshwater marshes at the edges of lakes and rivers, lagoons, floodplains, wet meadows, swamps, reservoirs, sewerage ponds, rice-fields and cultivated areas under irrigation (DSEWPaC 2013).	**Unlikely.** While numerous DBCA records have been made within 5km of the Survey Areas, suitable freshwater lakes and river habitat is not present for regular feeding and foraging.	**Unlikely.** While numerous DBCA records have been made within 5km of the Survey Areas, suitable freshwater lakes and river habitat is not present for regular feeding and foraging.	**Unlikely.** While numerous DBCA records have been made within 5km of the Survey Areas, suitable freshwater lakes and river habitat is not present for regular feeding and foraging.	DBCA
Pterodroma mollis	Soft Plumaged Petrel	VU	VU	The Soft-plumaged Petrel is generally found over temperate and subantarctic waters in the South Atlantic, southern Indian and western South Pacific Oceans. The species is a regular and quite common visitor to southern Australian seas but is more common in the west than in the south and south-east (Marchant & Higgins 1990). In the southern Indian Ocean, the species is most numerous between 30° and 50°S from the South African to the west Australian coasts. The species is possibly common in seas south-west of Australia.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST
Rostratula australis	Australian Painted Snipe	En	En	The Australian Painted Snipe generally inhabits shallow terrestrial freshwater (occasionally brackish) wetlands, including temporary and permanent lakes, swamps and claypans. Australian Painted Snipe breeding habitat requirements may be quite specific: shallow wetlands with areas of bare wet mud and both upper and canopy cover nearby. The species rarely occurs in south-western Australia, where it was once more common (Marchant & Higgins 1993; Garnett and Crowley 2000).	**Unlikely.** Habitat not considered suitable for regular feeding and foraging. Any occurrence would be as infrequent visitor.	**Unlikely.** Habitat not considered suitable for regular feeding and foraging. Any occurrence would be as infrequent visitor.	**Unlikely.** Habitat not considered suitable for regular feeding and foraging. Any occurrence would be as infrequent visitor.	PMST, DBCA
Tringa brevipes	Grey-tailed Tattler	MI	MI	Within Australia, the Grey-tailed Tattler has a primarily northern coastal distribution and is found in most coastal regions. It is found in the south-west between Augusta and Cervantes (DAWE 2021d).	**Unlikely.** Habitat not considered suitable for regular feeding and foraging. Any occurrence would be as infrequent visitor.	**Unlikely.** Habitat not considered suitable for regular feeding and foraging. Any occurrence would be as infrequent visitor.	**Unlikely.** Habitat not considered suitable for regular feeding and foraging. Any occurrence would be as infrequent visitor.	PMST, DBCA
Tringa glareola	Wood Sandpiper	MI	MI	The Wood Sandpiper uses well-vegetated, shallow, freshwater wetlands, such as swamps, billabongs, lakes, pools and waterholes. They are typically associated with emergent, aquatic plants or grass, and dominated by taller fringing vegetation, such as dense stands of rushes or reeds, shrubs, or dead or live trees, especially Melaleuca and River Red Gums E. camaldulensis. They also frequent inundated grasslands, short herbage or wooded floodplains, where floodwaters are temporary or receding. They can occasionally be found at drying or stony small wetlands, but rarely use brackish wetlands, or dry stunted saltmarsh. They can also use artificial wetlands, including open sewage ponds, reservoirs, large farm dams, and bore drains (DotE 2016). In WA, they can be found in many of Perth's wetlands including drainage channels, in Wheatbelt inland ephemeral lakes if they are not too saline, but are uncommon on the south coast (Nevill 2013).	**Unlikely**. Known to occur locally with recent DBCA records within 5km of the Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline habitat. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. Known to occur locally with recent DBCA records within 5km of the Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline habitat. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. Known to occur locally with recent DBCA records within 5km of the Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline habitat. Any visitation would be infrequent vagrant occurrence.	PMST, DBCA
Tringa totanus	Common Redshank	MI	MI	In Australia, the Common Redshank has been recorded at scattered locations. In WA the species is vagrant to the south-west with records at Peel Inlet, Coodanup, the Gascoyne region, Coral Bay and Carnarvon (Higgins & Davis 1996). It is regular and widespread in the northwest, from the Dampier Salt fields to Roebuck Bay and Broome. The Common Redshank is found at sheltered coastal wetlands such as bays, river estuaries, lagoons, inlets and saltmarsh (with bare open flats and banks of mud or sand). They are also found around salt lakes, freshwater lagoons, artificial wetlands and saltworks and sewage farms (Higgins & Davies 1996).	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST
Tringa nebularia	Common Greenshank	MI	Mi	The Common Greenshank does not breed in Australia; however, the species occurs in all types of wetlands and has the widest distribution of any shorebird in Australia (DSEWPaC 2013).	**Unlikely**. Known to occur locally with recent DBCA records within 5km of the Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline habitat. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. Known to occur locally with recent DBCA records within 5km of the Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline habitat. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. Known to occur locally with recent DBCA records within 5km of the Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline habitat. Any visitation would be infrequent vagrant occurrence.	DBCA

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Tringa stagnatilis	Marsh Sandpiper	MI	MI	The Marsh Sandpiper lives in permanent or ephemeral wetlands of varying salinity, including swamps, lagoons, billabongs, saltpans, saltmarshes, estuaries, pools on inundated floodplains, and intertidal mudflats and also regularly at sewage farms and saltworks. They are recorded less often at reservoirs, waterholes, soaks, bore-drain swamps and flooded inland lakes. In north Australia they prefer intertidal mudflats (Higgins & Davies 1996), although surveys in Kakadu National Park recorded more birds around shallow freshwater lakes than in areas influenced by tide. At the Top End they often use ephemeral pools on inundated freshwater and tidal floodplains (Higgins & Davies 1996). They are found infrequently around mangroves (Higgins & Davies 1996).	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST
Dasyornis longirostris	Western bristlebird	EN	EN	The Western Bristlebird is restricted to low dense coastal heathland reaching up to 1.5m in height. Vegetation species typically include Baxter's Banksia *(Banksia baxteri)*, Dryandra-leaved Banksia (*B. dryandroides)*, Candlestick Banksia (*B. attenuata)* or Scarlet Banksia (*B. coccinea*)), paperbarks (such as *Melaleuca striata* or *M. thymoides*), hakeas (such as Hood Leaved Hakea (*Hakea cucullata*), or Two-leaf Hakea (*H. trifurcata*)), *Lambertia* spp., *Dryandra* spp., *Adenanthos* spp., *Leptospermum* spp., *Daviesia reversifolia* and Dwarf Sheoak *(Allocasuarina humilis). (DCCEEW)*	**Highly unlikely.** Locally and regionally extinct. Survey Areas is beyond the current known range and lack of suitable habitat.	**Highly unlikely.** Locally and regionally extinct. Survey Areas is beyond the current known range and lack of suitable habitat.	**Highly unlikely.** Locally and regionally extinct. Survey Areas is beyond the current known range and lack of suitable habitat.	DBCA
Hydroprogne caspia	Caspian tern	MI	MI	The Caspian Tern is mostly associated with sheltered coasts such as harbours, bays, estuaries, etc. They can also be found in inland terrestrial wetlands (saline or fresh) or man-made bodies of water (lakes or reservoirs). (DCCEEW).	**Possible.** Known to occur locally with 10 DBCA records within 10km of the Survey Areas. The open water aspects of the Survey Areas provide the potential to occur on an occasional basis for feeding and foraging.	**Possible.** Known to occur locally with 10 DBCA records within 10km of the Survey Areas. The open water aspects of the Survey Areas provide the potential to occur on an occasional basis for feeding and foraging.	**Possible.** Known to occur locally with 10 DBCA records within 10km of the Survey Areas. The open water aspects of the Survey Areas provide the potential to occur on an occasional basis for feeding and foraging.	PMST, DBCA
Onychoprion anaethetus	Bridled Tern	MI	MI	The species forages in offshore, continental shelf waters and is only rarely recorded along mainland coasts, even those adjacent or close to breeding colonies (though note breeding on mainland in Western Australia just mentioned). At least, the southern populations migrate north after breeding. The species is a vagrant to southern and south-eastern Australian waters outside the breeding range (Barrett et al. 2003; Blakers et al. 1984; Bonnin 1968, 1969, 1982; Higgins & Davies 1996; Hulsman & Langham 1985; Johnstone & Storr 1998). In Western Australia, breeding is widespread from islands off Cape Leeuwin (extending round the southern coast to Seal Rocks) north to Shark Bay and in Pilbara region and Kimberley Division. At sea, distribution extends from Cape Leeuwin north to Dirk Hartog Island, with isolated mainland coastal records at Point Maud and Ningaloo, and from Barrow Island to the Dampier Archipelago, and at sea off the Kimberley coast from waters west of the Dampier Peninsula to Ashmore Reef and Joseph Bonaparte Gulf (Barrett et al. 2003; Blakers et al. 1984; Higgins & Davies 1996; Johnstone & Storr 1998). In the Northern Territory, most breeding colonies are in the eastern portion of the territory, with main colonies being off north-eastern Arnhem Land, and on south-eastern Groote Eylandt and the Sir Edward Pellew Group.	**Unlikely**. Known to occur locally in neighbouring areas. However, the Survey Areas lacks suitable shallow extensive shoreline and coastal habitat. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. Known to occur locally in neighbouring areas. However, the Survey Areas lacks suitable shallow extensive shoreline and coastal habitat. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. Known to occur locally in neighbouring areas. However, the Survey Areas lacks suitable shallow extensive shoreline and coastal habitat. Any visitation would be infrequent vagrant occurrence.	PMST, DBCA
Pachyptila turtur subantarctica	Fairy Prion (Southern)	VU	VU	The fairy prion (southern) breeds on Macquarie Island and a number of other subantarctic islands outside of Australia. There are 80 to 250 breeding pairs in Australia and a global population of 80 000. In Australia, breeding is recorded on two rock stacks off Macquarie Island and on the nearby Bishop and Clerk Island. he subspecies digs burrows among rocks or low vegetation in which to nest. Burrows may be dug below mat forming herbs. The species feeds by plucking food from the ocean surface. Some individuals may migrate towards New Zealand and southern Australia in winter.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST
Phoebetria fusca	Sooty albatross	Mi	Mi	The Sooty Albatross is a Marine and pelagic species, tolerating a wide range of salinities and se surface temperatures. The species typically occurs 35^{o}S in subtropical and subantarctic waters but is in greatest abundance near the Subtropical Convergence. (DCCEEW)	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST, DBCA

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		State	Federal					
Platycercus icterotis xanthogenys	Western Rosella	P4		Western Rosellas are found in open eucalypt forests and timbered areas, including cultivated land and orchards.	**Unlikely.** Suitable habitat does not occur within Survey Areas and only one confirmed record has been made within 10km of the current Survey Areas.	**Unlikely.** Suitable habitat does not occur within Survey Areas and only one confirmed record has been made within 10km of the current Survey Areas.	**Unlikely.** Suitable habitat does not occur within Survey Areas and only one confirmed record has been made within 10km of the current Survey Areas.	DBCA
Pluvialis fulva	Pacific Golden Plover	MI	MI	The Pacific Golden Plover breeds on the Arctic tundra in western Alaska. It winters in South America and islands of the Pacific Ocean to India, Indonesia and Australia. In Australia it is widespread along the coastline. Pacific Golden Plovers usually occur on beaches, mudflats and sandflats (sometimes in vegetation such as mangroves, low saltmarsh such as Sarcocornia, or beds of seagrass) in sheltered areas including harbours, estuaries and lagoons, and also in evaporation ponds in saltworks. The species is also sometimes recorded on islands, sand and coral cays and exposed reefs and rocks (DEE 2019b).	**Unlikely.** Suitable mudflats, salt-flats and sheltered coastal habitat is not present, and less than 10 DBCA records have been made within 10km of the Survey Areas.	**Unlikely.** Suitable mudflats, salt-flats and sheltered coastal habitat is not present, and less than 10 DBCA records have been made within 10km of the Survey Areas.	**Unlikely.** Suitable mudflats, salt-flats and sheltered coastal habitat is not present, and less than 10 DBCA records have been made within 10km of the Survey Areas.	PMST, DBCA
Pluvialis squatarola	Grey plover	MI	MI	The Grey Plover inhabits entirely coastal areas where they typically reside in sheltered areas such as estuaries and lagoons with mudflats and sandflats. (DCCEEW)	**Unlikely**. Known to occur locally, with numerous DBCA records within a 5km radius of the current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. Known to occur locally, with numerous DBCA records within a 5km radius of the current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline. Any visitation would be infrequent vagrant occurrence.	**Unlikely**. Known to occur locally, with numerous DBCA records within a 5km radius of the current Survey Areas. However, the Survey Areas lacks suitable shallow extensive shoreline. Any visitation would be infrequent vagrant occurrence.	PMST, DBCA
Sterna dougallii	Roseate Tern	MI	MI	The Roseate Tern occurs in coastal and marine areas in subtropical and tropical seas. The species inhabits rocky and sandy beaches, coral reefs, sand cays and offshore islands. Birds rarely occur in inshore waters or near the mainland, usually venturing into these areas only accidentally, when nesting islands are nearby (Higgins & Davies 1996).	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST
Sternula albifrons	Little Tern	MI	MI	In Australia, Little Terns inhabit sheltered coastal environments, including lagoons, estuaries, river mouths and deltas, lakes, bays, harbours and inlets, especially those with exposed sandbanks or sand-spits, and also on exposed ocean beaches (DCCEEW 2022).	**Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST
Sternula nereis nereis	Australian Fairy Tern	VU	VU	The Fairy Tern is approximately 22–27 cm in length, 70 g in weight and has a wingspan of 44–53 cm (Higgins & Davies 1996). The Fairy Tern is bulky and round bodied (Simpson & Day 2004). The breeding plumage of both sexes is pale grey-white, with a black crown, nape, ear coverts and patch in front of the eyes (square to round in shape). The forehead is white and the bill is orange-yellow (Higgins & Davies 1996). Legs are dull yellow and the iris is dark brown (Lindsey 1986a). The species is gregarious and often found in flocks of 50–150 birds. However the bird is also seen singularly or in pairs (Higgins & Davies 1996). The Fairy Tern (Australian) nests on sheltered sandy beaches, spits and banks above the high tide line and below vegetation. The subspecies has been found in embayments of a variety of habitats including offshore, estuarine or lacustrine (lake) islands, wetlands and mainland coastline (Higgins & Davies 1996; Lindsey 1986a). The bird roosts on beaches at night (Higgins & Davies 1996). Within Australia, the Fairy Tern occurs along the coasts of Victoria, Tasmania, South Australia and Western Australia; occurring as far north as the Dampier Archipelago near Karratha.	**Unlikely**. The Survey Areas lacks consistent, suitable habitat for feeding and nesting only 6 confirmed DBCA records have been made within 10km of the Survey Areas.	**Unlikely**. The Survey Areas lacks consistent, suitable habitat for feeding and nesting only 6 confirmed DBCA records have been made within 10km of the Survey Areas.	**Unlikely**. The Survey Areas lacks consistent, suitable habitat for feeding and nesting only 6 confirmed DBCA records have been made within 10km of the Survey Areas.	PMST, DBCA

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		State	Federal					
Thalassarche carteri	Indian Yellow-Nosed Albatross	VU, MI	VU, MI	*Thalassarche carteri* breeds on Amsterdam, Crozet Islands, Kerguelen Islands, and St Paul Islands (French Southern Territories) and on Prince Edward Island (South Africa). Breeding It breeds on slopes or cliffs, typically in bare, rocky areas but sometimes in tussock-grass and ferns (Brooke 2004). Foraging range Satellite-tracking of birds from Amsterdam Island has shown that breeding birds forage up to 1,500 km from the colony (Pinaud and Weimerskirch 2007). (Birdlife 2020). In Australian territory, Grey-headed Albatross breed on the southern and western flanks of Petrel Peak, Macquarie Island (Copson 1988). The Grey-headed Albatross has bred in this same restricted area on Macquarie Island for at least the past 30 years (Terauds et al. 2005).	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST, DBCA
Thalassarche chrysostoma	Grey-headed Albatross	VU	VU	The Grey-headed Albatross is a medium sized albatross with a length of 70–85 cm, a wingspan of 1.8–2.05 m, males weigh 3.4–3.7 kg and females weigh 3–3.6 kg (Marchant & Higgins 1990). Adults have a distinct combination of a wholly grey head, neck and mantle, and a black bill with narrow yellow stripes along the culmen and the bottom of the lower mandible. Like the majority of albatross, the Grey-headed Albatross is marine, pelagic and migratory. Its habitat includes subantarctic, subtropical, and occasionally Antarctic waters in the Pacific, Indian, Atlantic and Southern Oceans (del Hoyo et al. 1992; Marchant & Higgins 1990). In Australian territory, Grey-headed Albatross breed on the southern and western flanks of Petrel Peak, Macquarie Island (Copson 1988). The Grey-headed Albatross has bred in this same restricted area on Macquarie Island for at least the past 30 years (Terauds et al. 2005).	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	DBCA
Thalassarche impavida	Campbell Albatross	VU, MI	VU, MI	The Campbell Albatross is a medium sized albatross, with a wingspan of 210–250 cm. Like the Black-browed Albatross (*Thalassarche melanophris*), adult Campbell Albatross have a white head with a distinctive black brow, bright yellow-orange bill and broad black leading edge on the underwing. The Campbell Albatross differs from the Black-browed Albatross in having a heavier black brow (more extensive in front of the eye); a honey coloured (not dark-brown) iris; slightly broader black leading edge on underwing; and a series of bold streaks running from the elbow and extending inwards to the base of the wing, creating an isolated white patch in the centre of the wing-pit (Marchant & Higgins 1990). The Campbell Albatross is a marine sea bird inhabiting sub-Antarctic and subtropical waters from pelagic to shelf-break water habitats (Marchant & Higgins 1990). The Campbell Albatross breed on Campbell Island (Marchant & Higgins 1990). They make their nests on tussock-covered ledges and terraces of cliffs, slopes and hills, overlooking the sea or valleys, and on the summits of rocky islets (Bailey & Sorenson 1962; Downes et al. 1959; Weimerskirch et al. 1986). The Campbell Albatross is a non-breeding visitor to Australian waters. After breeding, birds move north and may enter Australia's temperate shelf waters (Marchant & Higgins 1990).	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST

Species name	Common name	Status		Habitat requirements	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
		State	Federal					
Thalassarche melanophris	Black-browed Albatross	VU, MI	VU, MI	The Black-browed Albatross is 80–95 cm in length, has a mass of 3–5 kg and a wingspan of 210–250 cm (Marchant & Higgins 1990). Adults of either gender are white with dark-brown irides; an orange-yellow bill; a black brow, back, upperwing and tail; broad black edges to the underwing; and bluish-grey legs and feet (Brooke 2004; Marchant & Higgins 1990). Juvenile and immature birds can be distinguished from the adults by the colour and pattern of the plumage and by the darker bill which has a black tip (Brooke 2004; Marchant & Higgins 1990). The Black-browed Albatross is a marine species that inhabits Antarctic, subantarctic and temperate waters and occasionally enters the tropics (Brooke 2004; Marchant & Higgins 1990; Tickell 2000; Woehler et al. 1991). It can tolerate a broad range of sea-surface temperatures from 0–24º C (Ainley et al. 1984; Bierman & Voous 1950; Brown et al. 1975; Grindley 1981; Reid et al. 2002), and it forages around the breaks of continental and island shelves and across nearby underwater banks (Prince et al. 1998; Reid et al. 2002; Terauds et al. 2006; Weimerskirch et al. 1988, 1997), but also frequents other marine habitats, such as oceanic waters (Reid et al. 2002; Terauds et al. 2006; Woehler et al. 1991) and the iceberg belt at the limit of the Antarctic pack ice (Falla 1937; Hicks 1973; Murphy 1936; Raymond & Woehler 2003; Woehler et al. 2003). The Black-browed Albatross breeds on subantarctic and peri-antarctic islands (Marchant & Higgins 1990) in colonies located on terraces of coastal cliffs, slopes of nearby hills, summits of rocky islets or on flat or gently-sloping ground. The Black-browed Albatross breeds within Australian jurisdiction on Heard Island (Kirkwood & Mitchell 1992; Woehler 2006; Woehler et al. 2002), McDonald Islands (Gales 1998; Woehler 2006; Woehler et al. 2002), Macquarie Island (Copson 1988; Gales 1998; Scott 1994c) and Bishop and Clerk Islets (Scott 1994c; Gales 1998).	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST, DBCA
Thalassarche steadi	White-capped Albatross	VU, MI	VU, MI	The White-capped Albatross has a grey back and wings; faint or absent greyish wash on cheeks; and a white head, neck and rump. The underwing is mostly white with a narrow black margin and a small dark notch at the wing-pit. The bill is pale greyish straw colour, with a yellowish tip (Pizzey & Knight 1999). There is also a thin black eyebrow and a delicate, grey wash over the face.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	**Highly Unlikely**. The Survey Areas lacks suitable habitat and, and no DBCA records have been made within 10km of the Survey Areas.	PMST
Thalasseus bergii	Crested tern	MI	MI	This species inhabits tropical and subtropical coastlines, foraging in the shallow waters of lagoons, coral reefs, estuaries, bays, harbours and inlets, along sandy, rocky, coral or muddy shores, on rocky outcrops in open sea, in mangrove swamps and also far out to sea on open water. It shows a preference for nesting on offshore islands, low-lying coral reefs, sandy or rocky coastal islets, coastal spits, lagoon mudflats, and artificial islets in saltpans and sewage works within 3 km of the coast. (BirdLife International, 2023)	**Possible**. Known to occur locally with numerous DBCA records within 5km of the Survey Areas. While suitable habitat for foraging and feeding is not present in quantity, there is the potential for occasional visitation.	**Possible**. Known to occur locally with numerous DBCA records within 5km of the Survey Areas. While suitable habitat for foraging and feeding is not present in quantity, there is the potential for occasional visitation.	**Likely.** Known to occur locally with numerous DBCA records within 5km of the Survey Areas and there is potential for occasional feeding and foraging utilisation,.	DBCA
Ixobrychus dubius	Australian little bittern	P4		The Australian Little Bittern occurs in diverse freshwater swamp habitats, mainly where tall rushes, reeds, Typha (cumbungi), shrub thickets or other dense cover is inundated by at least 30 cm of water. It can be found in vast swamps, but unlike the Australasian Bittern, it often inhabits small patches of dense wetland vegetation such as Typha along drains or in small urban lakes. (Birdlife Australia, 2023)	**Unlikely.** Suitable wetland and swamp habitat is not present and no DBCA records have been made within 10km of the Survey Areas for 50 years.	**Unlikely.** Suitable wetland and swamp habitat is not present and no DBCA records have been made within 10km of the Survey Areas for 50 years.	**Unlikely.** Suitable wetland and swamp habitat is not present and no DBCA records have been made within 10km of the Survey Areas for 50 years.	DBCA
Xenus cinereus	Terek Sandpiper	VU, MI	VU, MI	In Australia, the Terek Sandpiper has a primarily coastal distribution, with occasional records inland. It is more widespread and common in northern and eastern Australia than southern Australia (DEE 2018). The Terek Sandpiper mostly forages in the open, on soft wet intertidal mudflats or in sheltered estuaries, embayments, harbours or lagoons. The species has also been recorded on islets, mudbanks, sandbanks and spits, and near mangroves and occasionally in samphire (Halosarcia spp.). Birds are seldom near the edge of water, however, birds may wade into the water (Marchant & Higgins 1993).	**Highly Unlikely.** Suitable habitat for the species does not occur, no DBCA recordings have been made within 10km and the Survey Areas are to the very outer limits of the species known range.	**Highly Unlikely.** Suitable habitat for the species does not occur, no DBCA recordings have been made within 10km and the Survey Areas are to the very outer limits of the species known range.	**Highly Unlikely.** Suitable habitat for the species does not occur, no DBCA recordings have been made within 10km and the Survey Areas are to the very outer limits of the species known range.	PMST

Species name	Common name	Status		Habitat requirements	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
		State	Federal					
Bettongia penicillata ogilbyi	Woylie	EN	EN	Preferred habitat for the Woylie includes dense undergrowth, logs and rock-cavities and occasionally in burrows (Burbidge 2004). Scattered Woylie populations may be found throughout the Jarrah Forest in the south-west corner of WA. Extant naturally occurring populations of the species are restricted to three small wheatbelt reserves – Dryandra Woodland, Tutanning Nature Reserve and Perup Forest. All are characterised by the presence of thickets of the plant Gastrolobium (Van Dyck and Strahan 2008). The species is now restricted to forests and areas where predation has been controlled (or excluded). It rests during the day in a well-concealed nest, built over a shallow depression. The nest is most commonly built using long strands, of grasses, but other material such as strips of bark are also used (in the forest) or dried seagrass and/or triodia (in arid coastal areas) (Freegard 2007).	**Highly unlikely.** The Survey Areas is beyond the current range and lacks suitable habitat.	**Highly unlikely.** The Survey Areas is beyond the current range and lacks suitable habitat.	**Highly unlikely.** The Survey Areas is beyond the current range and lacks suitable habitat.	PMST
Dasyurus geoffroii	Chuditch	Vu	Vu	The Chuditch inhabits eucalypt forest (especially Jarrah, Eucalyptus marginata), dry woodland and mallee shrublands. In Jarrah Forest, Chuditch populations occur in both moist, densely vegetated, steeply sloping forest and drier, open, gently sloping forest. Most diurnal resting sites in sclerophyll forest consist of hollow logs or earth burrows (Van Dyke & Strahan, 2008). The species can travel large distances, has a large home range and is sparsely populated through a large portion of its range.	**Highly unlikely.** The Survey Areas is beyond the current range and lacks suitable habitat.	**Highly unlikely.** The Survey Areas is beyond the current range and lacks suitable habitat.	**Highly unlikely.** The Survey Areas is beyond the current range and lacks suitable habitat.	PMST, DBCA
Hydromys chrysogaster	Water-rat, rakali	P4		Water-rats live primarily in a wide variety of freshwater habitats, from sub-alpine streams and other inland waterways to lakes, swamps, farm dams and irrigation channels and are thought to be one of the few native species to have at least partially benefited from human encroachment (Gardner and Serena, 1995).	**Unlikely.** Despite known locally for within 5km of the Survey Areas, the Survey Areas lacks suitable habitat and wetland connectivity, and no evidence of feeding or foraging presence was present during field surveys within the Survey Areas.	**Unlikely.** Despite known locally for within 5km of the Survey Areas, the Survey Areas lacks suitable habitat and wetland connectivity, and no evidence of feeding or foraging presence was present during field surveys within the Survey Areas.	**Unlikely.** Despite known locally for within 5km of the Survey Areas, the Survey Areas lacks suitable habitat and wetland connectivity, and no evidence of feeding or foraging presence was present during field surveys within the Survey Areas.	DBCA
Isoodon obesulus fusciventer	Quenda	P4		The Quenda prefers dense scrubby, often swampy, vegetation with dense cover up to one metre high. However, it also occurs in woodlands, and may use less ideal habitat where this habitat occurs adjacent to the thicker, more desirable vegetation. The species often feeds in adjacent forest and woodland that is burnt on a regular basis and in areas of pasture and cropland lying close to dense cover (Van Dyck and Strahan, 2008).	**Unlikely** Survey Areas lacks suitable habitat and bushland connectivity without adequate cover and local urban vegetation to allow persistence and utilisation as a linkage corridor.	**Unlikely** Survey Areas lacks suitable habitat and bushland connectivity without adequate cover and local urban vegetation to allow persistence and utilisation as a linkage corridor.	**Possible.** Survey Areas lacks suitable habitat and bushland connectivity, however there is the potential for utilising the Survey Areas as an occasional foraging or linkage purpose in revegetated sections.	DBCA
Notamacropus irma	Western Brush Wallaby	P4		The Western Brush Wallaby is found primarily in open forest or woodland, particularly favouring open, seasonally wet flats with low grasses and open scrubby thickets. It is also found in some areas of mallee and heathland, and is uncommon in karri forest (DEC, 2012b; Van Dyck & Strahan, 2008).	**Highly Unlikely** The Survey Areas lacks suitable habitat and the Survey Areas is outside of the current typical species range, with previous records now quite old.	**Highly Unlikely.** The Survey Areas lacks suitable habitat and the Survey Areas is outside of the current typical species range, with previous records now quite old.	**Highly Unlikely.** The Survey Areas lacks suitable habitat and the Survey Areas is outside of the current typical species range, with previous records now quite old.	DBCA
Phascogale tapoatafa wambenger	south-western brush-tailed phascogale, wambenger	CD		The southwest Western Australia Brush-tailed Phascogale have been observed in dry sclerophyll forests and open woodlands that contain hollow-bearing trees. Records are less common in high rainfall areas. (DPAW, 2012)	**Highly Unlikely** The Survey Areas lacks suitable habitat and the Survey Areas is outside of the current typical species range, with previous records now quite old.	**Highly Unlikely.** The Survey Areas lacks suitable habitat and the Survey Areas is outside of the current typical species range, with previous records now quite old.	**Highly Unlikely.** The Survey Areas lacks suitable habitat and the Survey Areas is outside of the current typical species range, with previous records now quite old.	DBCA
Pseudocheirus occidentalis	Western Ringtail Possum	CR	CR	The Western Ringtail Possum occurs in and near coastal Peppermint Tree (*Agonis flexuosa*) forest and Tuart (*Eucalyptus gomphocephala*) dominated forest with a Peppermint Tree understorey from Bunbury to Albany. Also occurs in Jarrah (*Eucalyptus marginata*) forest and Jarrah-Marri (*Corymbia calophylla*) forest associated with Peppermint Tree (Van Dyck & Strahan 2008).	**Highly Unlikely** The Survey Areas lacks suitable habitat and the Survey Areas is outside of the current typical species range, with previous records now quite old.	**Highly Unlikely.** The Survey Areas lacks suitable habitat and the Survey Areas is outside of the current typical species range, with previous records now quite old.	**Highly Unlikely.** The Survey Areas lacks suitable habitat and the Survey Areas is outside of the current typical species range, with previous records now quite old.	PMST, DBCA

Species name	Common name	Status		Habitat requirements	LOO – Elizabeth Quay	LOO - Applecross	LOO – Matilda Bay	Source
		State	Federal					
Ctenotus ora	Coastal Plains skink	P3		The coastal plains skink (*Ctenotus ora*) is a species of lined or striped Ctenotus skinks**,** found on the Swan Coastal Plain south of Perth, Western Australia growing to around 6 centimetres in length from snout to vent (Wilson & Swan, 2012). It is dark in colour, with a continuous white dorsolateral stripe. The species has only been found in low numbers in a small stretch of sand dunes on the Swan Coastal Plain south of Perth, Western Australia**,** between Dunsborough and Mandurah (ALA, 2024).	**Unlikely** The Survey Areas lacks suitable habitat in terms of sandy coastal habitat with dunes and well vegetated woodlands and sandplains, and previous DBCA records are quite old.	**Unlikely** The Survey Areas lacks suitable habitat in terms of sandy coastal habitat with dunes and well vegetated woodlands and sandplains, and previous DBCA records are quite old.	**Unlikely** The Survey Areas lacks suitable habitat in terms of sandy coastal habitat with dunes and well vegetated woodlands and sandplains, and previous DBCA records are quite old.	DBCA
Lerista lineata	Perth Slider	P3		A slender species of skink endemic to Western Australia with two digits on forelimbs, three on hindlimbs, fused eyelids and broad, black lateral stripe. This species has a strong habitat preference for sandy, coastal heath and shrubland, particularly between Perth and Mandurah (Wilson & Swan, 2013).	**Unlikely** The Survey Areas lacks suitable habitat in terms of sandy coastal habitat with dunes and well vegetated shrubs, and previous DBCA records are quite old.	**Unlikely** The Survey Areas lacks suitable habitat in terms of sandy coastal habitat with dunes and well vegetated shrubs, and previous DBCA records are quite old.	**Unlikely** The Survey Areas lacks suitable habitat in terms of sandy coastal habitat with dunes and well vegetated shrubs, and previous DBCA records are quite old.	DBCA
Neelaps calonotos	Black-striped snake	P3		This Black-striped Snake is restricted to the sandy coastal strip near Perth, between Mandurah and Lancelin. It occurs on dunes and sandplains vegetated with heaths and eucalypt/banksia woodlands. This species is seriously threatened by increasing development within its restricted distribution (Wilson and Swan, 2013).	**Unlikely** The Survey Areas lacks suitable habitat in terms of sandy coastal habitat with dunes and well vegetated woodlands and sandplains, and previous DBCA records are quite old.	**Unlikely** The Survey Areas lacks suitable habitat in terms of sandy coastal habitat with dunes and well vegetated woodlands and sandplains, and previous DBCA records are quite old.	**Unlikely** The Survey Areas lacks suitable habitat in terms of sandy coastal habitat with dunes and well vegetated woodlands and sandplains, and previous DBCA records are quite old.	DBCA
Euoplos inornatus	Inornate trapdoor spider (northern Jarrah Forest)	P3		Northern Jarrah Forrest vegetation comprises Jarrah-Marri Forest in the west with Bullich and Blackbutt in the valleys grading to Wandoo and Marri woodlands in the east with Powder bark on breakaways. There are extensive but localised sand sheets with Banksia low woodlands. Heath is found on granite rocks and as a common understorey of forests and woodlands in the north and east (DPAW, 2002)	**Highly Unlikely** The Survey Areas lacks suitable habitat and only two confirmed records have been made within 10km of the Survey Areas, with none within the past decade.	**Highly Unlikely** The Survey Areas lacks suitable habitat and only two confirmed records have been made within 10km of the Survey Areas, with none within the past decade.	**Highly Unlikely** The Survey Areas lacks suitable habitat and only two confirmed records have been made within 10km of the Survey Areas, with none within the past decade.	DBCA
Hesperocolletes douglasi	Douglas' Broad-headed Bee	CR	CR	This is a highly localised and endemic bee species that is about the same size as a honeybee (body length approximately 12 mm), generally black and brown and moderately hairy" (Houston 2014). It is a moderate-sized, non-metallic species similar in appearance to bees from the genera Trichocolletes, Paracolletes and Leioproctus (Michener 2007). As with the majority of native bees, this species is solitary, with each female constructing its own nest and rearing its own offspring and male bees playing no part in nest construction or brood care, ground-nesting and univoltine (single generation per year) with the emergence of adult bees timed to coincide with flowering of the food plants. The most recently found specimens were collected on a Pepper and Salt shrub (Philotheca spicata) during a survey of plant-pollinator interaction networks in Banksia woodland remnants in the Swan Coastal Plain (SCP) in the Perth Region for a PhD research project on the spatial energetics of pollination failure in habitat restoration.	**Highly Unlikely** The Survey Areas lacks suitable habitat and no confirmed records have been made within 10km of the Survey Areas.	**Highly Unlikely** The Survey Areas lacks suitable habitat and no confirmed records have been made within 10km of the Survey Areas.	**Highly Unlikely** The Survey Areas lacks suitable habitat and no confirmed records have been made within 10km of the Survey Areas.	PMST
Leioproctus douglasiellus	Native Short-tongued Bee	CR	CR	*Leioproctus douglasiellus*, is a small black bee which belongs to a group of species characterised by short tongues. Female specimens are 8 mm in length, with a wing length of almost 5 mm (DEC, 2009). L. *douglasiellus* is now thought to occur in three locations within the Perth metropolitan area ranging from Cannington to Forrestdale, as reported in the 2006-2008 Rare Native Bee Survey results conducted by the Western Australian Department of Environment and Conservation (DEC) (Swan Region) (DEC, 2009). The current extent of occurrence is 24.3 km2 , the area of occupancy is 0.2 km2 , and there has been an inferred decline of suitable habitat since surveys undertaken in 1954 due to a large portion of the Swan Coastal Plain being significantly altered, especially around the Perth metropolitan area where the only known populations of the species occur (DEC, 2009). Specimens of L. douglasiellus have been collected on two plant species, both of which are on the DEC Priority Flora list: Goodenia filiformis (Priority 3) and Anthotium junciforme (Priority 4) (DEC, 2009).	**Highly Unlikely** The Survey Areas lacks suitable habitat and only two records of the species have been made, both of which have occurred only in high diversity and high biodiversity value wetlands.	**Highly Unlikely** The Survey Areas lacks suitable habitat and only two records of the species have been made, both of which have occurred only in high diversity and high biodiversity value wetlands.	**Highly Unlikely** The Survey Areas lacks suitable habitat and only two records of the species have been made, both of which have occurred only in high diversity and high biodiversity value wetlands.	PMST, DBCA

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		State	Federal					
Hylaeus globuliferus	Woolybush bee	P3		Hylaeus globuliferus is known to be associated with Adenanthos cygnorum and Banksia attenuata amongst other native plants (Houston 2018)	**Highly Unlikely** The Survey Areas lacks suitable habitat and only one confirmed record of the species has been made within 10km of the current Survey Areas, which is more than 50 years old.	**Highly Unlikely** The Survey Areas lacks suitable habitat and only one confirmed record of the species has been made within 10km of the current Survey Areas, which is more than 50 years old.	**Highly Unlikely** The Survey Areas lacks suitable habitat and only one confirmed record of the species has been made within 10km of the current Survey Areas, which is more than 50 years old.	DBCA
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	P3		This trapdoor species is native to the Swan Coastal Plain, and favours low lying coastal plain systems, mainly covered with woodlands. Preferred habitats include those dominated by Banksia or Tuart on sandy soils, Casuarina obesa on outwash plains, and paperbark in swampy areas. In the east, the plain rises to duricrusted Mesozoic sediments dominated by Jarrah woodland. (DPAW, 2002)	**Unlikely** Even though the species is known locally from numerous neighbouring woodlands and protected sites within 5km of the Current Survey Areas, the Survey Areas itself lacks suitable habitat of any kind for persistence.	**Unlikely** Even though the species is known locally from numerous neighbouring woodlands and protected sites within 5km of the Current Survey Areas, the Survey Areas itself lacks suitable habitat of any kind for persistence.	**Unlikely** Even though the species is known locally from numerous neighbouring woodlands and protected sites within 5km of the Current Survey Areas, the Survey Areas itself lacks suitable habitat of any kind for persistence.	DBCA
Synemon gratiosa	Graceful Sunmoth	P4		Graceful Sun Moth is associated with two habitat types: Coastal heathland on Quindalup dunes where it is restricted to secondary sand dunes due to the abundance of the preferred host plant *Lomandra maritima*. Targeted surveys by WA DEC in 2010 indicate that Graceful Sun Moth is recorded at substantially higher rates on the *L. maritima* habitat and is therefore more numerous/dense in this coastal habitat (WA DEC 2011). *Banksia* woodland on Spearwood and Bassendean dunes, where the second known host plant *L. hermaphrodita* is widespread. The relative contribution of the *Banksia* woodland (*L. hermaphrodita*) habitat to the total population and area of occupied habitat of the Graceful Sun Moth is small (WA DEC 2011).	**Unlikely** The Survey Areas lacks suitable habitat, and only three recent records have been made within 10km of the Survey Areas.	**Unlikely** The Survey Areas lacks suitable habitat, and only three recent records have been made within 10km of the Survey Areas.	**Unlikely** The Survey Areas lacks suitable habitat, and only three recent records have been made within 10km of the Survey Areas.	DBCA
Westralunio carteri	Carter's freshwater mussel	Vu	Vu	Carter's Freshwater Mussel is usually found in freshwater river pools. They are most common in areas with muddy, silty and sandy bottoms and flowing permanent water. Environmental tolerances of *W. carteri* are not precisely known but they can be found where water temperatures range from 4° C to over 30° C. Formerly this species occurred widely through the southwest including interior rivers of southwest such as Avon, Murray and Blackwood, however Salination of many waterways has severely reduced this species distribution (DCCEEW 2022).	**Highly unlikely** The Survey Areas lacks suitable habitat and all recent nearby records are of translocations at specific, core habitat locations.	**Highly unlikely** The Survey Areas lacks suitable habitat and all recent nearby records are of translocations at specific, core habitat locations.	**Highly unlikely** The Survey Areas lacks suitable habitat and all recent nearby records are of translocations at specific, core habitat locations.	PMST, DBCA

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The Power of Commitment