City of **Bayswater**



Maylands Samphire Flats Environmental Management Plan 2020 - 2030





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Contents

1.0	Introduction	4
1.1	Zoning and Land Use	5
1.2	2 Management Plan Aim	5
1.3	Roles and responsibilities	6
2.0	Methodology	7
2.1	Desktop and Literature Review	7
2.2	2 On-ground Survey Methodology	7
2	2.2.1 Flora Species	7
2	2.2.2 Vegetation Type	7
2	2.2.3 Vegetation Condition	7
2	2.2.4 Fauna On-Ground Methodology	8
2	2.2.5 Limitations	8
3.0	Existing Environment	9
3.1	Landform and Soils	9
3.2	P. Heritage	9
3.3	B Community Involvement	10
3.4	Hydrology	10
3.5	Infrastructure and Signage	10
3.6	Native Flora and Vegetation	13
3	3.6.1 Native Flora	13
3	3.6.2 Vegetation Type	13
3.7	Vegetation Condition	14
3.8	B Fauna	15
3.9	Threatened and Priority Fauna Species	16
4.0	Threats	17
4.1	Climate Change	17
4.2	2 Introduced Flora	17
4.3	3. Acid Sulphate Soils	17
4.4	Hydrological Issues	18
4.5	Introduced Fauna	18
4.6	Human Recreation	18
4.7	Diseases and Pathogens	19
4.8	Nutrient and Pollution Contamination	19
5.0	Revegetation Plan	20

5.1 Weed Management	21
Management Strategies	22
Manual Weed Control	22
Chemical Weed Control	22
Weed Control Post Revegetation	23
Weed Treatment	23
Herbicide Use in Wetlands	23
5.2 Biomass removal	27
5.3 Planting	27
5.5 Capital works	29
5.5.1 Limestone Path Installation and Sign Relocation	29
6.0 Works plan	30
7.0 Cost schedules	34
8.0 References	38
Appendix 1 – NatureMap (5km)	40
Appendix 2 – Protected Matters Search Tool (5km)	62
Appendix 3 – Flora Species List	77
Appendix 4 – Fauna Species List	79
Appendix 5 – Quadrat Data	81
Appendix 6 – Weed Maps	85
Appendix 7 – Vegetation Structural Classes	90
Annendix 8 – Vegetation Condition Rating Scale	91

1.0 Introduction

The City of Bayswater contracted Natural Area Consulting Management Services (Natural Area) to undertake a level 2 flora survey (including weed mapping), level 1 fauna reconnaissance survey and infrastructure survey in order to prepare a 10 year costed management plan to restore the Maylands Samphire Flats. The survey site contains the threatened ecological community, *Subtropical and Temperate Coastal Saltmarsh* with areas of the site having been impacted by historic practices and disturbed by invasive weeds.

The site is located 4.5 km east of the Perth central business district in the south ward of the City of Bayswater. It is bordered by the Maylands Sports and Recreation Club, Maylands Tennis club, Clarkson Road, Clarkson Reserve and the Swan River. Maylands Samphire occupies an area of approximately 7.4 hectares (Figure 1).



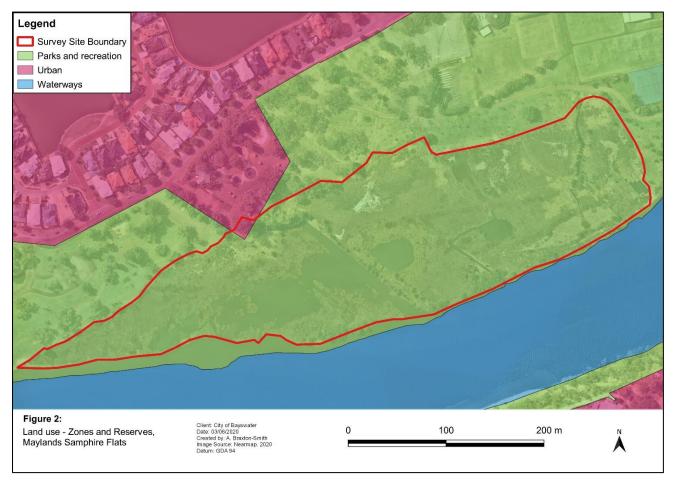
Vegetation on site consists of excellent condition saltmarsh adjacent the Swan River, bordered by degraded areas along the edge of the samphire with high a density of weeds including but not limited to:

- Invasive running grasses such as Couch, Buffalo Grass and Kikuyu
- One-leaf Cape Tulip (Moraea flaccida), Declared Pest
- Brazilian Pepper (Schinus terebinthifolia)
- Giant Reed (*Arundo donax*)
- Divided Sedge (Carex divisa)

- Perennial Veldt Grass (Ehrharta calycina)
- Bulbil Watsonia (Watsonia meriana).

A flora survey undertaken in May 2020 determined 1 vegetation type (Appendix 1), with the Samphire low heathland being assessed as a threatened ecological community; this is consistent with the Subtropical and Temperate Coastal Saltmarsh listed under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) (Department of Biodiversity, Conservation and Attraction, 2020d).

1.1 Zoning and Land Use



1.2 Management Plan Aim

The Management Plan will aim to:

- define current site conditions
- guide revegetation and weed control over 10 years
- describe restoration methodologies
- cost proposed works
- provide an indicative implementation schedule.

1.3 Roles and responsibilities

Maylands Samphire Flats has a number of built and natural elements that are required to be maintained to ensure service delivery. Table 1 identifies the relevant management items and their requirements.

Table 1: Management Roles and responsibilities

Management item	Responsibility	Action required
Dual use path	Engineering Services	 Undertake and document quarterly inspections Budget depreciation Undertake repairs as required
Domestic animals	Rangers and security	Undertake periodic patrolsEnforce local laws for dogs and cats
Mosquito and midge management	Environmental Health	 Undertake monitoring and implement control measures as required
Mowing	Parks and Gardens	 Maintain grass areas prevent infestation into natural areas
Natural area maintenance	Sustainability and environment	 Maintain natural areas for biodiversity
Rehabilitation of natural areas	Sustainability and Environment	 Implement a 10 year revegetation program
Trees within Natural areas	Sustainability and Environment	 Undertake inspections and maintain as required
Trees within Parkland	Parks and Gardens	 Undertake inspections and maintain as required
Water quality monitoring	Sustainability and environment	 Periodic monitoring of water quality monitoring

2.0 Methodology

2.1 Desktop and Literature Review

The desktop survey included reviewing online databases and literature to determine preliminary site characteristics, including:

- Natural resource info (NR Info) to determine soil types
- NatureMap to indicate the flora and fauna species (native and non-native) that could potentially occur (Appendix 1)
- Protected Matters Search Tool to determine if any matters of national environmental significance were likely to occur (Appendix 2)
- FloraBase to review the likelihood of significant flora listed as potentially present
- Western Australian Local Government Association (WALGA) Environmental Planning Tool to determine the potential for acid sulfate soils to occur
- Maylands Samphire Flats Hydrological Assessment Summary Report (Urbaqua, 2019)
- Samphire Survey, Maylands Wetlands (actis Environmental Services, 2018).

2.2 On-ground Survey Methodology

Natural Area botanists Sharon Hynes, Aster Braxton-Smith, Tshering Chekey undertook the onground level 2 flora, level 1 fauna and site assessment on 08 and 15 May 2020,

- recording vegetation type and condition using the scale attributed to Keighery (Government of Western Australia, 2000)
- recording the presence of significant flora, fauna and ecological communities
- recording locations and densities of introduced flora
- noting infrastructure, amenities and recreation areas
- noting threatening processes
- GPS locations of data was recorded using a handheld GPS device
- Photographs were taken of site features, vegetation types, and flora and fauna species where possible to do so.

2.2.1 Flora Species

Flora species (native and introduced) were recorded on observation within when the site was traversed on 08 and 15 May 2020, with the list of potential declared rare or priority flora species (NatureMap and Protected Matters Search Tool reports) used to guide targeted searches for those species.

2.2.2 Vegetation Type

The vegetation type was determined using the structural classes described in Bush Forever Volume 2 (Government of Western Australia, 2000) (Appendix 7), and records dominant over, middle and understorey species, with four 10 x 10 m guadrats set out across the site (Figure 3).

2.2.3 Vegetation Condition

Vegetation condition was assessed using the rating scale attributed to Keighery in *Bush Forever Volume 2* (Government of Western Australia, 2000) (Appendix 8). A Samsung Tablet with GPS mapping software (Mappt) used to differentiate the locations of the vegetation condition across the site and assist with mapping outcomes.



2.2.4 Fauna On-Ground Methodology

A level 1 fauna survey was undertaken during site assessment activities on the 08 and 15 May 2020. This included walking the site to record opportunistic sightings of fauna or indicative signs of their presence including calls, tracks and scats. Photographs were taken of fauna when possible to do so.

2.2.5 Limitations

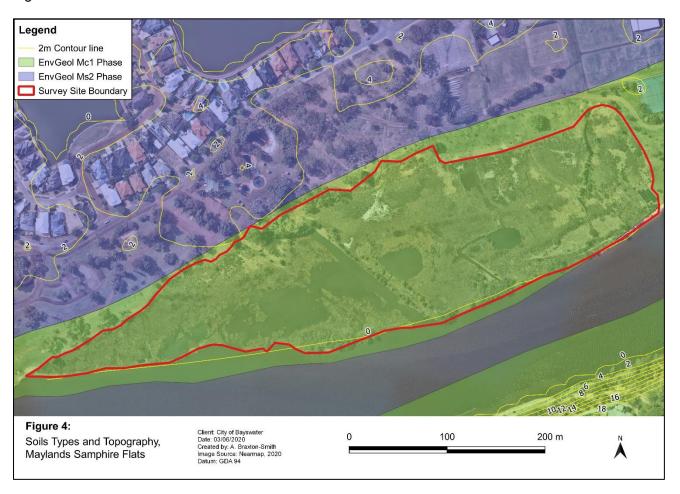
This survey was undertaken outside the optimal time of year for flora surveys in the South West Botanical Region, which is spring. Other limitations associated with the surveys include:

- database searches only provide an indication of what flora or fauna species may be present,
 with on-ground surveys required to confirm those actually present
- differing databases rely on information submitted via various reporting mechanisms, so all records of a particular species/ecological community specific area may not be complete
- information on species provided may include out-of-date species names, meaning that names need to be checked for currency
- herbarium records are largely limited to vouchered specimens
- on-ground surveys indicate species present at the time of the assessment, with species flowering at different times and not every year not always able to be identified
- some fauna species are highly mobile and may utilise the site as part of their range but may not be present on site at the time of the survey
- a level 1 fauna survey is reliant on observation at the time the survey is undertaken only, with no trapping activities or the installation of motion activated cameras to record species to record species that may be active at other times.

3.0 Existing Environment

3.1 Landform and Soils

There was only one soil type within the survey type, namely EnvGeol Mc 1 Phase (213Pj__Mc1) which is characterised as clayey silty with yellow brown to strong brown, blocky, mottled, soft, with variable clay content, dispersive in part and of alluvial origin (DPIRD, 2020). Contours within the survey site were 0 m AHD (Australian Height Datum) due to being bounded by the Swan River to the south and areas within the parkland reach up to 4 m AHD. Soils and contours are shown in Figure 4.



3.2 Heritage

A review of the Aboriginal Heritage Inquiry System (2020) determine two Aboriginal Heritage places occur within Maylands Samphire Flats (Department of Planning, Lands and Heritage (DPLH), 2020):

- Swan River Site 3536 mythological with no gender restrictions
- Perth Site 3753 historical, mythological, hunting place, named place, natural feature, no gender restrictions.

Section 174 of the Aboriginal Heritage Act 1972 states that it is an offence to excavate, destroy, damage, conceal or in any way alter an Aboriginal Heritage site. Any management activities carried out in the Maylands Samphire Flats needs to consider the presence of these sites, and if required, appropriate permits obtained from the DPLH prior to commencement. If any skeletal remains are

found during ground disturbance within the site a stop work order will need to be issued and police informed to determine the origins of the remains.

3.3 Community Involvement

Members of the community environment centre, Environment House initiated the Samphire Project at the adjacent Clackson Reserve in 2012 in consultation with Jeremy Maher, Environmental Coordinator at the City of Bayswater. This community group has become the Friends of Maylands Samphires. Members of the community group has undertaken several on-ground works which include weeding and revegetation in the saltmarsh. Several grants have enabled the community group to work with Apace to undertake weed control and the propagation of samphire and other species including *Suaeda australis* to supplement the natural regeneration of the area.

3.4 Hydrology

The Samphire Flats contains both conservation category and multiple use wetlands according to the Geomorphic Wetlands of the Swan Coastal Plain dataset (DBCA, 2020c). The conservation category wetland UFI 8477 is located in the center of the Flats, which is describes as the Maylands Golf Course Floodplain and the landform as a basin. The periphery of the Flats is multiple use wetland UFI 13378 and described as estuary-peripheral and the landform as a basin (DBCA, 2020c). The Swan River Estuary adjacent the south of the Flats is listed as conservation category wetland UFI 13316 and described as estuary waterbody (DBCA, 2020c). The Samphire Flats also make up part of the Swan River environmentally sensitive area (ESA) (DWER, 2020a).

According to the Interactive Groundwater Map (Department of Water and Environmental Regulation (DWER), 2020), depth to groundwater at Maylands Samphire Flats is between -1 m and increasing to 0.3 m along the eastern edge of the survey site. The site is a tidal wetland bordering the Swan River with groundwater flowing from the site into the River at low tide and from the River into the Flats at high tide, leading to a high groundwater salinity on site (Urbaqua, 2019).

There are five main stormwater drainage points entering the site from the northern suburban area, where freshwater flows into the Flats from the adjacent parkland, following rainfall events (Figure 5). Historical aerial imagery from the City of Bayswater imagery archive (2020) shows that the river water level has risen with the high tide water mark on the foreshore encroaching into the wetland/parkland on average between 5 and 15 m since 1953 and by up to 47 m in some places.

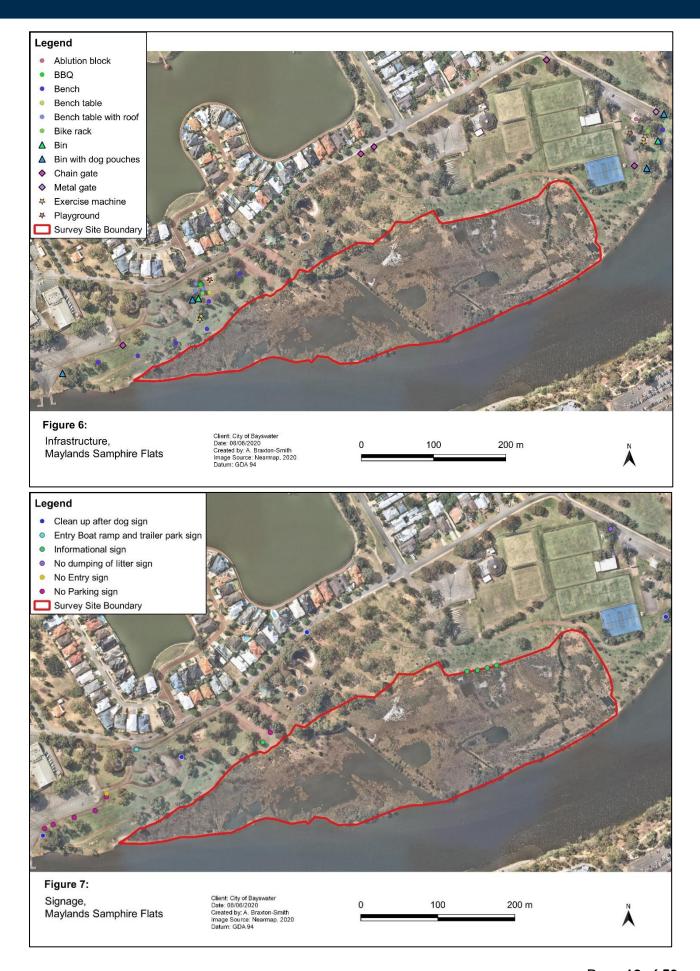
3.5 Infrastructure and Signage

The Samphire Flats contain minimal infrastructure, amenities and signage, with existing infrastructure present in the surrounding Public Open Space to the north of the Flats. Paths and tracks are shown in Figure 5, amenities and infrastructure in Figure 6 and signage in Figure 7. The Flats are not fenced with fencing and gates present around the periphery of the larger parkland areas and as a boundary with other properties and land use areas e.g. the Bowling Club and tennis courts.

Four informational signs to the north east of the site are right against existing vegetation and are not easily noticed or accessible by visitors utilising the footpath 35 m to the north of the signage (Figure 7). It is recommended that these signs are relocated adjacent the footpath to the north to be more

accessible by users of the park, and to allow revegetation of their current location as this area consistently floods in winter and is an ideal location to extend the current TEC.





3.6 Native Flora and Vegetation

3.6.1 Native Flora

A total of 18 native flora species from 11 families were recorded within the survey site. Six of the 11 native species were from the Chenopodiaceae family. Two of the native species recorded although native to Western Australia are not native to this local government area both being Wheatbelt species and have likely been planted within the site, namely *Eucalyptus camaldulensis* (River Gum) and *Atriplex semibaccata* (Berry Saltbush). A complete flora list is provided in Appendix 3 with examples of flora species recorded in the Flats are provided in Figure 8.

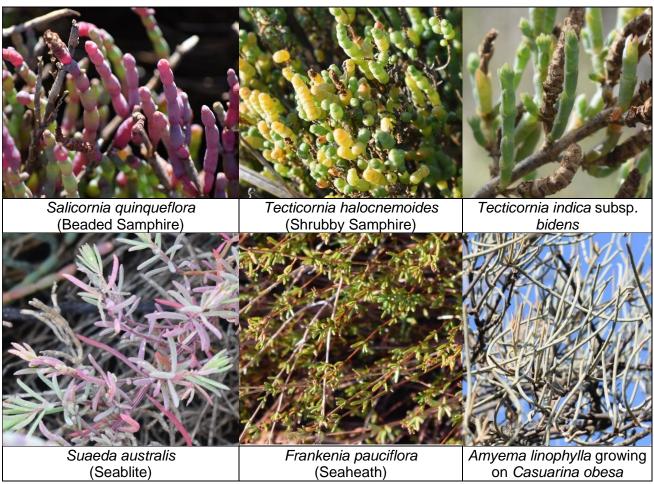


Figure 8: Examples of native flora

3.6.2 Vegetation Type

The vegetation type was determined using the structural classes described in Bush Forever Volume 2 (Government of Western Australia, 2000a), and records dominant over, middle and understorey species. One distinct vegetation type was recorded on site, namely the Samphire Closed Low Heath and this is described in Table 1.

Table 1: Vegetation type for the Maylands Samphire Flats

Name	Description	Photograph
Samphire	A mosaic of samphire	
Closed Low	species dominated by	
Heath	Salicornia quinqueflora and	
	Tecticornia indica subsp.	The second secon
	bidens with native herbs	
	Samolus repens, Suaeda	Control of the second s
7.4 ha area	australis throughout and	Annual Control of the
100% cover	scattered clusters of Juncus	
	kraussii; the S. quinqueflora	THE RESERVE OF THE PARTY OF THE
	occurs in lower elevated	STATE OF THE STATE
	and wetter areas, whilst the	
	T. indica subsp. bidens is	
	recorded in the higher	
	elevated and drier areas on	
	the periphery of the	
	wetland.	

3.6.2.1 Threatened Ecological Community

A review of the PMST report (DoEE, 2020) indicated the potential presence of the threatened ecological community (TEC) *Subtropical and Temperate Coastal Saltmarsh* listed as Vulnerable under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth). The vegetation type recorded on site, Samphire Closed Low Heath, has identifying characteristics and is an prime example of this TEC. A review of the priority and threatened ecological community database held by the Department of Biodiversity, Conservation and Attractions (2020d) indicated and reinforced the presence of the threatened ecological community *Subtropical and Temperate Coastal Saltmarsh*.

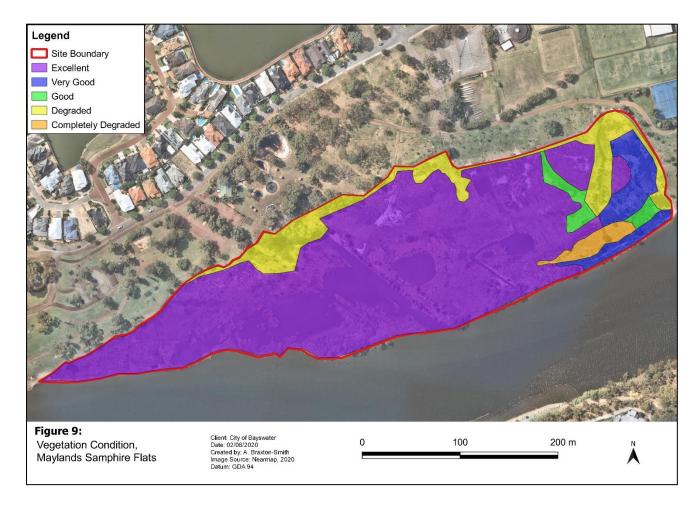
3.7 Vegetation Condition

Vegetation condition was assessed in accordance with the scale attributed to Keighery (1994) described in Bush Forever Vol. 2 (Government of Western Australia, 2000a). Vegetation condition ranged from Completely Degraded to Excellent, with the majority of the Samphire Flats in Excellent condition (Table 2, Figure 9). Lower condition areas occurred around the periphery of the wetland where edge effects and weed invasion was highest, and in the east end of the site where historic land clearing and degradation has caused increased weed density and altered land elevation.

Previous land clearing and infill of soil in this area has elevated the eastern end of the site leading to an increase in weed species that prefer drier areas and are not found over the remainder of the site such as Ryegrass. It has also lead to an increased abundance of *Tecticornia indica* subsp. bidens in this area which prefer better drained soils than the *Salicornia quinqueflora* and *Tecticornia halocnemoides* which prefer the wetter part of the wetland profile (Department of Conservation and Land Management, 2002).

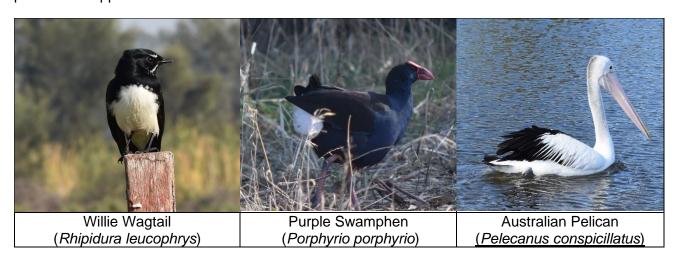
Table 2: Vegetation condition cover within Maylands Samphire Flats:

	Excellent	Very Good	Good	Degraded	Completely Degraded	Total
Area (ha)	5.72	0.40	0.19	0.78	0.14	7.23
Percent (%)	79.1	5.6	2.6	10.8	2.0	100



3.8 Fauna

A total of 26 native fauna species were recorded during the 2020 site assessment at Maylands Samphire Flats including 23 birds, one reptile and two invertebrates. Due to the small isolated nature of the reserve, and the fact that it is frequently inundated with water it is not unusual to get low numbers of mammals and reptiles. However, it is likely that a number of wetland skinks and amphibians would exist it the wetland, but a fauna trapping event would be required to determine the species present. Examples of species recorded are shown in Figure 10, with a total species list provided in Appendix 4.



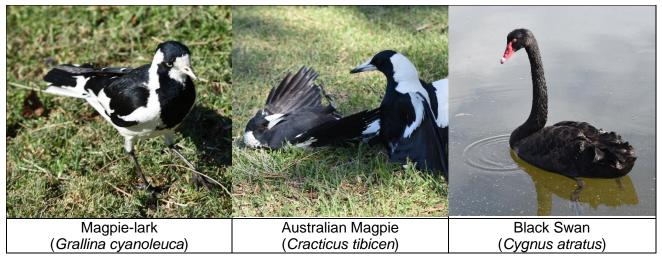


Figure 10: Examples of native fauna in Maylands Samphire Flats

3.9 Threatened and Priority Fauna Species

No threatened or priority species were recorded during the 2020 site assessment. A review of the DBCA's threatened and Priority fauna database identified Peregrine Falcon (Falco Peregrinus), Water Rat (*Hydromys chrysogaster*), Blue-billed Duck (*Oxyura australis*), Crested Tern (*Sterna bergii*), Carnaby's Cockatoo (*Calyptorhynchus latirostris*) as having previously been recorded within the Maylands Samphire Flats (DBCA, 2020d). As the bird species are highly mobile and some are migratory it is likely that they utilise the area for roosting and foraging or may fly over the sites at different times.

4.0 Threats

This Section discusses the current and potential threats to the Maylands Samphire Flats.

4.1 Climate Change

Climate change in the south west of Western Australia is expected to cause increased and more intense storm events, decreased rainfall, sea level rise and increased temperatures. These changes are likely to increase potential for erosion during storm events and increase water stress on plants with increased temperatures and decreased rainfall. This will increase stress on groundwater dependent species and may lead to changes in vegetation complexes and structures therefore affecting fauna habitat.

4.2 Introduced Flora

Many weeds present, total of 26 from 12 families, of which one the One-leaf Cape Tulip (*Moraea flaccida*) is classified as a category C3 declared pest on the under the Biosecurity and Agriculture Management Act 2007 (WA), which requires control by the land owner/manager to reduced the abundance and spread of the species (Figure 12). Weed control methodology and treatments are discussed in Section 5.1.



Figure 12: Declared pest One-leaf Cape Tulip (Moraea flaccida) in the Flats

4.3. Acid Sulphate Soils

Acid sulphate soils are naturally occurring soils that contain iron sulphides, primarily in the form of pyrite materials, formed under waterlogged conditions in fresh and saline wetlands around Western Australia. If left and not exposed to the air, they do not pose a significant risk to humans or the environment. However, when exposed to air, sulphuric acid is formed, which can lead to the release of heavy metals into the surrounding environment (Department of Environment Regulation, 2015). A review of the Environmental Planning Tool (2020) indicated that the Maylands Samphire Flats are at a high to moderate risk of acid sulfate soils occurring if the ground is disturbed (WALGA, 2020).

4.4 Hydrological Issues

A decline in tidal flushing and stormwater entering the site and this was considered a possible cause of reduced health in the eastern portion of the site as the area had been built up with sediment piles dumped here during construction of the surrounding areas. The possibility of opening this up to the river using a series of runnels was considered, however is suggested that this would not improve the health of the Samphire as the groundwater salinity is significantly higher than that of the River.

There are four main drainage points entering the site from the northern urban areas and where they enter there is a significant increase in weed density and diversity, so they are acting as weed dispersing vectors into the site and therein impact the integrity of the threatened ecological community. They also act as vectors for rubbish and litter into the site and secondly the adjacent River if not removed.

Historical aerial imagery from the City of Bayswater intramaps (2020) shows that the river water level has risen with the high tide water mark encroaching on average between 5 and 15 m into the wetland and surrounding foreshore areas since 1953 and by up to 47 m in some places.

4.5 Introduced Fauna

Two introduced fauna species and their tracks were recorded during the 2020 fauna survey. Signs of dogs walked along the informal tracks within the wetland were noted, and if not on lead they pose a threat to native fauna like the Priority 4 Water Rat and water birds. Introduced rat tracks were recorded along the foreshore edge although it cannot be determined whether they belong to the Black Rat (*Rattus rattus*) or the Brown Rat (*Rattus norvegicus*) as they are very similar in size. Introduced rats are common in urban areas and pose a threat to native fauna as they increase competition for resources and may feed on small vertebrates, such as young birds.





Domestic Dog tracks

Rai liacks

Figure 13: Introduce fauna tracks within Maylands Samphire Flats

4.6 Human Recreation

The four informational signs in the north-east of the site are starting to get encroached on by the adjacent vegetation and it is recommended that they are relocated north towards the existing footpath so users of the park can more readily read them. It is also recommended that a crushed

limestone pathway be installed around the periphery of the Samphire Flats, to create a hard border between the lawn in the park and the natural vegetation to assist with weed control. Crushed limestone is recommended so in the event of flooding or the natural encroachment of the river in future the path will be safely broken down into the native vegetation without leaving hazardous building materials like cement or bitumen.

There are a few informal paths along the riverbank, which many park user utilise to go fishing off the banks along the river in front of the Samphire Flats. It is recommended that the main track along the foreshore be left for passive recreation such as fishing, but any other car tracks and pedestrian tracks throughout the rest of the flats be closed and allowed to regenerate.

4.7 Diseases and Pathogens

No evidence of disease or pathogens within the survey site. Phytophthora cinnamomi is unlikely to be present with no species within the survey site susceptible. Although, other species of *Phytophthora* could still be present within the site, but unlikely as no unexplainable decline of vegetation was noted on site. If vegetation decline is noted in future and not attributed to hydrological changes or nutrient runoff into the site, then testing for diseases and pathogens may need to be considered

4.8 Nutrient and Pollution Contamination

Contamination from adjacent sources was noted during the 2020 site assessment with evidence of oils/fuel on the surface of the ground (Figure 14). The four drains allow road runoff into the site which poses a risk off carrying these sources of fuel and oils into the Flats. Boats and other engine crafts on the River are also a potential vector for the introduction of fuels and oils into the site when tidal inflows enter the wetland from the river at high tide.



Figure 14: Oils observed on surface of water within the Samphire Flats

5.0 Revegetation Plan

Revegetation works specified within this plan are planned to occur over a ten-year period from 2020 – 2030 within degraded areas. The degraded area has been split into 5 revegetation zones (Zones 1 to 5) with the additional Zone 6 located where the proposed extension of the vegetation boundary will occur (Figures 15 and 16; Table 3). Activities associated with revegetation include:

- clearing and removal of non-endemic vegetation
- site preparation including removal of rubbish and other deleterious materials
- pre-planting weed control
- manual weed removal
- installation of tubestock
- post planting weed control
- monitoring
- infill planting.

Zone 6 was added to the 10 year revegetation plan to account for potential increases in river water levels in future, due to climate change. This area at the back currently is inundated with water during winter but dry in summer with the species indicated to prefer higher elevations (Table 6) suitable for this area. This will also ease the difficulty of maintaining lawn in this area which is too wet and muddy for mowers to get to during the wetter months.

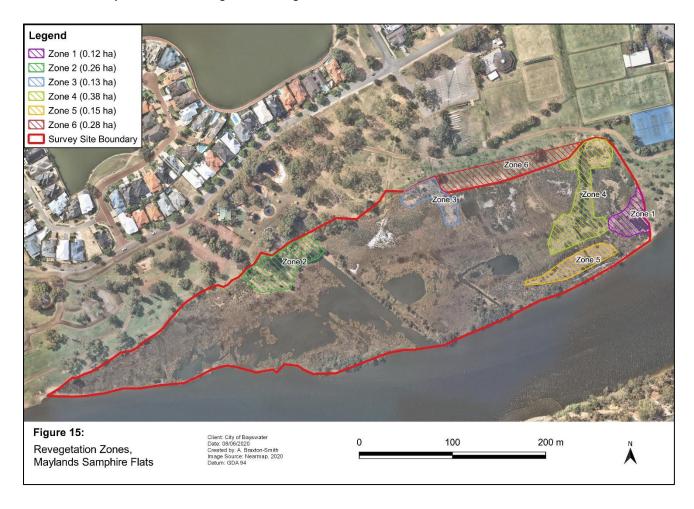




Table 3: Revegetation zones

Maylands Samphire Flats	Area (m²)	Plant Numbers
Zone 1	1,232	2,460
Zone 2	2,574	5,150
Zone 3	1,311	2,620
Zone 4	3,823	7,500
Zone 5	1,525	3,050
Zone 6	2789	5,580
Total	13,254	26,360

5.1 Weed Management

Weed management considerations include:

- weed type
- treatment priority
- area of infestation and population density
- control methods
- access considerations
- presence of native flora and fauna species
- management of community members near active weed control works.

Management Strategies

Weed management strategies involves the removal of weeds from a designated area by manual, chemical, or biological treatment methods, with manual and chemical treatments being the most common. Control techniques for target weed species depend on the plant characteristics including its rate of growth, regenerative capacity and the presence of non-target species or other sensitive areas, such as threatened and/or priority flora and/or fauna.

Manual Weed Control

Manual control typically involves the removal of the nominated weed either mechanically (machine) or by hand. Removal of woody weeds (trees and shrubs with woody stems), will often involve the following:

- manual ('hand') removal of plant physically removing the plant by hand or using handoperated tools to assist with removal
- cut and paint removal of woody weeds by trimming and then cutting trunk at the base followed by painting of the stump with herbicide; the stump will break down over time
- stem injection injecting the stem of woody weeds at a nominated location with herbicide to kill the plant
- brush cutting/slashing using a line trimmer or similar for weed control rather than removal;
 effective on long, grassy weeds
- stump removal if required, a stump grinder can be used to removal the large woody mass left behind, encouraging faster break down of plant remains.

Advantages of manual weed control:

- particular species can be targeted rather than 'blanket' control
- can significantly reduce the weed seed bank when plants and all seeds are removed
- mechanical removal is the most successful method of eradicating rhizomatous weeds as all the root mass can be removed
- plants will not develop a 'resistance' to the control method
- can be used effectively in conjunction with other methods
- avoids the use of chemicals that could pose a risk to non-target areas and operators.

Disadvantages of manual weed control:

- the process can be laborious and time-consuming, meaning that it is not economical for many weed types
- seed bank within the topsoil will provide the basis for new infestations
- key areas of plants can be left behind, such as bulbs or corms that can regrow under favourable conditions
- large numbers of people hand weeding can result in greater damage to sensitive bushland areas.

Chemical Weed Control

The use of herbicides is the most common and cost-effective method of controlling many environmental weeds. Chemical control can be targeted at a particular species or weed class, with large areas being treated in a cost effect manner. There are a range of herbicides in common usage with differing active ingredients that target different weed types.

Advantages of chemical weed control include:

- results apparent in a short time frame
- more likely to be effective on the entire plant
- can treat large areas in a cost-effective manner.

Disadvantages of chemical controls include:

- some plants, particularly those that have tuberous or rhizomatous root systems, may require follow up treatments to ensure effective control
- some plants can develop a resistance to a particular herbicide
- herbicides have the potential to impact non-target flora and fauna species
- potential health effects on operators need to be considered and managed
- the use of herbicides by contractors are subject to complying with:
 - off-label permits for use in bushland areas (Australian Pesticides and Veterinary Medicines Authority)
 - operator licence requirements by the Department of Health WA.

Weed Control Post Revegetation

General weed control activities should be carried out each year in revegetation zones following initial revegetation works to ensure weeds do not reinstate in these areas. Weed control should be undertaken in conjunction with quarterly maintenance activities occurring in January, April, July and October each year. Quarterly weed control should focus on areas that are not undergoing initial weed treatments to reduce the potential for weeds to germinate post planting. This will enhance the survival of the plantings by keeping weed coverage low and reducing competition for resources. Refer to Table 3 for weed treatments and timings to control particular weeds.

Weed Treatment

Various treatments are commonly used in natural areas that allow the targeting of weeds with minimal off-target damage to native plants. Best practice application methods should be applied, including the following:

- do not spray over standing water
- use lowest possible spray pressure to reduce spray drift
- do not spray in windy conditions to avoid spray drift
- do not spray if rainfall is forecast within the rainfast period as per label recommendations.

Treatment methodologies for the species present at Maylands Samphire Flats are summarised below in Table 4. Weed maps for Maylands Samphire Flats are provided in Appendix 5.

Herbicide Use in Wetlands

Consideration needs to be given to the use of herbicides in bushland and wetland areas through permitted off-label use by the Australian Pesticides and Veterinary Medicines Authority (APVMA). It is recommended that herbicides such as Metsulfuron and Triasulfuron be used once a year at the recommended dose within the site to reduce residual effect in soils, which can lead to some species becoming resistant to their effects and associated death of non-target species. Due to the tidal nature of the wetland and the fact that it consistently has differing levels of inundation all year round, some herbicides are inappropriate to use in wetland areas as they are water pollutants. Roundup Biactive® is the only wetland safe herbicide to use near waterways. The recommended treatment and optimal treatment timing for species is provided in Table 4.

Table 4: Weed control methodologies

Species	Common Name	Treatment Type	Herbicide Timing
Arundo donax	Giant Reed	 Cut plants to base Apply foliar spray 3-5% glyphosate As spread tends to occur downstream the best method is the start upstream 	Feb-Mar
Atriplex prostrata	Hastate Orache	Manual removal all year roundApply foliar spray 1% gylphosate	
Carex divisa	Divided Sedge	Manual removal all year roundFoliar spray with 1% glyphosate	Jan-Dec, Aug-Oct
Carpobrotus edulis	Hottentot Fig	 Manual removal all year round making sure roots and stem fragments are removed from site Foliar spray with 2% glyphosate + surfactant 	Jun-Oct
Casuarina glauca		 Hand weed seedlings Mature plants apply 50% glyphosate to basal bark 50 cm of trunk or drill and fill 	Sep-Mar
Cenchrus clandestinus	Kikuyu	 Spray with 1% glyphosate or Fusilade® Forte at 16 mL/L 	Nov-Jan
Chamaecytisus palmensis	Tagasaste	 Hand weed seedlings Mature plants apply 50% glyphosate to basal bark 50 cm of trunk or drill and fill 	Mar-Sep
Cynodon dactylon	Couch	 Small infestations can be dug out, making sure all rhizomes and stolons are removed, but herbicides are best treatment Spray Fusilade Forte® at 13 mL/L when plants are small and beginning new growth, or 1% glyphosate in late spring/summer and autumn when rhizomes are actively growing Follow up always required 	Nov-Feb/Apr
Cyperus rotundas	Nutgrass	 Hand remove small isolated infestations ensuring all tubers and rhizomes are removed Foliar spray of glyphosate before the fifth leaf stage (after this time the herbicide is not translocated to the tubers) Repeat applications are required for effectiveness 	Sep-Feb
Ehrharta calycina	Perennial Veldt Grass	 Manual removal during summer Foliar spray of Fusilade Forte® at 13mL/L or 1% glyphosate 	Jun-Aug
Gladiolus undulatus	Wild Gladiolus	Spot spray melsulfuron methyl 0.2g/15L	Jul

Species	Common Name	Treatment Type	Herbicide Timing
		 Application should just occur on corm exhaustion Physical removal can result in the spread of cormels (once the parent corm is killed, cormels in the soil tend to lose dormancy ad germinate) 	
Lolium rigidum	Wimmera Ryegrass	Manual removal July-DecemberFoliar spray of Fusilade Forte® 13 mL/L	Jun-Oct
Medicago polymorpha	Burr Medic	Hand pull isolated patches before flowering	Jun-Aug
Moraea flaccida	One-leaf Cape Tulip	 Wipe with metsulfuron methyl 0.2 g/15 L + Pulse® apply on flowering at corm exhaustion, alternatively wipe with 10% glyphosate Alternatively, hand weed ensuring all corms are dug up and removed from site 	Jul-Aug
Oxalis pes-caprae	Soursob	 Spot spray 1% glyphosate just on flowering 	Jun-Jul
Paspalum dilatatum		 Cut out small populations and isolated plants, ensuring rhizome removal and remove seed heads for safe disposal At early head stage spray with 1% glyphosate, and for established actively growing adult plants spray Fusilade Forte® 16 mL/L Older stands can be controlled with 1% glyphosate, preferably pre or early flowering Alternatively cut near ground and wipe with 10% glyphosate, with repeat application may be required for well-established plants Follow up control for seedlings with 2 mL/L Fusilade Forte® 	Nov-Mar
Romulea rosea	Guildford Grass	 Spot spray with 1% glyphosate 	Jul-Aug
Rumex crispus	Curled Dock	 Spot spray with 1% glyphosate in early bud stage 	Jun-Aug
Schinus terebinthifolia	Brazilian pepper	 Hand pull seedlings ensuring removal of all root material Stem inject older plants or basal bark base 50 cm of trunk using 50% glyphosate during summer Avoid root disturbance until trees are confirmed dead 	Dec-Mar
Solanum nigrum	Black Berry Nightshade	 Prevent seed set for several years Hand weed small infestations Manually remove plants before flowering Spray 1% glyphosate before fruiting stage 	Jun-Nov, Jul-Dec

Species	Common Name	Treatment Type	Herbicide Timing
Sonchus oleraceus	Common	 Hand pull isolated populations prior to seed set 	Jun-Aug
	Sowthistle	•	
		 Spray with 1% glyphosate two to three times over a single growing season, 	
Stenotaphrum secundatum	Buffalo Grass	alternatively spray Fusilade Forte® 13 mL/L	Nov-May
		 Solarisation over warmer months can be useful for small isolated infestations 	·
Sumphyotrichum squamatum	Buchy Starwort	Hand weed isolated plants before seed set	Dec-Jan
Symphyotrichum squamatum	Bushy Starwort	 Alternatively use 1% glyphosate before seeding stage all year round 	Dec-Jan
Washingtonia filifera	Cotton Palm	Hand pull seedlings and small plants	Year round
wasiiiigiona iiilera		 Cut older plants at base when not in fruit 	rear round
Watsonia meriana	Bulbil Watsonia	 Wipe individual leaves with 10% glyphosate, apply just as flower spike emerge at 	Son
vvalsonia menana	Duibii vvatsonia	corm exhaustion	Sep

Source: FloraBase (Department of Biodiversity, Conservation and Attractions, 2020)

5.2 Biomass removal

Certain species will require intensive physical removal once properly treated, to allow for successful revegetation works. The following species will require clearing once treated:

- Brazilian Pepper
- Casuarina glauca
- Cotton Palm
- Tagasaste
- Typha orientalis (where necessary for the management of other weeds or to maintain drainage flow).

Clearing methodologies are summarised below in Table 5.

Table 5: Clearing methodologies

Species	Common Name	Removal methodology	
Casuarina glauca		Cut and remove from site. Disturbance will promote suckering.	
		Ensure the plant is dead before cutting and removal.	
Chamaecytisus	Tagasaste	Cut and remove from site. Ensure the plant is dead before	
palmensis	Tayasasie	cutting and removal.	
Schinus		Cut and remove from site. Disturbance will promote suckering.	
terebinthifolia	Brazilian pepper	Ensure the plant is dead before cutting and removal. Follow up	
Lorobintrillolla		treatments may be required.	
		Slash and mulch finely. Typha mulch will suppress other weeds	
Typha orientalis	Bulrush	and will break down quickly into the site. Typha will recolonise	
		the area quickly.	
Washingtonia	Cotton Palm	Cut and remove from site. Ensure the plant is dead before	
filifera	Collon Palli	cutting and removal.	

5.3 Planting

Revegetation species were selected based on the native flora recorded across the site and additional species that are likely to occur in the vegetation type present. The revegetation works have been split into 10 revegetation zones for the 10 year plan (refer to Table 2). Planting density for overstorey (trees) is recommended to be 1 plant per 10 square meters and understorey species at 2 plants per square meter. Plant species prescribed for the revegetation zones are provided in Table 6, the indicative number of plantings and areas per zone are shown in Table 3 and Figure 15.

Revegetation species may be subject to availability, with species able to be substituted for suitable alternatives if they are unable to be sourced for planting. As site conditions may be subject to change once weed management has taken place, each zone should be inspected prior to ordering plants and adjustments made based on the presenting conditions. Specific numbers of species should also be prescribed as per the vegetation cover and condition at the time of plant ordering.

Table 6: Indicative planting species their densities and planting locations

Species Name	Common Name	Species Planting Density (%)	Landscape Location
Apium prostratum	Sea Celery	2	Higher elevations
Casuarina obesa	Swamp Sheoak	1	Higher elevations

Species Name	Common Name	Species Planting Density (%)	Landscape Location
Ficinia nodosa	Knotted Club Rush	10	Higher elevations
Frankenia pauciflora	Seaheath	10	Higher elevations
Juncus kraussii	Sea Rush	10	Lower elevations
Melaleuca rhaphiophylla		1	Drier periphery of wetland in Zones 2, 3 and 6
Salicornia quinqueflora	Beaded Samphire	10	Lower elevations
Samolus repens	Creeping Brookweed	10	Lower elevations
Sporobolus virginicus	Marine Couch	1	Higher elevations
Suaeda australis	Seablite	10	Lower elevations
Tecticornia halocnemoides	Shrubby Samphire	10	Lower elevations
Tecticornia indica subsp. bidens		10	Higher elevations
Tecticornia lepidosperma		10	Lower elevations
Bolboschoenus caldwellii	Marsh Club-rush	4	Lower elevations/freshwater drainage channels
Eucalyptus rudis	Flooded Gum	1	Drier periphery of wetland in Zones 2, 3 and 6

5.5 Capital works

Indicative costings for various capital works projects which may be applicable to this site are provided in Table 20. Costs are provided for:

- Installation of a crushed limestone pathway on the periphery of the Samphire Flats
- Relocation of interpretive signage.

Any works of this nature may require capital works funding and as such have not been considered as part of this conservation plan.

5.5.1 Limestone Path Installation and Sign Relocation

A crushed limestone path will go in around the periphery of the wetlands to create a hard buffer to stop lawn encroaching on the samphire vegetation. The crushed limestone is seen as the optimal material which in the event of rising water levels can be safely taken over by the river and samphire vegetation without leaving rubble and debris behind, in the event of climate change increasing river levels. The signs will also be moved to along the path for easier viewing by pedestrians. Turf removed and revegetation works will take place to convert this area into the Samphire Closed Low Heath vegetation type using specified species as outlined in this report (refer to Figure 16).

6.0 Works plan

Indicative works schedules for each year are outlined in Tables 7 – 16 below.

Table 7: Works schedule - Maylands Samphire Flats revegetation program 2020 - 2021

Year 1 - 2020/2021	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun
Clearing/initial weed control - Zone 1												
Follow up weed control - Zone 1												
Plant supply												
Plant install - volunteer												
Plant install - contractor												
General maintenance												

Table 8: Works schedule - Maylands Samphire Flats revegetation program 2021 - 2022

Year 2 - 2021/2022	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun
Initial weed control - Zone 2												
Follow up weed control - Zone 1												
Follow up weed control - Zone 2												
Plant supply												
Plant install - volunteer												
Plant install - contractor												
Infill plant supply												
Infill plant install Zone 1 - contractor												
General maintenance												

 Table 9: Works schedule - Maylands Samphire Flats revegetation program 2022 - 2023

Year 3 - 2022/2023	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun
Clearing/initial weed control - Zone 3												
Follow up weed control - Zone 1												
Follow up weed control - Zone 2												
Follow up weed control - Zone 3												
Plant supply												
Plant install - volunteer												

Year 3 - 2022/2023	luC	Aug	deS	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun
Plant install - contractor												
Infill plant supply												
Infill plant install Zone 2 - contractor												
General maintenance												

Table 10: Works schedule - Maylands Samphire Flats revegetation program 2023 - 2024

Year 4 - 2023/2024	Inc	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun
Clearing/initial weed control - Zone 4												
Follow up weed control - Zone 2												
Follow up weed control - Zone 3												
Follow up weed control - Zone 4												
Plant supply												
Plant install - volunteer												
Plant install - contractor												
Infill plant supply												
Infill plant install Zone 2 - contractor		·										
General maintenance		·										

Table 11: Works schedule - Maylands Samphire Flats revegetation program 2024 - 2025

Year 5 - 2024/2025	Ju	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Clearing/initial weed control - Zone 5												
Follow up weed control - Zone 3												
Follow up weed control - Zone 4												
Follow up weed control - Zone 5												
Plant supply												
Plant install - volunteer												
Plant install - contractor												
Infill plant supply												
Infill plant install Zone 3 - contractor												
General maintenance												·

Table 12: Works schedule - Maylands Samphire Flats revegetation program 2025 - 2026

Year 6 - 2025/2026	Ιης	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun
Clearing/initial weed control - Zone 6												
Follow up weed control - Zone 4												
Follow up weed control - Zone 5												
Follow up weed control - Zone 6												
Plant supply												
Plant install - volunteer												
Plant install - contractor												
Infill plant supply												
Infill plant install Zone 4 - contractor												
General maintenance												

Table 13: Works schedule - Maylands Samphire Flats revegetation program 2026 - 2027

Year 7 - 2026/2027	Ξ	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun
Clearing/initial weed control - Zone 6												
Follow up weed control - Zone 5												
Follow up weed control - Zone 6												
Follow up weed control - Zone 7												
Plant supply												
Plant install - volunteer												
Plant install - contractor												
Infill plant supply												
Infill plant install Zone 4 - contractor												
General maintenance												

Table 14: Works schedule - Maylands Samphire Flats revegetation program 2027 - 2028

Year 8 - 2027/2028	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Follow up weed control - Zone 6												
Plant supply												
Plant install - volunteer												
Plant install - contractor												
Infill plant supply												

Year 8 - 2027/2028	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun
Infill plant install Zone 5 - contractor												
General maintenance												

Table 15: Works schedule - Maylands Samphire Flats revegetation program 2028 - 2029

Year 9 - 2028/2029	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Follow up weed control - Zone 6												
Plant supply												
Plant install - volunteer												
Plant install - contractor												
Infill plant supply												
Infill plant install Zone 6 - contractor									·			
General maintenance									·			

Table 16: Works schedule - Maylands Samphire Flats revegetation program 2029 - 2030

Year 10 - 2029/2030	Jnc	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun
Follow up weed control - Zone 6												
Plant supply												
Plant install - volunteer												
Plant install - contractor												
Infill plant supply												
Infill plant install Zone 6 - contractor												
Coir matting install to slope												·
General maintenance												·

7.0 Cost schedules

Costing schedules for revegetation, weed control and maintenance works are provided in Table 17 – 19. Built environment (capital works) indicative costings are provided in Table 20.

Table 17: Costings Years 1 - 4

	Y	ear 1 (Jul	2020 - Jun	2021)	Year 2 (Jul 2021 - Jun 2022)				Y	ear 3 (Ju	l 2022 - Jun	2023)	Year 4 (Jul 2023 - Jun 2024)				
Activity	Unit	Qty	Unit rate	Cost (\$ ex GST)	Unit	Qty	Unit rate	Cost (\$ ex GST)	Unit	Qty	Unit rate	Cost (\$ ex GST)	Unit	Qty	Unit rate	Cost (\$ ex GST)	
Initial weed control - Zone 1	event	1	5,000.00	5,000.00				-				-				-	
Initial weed control - Zone 2				1	event	1	5,000.00	5,000.00				-				-	
Initial weed control - Zone 3				-				ı	event	1	5,125.00	5,125.00				-	
Initial weed control - Zone 4				1				1				-	event	1	5,125.00	5,125.00	
Maintenance weed control - Zone 1	event	3	1,150.00	3,450.00	event	4	600.00	2,400.00	event	4	615.00	2,460.00				-	
Maintenance weed control - Zone 2				1	event	3	1,150.00	3,450.00	event	4	615.00	2,460.00	event	4	615.00	2,460.00	
Maintenance weed control - Zone 3				1				1	event	3	1,178.75	3,536.25	event	4	615.00	2,460.00	
Maintenance weed control - Zone 4				1				1				1	event	3	1,178.75	3,536.25	
Plant supply initial - Zone 1	each	2,460	1.75	4,305.00				ı				-				-	
Plant supply initial - Zone 2				ı	each	2,570	1.75	4,497.50	each	2,570	1.79	4,609.94				-	
Plant supply initial - Zone 3				-				-				-	each	2,620	1.79	4,699.63	
Initial plant install - contractor	each	2,460	1.10	2,706.00	each	2,570	1.10	2,827.00	each	2,570	1.13	2,897.68	each	2,620	1.13	2,954.05	
Infill plant supply - Zone 1				-	each	1,000	1.75	1,750.00				-				-	

	Υ	ear 1 (Jul	2020 - Jun	2021)	Year 2 (Jul 2021 - Jun 2022)				Y	ear 3 (Jul	2022 - Jun	2023)	Year 4 (Jul 2023 - Jun 2024)			
Activity	Unit	Qty	Unit rate	Cost (\$ ex GST)	Unit	Qty	Unit rate	Cost (\$ ex GST)	Unit	Qty	Unit rate	Cost (\$ ex GST)	Unit	Qty	Unit rate	Cost (\$ ex GST)
Infill plant supply - Zone 2				-				-				-	each	1,000	1.79	1,793.75
Infill plant install - contractor				-	each	1,000	1.10	1,100.00	each	1,000	1.13	1,127.50	each	1,000	1.13	1,127.50
General maintenance works (rubbish etc)	item	1	2,000.00	2,000.00	item	1	2,000.00	2,000.00	item	1	2,050.00	2,050.00	item	1	2,050.00	2,050.00
Yearly Total (ex GST)				17,461.00				23,024.50				24,266.36				26,206.18
GST				1,746.10				2,302.45				2,426.64				2,620.62
Yearly Total (inc GST)				19,207.10				25,326.95				26,693.00				28,826.79

 Table 18: Costings Years 5 - 7

		Year 5 (J	ul 2024 - Jun 20	25)		Year 6 (J	ul 2025 - Jun 20	026)	Year 7 (Jul 2026 - Jun 2027)					
Activity	Unit	Qty	Unit rate	Cost (\$ ex GST)	Unit	Qty	Unit rate	Cost (\$ ex GST)	Unit	Qty	Unit rate	Cost (\$ ex GST)		
Initial weed control - Zone 5	event	1	5,253.13	5,253.13				-				-		
Initial weed control - Zone 6				-	event	1	5,253.13	5,253.13				-		
Maintenance weed control - Zone 3	event	4	630.38	2,521.50				-				-		
Maintenance weed control - Zone 4	event	4	630.38	2,521.50	event	4	630.38	2,521.50				-		
Maintenance weed control - Zone 5	event	3	1,208.22	3,624.66	event	4	630.38	2,521.50	event	4	646.13	2,584.54		
Maintenance weed control - Zone 6				-	event	3	1,208.22	3,624.66	event	4	646.13	2,584.54		
Plant supply initial - Zone 4	each	3,750	1.84	6,894.73				-				-		

Maylands Samphire Flats Environmental Management Plan 2020 – 2030

	Year 5 (Jul 2024 - Jun 2025)					Year 6 (Jul 2025 - Jun 2026)				Year 7 (Jul 2026 - Jun 2027)			
Activity	Unit	Qty	Unit rate	Cost (\$ ex GST)	Unit	Qty	Unit rate	Cost (\$ ex GST)	Unit	Qty	Unit rate	Cost (\$ ex GST)	
Plant supply initial - Zone 5				-	each	3,750	1.84	6,894.73	each	3,050	1.88	5,734.00	
Initial plant install - contractor	each	3,750	1.16	4,333.83	each	3,750	1.16	4,333.83	each	3,050	1.18	3,612.97	
Infill plant supply - Zone 3	each	1,000	1.84	1,838.59				-				-	
Infill plant install - contractor	each	1,000	1.16	1,155.69	each	1,000	1.16	1,155.69	each	1,000	1.18	1,184.58	
General maintenance works (rubbish etc)	item	1	2,101.25	2,101.25	item	1	2,101.25	2,101.25	item	1	2,153.78	2,153.78	
Yearly Total (ex GST)				30,244.87				28,406.27				17,854.40	
GST				3,024.49				2,840.63				1,785.44	
Yearly Total (inc GST)				33,269.35				31,246.90				19,639.84	

 Table 19: Costings Years 8 - 10

		Year 8	(Jul 2027 - Jun	2028)		Year 9	(Jul 2028 - Jun	2029)		Year 10	(Jul 2029 - Jun	2030)
Activity	Unit	Qty	Unit rate	Cost (\$ ex GST)	Unit	Qty	Unit rate	Cost (\$ ex GST)	Unit	Qty	Unit rate	Cost (\$ ex GST)
Maintenance weed control - Zone 6	event	4	646.13	2,584.54	event	4	646.13	2,584.52	event	4	646.13	2,584.52
Plant supply initial - Zone 6	each	2,790	1.88	5,245.20	each	2,790	1.93	5,384.70				-
Initial plant install - contractor	each	2,790	1.18	3,304.98	each	2,790	1.21	3,387.60				-
Infill plant supply - Zone 4	each	1,000.00	1.88	1,880.00				-				-
Infill plant supply - Zone 5				ı	each	1,000	1.88	1,880.00				-
Infill plant supply - Zone 6				-				-	each	1,000	1.93	1,930.00
Infill plant install - contractor	each	1,000	1.18	1,184.58	each	1,000	1.21	1,214.19	each	1,000	1.21	1,210.00

Maylands Samphire Flats Environmental Management Plan 2020 – 2030

	Year 8 (Jul 2027 - Jun 2028)			Year 9 (Jul 2028 - Jun 2029)				Year 10 (Jul 2029 - Jun 2030)				
Activity	Unit	Qty	Unit rate	Cost (\$ ex GST)	Unit	Qty	Unit rate	Cost (\$ ex GST)	Unit	Qty	Unit rate	Cost (\$ ex GST)
General maintenance works (rubbish etc)	item	1	2,153.78	2,153.78	item	1	2,207.63	2,207.63	item	1	2,262.82	2,262.82
Yearly Total (ex GST)				16,353.08				16,658.64				7,987.34
GST				1,635.31				1,665.86				798.73
Yearly Total (inc GST)				17,988.38				18,324.51				8,786.07

Table 20: Built environment indicative costings – capital works

Item	Unit	Qty	Unit rate	Cost (\$ ex GST)
Supply and installation of 790 linear metres crushed limestone track (2m width)	Lm	790	39.95	31,560.50
Relocation of interpretive signage	each	1	2,000.00	2,000.00

Notes
Allows for supply of 75mm crushed limestone in semi-trailers, plus labour
and equipment (posi track, rolling and compaction equipment). Cost
allows for construction of 100 linear metres at 2m width.
Allows for artwork, supply and installation of aluminium signage installed
to concrete footing.

Note: Capital works costings are indicative at time of plan preparation in 2020; these costs will need to be revised according to final design/timing of potential works.

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Appendix 1 – NatureMap (5km)



NatureMap Species Report

Created By Guest user on 08/05/2020

Current Names Only Yes
Core Datasets Only Yes

Method 'By Circle'

Centre 115° 54' 42" E,31° 57' 03" S

Buffer 5km

Group By Species Group

Species Group	Species	Records
Alga	6	8
Amphibian	9	110
Bird	204	27840
Bryopsid (Moss)	10	13
Dicotyledon	547	1197
Fish	43	64
Fungus	76	179
Gymnosperm	2	2
Hepatic (Liverwort)	1	2
Invertebrate	83	571
Lichen	2	2
Mammal	21	92
Monocotyledon	266	540
Pteridophyte (Fern)	4	4
Reptile	61	755
Slime Mould	11	12
TOTAL	1346	31391

26501 Bangia atropurpurea

Name ID Species Name	Naturalised	Conservation Code	Area

	and the second s		
2.	27380 Caulerpa flexilis var. muelleri		
3.	26675 Codium laminarioides		
4.	26876 Gracilaria verrucosa		
5.	26900 Haloplegma preissii		
6.	35262 Ulva intestinalis		
mphibian			
7.	25398 Crinia georgiana (Quacking Frog)		
8.	25399 Crinia glauerti (Clicking Frog)		
9.	25400 Crinia insignifera (Squelching Froglet)		
10.	25410 Heleioporus eyrei (Moaning Frog)		
11.	25415 Limnodynastes dorsalis (Western Banjo Frog)		
12.	25378 Litoria adelaidensis (Slender Tree Frog)		
13.	25388 Litoria moorei (Motorbike Frog)		
14.	25420 Myobatrachus gouldii (Turtle Frog)		
15.	25433 Pseudophryne guentheri (Crawling Toadlet)		
ird			
16.	24260 Acanthiza apicalis (Broad-tailed Thornbill, Inland Thornbill)		
17.	24261 Acanthiza chrysorrhoa (Yellow-rumped Thornbill)		
18.	24262 Acanthiza inornata (Western Thornbill)		
19.	24560 Acanthorhynchus superciliosus (Western Spinebill)		
20.	25535 Accipiter cirrocephalus (Collared Sparrowhawk)		
21.	24281 Accipiter cirrocephalus subsp. cirrocephalus (Collared Sparrowhawk)		
22.	25536 Accipiter fasciatus (Brown Goshawk)		
23.	24282 Accipiter fasciatus subsp. fasciatus (Brown Goshawk)		
24.	25755 Acrocephalus australis (Australian Reed Warbler)		
25.	41323 Actitis hypoleucos (Common Sandpiper)	IA	
26.	25544 Aegotheles cristatus (Australian Owlet-nightjar)		
27.	Agapornis sp.		Υ
28.	24310 Anas castanea (Chestnut Teal)		
	24311 Anas clypeata (Northern Shoveler)		Υ
29.			
29. 30.	24312 Anas gracilis (Grey Teal)		

NatureMap is a collaborative project of the Department of Biodiversity, Conservation and Attractions and the Western Australian Museum.





Alga



	Name ID	Species Name	Naturalise	d Conservation Code	Area
32.		Anas platyrhynchos subsp. domesticus			
33.	24315	Anas rhynchotis (Australasian Shoveler)			
34.	24316	Anas superciliosa (Pacific Black Duck)			
35.	47414	Anhinga novaehollandiae (Australasian Darter)			
36.		Anser anser			
37.	24561	Anthochaera carunculata (Red Wattlebird)			
38.	24562	Anthochaera lunulata (Western Little Wattlebird)			
39.	24599	Anthus australis subsp. australis (Australian Pipit)			
40.	25554	Apus pacificus (Fork-tailed Swift, Pacific Swift)		IA	
41.	24337	Ardea garzetta subsp. nigripes (Little Egret)			
42.		Ardea ibis (Cattle Egret)			
43.		Ardea modesta (great egret, white egret)			
44.		Ardea novaehollandiae (White-faced Heron)			
45.		Ardea pacifica (White-necked Heron)			
46.		Argusianus argus			Υ
47.	25566	Artamus cinereus (Black-faced Woodswallow)			
48.		Artamus cinereus subsp. melanops (Black-faced Woodswallow)			
49.		Aythya australis (Hardhead)			
50.	2-1010	Barnardius zonarius			
	2/210	Biziura lobata (Musk Duck)			
51.				-	
52.		Botaurus poiciloptilus (Australasian Bittern)		Т	
53.		Burhinus grallarius (Bush Stone-curlew)			
54.		Cacatua galerita (Sulphur-crested Cockatoo)			
55.		Cacatua pastinator (Western Long-billed Corella)			
56.	24724	Cacatua pastinator subsp. pastinator (Muir's Corella, Muir's Corella (Western Corella		S	
		SW WA))			
57.		Cacatua roseicapilla (Galah)			
58.	25716	Cacatua sanguinea (Little Corella)			
59.	24729	Cacatua tenuirostris (Eastern Long-billed Corella)	Υ		
60.	25598	Cacomantis flabelliformis (Fan-tailed Cuckoo)			
61.	24427	Cacomantis flabelliformis subsp. flabelliformis (Fan-tailed Cuckoo)			
62.	42307	Cacomantis pallidus (Pallid Cuckoo)			
63.	24779	Calidris acuminata (Sharp-tailed Sandpiper)		IA	
64.	24784	Calidris ferruginea (Curlew Sandpiper)		Т	
65.	24786	Calidris melanotos (Pectoral Sandpiper)		IA	
66.	24788	Calidris ruficollis (Red-necked Stint)		IA	
67.	25717	Calyptorhynchus banksii (Red-tailed Black-Cockatoo)			
68.		Calyptorhynchus banksii subsp. naso (Forest Red-tailed Black Cockatoo)		Т	
69.		Calyptorhynchus baudinii (Baudin's Cockatoo, White-tailed Long-billed Black			
		Cockatoo)		Т	
70.	24734	Calyptorhynchus latirostris (Carnaby's Cockatoo, White-tailed Short-billed Black			
		Cockatoo)		Т	
71.	48400	Calyptorhynchus sp. (white-tailed black cockatoo)		Т	
72.		Carduelis carduelis (Goldfinch, European Goldfinch)	Υ	·	
73.		Carduelis carduelis (Goldfinch, European Goldfinch) Carduelis carduelis subsp. britannica (Goldfinch)	Y		
			Ť		
74. 75		Charadrius ruficapillus (Red-capped Plover) Charadrius ruficapillus (Red-capped Plover)			
75.		Chenonetta jubata (Australian Wood Duck, Wood Duck)			
76.	4/909	Cheramoeca leucosterna (White-backed Swallow)			
77.		Chroicocephalus novaehollandiae			
78.		Chrysococcyx basalis (Horsfield's Bronze Cuckoo)			
79.		Chrysococcyx lucidus subsp. plagosus (Shining Bronze Cuckoo)			
80.		Circus approximans (Swamp Harrier)			
81.		Cladorhynchus leucocephalus (Banded Stilt)			
82.		Colluricincla harmonica (Grey Shrike-thrush)			
83.	24399	Columba livia (Domestic Pigeon)	Υ		
84.	25568	Coracina novaehollandiae (Black-faced Cuckoo-shrike)			
85.	24362	Coracina novaehollandiae subsp. novaehollandiae (Black-faced Cuckoo-shrike)			
86.	24416	Corvus bennetti (Little Crow)			
87.	25592	Corvus coronoides (Australian Raven)			
88.	24671	Coturnix pectoralis (Stubble Quail)			
89.		Cracticus nigrogularis (Pied Butcherbird)			
90.		Cracticus tibicen (Australian Magpie)			
91.		Cracticus tibicen subsp. dorsalis (White-backed Magpie)			
92.		Cracticus torquatus (Grey Butcherbird)			
93.		Cygnus atratus (Black Swan)			
94.		Dacelo novaeguineae (Laughing Kookaburra)	Υ		
95.		Dacelo novaeguineae (Laugning Rookaburra) Dacelo novaeguineae subsp. novaeguineae (Laughing Kookaburra)	Y		
			Ť	т	
96. 97		Dasyornis longirostris (Western Bristlebird) Dicaeum hirundinaceum (Mistletoehird)		Т	
97.	23007	Dicaeum hirundinaceum (Mistletoebird)			
00		Egretta garzetta			
98.		29.01.d 9dr.201.d	Edd.	partment of Biodiversity,	MEST



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1912			-			
100.2		47027				
101. 2460		4/93/				
1016. 2022 Fisch bergere (Filmen Fiction)		24567				
1016. 24-11 Falor comprises atomp, bringing (Breams Faloria)	104.	24379	Erythrogonys cinctus (Red-kneed Dotterel)			
107. 2502 Faire commitmatives (Australian Netwern Netwern Netwern)	105.	25621	Falco berigora (Brown Falcon)			
108. 24.47 Fabro complorative study, contribution (Australian Research Natural)						
100. 2447 Falor Ingolineary (Australian Holder)						
110.					т	
11.1. 24/17 Farico broglowins adulty includes in Followy						
13.3 24417 Science promptines usubp, miscropic (Autominian Perceptine) S						
11.5	112.	25624	Falco peregrinus (Peregrine Falcon)		S	
11.5. 2476 Fullion arms suitipe, neutratine (Eurosiane Coord)	113.	24475	Falco peregrinus subsp. macropus (Australian Peregrine Falcon)		S	
116.						
117. 24753 Galifoulds innerbrona subps. mentions (Dully Mochanie)						
118. 25710 Callinatus philippoenis subsp. mailron (Buff-banded Rail) 119. Calles gallus: 121. 42145 Galicia philippoenis subsp. mailron (Buff-banded Rail) 121. 4214 Callination (Sergiopen Lusca (Neutran Gerpone) 122. 25530 Gerygone Lusca (Neutran Gerpone) 123. 25530 Gerygone Lusca (Neutran Gerpone) 124. 4792 Cylicphilia mailrongs (Tamyr crumod Honeyaetar) 125. 2444 Grailline symanicus (Migagie Inth) 126. 2446 Grailline symanicus (Migagie Inth) 127. 2428 Fallastir aphenus (Migagie Inth) 128. 2447 Hammidous Araginostra (Pred Cysternatcher) 129. 2428 Fallastir aphenus (Misaling Rail) 129. 2429 Fallastir aphenus (Misaling Rail) 130. 2457 Himmedia morphrosites (Inthis Eugle) 131. 2441 Fallastir aphenus (Misaling Rail) 131. 2441 Fallastir aphenus (Misaling Rail) 132. 2443 Fallastir aphenus (Misaling Rail) 133. 2449 Fallastir aphenus (Misaling Rail) 134. 2441 Fallastir (Allastir aphenus (Misaling Rail) 135. 2458 Fallastir (Allastir aphenus (Misaling Rail) 136. 2458 Fallastir (Allastir aphenus (Misaling Rail) 137. 4447 Fallastir (Allastir aphenus (Misaling Rail) 138. 2458 Fallastir (Allastir aphenus (Misaling Rail) 139. 2458 Fallastir (Allastir aphenus (Misaling Rail) 130. 2459 Fallastir (Allastir aphenus (Misaling Rail) 131. 2441 Fallastir (Allastir aphenus (Misaling Rail) 132. 2459 Fallastir (Allastir aphenus (Misaling Rail) 133. 2459 Fallastir (Allastir aphenus (Misaling Rail) 134. 2459 Fallastir (Allastir aphenus (Misaling Rail) 135. 2459 Fallastir (Allastir aphenus (Misaling Rail) 136. 2459 Fallastir (Allastir aphenus (Misaling Rail) 137. 2459 Fallastir (Allastir aphenus (Misaling Rail) 138. 2450 Fallastir (Allastir aphenus (Misaling Rail) 149. 2450 Fallastir (Allastir aphenus (Misaling Rail) 140. 2450 Fallastir (Allastir aphenus (Misaling Rail) 141. 2450 Fallastir (Allastir aphenus (Misaling Rail) 142. 2450 Fallastir (Allastir aphenus (Misaling Rail) 143. 2450 Fallastir (Allastir aphenus (Misaling Rail) 144. 2450 Fallastir (Allastir aphenus (Misaling Rail) 145. 2450 Fallastir (Allastir aphenus (Misaling Rail) 146						
1919. 24795 Gallway philippensis ababa, mellor (Bulf-bancked Rail)						
121, 42316 Gaivcallas ivilacarias (Singing Honeyselarir) 122 2830 Georgeo Laca (Western Recyptors) 123 30818 Obasiopsitla concinna (Musik Lorikeer) Y 124 47802 Opiciphia mibrinogo (Tawry-crowned Honeysator) 126 24449 Gerillano (garnolicus (Ringing Fairs) 127 24449 Gerillano (garnolicus (Ringing Fairs) 128 24489 Haberatopus Iongrioratoris (Plad Oystorather) 127 24489 Haberatopus Iongrioratoris (Ringing Kile) 128 24489 Haberatopus Iongrioratoris (Ringing Kile) 128 24489 Haberatopus Iongrioratoris (Ringing Kile) 129 44785 Haberatopus Inmanipus (Blad-winged Sill) 130 22513 Himanopus Inmanipus (Blad-winged Sill) 131 24481 Himanopus Inmanipus (Blad-winged Sill) 131 24481 Himanopus Inmanipus (Blad-winged Sill) 132 44857 Haberatopus Inmanipus (Blad-winged Sill) 133 44705 Inboyrhus obbias (Australian Libe Bittom) P4 133 44705 Inboyrhus obbias (Australian Libe Bittom) P4 134 24367 Lalage stocker (White-winged Trilor) 135 25658 Licherosatorus Buccole (White-ward Honeysater) 136 22658 Licherosatorus Buccole (White-ward Honeysater) 137 Lopiolicinia issue 138 24406 Machinerose signameus (Southern Gent Petrel) 14 138 24406 Machinerose signameus (Southern Gent Petrel) 14 138 24406 Machinerose signameus (Southern Gent Petrel) 14 14 25651 Makhusu siphindenis (Southern Gent Petrel) 14 14 25651 Makhusu siphindenis (Southern Gent Petrel) 14 25651 Makhusu siphindenis (Southern Aeaded Honeysater) 14 25651 Makhusu siphindenis (Southern Aeaded Honeysater) 14 25651 Makhusu siphindenis (Southern Aeaded Honeysater) 15 24708 Makhusu brownisti (Sillorus Neaded Honeysater) 15 24708 Makhusu Brownisti (Sillorus Holland Liberatori (Sillorus Neaded Honeysater) 15 247	119.					
122	120.		Gallus gallus			
123. 30918 Glassopatia controlina (Musik Lonkeet) Y 1796.2 Glyciphila molanops (Talmy-cronned Honeyaster) 124. 4796.2 Glyciphila molanops (Talmy-cronned Honeyaster) 125. 24445 Gralibare syndrouse (Millegiar-Buril) 126. 2445 Malmatopus knylivostari (Pied Olysteracher) 127. 24295 Malmatopus knylivostari (Pied Olysteracher) 128. 24395 Malmatopus knylivostari (Pied Olysteracher) 129. 47965 Malmatopus knylivostari (Pied Olysteracher) 129. 47965 Malmatopus knylivostari (Ribe Petrol) 130. 25734 Milmatopus himatopus (Ribe Petrol) 131. 24349 Milmatopus himatopus (Ribe Petrol) 131. 24349 Milmatopus himatopus (Riberol Saulavi) 132. 48591 Mydroprograe cassis (Caspian Tarri) 14. 133. 47975 knylivosta diskina (Astrolina Little Bittori) P4. 134. 24367 Laliage tricolor (White-winged Triller) 135. 25655 Lichtenostorius knockes (White-winged Triller) 136. 25655 Lichtenostorius knockes (White-winged Triller) 137. Lophocitria istaria in staliantia (Robum Honeyaetari) 138. 24360 Malmocrotic gigarietus (Southern Gient Petrol) 14. 14. 24560 Malmocrotic gigarietus (Southern Gient Petrol) 14. 14. 25655 Malmocrotic gigarietus (Southern Gient Petrol) 14. 25656 Malmocrotic gigarietus (Riberol Miller Grassbrid) 14. 25656 Malmocrotic gigarietus (Riberol Miller Grassbrid) 14. 25656 Malmocrotic gigarietus (Riberol Miller Grassbrid) 14. 25656 Malmocrotic girminer (Riberol Miller Grassbrid) 14. 25656 Malmocrotic girminer (Riberol Miller Grassbrid) 14. 25656 Malmocrotic girminer (Riberol Miller Grassbrid) 15. 24656 Malmocrotic girminer (Riberol Miller Grassbrid) 15. 24656 Malmocrotic girminer (Riberol Miller Grassbrid) 1			, , ,			
124						
1255				Υ		
126. 24487 Heinsteingus longioestis (Peud Oystercacher)						
127. 24265 Hallostur spheniums (Whiteling Kire)						
120.						
130. 2573	128.	24689	Halobaena caerulea (Blue Petrel)			
131. 24491 Hrundo neoxene (Welcome Swallow) 132. 48587 Hydroprogne caspie (Caspian Tem) 14. 133. 47875 kobophous dubina (karatiana Litile Bittern) P4 134. 24367 Lalage tricolor (White-winged Triller) 135. 25569 Lichmera indistincta (Brown Honeyeater) 136. 25661 Lichmera indistincta (Brown Honeyeater) 137. Lophocitoria isura 138. 24090 Macronactes giganatus (Southern Giant Petral) 14.	129.	47965	Hieraaetus morphnoides (Little Eagle)			
132.						
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134. 24367 Lalege tricolor (White-winged Triller) 135. 25659 Lichenostomus leucoits (White-aerad Honeyeater) 136. 25661 Lichenaer Indistincts (Brown Honeyeater) 137. Lophoictinia isura Lophoictinia Lophoictinia isura Lophoictinia Lophoictinia isura Lophoictinia Lophoictinia Lophoictinia Lophoictinia Lophoictinia Lophoictinia Lophoictinia L						
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137. Lopholcitria isura IA 138. 24690 Macronectes giganeus (Southern Giant Petrel) IA 139. 24326 Malacorthynchus membranaçeus (Pink-eared Duck) 140. 25651 Malurus Ismberti (Variegated Fairy-wren) 141. 25658 Malurus sepienderis (Splendid Fairy-wren) 142. 25758 Megalunus gramineus (Ittle Grassbird) 143. 47997 Melandrodyas cucullata (Hooded Robin) 144. 25663 Melithreptus brevirostris Subsp. leaded Honeyeater) 145. 24586 Melithreptus brevirostris sübsp. leaded Honeyeater) 146. 24736 Melopsittacus undulatus (Budgerigar) 147. 24588 Meropa omatus (Rainbow Bee-eater) 148. Microcarbo melanoleucos 149. 25564 Nycticorax caledonicus (Coctatel) 150. 24742 Nymphicus hollandicus (Coctatel) 151. 24407 Nymphicus hollandicus (Coctatel) 152. 24328 Nyura australis (Blue-billed Duck) P4 153. 25680 Pachycephala rufiventris «Itzulous Whistler)	135.					
138. 24690 Macronectes giganteus (Southern Giant Petrel) IA 139. 2436 Malacorhynchus membranaceus (Pink-eared Duck) 140. 25651 Malurus Ampelineus (Little Grassbird) 141. 25758 Megalurus gramineus (Little Grassbird) 143. 47997 Megalurus gramineus (Little Grassbird) 144. 25663 Melithreptus brevirostris (Brown-headed Honeyeater) 144. 25663 Melithreptus brevirostris (Brown-headed Honeyeater) 145. 24586 Melithreptus brevirostris (Brown-headed Honeyeater) 146. 24736 Melopsittacus undulatus (Budgerigar) 147. 24598 Merops ornatus (Rainbow Bee-eater) 148. Microcarbo melanoleucos 149. 25564 Mycticorax caledonicus (Rufuous Night Heron) 150. 24742 Mymphicus holiandicus (Cockateil) 151. 24407 Ocyphaps lophotes (Crested Pigeon) 152. 24328 Oxyura sustratis (Blue-billed Duck) 153. 25880 Pachyceplaia utiliventris (Rufous Whistler) 155. 24893 Pachyceplaia utiliventris (Rufou	136.	25661	Lichmera indistincta (Brown Honeyeater)			
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140. 25651 Malurus Iamberti (Variegated Fairy-wren)					IA	
141. 25654 Malurus splendens (Splendid Fairy-wren) 142. 25758 Megalurus gramineus (Little Grassbird) 143. 47997 Melanodryas cucullata (Hooded Robin) 144. 25663 Melithreptus brevirostris subsp. leucogenys (Brown-headed Honeyeater) 145. 24586 Melithreptus brevirostris subsp. leucogenys (Brown-headed Honeyeater) 146. 24736 Melopstitacus undulatus (Budgerigar) 147. 24598 Merops omatus (Rainbow Bee-eater) 148. Microcarbo melanoleucos 149. 25564 Nycticorax celedonicus (Rufous Night Heron) 150. 24742 Nymphicus hollandicus (Cookatel) 151. 24407 Oxyura australis (Blue-billed Duck) P4 152. 24328 Oxyura australis (Blue-billed Duck) P4 153. 25680 Pachycephala rufiventris subsp. rufiventris (Rufous Whistler) 154. 24624 Pachypelial desolata (Antarctic Prion) IA 155. 24639 Pachypilla desolata (Spotted Pardalote) IA 157. 25681 Pardalotus suriatus (Spotted Pardalote) IA 159. 24648 Pelecanus conspicillatus						
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144. 25663 Melithreptus brevirostris (Brown-headed Honeyeater) 145. 24586 Melithreptus brevirostris subsp. leucogenys (Brown-headed Honeyeater) 146. 24736 Melopsitiacus undulatus (Budgerigar) 147. 24598 Merops omatus (Rainbow Bee-eater) 148. Microcarbo melanoleucos 149. 25564 Nycticorax caledonicus (Rufous Night Heron) 150. 24742 Nymphicus hollandicus (Cockatiel) 151. 24407 Ocyphaps lophotes (Crested Pigeon) 152. 24328 Oxyura australis (Blue-billed Duck) P4 153. 25680 Pachycephala rufiventris (Rufous Whistler) 154. 24624 Pachycephala rufiventris subsp. rufiventris (Rufous Whistler) 155. 24693 Pachytilla desolata (Antarctic Prion) 156. 48591 Pandion cristatus (Osprey, Eastern Osprey) IA 157. 25681 Pardalotus punctatus (Spotted Pardalote) 158. 25682 Pardalotus striatus (Striated Pardalote) 159. 24648 Pelecanus conspicillatus (Australian Pelican) 160. 48060 Petrochelidon ariel (Fairy Martin) 161. 48061 Petrochelidon nigricans (Tree Martin) 162. 4806 Petroica boodang (Scarlet Robin) 163. 24659 Phalacrocorax melanoleucos (Little Pied Cormorant) 166. 24667 Phalacrocorax varius (Creat Cormorant) 167. 25699 Phalacrocorax varius (Pied Cormorant) 168. 24699 Phalacrocorax varius (Pied Cormorant)						
145. 24586 Melithreptus brevirostris subsp. leucogenys (Brown-headed Honeyeater) 146. 24798 Melopsittacus undulatus (Budgerigar) 147. 24598 Merops ornatus (Rainbow Bee-eater) 148. Microcarbo melanoleucos 149. 25564 Nycticorax caledonicus (Rufous Night Heron) 150. 24742 Nymphicus hollandicus (Cockatiel) 151. 24407 Ocyphaps lophotes (Crested Pigeon) 152. 24328 Oxyura australis (Blue-billed Duck) 153. 25680 Pachycephala rufiventris (Rufous Whistler) 154. 24624 Pachycephala rufiventris (Rufous Whistler) 155. 24639 Pachyptila desolata (Antarctic Prion) 156. 48591 Pandion cristatus (Osprey, Eastern Osprey) 158. 25681 Pardalotus punctatus (Spotted Pardalote) 159. 24648 Pelecanus conspicillatus (Australian Pelican) 160. 48060 Petrocleidon ariel (Fairy Martin) 161. 48061 Petrochelidon ingicans (Tree Martin) 162. 48066 Petroica boodang (Scarlet Robin) 163. 25699 Phalacrocorax carbo (Great Cormorant) 166. 24667 Phalacrocorax sulcinostris (Little Black Cormorant) 167. 25699 Phalacrocorax varius (Pled Cormorant)	143.	47997	Melanodryas cucullata (Hooded Robin)			
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167. 25699 Phalacrocorax varius (Pied Cormorant)						
168. 24668 Phalacrocorax varius subsp. hypoleucos (Pied Cormorant)						
	168.	24668	Phalacrocorax varius subsp. hypoleucos (Pied Cormorant)			

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Na	me ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Que Area
169.	24409	Phaps chalcoptera (Common Bronzewing)			
170.	48071	Phylidonyris niger (White-cheeked Honeyeater)			
171.	24596	Phylidonyris novaehollandiae (New Holland Honeyeater)			
172.	24841	Platalea flavipes (Yellow-billed Spoonbill)			
173.	24842	Platalea regia (Royal Spoonbill)			
174.	24747	Platycercus spurius (Red-capped Parrot)			
175.	24750	Platycercus zonarius subsp. semitorquatus (Twenty-eight Parrot)			
176.	24383	Pluvialis squatarola (Grey Plover)		IA	
177.	25703	Podargus strigoides (Tawny Frogmouth)			
		Podargus strigoides subsp. brachypterus (Tawny Frogmouth)			
179.	25704	Podiceps cristatus (Great Crested Grebe)			
		Poliocephalus poliocephalus (Hoary-headed Grebe)			
		Polytelis anthopeplus subsp. westralis (Regent Parrot)			
		Porphyrio porphyrio (Purple Swamphen)			
		Porphyrio porphyrio subsp. bellus (Purple Swamphen)			
		Porzana fluminea (Australian Spotted Crake)			
		Porzana pusilla (Baillon's Crake)			
		Porzana pusilla subsp. palustris (Baillon's Crake)			
		Porzana tabuensis (Spotless Crake)			
		Pterodroma brevirostris (Kerguelen Petrel)			
		Pterodroma lessonii (White-headed Petrel)			
	24716	Puffinus pacificus (Wedge-tailed Shearwater)		IA	
191.		Purpureicephalus spurius			
		Recurvirostra novaehollandiae (Red-necked Avocet)			
		Rhipidura albiscapa (Grey Fantail)			
		Rhipidura leucophrys (Willie Wagtail)			
	25534	Sericornis frontalis (White-browed Scrubwren)			
196.		Serinus canarius			
		Smicrornis brevirostris (Weebill)			
		Stagonopleura oculata (Red-eared Firetail)			
		Sterna fuscata subsp. nubilosa (Sooty Tern)			
		Stictonetta naevosa (Freckled Duck)			
		Strepera versicolor (Grey Currawong)			
		Streptopelia chinensis (Spotted Turtle-Dove)	Y		
		Streptopelia senegalensis (Laughing Turtle-Dove)	Y		
		Streptopelia senegalensis subsp. senegalensis (Laughing Turtle-Dove)	Y		
		Tachybaptus novaehollandiae (Australasian Grebe, Black-throated Grebe)			
206.	24682	Tachybaptus novaehollandiae subsp. novaehollandiae (Australasian Grebe, Black-			
007	0.4004	throated Grebe)			
		Tadorna tadornoides (Australian Shelduck, Mountain Duck)			
		Thalasseus bergii (Crested Tern) Thrackiomia anininglia (Ctraw packed thin)		IA	
		Threskiornis spinicollis (Straw-necked Ibis)			
		Todiramphus sanctus (Sacred Kingfisher)			
		Todiramphus sanctus subsp. sanctus (Sacred Kingfisher)			
		Tribonyx ventralis (Black-tailed Native-hen)			
		Trichoglossus haematodus (Rainbow Lorikeet)	.,		
		Trichoglossus haematodus subsp. moluccanus (Rainbow Lorikeet)	Y		
		Tringa nebularia (Common Greenshank, greenshank)		IA	
		Tyto alba subsp. delicatula (Barn Owl)			
		Tyto novaehollandiae subsp. novaehollandiae (Masked Owl (southwest))		P3	
		Vanellus tricolor (Banded Lapwing)			
219.	25/65	Zosterops lateralis (Grey-breasted White-eye, Silvereye)			
ryopsid (Mos:	s)				
		Barbula calycina			
221.	32462	Ceratodon purpureus subsp. convolutus			
222.	32469	Fissidens taylorii var. taylorii			
223.	32370	Funaria hygrometrica			
224.	32380	Gemmabryum pachythecum			
225.	32398	Leptobryum pyriforme			
226.	32417	Ptychostomum angustifolium			
		Syntrichia antarctica			
		Syntrichia pagorum			
		Tortula muralis			
icotyledon	10700	A houtile an expandite times			
		Abutilon grandifolium	Y		
		Acadia applanata			
	3282	Acacia cyclops (Coastal Wattle)			
232.	11004				
		Acacia drummondii subsp. drummondii Acacia huegelii			

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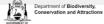






	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
235.	15721	Acacia lasiocarpa var. sedifolia			
236.	3442	Acacia microbotrya (Manna Wattle, Kalyang)			
237.	3454	Acacia nervosa (Rib Wattle)			
238.	15481	Acacia pulchella var. glaberrima			
239.	15483	Acacia pulchella var. pulchella			
240.		Acacia saligna subsp. saligna			
241.		Acacia stenoptera (Narrow Winged Wattle)			
242.	3576	Acacia tetragonocarpa			
243.		Acacia truncata			
244.		Acacia willdenowiana (Grass Wattle)			
245.		Actinotus glomeratus			
246.		Actinotus leucocephalus (Flannel Flower)			
247. 248.		Adenanthos barbiger			
249.		Adenanthos cygnorum subsp. cygnorum (Common Woollybush)			
250.		Adenanthos obovatus (Basket Flower) Ailanthus altissima (Tree of Heaven)	Υ		
251.		Allocasuarina fraseriana (Sheoak, Kondil)	ı		
252.		Allocasuarina humilis (Dwarf Sheoak)			
253.		Alternanthera denticulata (Lesser Joyweed)			
254.		Amaranthus caudatus (Love Lies Bleeding)	Υ		
255.		Amaranthus cruentus (Redshank)	Y		
256.		Amaranthus hybridus (Slim Amaranth)	Y		
257.		Amaranthus powellii (Powell's Amaranth)	Y		
258.		Amaranthus viridis (Green Amaranth)	Y		
259.		Amyema linophylla			
260.		Amyema linophylla subsp. linophylla			
261.	7831	Angianthus micropodioides		P3	
262.	17455	Anredera cordifolia	Υ		
263.	3686	Aotus cordifolia			
264.	3692	Aotus procumbens			
265.	6210	Apium annuum			
266.	12040	Apium prostratum subsp. prostratum var. prostratum (Sea Celery)			
267.	28293	Argyranthemum frutescens subsp. foeniculaceum	Υ		
268.	20350	Astartea affinis (West-coast Astartea)			
269.	20283	Astartea scoparia (Common Astartea)			
270.	6330	Astroloma macrocalyx (Swan Berry)			
271.		Astroloma microcalyx (Native Cranberry)			
272.		Astroloma xerophyllum			
273.		Atriplex hypoleuca			
274.		Atriplex prostrata (Hastate Orache)	Υ		
275.		Atriplex semibaccata (Berry Saltbush)	V		
276.		Auranticarpa rhombifolia	Υ		Y
277. 278.		Babingtonia camphorosmae (Camphor Myrtle)	V		
279.		Bacopa monnieri Banksia armata var. armata	Υ		
280.		Banksia ilicifolia (Holly-leaved Banksia)			
281.		Banksia incana			
282.		Banksia littoralis (Swamp Banksia, Pungura)			
283.		Banksia menziesii (Firewood Banksia)			
284.		Banksia sessilis var. cygnorum			
285.		Berkheya rigida (African Thistle, Hamelin Thistle)	Υ		
286.		Billardiera fraseri (Elegant Pronaya)			
287.		Billardiera fusiformis (Australian Bluebell)			
288.		Boronia ramosa subsp. anethifolia			
289.		Bossiaea eriocarpa (Common Brown Pea)			
290.	3714	Bossiaea ornata (Broad Leaved Brown Pea)			
291.	7878	Brachyscome iberidifolia			
201.	2003	Brassica fruticulosa (Twiggy Turnip)	Υ		
292.	2993	D .	Υ		
		Brassica x napus			
292. 293. 294.	2995	Brassica x napus Byblis gigantea (Rainbow Plant)	,	P3	
292. 293.	2995 3178			P3	
292. 293. 294. 295. 296.	2995 3178 2848 4717	Byblis gigantea (Rainbow Plant) Calandrinia corrigioloides (Strap Purslane) Callitriche stagnalis (Common Starwort)	Y	P3	
292. 293. 294. 295. 296. 297.	2995 3178 2848 4717 5415	Byblis gigantea (Rainbow Plant) Calandrinia corrigioloides (Strap Purslane) Callitriche stagnalis (Common Starwort) Calothamnus lateralis		P3	
292. 293. 294. 295. 296. 297. 298.	2995 3178 2848 4717 5415 35816	Byblis gigantea (Rainbow Plant) Calandrinia corrigioloides (Strap Purslane) Callitriche stagnalis (Common Starwort) Calothamnus lateralis Calothamnus quadrifidus subsp. quadrifidus		P3	
292. 293. 294. 295. 296. 297. 298.	2995 3178 2848 4717 5415 35816 5428	Byblis gigantea (Rainbow Plant) Calandrinia corrigioloides (Strap Purslane) Callitriche stagnalis (Common Starwort) Calothamnus lateralis Calothamnus quadrifidus subsp. quadrifidus Calothamnus rupestris (Mouse Ears)		P3	
292. 293. 294. 295. 296. 297. 298. 299. 300.	2995 3178 2848 4717 5415 35816 5428 5429	Byblis gigantea (Rainbow Plant) Calandrinia corrigioloides (Strap Purslane) Callitriche stagnalis (Common Starwort) Calothamnus lateralis Calothamnus quadrifidus subsp. quadrifidus Calothamnus rupestris (Mouse Ears) Calothamnus sanguineus (Silky-leaved Blood flower, Pindak)		P3	
292. 293. 294. 295. 296. 297. 298. 299. 300. 301.	2995 3178 2848 4717 5415 35816 5428 5429 5439	Byblis gigantea (Rainbow Plant) Calandrinia corrigioloides (Strap Purslane) Callitriche stagnalis (Common Starwort) Calothamnus lateralis Calothamnus quadrifidus subsp. quadrifidus Calothamnus rupestris (Mouse Ears) Calothamnus sanguineus (Silky-leaved Blood flower, Pindak) Calytrix angulata (Yellow Starflower)		P3	
292. 293. 294. 295. 296. 297. 298. 299. 300. 301.	2995 3178 2848 4717 5415 35816 5428 5429 5439 5458	Byblis gigantea (Rainbow Plant) Calandrinia corrigioloides (Strap Purslane) Callitriche stagnalis (Common Starwort) Calothamnus lateralis Calothamnus quadrifidus subsp. quadrifidus Calothamnus rupestris (Mouse Ears) Calothamnus sanguineus (Silky-leaved Blood flower, Pindak) Calytrix angulata (Yellow Starflower) Calytrix flavescens (Summer Starflower)		P3	
292. 293. 294. 295. 296. 297. 298. 299. 300. 301.	2995 3178 2848 4717 5415 35816 5428 5429 5439 5458 5460	Byblis gigantea (Rainbow Plant) Calandrinia corrigioloides (Strap Purslane) Callitriche stagnalis (Common Starwort) Calothamnus lateralis Calothamnus quadrifidus subsp. quadrifidus Calothamnus rupestris (Mouse Ears) Calothamnus sanguineus (Silky-leaved Blood flower, Pindak) Calytrix angulata (Yellow Starflower)		P3	

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	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Que
305.	5476	Calytrix sapphirina			Alea
306.		Campsis radicans	Υ		
307.	44535	Campsis x tagliabuana	Υ		
308.		Capsella bursa-pastoris (Shepherd's Purse)	Υ		
309.		Cardamine hirsuta (Common Bittercress)	Y		
310.		Cardamine occulta	Y		
311.		Casuarina glauca	Y		
312.		Casuarina obesa (Swamp Sheoak, Kuli)	·		
313.		Centaurium tenuiflorum	Υ		
314.		Centella asiatica	'		
315.		Centipeda cunninghamii (Common Sneezewood, Gukwonderuk, Old Man Weed)			
		, , , , , , , , , , , , , , , , , , , ,	V		
316.		Cerastium glomeratum (Mouse Ear Chickweed)	Y		
317.		Chenopodium album (Fat Hen)	Y		
318.		Chrysocoma coma-aurea	Υ		Y
319.		Cinnamomum camphora	Υ		
320.		Cirsium vulgare (Spear Thistle, Scotch Thistle)	Υ		
321.	2929	Clematis pubescens (Common Clematis)			
322.	44593	Coleonema pulchellum	Υ		
323.	4554	Comesperma flavum			
324.	4564	Comesperma virgatum (Milkwort)			
325.	1875	Conospermum huegelii (Slender Smokebush)			
326.	1876	Conospermum incurvum (Plume Smokebush)			
327.	1882	Conospermum stoechadis (Common Smokebush)			
328.	15520	Conospermum stoechadis subsp. sclerophyllum			
329.		Conospermum stoechadis subsp. stoechadis (Common Smokebush)			
330.		Conospermum undulatum		Т	
331.		Conostephium minus (Pink-tipped Pearl flower)			
332.		Conostephium pendulum (Pearl Flower)			
333.		Conostephium preissii			
334.		Conyza bonariensis (Flaxleaf Fleabane)	Υ		
			Y		
335.		Conyza canadensis var. canadensis			
336.		Conyza parva	Y		
337.		Conyza sumatrensis	Υ		
338.		Corymbia calophylla (Marri)			
339.		Cotula australis (Common Cotula)			
340.	7945	Cotula coronopifolia (Waterbuttons)	Υ		
341.	7947	Cotula turbinata (Funnel Weed)	Υ		
342.	3136	Crassula alata	Υ		
343.	11221	Crassula alata var. alata	Υ		
344.	11709	Crassula colorata var. acuminata			
345.	11563	Crassula colorata var. colorata			
346.	3138	Crassula decumbens (Rufous Stonecrop)			
347.	11349	Crassula decumbens var. decumbens			
348.	3139	Crassula exserta			
349.	29054	Crepis foetida subsp. foetida (Stinking Hawksbeard)	Υ		
350.		Cryptandra arbutiflora var. tubulosa			
351.		Cuscuta epithymum (Lesser Dodder, Greater Dodder)	Υ		
352.		Cyclospermum leptophyllum	Y		
353.		Cymbalaria muralis subsp. muralis	Y		
354.		Dampiera alata (Winged-stem Dampiera)			
		Dampiera linearis (Common Dampiera)			
355.				DO.	
356.		Dampiera triloba		P3	
357.		Datura inoxia	Y		
358.		Datura metel (Downy Thornapple)	Y		
359.		Datura stramonium (Common Thornapple)	Υ		
360.		Datura wrightii (Hairy Thornapple)	Υ		
361.	18560	Daviesia divaricata subsp. divaricata			
362.	15505	Daviesia incrassata subsp. incrassata			
363.	16585	Daviesia nudiflora subsp. nudiflora			
364.	3831	Daviesia pedunculata			
365.	3832	Daviesia physodes			
366.	3833	Daviesia podophylla			
367.		Daviesia triflora			
		Diplopeltis huegelii subsp. lehmannii			
368.		Diplotaxis muralis (Wall Rocket)	Υ		
		Dischisma arenarium	Y		
369.	7054				
369. 370.			Y		
369. 370. 371.	7055	Dischisma capitatum (Woolly-headed Dischisma)	Y		
369. 370. 371. 372.	7055 7961	Dischisma capitatum (Woolly-headed Dischisma) Dittrichia graveolens (Stinkwort)	Y Y	D4	
369. 370. 371.	7055 7961 4763	Dischisma capitatum (Woolly-headed Dischisma)		P4	



	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
375.		Drosera drummondii			
376.		Drosera gigantea (Giant Sundew)			
377.		Drosera glanduligera (Pimpernel Sundew)			
378.		Drosera hirsuta			
379.		Drosera macrantha (Bridal Rainbow)			
380. 381.		Drosera menziesii (Pink Rainbow) Drosera microphylla (Golden Rainbow)			
381.		Drosera minutiflora			
383.		Drosera nitidula (Shining Sundew)			
384.		Drosera pallida (Pale Rainbow)			
385.		Drosera porrecta			
386.		Drosera pulchella (Pretty Sundew)			
387.	3128	Drosera ramellosa (Branched Sundew)			
388.	8911	Drosera rosulata			
389.		Drosera sp.			
390.	49090	Drosera sp. Branched styles (S.C. Coffey 193)			
391.		Drosera spilos			
392.		Drosera stolonifera (Leafy Sundew)			
393.		Dysphania ambrosioides (Mexican Tea)	Y		
394.		Echium plantagineum (Paterson's Curse)	Υ		
395. 306		Elatine gratioloides (Waterwort)	Υ		
396. 397.		Epilobium ciliatum Epilobium hirtigerum (Hairy Willow Herb)	Ť		
398.		Epilobium tetragonum subsp. tetragonum	Υ		
399.		Eremaea asterocarpa subsp. asterocarpa			
400.		Eremaea pauciflora			
401.		Eremaea pauciflora var. pauciflora			
402.	17175	Eremophila glabra subsp. albicans			
403.	4332	Erodium botrys (Long Storksbill)	Υ		
404.	4336	Erodium moschatum (Musky Crowfoot)	Υ		
405.	5708	Eucalyptus marginata (Jarrah, Djara)			
406.	13547	Eucalyptus marginata subsp. marginata (Jarrah)			
407.		Eucalyptus rudis (Flooded Gum, Kulurda)			
408.		Eucalyptus todtiana (Coastal Blackbutt)			
409. 410.		Eucalyptus utilis Eucalyptus utilis			
410.		Euchilopsis linearis (Swamp Pea) Euphorbia dendroides	Υ		
412.		Euphorbia hyssopifolia	Y		
413.		Euphorbia lathyris (Caper Spurge)	Y		
414.		Euphorbia maculata	Y		
415.		Euphorbia marginata (Snow-on-the-mountain)	Υ		
416.	4638	Euphorbia peplus (Petty Spurge)	Υ		
417.	4648	Euphorbia terracina (Geraldton Carnation Weed)	Υ		
418.	3880	Eutaxia virgata			
419.	8850	Fallopia convolvulus	Υ		
420.		Ficus carica (Common Fig)	Υ		
421.		Foeniculum vulgare (Fennel)	Υ		
422.		Frankenia pauciflora (Seaheath)	.,		
423.		Fumaria capreolata (Whiteflower Fumitory)	Y		
424. 425.		Fumaria muralis (Wall Fumitory) Galinsoga parviflora (Potato Weed)	Y Y		
425. 426.		Gamochaeta coarctata	Υ Υ		
426. 427.		Gamochaeta pensylvanica	Ϋ́		
428.		Gastrolobium capitatum	,		
429.		Gastrolobium ebracteolatum			
430.		Gastrolobium linearifolium			
431.	20512	Gastrolobium praemorsum			
432.	4339	Geranium molle (Dove's Foot Cranesbill)	Υ		
433.	4341	Geranium solanderi (Native Geranium)			
434.		Glischrocaryon aureum (Common Popflower)			
435.		Gnephosis tenuissima			
436.		Gomphocarpus fruticosus (Narrowleaf Cottonbush)	Υ		
437.		Gomphocarpus physocarpus	Υ		
438.		Gompholobium confertum			
439. 440.		Gompholobium polymorphum Gompholobium scalarum			
440. 441.		Gompholobium scabrum Gompholobium shuttleworthii			
441.		Gompholobium tomentosum (Hairy Yellow Pea)			
443.		Gonocarpus paniculatus			
444.		Gonocarpus pithyoides			
			Department	of Biodiversity,	WESTERN

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		Species Name	Naturalis	ed Conservation Code	Area
445. 446.		Goodenia pulchella subsp. Coastal Plain A (M. Hislop 634) Grammatotheca bergiana var. bergiana	Υ		
446. 447.		Gratiola pubescens	Y		
448.		Grevillea bipinnatifida subsp. bipinnatifida			
449.		Grevillea crithmifolia			
450.		Grevillea endlicheriana (Spindly Grevillea)			
451.		Grevillea pilulifera (Woolly-flowered Grevillea)			
452.		Grevillea synapheae subsp. synapheae			
453.		Grevillea vestita			
454.	12824	Grevillea vestita subsp. vestita			
455.	2784	Gyrostemon ramulosus (Corkybark)			
456.	2143	Hakea conchifolia (Shell-leaved Hakea)			
457.	2175	Hakea lissocarpha (Honey Bush)			
458.	2197	Hakea prostrata (Harsh Hakea)			
459.	2203	Hakea ruscifolia (Candle Hakea)			
460.	2212	Hakea sulcata (Furrowed Hakea)			
461.	2214	Hakea trifurcata (Two-leaf Hakea)			
462.	2216	Hakea varia (Variable-leaved Hakea)			
463.	3961	Hardenbergia comptoniana (Native Wisteria)			
464.		Helianthus annuus (Sunflower, Common Sunflower)	Υ		
465.		Helianthus debilis subsp. cucumerifolius	Y		
466.		Heliophila pusilla	Υ		
467.		Helminthotheca echioides (Ox-tongue, Prickly Ox-tongue)	Υ		
468.		Hemiandra pungens (Snakebush)			
469. 470		Hibbertia amplexicaulis			
470. 474		Hibbertia aurea			
471.		Hibbertia hypericoides subsp. hypericoides			
472. 472		Hibbertia racemosa (Stalked Guinea Flower)		D0	
473. 474		Hibbertia spicata subsp. leptotheca		P3	
474. 475		Hibbertia stellaris (Orange Stars)			
475. 476.		Hibbertia subvacinata			
477.		Hibbertia subvaginata			
477. 478.		Hibiscus diversifolius	Υ		Υ
479.		Hibiscus diversifolius subsp. diversifolius	Y		ī
480.		Homalospermum firmum	ī		
481.		Hovea trisperma (Common Hovea)			
482.		Hyalosperma cotula			
483.		Hybanthus calycinus (Wild Violet)			
484.		Hypericum gramineum (Small St John's Wort)			
485.		Hypocalymma angustifolium (White Myrtle, Kudjid)			
486.	8086	Hypochaeris glabra (Smooth Catsear)	Υ		
487.	9352	Hypochaeris radicata (Flat Weed, Cats-ear)	Υ		
488.	6620	Ipomoea cairica (Coast Morning Glory)	Υ		
489.	6630	Ipomoea indica (Morning Glory)	Υ		
490.	29775	Isopogon drummondii		P3	
491.	7396	Isotoma hypocrateriformis (Woodbridge Poison)			
492.	19700	Isotropis cuneifolia subsp. cuneifolia			
493.	4010	Jacksonia floribunda (Holly Pea)			
494.	4012	Jacksonia furcellata (Grey Stinkwood)			
495.		Jacksonia lehmannii			
496.		Jacksonia sericea (Waldjumi)		P4	
497.		Jacksonia sternbergiana (Stinkwood, Kapur)			
498.		Kennedia coccinea (Coral Vine)			
499.		Kennedia prostrata (Scarlet Runner)			
500.		Kunzea glabrescens (Spearwood)			
501.		Kunzea micrantha subsp. micrantha			
502.		Lactuca saligna (Wild Lettuce, Willow-leaf Lettuce)	Y		
503.		Lactuca serriola (Prickly Lettuce)	Y		
504.		Lactuca serriola forma serriola	Y		
505. 506		Lantana camara (Common Lantana)	V		
506. 507		Lantana camara (Common Lantana)	Y		
507. 508		Latrobea tenella	Y		
508. 509		Laurencella rosea			
509. 510.		Lechenaultia biloba (Blue Leschenaultia)			
510.		Lechenaultia floribunda (Free-flowering Leschenaultia)			
		Leontodon rhagadioloides	Υ		
		Lepidium didymum			
512. 513.	19989		V		
512. 513. 514.		Leptomeria empetriformis	Y		



	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Qu Area
515.		Leptospermum continentale			
516.		Leucopogon conostephioides			
517.		Leucopogon polymorphus			
518.		Leucopogon propinquus			
519.		Leucopogon pulchellus (Beard-heath)			
520.		Leucopogon racemulosus			
521.		Leucopogon sprengelioides			
522.		Leucopogon verticillatus (Tassel Flower)			
523. 524.		Levenhookia preissii (Preiss's Stylewort) Levenhookia stipitata (Common Stylewort)			
525.		Linaria maroccana	Υ		
525. 526.		Linum usitatissimum (Flax)	Y		
520.		Liparophyllum capitatum	Ť		
528.		Lobelia anceps (Angled Lobelia)			
529.		Lobularia maritima (Sweet Alyssum)	Υ		
530.		Lotus uliginosus (Greater Lotus)	Y		
531.		Ludwigia repens	Y		
532.		Lupinus cosentinii	Y		
533.		Lupinus luteus (Yellow Lupin)	Y		
534.		Lysiana casuarinae	•		
535.		Lysinema pentapetalum			
536.		Macarthuria australis			
537.		Macarthuria keigheryi		Т	
538.		Macroptilium atropurpureum (Purple Bean)	Υ		
539.		Malva pseudolavatera	Y		
540.		Mauranthemum paludosum	Y		
541.		Medicago arabica (Spotted Medic)	Y		
542.		Medicago polymorpha (Burr Medic)	Υ		
543.		Melaleuca huegelii subsp. huegelii			
544.		Melaleuca lanceolata (Rottnest Teatree, Moonah)			
545.		Melaleuca preissiana (Moonah)			
546.		Melaleuca seriata			
547.	18598	Melaleuca systena			
548.		Melaleuca teretifolia (Banbar)			
549.		Melaleuca trichophylla			
550.		Melaleuca viminea (Mohan)			
551.		Melaleuca viminea subsp. viminea			
552.		Melilotus albus	Υ		
553.	4085	Melilotus indicus	Υ		
554.	15994	Mentha x piperita var. citrata	Υ		
555.	8105	Millotia myosotidifolia			
556.	7085	Misopates orontium (Lesser Snapdragon)	Υ		
557.	29418	Monoculus monstrosus	Υ		
558.	37440	Monopsis debilis var. depressa	Υ		
559.	4662	Monotaxis grandiflora (Diamond of the Desert)			
560.	19585	Monotaxis grandiflora var. grandiflora			
561.	2415	Muehlenbeckia polybotrya			
562.		Myoporum caprarioides (Slender Myoporum)			
563.		Myriophyllum aquaticum (Brazilian Water Milfoil)	Υ		
564.		Nicandra physalodes (Apple of Peru)	Υ		
565.		Nicotiana glauca (Tree Tobacco)	Υ		
566.		Nuytsia floribunda (Christmas Tree, Mudja)			
567.		Ocimum americanum	Υ		
568.	6137	Oenothera affinis (Longflower Evening Primrose)	Υ		
569.	6138	Oenothera drummondii (Beach Evening Primrose)	Υ		
570.		Oenothera glazioviana (Evening Primrose)	Υ		
571.	16347	Oenothera laciniata	Υ		
572.	8127	Olearia axillaris (Coastal Daisybush)			
573.		Olearia elaeophila			
574.		Olearia paucidentata (Autumn Scrub Daisy)			
575.	8149	Olearia rudis (Rough Daisybush)			
576.		Opercularia vaginata (Dog Weed)			
577.		Opuntia monacantha (Barbary Fig)	Υ		
578.		Ornduffia albiflora			
579.		Ornithopus compressus (Yellow Serradella)	Υ		
580.		Ornithopus pinnatus (Slender Serradella)	Y		
581.		Ornithopus sativus (French Serradella)	Y		
582.		Orobanche minor (Lesser Broomrape)	Y		
583.		Oxalis bowiei (Bowie Wood Sorrel)	Y		
584.		Oxalis caprina	Y		



	Mame ID	Species Name	Naturalised	Conservation Code	Area
585.	4349	Oxalis corniculata (Yellow Wood Sorrel)	Υ		
586.	18331	Oxalis debilis var. corymbosa (Pink Shamrock)	Υ		
587.	4359	Oxalis violacea (Violet Wood Sorrel)	Υ		
588.	2965	Papaver rhoeas (Field Poppy)	Υ		
589.	2966	Papaver somniferum (Opium Poppy)	Υ		
590.	3618	Paraserianthes lophantha (Albizia)			
591.		Parthenocissus tricuspidata	Υ		Υ
592.	5225	Passiflora filamentosa	Υ		
593.		Pelargonium littorale			
594.		Pericalymma ellipticum var. floridum			
595.		Persicaria decipiens			
596.		Persicaria maculosa	Υ		
597.		Persoonia elliptica (Spreading Snottygobble)			
598.		Persoonia saccata (Snottygobble)			
599.		Petrophile brevifolia subsp. brevifolia			
600.		Petrophile linearis (Pixie Mops)			
601.		Petrophile macrostachya	.,		
602.		Petrorhagia dubia	Y		
603.		Petunia x atkinsiana	Y		
604.		Phacelia tanacetifolia	Υ		
605.		Philotheca spicata (Pepper and Salt)			
606.		Phyllangium paradoxum			
607.	4675	Phyllanthus calycinus (False Boronia)			
608.	17794	Phyllanthus tenellus	Υ		
609.	20652	Physalis angulata	Υ		
610.	6983	Physalis peruviana (Cape Gooseberry)	Υ		
611.	2793	Phytolacca octandra (Red Ink Plant)	Υ		
612.	5232	Pimelea argentea (Silvery Leaved Pimelea)			
613.	5264	Pimelea spectabilis (Bunjong)			
614.		Pimelea sulphurea (Yellow Banjine)			
615.		Pimelea sylvestris			
616.		Pithocarpa cordata			
617.		Plantago coronopus subsp. commutata	Υ		
618.		Plantago major (Greater Plantain)	Y		
619.		Platanus x hispanica	Y		V
620.		Platysace compressa (Tapeworm Plant)			•
621.		Platysace filiformis			
622.		Platysace juncea			
		• •		פס	
623.		Platysace ramosissima		P3	
624.		Platytheca galioides			
625.		Podotheca angustifolia (Sticky Longheads)			
626.		Podotheca chrysantha (Yellow Podotheca)			
627.		Polycarpon tetraphyllum (Fourleaf Allseed)	Y		
628.		Polygonum aviculare (Wireweed)	Υ		
629.		Populus alba	Υ		
630.	11260	Ptilotus drummondii var. drummondii (Pussytail)			
631.	2933	Ranunculus muricatus (Sharp Buttercup)	Υ		
632.	2938	Ranunculus trilobus (Buttercup)	Υ		
633.	3061	Raphanus raphanistrum (Wild Radish)	Υ		
634.	3062	Raphanus sativus (Radish)	Υ		
635.	6012	Regelia ciliata			
636.	3084	Reseda lutea (Cutleaf Mingnonette)	Υ		
637.		Rhagodia baccata subsp. baccata			
638.		Rhodanthe chlorocephala subsp. rosea			
639.		Rhodanthe manglesii			
640.		Ricinocarpos megalocarpus			
641.		Ricinocarpos undulatus			
642.		Ricinus communis (Castor Oil Plant)	Υ		
643.		Robinia pseudoacacia	Y		
644.		Romneya coulteri (California Tree Poppy)	Y		
645.			Y		
		Rorippa nasturtium-aquaticum (Watercress)			
646.		Rosa chinensis x moschata	Y		
647.		Rubus laudatus	Y		
648.		Rumex acetosella (Sorrel)	Y		
649.		Rumex hypogaeus	Y		
650.		Rumex vesicarius (Ruby Dock)	Y		
651.		Sagina apetala (Annual Pearlwort)	Υ		
652.		Sagina procumbens (Spreading Pearlwort)	Υ		
653.	48430	Salicornia quinqueflora			
654.	48431	Salicornia quinqueflora subsp. quinqueflora (Beaded Glasswort)			
			Departme	ent of Biodiversity,	WESTE
		the Department of Biodiversity, Conservation and Attractions and the Western Australian Museum.		ation and Attractions	AUSTI



	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
655.	20063	Salix babylonica	Υ		
656.	31594	Salix cinerea	Υ		
657.		Salix humboldtiana	Y		
658.		Salpichroa origanifolia (Pampas Lily of the Valley)	Y		
659.		Salvia reflexa (Mintweed)	Y		
660. 661.		Salvia verbenaca (Wild Sage) Samolus repens (Creeping Brookweed)	Y		
662.		Scaevola canescens (Grey Scaevola)			
663.		Scaevola lanceolata (Long-leaved Scaevola)			
664.		Scaevola repens var. repens			
665.	13152	Scaevola thesioides subsp. thesioides			
666.	48834	Schinus terebinthifolia	Υ		
667.	6033	Scholtzia involucrata (Spiked Scholtzia)			
668.	8218	Senecio ramosissimus (Auricled Groundsel)			
669.		Senecio vulgaris (Common Groundsel)	Y		
670.		Silene gallica (French Catchfly)	Y		
671.		Silene gallica var. gallica	Y		
672. 673.		Siloxerus filifolius Siloxerus humifusus (Procumbent Siloxerus)			
674.		Sisymbrium irio (London Rocket)	Υ		
675.		Sisymbrium orientale (Indian Hedge Mustard)	Y		
676.		Solanum americanum (Glossy Nightshade)	Y		
677.		Solanum giganteum	Y		
678.	7022	Solanum nigrum (Black Berry Nightshade)	Υ		
679.	7035	Solanum sisymbriifolium (Viscid Nightshade)	Υ		
680.	45036	Solidago chilensis	Υ		
681.		Soliva sessilis (Jo-jo, Onehunga Weed)	Υ		
682.		Sonchus asper (Rough Sowthistle)	Y		
683.		Sonchus oleraceus (Common Sowthistle)	Y		
684. 685.		Spergula arvensis (Corn Spurry)	Y		
686.		Sphaerolobium linophyllum Sphaerolobium medium			
687.		Sphaerolobium vimineum (Leafless Globe Pea)			
688.		Stachys arvensis (Staggerweed)	Υ		
689.		Stachystemon vermicularis			
690.	4733	Stackhousia monogyna			
691.	2918	Stellaria media (Chickweed)	Υ		
692.	19403	Stenopetalum gracile			
693.		Stirlingia latifolia (Blueboy)			
694.		Stylidium adpressum (Trigger-on-stilts)			
695.		Stylidium androsaceum			
696. 697.		Stylidium araeophyllum (Stilt Walker) Stylidium asteroideum (Star Triggerplant)		P3	
698.		Stylidium bicolor		F3	
699.		Stylidium carnosum (Fleshy-leaved Triggerplant)			
700.		Stylidium cygnorum			
701.	7712	Stylidium despectum (Dwarf Triggerplant)			
702.	7713	Stylidium dichotomum (Pins-and-needles)			
703.		Stylidium divaricatum (Daddy-long-legs)			
704.		Stylidium hesperium			
705.		Stylidium longitubum (Jumping Jacks)		P4	
706.		Stylidium neurophyllum (Coastal Plain Triggerplant)		DO.	
707. 708.		Stylidium paludicola Stylidium pulchellum (Thumbelina Triggerplant)		P3	
708.		Stylidium repens (Matted Triggerplant)			
710.		Stylidium schoenoides (Cow Kicks)			
711.		Stylidium utricularioides (Pink Fan Triggerplant)			
712.		Suaeda australis (Seablite)			
713.	25902	Symphyotrichum squamatum (Bushy Starwort)	Υ		
714.	15532	Synaphea spinulosa subsp. spinulosa			
715.		Taraxacum khatoonae	Υ		
716.		Taxandria linearifolia			
717.		Tecticornia halocnemoides (Shrubby Samphire)			
718.		Tecticornia halocnemoides subsp. halocnemoides			
719. 720.		Tecticornia indica subsp. bidens Tecticornia lepidosperma			
720. 721.		Tetratheca hirsuta subsp. hirsuta			
721.		Tetratheca hirsuta subsp. viminea			
723.		Tetratheca nuda			
724.	5080	Thomasia foliosa			
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	Name ID	Species Name	Naturalised	Conservation Code	Endemic To Qu Area
725. 726.		Thomasia pauciflora (Few Flowered Thomasia)			
726.		Thomasia purpurea Thomasia rulingioides			
728.		Trachymene cyanopetala			
729.		Trachymene ornata (Spongefruit)			
730.		Trachymene pilosa (Native Parsnip)			
731.		Tribulus terrestris (Caltrop)	Υ		
732.		Trifolium angustifolium var. angustifolium	Y		
733.		Trifolium arvense (Hare's Foot Clover)	Y		
734.		Trifolium campestre var. campestre (Hop Clover)	Y		
735.		Trifolium cherleri (Cupped Clover)	Y		
736.		Trifolium dubium (Suckling Clover)	Υ		
737.		Trifolium glomeratum (Cluster Clover)	Υ		
738.		Trifolium hirtum (Rose Clover)	Y		
739.		Trifolium hybridum var. hybridum	Υ		
740.		Trifolium michelianum	Υ		Υ
741.		Trifolium pratense var. sativum	Υ		
742.		Trifolium repens (White Clover)	Y		
743.		Trifolium repens var. repens	Y		
744.		Trifolium resupinatum var. majus	Y		
745.		Trifolium resupinatum var. resupinatum	Y		
746.		Trifolium spumosum (Bladder Clover)	Y		
747.		Trifolium subterraneum (Subterranean Clover)	Y		
748.		Trifolium tomentosum (Woolly Clover)	Y		
749.		Trifolium tomentosum var. tomentosum	Y		
750.		Tropaeolum majus (Garden Nasturtium)	Y		
751.		Trymalium ledifolium var. rosmarinifolium	•		
752.		Trymalium odoratissimum subsp. odoratissimum			
753.		Ulex europaeus (Gorse)	Υ		
754.		Urospermum picroides (False Hawkbit)	Y		
755.		Ursinia anthemoides subsp. anthemoides	Y		
756.		Urtica urens (Small Nettle)	Y		
757.		Utricularia menziesii (Redcoats)	•		
758.		Utricularia multifida			
759.		Utricularia volubilis (Twining Bladderwort)			
760.		Vellereophyton dealbatum (White Cudweed)	Υ		
761.		Verbena incompta (Purple-top Verbena)	Y		
762.		Verbena rigida var. rigida	Y		
763.		Verbesina encelioides	Y		
764.		Veronica arvensis (Wall Speedwell)	Y		
765.		Verticordia densiflora var. densiflora	·		
766.		Verticordia lindleyi subsp. lindleyi		P4	
767.		Verticordia nitens (Morrison Featherflower, Kodjeningara)			
768.		Verticordia plumosa var. plumosa			
769.		Vicia hirsuta (Hairy Vetch)	Υ		
770.		Vicia sativa subsp. nigra	Y		
771.		Vicia sativa subsp. sativa	Y		
772.		Viminaria juncea (Swishbush, Koweda)			
773.		Waitzia nitida			
774.		Waitzia suaveolens var. suaveolens			
775.		Waltheria indica			
776.		Xanthosia huegelii			
	3200				
sh					
777.		??			
778.		Aldrichetta forsteri			
779.		Anguilla australis			
780.		Anoplocapros lenticularis			
781.		Apogon victoriae			
782.		Aracana aurita			
783.		Bostockia porosa			
784.		Carassius auratus			
785.		Cheilodactylus gibbosus			
786.		Chelmonops curiosus			
787.		Cleidopus gloriamaris			
788.		Cnidoglanis macrocephalus			
789.		Coris auricularis			
790.		Craterocephalus mugiloides			
791.		Diodon nicthemerus			
792.		Edelia vittata			
		Enoplosus armatus	, Solak ,	t of Biodiversity,	
793.			Danageman		WEST AUST



	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
794.		Epinephelides armatus			
795.	34028	Galaxias occidentalis (Western Minnow)			
796.		Gambusia affinis			
797.		Gerres subfasciatus			
798. 799.		Gobiomorphus coxii			
799. 800.		Gymnapistes marmoratus Microcanthus strigatus			
801.		Mugil cephalus			
802.		Nannoperca vittata			
803.		Notolabrus parilus			
804.		Ophisurus serpens			
805.		Papillogobius punctatus			
806.		Parma microlepis			
807.		Pegasus volitans			
808.		Pempheris klunzingeri			
809.		Phalloceros caudimaculatus			
810.		Phyllopteryx taeniolatus			
811.		Platax teira			
812.		Plotosus unicolor			Υ
813.		Pseudocaranx dentex			
814.		Pseudogobius olorum			
815.		Scorpis aequipinnis			
816.		Scorpis georgianus Throntorius magulacus			
817.		Threpterius maculosus Tilodon sexfesciatum			
818. 819.		Tilodon sexfasciatum Trygonoptera ovalis			
013.		Trygonopiora Ovalio			
Fungus					
820.	38751	Agaricus californicus			Υ
821.	38752	Agaricus campestris			
822.		Agaricus sp.			
823.		Alternaria solani			
824.		Amanita conicobulbosa			
825.		Amanita drummondii		P3	
826.		Amanita preissii (Cinnamon-ring Lepidella)		P3	
827. 828.		Amanita umbrinella			
829.	30/3/	Amanita xanthocephala Anthracobia muelleri			
830.		Armillaria luteobubalina			
831.	38848	Bolbitius titubans			
832.	00010	Boletellus obscurecoccineus			
833.		Boletus sp.			
834.		Botrytis cinerea			
835.		Byssomerulius corium			
836.		Calvatia candida			
837.	38768	Chlorophyllum molybdites			
838.	38770	Clitocybe kenkulunea			
839.		Coprinellus micaceus			
840.		Coprinus comatus			
841.		Cortinarius basirubescens			
842.		Cortinarius erythraeus			
843.		Cortinarius rotundisporus			
844.		Crepidotus applanatus			
845.	38780	Crepidotus eucalyptorum			
846.		Diplocarpon rosae			
847.	.=-	Drechslera poae			Y
848.	45819	Entorrhiza casparyana			Y
849.		Erysiphe necator Eight line henging			
850. 851.		Fistulina hepatica			
	20707	Geastrum sp. Geastrum triplex			
852.	00.0.				
852. 853.	00.01	Gymnopilus allantopus Gymnopilus purpuratus			
852. 853. 854.		Gymnopilus purpuratus			
852. 853. 854. 855.	49124	Gymnopilus purpuratus Gyroporus occidentalis			
852. 853. 854. 855. 856.	49124	Gymnopilus purpuratus Gyroporus occidentalis Hebeloma crustuliniforme			
852. 853. 854. 855.	49124 38791	Gymnopilus purpuratus Gyroporus occidentalis Hebeloma crustuliniforme Hygrocybe polychroma	Y		
852. 853. 854. 855. 856. 857.	49124 38791 40869	Gymnopilus purpuratus Gyroporus occidentalis Hebeloma crustuliniforme	Y		
852. 853. 854. 855. 856. 857.	49124 38791 40869 38799	Gymnopilus purpuratus Gyroporus occidentalis Hebeloma crustuliniforme Hygrocybe polychroma Inocybe curvipes	Y		
852. 853. 854. 855. 856. 857. 858.	49124 38791 40869 38799 38803	Gymnopilus purpuratus Gyroporus occidentalis Hebeloma crustuliniforme Hygrocybe polychroma Inocybe curvipes Inocybe violaceocaulis	Y		





N	ame ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
863.	31333	Lichenomphalia umbellifera			
864.	49003	Macrolepiota turbinata			
865.		Morchella elata			
866.		Omphalotus nidiformis			
867.	38817	Panaeolus papilionaceus			
868.	40070	Paxillus involutus			
869.	49073	Peziza austrogeaster			
870. 871.		Peziza repanda Peziza sp.			
872.	38819	Peziza vesiculosa			
873.	000.0	Phellinus gilvus			
874.		Pholiota highlandensis			
875.	38822	Phylloporus clelandii			
876.		Phytophthora cinnamomi			
877.	48973	Pisolithus albus			
878.		Pisolithus sp.			
879.		Psathyrella candolleana			
880.	38830	Psilocybe coprophila			
881.		Puccinia dampierae			
882.		Pycnoporus coccineus			
883.		Rhizopogon roseolus			
884.	38836	Russula erumpens Schizophyllum communa			
885. 886.	38840	Schizophyllum commune Stereum hirsutum			
887.	30040	Stropharia semiglobata			
888.		Thelephora terrestris			
889.	45838	Tilletia ehrhartae			
890.	38844	Trametes versicolor			
891.		Tricholomopsis rutilans			
892.		Uromycladium tepperianum			
893.	45895	Ustilago avenae			
894.	45898	Ustilago cynodontis			
895.	45899	Ustilago hordei			
Gymnosperm					
896.	96	Callitris preissii (Rottnest Island Pine, Maro)			
897.	85	Macrozamia riedlei (Zamia, Djiridji)			
Hepatic (Livery	wort)	Marchantia berteroana			
		Waldrania Borto Garia			
Invertebrate					
899.		Allaharana masulata			
900. 901.		Allothereua maculata Amblyomma triguttatum			
901.		Aname mainae			
903.		Aname tepperi			
904.		Araneus cyphoxis			
905.		Araneus eburneiventris			
906.		Araneus senicaudatus			
907.		Araneus talipedatus			
908.		Argiope protensa			
909.		Argiope trifasciata			
910.		Artoria linnaei			
911.		Artoria taeniifera			
912.		Artoriopsis eccentrica			
913.		Artoriopsis expolita			
914. 915.		Austracantha minax Austrammo harveyi			
916.		Badumna insignis			
917.		Celaenia excavata			
918.	33939	Cherax cainii (Marron)			
919.		Copidognathus cooki			Υ
920.		Cormocephalus aurantiipes			
921.		Cormocephalus novaehollandiae			
922.		Cormocephalus rubriceps			
923.		Cormocephalus strigosus			
924.		Cormocephalus turneri			
925.		Cyclosa trilobata			
926.		Dingosa serrata			
927. 928.		Dinocambala ingens Eriophora biapicata			
920.		порнога виричива	Department of	Biodiversity, and Attractions	WESTERN



	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Que
929.		Ethmostigmus rubripes			7.11.00
930.		Hogna immansueta			
931.		Holconia insignis			Υ
932.		Holocnemus pluchei			
933.		Idiommata blackwalli			
934.		Idiosoma hirsutum			
935.	48935	Idiosoma sigillatum (Swan Coastal Plain shield-backed trapdoor spider)		P3	
936.		Isometroides vescus			
937.		Isopeda leishmanni			
938.		Isopedella cana			
939.		Isopedella tindalei			
940.		Ixodes tasmani			Υ
941.		Karaops jarrit			
942.		Lampona cylindrata			
943.		Latrodectus hasseltii			
944.		Longepi woodman			
945.		Lycosa ariadnae			
946.		Lycosa gilberta			
947.		Lycosa godeffroyi			
948.		Maratus pavonis			
949.		Missulena granulosa			
950.		Missulena occatoria			
951.		Mituliodon tarantulinus			
952.		Nephila edulis			
953.		Nicodamus mainae			
954.		Notiasemus glauerti			
955.		Ocrisiona leucocomis			
956.		Oecobius navus			
957.		Ommatoiulus moreleti			
958.		Ommatoiulus moreletii			
959.		Oratemnus curtus			
960.		Ostearius melanopygius			
961.		Oxidus gracilis			
962.		Oxyopes gracilipes			
963.		Pediana occidentalis			
964.		Pholcus phalangioides			
965.		Phryganoporus candidus Phryganoporus candidus			
966.		Physocyclus globosus			
967.		Scolopendra laeta			
968.		Scolopendra morsitans			
969.		Servaea melaina			
970. 971.		Steatoda capensis			
		Steatoda grossa			
972.		Storena formosa			
973.		Supunna funerea Tamanaja facialia			
974.		Tamopsis facialis Tasmanicosa leuckartii			
975.					
976.		Tetragnatha demissa			
977.		Thereuopoda lesueurii			
978.		Urodacus novaehollandiae Venator immansueta			
979.		Venatrix pullastra			
980. 981.		Venatrix pullastra Xysticus periscelis			V
301.		Ayouaa panacais			Υ
ichen					
982.	27665	Cladia ferdinandii			
983.	27727	Dirinaria aegialita			
ammal					
984.	24186	Chalinolobus gouldii (Gould's Wattled Bat)			
985.		Chalinolobus morio (Chocolate Wattled Bat)			
986.		Dasyurus geoffroii (Chuditch, Western Quoll)		Т	
987.		Felis catus (Cat)	Υ	'	
988.		Hydromys chrysogaster (Water-rat, Rakali)		P4	
989.		Isoodon fusciventer (Quenda, southwestern brown bandicoot)		P4	
990.		Macropus fuliginosus (Western Grey Kangaroo)		17	
990.		Mus musculus (House Mouse)	Υ		
992.		Mustela putorius (European Polecat, Ferret)	Y		
993.		Myrmecobius fasciatus (Numbat, Walpurti)		Т	
		Nyctophilus geoffroyi (Lesser Long-eared Bat)		,	
994.		,, g			
994. 995.		Oryctolagus cuniculus (Rabbit)	Υ		



996. 997. 998.		Pseudomys delicatulus (Delicate Mouse)			
997.					
998.	2-12-1-1	Rattus norvegicus (Brown Rat)	Υ		
	24245	Rattus rattus (Black Rat)	Υ		
999.		Sus scrofa (Pig)	Υ		
1000.		Tachyglossus aculeatus (Short-beaked Echidna)	•		
1001.		Tarsipes rostratus (Honey Possum, Noolbenger)			
1002.		Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum)			
1003.		Vespadelus regulus (Southern Forest Bat)			
1004.	24040	Vulpes vulpes (Red Fox)	Υ		
onocotyle	edon				
1005.		Aira cupaniana (Silvery Hairgrass)	Υ		
1006.		Albuca flaccida	Y		
			1		
1007.		Alexgeorgea nitens	.,		
1008.		Allium triquetrum (Three-cornered Garlic)	Υ		
1009.		Alocasia brisbanensis	Υ		
1010.	190	Alopecurus myosuroides (Slender Foxtail)	Y		
1011.	1489	Amaryllis belladonna (Belladonna Lily)	Υ		
1012.	194	Amphipogon amphipogonoides			
1013.	20184	Amphipogon laguroides subsp. laguroides			
1014.	200	Amphipogon turbinatus			
1015.		Anigozanthos humilis (Catspaw)			
1016.		Anigozanthos manglesii (Mangles Kangaroo Paw, Kurulbrang)			
1017.		Anigozanthos manglesii subsp. manglesii			
1017.		Aphelia cyperoides			
1010.					
		Arrhopothorum pletino var. hulborum (Opion Twitch)	V		
1020.		Arrhenatherum elatius var. bulbosum (Onion Twitch)	Y		
1021.		Arundo donax (Giant Reed)	Υ		
1022.	1364	Asphodelus fistulosus (Onion Weed)	Υ		
1023.	233	Avena barbata (Bearded Oat)	Υ		
1024.	20013	Axonopus fissifolius	Υ		
1025.	18280	Babiana nana	Υ		
1026.	740	Baumea arthrophylla			
1027.	741	Baumea articulata (Jointed Rush)			
1028.		Baumea laxa			
1029.		Baumea preissii			
1030.		Baumea rubiginosa			
1030.		-			
		Baumea vaginalis (Sheath Twigrush)			
1032.		Blancoa canescens (Winter Bell)			
1033.		Bolboschoenus caldwellii (Marsh Club-rush)			
1034.		Borya sphaerocephala (Pincushions)			
1035.		Briza maxima (Blowfly Grass)	Υ		
1036.	245	Briza minor (Shivery Grass)	Υ		
1037.	246	Bromus alopecuros	Υ		
1038.	248	Bromus catharticus (Prairie Grass)	Υ		
1039.	249	Bromus diandrus (Great Brome)	Υ		
1040.	250	Bromus hordeaceus (Soft Brome)	Υ		
1041.	12770	Burchardia congesta			
1042.	1276	Caesia micrantha (Pale Grass Lily)			
1043.		Caladenia flava subsp. flava			
1044.		Caladenia latifolia (Pink Fairy Orchid)			
1044.		Caladenia laurolla (Firik Fally Ofchid) Caladenia longiclavata (Clubbed Spider Orchid)			
		Caladenia pectinata (King Spider Orchid)			
1046.					
1047.		Calectasia narragara			
1048.		Calochilus stramenicola			
1049.		Canna x generalis	Υ		
1050.	753	Carex appressa (Tall Sedge)			
1051.	755	Carex fascicularis (Tassel Sedge)			
1052.	1162	Cartonema philydroides			
1053.	13685	Catapodium rigidum (Rigid Fescue)	Υ		
1054.		Cenchrus echinatus (Burrgrass)	Υ		
1055.		Cenchrus longisetus (Feathertop)	Y		
1056.		Cenchrus purpureus (Elephant Grass)	Y		
1057.		Centrolepis aristata (Pointed Centrolepis)	•		
1058.		Centrolepis mutica			
1059.		Chamaescilla corymbosa var. corymbosa			
1060.		Coix lacryma-jobi (Job's Tears)	Υ		Υ
1061.	32999	Colocasia esculenta var. esculenta	Υ		
1062.	1418	Conostylis aculeata (Prickly Conostylis)			
1063.	11513	Conostylis aculeata subsp. cygnorum			
	12100	Conostylis aculeata subsp. preissii			
1064.	12109	Correctly no dedicate capap. protecti	, Lokak	nt of Biodiversity,	WESTER



	Name ID	Species Name	Naturalised	Conservation Code	Endemic To Q Area
1065.		Conostylis aurea (Golden Conostylis)			
1066.		Conostylis bracteata		P3	
1067.		Conostylis juncea			
1068.	11597	Conostylis setigera subsp. setigera			
1069.	1455	Conostylis setosa (White Cottonhead)			
1070.	48259	Cortaderia selloana subsp. selloana	Υ		
1071.	15114	Cyanicula gemmata			
1072.	768	Cyathochaeta avenacea			
1073.	16245	Cyathochaeta teretifolia		P3	
1074.	40661	Cycnogeton lineare			
1075.	283	Cynodon dactylon (Couch)	Υ		
1076.	776	Cyperus brevifolius (Kyllinga Weed)	Υ		
1077.	783	Cyperus congestus (Dense Flat-sedge)	Υ		
1078.	794	Cyperus gymnocaulos (Spiny Flat-sedge)			
1079.	806	Cyperus polystachyos (Bunchy Sedge)			
1080.	815	Cyperus tenellus (Tiny Flatsedge)	Υ		
1081.		Cyperus tenuiflorus (Scaly Sedge)	Υ		
1082.		Cyrtostylis tenuissima			
1083.		Dasypogon bromeliifolius (Pineapple Bush)			
1084.		Desmocladus fasciculatus			
1085.		Desmocladus lasciculatus Desmocladus flexuosus			
1085.		Dielsia stenostachya			
1086.		•	Υ		
		Digitaria eriantha Digitaria eaguinalia (Crab Grass)			
1088.		Digitaria sanguinalis (Crab Grass)	Y		
1089.		Digitaria violascens	Υ		
1090.		Diuris corymbosa			
1091.		Diuris decrementa			
1092.		Diuris laxiflora (Bee Orchid)			
1093.	12939	Diuris magnifica			
1094.	11156	Drakaea livida			
1095.	328	Echinochloa colona (Awnless Barnyard Grass)	Υ		
1096.	11105	Echinochloa crus-galli	Υ		
1097.	338	Echinochloa telmatophila (Swamp Barnyard Grass)	Υ		
1098.	11818	Ehrharta brevifolia var. brevifolia	Υ		
1099.	347	Ehrharta calycina (Perennial Veldt Grass)	Υ		
1100.	349	Ehrharta longiflora (Annual Veldt Grass)	Υ		
1101.	353	Eleusine indica (Crowsfoot Grass)	Υ		
1102.		Elythranthera brunonis (Purple Enamel Orchid)			
1103.	1067	Empodisma gracillimum			
1104.	1645	Epiblema grandiflorum (Babe-in-a-cradle)			
1105.		Eragrostis cilianensis (Stinkgrass)	Υ		
1106.		Eriochilus scaber subsp. scaber			
1107.		Eustachys distichophylla (Evergreen Chloris)	V		
1107.		Ferraria crispa subsp. crispa	Y		
		Ficinia nodosa (Knotted Club Rush)	1		
1109.		, ,	V		
1110.		Freesia alba x leichtlinii	Υ		
1111.		Gahnia decomposita			
1112.		Gladiolus caryophyllaceus (Wild Gladiolus)	Y		
1113.		Gladiolus undulatus (Wild Gladiolus)	Υ		
1114.		Haemodorum paniculatum (Mardja)			
1115.		Hensmania turbinata			
1116.	444	Holcus lanatus (Yorkshire Fog)	Υ		
1117.	449	Hordeum leporinum (Barley Grass)	Υ		
1118.	1070	Hypolaena exsulca			
1119.	20200	Isolepis cernua var. setiformis			
1120.	912	Isolepis cyperoides			
1121.	914	Isolepis hookeriana (Bristle Club Rush)			
1122.		Isolepis marginata (Coarse Club-rush)			
1123.		Isolepis prolifera (Budding Club-rush)	Υ		
1124.		Isolepis stellata (Star Club-rush)			
1125.		Ixia maculata (Yellow Ixia)	Υ		
1126.		Ixia paniculata	Y		
1120.		Johnsonia pubescens subsp. pubescens	,		
			V		
1128.		Juncus acutus (Spiny Rush)	Y		
1129.		Juncus acutus subsp. acutus	Υ		
1130.		Juncus holoschoenus (Jointleaf Rush)			
1131.		Juncus kraussii (Sea Rush)			
1132.		Juncus kraussii subsp. australiensis			
	1186	Juncus microcephalus	Υ		
1133. 1134.		Juncus oxycarpus	Υ		



	Name ID	Species Name	Naturalised	Conservation Code	Engemic To Q Area
1135.		Juncus pallidus (Pale Rush)			
1136.		Lachenalia bulbifera	Υ		
1137.		Lachenalia reflexa	Υ		
1138.		Lachnagrostis filiformis			
1139.		Lagurus ovatus (Hare's Tail Grass)	Υ		
1140.		Laxmannia grandiflora subsp. grandiflora			
1141.		Laxmannia ramosa subsp. ramosa			
1142.		Laxmannia sessiliflora subsp. australis			
1143.		Laxmannia squarrosa			
1144.		Lemna disperma (Duckweed)			
1145.		Lepidobolus preissianus			
1146.		Lepidobolus preissianus subsp. preissianus			
1147.		Lepidosperma asperatum			
1148.		Lepidosperma longitudinale (Pithy Sword-sedge)			
1149.		Lepidosperma pubisquameum			
1150.		Lepidosperma scabrum			
1151.		Lepidosperma striatum			
1152.		Leptocarpus coangustatus			
1153.		Leptocarpus laxus			
1154.		Leptocarpus scariosus			
1155.		Leptoceras menziesii			
1156.		Lepyrodia macra (Large Scale Rush)			
1157.		Lepyrodia muirii			
1158.		Lolium Ioliaceum (Stiff Ryegrass)	Υ		
1159.		Lolium multiflorum (Italian Ryegrass)	Υ		
1160.		Lolium perenne (Perennial Ryegrass)	Υ		
1161.		Lolium perenne x rigidum	Υ		
1162.		Lolium remotum (Hardy Ryegrass)	Υ		
1163.		Lolium rigidum (Wimmera Ryegrass)	Υ		
1164.		Lolium temulentum forma arvense	Υ		
1165.		Lomandra maritima			
1166.	14542	Lomandra micrantha subsp. micrantha			
1167.	1236	Lomandra odora (Tiered Matrush)			
1168.	1239	Lomandra preissii			
1169.	1246	Lomandra suaveolens			
1170.	1198	Luzula meridionalis (Field Woodrush)			
1171.	1097	Lyginia barbata			
1172.	18049	Lyginia imberbis			
1173.	14985	Melinis repens	Υ		
1174.	955	Mesomelaena pseudostygia			
1175.	957	Mesomelaena tetragona (Semaphore Sedge)			
1176.	10954	Microtis media (Tall Mignonette Orchid)			
1177.	12761	Microtis media subsp. densiflora			
1178.	15419	Microtis media subsp. media			
1179.	20774	Musa acuminata	Υ		
1180.	44494	Narcissus tazetta subsp. aureus	Υ		
1181.	1381	Nothoscordum gracile	Υ		
1182.	516	Parapholis incurva (Coast Barbgrass)	Υ		
1183.	527	Paspalum dilatatum	Υ		
1184.	528	Paspalum distichum (Water Couch)	Υ		
1185.	532	Paspalum urvillei (Vasey Grass)	Υ		
	1550	Patersonia occidentalis (Purple Flag, Koma)			
1186.	1330				
1186. 1187.		Patersonia occidentalis var. occidentalis			
	30472	Patersonia occidentalis var. occidentalis Pauridia glabella var. glabella			
1187.	30472 43765				
1187. 1188.	30472 43765 43782	Pauridia glabella var. glabella	Y		
1187. 1188. 1189.	30472 43765 43782 550	Pauridia glabella var. glabella Pauridia vaginata var. vaginata	Y Y		
1187. 1188. 1189. 1190.	30472 43765 43782 550 551	Pauridia glabella var. glabella Pauridia vaginata var. vaginata Phalaris canariensis (Canary Grass)			
1187. 1188. 1189. 1190. 1191.	30472 43765 43782 550 551 1172	Pauridia glabella var. glabella Pauridia vaginata var. vaginata Phalaris canariensis (Canary Grass) Phalaris minor (Lesser Canary Grass)			
1187. 1188. 1189. 1190. 1191. 1192. 1193.	30472 43765 43782 550 551 1172 1173	Pauridia glabella var. glabella Pauridia vaginata var. vaginata Phalaris canariensis (Canary Grass) Phalaris minor (Lesser Canary Grass) Philydrella drummondii			
1187. 1188. 1189. 1190. 1191.	30472 43765 43782 550 551 1172 1173	Pauridia glabella var. glabella Pauridia vaginata var. vaginata Phalaris canariensis (Canary Grass) Phalaris minor (Lesser Canary Grass) Philydrella drummondii Philydrella pygmaea (Butterfly Flowers)			
1187. 1188. 1189. 1190. 1191. 1192. 1193. 1194.	30472 43765 43782 550 551 1172 1173 14306	Pauridia glabella var. glabella Pauridia vaginata var. vaginata Phalaris canariensis (Canary Grass) Phalaris minor (Lesser Canary Grass) Philydrella drummondii Philydrella pygmaea (Butterfly Flowers) Philydrella pygmaea subsp. pygmaea			
1187. 1188. 1189. 1190. 1191. 1192. 1193. 1194. 1195.	30472 43765 43782 550 551 1172 1173 14306 1478	Pauridia glabella var. glabella Pauridia vaginata var. vaginata Phalaris canariensis (Canary Grass) Phalaris minor (Lesser Canary Grass) Philydrella drummondii Philydrella pygmaea (Butterfly Flowers) Philydrella pygmaea subsp. pygmaea Phlebocarya ciliata Phlebocarya filifolia	Y		
1187. 1188. 1189. 1190. 1191. 1192. 1193. 1194. 1195. 1196. 1197.	30472 43765 43782 550 551 1172 1173 14306 1478 1479	Pauridia glabella var. glabella Pauridia vaginata var. vaginata Phalaris canariensis (Canary Grass) Phalaris minor (Lesser Canary Grass) Philydrella drummondii Philydrella pygmaea (Butterfly Flowers) Philydrella pygmaea subsp. pygmaea Phlebocarya ciliata Phlebocarya filifolia Poa annua (Winter Grass)			
1187. 1188. 1189. 1190. 1191. 1192. 1193. 1194. 1195. 1196. 1197. 1198.	30472 43765 43782 550 551 1172 1173 14306 1478 1479 571	Pauridia glabella var. glabella Pauridia vaginata var. vaginata Phalaris canariensis (Canary Grass) Phalaris minor (Lesser Canary Grass) Philydrella drummondii Philydrella pygmaea (Butterfly Flowers) Philydrella pygmaea subsp. pygmaea Phlebocarya ciliata Phlebocarya filifolia Poa annua (Winter Grass)	Y		
1187. 1188. 1189. 1190. 1191. 1192. 1193. 1194. 1195. 1196. 1197. 1198.	30472 43765 43782 550 551 1172 1173 14306 1478 1479 571 575	Pauridia glabella var. glabella Pauridia vaginata var. vaginata Phalaris canariensis (Canary Grass) Phalaris minor (Lesser Canary Grass) Philydrella drummondii Philydrella pygmaea (Butterfly Flowers) Philydrella pygmaea subsp. pygmaea Phlebocarya ciliata Phlebocarya filifolia Poa annua (Winter Grass) Poa homomalla Poa porphyroclados	Y		
1187. 1188. 1189. 1190. 1191. 1192. 1193. 1194. 1195. 1196. 1197. 1198. 1199. 1200.	30472 43765 43782 550 551 1172 1173 14306 1478 1479 571 575 578	Pauridia glabella var. glabella Pauridia vaginata var. vaginata Phalaris canariensis (Canary Grass) Phalaris minor (Lesser Canary Grass) Philydrella drummondii Philydrella pygmaea (Butterfly Flowers) Philydrella pygmaea subsp. pygmaea Phlebocarya ciliata Phlebocarya filifolia Poa annua (Winter Grass) Poa homomalla Poa porphyroclados Polypogon monspeliensis (Annual Beardgrass)	Y		
1187. 1188. 1189. 1190. 1191. 1192. 1193. 1194. 1195. 1196. 1197. 1198. 1199. 1200. 1201.	30472 43765 43782 550 551 1172 1173 14306 1478 1479 571 575 578 582	Pauridia glabella var. glabella Pauridia vaginata var. vaginata Phalaris canariensis (Canary Grass) Phalaris minor (Lesser Canary Grass) Philydrella drummondii Philydrella pygmaea (Butterfly Flowers) Philydrella pygmaea subsp. pygmaea Phlebocarya ciliata Phlebocarya filifolia Poa annua (Winter Grass) Poa homomalla Poa porphyroclados Polypogon monspeliensis (Annual Beardgrass) Prasophyllum cyphochilum (Pouched Leek Orchid)	Y		
1187. 1188. 1189. 1190. 1191. 1192. 1193. 1194. 1195. 1196. 1197. 1198. 1199. 1200.	30472 43765 43782 550 551 1172 1173 14306 1478 1479 571 575 578 582 1669	Pauridia glabella var. glabella Pauridia vaginata var. vaginata Phalaris canariensis (Canary Grass) Phalaris minor (Lesser Canary Grass) Philydrella drummondii Philydrella pygmaea (Butterfly Flowers) Philydrella pygmaea subsp. pygmaea Phlebocarya ciliata Phlebocarya filifolia Poa annua (Winter Grass) Poa homomalla Poa porphyroclados Polypogon monspeliensis (Annual Beardgrass)	Y		





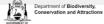


	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
1205.		Prasophyllum gibbosum (Humped Leek Orchid)			
1206.		Prasophyllum giganteum (Bronze Leek Orchid)			
1207.		Prasophyllum hians (Yawning Leek Orchid)			
1208. 1209.		Prasophyllum macrostachyum (Laughing Leek Orchid) Prasophyllum odoratissimum			
1210.		Prasophyllum parvifolium (Autumn Leek Orchid)			
1211.		Pterostylis atrosanguinea			
1212.		Pterostylis vittata (Banded Greenhood)			
1213.		Pyrorchis nigricans (Red beaks, Elephants ears)			
1214.		Romulea flava var. minor	Υ		
1215.	1556	Romulea rosea (Guildford Grass)	Υ		
1216.	10970	Rostraria cristata	Υ		
1217.	40425	Rytidosperma caespitosum			
1218.	48356	Schoenoplectus tabernaemontani			
1219.	971	Schoenus andrewsii			
1220.	979	Schoenus caespititius			
1221.		Schoenus curvifolius			
1222.		Schoenus efoliatus			
1223.		Schoenus elegans			
1224.		Schoenus grammatophyllus			
1225.		Schoenus grandiflorus (Large Flowered Bogrush)			
1226. 1227.		Schoenus laevigatus Schoenus pedicellatus			
1227.		Schoenus sculptus (Gimlet Bog-rush)			
1229.		Schoenus subfascicularis			
1230.		Setaria italica (Italian Millet)	Υ		
1231.		Setaria palmifolia (Palm Grass)	Y		
1232.		Sisyrinchium rosulatum	Υ		
1233.	616	Sorghum bicolor (Grain Sorghum)	Υ		
1234.	617	Sorghum halepense (Johnson Grass)	Υ		
1235.	35236	Sorghum x drummondii (Sudan Grass)	Υ		
1236.	1558	Sparaxis bulbifera	Υ		
1237.	8710	Sporobolus africanus (Parramatta Grass)	Υ		
1238.		Stenotaphrum secundatum (Buffalo Grass)	Υ		
1239.		Stuckenia pectinata			
1240.		Stypandra glauca (Blind Grass)			
1241. 1242.		Thelymitra antennifera (Vanilla Orchid) Thelymitra antennifera (Chirt Orchid)			
1242.		Thelymitra campanulata (Shirt Orchid) Thelymitra comicina (Lilac Sun Orchid)			
1244.		Thelymitra crinita (Blue Lady Orchid) Thelymitra crinita (Blue Lady Orchid)			
1245.		Thelymitra mucida (Plum Orchid)			
1246.		Thelymitra tigrina (Tiger Orchid)			
1247.		Thelymitra variegata (Queen of Sheba)		P2	
1248.	20731	Thelymitra vulgaris			
1249.		Thysanotus arbuscula			
1250.	1319	Thysanotus arenarius			
1251.	1338	Thysanotus manglesianus (Fringed Lily)			
1252.	1339	Thysanotus multiflorus (Many-flowered Fringe Lily)			
1253.		Thysanotus triandrus			
1254.		Tremulina tremula			
1255.		Tribonanthes brachypetala (Nodding Tiurndin)			
1256. 1257.		Tribonanthes longipetala (Branching Tiurndin) Tricoryne elatior (Yellow Autumn Lily)			
1257.		Triglochin minutissima			
1259.		Triglochin mucronata			
1260.		Triglochin nana			
1261.		Triticum aestivum (Wheat)	Υ		
1262.		Typha orientalis (Bulrush, Cumbungi)			
1263.		Vallisneria nana			
1264.	722	Vulpia bromoides (Squirrel Tail Fescue)	Υ		
1265.	11137	Vulpia fasciculata	Υ		
1266.		Watsonia aletroides	Υ		Υ
1267.		Watsonia marginata	Υ		
1268.		Watsonia versfeldii	Υ		
1269.		Wurmbea monantha			
1270.	1049	Zantedeschia aethiopica (Arum Lily)	Υ		
Pteridophy	te (Fern)				
1271.	65	Pleurosorus rutifolius (Blanket Fern)			
1272.		Pteridium esculentum subsp. esculentum			
1273.	24	Schizaea fistulosa (Narrow Comb Fern)	Department of	of Biodiversity, n and Attractions	WESTERN
NatureMap is a collabora	ative project of t	he Department of Biodiversity, Conservation and Attractions and the Western Australian Museum.	Conservatio OVERNMENT OF WESTERN AUSTRALIA	n and Attractions	AUSTRALIA MUSEUM



Name ID Species Name Naturalised Conservation Code ¹Endemic To Query 1274. 6 Selaginella gracillima (Tiny Clubmoss) Reptile 1275. 42368 Acritoscincus trilineatus (Western Three-lined Skink) 1276. 25241 Antaresia stimsoni subsp. stimsoni (Stimson's Python) 1277. 24991 Aprasia repens (Sand-plain Worm-lizard) 1278. 42380 Brachyurophis fasciolatus subsp. fasciolatus (Narrow-banded Shovel-nosed Snake) 1279. 42381 Brachyurophis semifasciatus (Southern Shovel-nosed Snake) 43380 Chelodina colliei (South-western Snake-necked Turtle) 1280 1281. 24980 Christinus marmoratus (Marbled Gecko) 1282 30893 Cryptoblepharus buchananii 1283 25020 Cryptoblepharus plagiocephalus 1284 30899 Ctenophorus adelaidensis (Southern Heath Dragon, Western Heath Dragon) 1285. 25027 Ctenotus australis 1286. 25039 Ctenotus fallens 1287. 25047 Ctenotus impar 1288 25049 Ctenotus labillardieri 1289 41641 Ctenotus ora (Coastal Plains Skink) 25087 Cyclodomorphus celatus (Western Slender Blue-tongue) 1290 1291. 25766 Delma fraseri (Fraser's Legless Lizard) 1292. 24999 Delma grayii 1293. 25296 Demansia psammophis subsp. reticulata (Yellow-faced Whipsnake) 1294 24939 Diplodactylus polyophthalmus 1295. 25251 Echiopsis curta (Bardick) 25096 Egernia kingii (King's Skink) 1296 1297. 25100 Egernia napoleonis 1298 25250 Elapognathus coronatus (Crowned Snake) 1299 24959 Gehyra variegata 1300 25232 Hemidactylus frenatus (Asian House Gecko) Υ 1301. 25475 Hemierais peronii 1302 25119 Hemiergis quadrilineata 1303. 25131 Lerista distinguenda 1304. 25133 Lerista elegans 25147 Lerista lineata (Perth Slider, Lined Skink) 1305. 1306 25148 Lerista lineopunctulata 1307. 25165 Lerista praepedita 1308. 25005 Lialis burtonis 1309. 42413 Lissolepis luctuosa (Western Swamp Skink) 1310. 42414 Lucasium alboquttatum 1311. 25184 Menetia greyii 25240 Morelia spilota subsp. imbricata (Carpet Python) 1312. 1313. 25192 Morethia obscura 1314. 25248 Neelaps bimaculatus (Black-naped Snake) 1315. 25249 Neelaps calonotos (Black-striped Snake, black-striped burrowing snake) 1316 25252 Notechis scutatus (Tiger Snake) 1317. 25253 Parasuta gouldii 1318. 25007 Pletholax gracilis subsp. gracilis (Keeled Legless Lizard) 25510 Pogona minor (Dwarf Bearded Dragon) 1319. 1320 24907 Pogona minor subsp. minor (Dwarf Bearded Dragon) 1321. 25345 Pseudemydura umbrina (Western Swamp Tortoise, Western Swamp Turtle) 1322 25511 Pseudonaja affinis (Dugite) 1323. 25259 Pseudonaja affinis subsp. affinis (Dugite) 1324. 42416 Pseudonaja mengdeni (Western Brown Snake) 1325. 25263 Pseudonaja modesta (Ringed Brown Snake) 1326. 25008 Pygopus lepidopodus (Common Scaly Foot) 1327. 25266 Simoselaps bertholdi (Jan's Banded Snake) 1328 24942 Strophurus spinigerus subsp. spinigerus 25203 Tiliqua occipitalis (Western Bluetongue) 1329 1330 25519 Tiliqua rugosa 1331. 25204 Tiliqua rugosa subsp. aspera 1332 25207 Tiliqua rugosa subsp. rugosa 1333. 24983 Underwoodisaurus milii (Barking Gecko) 1334 25218 Varanus gouldii (Bungarra or Sand Monitor) 1335. 25526 Varanus tristis (Racehorse Monitor) Slime Mould 1336 38973 Arcyria pomiformis 1337. 38982 Ceratiomyxa fruticulosa 1338 38990 Comatricha nigra 1339 38997 Craterium leucocephalum 1340 39008 Diachea leucopodia

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	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
1341.	39009	Diachea radiata			Υ
1342.	39012	Diderma cinereum			
1343.	39016	Diderma saundersii			Υ
1344.	39034	Hemitrichia calyculata			
1345.	39073	Physarum nudum			Υ
1346.	39094	Trichia affinis			

Conservation Codes

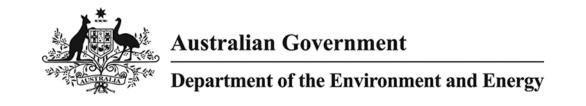
7 - Rare or likely to become extinct
X - Presumed extinct
IA - Protected under international agreement
S - Other specially protected fauna
1 - Priority 1
2 - Priority 2
3 - Priority 2
4 - Priority 4
5 - Priority 5

¹ For NatureMap's purposes, species flagged as endemic are those whose records are wholely contained within the search area. Note that only those records complying with the search criterion are included in the calculation. For example, if you limit records to those from a specific datasource, only records from that datasource are used to determine if a species is restricted to the query area.





Appendix 2 – Protected Matters Search Tool (5km)



EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about <u>Environment Assessments</u> and the EPBC Act including significance guidelines, forms and application process details.

Report created: 08/05/20 10:44:43

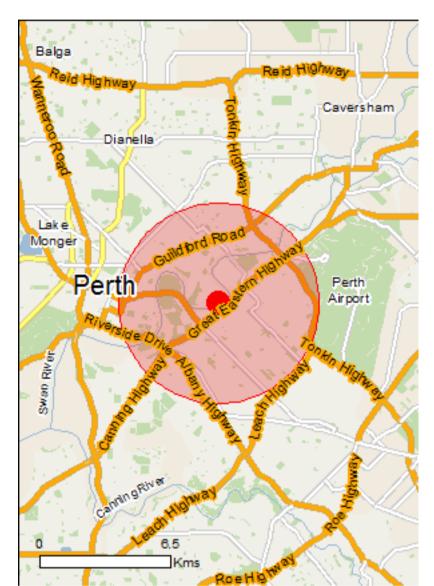
Summary

Details

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

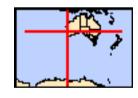
Caveat

Acknowledgements



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2010

Coordinates
Buffer: 5.0Km



Summary

Matters of National Environmental Significance

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

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	3
Listed Threatened Species:	48
Listed Migratory Species:	25

Other Matters Protected by the EPBC Act

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

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

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

Commonwealth Land:	2
Commonwealth Heritage Places:	2
Listed Marine Species:	32
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

Extra Information

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

State and Territory Reserves:	2
Regional Forest Agreements:	None
Invasive Species:	41
Nationally Important Wetlands:	1
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to				
produce indicative distribution maps.	egetation maps and point it	ocation data are used to		
Name	Status	Type of Presence		
Banksia Woodlands of the Swan Coastal Plain	Endangered	Community likely to occur		
ecological community Subtropical and Temperate Coastal Saltmarsh	Vulnerable	within area Community likely to occur within area		
Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain ecological community	Critically Endangered	Community likely to occur within area		
Listed Threatened Species		[Resource Information]		
Name	Status	Type of Presence		
Birds		71		
Anous tenuirostris melanops				
Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area		
Botaurus poiciloptilus				
Australasian Bittern [1001]	Endangered	Species or species habitat likely to occur within area		
Calidris ferruginea				
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area		
Calyptorhynchus banksii naso				
Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat known to occur within area		
Calyptorhynchus baudinii				
Baudin's Cockatoo, Long-billed Black-Cockatoo [769]	Endangered	Species or species habitat likely to occur within area		
Calyptorhynchus latirostris Carnaby's Cockatoo, Short-billed Black-Cockatoo	Endangered	Species or species habitat		
[59523]		known to occur within area		
Diomedea amsterdamensis				
Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area		
Diomedea epomophora				
Southern Royal Albatross [89221]	Vulnerable	Species or species habitat likely to occur within area		
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Species or species habitat		
J []	-	likely to occur within area		
<u>Diomedea sanfordi</u>				
Northern Royal Albatross [64456]	Endangered	Species or species		

[Resource Information]

Name	Status	Type of Presence
Leipoa ocellata	Ciatac	habitat likely to occur within area
Malleefowl [934]	Vulnerable	Species or species habitat may occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Species or species habitat known to occur within area
Thalassarche cauta cauta Shy Albatross [82345]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta steadi White-capped Albatross [82344]	Vulnerable	Species or species habitat likely to occur within area
<u>Thalassarche impavida</u> Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Mammals		
Bettongia penicillata ogilbyi Woylie [66844]	Endangered	Species or species habitat likely to occur within area
Dasyurus geoffroii Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat likely to occur within area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Vulnerable	Species or species habitat known to occur within area
Pseudocheirus occidentalis Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit [25911]	Critically Endangered	Species or species habitat likely to occur within area
Plants		
Andersonia gracilis Slender Andersonia [14470]	Endangered	Species or species habitat may occur within area
Anigozanthos viridis subsp. terraspectans Dwarf Green Kangaroo Paw [3435]	Vulnerable	Species or species habitat may occur within area

Name	Status	Type of Presence
Caladenia huegelii King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid [7309]	Endangered	Species or species habitat may occur within area
Calytrix breviseta subsp. breviseta Swamp Starflower [23879]	Endangered	Species or species habitat may occur within area
Conospermum undulatum Wavy-leaved Smokebush [24435]	Vulnerable	Species or species habitat likely to occur within area
Diuris drummondii Tall Donkey Orchid [4365]	Vulnerable	Species or species habitat likely to occur within area
<u>Diuris micrantha</u> Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat may occur within area
<u>Diuris purdiei</u> Purdie's Donkey-orchid [12950]	Endangered	Species or species habitat likely to occur within area
Drakaea elastica Glossy-leafed Hammer Orchid, Glossy-leaved Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat likely to occur within area
<u>Drakaea micrantha</u> Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat likely to occur within area
Eleocharis keigheryi Keighery's Eleocharis [64893]	Vulnerable	Species or species habitat may occur within area
Eremophila glabra subsp. chlorella [84927]	Endangered	Species or species habitat likely to occur within area
Eucalyptus x balanites Cadda Road Mallee, Cadda Mallee [87816]	Endangered	Species or species habitat may occur within area
Grevillea curviloba subsp. incurva Narrow curved-leaf Grevillea [64909]	Endangered	Species or species habitat may occur within area
<u>Lepidosperma rostratum</u> Beaked Lepidosperma [14152]	Endangered	Species or species habitat likely to occur within area
Macarthuria keigheryi Keighery's Macarthuria [64930]	Endangered	Species or species habitat likely to occur within area
Synaphea sp. Fairbridge Farm (D. Papenfus 696) Selena's Synaphea [82881]	Critically Endangered	Species or species habitat likely to occur within area
Thelymitra dedmaniarum Cinnamon Sun Orchid [65105]	Endangered	Species or species habitat may occur within area
Thelymitra stellata Star Sun-orchid [7060]	Endangered	Species or species habitat may occur within area
Reptiles		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area

Name	Status	Type of Presence
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area
Listed Migratory Species * Species is listed under a different scientific name on t	he EPBC Act - Threatened	[Resource Information] Species list.
Name	Threatened	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
<u>Diomedea amsterdamensis</u> Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Species or species habitat likely to occur within area
<u>Diomedea sanfordi</u> Northern Royal Albatross [64456]	Endangered	Species or species habitat likely to occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta Shy Albatross [89224]	Vulnerable*	Species or species habitat may occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable*	Species or species habitat likely to occur within area
Migratory Marine Species		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
<u>Dermochelys coriacea</u> Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur

Name	Threatened	Type of Presence
		within area
Manta alfredi		
Reef Manta Ray, Coastal Manta Ray, Inshore Manta		Species or species habitat
Ray, Prince Alfred's Ray, Resident Manta Ray [84994]		may occur within area
Manta birostris		
Giant Manta Ray, Chevron Manta Ray, Pacific Manta		Species or species habitat
Ray, Pelagic Manta Ray, Oceanic Manta Ray [84995]		may occur within area
Natator depressus		
Flatback Turtle [59257]	Vulnerable	Species or species habitat
	Valiforable	known to occur within area
		mom to occar mam area
Migratory Terrestrial Species		
Motacilla cinerea		
Grey Wagtail [642]		Species or species habitat
		may occur within area
Migratory Wetlands Species		
Actitis hypoleucos		
Common Sandpiper [59309]		Species or species habitat
		known to occur within area
Calidris acuminata		
Sharp-tailed Sandpiper [874]		Species or species habitat
		known to occur within area
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat
	Childany Endangered	likely to occur within area
		incry to occur within area
<u>Calidris melanotos</u>		
Pectoral Sandpiper [858]		Species or species habitat
		likely to occur within area
Numanius madagas sariansis		
Numenius madagascariensis Factoria Curlou For Factoria Curlou [0.47]	Critically Endonmorad	Consider or appealed babitat
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat
		may occur within area
Pandion haliaetus		
Osprey [952]		Breeding known to occur
		within area
<u>Tringa nebularia</u>		
Common Greenshank, Greenshank [832]		Species or species habitat
		likely to occur within area
Othor Mottors Ductocts of building EDDO Act		
Other Matters Protected by the EPBC Act		
Commonwealth Land		[Resource Information]

[Resource Information] Commonwealth Land

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

Name

Commonwealth Land -

Defence - HOLDFAST BARRACKS

Commonwealth Heritage Places		[Resource Information]
Name	State	Status
Historic		
Inglewood Post Office	WA	Listed place
Victoria Park Post Office	WA	Listed place
Listed Marine Species		[Resource Information]
* Species is listed under a different scient	tific name on the EPBC Act - Threate	ned Species list.
Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos		

Common Sandpiper [59309] Species or species habitat known to occur

Name	Threatened	Type of Presence
		within area
Anous tenuirostris melanops Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat
		likely to occur within area
Ardea alba Great Egret, White Egret [59541]		Breeding known to occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area
Calidris melanotos		
Pectoral Sandpiper [858]		Species or species habitat likely to occur within area
Diomedea amsterdamensis		
Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area
Diomedea epomophora		
Southern Royal Albatross [89221]	Vulnerable	Species or species habitat likely to occur within area
<u>Diomedea exulans</u>		
Wandering Albatross [89223]	Vulnerable	Species or species habitat likely to occur within area
Diomedea sanfordi		
Northern Royal Albatross [64456]	Endangered	Species or species habitat likely to occur within area
Haliaeetus leucogaster		
White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli		
Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Merops ornatus		
Rainbow Bee-eater [670]		Species or species habitat may occur within area
Motacilla cinerea		
Grey Wagtail [642]		Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pachyptila turtur		
Fairy Prion [1066]		Species or species habitat likely to occur within area

Name	Threatened	Type of Presence
Pandion haliaetus		
Osprey [952]		Breeding known to occur within area
Rostratula benghalensis (sensu lato)		
Painted Snipe [889]	Endangered*	Species or species habitat
		likely to occur within area
<u>Thalassarche cauta</u>		_
Shy Albatross [89224]	Vulnerable*	Species or species habitat
		may occur within area
Thalassarche impavida		
•	Vulnoroblo	Charles or angeles habitat
Campbell Albatross, Campbell Black-browed Albatross	vuinerable	Species or species habitat
[64459]		may occur within area
Thalassarche melanophris		
Black-browed Albatross [66472]	Vulnerable	Species or species habitat
Didok Browed Albatross [66472]	Valiforable	may occur within area
		may cood main area
Thalassarche steadi		
White-capped Albatross [64462]	Vulnerable*	Species or species habitat
		likely to occur within area
<u>Thinornis rubricollis</u>		
Hooded Plover [59510]		Species or species habitat
		likely to occur within area
Tringo nobulario		
Tringa nebularia		
Common Greenshank, Greenshank [832]		Species or species habitat
		likely to occur within area
		likely to occur within area
Mammals		likely to occur within area
Mammals Neophoca cinerea		likely to occur within area
Neophoca cinerea	Vulnerable	
	Vulnerable	Species or species habitat known to occur within area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Vulnerable	Species or species habitat
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22] Reptiles	Vulnerable	Species or species habitat
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22] Reptiles Caretta caretta		Species or species habitat known to occur within area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22] Reptiles	Vulnerable Endangered	Species or species habitat known to occur within area Species or species habitat
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22] Reptiles Caretta caretta		Species or species habitat known to occur within area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22] Reptiles Caretta caretta Loggerhead Turtle [1763]		Species or species habitat known to occur within area Species or species habitat
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22] Reptiles Caretta caretta Loggerhead Turtle [1763] Chelonia mydas	Endangered	Species or species habitat known to occur within area Species or species habitat known to occur within area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22] Reptiles Caretta caretta Loggerhead Turtle [1763]		Species or species habitat known to occur within area Species or species habitat known to occur within area Species or species habitat
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22] Reptiles Caretta caretta Loggerhead Turtle [1763] Chelonia mydas	Endangered	Species or species habitat known to occur within area Species or species habitat known to occur within area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22] Reptiles Caretta caretta Loggerhead Turtle [1763] Chelonia mydas Green Turtle [1765]	Endangered	Species or species habitat known to occur within area Species or species habitat known to occur within area Species or species habitat
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22] Reptiles Caretta caretta Loggerhead Turtle [1763] Chelonia mydas Green Turtle [1765] Dermochelys coriacea	Endangered Vulnerable	Species or species habitat known to occur within area Species or species habitat known to occur within area Species or species habitat known to occur within area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22] Reptiles Caretta caretta Loggerhead Turtle [1763] Chelonia mydas Green Turtle [1765]	Endangered	Species or species habitat known to occur within area Species or species habitat known to occur within area Species or species habitat known to occur within area Species or species habitat known to occur within area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22] Reptiles Caretta caretta Loggerhead Turtle [1763] Chelonia mydas Green Turtle [1765] Dermochelys coriacea	Endangered Vulnerable	Species or species habitat known to occur within area Species or species habitat known to occur within area Species or species habitat known to occur within area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22] Reptiles Caretta caretta Loggerhead Turtle [1763] Chelonia mydas Green Turtle [1765] Dermochelys coriacea	Endangered Vulnerable	Species or species habitat known to occur within area Species or species habitat known to occur within area Species or species habitat known to occur within area Species or species habitat known to occur within area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22] Reptiles Caretta caretta Loggerhead Turtle [1763] Chelonia mydas Green Turtle [1765] Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered Vulnerable	Species or species habitat known to occur within area Species or species habitat known to occur within area Species or species habitat known to occur within area Species or species habitat known to occur within area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22] Reptiles Caretta caretta Loggerhead Turtle [1763] Chelonia mydas Green Turtle [1765] Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768] Natator depressus	Endangered Vulnerable Endangered	Species or species habitat known to occur within area Species or species habitat known to occur within area Species or species habitat known to occur within area Species or species habitat known to occur within area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22] Reptiles Caretta caretta Loggerhead Turtle [1763] Chelonia mydas Green Turtle [1765] Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768] Natator depressus	Endangered Vulnerable Endangered	Species or species habitat known to occur within area Species or species habitat known to occur within area Species or species habitat known to occur within area Species or species habitat known to occur within area Species or species habitat known to occur within area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22] Reptiles Caretta caretta Loggerhead Turtle [1763] Chelonia mydas Green Turtle [1765] Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768] Natator depressus	Endangered Vulnerable Endangered	Species or species habitat known to occur within area Species or species habitat known to occur within area Species or species habitat known to occur within area Species or species habitat known to occur within area Species or species habitat known to occur within area

Extra Information

State and Territory Reserves	[Resource Information]
Name	State
Swan River	WA
Unnamed WA36440	WA

Invasive Species [Resource Information]

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resouces Audit, 2001.

Name	Status	Type of Presence
Birds		

Name	Status	Type of Presence
Acridotheres tristis Common Myna, Indian Myna [387]		Species or species habitat likely to occur within area
Anas platyrhynchos Mallard [974]		Species or species habitat likely to occur within area
Carduelis carduelis European Goldfinch [403]		Species or species habitat likely to occur within area
Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]	Species or species habitat likely to occur within area
Passer domesticus House Sparrow [405]		Species or species habitat likely to occur within area
Passer montanus Eurasian Tree Sparrow [406]		Species or species habitat likely to occur within area
Streptopelia chinensis Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
Streptopelia senegalensis Laughing Turtle-dove, Laughing Dove [781]		Species or species habitat likely to occur within area
Sturnus vulgaris Common Starling [389]		Species or species habitat likely to occur within area
Mammals		
Mammals Bos taurus Domestic Cattle [16]		Species or species habitat likely to occur within area
Bos taurus		·
Bos taurus Domestic Cattle [16] Canis lupus familiaris		likely to occur within area Species or species habitat
Bos taurus Domestic Cattle [16] Canis lupus familiaris Domestic Dog [82654] Felis catus	uirrel	Species or species habitat likely to occur within area Species or species habitat
Bos taurus Domestic Cattle [16] Canis lupus familiaris Domestic Dog [82654] Felis catus Cat, House Cat, Domestic Cat [19] Funambulus pennantii Northern Palm Squirrel, Five-striped Palm Sc	uirrel	Species or species habitat likely to occur within area Species or species habitat likely to occur within area Species or species habitat likely to occur within area
Bos taurus Domestic Cattle [16] Canis lupus familiaris Domestic Dog [82654] Felis catus Cat, House Cat, Domestic Cat [19] Funambulus pennantii Northern Palm Squirrel, Five-striped Palm Sc [129] Mus musculus	uirrel	Species or species habitat likely to occur within area Species or species habitat likely to occur within area Species or species habitat likely to occur within area Species or species habitat likely to occur within area
Bos taurus Domestic Cattle [16] Canis lupus familiaris Domestic Dog [82654] Felis catus Cat, House Cat, Domestic Cat [19] Funambulus pennantii Northern Palm Squirrel, Five-striped Palm Sc [129] Mus musculus House Mouse [120] Oryctolagus cuniculus	uirrel	Species or species habitat likely to occur within area Species or species habitat likely to occur within area Species or species habitat likely to occur within area Species or species habitat likely to occur within area Species or species habitat likely to occur within area Species or species habitat likely to occur within area
Bos taurus Domestic Cattle [16] Canis lupus familiaris Domestic Dog [82654] Felis catus Cat, House Cat, Domestic Cat [19] Funambulus pennantii Northern Palm Squirrel, Five-striped Palm Sc [129] Mus musculus House Mouse [120] Oryctolagus cuniculus Rabbit, European Rabbit [128]	uirrel	Species or species habitat likely to occur within area Species or species habitat likely to occur within area Species or species habitat likely to occur within area Species or species habitat likely to occur within area Species or species habitat likely to occur within area Species or species habitat likely to occur within area Species or species habitat likely to occur within area

Name Plants	Status	Type of Presence
Anredera cordifolia		
Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Anredera, Gulf Madeiravine, Heartleaf Madeiravine, Potato Vine [2643] Asparagus aethiopicus		Species or species habitat likely to occur within area
Asparagus aethopicus Asparagus Fern, Ground Asparagus, Basket Fern, Sprengi's Fern, Bushy Asparagus, Emerald Asparagus [62425] Asparagus asparagoides		Species or species habitat likely to occur within area
Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]		Species or species habitat likely to occur within area
Asparagus declinatus Bridal Veil, Bridal Veil Creeper, Pale Berry Asparagus Fern, Asparagus Fern, South African Creeper [66908]		Species or species habitat likely to occur within area
Asparagus plumosus Climbing Asparagus-fern [48993]		Species or species habitat likely to occur within area
Brachiaria mutica Para Grass [5879]		Species or species habitat may occur within area
		-,
Cenchrus ciliaris Buffel-grass, Black Buffel-grass [20213]		Species or species habitat may occur within area
Chrysanthemoides monilifera		
Bitou Bush, Boneseed [18983]		Species or species habitat may occur within area
Chrysanthemoides monilifera subsp. monilifera Boneseed [16905]		Species or species habitat likely to occur within area
Eichhornia crassipes Water Hyacinth, Water Orchid, Nile Lily [13466]		Species or species habitat likely to occur within area
Conjeta linifolio		
Genista linifolia Flax-leaved Broom, Mediterranean Broom, Flax Broom [2800]	1	Species or species habitat likely to occur within area
Genista sp. X Genista monspessulana Broom [67538]		Species or species habitat may occur within area
Lantana camara		
Lantana, Common Lantana, Kamara Lantana, Largeleaf Lantana, Pink Flowered Lantana, Red Flowered Lantana, Red-Flowered Sage, White Sage, Wild Sage [10892]		Species or species habitat likely to occur within area
Lycium ferocissimum African Boxthorn, Boxthorn [19235]		Species or species habitat likely to occur within area
Olea europaea Olive, Common Olive [9160]		Species or species habitat may occur within area
		,
Opuntia spp. Prickly Pears [82753]		Species or species habitat likely to occur within area
Pinus radiata Radiata Pine Monterey Pine, Insignis Pine, Wilding Pine [20780]		Species or species habitat may occur within area
Rubus fruticosus aggregate Blackberry, European Blackberry [68406]		Species or species habitat likely to occur

Name	Status	Type of Presence
Sagittaria platyphylla		within area
Delta Arrowhead, Arrowhead, Slender Arrowhea [68483]	ad	Species or species habitat likely to occur within area
Salix spp. except S.babylonica, S.x calodendror Willows except Weeping Willow, Pussy Willow a Sterile Pussy Willow [68497]		Species or species habitat likely to occur within area
Salvinia molesta Salvinia, Giant Salvinia, Aquarium Watermoss, Weed [13665]	Kariba	Species or species habitat likely to occur within area
Tamarix aphylla Athel Pine, Athel Tree, Tamarisk, Athel Tamaris Athel Tamarix, Desert Tamarisk, Flowering Cyp Salt Cedar [16018]	•	Species or species habitat likely to occur within area
Reptiles		
Hemidactylus frenatus Asian House Gecko [1708]		Species or species habitat likely to occur within area
Nationally Important Wetlands		[Resource Information]
Name		State
Swan-Canning Estuary		WA

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the gualifications below and may need to seek and consider other information sources.

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

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

Where very little information is available for species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc). In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

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

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

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

Coordinates

-31.95054 115.91148

Acknowledgements

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

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

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

Please feel free to provide feedback via the Contact Us page.

Appendix 3 – Flora Species List

This list is a record of the flora survey carried out during preparation of this plan.

denotes native to Western Australia but not endemic to the site

Species Name	Common Name	Comment
Native Species		
Amyema linophylla		
Bolboschoenus caldwellii	Marsh Club-rush	
Casuarina obesa	Swamp Sheoak	
Atriplex semibaccata#	Berry Saltbush	
Eucalyptus rudis	Flooded Gum	
Ficinia nodosa	Knotted Club Rush	
Frankenia pauciflora	Seaheath	
Juncus kraussii	Sea Rush	
Pogonolepis stricta	Stiff Angianthus	
Salicornia quinqueflora	Beaded Samphire	
Samolus repens	Creeping Brookweed	
Sporobolus virginicus	Marine Couch	
Suaeda australis	Seablite	
Tecticornia halocnemoides	Shrubby Samphire	
Tecticornia indica subsp. bidens		
Tecticornia lepidosperma		
Typha domingensis	Bulrush	
Weed Species		
Arundo donax*	Giant Reed	
Atriplex prostrata*	Hastate Orache	
Carex divisa*	Divided Sedge	
Carpobrotus edulis*	Hottentot Fig	
Casuarina glauca*		
Cenchrus clandestinus*	Kikuyu Grass	
Chamaecytisus palmensis*	Tagasaste	
Cynodon dactylon*	Couch	
Cyperus rotundus*	Nut Grass	
Ehrharta calycina*	Perennial Veldt Grass	
Gladiolus undulatus*	Wild Gladiolus	
Lolium rigidum*	Wimmera Ryegrass	
Medicago polymorpha*	Burr Medic	
Moraea flaccida*	One-leaf Cape Tulip	Declared Pest

^{*} denotes introduced species

Species Name	Common Name	Comment
Oxalis pes-caprae*	Soursob	
Paspalum dilatatum*		
Romulea rosea*	Guildford Grass	
Rumex crispus*	Curled Dock	
Schinus terebinthifolia*		
Solanum nigrum*	Black Berry Nightshade	
Sonchus oleraceus*	Common Sowthistle	
Stenotaphrum secundatum*	Buffalo Grass	
Symphyotrichum squamatum*	Bushy Starwort	
Washingtonia filifera*		
Watsonia meriana*	Bulbil Watsonia	

Appendix 4 – Fauna Species List

This list is a record of the fauna survey carried out during preparation of this plan, listed in order of family.

^{*} denotes introduced species

Family	Species Name	Common Name
Birds		
Accipitridae	Elanus caeruleus	Black Shouldered Kite
Accipitridae	Haliastur indus	Whistling Kite
Alcedinidae	*Dacelo novaeguineae	*Laughing Kookaburra
Anatidae	Anas superciliosa	Pacific Black Duck
Anatidae	Cygnus atratus	Black Swan
Anhingidae	Anhinga novaehollandiae	Australasian Darter
Ardeidae	Ardea novaehollandiae	White-faced Heron
Cacatuidae	Cacatua sanguinea	Little Corella
Corvidae	Corvus coronoides	Australian Raven
Cracticidae	Cracticus tibicen	Australian Magpie
Cracticidae	Cracticus torquatus	Grey Butcher Bird
Hirundinidae	Hirundo neoxena	Welcome Swallow
Laridae	Sterna bergii	Crested Tern
Meliphagidae	Anthochaera carunculata	Red Wattlebird
Meliphagidae	Gavicalis virescens	Singing Honeyeater
Monarchidae	Grallina cyanoleuca	Magpie-lark
Pelecanidae	Pelecanus conspicillatus	Australian Pelican
Phalacrocoracidae	Phalacrocorax carbo	Great Cormorant
Phalacrocoracidae	Phalacrocorax melanoleucos	Little Pied Cormorant
Phalacrocoracidae	Phalacrocorax sulcirostris	Little Black Cormorant
Psittacidae	*Trichoglossus moluccanus	*Rainbow Lorikeet
Rallidae	Fulica atra	Eurasian Coot
Rallidae	Porphyrio porphyrio	Purple Swamphen
Rhipiduridae	Rhipidura leucophrys	Willie Wagtail
Threskiornithidae	Threskiornis spinicollis	Straw-necked Ibis
Reptiles		
Scincidae sp.		
Mammals		
Muridae	*Rattus rattus	*Black Rat
Canidae	*Canis lupis familiaris	*Domestic Dog
Invertebrates		

Family	Species Name	Common Name
Formicidae	Myrmecia vindex	Bull Ant
Formicidae	Iridomyrmex purpureus	Meat Ant
Pentatomidae	Nezara viridula	Southern Green Stinkbug

Appendix 5 – Quadrat Data

Quadrat

SF01

No.: Survey

15 May 2020

Date:

Personnel: Sharon Hynes,

Aster Braxton-

Smith

GPS

Coordinates:

Landform: Tidal Flat Aspect: Flat

Soil: Dark brown

loamy clay

Leaf Litter: 0% Surface None

Rock:

Condition: Excellent Notes: Potential TEC

Samphire Wetland

Native Species	Cover (%)	Height (m)	Invasive Species	Cover (%)	Height (m)
Salicornia quinqueflora	50	0.5	*Atriplex prostrata	0.5	0.5
Suaeda australis	10	0.5			
Tecticornia indica subsp. bidens	40	1.5			

Quadrat No.:SF02

Survey Date:15 May 2020

Personnel: Sharon

Hynes,

Aster Braxton-

Smith

GPS

Coordinates:

Landform: Tidal Flat

Aspect: Flat

Soil: Dark brown

loamy clay

Leaf Litter: 0% Surface None

Rock:

Condition: Excellent

Notes: Potential TEC



	Samphire Wetland					
Native Species	Cover (%)	Height (m)	Invasive Species	Cover (%)	Height (m)	
Amyema linophylla	0.5	2				
Casuarina obesa	4	5				
Atriplex semibaccata	5	0.5				
Juncus kraussii	25	1				
Salicornia quinqueflora	20	0.5				
Samolus repens	0.5	0.5				
Suaeda australis	40	0.8				

Quadrat No.:SF03

15 May 2020 Survey

Date:

Personnel: Sharon

Hynes, Aster

Braxton-Smith

GPS

Coordinates:

Tidal Flat Landform: Aspect: Flat

Soil: Dark brown

loamy clay

Leaf Litter: 0% Surface None

Rock:

Condition: Excellent

Notes: Potential TEC



Native Species	Cover (%)	Height (m)	Invasive Species	Cover (%)	Height (m)
Juncus kraussii	2	1			
Salicornia quinqueflora	70	0.5			
Samolus repens	20	0.5			
Suaeda australis	2	0.5			

Quadrat No.:SF04

Survey Date:15 May 2020

Personnel: Sharon

Hynes,

Aster Braxton-

Smith

GPS

Coordinates:

Landform: Tidal Flat Aspect: Flat

Soil: Dark brown

loamy clay

Leaf Litter: 0% Surface None

Rock:

Condition: Excellent

Notes: Potential TEC

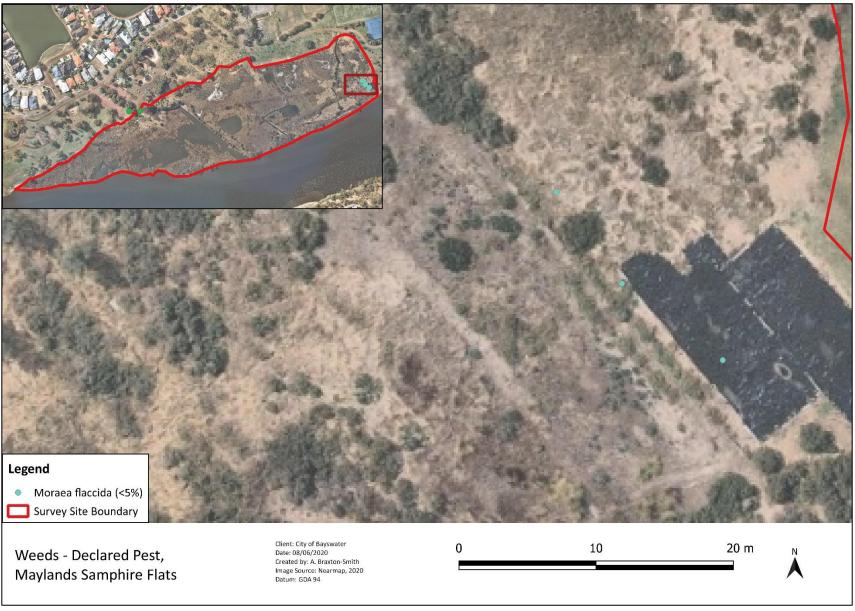


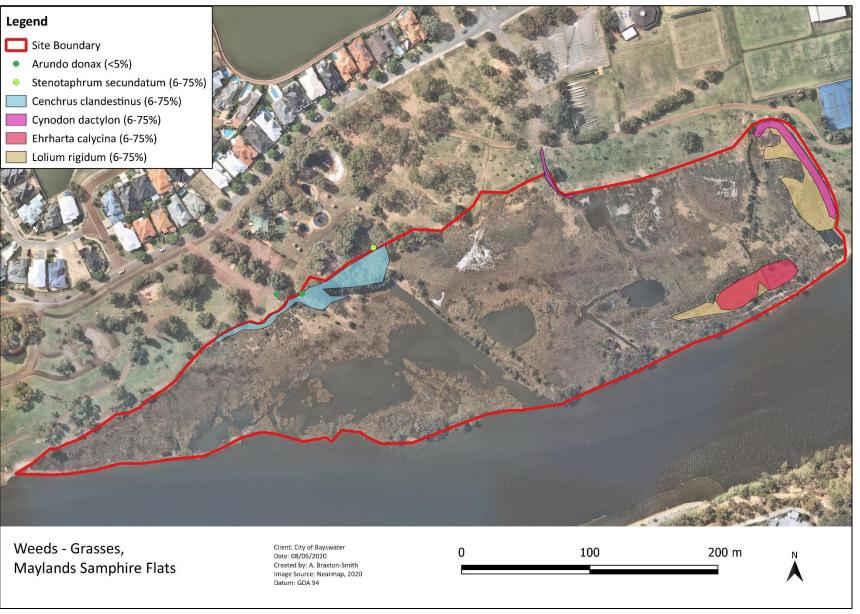
Samphire Wetland

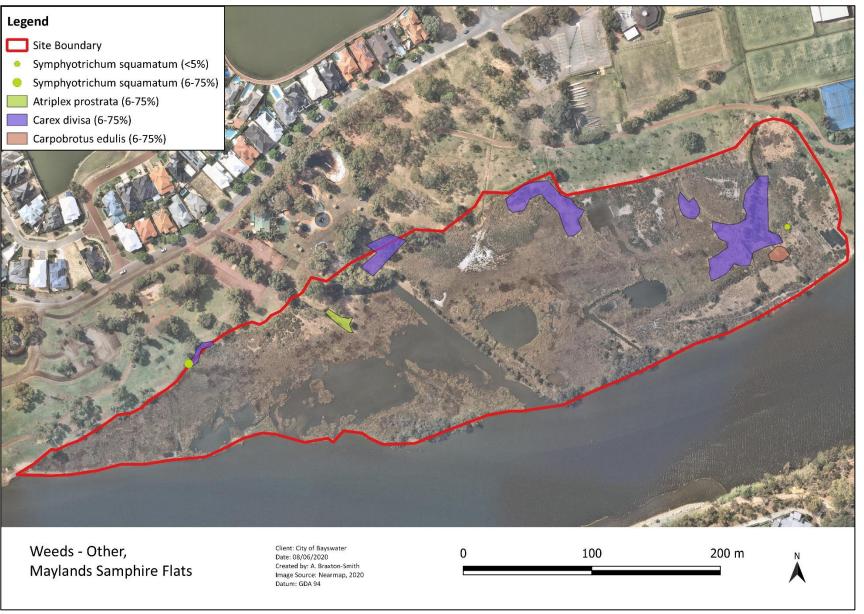
Native Species	Cover (%)	Height (m)	Invasive Species	Cover (%)	Height (m)
Juncus kraussii	3	1			
Salicornia quinqueflora	70	0.5			
Samolus repens	25	0.5			
Suaeda australis	3	0.8			
Tecticornia indica subsp. bidens	1	1			

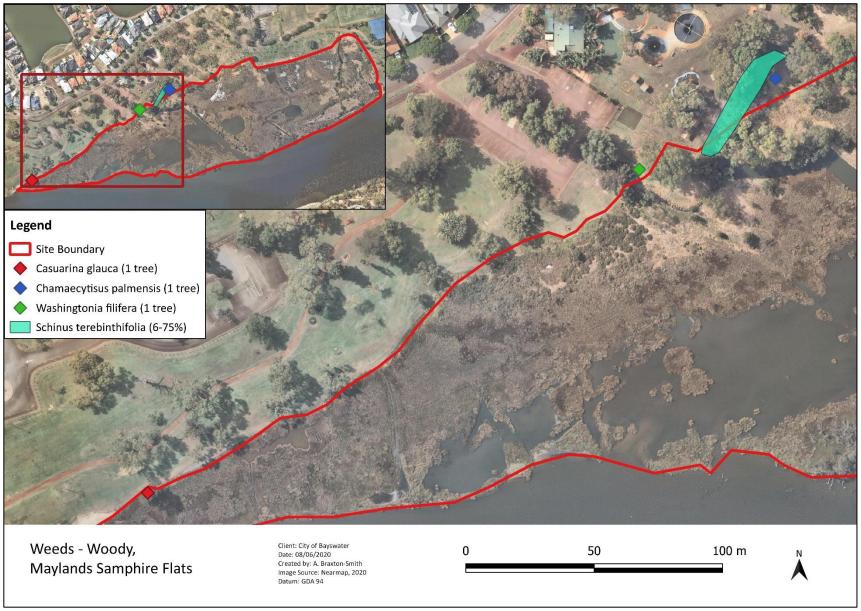
Appendix 6 – Weed Maps











Appendix 7 – Vegetation Structural Classes

Life Form/Height	Canopy Percentage Cover				
Class	100 – 70%	70 – 30%	30 - 10%	10 – 2 %	
Trees over 30 m	Tall closed forest	Tall open forest	Tall woodland	Tall open woodland	
Trees 10 – 30 m	Closed forest	Open forest	Woodland	Open woodland	
Trees under 10 m	Low closed forest	Low open forest	Low woodland	Low open woodland	
Tree Mallee	Closed tree mallee	Tree mallee	Open tree mallee	Very open tree mallee	
Shrub Mallee	Closed shrub mallee	Shrub mallee	Open shrub mallee	Very open shrub mallee	
Shrubs over 2 m	Closed tall scrub	Tall open scrub	Tall shrubland	Tall open shrubland	
Shrubs 1 – 2 m	Closed heath	Open heath	Shrubland	Open shrubland	
Shrubs under 1 m	Closed low heath	Open low heath	Low shrubland	Low open shrubland	
Grasses	Closed grassland	Grassland	Open grassland	Very open grassland	
Herbs	Closed herbland	Herbland	Open herbland	Very open herbland	
Sedges	Closed sedgeland	Sedgeland	Open sedgeland	Very open sedgeland	

(Source: Government of Western Australia, 2000a)

Appendix 8 – Vegetation Condition Rating Scale

Category		Description
1	Excellent	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.
2	Very Good	Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks.
3	Good	More obvious signs of damage caused by human activities since European settlement, including some obvious impact on the vegetation structure such as that caused by low levels of grazing or slightly less aggressive weeds.
4	Poor	Still remains basic vegetation structure or ability to regenerate to it after very obvious impacts of human activities since European settlement, such as grazing, partial clearing, frequent fires or aggressive weeds.
5	Very Poor	Severely impacted by grazing, very frequent fires, clearing or a combination of these activities. Scope for some regeneration but not to a state approaching good condition without intensive management. Usually with a number of weed species present including very aggressive species.
6	Completely Degraded	Areas that are completely or almost completely without native species in the structure of their vegetation, i.e. areas that are cleared or 'parkland cleared' with their flora comprising of weed or crop species with isolated native trees or shrubs.

(Source: Government of Western Australia, 2000a)