

Dry Creek

Management Plan

City of Port Adelaide Enfield

Dry Creek Management Plan, City of Port Adelaide Enfield

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Version 1.1

Prepared by EBS Ecology for the City of Port Adelaide Enfield

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Front cover photo: Eucalyptus camaldulensis var. camaldulensis (River Red Gum) Woodland.



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1 INTRODUCTION

This management plan outlines the biodiversity assets and the threatening processes existing within the Dry Creek Linear Reserve, managed by the City of Port Adelaide Enfield. The aim of the plan is to provide a practical resource document for community and land managers to assist in achieving onground works that enhance current native vegetation and biodiversity assets, together with recreation opportunities.

Located Within the suburb of Valley View, the project area is primarily used for recreational activities such as walking and cycling while the creekline provides an important drainage system for storm water dispersal from adjoining suburbs. Widespread urbanisation has led to native vegetation fragmentation and the introduction of invasive plants and animals, which are now placing significant pressure on biodiversity values within the area.

The management of native vegetation within Adelaide's metropolitan environment remains a conservation priority particularly given that much of the region has been heavily modified. As urban development expands, there is increasing pressure on landscapes to provide for public recreation and open space.

It is anticipated information contained in this plan, will assist land managers in making key decisions towards the long term conservation and management of biodiversity values within the area.

1.1 Objectives

- Conservation and restoration of existing remnant vegetation,
- Control and management of high priority weed species,
- Identify other threatening process within the project area,
- Implementation of appropriate revegetation programs,
- Identify opportunities for the enhancement of public recreational activities.

2 BACKGROUND INFORMATION

2.1 Pre-European Settlement

Aboriginal people of the Kaurna 'tribe' are the original inhabitants of the Dry Creek project area and surrounding region. Several indigenous site locations outlined in the *State of the Environment Report, 2007, City of Port Adelaide Enfield*, are in the vicinity of the project area. It is likely the Kaurna people utilised the area and surrounding environs for food and, water supply, campsites, possible burial locations and ceremonial grounds.

2.2 Post European Settlement

Since European settlement significant modification of the natural environment has occurred. Large scale clearing of native vegetation coupled with the introduction of feral animals and exotic vegetation has resulted in significant loss of biodiversity within the region. The current landscape is now characterised by urbanisation and associated infrastructure, with limited remnant vegetation remaining.

2.3 Survey Limitations

The seasonal nature of flora and fauna species means that not all species that may use the project area would have been observed during the field survey. Some plant species, such as orchid and lily species have short growth patterns and are typically only conspicuous during spring. Consequently, as the current survey was conducted in early autumn, these species may not have been readily detected. Other species, including many of the native grasses, are identifiable to species level only by distinguishing features (e.g. seeds), which were not necessarily present at the time of the survey. Similarly, without carrying out intensive trapping or spotlighting, it is not possible to detect all fauna species that may use the site. However, the assessment of habitats together with the site observations made, and previous records are considered adequate to make a reasonable assessment of potential threats upon native fauna and flora within the survey area.

3 SITE DETAILS AND DESCRIPTION

3.1 Physical description

Dry Creek originates near the suburb of Golden Grove and extends westward through the council areas of Tea Tree Gully, Salisbury and Port Adelaide Enfield before entering the sea at Barker Inlet. It is an important stream of the Northern Adelaide Plains directing stormwater away from suburbs such as Hope Valley, St Agnes, Modbury, Valley View and Walkley Heights.

Significant urban development within the region has resulted in the introduction of many invasive weed species while an increase in stormwater runoff has resulted in erosion of the creek bed and adjacent banks.

Figure 1 details the project area separated into three distinct management areas forming the basis for all management actions.

3.1.1 Topography

The broad scale surrounding landscape is described as a coastal plain with the landform depicted as undulating to rolling plain on shale with broad floodplains. The Dry Creek project area is represented by a riparian creek system surrounded with low gradient slopes.

3.1.2 Soils

Soils within the project area are described as hard pedal red duplex soils, reddish friable loams and brown self mulching cracking clays.

3.1.3 Climate

The Adelaide region experiences a Mediterranean style climate with cool wet winters and warm dry summers. Table 1. details average temperatures and rainfall recorded at Parafield Airport, supplied by the *Bureau of Meteorology*, 2011.

				-										
Statistics	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average	Years
Mean maximum temperature (°C)	29.5	29.3	26.8	22.6	18.9	15.7	15.1	16.2	18.8	21.7	25.2	27.6	22.3	1939 2011
Mean minimum temperature (°C)	16.3	16.4	14.6	11.8	9.4	7.1	6.3	6.7	8.2	10.1	12.8	14.8	11.2	1939 2011
Mean rainfall (mm)	20.9	17.8	21.3	39.9	47.6	53.9	58.9	54.0	44.3	42.3	27.1	25.2	452.6	1929 2011

Table 1. Annual temperature and rainfall figures for Parafield Airport.



Figure 1. Project Area.

3.2 Vegetation

Vegetation within the Dry Creek project area can be described as *Eucalyptus camaldulensis* var. *camaldulensis* (River Red Gum) +/- *Acacia salicina* (Willow Wattle) Woodland association. The understorey condition varied throughout the project area but was predominantly an anthropogenic grass/herbland. Areas 2 & 3 (Figure 1) have the highest value vegetation within the project area. Numerous revegetation plantings within these two areas have improved the condition of middle and understorey vegetation stratum, however several mature revegetation areas were planted with non indigenous natives such as *Acacia saligna* (Golden Wreath Wattle) that are now recognised as invasive weed species.

Area 1, located adjacent the Thomas Turner Reserve playing fields and Valley View Par 3 Golf Course has little in the way of native understorey. The recreational areas surrounding Dry Creek generally extend up to the riparian zone and are currently well manicured introduced grasses.

3.2.1 Remnant Vegetation

The overstorey remnant vegetation largely comprised of *Eucalyptus camaldulensis* var. *camaldulensis* (River Red Gum) and *Acacia salicina* (Willow Wattle). It is likely these two species are a combination of remnant and revegetated individuals. Recruitment of these two species was evident. Several significant *Eucalyptus camaldulensis* var. *camaldulensis* are present within the project area. These mature trees possess hollows which provide important nesting resources for bird and mammal species.

Understorey remnant vegetation represented primarily riparian/aquatic species including; *Phragmites australis* (Common Reed), *Typha sp.* (Bulrush) and *Cyperus vaginatus* (Stiff Flat-sedge). It is likely these species have persisted due to the riparian and aquatic zones not being entirely altered and developed. The adjoining slopes have been modified through human influences including urban expansion and recreational development.

Several small areas of *Themeda triandra* (Kangaroo Grass) and *Austrostipa sp* (Spear Grass) were present upon slopes adjacent to Dry Creek. These areas containing native grasses were generally found in locations with shallow soil profiles that impede the development of herbaceous weeds.

Table 2 outlines native species identified during the EBS Ecology field survey and listed in the *Action Plan for Dry Creek Reserve (City of Port Adelaide and Enfield).* The comments section indicates if the species was regarded as remnant, regenerated or revegetated.

Species Name	Common Name	AUS status	SA status	Comment
Acacia acinacea	Wreath Wattle			revegetation
Acacia notabilis	Notable Wattle			revegetation / regeneration
Acacia paradoxa	Kangaroo Thorn			revegetation / regeneration

Table 2. Native species identified within the Dry Creek project area.

Species Name	Common Name	AUS status	SA status	Comment
Acacia pendula	Weeping Myall		V	revegetation
Acacia pycnantha	Golden Wattle			remnant / revegetation / regeneration
Acacia salicina	Willow Wattle			remnant / revegetation / regeneration
Acacia victoriae ssp.	Elegant Wattle			revegetation
Arthropodium strictum	Common Vanilla Lily			listed in Dry Creek Action Plan
Austrodanthonia caespitosa	Common Wallaby Grass			listed in Dry Creek Action Plan
Austrodanthonia racemosa sp. racemosa	Wallaby Grass			listed in Dry Creek Action Plan
Austrodanthonia sp.	Wallaby Grass			remnant
Austrostipa nitida	Spear Grass			listed in Dry Creek Action Plan
Austrostipa nodosa	Tall Spear Grass			listed in Dry Creek Action Plan
Austrostipa scabra ssp. falcata	Slender Spear Grass			listed in Dry Creek Action Plan
Austrostipa sp.	Spear Grass			remnant
Atriplex sp.	Saltbush			listed in Dry Creek Action Plan
Bursaria spinosa ssp.	Bursaria			remnant / revegetation
Calystegia sepium ssp. roseata	Large Bindweed			listed in Dry Creek Action Plan
Carex breviculmis	Short Stem Sedge			remnant
Chenopodium sp.	Goosefoot			remnant
Chloris truncata	Windmill Grass			listed in Dry Creek Action Plan
Convolvulus remotus	Grassy Bindweed			listed in Dry Creek Action Plan
Cyperus vaginatus	Stiff Flat-sedge			remnant
Dianella revoluta ssp. revoluta	Black-anther Flax- lily			listed in Dry Creek Action Plan
Dichondra repens	Kidney Weed			remnant
Dodonaea viscosa ssp. spatulata	Sticky Hop-bush			revegetation / regeneration
Enchylaena tomentosa var.	Ruby Saltbush			remnant / revegetation
Eucalyptus camaldulensis var.	River Red Gum			remnant / revegetation / regeneration
Eucalyptus cladocalyx	Sugar Gum			revegetation
Eucalyptus sp.	(blank)			revegetation
Lomandra nana	Small Mat-rush			listed in Dry Creek Action Plan
Oxalis perennans	Native Sorrel			remnant
Phragmites australis	Common Reed			remnant
Pittosporum angustifolium	Native Apricot			remnant / revegetation
Senna artemisioides ssp. petiolaris	(blank)			revegetation
Themeda triandra	Kangaroo Grass			remnant
Typha sp.	Bulrush			remnant
Vittadinia sp	New Holland Daisy			listed in Dry Creek Action Plan

*Species Listed in Dry Creek Action Plan were not observed during EBS field survey

3.2.2 Significant Flora

Acacia salicina was recorded within the project area and is considered to be Vulnerable in the Southern Mount Lofty Ranges. It is unclear whether the majority of specimens are remnant or revegetated. It is likely a combination now exist. Acacia pendula (Weeping Myall), Vulnerable in South Australia was also recorded within the project area, however this species is not naturally found within this region and is the result of revegetation. No remnant flora species with a National or State conservation rating were recorded.

3.2.3 Condition

The overall condition of vegetation within the project area is considered poor to moderate. Overstorey stratum consisting of *Eucalyptus camaldulensis* var. *camaldulensis* (River Red Gum) and *Acacia salicina* (Willow Wattle) was regarded as moderate to good condition, however it is unclear how much of the overstorey vegetation can be classified as remnant. Midstorey species mainly consist of staged revegetation with a mix of endemic and non-endemic shrub species. The midstorey structure provides important habitat for bird species within the area, however due to the large amount of woody weeds present, it is considered to be in poor condition.

Invasive grasses and herbs dominate the understorey layer. Very few native species now persist, with the exception of the riparian zone and in isolated pockets on the adjoining slopes. The condition of the understorey layer is considered to be poor.

3.3 Fauna

3.3.1 Native Fauna

Fifteen bird species were observed within the project area during the field survey. Thirteen were native species and two were introduced (Refer Table 3). No native reptile or mammal species were recorded. Table 4 lists possible native reptile and mammal species that would likely be present within the project area.

Species Name	Common Name	No. of birds observed
Phylidonyris novaehollandiae	New Holland Honeyeater	25
Gymnorhina tibicen	Australian Magpie	5
Trichoglossus haematodus	Rainbow Lorikeet	11
Glossopsitta concinna	Musk Lorikeet	17
Anthochaera carunculata	Red Wattlebird	5
Manorina melanocephala	Noisy Miner	9
Ocyphaps lophotes	Crested Pigeon	7
Anas superciliosa	Pacific Black Duck	5
*Columba livia	Rock Dove	3
Grallina cyanoleuca	Magpie-lark	1
Eolophus roseicapillus	Galah	11
Rhipidura leucophrys	Willie Wagtail	2
Corvus coronoides	Australian Raven	2

Table 3. Bird species recorded within the Dry Creek project area.

Species Name	Common Name	No. of birds observed
*Sturnus vulgaris	Common Starling	2
Stigmatopelia chinensis	Spotted Turtle-dove	1



Figure 2. Pacific Black Ducks observed along Dry Creek

Species Name	Common Name
Reptiles	
Christinus marmoratus	Marbled Gecko
Gehyra variegate	Tree Delta
Hemiergis peronii	Four-toed Earless Skink
Lampropholis guichenoti	Garden Skink
Lerista dorsalis	Southern Four-toed Slider
Menetia greyii	Dwarf Skink
Morethia adelaidensis	Adelaide Snake-eye
Mammals	
Trichosurus vulpecula	Common Brushtail Possum
Pseudocheirus peregrinus	Common Ringtail Possum
Chalinolobus morio	Chocolate Wattle Bat
Chalinolobus gouldii	Goulds Wattle Bat
Nyctophilus geoffroyi	Lesser Long-eared Bat
Nyctinomus australis	White-striped Freetail-bat

3.3.2 Introduced Fauna

No introduce fauna species were observed during the field survey apart from for two avian species; Rock Dove and Common Starling. However it is likely several introduced species frequent the area. Foxes are common within the Adelaide region are known to travel along linear reserves. Although no fox dens were recorded this species is likely to be present within the area. The surrounding suburban landscape provides a significant population of cats, both domestic and feral. Cats are likely to utilise the area primarily for hunting. House mice and black rats are common within urban area and are likely to be found within the survey area.

4 VALUES

4.1 Educational Value

The Dry Creek project area offers a unique opportunity to educate the broader community in environmental issues. In recent years primary schools have increasingly embraced our natural environment as an integral component of a child's education. Schools are often involved in revegetation programs and water conservation activities, bringing the classroom into an environmental setting. Dry Creek project area offers such a unique environment, being located within our urban landscape and close to schools.

The general community can also be informed about environmental issues. This can be in the form of information pamphlets and interpretive signage, outlining concerns about environmental weeds and water quality issues.

4.2 Aesthetic Value

Dry Creek project area provides an important aesthetic resource for local residents. It is one of only several open space locations within the local area. Large trees, where numerous bird species reside, coupled with an aquatic creek setting provides an ambience within our urban environment. The aesthetic value of the project area cannot be understated and has increasing importance as a community asset as urbanisation expands across the Northern Adelaide Plains.

4.3 Recreation Value

The project area is utilised by the local community for both active and passive recreational activities such as walking, dog walking, jogging and bike riding. Social interaction activities such as ball sports and picnicking are a common recreational activity within the area.

Several locations within the project area have been identified as providing an opportunity to increase community engagement through the development of barbeque facilities and undercover picnic locations.

4.4 Community Engagement

Community groups such as the Friends of Dry Creek are actively involved in the preservation and improvement of the Dry Creek project area. Community organisations should be supported and encouraged through funding initiatives that assist community based projects. Community organisations provide a valuable pool of experienced volunteers offering a broad range of skills and expertise. Relationships should be enhanced and developed between community groups and local government.

4.5 Biodiversity Value

Dry creek extends from the Adelaide hills to the mangrove forest at Barker Inlet. It provides an important resource for native flora and fauna species as a corridor for species dispersal and as a refuge within the surrounding urban landscape.

5 MANAGEMENT ISSUES

5.1 Weeds

Introduced weed species pose the biggest threat to biodiversity within the Dry Creek project area. Invasive and problematic weed species observed include *Fraxinus angustifolia* (Desert Ash), *Phoenix canariensis* (Canary Island Palm), *Thinopyrum elongatum* (Tall Wheat-grass), *Lycium ferocissimum* (African Boxthorn), *Acacia saligna* (Golden Wreath Wattle), *Rhamnus alaternus* (Blowfly Bush), *Olea europaea ssp.* (Olive), *Ricinus communis* (Castor Oil Plant), The majority of invasive weed species are likely to have been introduced through human activities such as illegal dumping, garden escapees, seed dispersal along the creekline from upstream and transported on clothing and footwear. Introduced animals such as foxes, cats, rabbits and mice may also transport weed seed on their fur while birds can distribute seed through droppings.

Weed species have been assigned a threat value based upon the Weed Value Allocation System adopted from the *Bushland Condition Monitoring Manual – Southern Mount Lofty Ranges.* This system was developed using the five invasive threat categories based upon the following principals;

- The weed's degree of invasiveness and ability to expand into intact scrub
- The weed's capabilities to disrupt natural processes in bushland
- The degree of difficulty involved in preventing or controlling an infestation

BCM Weed Threat Category	BCM Weed Threat Category Description
5	Highly invasive in either disturbed or intact remnant bushland, spreads rapidly producing dense stands and a blanket cover. Potential to eliminate almost all understorey species. Very difficult to control without outside help.
4	Highly invasive in either disturbed or intact remnant bushland, with the potential to spread rapidly and produce very dense stands given favourable habitat and / or vectors. High potential to reduce native species diversity and abundance. Can be controlled with substantial effort.
3	Invasive in intact bushland and moderate potential to reduce native species diversity. Rate of spread slower than Category 4 and 5 weeds but once present will persist and threaten biodiversity. May produce dense stands over a wide area but can be controlled with sustained effort.
2	Generally only invade disturbed bushland, but may spread rapidly. However, generally only a slight potential to reduce native species diversity, unless present in high densities.
1	Generally only invade disturbed bushland. Often widespread and abundant but not considered a significant threat to biodiversity, unless present at very high densities.

Table 5. Bushland condition monitoring – Threat category.

Weed species with a threat value of between 3 and 5 are classified as red alert weeds. These species have the capacity to spread quickly and are difficult to control. Species with a classification of between 4 and 5 require immediate attention.

Species Name	Common Name	BCM Weed Threat	Declared Plant**
*Acacia saligna	Golden Wreath Wattle	2	
*Arundo donax	Giant Reed	2	
*Avena barbata	Bearded Oat	2	
*Bromus sp.	Brome	1	
*Casuarina glauca	Grey Buloak	2	
*Conyza bonariensis	Flax-leaf Fleabane	1	
*Cynodon dactylon var. dactylon	Couch	2	
*Ehrharta erecta	Panic Veldt Grass	2	
*Erodium moschatum	Musky Herons-bill	2	
*Foeniculum vulgare	Fennel	2	
*Fraxinus angustifolia	Desert Ash	2	
*Fumaria sp.	Fumitory	1	
*Galenia pubescens var. pubescens	Coastal Galenia	2	
*Heliotropium europaeum	Common Heliotrope	1	
*Ipomoea indica	Purple Morning-glory	2	
*Lycium ferocissimum	African Boxthorn	3	\checkmark
*Malva parviflora	Small-flower Marshmallow	2	
*Moraea setifolia	Thread Iris	2	
*Nerium oleander	Oleander	1	
*Olea europaea ssp.	Olive	4	\checkmark
*Oxalis pes-caprae	Soursob	3	\checkmark
*Paspalum dilatatum	Paspalum	2	
*Pennisetum clandestinum	Kikuyu	2	
*Phalaris aquatica	Phalaris	3	
*Phoenix canariensis	Canary Island Palm	2	
*Pinus sp.	Pine	3	
*Piptatherum miliaceum	Rice Millet	2	
*Plantago lanceolata var.	Ribwort	2	
*Prunus sp.	Plum	2	
*Rhamnus alaternus	Blowfly Bush	3	
*Ricinus communis	Castor Oil Plant	2	
*Rosa canina	Dog Rose	2	\checkmark
*Salix sp.	Willow	2	\checkmark
*Scabiosa atropurpurea	Pincushion	2	
*Schinus molle	Pepper-tree	2	
*Setaria sp.	Pigeon-grass	2	
*Solanum nigrum	Black Nightshade	2	
*Sonchus oleraceus	Common Sow-thistle	1	
*Taraxacum officinale	Dandelion	1	
*Thinopyrum elongatum	Tall Wheat-grass	2	
*Tropaeolum majus	Nasturtium	2	
*Vinca major	Blue Periwinkle	2	

Table 6. Weed species identified within the project area and BCM weed threat category.

Species Name	Common Name	BCM Weed Threat Category	Declared Plant**
*Vulpia sp.	Fescue	2	

* Species in red have been assigned BCM weed threat category by EBS Ecology and are specific to Dry Creek Project Area.

** Under the under the Natural Resources Management Act 2004

5.2 Erosion

Serious erosion issues were observed within Dry Creek during the field survey. Heavy rain events prior to the field survey had resulted in considerable erosion to the creek banks (Refer Figure 3). New housing developments coupled with an increase in subdivisions of existing house blocks have reduced open areas of land that previously assisted in absorbing rainfall into the subsurface soil structure. The result is an increase in stormwater runoff entering Dry Creek and the velocity at which it enters.

One location within the project area has had an erosion mitigation structure installed along the creek bank. This structure consisted of a tiered concrete wall extending down the creek bank into the creek. (Refer Figure 4).



Figure 3. Erosion resulting from heavy rainfall event.



Figure 4. Erosion mitigation structure along creek bank.

5.3 Public Safety

Public safety within the project area is paramount in the overall management of the area. It is essential for councils and any statutory authorities to minimise safety issues in public areas within their jurisdiction.

A fundamental requirement for a safe environment within the project area include safe walking trails with minimal tripping hazards and direct line of site along the walking trails and into adjacent vegetation. Revegetation within ten metres of walking trails should consist of understorey and grass species only.

5.4 Stormwater Discharge

Several stormwater outlets were situated within the Dry Creek project area. Most outlets consisted of a single concrete pipe discharging directly into Dry Creek. Active erosion was noted at a large proportion of these outlet pipes during the field survey, (Refer Figure 5). Several stormwater outlets had erosion mitigation structures retrofitted at the point of entry into the creek. These included concrete steps (Figure 6) and concrete and rock surrounding wall (Figure 7). It was noted that erosion was less prevalent at outlets fitted with erosion mitigation structures.



Figure 5. Erosion damage around stormwater outlet pipe.



Figure 6. Stormwater outlet pipe with concrete steps into creek.



Figure 7. Stormwater outlet pipe with surrounding concrete and rock wall.

6 ACTION PLAN

6.1 Weed Control

Control of invasive weed species is the most significant and immediate issue concerning the Dry Creek project area. Twenty invasive weed species have been identified for control and these are detailed in Table 7. Each species has been selected specific to the Dry Creek project area and allocated a 'Hierarchy of Management' order based on the following principals:

- BCM threat category (Section 5.1, Table 5),
- Size of infestation,
- Overall abundance,
- Level of invasiveness,
- Listing (Declared under NRM Act, 2004),
- Prior management,
- Cost effectiveness.

The weeds identified for control, outlined in Table 7 are primarily woody weeds. Species with a 'Hierarchy of Management' classification of between 1 & 2 require immediate attention while weed species with a classification of 3 & 4 should be targeted following the control of weeds species with a higher classification.

Schinus molle (Pepper Tree) classified as a level 2 weed species has numerous specimens within the project area that meet the size criteria of a Significant Tree as well as aesthetically important. Figures 8, 9 & 10 detail locations, while Appendix 2 & 3 outlines GPS coordinates. These individuals should not be removed from the project area until revegetation has been undertaken and established in close proximity.

Due to the diversity and widespread distribution of herbaceous and grassy weeds it is impractical to undertake control on the majority of these species.

Weed control techniques outlined in Table 7 are a preliminary guide only. Weed control within the project area should be undertaken by qualified weed control contractors using best practice techniques. Appendix 1 details weed control methodology.

Species Name	Common Name	Hierarchy of management	Control techniques
*Olea europaea ssp.	Olive	1	Hand pull (juveniles) , Cut and swab, drill & fill
*Lycium ferocissimum	African Boxthorn	1	Hand pull (juveniles) , Cut and swab, drill & fill, spray
*Rhamnus alaternus	Blowfly Bush	1	Cut and swab, drill & fill
*Fraxinus angustifolia	Desert Ash	1	Hand pull (juveniles) , Cut and swab, drill & fill
*Acacia saligna	Golden Wreath Wattle	2	Hand pull (juveniles) , Cut and swab, drill & fill
*Arundo donax	Giant Reed	2	Cut and swab
*Casuarina glauca	Grey Buloak	2	Cut and swab, drill & fill
*Schinus molle	Pepper-tree	2	Cut and swab, drill & fill
*Phoenix canariensis	Canary Island Palm	2	Cut and swab, drill & fill
*Pinus sp.	Pine	3	Cut
*Foeniculum vulgare	Fennel	3	Cut and swab
*Nerium oleander	Oleander	3	Cut and swab, drill & fill
*Prunus sp.	Plum	3	Cut and swab, drill & fill
*Ricinus communis	Castor Oil Plant	3	Hand pull (juveniles) , Cut and swab
*Rosa canina	Dog Rose	3	Cut and swab
*Salix sp.	Willow	3	Cut and swab, drill & fill
*Thinopyrum elongatum	Tall Wheat-grass	3	Spray
*lpomoea indica	Purple Morning-glory	3	Spray
*Oxalis pes-caprae	Soursob	4	Spray
*Tropaeolum majus	Nasturtium	4	Spray

Table 7. Weed species for control – Hierarchy of Management.



Figure 8. Priority weeds & Erosion locations – Area 1



Figure 9. Priority weeds & Erosion locations - Area 2.



Figure 10. Priority weeds & Erosion locations – Area 3.

6.2 Revegetation

Revegetation works within the project area aims to improve biodiversity, restore existing habitats, provide additional habitat for native fauna species and reinstate representative samples of the pre-European vegetation communities through the reintroduction of plant species once common to the region. This can be achieved through infilling remnant vegetation and establishing small clusters of vegetation as habitat refuge. All previous rehabilitation plantings should be assessed for biodiversity, recreational and aesthetic value.

Revegetation within the project area is targeted towards riparian restoration together with the establishment of small clusters of understorey species within the adjoining woodland community. This approach has been selected through consideration of the following details:

- Overstorey canopy is for the most part intact and requires no additional infilling.
- Public safety concerns necessitate the need to allow direct line of site within the project area.
- Revegetation of midstorey species undertaken in recent years now provide adequate areas of habitat for local fauna species with only minimal further infill revegetation required.

Two distinct revegetation zones have been identified for revegetation works; the Riparian Zone and the Woodland Zone. Each zone has a species list and revegetation technique specific to that zone. Details are outline below.

Riparian Zone

The Riparian Zone is the area immediately adjoining the Aquatic Zone and is subject to seasonal inundation by floodwaters. The planting technique for this zone is to plug directly into the banks of the creek using a Hamilton planter or similar tool. Plantings should be in small groups of the same species (approximately 10 to 15 individuals), with a space between groups of plantings. No watering, tree guards or follow up weed control around plantings is required within this Zone. Table 8 details species and the number of individuals recommended for revegetation per year.

Species Name	Common Name	Number of plants required per year
Baumea juncea	Bare Twig-rush	200
Carex breviculmis	Short Stem Sedge	200
Cyperus gymnocaulos	Spiny Flat-sedge	200
Cyperus vaginatus	Stiff Flat-sedge	200
Phragmites australis	Common Reed	800

Table 8. Revegetation species for Riparian Zone.

Woodland Zone

The Dry Creek Woodland Zone is the area adjoining the Riparian Zone that is not subject to seasonal inundation from floodwaters. The planting technique for this zone is cluster plantings. Cluster planting is a collection of shrub and understorey species grouped together in a small area (usually 20m x 20m).

Cluster plantings can be any shape and should be tailored to the surrounding landscape. They are designed to reintroduce native species and provide habitat, while consolidating plantings into small manageable areas where weed control can be concentrated and more effective.

Weed control should be undertaken within planting areas, prior to revegetation to reduce competition. Subsequent follow up weed control should be undertaken to reduce competition and increase seedling survival rates. Tree guards are only required for the tall shrub species and watering will be dependent on seasonal variability. Table 9 details the species and number of plants for each cluster.

Species Name	Common Name	Number of plants for each cluster
Acacia pycnantha	Golden Wattle	2
Austrodanthonia caespitosa	Common Wallaby Grass	10
Austrodanthonia racemosa sp. racemosa	Wallaby Grass	10
Austrostipa nodosa	Tall Spear Grass	10
Austrostipa scabra ssp. falcata	Slender Spear Grass	10
Atriplex semibicata	Saltbush	10
Billardieria cymosa	Sweet Apple-berry	10
Bursaria spinosa ssp.	Bursaria	2
Chenopodium pumilio	Clammy Goosefoot	10
Chloris truncata	Windmill Grass	10
Dianella revoluta ssp. revoluta	Black-anther Flax-lily	10
Dodonaea viscosa ssp. spatulata	Sticky Hop-bush	2
Enchylaena tomentosa var.	Ruby Saltbush	10
Einadia nutans	Climbing Saltbush	10
Hibbertia sericea	Silky Guinea-flower	10
Pittosporum angustifolium	Native Apricot	2
Themeda triandra	Kangaroo Grass	12
Total plants per cluster		140

Table 9. Revegetation species and numbers for each 20x20m cluster within Woodland Zone.



Figure 11. Proposed revegetation – Area 1.



Figure 12. Proposed revegetation & BBQ areas – Area 2.



Figure 13. Proposed Revegetation – Area 3

6.3 Erosion mitigation

Numerous locations within the project area were identified as having serious erosion issues, Figures 8, 9 & 10 details these locations. Significant amounts of erosion recorded and the threat it may pose to public safety warrants the appointment of a suitably qualified engineer to survey and monitor the creek banks. Appropriate mitigation outcomes combining manmade structures that reduce the velocity of water flow coupled with revegetation outlined for the riparian area is expected to provide the best outcome.

Cooperation with adjoining councils may be required to initiate a total catchment approach to erosion issues affecting Dry Creek.

6.4 Public safety mitigation

- Vegetation should be structured in such a manner that line of site along all walking trails is maintained and not obstructed by vegetation. Large shrubs and bushes that are located within 10 metres of walkways should be removed.
- Revegetation within 10 metres of walking trails should be understorey and grass species only.
- Regularly conduct maintenance audits on walking trails to make sure tripping hazards are minimised.

6.5 Stormwater discharge mitigation

Stormwater discharge points not fitted with erosion mitigation structures such as those detailed in Section 5.4 (Figures 6 & 7) should be surveyed by a qualified engineer. Mitigating structures should be designed that reduce the velocity of water discharged into Dry Creek while also stabilizing the surrounding creek bank.

6.6 Amenity Enhancement

Several opportunities exist within the project area to increase amenities infrastructure for community benefit. Two locations within the project area have been identified as providing the appropriate amount of open space to provide additional barbeque and undercover picnic area for community recreational activities. Figure 12 details these proposed locations.

Location 1; at the corner of Ancell Court and Haddington Street is a large open space area with mature *Eucalyptus camaldulensis* var. *camaldulensis* providing a scenic location (Refer Figure 14)

Location 2; at the corner of Down Drive and Brougham Drive is on the border between the City of Port Adelaide Enfield and the City of Salisbury. This location provides large open space area with mature *Eucalyptus camaldulensis* var. *camaldulensis* providing an attractive location. This location will require joint cooperation between the City of Salisbury and the City of Port Adelaide Enfield to undertake this development (Refer Figure 15).

The remaining parts of the project area have established parklands or are deemed unsuitable to support amenity infrastructure.



Figure 14. Possible amenity location, corner of Ancell Court and Haddington Street.



Figure 15. Possible amenity location, corner of Down Drive and Brougham Drive.

Activity	Zone	Actions	Timing	Cost details	total costs
Year 1					
Weed control	1,2,& 3	Undertake weed control as per hierarchy of management, Section 6.1, Table 7.	When actively growing - Species dependant	200 hrs	\$11,000
	2&3	Site preparation for Woodland Zone revegetation. Slash and herbicide spray 1m circles in preparation for planting. (Six clusters).	one month before commencing revegetation	15 hrs	\$825
Revegetation - Riparian Zone	1,2,& 3	Riparian Zone revegetation - Refer Section 6.2 for species list and planting instructions.	June / July		
Plant supply	1,2,& 3	Organise tubestock - 1600 plants.	June / July	\$1.50 each	\$2400
Planting	1,2,& 3	Tubestock planting - 1600 plants.	June / July	\$1.20 each	\$1920
Revegetation - Woodland Zone (six clusters)	2&3	Woodland Zone revegetation - Cluster plantings. Refer Section 6.2 for species list and planting instructions. Figure 12 & 13 details cluster locations.	June / July		
Plant supply	2&3	Organise tubestock - six clusters (6 x 140) = 840 plants.	June / July	\$1.50 each	\$1,260
Planting	2&3	Tubestock planting - includes digging small hole for tubestock 840 plants.	June / July	\$1.50 each	\$1,260
Install treeguard and stake	2 & 3	Install treeguard and stake on tall shrub species - (8 per cluster) 8 x 6 = 48 plants.	June / July	\$3.00 each	\$144
Erosion Mitigation	1,2,& 3	Appoint engineer to report on best approach for erosion mitigation. Initiate mitigation approaches.	As soon as possible	TBC	TBC

Activity	Zone	Actions	Timing	Cost details	total costs
Stormwater discharge mitigation	1,2,& 3	Appoint engineer to report on best approach stormwater discharge mitigation. Initiate mitigation approaches.	As soon as possible	ТВС	ТВС
Amenity enhancement	2	Council to choose appropriate location as outlined in section 6.5. Design and implement amenity enhancement program.	Ongoing	ТВС	ТВС
Public Safety Mitigation	1,2 &3	Council to conduct audit on line of site vegetation clearance and footpath safety.	As soon as possible	ТВС	TBC
Weed control	2&3	Follow up weed control within cluster plantings.	September	15 hrs	\$825
Weed control	2&3	Follow up weed control within cluster plantings.	November	15 hrs	\$825
Total costs					\$20,459
Total cost + Contingency 10%					\$22,505
Year 2					
Weed control	1,2,& 3	Undertake weed control as per hierarchy of management, Section 6.1, Table 7.	When actively growing - Species dependant	200 hrs	\$11,000
Revegetation - Riparian Zone	1,2,& 3	Riparian Zone revegetation - Refer Section 6.2 for species list and planting instructions.	June / July		
Plant supply	1,2,& 3	Organise tubestock - 1600 plants.	June / July	\$1.50 each	\$2400
Planting	1,2,& 3	Tubestock planting - 1600 plants.	June / July	\$1.20 each	\$1920
Erosion Mitigation Review	1,2,& 3	Review and evaluate engineer's findings and mitigation approaches.	Ongoing	ТВС	ТВС
Stormwater discharge mitigation Review	1,2,& 3	Review and evaluate engineer's findings and mitigation approaches.	Ongoing	ТВС	ТВС
Total costs					\$15,320

Activity	Zone	Actions	Timing	Cost details	total costs
Total cost + Contingency 10%					\$16,852
Year 3					
Weed control	1,2,& 3	Undertake weed control as per hierarchy of management, Section 6.1, Table 7.	When actively growing - Species dependant	200 hrs	\$11,000
Revegetation - Riparian Zone	1,2,& 3	Riparian Zone revegetation - Refer Section 6.2 for species list and planting instructions.	June / July		
Plant supply	1,2,& 3	Organise tubestock - 1600 plants.	June / July	\$1.50 each	\$2400
Planting	1,2,& 3	Tubestock planting - 1600 plants.	June / July	\$1.20 each	\$1920
Erosion Mitigation Monitoring	1,2,& 3	Monitor and report on mitigation approaches.		ТВС	ТВС
Stormwater discharge mitigation Monitoring	1,2,& 3	Monitor and report on mitigation approaches.		ТВС	TBC
Total costs					\$15,320
Total cost + Contingency 10%					\$16,852
Year 4					
Weed control	1,2,& 3	Undertake weed control as per hierarchy of management, Section 6.1, Table 7.	When actively growing - Species dependant	200 hrs	\$11,000
Revegetation - Riparian Zone	1,2,& 3	Riparian Zone revegetation - Refer Section 6.2 for species list and planting instructions.	June / July		
Plant supply	1,2,& 3	Organise tubestock - 1600 plants.	June / July	\$1.50 each	\$2400
Planting	1,2,& 3	Tubestock planting - 1600 plants.	June / July	\$1.20 each	\$1920
Management Plan Review		Review management plan. Evaluate aims and objectives.		ТВС	ТВС
Total costs					\$15,320

Activity	Zone	Actions	Timing	Cost details	total costs
Total cost + Contingency 10%					\$16,852
Year 5					
Weed control	1,2,& 3	Undertake weed control as per hierarchy of management, Section 6.1, Table 7.	When actively growing - Species dependant	200 hrs	\$11,000
Revegetation - Riparian Zone	1,2,& 3	Riparian Zone revegetation - Refer Section 6.2 for species list and planting instructions.	June / July		
Plant supply	1,2,& 3	Organise tubestock - 1600 plants.	June / July	\$1.50 each	\$2400
Planting	1,2,& 3	Tubestock planting - 1600 plants.	June / July	\$1.20 each	\$1920
Total costs					\$15,320
Total cost + Contingency 10%					\$16,852

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8 APPENDICES

Appendix 1. Weed control methodology.

There are a variety of weed control methods that can be utilised to effectively control different weed species. Weed control methods include cutting and swabbing, stump injection, drilling and filling, spot spraying and hand pulling. The way to carry out each method effectively and safely is detailed below:

Cut and Swab

- Cut off all stems as low as possible using a chainsaw or pruning saw, secateurs or long-handled loppers. The cut must be horizontal so that the herbicide rests on the cut area while being absorbed, rather than running down the side of the stem;
- Stumps will be left in the ground so as to not disturb the soil and to help retain the soil in place i.e. reduce the likelihood of soil erosion;
- Remove all stems from the stump, so that no active (or green) branches/shoots remain, no matter how small they are;
- Liberally swab all cut surfaces immediately with the herbicide mixture. This must be done
 preferably within half a minute, or immediately if possible. The cut surface cannot be allowed to
 dry out, otherwise the herbicide will be much less effective. Use a paintbrush, swabber or
 squeeze bottle (laboratory) to apply the herbicide mixture. Add a dye to the herbicide mixture that
 will help indicate where swabbing has already been done;
- The tissues that take up and move the poison are immediately under the bark layer, so concentrate on applying the poison around the outer rim of the stump;
- Follow up work may be required. If the stumps re-sprout which can be common with some species, then cut and swab or spray the new regrowth with the herbicide;
- The most effective time of the year to cut and swab plants is when they are actively growing, which varies between species.

Drill and Fill

- Drill a steeply angled hole into the plant's cambium layer (where sap flows just beneath the bark layer) with a cordless drill, using a 10mm drill bit;
- The holes should be as close to the base of the plant as possible, and it is essential for the hole to be steeply angled into the cambium otherwise the herbicide will not be absorbed into the sap flow;
- Immediately after the hole has been drilled, it should be filled with herbicide. Syringes (without the needle) or squeeze bottles can be used to administer the herbicide into the hole;
- Holes are drilled every 2.5-5cm until the base of the plant has been circled;
- Follow up work may be required. If the plant re-sprouts which can be common with some species, then the process needs to be repeated.

Frilling

- For large and medium sized trees and shrubs with a large stump or lignotuber the following "Frilling" method is recommended. It can be used in conjunction with the cut and swab method or the drill and fill method to get a higher dose of herbicide into the plant, and to get a more thorough application of herbicide;
- After the plant has been cut and swabbed, make regular extra cuts into the remaining stump and any exposed roots with a hammer and chisel to expose the sapwood. Immediately fill chisel marks with the herbicide mixture in the squeeze bottle. This provides more surface area for the herbicide to penetrate, and ensures a good dose of herbicide. This method, used in conjunction with either the cut and swab method or drill and fill method, should provide a much better kill rate when compared to the cut and swab method or drill and fill method by themselves.

Spraying

- The most effective time of the year to spray is when the plant is actively growing;
- Look for native plants and cover with plastic bags or sheeting while spraying. If there are too many native plants amongst the weeds then this method should not be used;
- Always read the label on the herbicide container, follow the instructions and wear protective clothing. Dilute the mixture as recommended. Add a dye to the herbicide mixture that will help to indicate where spraying has already been done;
- If spraying near creeks or other water bodies, care needs to be taken due to the aquatic environment. Herbicides can have a negative effect on aquatic fauna such as frogs. It is preferable to use other more accurate methods such as cut and swab and drill and fill along creek lines;
- Surfactants can also be used when spraying plants such as Bridal Creeper which have a waxy leaf surface. A surfactant can be added to the herbicide mix which will increase the uptake of the poison through the waxy leaf surface. Surfactants should not be used on or near plants growing in water as they are suspected of affecting frogs;
- Where weeds have narrow vertical leaves, spraying might result in herbicide running off or drifting onto non-target plants. In this situation, wipe on the herbicide mixture with a weed wand, sponge or wick applicator;
- To increase the effectiveness of the herbicide whilst spraying large tussocks of grass, the grass can be slashed and then left to re-grow for several weeks. The regrowth can then be sprayed.

Mechanical Removal

- Some weed species can be removed using machinery. This can either be done on a broad scale where there is a high level of soil disturbance (e.g. using an excavator) or on a smaller scale using equipment such as 'tree poppers'.
- A tree popper is a practical tool which allows the easy removal of small woody weeds. It comes in three sizes and is relatively easy to use. A small jaw is placed around the stem of the plant to be removed, the handle is then pulled down so that pressure is placed on the base plate and the plant. The plant is then levered out of the ground with minimal soil disturbance.
- Up to medium size (2-3m tall) woody weeds can be removed utilising this tool. The tree popper should be utilised when the soil is moist as it will be easier to use and less damage will be caused to the surrounding environment.

Hand Pulling / Chipping

- Hand pulling of smaller plants is easiest in the wetter months of the year when the soil is soft and the seedlings are much easier to pull out;
- Seedlings: take hold of the plant at ground level and pull. If you pull at any point higher on the stem it may break and the plant will then require swabbing with herbicide;
- Small woody plants: Take hold of the stem at ground level and gently rock the plant back and forth until it comes away cleanly;
- For species that have a bulb, such as sparaxis or watsonia, a screw driver can be used to gently lift the bulb out of the ground;
- If possible place both feet or fingers on either side of the plant when pulling out. This helps to keep the soil in place and avoids unnecessary disturbance of the soil.
- To chip plants out, use a mattock to remove plants from the ground. Minimise soil disturbance whilst undertaking this activity but ensure that the entire plant and where possible, all of the roots are removed. A number of plants can re-shoot from roots left in the ground. Ensure that any disturbed soil is replaced and patted down.

ID	On a size Nie was	Common	Number	Size			0
number	Species Name	Name	/ Area	S/M/L	Easting	Northina	Comment
1	Fraxinus angustifolia	Desert Ash	10	М	286867	6141962	
2	Phoenix canariensis	Canary Island Palm	3	S	286838	6141931	
3	Schinus molle	Pepper-tree	1	L	286835	6141889	aesthetic
4	Schinus molle	Pepper-tree	1	L	286830	6141879	aesthetic
5	Schinus molle	Pepper-tree	1	L	286828	6141878	aesthetic
6	Schinus molle	Pepper-tree	4	L	286788	6141893	aesthetic
7	Fraxinus angustifolia	Desert Ash	2	М	286780	6141892	
8	Schinus molle	Pepper-tree	2	L	286763	6141892	aesthetic
9	Rhamnus alaternus	Blowfly Bush	1	М	286756	6141893	
10	Olea europaea ssp.	Olive	2	S	286756	6141893	
11	Schinus molle	Pepper-tree	1	L	286741	6141897	aesthetic
12	Olea europaea ssp.	Olive	1	М	286724	6141897	
13	Fraxinus angustifolia	Desert Ash	1	S	286724	6141897	
14	Rosa canina	Dog Rose	1	S	286724	6141897	
15	Schinus molle	Pepper-tree	1	М	286718	6141898	
16	Schinus molle	Pepper-tree	1	L	286707	6141900	aesthetic
17	Nerium oleander	Oleander	1	М	286676	6141904	
18	Schinus molle	Pepper-tree	1	L	286657	6141898	aesthetic
19	Foeniculum vulgare	Fennel	5x2m2		286657	6141898	
20	Olea europaea ssp.	Olive	1	М	286636	6141861	
21	Fraxinus angustifolia	Desert Ash	2	М	286631	6141851	
22	Schinus molle	Pepper-tree	1	М	286631	6141851	
23	Acacia saligna	Golden Wreath Wattle	4	M/L	286631	6141843	
24	Acacia saligna	Golden Wreath Wattle	1	М	286627	6141834	
25	Schinus molle	Pepper-tree	1	S	286613	6141822	
26	Phoenix canariensis	Canary Island Palm	1	S	286613	6141822	
27	Foeniculum vulgare	Fennel	1	S	286600	6141791	
28	Prunus sp.	Plum	10	S/M	286575	6141789	
29	Fraxinus angustifolia	Desert Ash	1	L	286484	6141695	
30	Fraxinus angustifolia	Desert Ash	1	L	286472	6141690	aesthetic
31	Acacia saligna	Golden Wreath Wattle	1	М	286475	6141679	

Appendix 2. Weed locations (Refer figures 8, 9 & 10)

ID		Common	Number	Size			Comment
number	Species Name	Name	/ Area	S/M/L	(WGS 84 - 54 H) Fasting Northing		
32	Fraxinus	Desert Ash	1	М	286475	6141679	
33	Arundo donax	Giant Reed	2x2m2		286482	6141668	
24	Olea europaea	Olivo	6	N.4	206400	6141667	
54	ssp.	Olive	0	IVI	200409	0141007	
35	Acacia saligna	Golden Wreath Wattle	1	М	286497	6141664	
36	Fraxinus angustifolia	Desert Ash		М	286175	6141628	
37	Fraxinus angustifolia	Desert Ash		М	286167	6141642	
38	Fraxinus angustifolia	Desert Ash		М	286159	6141652	
39	Fraxinus angustifolia	Desert Ash		М	286151	6141662	
40	Fraxinus angustifolia	Desert Ash		М	286142	6141676	
41	Arundo donax	Giant Reed	10 X 10		286142	6141682	
42	Schinus molle	Pepper-tree	1	S	286150	6141699	
43	Schinus molle	Pepper-tree	1	L	286148	6141703	aesthetic
44	Lycium ferocissimum	African Boxthorn	1	S	286142	6141706	
45	Schinus molle	Pepper-tree	1	S	286143	6141711	
46	Arundo donax	Giant Reed	10 X 10		286127	6141699	
47	Arundo donax	Giant Reed	10 X 10		286117	6141705	
48	Fraxinus angustifolia	Desert Ash		М	286096	6141710	
49	Phoenix canariensis	Canary Island Palm		М	286099	6141716	
50	Fraxinus angustifolia	Desert Ash		М	286082	6141720	
51	Schinus molle	Pepper-tree		М	286085	6141722	
52	Thinopyrum elongatum	Tall Wheat- grass	5x10m2		286100	6141744	
53	Thinopyrum elongatum	Tall Wheat- grass	1x1m2		286086	6141746	
54	Acacia saligna	Golden Wreath Wattle	8	М	286070	6141753	old planted revegetati on
55	Schinus molle	Pepper-tree	1	М	286072	6141754	
56	Schinus molle	Pepper-tree	1	М	286066	6141755	
57	Schinus molle	Pepper-tree	1	М	286076	6141761	
58	Schinus molle	Pepper-tree	1	М	286076	6141766	
59	Acacia saligna	Golden Wreath Wattle	1	М	286062	6141776	
60	Schinus molle	Pepper-tree	1	L	286058	6141798	aesthetic
61	Salix sp.	Willow	1	L	286033	6141799	

ID	On a size Niema	Common	Number	Size		Comment	
number	Species Name	Name	/ Area	S/M/L	Easting	Northing	Comment
62	Thinopyrum elongatum	Tall Wheat- grass	5x2m2		286018	6141799	
63	Acacia saligna	Golden Wreath Wattle	2	L	285997	6141811	
64	Schinus molle	Pepper-tree	1	М	285989	6141811	
65	Foeniculum vulgare	Fennel	2x1m2		285996	6141840	
66	Casuarina glauca	Swamp Oak	8	S/M	285970	6141876	
67	Casuarina glauca	Swamp Oak	20x20m 2	S/M/L	285970	6141890	
68	Acacia saligna	Golden Wreath Wattle	5	S	285958	6141880	
69	Schinus molle	Pepper-tree	1	L	285943	6141884	
70	Fraxinus angustifolia	Desert Ash	1	М	285920	6141903	
71	Thinopyrum elongatum	Tall Wheat- grass	10x10m 2		285919	6141923	
72	Phoenix canariensis	Canary Island Palm	1	S	285919	6141923	
73	Fraxinus angustifolia	Desert Ash	1	М	285912	6141961	
74	Ipomoea indica	Purple Morning-glory	5x5m2		285896	6142011	
75	Fraxinus angustifolia	Desert Ash	1	М	285896	6142011	
76	Fraxinus angustifolia	Desert Ash	2	М	285916	6142066	
77	Fraxinus angustifolia	Desert Ash	1	L	285866	6142103	
78	Phoenix canariensis	Canary Island Palm	1	S	285125	6142066	
79	Ricinus communis	Castor Oil Plant	2	S	285124	6142068	
80	Ricinus communis	Castor Oil Plant	1	S	285040	6142064	
81	Fraxinus angustifolia	Desert Ash	1	S	285040	6142064	
82	Arundo donax	Giant Reed	10x5m2		285029	6142074	
83	Fraxinus angustifolia	Desert Ash	7	S	284997	6142085	
84	Schinus molle	Pepper-tree	1	М	284961	6142055	
85	Tribulus terrestris	Caltrop	5x5m2		284958	6142080	
86	Fraxinus angustifolia	Desert Ash	2	S	284937	6142066	
87	Schinus molle	Pepper-tree	1	L	284933	6142066	aesthetic
88	Schinus molle	Pepper-tree	1	S	284900	6142053	
89	Foeniculum vulgare	Fennel	1x2m2		284871	6142053	

Dry Creek Management Plan - City of Port Adelaide Enfield

Patch	Species Name Common Name	Common Name	Number of	Size	Start L (WGS 8	Start Location (WGS 84 - 54 H)		ocation 4 - 54 H)	Comment
Identification		Individuais	S/IVI/L	Easting	Northing	Easting	Northing		
А	Rhamnus alaternus	Blowfly Bush	2	М	286835	6141889	286835	6141927	
А	Olea europaea ssp.	Olive	1	М	286835	6141889	286835	6141927	
А	Fraxinus angustifolia	Desert Ash	10	М	286835	6141889	286835	6141927	
А	Phoenix canariensis	Canary Island Palm	4	М	286835	6141889	286835	6141927	
А	Ricinus communis	Castor Oil Plant	3	S	286835	6141889	286835	6141927	
А	Schinus molle	Pepper-tree	1	М	286835	6141889	286835	6141927	
В	Fraxinus angustifolia	Desert Ash	10	М	286795	6141876	286819	6141868	
В	Olea europaea ssp.	Olive	1	М	286795	6141876	286819	6141868	
В	Rhamnus alaternus	Blowfly Bush	1	М	286795	6141876	286819	6141868	
С	Fraxinus angustifolia	Desert Ash	3	М	286682	6141905	286700	6141900	
D	Fraxinus angustifolia	Desert Ash	6	М	286636	6141864	286657	6141898	
Е	Fraxinus angustifolia	Desert Ash	6	М	286600	6141791	286627	6141834	Both sides of creek
F	Fraxinus angustifolia	Desert Ash	40	S/M	286513	6141725	286600	6141791	Both sides of creek
G	Fraxinus angustifolia	Desert Ash	6	М	286472	6141690	286491	6141705	
н	Fraxinus angustifolia	Desert Ash	7	S	285920	6141935	285916	6141951	
Н	Olea europaea ssp.	Olive	1	S	285920	6141935	285916	6141951	
I	Fraxinus angustifolia	Desert Ash	3	М	285914	6141899			
I	Phoenix	Canary Island Palm	1	М	285914	6141899			

Appendix 3. Weed Patches (Refer Figures 8,9 & 10).



Patch Identification	Species Name	Common Name	Number of individuals	Size S/M/L	Start Location (WGS 84 - 54 H)		End Location (WGS 84 - 54 H)		Comment
	canariensis								
I	Olea europaea ssp.	Olive	1	М	285914	6141899			
J	Fraxinus angustifolia	Desert Ash	15 individuals	S/M	286037	6141828	285988	6141866	
К	Schinus molle	Pepper-tree	4 individuals	L	286047	6141817	286037	6141828	Aesthetic value
L	Schinus molle	Pepper-tree	10 individuals	mixed sizes - S/M/L	286066	6141755	286063	6141790	
М	Phoenix canariensis	Canary Island Palm	15 individuals	mixed sizes - S/M/L	286066	6141755	286063	6141790	





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